

# Keramički i olovni pršljenci za vretena iz avarodobnih grobova na lokalitetu Nuštar - Dvorac

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# Keramički i olovni pršljenci za vretena iz avarodobnih grobova na lokalitetu Nuštar – Dvorac

## *Clay and lead spindle whorls from Avar period graves at Nuštar – Dvorac site*

Prethodno priopćenje  
Srednjovjekovna arheologija

*Preliminary communication  
Mediaeval archaeology*

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*Tijekom zaštitnoga arheološkog istraživanja avarodobnog groblja u Nuštru kao zanimljiv prilog u grobovima nađeni su keramički i olovni pršljenci. Prema rezultatima antropoloških analiza, nađeni su u grobovima svih dobnih i spolnih skupina (uključujući i jednog muškarca). Ukupno su otkrivena 33 keramička i tri olovna pršljenka u 34 ukopa. Osim jednoga otkrivenog na lijevom ramenu, uglavnom su se nalazili na sredini tijela – uz ruke ili zdjelicu (15 komada) ili natkoljenice i koljena (10 komada), dok su preostali iz zapune grobova. Najučestaliji su jednostavni i neukrašeni bikonični i okrugli pršljenci, a u slučajevima kad se pojavljuje ukras on je najčešće u vidu plitko urezanih vodoravnih linija. Raspon tonova pečenja keramičkih pršljenaka kreće se od narančaste, preko smeđe do sive boje. Sudeći po ostalim priložima u grobovima, čini se da društveni status nije utjecao na prilaganje pršljenaka u grob, jer se nalaze i u siromašnim i bogato opremljenim grobovima. Pršljenci za vretena kao kronološki neosjetljiv predmet u radu će se obraditi s aspekta priloga u grobu, interpretacije njegova značenja u odnosu na spol i dob, kao i pokušaja rekonstrukcije uporabe određenih tipova.*

*Ključne riječi: pršljenak za vreteno, keramički pršljenci, olovni pršljenci, grobni nalaz, kasnoavarsko razdoblje*

*During rescue archaeological excavation at the Late Avar Period cemetery in Nuštar clay and lead spindle whorls were found in graves as an interesting grave good. According to the results of anthropological analyses they were found in graves of all age and sex groups (including one male). A total of 33 clay and 3 lead spindle whorls were discovered in 34 graves. Except one discovered on left shoulder, spindle whorls were mainly found at the middle of the body – near the bones of the hand and in the pelvic area (15 pieces) or by thigh or knee (10 pieces), while the rest come from the backfill of the grave. The most common are simple undecorated biconical and round shapes and, when decorated, the decoration appears as shallow incised lines. The range of firing tones ranges from orange through brown to grey. Judging by the other grave goods it seems that social status did not affect the offering of whorls in the grave, since they were found in both poor and richly furnished graves. Spindle whorls, as chronologically insensitive objects, will be processed in terms of grave good in this paper, interpretation of their meaning in relation to gender and age as well as an attempt to reconstruct the use of certain type.*

*Keywords: spindle whorls, clay, lead, grave good, late Avar period*

## UVOD

Zaštitno arheološko istraživanje avarodobnog groblja u blizini dvorca obitelji Khuen-Belasi u Nuštru obavljeno je u jesen 2011. godine. Na dotada nepoznatom lokalitetu, radovi za gradnju nogometnog igrališta počeli su u siječnju iste godine, te je tom prilikom devastiran manji broj grobova, a kosti i nalazi su djelomično pokupljeni (Rapan Papeša 2012: 4). Nakon rješavanja papirologije i problema financiranja istraživanja, ono je obavljeno tek u rujnu i listopadu, što je uvelike utjecalo na kvalitetu sačuvanoga osteološkog materijala, kao i nalaza metala, jer su bili izloženi vremenskim nepogodama kroz dulje razdoblje. U konačnici, imenovan je

## INTRODUCTION

Rescue archaeological excavation of the Avar period cemetery near the family Khuen - Belasi castle in Nuštar was conducted in the fall of 2011. The site was unknown until works for the construction of a football field in January of the same year began and on this occasion a few graves were devastated while bones and finds were partially picked up (Rapan Papeša 2012: 4). After solving the problem of paperwork and research funding, archaeological excavation was carried out in September and October. This fact had greatly affected the quality of the preserved osteological material, as well as the metal finds, since they were exposed

201 grob, a istraženo ih je 196 (Rapan Papeša 2013, u tisku). Sam lokalitet, smješten blago jugozapadno u odnosu na državnu cestu D-55 koja povezuje Vinkovce i Vukovar, ne ističe se u prostoru. Vlastelinski sklop obitelji Khuen-Belasi, smješten u neposrednoj blizini, bio je presudan za imenovanje lokaliteta. Groblje, istraženo unutar gabarita budućega nogometnog igrališta, zauzima površinu od oko 2500 m<sup>2</sup>, s napomenom da nisu definirane južna i istočna granica groblja jer izlaze izvan iskopa. Ukupno 196 istraženih grobova, u kojima je pretežno pokopan po jedan pokojnik, raspodijeljeno je u 10 pravilnih redova. Bez iznimke, ukopi su orijentirani u smjeru zapad – istok. Pokojnici su u grobove polagani u odjeći s oruđem koje su koristili, a za prilog su im stavljane keramičke posude i životinjske kosti. Najčešći nalazi u grobovima bili su dijelovi pojasa (pređice, okovi, jezičci), nakit (naušnice, perle ogrlica, narukvice, prstenje) i oruđe (noževi, iglenice, pršljenci). Preliminarno većinu nalaza možemo datirati u kasnoavarsko razdoblje, odnosno u 8. i početak 9. stoljeća.<sup>1</sup> Ipak, na ovom stupnju obrađenosti ne možemo isključiti mogućnost da nekoliko grobova pripada i srednjoavarskom razdoblju.

Sve od završetka istraživanja intenzivno se radi na obradi nalaza. Tako je u međuvremenu napravljena preliminarna antropološka analiza (Premužić et al. 2013), dio keramičkih posuda je restauriran (jedan dio se čuva za dodatne analize), manji dio metalnih nalaza također je restauriran i konzerviran (Golubić 2012; 2013), obavljene su makro- i mikroarheobotaničke analize na izabranom manjem dijelu sakupljenih uzoraka (Peeto, Kenéz 2013), a crtanje nalaza je u tijeku. Objavljivanje građe određeno je najprije gore navedenim parametrima, a kako su pršljenci bili gotovi među prvim nalazima, ovaj rad bit će posvećen njima.

Iako je pršljenak relativno čest nalaz u arheološkom kontekstu, jako rijetko dolazi do pojedinačne znanstvene obrade i objave ovog tipa nalaza,<sup>2</sup> te se najčešće samo usput spominje. Smatramo da ovaj tip predmeta zavređuje malo više pozornosti stručnjaka, pogotovo kad prikupljeni podaci mogu biti iskorišteni i za rekonstrukciju društvenog položaja osoba pokapanih s pršljencima.

Pršljenak za vreteno je utilitarni uporabni predmet koji se susreće od mlađega kamenog doba pa sve do razvijenoga srednjeg vijeka; nalazi se u naseljima i grobovima. Tijekom navedenog razdoblja nije se mnogo mijenjao, i slični oblici nalaze se u različitim razdobljima. Pršljenci nađeni izvan konteksta, kao slučajan nalaz, ne pružaju sami po sebi relevantne podatke za dataciju. Upravo zbog te činjenice uzima ih se kao kronološki neosjetljiv predmet – što i jesu – ali ako potječu iz zatvorenih grobnih cjelina, mogu ponuditi zanimljiv raspon interpretacija (vezano uz spol, dob, društveni status...). Ovi predmeti, koji se u literaturi susreću pod nazivima pršljenak, pršljen, zamašnjak, kolut, uteg za vreteno, najčešće su keramički, no zabilježeni su i kameni, koštani, metalni, kao i ulomci keramičkih posuda u sekundarnoj uporabi. Pršljenak služi u procesu ručnog

to the elements for an extended period of time. Ultimately, we numbered 201 graves, and investigated 196 of them (Rapan Papeša 2013, *in press*).

The site, located somewhat southwest from state road D-55, which connects Vinkovci and Vukovar, does not stand out in the landscape. The nearby mansion complex of the Khuen-Belasi family was decisive for naming the site “Dvorac”, meaning “Castle”. Cemetery, excavated in the frame of a future football field covers about 2.500 m<sup>2</sup>. Not to be forgotten is the fact that southern and eastern borders were not defined since extend beyond the area planned for construction. Total of 196 graves, mostly with 1 person buried, were excavated. Graves are distributed in 10 regular rows. Without exception burials were oriented in the west-east direction. The deceased were laid in graves in their clothes, with tools that were used by them, and grave goods consist of pottery and animal bones. The most common finds were belt parts (buckles, straps, mounts), jewellery (earrings, necklace beads, bracelets, rings) and tools (knives, needle cases, spindle whorls). Preliminary most of the finds can be dated to Late Avar Period – to the 8<sup>th</sup> and beginning of 9<sup>th</sup> century.<sup>1</sup> However, the level of find processing at this stage does not allow us to exclude the possibility that several graves belong to Middle Avar Period.

Since the excavation ended, data and finds are being intensively processed. Thus, in the meantime we have made a preliminary anthropological analysis (Premužić et al. 2013), some ceramic vessels were restored (one part is kept for further analysis), a small number of metal finds was also restored and preserved (Golubić 2012; 2013), and macro and micro-analysis of the selected samples were carried out (Peeto, Kenéz 2013), while drawing of finds is in progress. Publication of excavated material is determined by the above-mentioned parameters, and since spindle whorls were done among the first, results of this paper will be dedicated to them.

Although spindle whorls are relatively common find in archaeological context, it rarely comes to individual scientific analysis and publication of this type of finds,<sup>2</sup> and they are often only mentioned in passing. We believe that this type of find deserves a little more of expert's attention, especially when the collected data can be used for the reconstruction of the social position of people buried with spindle whorls.

A spindle whorl is a utility item that was used since the Neolithic until the Late Middle Ages; it can be found in settlements and graves. During this period it did not change a lot, and similar forms were found in different time periods. Due to that fact they are often taken as a chronologically insensitive – which they are – but if they come from closed contexts like graves they can offer an interesting range of interpretations (in relation to gender, age, social status etc.). These items, which are encountered in the literature under the names of spindle whorls, whorls, flywheel, pulley, the weight of the spindle, are usually made of clay, but they

1 Preliminarna datacija ne vezuje se ni za jednu konkretnu kronologiju odnosno sustav. U ovom radu korištena je baza podataka P. Stadlera u koju je upisano preko 3000 pršljenaka, ali ne i njegov kronološki sustav.

2 Usporedi npr. Krasnik 2009; Sekelj Ivančan 2010.

1 Preliminary dating is not linked to a single specific chronology or system. In this paper we use P. Stadler's database in which over 3000 spindle whorls are catalogued, but not his chronological system.

2 Compare Krasnik 2009; Sekelj-Ivančan 2010.

sukanja niti iz prediva, koje može biti biljnog (lan, konoplja) ili životinjskog (vuna, dlaka) podrijetla (Radauš-Ribarić 1988: 13; Březinova 1997: 125). Pršljenak se stavljao na donji kraj vretena – konusnog štapića na koji se namotavala isukana nit, a svojom težinom – opterećenjem, pomagao je prelji da nit bude što ravnomjernije debljine (Radauš-Ribarić 1988: 14; Březinova 1997: 130). Nit se izvlačila iz sirovinskih vlakana jednom rukom, uz vlaženje i zavrtanje, a istodobno se drugom rukom namatala na vreteno (Eckhel 1988: 27; Březinova 1997: 138). Tako pripremljena nit bila je spremna za daljnju obradu, odnosno pranje, bojenje i tkanje.<sup>3</sup>

Pršljenci u grobovima mogu se tumačiti dvojako; prvo i osnovno tumačenje je obilježavanje spola i društvenog položaja u privredi naselja za određenu skupinu žitelja (žene), a druga je poveznica s mitološkom vezom tkalja, života i smrti. Tako vreteno grčkih Parki simbolizira smrt, dok vreteno samo po sebi simbolizira zakon vječnog povratka. Sva pomagala u procesu tkanja simbol su sudbine; predilje i tkalje do u beskraj otvaraju i zatvaraju individualne, povijesne i kozmičke cikluse. Preslica i vreteno simboli su kućnih vještina i spretnosti ruku. Nit je simbol veze; žena koja izrađuje nit radi stvaralačko djelo (Chavalier, Gheerbrant 1983: 432, 704–705, 767). U narodnoj predaji nit je služila kao šifra ili kod, kako povijesna tako i etnološka. Od niti se radilo platno koje je čovjeka pratilo od rođenja (kada je novorođenče zamotano u čisto platno) do smrti (umatanje pokojnika u platno ili stavljanje platna preko pokojnika u kovčegu) (Rihtman-Auguštin 1988: 11–12).

Pršljenci se iznimno rijetko susreću u grobovima muškaraca, a relativno češće u grobovima žena i, ponekad, djece. Stoga nalaz pršljenka u grobu u arheološkom kontekstu simbolizira ukop ženske individue, koja ovim prilogom potvrđuje i svoj status unutar naselja, a to je privređivanje, odnosno izrada tkanine. Ovaj oblik privređivanja je upravo kroz nalaze pršljenaka iz grobova najbolje dokumentiran (Kovačević 1977: 191). Prilaganje pršljenaka u grobove nakon smrti vlasnice sugerira i da je riječ o predmetu koji se nije nasljeđivao, a u slučaju prilaganja u grobove mlađe djece postoje tumačenja da je riječ o igračkama (tipa zvrk), kao i mogućnost da majka poklanja umrlom djetetu nešto svoje.

## PRŠLJENCI IZ NUŠTRA

U avarodobnim ukopima na položaju Nuštar – dvorac nađeno je ukupno 36 pršljenaka za vreteno, koji potječu iz 34 groba.<sup>4</sup> Od navedenog broja svega su tri izrađena od olova, dok su preostali izrađeni od gline.

Najveći broj pršljenaka, njih 22, potječe iz grobova žena; sedam pršljenaka nađeno je u grobovima odraslih osoba kojima zbog loše očuvanosti osteološkog materijala nije moguće odrediti spol, u grobovima djece nađena su četiri pršljenka, a po jedan u grobu muškarca, grobu bez osteološkog materijala i iz izbačene zemlje. Prema rezultatima antropološke analize pršljenci se najčešće nalaze u grobovima žena zrele dobi (35–50 godina starosti), ukupno 11

3 Podaci preuzeti s mrežne stranice <http://narodni.net/pređenje-tkanje-svakodnevn-posao-nasih-baka/> (13. 11. 2013.); A. Popić: Pređenje i tkanje svakodnevn posao naših baka.

4 U jednom grobu nađena su dva primjerka, dok jedan potječe iz izbačene zemlje, i iako se može dovesti u vezu s jednim grobom, ipak se vodi kao slučajni nalaz.

were also made of stone, bone, metal and secondarily used fragments of pottery vessels. Spindle whorls are used in the process of making manual skirts from yarn, which origin can be a plant (flax, hemp) or animal (wool, hair) (Radauš-Ribarić 1988: 13; Březinova 1997: 125). Spindle whorls are placed on the lower end of the spindle - tapered sticks so that hauling drawn thread, and its weight - load - helped overflow thread to be of uniform thickness (Radauš-Ribarić 1988: 14; Březinova 1997: 130). Thread is pulled out from the raw fiber with one hand by wetting and rotating, while the other hand winds it up on the spindle (Eckhel 1988: 27; Březinova 1997: 138). Such made thread was ready for further processing (washing, dyeing and weaving).<sup>3</sup>

A spindle whorl found in a grave can be interpreted in two ways; the first and foremost interpretation is the marking of gender and social status in the economy of the village for a certain group of residents (women), and the second is a link with the mythological connection of weavers, life and death. Thus, the spindle of Greek Parka's symbolizes death, while the spindle itself symbolizes the eternal law of return. All devices used in the process of weaving are a symbol of fate; weavers indefinitely open and close individual, historical and cosmic cycles. Distaff and spindle are symbols of house skills and manual dexterity. Thread is a connection icon; the woman who makes the thread is doing some creative work (Chavalier, Gheerbrant 1983: 432, 704–705, 767). In folk legends a thread is used as password or code, both historical and ethnological. A thread was used to produce a cloth that followed a man from birth (when a newborn is wrapped in a clean cloth) to death (wrapping deceased into cloth or placing cloth over the chest) (Rihtman-Auguštin, 1988: 11–12).

Spindle whorls are very rarely found in male graves, and relatively more frequently in the graves of women, and sometimes children. Therefore, finding a spindle whorl in a grave symbolizes the burial of female individual, which confirms her status within the village, and her livelihood, making fabrics. This production mode is often represented – and best documented – by finding spindle whorls in graves (Kovačević 1977: 191). Offering of spindle whorls in the graves after the death of the owner suggests that this is an item that is not inherited, and when found in the graves of young children interpretation comes to toys (top type), as well as to the possibility that a mother gives her child something of her own.

## SPINDLE WHORLS FROM NUŠTAR

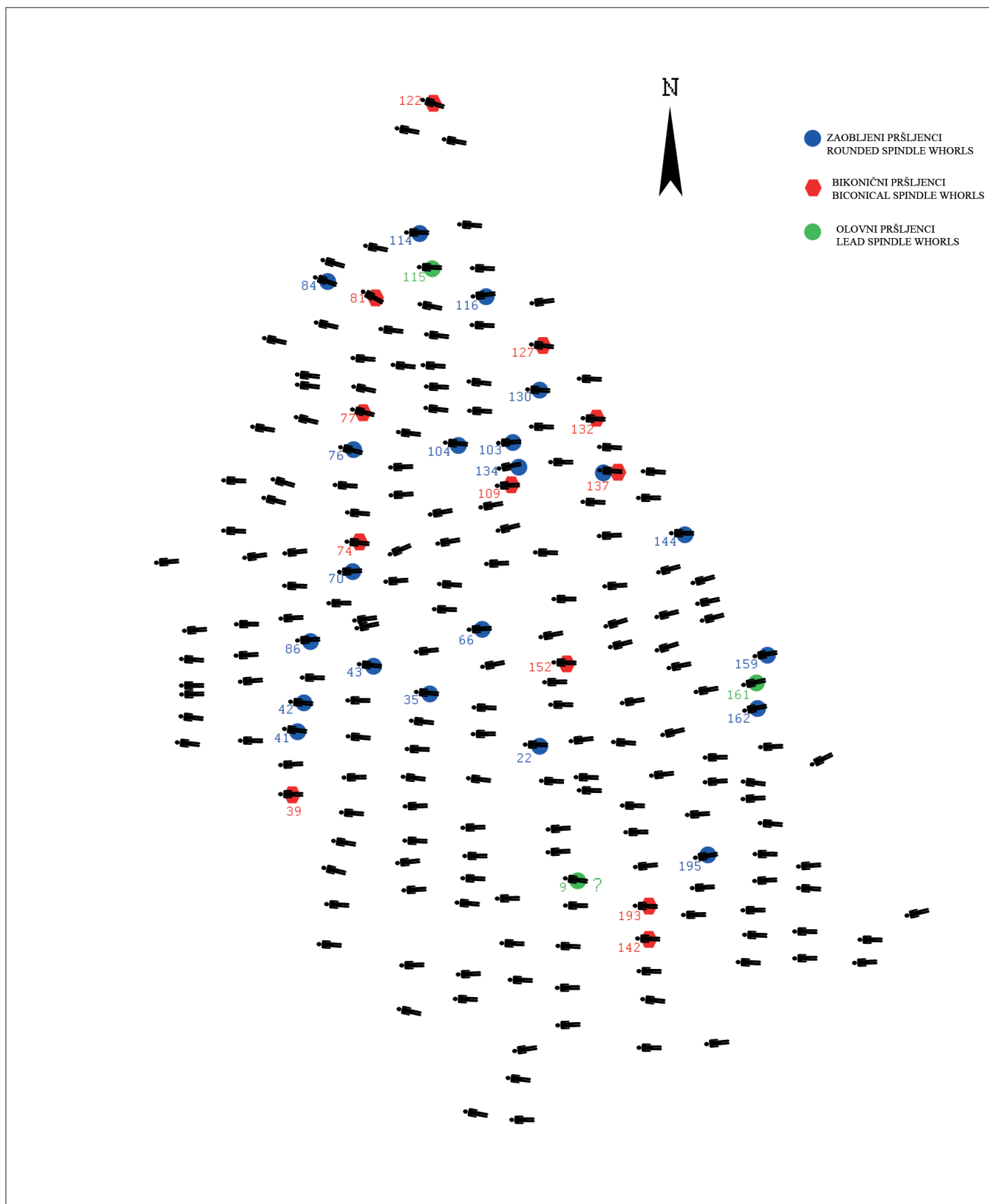
In Avar period burials at Nuštar/Dvorac site a total of 36 spindle whorls were found; they come from 34 graves.<sup>4</sup>

Only 3 pieces are made of lead, while the rest is made from clay.

The largest number of spindle whorls, 22 of them, were found in female graves, 7 spindle whorls were found in the graves of adults, whose sex is not possible to determine due to poor preservation of skeletal material, 4 spindle whorls

3 Data taken from <http://narodni.net/pređenje-tkanje-svakodnevn-posao-nasih-baka/> (accessed on 13th November 2013).

4 Two specimens were found in a single grave, and one comes from grave backfill; it can be related to one of the graves, but is listed as a stray find.



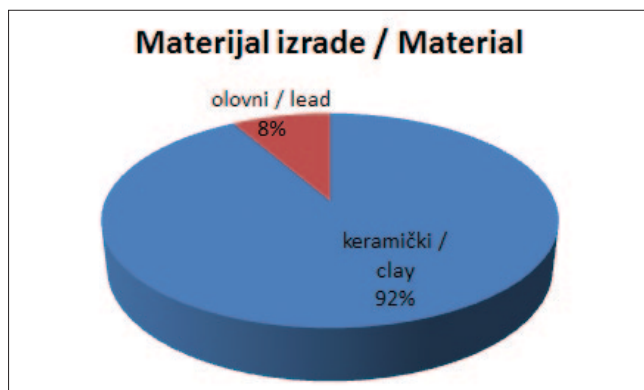
Sl. 1 Tlocrt groblja u Nuštru s ucrtanim pozicijama nalaza pršljenaka (izradila: A. Rapan Papeša).

Fig. 1 Ground plan of the cemetery in Nuštar with marked positions of spindle whorls findings (drawing: A. Rapan Papeša).

primjeraka. Gotovo je upola manje pršljenaka, šest komada, nađeno u grobovima mlađih žena (20–35 godina starosti). Iz grobova odraslih žena neutvrđene starosti potječu tri, a iz grobova odraslih osoba neodrediva spola sedam pršljenaka.

were found in children graves, 1 in male grave, 1 in a grave without osteological material and 1 in thrown soil. According to the anthropological analyses spindle whorls are most commonly found in graves of females in mature age





Graf 1 Pršljenici iz Nuštra – zastupljenost materijala izrade (izradi-  
la: A. Rapan Papeša)

Chart 1 Spindle whorls from Nuštra – representation of materials  
(drawing: A. Rapan Papeša)

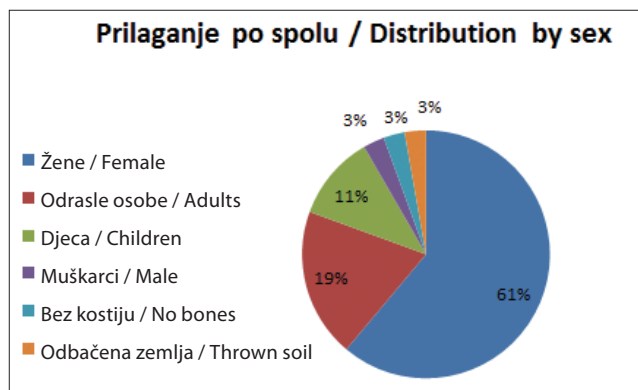
Po dva pršljenka potječu iz grobova starijih žena (starije od 50 godina) i djeteta starosti od 15 do 20 godina. Po jedan primjerak zatečen je u grobovima djece (starosti od 5 do 10 i od 10 do 15 godina), muškarca (20–35 godina) i grobu bez sačuvana osteološka materijala.

Iz zapune grobova potječe ukupno 10 pršljenaka koji imaju ponajprije tipološko i statističko značenje. U tri slučaja, a zbog loše očuvanosti osteološkog materijala, pršljenici su nađeni na sredini ili uz rub rake, što ipak sugerira da su polagani u predjelu zdjelice i/ili natkoljenice. Samo tri primjerka su nađena unutar zdjelčnih kostiju, a dva ispod zdjelčnih kostiju, što bi sugeriralo nošenje pršljenka zataknutog o pojasu ili u džepu (sl. 2: a, b); u ovim grobnim cjelinama, osim u jednoj, nisu nađeni materijalni dokazi postojanja remena i/ili torbica (pređice, okovi).<sup>5</sup> Ako pršljenici nisu nošeni u džepovima, možemo pretpostaviti da je umjesto remena korišten širi komad tkanine, a koji je imao funkciju pojasa, za koji su se mogli zataknuti manji predmeti. Pršljenici pronađeni uz natkoljenične kosti (9 komada) i koljena (4 komada) vjerojatno su na vrpici visjeli s remena (sl. 2: c). To je uobičajen način nošenja pršljenaka i drugih uporabnih predmeta u ranom srednjem vijeku (Vida 2000: 370), što u šest slučajeva indirektno potvrđuju i nalazi željeznih pređica i brončanih karika. Iako je ovakav način nošenja tipičan za germanski kulturni krug (ponajprije gepidski), ali i ranoavarodobni (Dobos 2012: 51), očito se susreće i u kasnoavarodobnim grobovima. Naravno da postoji mogućnost nošenja u torbicama. Međutim, nisu nađeni okovi koji bi potvrdili postojanje torbica. Od navedenih mjesta pronalaska odudara jedan slučaj u kojem je pršljenak položen na lijevo rame pokojnika, koji je prema antropološkim analizama mlađi muškarac; možemo pretpostaviti da je on pršljenak nosio kao perlu na uzici ili vrpici obješenoj oko vrata (sl. 2: d).

Pršljenici položeni na podlaktice, prste ruku ili u blizini šake (4 komada) indirektno su dokaz bavljenja pokojnice tkanjem, i možemo ih smatrati grobnim prilogom u pravom smislu te riječi.

Zanimljiv je i podatak da je ukupno 11 pršljenaka nađeno

<sup>5</sup> Iako arheološki ovakvu pretpostavku ne možemo dokazati, smatram da je ne bismo smjeli u potpunosti odbaciti, pogotovo u svjetlu činjenice da nemamo materijalni dokaz o drugačijem nošenju. Ponekad su najjednostavnija rješenja jedini mogući izlaz.



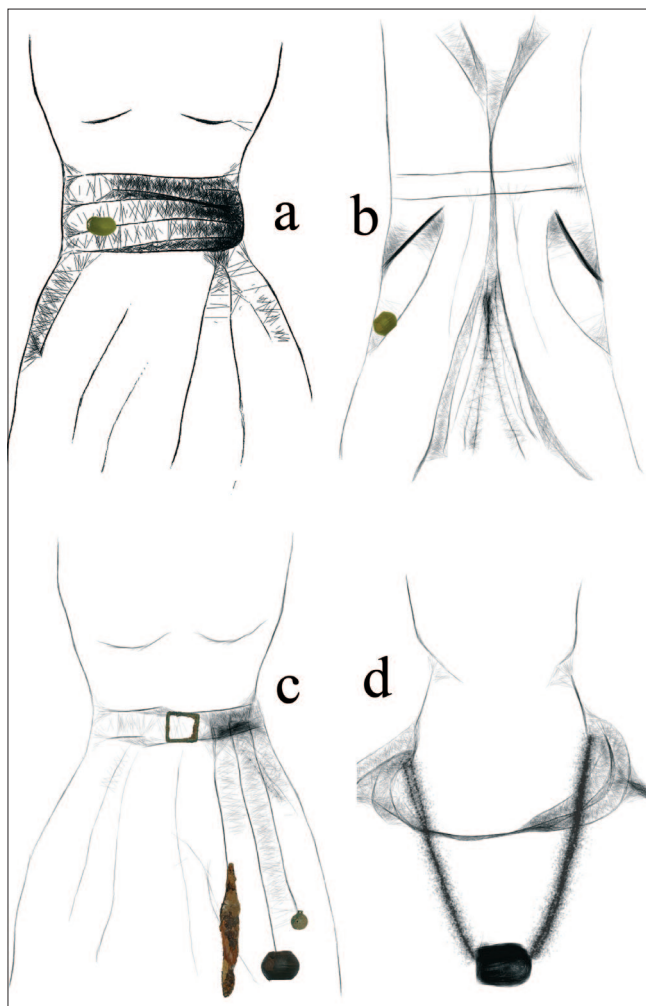
Graf 2 Zastupljenost prilaganja pršljenaka u odnosu na spol (izradi-  
dila: A. Rapan Papeša)

Chart 2 Distribution by sex (drawing: A. Rapan Papeša)

(35–50 years old), a total of 11 specimens. Nearly half less, 6 examples were found in younger female (20–35 years old) graves. From graves of adult females of indeterminate age come 3 spindle whorls and 7 specimens come from graves of adults of indeterminate sex. Two spindle whorls originate from older female (older than 50 years) graves, as well as 2 found in older child (15–20 years) grave. One specimen each originates from children graves (aged 5–10 and 10–15 years), men (20–35 years) and from a grave without preserved osteological material.

A total of 10 pieces originate from the grave fill and they have primarily typological and statistical significance. Because of poor preservation of the skeletal material in 3 cases spindle whorls were found in the middle or at the edge of the grave pit, which, however, suggests that they were placed in the pelvic and/or thigh area. Only 3 pieces were found inside the pelvic bones and two below the pelvic bones, which would suggest wearing of spindle whorls tucked into the belt or in a pocket (Fig. 2: a, b); except for one in these graves no physical evidence of the existence of belts and/or purse (buckles, hinges) were found.<sup>5</sup> If the spindle whorls were not carried in pockets, we can assume that instead of belt a wider piece of cloth, which had the function of the belt, was used; in such cloth one could tuck smaller items in. Spindle whorls found near the thighbone (9 pieces) and knee (4 pieces) were probably hanging on a ribbon from the belt (Fig. 2: c). This is a common way of carrying spindle whorls and other usable items in the Early Middle Ages (Vida 2000: 370) and is in 6 cases indirectly confirmed by the iron and bronze belt buckles and hoops. Although this way of wearing is typical for Germans (primarily Gepids) and in the Early Avar period (Dobos 2012: 51) it is also encountered in the Late Avar period. Of course there is also the possibility of carrying spindle whorls in bags. However, no fittings that would confirm this were found. The only exception to these usual places is the one case in which the spindle whorl had been placed on the left shoulder of the deceased, who, according to anthropological analyses was

<sup>5</sup> Although such an assumption cannot be proved archeologically I believe that we should not completely discard such proposal, especially in the light of the fact that we have no solid proof of different wearing. Sometimes the simplest solutions are the only way out.



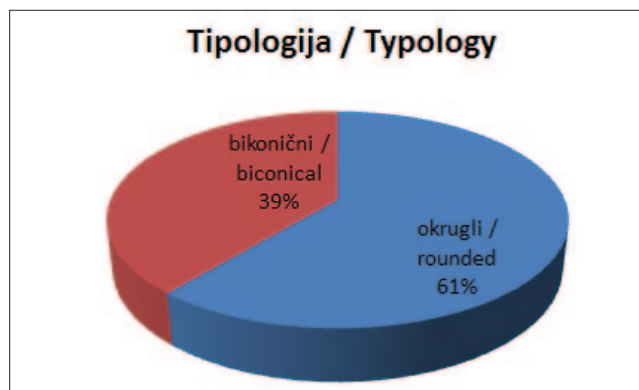
Sl. 2 Prijedlog rekonstrukcije nošenja pršljenaka (izradila: A. Rapan Papeša)

Fig. 2 Reconstruction of spindle whorls wearing (drawing: A. Rapan Papeša)

s desne strane pokojnika, a 10 s lijeve strane, neovisno o spolu i dobi pokojnika. Iako je teško reći je li ovdje riječ o slučajnosti ili o određenom grobnom ritualu, možda čak možemo pretpostaviti da je riječ o uporabi desne i lijeve ruke, što je također zanimljiv podatak. Naime, sukanje prediva desnom ili lijevom rukom rezultira različitim tipom prediva (Krasnik 2009: 71).

Keramičke pršljenke iz Nuštra po obliku možemo podijeliti na dvije glavne skupine: bikonične i okrugle.

Bikoničnih pršljenaka nađeno je ukupno 14 komada, od čega su dva olovna, a preostalih 12 su keramički. Unutar ove skupine tri su primjerka blago bikonična, dok je kod preostalih bikonitet izrazito naglašen. Kod svih primjeraka bikonitet se nalazi na sredini visine pršljenka, odnosno konusi su simetrični. Samo su četiri primjerka ukrašena; kod tri primjerka riječ je o plitko urezanim nizovima vodoravnih crta na oba konusa, dok je preostali primjerak bogato ukrašen trostrukim urezanim cik-cak crtama na oba konusa, te ravnim crtama uz rub i po sredini. Potonji je odavno u literaturi definiran kao tipičan kasnoavardobni nalaz (Böhme 1965: 8, 31, 35). Bikonični pršljenki nalaze su



Graf 3 Zastupljenost tipoloških oblika (izradila: A. Rapan Papeša)  
Chart 3 Typology (drawing: A. Rapan Papeša)

a younger man; we can assume that he had worn the spindle whorl as a bead on a string or ribbon hung around his neck (Fig. 2: d).

Spindle whorls placed on the forearm, hand, fingers or near the arm (4 pieces), are indirect evidence that the deceased engaged in weaving and can be regarded as a grave good in the true sense of the word.

It is interesting that a total of 11 spindle whorls were found on the right side of the deceased, and 10 on the left side, independent of sex and age of the deceased. Although it is difficult to say whether this is accidental or a specific burial rite, perhaps we could assume that it indicates the using of right and left hands, which is also an interesting fact. The twisting of a yarn with right or left hand results in different types of yarn (Krasnik 2009: 71).

Clay spindle whorls from Nuštar can be divided into two main groups by shape: biconical and round.

A total of 14 biconical spindle whorls have been found, two of which are made of lead, and the remaining 12 are made of clay. Within this group 3 pieces are slightly biconical, while in the remaining biconcavity is especially stressed. The biconical break in all specimens is located exactly at mid-height of the spindle whorl and cones are symmetrical. Only 4 pieces are decorated; 3 pieces carry a series of shallow incised horizontal lines, while the remaining one is richly decorated with triple zigzag lines on both cones and straight lines along the edge and in the middle. The latter has long been defined as typical for Late Avar Period (Böhme 1965: 8, 31, 35). Biconical spindle whorls were found in graves that are generally poorly equipped,<sup>6</sup> and only in 3 cases we can speak of richly furnished graves. Preliminary insight into other (unpreserved) finds dates this group of spindle whorls in the last quarter of the eighth and the beginning of the ninth century. Biconical spindle whorls were found in female, adult, male and children graves.

A total of 22 round spindle whorls have been found, out of which 1 is made of lead and the rest are made of clay. Within this group we can extract several sub-groups: flat, grooved and curved (D-shaped cross-section). Only 2 pie-

<sup>6</sup> Those are mainly pots (13) and earrings (18), less frequently beads (6), buckles (5), knives (5) and bracelets (8)

u grobovima koji su uglavnom siromašnije opremljeni,<sup>6</sup> dok se samo u tri slučaja može govoriti o bogatije opremljenim grobovima. Preliminarni uvid u (nekonzervirane) nalaze datira ovu skupinu predmeta u posljednju četvrtinu 8. i početak 9. stoljeća. Bikonični pršljenici nalaze se u grobovima žena, odraslih osoba, muškarca i djece.

Okruglih pršljenaka nađeno je ukupno 22, od čega je jedan olovan, a preostali su keramički. Unutar ove skupine možemo izdvojiti nekoliko podgrupa: plosnati (diskoidni), kanelirani i zaobljeni (presjeka u obliku slova D). Plosnatim primjercima pršljenaka pripadaju samo dva primjerka, jedan keramički i jedan olovni; kaneliranih je ukupno dva komada, oba keramička, dok preostalih 18 primjeraka pripada jednostavnim zaobljenim oblicima, te su svi keramički. Ukrašenost u vidu urezanih vodoravnih crta nalazimo samo kod zaobljenih oblika, i to u 11 slučajeva. Ukrašenost pokriva cijelu površinu, ili se javlja na najširem dijelu, ili u samo jednoj polovici pršljenka. Okrugli pršljenici nalaze se uglavnom u siromašnije opremljenim grobovima,<sup>7</sup> dok se u samo tri slučaja javlja u izrazito bogato opremljenim grobovima. Preliminarni uvid u (nekonzervirane) nalaze datira ovu skupinu predmeta u drugu polovinu 8. i početak 9. stoljeća. Okrugli pršljenici nalaze se u grobovima žena, odraslih osoba i djece.

Najveći broj keramičkih pršljenaka izrađen je od kvalitetne gline, dobro pročišćene i s dodatkom pijeska radi veće čvrstoće. Isto tako su kvalitetno i dobro pečeni, a poneki ukrašeni primjerci pokazuju sličnosti s kvalitetno izrađenim keramičkim loncima iz grobova.

Kod dosta nuštarskih primjeraka, na pršljencima su vidljivi tragovi izlizanosti i dugotrajne uporabe, a na ponekima i stara oštećenja; s velikom sigurnošću možemo tvrditi da je riječ o predmetima koji su bili u uporabi, te nisu samo simbolično prilagani u grobove.

Iznimno je značajan nalaz keramičkoga bikoničnog i okruglog pršljenka u grobu 137, što sugerira da su korišteni istodobno i da nema veće kronološke razlike u ovim oblicima.

Olovni pršljenici nađeni su u dva bogato opremljena ženska groba, dok je treći pronađen detektorom u izbačenoj zemlji i vjerojatno pripada bogato opremljenom grobu 9. U sva tri navedena ukopa nađene su i dvojne brončane spojke koje grobne cjeline datiraju u kraj 8. stoljeća.

Dva primjerka su bikonični pršljenici dok je treći plosnat, i svi oni imitiraju keramičke uzore. Bikonični olovni pršljenici svojom se težinom uklapaju u prosjek koji je vidljiv iz težine keramičkih pršljenaka, dok je plosnati pršljenak gotovo duplo teži od prosjeka. S obzirom na činjenicu da potječu iz reda najluksuznije opremljenih ženskih grobova možemo pretpostaviti da je riječ o statusnom obilježju, iako je za očekivati, i više nego realna, svakodnevna uporaba ovih predmeta.

Prilikom obrade nuštarskih pršljenaka izmjerena je i težina pojedinih primjeraka. Za konačne zaključke korišteni su samo cjelovito sačuvani primjerci. Ukupna prosječna težina svih

ces belong to flat spindle whorls, one made of lead and one made of clay; also 2 pieces are grooved, both made of clay, while the remaining 18 pieces belong to simple rounded shapes, and all of them are made of clay. The decoration in the form of incised horizontal lines can be seen only by curved shapes, in 11 cases. The decoration may cover the whole surface, or occur at the widest part, or only on a half of the spindle whorl. Round spindle whorls were found mainly in the poorly equipped graves,<sup>7</sup> while in only 3 cases we can speak about very richly furnished graves. Preliminary insight into the (unpreserved) finds is dating this group of spindle whorls in the second half of the 8<sup>th</sup> and the beginning of the 9<sup>th</sup> century. Round spindle whorls were found in female, adult and children graves.

The largest number of found spindle whorls are made of high-quality well-refined clay with the addition of sand for maximum hardness. They are of high quality and well-baked, and some decorated pieces show similarities with well-made ceramic pots from graves.

Plenty of spindle whorls found in Nuštar show traces of wear and usage over a long time period, and combined with some old damages, with great certainty, we can say that these objects were in use, and not just a symbolical grave good.

Finding of both biconical and rounded clay spindle whorl in grave 137 is of extreme importance; hence it suggests that they were used at the same time and that there is no particular chronological difference in these forms.

Lead spindle whorls were found in 2 richly furnished female graves, while the third was found by a detector in thrown soil, and it probably also belongs to a richly furnished female grave. In all mentioned burials bronze breast clasps were found, which date them to late 8<sup>th</sup> century.

Two lead spindle whorls are biconical while the third is discoid and they all imitate clay models. The weight of biconical lead spindle whorls fits into clay spindle whorls average weight, while the discoid one is almost twice as heavy than average. Due to the fact that they originate from the rank of most luxurious graves we can assume that they are status characteristic, although the everyday use of these items is to be expected.

When processing spindle whorls from Nuštar the weight of each item was measured. We have used only completely preserved specimens for final conclusions. The average weight of all fully preserved spindle whorls is 22.76 g; however this data can be further analyzed. Due to the small number of specimens, grooved and flat discoid spindle whorls will be excluded from further analyses. Full-preserved biconical clay spindle whorls can be divided in two groups according to average weight; those with average weight of 16.20 g (5 specimen) and others with average weight of 22.71 g (6 specimen). One specimen which is preserved in one half weighing 11.31 g can be joined to this group, as well as two lead biconical spindle whorls which weight little more than 26 g. Completely preserved round clay spindle whorls of D-section can be divided into 4 groups: 3 speci-

6 Riječ je o uglavnom loncima (13) i naušnicama (18), rjeđe perlama ogrlica (6), predicama (5), noževima (5) i narukvicama (8).

7 Riječ je o loncima (22), naušnicama (30), noževima (13) i perlama ogrlica (10), rjeđe narukvicama (6) i predicama (6).

7 Those are mainly pots (22), earrings (30), knives (13) and beads (10), less frequently buckles (6) and bracelets (6)



cjelovito sačuvanih pršljenaka iznosi 22,76 g; međutim, ovaj se podatak može još dodatno raščlaniti. Zbog malog broja primjeraka iz daljnje analize izuzeti su plosnati i kanelirani pršljenci. Keramičke cjelovito očuvane bikonične pršljenke možemo po težini podijeliti u dvije skupine, koje imaju prosječnu težinu od 16,20 g (5 komada) i prosječnu težinu od 22,71 g (6 komada), a ovoj skupini mogli bismo priključiti i pršljenak kojem je sačuvana polovina koja teži 11,31 g. Dva olovna bikonična pršljenka teže malo više od 26 g, te se također mogu uklopiti u ovu sliku. Keramičke cjelovito očuvane okrugle pršljenke D-presjeka po težini možemo podijeliti u četiri grupe: s tri primjerka zastupljena je prosječna težina od 13,26 g (u ovu skupinu spadala bi još dva necjelovito očuvana primjerka), sa šest primjeraka prosječna težina od 20,12 g, s tri primjerka prosječna težina od 28,28 g (vjerojatno još jedan djelomično sačuvan primjerak), i s dva primjerka prosječna težina od 34,36 g (ovoj skupini možemo pribrojiti i jedan kanelirani pršljenak težine 35,14 g). Kakvi se zaključci mogu izvući iz ovih podataka? Prije svega, možemo vidjeti razliku između težina bikoničnih i okruglih pršljenaka, ali i određenu uniformnost u težinama. Kako je težina direktno vezana uz opterećenje, nameće se pitanje jesu li ove razlike namjerne, odnosno služi li određena težina pršljenaka za izradu specifične debljine niti i/ili ovisi i o sirovini (lan, kudjelja, vuna, dlake) koja je korištena. Za konačnu potvrdu ovih pretpostavki nužno je napraviti arheološki eksperiment kojim bismo zasigurno riješili barem dio nedoumica.

Što se tiče dimenzija samih pršljenaka, njihov promjer kreće se u rasponu od 22 do 35 mm, ali najveći broj primjeraka ima promjer u rasponu od 27 do 33 mm.

Promjer otvora za nasad na konusni štapić (rupe) kreće se u rasponu od 7 do 12 mm, ali najučestaliji su otvori promjera od 9 do 10 mm.

Visina pršljenaka kreće se u rasponu od 16 do 34 mm, a najzastupljenije su visine od 18, 19 i 22 mm.

Bikonični keramički pršljenci uglavnom su većih dimenzija (promjer 29–35 mm, otvor promjera 8–12 mm, visina 17–24 mm); osim jednoga keramičkog nešto su manjih dimenzija i bikonični olovni pršljenci (promjer 19–22 mm, otvor 9 mm, visina 15 mm). Okrugli pršljenci sličnih su dimenzija kao i bikonični (promjer 28–34 mm, otvor promjera 9–11 mm, visina 21–23 mm), međutim u ovoj skupini postoje i oni manjih (promjer 22–30 mm, otvor promjera 8–12 mm, visina 16–25 mm) i većih dimenzija (promjer 32–34 mm, otvor promjera 10 mm, visina 25–34 mm).

## IZDOJENI NALAZI

Nalazi pršljenaka u grobovima u Nuštru uklapaju se u poznatu sliku o uporabi i izgledu ovakvih predmeta u avarskom razdoblju (Mrkobrad 1980: 104, T. CLI: 2–4, 11–18).

S obzirom na činjenicu da se većina nuštarskih pršljenaka uklapa u sliku koja nam je poznata iz publikacija (kasno) avarodobnih lokaliteta diljem karpatske kotline na ovom mjestu više će se pozornosti posvetiti primjerima koji su neuobičajeni i/ili se izdvajaju iz uobičajene slike.

Jedna od značajnijih karakteristika groblja u Nuštru su tri olovna pršljenka, sva tri otkrivena u bogatijim ženskim

mens have an average weight of 13.26 g (2 incompletely preserved specimens can be added to this group), 6 specimens have an average weight of 20.12 g, 3 specimens have an average weight of 28.28 g (probably one partially preserved specimen belongs to this group) and 2 specimens have an average weight of 34.36 g (one grooved spindle whorl with weight of 35.14 g could be joined to this group). What kind of conclusions can be drawn from this data? Primarily we can see the difference between the weight of biconical and round spindle whorls and secondarily certain uniformity in weights. As the weight is directly related to the load, a question arises whether this difference was intentional, meaning that specific weight of spindle whorl was used for producing specific thickness and/or it depended on raw materials (flax, hemp, wool, hair) that were used? For final confirmation of these assumptions it is necessary to make an archaeological experiment which could solve at least a part of the doubts.

As for the dimensions of spindle whorls, their diameter ranges from 22 to 35 mm, but the largest number of them has a diameter between 27 and 33 mm.

The diameter of the hole for the conical stick is in the range 7–12 mm, but the most common diameter of the hole is 9–10 mm.

Spindle whorls height ranges from 16 to 34 mm, but the most common height is 18, 19 and 22 mm.

Biconical spindle whorls made of clay are generally larger in size than average (diameter 29–35 mm, hole diameter 8–12 mm, height 17–24 mm), except for one made of clay and two made of lead (diameter 19–22 mm, hole diameter 9 mm and height 15 mm). Round spindle whorls are similar by size to biconical ones (diameter 28–34 mm, hole diameter 9–11 mm, height 21–23 mm), but in this group there are specimens smaller than average (diameter 22–30 mm, hole diameter 8–12 mm, height 16–25 mm), as well as specimens larger than average (diameter 32–34 mm, hole diameter 10 mm, height 25–34 mm).

## SELECTED FINDS

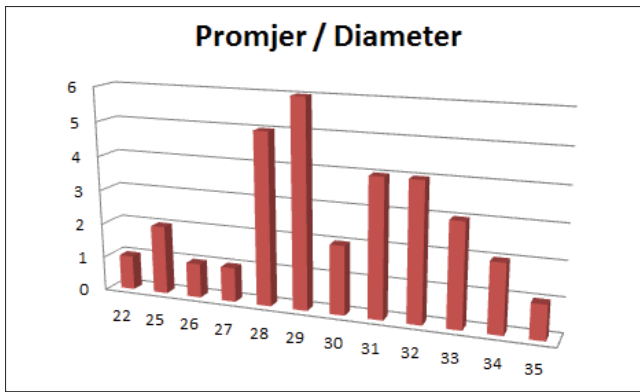
Spindle whorls findings in Avar Period graves in Nuštar fit well into the known picture of the use and appearance of these objects (Mrkobrad 1980: 104, T. CLI: 2–4, 11–18).

Given the fact that most spindle whorls from Nuštar fit the picture that we know from published papers or books about (late) Avar Period sites throughout the Carpathian Basin at this point more attention will be paid to examples that are unusual and/or different from a common image.

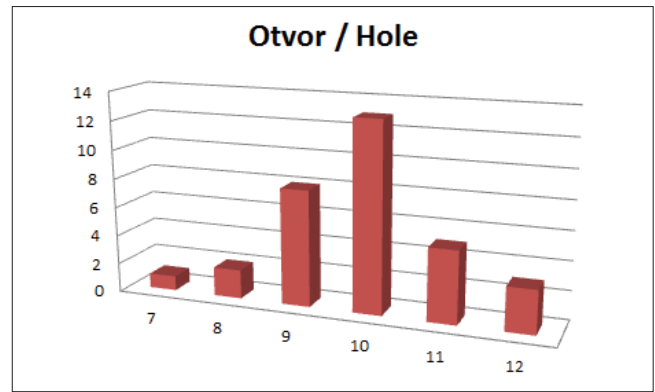
One of the major characteristics of the cemetery in Nuštar are three lead spindle whorls, all 3 discovered in graves of wealthy women with finds of bronze breast clasps<sup>8</sup> with glass inserts dated to the late 8<sup>th</sup> century. The specificity of 2 spindle whorls is their biconcavity, unlike conventional flat lead spindle whorls at other sites. In addition to shape, biconical lead spindle whorls coincide with the mass of ceramic spindle whorls, and represent a status symbol, which may well have been in use.

Lead spindle whorls are not uncommon in Avar Period

<sup>8</sup> Also called agraphs or round buckles.



Graf 4 Promjer pršljenaka (izradila: A. Rapan Papeša)  
Chart4 Spindle whorl diameter (drawing: A. Rapan Papeša)



Graf 5 Promjer otvora za nasad pršljenka (izradila: A. Rapan Papeša)  
Chart5 Diameter of the hole (drawing: A. Rapan Papeša)

grobovima koje nalazima brončanih spojki<sup>8</sup> sa staklenim umetcima datiraju u kraj 8. stoljeća. Posebnost dvaju pršljenaka je i činjenica da su bikoničnog oblika, za razliku od uobičajenih plosnatih olovni pršljenaka na drugim lokalitetima. Osim oblikom, bikonični olovni pršljenci podudaraju se i masom s keramičkim pršljencima, te očito predstavljaju statusni simbol, koji je vrlo vjerojatno bio i u uporabi.

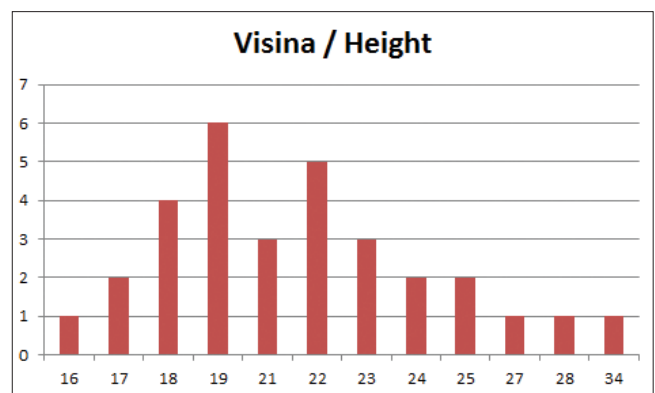
Olovni pršljenci nisu nepoznanica u avarodobnim grobovima, ali su u svakom slučaju slabije zastupljeni od keramičkih. Predmeti od olova obično se tumače kao amuleti (usp. Vida 2002: 180), a postoji i mišljenje da je riječ o simboličnoj zamjeni uporabnih predmeta predmetima od olova (Kovačević 1977: 173). Od bikoničnih puno su uobičajeniji pločasti olovni pršljenci, koji se uglavnom vezuju uz ranoavarsko razdoblje. Tako je na ranoavarskom groblju u Pionirskoj ulici u Bečeju nađen pločasti olovni pršljenak u grobu 27 (Mikić Antić 2012: 18, 40, 45); na kasnoavarskom groblju Szebény I olovni pločasti pršljenak nađen je u grobu 176 koji pripada skupini najstarijih ukopa na ovom lokalitetu datiranih u 7. stoljeće (Garam 1975: 84, 103, 109). Iako se većina nalaza pločastih olovni pršljenaka ranije datira, oni nisu nepoznati ni u kasnoavarskom razdoblju; navodimo primjer iz groba 4 na lokalitetu Stapar – Kneževa bara, datiranom u početak 9. stoljeća (Anđelić 2008: 130–131).

Iznimno je zanimljiv i nalaz keramičkog pršljenka u grobu muškarca. Pršljenak je, zajedno sa željeznim nožem i staklenim perlama (žutim, smeđim i crnim tipa proso), nađen u području lijevog ramena. Mjesto nalaza pršljenka na ramenu nije često, ali nije ni nepoznato.<sup>9</sup> Jedno od objašnjenja za ovaj nalaz je da pršljenak osim kao zamašnjak na vretenu može služiti i kao zamašnjak na štapu za paljenje vatre (Berseneva 2008: 143). Budući da u grobu nisu nađeni kremen i kresivo, ova mogućnost vjerojatno nije točna. Drugo je objašnjenje da je riječ o poklonu/uspomeni na dragu žensku osobu, jer mjesto nalaza sugerira da je predmet nošen o vrpici na vratu.

U neposrednoj blizini groblja u Nuštru nalazi se još jedno kasnoavarsko groblje, Gole njive u Privlaci, na kojem

<sup>8</sup> U literaturi se ovi predmeti nazivaju i agrafama, paftama i okruglim kopčama.

<sup>9</sup> Usporedi: ADAM 2002: 55, lokalitet Békésszentandrás.



Graf 6 Visina pršljenaka (izradila: A. Rapan Papeša)  
Chart6 Spindle whorl height (drawing: A. Rapan Papeša)

graves, but in any case are less represented than ceramic ones. Objects made of lead are usually interpreted as amulets (cf. Vida 2002: 180), and there is an opinion that it is a symbolic exchange of utilitarian objects with objects made of lead (Kovačević 1977: 173). Oblique discoid lead spindle whorls, mainly related to Early Avar period, are much more common than biconical ones. At Early Avar period cemetery in Pionirska ulica in Bečej a discoid lead spindle whorl was found in grave 27 (Mikić Antić 2012: 18, 40, 45); at the cemetery Szebény I a lead discoid spindle whorl was found in grave 176 belonging to the oldest burials at this site dating back to the 7<sup>th</sup> century (Garam 1975: 84, 103, 109). While most of the findings of the discoid lead spindle whorls are of an earlier date they are not unknown even in Late Avar period; Here is an example from the grave 4 at the site Stapar – Kneževa bara, dated to the beginning of the 9<sup>th</sup> century (Anđelić 2008: 130–131).

An interesting finding is a ceramic spindle whorl from a male grave. Spindle whorl, together with an iron knife and glass beads (yellow, brown and black millet type) was found on the left shoulder. Placing spindle whorls on the shoulder is not common, but it is known.<sup>9</sup> One explanation for this find is that spindle whorl except as a flywheel on the spindle may serve as a flywheel on the rod for making fire (Berseneva 2008: 143). The second is that it is a gift / memory of

<sup>9</sup> Compare: ADAM 2002: 55, site Békésszentandrás.

je zabilježen nalaz keramičkog pršljenka u grobu mlađeg muškarca.<sup>10</sup>

Neobičnim oblicima pripada keramički pršljenak s dubokim žljebovima, nađen u grobu odrasle osobe. Osim pršljenka, iz ovog groba potječu još i keramički lonac, željezni nož, perle od staklene paste i dvije brončane karičice.

Keramički pršljenci sa žljebovima nisu nepoznati na avarskim lokalitetima, međutim često su žljebovi izvedeni mnogo pliće i manje primjetno nego kod ovoga našeg primjerka.

Za usporedbu naših nalaza s identičnim primjerima s prostora avarske države koristit ćemo se bazom podataka koju je napravio i objavio P. Stadler 2005. godine.<sup>11</sup> Tom prilikom je pobrojao ukupno 3174 pršljenka sa 298 nalazišta (Stadler 2005: 147) i izdvojio ukupno 68 podtipova pršljenaka; tri tipa rađena su od kosti, jedan od olova, a preostali su keramički. Sukladno ovoj podjeli slijedi:

## ZAKLJUČNA RAZMATRANJA

Kat. br. nos. / Cat. No. Nos.	Tip prema Stadler 2005 / Type according to Stadler 2005:	Broj primjeraka / Number of exem- plars:	Broj lokaliteta na kojima se javlja / Number of sites represented:	Opis / Description
1 – 3	00220	265	95	Blago bikonični, ukrašeni urezanim linijama, srednji / Slightly biconical, decorated with incised lines, middle
4	00310	22	17	Bikonični, ukrašen cik-cak linijama, srednji / Biconical, decorated with zig-zag lines, middle
5	00100	11	5	Bikonični neukrašen, niski / Biconical, undecorated, low
6 – 10	00110	45	25	Bikonični neukrašen, srednji / Biconical, undecorated, middle
11 – 12	00120	7	6	Bikonični neukrašen, visoki / Biconical, undecorated, high
13	00530	462	32	Plosnati neukrašen, niski / Flat, undecorated, low
14	00210	27	14	Kanelirani, niski / Grooved, low
15	00230	54	32	Kanelirani, visoki / Grooved, high
16 – 18	00480	5	5	Zaobljeni, ukrašen urezanim linijama, niski / Rounded, decorated with incised lines, low
19 – 23	00490	28	15	Zaobljeni, ukrašen urezanim linijama, srednji / Rounded, decorated with incised lines, middle
24 – 26	00500	18	15	Zaobljeni, ukrašen urezanim linijama, visoki / Rounded, decorated with incised lines, high
27 – 28	00450	13	11	Zaobljeni neukrašeni, niski / Rounded, undecorated, low
29 – 31	00460	122	46	Zaobljeni neukrašeni, srednji / Rounded, undecorated, middle
32 – 33	00470	42	30	Zaobljeni neukrašeni, visoki / Rounded, undecorated, high
34 – 36	00040	-	-	Olovni / Leaded

Tab. 1 Tipološke analogije (izradila: A. Rapan Papeša)

Tab. 1 *Typological analogies* (edited: A. Rapan Papeša)

<sup>10</sup>Neobjavljeno; uvid u građu koja se čuva u Gradskom muzeju Vinkovci (dalje: GMV), zaključak prema napomeni istraživača.

<sup>11</sup>Stadler P., *Quantitative Studien zur Archäologie der Awaren I*, Wien 2005.

a dear woman, since the location of finds suggests that the spindle whorl was worn on a ribbon at the neck.

At the site Gole njive in Privlaka, in neighbourhood of Nuštar, a spindle whorl was also found in a male grave.<sup>10</sup>

A ceramic spindle whorl of unusual shape, with deep grooves, was found in the tomb of an adult. Besides the spindle whorl, this grave yielded also a ceramic pot, an iron knife, glass beads and 2 bronze rings.

Ceramic spindle whorls with grooves are not unknown at the Avar sites, however, grooves are often much shallower and less noticeable than those on our specimens.

For comparing our finds with identical examples from the area of the Avar state we will be using the database that was made and published by P. Stadler in 2005.<sup>11</sup> He counted 3174 exemplars from 298 sites (Stadler 2005: 147) and singled out a total of 68 subtypes of spindle whorls; 3 types are made of bone, 1 of lead and the rest are made of clay.

In accordance to his classification follows:

<sup>10</sup>Insight into the unpublished material stored in GMV.

<sup>11</sup>Stadler P., *Quantitative Studien zur Archäologie der Awaren I*, Wien 2005.

Nakon preliminarne obrade nalaza iz avarodobnih grobova na lokalitetu Nuštar – dvorac Khuen-Belasi pristupilo se selektivnoj obradi građe. Tako su ovom prilikom izdvojeni keramički i olovni pršljenici za vretena. Ustanovljeno je da nalazi pripadaju kasnoavarskom razdoblju, odnosno vremenu od druge polovine 8. do prve četvrtine 9. stoljeća.

Pregledom dijela nalaza koji potječu s istodobnih i/ili prostorno bliskih avarodobnih lokaliteta može se zaključiti da se nalazi pršljenika iz Nuštra uklapaju u opću sliku, kako tipologijom tako i položajem nalaza u grobu. Ono što Nuštar izdvaja iz većine ovdje spomenutih lokaliteta je kvantiteta nalaza: 52,27% žena pokopano je s pršljenkom, kao i 20% odraslih osoba kojima nije moguće ustanoviti spol (možemo još spomenuti 1,54% muškaraca i 7,16% djece). Uz još neke pokazatelje – antropološku analizu koja upućuje na mirnu, sjedilačku populaciju, kao i arheobotaničke rezultate koji sugeriraju uzgoj žitarica – možemo pretpostaviti da su na lokalitetu Nuštar – dvorac Khuen-Belasi pokapani pripadnici manje seoske zajednice koja je živjela mirnim sjedilačkim životom na marginama velike avarske države. Naime, rezultati antropološke analize ne pokazuju traume na osteološkom materijalu koje bi se mogle interpretirati kao posljedice obrambenih (ili napadačkih) rana. Arheobotaničke analize su provedene doduše na manjem uzorku, ali se uklapaju u novije spoznaje o načinu života u kasnoavarskom vremenu. Novija istraživanja na mađarskim lokalitetima pokazuju da Avari nisu ovisili isključivo o uzgoju životinja, te da su u znatnoj mjeri uzgajali i žitarice (Pető et al. 2012: 181). Većina opisanih žitarica (proso, ječam, pšenica) su nađene i u uzorcima iz Nuštra; uzgoj prosa obično se vezuje uz polusjedilačke populacije, dok uzgoj ječma i pšenice zahtjeva stabilniji, sjedilački život. U konačnici, ni blizina kasnoavarske južne i jugoistočne granice s pretpostavljenim graničnim postajama ne bi trebala utjecati na činjenicu i zaključivanje da je i populacija sahranjena u Nuštru dio jedne takve vojne postrojbe. Uz prethodno navedene argumente važno je napomenuti da za sada<sup>12</sup> u Nuštru nemamo nalaza oružja (izuzev nekoliko strelica od kojih je većina pronađena u dječjim ukopima). U dva ukopa konjanika i konja istražena u Nuštru nisu otkriveni "tipični" elementi konjske opreme (falere, stremeni, žvale), koji se navode kao karakteristični prilikom definiranja granica kasnoavarske države (Garam 1987: 88). Ova pretpostavka može se povezati s grobljima u Otoku i Privlaci (Šmalcelj 1981: 143; 1992: 44), grobljima na kojima su istraženi konjski ukopi s velikim falerama, a nađen je mali broj pršljenika (Otok 1 u 22 groba, Privlaka 4 u 230 grobova). Vojni karakter ovih lokaliteta višekratno se navodi kao primjer groblja pogranične posade (Filipec 2003: 123). Slično mišljenje iznio je i A. Trugly prilikom objave kasnoavarskog groblja u Komarnu, koristeći se nedostatkom pršljenika u grobovima kao argumentom za vojni karakter groblja (Trugly 1987: 291). Iz toga proizlazi da veći broj pršljenika svakako sugerira civilni karakter naselja kojem je groblje pripadalo.

Ono što se uobičajeno pretpostavlja za nalaze ovog tipa

## CONCLUSION

After the preliminary processing of the grave goods from the Avar period cemetery at the site Castle Khuen-Belasi in Nuštar was concluded, we started a selective processing of individual finds. On this occasion clay and lead spindle whorls were singled out. We have established that they belong to Late Avar period, dating from the middle of the 8<sup>th</sup> century up to the first quarter of the 9<sup>th</sup> century.

By reviewing a part of finds that come from concurrent and/or neighbouring Avar period sites it can be concluded that spindle whorls from Nuštar fit into the overall picture with typology and the position of finds in the graves. What makes Nuštar stand out from most of the mentioned sites is the quantity of findings: 52.27% of all women at the site were buried with spindle whorls, as well as 20% of adults whose sex it was not possible to determine (we can also mention 1.54% of male and 7.16% of children buried with spindle whorls). Including some other indicators like anthropological analyses that indicate a peaceful, sedentary population as well as the results of archaeobotany that suggest cultivation of grains, we can assume that at the site Nuštar/ Castle Khuen-Belasi members of smaller rural community have been buried. They lived a peaceful sedentary life at the margins of the large Avar state. The results of anthropological analysis show no trauma to the osteological material that could be interpreted as a consequence of defensive (or offensive) wounds. Although archaeobotanical analyses were made on a rather small sample, they nevertheless fit into the new insights about the way of life in the Late Avar Period. Recent investigations at Hungarian sites show that the Avars did not depend solely on breeding animals and that they have largely grown cereals (Pető et al. 2012: 181). Most of the described cereals (millet, barley, wheat) were found in samples from Nuštar; cultivation of millet is usually linked to semi-sedentary population, while growing barley and wheat demands stable, sedentary life. Ultimately, neither the proximity of Late Avar period southern and south-eastern border with the assumed border stations should not affect the fact and the conclusion that the population buried in Nuštar was part of such a military unit. In addition to the above-mentioned arguments, it is important to note that for the time being<sup>12</sup> no finds of weapons in Nuštar were found (except for a few arrows mainly found in children's burials). In 2 horsemen and horse burials excavated in Nuštar no "typical" elements of horse equipment (phalerae, stirrups, bits) were found, which are listed as typical when defining the boundaries of Late Avar period state (Garam 1987: 88). This presumption may be associated with cemeteries in Otok and Privlaka (Šmalcelj 1981: 143; 1992: 44), the cemeteries where horse burials with large phalerae were explored, and a small number of spindle whorls were found (Otok 1 in 22 graves, Privlaka 4 in 230 graves). The military character of these sites is repeatedly cited as an example of the cemetery of a bordering crew (Filipec 2003: 123). A similar opinion was also put forward by A. Trugly in the publication of the Late Avar Period cemetery in Komarno,

<sup>12</sup> Ne treba smetnuti s uma da groblje nije u potpunosti istraženo.

<sup>12</sup> It should not be forgotten that only a part of the cemetery has been excavated.



potvrđeno je i na našem materijalu, a to je da je najveći broj ukopa s pršljencima ukop žena. Kako ipak veći broj nalaza pripada skupini žena u zreloj dobi, možemo pretpostaviti da je predenje posao kojima se bave žene poslije reproduktivne dobi ili, u slučaju nalaza kod žena mlađe životne dobi, one koje imaju veću djecu. Kod nalaza iz tri dječja groba, jedan u kojem su nađena dva primjerka pripada djetetu starosti od 15 do 20 godina, a po svim drugim prilozima riječ je o ženskoj osobi, možemo izuzeti iz sljedeće pretpostavke: kod mlađeg djeteta vjerojatno je riječ o igrački ili majčinu poklonu, a kod djeteta u dobi od 10 do 15 godina možda možemo pretpostaviti donju granicu početka uporabe pršljenka kao načina privređivanja u društvu. Društveni status očito nije igrao veću ulogu u sudjelovanju u privredi naselja, jer su pršljenci nalaženi u različito opremljenim grobovima, od najsiromašnijih do najbogatijih. Zanimljivo je da jedan drugi predmet, koji se također može vezati uz proizvodnju i izradu tkanine, a riječ je o koštanim iglenicama, kojih je u Nuštru nađeno 8 komada, samo u jednom slučaju potječe iz grobne cjeline u kojoj je nađen i pršljenak; iako su predenje, tkanje i šivanje nepobitno povezani, na osnovi ovog podataka možemo razmišljati o nekom obliku uže specijalizacije unutar privrede naselja.

Nuštar je specifičan i po broju olovnih pršljenaka; iz nama dostupne literature uspjeli smo naći svega četiri nalazišta s olovnim pršljencima, i u svim slučajevima su plosnati. Za razmišljanje ostaje pitanje zašto se baš u Nuštru javljaju u većem broju.

Kao što smo već spomenuli, vjerojatno nema veće kronološke razlike u uporabi okruglih i bikoničnih pršljenaka. Kako je ovaj rad gotovo pionirski na ovu temu, dodatne mikroskopske analize i eksperimentalna arheologija trebale bi, u budućnosti, dati odgovor na pitanje je li oblik pršljenaka uvjetovan načinom uporabe.

## KATALOG:

1. Keramički pršljenak (T. 1: 1)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 32 mm, Ø rupe 11 mm, visina 22 mm, masa 24,20 g  
Mjesto nalaza: Grob 77 (M, 20–35), na lijevom ramenu  
Opis: Blago bikoničan keramički pršljenak rađen od pjeskovite gline s dosta krupnih primjesa, siva boja, ukrašen trima vodoravnim urezanim crtama. Slijepljen od tri ulomka, mali dio nedostaje.  
Terenska oznaka, inventarni broj: PN 701, GMV A5933
2. Keramički pršljenak (T. 1: 2)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 29 mm, Ø rupe 10 mm, visina 19 mm, masa 16,92 g  
Mjesto nalaza: Grob 81 (Ž, 35–50), s vanjske strane lijevog kuka  
Opis: Blago bikoničan keramički pršljenak rađen od pjeskovite gline, smeđa boja, ukrašen vodoravno urezanim crtama. Dosta izraženi tragovi uporabe/

using the lack of spindle whorls in graves as an argument for the military character of the cemetery (Trugly 1987: 291). This means that a larger number of spindle whorls certainly suggest the civilian character of the village to which the cemetery belonged.

What is commonly assumed for this type of finds was confirmed in our study: the largest number of burials with spindle whorls is female. However, since most spindle whorls were found in graves of mature women, we can assume that spinning was a process that women after reproductive age or women with older children dealt with. When looking at finds from children graves we can exclude 1 in which a young woman aged 15–20 years was buried; in case of a younger child spindle whorl was a toy or mother's gift, and by the child aged 10–15 we can assume the lower bound of doing spinning as a way to contribute to the economic mode in this society. Social status apparently did not play a bigger role in the participation in the settlement economy, since we have found spindle whorls in differently furnished graves, from poorest to richest. Interestingly, another item that can be linked to the production and making of fabric—bone needle cases (8 examples found in Nuštar)—was found only once together with a spindle whorl. Based on this data we could assume that a kind of specialisation within the settlement's economy existed.

Nuštar is specific for the number of found lead spindle whorls; from available literature we were able to find only four sites where lead spindle whorls were found, all of them being flat. The question why they appear in Nuštar in such number should remain open.

As we have already mentioned, there is no chronological difference between biconical and rounded spindle whorls. Since this is almost a pioneering paper on this topic, additional microscopic analyses and experimental archaeology should, in future, answer the question whether the shape of spindle whorls was conditioned by usage.

## CATALOGUE:

1. Clay spindle whorl (Pl. 1: 1)  
Material, technique: clay, baking  
Dimensions: Ø 32 mm, Ø hole 11 mm, h. 22 mm, m. 24.20 g  
Grave No: 77 (male, 20–35), on the left shoulder  
Description: Slightly biconical clay spindle whorl made of sandy clay with a lot of big tinge; grey in colour, decorated with three incised horizontal lines. Glued together from three fragments; a small part still missing.  
Field label, inventory number: PN 701, GMV A5933
2. Clay spindle whorl (Pl. 1: 2)  
Material, technique: clay, baking  
Dimensions: Ø 29 mm, Ø hole 10 mm, h. 19 mm, m. 16.92 g  
Grave No: 81 (female, 35–50), on the outer side of the left hip  
Description: Slightly biconical clay spindle whorl made

- izlizanosti. Staro oštećenje.  
Terenska oznaka, inventarni broj: PN 843, GMVk A5935
3. Keramički pršljenak (T. 1: 3)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 28 mm, Ø rupe 11 mm, visina 18 mm, masa 14,59 g  
Mjesto nalaza: Grob 137 (D, 15–20), s vanjske strane desne natkoljenice  
Opis: Blago bikoničan keramički pršljenak rađen od pjeskovite gline, narančasta boja, ukrašen četirima vodoravno urezanim linijama. Dosta izraženi tragovi uporabe/izlizanost.  
Terenska oznaka, inventarni broj: PN 1078, GMVk A5938
4. Keramički pršljenak (T. 1: 4)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 31 mm, Ø rupe 9 mm, visina 19 mm, masa 22,46 g  
Mjesto nalaza: Grob 109 (Ž, odrasla), iz zapune groba  
Opis: Bikonični keramički pršljenak rađen od pjeskovite gline, oker boja, ukrašen četirima vodoravno urezanim linijama, te dvostrukom cik-cak linijom. Dosta izraženi tragovi uporabe/izlizanost.  
Terenska oznaka, inventarni broj: PN 1154, GMVk A5936
5. Keramički pršljenak (T. 1: 5)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 29 mm, Ø rupe 9 mm, visina 17 mm, masa 16,77 g  
Mjesto nalaza: Grob 127 (Ž, odrasla), s vanjske strane lijevog koljena  
Opis: Bikonični keramički pršljenak rađen od pročišćene gline, narančasta boja, neukrašen. Dosta izraženi tragovi uporabe/izlizanost.  
Terenska oznaka, inventarni broj: PN 1041, GMVk A5939
6. Keramički pršljenak (T. 1: 6)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 32 mm, Ø rupe 10 mm, visina 18 mm, masa 11,31 g  
Mjesto nalaza: Grob 39 (odrasla osoba i dvoje djece), s vanjske strane desnog koljena odrasle osobe  
Opis: Bikonični keramički pršljenak rađen od kvalitetne pjeskovite gline, tamnosmeđa boja, neukrašen. Očuvana je polovica pršljenka.  
Terenska oznaka, inventarni broj: PN 174, GMVk A5931
7. Keramički pršljenak (T. 1: 7)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 30 mm, Ø rupe 10 mm, visina 18 mm, masa 17,40 g  
Mjesto nalaza: Grob 74 (Ž, 20–35), iz zapune groba  
Opis: Bikonični keramički pršljenak rađen od pjeskovite gline, svijetlosmeđa boja, neukrašen. Dosta izraženi tragovi uporabe/izlizanost. Slijepljen od dva ulomka.  
Terenska oznaka, inventarni broj: PN 544, GMVk A5932
8. Keramički pršljenak (T. 1: 8)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 22 mm, Ø rupe 8 mm, visina 19 mm, masa 15,30 g  
Mjesto nalaza: Grob 152 (D, 10–15), iz zapune rake
- of sandy clay; brown in colour, decorated with incised horizontal lines. Quite expressed traces of use/frayed. Old damage.  
Field label, inventory number: PN 843, GMVk A5935
3. Clay spindle whorl (Pl. 1: 3)  
Material, technique: clay, baking  
Dimensions: Ø 28 mm, Ø hole 11 mm, h. 18 mm, m. 14.59 g  
Grave No: 137 (child, 15–20), on the outer side of the right upper leg  
Description: Slightly biconical clay spindle whorl made of sandy clay; orange in colour, decorated with four incised horizontal lines. Quite expressed traces of use/frayed.  
Field label, inventory number: PN 1078, GMVk A5938
4. Clay spindle whorl (Pl. 1: 4)  
Material, technique: clay, baking  
Dimensions: Ø 31 mm, Ø hole 9 mm, h. 19 mm, m. 22.46 g  
Grave No: 109 (female, adult), from grave fill  
Description: Biconical clay spindle whorl made of sandy clay; ochre in colour, decorated with four incised horizontal lines and double incised zigzag line. Quite expressed traces of use/frayed.  
Field label, inventory number: PN 1154, GMVk A5936
5. Clay spindle whorl (Pl. 1: 5)  
Material, technique: clay, baking  
Dimensions: Ø 29 mm, Ø hole 9 mm, h. 17 mm, m. 16.77 g  
Grave No: 127 (female, adult), on the outer side of the left knee  
Description: Biconical clay spindle whorl made of purified clay; orange in colour, undecorated. Quite expressed traces of use/frayed.  
Field label, inventory number: PN 1041, GMVk A5939
6. Clay spindle whorl (Pl. 1: 6)  
Material, technique: clay, baking  
Dimensions: Ø 32 mm, Ø hole 10 mm, h. 18 mm, m. 11.31 g  
Grave No: 39 (adult and two children), on the outer side of the adult's right knee  
Description: Biconical clay spindle whorl made of quality sandy clay; dark brown in colour, undecorated. About a half of the spindle whorl is preserved.  
Field label, inventory number: PN 174, GMVk A5931
7. Clay spindle whorl (Pl. 1: 7)  
Material, technique: clay, baking  
Dimensions: Ø 30 mm, Ø hole 10 mm, h. 18 mm, m. 17.40 g  
Grave No: 74 (female, 20–35), from grave fill  
Description: Biconical clay spindle whorl made of sandy clay; light brown in colour, undecorated. Quite expressed traces of use/frayed. Glued from two fragments.  
Field label, inventory number: PN 544, GMVk A5932
8. Clay spindle whorl (Pl. 1: 8)  
Material, technique: clay, baking  
Dimensions: Ø 22 mm, Ø hole 8 mm, h. 19 mm, m. 15.30 g  
Grave No: 152 (child, 10–15), from grave fill

- Opis: Bikonični keramički pršljenak rađen od pjeskovite gline s mnogo krupnih primjesa, narančasta boja, neukrašen.  
Terenska oznaka, inventarni broj: PN 1177, GMV A5941
9. Keramički pršljenak (T. 1: 9)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 35 mm, Ø rupe 12 mm, visina 22 mm, masa 22,72 g  
Mjesto nalaza: Grob 132 (neodrediv), po sredini rake  
Opis: Bikonični keramički pršljenak rađen od loše pročišćene gline s mnogo primjesa, svijetlosmeđa boja, neukrašen. Dosta izraženi tragovi uporabe/izlizanost. Slijepljen od dva ulomka, tragovi starih oštećenja.  
Terenska oznaka, inventarni broj: PN 1025, GMV A5934
10. Keramički pršljenak (T. 1: 10)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 31 mm, Ø rupe 10 mm, visina 22 mm, masa 22,71 g  
Mjesto nalaza: Grob 193 (Ž, 35–50), na lijevoj strani zdjelice  
Opis: Bikonični keramički pršljenak rađen od pjeskovite gline, narančasta boja, neukrašen. Dosta tragova uporabe/izlizanost. Stara oštećenja.  
Terenska oznaka, inventarni broj: PN 1324, GMV A 5942
11. Keramički pršljenak (T. 1: 11)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 28 mm, Ø rupe 10 mm, visina 24 mm, masa 20,81 g  
Mjesto nalaza: Grob 122 (Ž, 20–35), na lijevoj natkoljenici  
Opis: Bikonični keramički pršljenak rađen od pjeskovite gline s krupnim primjesama, siva boja, neukrašen. Slijepljen od tri ulomka.  
Terenska oznaka, inventarni broj: PN 962, GMV A5937
12. Keramički pršljenak (T. 1: 12)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 29 mm, Ø rupe 10 mm, visina 23 mm, masa 23,33 g  
Mjesto nalaza: Grob 142 (Ž, 35–50), iz zapune groba  
Opis: Bikonični keramički pršljenak rađen od pjeskovite gline s dosta primjesa, smeđa boja, neukrašen. Stara oštećenja.  
Terenska oznaka, inventarni broj: PN 1250, GMV A5940
13. Keramički pršljenak (T. 2: 1)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 30 mm, Ø rupe 12 mm, visina 16 mm, masa 10,21 g  
Mjesto nalaza: Grob 114 (Ž, 20–35), iz zapune groba  
Opis: Okrugli plosnati keramički pršljenak rađen od pjeskovite gline s puno primjesa, smeđa boja, neukrašen. Slijepljen od dva ulomka, nedostaje oko četvrtine pršljenka.  
Terenska oznaka, inventarni broj: PN 849, GMV A5943
14. Keramički pršljenak (T. 2: 2)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 29 mm, Ø rupe 9 mm, visina 18 mm, masa 16,84 g.  
Mjesto nalaza: Grob 162 (Ž, 35–50), s vanjske strane
- Description: Biconical clay spindle whorl made of sandy clay with a lot of big tinges; orange in colour, undecorated.  
Field label, inventory number: PN 1177, GMV A5941
9. Clay spindle whorl (Pl. 1: 9)  
Material, technique: clay, baking  
Dimensions: Ø 35 mm, Ø hole 12 mm, h. 22 mm, m. 22.72 g  
Grave No: 132 (indeterminate), in the middle of the grave pit  
Description: Biconical clay spindle whorl made of unpurified clay with a lot of big tinges; light brown in colour, undecorated. Quite expressed traces of use/frayed. Glued from two fragments, traces of old damages.  
Field label, inventory number: PN 1025, GMV A5934
10. Clay spindle whorl (Pl. 1: 10)  
Material, technique: clay, baking  
Dimensions: Ø 31 mm, Ø hole 10 mm, h. 22 mm, m. 22.71 g  
Grave No: 193 (female, 35–50), on the left pelvic bone  
Description: Biconical clay spindle whorl made of sandy clay; orange in colour, undecorated. Quite expressed traces of use/frayed. Traces of old damage.  
Field label, inventory number: PN 1324, GMV A5942
11. Clay spindle whorl (Pl. 1: 11)  
Material, technique: clay, baking  
Dimensions: Ø 28 mm, Ø hole 10 mm, h. 24 mm, m. 20.81 g  
Grave No: 122 (female, 20–35), on the left upper leg  
Description: Biconical clay spindle whorl made of sandy clay with big tinges; grey in colour, undecorated. Glued together from three fragments.  
Field label, inventory number: PN 962, GMV A5937
12. Clay spindle whorl (Pl. 1: 12)  
Material, technique: clay, baking  
Dimensions: Ø 29 mm, Ø hole 10 mm, h. 23 mm, m. 23.33 g  
Grave No: 142 (female, 35–50), from the grave fill  
Description: Biconical clay spindle whorl made of sandy clay with a lot of big tinges; brown in colour, undecorated. Old damages.  
Field label, inventory number: PN 1250, GMV A5940
13. Clay spindle whorl (Pl. 2: 1)  
Material, technique: clay, baking  
Dimensions: Ø 30 mm, Ø hole 12 mm, h. 16 mm, m. 10.21 g  
Grave No: 114 (female, 20–35), from the grave fill  
Description: Rounded clay spindle whorl made of sandy clay with a lot of tinges; brown in colour, undecorated. Glued together from two fragments, about ¼ of the spindle whorl is missing.  
Field label, inventory number: PN 849, GMV A5943
14. Clay spindle whorl (Pl. 2: 2)  
Material, technique: clay, baking  
Dimensions: Ø 29 mm, Ø hole 9 mm, h. 18 mm, m. 16.84 g  
Grave No: 162 (female, 20–35), on the outer side of the left knee  
Description: Rounded clay spindle whorl made of sandy

- lijevog koljena  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, smeđa boja, ukrašen četirima vodoravnim kanelirama. Stara oštećenja.  
 Terenska oznaka, inventarni broj: PN 1230, GMVk A5945
15. Keramički pršljenak (T. 2: 3)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 33 mm, Ø rupe 10 mm, visina 34 mm, masa 35,14 g  
 Mjesto nalaza: Grob 103 (neodrediv, odrasla), na prstima desne ruke  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, smeđa boja, ukrašen četirima dubokim vodoravnim kanelirama. Na nekoliko mjesta stara oštećenja.  
 Terenska oznaka, inventarni broj: PN 831, GMVk A5944
16. Keramički pršljenak (T. 2: 4)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 28 mm, Ø rupe 8 mm, visina 19 mm, masa 14,62 g  
 Mjesto nalaza: Grob 41 (Ž, 20–35), na desnoj podlaktici  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline s malo krupnih primjesa, smeđa boja, ukrašen s osam vodoravno urezanih crta/kanelira. Dosta izraženi tragovi uporabe/izlizanost. Slijepljen od četiri ulomka, jedan manji dio nedostaje.  
 Terenska oznaka, inventarni broj: PN 182, GMVk A5946
17. Keramički pršljenak (T. 2: 5)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 29 mm, Ø rupe 10 mm, visina 20 mm, masa 19,17 g  
 Mjesto nalaza: Grob 76 (Ž, 35–50), nakon dizanja kostura, ispod zdjelice  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, tamnosmeđa boja, ukrašen četirima urezanim vodoravnim crtama. Staro oštećenje.  
 Terenska oznaka, inventarni broj: PN 697, GMVk A5950
18. Keramički pršljenak (T. 2: 6)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 25 mm, Ø rupe 9 mm, visina 19 mm, masa 13,48 g  
 Mjesto nalaza: Grob 84 (Ž, 35–50), s vanjske strane desnog kuka  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, smeđa boja, ukrašen vodoravno urezanim crtama. Dosta izraženi tragovi uporabe/izlizanost.  
 Terenska oznaka, inventarni broj: PN 941, GMVk A5951
19. Keramički pršljenak (T. 2: 7)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 26 mm, Ø rupe 10 mm, visina 19 mm, masa 7,95 g  
 Mjesto nalaza: Grob 159 (nisu sačuvane kosti), iz zapune groba  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, smeđa boja, ukrašen vodoravno urezanim crtama. Slijepljen od dva ulomka, oko polovica nedostaje.  
 Terenska oznaka, inventarni broj: PN 1218, GMVk A5955
20. Keramički pršljenak (T. 2: 8)  
 clay; brown in colour, decorated with four grooves. Old damages.  
 Field label, inventory number: PN 1230, GMVk A5945
15. Clay spindle whorl (Pl. 2: 3)  
 Material, technique: clay, baking  
 Dimensions: Ø 33 mm, Ø hole 10 mm, h. 34 mm, m. 35.14 g  
 Grave No: 103 (adult, indeterminate sex), on the right hand fingers  
 Description: Rounded clay spindle whorl made of sandy clay; brown in colour, decorated with four grooves. Several old damages.  
 Field label, inventory number: PN 831, GMVk A5944
16. Clay spindle whorl (Pl. 2: 4)  
 Material, technique: clay, baking  
 Dimensions: Ø 28 mm, Ø hole 8 mm, h. 19 mm, m. 14.62 g  
 Grave No: 41 (female, 20–35), on the right lower arm  
 Description: Rounded clay spindle whorl made of sandy clay with a lot of big tinges; brown in colour, decorated with eight incised horizontal lines. Quite expressed traces of use/frayed. Glued together from four fragments, one smaller part missing.  
 Field label, inventory number: PN 182, GMVk A5946
17. Clay spindle whorl (Pl. 2: 5)  
 Material, technique: clay, baking  
 Dimensions: Ø 29 mm, Ø hole 10 mm, h. 20 mm, m. 19.17 g  
 Grave No: 76 (female, 35–50), under the pelvis  
 Description: Rounded clay spindle whorl made of sandy clay; dark brown in colour, decorated with four incised horizontal lines. Old damage.  
 Field label, inventory number: PN 697, GMVk A5950
18. Clay spindle whorl (Pl. 2: 6)  
 Material, technique: clay, baking  
 Dimensions: Ø 25 mm, Ø hole 9 mm, h. 19 mm, m. 13.48 g  
 Grave No: 84 (female, 35–50), on the outer side of the right hip  
 Description: Rounded clay spindle whorl made of sandy clay; brown in colour, decorated with incised horizontal lines. Quite expressed traces of use/frayed.  
 Field label, inventory number: PN 941, GMVk A5951
19. Clay spindle whorl (Pl. 2: 7)  
 Material, technique: clay, baking  
 Dimensions: Ø 26 mm, Ø hole 10 mm, h. 19 mm, m. 7.95 g  
 Grave No: 159 (no bones present), from the grave fill  
 Description: Rounded clay spindle whorl made of sandy clay; brown in colour, decorated with incised horizontal lines. Glued together from two pieces, about a half missing.  
 Field label, inventory number: PN 1218, GMVk A5955
20. Clay spindle whorl (Pl. 2: 8)  
 Material, technique: clay, baking  
 Dimensions: Ø 31 mm, Ø hole 11 mm, h. 21 mm, m. 20.80 g  
 Grave No: 195 (female, 35–50), on the outer side of the right hip and on the right lower arm



- Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 31 mm, Ø rupe 11 mm, visina 21 mm, masa 20,80 g  
 Mjesto nalaza: Grob 195 (Ž, 35–50), s vanjske strane desnog kuka, i na desnoj podlaktici  
 Opis: Okrugli keramički pršljenak rađen od nepročišćene gline, smeđa boja, ukrašen vodoravno urezanim crtama. Dosta tragova uporabe/izlisanost. Stara oštećenja.  
 Terenska oznaka, inventarni broj: PN 1406, GMVk A5956
21. Keramički pršljenak (T. 2: 9)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 28 mm, Ø rupe 10 mm, visina 21 mm, masa 18,23 g  
 Mjesto nalaza: Grob 116 (Ž, 50+), nakon dizanja kostura, ispod zdjelice  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, smeđa boja, ukrašen s vodoravno urezanim crtama. Dosta izraženi tragovi uporabe/izlisanost. Slijepljen od dva ulomka.  
 Terenska oznaka, inventarni broj: PN 968, GMVk A5953
22. Keramički pršljenak (T. 2: 10)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 28 mm, Ø rupe 12 mm, visina 22 mm, masa 12,71 g  
 Mjesto nalaza: Grob 130 (Ž, 20–35), s vanjske strane lijeve natkoljenice  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, smeđa boja, ukrašen trima vodoravno urezanim crtama. Slijepljen od četiri ulomka, nedostaje oko četvrtine pršljenka.  
 Terenska oznaka, inventarni broj: PN 1049, GMVk A5952
23. Keramički pršljenak (T. 2: 11)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 29 mm, Ø rupe 9 mm, visina 23 mm, masa 22,05 g  
 Mjesto nalaza: Grob 66 (neodrediv, odrasla), po sredini rake  
 Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, siva boja, ukrašen urezanim vodoravnim crtama vidljivim u tragovima. Dosta izraženi tragovi uporabe/izlisanost.  
 Terenska oznaka, inventarni broj: PN 499, GMVk A5948
24. Keramički pršljenak (T. 2: 12)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 34 mm, Ø rupe 10 mm, visina 25 mm, masa 13,08 g  
 Mjesto nalaza: Grob 70 (neodrediv, odrasla), iz zapune groba  
 Opis: Okrugli keramički pršljenak rađen od gline s dosta krupnih primjesa, smeđa boja, ukrašen u donjoj polovici trima urezanim vodoravnim crtama. Slijepljen od dva ulomka, a sačuvano je nešto malo manje od polovice pršljenka u jako lošem stanju.  
 Terenska oznaka, inventarni broj: PN 487, GMVk A5949
25. Keramički pršljenak (T. 3: 1)  
 Materijal, tehnika izrade: glina, pečenje  
 Dimenzije: Ø 32 mm, Ø rupe 9 mm, visina 25 mm, masa 27,12 g  
 Mjesto nalaza: Grob 86 (Ž, 35–50), iz zapune groba
- Description: Rounded clay spindle whorl made of unpurified clay; brown in colour, decorated with incised horizontal lines. Quite expressed traces of use/frayed. Old damages.  
 Field label, inventory number: PN 1406, GMVk A5956
21. Clay spindle whorl (Pl. 2: 9)  
 Material, technique: clay, baking  
 Dimensions: Ø 28 mm, Ø hole 10 mm, h. 21 mm, m. 18.23 g  
 Grave No: 116 (female, 50+), under the pelvis  
 Description: Rounded clay spindle whorl made of sandy clay; brown in colour, decorated with incised horizontal lines. Quite expressed traces of use/frayed. Glued together from two fragments.  
 Field label, inventory number: PN 968, GMVk A5953
22. Clay spindle whorl (Pl. 2: 10)  
 Material, technique: clay, baking  
 Dimensions: Ø 28 mm, Ø hole 12 mm, h. 22 mm, m. 12.71 g  
 Grave No: 130 (female, 20–35), on the outer side of the left upper leg  
 Description: Rounded clay spindle whorl made of sandy clay; brown in colour, decorated with three incised horizontal lines. Glued together from four fragments, about ¼ is missing.  
 Field label, inventory number: PN 1049, GMVk A5952
23. Clay spindle whorl (Pl. 2: 11)  
 Material, technique: clay, baking  
 Dimensions: Ø 29 mm, Ø hole 9 mm, h. 23 mm, m. 22.05 g  
 Grave No: 66 (adult, indeterminate sex), in the middle of the grave pit  
 Description: Rounded clay spindle whorl made of sandy clay; grey in colour, decorated with hardly visible incised horizontal lines. Quite expressed traces of use/frayed.  
 Field label, inventory number: PN 499, GMVk A5948
24. Clay spindle whorl (Pl. 2: 12)  
 Material, technique: clay, baking  
 Dimensions: Ø 34 mm, Ø hole 10 mm, h. 25 mm, m. 13.08 g  
 Grave No: 70 (adult, indeterminate sex), from the grave fill  
 Description: Rounded clay spindle whorl made of clay with a lot of big tinges; brown in colour, decorated in the lower part with three incised horizontal lines. Glued together from two fragments, about a half of the spindle whorl in very poor condition is preserved.  
 Field label, inventory number: PN 487, GMVk A5949
25. Clay spindle whorl (Pl. 3: 1)  
 Material, technique: clay, baking  
 Dimensions: Ø 32 mm, Ø hole 9 mm, h. 25 mm, m. 27.12 g  
 Grave No: 86 (female, 35–50), from the grave fill  
 Description: Rounded clay spindle whorl made of sandy clay; orange-brown in colour, decorated with four incised horizontal lines. Quite expressed traces of use/frayed. Glued together from three fragments.  
 Field label, inventory number: PN 1419, GMVk A5954

- Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, narančasto-smeđa boja, ukrašen četirima vodoravno urezanim crtama. Dosta izraženi tragovi uporabe/izlizanost. Slijepljen od tri ulomka.  
Terenska oznaka, inventarni broj: PN 1419, GMVk A5954
26. Keramički pršljenak (T. 3: 2)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 33 mm, Ø rupe 10 mm, visina 28 mm, masa 34,49  
Mjesto nalaza: Grob 43 (Ž, 50+), na desnoj natkoljenici  
Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, smeđa boja, ukrašen vodoravno izvedenim žlijebljenim crtama. Naglašen prstenasti gornji dio pršljenka. Tragovi uporabe/izlizanosti mjestimično. Slijepljen od dva ulomka.  
Terenska oznaka, inventarni broj: PN 614, GMVk A5947
27. Keramički pršljenak (T. 3: 3)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: 8x16 mm, masa 3,49 g  
Mjesto nalaza: Grob 35 (neodrediv, odrasla), po sredini rake (vjerojatno uz zdjelicu koja nije očuvana)  
Opis: Ulomak okrugloga keramičkog pršljenka rađen od kvalitetno pročišćene gline, svijetlosmeđe boje, neukrašen.  
Terenska oznaka, inventarni broj: PN 405, GMVk A5958
28. Keramički pršljenak (T. 3: 4)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 25 mm, Ø rupe 7 mm, visina 17 mm, masa 11,69 g  
Mjesto nalaza: Grob 42 (D, 5–10), s vanjske desne strane koljena  
Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, narančasta boja, neukrašen. Dosta izraženi tragovi uporabe/izlizanost. Trag starog oštećenja.  
Terenska oznaka, inventarni broj: PN 239, GMVk A5963
29. Keramički pršljenak (T. 3: 5)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 32 mm, Ø rupe 9 mm, visina 21 mm, masa 21,96 g  
Mjesto nalaza: Grob 22 (Ž, 35–50), s vanjske desne strane zdjelice  
Opis: Okrugli keramički pršljenak rađen od pjeskovite gline s dosta krupnih primjesa, narančasto-smeđa boja, neukrašen. Slijepljen od tri ulomka.  
Terenska oznaka, inventarni broj: PN 269, GMVk A5957
30. Keramički pršljenak (T. 3: 6)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 27 mm, Ø rupe 11 mm, visina 22 mm, masa 18,53 g  
Mjesto nalaza: Grob 137 (D, 15–20), s vanjske strane lijeve natkoljenice  
Opis: Okrugli keramički pršljenak rađen od pjeskovite gline s malo krupnijih primjesa, narančasto-smeđa boja, neukrašen.  
Terenska oznaka, inventarni broj: PN 1089, GMVk A5962
31. Keramički pršljenak (T. 3: 7)  
Materijal, tehnika izrade: glina, pečenje
26. Clay spindle whorl (Pl. 3: 2)  
Material, technique: clay, baking  
Dimensions: Ø 33 mm, Ø hole 10 mm, h. 28 mm, m. 34.49 g  
Grave No: 43 (female, 50+), on the right upper leg  
Description: Rounded clay spindle whorl made of sandy clay; brown in colour, decorated with deep incised horizontal lines. Upper part of the spindle whorl is emphasized and annular. Sporadic traces of use/frayed. Glued together from two fragments.  
Field label, inventory number: PN 614, GMVk A5947
27. Clay spindle whorl (Pl. 3: 3)  
Material, technique: clay, baking  
Dimensions: 8x16 mm, m. 3.49 g  
Grave No: 35 (adult, indeterminate sex), in the middle of grave pit  
Description: Fragment of a rounded clay spindle whorl made of quality purified clay; light brown in colour, undecorated.  
Field label, inventory number: PN 405, GMVk A5958
28. Clay spindle whorl (Pl. 3: 4)  
Material, technique: clay, baking  
Dimensions: Ø 25 mm, Ø hole 7 mm, h. 17 mm, m. 11.69 g  
Grave No: 42 (child, 5–10), on the outer side of the right knee  
Description: Rounded clay spindle whorl made of sandy clay; orange in colour, undecorated. Quite pronounced traces of use/frayed. Trace of an old damage.  
Field label, inventory number: PN 239, GMVk A5963
29. Clay spindle whorl (Pl. 3: 5)  
Material, technique: clay, baking  
Dimensions: Ø 32 mm, Ø hole 9 mm, h. 21 mm, m. 21.96 g  
Grave No: 22 (female, 35–50), on the outer side of the right pelvis  
Description: Rounded clay spindle whorl made of sandy clay with a lot of big tinges; orange-brown in colour, undecorated. Glued together from three fragments.  
Field label, inventory number: PN 269, GMVk A5957
30. Clay spindle whorl (Pl. 3: 6)  
Material, technique: clay, baking  
Dimensions: Ø 27 mm, Ø hole 11 mm, h. 22 mm, m. 18.53 g  
Grave No: 137 (child, 15–20), on the outer side of the left upper leg  
Description: Rounded clay spindle whorl made of sandy clay with a lot of big tinges; orange-brown in colour, undecorated.  
Field label, inventory number: PN 1089, GMVk A5962
31. Clay spindle whorl (Pl. 3: 7)  
Material, technique: clay, baking  
Dimensions: Ø 31 mm, Ø hole 9 mm, h. 23 mm, m. 27.89 g  
Grave No: 134 (female, 35–50), on the outer side of the left lower arm  
Description: Rounded clay spindle whorl made of sandy clay; grey in colour, undecorated.  
Field label, inventory number: PN 1150, GMVk A5961

- Dimenzije: Ø 31 mm, Ø rupe 9 mm, visina 23 mm, masa 27,89 g  
Mjesto nalaza: Grob 134 (Ž, 35–50), s vanjske strane lijeve podlaktice  
Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, siva boja, neukrašen.  
Terenska oznaka, inventarni broj: PN 1150, GMVk A5961
32. Keramički pršljenak (T. 3: 8)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 33 mm, Ø rupe 11 mm, visina 24 mm, masa 34,22 g  
Mjesto nalaza: Grob 104 (Ž, odrasla), na desnom kuku  
Opis: Okrugli keramički pršljenak rađen od pjeskovite gline, narančasto-smeđa boja, neukrašen.  
Terenska oznaka, inventarni broj: PN 719, GMVk A5960
33. Keramički pršljenak (T. 3: 9)  
Materijal, tehnika izrade: glina, pečenje  
Dimenzije: Ø 34 mm, Ø rupe 10 mm, visina 27 mm, masa 29,82 g  
Mjesto nalaza: Grob 144 (Ž, 35–50), s vanjske strane lijeve natkoljenice  
Opis: Okrugli keramički pršljenak rađen od pjeskovite gline s mnogo krupnih primjesa, siva boja, neukrašen. Slijepljen od dva ulomka, mali dio nedostaje, stara oštećenja.  
Terenska oznaka, inventarni broj: PN 1394, GMVk A5959
34. Olovni pršljenak (T. 3: 10)  
Materijal, tehnika izrade: olovo, lijevanje  
Dimenzije: Ø 22 mm, Ø rupe 9 mm, visina 15 mm, masa 26,85 g  
Mjesto nalaza: Grob 161 (Ž, 20–35), na desnoj strani trbuha  
Opis: Bikonični pršljenak rađen od pročišćenog olova, neukrašen.  
Terenska oznaka, inventarni broj: PN 1237, GMVk A5966
35. Olovni pršljenak (T. 3: 11)  
Materijal, tehnika izrade: olovo, lijevanje  
Dimenzije: Ø 19 mm, Ø rupe 9 mm, visina 15 mm, masa 26,08 g  
Mjesto nalaza: detektorom iz izbačene zemlje (? možda groba 9)  
Opis: Bikonični pršljenak rađen od olova s dosta primjesa, neukrašen.  
Terenska oznaka, inventarni broj: PN 70, GMVk A5964
36. Olovni pršljenak (T. 3: 12)  
Materijal, tehnika izrade: olovo, lijevanje  
Dimenzije: Ø 22 mm, Ø rupe 9 mm, visina 10 mm, masa 43,78 g  
Mjesto nalaza: Grob 115 (neodrediv, odrasla), iz zapune groba  
Opis: Plosnati pršljenak rađen od olova s dosta primjesa.  
Terenska oznaka, inventarni broj: PN 841, GMVk A5965
32. Clay spindle whorl (Pl. 3: 8)  
Material, technique: clay, baking  
Dimensions: Ø 33 mm, Ø hole 11 mm, h. 24 mm, m. 34.22 g  
Grave No: 104 (female, adult), on the right hip  
Description: Rounded clay spindle whorl made of sandy clay; orange-brown in colour, undecorated.  
Field label, inventory number: PN 719, GMVk A5960
33. Clay spindle whorl (Pl. 3: 9)  
Material, technique: clay, baking  
Dimensions: Ø 34 mm, Ø hole 10 mm, h. 27 mm, m. 29.82 g  
Grave No: 144 (female, 35–50), on the outer side of the left upper leg  
Description: Rounded clay spindle whorl made of sandy clay with a lot of big tinges; grey in colour, undecorated. Glued together from two fragments, small part missing. Traces of old damages.  
Field label, inventory number: PN 1394, GMVk A5959
34. Lead spindle whorl (Pl. 3: 10)  
Material, technique: lead, casting  
Dimensions: Ø 22 mm, Ø hole 9 mm, h. 15 mm, m. 26.85 g  
Grave No: 161 (female, 20–35), on the right side of the belly  
Description: Biconical spindle whorl made of purified lead; undecorated.  
Field label, inventory number: PN 1237, GMVk A5966
35. Lead spindle whorl (Pl. 3: 11)  
Material, technique: lead, casting  
Dimensions: Ø 19 mm, Ø hole 9 mm, h. 15 mm, m. 26.08 g  
Grave No: found with metal detector in thrown soil (grave 9)  
Description: Biconical spindle whorl made of lead with a lot of tinges; undecorated.  
Field label, inventory number: PN 70, GMVk A5964
36. Lead spindle whorl (Pl. 3: 12)  
Material, technique: lead, casting  
Dimensions: Ø 22 mm, Ø hole 9 mm, h. 10 mm, m. 43.78 g  
Grave No: 115 (adult, indeterminate sex), from grave fill  
Description: Flat spindle whorl made of lead with a lot of tinges; undecorated.  
Field label, inventory number: PN 841, GMVk A5965

Prijevod / Translation  
Anita Rapan Papeša

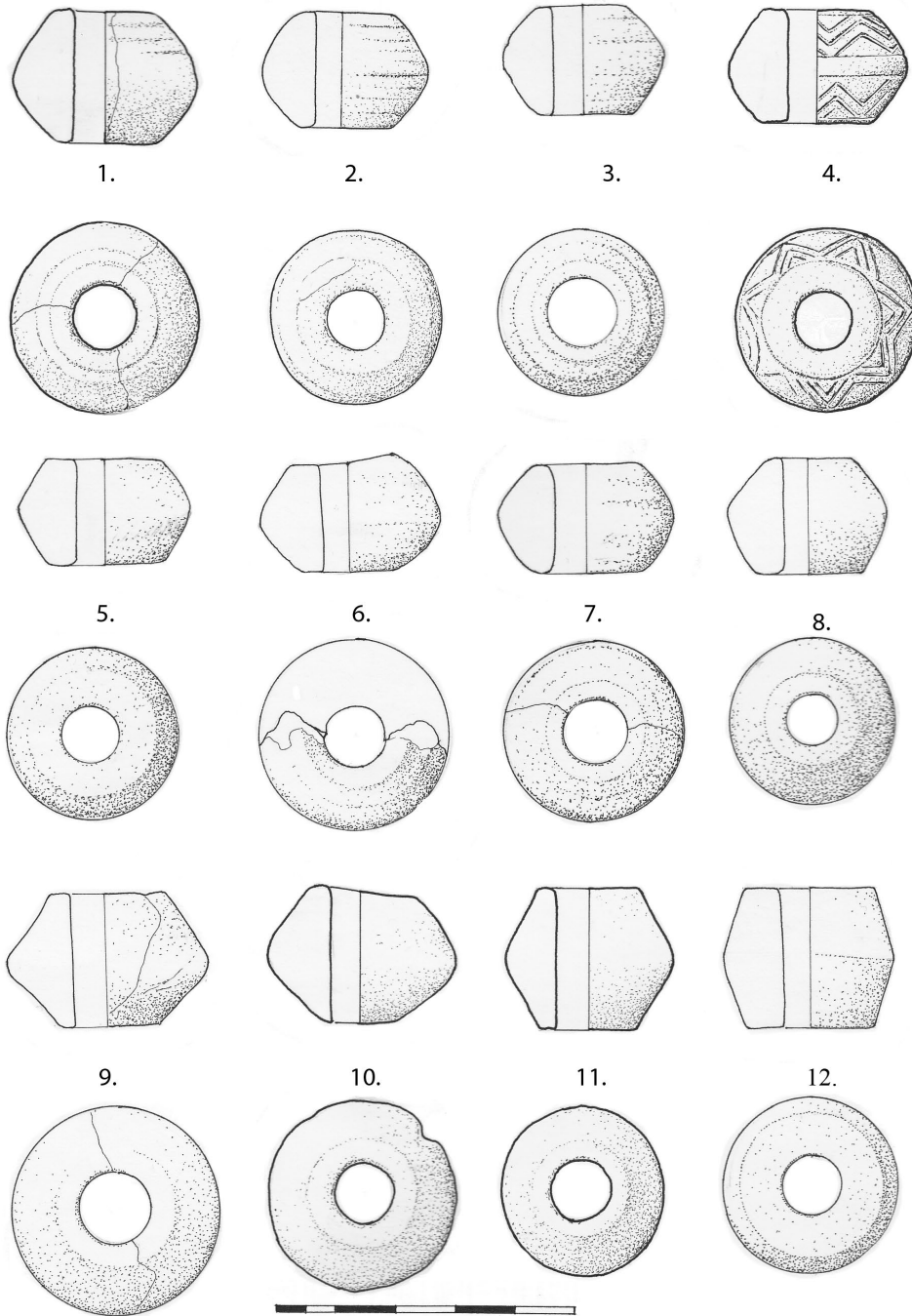
Lektura / Proofreading  
Hrvoje Vulić, Sanjin Mihelić

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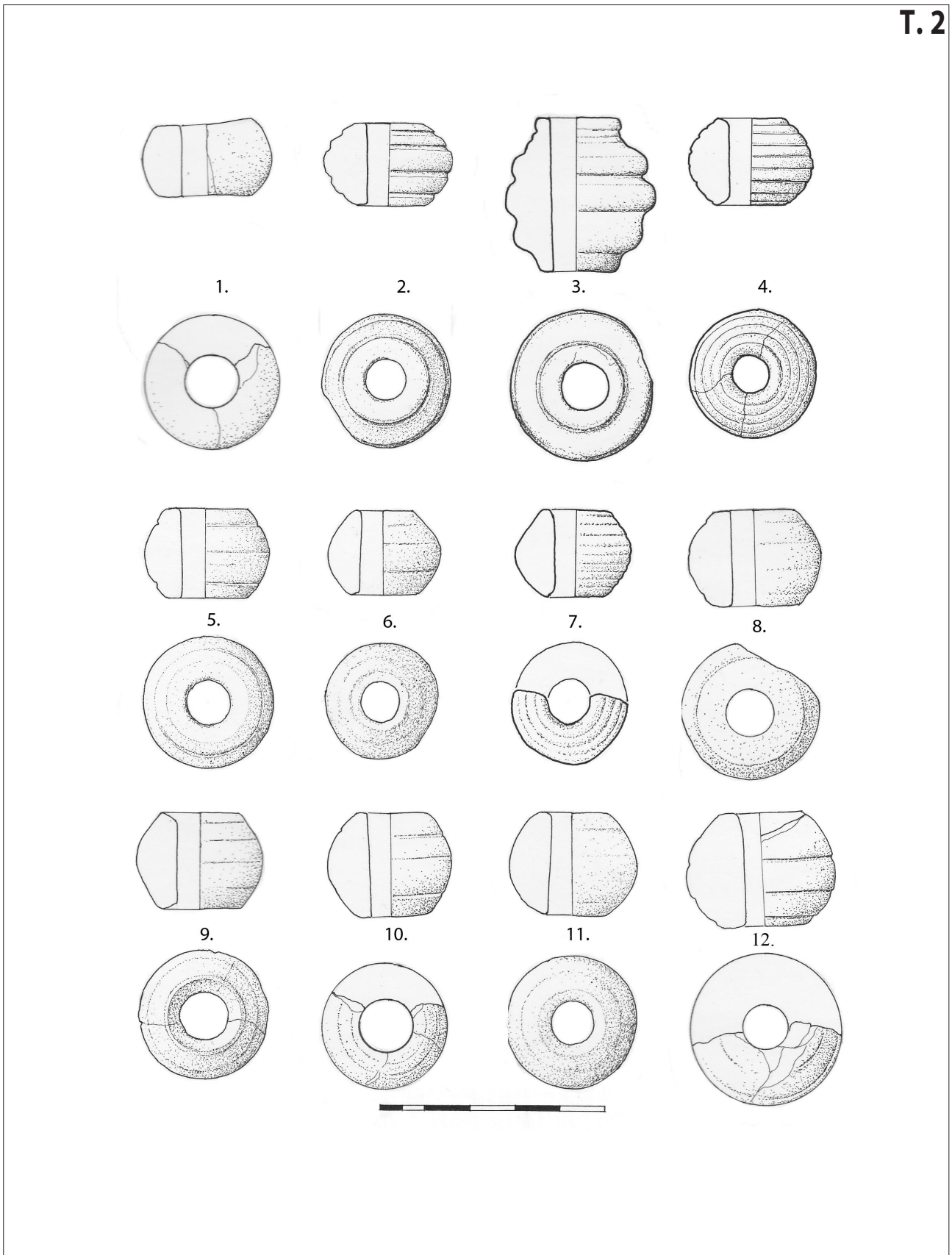


T. 1



T. 1 Bikonični keramički pršljenci (crtež: M. Galić; uredila: A. Rapan Papeša).  
Pl. 1 Biconical clay spindle whorls (drawing: M. Galić; edited: A. Rapan Papeša).

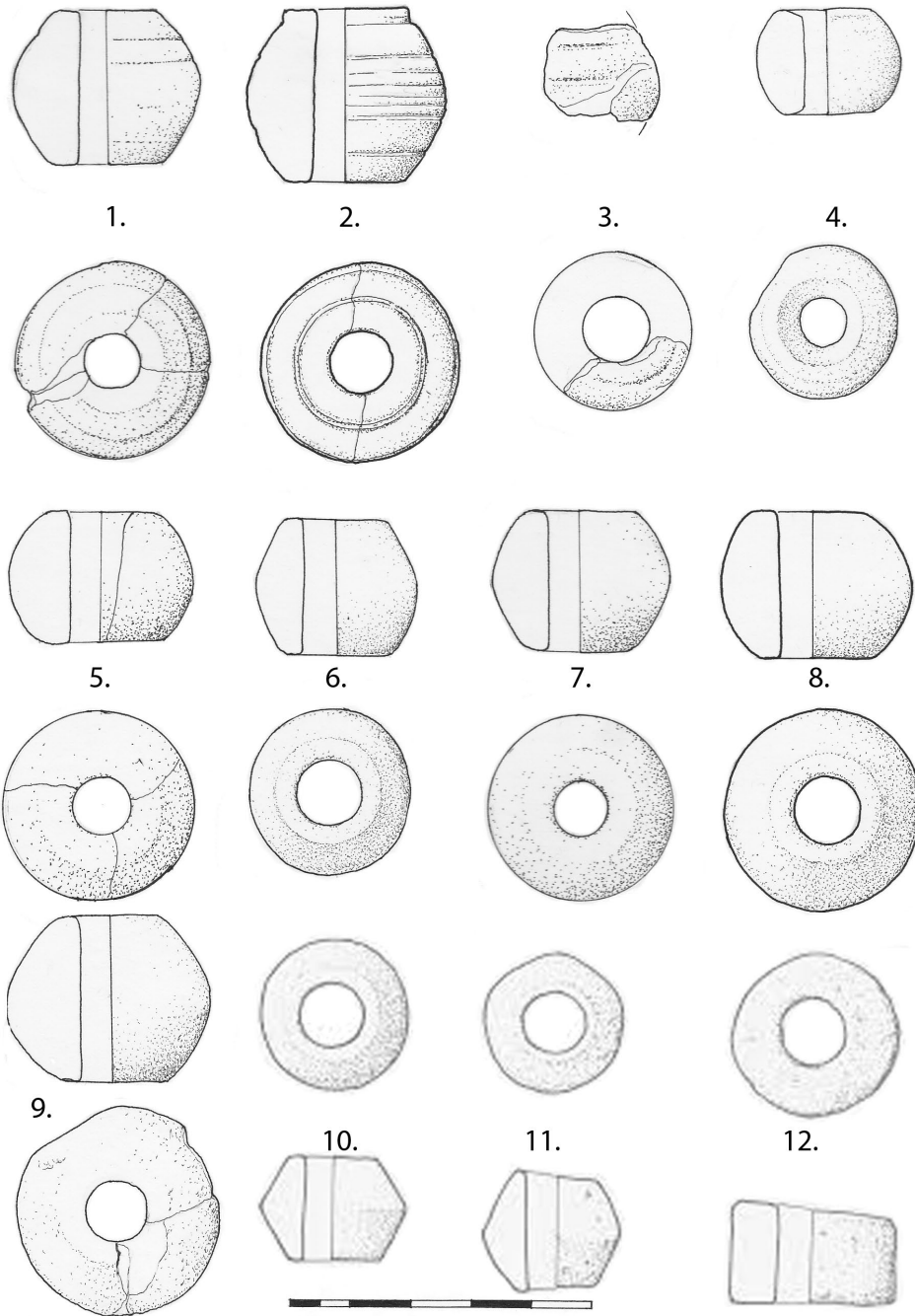
T. 2



T. 2 Zaobljeni keramički pršljenci (crtež: M. Galić; uredila: A. Rapan Papeša).

Pl. 2 Rounded clay spindle whorls (drawing: M. Galić; edited: A. Rapan Papeša).

**T. 3**



T. 3 Zaobljeni keramički pršljenci; olovni pršljenci (crtež: M. Galić; uredila: A. Rapan Papeša).  
Pl. 3 Rounded clay spindle whorls; Lead spindle whorls (drawing: M. Galić; edited: A. Rapan Papeša).