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RADOVI ARHEOLOŠKOG ZAVODA
PAPERS OF THE DEPARTMENT
O F A R C H A E O L O G Y

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Saša KOVAČEVIĆ & Tomislav HRŠAK

PRILOG POZNAVANJU NASELJENOSTI VIROVITIČKE PODRAVINE TIJEKOM STARIJEGA ŽELJEZNOG DOBA

A CONTRIBUTION TO UNDERSTANDING HUMAN SETTLEMENT IN THE VIROVITICA PODRAVINA DURING THE EARLY IRON AGE

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Tijekom 2005. i 2006. g. izvođena su velika arheološka iskopavanja na trasi zapadne obilaznice grada Virovitice. Tom prilikom istraženo je osam lokaliteta koji pripadaju različitim razdobljima i kulturama. Među njima nalazi se i više prapovijesnih naselja. Lokalitet Virovitica-Đurađ istok najjužniji je u nizu lokaliteta na zaobilaznici. Nalazi iz halštatskoga naselja Virovitica-Đurađ istok poslužili su kao osnova iscrpne analize u ovome radu, ali se u nju uključuju i nalazi s lokaliteta Virovitica-Kiškorija sjever, dok se dotičemo i lokaliteta Virovitica-Đota, koliko je to s obzirom na stanje objavljenosti nalaza bilo moguće. Pri tom se velika pozornost pridaje analizi strukture naselja i karakterističnih pokretnih nalaza.

Ključne riječi: Podravina, Virovitica, Sv. Đurađ, starije željezno doba, nizinsko naselje, keramika

During 2005 and 2006, a major archaeological excavation was conducted on a section of the western ring-road in the town of Virovitica. On this occasion, eight sites were excavated which belong to various periods and cultures. Among them there are several prehistoric settlements. The Virovitica-Đurađ East site is the southernmost in a chain of sites on the ring-road. The finds from the Hallstatt settlement at Virovitica-Đurađ East served as the basis for an exhaustive analysis in this work, but it also includes finds from the Virovitica-Kiškorija North site, as well as those from the Virovitica-Đota site to the extent possible given the state of publication of these finds. Here considerable attention has been accorded to analyzing the structure of the settlements and the typical movable finds.

Key words: Podravina, Virovitica, Sveti Đurađ, Early Iron Age, lowland settlement, pottery

UVOD I GEOGRAFSKE ODLIKE PODRUČJA

Podravina je regija u središnjem dijelu Hrvatske. Okosnicu ili žilu kucavicu čini joj rijeka Drava s

INTRODUCTION AND GEOGRAPHIC FEATURES OF THE AREA

Podravina is a region in the central part of Croatia. As its name suggests, its backbone or main artery is the

svojim pritocima – Murom, Bednjom, Plitvicom, Glibokim i drugima.¹ Brza je i hirovita to rijeka koja je u prošlosti često mijenjala tok, stvarala meandre i plavila okolna područja. No istodobno ona je i važan prirodni resurs koji omogućava život brojnu i raznoliku biljnom i životinjskom svijetu. Nizinska područja uz rijeku bogata ribom i divljači te plodnom zemljom na uzdignutijim dijelovima zasigurno su od davnina privlačila ljude i pozivala na trajnije naseljavanje.

Podravinu na tlu Hrvatske možemo podijeliti na tri osnovna dijela: 1. gornja Podravina smjestila se između rijeke i zagorskih gora na jugu, a gravitira Varaždinu, 2. srednja ili bilogorska, između Drave i Bilogore, gravitira Koprivnici, 3. donja ili slavonska, između rijeke i papučko-krndijskoga niza, s prirodnim centrom u Osijeku (*Veliki atlas* 2002: 244). Granica između srednje i donje Podravine, a time i istočna granica središnje Hrvatske, povučena je na međuriječnim gorama, gorskim grebenima Psunja, Ravne gore i Lisine, istočno od Virovitice, uključujući tako i negdašnju općinu Virovitica u sastav središnje Hrvatske (*Veliki atlas* 2002: 255; Crkvenčić *et al.* 1974: 45). No Podravinu prema istim publikacijama na još nižoj razini možemo podijeliti prema vodećim naseljima mikroregija. Tako se i u ovome radu spominju varaždinska, koprivnička ili virovitička Podravina. Upravo prema virovitičkoj Podravini bit će usmjerena razmatranja u ovome radu.

Virovitica se nalazi na prostoru dodira središnje i istočne Hrvatske, a kroz povijest bila je istaknuto prometno središte. U klimatskome smislu okoliš Virovitice pripada kontinentalnoj, umjereno toploj vlažnoj klimi, što znači da prevladavaju topla, ponekad i vrlo topla ljeta te hladne i oštre zime. Cijelo područje između Koprivnice i Virovitice geološki dio je dravske potoline, koja se pruža od južnomađarskih planina Mecsek, Villany i masivâ Görgeteg i Inke na sjeveru do kalničkoga, bilogorskoga i papučko-krndijskoga masiva na jugu (Kurtek 1966: 6) (karta 1). Među najvažnije vodotokove virovitičkoga kraja – uz, naravno, samu rijeku Dravu – pripada i rječica Odenica, koja izvire u krilu Bilogore, na području katastarske općine Sv. Đurađ. Odenica prolazi podravskim poljem i ulijeva se u Dravu (Feletar 2008: 55). Kao i u krajevima uzvodno i u virovitičkoj Podravini rijeka Drava hirovita je – često je plavila okolna područja i mijenjala tok (Sabolić

Drava River with its tributaries: the Mura, Bednja, Plitvica, Gliboki and other watercourses.¹ This is a river with a rapid and capricious current, which has altered its course in the past, creating meanders and also flooding surrounding areas. Even so, it is simultaneously a vital natural resource which facilitates essential living conditions for abundant plant and animal life. The lowlands adjacent to the river, rich in fish and game and fertile soil at higher elevations, certainly attracted people since the distant past and enticed them to settle on a more permanent basis.

In Croatia's territory, Podravina can be divided into three basic sections: 1. upper Podravina lies between the river and the uplands in the south, and gravitates toward Varaždin; 2. central or Bilogora Podravina, between the Drava and the Bilogora highlands, gravitates toward Koprivnica; and 3. lower or Slavonian Podravina, between the river and the Papuk-Krndija chain of hills, with its natural centre in Osijek (*Veliki atlas* 2002: 244). The boundary between central and lower Podravina, simultaneously the eastern boundary of central Croatia, has been drawn on the interfluvial highlands, the ridges of Psunj, Ravna gora and Lisina, east of Virovitica, also including the former Virovitica Municipality in central Croatia (*Veliki atlas* 2002: 255; Crkvenčić *et al.* 1974: 45). However, according to these same publications, Podravina can be divided at an even lower level based on the leading settlements of its micro-regions. Thus, here the Podravina of Varaždin, Koprivnica or Virovitica shall also be mentioned. The analysis in this work shall focus on the Virovitica Podravina.

Virovitica lies at the point of contact between central and eastern Croatia, and throughout history it has been a prominent transportation hub. In the climatic sense, Virovitica's environment has a continental, moderately warm and damp climate, which means generally warm and sometimes hot summers and cold and bracing winters. Geologically, the entire area between Koprivnica and Virovitica is a part of the Drava depression, which extends from the southern Hungarian mountains of Mecsek, Villany and the Görgeteg and Inke massifs in the north, to the Kalnik, Bilogora and Papuk-Krndija massifs in the south (Kurtek 1966: 6) (map 1). Among the most important waterways of the Virovitica area, besides the Drava to be sure, is the stream called Odenica,

¹ U najširem, geografskom smislu riječi Podravina je 10–20 km široka nizina uz rijeku Dravu, dok je u kulturno-povijesnom ili užem smislu riječi područje koje gravitira Ludbregu, Koprivnici i Đurđevcu. U ovome radu pojam "Podravina" ima najširi, geografski smisao.

¹ In the broadest geographic sense of the word, Podravina is the 10-20 km wide belt of plains along the Drava River, while in the cultural-historical and narrower sense of the word, it is the area which gravitates toward Ludbreg, Koprivnica and Đurđevac. In this work, "Podravina" will be used in the broadest, geographic sense.



Karta 1. Položaj Virovitice u širem geografskom kontekstu (Arhiv arheoloških iskopavanja).

Map 1. Position of Virovitica in the wider geographic context (Excavation archives).

2008: 53). Tek u dijelu toka istočno od Virovitice, a posebno od Donjeg Miholjca, rijeka ima manje rukavaca i meandara, ima mirniji i jedinstveniji tok (Kurtek 1966: 1).

Reljefni profil područja Virovitice u smjeru sjever-jug slični stanju uzvodno uz Dravu; izdužena zona slabo naseljenih niskih poloja nalazi se uz samu rijeku. Potom slijedi zona niskih riječnih ocjeditih terasa s razmjerno plodnim zemljištem i nešto većom naseljenosti. Najvažnija i najgušće naseljena jest treća zona mlađih i starijih ocjeditih würmskih terasnih nizina koje su se smjestile u kontaktnome području prema šumovitim i slabije naseljenim sjevernim obroncima Bilogore. To je zona najkvalitetnijega tla kojom i danas prolaze najvažnije prometnice (Feletar 2008: 55). Upravo u toj zoni danas se nalazi i naselje Sv. Đurađ s lokalitetom starijega željeznog doba kojemu će u ovome radu biti posvećena najveća pozornost.

VIROVITICA-ĐURAĐ ISTOK

POLOŽAJ LOKALITETA

Sv. Đurađ naselje je u Virovitičko-podravskoj županiji 4 km jugozapadno od samoga središta grada Virovitice, kojega je sastavni dio od 1991. g. (karta 2) (Felbauer 2005: 759). Naselje starijega željeznog doba zauzima vrlo blago uzvišenje iznad nizinskoga vodoplavnog područja na samome južnom rubu podravske ravnice. To je i jugozapadni rub grada Virovitice, oko 3 km od središta grada, istočno uz cestu prema selu Sv. Đurađ (Hršak 2006: 81). Već

which has its source on an offshoot of Bilogora, in the territory of the Sveti Đurađ cadastral municipality. The Odenica passes through the Podravina flood-plain and flows into the Drava (Feletar 2008: 55). As at all places upstream, at Virovitica the Drava is also unpredictable: it often flooded the surrounding areas and changed course (Sabolić 2008: 53). Only in that part of its course east of Virovitica, and particularly from Donji Miholjac, does the river have fewer channels and meanders, and a more tranquil and less mutable course (Kurtek 1966: 1).

The relief profile of the Virovitica region in the north-south direction is similar to conditions upstream along the Drava; an oblong zone of sparsely inhabited flood-plains flanks the river itself. This is followed by a zone of low riverine alluvial terraces with relatively more fertile soil and higher population density. The most important and most densely populated is the third zone of younger and older drained Würmian terraced lowlands which are located in the contact zone between the forested and more sparsely populated northern foothills of Bilogora. This is a zone with the highest quality soil, adjacent to the most important roads even today (Feletar 2008: 55). This is precisely the location of today's settlement of Sveti Đurađ with an Early Iron Age site which shall be the predominant focus of this work.

VIROVITICA-ĐURAĐ EAST

SITE LOCATION

Sveti Đurađ is a settlement in Virovitica-Podravina County that is 4 km south-west of the heart of downtown Virovitica, of which it has been a component since 1991 (map 2) (Felbauer 2005: 759). The Early Iron Age settlement occupied a very slightly elevated point above the lowland flood-plain at the very southern edge of the Podravina flats. This is also the south-west periphery of the town of Virovitica, approximately 3 km from the town centre, east along the road toward the village of Sveti Đurađ (Hršak 2006: 81). The first foothills of Bilogora already begin in the immediate southern hinterland of the settlement, while the eastern section of the area is skirted by the Odenica and a plain extends northward with the Drava River in the distance (maps 2 and 3) (Hršak 2007). Like numerous other lowland settlements along the Drava River, such as Zbelava, Sigetec or Torčec (Kovačević 2008; 2009; 2009a; Šimek 1982; 1982a), the settlement of Virovitica-Đurađ East is a typical lowland settlement situated on a slight rise above the flood-plain, with a hilly

u neposrednu zaleđu naselja prema jugu počinju prvi obronci Bilogore, na istoku područje zaokružuje rječica Odenica, dok se prema sjeveru prostire nizinsko područje s rijekom Dravom u daljini (karta 2 i 3) (Hršak 2007). Kao i brojna nizinska naselja uz rijeku Dravu, poput Zbelave, Sigeca ili Torčeca (Kovačević 2008; 2009; 2009a; Šimek 1982; 1982a), tako je i naselje Virovitica-Đurađ istok tipično nizinsko naselje smješteno na blagoj uzvisini iznad plavne ravnice, s brežuljkastim zaleđem prema jugu. Čini se da je prilikom zaštitnih istraživanja na trasi obilaznice zahvaćen tek istočni rubni dio naselja te da se naselje prostiralo dalje prema jugozapadu, prema centru Sv. Đurđa i Bilogori. Prilikom istraživanja nisu utvrđeni ostaci kulturnoga sloja, pa se može pretpostaviti da su i objekti unutar naselja tijekom vremena sniženi.

Vrijedi odmah istaknuti da su tragovi naseljenosti iz starijega željeznog doba u novije vrijeme utvrđeni i na nekim drugim lokalitetima u okolici Virovitice, na trasi zapadne virovitičke obilaznice na kojoj se našao i Sv. Đurađ-istok. Najznačajniji nalazi te vrste potječu s najsjevernijeg u nizu od osam lokaliteta na zapadnoj obilaznici, s lokaliteta Virovitica-Đota, koji je istraživala dr. sc. Daria Ložnjak-Dizdar, te s lokaliteta Virovitica-Kiškorija sjever, koji je istraživala ekipa s dr. sc. Markom Dizdarom na čelu (Ložnjak-Dizdar 2006; 2007; Dizdar 2007). U određenoj mjeri tim ćemo se lokalitetima nešto detaljnije vratiti kasnije u tekstu.

POVIJEST ISTRAŽIVANJA

Razdoblje starijega željeznog doba jedno je od najslabije istraženih razdoblja na području virovitičke Podravine. U stručnoj literaturi tek se ponegdje spominju lokaliteti kao Ivanec u Lipovcu ili Luka na Orešcu, koji se pripisuju halštatskomu razdoblju, bez bilo kakvih detaljnijih podataka (Salajić 2001: 10). Time znatno na težini dobivaju pokretni i nepokretni nalazi s lokaliteta Virovitica-Đurađ istok koji će ovdje biti predstavljeni.

Tijekom 2005. i 2006. g. provedena su opsežna zaštitna arheološka istraživanja na trasi zapadne obilaznice grada Virovitice. Prije toga cijeli prostor buduće trase podvrgnut je intenzivnim arheološkim rekognosciranjima koja su proveli dr. sc. M. Dizdar iz Instituta za arheologiju u Zagrebu i dr. sc. Jacqueline Balen iz Arheološkog muzeja u Zagrebu. Prapovijesni i srednjovjekovni lokalitet Virovitica-Đurađ istok, najjužnije u nizu od osam arheoloških nalazišta na trasi zaobilaznice, otkriven je tijekom arheološkoga nadzora nakon što su već počeli pripremni zemljani radovi za gradnju ceste (Salajić 2007: 69) (karta 4).

hinterland to the south. It would appear that only the eastern periphery of the settlement was encompassed during rescue excavation on the section of the ring-road, and that the settlement actually extended toward the south-west, toward the centre of Sveti Đurađ and Bilogora. During excavation, no traces of a cultural layer were ascertained, so it may be assumed that the structures inside the settlement were lowered over time.

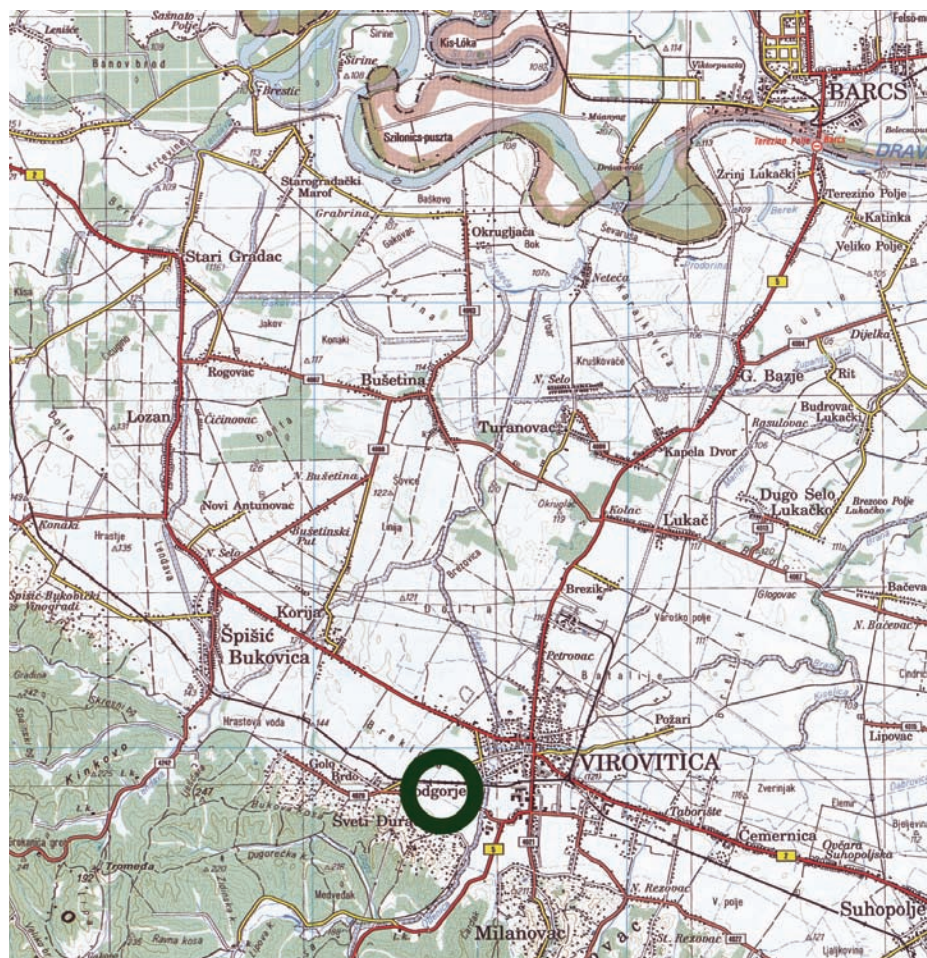
It should be immediately stressed that traces of settlement from the Early Iron Age to more recent times were also ascertained at some other sites in the vicinity of Virovitica, on a section of Virovitica's western ring-road on which Sveti Đurađ-East is located. The most significant finds of this type are from the northernmost in a series of eight sites on the western ring-road, from the Virovitica-Đota site, which was excavated by Daria Ložnjak-Dizdar, and from the Virovitica-Kiškorija North site, which was researched by a team headed by Marko Dizdar (Ložnjak-Dizdar 2006; 2007; Dizdar 2007). We shall return to these sites to a certain extent later in the text.

RESEARCH HISTORY

The Early Iron Age is one of the most poorly researched periods in the Virovitica Podravina. In the archaeological literature there is only occasional mention of sites like Ivanec in Lipovec or Luka at Orešec, which are ascribed to the Hallstatt period, without any more detailed information (Salajić 2001: 10). The finds from the Virovitica-Đurađ East site that will be presented herein therefore assume additional importance.

During 2005 and 2006, extensive rescue archaeological excavation was conducted on a section of Virovitica's west ring-road. Prior thereto, the entire area of the future road section was subjected to intensive archaeological reconnaissance conducted by M. Dizdar from the Institute of archaeology in Zagreb and Jacqueline Balen from the Archaeological Museum in Zagreb. The prehistoric and medieval site of Virovitica-Đurađ East, the southernmost in a series of eight archaeological find-sites on the ring-road section, was discovered during archaeological surveillance, after the preparatory earthworks for road construction had already commenced (Salajić 2007: 69) (map 4).

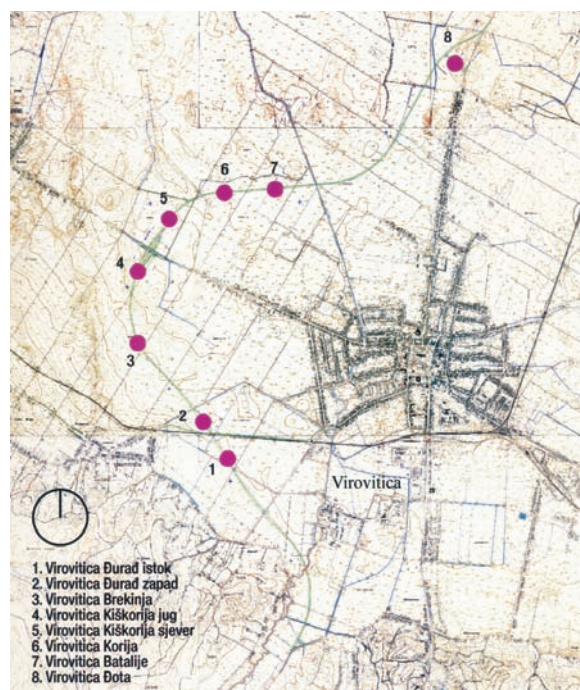
The site was encompassed by rescue archaeological excavations in August and September 2005, led by Tomislav Hršak, an archaeologist now employed in the Archaeological Museum in Osijek, while the project was commissioned by the Virovitica Town



Karta 2. Položaj naselja Sv. Đurađ u virovitičkoj Podravini (Arhiv arheoloških iskopavanja).
 Map 2. Position of settlement of Sveti Đurađ in the Virovitica Podravina (Excavation archives).



Karta 3. Položaj lokaliteta Virovitica-Đurađ istok (Arhiv arheoloških iskopavanja).
 Map 3. Position of Virovitica-Đurađ East site (Excavation archives).



Karta 4. Lokaliteti na zapadnoj virovitičkoj obilaznici (Salajić 2007: 4).
 Map 4. Sites on western Virovitica ring-road (Salajić 2007: 4).

Lokalitet je bio obuhvaćen zaštitnim arheološkim iskopavanjima u kolovozu i rujnu 2005. g. Arheološka istraživanja vodio je Tomislav Hršak, diplomirani arheolog, sada zaposlen u Arheološkome muzeju u Osijeku, dok je nositelj projekta bio Gradski muzej Virovitica.² Tijekom radova istražena je površina od 5 000 m². Već pri zaštitnim istraživanjima utvrđeno je da na istom položaju treba računati s tragovima naseljenosti iz više razdoblja. Kasnijom analizom samo je potvrđeno da se radi o dva naselja – jednome iz starijega željeznog doba, dok manji dio objekata pripada naselju iz ranoga srednjeg vijeka (9–10. st. po. Kr.) (Hršak 2007: 9). Kao što je već naznačeno, nalazište Virovitica-Đurađ istok tek je djelomično istraženo, s obzirom na to da je trasa ceste prolazila rubnim dijelom nalazišta. Može se pretpostaviti da se ostatak lokaliteta nalazi dalje prema jugu, prema selu Sv. Đurađ i obroncima Bilogore (*ibid.* 7). Arheološka istraživanja temeljena su na sustavu stratigrafskih jedinica i mreži kvadrata dimenzija 5 × 5 m usmjerenoj prema sjeveru. Tijekom radova otkriveni su isključivo arheološki objekti ukopanoga tipa, dok ostaci kulturnoga sloja nisu otkriveni (Hršak 2006: 81).

Iako su istraživanja kasnijih razdoblja prapovijesti, a pritom se posebno misli na istraživanja naseobinskih lokaliteta, u virovitičkome kraju gotovo na samome početku, upravo su zaštitna iskopavanja na trasi zaobilaznice možda najbolje pokazala da je riječ o vrlo gusto naseljenoj kraju, kako u prapovijesti tako i u kasnijim razdobljima. Vrijedi zato spomenuti da se u neposrednoj blizini naselja starijega željeznog doba u Sv. Đurđu, koje će među novoistraženim lokalitetima virovitičke Podravine ovdje zaokupljati najviše pozornosti, nalazi lokalitet Đurađ-zapad, koji je istraživala ekipa Arheološkog muzeja u Zagrebu. Na blagu uzvišenju smjestilo se naselje koje pripada starčevačkoj kulturi, dok su u jednom objektu pronađeni materijalni ostaci koji pripadaju ranomu brončanom dobu, odnosno vinkovačkoj kulturi (Balen 2007). Na trasi zaobilaznice u Brekinji otkriven je još jedan naseobinski lokalitet starčevačke kulture, koji uz prije otkrivene Pepelane i nove nalaze iz Đurđa govori o intenzivnijoj naseljenosti virovitičkoga kraja i u neolitičkome razdoblju (Sekelj Ivančan & Balen 2007; Minichreiter 1992). I tu se ponavlja uzorak ranije zamijećen u slučaju naselja starijega željeznog doba u Zbelavi i Torčecu: tek intenzivna arheološka istraživanja na pojedinoj lokalitetu otkrivaju – zahvaljujući intenzivnim rekognosciranjima ili pak zaštitnim iskopavanjima

Museum.² During works, a surface area of 5,000 m² was examined. Already during rescue research, it was established that vestiges of human habitation from different periods should be expected at this same site. Subsequent analysis only confirmed that there were two settlements: one dating to the Early Iron Age, with a smaller portion of the structures belonging to an early medieval settlement (9th-10th cent. AD) (Hršak 2007: 9). As already indicated, the Virovitica-Đurađ East site has only been partially reassembled, given that the road section passed through the site's periphery. It may be assumed that the remainder of the site is farther south, toward the village of Sveti Đurađ and the Bilogora foothills (*Ibid.* 7). The archaeological excavation is based on the system of stratigraphic units and a grid of quadrants with dimensions of 5 × 5 m oriented northward. During works, only archaeological structures of the below-ground type were found, while no remains of a cultural layer were discovered (Hršak 2006: 81).

Even though research into later prehistoric periods, particularly research into settlement sites, are practically at their very beginnings in the Virovitica area, it was precisely the rescue excavations at the ring-road section which best demonstrated that this was a densely-populated region, both in prehistory as in later periods. Thus, it bears noting that the Đurađ-West site, researched by a team from the Archaeological Museum in Zagreb, is located in the immediate vicinity of the Early Iron Age settlement in Sveti Đurađ, which will be the focus of the most attention herein among the newly-researched sites of the Virovitica Podravina. A Starčevo culture settlement was located on a slight rise, while in one structure finds were found which date to the Early Bronze Age, i.e., the Vinkovci culture (Balen 2007). Another Starčevo culture settlement site was discovered on a section of the ring-road in Brekinja, which together with the previously discovered Pepelane and the new finds from Đurađ, speaks of intense habitation of the Virovitica region in the Neolithic as well (Sekelj Ivančan & Balen 2007; Minichreiter 1992). And here the pattern already noted in the case of the Early Iron Age settlements in Zbelava and Torčec is repeated: only thorough-going archaeological investigation at individual sites reveal – thanks to intense reconnaissance or just rescue excavations in the micro-region – the genuine, much richer picture of the human occupation of this entire region in the past (Kovačević 2007: 91). The same occurred in Virovitica in the case of the town's western ring-road.

² U istraživanjima su osim voditelja Tomislava Hrška sudjelovali i Silvija Salajić u ime Gradskog muzeja Virovitica te studentice arheologije Asja Tonc i Katarina Jerbić.

² Besides research leader Tomislav Hršak, Silvija Salajić on behalf of the Virovitica Town Museum and archaeology students Asja Tonc and Katarina Jerbić also participated in the research.

u mikroregiji – pravu, znatno bogatiju sliku naseljenosti cijeloga kraja u prošlosti (Kovačević 2007: 91). Isto se dogodilo s Viroviticom u slučaju zapadne gradske zaobilaznice.

STRUKTURA NASELJA I TIPOVI OBJEKATA

Prilikom temeljite analize infrastrukture podravske naselja starijega željeznog doba objekti koji su pronađeni u naseljima podijeljeni su u dvije osnovne skupine – na *ukopane* i *nadzemne* objekte (Kovačević 2009: 28–35).³ Kako se isti sistem podjele preuzima u ovome radu, zaustavimo se nakratko na osnovnim početima te razdiobe.

Odredili smo da je ukopani objekt svaki onaj objekt kojemu se u izvornome stanju velika većina njegova najnižega dijela nalazi ispod nekadašnje površine tla te da u pravilu ne može biti ukopan u zemlju manje od 20 cm, osim u iznimnim slučajevima (primjerice kad izvornu dubinu zbog devastacije lokaliteta nije moguće odrediti). Kao ogledni primjer ukopanog objekta može se uzeti zemunica. Za nadzemni objekt utvrdili smo da je to svaki objekt čija se osnovna konstrukcija nalazi iznad površine tla, a nije ukopan dublje od 20 cm. Pritom se ne misli na dubinu ukopanih dijelova kao što su rupe od stupova ili kanali za polaganje horizontalnih greda ili balvana. Primjer tipičnoga nadzemnog objekta jest koliba s podnicom od nabijene gline i s krovom na dvije vode. Pojmovi *ukopani* i *nadzemni* nisu u svim slučajevima odijeljeni nepremostivim jazom. Ako je neki objekt označen kao ukopani, to nipošto ne mora značiti da njegov dio (primjerice šatorasta krovna konstrukcija zemunice) nije izvan zemlje ili nadzeman. Među ukopane objekte uvrštene su zemunice, radne jame, otpadne jame, vatrišta i ognjišta, rupe od stupova i bunari. Nadzemni su objekti kuće, pomoćni ili gospodarski nadzemni objekti i ograde (Kovačević 2009: 31–35). Pritom se obično može razlikovati primarna ili izvorna od naknadne ili sekundarne funkcije objekta. Posebno se to odnosi na ukopane objekte, čak i one većih dimenzija, kao što su zemunice, za koje se s velikom sigurnošću može reći da su izvorno imali jednu namjenu (primjerice stanovanje), dok su sekundarno, nakon prestanka izvorne funkcije, u brojnim slučajevima iskorišteni za saniranje otpada. To je slučaj s kojim ćemo se unutar podravske naselja starijega željeznog doba često susretati. No postoje i ukopani objekti za koje prema okolnostima nalaza ili sastavu zapune možemo zaključiti da su nakon prestanka

SETTLEMENT STRUCTURE AND BUILDING TYPES

During a comprehensive analysis of the infrastructure of the Early Iron Age settlements, the structures found therein were classified into two basic groups: *below-ground* and *above-ground* structures (Kovačević 2009: 28–35).³ Since the same classification is assumed in this work, it would be worthwhile to briefly review the basic precepts of this division.

We have established that a below-ground (dugout) structure is any structure that in its original state had the majority of its lower section below ground level at the time of its use, and that as a rule it cannot be dug into the ground less than 20 cm, excluding exceptional cases (for example, when the original depth cannot be determined due to devastation of a given site). The dugout (*zemunica*) can serve as an ideal example of a below-ground structure. An above-ground structure is any structure with its basic construction elements above the surface of the soil, and is not dug in any deeper than 20 cm. The latter aspect does not refer to the depth of embedded sections, such as post holes or trenches to install horizontal beams or posts. An example of a typical above-ground structure is a hut with compacted clay floor and a saddleback roof. The terms *below-ground* and *above-ground* are not irreconcilably separated in all cases. If a given structure is designated as below-ground, this certainly does not mean part of it (for example the tent-like roof structure of the dugout) was not outside or above the ground. Below-ground structures include dugouts, work pits, waste pits, fireplaces and hearths, post holes and wells. Above ground structures are houses, outbuildings and fences (Kovačević 2009: 31–35). Herein the primary or original function of a given structure can usually be distinguished from its subsequent or secondary use. This particularly pertains to below-ground structures, even those with larger dimensions, such as dugouts, which can be said with great certainty to have originally had a single purpose (housing, for example), while in many cases, after cessation of the original function, they were secondarily used as waste disposal units. This is the case that will be frequently encountered within the Podravina Early Iron Age settlements. But there are also below-ground structures about which, based on the circumstances surrounding their discovery or the composition of their fill, we may conclude that after cessation of their original function, they were

³ Kao osnova ovomu radu poslužila je problematika i opsežna analiza halštatskih naselja obrađena u disertaciji Kovačević (2009).

³ The deliberations and extensive analysis of Hallstatt settlements contained in Kovačević's dissertation served as the basis for this work (Kovačević 2009).

izvorne funkcije jednostavno napušteni, a vjerojatno i sam položaj na kojem su se nalazili. Upravo s takvim objektima susretat ćemo se više puta na lokalitetima u okolici Virovitice.

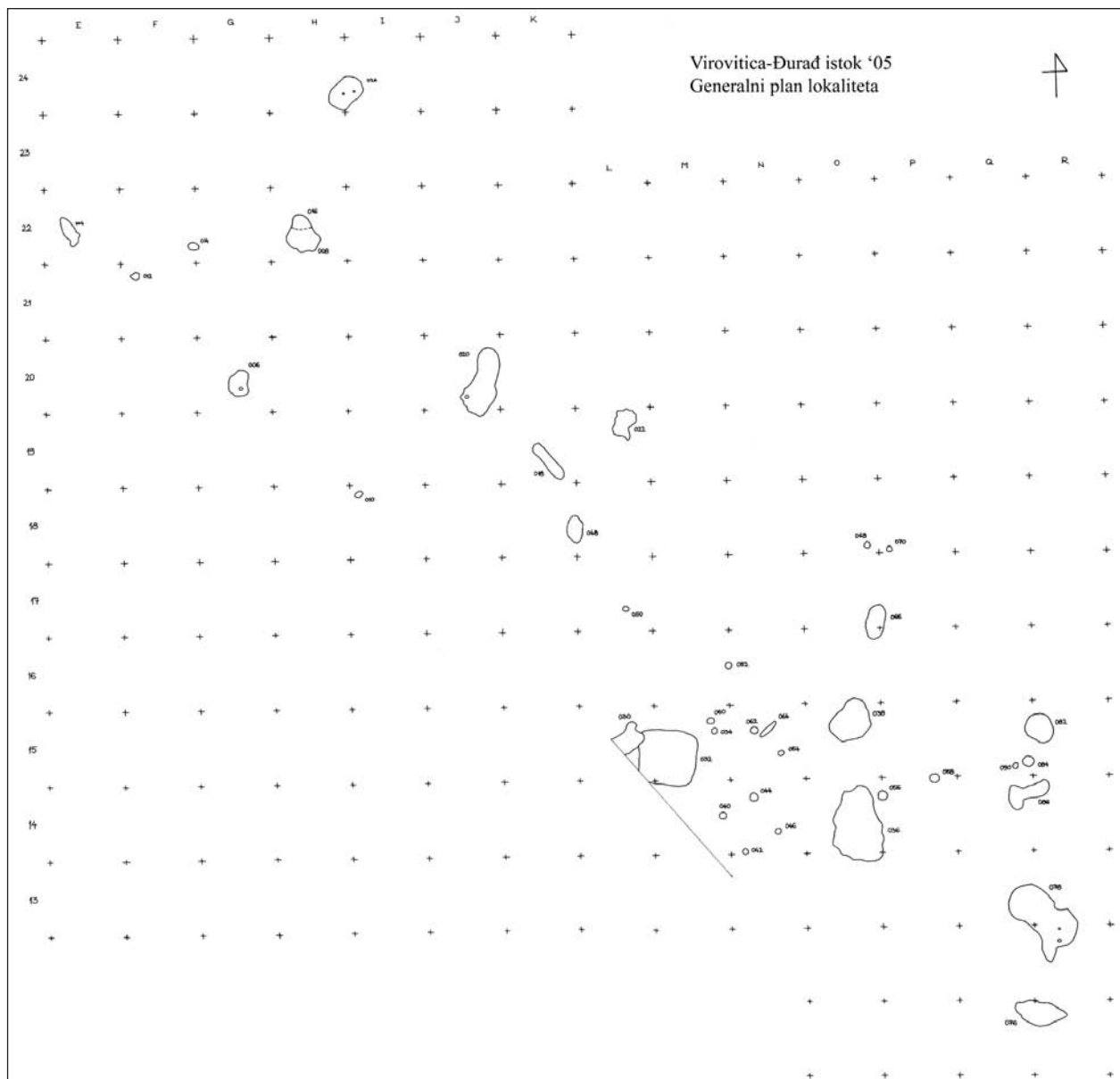
Svi sačuvani elementi naseobine starijega željeznog doba otkriveni i dokumentirani na lokalitetu Virovitica-Đurađ istok bili su ukopani u zdravicu. Među ukopanim objektima možemo izdvojiti nekoliko osnovnih tipova (plan 1):

- zemunice nepravilna tlocrta,
- kvadratna zemunica,
- jame različitih tlocrta i namjena,
- rupe od stupova.

simply abandoned, probably together with the area in which they were located. Precisely such structures will be encountered a number of times at sites in the Virovitica environs.

All preserved elements of the Early Iron Age settlement discovered and documented at the Virovitica-Đurađ East site were dug into sterile soil. Among the below-ground structures, several basic types can be distinguished (ground plan 1):

- dugouts with irregular ground plans,
- square dugouts,
- pits with differing ground plans and purposes,
- post holes.

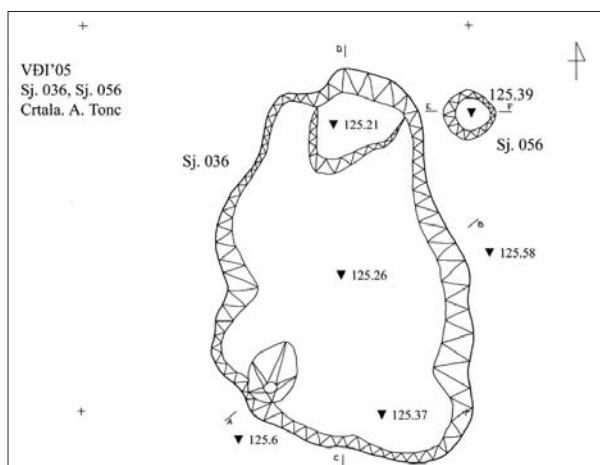


Plan 1. Generalni plan istraženoga dijela lokaliteta Virovitica-Đurađ istok (Arhiv arheoloških iskopavanja).

Ground plan 1. General map of excavated section of Virovitica-Đurađ East site (Excavation archives).

Zemunice s jednom prostorijom

Među objektima koji se tlocrtom i brojem u strukturi naselja Virovitica Đurađ-istok posebno ističu veći su objekti nepravilna tlocrta, obično pliće ukopani. S obzirom na njihove dimenzije, koje dosežu i preko 5 m, može se pretpostaviti da je riječ o stambenim objektima. Na dnu ili uz vanjske rubove nekih od njih uočene su i rupe od stupova koji su nosili drvenu, vjerojatno šatorastu nadzemnu konstrukciju objekta. Ona je vjerojatno barem djelomično bila oblijepljena kućnim lijepom, fragmenti kojega su često pronalazeni u zapuni objekata unutar naselja. Nekoliko je boljih predstavnika tog tipa objekata pa ih u ovome dijelu teksta treba kratko predstaviti. To su SJ 035, 036 u □ O+P/13+14, SJ 077, 078 u □ R/12+13, Q/13 te SJ 019, 020 u □ J/20 (plan 1).



Slika 1. Tlocrt ukopanog objekta SJ 035, 036 u naselju Sv. Đurađ-istok (Arhiv arheoloških iskopavanja).

Figure 1. Layout of below-ground structure SU 035, 036 in Sveti Đurađ-East settlement (Excavation archives).

SJ 035, 036 (plan 1, sl. 1, T. 1) jamski je objekt nepravilna izdužena tlocrta. Istražen je u cijelosti. Njegova najveća dužina iznosi 5,2 m, dok na najširem dijelu doseže 3,36 m. Objekt ima koritasto dno, ukopano na dubinu od 0,35 m mjereno od današnje razine okolnoga zdravičnog sloja.⁴ Na dnu se uz sjeverni i jugozapadni rub nalaze dva udubljenja, vjerojatno rupe od stupova u koje su bili ukopani dijelovi drvene konstrukcije objekta, moguće jednostavna šatorasta krova. Dublja, jugozapadna rupa od stupa

Single-room dugouts

Among the structures which stand out in particular in the composition of the Virovitica Đurađ-East settlement in terms of their layout and number are those larger ones with irregular ground plans that are normally only shallowly embedded. Given their dimensions, which reach up to 5 m, one may suppose that these were residential structures. Post holes were observed at the bottom or outer edges of some of them, and these posts supported a wooden, perhaps tent-shaped above-ground structure. It was probably at least partially affixed with household daub, fragments of which were often found in the fill of the structures in the settlement.

There are several better representatives of this type of structure, so they should be briefly presented in this section of the work. These are SU 035, 036 in □ O+P/13+14, SU 077, 078 at □ R/12+13, Q/13 and SU 019, 020 at □ J/20 (ground plan 1).

SU 035, 036 (ground plan 1, Fig. 1, Pl. 1) is a pit structure with irregular, oblong layout. It has been completely excavated. Its greatest length is 5.2 m, while at its widest it is 3.36 m. The trough-like bottom, dug to a depth of 0.35 m measured from today's level of the surrounding sterile topsoil.⁴ There are two depressions on the bottom along the north and south-west edges, probably post holes, into which parts of the structure's wooden components were buried, possibly for a simply tent-shaped roof. The deeper, south-west post hole was dug 0.48 cm from the ground level, or 0.17 deeper than the structure's bottom. Another post hole (SU 055, 056) was dug on the outside of the north-east edge of SU 036, which is joined by three more post holes running toward the north-east. Pottery (86 fragments), daub and stones were found in the dark grey soil without traces of the soot which filled SU 035, 036.

All of the circumstances surrounding the find, above all the shape and dimensions of the below-ground structure and the presence of post holes on the outside or inside of the edge indicate that this was a structure which – like all of the other structures of this type – may be deemed a dugout with one room or possibly a structure used for work or some other ancillary use.

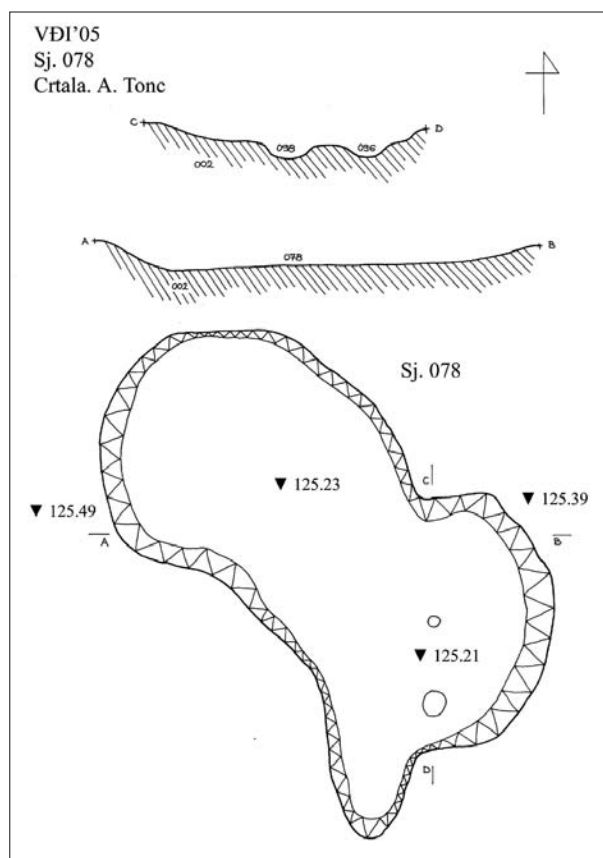
SU 077, 078 has an even more irregular layout (ground plan 1, Fig. 2, Pl. 2-8). Just like SU 035, 036, from which it is roughly 10 m to the south-east, SU 078 is also elongated toward in the north-

⁴ Lokalitet u Sv. Đurđu nalazi se usred ravnice koja je bila podvrgnuta dugotrajnoj poljoprivrednoj obradi zemlje pa je vrlo visoka vjerojatnost da je i halštatsko naselje na tom mjestu znatno oštećeno i sniženo, poput većine ostalih podravskih naselja starijega željeznog doba. U prilog tomu govori i nepostojanje bilo kakva kulturnoga sloja na bilo kojem dijelu lokaliteta.

⁴ The site in Sveti Đurađ is in the middle of a plain that was long subjected to soil cultivation, so it is highly likely that the Hallstatt settlement here was considerably damaged and lowered, like most of the remaining Podravina settlements of the Early Iron Age. This is further confirmed by the absence of any cultural layer at any part of the site.

ukopana je 0,48 m od razine tla ili 0,17 m od razine dna objekta. S vanjske strane sjeveroistočnoga ruba SJ 036 ukopana je još jedna rupa od stupa (SJ 055, 056), na koju se u nizu, dalje prema sjeveroistoku, nadovezuju još tri rupe od stupa. U tamnosivoj zemlji bez tragova gara koja je zapunjavala SJ 035, 036 bilo je keramike (86 ulomaka), lijepa i kamena.

Sve okolnosti nalaza, prije svega oblik i dimenzije ukopanog objekta te prisutnost rupa od stupova s unutrašnje ili vanjske strane ruba, ukazuju da se radi o objektu koji – kao i sve ostale objekte istoga tipa – možemo smatrati zemunicom s jednom prostorijom ili eventualno nekim radnim ili pomoćnim objektom.



Slika 2. Tlocrt ukopanog objekta SJ 077, 078 u naselju Sv. Đurađ-istok (Arhiv arheoloških iskopavanja).

Figure 2. Layout of below-ground structure SJ 077, 078 in Sveti Đurađ-East settlement (Excavation archives).

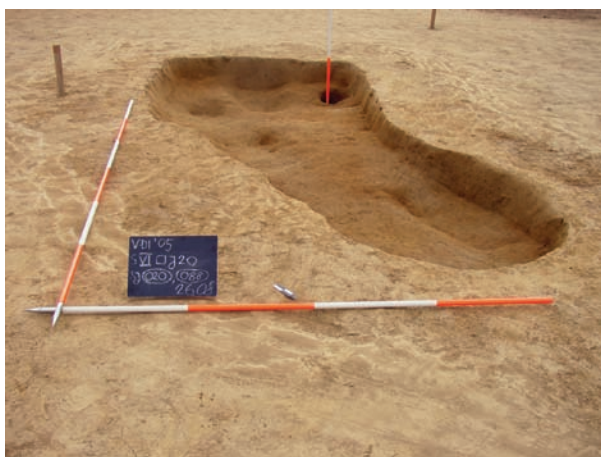
SJ 077, 078 još je nepravilnijega tlocrta (plan 1, sl. 2, T. 2–8). Isto kao SJ 035, 036, od koje se nalazi udaljena 10-ak m prema jugoistoku, i SJ 078 izdužena je u smjeru sjever–jug. Dužina joj doseže 5,3 m, a najveća širina 3,4 m. Objekt je bio ukopan tek 20 cm u tlo mjereći od okolne zdravice, što ni u ovome slučaju vjerojatno nije izvorna dubina objekta. Na ravnu, pomalo koritastu dnu nalaze se dvije rupe od kolca, promjera 10-ak i 20-ak cm, a od razine dna objekta

south direction. Its length is 5.3 m, while its greatest width is 3.4 m. The structure was only dug 20 cm into the ground measured from the surrounding topsoil, which in this case as well was probably not the original depth of the structure. Two stake holes were found on the flat, somewhat trough-like bottom, with diameters of approximately 10 and 20 cm., while they were dug roughly 15 cm into the soil from the level of the structure's base. Massive vertical girders could not be buried into such holes, so the structure's wooden construction had to have been built in some other fashion. It is possible that the stake holes were not discovered because the characteristic colour of the fill made it difficult to distinguish between the surrounding soil into which they were buried. This is the situation often encountered in research at sites in Podravina, particularly when there is not enough organic material in the hole's fill, making the fill more friable and changing its colour (Kovačević 2007a: 4). The fill of structure SU 078 consisted of dark brown soil containing pieces of daub, soot, over 500 potsherds and some stones. The dugout with a single room, SU 078, is among the finds with the richest closed units of the Early Iron Age at the Sveti Đurađ site.

The third similar structure, SU 019, 020, is north-west of SU 036 and SU 078 (ground plan 1, Fig. 3). Its greatest length is 4.6 m, while its width reaches 2.3 m. The structure's approximate depth is 30 cm. The bottom of SU 020 trough-like, with small uneven spots and a post hole in the south-west section. The structure was filled with brown soil which could scarcely be distinguished from the surrounding layer in which the structure was buried.⁵ However, since the fill was considerably more friable than the surrounding soil, the structure could be examined quite well. The structure contained only very little crushed and very coarse pottery, which judging by the facture belonged to the prehistoric period. The context of the find points to the hypothesis that pit structure SU 019, 020 was not used secondarily as a waste pit, rather it was filled naturally, probably over a longer period. The materials found in the structure may have originated in the time of its use or brought in with surrounding materials during its gradual burial. This fact confirms that structures of this type were not originally used to dispose of the settlement's waste, and the fact that it was not even used for this purpose secondarily indicates that certain parts of the settlement or the settlement as a whole did not persist long enough for all below-ground structures to be utilized in this manner.

⁵ It is precisely because of this that gives added weight to the assumption that some post holes may have evaded the gaze of researchers during the rescue archaeological excavations.

ukopane su 15-ak cm u zdravicu. U takve rupe od stupova nisu mogli biti ukopani masivniji vertikalni nosači, pa je drvena konstrukcija objekta morala biti izgrađena na neki drugi način. Moguće je da rupe od stupova nisu otkrivene i zbog toga što ih je zbog karakteristične boje zapune bilo teško ili nemoguće razlikovati od okolnoga tla u koje su bile ukopane. To je situacija koju pri istraživanju lokaliteta u Podravini često zatječemo, posebno kad u zapuni rupa od stupa nije bilo dovoljno organskoga materijala, zbog kojega bi zapuna bila rahlija i promijenila svoju boju (Kovačević 2007a: 4). Zapunu objekta SJ 078 činila je tamnosmeđa zemlja s komadićima lijepe, gara, više od 500 ulomaka keramike i nešto kamenja. Zemunica s jednom prostorijom SJ 078 spada među nalazima najbogatije zatvorene cjeline starijega željeznog doba na lokalitetu u Sv. Đurđu.



Slika 3. Objekt SJ 020 u □ J/20 nakon pražnjenja (snimio: T. Hršak).
Figure 3. Structure SU 020 at □ J/20 after excavation (photograph: T. Hršak).

Treći sličan objekt, SJ 019, 020, nalazi se sjeverozapadno od SJ 036 i SJ 078 (plan 1, sl. 3). Najveća dužina iznosi mu 4,6 m, a širina doseže 2,3 m. Dubina objekta iznosi 30-ak cm. Dno SJ 020 koritasto je, s manjim neravninama i rupom od stupa u jugozapadnome dijelu dna. Objekt je bio zapunjen zemljom smeđe boje koja se jedva mogla razlikovati od okolnoga sloja u koji je objekt bio ukopan.⁵ No kako je zapuna bila znatno rahlija od okolnoga tla, objekt se mogao dobro istražiti. U objektu je bilo tek nešto malo vrlo usitnjene i vrlo grube keramike, koja po fakturi pripada prapovijesnomu razdoblju. Okolnosti nalaza upućuju na pretpostavku da jamski objekt SJ 019, 020 nije sekundarno iskorišten kao

⁵ Upravo zbog te okolnosti pretpostavka da su neke rupe od stupova oku istraživača tijekom zaštitnih arheoloških istraživanja u Sv. Đurđu mogle promaknuti dobiva dodatnu težinu.

Square below-ground structures with surrounding structures

A structure in the researched portion of the Virovitica-Đurađ East settlement which appears only once can be described as a square dugout. SU 031, 032 is at □ L+M/14+15, along the very edge of the ring-road (ground plan 1, Fig. 4, Pl. 9-15). It consists of a deeper section to the north and a shallower, stair-shaped section to the south. The structure has a square layout with rounded corners, with sides 3.7 m long. The depth of the structure in its deeper portion is approximately 0.77m, and 0.40 m in the shallower portion.

Such structures are not unknown in the Early Iron Age settlements of Podravina. A minimum of two identical structures were analyzed in Zbelava, and analogies to them can be found everywhere in the eastern Alpine and western Pannonian zone, especially from the late Hallstatt and early La Tène periods (Kovačević 2008: 51; 2009: 174-180). Dugout SU 032 was filled with dark grey/brown soil, containing considerable pottery that was visible already during surface scratching and definition of the structure.

The square dugout from Sveti Đurađ is significant not only as a characteristic element of the actual settlement in Sveti Đurađ, for its importance rests on the diversity and number of movable finds from its fill. Over 500 pottery fragments were found in it, of which the most significant will be presented here (Pl. 9-15). It was precisely these finds, as well as those from the larger structures SU 077, 078 and from SU 035, 036, that greatly aided the cultural and chronological determination of the Early Iron Age settlement at Virovitica-Đurađ East.

The smaller, shallower structure SU 029, 030 is located adjacent to the north-west corner of structure SU 032, and its north-east corner "sat" on the edge of the square dugout (Fig. 4). Based on the finds in the fill from SU 029, 030, of which most once more consists of coarse household pottery, it is possible to place this structure in the Early Iron Age. However, since SU 029, 030 has only been partially excavated, it is unclear as to whether this was a construction element of the square dugout SU 031, 032 or an entirely independent structure, of which the entire ground plan remains unknown.

East along SU 031, 032 there are several *post holes*, so it is almost certain that a smaller above-ground structure was located 3 m south-east along SU 031, 032, which had a regular quadratic layout, and sides that were 2.5 m long (Fig. 5). Pottery was found in the fill of the holes, and its facture and shapes correspond to the remaining pottery of the developed phase of the Early Iron Age from this settlement,

otpadna jama, već da je zatrpan prirodnim putem, vjerojatno tijekom dužeg razdoblja. Materijal koji je pronađen u objektu mogao bi potjecati iz vremena korištenja objekta ili biti nanesen s okolnim materijalom tijekom postupna zatrpavanja. Ta činjenica potvrđuje da objekti tog tipa nisu izvorno bili namijenjeni saniranju naseobinskog otpada, a činjenica da ni sekundarno nisu iskorišteni u tu svrhu možda govori da određeni dijelovi naselja ili naselje u cjelini nisu živjeli dovoljno dugo da bi se svi ukopani objekti iskoristili na taj način.

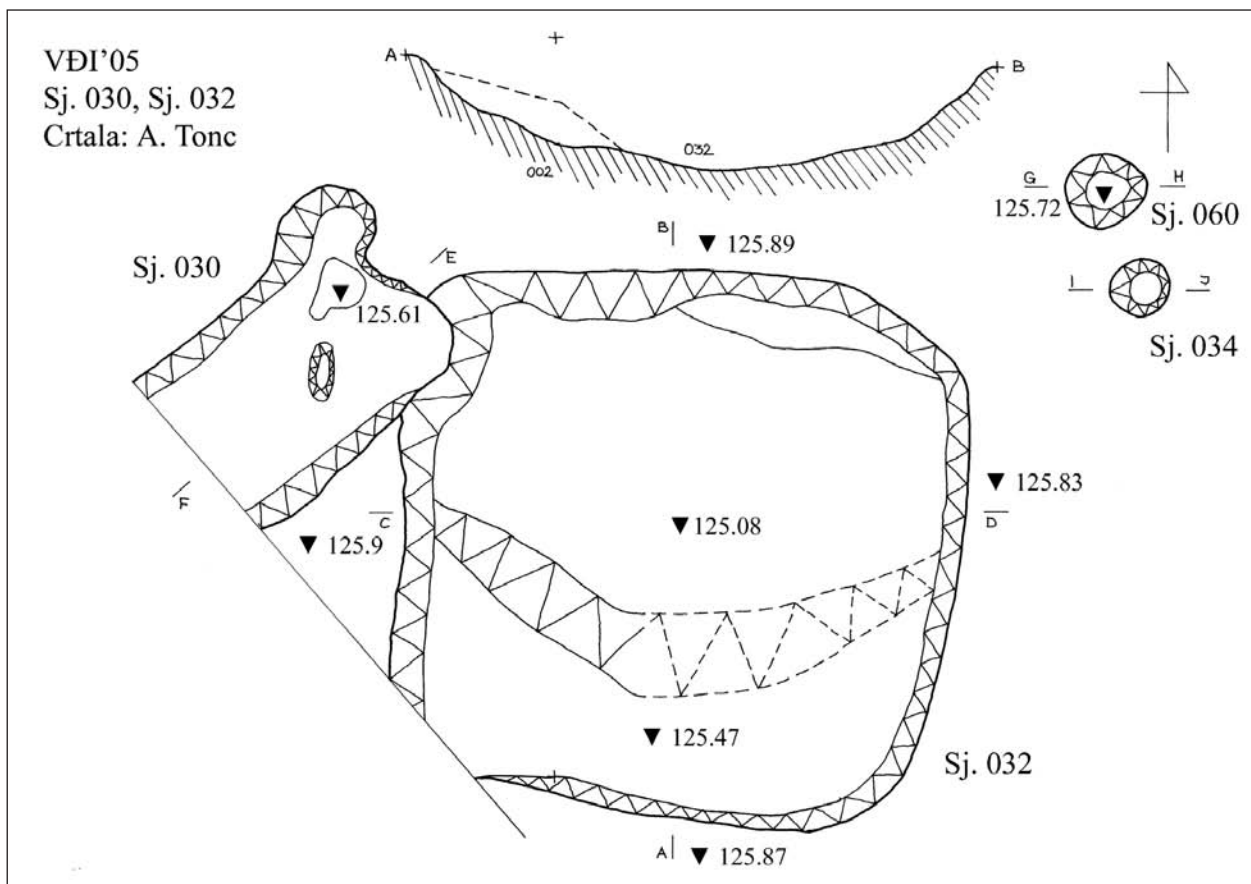
Kvadratni ukopani objekt s okolnim objektima

Kvadratna zemunica oblik je koji se u strukturi istraženoga dijela naselja Virovitica-Đurađ istok javlja samo jedanput. SJ 031, 032 nalazi se u □ L+M/14+15, uza sam rub trase zaobilaznice (plan 1, sl. 4, T. 9–15). Sastoji se od dubljega dijela na sjeveru i plićege dijela u obliku stepenice na jugu. Objekt je kvadratnoga tlocrta zaobljenih uglova, čije su stranice duge 3,7 m. Dubina objekta u dubljemu je dijelu iznosila oko 0,75 m, u plićeemu oko 0,40 m.

Takvi objekti u naseljima starijega željeznog doba u Podravini nisu nepoznanica. U Zbelavi su analizirana barem dva istovrsna objekta, a analogije im

which confirms that the above-ground structure was contemporary with the rest of the settlement. It may be assumed that it served as some type of utility or ancillary structure next to the square dugout SU 032, with which it would then form a harmonious unit. It is possible that some type of fence was connected to the northern corner of the square structure, running north-west in an irregular line. The distance between the posts, which had a diameter of 0.40-0.50 m, is 2-3.5 m. Since they are close to the edge of the square dugout, the post holes SU 060 and SJ 034 (Fig. 5) may constitute the remains of the fortified above-ground construction of SU 032 itself.

It is interesting that the post holes inside the Đurađ-East settlement appear most frequently in the vicinity of the larger below-ground structures. Besides the group next to rectangular dugout SU 032 analyzed above, a series of post holes extends from the north-east edge of dugout SU 036 onward in the north-east direction (Fig. 5, Pl. 17: 1-2). It is possible that this was some type of fence. On the other hand, if post SJ 056 is attributed to the above-ground construction of the dugout and due consideration is given to the fact that the distance



Slika 4. Tlocrt kvadratnog ukopanog objekta SJ 031, 032 iz Sv. Đurda (Arhiv arheoloških iskopavanja).

Figure 4. Layout of square below-ground structure SJ 031, 032 from Sveti Đurađ (Excavation archives).

pronalazimo posvuda u istočnoalpskom i zapadno-panonskom području, posebno u kasnohalštatskom i ranolatenskom vremenu (Kovačević 2008: 51; 2009: 174-180). Zemunica SJ 032 bila je zapunjena tamnosivo-smeđom zemljom, s dosta keramike vidljive već prilikom poliranja i definiranja objekta. Kvadratna zemunica iz Sv. Đurđa nije značajna samo kao karakterističan element strukture samog naselja u Sv. Đurđu, već njezina važnost proizlazi iz raznovrsnosti i broja pokretnih nalaza iz njezine zapune. U njoj je pronađeno više od 500 ulomaka keramike, od kojih će ovdje biti predstavljeni najznačajniji (T. 9-15). Upravo ti nalazi, kao i nalazi iz većih objekata SJ 077, 078 te iz SJ 035, 036, umnogome su pomogli pri kulturnom i kronološkom određenju naselja starijega željeznog doba Virovitica-Đurađ istok.

Uza sjeverozapadni ugao objekta SJ 032 nalazi se manji, plići objekt SJ 029, 030, koji je svojim sjeveroistočnim rubom "sjeo" na rub kvadratne zemunice (sl. 4). Prema nalazima iz zapune SJ 029, 030, od kojih većina ponovo pripada grubljoj kućnoj keramici, moguće je i taj objekt pripisati razdoblju starijega željeznog doba. No kako je SJ 029, 030 djelomično istražen, nejasno je radi li se tu o nekom konstrukcijskom elementu kvadratne poluzemunice SJ 031, 032 ili o sasvim neovisnu objektu, čiji nam je cijeli tloris ostao nepoznat.

Istočno uza SJ 031, 032 nalazi se više *rupa od stupova*, pa je gotovo sigurno da se 3 m jugoistočno uza SJ 031, 032 nalazio manji nadzemni objekt, pravilna kvadratnoga tlocrta, čije su stranice duljine 2,5 m (sl. 5). U zapuni rupa od stupova pronađena je keramika koja po fakturi i oblicima odgovara ostaloj keramici razvijene faze starijega željeznog doba iz ovoga naselja, što potvrđuje istodobnost nadzemnog objekta s ostatkom naselja. Može se pretpostaviti da je služio kao neka vrsta gospodarskog ili pomoćnog objekta uz kvadratnu poluzemunicu SJ 032, s kojom bi onda činio skladnu cjelinu. Moguće je da se na sjeverni ugao kvadratnoga nadzemnog objekta nadovezivala i neka vrsta ograde koja u nepravilnoj liniji ide prema sjeverozapadu. Razmak između stupova, koji su promjera 0,40-0,50 m, iznosi 2-3,5 m. Kako su blizu ruba kvadratne zemunice, rupe od stupova SJ 060 i SJ 034 (sl. 5) vjerojatno bi mogle predstavljati ostatak uzemljenja nadzemne konstrukcije same SJ 032.

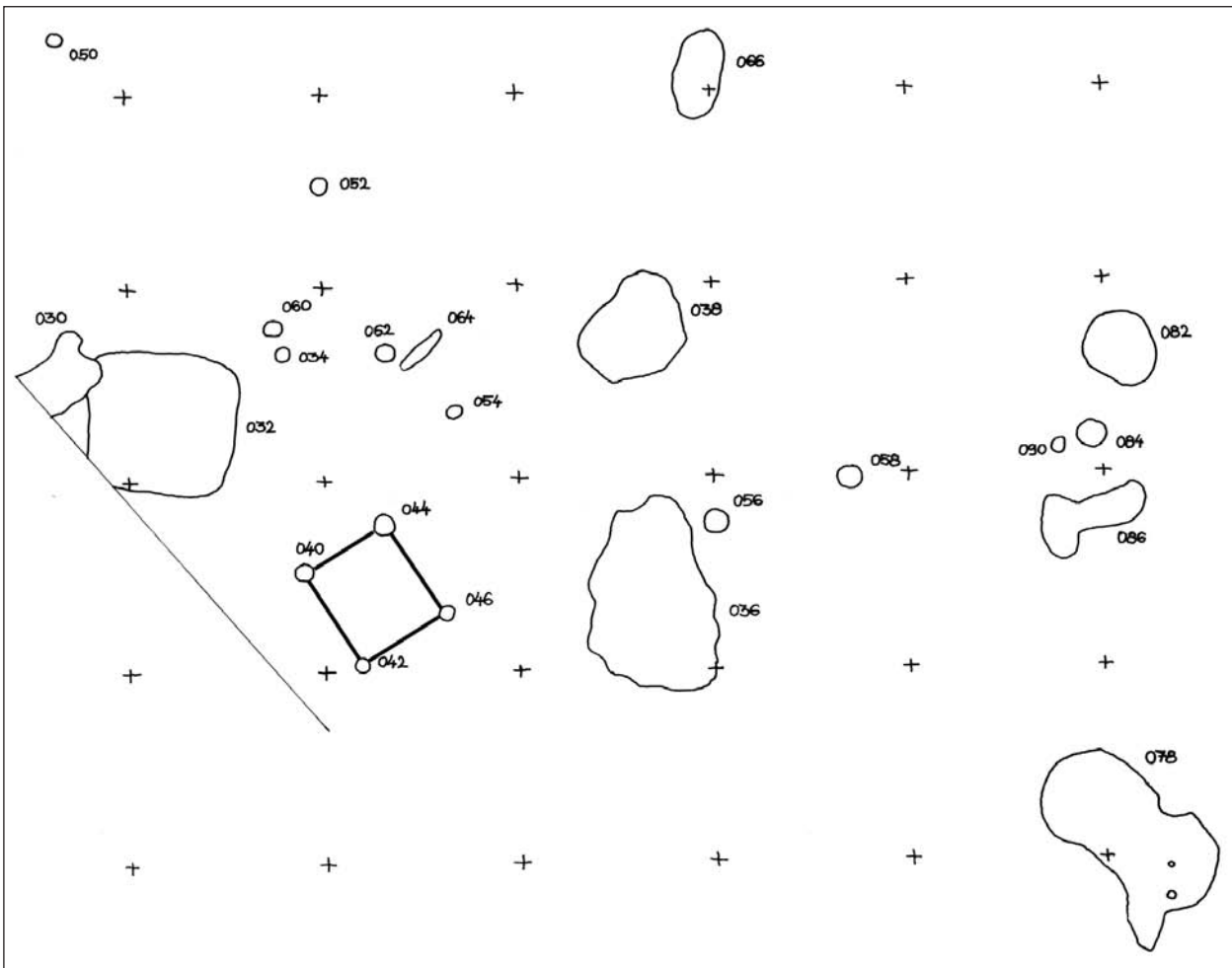
Zanimljivo je da se rupe od stupova unutar naselja Đurađ-istok javljaju najčešće u okolici većih ukopanih objekata. Osim upravo analizirane skupine uz pravokutnu zemunicu SJ 032 jedan niz rupa od stupova pruža se od sjeveroistočnoga ruba zemunice SJ 036 dalje u smjeru sjeveroistoka (sl. 5, T. 17: 1-2). Moguće je da se radi o nekoj vrsti ograde. No s druge strane, ako stup SJ 056 pripišemo nadzemnoj konstrukciji zemunice i uvažimo činjenicu da razmak između stupova SJ 058 i SJ 084 iznosi

between posts SU 058 and SU 084 is 6 m, the assumption of a fence does not appear very probable. East of square dugout SU 032 there is also SU 037, 038 at □ O/15+16 (ground plan 1, Fig. 5, Pl. 16). This is a below-ground structure with irregular circular layout and dimensions of 2.8 × 2.6 m, and greatest depth of 0.59 m. It was filled with darker, grey-brown soil and some pottery, daub and stones. In the morphological sense, the structure consists of a deeper and more spacious room with steeper walls to the north-east, and a shallower and smaller room to the south-west. It is possible that the structure was entered from the south-west, and that the shallower room was some sort of entry ramp or stair. In this case, it was probably some type of ancillary or work space.

Pits

Pits of various dimensions and layouts appeared at the Virovitica-Đurađ East settlement, and they may have served to dispose of the settlement's waste. Although the existence of this structure type has been recorded, one may not conclude that it is notably frequent, at least not as far as the examined portion of the settlement is concerned. Moreover, almost all finds are from the larger below-ground structures. Most – but certainly not all – served as waste pits at some point. Therefore, the most likely hypothesis is that during one phase of the settlement's existence, after the cessation of their original function, these larger below-ground structures may have assumed a role which would have otherwise been relegated to smaller waste pits. The other possibility is that the waste pits were located in some other, unexplored part of the settlement. Worth consideration also is the possibility that some of the smaller pits were initially excavated as clay-pits, meaning they served as a source of raw materials for the production of the ceramics so necessary to any settlement. Since the periphery of the settlement was excavated at Sveti Đurađ, such conjecture seems even more logical. Nonetheless, it could not be confirmed in the course of research.

Whether or not SU 081, 082 at S-IV, □ Q+R/15 should also be classified as a waste pit remains unclear. This is a shallower pit with circular layout and dimensions of 1.9 × 1.7 m, while its greatest depth is 0.31 m (ground plan 1, Pl. 17: 5-8). It is precisely because of the dimensions and the shallow depth that it may have served as some sort of semi-excavated ancillary structure, but this could not be confirmed with any certainty. It was filled with dark-grey soil in which, it would appear, there was a considerable amount of organic remains (which were, to be sure,



Slika 5. Dio naselja starijega željeznog doba s kvadratnim ukopanim objektom SJ 031, 032 i objektima u neposrednoj blizini (Arhiv arheoloških iskopavanja).

Figure 5. Part of Early Iron Age settlement with square below-ground structure SU 031, 032 and structures in immediate vicinity (Excavation archives).

6 m, pretpostavka o ogradi možda se i ne čini toliko vjerojatna.

Istočno od kvadratne zemunice SJ 032 nalazi se i SJ 037, 038 u □ O/15+16 (plan 1, sl. 5, T. 16). To je ukopani objekt nepravilno kružnoga tlocrta, dimenzija 2,8 × 2,6 m, najveće dubine do 0,59 m. Zapunjen je bio tamnijom, sivo-smeđom zemljom s nešto keramike, lijepa i kamena. U morfološkom smislu objekt se sastoji od dubljeg i prostranijeg prostora strmijih stijenki na sjeveroistoku te plićege i manjega na jugozapadu. Moguće je da se upravo s jugozapada ulazilo u objekt te da plići prostor predstavlja neku vrstu ulazne rampe ili stepenice. U tom slučaju vjerojatno se radi o nekoj vrsti pomoćnog ili radnog objekta.

Jame

U naselju Virovitica-Đurađ istok javljaju se jame različitih dimenzija i tlocrta koje su mogle poslužiti i za saniranje otpada iz naselja. Iako bilježimo postojanje tog tipa objekta, ne bi se moglo zaključiti,

no longer there at the time of research), as well as a considerable quantity of daub and some ceramics and stones.

The other structure we wish to present is near SU 081, 082. This is a pit with oblong, irregular layout, SU 085, 086 at S-III, □ Q+R/14 (ground plan 1, Pl. 17: 3-4). The length of pit structure SU 086 is 2.8 m, while its width varies between 0.9 and 1.7 m. SU 086 is also a shallowly embedded structure, with a maximum depth of 0.47 m and an uneven bottom. Given its irregular layout, which consists of narrower and wider parts, the possibility that it is two structures excavated close to one another should not be discounted. However, there is no basis for such a hypothesis in the field documentation. SU 086, like the neighbouring pit SU 082, was filled with almost identical dark-grey soil, which in the case of SU 086 contained some coarse household ceramics and stones, making the hypothesis on waste pits all the more probable.

barem što se tiče istraženoga dijela naselja, da je on izrazito čest. Štoviše, gotovo svi nalazi potječu iz većih ukopanih objekata. Većina njih – ali nikako svi – u jednome su trenutku poslužili kao otpadne jame. Stoga je vjerojatnija pretpostavka da su u jednoj fazi trajanja naselja, nakon prestanka izvorne funkcije, upravo ti veći ukopani objekti možda preuzeli ulogu koju bi inače nosio niz manjih otpadnih jama. Druga mogućnost je da su otpadne jame bile smještene u nekome drugom, neistraženu dijelu naselja. Vrijedna razmatranja jest i mogućnost da su neke od manjih jama na početku iskopane kao gliništa, odnosno da su poslužile kao izvor sirovine za izradu keramičkih predmeta koja je nužna svakom naselju. Kako je kod Sv. Đurđa istražen rubni dio naselja, takva pretpostavka čini se još logičnijom. No tijekom istraživanja ta se pretpostavka nije dala potvrditi.

Nejasno je treba li među otpadne jame uvrstiti i SJ 081, 082 u S-IV, □ Q+R/15. To je pliča jama nepravilno kružnoga tlocrta, dimenzija 1,9 × 1,7 m, a najveća dubina doseže 0,31 m (plan 1, T. 17: 5–8). Upravo zbog dimenzija i male dubine ona je mogla poslužiti i kao neka vrsta poluukopanoga pomoćnog objekta, ali to se nije moglo sa sigurnošću utvrditi. Zapunjena je bila tamnosivom zemljom u kojoj je, izgleda, bilo dosta organskih ostataka (kojih u trenutku istraživanja, dakako, više nije bilo), dosta lijepa, nešto keramike i kamena.

Drugi objekt koji želimo predstaviti nalazi se u blizini SJ 081, 082. To je jama izdužena, nepravilna tlocrta SJ 085, 086 u S-III, □ Q+R/14 (plan 1, T. 17: 3–4). Dužina jamskog objekta SJ 086 doseže 2,8 m, dok mu širina varira između 0,9 i 1,7 m. I SJ 086 plitko je ukopan objekt, dubina mu doseže maksimalnih 0,47 m te je imao neravno dno. S obzirom na nepravilan tlocrt, koji čini jedan už i jedan širi dio, ne treba odbaciti mogućnost da se zapravo radi o dva blizu postavljena ukopana objekta. No za takvu tezu u terenskoj dokumentaciji ne nalazimo uporišta. I SJ 086, kao i susjedna jama SJ 082, bila je zapunjena gotovo identičnom tamnosivom zemljom, u kojoj je u slučaju SJ 086 nađeno nešto grublje kućne keramike i kamena, pa je pretpostavka da je riječ o otpadnim jamama tim vjerojatnija.

POKRETNI NALAZI S LOKALITETA VIROVITICA-ĐURAD ISTOK

Keramika

Najbrojnija skupina nalaza iz Sv. Đurđa pripada ulomcima keramičkih posuda.⁶ Najbogatije tom

MOVABLE FINDS FROM THE VIROVITICA- ĐURAD EAST SITE

Pottery

The most numerous group of finds from Sveti Đurađ are the potsherds.⁶ The square dugout SU 031, 032 and the dugout with irregular layout, SU 077, 078 (ground plan 1, Fig. 2 and 4) yielded the most such finds, both with over 500 potsherds. Among the pottery finds the most common is coarse household ware.

In terms of frequency, two forms stand out in particular. The first type consists of simple pots with elongated bodies and vertical, lightly drawn rims, which in previous analysis – according to the typological pottery table for the settlement in Zbelava – has been designated as type A1 (Kovačević 2008: Fig. 8, 56) (Pl. 1: 3; Pl. 4: 1-2; Pl. 6: 6; Pl. 11: 2, etc.). As shown, they also come in sub-types without any ornaments or functional/decorative additions, but they also appear in variants with applications, such as tongue-shaped small handles, wart-like protrusions or horizontally articulated bands below the rim or at the vessel's widest section. Decorative elements, if any, are generally in the upper third of the pot. Articulated applied bands are in fact the most frequent decorative element on type A1 pots in the Đurađ-East settlement. A notable exception is a type A1 pot decorated with a very shallow horizontal cannellure immediately below the edge, which is connected to the same type of vertical cannellure (Pl. 3: 4). Type A1 has often been the object of consideration and analysis in previous works on the material culture of the Early Iron Age in Podravina, so there is no need for repetition here (Kovačević 2007; 2008; 2009). It bears emphasis that in the Virovitica-Đurađ East settlement, the type A1 pot not only appears but is in fact one of the most dominant forms. Even though the presence of this type has been recorded at sites of the early phase of the Early Iron Age in Podravina (such as Torčec, Kovačević 2009: Pl. 1: 3-4) and beyond, it would appear in the Podravina it became more numerous as the late Hallstatt period approached. The great popularity of this type is shown quite well within the late Hallstatt settlement in Zbelava (Kovačević 2007: Pl. 1: 1; Pl. 2: 2; Pl. 3: 9), but also at other related and coterminous settlements of the wider area (*Ibid.* 57-59).

The second most numerous type is the bowl with indrawn rim, with ornamented and unornamented variants (Pl. 2: 7; Pl. 6: 2-5, 7; Pl. 8: 2; Pl. 13: 4, etc.). This bowl type was also encountered frequently

⁶ Nalazi s lokaliteta Virovitica-Đurađ istok nakon obrade bit će pohranjeni u Gradskom muzeju Virovitica.

⁶ Finds from the Virovitica-Đurađ East site will be stored in the Virovitica Town Museum after analysis.

vrstom nalaza bile su kvadratna zemunica SJ 031, 032 i zemunica nepravilna tlocrta SJ 077, 078 (plan 1, sl. 2 i 4), obje s više od 500 keramičkih ulomaka. Među keramičkim nalazima najčešće je grubo kućno posuđe.

Dva se oblika po učestalosti posebno izdvajaju. Prvi su tip jednostavni lonci izdužena tijela i vertikalna, blago uvučena ruba, koji su u dosadašnjoj obradi – prema tipološkoj tabeli keramike naselja u Zbelavi – označavani kao tip A1 (Kovačević 2008: sl. 8, 56) (T. 1: 3; T. 4: 1–2; T. 6: 6; T. 11: 2 itd.). Kao što se vidi, oni dolaze i u podtipu bez ikakvih ukrasa ili funkcionalno-dekorativnih dodataka, ali javlja se i varijanta s aplikacijama, poput jezičastih drškica, bradavica ili horizontalnih raščlanjenih traka ispod ruba ili na najširem dijelu posude. Ukrasni element, ako postoji, u pravilu se nalazi u gornjoj trećini lonca. Upravo su raščlanjene aplicirane plastične trake najčešći dekorativni element na tipu A1 lonca u naselju Đurađ-istok. Kao iznimku vrijedi istaknuti primjerak lonca tipa A1 koji je ukrašen vrlo plitkom vodoravnom kanelurom neposredno ispod ruba, na koju se nadovezuje ista takva okomita kanelura (T. 3: 4). Tipu A1 često su bila usmjerena razmatranja i analize u dosadašnjim radovima o materijalnoj kulturi starijega željeznog doba u Podravini, pa njih ovdje nema potrebe ponavljati (Kovačević 2007; 2008; 2009). Vrijedi naglasiti da se i unutar naselja Virovitica-Đurađ istok lonac tipa A1 ne samo javlja nego je i jedan od najdominantnijih oblika. Iako je prisutnost toga tipa zabilježena na lokalitetima rane faze starijega željeznog doba u Podravini (kao u Torčecu, Kovačević 2009: T. 1: 3–4) i šire, čini se da je i u Podravini sve brojniji kako se bližimo kasnohalštatskom razdoblju. Velika omiljenost toga tipa vrlo je dobro iskazana unutar kasnohalštatskog naselja u Zbelavi (Kovačević 2007: T. 1: 1; T. 2: 2; T. 3: 9), ali i na drugim srodnim i istodobnim naseljima širega područja (*ibid.* 57–59).

Tip koji po brojnosti zauzima drugo mjesto jest zdjela uvučena ruba, u ukrašenoj i neukrašenoj varijanti (T. 2: 7; T. 6: 2–5, 7; T. 8: 2; T. 13: 4 itd.). I s tom vrstom zdjela često smo se susretali prilikom analize nalaza iz podravske naselja starijega željeznog doba (tip B1b u Zbelavi ili Torčecu, Kovačević 2008: T. 1: 5; T. 2: 7; T. 4: 10; 2009a: T. 2: 4; T. 3: 7–10; T. 4: 3). Zdjela uvučena glatka ruba među najčešćim je oblicima keramičkih posuda u velikoj većini naselja starijega željeznog doba na širem području, pa tako i u Podravini. Zato njihova brojnost u naselju u Sv. Đurđu ne iznenađuje.

Zdjelama s turbanastim rubom posvećeno je više pozornosti u radu koji analizira keramičke nalaze iz naselja u Torčecu (Kovačević 2009). U naselju u Sv. Đurđu ne javljaju se često; među materijalom nalazimo dva primjerka ukrašena vrlo plitkim,

during analysis of finds from the Early Iron Age settlements of Podravina (type B1b in Zbelava or Torčec, Kovačević 2008: Pl. 1: 5; Pl. 2: 7; Pl. 4: 10; 2009a: Pl. 2: 4; Pl. 3: 7–10; Pl. 4: 3). The bowl with smooth inwardly drawn rim is among the most common forms of ceramic vessel in the vast majority of Early Iron Age settlements in the wider region, including Podravina. So their high numbers in the settlement in Sveti Đurađ comes as no surprise.

Bowls with turban-shaped rims have been accorded more attention in the work which analyzes pottery from the settlement in Torčec (Kovačević 2009). They do not appear quite often in the settlement in Sveti Đurađ. Among the materials there are two examples decorated with very shallow, diagonal cannelures from dugout SU 077, 078 and pit SU 081, 082 (Pl. 6: 3; Pl. 17: 5), while a somewhat more prominent ornament can be found on the example from SU 031, 032 (Pl. 13: 4). Not one of these three examples has markedly deep fluting with sharp edges, so they can rather be attributed to pseudo-turban-shaped or “false” turban-shaped bowls with inwardly drawn rims, as they were called by R. Smolnik and C. Dobiat, and also in more recent analyses of materials from the territory of Kleinklein by A. Weihs (Smolnik 1994; Dobiat 1980; Weihs 2003: 219).

Cone-necked pots are among the more prominent representatives of the Early Iron Age in north-west Croatia, and throughout the entire eastern Hallstatt sphere. They constitute a major form in the ceramography of the Hallstatt culture, and predecessors to it can be found in Late Bronze Age examples, such as pots from the Delovi-Grede I settlement near Koprivnica or from Blizna near Jakopovec (Bekić 2006: 109; Marković 1984: 295, Fig. 2), which according to C. Dobiat's classification would belong to the basic type or type 1 of conical-necked pots, the use of which continued far into the Early Iron Age (Dobiat 1980: 71). The appearance of the richly ornamented examples of these vessels from the graves in Martijanec and Kaptol is particularly impressive. Also from the Požega Valley are the examples from the lowland settlement of Gložđe, near Pleternica, in which there are also examples of type A1 pots and vessels often ornamented with functional/decorative additions (Potrebica 2008: 110; 2003: Pl. II, V; Vejvoda & Mirnik 1971: Pl. III: 4–6, 8; Pl. VI: 10; Vinski-Gasparini 1961: Pl. V, Pl. VI). But conical-necked pots decorated with meanders or animal heads were only very rarely found in the Early Iron Age settlements of Podravina, which have already been thoroughly analyzed elsewhere (Kovačević 2005; 2009). This certainly underlines the differences between grave pottery, i.e., pottery meant for funeral rites, and pottery for everyday use, which normally exhibited coarser rendering. Not one of the conical-

kosim kanelurama iz zemunice SJ 077, 078 i jame SJ 081, 082 (T. 6: 3; T. 17: 5), dok nešto izraženiji ukras nosi primjerak iz SJ 031, 032 (T. 13: 4). Nijedan od ta tri primjerka nema izrazito duboke kanelure oštarih rubova, pa ih prije možemo pripisati pseudoturbanastim ili "lažnim" turbanastim zdjelama uvučena ruba, kako su ih nazvali R. Smolnik i C. Dobiat, a u novijim obradama materijala s područja Kleinkleina i A. Weihs (Smolnik 1994; Dobiat 1980; Weihs 2003: 219).

Među izrazite predstavnike starijega željeznog doba u sjeverozapadnoj Hrvatskoj, ali i u cijelom istočnom halštatskom krugu, pripadaju lonci stožasta vrata. Važan su oblik u keramografiji halštatske kulture, a prethodnike im nalazimo u kasnobrončanodobnim primjercima, poput lonaca iz naselja Delovi-Grede I kod Koprivnice ili iz Blizne kod Jakopovca (Bekić 2006: 109; Marković 1984: 295, sl. 2), koji bi prema podjeli C. Dobiata pripadali osnovnomu tipu ili tipu 1 lonaca stožasta vrata, čija se upotreba nastavlja duboko u starije željezno doba (Dobiat 1980: 71). Posebno dojmljivo izgledaju bogato ukrašeni primjerci tih posuda iz grobova u Martijancu i Kaptolu. Iz Požeške kotline dolaze i primjerci iz nizinskoga naselja Gložđe kod Pleternice, u kojemu nalazimo i primjerke lonca tipa A1 te posude koje je često ukrašeno funkcionalno-dekorativnim dodacima (Potrebica 2008: 110; 2003: T. II, V; Vejvoda & Mirnik 1971: T. III: 4-6, 8; T. VI: 10; Vinski-Gasparini 1961: T. V, T. VI). No lonci stožasta vrata ukrašeni meandrima ili životinjskim glavicama vrlo se rijetko nalaze u podravskim naseljima starijega željeznog doba koja su temeljito analizirana na drugom mjestu (Kovačević 2005; 2009). To sigurno podcrtava razlike između grobljanske keramike, odnosno keramike namijenjene pogrebnoj kulturi, i svakodnevnoga keramičkoga posuđa, obično grublje izrade. Nijedan među virovitičkim loncima stožasta vrata nije ukrašen meandrom, a on se, općenito uzevši, i ne pojavljuje na nasebinskoj đurđanskoj keramici. Naglasimo i da U. Brosseder ističe da je iznimna i složena ornamentika na posuđu (poput meandra) vezana praktički isključivo uz iznimno bogate halštatske grobove (2004: 312).

U Sv. Đurđu pronađeno je više keramičkih fragmenta koji su vjerojatno sastavni dijelovi lonaca sa stožastim vratom (T. 9: 3; T. 10: 4; T. 11: 5; T. 15: 1 itd.). Među njima nekoliko je reprezentativnih primjeraka koji, istodobno, pripadaju među najdojmljivije primjerke keramičkoga posuđa na lokalitetu uopće (T. 13: 1; T. 16: 1).

Lonac iz kvadratne zemunice SJ 031, 032 rekonstruiran je u crtežu (T. 13: 1). Posuda je izrađena od pročišćene gline koja je vrlo dobro pečena te ima

necked pots from Virovitica has meander ornamentation, and the latter does not, considered generally, appear on the Đurađ settlement pottery. Also notable is U. Brosseder's emphasis on the fact that exceptional and complex ornamentation on pottery (such as meanders) is associated almost exclusively with exceptionally rich Hallstatt graves (2004: 312).

Several ceramic fragments were found in Sveti Đurađ which were probably pieces of conical-necked pots (Pl. 9: 3; Pl. 10: 4; Pl. 11: 5; Pl. 15: 1, etc.). Among them are several typical examples which are simultaneously among the most impressive examples of ceramic vessels at the site in general (Pl. 13: 1; Pl. 16: 1).

The pot from square dugout SU 031, 032 was reconstructed in a sketch (Pl. 13: 1). The vessel was made of refined clay which was fired well, and it has a black smoothed surface. It has a prominent, wide upper body with a shoulder that is clearly divided from the conical neck by a horizontal flute. The neck light transitions to the outwardly drawn rim, no fragments of which have been preserved. The body narrows toward the relatively narrow base in a slightly concave line. Rows of metopically arranged wide flutes descend from the shoulder in diagonal bundles. A fragment with similar ornamentation on the upper part of the body (Pl. 11: 7) was found inside the same structure. Based on its facture and colour, and the features of the ornamentation, it does not belong to the pot on Pl. 13, rather it was probably part of another, obviously very similar conical-necked pot.

Such partial fluting of the shoulders on conical-necked pots is one of the fundamental features of the older horizon of the necropolis in Kleinklein, i.e., phase Ha C, which has been additionally confirmed by finds from the Masser-Kreuzbauer necropolis dated to phase Ha C1b (Bernhard & Weihs 2003: Pl. 10: 1; Pl. 23: 1; Pare 1999; Dobiat 1980: 118, Pl. 8: 1; Pl. 70: 3). B. Teržan distinguished the fluted ornament, which she characterized as a "post-Bessarabian novelty" in the Danubian Basin and the east Alpine-Pannonian zone, in its various compositions as a feature of Poštela horizon II (1990: 32). This type of ornament can be found precisely on pots with high conical necks, one of the most important pottery forms of the later Hallstatt in the Poštela settlement. The onset of horizon II has been placed at the end of the eighth and beginning of the seventh centuries BC (Teržan 1990: Pl. 10: 13; Pl. 11: 4, 5). Judging by the graphic reconstruction of the vessel, in morphological terms the pot from square structure SU 032 can be classified between Dobiat's basic type 1 and very articulated type 4, to which it appears closer, particularly due to the concavity of the lower part of the body (Dobiat 1980: 67). While the basic type of conical-

crnu poliranu površinu. Naglašena je i široka gornjega dijela tijela s ramenom koje je vodoravnom kanelurom jasno odvojeno od stožasta vrata. Vrat lagano prelazi u izvučen rub, fragmenti kojega nisu očuvani. Tijelo se u lagano konkavnoj liniji sužava prema dnu, koje je relativno usko. S ramena se u kosim snopovima spuštaju nizovi metopno raspoređenih širih kanelura. Unutar istog objekta pronađen je jedan ulomak sa sličnim ukrasom na gornjem dijelu tijela (T. 11: 7). Prema fakturi i boji, kao i po značajkama ukrasa, on ne pripada loncu na T. 13, već je vjerojatno dio drugog, očito vrlo slična lonca stožasta vrata.

Takvo parcijalno kaneliranje ramena na loncima stožasta vrata jedna je od temeljnih odlika starijega horizonta nekropole u Kleinkleinu, odnosno stupnja Ha C, što potvrđuju i novi nalazi iz groblja Masser-Kreuzbauer datirani u Ha C1b (Bernhard & Weihs 2003: T. 10: 1; T. 23: 1; Pare 1999; Dobiat 1980: 118, T. 8: 1; T. 70: 3). B. Teržan kanelirani ornament, koji obilježava kao "postbasarapsku novost" u Podunavlju i istočnoalpsko-panonskom području, u raznim kompozicijama izdvaja kao značajku II. horizonta Poštela (1990: 32). Tu vrstu ukrasa često nalazimo upravo na loncima visoka stožasta vrata, jednog od najvažnijih keramičkih oblika razvijenoga halštata u naselju Poštela. Početak horizonta II postavlja se u kraj 8. i početak 7. st. pr. Kr. (Teržan 1990: T. 10: 13; T. 11: 4, 5). Pouzdamo li se u grafičku rekonstrukciju posude, morfološki gledano lonac iz kvadratnog objekta SJ 032 možemo postaviti između Dobiatova osnovnoga tipa 1 i jako profilirana tipa 4, kojemu se čini bliži, posebno zbog konkavnosti donjega dijela tijela (Dobiat 1980: 67). Dok se temeljni tip lonca sa stožastim vratom javlja još u kasnome brončanom dobu i u nekropoli Kleinklein traje cijelo vrijeme, tip 4 bio bi karakterističan za srednji i kasni horizont nekropole (*ibid.* 70). Slijedom toga kanelirane primjerke iz naselja Virovitica-Đurađ istok relativnokronološki datiramo u razvijeni Ha C ili na početak Ha D.

Drugi lonac stožasta vrata koji je uspješno rekonstruiran u crtežu (T. 16: 1) potječe iz većega, plitko ukopana objekta nepravilno kružnoga tlocrta, iz SJ 037, 038 u □ O/15 (plan 1, sl. 5). Objekt se nalazi istočno od kvadratne zemunice SJ 032 i u svom izvornom obliku mogao je biti korišten kao neka vrsta pomoćnog ili radnog objekta. Oba lonca stožasta vrata prate drugi nalazi, koji su u prethodnim radovima koji tematiziraju sličnu problematiku (Kovačević 2007; 2008; 2009) prepoznati kao tipični oblici kućne keramike u naseljima starijega željeznog doba u Podravini: zdjele uvučena ruba (T. 13: 4; T. 16: 4-5), lonci tipa A1 (T. 11: 2; T. 16: 2), polukuglaste šalice (T. 12: 4; T. 16: 3), kao i dekorativni

necked pot appeared already in the Late Bronze Age and was present the entire time in the Kleinklein necropolis, type 4 was characteristic of the middle and late horizon at the necropolis (*Ibid.* 70). Therefore, we have given the fluted examples from the Virovitica-Đurađ East settlement a relative chronological dating from the later Ha C to the beginning of Ha D.

The other conical-necked pot, successfully reconstructed in a sketch (Pl. 16: 1), is from a larger structure, less deeply embedded, with an irregular circular layout, from SU 037, 038 at □ O/15 (ground plan 1, Fig. 5). The structure is east of square dug-out SU 032 and in its original form it may have been used as some type of ancillary or work facility. Both conical-necked pots are accompanied by other finds (covered in a previous work dealing with a similar topic: Kovačević 2007; 2008; 2009) which have been recognized as typical forms of household pottery in Early Iron Age settlements in Podravina: bowls with inwardly drawn rims (Pl. 13: 4; Pl. 16: 4-5), type A1 pots (Pl. 11: 2; Pl. 16: 2), semi-spherical cups (Pl. 12: 4; Pl. 16: 3), as well as decorative systems in which various applied elements predominate – articulated bands, wart-shaped protuberances and tongue-shaped handles (Pl. 9: 8; Pl. 10: 6-7, 9; Pl. 11: 2, 6; Pl. 12: 3). The pot from SU 037,038 has an exceptionally biconical body. It was made of well-baked light-brown clay, smoothed on the outside. The lower part of the body descends concavely toward the flat base, the shoulder is high and prominently biconical and it smoothly transitions into a narrow conical neck. The transition from shoulder to neck is indicated by two engraved lines, among which there is a series of regular, circular depressions. This horizontal row is connected on the lower side with a shallowly-engraved, almost scratched, clumsily rendered ornament consisting of multiple zigzag lines. If this ceramic vessel is compared to the examples from the necropolis in Kleinklein, it may be concluded that the pot from SU 037, 038 is closest to Dobiat's conical-necked pot type 4, which we have confirmed to be typical of the younger phase of the necropolis, while the ornament design with simple engraved lines and rows of stippled dots can already be found in the oldest horizon in Kleinklein (Brosseder 2004: Abb. 80, Ia; Dobiat 1980: 67, Pl. 109: 1). Concave lower bodies, like the high and narrow conical neck, are among the more prominent features on such pots, both in the later graves in Kleinklein and in phase III at Poštela (Teržan 1990: Pl. 60: 1, 2).

Engraving in combination with stippling can be found in Poštela horizon III, but also during the entire duration of the settlement, and also at the necropolis in Kleinklein (Smolnik 1994: 82; Teržan 1990: Pl. 15, 20; Dobiat 1980: Pl. 27: 4; Pl. 44: 1; Pl. 49: 4). But just engraving is one of the characteristic

sustavi u kojima očekivano prevladavaju razni aplicirani elementi – raščlanjene trake, bradavice i jezičaste drške (T. 9: 8; T. 10: 6–7, 9; T. 11: 2, 6; T. 12: 3). Lonac iz SJ 037,038 izrazito je bikonična tijela. Izrađen je od dobro pečene gline svijetlosmeđe boje te je s vanjske strane poliran. Donji dio tijela konkavno se spušta prema ravnu dnu, rame je visoko i naglašeno bikonično te glatko prelazi u vitak stožast vrat. Prijelaz između ramena i vrata naznačen je s dvije urezane linije među kojima se nalazi niz pravilnih, kružnih udubljenja. Na taj horizontalni niz nadovezuje se s donje strane plitko urezan, gotovo ugreban, nemarnije izrađen ukras višestruke cik-cak linije. Usporedi li se ta keramička posuda s primjercima iz nekropole u Kleinkleinu, može se zaključiti da je i lonac iz SJ 037, 038 najbliži Dobiatovu tipu 4 lonaca sa stožastim vratom, za koji smo ustvrdili da je tipičan za mlađu fazu nekropole, dok koncept ukrasa s jednostavnim urezanim linijama i nizovima uboda možemo pronaći već u najstarijem horizontu grobova u Kleinkleinu (Brosseder 2004: Abb. 80, Ia; Dobiat 1980: 67, T. 109: 1). Konkavni donji dio tijela, kao i visok i vitak stožast vrat, na takvim loncima jedno je od izrazitih obilježja, kako kasnijih grobova u Kleinkleinu tako i III. faze Poštela (Teržan 1990: T. 60: 1, 2).

Urezivanje u kombinaciji s ubadanjem nalazimo u III. horizontu Poštela te tijekom cijeloga trajanja naselja, ali i nekropole u Kleinkleinu (Smolnik 1994: 82; Teržan 1990: T. 15, 20; Dobiat 1980: T. 27: 4; T. 44: 1; T. 49: 4). No samo urezivanje jedna je od karakterističnih tehnika ukrašavanja koja se veže još uz kulturu polja sa žarama, pa se javlja već u I. horizontu Poštela, kao i u 3. fazi naselja u Ormožu te u fazi Ia nekropole u Kleinkleinu, ali i unutar istodobnih štajerskih naselja, primjerice na gradini Kapfensteiner Kogel, na kojoj se halštatski horizont datira u 8 st. pr. Kr., odnosno u stupanj Ha C1a (Brosseder 2004: Abb. 80; Penz 2001: T. 8: 12; Teržan 1990: 32; Lamut 1988–1989: T. 27: 2).

Po konceptu ukrasa lonac iz SJ 037, 038 donekle je blizak loncu iz groba 1 i groba 2 tumula II na Čemernici u Kaptolu, a urezani cik-cak ukras, ponekad popraćen ubodima, rozetama i sl., javlja se i na keramici razvijenoga starijeg željeznog doba Transdanubije, primjerice u grobovima Ha C groblja Halimba-Cseres sjeverno od Balatona, kući 9 ranoga Ha D u naselju Sopron-Burgstall i drugdje (Patek 1982: Fig. 14; 1993: Abb. 71: 14; Vejvoda & Mirnik 1975: T. I: 6–8). Iako urezivanje u naselju u Sv. Đurđu nije prevladavajuća tehnika ukrašavanja, ono se povremeno pojavljuje ili samo (T. 5: 5; T. 7: 3) ili u kombinaciji s ubadanjem (T. 10: 8; T. 16: 1). Obično se radi o pravocrtnim motivima, ravnim ili cik-cak linijama te visećim trokutima ili ukrasu u obliku slova "V".

ornamentation techniques which is associated with the Urnfield culture, so it had already appeared in Poštela horizon I, and in the third phase of the settlement in Ormož and in phase Ia of the necropolis in Kleinklein, but also in contemporary settlements in Steiermark, such as the Kapfensteiner Kogel hillfort, at which the Hallstatt horizon has been dated to the eighth century BC, i.e., the Ha C1a phase (Brosseder 2004: Abb. 80; Penz 2001: Pl. 8: 12; Teržan 1990: 32; Lamut 1988-1989: Pl. 27: 2).

Based on the ornamentation design on the pot from SU 037, 038, it is to some extent similar to the pot from grave 1 and grave 2 of tumulus II at Čemernica in Kaptol, while the engraved zigzag decoration, sometimes accompanied by stippled dots, rosettes, etc., also appears on pottery of the high phase of the Early Iron Age in Transdanubia, for example in graves Ha C of the Halimba-Cseres necropolis north of Lake Balaton, house 9 of the early Ha D in the settlement of Sopron-Burgstall and elsewhere (Patek 1982: Fig. 14; 1993: Abb. 71: 14; Vejvoda & Mirnik 1975: Pl. I: 6-8). Even though engraving is the predominant ornamentation technique in the settlement in Sveti Đurađ, it occasionally appears either alone (Pl. 5: 5; Pl. 7: 3) or in combination with stippling (Pl. 10: 8; Pl. 16: 1). Normally these are linear motifs, straight or zigzag lines and hanging triangles or V-shaped ornaments.

It is worth noting that conical-necked pots also appeared in late Hallstatt Zbelava (type A6, Kovačević 2008: Fig. 8 and 9, Pl. 4: 4). Neither there nor in Sveti Đurađ do they constitute the dominant shape, but a certain continuity in development should be seen in them between the early and late phases of the Early Iron Age in Podravina.

The ceramic fragments from square dugout SU 031, 032 also include the remains of two vessels with outwardly drawn rims that are horizontally faceted on the inside. This type of ornament is typical of the end of the Late Bronze Age and early phase of the Early Iron Age in the wider, south-west Pannonian and east Alpine zone, to which the Virovitica-Đurađ East settlement also belongs (Kovačević 2009a; Penz 2001: 273, Pl. 3: 14; Pl. 4: 10; Dobiat 1980: 113). Horizontal faceting on the external walls of bowls with inwardly drawn rims and on the inside of rims on conical-necked pots is primarily associated with the older phase of the necropolis in Kleinklein, even though bowls with faceted rims can be found sporadically in the final, third phase at the same site, as shown by the finds from the newly-examined Grellwald 31 tumulus, which has been established as phase Ha D1 (Bernhard & Weihs 2003: 35, 54, Pl. 4: 1; Dobiat 1980: Pl. 46). Even though A. Bernhard largely dated horizontal faceting on the inside rim of conical-necked pots in the relatively brief chronological span

Valja napomenuti da se i u kasnohalštatskoj Zbelavi javljaju lonci stožasta vrata (tip A6, Kovačević 2008: sl. 8 i 9, T. 4: 4). Ni tamo, kao ni u Sv. Đurđu, ne predstavljaju dominantan oblik, ali bi u njima vjerojatno trebalo vidjeti određeni kontinuitet u razvoju između rane i kasne faze starijega željeznog doba u Podravini.

Među keramičkim ulomcima iz kvadratne zemunice SJ 031, 032 javljaju se i ostaci dvije posude izvučena, s unutrašnje strane horizontalno facetirana ruba. Ta vrsta ukrasa karakteristična je za kraj kasnoga brončanog i ranu fazu starijega željeznog doba širega, jugozapadnopanonsko-istočnoalpskoga područja, kojemu pripada i lokalitet Virovitica-Đurađ istok (Kovačević 2009a; Penz 2001: 273, T. 3: 14; T. 4: 10; Dobiati 1980: 113). Horizontalno facetiranje na vanjskim stijenama zdjela uvučena ruba i na unutrašnjoj strani rubova lonaca stožasta vrata ponajprije se veže uz stariju fazu nekropole u Kleinkleinu, iako zdjele facetirana ruba sporadično nalazimo još u posljednjoj, trećoj fazi istog lokaliteta, kao što pokazuju i nalazi iz novoistraživanoga tumula Grellwald 31, koji je određen u stupanj Ha D1 (Bernhard & Weihs 2003: 35, 54, T. 4: 1; Dobiati 1980: T. 46). Iako A. Bernhard horizontalno facetiranje s unutrašnje strane ruba lonaca stožasta vrata pretežno datira u relativno kratki vremenski raspon koji odgovara stupnju Ha C1a prema C. H. Pareu (Bernhard & Weihs 2003: 35, T. 46: 1; Pare 1999), primjerak lonca izvučenog, horizontalno facetirana ruba nalazimo u već duboko kasnohalštatskome razdoblju, što pokazuje nalaz iz naselja Zbelava-Pod lipom u varaždinskoj Podravini (Kovačević 2007: T. 3: 7).

Iz naselja u Sv. Đurđu potječu i razni predmeti koji predstavljaju tipične naseobinske nalaze, a koji se velikim dijelom teško mogu kronološki uže odrediti. U inventaru kućanstava nalazili su se grijači koji izgledaju kao preokrenute posude s izbočenim dnom i perforacijama na tijelu (T. 1: 1; T. 9: 2), a pronađeni su u kvadratnoj zemunici SJ 031, 032 te u susjednoj zemunici s jednom prostorijom SJ 035, 036 (plan 1, sl. 5). Iako im je funkcija praktički identična ili vrlo slična, te predmete trebalo bi razlikovati od prijenosnih ognjišta, od kojih su obično manjih dimenzija i tanjih stijenki. Sa sličnim predmetima susretali smo se unutar naselja starijega željeznog doba u Torčecu (Kovačević 2009: T. 9: 3), a zanimljivo je da se primjerak gotovo identičan ovom virovitičkom javlja i u kasnohalštatskoj Zbelavi (Kovačević 2005: T. 46: 7). S obzirom na to da analogije za tu vrstu svakodnevnih uporabnih predmeta nalazimo već u horizontu I naselja u Ormožu, koji B. Lamut određuje u stariji dio Ha B, to je pokazatelj kako se dio utilitarnih predmeta ili kućnih pomagala tijekom prošlosti malo mijenja.

which corresponds to phase Ha C1a according to C. H. Pare (Bernhard & Weihs 2003: 35, Pl. 46: 1; Pare 1999), an example of a pot with outwardly drawn, horizontally faceted edge can be found already in deep in the late Hallstatt period, which is shown by the find from the Zbelava-Pod lipom settlement in the Varaždin Podravina (Kovačević 2007: Pl. 3: 7).

Various items that are typical settlement finds also originated in Sveti Đurađ, and it is largely quite difficult to ascertain any more precise chronological determination for them. In the household inventory, heaters were found which resemble overturned vessels with protruding bases and perforations on the body (Pl. 1: 1; Pl. 9: 2), and they were found in square dugout SU 031, 032 and in the neighbouring single-room dugout, SU 035, 036 (ground plan 1, Fig. 5). Even though their function is practically identical or very similar, these items should be distinguished from the movable hearths, since the former normally have smaller dimensions and thinner walls. We have encountered similar items in the Early Iron Age settlement in Torčec (Kovačević 2009: Pl. 9: 3), and it is interesting that an example almost identical to this one from Virovitica appeared in late Hallstatt Zbelava (Kovačević 2005: Pl. 46: 7). Given that analogies for this type of item of everyday use were already found in horizon I of the settlement in Ormož, which B. Lamut specified as the older part of Ha B, this is an indicator of how utility items or household aids changed very little during the past. The examples from Rifnik horizon II belong to the same time (Teržan 1990: Fig. 4: 33; Lamut 1988-1989: 238, Pl. 4: 4; Pl. 5: 7). Heating elements and mats appeared in Poštela horizon III at Brinjeva gora and Kučar, near Podzemlje, in Kleinklein, the Ha C settlement at Vaszar-Várospuszta, and in late Hallstatt units, such as the well-known Sopron-Krautacker settlement and elsewhere (Smolnik 1994: 62, Pl. 131: 12; Pl. 145: 9; Dular, Ciglenečki & Dular 1995: Pl. 54: 3; Teržan 1990: Fig. 4: 33; Jerem, *et al.* 1984: Fig. 12: 9; Oman 1981: Pl. 48: 6-7; Mitthay 1980: Abb. 19: 2). The Podravina examples, like those cited from Kleinklein, have circular perforations, but also triangular ones, like the aforementioned mats from Poštela and Brinjeva gora and from the Zbelava settlement (Kovačević 2005: Pl. 88: 14; Pl. 93: 6). We have concluded that this is a find which appeared in Podravina at the end of the Late Bronze Age at the latest, and endured in almost unaltered form during the earlier and later phases of the Early Iron Age.

Baking lids are also often used as a good illustration of the endurance of a certain type of find. They also appeared among the finds from Sveti Đurađ (Pl. 11: 3). Their long-lasting use can be followed all up to the present day. They appeared in practically all settlements of the Early Iron Age in Podravina and be-

Istom vremenu pripadaju primjerci iz II. horizonta Rifnika (Teržan 1990: Sl. 4: 33; Lamut 1988-1989: 238, T. 4: 4; T. 5: 7). Grijači ili podlošci za kuhanje javljaju se i u III. horizontu Poštela, na Brinjevoj gori i na Kučaru kod Podzemlja, u Kleinkleinu, naselju Ha C vremena Vaszar-Várospuszta, ali i u kasnohalštatskim cjelinama, kao u poznatome naselju Sopron-Krautacker i drugdje (Smolnik 1994: 62, T. 131: 12; T. 145: 9; Dular, Ciglonečki & Dular 1995: T. 54: 3; Teržan 1990: sl. 4: 33; Jerem *et al.* 1984: Fig. 12: 9; Oman 1981: T. 48: 6-7; Mitthay 1980: Abb. 19: 2). Podravski primjerci, poput navedenih iz Kleinkleina, imaju kružne perforacije, ali i trokutaste, poput spomenutih podložaka s Poštela i Brinjeve gore te iz zbelavskoga naselja (Kovačević 2005: T. 88: 14; T. 93: 6). Zaključujemo da se radi o vrsti nalaza koji se u Podravini pojavljuje najkasnije krajem kasnoga brončanog doba, a u gotovo neizmijenjenu obliku dokazano traje tijekom starije i mlađe faze starijega željeznog doba.

Kao dobra ilustracija dugotrajnosti jedne vrste nalaza često su uzimane pekve. I one se pojavljuju među nalazima iz Sv. Đurđa (T. 11: 3). Njihov dugotrajan uporabni put možemo pratiti sve do suvremenosti. Pojavljuju se praktično u svim naseljima starijega željeznog doba u Podravini i šire, a vezane su uz postojanje vatrišta ili ognjišta na kojima se pripremala hrana.

Široko su rasprostranjeni i poklopci (T. 3: 5; T. 6: 1; T. 12: 7 itd.), kao i piramidalni utezi i sita (T. 9: 5; T. 13: 2). Grubljemu kućnom posuđu pripadaju i jednostavne zdjele i lonci konična tijela i vertikalna, nenaglašena ruba (T. 8: 4; T. 9: 6; T. 11: 5 itd.). I s njima smo se susretali u naselju koje je poslužilo kao temeljno u analizi kasne faze starijega željeznog doba Podravine, u Zbelavi (tip A3 lonca i B1a zdjela, Kovačević 2008: sl. 8). Obično su neukrašeni, iako primjerak iz kvadratne zemunice SJ 031, 032 (T. 12: 5) ima utisnute kose linije s gornje strane ruba, što i nije čest ukrasni element u Sv. Đurđu, ali je donekle sličan citiranomu zbelavskom primjerku.

Među loncima iz Sv. Đurđa nalazi se još jedan dugotrajan tip. Lonac s-profilirana tijela (T. 4: 3; T. 10: 2; T. 11: 1), pod oznakom tip III, susrećemo u svim horizontima naselja u Kleinkleinu (Smolnik 1994: 33), na gradini Kapfensteiner Kogel u jugoistočnoj Štajerskoj (Penz 2001: T. 4: 14), u naseljima sjeverozapadnoga dijela Hrvatske, u Torčecu (Kovačević 2009: T. 4: 4), Farkašiću P (Marković 1982: T. 7: 7), Goričanu (Tomičić 1985: sl. 8: 1), Zbelavi (Kovačević 2008: T. 9: 9) i drugdje. M. Penz ističe da je ta vrsta lonaca općenito česta u naseljima kulture polja sa žarama i starijega željeznog doba na širem području istočnog alpskog ruba i zapadne Panonije (2001:

yond, and they are associated with the existence of fireplaces and hearths in which food was prepared.

Lids (Pl. 3: 5; Pl. 6: 1; Pl. 12: 7, etc.) are also widely distributed, as are pyramidal weights and sieves (Pl. 9: 5; Pl. 13: 2). The coarser household pottery includes simple bowls and conical pots with vertical, muted rims (Pl. 8: 4; Pl. 9: 6; Pl. 11: 5, etc.). These were also encountered in the settlement, and they served as a foundation in the analysis of the late phase of the Early Iron Age in Podravina, in Zbelava (pot type A3 and bowl B1a, Kovačević 2008: Fig. 8). Normally they were unornamented, even though the example from square dugout SU 031, 032 (Pl. 12: 5) has impressed diagonal lines on the upper side of the rim, which is not a frequent decorative element in Sveti Đurađ, but it is to some extent similar to the cited example from Zbelava.

There is one more long-lasting type among the pots from Sveti Đurađ. The pot with S-profile body (Pl. 4: 3; Pl. 10: 2; Pl. 11: 1), under the designation type III, is encountered in all horizons of the settlement in Kleinklein (Smolnik 1994: 33), at the Kapfensteiner Kogel hillfort in south-east Steiermark (Penz 2001: Pl. 4: 14), in the settlements of the north-west parts of Croatia, in Torčec (Kovačević 2009: Pl. 4: 4), Farkašić P (Marković 1982: Pl. 7: 7), Goričan (Tomičić 1985: Fig. 8: 1), Zbelava (Kovačević 2008: Pl. 9: 9) and elsewhere. M. Penz stressed that this pot type in general was frequent in settlements of the Urnfield culture and Early Iron Age in the wider territory of the eastern Alpine periphery and west Pannonia (2001: 273). The S-profile pots from Zbelava have been designated as type A4 (Kovačević 2007: Fig. 4) and they are serve as significant evidence that this type of ceramic vessel should also be expected in the late phase of the Early Iron Age in Podravina. During the entire Early Iron Age, simple semi-spherical cups with high ribbon-like handles (Pl. 12: 4; Pl. 16: 3; Pl. 17: 4) also appeared, so they should be classified among the household pottery which in its simple and unornamented form is difficult to pinpoint chronologically.

However, cups with articulated bodies also appeared at the Đurađ East site, normally with prominent bi-conical bodies which transition to concave necks. Unornamented examples, such as the fragment from dugout SU 077, 078 (Pl. 5: 2), like the semi-spherical cups, are difficult to specify chronologically. Two interesting, ornamented examples (Pl. 7: 4-5) appear in this same structure. Both have similar contours in profile, in which the prominent low belly descends diagonally toward the base in the lower section and the prominently articulated shoulders that are flattened at their widest point, thereby creating something of a facet on which an ornament is placed. The example on Pl. 7: 4 is ornamented with multiply articulated zigzag bundles, while the cup on Pl. 7: 5 has

273). Lonci s-profilirana tijela u Zbelavi su označeni kao tip A4 (Kovačević 2007: sl. 4) i značajan su dokaz da s tim tipom keramičkoga posuda treba računati i u kasnoj fazi starijega željeznog doba u Podravini. Tijekom cijeloga starijega željeznog doba javljaju se i jednostavne šalice polukuglasta tijela, s visokom trakastom ručkom (T. 12: 4; T. 16: 3; T. 17: 4), pa i njih treba uvrstiti među kućnu keramiku koja je u jednostavnu i neukrašenu obliku vremenski teško pobliže određiva.

No na lokalitetu Đurađ istok javljaju se i šalice profilirana tijela, obično naglašeno bikonična tijela koje prelazi u konkavan vrat. Neukrašeni primjerci, poput ulomka iz zemunice SJ 077, 078 (T. 5: 2), slično kao šalice polukuglasta tijela, teže se vremenski daju fiksirati. U istom objektu javljaju se i dva zanimljiva, ukrašena primjerka (T. 7: 4–5). Oba imaju sličnu konturu u profilu, u kojoj je naglašen nizak trbuh koji se koso u donjem dijelu spušta prema dnu, naglašeno profilirano rame koje je na najširem dijelu zaravnjeno pa tvori svojevrsnu facetu na kojoj se smjestio ukras. Primjerak na T. 7: 4 ukrašen je višestrukim razvedenim cik-cak snopovima, a šalica na T. 7: 5 skupinama s po tri metopno raspoređene ukošene kratke kanelure. Iz najširega dijela tijela uzdiže se koničan, blago konkavan vrat s visokom trakastom ručkom. Finije su izrade i tanjih stijenki, od dobro pečene i pročišćene gline te imaju zaglađenu površinu. Najsličnije šalice oštra profila sa zaravnatim ramenom nalazimo u III. horizontu Poštela, izdvojene kao čest oblik stupnja Ha D (Teržan 1990: T. 15: 3, 6; T. 37: 31). Razvijenoj fazi starijega željeznog doba pripadaju i srodni primjerci iz Farkašića P (Marković 1982: T. 7: 2, 4) i Goričana (Tomičić 1985: sl. 8: 10).

C. Dobiati razlikuje profilirane zdjelice od vrlo srodnih profiliranih šalica. Osnovna je razlika u veličini i profiliranosti ramena, koje je kod šalica jednostavnije, oštro bikonično, uz naznaku da su šalice rjeđe ukrašene (Dobiati 1980: Abb. 8,9). Posude iz SJ 077, 078 po određenim bi se obilježjima mogle svrstati između ta dva Dobiatova podtipa. Treći primjerak iz zemunice SJ 078 (T. 2: 3) dao bi se lakše odrediti kao profilirana zdjelica; posuda, koja je bila nešto većih dimenzija, imala je jasno odvojeno rame na kojemu se nalazio ukras od rijetko raspoređenih kratkih kanelura. Identičan ukras na srodnu tipu posuda nalazimo u stupnju Ha C2 naselja na Libni (Guštin 1976: T. 84: 6), u naseobini Ptuj-Rabelčja Vas (Teržan 1990: sl. 7: 7), u naselju Sopron-Burgstall, ali i u kasnohalštatskome vremenu, u Tokodu, zajedno sa stiliziranim protomama u obliku bikoničnih čepova, kakve poznajemo iz Zbelave (Kovačević 2008: sl. 11: 3; Patek 1982: sl. 14, 16, 17; 1982–1983: T. 19: 11). U više navrata isti

groups of three metopically arranged short diagonal flutes. A conical, lightly concave neck with high ribbon-like handle ascends from the widest part of the body. They are more finely rendered, with thinner walls, and made of well-baked and refined clay, with smoothed surfaces. The most similar cups with sharp profile and flattened shoulders can be found in Poštela horizon III, distinguished as a frequent form of phase Ha D (Teržan 1990: Pl. 15: 3, 6; Pl. 37: 31). Similar examples from Farkašić P (Marković 1982: Pl. 7: 2, 4) and Goričan (Tomičić 1985: Fig. 8: 10) also belong to the developed phase of the Early Iron Age.

C. Dobiati distinguished the articulated bowls from the very similar articulated cups. The basic difference is the size and articulation of the shoulders, which is simpler on the cups, sharply biconical, with the note that the cups are more sparsely ornamented (Dobiati 1980: Abb. 8.9). The vessels from SU 077, 078, based on certain features, may be classified between Dobiati's two sub-types. The third example from dugout SU 078 (Pl. 2: 3) may be more simply determined as an articulated bowl; the vessel, which had somewhat larger dimensions, had a clearly separated shoulder on which there was an ornament consisting of sparsely arranged short flutes. An identical ornament on a similar vessel type can be found in phase Ha C2 of the settlement at Libna (Guštin 1976: Pl. 84: 6), in the Ptuj-Rabelčja Vas settlement (Teržan 1990: Fig. 7: 7), in the Sopron-Burgstall settlement, and also in the late Hallstatt period, in Tokod, together with the stylized protomes shaped like biconical corks, which are known from Zbelava (Kovačević 2008: Fig. 11: 3; Patek 1982: Fig. 14, 16, 17; 1982-1983: Pl. 19: 11). The same pottery form also appears in the Lower Carniola group, particularly in Stična-Novo Mesto phase 2, where it remained current until the end of the Early Iron Age (Križ 1997: Pl. 44: 3; Knez 1986: Pl. 24: 1-8; Dular 1982: 70, Pl. 24: 223-224; Stare 1962-1963: Pl. 11: 7-8). A bowl similar to our example on Pl. 2: 3 was found in the Kleinklein settlement with hollow wide-ribbed pottery (Smolnik 1994: Pl. 131: 6), which also appeared in dugout SU 077, 078 from Sveti Đurađ.

The articulated bowls belong to a widely distributed, long-lasting type having shoulders normally ornamented with vertical or diagonal grooves, and handles sometimes ornamented with applied small horns at their highest parts. The scholar who analyzed the materials from the Kleinklein necropolis placed their duration in the late Hallstatt period in Steiermark, Lower Carniola, Transdanubia, Lower Austria, Donja Dolina, Sanski Most, Kaptol and elsewhere (Dobiati 1980: 84, Pl. 28: 3; Pl. 36: 8, 9, 12; Pl. 94: 2-4; Guštin 1976: Pl. 35: 16; Pl. 38: 1; Vejvoda & Mirnik 1975: Pl. 5: 11; Truhelka 1904: Abb. 23, Abb. 76; Fiala 1899: Abb. 23, 63). It would appear

se keramički oblik javlja u dolenskoj grupi, posebno u fazi Stična-Novo Mesto 2, gdje ostaje aktualan do kraja starijega željeznog doba (Križ 1997: T. 44: 3; Knez 1986: T. 24: 1-8; Dular 1982: 70, T. 24: 223-224; Stare 1962-1963: T. 11: 7-8). U naselju Kleinklein zdjelica slična našem primjerku na T. 2: 3 pronađena je s naboranom keramikom (Smolnik 1994: T. 131: 6), koja se javlja i u zemunici SJ 077, 078 iz Sv. Đurđa.

Profilirane zdjelice pripadaju široko rasprostranjenu, dugotrajnu tipu čije je kratko rame obično ukrašeno vertikalnim ili kosim žljebovima, a ručke katkada na najvišem dijelu ukrašene apliciranim roščićima. Njihovo trajanje autor analize gradiva iz nekropole u Kleinkleinu proteže do u kasnohalštatsko vrijeme u Štajerskoj, Dolenjskoj, Transdanubiji, Donjoj Austriji, u Donjoj Dolini, Sanskom Mostu, Kaptolu i drugdje (Dobiat 1980: 84, T. 28: 3; T. 36: 8, 9, 12; T. 94: 2-4; Guštin 1976: T. 35: 16; T. 38: 1; Vejvoda & Mirnik 1975: T. 5: 11; Truhelka 1904: Abb. 23, Abb. 76; Fiala 1899: Abb. 23, 63). Čini se da primjerci profiliranih zdjelica najbliži nalazima iz Sv. Đurđa u Kleinkleinu dolaze češće u III. horizontu groblja, kada prema C. Dobiatu sve više preuzimaju ulogu polukuglastih šalica (1980: 85). U najmlađu fazu nekropole C. Dobiat postavlja i profilirane šalice, tako da bez obzira na to kojemu se tipu ti primjerci iz virovitičke Podravine pripisuju, u kronološkome smislu oni vjerojatno pripadaju početku kasnohalštatskoga razvoja. Takvo određenje potvrđuje i dublja zdjela cilindrična vrata s naboranim ukrasom na najširem dijelu tijela, iz istog objekta (T. 8: 1). Taj način ukrašavanja nalazi se na još jednom manjem fragmentu iz kvadratne zemunice SJ 032 (T. 15: 3) i ulomku manje posude iz SJ 036 (T. 1: 7). Iako u Sv. Đurđu nije čest, naborani ukras značajan je jer s jedne strane ukazuje na kasnohalštatsko vrijeme, a s druge upućuje na kontakte s dolenskom skupinom starijega željeznog doba. Oni se jasno mogu očitati i na mlađem, kasnohalštatskom materijalu u Podravini, prije svega u Zbelavi, ali i Sigecu, u kojem se naborana keramika isto tako javlja (Kovačević 2008: T. 2: 5, 6; T. 5: 1, 4-6; Šimek 1982: T. IV: 1-2).

Vratimo li se još nakratko profiliranim zdjelicama, potvrdu da se one javljaju na širem prostoru u vremenu Ha D daju posude slična tipa iz donjoaustrijskog Unterparschenbrunn, koji na više razina (spomenimo samo pojavu kvadratnih ukopanih objekata kao i pripadnost približno istom vremenu) pokazuje srodnosti s lokalitetom u Sv. Đurđu (Lauermann 1994: T. 7: 6; T. 12: 3). Upravo se na sredini unutrašnje strane dna te vrste zdjelica ponekad u Kleinkleinu javlja ukras u obliku rozete, kakav nalazimo u kvadratnoj poluzemunici

that the articulated bowls most similar to the finds from Sveti Đurađ in Kleinklein are more frequently from horizon III of this necropolis, when according to C. Dobiat they increasingly assumed the role of semi-spherical cups (1980: 85). Dobiat also places the articulated cups in the youngest phase at the necropolis, so that regardless of the type to which these examples from the Virovitica Podravina are attributed, in the chronological sense they probably belong to the beginning of late Hallstatt development. This classification is additionally confirmed by the deeper bowl with cylindrical neck and hollow wide-ribbed ornament at the widest part of the body, from the same structure (Pl. 8: 1). This ornamentation method can be found on another small fragment from square dugout SJ 032 (Pl. 15: 3) and a fragment of a small vessel from SU 036 (Pl. 1: 7). Although it is not common in Sveti Đurađ, the wide-ribbed ornament is significant because on the one hand it indicates the late Hallstatt period, while on the other it points to contacts with the Lower Carniola group of the Early Iron Age. They can also clearly be discerned on the younger, late Hallstatt materials in Podravina, above all in Zbelava, but also in Sigetec, in which hollow wide-ribbed pottery also appears (Kovačević 2008: Pl. 2: 5, 6; Pl. 5: 1, 4-6; Šimek 1982: Pl. IV: 1-2).

To return briefly to articulated bowls, confirmation that they appeared over a wider territory during the Ha D period is provided by similar vessels from Unterparschenbrunn in Lower Austria, which at several levels (one only needs mention the appearance of square-shaped dugouts structures and their belonging to roughly the same time) exhibits similarities with the site in Sveti Đurađ (Lauermann 1994: Pl. 7: 6; Pl. 12: 3). It is precisely in the middle of the inside base of this type of bowl in Kleinklein that an ornament sometimes appears in the shape of a rosette, of the type we have found in dugout SU 031, 032 in Sveti Đurađ (Pl. 14: 4). The rosette was found in a small vessel with black smoothed surface, possibly on the widest portion of the body of a cup or bowl. The ornament consists of a larger depression, around which there is a series of stippled dots arranged in a ring. The closest analogy to the Virovitica rosette can be found in the vicinity of Koprivnica, in the Farkašić P settlement (Marković 1982: Pl. 7: 16). This ornament was highly favoured in the south-east Alpine and Pannonian zones. According to N. Majnarić-Pandžić, the older form of this ornament has not wreath of stippled dots, rather it was simply a circular depression. These have been dated to the earlier phase of the Early Iron Age (1986: 35). The examples from Dvorišće stand out among the southern Pannonian finds (Vidović 2003: Pl. III: 4), from grave 1 of tumulus III in Kaptol (Vejvoda & Mirnik 1971: Pl. III: 6), and from the late Hallstatt horizon of the

SJ 031, 032 u Sv. Đurđu (T. 14: 4). Rozeta se nalazila na nekoj manjoj posudi crne polirane površine, moguće na najširem dijelu tijela neke šalice ili zdjelice. Ukraša čini jedno veće udubljenje oko kojega se nalazi prstenasto raspoređen niz uboda. Najbližu analogiju virovitičkoj rozeti nalazimo u okolici Koprivnice, u naselju Farkašić P (Marković 1982: T. 7: 16). Taj ukraša vrlo je omiljen na širem jugoistočnoalpskom i panonskom prostoru. Prema N. Majnarić-Pandžić stariji oblik tog ukrasa nema vjenčić uboda, nego samo kružno udubljenje. Takvi se datiraju u stariju fazu starijega željeznog doba (1986: 35). Od južnopanonskih nalaza ističu se primjeri iz Dvorišća (Vidović 2003: T. III: 4), iz groba 1 tumula III u Kaptolu (Vejvoda & Mirnik 1971: T. III: 6), kasnohalštatskog horizonta gradine Klinac južno od Petrinje, Donje Doline, Sanskog Mosta, Dalja i Dorosolova (Majnarić-Pandžić 1986: sl. 12: 1; Trajković 1978: sl. 7; Hoffiller 1938: T. 13: 9; Truhelka 1904: 46, T. 26: 6; Fiala 1899: sl. 83). U Štajerskoj su rozete te vrste tipične za razvijeni Ha C i vodeći su oblik II. horizonta Poštela, a takvu dataciju potvrđuju i novoistraženi grobovi vremena Ha C1b u Kleinkelinu (Bernhard & Weihs 2003: T. 47: 5). Čini se da se tek na Rifniku, kao i u Moravskoj, javljaju još i ranije, tijekom Ha B2-B3 (Teržan 1990: 53). Na Pošteli je njihova pojava zabilježena na loncima stožasta vrata i na dubljim zdjelama i u najmlađem, III. horizontu, a javljaju se i na početku Ha D, odnosno u III. horizontu groblja u Kleinkleinu, kako pokazuju prije objavljeni nalazi te novoistraživani tumul Grellwald 31 (Bernhard & Weihs 2003: T. 1: 5; T. 2: 1; Teržan 1990: 45, T. 11: 6; T. 19: 8; Dobiat 1980: T. 36: 9; T. 73: 3-4; T. 84: 9). Razdoblju Ha C1 pripada lonac stožasta vrata koji je ukrašen kanelurama, ubodima i rozetama, pronađen u tumulu iz Pivole, ispod Pošte (Strmčnik-Gulić & Teržan 2004: sl. 9). Rozete se javljaju i u mlađem horizontu naselja Kleinklein (Smolnik 1994: 22, T. 2: 8; T. 99: 9). Česte su i u prekodravskim, zapadnomadžarskim pokrajinama, u tumulu I s čuvenom kacigom u mjestu Csöngö (Patek 1993: Abb. 95: 10), u poznatome tumulu s kamenom komorom i dromosom Süttö (Vadász 1984: T. 2; T. 3) iz kuće 9 naselja Sopron-Burgstall i drugdje (Patek 1982: Fig. 14: 10). Jasno je da se rozete poput ove u Sv. Đurđu javljaju već u ranoj fazi starijega željeznog doba i da su raznim inačicama vrlo omiljen ukrasni oblik na širem području koji traje duboko u kasnohalštatsko vrijeme.

Pri analizi ukrasnih elemenata na keramici naselja Virovitica-Đurađ istok upadljiva je mnogobrojnost plastičnih, odnosno apliciranih elemenata. Upravo dekorativno-funkcionalni dodaci poput raščlanjenih plastičnih traka (T. 4: 2; T. 5: 1; T. 10: 9), jednostavnih okruglih ili raščlanjenih duguljastih

Klinac hillfort south of Petrinja, and Donja Dolina, Sanski Most, Dalj and Dorosolovo (Majnarić-Pandžić 1986: Fig. 12: 1; Trajković 1978: Fig. 7; Hoffiller 1938: Pl. 13: 9; Truhelka 1904: 46, Pl. 26: 6; Fiala 1899: Fig. 83). In Steiermark, rosettes of this type are typical of the high Ha C phase and the leading form of Poštela horizon II, and this dating has been confirmed by the newly-examined graves from the Ha C1b period in Kleinklein (Bernhard & Weihs 2003: Pl. 47: 5). It seems that they appeared earlier only at Rifnik, as in Moravia, during the Ha B2-B3 (Teržan 1990: 53). At Poštela, their appearance was recorded on conical-necked pots and on deeper bowls in the youngest, horizon III, and they also appeared at the beginning of Ha D, i.e., horizon III at the necropolis in Kleinklein, as shown by the previously published finds and newly-examined tumulus Grellwald 31 (Bernhard & Weihs 2003: Pl. 1: 5; Pl. 2: 1; Teržan 1990: 45, Pl. 11: 6; Pl. 19: 8; Dobiat 1980: Pl. 36: 9; Pl. 73: 3-4; Pl. 84: 9). The conical-necked pot decorated with fluting, stippling and rosettes, found in the tumulus from Pivola, below Poštela, belongs to the Ha C1 period (Strmčnik-Gulić & Teržan 2004: Fig. 9). Rosettes also appear in the youngest horizon of the Kleinklein settlement (Smolnik 1994: 22, Pl. 2: 8; Pl. 99: 9). They are also frequent in the trans-Drava, western Hungarian regions: in tumulus I with the preserved helmet at Csöngö (Patek 1993: Abb. 95: 10), in the well-known tumulus with the stone chamber and dromos at Süttö (Vadász 1984: Pl. 2; Pl. 3), from house 9 of the Sopron-Burgstall settlement and elsewhere (Patek 1982: Fig. 14: 10). It is clear that rosettes such as this one from Sveti Đurađ appeared already in the early phase of the Early Iron Age and that they were a favoured ornament in several variants over a wider territory which lasted well in the late Hallstatt period.

During analysis of the decorative elements on the pottery from the Virovitica-Đurađ East settlement, a strikingly high number of sculpted and applied elements was observed. Decorative/functional additions such as articulated sculpted bands (Pl. 4: 2; Pl. 5: 1; Pl. 10: 9), simple round or articulated longish wart-like protuberances (Pl. 1: 6; Pl. 2: 2; Pl. 5: 3; Pl. 6: 6; Pl. 9: 8) and tongue-shaped handles (Pl. 2: 6; Pl. 6: 5; Pl. 11: 6) that normally appeared on coarse household pottery are in fact those of which there are the most in the settlement. Among the applied elements, a horseshoe ornament with a bar in the middle (Pl. 5: 7) and a smooth sculpted rib (Pl. 10: 6) stand out. The horseshoe-shaped attachment was encountered previously in settlements of the entire Early Iron Age in Podravina, for example, in Sveti Petar Ludbreški and Zbelava (Kovačević 2008: Pl. 9: 5; Vinski-Gasparini 1987: Pl. XXIII: 5). Smaller vessels ornamented with vertical or diagonal smooth ribs were also found in Torčec (Kovačević 2009: Pl. 7: 1) or Sigetec (Šimek 1982a: Pl. 1: 5) and in Goričan (Tomičić 1984a:

bradavica (T. 1: 6; T. 2: 2; T. 5: 3; T. 6: 6; T. 9: 8) te jezičastih drški (T. 2: 6; T. 6: 5; T. 11: 6) javljaju se obično na grubome kućnom posuđu kojega u naselju ima najviše. Među apliciranim elementima izdvajaju se potkovast ukras s prečkom u sredini (T. 5: 7) i glatka plastična rebra (T. 10: 6). Potkovaste naljepke susretali smo prije u naseljima cijeloga starijeg željeznog doba u Podravini, primjerice u Sv. Petru Ludbreškom i Zbelavi (Kovačević 2008: T. 9: 5; Vinski-Gasparini 1987: T. XXIII: 5). Manje posude ukrašene vertikalnim ili kosim glatkim rebrima nađene su i u Torčecu (Kovačević 2009: T. 7: 1) ili Sigecu (Šimek 1982a: T. 1: 5) te u Goričanu (Tomičić 1984a: sl. 1). Kao nov motiv takva se rebra javljaju u horizontu II naselja u Ormožu, koji se datira u Ha B3/C1, odnosno u početnu fazu starijega željeznog doba, a zabilježili smo ih i u I. horizontu Poštela (Teržan 1990: T. 47: 21; Lamut 1988-1989: T. 24: 9; T. 25: 2, 14, 16). Sličnim rebrima ukrašeni su najširi dijelovi tijela nekih posuda nekropole u Kleinkleinu, gdje su upravo takva vertikalna rebra izdvojena kao važan element II. faze groblja, odnosno razvijenog Ha C (Dobiat 1980: T. 29: 2; T. 52: 2; T. 74: 4), iako je njihova pojava zabilježena već na samome početku razvoja halštatske kulture, kako pokazuju novoistraženi grobovi u Masser-Kreuzfeldu kod Kleinkelina (Bernhard & Weihs 2003: T. 1: 1).

Većina vertikalnih trakastih ručki potječe s grubljih posuda većih dimenzija, kojima je teško odrediti oblik (T. 1: 5; T. 14: 1). Među njima izdvaja se vertikalna ručka od dobro pečene gline i crne, nemarnije zaglađene površine iz kvadratne zemunice SJ 032 (T. 14: 2). S obzirom na profil stijenke tog ulomka, moguće je da se radi o malome lončiću. Takve susrećemo u III. horizontu Poštela, gdje su često združeni s loncima koji su u ovoj analizi određeni kao tip A1 i drugim keramičkim oblicima (Teržan 1990: 34, T. 9: 3). Jednostavni lončići manjih dimenzija javljaju se od stupnja Stična-Novo Mesto I u Dolenjskoj i dalje traju dugo (Dular 1982: T. 9: 80-84).

Među oblicima iz pravokutne zemunice SJ 032 zanimljivi su ostaci donjega dijela tijela veće posude svjetlije smeđe boje, vjerojatno lonca, koje na ravnu dnu ima čepaste nožice (T. 11: 4). Potvrđeno je da se taj oblik u podravskim naseljima javlja i u kasnoj fazi starijega željeznog doba, u Zbelavi neposredno ispod podnice kuće SJ 143 (Kovačević 2008: T. 7: 12). Bilježimo njihovu pojavu u dolini rijeke Solbe, u nizinskome naselju Graschach zapadno od Kleinkleina te u naselju Kalsdorf kod Graza. Dok je gruba, kućna keramika iz Graschacha određena u ranu fazu starijega željeznog doba, nalazi iz Kalsdorfa istodobni su s III. fazom nekropole u Kleinkleinu ili s vremenom Ha C2-D1 (Hebert & Lehner 1996: Abb. 5, 9; Hebert 1989: Abb. 452).

Fig. 1). Such ribs appear as a new motif in horizon II of the settlement in Ormož, which has been dated to Ha B3/C1, i.e., the initial phase of the Early Iron Age, and we have also recorded them in Poštela horizon I (Teržan 1990: Pl. 47: 21; Lamut 1988-1989: Pl. 24: 9; Pl. 25: 2, 14, 16). Similar ribs ornament the widest section of the body on certain vessels from the necropolis in Kleinklein, where such vertical ribs were in fact distinguished as a vital element of its phase II, i.e., the later Ha C (Dobiat 1980: Pl. 29: 2; Pl. 52: 2; Pl. 74: 4), even though their appearance has already been recorded at the very onset of the Hallstatt culture, which has been shown by the newly examined graves in Masser-Kreuzfeld near Kleinkelin (Bernhard & Weihs 2003: Pl. 1: 1).

Most vertical ribbon-like handles are from outsized coarser vessels with shapes difficult to determine (Pl. 1: 5; Pl. 14: 1). Outstanding among these is the vertical handle made of well-fired clay with a black, rather artlessly smoothed surface from square dugout SU 032 (Pl. 14: 2). Given the profile of the wall on this fragment, it is possible that this was a small pot/cup. These were encountered in Poštela horizon III, in which they are often together with pots which in this analysis have been specified as type A1, as well as other pottery forms (Teržan 1990: 34, Pl. 9: 3). Simple small pots with modest dimensions appeared from Stična-Novo Mesto phase I in Lower Carniola and they endured long afterward (Dular 1982: Pl. 9: 80-84).

Among the shapes from rectangular dugout SU 032, interesting are the remains of the lower body of a large light-brown vessel, probably a pot, with small, cork-shaped foot pieces on its flat base (Pl. 11: 4). It has been confirmed that this shape also appeared in the Podravina settlements in the late phase of the Early Iron Age; in Zbelava it was found directly beneath the floor of house SU 143 (Kovačević 2008: Pl. 7: 12). Their appearance has been recorded in the Solba River Valley, in the lowland settlement of Graschach west of Kleinklein and in the Kalsdorf settlement near Graz. While the course, household pottery from Graschach has been placed in the early phase of the Early Iron Age, the finds from Kalsdorf are contemporary with phase III of the necropolis in Kleinklein or with the Ha C2-D1 period (Hebert & Lehner 1996: Abb. 5, 9; Hebert 1989: Abb. 452). It is interesting that pot type A1 appeared in both Steiermark settlements, to which considerable space in this work is also dedicated, and this once more confirms the popularity of this type of household vessel during the entire Early Iron Age.

An ornament in the form of a painted graffito band only appears on one ceramic fragment from Sveti Đurađ (Pl. 8: 5), while graffito coating does not appear at all. The graffito-decorated fragment is very

Zanimljivo je da se u oba štajerska naselja javlja i lonac tipa A1, kojemu je posvećeno prilično prostora i u ovome radu, a što još jednom potvrđuje široku omiljenost toga tipa kućnoga posuđa tijekom cijeloga starijeg željeznog doba.

Tek na jednome keramičkom ulomku iz Sv. Đurđa pojavljuje se ukras u vidu grafitiranih pojasa (T. 8: 5), dok se grafitni premaz i ne javlja. Ulomak ukrašen grafitnim slikanjem vrlo je dobro pečen, crne boje te poliran, a pronađen je u zemunici SJ 077, 078. S obzirom na to da se grafitiranje nalazi na unutrašnjoj strani stijenke posude, pretpostavka je da ulomak potječe od šire i pliće posude, vjerojatno neke zdjele uvučena ruba. Križno ili zvjezdasto grafitno slikanje javlja se u mlađim grobovima Kleinkleina, u kneževskom grobu iz Strettwega, na pragu kasnohalštatskog doba, a unutar naselja Kleinklein označeno je kao kronološki značajan element koji se ne javlja unutar faze 1 i 2 na Burgstallu, nego tek u razvijenom Ha C. Čini se da je ukrašavanje grafitom posebno omiljeno i u ranoj i kasnoj fazi starijega željeznog doba u Transdanubiji (*Schatze aus der Keltenzeit* 1998: 82; Egg 1996: Abb. 138; Smolnik 1994: 86; Jerem *et al.* 1984: Fig. 10: 1; Fig. 16: 1-2; Patek 1993: Abb. 43, Abb. 56, Abb. 69; 1984: Pl. 4: 1; Dobiat 1980: 76, Pl. 95: 3; Wollák 1979: Abb. 5). E. Patek začetke grafitnog ukrašavanja u Transdanubiji nalazi u rijetkim primjercima iz kulture polja sa žarama, dok primjenu grafita u ukrašavanju raznih tipova keramičkoga suđa prati kroz cijeli Ha C i D (Patek 1982-1983: 67). U. Brosseder u svojoj opširnoj studiji o ornamentici na halštatskoj keramici ističe da je zrakasto grafitno slikanje na unutrašnjoj strani stijenke zdjela uvučena ruba posebno karakteristično za arheološke kontekste iz stupnja Ha C2 i Ha D1 (2004: 117).

Za razliku od grafitiranja na posudu iz Sv. Đurđa žlijebljenje je jedna od zastupljenijih tehnika ukrašavanja. Najčešće se radi o jednoj ili dvije linije koje obilježavaju prijelaz u rame (T. 5: 7; T. 8: 1; T. 9: 3; T. 13: 1 itd.), dok se rijetko javljaju i motivi poput višestruka visećeg slova "V" (T. 1: 8) ili kompozicije šrafiranih visećih trokuta (T. 15: 1). Taj ukras vjerojatno se smjestio na vratnome dijelu lonca stožasta vrata, crnih i poliranih stijenki, te je bio složenije koncepcije.⁷ Iako se javljaju već u ranoj fazi starijega željeznog doba, što nam odlično pokazuje gradina Kapfensteiner Kogel u jugoistočnoj Štajerskoj, upravo različito komponirani šrafirani trokuti jedna su od značajki grobne keramike zapadnomadžarskoga Soprona tijekom Ha C. Isti takav ukras javlja se i u stupnju Ha D1, primjerice u najmlađem objektu u

well-fired, painted black and polished, and it was discovered in dugout SU 077, 078. Since the painted graffiti band was found on the inside walls of the vessel, the fragment is assumed to have come from a wider and shallower vessel, probably a bowl with inwardly drawn rim. The cross- or star-shaped grafito appears in the younger graves of Kleinklein, in the prince's necropolis in Strettweg, at the threshold of the late Hallstatt, and inside the Kleinklein settlement it was designated as a chronologically significant element which does not appear in phases 1 and 2 at Burgstall, rather only in the high Ha C period. It would appear that grafito ornamentation was particularly favoured in both the early and late phases of the Early Iron Age in Transdanubia (*Schatze aus der Keltenzeit* 1998: 82; Egg 1996: Abb. 138; Smolnik 1994: 86; Jerem *et al.* 1984: Fig. 10: 1; Fig. 16: 1-2; Patek 1993: Abb. 43, Abb. 56, Abb. 69; 1984: Pl. 4: 1; Dobiat 1980: 76, Pl. 95: 3; Wollák 1979: Abb. 5). E. Patek found the origins of grafito ornamentation in Transdanubia in the rare examples of the Urnfield culture, while the application of grafito in the ornamentation of various types of pottery can be followed over the entire Ha C and D (Patek 1982-1983: 67). In his extensive study on ornamentation on Hallstatt pottery, U. Brosseder stressed that radial grafito painting on the inside walls of bowls with inwardly drawn rims is characteristic of the archaeological contexts of the Ha C2 and Ha D1 phases (2004: 117). As opposed to the grafito painting on the pottery from Sveti Đurađ, grooving is one of the more common ornamentation techniques. This is most often a case of one or two lines which mark the transition to the shoulder (Pl. 5: 7; Pl. 8: 1; Pl. 9: 3; Pl. 13: 1, etc.), while motifs like multiple hanging "Vs" (Pl. 1: 8) or compositions of cross-hatched hanging triangles (Pl. 15: 1) appear rarely. This ornament probably appeared on the neck of the conical-necked pot with black and smoothed walls, and its design was complex.⁷ Even though they had already appeared in the early phase of the Early Iron Age, which is wonderfully shown by the Kapfensteiner Kogel hillfort in south-east Steiermark, variously composed cross-hatched triangles are one of the features of grave pottery of Sopron in western Hungary during Ha C. The same ornament also appeared in phase Ha D1, for example in the youngest structure in the Sopron-Varhely settlement, in house 9 (Penz 2001: Pl. 8: 11; Teržan 1990: 150; Patek 1982: Fig. 11, Fig. 13: 2).

The hollow wide-ribbed ornament is one of the chronologically more sensitive ornamentation techniques which appears on pottery finds from

⁷ Nadenno je više ulomaka te posude, od kojih je nacrtan samo dio. Očito se radi o sjenčanim trokutima koji su grupirani u danas neprepoznatljiv, složeniji motiv.

⁷ Several vessel fragments were found, of which only some had drawing on them. These were obviously shaded triangles grouped in a now unrecognizable, more complex motif.

naselju Sopron-Varhely, u kući 9 (Penz 2001: T. 8: 11; Teržan 1990: 150; Patek 1982: Fig. 11, Fig. 13: 2). Naborani ukras jedna je od kronološki osjetljivijih tehnika ukrašavanja koje se javljaju na keramičkim nalazima u Sv. Đurđu. Iako je razlomljena na mnogo sitnih komada i necjelovita, u crtežu se donosi rekonstrukcija dublje zdjele s cilindričnim vratom i vrlo blago izvučenim rubom iz zemunice SJ 077, 078 (T. 8: 1). Na najširem dijelu posuda je ukrašena duguljastim buklima. Zdjela je crne, zaglađene površine, koja mjestimice ima sitne pukotine nastale vjerojatno prilikom istiskanja šupljih bukli, a prijelaz između ramena i vrata naglašen je vodoravnom žlijebljenom linijom. Zdjele s naboranim ukrasom na ramenu u uporabi su prije svega tijekom horizonta zmijolike fibule u Dolenjskoj, ali su uobičajene i u sljedećem, *certosa*-horizontu (Dular 1982: 71). Treba reći da B. Teržan korigira Dularovo kronološko određenje naboranog ukrasa ponajprije u zmijoliki i *certosa*-horizont dolenjske grupe te ističe njegovu dokazanu pojavu već u stupnju Stična 2 (Teržan 1990: 68, n. 215). Takva ranija datacija važna je i u slučaju naselja u Sv. Đurđu, jer je upravo naborana keramika jedan od ključnih elemenata na temelju kojih smo relativno-kronološki datirali cijelo naselje.

Primjerak iz Sv. Đurđa prema popratnom materijalu možemo odrediti u ranije razdoblje, u kraj Ha C ili početni Ha D, što bi se možda moglo shvatiti kao dokaz veza s dolenjskim područjem u toj fazi stariježeljeznodobnoga razvoja. Da utjecaji s rubnog alpskog područja dosežu i panonske krajeve istočnije od virovitičke regije, pokazuju nalazi iz tumula Pecs-Kövágótöttös, u kojem je nađena crno-crvena slikana i grafitirana keramika, tipična za istočnohalštatski kulturni krug (Metzner-Nebelsick 1996: Abb. 13).⁸

Jedan ulomak s naboranim ukrasom pronađen je i u zemunici SJ 035, 036 (T. 1: 7). Iako je taj ulomak malen, šuplji bukl očuvan je u cijelosti te valja pretpostaviti da je dio složenijeg ukrasa na manjoj posudi zaobljena tijela, kvalitetnije izrade i tanjih stijenki. Značajan je i ulomak ramena neke posude crne boje s ostatkom dva ovalna šuplja bukla iz kvadratne zemunice SJ 032 (T. 15: 3).

Sveti Đurađ. Even though broken into many tiny pieces and incomplete, the drawing contains a reconstruction of a deeper bowl with cylindrical neck and very lightly outwardly drawn rim from dugout SU 077, 078 (Pl. 8: 1). At its widest section, the vessel is ornamented with longish bouclés. The bowl is black, with smoothed surface, which has tiny fissures at places which probably emerged when the hollow bouclés were pressed out, while the transition from the shoulder to neck is emphasized by a horizontal grooved line. Bowls with hollow wide-ribbed ornamentation on the shoulders were in use above all during the serpentine fibula horizon in Lower Carniola, but they were also customary in the subsequent Certosa horizon (Dular 1982: 71). It should be noted that Teržan corrected Dular's chronology of the hollow wide-ribbed ornamentation first and foremost in the serpentine and Certosa horizons of the Lower Carniola groups, and stressed its proven appearance already during Stična phase 2 (Teržan 1990: 68, n. 215). This earlier dating is also important to the settlement in Sveti Đurađ, for hollow wide-ribbed pottery is one of the key elements forming the foundation for a relative chronological dating for the entire settlement.

Based on the accompanying materials, the example from Sveti Đurađ can be placed in an earlier period, the end of Ha C or the beginning of Ha D, which may possibly be seen as evidence of a tie with Lower Carniola in that phase of Early Iron Age development. The finds from the Pecs-Kövágótöttös tumulus, in which a black and red gloss and graffito ware, typical of the eastern Hallstatt cultural sphere, show that influences from the peripheral Alpine zone even reached the Pannonian regions farther east of the Virovitica area (Metzner-Nebelsick 1996: Abb. 13).⁸

One fragment with hollow wide-ribbed ornamentation was also found in dugout SU 035, 036 (Pl. 1: 7). Even though this fragment is small, the hollow bouclé was entirely preserved, and it should be assumed that it was part of a more complex ornament on a small vessel with rounded body, higher quality rendering and thinner walls. The fragment of a shoulder of a black vessel with the remains of two oval hollow bouclés from square dugout SU 032 (Pl. 15: 3) is also significant.

⁸ Da su uske kulturne veze jugoistočnoga i jugozapadnoga panonskog područja postojale već pri kraju kasnoga brončanog doba, pokazala je C. Metzner-Nebelsick. Pritom, slobodni smo pretpostaviti, sigurno je značajnu ulogu odigrala komunikacija uzduž rijeke Drave. Među elementima koji su obilježeni kao utjecaj grupe Ruše na grupu Dalj posebno je zanimljiva rana pojava apliciranih metalnih lamela na kantarosu iz Batine. Upravo ta tehnika ukrašavanja javljat će se u grobovima razvijene faze starijega željeznog doba u istočnom halštatskom krugu, pa tako i u Podravini (primjer: lonci s meandarskim ukrasom iz Martijanec) (Metzner-Nebelsick 1996: 287; Vinski-Gasparini 1961: T. IV).

⁸ C. Metzner-Nebelsick showed that close cultural ties existed between the south-east and south-west Pannonian zone already toward the end of the Late Bronze Age. Here we are freely assuming that communication all down the Drava River certainly played a major role. Among the elements recorded as influences of the Ruše group on the Dalj group is the intriguing early appearance of applied metal lamellae on a kantharos from Batina. Precisely this ornamentation technique would appear in the graves of the developed phase of the Early Iron Age in the eastern Hallstatt circle, including Podravina (example: the pots with meander ornaments from Martijanec) (Metzner-Nebelsick 1996: 287; Vinski-Gasparini 1961: Pl. IV).

Najbliže analogije za keramiku ukrašenu naboranim ukrasom tijekom razdoblja Ha C2-D1 nalazimo u Kaptolu, u dislociranome grobu 1 tumula V na Čemernici, u kojemu su pronađeni i dijelovi fibule *a tre bottoni*, te iz približno istog vremena na području Transdanubije, primjerice u tumulu iz Bobe, sjeverozapadno od Balatona (Patek 1993: Abb. 100; Vejvoda & Mirnik 1975: T. 4: 13). B. Teržan, prateći intenzitet doljenjskih utjecaja u smjeru panonskog istoka na primjeru široke rasprostranjenosti čunolikih šmarjetskih fibula kao izrazito doljenjskog tipa, pokazala je da ti kontakti koji indiciraju i intenzivnu razmjenu dobara postoje upravo u Ha C2 ili ranom razdoblju Ha D1, a nakon toga na duže vrijeme zamiru (1998: 522).

Više je autora pokušalo objasniti što se događalo na početku kasnohalštatskog razdoblja. B. Teržan govori o pljačkaškim upadima skitoidnih konjanika s istoka, ističući mogućnost izbijanja kuge (1998: 521). M. Egg i D. Kramer, ne isključujući mogućnost takva scenarija, govore i o mogućoj unutrašnjoj krizi i previranjima ili sukobima s drugim susjednim halštatskim centrima (2005: 39). M. Parducz razlog jačanja utjecaja kulture Vekerzug zapadno od Dunava postavlja u vezu s potrebom kontrole trgovačkih putova u zapadnoj Mađarskoj (1965: 297–299), dok G. Tomedi pretpostavlja da se mogla dogoditi jedna dublja kriza društva, koja bi uključivala iscrpljenost prirodnih resursa i politički kolaps. Takav oslabljeni poredak mogli su onda lako srušiti ratni sukobi, odnosno opasnost izvana (2002: 353). Sigurno je da dolazi do napuštanja cijeloga niza naselja i prestanka ukopavanja na pripadajućim grobljima, dok raniji keramički tipovi ili nestaju ili nastavljaju svoj život preoblikovani u kasnohalštatsku fazu. Sopron, Kleinklein i Poštela samo su neki od najupečatljivijih primjera (Dular & Tecco-Hvala 2007; Tankó 2005; Teržan 1998, 519; Romsauer 1996). Čini se da u isto vrijeme sve više opada i značaj Hallstatta, pa B. Teržan pretpostavlja da ni on nije bio pošteđen skitskih upada. U stupnju zmijolike fibule u Doljenjskoj, kako u novijoj razradi kronološkoga sustava doljenjske skupine ponovo zaključuje J. Dular, nedostaju bogati ratnički grobovi kao i spomenici situlske umjetnosti (Dular 2003: 131). To se uzima kao indicija da nemirna vremena nisu prošla bez odjeka ni u moćnim doljenjskim centrima starijega željeznog doba. Stagnacija se osjeća i na jugoistočnome dijelu panonskoga područja na pragu kasnohalštatskoga vremena, točnije, već tijekom IV., a posebno u V. keramičkom horizontu koji C. Metzner-Nebelsick kronološki postavlja u vrijeme upotrebe *certosa*-fibula (1996: 305). No kakav god karakter ili uzrok te promjene imale, jasno je da dolazi do prekida komunikacije

The closest analogies to pottery with hollow wide-ribbed ornamentation during the Ha C2-D1 phase can be found in Kaptol, in the dislocated grave 1 of tumulus V at Čemernica, in which pieces of a fibula *a tre bottoni* were also found, and in the Transdanubian territory dating to roughly the same period, for example in the tumulus from Boba, north-west of Lake Balaton (Patek 1993: Abb. 100; Vejvoda & Mirnik 1975: Pl. 4: 13). In following the intensity of Lower Carniolan influences toward the Pannonian east based on the example of the wide distribution of Šmarjeta fibulae as an explicitly Lower Carniolan type, B. Teržan showed that these contacts, which also indicate an intense exchange of goods, existed precisely in the Ha C2 or early Ha D1 periods, while thereafter they dwindled (1998: 522). Several scholars have attempted to explain what happened at the beginning of the late Hallstatt period. B. Teržan spoke of the plundering raids of Scythian-type cavalries from the east, stressing possible outbreaks of the plague (1998: 521). Without excluding the likelihood of such scenarios, M. Egg and D. Kramer also raised the possibility of internal strife and turmoil or conflicts with other, neighbouring Hallstatt centres (2005: 39). M. Parducz associated the enhanced influence of the Vekerzug culture west of the Danube with the need to control trade routes into western Hungary (1965: 297-299), while G. Tomedi speculated that a very deep social crisis may have occurred, which would have included the exhaustion of natural resources and political collapse. Such an enfeebled order could have then been easily toppled by warfare or external threats (2002: 353). What is known for certain is that an entire series of settlements were abandoned and interments at the adjacent necropoleis ceased, while earlier pottery types either disappeared or continued their existence transformed in the late Hallstatt phase. Sopron, Kleinklein and Poštela are only some of the more remarkable examples (Dular & Tecco-Hvala 2007; Tankó 2005; Teržan 1998, 519; Romsauer 1996). It would appear that at the same time the importance of Hallstatt itself increasingly declined, so Teržan assumed that it was not spared attacks by the Scythians. During the serpentine fibula phase in Lower Carniola, as J. Dular once more concluded in the more recent breakdown of the chronological system of the Lower Carniola group, rich military graves are absent, as are artefacts of situla art (Dular 2003: 131). This is taken as an indication that these restless times did not pass without some repercussions in the powerful Lower Carniolan centres of the Early Iron Age. Stagnation was also felt in the south-east section of the Pannonian zone at the threshold of the late Hallstatt period, during pottery horizons IV and especially V, which C. Metzner-Nebelsick chronologically placed at the time of use of Certosa fibulae (1996: 305). But whatever the

između dolenskog i ostalih područja na zapadu s panonskim prostorima na istoku. To je dobro pokazala B. Teržan na primjeru rasprostiranja fibula (1998: 522–523). Iz temelja se mijenja materijalna kultura i identitet lokalnih zapadnomadžarskih, štajerskih, a očito i podravske populacije. Promjene političke i kulturne situacije u Karpatskoj kotlini očito su imale velik utjecaj na kraj ili transformaciju istočnohalštatskih skupina na području zapadne Panonije i Štajerske. Prije te svojevrsne prekretnice u razvoju stariježeljeznodobnih kulturnih skupina na jugozapadpanonsko-štajerskome prostoru, u isto vrijeme kad svoj najveći cvat i razvoj doživljava Kleinklein, a panonski je istok intenzivnom komunikacijom povezan s istočnim Alpama, kronološki treba svrstati i naselje u Sv. Đurđu.

Iz razdoblja konsolidacije panonsko-štajerskoga područja, kako B. Teržan naziva vrijeme prijelaza iz stupnja Ha D1 u Ha D2 (1998: 521), u Podravini ne raspolazemo gotovo nikakvim nalazima, s izuzetkom groba iz Sv. Petra Ludbreškog koji je D. Balen-Letunić odredila u drugu polovinu 6. st. (1984: T. 1), dok bi nešto ranijem vremenu pripadao tumul s dromosom i skitskim elementima Jalžabet II (Šimek 2001; 1998).

Veze podravske naselja s dolenskom skupinom ponovo će biti intenzivirane u kasnijem kasnohalštatskom razdoblju, što izvrsno pokazuju nalazi iz Zbelave (Kovačević 2008; 2007). Naborani ukras i određeni tipovi fibula javljaju se istočnije, u Beremendu i Vinkovcima, pa iako dokaza o kasnohalštatskoj naseljenosti virovitičkoga područja nemamo, pretpostavljamo da je i ono bilo uključeno u intenzivnu i široko rastegnutu komunikacijsku mrežu između panonskih područja na istoku i jugoistočnih Alpa tijekom kasne faze starijega željeznog doba. Komparacija nalaza iz Sv. Đurđa i Zbelave, koji – to je sasvim jasno – pripadaju različitim kulturnim kontekstima, potpora je u razmatranjima o segmentima kontinuirana razvoja između starije i mlađe faze starijega željeznog doba. Među istim elementima, elementima kontinuiteta, prepoznajemo lonac stožasta vrata (Kovačević 2008: T. 4: 4) (T. 13: 1; T. 15: 1–2, T. 16: 1), kao i cijeli niz nalaza kućnog posuđa, među kojim značajnu ulogu ima jednostavan lonac tipa A1, zajedno s nizom razna grubljega kućnog posuđa i uporabnih predmeta (Kovačević 2008: T. 2: 2) (T. 4: 1–2; T. 6: 6; T. 11: 2). Dva naselja povezuje, kako je pokazano, i pojava naboranog ukrasa, s razlikom da se između dva vala koji donose istu tehniku ukrašavanja na podravsko tlo – na pragu i pri kraju kasnohalštatskog vremena – ruši ili mijenja stari poredak, pri čemu svoj život, zajedno s brojnim drugima, očito završava i naselje u Sv. Đurđu.

character these changes assumed, there was clearly a break in communications between Lower Carniola and other regions in the west with the Pannonian regions in the east. This was demonstrated quite well by Teržan using the example of fibula distribution (1998: 522–523). The material culture and identity of the local west Hungarian, Steiermark and especially Podravina populations changed thoroughly. Political and cultural change in the Carpathian Basin obviously exerted a great impact on the end or transformation of the eastern Hallstatt group in western Pannonia and Steiermark. The settlement in Sveti Đurad should be chronologically placed before this watershed of a sort in the development of the Early Iron Age cultural groups in the south-west Pannonian-Steiermark zone, at the same time when Kleinklein experienced its peak and the Pannonian east was linked to the eastern Alps by intensive communications.

There are almost no finds in Podravina from the period of consolidation of the Pannonian-Steiermark zone, as Teržan refers to the transition period from Ha D1 into Ha D2 (1998: 521), with the exception of the grave from Sveti Petar Ludbreški which D. Balen-Letunić established in the latter half of the sixth century (1984: Pl. 1), while the tumulus with dromos and Scythian elements, Jalžabet II, belongs to a somewhat earlier period (Šimek 2001; 1998).

Contacts between the Podravina settlements with the Lower Carniola group once more intensified in the later phase of the late Hallstatt period, which are nicely shown by the finds from Zbelava (Kovačević 2008; 2007). The hollow wide-ribbed ornament and certain types of fibulae appeared farther east, in Beremend and Vinkovci, so even though there is no evidence of late Hallstatt settlement in the Virovitica area, we assume that it was incorporated in the intense and widely extended communication network between the Pannonian zone in the east and the south-east Alps during the late phase of the Early Iron Age. A comparison of finds from Sveti Đurad and Zbelava, which – this point is entirely clear – belonged to different cultural contexts, serves to support considerations of segments of continued development between the older and younger phases of the Early Iron Age. Recognizable as the same elements, the elements of continuity, is the conical-necked pot (Kovačević 2008: Pl. 4: 4) (Pl. 13: 1; Pl. 15: 1–2, Pl. 16: 1), as well as an entire series of household pottery finds, among which pot type A1 had a prominent place together with a series of various coarser household vessels and items of everyday use (Kovačević 2008: Pl. 2: 2) (Pl. 4: 1–2; Pl. 6: 6; Pl. 11: 2). The two settlements were also connected, as has been shown, by the appearance of the hollow wide-ribbed ornamentation, with the difference being that between the two waves which brought this same technique to Podravina – at the threshold and at the end of the late Hallstatt –

Vrijedi napomenuti da od metalnih nalaza prikupljenih prilikom zaštitnih arheoloških istraživanja na lokalitetu Sv. Đurađ-istok većina pripada naselju ranoga srednjeg vijeka. Od prapovijesnih metalnih nalaza pronađeni su jedino nedefinirani komadići bronce u zapuni kvadratne zemunice SJ 031, 032. Drugih nalaza, koji bi nam pomogli u kulturnokronološkom određenju naselja, nažalost, nije bilo.

Interdisciplinarnе analize i datacija

Vjerojatno zbog kiselosti tla, slično kao u Zbelavi (Kovačević 2007: 97), i u naselju Virovitica-Đurađ istok skupljena je mala količina vrlo usitnjenih životinjskih kostiju. Zbog toga nije bilo moguće obaviti detaljne zooarheološke analize.

Međutim skupljeno je više uzoraka ugljena. U Kielu su obavljene dvije analize C-14, koje su potvrdile vremensko određenje prapovijesnoga naselja u razdoblje starijega željeznog doba, dok je srednjovjekovnim objektima analizom određena pripadnost ranomu srednjem vijeku.⁹

Analizom je obuhvaćen materijal organskoga podrijetla, odnosno ugljen iz kvadratne zemunice SJ 031, 032, koja je jedan od najvažnijih i arheološkim materijalom najbogatijih objekata starijega željeznog doba u naselju. Rezultati AMS-analize C-14 ugljen iz zapune zemunice s 95,4% sigurnosti odredili su u razdoblje 725–538 cal BC (KIA 29562, BP 2507±24), odnosno od posljednje četvrtine 8. do u drugu polovinu 6. st. pr. Kr.¹⁰

Nakon što su obavljene radiokarbonske analize na materijalu iz nekih drugih halštatskih naselja Podravine,¹¹ takvo vrlo okvirno određenje naselja u starije željezno doba i ne iznenađuje. Želimo li preciznije odrediti vrijeme u kojem živi naselje u Sv. Đurđu, morat ćemo se osloniti na relativnokronološku analizu materijala. Naselje Virovitica-Đurađ

the older order collapsed or was altered, wherein the settlement in Sveti Đurađ, together with many others, obviously ended its existence.

It is worth noting that among the metal items discovered during rescue archaeological research at the Sveti Đurađ-East site, most belong to the early medieval settlement. Among the prehistoric metal items, only undefined pieces of bronze were found in the fill of square dugout SU 031, 032. There were not, unfortunately, any other finds that would aid in the cultural and chronological determination of the settlement.

Interdisciplinary analyses and dating

A small quantity of very tiny animal bones were gathered in the Virovitica-Đurađ East settlement, as in Zbelava (Kovačević 2007: 97), probably due to the acidity of the soil. Detailed zooarchaeological analysis was therefore not possible.

However, several charcoal samples were collected. Two C-14 analyses were conducted in Kiel which confirmed the chronological determination of the prehistoric settlement during the Early Iron Age, while the medieval structures were ascertained as belonging to the Early Middle Ages.⁹

The analysis encompassed materials of organic origin as well, meaning the charcoal from square dugout SU 031, 032, which is among the most important archaeological materials in the richest structures of the Early Iron Age in the settlement. The results of AMS-analysis of C-14 charcoal from the dugout's fill has been ascertained with 95.4% certainty in the period of 725–538 cal BC (KIA 29562, BP 2507±24), i.e., from the last quarter of the eighth to the latter half of sixth centuries BC.¹⁰

After radiocarbon analysis of the materials from other Hallstatt settlements in Podravina were conducted,¹¹ this rather general determination of the

⁹ Analize je obavio Leibniz-Labor für Altersbestimmung und Isotopenforschung iz Kiela.

¹⁰ Mlađe, srednjovjekovno naselje u Sv. Đurđu istom je metodom svrstano u razdoblje od druge polovine 9. do druge polovine 10. st. po. Kr., odnosno s 95,4% sigurnosti između 856. i 978. cal AD (KIA 29561, BP 1148±25).

¹¹ Na ugljenu uzorkovanom iz zapune objekta SJ 237, 238 iz radne jame kružnoga tlocrta s nadstrešnicom iz Zbelave istočno od Varaždina potvrđuje se tek pripadnost naselja razdoblju starijega željeznog doba. Objekt SJ 237, 238, a time i zbelavsko naselje u cjelini, datirani su u Kielu s 95,4% vjerojatnosti u razdoblje 595–413 cal BC (KIA 36889; BP 2455 ± 19) (Kovačević 2009: 84). Analiza ugljena iz kanala SJ 010, 011 iz naselja u Torčecu kod Koprivnice rezultirala je kalibriranim datumom s 95,4% vjerojatnosti 671–482 BC (KIA 36890, 2645±30 BP) (Kovačević 2009: 121). I te analize obavljene su u Leibniz-Labor für Altersbestimmung und Isotopenforschung iz Kiela. Uz pomoć analiza C-14, obavljenih u istom laboratoriju u Kielu, naselje Virovitica-Đota na trasi virovitičke zaobilaznice datirano je okvirno u starije željezno doba (703–541 cal BC, Ložnjak-Dizdar 2007: 64).

⁹ The analyses were conducted by the Leibniz Laboratory for Radiometric Dating and Stable Isotope Research in Kiel.

¹⁰ Using the same method, the younger, medieval settlement in Sveti Đurađ was placed in the period from the latter half of the ninth century to the latter half of the tenth century, i.e. with 95.4% certainty between 856 and 978 cal AD (KIA 29561, BP 1148±25).

¹¹ Based on the charcoal sampled from the fill of structure SU 237, 238, from the working pit with circular layout and canopy from Zbelava, east of Varaždin, the settlement could only be dated to the Early Iron Age. Structure SU 237, 238, and thereby the Zbelava settlement as a whole, were dated in Kiel with 95.4% probability to the period of 595–413 cal BC (KIA 36889; BP 2455 ± 19) (Kovačević 2009: 84). Analysis of the charcoal from canal SU 010, 011, from the settlement in Torčec near Koprivnica, resulted in a calibrated date with 95.4% probability of 671–482 BC (KIA 36890, 2645±30 BP) (Kovačević 2009: 121). These analyses were also conducted in the Leibniz Laboratory for Radiometric Dating and Stable Isotope Research in Kiel. With the help of C-14 analysis conducted in the same laboratory in Kiel, the Virovitica-Đota settlement on the section of the Virovitica ring-road was roughly dated to the Early Iron Age (703–541 cal BC, Ložnjak-Dizdar 2007: 64).

istok tako bismo mogli datirati u razvijenu fazu starijega željeznog doba, u kasni stupanj Ha C i sam početak Ha D. U relativnokronološkome smislu to je vrijeme stupnja Stična 2 u dolenskoj skupini starijega željeznog doba ili horizonta Štajerska III prema B. Teržan (Teržan 1990; Gabrovec 1987). Pokušamo li novootkriveno naselje u Sv. Đurđu uvrstiti u kronološku shemu K. Vinski-Gasparini (Vinski-Gasparini 1987), pridodajemo ga njezinu horizontu 3.

VIROVITICA-KIŠKORIJA SJEVER

POLOŽAJ LOKALITETA I POVIJEST ISTRAŽIVANJA

Prilikom arheoloških istraživanja na trasi zapadne virovitičke zaobilaznice, kao što je prije u tekstu spomenuto, istraženo je osam arheoloških lokaliteta koji pripadaju raznim vremenskim fazama (karta 4). Među njima nalazi se i veliki kasnolatenški lokalitet Virovitica-Kiškorija sjever, koji se smjestio tek nekoliko kilometara sjevernije od naselja Virovitica-Đurađ istok.¹² Kasnolatenško naselje na Kiškoriji nalazi se na blagoj uzvisini, na zapadnome rubu Virovitice. To je naselje od svibnja do srpnja 2005. g. istraživao Institut za arheologiju u Zagrebu (Dizdar 2006).

U strukturi latenskoga naselja, čija istražena površina iznosi čak 19 600 m², ističu se brojne poluukopane zemunice i nadzemni objekti pravokutna tlocrta, organizirani u obiteljske cjeline (Dizdar 2007: 37). Ova će analiza prije svega biti usmjerena na malo-brojne objekte starijega željeznog doba koji su se pojavili unutar površine nizinskoga naselja pripisanog mokronoškoj skupini Tauriska i datiranog u kraj 2. i početak 1. st. pr. Kr., osnovanog negdje u razdoblju srednjeg latena (Dizdar 2006: 88; 2007: 39).

TIPOVI OBJEKATA

S obzirom na to da su na lokalitetu Kiškorija sjever pronađena samo dva objekta kojima se mogla odrediti pripadnost starijemu željeznom dobu, vjerojatno je pretjerano govoriti o postojanju naselja starijega željeznog doba na tom položaju (sl. 6). Posebno uzme li se u obzir činjenica da su objekti smješteni na samome sjeveroistočnom rubu

settlement to the Early Iron Age is not surprising. If we want a more precise time for the life of the settlement in Sveti Đurađ, we shall have to depend on a relative chronological analysis of the materials. The Virovitica-Đurađ East settlement can thus be dated to the developed phase of the Early Iron Age, in late phase Ha C and the very beginning of Ha D. In the relative chronological sense, this is the time of Stična phase 2 in the Lower Carniola group of the Early Iron Age or Steiermark horizon III according to B. Teržan (Teržan 1990; Gabrovec 1987). If we attempt to place the newly-discovered settlement in Sveti Đurađ into the chronological scheme of K. Vinski-Gasparini (Vinski-Gasparini 1987), it would be added to her horizon 3.

VIROVITICA-KIŠKORIJA NORTH

SITE LOCATION AND RESEARCH HISTORY

As noted previously in this text, during archaeological research of a section of the western Virovitica ring-road, eight archaeological sites belonging to different chronological phases were examined (map 4). Among them is the large late La Tène site Virovitica-Kiškorija North, which is situated only a few kilometres farther north of the Virovitica-Đurađ East settlement.¹² The late La Tène settlement at Kiškorija is on a slight rise on the western edge of Virovitica. This settlement was researched by the Institute of archaeology in Zagreb from May to July 2005 (Dizdar 2006).

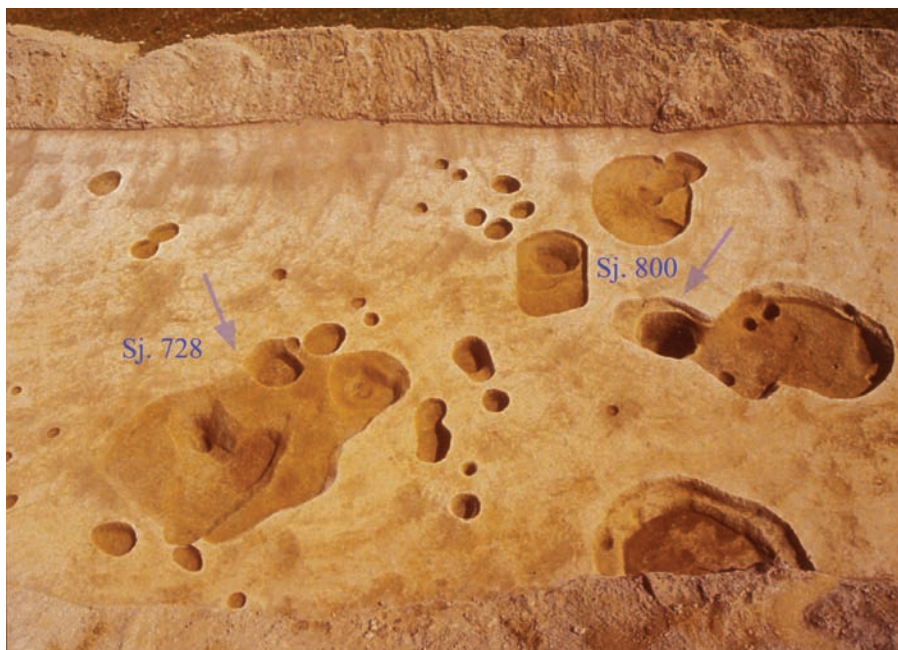
In the structure of the La Tène settlement, in which the researched surface covers as much as 19,600 m², numerous dugouts only partially below ground and above-ground structures, organized into familial units (Dizdar 2007: 37), stand out. This analysis shall above all be oriented toward the few Early Iron Age structures which appeared within the area of this lowland settlement attributed to the Mokronog group of Taurisci and dated to the end of the second and early first centuries BC, established somewhere in the middle La Tène period (Dizdar 2006: 88; 2007: 39).

TYPES OF STRUCTURES

Since only two structures were found at the Kiškorija North site which could be specified as belonging to

¹² Zahvaljujem dr. sc. Marku Dizdaru, voditelju zaštitnih istraživanja lokaliteta Virovitica-Kiškorija sjever, na ustupljenom materijalu i popratnoj terenskoj i drugoj dokumentaciji, koja je izvršena u strukturu ovoga rada.

¹² I would like to thank Marko Dizdar, Ph.D., the head of the rescue excavation at the Virovitica-Kiškorija North site, for providing the materials and the accompanying field and other documentation, which have been incorporated into the structure of this work.



Slika 6. Pogled sa sjevera na zemunicu SJ 728 i jamu SJ 800 s okolnim latenskim objektima (prema Dizdar 2007: 42).

Figure 6. View from north of dugout SU 728 and pit SU 800 with surrounding La Tène structures (based on Dizdar 2007: 42).

latenskoga naselja, koje dalje u smjeru istoka, ako slijedimo istraženu trasu zaobilaznice, sigurno završava.

Prvi je ukopani objekt većih dimenzija SJ 727, 728 (sl. 6 i 7, T. 19: 2–7). Objekt je pronađen u sondi XXII, □ f/g-76-78. Radi se zemunici nepravilna, izdužena tlocrta, čija najveća dužina iznosi 9,10 m, a širina doseže 5,05 m. Morfološki, objekt možemo podijeliti na dva dijela, na plići dio koji se nalazi na jugu te dublji dio na sjeveru, iz čega se može zaključiti da se radi o zemunici s dvije odvojene prostorije. U sjevernom dijelu dubina zemunice doseže priličnih 1,35 m.

Zemunica iz Kiškorije svrstala bi se tako u red kompleksnijih, višesobnih zemuničkih objekata većih dimenzija, kakve smo do sada susretali u Zbelavi, Sigecu ili Farkašiću (Kovačević 2008: 49; Marković 1982: 249; Šimek 1982: 269; 1982a: 26). Kao što se vidi na ilustracijama (sl. 6 i 7), zemunicu su presložile tri kasnije, latenske jame, dvije u južnome (SJ 718 i SJ 756) i jedna u sjevernome dijelu objekta (SJ 734). U neposrednoj blizini zemunice nalazi se desetak rupa od stupova, za koje nismo u mogućnosti utvrditi pripadaju li ostatku halštatskog objekta ili su dio strukture latenskoga naselja.

Drugi objekt nalazi se 10-ak m zapadno od zemunice SJ 727, 728. SJ 799, 800 nalazi se u □ d/e-75 S-XXII. To je oznaka koju nosi dublja, cilindrična jama s nešto proširenim otvorom nepravilno kružnoga tlocrta (sl. 6, T. 18; T. 19: 1). Promjer jame

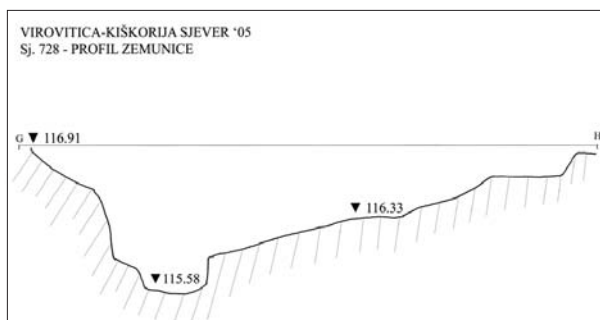
the Early Iron Age, it may be excessive to speak of the existence of an Early Iron Age settlement at this site (Fig. 6). Particularly if one takes into consideration the fact that the structures are situated at the very north-east periphery of the La Tène settlement, which certainly ends in the eastward direction if one follows the researched section of the ring-road.

The first is a below-ground structure with large dimensions, SU 727, 728 (Fig. 6 and 7, Pl. 19: 2-7). The structure was found in test trench XXII, □ f/g-76-78. This is a dug-out with irregular, oblong layout, and its greatest length is 9.1 m, while its width reaches 5.05 m.

Morphologically, the structure may be divided into two sections: a shallower section to the south and a deeper section to the north, whereby one may conclude that it was a dugout with two separate rooms. In the northern section, the dugout attains a considerable depth of 1.35 m.

The dugout from Kiškorija therefore joins the ranks of the more complex, larger dugout structures with more than a single room, the type thus far been encountered in Zbelava, Sigetec or Farkašić (Kovačević 2008: 49; Marković 1982: 249; Šimek 1982: 269; 1982a: 26). As seen in the illustrations (Fig. 6 and 7), the dugout was intersected with three later, La Tène pits, two in the southern (SU 718 and SU 756) and one in the northern section of the structure (SJ 734). Ten post holes are located in the immediate vicinity of the dugout, and it is impossible to ascertain whether they belonged to the remains of the Hallstatt structure or part of a structure in the La Tène settlement.

The other structure is approximately 10 m west of dugout SU 727, 728. SU 799, 800, at □ d/e-75 S-XXII. This is the designation borne by the deeper, cylindrical pit with something of an expanded opening that has an irregular circular layout (Fig. 6, Pl. 18; Pl. 19: 1). The diameter of the pit is 1.85 m, while its depth reaches 2.21 m. The structure narrows toward the flat bottom, and roughly at the middle of its depth, and on its western wall it has a stair which probably served as an aid when the structure was being made or used. According to the layout and the profile of



Slika 7. Profil halštatske zemunice SJ 727, 728 na lokalitetu Virovitica-Kiškorija sjever (Arhiv arheoloških iskopavanja).

Figure 7. Profile of Hallstatt dugout SU 727, 728 at Virovitica-Kiškorija North site (Excavation archives).

iznosi 1,85 m, dok joj dubina doseže 2,21 m. Objekt se sužava prema ravnu dnu, a otprilike na sredini svoje dubine, na zapadnoj stijenci, ima jednu stepenicu koja je vjerojatno poslužila kao pomoćni element pri izradi ili korištenju objekta. Prema tlocrtu i profilu SJ 799, 800 tipološki treba odrediti kao bunar. I u ovom slučaju dogodilo se naknadno preslojenje objekta pa je na zapadni rub SJ 799, 800 "sjeo" veći, pliće ukopani kasnolatenski objekt. Značajna je činjenica, koju ovdje vrijedi posebno istaknuti, da je to jedini dosad objavljeni bunar otkriven unutar naselja starijega željeznog doba u hrvatskome dijelu Podravine.

Zapune oba halštatska objekta s Kiškorije sadržavale su vrlo malo pokretnih arheoloških nalaza. To u znatnoj mjeri podsjeća na još jedan – treći – lokalitet sa zapadne virovitičke obilaznice na kojem su utvrđeni tragovi života u starijemu željeznom dobu, na lokalitet Virovitica-Đota, ali i na neke objekte s lokaliteta Virovitica-Đurađ istok (SJ 019, 020). Virovitica-Đota najsjeverniji je u nizu od osam lokaliteta na trasi zaobilaznice. Nalazište, koje je istraživala Daria Ložnjak-Dizdar iz Instituta za arheologiju u Zagrebu, smjestilo se na izduženoj gredi na sjevernom izlazu iz Virovitice, a zapadno od ceste koja vodi prema Barcsu (karta 4) (Ložnjak-Dizdar 2006). Iako većina materijalnih ostataka s Đote potječe iz starije faze kasnoga brončanog doba i može se pripisati grupi Virovitica, pronađeno je više objekata koji se datiraju u ranu fazu starijega željeznog doba. Na Đoti se javljaju i nasebinski objekti koji su kronološki određeni u razdoblje ranoga srednjeg vijeka (Ložnjak-Dizdar 2007: 64). U prvim objavama lokaliteta spominju se ognjište i jame s rijetkim nalazima stariježeljeznodobne keramike, zbog čega voditeljica istraživanja zaključuje da su objekti zapunjeni prirodnim putem, odnosno da nisu iskorišteni kao otpadne jame (*ibid.*). Kao što smo ranije u tekstu naznačili, ta je situacija vrlo slična onoj na

SU 799, 800, it should be typologically classified as a well. In this case also there was an intermingling of structures, so a larger, shallower late La Tène below-ground structure "sat" on the western edge of SU 799, 800. A significant fact, worthwhile stressing at this point, is that this is the only thus far published well discovered inside an Early Iron Age settlement in the Croatian part of Podravina.

The fill in both Hallstatt structures at Kiškorija contained very little in the way of movable archaeological finds. This considerably recalled another – third – site along the Virovitica ring-road at which traces of life in the Early Iron Age were ascertained, the Virovitica Đota site, as well as some structures at the Virovitica-Đurađ East site (SU 019, 020). Virovitica-Đota is the northernmost in the series of eight sites on the ring-road section. The find-site, which was researched by Daria Ložnjak-Dizdar of the Institute of archaeology in Zagreb, is situated on an extended ridge at the northern exit from Virovitica, west of the road which leads to Barcs (map 4) (Ložnjak-Dizdar 2006). Even though most of the finds from Đota date to the earlier phase of the Late Bronze Age and may be ascribed to the Virovitica group, several structures were found which date to the early phase of the Early Iron Age. Settlement structures also appeared at Đota which have been chronologically placed in the Early Middle Ages (Ložnjak-Dizdar 2007: 64). In the first publications of the site, a hearth and pit containing rare Early Iron Age pottery finds were mentioned, which led the research leader to conclude that the structures were filled naturally, that they were not used as waste pits (*Ibid.*). As already indicated herein, this situation is quite similar to that at the Virovitica-Kiškorija North site, where a very few movable finds were discovered in the examined dugout and well, so it may be concluded that they were filled gradually, by natural processes. It would appear that during rescue excavations at Đota, the northern periphery of an Early Iron Age settlement was examined, which was very likely inhabited at the same time as the Virovitica-Sveti Đurađ settlement and the large dugout, SU 727, 728, at the Virovitica-Kiškorija North site.

The fact that the presence of people has been recorded in a relatively small area at the same time in the Early Iron Age, probably during the high phase or conclusion of Ha C into the initial Ha D, appears rather important. If the results of these relative chronological analyses and the results of C-14 analysis of all three sites placing them in the Early Iron Age are accepted, then it may be concluded that the wider area of Virovitica was relatively densely populated during the Early Iron Age. Since previously there was virtually no information on the Early Iron Age in this micro-region, this is a very important step forward.

lokalitetu Virovitica-Kiškorija sjever, gdje se u istraženju zemunici i bunaru našlo vrlo malo grubih, pokretnih nalaza, pa se i za njih može zaključiti da su zatrpani postupno, prirodnim putem. Čini se da je u Đoti prilikom zaštitnih iskopavanja istražen sjeverni rubni dio naselja starijega željeznog doba, koje je po svoj prilici bilo istodobno s naseljem Virovitica-Sv. Đurađ i velikim zemuničkim objektom SJ 727, 728 lokaliteta Virovitica-Kiškorija sjever.

Važnim se čini podatak da je u isto vrijeme na relativno malenu području zabilježena prisutnost ljudi tijekom istog razdoblja u starijem željeznom dobu, vjerojatno u razvijenom ili završnom Ha C do u početni Ha D. Prihvatimo li rezultate tih relativnokronoloških analiza, kao i rezultate analiza C-14 koje sva tri lokaliteta postavljaju u razdoblje starijega željeznog doba, možemo zaključiti da je šire područje grada Virovitice tijekom razvijenoga starijeg željeznog doba bilo relativno gusto naseljeno. Kako dosad nismo raspolagali s gotovo nikakvim informacijama o starijem željeznom dobu ove mikroregije, to je vrlo bitan pomak.

No vratimo se nalazima s lokaliteta Virovitica-Kiškorija sjever. Iako se velika količina latenskih nalaza iz Kiškorije upravo obrađuje i sprema za objavu, pa ovdje ne bismo željeli detaljnije ulaziti u raspravu o segmentima kasnolatskoga naselja, pozornost želimo kratko usmjeriti na jedan tip objekta kojega smo se prije doticali u obradi, a koji se – prema preliminarnim izvještajima – pojavljuje i unutar latenskoga naselja Virovitica Kiškorija-sjever. Riječ je o ukopanim objektima pravokutna tlocrta, zaobljenih uglova. Spomenuto je da srodan objekt poznaje i naselje Virovitica-Đurađ istok – SJ 031, 032 (sl. 4). Vrlo slični objekti javljaju u naseljima starijega, ali i mlađega željeznog doba u Podravini, Prekomurju, Transdanubiji, Donjoj Austriji i drugdje (Szabó, Kriveczky & Czajlik 2004: Fig. 7; Guštin & Tiefengraber 2001: 112; Griehl 1996: 98; Rams 1998: T. 11: 151; Stegmann-Rajtár 1996: Abb. 3; Raimund 1996: 285; Lauermann 1994: 170; Béla 1993: 195; Čučković 1993: 168, sl. 14; Jerem *et al.* 1984: Fig. 7; Vidović & Tomičić 1984: 92; Wollak 1979: Abb. 2). Primjer iz kasnolatskoga naselja u Kiškoriji plitko je ukopan, a čini se više pravokutnoga nego kvadratnoga tlocrta. No morfološki je zadržao istu strukturu kao poznati halštatski primjerci – ima stepenicu uz jednu od stranica (Dizdar 2007: 41 dolje). Pojava istog tipa objekta unutar naselja razvijene faze starijega i mlađega željeznog doba u Kiškoriji i Sv. Đurđu ukazuje da i ovdje, u virovitičkoj Podravini, možemo očekivati dugotrajno korištenje tog tipa ukopanih objekta, vjerojatno kontinuirano u halštatskom i latenskom razdoblju.

But to return to the Virovitica-Kiškorija North site: even though a high quantity of La Tène finds from Kiškorija are being analyzed and prepared for publication (so we do not wish to engage in a detailed discussion of segments of the late La Tène settlement), we do wish to briefly turn attention to a type of structure touched upon previously in the analysis, and which – according to preliminary reports – also appears within the late La Tène settlement of Virovitica Kiškorija-North. This is a below-ground structure with rectangular layout and rounded corners. It has been mentioned that a related structure is also known from the Virovitica-Đurađ East settlement – SU 031, 032 (Fig. 4). Very similar structures appear in the settlements of both the Early and Late Iron Age in Podravina, Prekomurje, Transdanubia, Lower Austria and elsewhere (Szabó, Kriveczky & Czajlik 2004: Fig. 7; Guštin & Tiefengraber 2001: 112; Griehl 1996: 98; Rams 1998: Pl. 11: 151; Stegmann-Rajtár 1996: Abb. 3; Raimund 1996: 285; Lauermann 1994: 170; Béla 1993: 195; Čučković 1993: 168, Fig. 14; Jerem *et al.* 1984: Fig. 7; Vidović & Tomičić 1984: 92; Wollak 1979: Abb. 2). The example from the late La Tène settlement in Kiškorija is shallowly dug, and it appears more rectangular than square in layout. But morphologically it retained the same structure as the known Hallstatt examples: it has a stair on one of its sides (Dizdar 2007: 41 down). The appearance of the same type of structure inside a settlement of the developed phase of the Early and in the Late Iron Age in Kiškorija and Sveti Đurađ indicates that here as well, in the Virovitica Podravina, the long-term use of this type of below-ground structure can be expected, probably continuously in the Hallstatt and La Tène periods.

FINDS FROM THE STRUCTURES AT KIŠKORIJA

Already during first analysis of movable materials from Kiškorija in the Early Iron Age, it has noted that these are few in number and very coarse and fragmentary pieces of atypical everyday ware.¹³ Do these facts, just like the isolation of these two structures at sites with large examined surfaces, speak of only occasional use and their remoteness from a core settlement? For example, a seemingly attractive notion is that this was a temporary livestock shelter consisting of one residential structure and a well to water said livestock which belonged to the settlement in Sveti Đurađ or another nearby settlement.

¹³ Only thirty pottery fragments were found in each of the two structures.

NALAZI IZ OBJEKATA NA KIŠKORIJI

Već prilikom prve analize pokretnoga materijala starijega željeznog doba iz Kiškorije uočeno je da se radi o malobrojnim te vrlo grubim i fragmentiranim ulomcima atipična svakodnevnoga posuđa.¹³ Progovaraju li možda te činjenice, uostalom kao i usamljenost ovih dvaju objekata na lokalitetu velike istražene površine, o tek povremenoj upotrebi, odnosno o njihovoj udaljenosti od matičnoga naselja? Privlačnom se čini ideja o, primjerice, povremeno-me stočarskom staništu koje je činio jedan stambeni objekt i bunar nuždan za napajanje stoke, a koje bi pripadalo naselju u Sv. Đurđu ili nekom drugom obližnjem naselju. To svakako ostaje u sferi spekulacije jer nam nedostaje više elemenata koji bi tu teoriju mogli poduprijeti ili je opovrgnuti. Činjenica ostaje da u fakturi i načinu izrade nema bitne razlike između materijala iz zemunice i bunara, iako rezultati analize C-14, kako ćemo vidjeti nešto kasnije, sugeriraju da je zemunica nešto starija od bunara, isto kao što nema razlike u fakturi i oblicima između keramičkih nalaza iz Kiškorije i onih koji su predstavljeni ovdje, a potječu iz objekata u naselju Virovitica-Đurađ istok.

Među rijetkim oblicima koji su se dali tipološki odrediti nalazi se lonac koji je u dosadašnjoj obradi nazvan tip A1 (T. 18: 3). Njemu smo se detaljnije posvetili prije u ovom tekstu, kao i u drugim radovima o naseljima podravskoga halštata, te pokazali da se javlja i tijekom razvijene i u kasnoj fazi starijega željeznoga doba u Podravini, kada zahvaljujući svojoj brojnosti postaje jedan od vodećih tipova (Kovačević 2008: 56-59; 2009: T. 1: 1). Iako ih je teže precizno kronološki odrediti, ti lonci značajan su stariježeljeznodobni element među materijalnim ostacima iz Kiškorije.

Primjerak iz Kiškorije nađen je unutar zapune zemunice SJ 727, 728 i nema, koliko je moguće vidjeti iz očuvanih fragmenata, nikakve dodatne aplikacije, odnosno funkcionalno-dekorativne elemente koji se obično javljaju na toj vrsti lonca. Istom tipu mogao bi pripadati fragment iz bunara SJ 799, 800 (T. 19: 4), koji neposredno ispod ruba ima vodoran niz jednostavnih, vjerojatno prstom učinjenih okruglih otisaka. Taj način ukrašavanja zabilježili smo na više podravskih lokaliteta, na loncu blage s-profilacije u kvadratnoj poluzemnici SJ 031, 032 obližnjeg naselja Sv. Đurađ-istok (T. 11: 1) ili među rekognosciranjima skupljenu materijalu s lokaliteta Torčec-Međuriče (Kovačević 2009: T. 9: 1). Isti ukras, niz okruglih udubljenja utisnutih u stijenku gornjega dijela posude, nalazi se u više navrata

This certainly remains within the realm of speculation, for elements that could either confirm or negate this theory are absent. The fact remains that there are no essential differences between the materials from the dugout and well in terms of facture or rendering, although the results of C-14 analysis (which will be shown later) suggest that the dugout is somewhat older than the well, just as there are no differences in facture and form between the pottery finds from Kiškorija and those presented herein which originated in the structures in the Virovitica-Đurađ East settlement.

Among the rare forms which could be typologically ascertained, there is a pot which in all previous analysis has been referred to as type A1 (Pl. 18: 3). We have treated it in greater detail elsewhere in this text, and in other works on the settlements of the Podravina Hallstatt, and showed that it also appeared during the developed and late phases of the Early Iron Age in Podravina, when, thanks to its high number, it became one of the leading types (Kovačević 2008: 56-59; 2009: Pl. 1: 1). Even though they are more difficult to chronologically determine with any precision, these pots were a significant Early Iron Age element among the finds from Kiškorija.

The example from Kiškorija was found inside the fill of dugout SU 727, 728 and there is not, as far as can be discerned from the preserved fragments, any added appliqués or the functional/decorative elements which normally appear on this type of pot. The fragment from well SU 799, 800 (Pl. 19: 4) could belong to the same type; it has a series of simple circular imprints, probably made by finger, immediately below its rim. This ornamentation method has been recorded at several Podravina sites, on the pot with light S-profile in square dugout SU 031, 032 in the nearby Sveti Đurađ-East settlement (Pl. 11: 1) or among the materials gathered during the reconnaissance at the Torčec-Međuriče site (Kovačević 2009: Pl. 9: 1). The same ornament, a series of round depressions impressed into the wall of the upper section of the vessel, can be found several times together with type A1 pots in Zbelava (Kovačević 2005: Pl. 31: 2; Pl. 43: 5), which speaks in favour of the more frequent use of this decorative concept in the late Hallstatt phase. This same determination has been suggested by certain other finds outside of Croatia, such as those from the very end of the Early Iron Age from the Lower Austrian settlement of Inzersdorf-Walpersdorf, where it was precisely this ornamentation technique that played an important role, or from the grave in Zemendorf, in Burgenland (Ramsel 1998: Pl. 33: 74; Pl. 51: 292; Jerem 1996: Abb. 2). The series of oval depressions appeared earlier in the same area, for example in a settlement mostly

¹³ I u jednom i u drugom objektu nađeno je tek po tridesetak ulomaka keramičkih posuda.

združen s loncima tipa A1 u Zbelavi (Kovačević 2005: T. 31: 2; T. 43: 5), što govori u prilog češćoj uporabi tog dekorativnog koncepta u kasnohalštatskoj fazi. Takvo određenje sugeriraju i neki drugi nalazi izvan Hrvatske, poput onih sa samo-ga kraja starijega željeznog doba iz donjoaustrijskoga naselja Inzersdorf-Walpersdorf, gdje upravo ta tehnika ukrašavanja ima značajnu ulogu, ili iz groba u Zemendorf, u Gradišću (Ramsl 1998: T. 33: 74; T. 51: 292; Jerem 1996: Abb. 2). Na istome području nizovi ovalnih udubljenja javljaju se ranije, primjerice u naselju pretežno vremena Ha D iz Unterparschenbrunn, u kojemu nalazimo i kvadratne ukopane objekte, konstrukcijski gotovo identične primjercima iz Zbelave ili Sv. Đurđa (Lauer mann 1994: T. 17: 3; T. 21: 1).

Nasuprot znatnijoj učestalosti tog tipa ukrašavanja u kasnohalštatskome vremenu očito je da se ne radi o prevladavajućem načinu ukrašavanja keramičkih posuda tijekom rane i razvijene faze starijega željeznog doba u Podravini, no njegova se pojava ne može zanemariti. Jasno je da taj ukras nije forma koju treba vezati samo uza starije željezno doba, već ga kao jednu od najstarijih tehnika ukrašavanja pratimo često tijekom prapovijesti. Tako uz rijeku Dravu bilježimo njegovu pojavu u naselju kasne kulture polja sa žarama u Ormožu (Tomanič-Jevremov 1988–1989: T. 11: 5), a u slovenskoj Štajerskoj javlja se više puta i u I. horizontu naselja Poštela (Teržan 1990: T. 104: 1, 2; T. 115: 13). Ti primjeri pokazuju da nećemo pogriješiti zaključimo li da se isti ukras na naseobinskoj keramici u Podravini povremeno javlja tijekom cijeloga starijeg željeznog doba, dok je u vrijeme kasnoga halštata i nešto češće u upotrebi.

Drugi oblik prepoznat unutar materijala iz halštatskih objekata u Kiškoriji jest zdjela uvučena ruba ili tip B1b (T. 18: 1; T. 19: 1, 7). To je jedan od tipova koji, u najužem smislu riječi, pripadaju inventaru gotovo svakog stambenog objekta starijega željeznog doba u Podravini, i to u svim njegovim razvojnim stupnjevima, pa ne predstavljaju kronološki osjetljiv element. Zanimljiv je primjerak iz zemunice (T. 19: 1) koji na rubu ima vertikalne, plitke tragove modeliranja, koji nisu ukras, već prije još jedan dodatak općoj slici o gruboj i netipičnoj naseobinskoj keramici.

Uz te jedini primjerci koji se još izdvajaju jesu ulomak manjega poklopca (ili možda zvonaste noge nepoznate posude?) (T. 18: 4) te ulomak ramena većeg lonca, koji je također vrlo grube izrade, deblijih stijenki i neravne površine (T. 19: 6). Od funkcionalno-dekorativnih elemenata, koji su obično na gruboj, naseobinskoj keramici najčešći ukras, u Kiškoriji u bunaru SJ 799, 800 javlja se tek jedan ulomak posude na kojemu se nalazi donje hvatište

of Ha D period in Unterparschenbrunn, in which square below-ground structures were found, almost identical in terms of construction to the examples from Zbelava or Sveti Đurđ (Lauer mann 1994: Pl. 17: 3; Pl. 21: 1).

In contrast to the considerably higher frequency of this type of ornamentation in the late Hallstatt period, it is apparent that this was not the predominant method for ornamenting pottery during the early and more developed phases of the Early Iron Age in Podravina, but its appearance should not be disparaged. Clearly this ornament is not a form that should solely be associated with the Early Iron Age, for as one of the oldest ornamentation techniques it can be followed throughout prehistory. Thus, its appearance has been recorded along the Drava River in a late Urnfield culture settlement in Ormož (Tomanič-Jevremov 1988-1989: Pl. 11: 5), while in the Slovenian Steiermark it appeared several times as well during horizon I in the Poštela settlement (Teržan 1990: Pl. 104: 1, 2; Pl. 115: 13). These examples show that it would not be erroneous to conclude that this same ornament on settlement pottery in Podravina occasionally appeared throughout the Early Iron Age, while during the late Hallstatt it was in use even more.

The second form discerned in the materials from the Hallstatt structures in Kiškorija is the bowl with inwardly drawn rim, or type B1b (Pl. 18: 1; Pl. 19: 1, 7). This is one of the types which, in the broadest sense of the word, belonged to the inventory of virtually every residential structure of the Early Iron Age in Podravina, in all of its developmental stages, so it is not a chronologically sensitive element. The example from the dugout (Pl. 19: 1) is interesting, for at its edges it has vertical, shallow traces of modelling which are not decorations, rather yet another addition to the general picture of coarse and atypical settlement pottery.

Besides these, the only examples that also stand out are the fragment of a small lid (or perhaps the campaniform foot of an unidentified vessel?) (Pl. 18: 4) and the fragment of the shoulder of a large pot, which was also coarsely rendered, with thicker walls and an uneven surface (Pl. 19: 6). Among the functional/decorative elements, which are the most common ornament on coarse, settlement pottery, only a single vessel fragment appeared in Kiškorija, in well SU 799, 800, which has on it the lower grip of a horizontal ribbon-like handle (Pl. 19: 5). Besides the series of depressions on the earlier described fragment from the same well (Pl. 19: 4), these are also the only examples of ornamental or functional-decorative elements in the discovered Early Iron Age structures at the Virovitica-Kiškorija North site.

odlomljene okomite trakaste ručke (T. 19: 5). Osim niza udubljenja na ranije opisanom ulomku iz istog bunara (T. 19: 4) to su i jedini primjeri ukrasnih ili funkcionalno-dekorativnih elemenata u otkrivenim objektima starijega željeznog doba na lokalitetu Virovitica-Kiškorija sjever.

DATACIJA NALAZA S KIŠKORIJE

Analizom C-14 dobiveni su određeni datumi za oba ukopana halštatska objekta iz naselja Virovitica-Kiškorija sjever. Leibniz Labor für Altersbestimmung und Isotopenforschung iz Kiela obradio je dva uzorka ugljena. Materijal iz jame SJ 727 (uzorak U-155) datiran je s 95,4% sigurnosti u 719–540 cal BC, odnosno okvirno u razdoblje od kraja 8. st. do u drugu polovinu 6. st. pr. Kr. Ugljen iz drugoga spominjanog objekta, iz bunara SJ 799 (U-153), datiran je istom metodom, u istoj ustanovi i s istom sigurnosti (95,4%) u 555–407 cal BC, odnosno od sredine 6. do kraja 5. st. pr. Kr. Time su oba objekta iz Kiškorije obuhvaćena analizom u ovome radu sigurno postavljena u razdoblje starijega željeznog doba, što s obzirom na fragmentirano i izrazito grubo keramičko posuđe koje je prikazano pri analizi nalaza iz Kiškorije i nije nebitna informacija. No neobično je da jedina dva objekta koja u Kiškoriji pripadaju starijemu željeznom dobu, a koja su i smještena u neposrednoj blizini jedan do drugoga, pokazuju razliku u vremenskom određivanju. Tim više što analiza pokretnoga građiva iz oba objekta, ma koliko ono oskudno i netipično bilo, nije ukazala na izrazite razlike među njima. Skloniji smo pretpostavci da je analizirani organski materijal u bunar dospio naknadno, tijekom vremena u kojem je bunar postupno zatrpavan prirodnim putem, i da je to moglo utjecati na rezultat analize.

S obzirom na iskazanu materijalno-kulturnu bliskost, kao i činjenicu da nedostaju bilo koji nalazi izrazito stariji ili izrazito mlađi od Sv. Đurđa, skloni smo zemunički objekt s bunarom kronološki odrediti u približno isti vremenski odsjek kao lokalitet Sv. Đurđ. To znači u razvijeni ili kasni Ha C do u početni Ha D, u horizont Stična 2 ili Štajerska III.

ZAKLJUČAK

Tijekom opsežnih zaštitnih arheoloških istraživanja na trasi zapadne virovitičke obilaznice istraženo je i naselje starijega željeznog doba Virovitica-Đurđ istok. S obzirom na to da je u ovome radu prvi put predstavljeno jedno naselje starijega željeznog doba s virovitičkoga područja, u zaključnim

DATING OF THE FINDS FROM KIŠKORIJA

C-14 analysis secured specific dates for both below-ground Hallstatt structures from the Virovitica-Kiškorija North settlement. The Leibniz Laboratory for Radiometric Dating and Stable Isotope Research in Kiel analyzed two charcoal samples. The material from pit SU 727 (sample U-155) was dated with 95.4% certainty to 719-540 cal BC, meaning generally within the period from the end of the eighth to the latter half of the sixth centuries BC. Charcoal from the other structure, from well SU 799 (U-153), was dated using the same method, in the same laboratory, and with the same certainty (95.4%) to 555-407 cal BC, or the mid-sixth to the end of the fifth centuries BC. Both structures from Kiškorija encompassed by the analysis in the work were thereby certainly placed in the Early Iron Age, which, given the fragmentary and very coarse pottery shown in the analysis of finds from Kiškorija, is not irrelevant information. It is, however, unusual that the only two structures at Kiškorija which belong to the Early Iron Age, situated in the direct vicinity of one another, exhibit differences in their chronological determination. This is all the more unusual because an analysis of the movable finds from both structures, however meagre and atypical they are, did not show any marked differences between them. We are more apt to favour the hypothesis that the analyzed organic materials made their way into the well subsequently, during a time when the well was entirely fill by natural means, and this could have influenced the results of the analysis.

Given the demonstrated material and cultural closeness, and the fact that any finds exceptionally older or younger than Sveti Đurđ are absent, we favour a chronological determination for the dug-out and well in the same approximate time-frame as the Sveti Đurđ site. This means from the high or late Ha C to the initial Ha D, in Stična horizon 2 or Steiermark horizon III.

CONCLUSION

During extensive rescue archaeological research on a section of the Virovitica ring-road, the Early Iron Age settlement designated as Virovitica-Đurđ East was also examined. Given that an Early Iron Age settlement from the Virovitica area is presented for the first time in this work, it would be worthwhile to reiterate the basic results of the completed analyses in the concluding remarks.

The settlement in Sveti Đurđ consisted of below-ground residential structures, and prominent among

razmatranjima vrijedi ponoviti osnovne rezultate provedenih analiza.

Naselje u Sv. Đurđu činili su ukopani stambeni objekti, među kojima su posebno mjesto vjerojatno zauzimale plitko ukopane zemunice nepravilna tlocrta s jednom prostorijom, u pravilu duže od 5 m, te zemunica kvadratnoga tlocrta sa zemljanom kluptom ili stepenicom u južnome dijelu. Uz njihove rubove, s vanjske, a ponekad i unutrašnje strane, otkrivene su rupe od stupova, odnosno tragovi vertikalne drvene konstrukcije objekata, moguće neke vrste šatorasta krova. Uz kvadratnu zemunicu pronađene su i rupe od stupa raspoređene u pravilan kvadratni tlocrt i identičnih dimenzija kao kvadratna zemunica, koje bi mogle predstavljati zadnji ostatak nekog pomoćnog nadzemnog objekta s kojim su kvadratna zemunica i moguće neki drugi ukopani objekti u neposrednoj okolici mogli činiti jednu stambeno-gospodarsku cjelinu. Iz zapune kvadratne zemunice SJ 032, kao i jedne od zemunica nepravilna tlocrta (SJ 077, 078), potječe većina najznačajnijih nalaza s lokaliteta, na kojima smo i utemeljili našu kronološku i kulturnu analizu. Unutar istraženoga dijela naselja nisu pronađena ognjišta, vatrišta, bunari ili srodni pomoćni objekti. Zanimljiv je i malen broj otpadnih jama na istraženoj dijelu lokaliteta, kao i činjenica da dio većih ukopanih objekata nije sekundarno iskorišten za saniranje otpada iz naselja, već je zatrpan prirodnim putem. Iz tih bismo činjenica mogli zaključiti da je istražen dio naselja ili naselje u cjelini bilo u jednom trenu napušteno i da nije poživjelo dovoljno dugo da se ukopani objekti iskoriste na taj način. Druga je mogućnost da su se otpadne jame nalazile u nekome drugom, neistraženu dijelu naselja.

Postoje indicije koje bi mogle govoriti da naselje u Sv. Đurđu živi u relativno kratku vremenskome rasponu, negdje na pragu kasnohalštatskoga razdoblja, kad se na širem zapadnopanonskom području događaju promjene koje će donijeti kraj života nizu značajnih centara, poput Kleinkleina, Poštela ili Sopron-Burgstalla (Teržan 1998: 519). Osim određenih stratigrafskih ili podataka o strukturi naselja u Sv. Đurđu o takvu ograničenu trajanju govorili bi i pokretni arheološki nalazi, prije svega keramika, koji ne upućuju ni na izrazito starije ni na mlađe razdoblje. Naravno, ne treba smetnuti s uma vrlo važnu činjenicu da se radi tek o djelomično istraženu lokalitetu i da su sve ove pretpostavke jednostavno odraz izostanka još opsežnijih terenskih istraživanja. Zato je nužno neke navedene pretpostavke o životu naselja ipak ostaviti u području nepotvrđene teorije.

I u ovome naselju najčešće je standardno grublje kućno posuđe ukrašeno različitim funkcionalno-

the latter were shallowly embedded dugouts with irregular layout and a single room, generally longer than 5 m, and also square dugouts with an earthen bench or stair in the southern section. Along their edges, normally on the outside but sometimes also on the inside, post holes were discovered – these are the vestiges of a vertical construction accompanying the structure, possibly some type of tent-shaped roof. Post holes were found together with the square dugout which were arranged in a standard rectangular layout with dimensions identical to that of the dugout itself, and they may constitute the last remains of some ancillary above-ground structure which together with the dugout and some other immediately adjacent below-ground structure may have formed a single residential or functional structure. Most of the most significant finds from the site, which served as the basis for chronological and cultural analysis, came from the fill of square dugout SU 032 and one of the dugouts with irregular layout (SU 077, 078). No hearths, fireplaces, well or similar auxiliary structures were found in the examined portion of the settlement. Also interesting is the small number of waste pits in the examined portion of the site, and the fact that part of the larger below-ground structures were not utilized secondarily to dispose of the settlement's waste, rather they were buried by natural processes. These facts point to the possible conclusion that the examined part of the settlement or even the settlement as a whole was abandoned at a given moment and that it did not endure long enough for the below-ground structures to be utilized in this manner. The other possibility is that the waste pits were located in some other, unexplored part of the settlement.

There are indications that the settlement in Sveti Đurađ existed for only a relatively brief time, somewhere at the threshold of the late Hallstatt period, when changes were occurring throughout the west Pannonian zone that would lead to the end of a series of major centres, such as Kleinklein, Poštela and Sopron-Burgstall (Teržan 1998: 519). Besides certain data on the stratigraphy and structure of the settlement in Sveti Đurađ, this limited duration is also confirmed by the archaeological artefacts, above all the pottery, which does not indicate either an older or younger period. To be sure, one cannot discount the very vital fact that this is only a partially examined site and that all hypotheses are simply a reflection of the lack of even more extensive field research. This is why it some of this conjecture on the settlement's life should be left within the realm of unsubstantiated theory.

The most common pottery in this settlement, as in others, is coarse household ware ornamented with various functional/decorative additions. The f

-dekorativnim dodacima. Posebno se izdvaja česta pojava jednostavna lonca tipa A1, koji je ovdje jedan od najdominantnijih tipova. Isto se može reći i za zdjelu uvučena ruba ili tip B1b, kako smo je označili tijekom analize. Na zdjelama se povremeno javljaju i pliče kose kanelure. Među najznačajnije nalaze valja ubrojiti lonce stožasta vrata ukrašene kaneliranim ukrasom. Obradujući primjerke iz Sv. Đurđa pokazali smo da im analogije prije svega treba tražiti na području slovenske i austrijske Štajerske te u Transdanubiji. Prema morfološkim obilježjima, među kojima je izražena konkavnost donjega dijela tijela, nalaze iz Sv. Đurđa mogli smo usporediti s tipom 4 lonca stožasta vrata u Kleinkleinu, koji C. Dobiat određuje u mlađu fazu nekropole (1980: 68).

Uz niz drugih tipično nasebinskih predmeta, kao što su grijači s perforacijama na tijelu, pekve, poklopci, sita ili utezi, javlja se i nešto finije posuđe, poput malih zdjelica stepenasto profilirana i ukrašena ramena, kojima smo bliske analogije našli u Farkašiću i Goričanu, no srodni primjerci nađeni su u grobovima Kleinkleina, na Pošteli i Libni te u Dolenjskoj tijekom Ha C-D1.

Od tehnika ukrašavanja koje se javljaju u Sv. Đurđu jedna od kronološki najznačajnijih jest naborani ukras. Javlja se na tri različite posude. Šuplji nabori, obično postavljeni na najširem dijelu posude, ukazuju na kasnohalštatsko vrijeme, kao i na kontakte s dolenskom grupom starijega željeznog doba. Pojava naboranog ukrasa nije rijetkost unutar kulturne grupe Martijanec-Kaptol. Javlja se i u Sigecu te u III. horizontu naselja Poštela. B. Teržan pojavu naboranog ukrasa postavila je u razdoblje horizonta Stična 2, u drugu polovinu 7. st., odnosno u svoj stupanj Štajerska III (Teržan 1990: 68, n. 215). Međutim naborana keramika posebno će biti karakteristična za kasnija vremena, kako su pokazali nalazi iz Zbelave (Kovačević 2008: T. 5). Od ukrasa koji se na keramici iz Sv. Đurđa javljaju rijetko jest trakasto slikanje grafitom koje je, čini se, osobito omiljeno tijekom starije, a posebno mlađe faze starijega željeznog doba u Transdanubiji. I toj tehnici ukrašavanja porijeklo treba tražiti u rijetkim primjercima iz vremena kulture polja sa žarama (Patek 1982-1983: 117).

Među karakterističnim ukrasima izdvojili smo i malenu rozetu – udubljenje okruženo sitnim ubodima – za koju smo utvrdili da je tipičan oblik razvijenoga halštata na širem jugoistočnoalpskom i panonskom prostoru, s porijeklom koje se seže u najraniju fazu starijega željeznog doba. Značajan udio među ukrasima ima i žlijebljeni ornament, ponekad u kombinaciji s ubadanjem. Obično se radi o vodoravnim linijama na prijelazu ramena u vrat, ili nešto

requant appearance of type A1 pots is particularly notable, for here it is one of the most dominant types. The same can also be said of the bowl with inwardly drawn rim, or type B1b, as it has been designated in this analysis. Occasionally shallow diagonal flutes appear on these bowls. Among the more significant finds are the conical-necked pots adorned with fluted ornaments. In our analysis of the examples from Sveti Đurađ, we have shown that analogies to them should be sought in the territory of the Slovenian and Austrian Steiermark and in Transdanubia. Based on the morphological features, among which the concavity of the lower bodies is prominent, the finds from Sveti Đurađ may be compared to type 4 conical-necked pots in Kleinklien which C. Dobiat specified as belonging to the younger phase of the necropolis (1980: 68).

Besides a number of typical settlement items, such as heating elements with perforated bodies, baking lids, standard lids, sieves or weights, some finer ware also appeared, such as small bowls with staired articulation and ornamented shoulders, which have close analogies in Farkašić and Goričan, while similar examples were also found in graves in Kleinklein, at Poštela and Libna and in Lower Carniola during phase Ha C-D1.

Among the ornamentation techniques which appeared in Sveti Đurađ, one of the most chronologically important is the hollow wide-ribbed ornament. It appears on three different vessels. Hollow wide ribs, normally placed on the widest part of a vessel, indicate the late Hallstatt period, as well as contacts with the Lower Carniola group of the Early Iron Age. The appearance of hollow wide-ribbed ornaments is not rare within the Martijanec-Kaptol cultural group. It also appeared in Sigetec and during horizon III of the Poštela settlement. B. Teržan placed the hollow wide-ribbed ornament in Stična horizon 2, in the latter half of the seventh century BC, i.e., her Steiermark phase III (Teržan 1990: 68, n. 215). However, hollow wide-ribbed pottery would particularly become a feature of later periods, as shown by the finds from Zbelava (Kovačević 2008: Pl. 5). Among the ornaments which appear on the pottery from Sveti Đurađ, banded graffito painting is rare; this technique was, it would appear, especially favoured during the older and younger phases of the Early Iron Age in Transdanubia. The origin of this ornamentation technique should also be sought in examples from the time of the Urnfield culture (Patek 1982-1983: 117).

Among the characteristic ornaments, we also distinguished the small rosette – a depression encircled by tiny stippled dots – which we have ascertained as a typical form of the developed Hallstatt in

složenije koncipiranu ukrasu višestruka slova "V", ili kompozicije načinjene od više sjenčanih visećih trokutova. Upravo je posljednji koncept posebno karakterističan za grobnu keramiku stupnja Ha C u Sopronu (Patek 1982: Fig. 11; Fig. 13: 2).

Pri analizi keramike iz naselja u Sv. Đurđu upadljiva je prevaga koju odnose aplicirani, odnosno plastični ukrasi. To je značajka koja će povezivati sva podravska naselja starijega željeznog doba. Među brojnim i raznovrsnim elementima izdvajaju se raščlanjene i glatke aplicirane trake, bradavice i drške, kao i potkovasti naljepci. Zahvaljujući pokretnim nalazima naselje u Sv. Đurđu određeno je u stupnjeve Ha C2-D1, u vrijeme horizonta 3 grupe Martijanec-Kaptol, stupnja Stična 2 dolenske grupe ili horizonta Štajerska III. Apsolutnokronološki, analiza ugljena iz pravokutne zemunice pokazala je da se naselje svrstava u starije željezno doba (725–538 cal BC, KIA 29562, BP 2507±24), što ne odudara od relativnokronološkog određenja, ali i ne pomaže u preciznijem apsolutnokronološkom određenju lokaliteta.

Uz naselje u Sv. Đurđu na trasi zapadne virovitičke zaobilaznice pronađeni su još neki materijalni ostaci pripisani razdoblju starijega željeznog doba. Unutar velikoga kasnolatenskog naselja Virovitica-Kiškorija sjever pronađena su i dva izolirana objekta pripisana starijemu željeznom dobu. Radi se o velikoj devetometarskoj zemunici i bunaru u neposrednoj blizini ukopanoga stambenog objekta.

Rijetku pojavu bunara u naseljima starijega željeznog doba Podravine vjerojatno treba povezati sa stanjem istraženosti naselja i stupnjem objavljenosti nalaza. No možda je neposredna blizina vodotokova uza sva podravska naselja mogla u određenoj mjeri nadomjestiti potrebu za bunarima ili spremnicima za vodu. Oba objekta na Kiškoriji bila su zapunjena s vrlo malo netipične, grube keramike, koja po fakturi i oblicima ne odudara od nalaza iz Sv. Đurđa. Štoviše, i analiza ugljena C-14 iz zemunice pokazala je da taj kompleks treba postaviti u starije željezno doba, a pomoću analize pokretnoga materijala zaključili smo da otkriveni objekti iz Kiškorije vjerojatno pripadaju istom vremenu u kojem živi naselje u Sv. Đurđu. No s obzirom na općenito malu korist koju su nam donijele analize C-14 halštatskoga materijala iz Podravine takve se nijanse i ne mogu iščitati iz rezultata analiza bunara i zemunice u Kiškoriji. I objekte iz Kiškorije, kao i naselje u Sv. Đurđu te halštatske objekte iz Đote, postavljamo u Ha C2-D1, horizont 3 grupe Martijanec-Kaptol, stupanj Stična 2 dolenske grupe i horizont Štajerska III. S obzirom na izoliranost nalaza moguće je da se radi o rubnom dijelu nekog naselja starijega željeznog doba u blizini. No s druge

the wider south-east Alpine and Pannonian zones, with origins reaching into the earliest phase of the Early Iron Age. The grooved ornament, sometimes in combination with stippling, also accounts for a considerable share of the ornamentation. Normally it consists of horizontal lines at the transition from the shoulder to the neck or a more complexly conceived ornament with several letters V or a composition consisting of several shadowed hanging triangles. It is precisely the latter design that is particularly typical of the grave pottery of phase Ha C in Sopron (Patek 1982: Fig. 11; Fig. 13: 2).

During analysis of the pottery from the settlement in Sveti Đurađ, the preponderance of applied, or sculpted, ornaments was striking. This is a feature that linked all Podravina settlements of the Early Iron Age. Among the numerous and diverse elements, articulated and smooth applied bands, protuberances and handles, as well as horseshoe additions stand out. Thanks to the movable finds, the settlement in Sveti Đurađ was placed in phases Ha C2-D1, at the time of the Martijanec-Kaptol group's horizon 3, the Lower Carniola group's Stična phase 2 or the Steiermark III horizon. The absolute chronological analysis of the charcoal from the rectangular dugout showed that the settlement can be classified into the Early Iron Age (725-538 cal BC, KIA 29562, BP 2507±24), which does not deviate from the relative chronological dating, but also does not help in a more precise absolute chronological specification of the site.

Some other finds ascribed to the Early Iron Age were also discovered next to the settlement in Sveti Đurađ on the section of the Virovitica ring-road. Two isolated structures ascribed to the Early Iron Age were also discovered inside the late La Tène settlement of Virovitica-Kiškorija North. These are a large nine-meter dugout and a well in the immediate vicinity of the below-ground residential structure.

The rare appearance of wells in the Early Iron Age settlements of Podravina should probably be attributed to the state of research into the settlements and the degree of publication of the findings thereof. However, it is possible that the immediate vicinity of waterways next to all Podravina settlements may have obviated the need for wells or water storage structures to some extent. Both structures at Kiškorija were filled with very small, atypical coarse pottery, which in terms of form and facture did not depart from the Sveti Đurađ finds. Moreover, C-14 analysis of the charcoal from the dugout demonstrated that this complex should be placed in the Early Iron Age, and with the help of the analysis of the movable finds, we have concluded that the discovered structures from Kiškorija probably belongs

strane ne treba odbaciti mogućnost da se radi o povremenome sezonskom ili pastirskom staništu koje se nalazi dublje u podravskoj ravnici, a možda je povezano s naseljem u Sv. Đurđu. To bi objasnilo i siromaštvo i rustikalnost nalaza iz objekata koji na kraju nisu iskorišteni kao otpadne jame, već su zatrpani tijekom dužega vremena prirodnim putem.

Ne iznenađuje činjenica da se među rijetkim nalazima iz Kiškorije koji su se dali tipološki odrediti nalaze upravo oblici posuđa koje smo višekratno označili kao najznačajnije i najbrojnije predstavnike kako u ranoj tako i u kasnoj fazi starijega željeznog doba Podravine – lonac tipa A1 i zdjela tipa B1b.

Sagledamo li tri virovitička lokaliteta – Sv. Đurađ, Kiškoriju i Đotu – u cjelini, može se zaključiti da je na kraju rane i početkom kasne faze starijega željeznog doba uže područje grada Virovitice intenzivno naseljeno. Radi se o vremenu neposredno prije korjenitih promjena koje će uskoro zahvatiti šire zapadnopanonsko-štajersko područje i označiti kraj "halštatske kulture tumula" i završetak života niza važnih halštatskih centara (Teržan 1998: 519).

to the same period in which the settlement in Sveti Đurađ lived. However, given the rather scant benefits derived from C-14 analysis of the Hallstatt materials from Podravina, such nuances cannot be interpreted from the results of analysis of the well and dugout in Kiškorija. We have placed the structures in Kiškorija, like the settlement in Sveti Đurađ and the Hallstatt structures from Đota in phases Ha C2-D1, the Martijanec-Kaptol group's horizon 3, the Lower Carniola group's Stična phase 2 and Steiermark horizon III. Given the isolation of the finds, it is possible that this was the periphery of an Early Iron Age settlement in the vicinity. On the other hand, the possibility of an occasional, seasonal or shepherd's shelter deeper in the Podravina plain, perhaps tied to the settlement in Sveti Đurađ, should not be discounted. This would also explain the poverty and rustic nature of the finds from the structures, which were not ultimately used as waste pits, but rather buried over time by natural processes.

It is not surprising that among the rare finds from Kiškorija that could be typologically determined there are precisely those forms of vessels that we have designated a number of times as the most important and most numerous representatives of both the early and later phases of the Early Iron Age in Podravina: pot type A1 and bowl type B1b.

Observing all three Virovitica sites, Sveti Đurađ, Kiškorija and Đota, as whole, it may be concluded that during the early and the beginning of the late phase of the Early Iron Age the narrower territory of the town of Virovitica was rather densely populated. This was the time immediately prior to radical changes that would soon encompass the wider west Pannonian-Steiermark region and mark the end of the "Hallstatt tumulus culture" and the end of life in a series of major Hallstatt centres (Teržan 1998: 519).

KATALOG NALAZA PO TABLAMA

Tabla 1 (Virovitica-Đurađ istok, sve SJ 035, 036)

1. Ulomak podloška ili grijača izrađena od pročišćene i dobro pečene gline, mrljaste smeđe nemarno zaglađene površine; gornji dio izgleda poput okrenuta dna s proširenom stopom; deblje stijenke imaju na sebi okrugle perforacije koje su služile za dovoz kisika.
2. Dva ulomka iste posude, vjerojatno manjeg lonca s naglašenim ramenom, koji su spojeni u crtežu; površina ulomaka porozna je i hrapava, s dosta sitnih kamenčića te ostavlja dojam sekundarnog gorenja.
3. Ulomak dublje posude, vjerojatno lonca izdužena zaobljena tijela, s uvučenim nenaglašenim rubom, mrljasto crno-svijetlosmeđe površine stijenki.
4. Ulomak manje posude konična, blago s-profilirana tijela s vertikalnim rubom koji je s gornje strane zaravnat; stijenke smeđe boje nemarno su modelirane i neravne.
5. Ulomak vertikalne trakaste ručke relativno nemarne izrade, smeđe boje; sačuvan je donji dio ručke s hvatištem prema stijenci posude; s vanjske strane ručka je imala središnje zaobljeno vertikalno rebro.
6. Ulomak stijenke posude svijetlosmeđe boje, nemarno zaglađene površine, s izduženom bradavičom zaobljena, gotovo ravna vrha.
7. Ulomak tijela sekundarnim gorenjem znatno oštećene manje posude s malim šupljim buklom koji je istisnut iz stijenke posude prije pečenja.
8. Ulomak ramena veće posude, debljih stijenki; dobro pečene stijenke smeđe boje bile su ukrašene višestrukim visećim "V"-ukrasom ili visećim višestrukim trokutima.

Tabla 2 (Virovitica-Đurađ istok, sve SJ 077, 078)

1. Ulomak manje posudice (zdjelice ili šalice) tanjih crnih poliranih stijenki, s-profilirana tijela; na ramenu se nalaze tri kose paralelne urezane linije, očito dio kompleksnijeg ukrasa.
2. Ulomak veće posude debljih stijenki, narančaste boje površine, s malom niskom okruglom bradavičom zaobljena vrha.
3. Ulomak gornjega dijela tijela manje posude crnih zaglađenih stijenki; prijelaz ramena u vrat naglašen je i s njega se spuštaju vertikalne rijetko postavljene plitke kanelure; donji dio tijela pod ostrim se kutom spušta prema dnu koje nedostaje, dok gornji preko naglašena prijelaza prerasta u (ljevkast?) vrat koji nedostaje.
4. Ulomak donjega dijela tijela dublje bikonične posude narančasto-smeđe vanjske i crne unutrašnje

CATALOGUE OF FINDS BY PLATES

Plate 1 (Virovitica-Đurađ East, all SU 035, 036)

1. Fragment of a stand or heating element made of refined and well-baked clay, artlessly smoothed unevenly brown surface; upper portion resembles overturned base with expanded foot; thicker walls have on them round perforations used for oxygen intake.
2. Two fragments of the same vessel, probably small pot with prominent shoulder, assembled in a sketch; surface of fragments porous and rough, with considerable small stones; leaves the impression of secondary burning.
3. Fragment of deeper vessel, probably pot with oblong rounded body, with inwardly drawn, simple rim, surface of walls has black-light brown smudges.
4. Fragment of small vessel with conical body having light S-profile and vertical rim flattened on upper side; brown walls artlessly modelled and uneven.
5. Fragment of vertical ribbon-shaped handle, rather artlessly rendered, brown; lower part of handle with grip toward vessel wall preserved; handle had rounded vertical rib down middle on outside.
6. Fragment of light-brown vessel wall, artlessly smoothed surface, with oblong protuberance that has rounded, almost flat top.
7. Fragment of body of small vessel damaged by secondary burning; has shallow bouclé pushed out from vessel wall prior to firing.
8. Fragment of large vessel's shoulder, thicker walls; well-fired brown walls ornamented with multiple hanging Vs or multiple hanging triangles.

Plate 2 (Virovitica-Đurađ East, all SU 077, 078)

1. Fragment of smaller vessel (bowl or cup) with thin black smoothed walls, S-profile body; three diagonal parallel engraved lines on shoulder, obviously part of more complex ornament.
2. Fragment of large vessel with thick walls, orange surface, with small low round wart-like protuberance with rounded tip.
3. Fragment of upper portion of small vessel's body with black smoothed walls; transition from shoulder to neck prominent, vertical intermittently placed shallow cannelures descend from it; lower part of body descends to missing base at sharp angle, while upper portion expands into (funnelled?), missing neck above prominent transition.
4. Fragment of lower section of body of deep biconical vessel with orange-brown exterior and black interior surface; bicone has horizontal row of short

površine; na bikonitetu se nalazi vodoravan niz kratkih vertikalnih ovalnih udubljenja; s unutrašnje strane vidljivi su horizontalni tragovi modeliranja.

5. Ulomak posude debljih stijenki, svijetlosmeđe boje, s gornje strane zaravnata uvučena ruba.

6. Ulomak donjega dijela tijela veće i dublje posude (lonca) debljih stijenki smeđe boje; na stijenci posude aplicirana je jezičasta drška čiji je vrh profiliran i ima dvije izbočine-kvržice.

7. Ulomak zdjele uvučena ruba, debljih nemarnije zaglađenih stijenki sive, hrapave površine, što ukazuje na to da je ulomak sekundarno gorio.

Tabla 3 (Virovitica-Đurađ istok, sve SJ 077, 078)

1. Ulomak dublje posude zaobljena (kuglasta?) tijela i blago uvučena ruba koji je s gornje strane zaravnat; stijenke su smeđe i nemarno zaglađene.

2. Ulomak dublje posude zaobljena (kuglasta) tijela, blage s-profilacije i blago uvučena ruba; površina stijenki crna je i nemarno zaglađena.

3. Ulomak zdjele niska zaobljena tijela i visoka cilindrična ili blago ljevkastrata vrata koji završava s gornje strane zaravnatim rubom; prijelaz između ramena i vrata naglašen je; posuda ima zaglađene stijenke smeđe boje.

4. Ulomak dublje posude zaobljena tijela i uvučena ruba od dobro pečene gline, nemarno zaglađenih svijetlosmeđih stijenki; s vanjske strane neposredno ispod ruba nalazi se jedna plitka vodoravna kanelura s koje se spušta jedna okomita plitka kanelura (kakvih je možda bilo još).

5. Dva ulomka crveno-smeđe nemarno zaglađene površine, vjerojatno od poklopca.

6. Više ulomaka grublje posude zaobljena tijela i blago uvučena nenaglašena ruba, svijetlosmeđe mrljaste površine.

7. Više ulomaka dublje zdjele uvučena ruba i zdepastrata, zaobljena tijela, mrljaste svijetlosmeđe-narančaste nemarno zaglađene površine.

Tabla 4 (Virovitica-Đurađ istok, sve SJ 077, 078)

1. Više ulomaka dublje posude (lonca) zaobljena tijela koje se postupno sužava prema ravnu nenaglašenu dnu; rub je nenaglašen i uvučen, a nemarno zaglađena površina stijenki mrljaste je smeđe-narančaste boje.

2. Više ulomaka dublje posude (lonca) zaobljena tijela koje se postupno sužava prema ravnu nenaglašenu dnu; rub je nenaglašen i blago uvučen; na vanjskoj strani stijenke smeđe boje, neposredno ispod ruba, nalazi se aplicirana vodoravna traka s otiscima prstiju.

vertical oval depressions; horizontal modelling traces visible on inside.

5. Fragment of vessel with thick walls, light-brown, flattened inwardly drawn rim on upper side.

6. Fragment of lower section of large and deep vessel (pot) with thick walls, brown; tongue-shaped handle on vessel wall, handle top articulated with two protrusions/bumps.

7. Fragment of bowl with inwardly drawn rim, thicker artlessly smoothed vessel walls are grey, surface rough, which indicates the fragment was burned secondarily.

Plate 3 (Virovitica-Đurađ East, all SU 077, 078)

1. Fragment of deeper vessel with rounded (spherical?) body and lightly inwardly drawn rim flattened on upper side; walls brown and artlessly smoothed.

2. Fragment of deep vessel with rounded (spherical) body, gentle S-profile and lightly inwardly drawn rim; surface of walls black and artlessly smoothed.

3. Fragment of bowl with low rounded body and high cylindrical or lightly funnelled neck which ends on upper side with flattened rim; transition between shoulder and neck prominent; vessel has smoothed brown walls.

4. Fragment of deeper vessel with rounded body and inwardly drawn rim made of well-fired clay, artlessly smoothed light brown walls; single shallow horizontal canelure just below rim on exterior, single vertical shallow canelure (of which there may have been more) descends from it.

5. Two fragments with red-brown artlessly smoothed surface, probably lid.

6. Several fragments of coarse vessel with rounded body and lightly inwardly drawn rim, light brown smudged surface.

7. Several fragments of deeper bowl with inwardly drawn rim and lopsided, rounded body, smudged light brown/orange, artlessly smoothed surface.

Plate 4 (Virovitica-Đurađ East, all SU 077, 078)

1. Several fragments of deep vessel (pot) with rounded body which gradually narrows toward straight, unpronounced base; rim is not prominent and drawn inward, while the artlessly smoothed walls are smudged and brown-orange.

2. Several fragments of deep vessel (pot) with rounded body which gradually narrows toward straight, unpronounced base; rim is not prominent and lightly drawn inward; walls brown on outside, applied horizontal band with finger imprints immediately below rim.

3. Više ulomaka dublje posude zaobljena, kuglasta tijela s-profilacije, blago naglašena dna, s kratkim izvučenim i blago zadebljanim rubom; narančaste stijenke nemarno su zaglađene.

Tabla 5 (Virovitica-Đurađ istok, sve SJ 077, 078)

1. Ulomak donjega dijela zaobljena tijela veće posude (lonca) debljih, nemarno zaglađenih stijenki mrljaste svijetlosmeđe-narančaste površine; na stijenku je aplicirana vodoravna traka s otiscima prstiju.
2. Ulomak šalice izrazito bikonična tijela, od pročišćene i dobro pečene gline, crno polirane površine; na ramenu vidljivo hvatište visoke trakaste ručke koja je nadvisivala rub posude.
3. Ulomak donjega dijela zaobljena tijela veće posude (lonca) nemarno zaglađenih stijenki mrljaste svijetlosmeđe površine; u donjem dijelu posude nalazi se vodoravna jezičasta drška koja je raščlanjena utisnućem na sredini, a vjerojatno je takvih drškica na istoj posudi bilo još.
4. Ulomak manje posude s-profilirana tijela od pročišćene i dobro pečene gline; polirane tanke stijenke crne su boje; na ramenu se neposredno jedna uz drugu nalaze dvije horizontalne upolirane linije koje obilježavaju blagi prijelaz iz zaobljena ramena u ljevkast vrat.
5. Ulomak gornjega dijela tijela manje posude s-profilirana tijela s naglašenim prijelazom iz ramena u vrat; posuda je bila izrađena od pročišćene i dobro pečene gline i imala je crne i polirane stijenke; s ramena se spuštaju tri plitko urezane paralelne linije koje su vjerojatno bile dio metopno raspoređena ukrasa.
6. Ulomak manje vertikalne trakaste ručkice tamnosmeđe polirane površine, vjerojatno s manje šalice finije izrade.
7. Ulomak veće posude zaobljena, moguće i bikonična tijela, smeđe zaglađene površine; prijelaz između ramena u vrat naglašen je udubljenom vodoravnom linijom; na ramenu se nalazi apliciran potkovast naljepak koji ima i središnju prečku.

Tabla 6 (Virovitica-Đurađ istok, sve SJ 077, 078)

1. Ulomak poklopca grubljih i neravnih smeđe-crnih stijenki.
2. Ulomak zdjele uvučena ruba, nemarno zaglađenih svijetlosmeđih stijenki.
3. Ulomak zdjele uvučena ruba smeđe zaglađene površine; s vanjske strane ruba spuštaju se blage, plitke i široke kose kanelure.
4. Ulomak grublje rađene posude, zdjele uvučena ruba, narančasto-svijetlosmeđe mrljaste nemarno

3. Several fragments of deep vessel with rounded, spherical body with S-profile, lightly prominent base, with short inwardly drawn, slightly rounded rim; orange walls artlessly smoothed.

Plate 5 (Virovitica-Đurađ East, all SU 077, 078)

1. Fragment of lower section of rounded body of large vessel (pot) with thick, artlessly smoothed walls having smudged light brown/orange surface; horizontal band with finger imprints applied to wall.
2. Fragment of cup with prominently biconical body, made of refined and well-fired clay, black smoothed surface; grip of high ribbon-like handle at shoulder which exceeded vessel's rim.
3. Fragment of lower section of rounded body of large vessel (pot) with artlessly smoothed walls having smudged light brown surface; horizontal tongue-shaped handle on lower part of vessel articulated with impression in middle; probably more such small handles on vessel.
4. Fragment of small vessel with S-profile body made of refined and well-fired clay; smoothed thin walls black; two horizontal smoothed-in lines immediately below shoulder, which mark gentle transition from rounded shoulder to funnelled neck.
5. Fragment of upper section of body of small S-profile vessel with prominent transition from shoulder to neck; vessel was made of refined and well-fired clay and it had black and smoothed walls; three shallowly engraved diagonal parallel lines descend from shoulder which were probably part of metopically arranged ornament.
6. Fragment of small vertical band-like handle with dark brown smoothed surface, probably small cup of finer rendering.
7. Fragment of large vessel with rounded, possibly biconical body, brown smoothed surface; transition from shoulder to neck emphasized with depressed horizontal line; applied horseshoe attachment with central bar on shoulder.

Plate 6 (Virovitica-Đurađ East, all SU 077, 078)

1. Fragment of lid with rough and uneven brown-black walls.
2. Fragment of bowl with inwardly drawn rim, and artlessly smoothed light brown walls.
3. Fragment of bowl with inwardly drawn rim with brown smoothed surface; light, shallow and wide diagonal cannelures on exterior.
4. Fragment of coarsely made vessel, bowl has inwardly drawn rim, orange-light brown smudged and artlessly smoothed surface; lightly articulated

zaglađene površine; s vanjske strane rub je blago profiliran utisnutom horizontalnom linijom koja je prije posljedica modeliranja nego ukrasni element.

5. Ulomak dublje zdjele uvučena ruba, smeđih hrpavih stijenki; neposredno ispod ruba nalazi se (odlomljena) jezičasta drška, kakvih je na istom dijelu posude moglo biti još.

6. Ulomak dublje, uže posude (lonca), izdužena tijela i blago uvučena ruba, mrljaste smeđe površine; ispod ruba nalazi se okomito postavljena duguljasta bradavica raščlanjena s tri kvržice, kakvih je na istom dijelu lonca sigurno bilo više.

7. Ulomak šire zdjele uvučena ruba, smeđe nemarno zaglađene površine.

8. Ulomak dna manje posude s blago naglašenom stopom.

9. Veći dio dna velike, dublje posude debljih stijenki, najvjerojatnije lonca zaobljena tijela koje se znatno sužava prema nenaglašenu dnu; površina stijenki narančaste je boje.

Tabla 7 (Virovitica-Đurađ istok, sve SJ 077, 078)

1. Više ulomaka vrlo fino polirane zdjelice izrazito bikonična tijela tanjih stijenki crne boje; čini se da se na bikonitetu nalazio metopno raspoređen ukras koji su činili okomiti i kosi snopovi kanelura.

2. Ulomak manje posude blago s-profilirana tijela; prijelaz ramena u vrat blag je i ispod njega nalaze se dvije razmaknute ukoso postavljene upolirane linije.

3. Ulomak manjeg lonca stožasta vrata ili s-profilirana tijela s blago izvučenim rubom; prijelaz u rame nije sačuvan; ispod ruba nalaze se tri vodoravne paralelne urezane linije; ulomak je oštećen sekundarnim gorenjem, pa je svijetlosmeđe-narančaste boje.

4. Više ulomaka zdjelice profilirana tijela s naglašenim prijelazom ramena u visok vrat koji završava izvučenim ljevkastim rubom; donji dio tijela pod oštrim se kutom spušta prema dnu; posuda je izrađena od pročišćene gline, crnih je i poliranih stijenki; na zaravnatu ramenu nalazi se urezani ukras u obliku kompozicije cik-cak linija.

5. Više ulomaka posude manjih dimenzija koja je u obrisu vrlo slična prethodnoj; ispod naglašena prijelaza između vrata i tijela posude na zaravnatu ramenu nalazi se ukras sačinjen od metopno raspoređene po tri okomite, nakošene kratke kanelure; donji dio tijela koso se spušta prema dnu; na dijelu ramena nalazi se i otisak vertikalne trakaste ručice koja danas nedostaje.

impressed horizontal line on external side of rim which is more likely a result of modelling rather than ornamental element.

5. Fragment of deep bowl with inwardly drawn rim, brown rough walls; immediately below rim there is (broken off) tongue-like handle, of which there may have been more on same part of vessel.

6. Fragment of deep, narrow vessel (pot) with oblong body and lightly inwardly drawn rim, smudged brown surface; horizontally placed longish wart-like protrusion articulated into three nodules below rim, of which there were certainly more on the same part of the vessel.

7. Fragment of wide bowl with inwardly drawn rim, brown artlessly smoothed surface.

8. Fragment of base of small vessel with slightly prominent foot.

9. Large section of base of large, deep vessel with thick walls, most likely a pot with rounded body which narrows considerably toward unpronounced base; surface of walls orange.

Plate 7 (Virovitica-Đurađ East, all SU 077, 078)

1. Several fragments of finely smoothed bowl with conspicuously biconical body and thin black walls; it would appear that bicone had metopically arranged ornament formed by vertical and diagonal cannellure bundles.

2. Fragment of small vessel with slightly S-profiled body; transition from shoulder to neck is gentle, and below it there are two spaced-apart diagonally placed smoothed lines.

3. Fragment of small pot with conical neck or S-profiled body with lightly outwardly drawn rim; transition to shoulder not preserved; three horizontal parallel engraved lines below rim; fragment damaged by secondary burning, so it is light-brown/orange.

4. Several fragments of bowl with articulated body and prominent transition from shoulder to high neck which ends in outwardly drawn funnelled rim; lower section of body descends toward base at sharp angle; vessel made of refined clay, walls black and smoothed; engraved ornament shaped like zigzag line composition on flattened shoulder.

5. Several fragments of small vessel with contours similar to preceding exponent; ornament consisting of metopically arranged vertical, short skewed cannellures each below prominent transition between neck and body on flattened shoulder; lower portion of body descends diagonally toward base; imprint of now missing vertical band-like small handle on part of shoulder.

Tabla 8 (Virovitica-Đurađ istok, sve SJ 077, 078)

1. Više ulomaka iste posude rekonstruirane u crtežu; dublja zdjela zaobljena tijela ima tekući prijelaz iz ramena u cilindričan vrat koji završava zaravnatim, tek blago naglašenim rubom; na najširem dijelu tijela nalazi se niz ovalnih, iz vlažne stijenke istisnutih, šupljih bukli; posuda je izrađena od dobro pečene gline i ima crnu nemarnije zaglađenu površinu; na dijelu ulomaka na njihovoj unutrašnjoj strani vidljivi su vodoravni tragovi modeliranja.
2. Više ulomaka zdjele uvučena ruba koji su omogućili potpunu rekonstrukciju u crtežu; površina stijenki neravna je i nemarnije zaglađena, mrljaste smeđe boje; donji dio tijela koso se spušta prema dnu, pred kojim se dodatno sužava.
3. Ulomak užega dna dublje posude nepoznata izgleda; površina je smeđe boje i nemarno zaglađena.
4. Ulomci zdjele jednostavna, konična tijela i nenačeta ruba; dno je ravno, blago naglašeno; površina stijenki nemarno zaglađena, svijetlosmeđe boje.
5. Ulomak pliće posude dobro pečeni, crnih i poliranih stijenki; s unutrašnje strane nalazi se traka izrađena grafitiranjem, što ukazuje na pripadnost ulomka široj i plićoj posudi, možda zdjeli uvučena ruba.
6. Ulomak lonca izdužena tijela i blago uvučena ruba, debljih stijenki i smeđe nemarno zaglađene površine; ispod ruba s vanjske strane nalazi se aplicirana vodoravna plastična traka s rijetko raspoređenim otiscima prstiju.

Tabla 9 (Virovitica-Đurađ istok, sve SJ 031, 032)

1. Ulomak keramičkoga predmeta (zdjela ili poklopac?) debljih stijenki svijetlosmeđe boje i blago bikonična tijela.
2. Više ulomaka podloška ili grijača debljih, dobro pečeni stranica narančaste boje na kojima se nalaze okrugle perforacije; vanjska površina zaglađena je.
3. Više ulomaka veće posude narančasto-sive zaglađene površine; tekući prijelaz ramena u vrat u laganoj krivulji i naglašen s dvije vodoravne paralelne užlijebljene linije; moguće da se radi o loncu stožastu vrata ili s-profilirana tijela.
4. Ulomak tijela bikonične posude manjih dimenzija s kosim, uskim paralelnim linijama na gornjem konusu; površina je zaglađena, tamnosive boje.
5. Ulomak posude zaobljena tijela s nepravilno raspoređenim perforacijama na stijenkama; vjerojatno je služila kao cjedilo.
6. Ulomak jednostavne dublje posude konična tijela s okomitim nenaglašenim rubom; površina je nemarno zaglađena, smeđe-narančaste boje.

Plate 8 (Virovitica-Đurađ East, all SU 077, 078)

1. Several fragments of a vessel reconstructed by sketch; deep bowl with rounded body, has gradual transition from shoulder to cylindrical neck ending in flattened, only slightly prominent rim; series of oval, hollow bouclés pressed from still moist walls at widest part of body; vessel made of well-baked clay, with black somewhat artlessly smoothed surface; horizontal traces of modelling visible on part of inside of fragments.
2. Several fragments of bowl with inwardly drawn rim which enabled complete reconstruction by sketch; surface of walls uneven and somewhat artlessly smoothed, smudged brown; lower section of body diagonally descends to base, before which it narrows additionally.
3. Fragment of narrower base of deep vessel with unknown appearance; surface brown and artlessly smoothed.
4. Fragments of simple, conical body and unpronounced rim; base flat, lightly prominent; surface of walls artlessly smoothed, light brown.
5. Fragment of shallow vessel consisting of well-fired, black and smoothed walls; band made by grafito painting on inside, which indicates that fragment was part of wide and shallow vessel, perhaps bowl with inwardly drawn rim.
6. Fragment of pot with oblong body and lightly inwardly drawn rim, thicker walls and brown artlessly smoothed surface; applied horizontal sculpted band with sparsely arranged finger imprints below rim on outside.

Plate 9 (Virovitica-Đurađ East, all SU 031, 032)

1. Fragment of ceramic item (bowl or lid?) with thick light-brown walls and lightly biconical body.
2. Several fragments of stand or heating element with thick, well-fired, orange walls on which there are round perforations; external surface smoothed.
3. Several fragments of large vessel with orange-grey smoothed surface; flowing transition from shoulder to neck in light curve, and emphasised with two horizontal parallel grooved lines; possibly a cone-necked pot or S-profile vessel.
4. Fragment of small biconical vessel's body with slanted, narrow parallel lines on upper cone; surface smoothed and dark grey.
5. Fragment of vessel with rounded body and irregularly arranged perforations on walls; probably served as strainer.
6. Fragment of simple deep conical vessel with horizontal, unpronounced rim; brown-orange surface artlessly smoothed.

7. Ulomak posude svijetlosmeđih zaglađenih stijenki; vjerojatno se radi o posudi blage s-profilacije sa zaobljenim, zdepastim tijelom i blago izvučenim nenaglašenim rubom.

8. Ulomak stijenke posude većih dimenzija s apliciranom okruglom bradavicom zaobljena vrha; stijenke su nemarno zaglađene, svijetlosmeđe površine.

9. Oštećeni ulomak zdjele uvučena ruba, tanjih zaglađenih stijenki smeđe površine.

Tabla 10 (Virovitica-Đurađ istok, sve SJ 031, 032)

1. Ulomak posude s-profilacije, zaobljena tijela, narančasto-svijetlosmeđe površine; na vanjskoj strani stijenki nalaze se sporadični tragovi zaglađivanja.

2. Ulomak ljevkaista ruba veće posude (lonca?) s tragovima sekundarnog gorenja.

3. Ulomak ravna, gotovo vertikalna dna veće i dublje (cilindrične?) posude smeđe nemarno zaglađene površine.

4. Više ulomaka veće posude debljih stijenki, vjerojatno lonca stožasta vrata i zaobljena tijela; površina je svijetlosmeđe boje i zaglađena; prijelaz ramena u vrat naglašen je utisnutom vodoravnom linijom.

5. Ulomak dna dublje posude mrljaste svijetlosmeđe-narančaste nemarno zaglađene površine.

6. Ulomak posude zaobljena tijela i naglašena prijelaza ramena u vrat; prijelaz je naznačen i profilom posude jer je stijenka vrata znatno tanja od stijenke tijela; narančasto-svijetlosmeđe zaglađene površine; s prijelaza ramena u vrat spušta se okomito, blago nakošeno aplicirano plastično rebro, kakvih je na tijelu posude vjerojatno bilo još.

7. Ulomak donjega dijela tijela veće posude, debljih neravnih stijenki svijetlosmeđe boje na kojem se nalazi aplicirana duža bradavica zaobljena vrha koji je blago uvijen prema gornjem dijelu posude.

8. Ulomak posude zaobljena tijela teško oštećen sekundarnim gorenjem, sive i hrapave površine; na zaobljenu ramenu posude nalazi se ukras sastavljen od dvostrukih kosih užlijebljenih linija koje su ispunjene ubodima; vjerojatno se radi o motivu tekućih trokuta ili cik-cak linija koje su počinjale s prijelaza ramena u vrat posude ili sa samoga ruba (zdjele uvučena ruba).

9. Ulomak donjega dijela posude većih dimenzija (lonca), debljih neravnih stijenki smeđe nemarno zaglađene površine, sa širom vodoravnom apliciranom trakom s otiscima prstiju.

Tabla 11 (Virovitica-Đurađ istok, sve SJ 031, 032)

1. Više ulomka veće posude izdužena, ovalna tijela; lonac blage s-profilacije ima nenaglašen, blago

7. Fragment of vessel with light brown smoothed walls, probably vessel with slight S-profile and rounded, lopsided body and lightly outwardly drawn unpronounced rim.

8. Fragment of wall of large vessel with applied round wart-like protrusion with rounded tip; walls are artlessly smoothed with light brown surface.

9. Damaged fragment of bowl with inwardly drawn rim, thin smoothed walls with brown surface.

Plate 10 (Virovitica-Đurađ East, all SU 031, 032)

1. Fragment of S-profile vessel with rounded body, orange/light-brown surface; sporadic traces of polishing on exterior of walls.

2. Fragment of funnelled rim of large vessel (pot?) with traces of secondary burning.

3. Fragment of straight, almost vertical base of large and deep (cylindrical?) vessel with brown artlessly smoothed surface.

4. Several fragments of large vessels with thick walls, probably pot with cone neck and rounded body; surface light-brown and smoothed; transition from shoulder to neck emphasized with impressed horizontal line.

5. Fragment of base of deep vessel with smudged light-brown/orange artlessly smoothed surface.

6. Fragment of vessel with rounded body and emphasized transition from shoulder to neck; transition also indicated by vessel's profile, for neck wall is considerably thinner than that of body; orange/light-brown smoothed surface; descends vertically from shoulder to neck, with slightly skewed, applied sculpted rib, of which there were probably more on the vessel's body.

7. Fragment of lower section of large vessel's body with thick uneven light-brown walls on which a long wart-like protuberance with rounded tip is applied which is gently turned toward upper section of vessel.

8. Fragment of vessel with rounded body, severely damaged by secondary burning, with grey and rough surface; ornament on shoulder consisting of double, diagonal grooved lines filled with stippled dots; probably motif of flowing triangles or zigzag line which began with transition from shoulder to neck of vessel or from very rim (of bowl with inwardly drawn rim).

9. Fragment of lower section of large vessel (pot), with thick uneven brown artlessly smoothed walls and wide horizontal applied band and finger imprints.

Plate 11 (Virovitica-Đurađ East, all SU 031, 032)

1. Several fragments of large vessel with oblong, oval body; pot with slight S-profile has unpro-

izvučen rub, a površina stijenki mrljaste je smeđe boje i nemarno zaglađena; iznad najvećega promjera posude, na ramenu, nalazi se vodoravni niz u pravilnim razmacima načinjenih nepravilnih ovalnih udubljenja utisnutih u stijenkku posude.

2. Ulomak lonca izdužena tijela i blago uvučena ruba, grublje izrade; površina stijenki mrljasto je smeđe boje, nemarno zaglađena i hrapava; na najvećem promjeru tijela nalazi se nemarno izrađena aplicirana plastična vodoravna traka s otiscima prstiju.

3. Ulomak masivne ručke od pekve; ručka je pravokutna presjeka i po sredini ima uzdužni široki središnji žlijeb; prema hvatištu ručke s obje strane nalazila se nemarno izrađena šiljata bradavica.

4. Ulomak dublje posude jednostavna konična tijela, grublje fature i narančasto-sive boje; rub je jednostavan, okomit i nenaglašen; na ulomku nema sačuvanih ukrasa ili dekorativno funkcionalnih dodataka.

5. Ulomak donjega dijela tijela veće posude debljih stijenki, vjerojatno većega lonca; nemarno zaglađena površina mrljasto je svijetlosmeđe-narančaste boje; na stijenkku je aplicirana vodoravna jezičasta drška, blago nagnuta prema dnu posude, kakvih je na donjem dijelu posude vjerojatno bilo još.

6. Ulomak gornjega dijela tijela lonca stožasta vrata; posuda je bila dobro pečena, stijenke su zaglađene, svijetlosmeđe boje; na ramenu posude nalazi se ukras sastavljen od kosih paralelnih kanelura koje su vjerojatno počinjale od prijelaza ramena u vrat; sačuvani ukras očito je tek dio složenije, možda metopno raspoređene kompozicije.

Tabla 12 (Virovitica-Đurađ istok, sve SJ 031, 032)

1. Ulomak posude većih dimenzija, lonca zaobljena tijela, s-profilacije, s jednostavnim, nenaglašenim rubom; površina je zaglađena, mrljasto svijetlosmeđe-narančaste boje.

2. Ulomak lonca s-profilirana tijela, izvučena, malo zadebljana ruba koji je s unutrašnje strane horizontalno facetiran; površina je smeđa, nemarno zaglađena.

3. Ulomak dublje posude izdužena tijela i blago uvučena ruba; površina lonca crne je boje, nemarno zaglađena, mjestimično ispucala; ispod vanjske strane ruba, neposredno iznad najvećeg opsega posude, nalazi se vodoravna aplicirana traka s otiscima prstiju.

4. Ulomak ruba šalice s visokom trakastom rukom koja je nadvisivala rub posude; posuda je bila izrađena od pročišćene i dobro pečene gline; površina je dobro zaglađena, ali ne polirana, jednake svijetlosmeđe boje.

nounced, lightly inwardly drawn rim, while surface of walls is smudged brown and artlessly smoothed; above vessel's greatest diameter, at shoulder, series of irregular oval depressions pressed into vessel wall at regular intervals.

2. Fragment of pot with oblong body and lightly inwardly drawn rim, coarse rendering; surface of walls smudged brown, artlessly smoothed and rough; at greatest diameter of body there is an artlessly rendered applied sculpted horizontal band with finger imprints.

3. Fragment of massive baking lid handle; handle has rectangular cross-section and wide lengthwise central groove; artlessly rendered pointed wart-like protrusion toward handle grip on both sides.

4. Fragment of deep vessel with simple conical body, coarse fature, orange/grey; rim simple, vertical and not emphasized; no ornaments or decorative/functional attachments preserved on fragment.

5. Fragment of lower section of large vessel's body with thick walls, probably large pot; artlessly smoothed surface is light-brown/orange; horizontal tongue-like handle on wall, lightly turned toward vessel's base, of which there were probably more on vessel's lower section.

6. Fragment of lower section of cone-necked pot; vessel was well-fired, walls are smoothed and light-brown; ornament made of diagonal parallel cannelures on shoulder which probably began from transition from shoulder to neck; preserved ornament was obviously more complex, perhaps metopically arranged composition.

Plate 12 (Virovitica-Đurađ East, all SU 031, 032)

1. Fragment of large vessel, pot with rounded body and S-profile, and simple, unpronounced rim; surface smoothed and smudged light-brown/orange.

2. Fragment of S-profile pot, outwardly drawn, slightly thickened rim horizontally faceted on the inside; surface brown and artlessly smoothed.

3. Fragment of deep vessel with oblong body and lightly inwardly drawn rim; surface of pot is black, artlessly smoothed, cracked at places; below external side of rim, immediately below vessel's largest diameter there is horizontal applied band with finger imprints.

4. Fragment of rim of cup with high band-like handle which exceeded vessel's rim; vessel was made of refined and well-fired clay; surface nicely smoothed, but not polished, uniformly brown.

5. Fragment of deep vessel with conical, very lightly rounded body; vessel's rim prominent and T-shaped

5. Ulomak dublje posude konična, vrlo blago zaobljena tijela; rub posude je naglašen i ima oblik slova "T" u profilu; s gornje je strane raščlanjen nizom razmaknutih pravocrtnih kosih otisaka.

6. Ulomak veće posude debljih nemarno zaglađenih stijenki narančasto-svijetlosmeđe boje i izvučena ruba s unutrašnje strane kojeg se nalaze tri facete oštrih rubova.

7. Više ulomaka konična poklopca, blago zaobljena tijela relativno grube izrade; površina je nemarno zaglađena, neravna, svijetlosmeđe boje.

Tabla 13 (Virovitica-Đurađ istok, sve SJ 031, 032)

1. Više ulomaka većega lonca stožasta vrata rekonstruirana u crtežu, izrađena od dobro pečene gline, crne polirane površine; naglašeno rame prelazi u visok stožast vrat koji je završavao ljevkastim rubom; donji dio tijela u konkavnoj se liniji spušta prema ravnu dnu; rame je od vrata odijeljeno vodoravnom kanelurom s koje se spuštaju metopno raspoređeni snopovi od po tri široke i plitke kose kanelure.

2. Ulomak manjega piramidalna utega od slabije pečene gline, nemarno zaglađene svijetlosmeđe-narančaste površine; veći dio utega danas nedostaje.

3. Ulomak manje bikonične posude crnih poliranih stijenki; na gornjem konusu nalazio se ukras koji se protezao do bikoniteta, a koji su činili okomiti, gusto raspoređeni nizovi užlijebljenih okomitih linija.

4. Ulomak zdjele uvučena ruba, tankih crnih zaglađenih stijenki; rub je s vanjske strane ukrašen širokim i sasvim plitkim, gotovo horizontalno postavljenim kosim kanelurama.

Tabla 14 (Virovitica-Đurađ istok, sve SJ 031, 032)

1. Ulomak donjega dijela okomite trakaste ručke sa sačuvanim čepom za usađivanje u stijenku posude; površina je zaglađena, crne boje; na vanjskoj strani ručke nalaze se nemarno izvedeni uzdužni žljebovi.

2. Ulomak cijele okomite trakaste ručke s manje posude, moguće lončića; ručka je polukružnoga presjeka, izrađena od pročišćene i dobro pečene gline, crne nemarno zaglađene površine; na stijenci iznad same ručke nalazi se jedna vodoravna užlijebljena linija.

3. Ulomak manje posude zaobljena tijela tanjih crnih poliranih stijenki; ukras se sastoji od vodoravne ugrebene linije i upoliranih dvostrukih visećih linija u obliku razvedena "V".

4. Ulomak manje posude zaobljena tijela, tanjih stijenki tamnosive polirane površine; na ramenu ili najširem dijelu tijela nalazio se ukras u obliku rozete; rozeta je sastavljena od jednoga većeg središnjeg okruglog udubljenja i vjenčića sitnih uboda.

in profile; articulated on upper side with series of interspersed skewed geometric imprints.

6. Fragment of large vessel with thick artlessly smoothed orange/light-brown walls and outwardly drawn rim with three sharp-edged facets on its inside.

7. Several fragments of conical lid, lightly rounded body of relatively coarse rendering; surface artlessly smoothed, uneven, light-brown.

Plate 13 (Virovitica-Đurađ East, all SU 031, 032)

1. Several fragments of large cone-necked pot reconstructed by sketch, made of well-fired clay, black polished surface; prominent shoulder transition to high conical neck ending in funnelled rim; lower section of body descends in concave line toward base, shoulder separated from neck by horizontal fluting which descends in metopically arranged bundles made of three wide and shallow cannelures each.

2. Fragment of small pyramidal weight made of lightly fired clay, artlessly smoothed light-brown/orange surface, most of weight today missing.

3. Fragment of small biconical vessel with black polished walls, ornament on upper cone which extends to bicone, consisting of vertical, densely arranged rows of grooved vertical lines.

4. Fragment of bowl with inwardly drawn rim, thin black smoothed walls; rim ornamented on outside with wide and entirely shallow, almost horizontally placed diagonal cannelures.

Plate 14 (Virovitica-Đurađ East, all SU 031, 032)

1. Fragment of lower section of band-like handle with preserved stopper for insertion in vessel's wall; surface smoothed and black; artlessly rendered lengthwise grooves on external side of handle.

2. Fragment of whole vertical band-like handle from small vessel, possibly small pot; handle has semi-circular cross-section, made of refined and well-fired clay, black artlessly smoothed surface; single horizontal grooved line on wall above handle itself.

3. Fragment of small vessel with rounded body and thin black polished walls; ornament consists of horizontal scratched lines and smoothed double hanging V-shaped lines.

4. Fragment of small round-bodied vessel with thin, dark-grey polished walls; rosette-shaped ornament at shoulder or widest part of body; rosette consists of one large central round depression and small garland made of tiny stippled dots.

Tabla 15 (Virovitica-Đurađ istok, sve SJ 031, 032)

1. Više ulomaka lonca stožasta vrata, zaobljena tijela; posuda od pročišćene i dobro pečene gline, crne i polirane površine; prijelaz između ramena i vrata naglašen je ukrasom sačinjenim od žlijebljenih šrafiranih visećih trokuta koji nisu složeni u jedan vodoravan niz, već su bili grupirani u kompleksniji ukras koji je danas nemoguće točno rekonstruirati.
2. Ulomak manjeg lonca stožasta vrata tanjih zaglađenih smeđih stijenki, izrađena od pročišćene i dobro pečene gline; prijelaz između ramena i vrata naglašen je jednom vodoravnom užlijebljenom linijom; drugu vodoravnu užlijebljenu liniju nalazimo u gornjem dijelu vrata, vjerojatno neposredno ispod ruba koji danas nedostaje; s vodoravna žlijeba na ramenu započinje ukras koji čini snop okomitih, blago ukošenih kanelura; s obzirom na očuvanost fragmenta moguće je pretpostaviti da se radi o segmentu metopno komponirana ukrasa koji je mogao biti pravocrtan, ali i krivocrtan.
3. Ulomak ramena posude zaobljena tijela od kvalitetne, dobro pečene gline, crne, zaglađene, no ne i polirane površine; s lijeve i desne strane ulomka nazire se početak po jednog ovalnog bukla, iz čega se daje zaključiti da je rame posude, najvjerojatnije duboke zdjele, na najširem dijelu tijela krasio vodoravan niz iz vlažne stijenke istisnutih šupljih bukli.
4. Ulomak ravna dna posude zaobljena tijela; površina posude neravna je i nemarno zaglađena, crne boje.

Tabla 16 (Virovitica-Đurađ istok, sve SJ 037, 038)

1. Više ulomaka lonca stožasta vrata koji je rekonstruiran u crtežu; posuda je bila izrađena od pročišćene i dobro pečene gline, svijetlosmeđe polirane površine; zaobljeno, izrazito profilirano tijelo u donjem dijelu u konkavnoj liniji prelazi u blago izbočeno dno, dok se preko tekućeg prijelaza iz ramena linija profila nastavlja u vitak stožast vrat; na prijelazu u vrat i na gornjem dijelu tijela nalazi se ukras izveden u nekoliko tehnika; prijelaz ramena u vrat naglašen je s dvije urezane razmaknute vodoravne linije između kojih se nalazi vodoravni niz međusobno podjednako razmaknutih okruglih uboda; na gornjem dijelu tijela nalazi se i nemarno ugrebani ukras trostrukih cik-cak linija koji se u gornjem dijelu spaja s dvostrukom linijom ispunjenom ubodima.
2. Ulomak jednostavna lonca izdužena tijela, vertikalna, blago uvučena ruba i ravna nenaglašena dna; nemarno zaglađena površina stijenki neravna je, mrljaste narančasto-svijetlosmeđe boje.

Plate 15 (Virovitica-Đurađ East, all SU 031, 032)

1. Several fragments of cone-necked pot with rounded body; vessel made of refined and well-fired clay, black and polished surface; transition from shoulder to neck emphasized with ornament made of grooved, cross-hatched hanging triangles not composed in a single horizontal row, rather grouped into a more complex ornament which cannot be accurately reconstructed today.
2. Fragment of small cone-necked pot with thin smoothed brown walls, made of refined and well-fired clay; transition between shoulder and neck emphasized with single horizontal grooved line, second horizontal grooved line on upper section of neck, probably immediately below rim which is now missing; ornament begins at horizontal groove which consists of bundle of vertical, lightly skewed cannelures; given the state of preservation of the fragments, it is possible to assume that this was a segment of a metopically composed ornament that may have been geometric or curvilinear.
3. Fragment of vessel shoulder with rounded body made of high-quality, well-fired clay, black, smoothed but not polished surface, beginning of oval bouclé discernable on both left and right side, from which one may conclude that the shoulder of the vessel, probably a deep bowl, was ornamented at its widest section with a horizontal row of hollow bouclés pressed out of pressed moist clay.
4. Fragment of flat base of vessel with rounded body; surface of vessel uneven and artlessly smoothed and black.

Plate 16 (Virovitica-Đurađ East, all SU 037, 038)

1. Several fragments of cone-necked pot reconstructed by sketch; vessel was made of refined and well-fired clay, with light-brown polished surface; rounded, highly articulated body transitions at lower section in concave line into lightly protruding base, while over the flowing transition from shoulder the line of the profile continues into narrow conical neck; at the transition to the neck and in the upper section of the body there is an ornament rendered in several techniques; transition from shoulder into neck emphasized with two engraved interspersed horizontal lines between which there is a horizontal row of mutually, equally interspersed round stippled dots; on upper part of body there is an artlessly scratched in ornament consisting of triple zigzag lines which connected in upper section with double line filled with stippling.
2. Fragment of simple pot with oblong body, vertical lightly inwardly drawn rim and flat unpronounced

3. Ulomak većeg dijela jednostavne šalice polukuglasta tijela s malim udubljenim dnom i ručkom okruglog presjeka koja je nadvisivala rub posude; šalica je sekundarno gorjela, mrljaste je sivo-smeđe zaglađene površine.

4. Ulomak zdjele uvučena ruba, zaobljena tijela; površina stijenki zaglađena je, neravnomjerne svijetlosmeđe boje; ispod ruba, na najširem dijelu tijela, nalazi se jedna mala jezičasta drška čiji je vrh profiliran jednim središnjim udubljenjem.

5. Ulomak zdjele uvučena ruba, zaobljena tijela; posuda je bila izrađena od pročišćene i dobro pečene gline, stijenke su polirane i crne boje; rub je koso odrezan.

Tabla 17 (Virovitica-Đurađ istok, 1-2 SJ 057, 058, 3-4 SJ 085, 086, 5-8 SJ 081, 082)

1. Više ulomaka dublje i veće posude izrazito uvučena ruba, debljih mrljastih smeđih nemarno zaglađenih stijenki; na gornjem dijelu tijela lonca, čiji donji dio nije sačuvan, nalazila se nemarno izvedena vodoravna aplicirana plastična traka s otiscima prstiju.

2. Ulomak dublje posude gotovo cilindrična tijela, blage profilacije koja je više posljedica nemarna modeliranja nego promišljena djelovanja; posuda je sivo-smeđe boje, površina nemarno zaglađena, gotovo hrapava; rub je jednostavan, okomit i s gornje strane ravno odrezan.

3. Ulomak posude zaobljena tijela i debljih stijenki, s-profilacije, s ljevkastim rubom; zaglađena površina mrljasto je smeđe boje, nemarno zaglađena.

4. Ulomak jednostavne šalice polukuglasta tijela, s visokom ručkom koja je nadvisivala rub; posuda je bila izrađena od pročišćene i dobro pečene gline; stijenke posude pažljivo su zaglađene, smeđe boje.

5. Ulomak zdjele uvučena ruba, izrazito tankih stijenki; posuda je izrađena od kvalitetno pripremljene gline i dobro je pečena; površina je crna i polirana; s vanjske strane ruba nalaze se izrazito plitke i kose, gotovo vodoravne kanelure.

6. Ulomak ramena posude većih dimenzija (lonca?); stijenke su deblje, nemarno modelirane i neravne, svijetlosmeđe boje; s unutrašnje strane vidljivi su tragovi modeliranja koji potječu od neke vrste instrumenta ili alatke, moguće drveta ili trešćice.

7. Više ulomaka veće posude bikonična tijela, od dobro pečene gline, zaglađene, a mjestimično i polirane crne površine.

8. Ulomak jednostavna lonca izdužena tijela, nemarno zaglađene narančasto-sive mrljaste površine, vertikalna nenaglašena ruba koji je uvučen.

base; artlessly smoothed surface of walls is uneven and smudged orange/light-brown.

3. Fragment of simple cup with semi-circular body and small withdrawn base and handle with round cross-section which exceeded vessel's rim; cup was burned secondarily, surface smudged grey/brown.

4. Fragment of bowl with inwardly drawn rim and rounded body; surface of walls smoothed and unevenly brown; below rim, at widest section of body there is small tongue-like handle with top articulated with single central depression.

5. Fragment of bowl with inwardly drawn rim and rounded body; vessel was made of refined and well-fired clay, walls polished and black; rim diagonally cut.

Plate 17 (Virovitica-Đurađ East, 1-2 SU 057, 058, 3-4 SU 085, 086, 5-8 SU 081, 082)

1. Several fragments of deep and large vessel with pronounced inwardly drawn rim, thick smudged brown artlessly smoothed walls; on upper section of pot's body, of which the lower section has not been preserved, there was an artlessly rendered horizontally applied sculpted band with finger imprints.

2. Fragment of deep vessel with almost cylindrical body, light articulation which is more a result of careless modelling than purposeful design; vessel is grey/brown, almost coarse; rim simple, vertical and cut straight from upper side.

3. Fragment of vessel with rounded body and thick walls and S-profile and funnelled rim; smoothed surface is smudged brown and artlessly smoothed.

4. Fragment of simple cup with semi-spherical body and high handle that exceeded rim; vessel was made of refined and well-fired clay; vessel walls carefully smoothed and brown.

5. Fragment of bowl with inwardly drawn rim and very thin walls; vessel was made of high-quality clay, well-fired; surface is black and polished; very shallow and skewed, almost horizontal fluting on exterior of rim.

6. Fragment of shoulder of large vessel (pot?); walls thick, artlessly modelled and uneven, light-brown; traces of modelling visible on inside which were made by some type of instrument or tool, possibly made of wood or wood splinters.

7. Several fragments of large vessel with biconical body made of well-fired clay, smoothed and, at places, polished black surface.

8. Fragment of simple pot with oblong body, artlessly smoothed orange/grey smudged surface, vertical unpronounced inwardly drawn rim.

Tabla 18 (Virovitica-Kiškorija sjever, sve SJ 799, 800)

1. Više ulomaka zdjele uvučena ruba, grube izrade i debljih stijenki. Ulomci su narančaste boje i površina im je neravna.
2. Više ulomaka dublje posude jednostavna konična tijela i blago uvučena ruba. Posuda je grube izrade, lošije pečena, mrljaste nemarno zaglađene površine.
3. Ulomci ravna dna i blago uvučena ruba jednostavna lonca izdužena, zaobljena tijela, sivo-smeđe nemarno zaglađene površine.
4. Ulomak manjeg poklopca ili posude na zvonastoj nozi; površina je nemarno zaglađena, svijetlosmeđe boje.

Tabla 19 (Virovitica-Kiškorija sjever, 1 SJ 799, 800, 2–7 SJ 727, 728)

1. Više ulomaka zdjele uvučena ruba, nemarne modelacije i neravnih stijenki tamnosivo-svijetlosmeđe polirane površine na kojoj danas ima dosta kalcifikata; s vanjske strane ruba u pravilnim razmacima vidljiva su vertikalna plitka udubljenja, prije tragovi modeliranja nego dekoracija.
2. Ulomak ravna dna, vjerojatno neke dublje posude, svijetlosmeđe nemarno zaglađene površine.
3. Ulomak ravna dna veće, dobro pečene posude, vjerojatno lonca zaobljena tijela; dno s unutrašnje strane u središnjem dijelu ima izbočenje; stijenke su svijetlosmeđe boje i površina im je zaglađena.
4. Ulomak ruba posude izdužena tijela, vjerojatno manjega lonca; blago uvučen rub s gornje je strane zaravnat; s njegove vanjske strane, neposredno ispod ruba, nalazi se vodoravni niz okruglih udubljenja utisnutih izravno u stijenku posude.
5. Ulomak gornjega dijela tijela posude većih dimenzija, vjerojatno lonca, s otiskom vertikalne trakaste ručke (ili jezičaste drškice?) na ramenu; ulomak je narančaste i nemarno zaglađene površine te je vjerojatno sekundarno gorio.
6. Ulomak gornjega dijela posude, vjerojatno većega lonca izrađena od pročišćene i dobro pečene gline; na unutrašnjoj i posebno na vanjskoj površini stijenki svijetlosmeđe boje nalaze se vodoravni tragovi modeliranja zbog čega je površina neravna; na donjem kraju ulomka vidljiv naglašeniji prijelaz u rame koji ukazuje na to da bi se moglo raditi o loncu stožasta vrata.
7. Ulomak posude zaobljena (kuglasta?) tijela smeđe neravne površine, s jednostavnim okomitim naglašenim rubom.

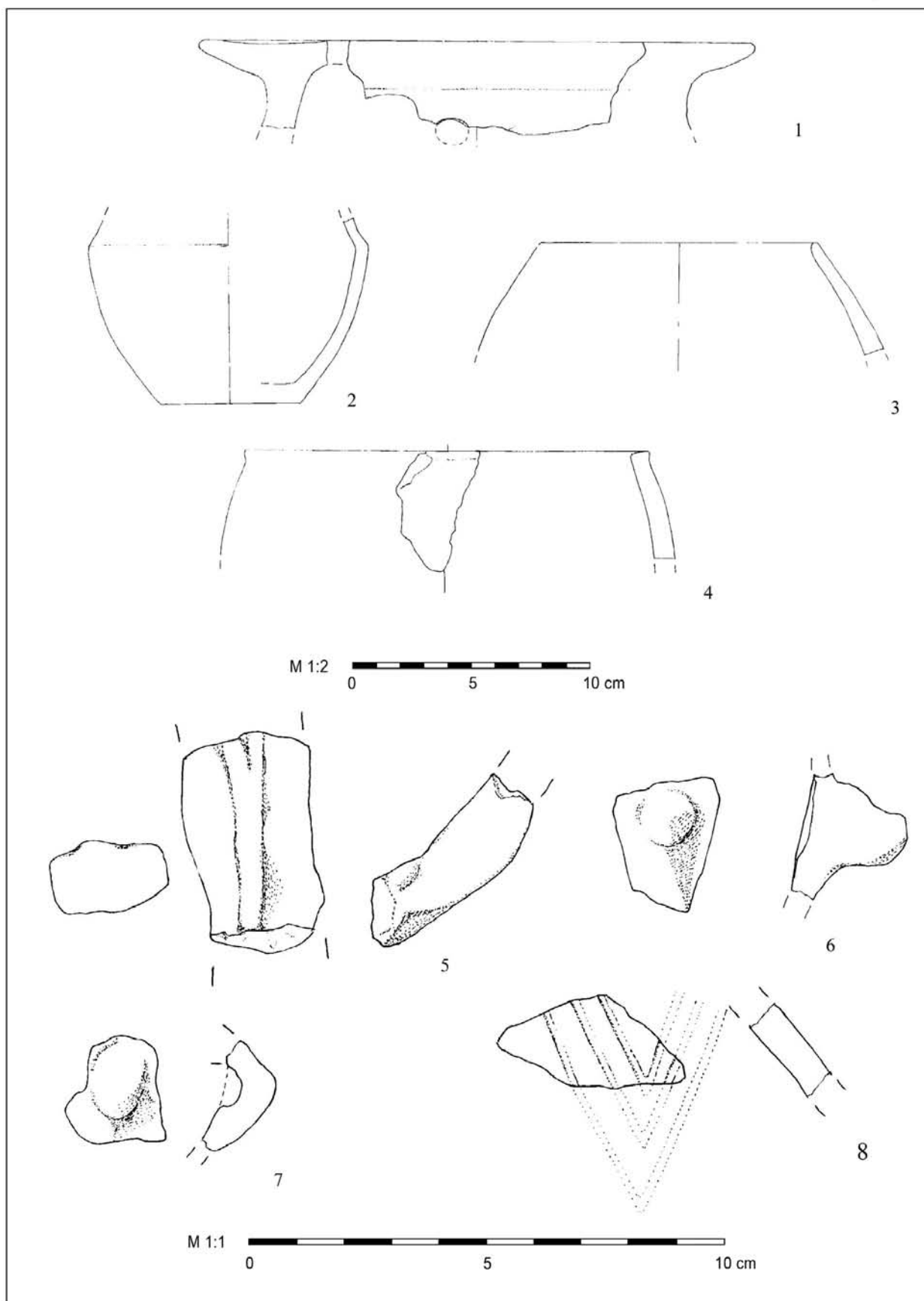
Plate 18 (Virovitica-Kiškorija North, all SU 799, 800)

1. Several fragments of bowl with inwardly drawn rim, coarsely rendered with thick walls. Fragments orange and surface uneven.
2. Several fragments of deep vessel with simple conical body and lightly inwardly drawn rim. Vessel is coarsely rendered, poorly fired, with smudged artlessly smoothed surface.
3. Fragments of flat base and inwardly drawn rim of pot with oblong, rounded body and grey/brown artlessly smoothed surface.
4. Fragment of small lid or vessel on campaniform foot; surface artlessly smoothed and light brown.

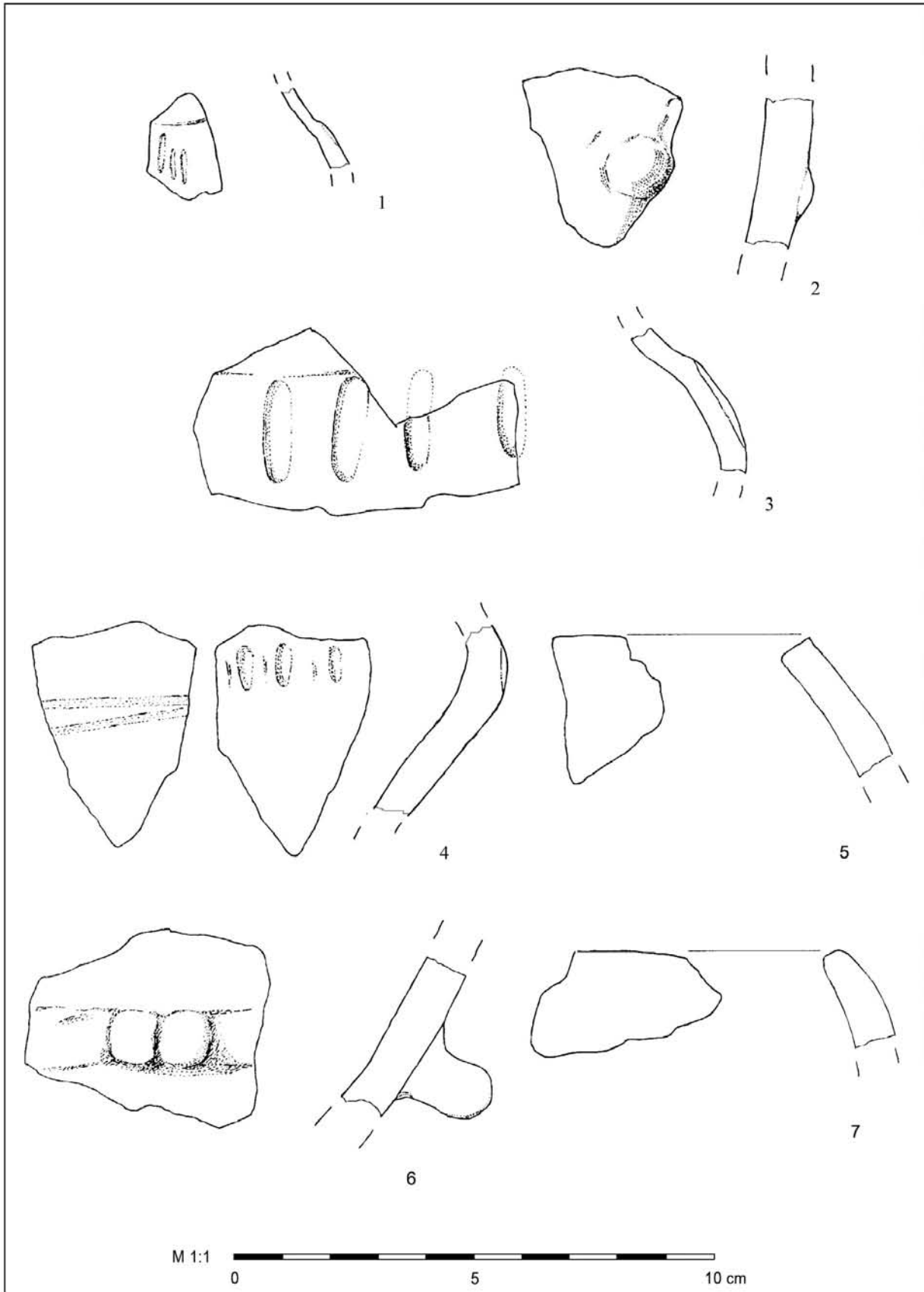
Plate 19 (Virovitica-Kiškorija North, 1 SU 799, 800, 2–7 SU 727, 728)

1. Several fragments of bowl with inwardly drawn rim, artlessly modelled with uneven walls that have dark-grey/light-brown polished surface on which there is now considerable calcification; vertical shallow depressions visible on external side of rim at regular intervals, more likely traces of modelling than decoration.
2. Fragment of flat base, probably of some deep vessel, with dark brown artlessly smoothed surface.
3. Fragment of flat base of large, well-fired vessel, probably pot with rounded body; base has ridging in central part of interior; walls light brown with smoothed surface.
4. Rim fragment of vessel with oblong body, probably a small pot; lightly inwardly drawn rim flattened on upper side; horizontal row of round depressions impressed directly into vessel's wall on outside immediately below rim.
5. Fragment of upper section of body of large vessel, probably a pot, with imprint of vertical band-like handle (or tongue-shaped small handle?) on shoulder; fragment has orange and artlessly smoothed surface, it was probably secondarily burned.
6. Fragment of upper section of vessel, probably a large pot made of refined and well-fired clay; horizontal traces of modelling on interior and especially exterior light-brown walls, which is why surface is uneven; prominent transition to shoulder visible on lower section of fragment, which indicates that this may have been conical-necked pot.
7. Fragment of vessel with rounded (spherical?) body, brown uneven surface, with simple vertical unpronounced rim.

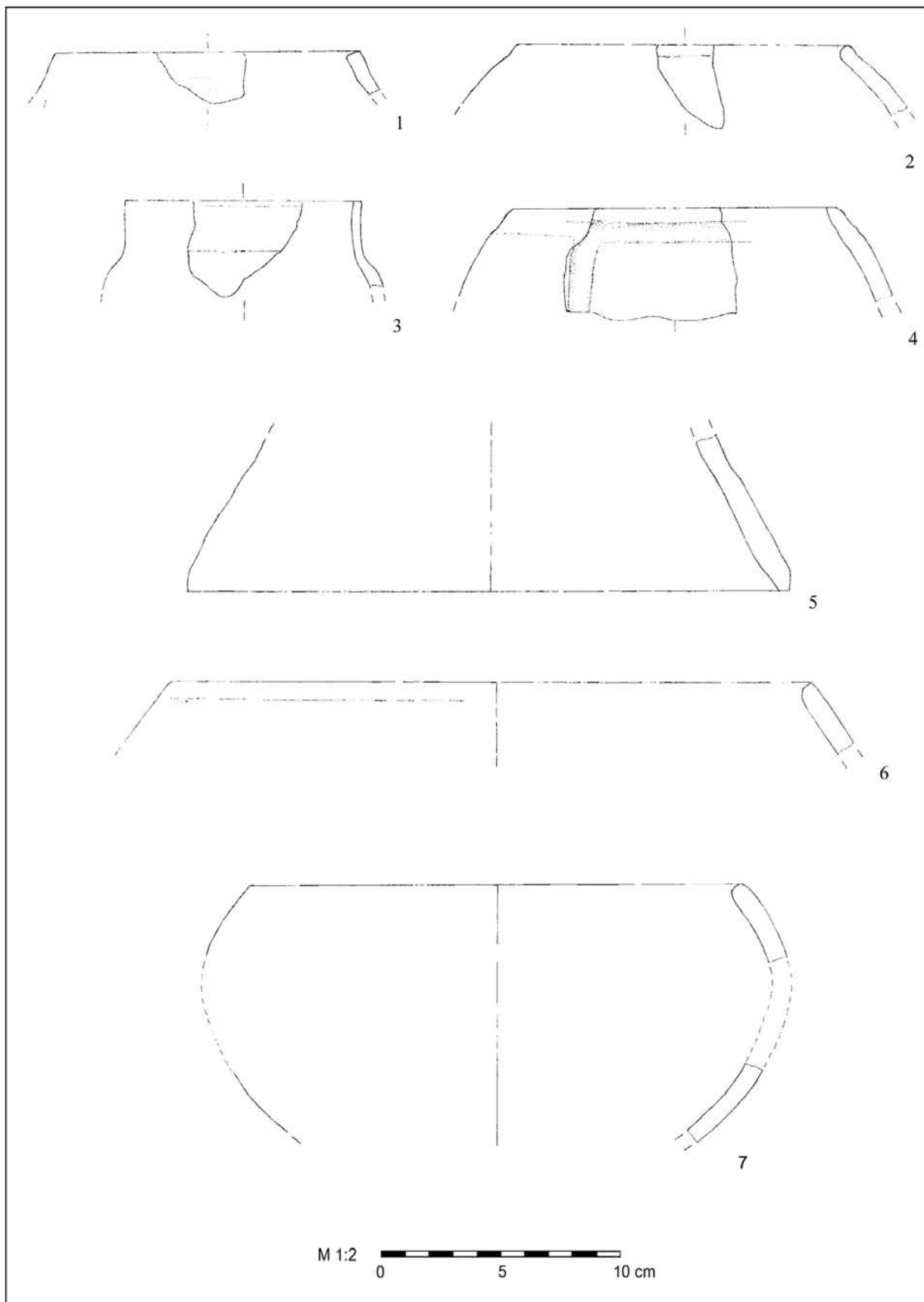
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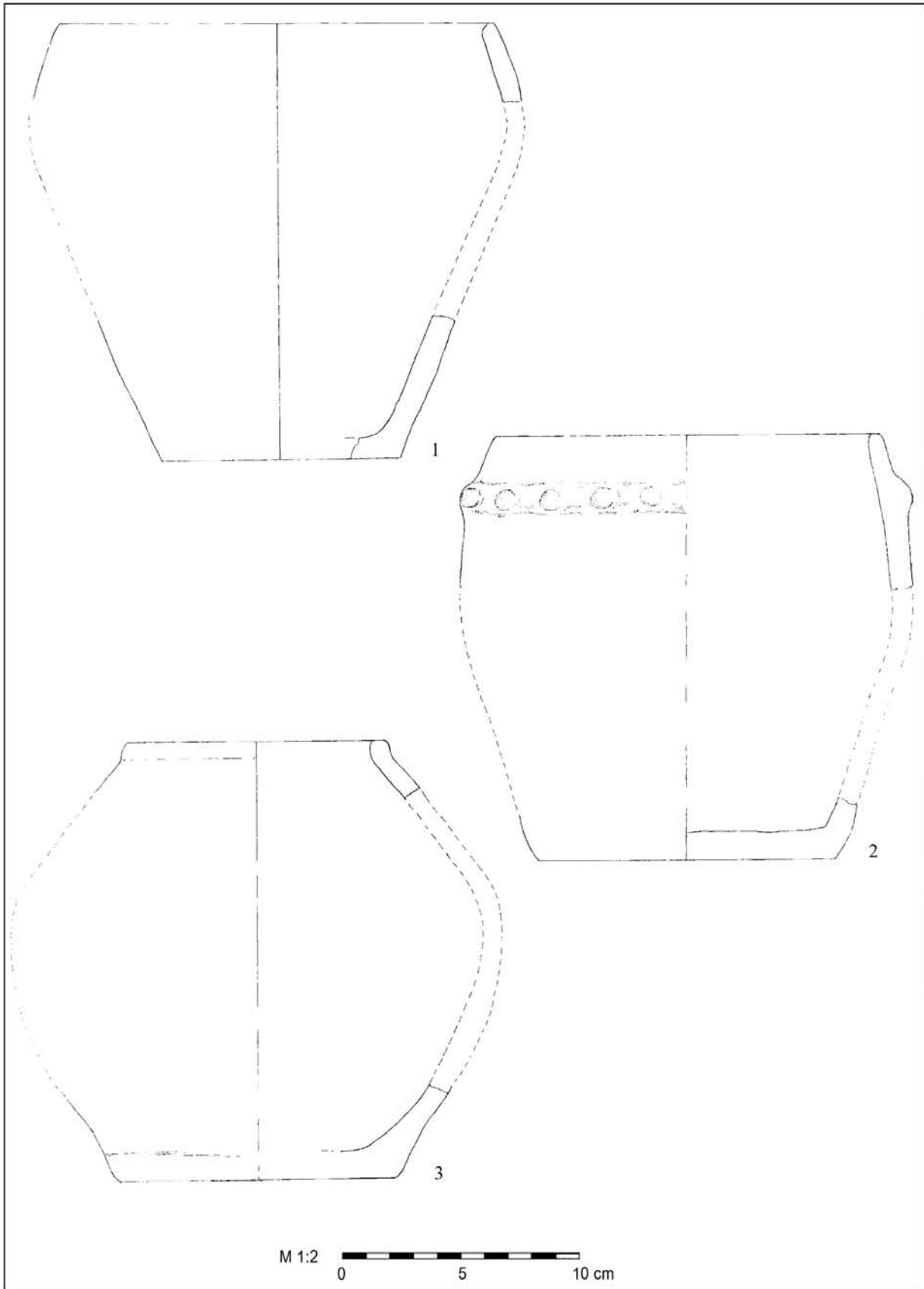
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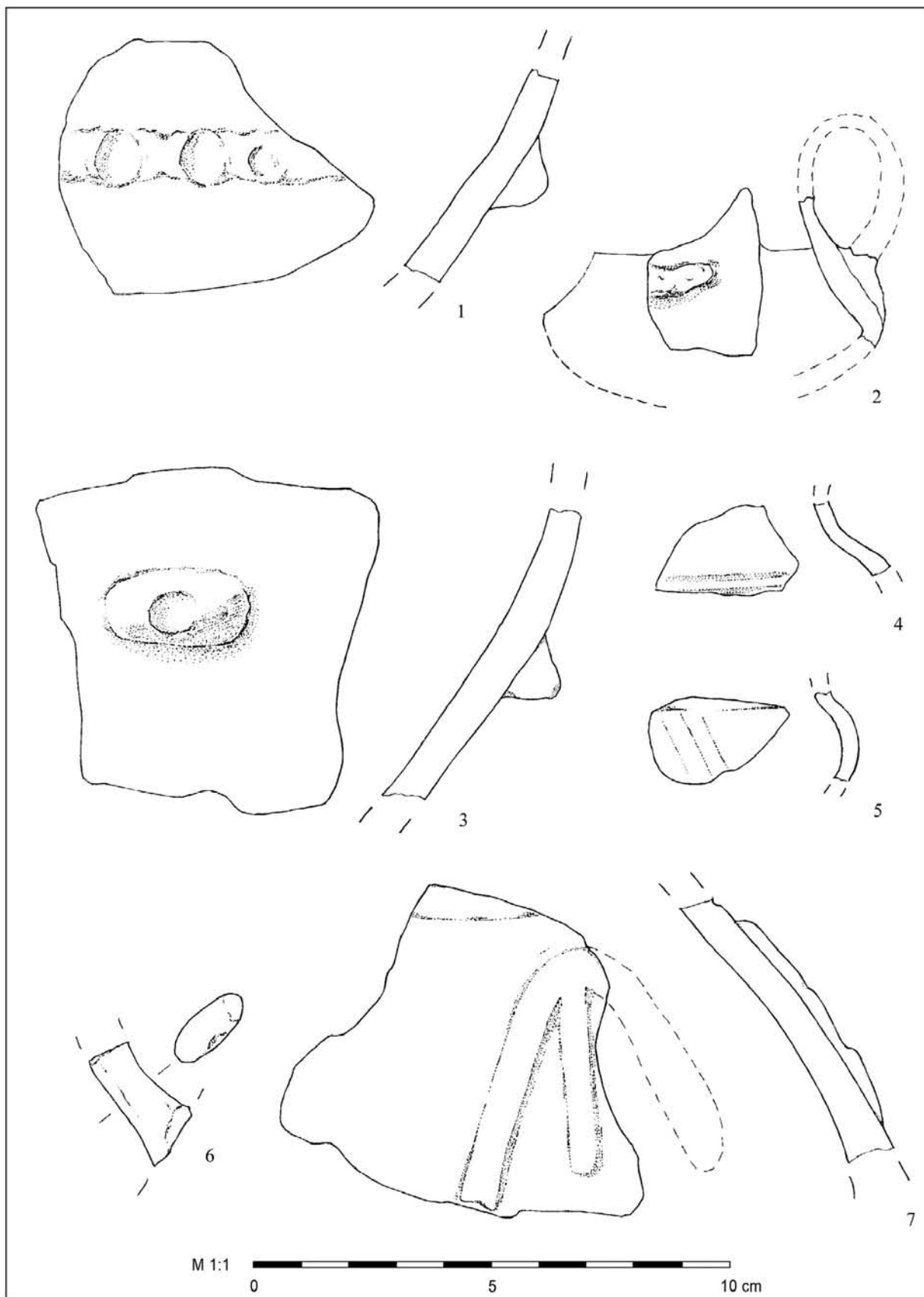
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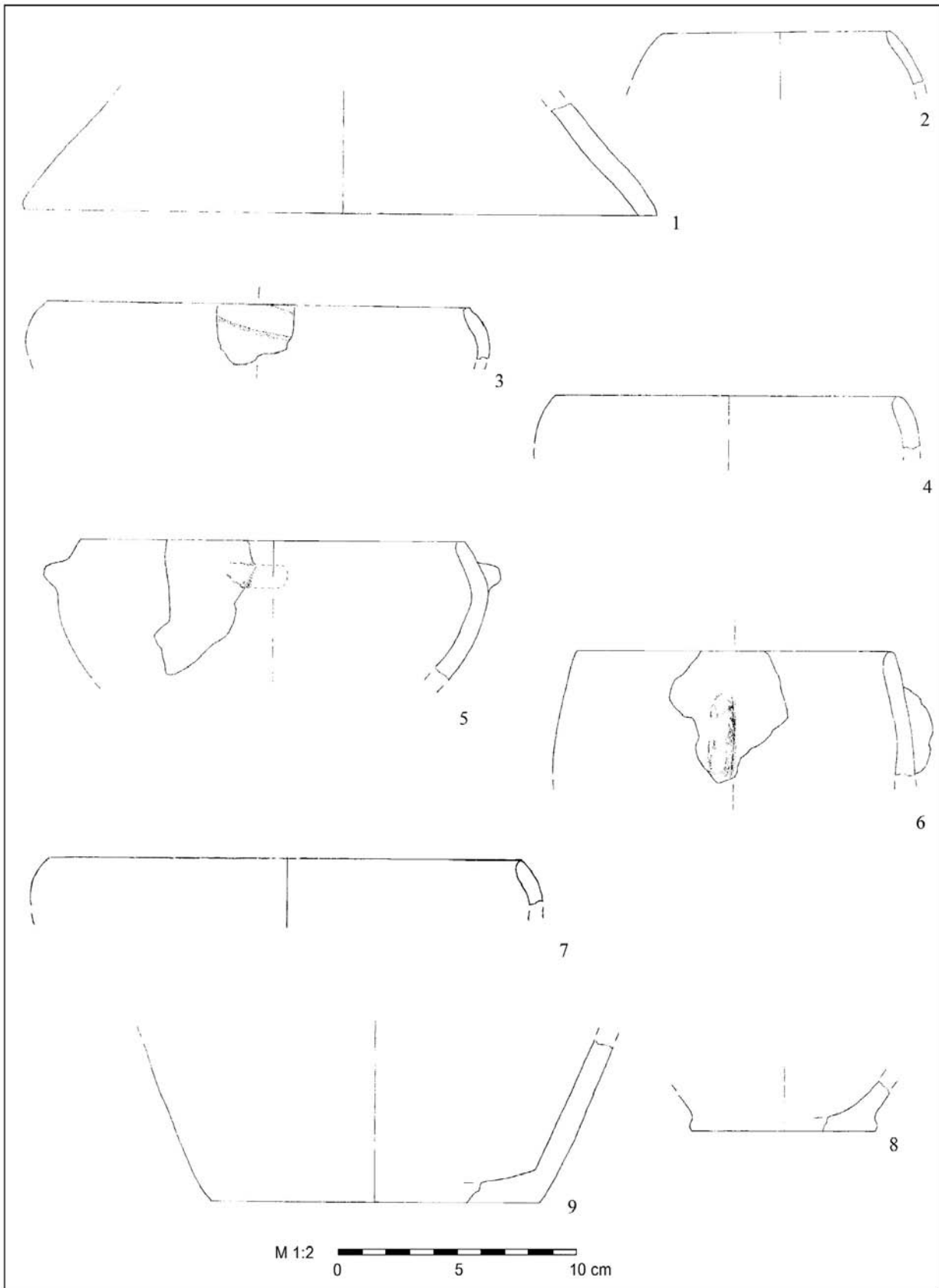
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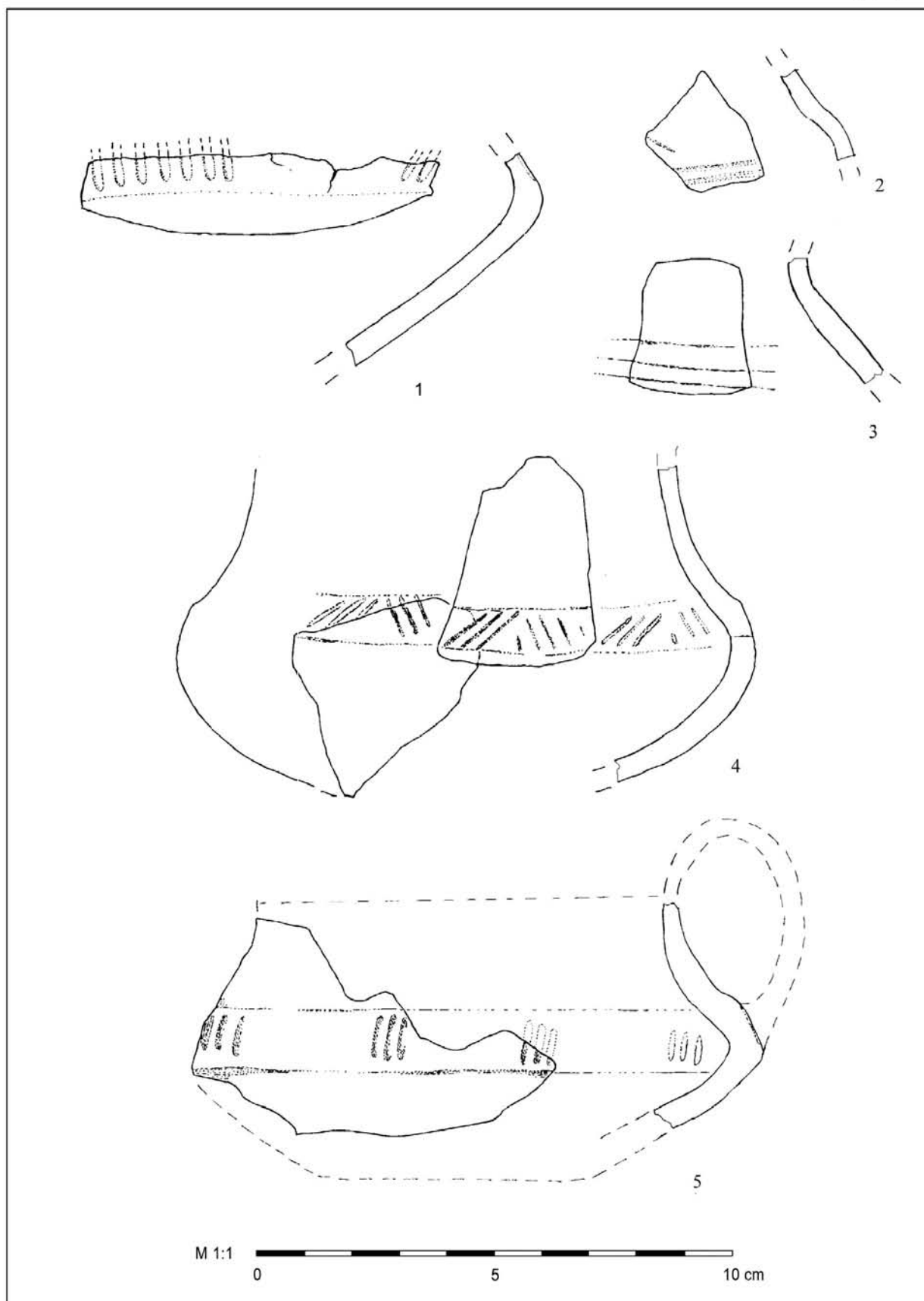
T. 5



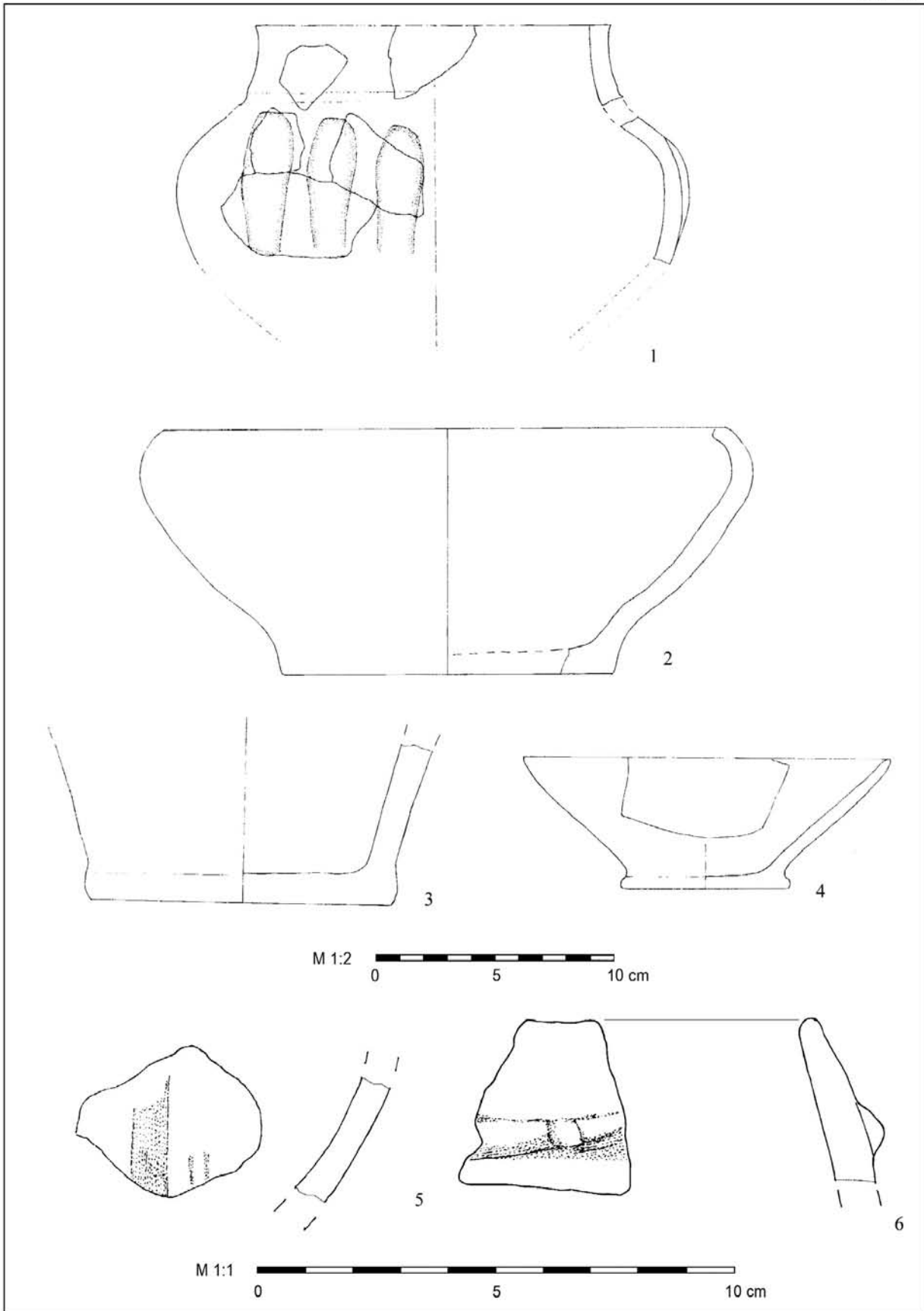
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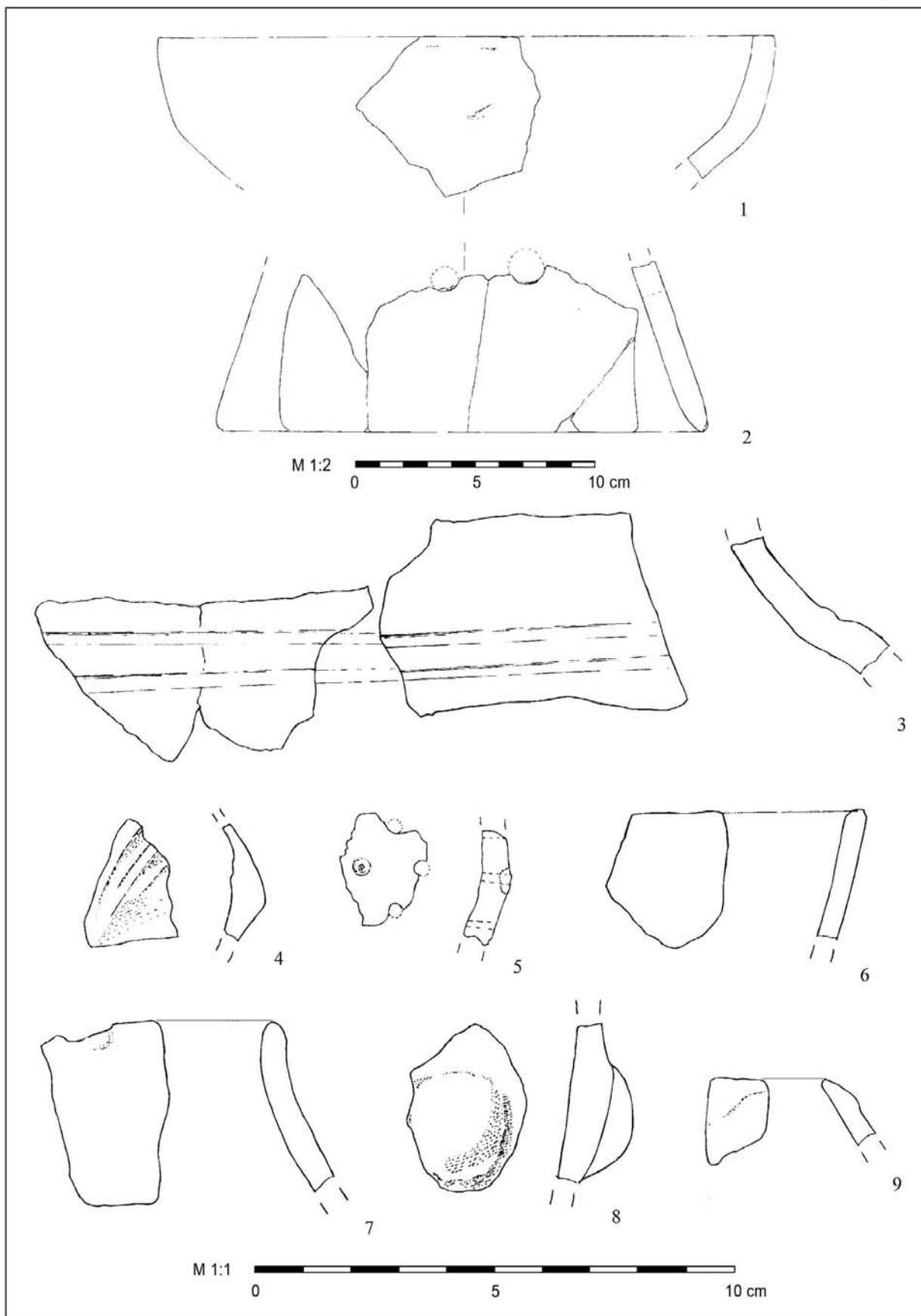
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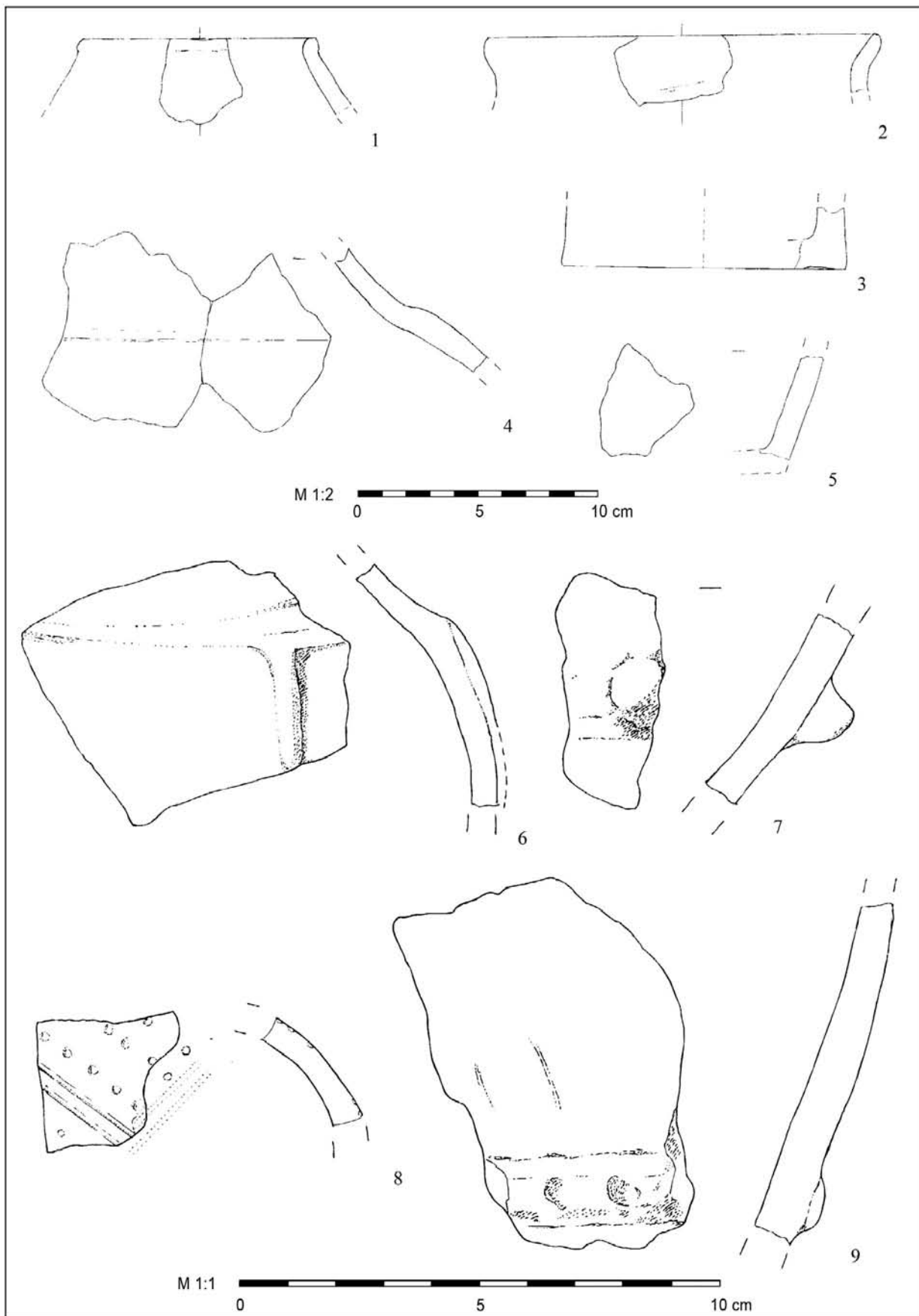
T. 8



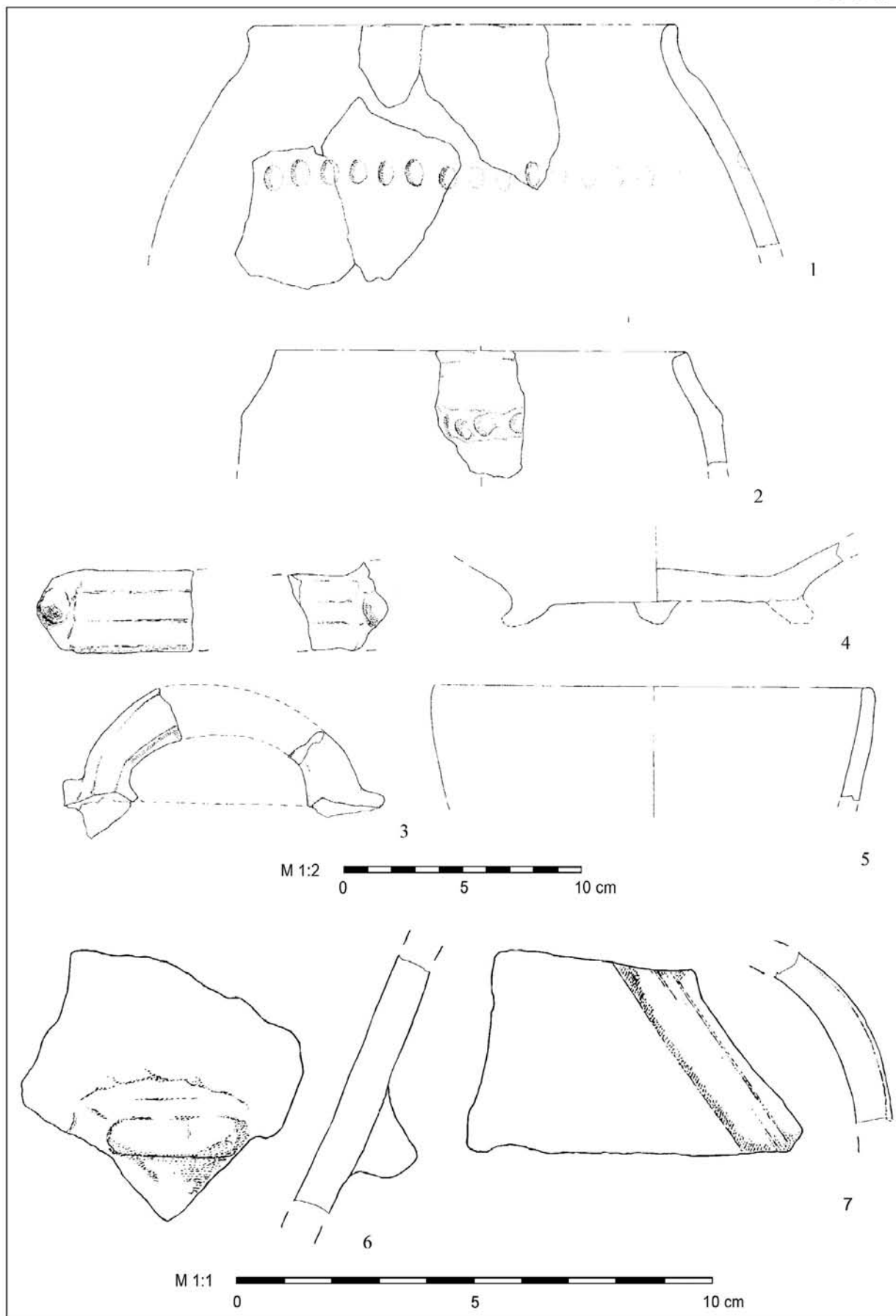
T. 9



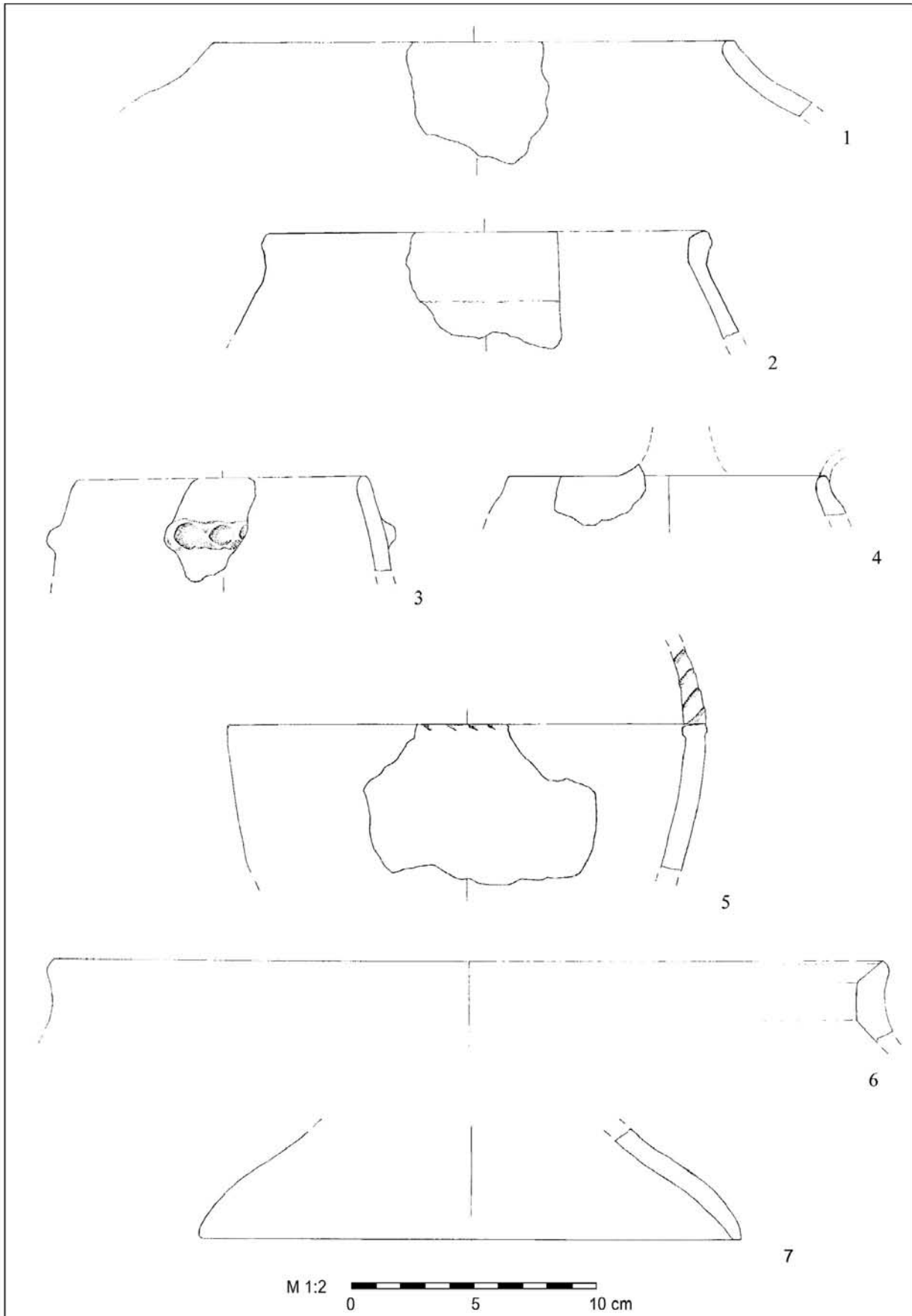
T. 10



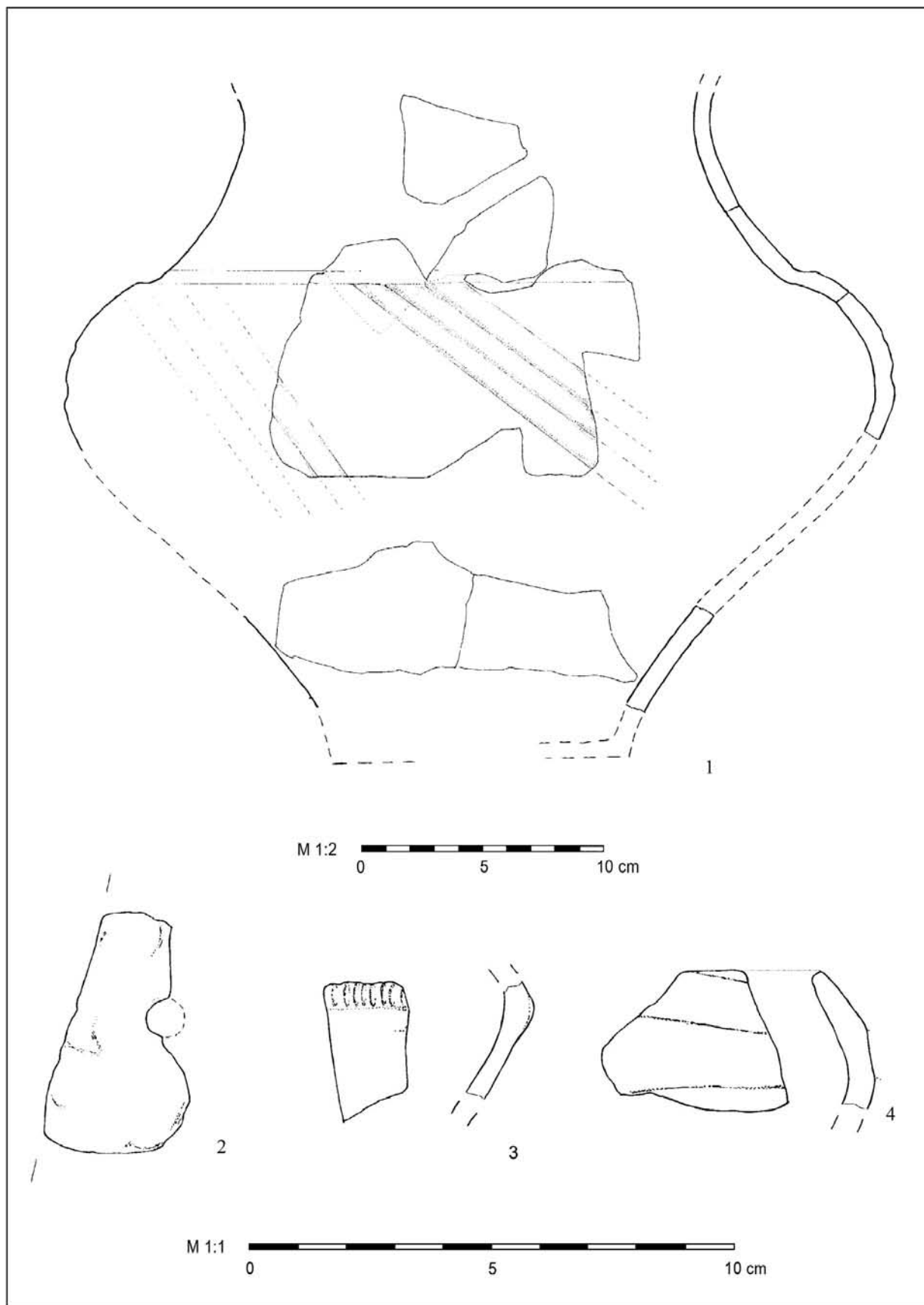
T.11



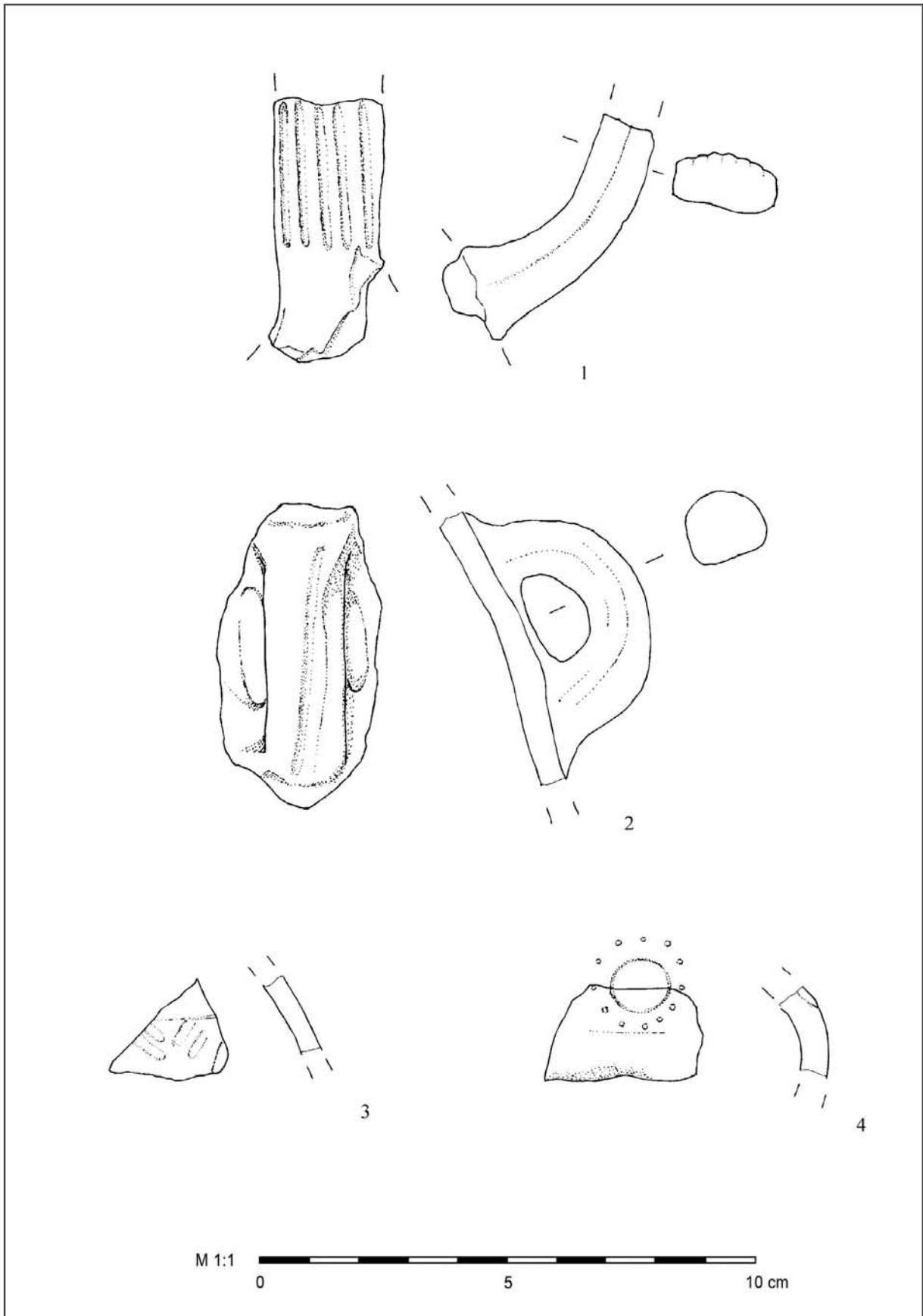
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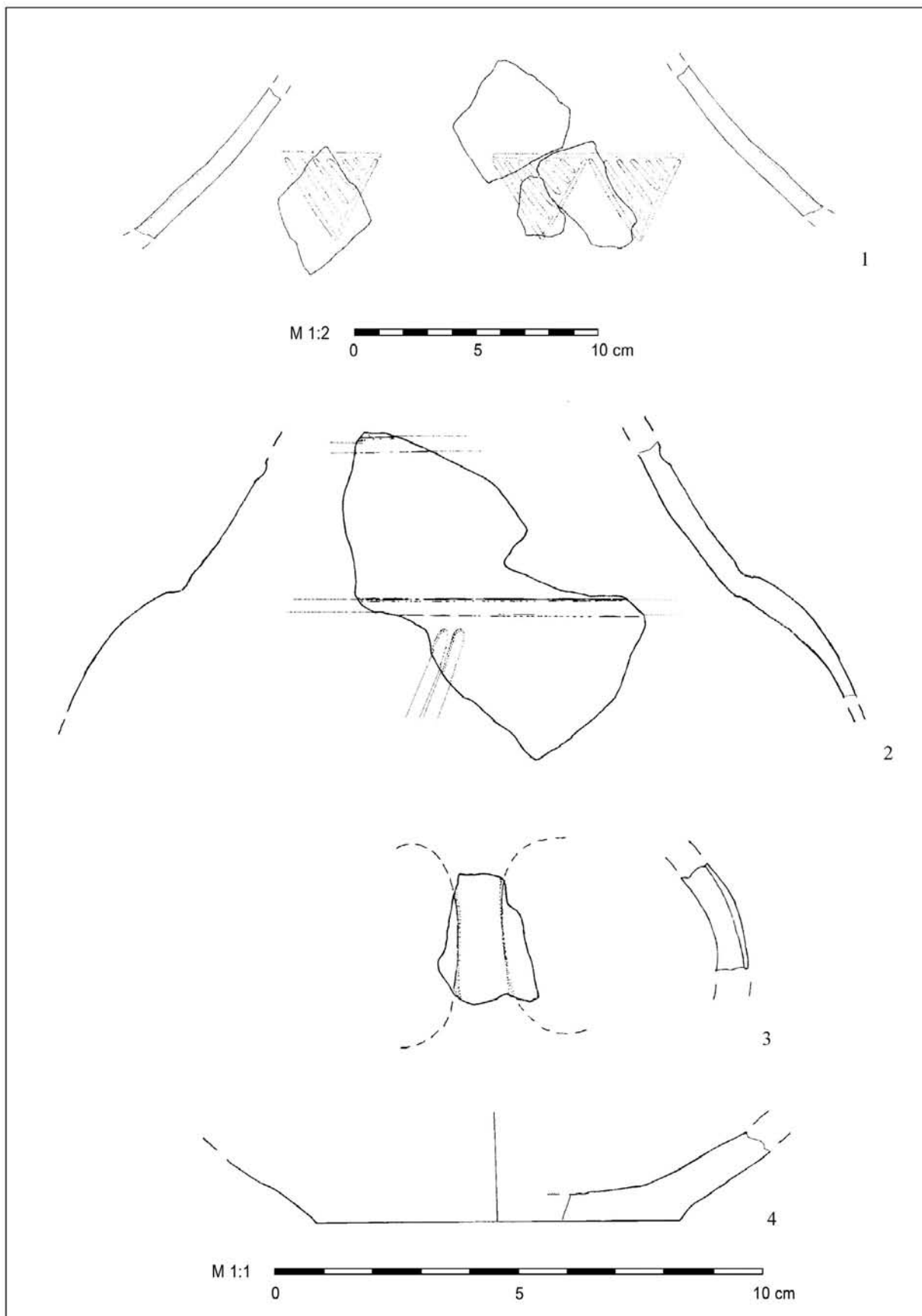
T. 13



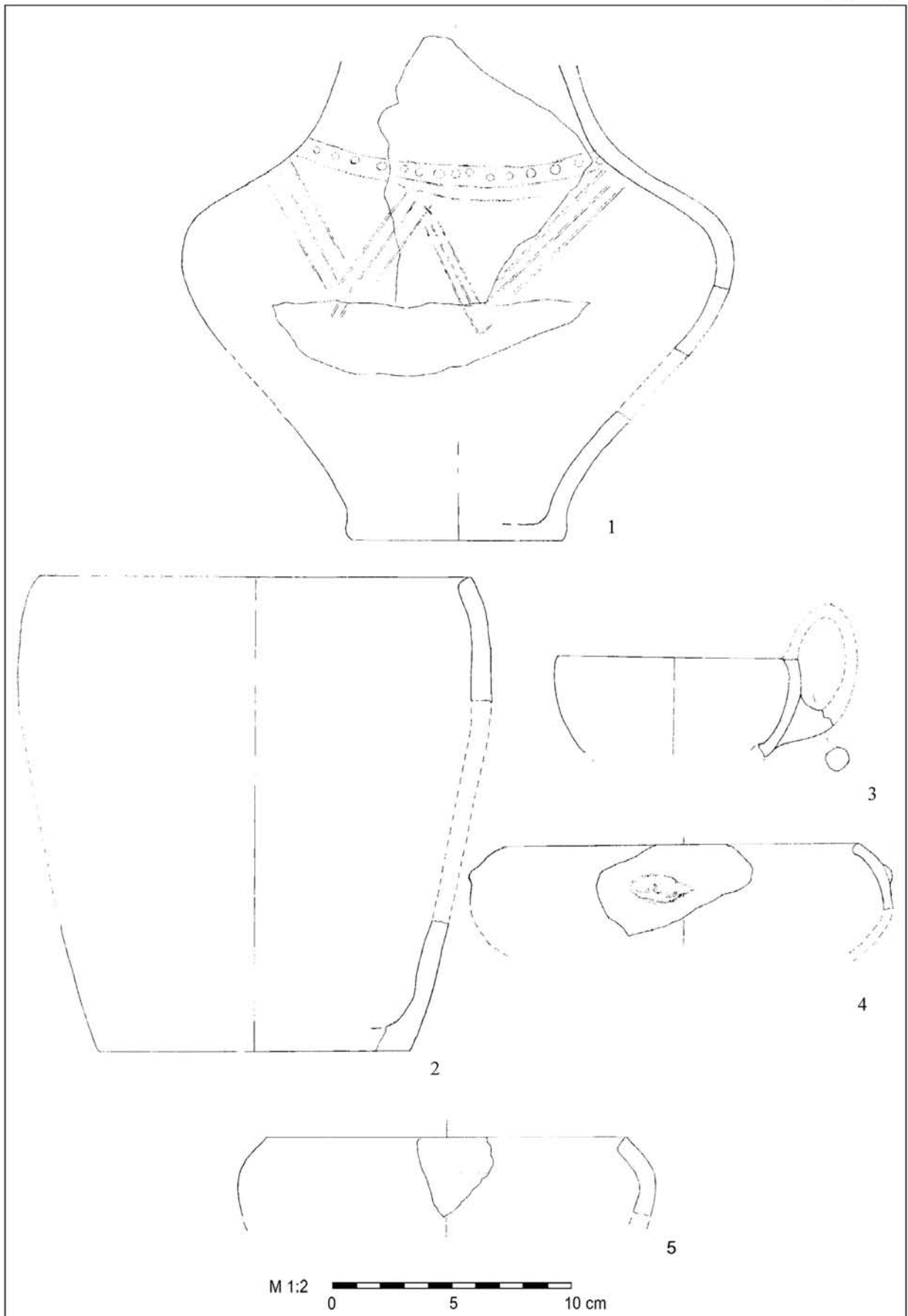
T. 14



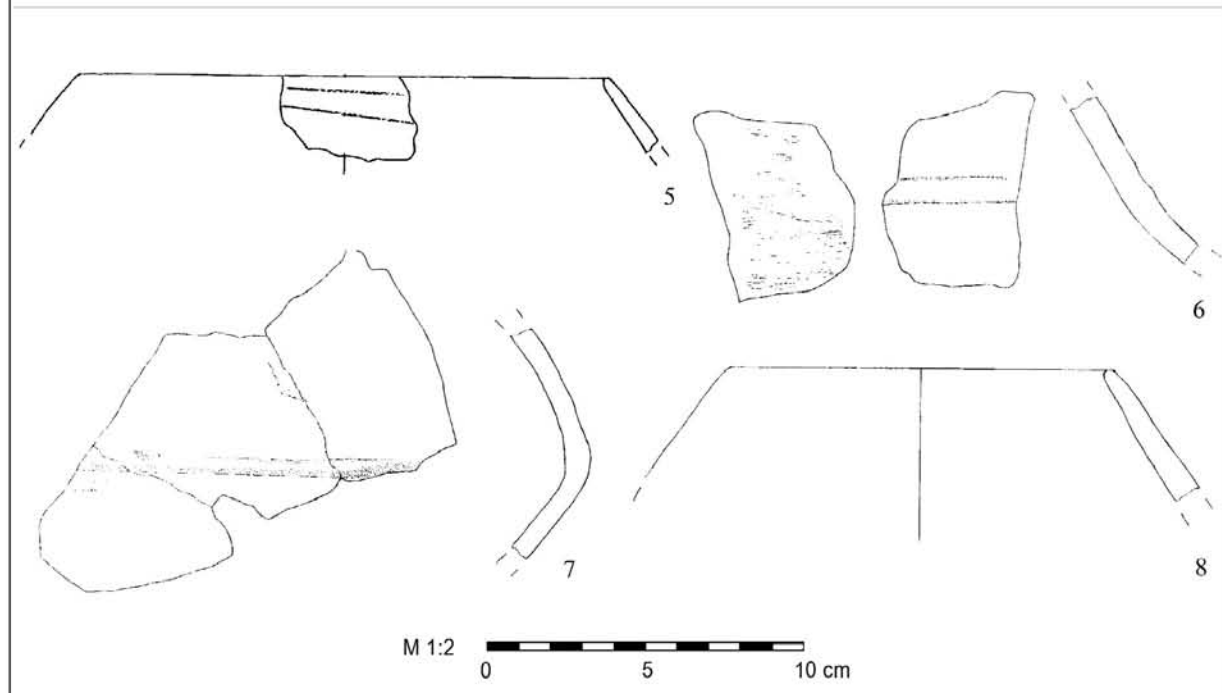
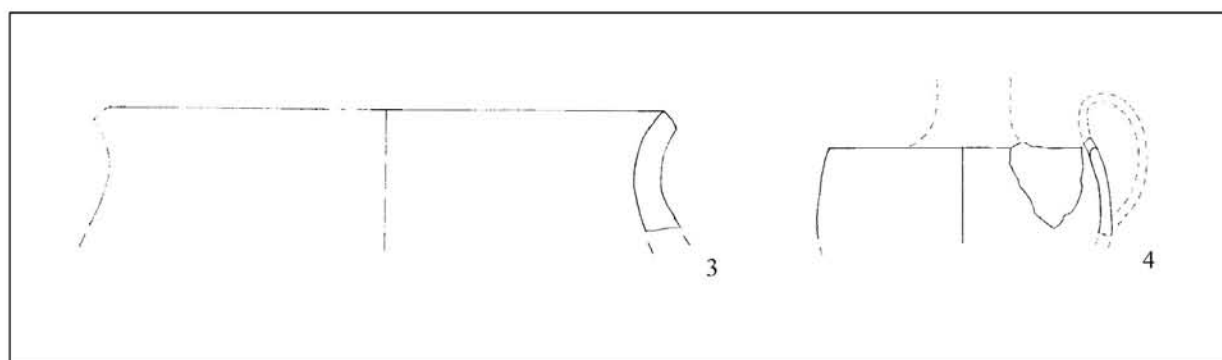
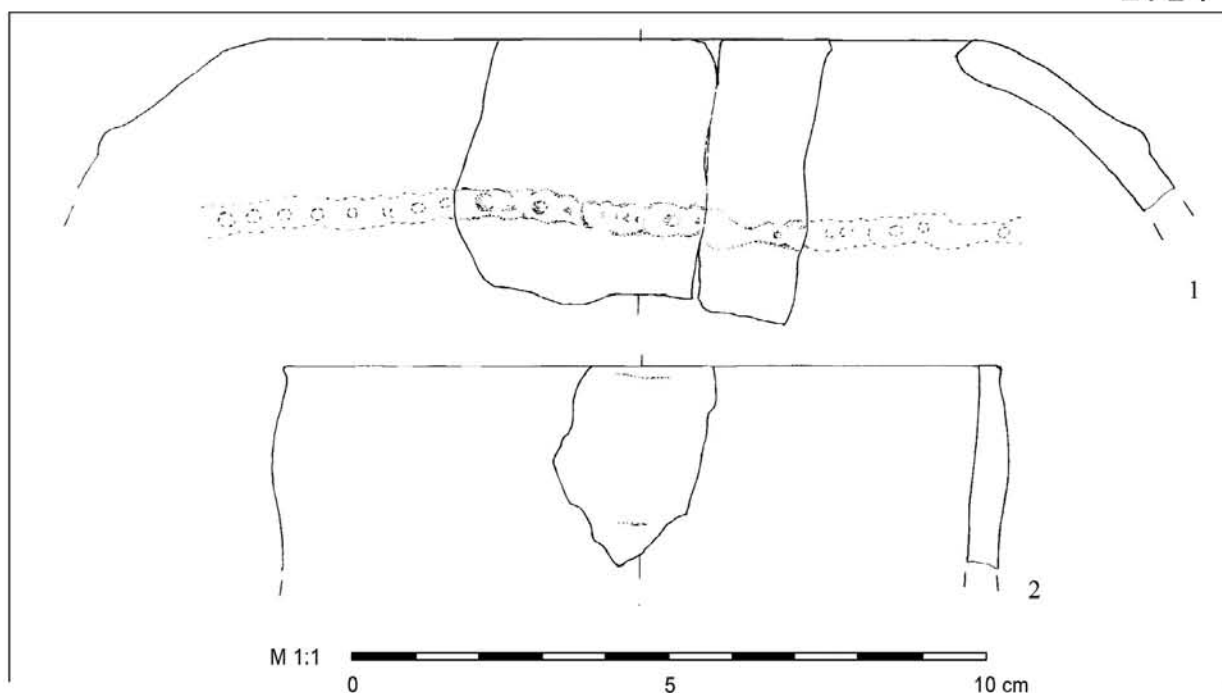
T.15



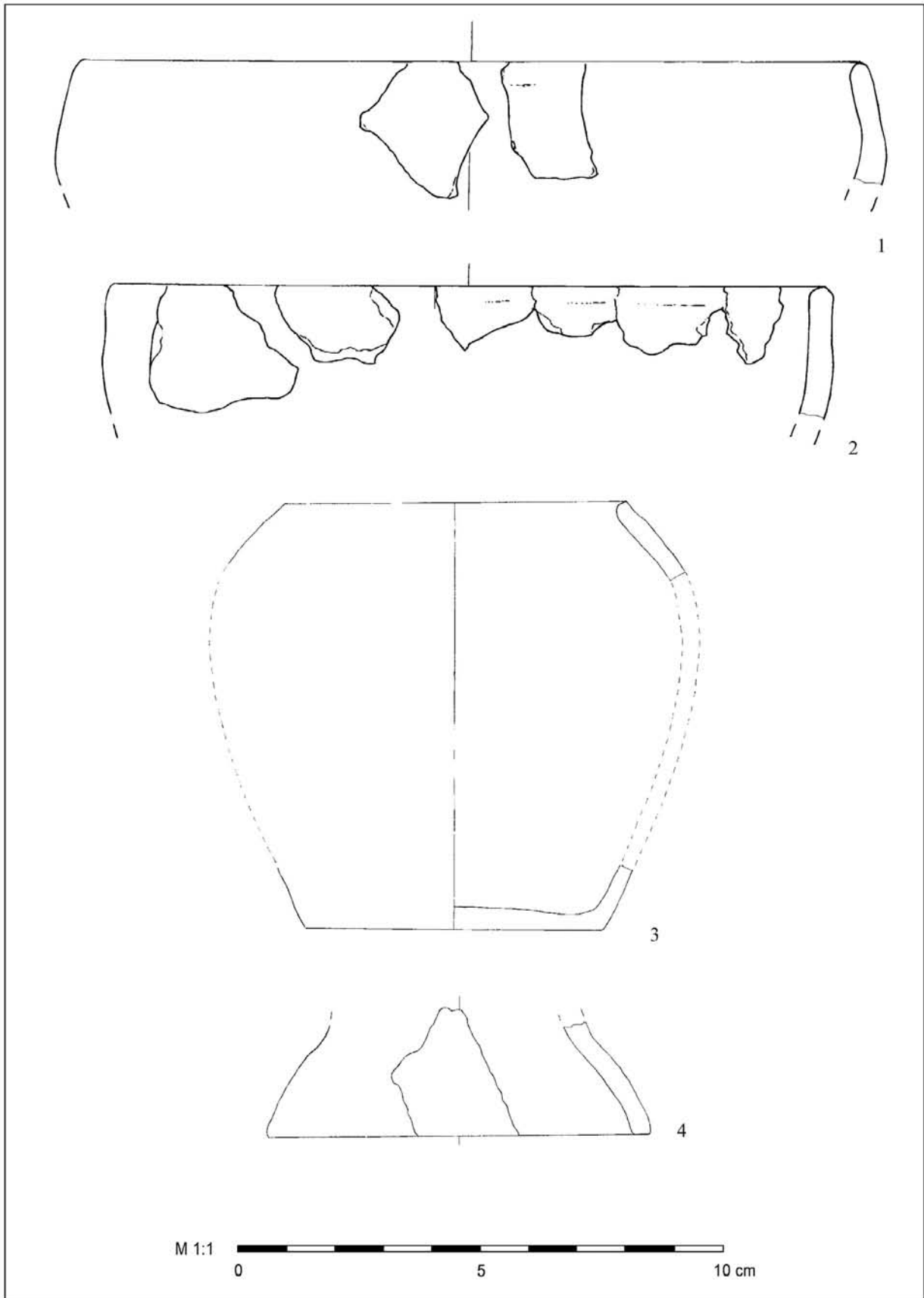
T.16



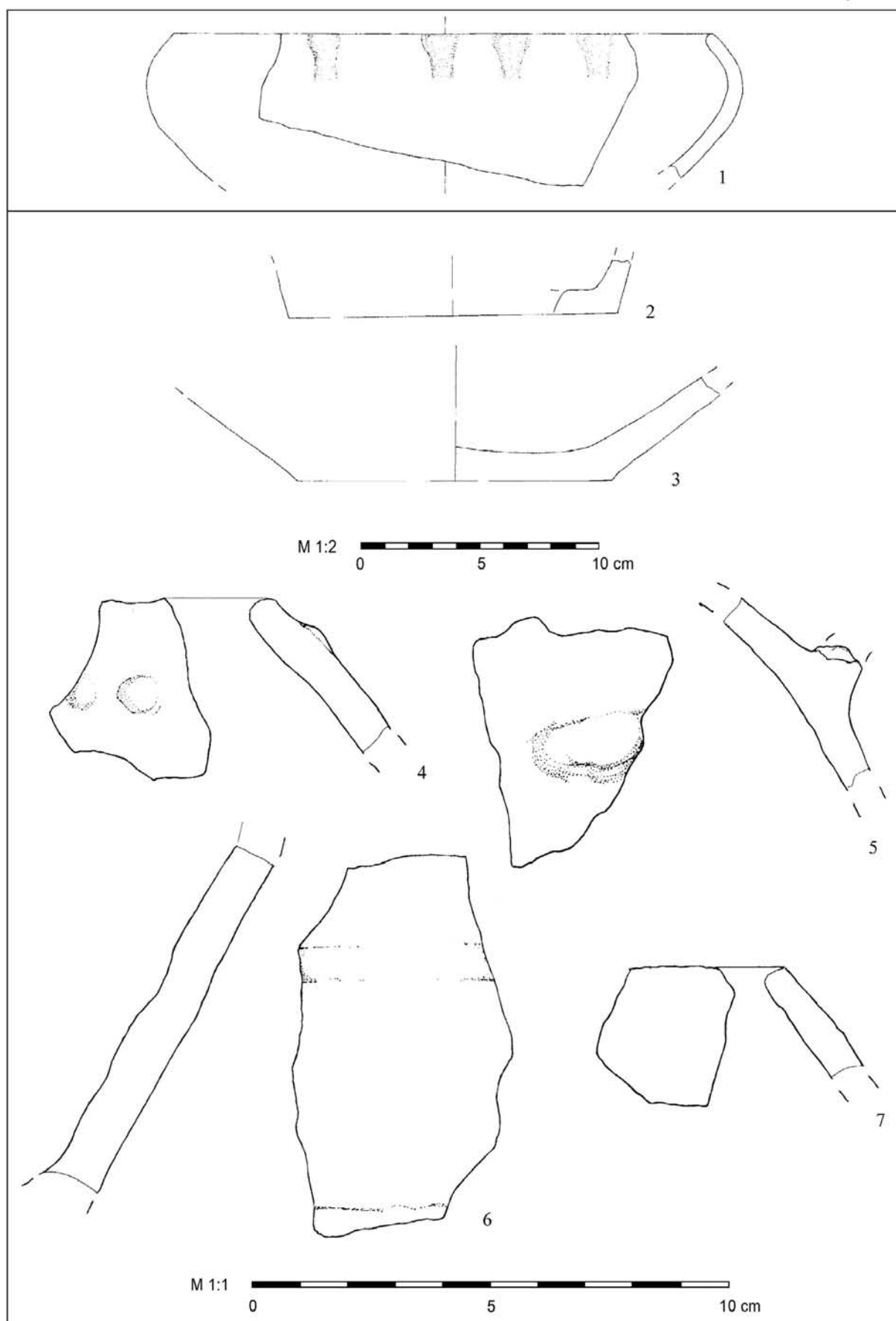
T.17



T. 18



T. 19



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ČETIRI INTAGLIA S GARDUNA U MUZEJU CETINSKE KRAJINE

FOUR INTAGLIOS FROM GARDUN IN THE CETINA TERRITORIAL MUSEUM

Izvorni znanstveni članak / Original scientific paper

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Članak analizira četiri dosad neobjavljena intaglia iz antičke zbirke Muzeja Cetinske krajine u Sinju. Geme potječu s Garduna, antičkog Tilurija. Izrađene su od poludragog kamena karneola i od staklene paste. Stilski su i ikonografski različite. Prikazuju Merkura koji u desnoj ruci drži ovnujsku glavu, heroja koji prinosi žrtvu, kovača koji iskucava štit te skupinu simbola koju čine kalat s čaškom maka i dva klasa žita flankirana kornukopijama. Datiraju se od 2–1. st. pr. Kr. do 2. st. po. Kr.

Ključne riječi: gliptika, intaglio, Tilurij, Muzej Cetinske krajine, antika

U antičkoj zbirci Muzeja Cetinske krajine u Sinju čuvaju se i četiri dosad neobjavljena rimskodobna intaglia.¹ Radi se o slučajnim nalazima koji su otкупom dospjeli u muzejsku zbirku.² U muzejskoj inventarnoj knjizi za sve je predmete kao mjesto

Four until-now unpublished intaglios from the Antiquities Collection of the Cetina Territorial Museum in Sinj are analyzed in this article. The gems are from Gardun, the Roman-era Tilurium. They are made of semi-precious cornelian and glass paste. They differ both stylistically and iconographically. They depict Mercury holding a ram's head in his right hand, a hero bringing a sacrifice, a smith hammering out a shield and a set of symbols consisting of a calathus with a poppy-head and two corn-ears flanked by cornucopias. They are dated from the second/first century BC to the second century AD.

Key words: glyptics, intaglio, Tilurium, Cetina Territorial Museum, Antiquity

Four as-yet unpublished Roman-era intaglios are held in the Antiquities Collection of the Cetina Territorial Museum.¹ These were chance finds that made their way to the Museum's collection after having been purchased.² Gardun is specified as the find-

¹ Zahvaljujem ravnateljici Muzeja Cetinske krajine Aniti Librenjak na ustupljenome materijalu i dokumentaciji.

² Tri su geme kupljene od mještana Petra Tadinca 1960-tih godina, a četvrta je (inv. br. MCK-AZ 336) od mještanke Ive Jurčević kupljena 1974. g.

¹ I would like to thank the director of the Cetina Territorial Museum, Anita Librenjak, for providing the relevant materials and documentation.

² Three gems were purchased from local resident Petar Tadinac in the 1960s, while the fourth (inv. no. MCK-AZ 336) was purchased from a local woman Iva Jurčević in 1974.

nalaza naveden Gardun, a opis je samo jednomu proširen opaskom "seoski put".³ U selu Gardunu kod Trilja, 30-ak kilometara udaljeno od Salone, u anti-ci se nalazio rimski legijski logor Tilurij (*Tilurium*). Logor se sustavno istražuje od 1997. g.⁴ U arheološkim iskopavanjima dosad je od nakita s gemama na-đen samo jedan prsten s vrlo oštećenim kamenom, koji je trenutačno na konzervaciji. Gardunske geme pohranjene u sinjskom muzeju stilski su i ikono-grafski raznovrsne. Tu malu kolekciju sačinjavaju dva intaglia izrađena od poludragog kamena karne-ola te dva od staklene paste.⁵

Karneol (sl. 1)⁶ prikazuje nalog Merkura⁷ s tijelom u poluprofilu i glavom u lijevom profilu, s petasom na glavi i kaducejem u lijevoj spuštеноj ruci preko koje je prebacio hlamidu. U ispruženoj desnoj ruci, lak-tom oslonjenoj na nizak stup, drži ovnujsku glavu. Ikonografske paralele pokazuju ahat iz Tunisa (Spier 1992: 119, br. 309), karneoli iz Verone (Magni 2009: 48, br. 102) i Gadare u Jordanu (Henig & Whiting 1987: 14, br. 88) te staklene paste iz Münchena (AGDS I, 2: 105, br. 1197; AGDS I, 3: 151, br. 3092).⁸ Tip Merkura na karneolu iz Muzeja Cetinske kra-jine na rimskim intagliima nalazimo nešto rjeđe. Merkur na njima najčešće u rukama drži kaducej i marsupij.⁹ Kad se Merkur prikazuje tijelom okre-nut prema stupu s njegove lijeve ili, nešto rjeđe, desne strane, tada on u ruci oslonjenoj na taj stup drži novu glavu. U nekim slučajevima umjesto nje nalazimo glavu jarca¹⁰ (AG Wien II: br. 1313) ili

site for all four pieces in the Museum's inventory log, while this description was expanded only in a single case to include a "village trail".³ During Antiquity, the Roman legionary camp called Tilurium was lo-cated in the village of Gardun, near Trilj, roughly 30 kilometres from ancient Salona. The camp has been undergoing systematic research since 1997.⁴ The only jewellery with gems found during the archaeological excavations so far is a single ring with a very dam-aged stone that is currently undergoing conservation procedures. The Gardun gems stored in the Museum in Sinj are iconographically diverse. This small col-lection consists of two intaglios made of semi-pre-cious cornelian and two made of glass paste.⁵

One cornelian (Fig. 1)⁶ features an image of nude Mercury⁷ with body in semi-profile and head in left profile, wearing a petasus on his head and holding a caduceus in his lowered left hand, over which a chlamys is thrown. He holds a ram's head in his right hand, with an elbow leaning on a low column. Iconographic parallels can be found in an agate from Tunisia (Spier 1992: 119, no. 309), cornelians from Verona (Magni 2009: 48, no. 102) and Gadara in Jordan (Henig & Whiting 1987: 14, no. 88), as well as a glass paste gem from Munich (AGDS I, 2: 105, no. 1197; AGDS I, 3: 151, no. 3092).⁸

The Mercury type on the cornelian from the Cetina Territorial Museum is found more rarely on Roman intaglios. On them Mercury usually holds a ca-

³ Kod intaglia inv. br. MCK-AZ 336.

⁴ O arheološkim istraživanjima Tilurija v. u M. Sanader, "Tilurij – rimski vojni logor. Prethodno izvješće s arheoloških istraživanja u 1997. i 1998.", *Opuscula archaeologica* 22, Zagreb, 1998, 243–255; M. Sanader, *Tilurij I. Istraživanja / Forschungen. 1997–2001*, Zagreb, 2003; M. Sanader, D. Tončinić & I. Ožanić, "Tilurij – arheološka istraživanja 2004. godine", *Opuscula arch-aeologica* 28, Zagreb, 2004 [2005], 221–243; M. Sanader *et al.*, "Gardun (*Tilurium*)", *Hrvatski arheološki godišnjak* 1–4, Zagreb, 2004–2008.

⁵ Materijal od kojeg su intagli izrađeni mikroskopskim je pre-gledom odredio dipl. inž. Marin Šoufek iz Mineraloško-petro-grafskog odjela Hrvatskog prirodoslovnog muzeja, na čemu mu ovom prilikom zahvaljujem.

⁶ Inv. br. MCK-AZ 336, karneol, 13 × 10 × 2, oblik 7 (prema AG Wien I: 15, sl. c).

⁷ O kultu Merkura i spomenicima posvećenima tom bogu u rim-skoj provinciji Dalmaciji v. u Giunio (2004). U okolici Trilja, na trasi antičke ceste u Čačvini, nađen je žrtvenik s posvetnim nat-pisom Merкуру (Gabričević 1961–1962: 238–239).

⁸ Istom ikonografskom tipu pripadaju i intaglio od staklene paste (AGDS I, 2: 104–105, br. 1195) i jaspis iz Münchena (AGDS I, 3: 67, br. 2518) te ametist iz Verone (Magni 2009: 48, br. 101), s tom razlikom što na njima Merkur drži kaducej usmjeren prema podu, a ne prema gore kao na prethodnim primjercima. Javlja se i tip Merkura koji u desnoj ruci drži ovnujsku glavu, a u lijevoj *rhabdos* umjesto kaduceja (AG Wien II: 174, br. 1313; Gesztelyi 2000: 54, br. 94; Spier 1992: 105, br. 257).

⁹ O ikonografiji Merkura v. u Simon & Bauchhenss (1992: 500–554).

¹⁰ Prema Magni (2009: 48, br. 102).

³ For intaglio inv. no. MCK-AZ 336.

⁴ On the archaeological research in Tilurium, see M. Sanader, "Tilurij – rimski vojni logor. Prethodno izvješće s arheoloških istraživanja u 1997. i 1998.", *Opuscula archaeologica* 22, Zagreb, 1998, 243–255; M. Sanader, *Tilurij I. Istraživanja / Forschungen. 1997–2001*, Zagreb, 2003; M. Sanader, D. Tončinić & I. Ožanić, "Tilurij – arheološka istraživanja 2004. godine", *Opuscula arch-aeologica* 28, Zagreb, 2004 [2005], 221–243; M. Sanader *et al.*, "Gardun (*Tilurium*)", *Hrvatski arheološki godišnjak* 1–4, Zagreb, 2004–2008.

⁵ The materials from which the intaglios are made were ascer-tained in a microscopic examination by Marin Šoufek of the Mineralogy-Petrography Department of the Croatian Natural History Museum, for which I would like to thank him.

⁶ Inv. no. MCK-AZ 336, cornelian, 13 × 10 × 2, shape 7 (according to AG Wien I: 15, Fig. c).

⁷ On the cult of Mercury and the monuments dedicated to this god in the Roman province of Dalmatia, see Giunio (2004). An altar with dedicatory inscription to Mercury was found in the Trilj area, on a section of the Roman-era road in Čačvina (Ga-bričević 1961–1962: 238–239).

⁸ A glass-paste intaglio belongs to the same iconographic type (AGDS I, 2: 104–105, no. 1195) as do one made of jasper from Munich (AGDS I, 3: 67, no. 2518) and one made of amethyst from Verona (Magni 2009: 48, no. 101), with the difference being that on them Mercury is holding the caduceus pointed downward, and not upright as on the preceding examples. There is also a type with Mercury holding a ram's head in his right hand, and a *rhabdos* instead of a caduceus in his left (AG Wien II: 174, no. 1313; Gesztelyi 2000: 54, no. 94; Spier 1992: 105, no. 257).

kornjaču¹¹ (Magni 2009: 48, br. 101). Ikonografski prikaz Merkura koji se podupire o stup na gema je prenesen iz grčke skulpture 5. st. pr. Kr. (Maioli 1971: 25–26, br. 21). Među najstarije primjere ubrajamo grčki intaglio iz polovice 5. st. pr. Kr. s Hermom oslonjenim lijevim laktom o stup, s kaducejem u lijevoj i paterom u desnoj ruci (Beazley 1920: 43, br. 48). Na staklenoj pasti iz Ravene iz 1. st. pr. Kr. Merkur lakat naslanja na stup na čijem se vrhu nalazi ovnujska glava (Maioli 1971: 25–26, br. 21).

U ranim objavama gema taj tip prikaza vezao se uz Herma Kriofora (*Hermes Kryophóros*).¹² Tako je opisan i karneol s Dioskuridovim¹³ potpisom iz British Museuma u Londonu (King 1872: 54, br. 8; Simon & Bauchhenss 1992: 512, br. 113). Međutim u rimskome štovanju Merkura izgubila se ta daleka poveznica s Hermom Krioforom, pa se ovan sada javlja samo kao žrtvena životinja (Simon & Bauchhenss 1992: 516, br. 4). U tom smislu treba tumačiti i ikonografiju na tilurijskom i njemu srodnim intagliama. Taj način prikazivanja Merkura ne nalazimo na rimskome novcu, na kojemu je taj bog, za razliku od gema, rijetko zastupljen.¹⁴ Opisani ikonografski tip u gliptici je najprisutniji tijekom 1. st., u rano carsko doba (Magni 2009: 45). Prema stilsko-tehničkom oblikovanju motiva, koje uključuje okruglu glavu s izraženim nosom bez ostalih detalja lica te tijelo pojednostavljene anatomije, karneol iz sinjskog muzeja može se datirati u 2. st.

duceus and purse (*marsupium*).⁹ When Mercury is depicted with his body turned toward a column to his left or, more rarely, right side, then he holds a ram's head in his hand, with arm leaning on said column. In some cases, instead of a ram's head it is the head of a goat¹⁰ (AG Wien II: no. 1313) or tortoise¹¹ (Magni 2009: 48, no. 101). The iconographic portrayal of Mercury leaning on the column was taken from Greek sculpture of the fifth century BC (Maioli 1971: 25–26, no. 21). Among the older examples is the Greek intaglio from the mid-fifth century BC showing Hermes leaning on a column with his left arm, holding a caduceus in his left hand and a patera in his right (Beazley 1920: 43, no. 48). The glass paste from Ravenna, from the first century BC, shows Mercury with his elbow on a column with a ram's head on top (Maioli 1971: 25–26, no. 21).

In early publications, gems of this type were linked to Hermes Kryophóros.¹² This is, in fact, the description of the cornelian signed by Dioscurides¹³ from the British Museum in London (King 1872: 54, no. 8; Simon & Bauchhenss 1992: 512, no. 113). However, in his Roman veneration, Mercury lost this distant tie to Hermes Kryophóros, so the ram only appeared as a sacrificial animal (Simon & Bauchhenss 1992: 516, no. 4). The iconography on the Tilurium and similar intaglios should be interpreted in this sense. This manner of depicting Mercury cannot be found on Roman coins, on which, as opposed to gems, this

¹¹ Merkur se na rimskim gemama često okružuje životinjama, već spomenutom kornjačom, koja ga evocira kao izumitelja lire, ali i pijetlom i škorpionom, koje grčka tradicija ne poznaje (Legrand 1905: 1819; Magni 2009: 45). Na karneolu iz Münchena Merkur u desnoj ruci drži štap, u lijevoj ovnujsku glavu, a sa strana ga okružuju škorpion i jarac (AGDS I, 3: 34, br. 2296).

¹² Prema legendi koju donosi Pausanija (Paus. 9.22.1) kipar Kalamid napravio je kip Herma s ovnom na ramenima u sjećanje na čin kojim je taj bog građane Tanagre u Beotiji spasio od zarazne epidemije. Hermo je, naime, odvratio bolest od grada noseći ovna gradskim zidinama. Herma Kriofora kao golobrada mladića nalazimo na reversu novca Tanagre iz 2. st. (B. V. Head, *A Catalogue of the Greek Coins in the British Museum. Central Greece (Locris, Phocis, Boeotia and Euboea)*, London, 1884: 64, br. 51, T. X.12). Pausanija opisuje i kip Herma koji nosi ovna iz Arkadije (Paus. 4.33.4). Tip Herma s bradom javlja se nešto kasnije. Hermo Kriofor, odnosno Hermo koji nosi ovna ili janje na ramenima ili pod pazuhom često se prikazivao u grčkoj umjetnosti 5. i 4. st. pr. Kr., a počeo se gubiti tijekom 3. st. pr. Kr. (Legrand 1905: 1810).

¹³ Majstor-graver iz Egeide, jedan od rijetkih koji se potpisivao na intagliama. Napravio je za cara Augusta pečat s njegovim portretom (Richter 1956: XXXII).

¹⁴ Merkur se u stojećem stavu (no ikonografski različito od ovdje opisanog intaglia) javlja na rimskome novcu 2. i 3. st., a osobito za cara Marka Aurelija. Na reversu sestercija Marka Aurelija s legendom RELIG. AVG. prikazano je pročelje hrama s Merkurivim kipom u sredini. Na polukružnome zabatu nalaze se Merkurovi atributi – kornjača, pijetao, ovan, kaducej, krilata kaciga i marsupij (RIC III: 299, br. 1074, T. 12, sl. 247).

⁹ On the iconography of Mercury, see Simon & Bauchhenss (1992: 500–554).

¹⁰ According to Magni (2009: 48, no. 102).

¹¹ Mercury on Roman gems is often surrounded by animals, such as the already mentioned tortoise, which evokes him as the inventor of the lyre, but also with a rooster and scorpion, which are absent from Greek tradition (Legrand 1905: 1819, Magni 2009: 45). On the cornelian from Munich, Mercury holds a staff in his right hand and a ram's head in his left, while he is flanked by a scorpion and goat (AGDS I, 3: 34, no. 2296).

¹² According to a legend recounted by Pausanias (Paus. 9.22.1), the sculptor Calamides made a statue of Hermes with a ram's head to commemorate the act whereby this god saved the populace of Tanagra in Boeotia from an epidemic. Hermes warded the disease from the city by carrying a ram's head to the city walls. Hermes Kryophóros as a beardless youth is featured on the reverse of a Tanagra coin from the second century (B. V. Head, *A Catalogue of the Greek Coins in the British Museum. Central Greece (Locris, Phocis, Boeotia and Euboea)*, London, 1884: 64, no. 51, Pl. X.12). Pausanias also described a statue of Hermes carrying a ram from Arcadia (Paus. 4.33.4). The bearded Hermes type appeared later. Hermes Kryophóros, i.e., Hermes carrying a ram or lamb on his shoulders or under his arm, was often depicted in Greek art of the fifth and fourth centuries BC, and began to disappear during the third century BC (Legrand 1905: 1810).

¹³ A master gem-cutter from Aegeides, one of the rare masters who signed intaglios. He made a seal for Augustus bearing the emperor's portrait (Richter 1956: XXXII).

Intaglio (sl. 2)¹⁵ od tamnosmeđega pojasnog stakla kao imitacije slojevita ahata prikazuje heroja koji prinosi žrtvu. Muškarac s kacigom na glavi stoji u lijevom profilu s plaštem koji mu pada niz rame, lijevu ruku pridiže prema glavi, a desnom drži štit. Njemu nasuprot nalazi se mali oltar s ovnujskom glavom i drvo s kojega visi životinjska koža. Ikonografija heroja koji prinosi žrtvu pripada u tzv. scene proročišta. Česta je na italjskim gemama republikanskoga doba, na kojima se javlja u različitim varijacijama.¹⁶ Scene istovjetne sceni na gardunskom intagliu zbog obješene životinjske kože tumače se kao prikaz grčkoga heroja Jazona i zlatnog runa (AGDS I, 2: 133, br. 1403; Hoey Middleton 1991: 42, br. 20). Ikonografijom i upotrebom perlica u izvedbi štita i viseće kože ovaj intaglio predstavlja rad italjskih radionica u periodu 2–1. st. pr. Kr. Sama tematika i područje legijskog logora kao mjesto nalaza sugeriraju da ga je mogao nositi neki pripadnik rimske vojske. Štovanje grčkih heroja i njihovih junačkih djela dobro je zastupljeno u rimskoj gliptici, a game s takvim sadržajem često se nalaze na području vojnih logora i mjesta gdje se zadržavala vojska (Henig 1970: 249–250).

Na karneolu (sl. 3)¹⁷ prikazan je nag muškarac u poluklećem položaju u lijevom profilu, s kacigom na glavi i s ispruženim rukama u kojima drži čekić i iskucava štit. Prema dostupnoj literaturi taj intaglio nema izravnih ikonografskih paralela. Najviše sličnosti nalazimo na karneolu iz Verone (Magni 2009: 132, br. 593). Prikaz bi se sadržajno mogao svrstati u scenografiju majstorâ-kovača koji izrađuju oružje. Iz tog konteksta izdvaja ga kaciga koja kovača karakterizira i kao ratnika. Prikaz podsjeća i na scenu iz Ilijade (*Il.* XVIII, 410–477) u kojoj bog Vulkan izrađuje Ahileju štit.¹⁸ Međutim štit se sa sigurnošću može dovesti u vezu s Ahilejem tek kad na sebi ima Meduzinu glavu (Toso 2007: 216). Nadalje, Vulkan se prikazuje ili gologlav ili kako

god is rarely shown.¹⁴ The iconographic type so described was most present in glyptics during the first century, in the early imperial period (Magni 2009: 45). According to the stylistic and technical modeling of the figure which includes a simplified body anatomy and a round head with no facial details except a prominent nose, the cornelian from the Sinj Museum can be dated to the second century.

The intaglio (Fig. 2) made of cast glass in imitation of banded agate depicts a hero conveying a sacrifice. A man wearing a helmet stands in left profile with a chlamys that falls down his shoulders, his left hand rising toward his head, his right hand holding a shield. Opposite to him is a small altar with a ram's head and a tree on which the ram's hide hangs. The motif of a hero bringing a sacrifice belongs to a so-called oracle scene. It is common on Italian gems of the Republic period on which it appears in several variants.¹⁶ Scenes identical to that on the Gardun intaglio are interpreted as portrayals of the Greek hero Jason and the golden fleece due to the hanging animal hide (AGDS I, 2: 133, no. 1403; Hoey Middleton 1991: 42, no. 20). By its iconography and the use of pellets in rendering the shield and the hanging ram's skin, this intaglio belongs to italic workshops of the 2-1 century BC. The theme itself and the area of a legionary camp as the find site suggest that it may have been worn by a Roman soldier. The reverence of Greek heroes and their heroic deeds was well represented in Roman glyptics, and gems with such motifs were often discovered in the area of Roman military camps and places where the military lingered (Henig 1970: 249-250).

The other cornelian (Fig. 3)¹⁷ bears a depiction of a nude man in semi-crouched posture in left pro-

¹⁵ Inv. br. MCK-AZ 284, staklena pasta, 13 × 9 × 3, oblik 6 (prema AG Wien I: 15, sl. c).

¹⁶ Ratnik koji stoji pred stupom sa zmijama na kojemu se nalazi ptica, s ovnom ili bez njega, jedna je od čestih varijanti (AGDS I, 2: 153, br. 1555–1558; AGDS III, Braunschweig: 12, br. 8, 9). Ratnik se tumači kao heroj koji u proročištu traži odgovor. Scena bi mogla prikazivati Marsovo proročište u Tiori u središnjoj Italiji, koje je opisao Dionizije Halikarnaški (*Ant. Rom.* I, 14). U njemu je ptica žuna (*picus Martius*), na vrhu drvenoga stupa, davala odgovor na postavljeno pitanje (Maaskant-Kleibrink 1978: 141, br. 221; 1986: 19, br. 37). Heroj koji na glavi umjesto kacige nosi kapu možda prikazuje i Eneju koji prinosi žrtvu prije silaska u Had (Maaskant-Kleibrink 1978: 141, br. 122).

¹⁷ Inv. br. MCK-AZ 282, staklena pasta, 12 × 10 × 2, oblik 8 (prema AG Wien I: 15, sl. c).

¹⁸ Na karneolu iz Beča (AG Wien I: br. 165) Vulkan u poluklećem stavu za Ahileja izrađuje oklop i štit s Gorgonom.

¹⁴ Mercury standing upright (but iconographically different from the intaglio described here) appeared on Roman money of the second and third centuries, particularly during the reign of Marcus Aurelius. The reverse of a Marcus Aurelius sesterce with the legend RELIG. AVG. shows the façade of a temple with a statue of Mercury in the centre. Mercury's attributes – a tortoise, rooster, ram, caduceus, winged helmet and purse – are in the semi-circular pediment (RIC III: 299, no. 1074, Pl. 12, Fig. 247).

¹⁵ Inv. no. MCK-AZ 284, glass paste, 13 × 9 × 3, shape 6 (according to AG Wien I: 15, Fig. c).

¹⁶ A warrior standing before a column with snakes on which there is a bird, with or without a ram, is one of the frequent variants (AGDS I, 2: 153, no. 1555-1558; AGDS III, Braunschweig: 12, no. 8, 9). The warrior is interpreted as a hero seeking an answer from an oracle. The scene may depict the oracle of Mars in Tiora, in central Italy, which was described by Dionysius of Halicarnassus (*Ant. Rom.* I, 14). In it, a woodpecker (*Dryocopus martius*) sitting atop a wooden post gave answers to queries (Maaskant-Kleibrink 1978: 141, no. 221; 1986: 19, no. 37). The hero wearing a hat instead of a helmet may be Aeneas, who is making a sacrifice prior to descending into Hades (Maaskant-Kleibrink 1978: 141, no. 122).

¹⁷ Inv. no. MCK-AZ 282, glass paste, 12 × 10 × 2, shape 8 (according to AG Wien I: 15, Fig. c).

nosi stožastu kapu (*pilos*), ali ne i kacigu.¹⁹ Inače se bog-kovač od običnoga kovača u gliptici može razlikovati jedino kad je prikazan u odgovarajućem mitološkom kontekstu i u društvu Tetide, Atene, Jupitera ili Marsa (Simon & Bauchhenss 1997: br. 288; Tassinari 1994: 37; Toso 2007: 216).²⁰ Stoga se intagli s ikonografijom kovača mahom tumače kao prikazi stvarnih majstora (AGDS II: 138, br. 351; Tassinari 1994: 37; Toso 2007: 122–123, 215). Mogli su ih koristiti ti isti majstori kao prepoznatljive oznake svojeg zanimanja (Toso 2007: 123). Prema tome i ovaj je karneol možda nosio neki kovač koji je u sklopu logora mogao izrađivati oružje za vojsku. Scene s majstorima na gemama se javljaju od 3. st. pr. Kr., da bi nakon 1. st. po. Kr. postale rijetke. Najveća produkcija zabilježena je u 1. st. pr. Kr. (Magni 2009: 131; Tassinari 1994: 36). Karneol iz Tilurija pripadao bi, prema ikonografiji i modelaciji figure, u razdoblje od sredine 1. st. pr. Kr. do u augustovsko doba.

Intaglio od staklene paste (sl. 4)²¹ sadrži skupinu simbola – *kalathos* s čaškom maka i dva klasa žita. S bočnih strana košare izlazi po jedan rog obilja (*cornucopia*). Izravne stilske i ikonografske paralele nalazimo na karneolu iz Ebchestera (Henig 2007: 199, App. 54). Istom tipu pripada i karneol iz Münchena upitne autentičnosti (AGDS I, 3: 134, br. 2990).²²

Mak, klasje žita i *kalathos* atributi su rimske božice Cerere, odnosno grčke Demetre.²³ *Kalathos*, košara sa suženim dnom, povezan je s eleuzinskim kultom štovanja Demetre i Perzefone.²⁴ Koristio se u ritualu inicijacije u misterije (Kerényi 1967: 65–66; Burkert 2007: 293). Mistična formula koju donosi Klement Aleksandrijski (*Protr.* 2, 21, 2) opisuje ritual u kojemu važnu ulogu ima upravo

file, wearing a helmet, with arms extended holding a hammer and shield. According to the available literature, this intaglio has no direct iconographic analogies. It is most similar to a cornelian from Verona (Magni 2009: 132, no. 593). In terms of content the portrayal may be classified as a scene of a master-smith crafting weapons. However, the helmet, which identifies the smith as a soldier as well, removes it from this context. The portrayal recalls the scene from the Iliad (*Il.* XVIII, 410–477) in which Vulcan makes a shield for Achilles.¹⁸ However, the shield may be linked to Achilles with certainty only when it bears the image of Medusa's head (Toso 2007: 216). Furthermore, Vulcan is depicted either bare-headed or wearing a peaked cap (*pileus*), but not a helmet.¹⁹ Otherwise, in glyptics this god of the forge is distinguished from ordinary smiths only by his depiction in the proper mythological context accompanied by Thetys, Athena, Jupiter or Mars (Simon & Bauchhenss 1997: no. 288; Tassinari 1994: 37; Toso 2007: 216).²⁰ Intaglios with smith motifs are therefore usually interpreted as depictions of actual craftsmen (AGDS II: 138, no. 351; Tassinari 1994: 37; Toso 2007: 122–123, 215). They may have been used by these same craftsmen as recognizable insignia of their trade (Toso 2007: 123). Therefore, this cornelian could have been worn by a smith who may have made weapons for the military inside the camp. Scenes with master craftsmen on gems appeared in the third century BC, only to become rare after the first century BC. The highest production was recorded in the first century BC (Magni 2009: 131; Tassinari 1994: 36). The Tilurium cornelian, by iconography and the body modelling, would belong to the period from the mid-first century BC to the Augustan era.

The other glass paste intaglio (Fig. 4)²¹ contains a set of symbols – a calathus with a poppy seed pod and two sheaves of grain. There is a cornucopia on each side of the basket. Direct stylistic and iconographic parallels can be found on the cornelian from Ebchester (Henig 2007: 199, App. 54). The cornelian

¹⁹ O ikonografiji Vulkana v. u Simon & Bauchhenss (1997: 283–298) i Tassinari (1994: 36–38). O kultu Vulkana u rimskoj provinciji Dalmaciji v. u Sanader (1999: 98–110).

²⁰ Za staklenu pastu iz Ženeve s kovačem koji sjedi i iskucava štit M.-L. Vollenweider s rezervom je predložila tumačenje da prikazuje Vulkana (Vollenweider 1979: 497, br. 561).

²¹ Inv. br. MCK-AZ 283, staklena pasta, 13 × 10 × 3, oblik 11 (prema AG Wien I: 15, sl. c).

²² Određene sličnosti u ikonografiji pokazuju intagli s kombinacijom košare s klasjem žita i čaškama maka bez kornukopije (AGDS IV: 249, br. 1315; Sena Chiesa 1966: 408, br. 1464) ili pak s košarom flankiranom kornukopijama koja umjesto čaški maka i žita na vrhu ima pticu (AGDS I, 3: 205, br. 3467; Sena Chiesa 1966: 404, br. 1434; Šeparović & Uroda 2009: 124, br. 295; Vollenweider 1979: 409, br. 462, 463).

²³ O ikonografiji Cerere v. u Lenormant (1887: 1021–1078).

²⁴ O antičkim izvorima koji spominju *kalathos*, o kalatu kao košari ispunjenoj cvijećem i njegovoj povezanosti s Perzefonom i kultom mrtvih v. u Hoti (1994: 122–123).

¹⁸ On a cornelian from Vienna (AG Wien I: no. 165), Vulcan in semi-crouch is crafting armour and a shield with a Gorgon image for Achilles.

¹⁹ On the iconography of Vulcan, see Simon & Bauchhenss (1997: 283–298) and Tassinari (1994: 36–38). On the cult of Vulcan in the Roman province of Dalmatia, see Sanader (1999: 98–110).

²⁰ M.-L. Vollenweider proposed that the glass paste from Geneva showing a smith sitting and hammering a shield be interpreted as a portrayal of Vulcan, albeit with some reserve (Vollenweider 1979: 497, no. 561).

²¹ Inv. no. MCK-AZ 283, glass paste, 13 × 10 × 3, form 11 (according to AG Wien I: 15, Fig. c).

kalathos.²⁵ Što se nalazilo u košari, nije sasvim jasno. Jedna od pretpostavki²⁶ jest da je mogla sadržavati klasje, mužar i tučak (Burkert 2007: 297). S eleuzinskim kultom povezan je i atenski novac s glavom Demetre na aversu i glavicom maka između dva klasa na reversu datiran u 1. st. pr. Kr. (Thompson 1942: 226–227). U helenizmu je Demetrin kult uvezen u Aleksandriju, koja je postala poznata po vlastitoj svetkovini božice.²⁷ Ptolomej II. Filadelf (285–246. g. pr. Kr.) ustanovio je procesiju kalata koji su na kočiji vukla četiri bijela konja. Taj element kulta eleuzinski misteriji ne poznaju (Picard 1951: 367–377; Lenormant 1887: 1071). Pjesnik Kalimah (Callim. *Hymn* 6) tom je prigodom Demetri spjevao himnu u kojoj opisuje samu procesiju i pripadne rituale. Tako saznajemo da u kalat nisu smjeli zavirivati neinicirani u kult, a sudeći prema formuli koju su sudionici uzvikivali pri prolasku kočije, kalat je mogao sadržavati i snopove klasja. Tu scenu procesije kalata nalazimo na reversu Trajanova novca²⁸ iz aleksandrijske kovnice. Košara je na njemu ispunjena klasjem žita (Hoti 1994: 122). Na reversu novca Antonina Pija iz aleksandrijske kovnice nalazi se košara s čaškama maka i klasjem.²⁹ Eleuzinski kult aleksandrijskoga tipa i njegove simbole u Rim uvođe carevi julijejsko-klaudijejske dinastije (Picard 1951: 376, 379–381). U rimsko doba *kalathos* kao košara ispunjena klasjem i voćem osim obilja simbolizira i razdoblje mira, povratak zemlji i poljodjelstvu (Vollenweider 1979: 406, br. 458).

²⁵ "Postio sam, pio sam *kykeon*, uzeo sam iz ciste, radio sam, vratio sam natrag u košaru i iz košare u cistu" (W. Burkert, *Homo necans. Interpretacije starogrčkih žrtvenih obreda i mitova*, Zagreb, 2007, s njemačkog preveli Nataša Filipašić i Krunoslav Zubović). Tijekom rituala inicijacije (*myesis*) pripravnici u misterije prošli bi post i ritual pročišćenja, nakon kojih bi smjeli izgovoriti mističnu formulu (*synthema*) koju nam je zabilježio Klement Aleksandrijski (Kerényi 1967: 65). Uz nju se veže ispijanje ritualnog pića *kykeon* od ječma, koje je možda mijenjalo stanje svijesti. Kikeon se vjerojatno nosio u metalnim posudama tijekom procesije (*ibid.* 181–186). O kikeonu više u Kerényi (1967: 177–180), M. Miličević Bradač, "Wine and oil – *kykeon* and Istrian supa", *Histria antiqua* 15, Pula, 2007, 117–124. i R. M. Rosen, "Hipponax Fr. 48 Dg. and the Eleusinian *Kykeon*", *The American Journal of Philology* 108/3, Baltimore, 1987, 416–426.

²⁶ O različitim teorijama v. u Burkert (2007: 295, n. 21).

²⁷ Postojanje misterija eleuzinskoga tipa u Aleksandriji, koja je imala i predgrađe zvano Eleuzina, nije potvrđeno. Usprkos obredu inicijacije aleksandrijska svetkovina Demetre nije zahtijevala visok stupanj tajnosti kao eleuzinski misteriji (Kerényi 1967: 118–120; Burkert 1987: 37–38; 2007: 294).

²⁸ R. S. Poole, *A Catalogue of the Coins of Alexandria and the Nomes*, London, 1892, 67, br. 552, T. 30.

²⁹ *Ibid.*, 67, br. 551, T. 30.

from Munich of questionable authenticity (AGDS I, 3: 134, no. 2990) belongs to the same type.²²

Poppy-heads, corn-ears and calathi are attributes of the Roman goddess Ceres, or the Greek goddess Demeter.²³ The calathus, a basket with a tapered bottom, is associated with the Eleusinian cult of Demeter and Persephone.²⁴ It was used in the mystery initiation rite (Kerényi 1967: 65–66; Burkert 2007: 293). The mystic incantation cited by Clement of Alexandria (*Protr.* 2, 21, 2) described a ritual in which the calathus played a vital role.²⁵ It is not entirely certain what was inside the basket. One hypothesis²⁶ is that it may have contained sheaves of grain and a mortar and pestle (Burkert 2007: 297). The Athenian coin with the head of Demeter on the obverse and a poppy pod between two sheaves on the reverse, dated to the first century BC, is associated with the Eleusinian cult (Thompson 1942: 226–227). During the Hellenistic era, the cult of Demeter was brought to Alexandria, which became renowned for its own holiday to this goddess.²⁷ Ptolmey II Philadelphus (285–246 BC) established a procession in which a calathus is drawn on a chariot by four white horses. This element was unknown to the Eleusianian mystery cult (Picard 1951: 367–377; Lenormant 1887: 1071). The poet Callimachus

²² Certain similarities in iconography are exhibited by the intaglios featuring a combination of a basket of poppy-heads and corn-ears without a cornucopia (AGDS IV: 249, no. 1315; Sena Chiesa 1966: 408, no. 1464) or a basket flanked by cornucopias which instead of a poppy pods and grain has a bird on top (AGDS I, 3: 205, no. 3467; Sena Chiesa 1966: 404, no. 1434; Šeparović & Uroda 2009: 124, no. 295; Vollenweider 1979: 409, no. 462, 463).

²³ On the iconography of Ceres, see Lenormant (1887: 1021–1078).

²⁴ On Classical sources which mention calathi, on the calathus as a basket of flowers and its connection to Persephone and the cult of the dead, see Hoti (1994: 122–123).

²⁵ "I have fasted, I have drunk the *kykeon*, I have taken from the kiste, worked, deposited into the basket and out of the basket into the kiste" (W. Burkert, *Homo necans: The Anthropology of Ancient Greek Sacrificial Ritual and Myth*, Berkley - Los Angeles, 1983: 269). During the initiation rite (*myesis*), novices to the mystery endured a fast and ritual cleansing, after which they could recite the mystical incantation (*synthema*) which was recorded by Clement of Alexandria (Kerényi 1967: 65). Tied to this is the ritual imbibing of the beverage *kykeon*, made of barley, which may have consciousness-altering properties. *Kykeon* was probably held in metal containers during the procession (*Ibid.* 181–186). For more on *kykeon*, see Kerényi (1967: 177–180) and R. M. Rosen, "Hipponax Fr. 48 Dg. and the Eleusinian *Kykeon*", *The American Journal of Philology* 108/3, Baltimore, 1987, 416–426.

²⁶ On various theories, see Burkert (2007: 295, n. 21).

²⁷ The existence of Eleusianian-type mysteries in Alexandria, which even had a suburb called Eleuzina, has not been confirmed. Despite the initiation rite, the Alexandrian holiday of Demeter did not require a high degree of secrecy like the Eleusinian Mysteries (Kerényi 1967: 118–120; Burkert 1987: 37–38; 2007: 294).

Simbol kornukopije³⁰ nije pak primarni Cererin/Demetrin atribut, već ga povezujemo s rimskom Anonom, personifikacijom godišnje zalihe žita u Rimu (Lenormant 1887: 1071). Anona se isprva prikazivala simbolima poput šest svezanih klasova žita. Tek se od Nerona na novcu personificira u ženskom obličju (Stevenson 1964: 49). Na reversu Neronova novca s legendom ANNONA AUGUSTI CERES S. C.³¹ Cerera sjedi lijevo s klasjem u desnoj i bakljom u lijevoj ruci. Cereri nasuprot stoji Anona držeći kornukopiju u lijevoj ruci. Takva kombinacija Cerere i Anone koja preuzima atribute Fortune javlja se u funkciji carske propagande i careve agrarne politike (Chirassi Colombo 1981: 424).

Kalathos i osobito rog obilja osim za Cereru karakteristični su i za Fortunu.³² *Kalathos* božica nosi na glavi, a kornukopiju obično drži u ruci. Fortuna se nerijetko prikazuje s atributima posuđenima od drugih božanstava. U tom je kontekstu posebno zanimljiv denar³³ Septimija Severa iz kovnice u Emesi, datiran u 194–195. g., s legendom FORTUNAE REDUCI na reversu. Fortuna sjedi lijevo držeći u ruci uz kornukopiju i čašku maka i klasje žita kao atribute koje je preuzela od Cerere (Kajanto 1981: 520). U ikonografskom repertoaru gema iz Dalmacije Fortuna je daleko najzastupljenije žensko božanstvo, što upućuje na rasprostranjenost njezina kulta u provinciji u okviru privatnog štovanja (Nardelli 2005: 237). Skupina simbola na intagliju iz Tilorija veže se dakle uz Cereru i/ili Fortunu. Grupirani zajedno jamčili su blagostanje i obilje nositelju intaglia. Prema stilsko-tehničkim karakteristikama detaljno urezanog, plosnato izvedenog motiva ovaj primjerak pripada u 2. st.

(Callim. *Hymn* 6) composed a hymn to Demeter for this occasion, in which he described the procession itself and the accompanying rituals. Here we learn that those not initiated into the cult could not peer into the calathus, and judging by the incantations exclaimed by the participants when the chariot passed, the calathus may have also contained bundles of grain. This calathus procession scene can be found on the reverse of Trajan's coins²⁸ from the Alexandrian mint. The basket on them is filled with corn-ears (Hoti 1994: 122). A basket with poppy-heads and corn-ears can be found on the reverse of the coins of Antoninus Pius from the Alexandrian mint.²⁹ The Alexandrian variant of the Eleusinian cult and its symbols were brought to Rome by the emperors of the Julio-Claudian dynasty (Picard 1951: 376, 379-381). During the Roman era, the calathus as a basket filled with sheaves of grain and fruit symbolized, besides abundance, peace, a return to the land and agriculture (Vollenweider 1979: 406, no. 458).

The cornucopia symbol³⁰ was not in fact the primary attribute of Ceres/Demeter, rather it is associated with the Roman Annona, the personification of the annual grain stocks in Rome (Lenormant 1887: 1071). Annona was first portrayed with symbols such as six tied sheaves of grain. It was only since Nero's reign that it was personified as a woman on coins (Stevenson 1964: 49). The reverse of Nero's coin bore the legend ANNONA AUGUSTI CERES S. C.³¹ Ceres sits to the left with a sheaf of grain in her right hand and a torch in her left hand. Annona stands opposite Ceres holding a cornucopia in her left hand. This combination of Ceres and Annona assuming the attributes of Fortuna appears as a function of the imperial propaganda and the imperial agrarian policy (Chirassi Colombo 1981: 424).

³⁰ Kornukopija ili rog obilja javlja se u mitu o kozi Amalteji, koja je othranila Zeusa u špilji. Njezin slomljeni rog uvijek se iznova puni voćem i cvijećem simbolizirajući plodnost i obilje. Osim za Amalteju rog obilja veže se i za riječnog boga Aheloja, koji se s Heraklom borio za Dejanirinu ruku. U toj borbi Ahelaj je preuzeo oblik ili čitava bika ili čovjeka s bikovskom glavom. Heraklo ga je pobijedio i otkinuo mu rog koji su posvetile nimfe i ispunile ga voćem i cvijećem. Taj mit vjerojatno opisuje uređenje riječnih korita u antici i iskorištavanje riječnih obala za poljodjelstvo (Ronchaud 1877: 25–26). Kornukopija kao čest motiv u rimskoj umjetnosti podrijetlo vuče iz Aleksandrije (H. Moebius, *Alexandria und Rom*, München, 1964, 27–28). Osim kao atribut različitih božanstava i personifikacija postaje i važan dio carske propagande na novcu. O kornukopiji v. u Vollenweider (1979: 372, br. 416).

³¹ RIC I: 156, br. 98, 99, T. 19, sl. 138.

³² O ikonografiji Fortune v. u Kajanto (1981: 518–521).

³³ RIC IV.1: 143, br. 387.

²⁸ R. S. Poole, *A Catalogue of the Coins of Alexandria and the Nomes*, London, 1892, 67, no. 552, Pl. 30.

²⁹ *Ibid.*, 67, no. 551, Pl. 30.

³⁰ The cornucopia or horn of plenty appears in the myth of the goat Amalthea, which nursed Zeus in the cave. Her broken horn always overflows with fruit and flowers, symbolizing fertility and abundance. Besides Amalthea, the cornucopia is associated with the river god Achelous, who fought Heracles for Deianira's hand. In this struggle, Achelous assumed the form of either an entire bull or a man with a bull's head. Heracles defeated him and tore off his horn, which was blessed by the nymphs and filled with fruit and flowers. This myth probably described the engineering of river beds in Antiquity and the exploitation of river banks for agriculture (Ronchaud 1877: 25–26). The cornucopia as a frequent motif in Roman art had its origins in Alexandria (H. Moebius, *Alexandria und Rom*, München, 1964, 27–28). Besides an attribute of various deities and personifications, it also became an important component of imperial propaganda on coins. On the cornucopia see Vollenweider (1979: 372, no. 416).

³¹ RIC I: 156, no. 98, 99, Pl. 19, Fig. 138.

Četiri ovdje obrađena intaglia proširuju poznati repertoar gema iz Tilurija.³⁴ Dva pripadaju rimskoj republikanskoj gliptičkoj produkciji (sl. 2, 3), a druga dva onoj carskog doba 1. i 2. st. (sl. 1, 4). Određivanje mogućih radionica otežano je zbog malog broja primjeraka, od kojih se jedino za staklenu pastu s herojem (sl. 2) može utvrditi da je italskoga podrijetla. Tek će se daljnjim obradama gliptičkog materijala iz Tilurija i ovi intagli moći vrednovati u potpunijem kontekstu.³⁵

Besides Ceres, the calathus and especially the cornucopia are characteristics of Fortuna.³² The goddess wears the calathus on her head, and normally holds the cornucopia in her hand. Fortuna is not uncommonly shown with attributes borrowed from other deities. In this context, a denarius³³ of Septimius Severus from the mint in Emesa is particularly interesting; dated to 194-195, the legend on the reverse reads FORTUNAE REDUCI. Fortuna sits to the left holding, besides a cornucopia, a poppy-head and ears of corn as attributes assumed from Ceres (Kajanto 1981: 520). In the iconography of gems from Dalmatia, Fortuna is by far the most common female deity, which indicates the widespread nature of her cult in the province within the sphere of private veneration (Nardelli 2005: 237). The set of symbols on the intaglio from Tilurium is therefore associated with Ceres and/or Fortuna. Grouped together, they guaranteed the well-being and prosperity of the intaglio's holder. Stylistic and technical characteristics of a detailed, flat engraved motif, place the intaglio to the 2nd century.

The four intaglios analyzed here expand the known array of gems from Tilurium.³⁴ Two emerged from the glyptic production of the Roman Republic (Fig. 2, 3), while the other two are from the imperial period in the first and second centuries (Fig. 1, 4). Ascertaining possible workshops is rendered difficult by the small number of examples, of which only the glass paste with the hero (Fig. 2) can be said with certainty to be Italian in origin. Only further analysis of the glyptic materials from Tilurium will enable the evaluation of these intaglios in a fuller context.³⁵

³⁴ Najveći broj tilurijskih gema čuva se u Arheološkom muzeju u Splitu. Podatke o njima sukcesivno je objavljivao don Frane Bulić u časopisu *Bulletino di archeologia e storia dalmata*. Objavu tilurijskih gema iz te zbirke priprema dr. Bruna Nardelli. Ulo-mak jedne gema iz Arheološkog muzeja u Splitu objavio je A. Milošević (A. Milošević, "Arheološki spomenici gornjeg i sred-njeg toka rijeke Cetine", *Zbornik Cetinske krajine* 2, Sinj, 1981, 59, br. 101; A. Milošević, *Arheološka topografija Cetine*, Split, 1998, 245, sl. 400). Sedam intaglia iz Tilurija nalazi se u zbirci dalmatinskih gema A. Evansa i J. Gardnera Wilkinsona (Hoey Middleton 1991: br. 68, 121, 153, 202, 203, 209, 217). Jedan kar-neol iz Garduna nalazi se u zbirci Kunsthistorisches Museuma u Beču (AG Wien I: 153-153, br. 491). Mali broj neobjavljenih gema iz Tilurija dio je i gliptičke zbirke Arheološkog muzeja u Zagrebu.

³⁵ Na velikoj pomoći pri pisanju ovoga rada zahvaljujem dr. Brunu Nardelli, kao i prof. dr. Marini Milićević Bradač na korisnim smjernicama.

³² On the iconography of Fortuna see Kajanto (1981: 518-521).

³³ RIC IV.1: 143, no. 387.

³⁴ The highest number of Tilurium gems are held in the Archae-ological Museum in Split. Data on them were successively pub-lished by Fr. Frane Bulić in the journal *Bulletino di archeologia e storia dalmata*. Publication of the Tilurium gems from this collection is being prepared by Bruna Nardelli. A fragment of a gem from the Archaeological Museum in Split was published by A. Milošević (A. Milošević, "Arheološki spomenici gornjeg i srednjeg toka rijeke Cetine", *Zbornik Cetinske krajine* 2, Sinj, 1981, 59, no. 101; A. Milošević, *Arheološka topografija Cetine*, Split, 1998, 245, Fig. 400). Seven intaglios from Tilurium are held in the collection of Dalmatian gems of A. Evans and J. Gardner Wilkinson (Hoey Middleton 1991: no. 68, 121, 153, 202, 203, 209, 217). One cornelian from Gardun is held in the Kunsthistorisches Museum in Vienna (AG Wien I: 153-153, no. 491). A small number of unpublished gems from Tilurium is part of the glyptic collection of the Archaeological Museum in Zagreb.

³⁵ I would like to thank Dr. Bruna Nardelli for her immense assi-stance in the writing of this work, and also Dr. Marina Milićević Bradač for her useful advice.



Slika 1. Intaglio od karneola s Merkurom, Muzej Cetinske krajine, inv. br. MCK-AZ 336 (snimila: I. Kaić, 2010).

Figure 1. Cornelian intaglio with image of Mercury, Cetina Territorial Museum, inv. no. MCK-AZ 336 (photograph: I. Kaić, 2010).



Slika 2. Intaglio od staklene paste s herojem koji prinosi žrtvu, Muzej Cetinske krajine, inv. br. MCK-AZ 284 (snimila: I. Kaić, 2010).

Figure 2. Glass paste intaglio with image of hero presenting sacrifice, Cetina Territorial Museum, inv. no. MCK-AZ 284 (photograph: I. Kaić, 2010).



Slika 3. Intaglio od karneola s majstorom koji iskucava štit, Muzej Cetinske krajine, inv. br. MCK-AZ 282 (snimila: I. Kaić, 2010).

Figure 3. Cornelian intaglio with image of master smith hammering shield, Cetina Territorial Museum, inv. no. MCK-AZ 282 (photograph: I. Kaić, 2010).



Slika 4. Intaglio od staklene paste sa skupinom simbola, Muzej Cetinske krajine, inv. br. MCK-AZ 283 (snimila: I. Kaić, 2010).

Figure 4. Glass paste intaglio with set of symbols, Cetina Territorial Museum, inv. no. MCK-AZ 283 (photograph: I. Kaić, 2010).

KRATICE / ABBREVIATIONS

AG Wien I	E. Zwierlein-Diehl, <i>Die antiken Gemmen des Kunsthistorischen Museums in Wien. Band I. Die Gemmen von der minoischen Zeit bis zur frühen römischen Kaiserzeit</i> , München, 1973.
AG Wien II	E. Zwierlein-Diehl, <i>Die antiken Gemmen des Kunsthistorischen Museums in Wien. Band II. Die Glaskemmen. Die Glaskameen</i> , München, 1979.
AGDS I, 2	E. Brandt & E. Schmidt, <i>Antike Gemmen in deutschen Sammlungen. Band I. Staatliche Münzsammlung München. Teil 2. Italische Gemmen etruskisch bis römisch-republikanisch. Italische Glaspasten vorkaiserzeitlich</i> , München, 1970.
AGDS I, 3	E. Brandt, A. Krug, W. Gercke & E. Schmidt, <i>Antike Gemmen in deutschen Sammlungen. Band I. Staatliche Münzsammlung München. Teil 3. Gemmen und Glaspasten der römischen Kaiserzeit sowie Nachträge</i> , München, 1972.
AGDS II	E. Zwierlein-Diehl, <i>Antike Gemmen in deutschen Sammlungen. Band II. Staatliche Museen Preussischer Kulturbesitz, Antikenabteilung</i> , Berlin – München, 1969.
AGDS III	V. Scherf, P. Gercke & P. Zazoff, <i>Antike Gemmen in deutschen Sammlungen. Band III. Braunschweig, Göttingen, Kassel, Wiesbaden</i> , 1970.
AGDS IV	M. Schlüter, G. Platz-Horster & P. Zazoff, <i>Antike Gemmen in deutschen Sammlungen. Band IV. Hannover, Kestner-Museum. Hamburg, Museum für Kunst und Gewerbe</i> , Wiesbaden, 1975.
ANRW	<i>Aufstieg und Niedergang der römischen Welt</i> , Berlin – New York.
DAGR	<i>Dictionnaire d'antiquités grèques et romaines</i> , E. Daremberg & E. Saglio (eds.), Paris, 1873–1919.
LIMC	<i>Lexicon Iconographicum Mythologiae Classicae</i> , Zürich – München, 1981–1999.
RIC	<i>Roman Imperial Coinage</i> , I–X, London, 1926–1994.
RIC I	H. Mattingly & E. A. Sydenham, RIC I, <i>Augustus to Vitellius</i> , London, 1923.
RIC III	H. Mattingly & E. A. Sydenham, RIC III, <i>Antonius Pius to Commodus</i> , London, 1930.
RIC IV.1	H. Mattingly & E. A. Sydenham, RIC IV.1, <i>Pertinax to Geta</i> , London, 1936.

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Sanja IVČEVIĆ

DIJELOVI VOJNIČKE OPREME IZ GARDUNA U ARHEOLOŠKOM MUZEJU U SPLITU

COMPONENTS OF MILITARY GEAR FROM GARDUN IN THE ARCHAEOLOGICAL MUSEUM IN SPLIT

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U radu se obrađuju metalni dijelovi vojničke opreme pronađeni u Gardunu, na mjestu rimskoga vojnog logora Tilverium. Osobnoj opremi rimskoga vojnika pripadaju pojasne kopče, a dijelovi oklopa (spojna kuka i spojna petlja) i kacige (držač perjanice) dio su zaštitne opreme. Najveći broj predmeta jesu privjesci konjske orme, dok je oružje zastupljeno samo jednim vrhom strijele. Uz izuzetak strijele, koja je datirana u srednjovjekovno razdoblje, sav obrađeni materijal pripada vremenu 1. st.

Ključne riječi: Tilverium (Gardun), rimska vojnička oprema, vrh strijele

Na području današnjeg Garduna u blizini Trilja u antici se nalazio rimski vojni logor *Tilverium*, u kojemu je u prvoj polovici 1. st. smještena VII. legija. Tada u logoru boravi najveći broj vojnika. Nakon odlaska VII. legije, sredinom 1. st., u logoru se znatnija vojna posada zadržava sve do sredine 3. st. Kasnoantički materijal u Gardunu je zastupljen u prilično manjoj količini od materijala datirana u ranorimsko doba, ali ipak u dovoljnoj da potvrdi već poznatu činjenicu da se na tom lokalitetu

Metallic components of military gear found in Gardun, at the site of the Roman military camp Tilverium, are analyzed in this work. Belt buckles were a part of a Roman soldier's personal gear, while components of armour (chest hooks and tie-hooks) and helmets (crest support) were parts of his protective ware. Most items are riding harness pendants, while the only weapon is an arrowhead. With the exception of the arrowhead, which has been dated to the medieval period, all of the materials analyzed date to the first century.

Key words: Tilverium (Gardun), Roman military gear, arrowhead

The area of today's Gardun, near the town of Trilj, was the site of the Roman military camp *Tilverium* during Antiquity. The Seventh Legion, (*Legio VII*), was posted there in the first half of the first century, and that is the period when the largest number of soldiers resided in the camp. After the departure of *Legio VII* in the mid-first century, the camp accommodated a significant military contingent up to the mid-third century. Materials from Late Antiquity are present in Gardun in smaller quantities than

život nastavio i kroz kasnoantičko vrijeme, kad je Gardun kao utvrda vjerojatno korišten u obrambene svrhe (Zaninović 1996: 270).

U Gardunu se od 1997. g. vode sustavna arheološka istraživanja u okviru kojih se, uz ostale, objavljuju i vojni nalazi (v. Sanader 2003; Sanader & Tončinić 2010). Nalazi s Garduna koji su tijekom 19. i 20. st. pohranjeni u Arheološki muzej u Splitu, a bili su dio vojničke opreme, dijelom su već ranije objavljeni (Ivčević 2004: 159–176). U reviziji građe Arheološkog muzeja ustanovljeno je da određen broj predmeta također pripada tom materijalu. Radi se o metalnim predmetima koji su bili dio vojničke osobne opreme (pojasne kopče), zaštitne opreme (dijelovi oklopa i kacige), zatim ukrasni dijelovi konjske orme (privjesci) te oružje (vrh strijele). Materijal je uglavnom datiran u okvire 1. st., s time da nekoliko predmeta koji se javljaju u 1. st. mogu trajati i kroz 2. st. Izuzetak predstavlja vrh strijele koji pripada razdoblju srednjeg vijeka.

Od doba vladavine cara Augusta (27. g. pr. Kr. – 14. g. po. Kr.) vojnici su običavali nositi dva pojasa oko bokova. Sudeći prema prikazima na nadgrobnim spomenicima u pretflavijevsko doba, dva pojasa nošena su oko bokova iznad karičastog ili pločastog oklopa, a osim što su služili za nošenje mača i bodeža, olakšavali su nošenje oklopa (Grew & Griffiths 1991: 51). Već u drugoj polovici 1. st. dolazi do postupne promjene i vojnici počinju nositi jedan pojas koji je mogao pridržavati oba oružja ili je mač nošen na remenu koji se prebacivao preko ramena, a istovremeno ostale vrste oklopa sve više istiskuje *lorica segmentata*, oklop čijoj je konstrukciji bolje odgovarao jedan pojas (*ibid.* 52). Zajednički elementi svim pojasiima jesu kopče i ukrasni okovi postavljani cijelom dužinom pojasa ili samo s prednje strane. Pojasni su okovi u 1. st. često ukrašeni nijelom i premazani kositrom, a motivi na njima bili su raznovrsni – od geometrijskih i vegetabilnih do figuralnih (Bishop & Coulston 2006: 107). Okovi kopče nisu se, osim konstrukcijski, odnosno time što su s jedne strane zglobom bili povezani s kopčom, razlikovali od pojasnih okova. Bogato ukrašena kopča s okovom (kat. br. 1, T. 1: 1, sl. 1) tipična je za razdoblje 1. st. Ovdje obrađeni primjerak jest kopča s gumbom, pomoću koje se oružje – bodež ili mač – kopčalo na pojas. Takvi nalazi javljaju se na području cijelog Rimskog Carstva, najviše ih je iz prve polovice 1. st., a u flavijevsko doba su rijetki (Grew & Griffiths 1991: 51). Premda ne možemo reći da su rijedak nalaz, s obzirom na namjenu koju su imali, odnosno činjenicu da je svaki vojnici trebao četiri takve kopče (dvije za mač i dvije za bodež), očekivao bi se veći broj takvih predmeta. Relativno malen broj takvih nalaza tumači se pret-

materials dated to the Early Roman period, but there is enough to confirm the already known fact that life continued at this site throughout Late Antiquity, when it was probably used as a defensive fortification (Zaninović 1996: 270).

Since 1997, systematic archaeological research has been conducted in Gardun, and within this framework, military finds, among others, have been published (see: Sanader 2003; Sanader & Tončinić 2010). The finds from Gardun that were stored in the Archaeological Museum in Split during the nineteenth and twentieth centuries and which were components of military gear have already been partially published (Ivčević 2004: 159-176). During a re-evaluation of the inventory in the Archaeological Museum, it was ascertained that a certain number of items also belong among these materials. These include metal items which were components of military gear (belt buckles), protective ware (pieces of armour and helmets), and decorative parts of riding harnesses (pendants), and weapons (arrowhead). The materials have been generally dated to the first century, although several items which appeared in the first century may have endured through the second century as well. The exception is the arrowhead which dates to the Middle Ages.

Since the reign of Emperor Augustus (27 BC – 14 AD), soldiers normally wore two belts around their waists. Judging by the portrayals on the gravestones from the pre-Flavian era, two belts were worn around the hips over chainmail or plate armour. Besides being used to carry swords and daggers, they made it easier to wear the armour itself (Grew & Griffiths 1991: 51). Already in the latter half of the first century, gradual changes set in, and soldiers began to wear a single belt that could hold both weapons – or the sword was carried on a belt slung over the shoulder – while at the same time other types of armour were pushed aside by segmented armour (*lorica segmentata*), whose construction was better suited to just a single belt (*ibid.* 52). The common elements of all belts are the buckles and decorative mounts placed along their entire length, or just on the front. Belt mounts in the first century were often niellated and coated with tin, while the motifs adorning them were diverse: from geometric and plant-like to figural (Bishop & Coulston 2006: 107). Buckle mounts did not differ from belt mounts except in terms of construction, i.e. except for being connected to the buckle on one side with a hinge. The richly decorated buckle with mount (cat. no. 1, Pl. 1: 1, Fig. 1) is typical of the first century. The example examined here is a buckle with stud, which was used to clip the weapon, a dagger or sword, to the belt. Such finds appear throughout the territory of the Roman Empire, most dating to the first half of



Slika 1. Kopča s gumbom, za vješanje bodeža ili mača, 1. st., Gardun, Arheološki muzej Split, H 4382 (T. Sesar, 2010).

Figure 1. Buckle with stud for hanging dagger or sword, 1st cent., Gardun, Archaeological Museum in Split, H 4382 (T. Sesar, 2010).

postavkom da su se za istu svrhu koristili i gumbi s ušicama, kakvih je na rimskim vojnim lokalitetima pronađen priličan broj (Wild 1970: 148 i dalje).

U tipologiji koju su za područje Britanije izradili Francis Grew i Nick Griffiths okovi su s obzirom na oblik i način ukrašavanja podijeljeni u dva osnovna tipa (Grew & Griffiths 1991: 49). Naš primjerak prema svojim karakteristikama odgovara tipu A, u koji su uvršteni četvrtasti okovi ravne uglačane površine, često ukrašene punciranjem, urezivanjem i nijelom. Za pojas su bili učvršćeni pomoću zakovica koje su se provlačile kroz rupice na uglovima, što je slučaj s našim okovom, ili pomoću trnova sa stražnje strane. Na pojasnim okovima poput našega najčešće je primijenjen ukras izrađen urezivanjem i punciranjem te nijeliranjem. Motivi su razni – listovi, vitice, zvijezde, trokuti koji međusobno kombinirani tvore različite motive. Ukras na gardunskom okovu sastoji se od rozete i šahovnice uokvirenih nizom trokuta, što je jedan od uobičajenih motiva na okovima kopči u 1. st. (*ibid.* 57, sl. 4). Okovi ukrašeni na isti način nalaze se na različitim područjima Rimskog Carstva, kao okovi pojasnih kopči (D-kopči ili kopči s gumbom) ili kao ukrasni pojasni okovi (Bishop & Coulston 2006: 108, sl. 62: 2; Henderson 1949: T. XXXIII: 72; Unz 1972: 55, sl. 4: 12). Sudeći prema rasprostranjenosti i međusobnim razlikama u kvaliteti izrade, o proizvodnji i distribuciji tih kopči i okova može se reći da su proizvođeni u više različitih radionica. Gumb na našem primjerku prilično je raskošno ukrašen, središnji motiv je rozeta, uokolo su vitice i manje rozete, ispunjene nijelom.

Nešto jednostavnije izrade bila je kopča s gumbom kojoj je pripadao ulomak kat. br. 2 (T. 1: 2). Sačuvan je dio koji je spajao gumb sa zglobovom

the first century, while during the Flavian era they were rare (Grew & Griffiths 1991: 51). Although such finds cannot be characterized as rare, given their purpose and the fact that each soldier had four such buckles (two for the sword and two for the dagger), a greater number of them could still be expected. The relatively small number of these finds has been interpreted by the hypothesis that looped studs, of which a considerable number have been found at Roman military sites (Wild 1970: 148 and *passim*), were used for the same purpose.

In the typology compiled for the territory of Britannia by Francis Grew and Nick Griffiths, mounts are divided into two basic types given their shape and manner of decoration (Grew & Griffiths 1991: 49). The example here, based on its features, corresponds to type A, which encompasses rectangular mounts with flat, smooth surfaces, often decorated with punched dots, engraving and niello. They were fastened to the belt with rivets that were pulled through the small holes at the corners, which is the case with this mount, or using prongs on the back side. Belt mounts like this one were most often decorated with engravings or punched dots, or they were niellated. The motifs varied; leaves, tendrils, stars, and triangles which, mutually combined, created a diversity of motifs. The ornament on the Gardun mount consists of a rosette and chessboard framed by a series of triangles, which is one of the customary motifs on first-century buckle mounts (*Ibid.* 57, Fig. 4). Mounts ornamented in the same manner have been found in various territories of the Roman Empire, either as belt buckle mounts (D-buckles or buckles with studs) or as decorative belt mounts (Bishop & Coulston 2006: 108, Fig. 62: 2; Henderson 1949: Pl. XXXIII: 72; Unz 1972: 55, Fig. 4: 12). Judging by their distribution and the differences in the quality of their rendering, it can be stated that these buckles and mounts were produced and distributed from a number of different workshops. The stud on the example here is rather luxuriously ornamented: the central motif is a rosette, and it is encircled by tendrils and smaller rosettes, and niellated.

The buckle with stud which belonged to the fragment under cat. no. 2 (Pl. 1: 2) is somewhat more simply rendered. The part which connected the stud to the hinge plate has been preserved. These simpler buckles, also produced during the first century, usually had this part rounded (Matešić 2005: 107, Pl. 11: 142; Ivčević 2004: Pl. 1: 6; Unz & Deschler-Erb 1997: Pl. 45: 1212, 1213), while the triangular variant as on this Gardun example are rarer (Unz & Deschler-Erb 1997: Pl. 45: 1215).

Among the military protective gear, parts of helmets and segmented armour and chainmail have been

kopče. Takve, jednostavnije kopče, izrađivane također tijekom 1. st., češće su taj dio imale zaobljen (Matešić 2005: 107, T. 11: 142; Ivčević 2004: T. 1: 6; Unz & Deschler-Erb 1997: T. 45: 1212, 1213), a rjeđe trokutast kao što je na gardunskome primjerku (Unz & Deschler-Erb 1997: T. 45: 1215).

Od zaštitne vojničke opreme sačuvani su dijelovi kacige, obručastog i karičastog oklopa. Karičasti oklop Rimljani su preuzeli od Kelta, a u rimskoj ga upotrebi nalazimo od 2. st. pr. Kr. Unatoč nekim nedostacima dugotrajan je oblik i zadržava se sve do kasnoantičkog razdoblja (Radman-Livaja 2004: 76–77). Kao dodatna zaštita ramena od udaraca odozgo preko oklopa u ranije se vrijeme stavljala zaštita izrađena od karika, na isti način kao i oklop, a u kasnijoj fazi na ramena se stavljala zaštita izrađena od lima, koja se na prsima spajala spojnim kukama, tako da je svaka pridržavala po jednu naramenicu. Sačuvana spojna kuka iz Garduna (kat. br. 3, T. 1: 3) kopčala je desnu naramenicu (*ibid.* 77, sl. 17). Obično im je vrh bio u obliku životinjske glave; ovnujske ili, češće, zmijske, a ponekad nose i natpise (Feugère 2002: 101). Spojne kuke karičastog oklopa datiraju se u 1. st., a javljaju se i početkom 2. st., kad ih postupno zamjenjuju dvije prsne ploče (Bishop & Coulston 2006: 139; Feugère 2002: 152, sl. 204). Prema tipologiji koju je izradio Eckhard Deschler-Erb gardunski primjerak pripadao bi tipu 2, kojemu je značajka zmi-joliko tijelo s glavom ovna ili zmiije (Deschler-Erb 1999: 38, n. 158).

Za spajanje dijelova obručastog oklopa rabile su se spojne petlje (kat. br. 4, T. 1: 4), odnosno okovi s kružnom ušicom za povezivanje dijelova oklopa tipa Corbridge. Mogle su pripadati bilo kojoj od tri inačice navedena oklopa (Radman-Livaja 2004: 84). Spajale su poluobruče lijeve i desne strane donjeg dijela oklopa (Bishop 2002: 37, sl. 5.6.4: 39; sl. 5.9), stoga su se na oba kraja nalazile identične spojnice kroz koje se onda provlačila vrpca (Feugère 2002: 103, sl. 126–128). Naš primjerak pripada tipu Thomas Hi, kojemu je značajka da su rubovi pločice paralelni (Thomas 2003: 93, sl. 61.17). Primjerci sa zarezanim krajem, kao što je na gardunskome primjerku, rijetki su, a takav završetak javlja se i na nekim drugim tipovima spojnih petlji.

Zaštitnoj vojničkoj opremi pripadaju i kacige. Od dijelova kacige sačuvan je držač perjanice. Takvi su se držači izrađivali od bronce ili željeza, o čemu njihov oblik nije ovisio. Uvijek se sastoje od štapića koji se razdvaja u dva kraka savijena pod pravim kutom. Na vrhu su krakovi mogli biti savijeni ili samo blago izvijeni prema van, a donji se dio držača oblikovao različito, ovisno o tome na koji je

preserved. The Romans assumed chainmail from the Celts, and it was in use among the Romans from the second century BC onward. Despite certain shortcomings, it was a long-lasting form and was maintained until Late Antiquity (Radman-Livaja 2004: 76–77). In earlier periods, a chainmail shoulder doubling was worn over the chainmail armour as additional protection against blows from above, while in later phases a shoulder guard made of sheet metal was worn, which was connected at the breast with chest hooks so that each held one shoulder guard. The preserved chest hook from Gardun (cat. no. 3, Pl. 1: 3) fastened the right shoulder guard (*Ibid.* 77, Fig. 17). Normally their ends were shaped like animal heads; a ram's or, more often, a serpent's head, and they sometimes bore inscriptions (Feugère 2002: 101). Chest hooks for chainmail date to the first century and the early second century, when they were gradually replaced with two breast plates (Bishop & Coulston 2006: 139; Feugère 2002: 152, Fig. 204). According to the typology compiled by Eckhard Deschler-Erb, the Gardun example would belong to type 2, characterized by a serpentine body with a ram's or snake's head (Deschler-Erb 1999: 38, n. 158). Tie-hooks (cat. no. 4, Pl. 1: 4) were used to connect the components of segmented armour; these were mounts with small circular holes used to connect the components of Corbridge type armour. They may have belonged to any of the three variants of this armour (Radman-Livaja 2004: 84). They connected the left and right girth hoops of the lower part of the armour (Bishop 2002: 37, Fig. 5.6.4: 39; Fig. 5.9), so that both ends had identical loops through which a lace was pulled (Feugère 2002: 103, Fig. 126–128). Our example belongs to Thomas Hi type, characterized by parallel edges on the plates (Thomas 2003: 93, Fig. 61.17). Examples with notched edges, like the Gardun piece, are rare, and such edges appeared on certain other types of tie-hooks.

Helmets were also components of military gear. Out of the helmet parts, a crest support has been preserved. Supports like this were made of bronze or iron, upon which their shape was not contingent. They always consist of a small rod which forks into two arms bent at a right angle. The tips of the arms were curved, or slightly curved down and outward, while the lower part of the support was shaped differently depending on how it was secured to the helmet. There were several ways to fasten it, depending on if the end of the support was either shaped like a socket, bent at a right angle or had slots at the bottom (Deschler-Erb 1999: 32). There are supports which at the point where the arms merge have a horizontal band that was pulled into the support with a lengthwise slot (*Ibid.* Pl. 11: 145–146), which may have been simple or divided into two, and the

način bio učvršćen za kacigu. Postojalo je nekoliko načina učvršćivanja te je ovisno o tome završetak držača bio oblikovan kao tuljac, savijen pod pravim kutom ili je pri dnu imao utore (Deschler-Erb 1999: 32). Postoje držači koji su odmah na mjestu spoja krakova imali vodoravnu trakicu koja se uvlačila u držač s uzdužnim prorezom (*ibid.* T. 11: 145–146), koji je mogao biti jednostavan ili podijeljen na dva dijela, pa je u skladu s tim bio izrađen i završetak držača perjanice (Harnecker 1997: 36). Naš primjerak (kat. br. 5, T. 1: 5) nema sačuvan taj dio, a prema ostalim karakteristikama može se pretpostaviti da je pripadao kacigi tipa Weisenau (Unz & Deschler-Erb 1997: 28). Završeci krakova uglavnom su savijeni, što s našim primjerkom nije slučaj. Martha Deimel takve držače naziva rašljastima i navodi da se javljaju od početka 1. st. na kacigama tipa Weisenau (Deimel 1987: 86).

Privjesci konjske orme najbrojniji su nalazi konjske opreme na rimskim vojnim lokalitetima. Deset dosad neobjavljenih privjesaka pronađenih u Gardunu pripada različitim tipovima. Poznato je da su takvi privjesci imali ukrasnu i simboličku ulogu pa su se, osim da bi se postigao efekt raskoši i sjaja, vješali na ormu kako bi konja, a i konjanika, zaštitili od bolesti i loših utjecaja, zlih pogleda i nesreće. Postoje različite pretpostavke o ulozi privjesaka, odnosno značenju koje su imali (Ivčević 2008: 213, n. 2, n. 3). Privjesci su izrađivani lijevanjem u različitim oblicima, a često su naknadno ukrašavani urezivanjem, nijeliranjem i premazivanjem kositrom. Vješali su se na remenje orme po tijelu konja, pomoću falere ili zakovice s ušicom, a vjerojatno su se samo veličinom razlikovali privjesci korišteni za ukras glave, prsa ili tijela konja (Lawson 1978: 153). Prema Bishopovoj tipologiji (1988: 96) najraniji privjesci javljaju se od augustovskog doba, a traju sve do 2. st. Od druge polovice 2. st. privjesci izlaze iz mode, a njihovo mjesto zauzimaju ukrasni okovi, o čemu svjedoči nedostatak nalaza u vojničkim grobovima i na prikazima na kamenim spomenicima (Lawson 1978: 153).

U 1. st. brojni su tzv. trodijelni listoliki privjesci (tip Bishop 1), koji se razvijaju iz lunulastih privjesaka sa središnjim privjeskom (tip Bishop 9). Primjerak kat. br. 6 (T. 1: 6) prema Bishopovoj podjeli pripada tipu Bishop 1, varijanti 1s (Bishop 1988: 142, sl. 43: 1s). Javljaju se od kladijevskog do flavijevskog vremena, nakon čega uglavnom izlaze iz upotrebe. A. K. Lawson (1978: 153) i M. Mackensen (1991: 174) pojavu tih privjesaka datiraju u tiberijevsko-kladijevsko vrijeme, no M. C. Bishop tvrdi da su najraniji sigurno datirani primjerci iz kladijevskog

end of the crest support was made in line with this (Harnecker 1997: 36). This part is not preserved on the example (cat. no. 5, Pl. 1: 5) discussed herein, but based on other features it can be assumed to have belonged to a Weisenau type helmet (Unz & Deschler-Erb 1997: 28). Generally the tips of the arms are curved, but this is not the case with the example in question here. Martha Deimel called such supports forked and stated that they appeared from the beginning of the first century on Weisenau type helmets (Deimel 1987: 86).

Riding harness pendants are the most numerous cavalry gear finds at Roman military sites. The ten thus far unpublished pendants found in Gardun belong to various types. It is known that such pendants played a decorative and symbolic role, so besides achieving the effect of luxury and splendour, they were hung on the harness to protect the horse, and the rider, from illness and misfortune, the evil eye and mishaps. There are differing theories on the role of pendants and their meaning (Ivčević 2008: 213, n. 2, n. 3). Pendants were made by casting in various shapes, and they were often decorated by engraving, niello and tin coating. They were hung on the straps of harnesses along the horse's body, with the help of phalerae or eye-hole rivets, and the pendants used to decorate the head, breast and body of the horse probably only differed in size (Lawson 1978: 153). According to Bishop's typology (1988: 96), the earliest pendants appeared during the Augustan era, and they persisted until the second century. By the latter half of the second century, pendants passed out of fashion, and they were often replaced by decorative fittings, to which the lack of finds in military graves and on portrayals on stone monuments testifies (Lawson 1978: 153).

In the first century, so-called tripartite foliate pendants (Bishop type 1) were numerous, and these developed into lunular pendants with a central pendant (Bishop type 9). The example under cat. no. 6 (Pl. 1: 6) belongs to Bishop type 1, variant 1s (Bishop 1988: 142, Fig. 43: 1s). It was present from the Claudian to Flavian periods, after which it generally fell out of use. A. K. Lawson (1978: 153) and M. Mackensen (1991: 174) dated the appearance of these pendants to the Tiberian-Claudian period, but M. C. Bishop stated that the earliest certainly dated examples are from the Claudian era (1988: 96). E. Deschler-Erb cited an example from Augst found with Tiberian-era materials, and one example in Dacia was dated to the second century (Deschler-Erb 1999: 54), so the question of precise dating of the appearance and duration of these pendants is still open. They were hung on straps with the help of phalerae, and they were almost regularly decorated by engraving, silver-plating or niello. They are variants in shape,

doba (1988: 96). E. Deschler-Erb donosi jedan primjerak iz Augste pronađen s materijalom iz tiberijskog doba, a jedan je primjerak u Daciji datiran u 2. st. (Deschler-Erb 1999: 54), pa je pitanje precizne datacije pojave i trajanja takvih privjesaka još uvijek otvoreno. Na remenje su se vješali pomoću falere, a gotovo redovito ukrašeni su urezivanjem, posrebnjem i nijelom. Postoje brojne varijante u obliku, uglavnom je središnji dio poput lista, a osnovni motivi ukrasa su biljni (hrast, vitice, lišće vinove loze, stilizirani grozdovi i sl.).

Sljedeći privjesak (kat. br. 7, T. 1: 7) možemo svrstati u skupinu listolikih privjesaka koje Bishop stavlja u tip 4, i dijeli u osam varijanti (1988: 147, sl. 45a–h). Privjesak se s ponuđenim Bishopovim varijantama ne podudara u potpunosti, kao ni ranije objavljeni privjesci tog tipa iz Garduna (Ivčević 2004: 166–167, T. 1: 20; T. 221–223), što ne čudi s obzirom na činjenicu da je raznolikost za taj tip privjeska karakteristična te da se unutar osnovnoga tipa (izduženi oblik valovitih rubova s kuglastim ukrasom na dnu i kukicom za vješanje na vrhu) privjesci međusobno razlikuju po obliku i ukrasu. Datiraju se od klaudivijskog razdoblja do početka 2. st. (Deschler-Erb 1999: 56). Neki autori primjerke slične našima stavljaju u skupinu kopljastih (*ibid.* 52, T. 26: 523).

Privjesak kat. br. 8 (T. 1: 8) pripada tipu Bishop 5, a najbliži je inačici 5e. Takvi su privjesci čest nalaz na rimskim lokalitetima. Najbrojniji su u razdoblju od Klaudija (41–54. g.) do Trajana (97–117. g.), a zadržavaju se u uporabi sve do kraja 2. st. (Radman-Livaja 2004: 113). Premda su identični privjesci vješani na remenje vojničke pregače, uglavnom se u literaturi interpretiraju kao privjesci orme (Voirol 2000: 24).

Istom tipu pripada privjesak kat. br. 9 (T. 2: 9), premda je ušica tog primjerka oblikovana u obliku ptičje glave i prijelaz iz gornjeg u donji dio tijela snažnije naglašen nego je slučaj s privjescima tipa Bishop 5. Navedene razlike ukazuju na vezu s ptičolikim privjescima, no ona je manja nego u slučaju privjeska iz Salone, kojemu oblik tijela ima naglašen gornji dio (Ivčević 2008: 218, T. I: 3). U Vindonissi postoji skupina privjesaka s ušicom u obliku ptičje glave kojima tijela, premda u osnovi suzolika, međusobno variraju u obliku (Unz & Deschler-Erb 1997: T. 55: 1522–1531).

Varijantu listolikih privjesaka predstavlja privjesak kat. br. 10 (T. 2: 10). Radi se o privjesku ukrašenom urezivanjem i bubrežastim probojima kakvi se na rimskim lokalitetima rijetko nalaze, a i međusobno pokazuju neke razlike. Nešto su bolje zastupljeni na području zapadne Galije, pa im se ondje smješta i

generally a central portion like a leaf, while the general motifs of ornamentation were plants (oak, tendrils, grape vine leaves, stylized grape bunches, etc.). The next pendant (cat. no. 7, Pl. 1: 7) can be classified in the group of foliate pendants which Bishop placed into type 4, and divided into eight variants (1988: 147, Fig. 45a–h). The pendant does not entirely correspond to any of Bishop's variants, just like the previously published pendant of this type from Gardun (Ivčević 2004: 166–167, Pl. 1: 20; Pl. 221–223), which should not be surprising, given that the diversity of this pendant type is typical and that within the basic group (oblong form with wavy edges and spherical decoration at bottom and small hook for hanging at top) the pendants differ from each other in terms of shape and ornamentation. They are dated from the Claudian era to the beginning of the second century (Deschler-Erb 1999: 56). Some authors place examples similar to these in the lance-shaped group (*Ibid.* 52, Pl. 26: 523).

The pendant under cat. no. 8 (Pl. 1: 8) belongs to Bishop type 5, and it is closest to variant 5e. Such pendants were frequent finds at Roman sites. They were most numerous in the period spanning the reigns of Claudius (41–54) to Trajan (97–117), while they remained in use until the end of the second century (Radman-Livaja 2004: 113). Although they are identical to the pendants hung on the straps of military aprons, they are generally interpreted in the literature as harness pendants (Voirol 2000: 24).

The pendant under cat. no. 9 (Pl. 2: 9) belongs to the same type, although the eyelet on this example is shaped like a bird's head, and the transition from the upper to lower portion of the body is more prominent than in the case of the Bishop type 5 pendants. These differences indicate a link with the bird-shaped pendants, but they are smaller than the pendants from Salona, on which the shape of the body has a prominent upper portion (Ivčević 2008: 218, Pl. I: 3). In Vindonissa there is a group of pendants with eyelets shaped like bird's heads on which the body, although basically teardrop shaped, differed from each other in form (Unz & Deschler-Erb 1997: Pl. 55: 1522–1531).

The pendant under cat. no. 10 (Pl. 2: 10) represents the foliate variant. This is a pendant decorated by engraving and kidney-shaped perforations, a type rarely found at Roman sites, and those that exist, exhibit some differences. They are somewhat more present in the territory of western Gallia, so their point of origin has been located here (Poux & Robin 2000: 207, n. 70). They have been dated to the Flavian era (Deschler-Erb 1999: 56), i.e. the latter half of the first century (Poux & Robin 2000: 207). Pendants which can be classified as Bishop type 5

porijeklo (Poux & Robin 2000: 207, n. 70). Datirani su u flavijevsko razdoblje (Deschler-Erb 1999: 56), odnosno u drugu polovicu 1. st. (Poux & Robin 2000: 207). Slični su privjesci koji se mogu svrstati u tip Bishop 5 i kojima je oblik tijela u osnovi suzolik i sužava se prema donjem dijelu. S obzirom na to da gardunskome primjerku nedostaje donji dio, moramo ostaviti mogućnost da je, poput sličnih primjeraka iz Siska i Vindonisse, pripadao tom tipu (Radman-Livaja 2004: 217, T. 68: 499; Unz & Deschler-Erb 1997: T. 55: 1488).

U ranije varijante lunulastih privjesaka ubrajaju se privjesci poput gardunskoga (kat. br. 11, T. 2: 11) koji se okvirno može staviti u tip Bishop 9, no ne i u neki od podtipova. Premda je s obzirom na središnji ukras sličan varijanti 9c, oblikom se ne podudara s tom varijantom, već je blizak varijantama Bishop 9d i 9e. Za naš primjerak ne postoje brojne analogije, a datira se u razdoblje Augustove i Tiberijeve (14–37. g.) vladavine (Voirol 2000: 22).

Lunulasti privjesci uz ukrasnu imali su i zaštitnu ulogu za konja i konjanika (Bishop 1987: 118). Običaj ukrašavanja konjske orme takvim privjescima postojao je već kod keltskih konjanika, a od augustovskog doba privjeske rabe i rimski konjanici (Deschler-Erb 1999: 55). Osobito su lunulasti falusoidni privjesci imali snažno apotropejsko značenje, a snaga djelovanja tih dvaju simbola pojačavala se kod nekih tipova još i prikazom fige (Koščević 2003: 30, 32; Ivčević 2003: 138; Kohlert-Németh 1988: 66). Za lunulaste falusoidne privjeske također nije sasvim jasno jesu li rabljeni za konje za vuču ili za vojničke konje, no kako su često nalaženi u vojničkom kontekstu, osobito oni s kombinacijom fige i falusa, obično se smatraju vojničkim materijalom (Bishop 1988: 98). Datiraju se od augustovskog razdoblja, a traju kroz 2. st. (Voirol 2000: 24; Bishop 1988: 98), no primjerci poput našega datiraju se u 1. st. (Radman-Livaja 2004: 114). Četiri gardunska primjerka pripadaju Bishopovu tipu 10, kojemu su značajke: lunula okrenuta prema gore sa završecima krakova u obliku šake stisnute u figu s jedne i falusa s druge strane, ušica za vješanje gotovo je uvijek prstenasta (jedan salonitanski privjesak koji pripada istom tipu kao i gardunski ima četvrtastu ušicu za vješanje, v. Ivčević 2008: 219, T. 2: 10). Oba u cijelosti sačuvana privjeska (kat. br. 12 i 13, T. 2: 12, 13) pripadaju inačici 10d, kojoj su značajke: krakovi lunule izvijeni prema gore, prstenasta ušica spojena izravno na lunulu, nema ušice za vješanje privjeska s donje strane, što većina privjesaka tog tipa ima.

Od preostala dva lunulasta falusoidna privjeska iz Garduna sačuvani su samo ulomci. Jednom je (kat.

and which are basically teardrop shaped, narrowing toward the bottom, are similar. Given that the Gardun example is missing its lower portion, the possibility should be left open that it, like similar examples from Sisak and Vindonissa, belonged to this type (Radman-Livaja 2004: 217, Pl. 68: 499; Unz & Deschler-Erb 1997: Pl. 55: 1488).

Pendants like the one from Gardun (cat. no. 11, Pl. 2: 11) are counted among the lunular pendant variants; it can generally be classified at Bishop type 9, but not into any of its sub-types. Although, given its central ornament, it is similar to variant 9c, the shape does not correspond to this variant, rather it is close to Bishop's variants 9d and 9e. There are not many analogies to this example, and it has been dated from reign of Augustus to Tiberius (14-37) (Voirol 2000: 22).

Lunular pendants, besides being decorative, also played a decorative role for horses and their riders (Bishop 1987: 118). The custom of decorating riding harnesses with such pendants had already existed among the Celtic cavalry, while as of the Augustan era pendants were also used by the Roman cavalry (Deschler-Erb 1999: 55). The lunular phallic pendants in particular had an explicitly apotropaic significance, and the power of these two symbols was enhanced among some types with the addition of a figa portrayal (Koščević 2003: 30, 32; Ivčević 2003: 138; Kohlert-Németh 1988: 66). In the case of lunular phallic pendants, it is also not entirely clear whether they were used for draught horses or military steeds, but since they were often found in a military context, particularly in combination with the figa and phallus, they are generally considered military items (Bishop 1988: 98). They have been dated to the Augustan period, and they endured through the second century (Voirol 2000: 24; Bishop 1988: 98), but examples like this one date to the first century (Radman-Livaja 2004: 114). The four Gardun examples belong to Bishop type 10, which have these features: the lunula is turned upward with one tip shaped like a figa-fist and the other like a phallus; the eyelet for hanging is almost always ring-shaped (one Salona pendant which belongs to the same type as the Gardun example has a rectangular eyelet, see Ivčević 2008: 219, Pl. 2: 10). Both entirely preserved pendants (cat. no. 12 and 13, Pl. 2: 12, 13) belong to variant 10d, which have these features: lunula arms turned upward, ring-shaped eyelet directly connected to lunula, no eyelet for hanging on the lower side, which most pendants of this type have.

Of the remaining two lunular phallic pendants from Gardun, only fragments remain. One (cat. no. 14, Pl. 2: 14) has a preserved arm with its end shaped like fist, while the other (cat. no. 15, Pl. 2:

br. 14, T. 2: 14) sačuvan krak sa završetkom u obliku šake, a drugom (kat. br. 15, T. 2: 15) u obliku falusa. Budući da im nedostaje veći dio, nije moguće sa sigurnošću odrediti varijantu kojoj pripadaju.

Oružju pripada samo jedan predmet – vrh strijele u obliku lastavičjeg repa, koji jedini od ovdje obrađenih predmeta pripada razdoblju srednjeg vijeka (kat. br. 16, T. 2: 16). Vrhove strijela nije moguće precizno datirati na osnovi tipologije, a kako za gardunski primjerak nemamo precizne podatke o okolnostima nalaza, moguća je jedino okvirna datacija. Obično se željezni vrhovi strijela u obliku lastavičjeg repa okvirno datiraju od 7. do 10. st. (Piteša 2009: 65), odnosno od 9. do 12. st. (Jelovina 1976: 120). Takve su strijele na nekim lokalitetima datirane već od 5. st. (*I Longobardi* 1990: 150), javljaju se u kasnoantičkim utvrdama, gdje su datirane u 6. st. (Popović 1999: 113), u nekropolama 7. i 8. st. (Marušić 1967: T. 3:5), a u starohrvatskim nekropolama 8. i prve polovice 9. st. najzastupljeniji su tip vrhova strijela (Belošević 1980: 104–105).

15) is phallus shaped. Since their larger portions are missing, it is impossible to ascertain the variant to which they belong.

Only one item can be counted as weaponry: a swallowtail arrowhead, which is the only item examined here which dates to the Middle Ages (cat. no. 16, Pl. 2: 16). Arrowheads cannot be precisely dated based on typology, and since there are no precise data on the circumstances surrounding the discovery of the Gardun example, only general dating is possible. Normally swallowtail arrowheads made of iron are generally dated from the seventh to tenth centuries (Piteša 2009: 65), or from the ninth to twelfth centuries (Jelovina 1976: 120). Such arrowheads have been dated as early as the fifth century at some sites (*I Longobardi* 1990: 150), and they have appeared in fortifications of Late Antiquity, where they were dated to the sixth century (Popović 1999: 113), and in necropolises of the seventh and eighth centuries (Marušić 1967: Pl. 3:5), while in the Early Croatian necropoleis of the eighth and first half of the ninth centuries they are the most common arrowhead types (Belošević 1980: 104-105).

KATALOG*

1. Pojasna kopča s okovom

Inv. br. H 4382

Materijal: bronca, nijelo

Mjere: gumb – pr. 2 cm, deb. 0,6 cm, okov kopče – duž. 10,35 cm, vis. 3,15 cm, deb. 0,15 cm

Opis: Glava gumba ukrašena je urezanim biljnim motivima, pomoću zgloba spojena je s pravokutnim okovom pojasa kojemu se na rubovima vide zakovice pomoću kojih je bio pričvršćen na pojas. S prednje je strane pravokutno polje u sredini ukrašeno rozetom, uokolo nje nalazi se šahovnica uokvirena motivom vučjih zubi. Svi urezani motivi ispunjeni su nijelom.

Datacija: 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 78, 79, kat. br. 46).

Literatura: Bishop & Coulston (2006: 108, sl. 62: 3, 21), Ivčević (2004: 166, T. 1: 6), Simpson (2000: 151, T. 25: 29), Deschler-Erb (1999: T. 19: 354), Unz & Deschler-Erb (1997: T. 40: 1012, 1020; T. 45: 1211, 1232, 1233), Unz (1972: 55, sl. 4: 12), Henderson (1949: T. XXXIII: 72), Behrens (1918: 28, sl. 9).

CATALOGUE*

1. Belt buckle with mount

Inv. no. H 4382

Material: bronze, niello

Dimensions: stud – dia. 2 cm, thk. 0.6 cm, buckle mount – l. 10.35 cm, ht. 3.15 cm, thk. 0.15 cm

Description: Head of stud decorated with engraved plant motifs, hinge connects it to rectangular belt mount on which rivets used to fasten it to the belt can be seen. Rectangular field on front side decorated by rosette in middle, around it there is a chess-board design framed in wolf's fangs. All engraved motifs are niellated.

Dating: 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 78, 79, cat. no. 46).

References: Bishop & Coulston (2006: 108, Fig. 62: 3, 21), Ivčević (2004: 166, Pl. 1: 6), Simpson (2000: 151, Pl. 25: 29), Deschler-Erb (1999: Pl. 19: 354), Unz & Deschler-Erb (1997: Pl. 40: 1012, 1020; Pl. 45: 1211, 1232, 1233), Unz (1972: 55, Fig. 4: 12), Henderson (1949: Pl. XXXIII: 72), Behrens (1918: 28, Fig. 9).

* Konzervacija: Ika Prpa Stojanac, Arheološki muzej Split.

* Conservation: Ika Prpa Stojanac, Archaeological Museum, Split.

2. Ulomak pojase kopče

Inv. br. AMS 41558

Materijal: bronca

Mjere: duž. 2,9 cm, vis. 2,4 cm

Opis: Dio kopče s gumbom, sačuvan je samo stražnji dio kopče, jednostavne izrade, trokutastog oblika s dva kružna dodatka na užem kraju.

Datacija: 1. st.

Literatura: Unz & Deschler-Erb (1997: T. 45: 1215).

3. Spojna kuka karičastog oklopa

Inv. br. H 4053

Materijal: bronca

Mjere: duž. 8,2 cm

Opis: Zmijolika kuka, s jedne strane završava proširenjem s urezima koje predstavlja glavu, po tijelu je ukrašena urezanim linijama.

Datacija: 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 68, kat. br. 26).

Literatura: Košćević (2008: 263, sl. 59), Bishop & Coulston (2006: 96, sl. 51: 4), Radman-Livaja (2004: T. 27: 130–132), Unz & Deschler-Erb (1997: T. 35: 861, 862).

4. Spojna petlja oklopa

Inv. br. H 3127

Materijal: bronca

Mjere: duž. 4,6 cm, šir. 1,6 cm

Opis: Ušica od savijene žice nepravilna je kružnog oblika, okov je pravokutan, s jedne strane zaobljenih rubova, a s druge valovit. Okov je bio pričvršćen s dvije zakovice, od kojih je jedna sačuvana.

Datacija: 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 69, kat. br. 27).

Literatura: Matešić (2005: 103, T. 9: 112–114), Radman-Livaja (2004: 180, T. 31: 182, 183), Feugère (2002: 105, sl. 130), Voirol (2000: 49, T. 7: 47), Unz & Deschler-Erb (1997: T. 32: 670–672, 675–681, 684–691), Frere & Joseph (1974: sl. 26: 31), Ritterling (1913: T. XI: 1, 2).

5. Držac perjanice

Inv. br. H 4385

Materijal: bronca

Mjere: vis. 3,9 cm, šir. 3,3 cm

2. Belt buckle fragment

Inv. no. AMS 41558

Material: bronze

Dimensions: l. 2.9 cm, ht. 2.4 cm

Description: Piece of buckle with stud, only back part of buckle preserved; simple rendering, triangular shape with two circular appendages on narrower end.

Dating: 1st cent.

References: Unz & Deschler-Erb (1997: Pl. 45: 1215).

3. Chest hook for chainmail

Inv. no. H 4053

Material: bronze

Dimensions: l. 8.2 cm

Description: Serpentine hook, one end expanded with engravings that constitute head, body decorated with engraved lines.

Dating: 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 68, cat. no. 26).

References: Košćević (2008: 263, Fig. 59), Bishop & Coulston (2006: 96, Fig. 51: 4), Radman-Livaja (2004: Pl. 27: 130–132), Unz & Deschler-Erb (1997: Pl. 35: 861, 862).

4. Armour tie-hook

Inv. no. H 3127

Material: bronze

Dimensions: l. 4.6 cm, wd. 1.6 cm

Description: Eye-hole made of bent wire with irregular circular shape, mount rectangular, rounded edges on one side, wavy edges on other. Mount was fastened with two rivets, of which one has been preserved.

Dating: 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 69, cat. no. 27).

References: Matešić (2005: 103, Pl. 9: 112–114), Radman-Livaja (2004: 180, Pl. 31: 182, 183), Feugère (2002: 105, Fig. 130), Voirol (2000: 49, Pl. 7: 47), Unz & Deschler-Erb (1997: Pl. 32: 670–672, 675–681, 684–691), Frere & Joseph (1974: Fig. 26: 31), Ritterling (1913: Pl. XI: 1, 2).

5. Crest support

Inv. no. H 4385

Material: bronze

Dimensions: ht. 3.9 cm, wd. 3.3 cm

Opis: Krakovi držača šire se prema krajevima, lagano su izvijeni prema van. Nedostaje donji dio koji se učvršćivao na kalotu kacige.

Datacija: 1–2. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 75, kat. br. 39).

Literatura: Deschler-Erb (1999: T. 10: 142, 143; T. 11: 144), Harnecker (1997: T. 63: 872), Unz & Deschler-Erb (1997: T. 29: 603), Rodríguez Colmenero & Vega Avelaira (1996: sl. 3: 3), Deimel (1987: T. 73: 3), Unz (1972: 54, sl. 3: 11).

6. Privjesak konjske orme

Inv. br. H 2125

Materijal: bronca

Mjere: vis. 3,6 cm, šir. 3,35 cm

Opis: Ušica za vješanje izrađena je savijanjem prema poledini privjeska, na ramenima je sa svake strane po jedan utor, središnji dio završava trokutasto, na obje strane završava u obliku palmete, na gornjem dijelu privjeska dva su otvora, na površini su urezane linije, ali su nepravilne i nije vidljiv motiv.

Datacija: 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 93, kat. br. 81).

Literatura: Unz & Deschler-Erb (1997: T. 51: 1390), Dixon & Southern (1992: 69, sl. 38).

7. Privjesak konjske orme

Inv. br. H 3128

Materijal: bronca

Mjere: vis. 4,4 cm, šir. 1,2 cm

Opis: Rubovi izduženog privjeska valoviti su, ušica je izrađena savijanjem prema poledini, na donjem kraju kuglasti ukras.

Datacija: 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 94, kat. br. 82).

Literatura: Šeparović & Uroda (2009: 47, sl. 74), Radman-Livaja (2004: 216, T. 67: 491), Ivčević (2004: 167, T. 2: 22), Deschler-Erb (1999: T. 26: 523), Unz & Deschler-Erb (1997: T. 56: 1533–1535), Nedved (1981: 156, sl. 2: 67).

8. Privjesak konjske orme

Inv. br. AMS 70561

Materijal: bronca

Mjere: vis. 4,6 cm, vis. s gumbom 6,65 cm, šir. 2,4 cm

Description: The arms of the support expand toward tips, slightly curved outward. Lower part fastened to helmet's calotte missing.

Dating: 1st-2nd cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 75, cat. no. 39).

References: Deschler-Erb (1999: Pl. 10: 142, 143; Pl. 11: 144), Harnecker (1997: Pl. 63: 872), Unz & Deschler-Erb (1997: Pl. 29: 603), Rodríguez Colmenero & Vega Avelaira (1996: Fig. 3: 3), Deimel (1987: Pl. 73: 3), Unz (1972: 54, Fig. 3: 11).

6. Riding harness pendant

Inv. no. H 2125

Material: bronze

Dimensions: ht. 3.6 cm, wd. 3.35 cm

Description: Eyelet for hanging made by bending toward back of pendant, one slot on each of the shoulders, central portion ends triangularly, both sides end in palmette shape, two slots on upper portion of pendant, lines engraved on surface, although irregular and motif cannot be discerned.

Dating: 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 93, cat. no. 81).

References: Unz & Deschler-Erb (1997: Pl. 51: 1390), Dixon & Southern (1992: 69, Fig. 38).

7. Riding harness pendant

Inv. no. H 3128

Material: bronze

Dimensions: ht. 4.4 cm, wd. 1.2 cm

Description: Edges of elongated pendant are wavy, eyelet made by bending toward back, spherical ornament on bottom.

Dating: 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 94, cat. no. 82).

References: Šeparović & Uroda (2009: 47, Fig. 74), Radman-Livaja (2004: 216, Pl. 67: 491), Ivčević (2004: 167, Pl. 2: 22), Deschler-Erb (1999: Pl. 26: 523), Unz & Deschler-Erb (1997: Pl. 56: 1533-1535), Nedved (1981: 156, Fig. 2: 67).

8. Riding harness pendant

Inv. no. AMS 70561

Material: bronze

Dimensions: ht. 4.6 cm, ht. with stud 6.65 cm, wd. 2.4 cm

Opis: Privjesak je u obliku suze, završava kuglastim ukrasom, na vrhu je ušica koja je izrađena savijanjem prema poledini. Glava gumba s ušicom, pomoću kojeg je privjesak bio učvršćen za remen, kružnog je oblika. Nedostaje manji dio.

Datacija: od sredine 1. st., 2. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 95, kat. br. 85).

Literatura: Šeparović & Uroda (2009: 45, sl. 64), Feugère & Poux (2001: 83, sl. 5: 7), Voirol (2000: 55, T. 13: 113), Koščević (1991: T. XIII: 204), Unz & Deschler-Erb (1997: T. 55: 1479), Deimel (1987: T. 83, 2), Nedved (1981: 157, sl. 2: 71), Unz (1974: 39, sl. 11: 131; sl. 12: 133), Behrens (1912: 88, sl. 4: 16).

9. Privjesak konjske orme

Inv. br. H 1596

Materijal: bronca

Mjere: vis. 7,5 cm, šir. 3,35 cm

Opis: Privjesak je suzolik oblika, završava kružnim otvorom koji je vjerojatno služio za vješanje nekog ukrasa. Ušica za vješanje u obliku ptičje glave izrađena je savijanjem prema naprijed.

Datacija: od sredine 1. st., 2. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 96, kat. br. 86).

Literatura: Ivčević (2008: 218, T. I: 3), Feugère & Poux (2001: 83, sl. 1: 8), Unz & Deschler-Erb (1997: T. 54: 1531).

10. Privjesak konjske orme

Inv. br. H 1612

Materijal: bronca

Mjere: vis. 2,35 cm, šir. 1,7 cm

Opis: Ušica za vješanje izrađena je savijanjem prema poledini, donji dio nedostaje, ukras urezanim linijama i bubrezastim probojima.

Datacija: druga polovica 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 96, kat. br. 87).

Literatura: Koščević (2008: 261, sl. 50), Matešić (2005: 111, T. 13: 180), Poux & Robin (2000: 205, sl. 16: 5), Unz & Deschler-Erb (1997: T. 56: 1555, 1556), Deschler-Erb (1999: T. 28: 574), Oldenstein (1976: T. 30: 207), Unz (1974: sl. 11: 132).

11. Privjesak konjske orme

Inv. br. H 3556

Materijal: bronca

Mjere: vis. 4,6 cm, šir. 3,9 cm

Description: Teardrop pendant, ending in spherical ornament, eyelet at top made by bending toward back. Head of stud with eyelet used to fasten pendant to strap, circular. Smaller portion missing.

Dating: after mid-1st cent, 2nd cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 95, cat. no. 85).

References: Šeparović & Uroda (2009: 45, fig. 64), Feugère & Poux (2001: 83, Fig. 5: 7), Voirol (2000: 55, Pl. 13: 113), Koščević (1991: Pl. XIII: 204), Unz & Deschler-Erb (1997: Pl. 55: 1479), Deimel (1987: Pl. 83, 2), Nedved (1981: 157, Fig. 2: 71), Unz (1974: 39, Fig. 11: 131; Fig. 12: 133), Behrens (1912: 88, Fig. 4: 16).

9. Riding harness pendant

Inv. no. H 1596

Material: bronze

Dimensions: ht. 7.5 cm, wd. 3.35 cm

Description: Teardrop pendant, ending with circular opening that probably served to hang an ornament. Eyelet for hanging shaped like bird's head, made by bending forward.

Dating: after mid-1st cent, 2nd cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 96, cat. no. 86).

References: Ivčević (2008: 218, Pl. I: 3), Feugère & Poux (2001: 83, Fig. 1: 8), Unz & Deschler-Erb (1997: Pl. 54: 1531).

10. Riding harness pendant

Inv. no. H 1612

Material: bronze

Dimensions: ht. 2.35 cm, wd. 1.7 cm

Description: Eyelet for hanging made by bending toward back, lower portion missing, ornament consists of engraved lines and kidney-shaped perforations.

Dating: latter half of 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 96, cat. no. 87).

References: Koščević (2008: 261, Fig. 50), Matešić (2005: 111, Pl. 13: 180), Poux & Robin (2000: 205, Fig. 16: 5), Unz & Deschler-Erb (1997: Pl. 56: 1555, 1556), Deschler-Erb (1999: Pl. 28: 574), Oldenstein (1976: Pl. 30: 207), Unz (1974: Fig. 11: 132).

11. Riding harness pendant

Inv. no. H 3556

Material: bronze

Dimensions: ht. 4.6 cm, wd. 3.9 cm

Opis: Lunulasti privjesak, krakovi su mu okrenuti prema dolje i završavaju kuglastim ukrasom, u sredini ukras u obliku palmete, zglobom povezan s falerom.

Datacija: augustovsko-tiberijsko doba

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 97, kat. br. 88).

Literatura: Fahr (2005: 129, sl. 9: 5), Müller (2002: T. 51: 557), Voirol (2000: 52, T. 10: 89), Unz & Deschler-Erb (1997: T. 48: 1319).

12. Privjesak konjske orme

Inv. br. H 3557

Materijal: bronca

Mjere: duž. 6,7 cm, vis. 4,55 cm

Opis: Lunula je okrenuta prema gore, s jedne strane je šaka, a s druge falus, s prednje strane urezane su linije.

Datacija: 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 97, kat. br. 89).

Literatura: Müller (2002: T. 46: 515), Deschler-Erb (1999: T. 27, 539, 540), Unz & Deschler-Erb (1997: T. 58: 1616), Franken (1996: 109, sl. 207), Unz (1972: 58, sl. 7: 71).

13. Privjesak konjske orme

Inv. br. H 4612

Materijal: bronca

Mjere: duž. 5,7 cm, vis. 5,2 cm

Opis: Lunula je okrenuta prema gore, s jedne strane je šaka, a drugi krak nedostaje, ušica za vješanje prstenasta je.

Datacija: 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 97, kat. br. 90).

Literatura: kao kat. br. 12.

14. Privjesak konjske orme

Inv. br. H 4198

Materijal: bronca

Mjere: duž. 4,1 cm, vis. 2,15 cm

Opis: Jedan krak lunulastog privjeska koji završava u obliku falusa, s donje strane ušica za vješanje privjeska.

Datacija: 1. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 97, kat. br. 27).

Literatura: Bolla (1997: T. LIII: 158), Franken (1996: 108, sl. 205).

Description: Lunular pendant, arms turned downward ending in spherical ornament, palmette shaped ornament in middle, connected to phalera with hinge.

Dating: Augustan/Tiberian era

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 97, cat. no. 88).

References: Fahr (2005: 129, Fig. 9: 5), Müller (2002: Pl. 51: 557), Voirol (2000: 52, Pl. 10: 89), Unz & Deschler-Erb (1997: Pl. 48: 1319).

12. Riding harness pendant

Inv. no. H 3557

Material: bronze

Dimensions: l. 6.7 cm, ht. 4.55 cm

Description: Lunula turned upward, fist on one end, phallus on other, engraved lines on front.

Dating: 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 97, cat. no. 89).

References: Müller (2002: Pl. 46: 515), Deschler-Erb (1999: Pl. 27, 539, 540), Unz & Deschler-Erb (1997: Pl. 58: 1616), Franken (1996: 109, Fig. 207), Unz (1972: 58, Fig. 7: 71).

13. Riding harness pendant

Inv. no. H 4612

Material: bronze

Dimensions: l. 5.7 cm, ht. 5.2 cm

Description: Lunula turned upward, fist on one end, other end missing, eyelet for hanging ring-shaped.

Dating: 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 97, cat. no. 90).

References: same as cat. no. 12.

14. Riding harness pendant

Inv. no. H 4198

Material: bronze

Dimensions: l. 4.1 cm, ht. 2.15 cm

Description: One arm of lunular pendant ending in phallus shape, eyelet for hanging pendant on lower side.

Dating: 1st cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 69, cat. no. 27).

References: Bolla (1997: Pl. LIII: 158), Franken (1996: 108, Fig. 205).

15. Privjesak konjske orme

Inv. br. H 3161

Materijal: bronca

Mjere: duž. 4,2, vis. 2,2 cm

Opis: Jedan krak lunulastog privjeska koji završava u obliku šake, s donje strane ušica za vješanje privjeska.

Datacija: 1. st.

Literatura: kao kat. br. 14.

16. Vrh strijele

Inv. br. H 6010

Materijal: željezo

Mjere: duž. 7,75 cm, pr. tuljca 1,2 cm

Opis: Vrh strelice s krilcima u obliku lastavičjeg repa s tuljcem za nasad, jedno krilce nedostaje.

Datacija: 7–10. st.

Objavljeno: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 59, kat. br. 8).

Literatura: Popović (1999: 112, sl. 59:2), *I Longobardi* (1990: 150, III: 24), Belošević (1985: T. IX: 4, 5), Belošević (1980: T. XXVII: 4, 15, 25; T. XXVIII: 13; T. XXIX: 19), Jelovina (1976: T. XXV: 14; T. LXI: 9; T. XXX: 4, 5), Marušić (1967: T. 3: 5, gr. 112).

15. Riding harness pendant

Inv. no. H 3161

Material: bronze

Dimensions: l. 4.2, ht. 2.2 cm

Description: One arm of lunular pendant ending in fist shape, eyelet for hanging pendant on lower side.

Dating: 1st cent.

References: same as cat. no. 14.

16. Arrowhead

Inv. no. H 6010

Material: iron

Dimensions: l. 7.75 cm, socket dia. 1.2 cm

Description: Arrowhead with lugs shaped like swallowtail, with socket, one lug missing.

Dating: 7th-10th cent.

Publication: *Nalazi rimske vojne opreme u Hrvatskoj* (2010: 59, cat. no. 8).

References: Popović (1999: 112, Fig. 59: 2), *I Longobardi* (1990: 150, Pl. III: 24), Belošević (1985: Pl. IX: 4, 5), Belošević (1980: Pl. XXVII: 4, 15, 25; Pl. XXVIII: 13; Pl. XXIX: 19), Jelovina (1976: Pl. XXV: 14; Pl. LXI: 9; Pl. XXX: 4, 5), Marušić (1967: Pl. 3: 5, gr. 112).

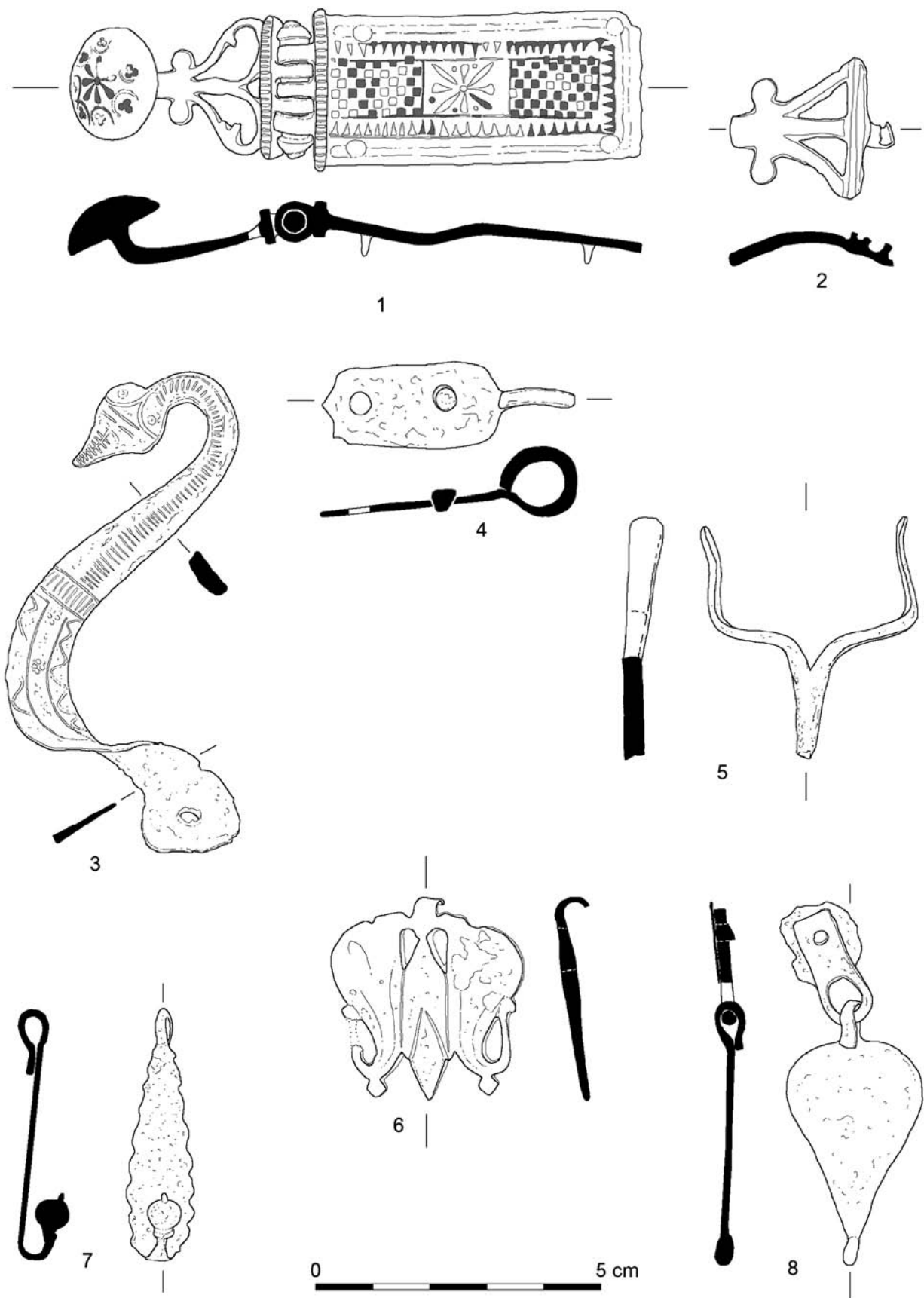


Tabla 1. Dijelovi opreme rimskog vojnika iz Garduna (Z. Podrug, 2009).

Plate 1. Pieces of Roman troop gear from Gardun (Z. Podrug, 2009).

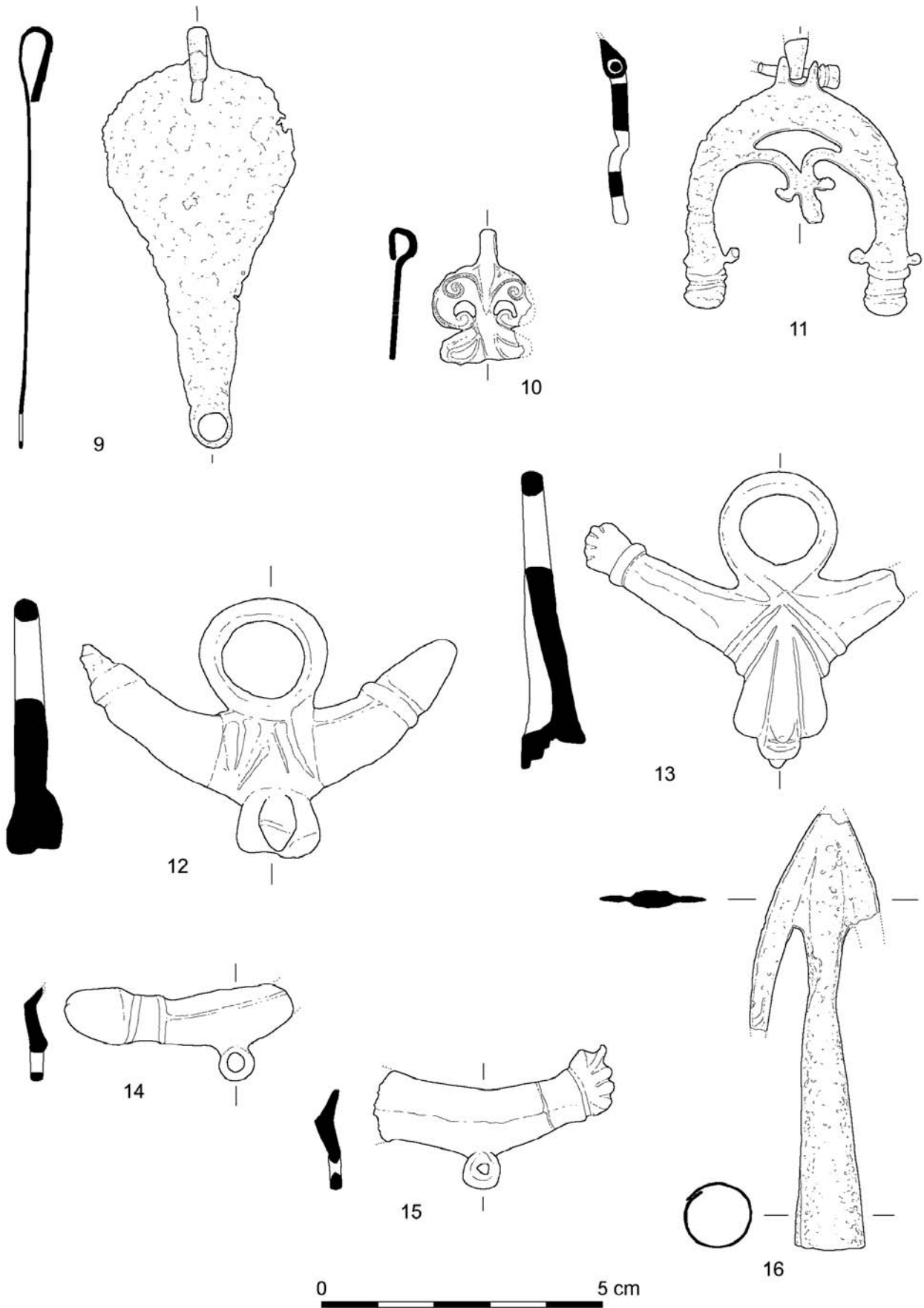


Tabla 2. Dijelovi opreme rimskog vojnika iz Garduna (Z. Podrug, 2009).

Plate 2. Pieces of Roman troop gear from Gardun (Z. Podrug, 2009).

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