

Antički Sikuli



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Sikuli

KATALOG IZLOŽBE

Artički

Kaštela, 2011.



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Pogled na sondu istraživanu 2007. god.
The view of the trench researched in 2007

Predgovor

Ivanka Kamenjarin / Ivan Šuta

Zamislamo li da je arheološko istraživanje putovanje u prošlost, a prikupljene spoznaje i predmeti suveniri i dojmovi s putovanja, istraživanja na Resniku bila bi egzotična i skupa destinacija. Naše putovanje traje već dvadesetak godina i možemo reći da mu se ne nazire kraj. U debelim slojevima plodne kaštelanske zemlje nalazi se mnogo nepoznatih i neistraženih putova. Resnik - antički Sikuli nije važan samo u lokalnim okvirima jer pitanja na koja nudi odgovor obuhvaćaju i probleme vezane uz čitav niz aspekata povezanih uz antičku prošlost Dalmacije.

Muzej grada Kaštela je kao mlada muzejska ustanova imao privilegij da čitavo vrijeme bude nositelj istraživanja. U njima su sudjele i druge institucije, od kojih je potrebno izdvojiti Arheološki odsjek Filozofskog fakulteta u Zadru, na čelu s dr. sc. Zdenkom Brusićem, koji je vodio istraživanja pristaništa iz 2. i 1. st. pr. Kr.

U muzeju se čuva najveći dio materijala prikupljenog istraživanjima, a muzej uz vlasnika (Hotelsko naselje Resnik) vodi brigu o konzervaciji i prezentaciji ostataka naselja. Značaj Sikula prepoznat je i u Ministarstvu kulture Republike Hrvatske, koje je preko Konzervatorskog odjela u Splitu i od 2007. Konzervatorskog odjela u Trogiru, pratilo i pružalo financijsku podršku radovima na lokalitetu.

Ovo je druga izložba posvećena Sikulima, prvom su 2003. g. prikazani rezultati istraživanja pristaništa iz 2. i 1. st. pr. Kr. Najviše zahvaljujući tim istraživanjima i pronađenom reprezentativnom keramičkom materijalu, Sikuli je privukao pažnju šire javnosti i postao nezaobilazna činjenica, naročito u proučavanju kasnorepublikanskog doba u Dalmaciji.

Nova izložba koncentrirana je na rezultate istraživanja nakon 2004. g., kada su u sklopu projekta Eko Kaštelanski zaljev započela zaštitna istraživanja na kopnenom dijelu nalazišta. Ovo je po opsegu i složenosti bilo dosada najveće arheološko istraživanje na kaštelanskom području. Izložba nema cilj samo prezentirati brojne nalaze, nego i upoznati javnost sa značenjem Sikula u širem povijesnom kontekstu, u razdoblju od osnutka naselja u 2. st. pr. Kr. do 5. st. po. Kr. Kroz tematske cjeline prezentirani su izabrani nalazi s ciljem rekonstrukcije svakodnevnog života i djelatnosti koje su se odvijale u naselju. Stanovnici naselja su imali inten-

Introduction

Ivanka Kamenjarin / Ivan Šuta

If we imagine archaeological research as a journey into history, and collected ideas and objects as souvenirs and impressions from that journey, the excavations at the archaeological site of Resnik would be an exotic and expensive destination. Our journey has been about twenty years long already, and it could be said that there is no visible end to it. In thick layers of fertile soil of Kaštela a lot of unknown and unexplored paths can be found. Resnik – antique Siculi – is more than only locally important because it answers some questions related to whole range of aspects of the ancient history of Dalmatia.

Being a young museum institution, the Municipal Museum of Kaštela has had a great privilege to be the carrier of the excavation from the beginning. Some other institutions also took part in the excavation, and among them a special place must be given to the Department of Archaeology at the Faculty of Philosophy in Zadar, lead by Zdenko Brusić, Ph. D., which has conducted the excavations of the pier dated to 2nd and 1st century BC.

The museum keeps most of the material which was collected during the excavations and, together with the owner of the site (Resnik Hotel), takes care of conservation and presentation of the remains of the settlement. The importance of Siculi was also recognized by the Ministry of Culture of the Republic of Croatia, which has watched over and supported the excavations financially, through Conservation Department in Split and, since 2007, through Conservation Department in Trogir.

This is the second exhibition dedicated to Siculi, and the first one, which was organized in 2003, introduced the results of the excavation of the pier from the 2nd and 1st century BC. Due mostly to this research and representative pottery finds, Siculi has gained the interest of wider population and has become an indispensable fact, especially in terms of research of the Late Republican period in Dalmatia. This new exhibition centres on the results of the research conducted after 2004, when rescue archaeological excavations were begun at the dry-land part of the site, as a part of the Eko Kaštela Bay project. According to its scope and complexity, this has been the largest archaeological excavation ever conducted in the area of Kaštela. The goal of the exhibition



Istočni dio sonde istraživane 2007. god.
Eastern part of the trench researched in 2007



Zapadni dio sonde istraživane 2007. god.
Western part of the trench researched in 2007

is not only to represent numerous finds, but also to show the importance of Siculi to the public, in wider historical context, from the foundation of the settlement in the 2nd century BC till the 5th century AD. Selected finds are represented through different thematic units, aiming to reconstruct everyday life and activities which took place in the settlement. The inhabitants of the settlement maintained intensive trade connections throughout the wider Mediterranean area, and many movable finds testify to this fact. Different kinds of pottery, among which the most beautiful examples are those of relief pottery, are just one part of the finds which are being presented to the public for the first time through this exhibition. Amphorae, *pithoi*, kitchen dishes, extensive finds of coins, metal tools and weapons, domestic altars, bone-made artefacts, jewellery and manual grindstones, all of these finds give an insight into the material culture and activities of the inhabitants of Siculi.

Another aim of this exhibition is emphasizing the necessity of conservation and presentation of the remains of the settlement, because only a minor conserved part of it is visible today. The major part of the antique settlement is located inside the hotel area, and although it has been significantly devastated while the hotel and the bungalows were being built, there is a good potential for forming an archaeological park which could be placed in the western part that hasn't been used since the Croatian War of Independence. This way a representative archaeological park would be created and, together with archaeological collection which should also be formed, it could become an exceptional part of the cultural and touristic offer of Kaštela and Dalmatia.

živne trgovačke veze sa širim mediteranskim područjem o čemu svjedoče brojni pokretni nalazi. Razne vrste keramičkog posuđa, od kojih se ljepotom izdvaja reljefno posuđe, samo su dio nalaza koji se izložbom prvi put prezentiraju javnosti. Amfore, pitosi, kuhinjsko posuđe, brojni nalazi novca, metalno oruđe i oružje, kućni žrtvenici, koštani artefakti, nakit i ručni žrvnjevi, nalazi su koji nam pružaju uvid u materijalnu kulturu i djelatnosti Sikuljana.

Cilj izložbe je i ukazati na potrebu zaštite i prezentacije ostataka naselja, od kojeg je danas vidljiv tek manji konzervirani dio. Većina antičkog naselja nalazi se unutar hotelskog naselja i, iako je znatno devastirana gradnjom hotela i bungalova, pruža dobar potencijal za formiranje arheološkog parka, koji bi se mogao smjestiti u zapadnom dijelu, a koji nije u funkciji od Domovinskog rata. Time bi se dobio reprezentativan arheološki park, koji bi uz formiranje arheološke zbirke mogao postati izniman dio kulturne i turističke ponude Kaštela i Dalmacije.

Povijest istraživanja

Ivanka Kamenjarin

Zavičajni muzej Kaštela osnovan je početkom 1991. godine kao prva muzejska ustanova u Kaštelima. Ubrzo po osnivanju, u svibnju iste godine, poduzimaju se prva arheološka istraživanja i to u Resniku. Ovaj lokalitet je izabran upravo na osnovi rezultata dobivenih probnim podmorskim sondiranjem poduzetim dvije godine ranije. Tada su otkriveni ostaci pristaništa iz 2. i 1. st. pr. Kr., u dužini od oko 70 m te mnogo ulomaka raznovrsne helenističke keramike (Brusić, 1990., 117-119). Od tada, može se kazati, počinje interes arheologa za Resnik.

Osamdesetih godina 20. stoljeća dvojica momaka, Ivica Svilan i Neven Lete, roneći školjke, počeli su pronalaziti ulomke keramike crnoglazirane i reljefno ukrašene. Kako tada još nema lokalnog, kaštelanskog muzeja, nalaze odnose u Arheološki muzej u Splitu B. Kiriginu koji je zainteresirao kolege arheologe roniocce iz Zadra i Zagreba. U rujnu 1989. godine dvodnevno podmorsko sondiranje proveli su iz Arheološkog muzeja u Zadru dr. sc. Zdenko Brusić i Smiljan Gluščević, a u ime Republičkog zavoda za zaštitu spomenika kulture u Zagrebu dr. sc. Mario Jurišić, Marijan Orlić i Irena Radić-Rossi.

Međutim, nisu to prvi nalazi na Resniku. Nekoliko godina prije, prigodom proširenja turističkog kompleksa s bungalov kućicama, pronađeni su novčići, ostaci staklenih posuda, ulomaka amfora i tegula, odnosno ostaci grobova. Tadašnji Zavod za zaštitu spomenika kulture Split pozvan je na teren i oni su preporučili obustavu radova (Kirigin, 1989., 25). Na žalost, tu se odluku nije ispoštovalo te se nastavilo graditi na lokalitetu (odnosno devastirati). To je vrijeme gradnje solinske zaobilaznice i zatrpavanja zapadne salonićanske nekropole. Razlika je što se u Saloni ipak istražilo pa zatrpalo, a u Resniku se nije istražilo, nego se uništila po svemu sudeći nekropola i dio naselja. Isto se dogodilo i šezdesetih godina kada se gradi resnički hotelski kompleks. Iako nema pisanih tragova o mogućim pronalascima, malo je vjerojatno da su se paviljoni izgradili na arheološki sterilnom mjestu.

Iz usmenih priča bivših vlasnika zemljišta saznajemo da su se pronalazili ulomci keramike, pokoji novčić, a vjerojatno i poneki metalni predmet. Jedan od pionira hrvatske arheologije don Šime Ljubić, kod opisa Bijaća u svom putopisu o starinama u Dalma-

History of Research

Ivanka Kamenjarin

The Municipal Museum of Kaštela was founded at the beginning of 1991, and it was the first museum institution in Kaštela. Soon after its foundation, in May of the same year, the first archaeological excavations were conducted, at the site of Resnik. This site was chosen based on results of trial underwater trenching that had been conducted two years before that. At that time, the remains of around 70 metres long port dated to the 2nd and 1st century BC and a significant number of fragments of various Hellenistic pottery were discovered (Brusić, 1990, 117-119). It is the time when the interest of archaeologists for Resnik rose.

During the 1980s, while diving for seashells, two young men, Ivica Svilan and Neven Lete, started to discover fragments of black-glazed and relief pottery. Since the local museum of Kaštela hasn't been founded yet at the time, they took their finds to archaeologist B. Kirigin from the Archaeological Museum in Split, who then managed to raise the interest of underwater archaeologists from Zadar and Zagreb. In September of 1989 a two-day underwater trenching was conducted by Zdenko Brusić Ph.D. and Smiljan Gluščević from the Archaeological Museum in Zadar and Mario Jurišić Ph.D., Marijan Orlić and Irena Radić-Rossi from the Conservation Department in Zagreb.

However, these weren't the first discoveries at Resnik. Several years before this, during the amplification of the touristic complex with bungalows, several coins, remains of glassware, fragments of amphorae and tegulae, or to be more specific, remains of graves had been discovered. Conservation Department from Split was asked to inspect the site, and they recommended suspension of construction work (Kirigin, 1989, 25). Unfortunately, this recommendation was ignored and construction work (or to be more precise devastation) at the site continued. This is the same period when bypass in Solin was constructed and western necropolis of Salona was buried. But the difference between these two sites is in the fact that Salona had still been researched before being buried, and Resnik was not even researched, which lead to destruction of what probably used to be a necropolis and one part of the settlement. The same had happened during the 1960s while hotel complex at Resnik was being constructed. While there are no written records of any possible discoveries, it is not very probable



Izgradnja hotelskog naselja značajno je devastirala antičko naselje
Construction of the hotel resort has significantly devastated the ancient settlement

that the pavilions had been built at the archaeologically sterile place.

Recounts of the previous owners of the land provide information about discoveries of pottery fragments, several coins and probably some metal objects. Don Šime Ljubić, one of the pioneers of Croatian archaeology, mentions Resnik and Tarce while describing Bijaći in his travelogue on Dalmatian antiquities (Ljubić, 1879, 12-15 i 50-55). In the 1870s he stated that old walls were visible in these two sites, and that peasants from Kaštela had found coins and pottery fragments during their field work. Ljubić concluded his description of the area of Bijać with words about Resnik, which, according to him, served as a port for Siculi which were located under Veli Bijać. He placed the Siculi of Claudius in Žabljak, under Veli Bijać, where there are visible remains of a Roman *villa rustica* (Ljubić 1879, 15, 52), although the Peutinger map places Siculi by the sea.

While researching the field of Kaštela, Don Frane Bulić, who was the main authority in Croatian archaeology at the end of 19th and beginning of 20th century, didn't place his scientific and researching interest in Resnik. This indicates that at that time, as well as today, there weren't any visible architectural remains at the surface. The walls noticed by Ljubić were probably covered with bush or maybe cleared to make place for vineyards. In *Bulletino*, Bulić published two inscriptions which are stated to be found at Resnik. Regardless to this, he placed the toponym Siculi, Sicum in the wider area of Bijaći, north to Resnik, around Veli Bijać and Stombraće (Bulić, 1908, 64-65). Ivan Lučić (1604-1679), father of Croatian history, mentioned Siculi in his book called *Historical Testimonies about Trogir (Povijesna svjedočanstva o Trogiru)*. He challenged the thesis of it being Šibenik and placed it between Trogir and Solin, not at Resnik or around Veli Bijać, but at Tarce where visible remains of antique walls still existed at that time (Lučić, 1979, 75-79).



Prva istraživanja na kopnu 1991. god.
First dry land researches of 1991

ciji (Ljubić, 1879, 12-15 i 50-55), spominje Resnik i Tarce. On sedamdesetih godina 19. stoljeća navodi da su vidljivi stari zidovi na ova dva lokaliteta te kako kaštelanski težaci, obrađujući polje, pronalaze novčiće i ulomke keramike. Ljubić zaključuje svoj opis bijačkog kraja riječima da je Resnik služio kao luka Sikulima koji se nalaze podno Velog Bijaća. Klaudijeve Sikule on smješta u Žabljačku podno Velog Bijaća gdje su bili vidljivi ostaci rimske vile rustike (Ljubić 1879, 15, 52), iako na Peutingerovoj karti Sikuli se nalaze uz more.

Don Frane Bulić, glavni autoritet u našoj arheologiji krajem 19. st. i početkom 20. st., proučavajući Kaštelansko polje, nije svoj znanstveni i istraživački interes usmjerio na Resnik. Iz toga možemo zaključiti da tada, kao ni danas, na površini nije bilo vidljivih arhitektonskih ostataka. Ljubićevi zidovi su vjerojatno tada zarasli i moguće iskrčeni u vinograde. Bulić donosi u *Bulletinu* dva natpisa za koje stoji da su pronađeni u Resniku. Međutim, toponim Siculi, Sicum i on stavlja na šire područje Bijaća, sjeverno od Re-



Položaj naselja sa bližom okolicom 1961. god. (Državna geodetska uprava)
 Position of the settlement and its close surroundings in 1961 (State Geodetic Administration)

snika, uokolo Velog Bijaća i Stombrata (Bulić, 1908, 64-65). Otac hrvatske povijesti Trogiranin Ivan Lučić (1604-1679) u svom djelu *Povijesna svjedočanstva o Trogiru* dotiče se Sikula. Pobija tezu da se radi o Šibeniku i smješta ga između Trogira i Solina, a ne u Resniku niti oko Velog Bijaća, nego u Tarcama gdje su tada još bili vidljivi ostaci antičkih zidova (Lučić, 1979, 75-79).

Polazeći od podmorskog nalaza pristaništa iz 2. i 1. st. pr. Kr. 1991. godine, Ivanka Bilich, arheolog novoosnovanog Zavičajnog muzeja Kaštela, otpočela je prva arheološka istraživanja u slobodnom prostoru zapadno od paviljona i velikog parkirališta. Istraženo je oko 100 m². Otkriveni su zidovi iz dviju faza s mnoštvom ulomaka keramike, pedesetak novčića, te jednim kasnoantičkim grobom u amfori. Uslijed malog obima istraživanja, zaključilo se da se radi o stambeno - skladišnom prostoru koji se povezivao s ostacima pristaništa u moru.

Starting with underwater discovery of the port dated to the 2nd and 1st century BC, Ivanka Bilich, archaeologist at the Municipal Museum of Kaštela which had just been founded around that time, began the first archaeological excavation in the available area west of the pavilions and large parking lot. An area of around 100 square metres was researched. Walls from two phases of the settlement with a significant number of pottery fragments, around fifty coins and one Late Antiquity amphora tomb were discovered. Due to the fact that this was a small scale research it was concluded that this was a housing and storage area which has been put in relation with the remains of the port under the sea.

Croatian War of Independence has influenced even the site at Resnik. During those years, refugees were placed within the touristic complex. Because of that further land research was suspended, so the attention turned towards the underwater research. Since



Konzervacija arhitektonskih ostataka iz sonde istraživane 1991-1992. god.
Conservation of architectural remains from the 1991-1992 excavations

1993 several campaigns of underwater research of the port dated to the 2nd and 1st century BC have been carried out, first in cooperation with the Archaeological Museum in Zadar and later with the Department of Archaeology of the University of Zadar. Reconnaissance has confirmed existence of horizontal stratigraphy as well as the fact that there were several phases of the port. A Neolithic layer has also been discovered under the sea, west of the Hellenistic port, as well as a Palaeolithic layer which has been discovered recently (Karavanić, 2009, 549-551). The results of the underwater research were presented at the exhibition *Resnik – hydro-archaeological researches (Resnik – hidroarheološka istraživanja)* which was organized in 2003 by Z. Brusić Ph.D. and I. Šuta. A small catalogue was printed in the year that followed (Brusić, 2004).

In September of 2004, the derelict trench was cleaned and walls discovered during the research of 1991 and 1992 were conserved, which was made possible by the Ministry of Culture of the

Domovinski rat dotaknuo je i lokalitet Resnik. U turistički kompleks smještaju se stradalnici – prognanici i izbjeglice na nekoliko godina. To je zaustavilo daljnja istraživanja na kopnu te se okrenulo prema podmorskim istraživanjima. Tako se od 1993. godine provelo nekoliko kampanja podmorskih istraživanja pristaništa iz 2. i 1. st. pr. Kr. u suradnji s Arheološkim muzejom iz Zadra te kasnije s Odsjekom za arheologiju Sveučilišta u Zadru. Rekognosciranjem se utvrdilo postojanje vodoravne stratigrafije te da luka ima nekoliko faza. U moru je otkriven i neolitski sloj zapadno od helenističke luke, a u najnovije vrijeme i paleolitički sloj (Karavanić et al., 2009, 549-551). Rezultati podmorskih istraživanja helenističke luke prezentirani su na izložbi *Resnik – hidroarheološka istraživanja* održanoj 2003. godine, autora prof. dr. sc. Z. Brusića i prof. I. Šute. Manji katalog tiskan je slijedeće godine (Brusić, 2004).

U rujnu 2004. godine, zahvaljujući sredstvima Ministarstva kulture RH, očišćena je zapuštena sonda i konzervirani su zidovi pronađeni u istraživanjima 1991./92. godine. Djelatnici arheološke

zbirke Zavičajnog muzeja Kaštela upozoravali su na važnost lokaliteta te čak 1993. godine postavili žičanu ogradu s vratima, no na žalost sonda je postala odlagalište smeća. Ovom intervencijom smo konsolidirali zidove, očistili okoliš od raslinja te postavili novu ogradu s vratima.

2002. godine Agencija EKO – Kaštelanski zaljev u Splitu dostavila je Muzeju grada Kaštela prijedlog buduće trase kolektora Kaštela – Trogir gdje se trebalo odrediti potencijalne lokalitete na kojima će se obaviti arheološka istraživanja i arheološki nadzor. Uz ostale lokalitete obuhvaćen je i Resnik. Predviđena trasa trebala je proći preko sonde istražene 1991./1992. godine. Iako se ukazalo na potencijalnu važnost i veličinu lokaliteta, nije se uspjela pomaknuti trasa, ali su dogovorena istraživanja cijele trase koja prolazi kroz Resnik. I tako za potrebe gradnje budućeg cjevovoda 2005. godine obavljena su probna sondiranja. Istraženo je 12 sondi od istoka prema zapadu, obuhvativši cijelo hotelsko naselje. Cilj je bio odrediti gustoću nalaza kako bi se uskladila istraživanja i sama gradnja cjevovoda. Istraživanja su pokazala da od sonde 10 kod tzv. trećeg paviljona na zapad jača intenzitet nalaza. Utvrđena je dinamika radova. Građevinari su trebali krenuti s istočne strane hotelskog kompleksa, a arheolozi od zapada i potoka.

Tijekom travnja i svibnja iste godine obavljena su zaštitna arheološka istraživanja na području budućeg podmorskoga ispusta

Početak istraživanja 2007. god.-strojni iskop asfaltne ceste
Beginning of the research of 2007 – machine excavation of an asphalt road



Republic of Croatia who provided the means for this intervention. Employees of the Archaeological Department of the Municipal Museum of Kaštela had been pointing out at the importance of the site and they had even put a fence with a door around it in 1993., but despite all that, the trench had unfortunately become a place for waste disposal. During the mentioned intervention the walls were consolidated, the surrounding area cleaned, and a new fence with doors placed.

In 2002 the ECO- Kaštela Bay Agency Split delivered a proposition for the future route of collector Kaštela – Trogir to the Municipal Museum of Kaštela, which had to determine the potential sites of archaeological research and archaeological supervision. Along with some other sites, Resnik was also included. The route which had been planned was supposed to go across the trench which was researched in 1991/1992. Even though the potential importance and size of the site was pointed out, it was not possible to move the route, but research of the part of the route which passed through Resnik was agreed upon. So, due to requirements of the future construction of the conduit, trial trenching was conducted in 2005. Twelve trenches oriented from east to west were researched, and they covered the whole area of the hotel settlement. The aim of the research was to determine density of finds so that research and construction of the conduit could be

Sortiranje nalaza iz istraživanja na incidentnom preljevu u svibnju 2005. god.
Sorting finds from the Incidental Spillover System in May 2005.







Istraživanja u kolovozu 2007. god.
Excavations in August of 2007.

coordinated. The research showed that the intensity of finds rose from trench 10, near a so-called third pavilion, towards the west. The dynamics of the work were then established. Construction workers were to start from the eastern side of the hotel, and archaeologists from the western side and stream.

During April and May of the same year, rescue archaeology research was conducted in the area of the future 100 metres long underwater outlet near the Resnik pumping station. Ivanka Kamenjarin and Ivan Šuta (employees of the Municipal Museum of Kaštela) took part in the research together with professors and students from the Faculty of Philosophy in Zadar (professors: Zdenko Brusić Ph.D. (head of the research) and Matko Ilkić Ph.D.; students: Igor Miholjek, Martina Čelhar and Mate Parica), and archaeologists from the Croatian Conservation Institute (Irena Radić Rosi M.S. and Kruno Zubčić). Conservation supervision was conducted by Andro Krstulović Opara from the Conservation Department in Split.

The location of the scheduled construction of the Incidental Spillover System was about ten metres to the east from the estuary of the Resnik stream. Previous research had shown that remains of architecture and a significant concentration of movable finds, primarily remains of amphorae and tegulae, could have been found here. During the 30 days long research, all 100 metres of the future excavation route had been visually inspected, and after that, 2 x 2 metres large trenches were placed, primarily at those locations where deeper layers with archaeological remains were to be expected. Roughly carved blocks of stone placed in a row were discovered near the coast. The layers were filled with numerous archaeological finds, as well as with organic remains which have been preserved due to specific conditions such as mud at the sea bottom. Over 7000 pottery fragments and around fifty metal finds – coins, nails, chocks, links and cylinders – were discovered.

* Participants of land excavations were:

Team of experts:

Ivanka Kamenjarin, Ivan Šuta, Ivan Carev, Petar Dozan, Ivana Anterić, Marijeta Babin, Ivana Milošević, Vedrana Supan, Jasminka Brzović, Andrea Fabjanović, Marica Milić, Mario Mustapić, Ivana Klaić, Vedran Kos, Vedran Katavić, Nikolina Putica, Dominik Žanić, Silvana Juraga, Jelena Matijaca, Tomislav Jerončić, Mladen Popović

Manual workers:

Petar Kapov, Mario Matas, Ante Prančić, Ivan Boljat, Joško Fiamengo, Ante Boljat, Ivo Gusić, Ivan Penović, Ivo Svilan, Hrvoje Burić, Marin Banović, Tomislav Zoko, Jakov Karađole, Viktor Žižić, Soniboj Grgin, Neven Alajbeg, Ivo Živković, Ante Radnić, Marinko Garbati, Tonći Armanda, Hrvoje Sablić, Ante Kapov, Ivan Kapov, Rato Šamandan, Ante Šimović, Virgil Jureškin, Marin Anterić, Marin Pleško, Igor Cerjan, Petar Krivić, Mario Duplančić, Josip Milković, Kristofor Buzov, Dean Rajić, Boris Žižić, Ante Kesić, Antonio Rogulj, Miro Čota, Ivo Živković, Ante Krišto, Pave Begić, Ivan Radovčić, Ante Radovčić i Jozo Matijević.

kod crpne stanice Resnik u dužini od 100 m u more. U istraživanjima su uz djelatnike Muzeja grada Kaštela Ivanka Kamenjarin i Ivana Šutu sudjelovali profesori i studenti s Filozofskog fakulteta u Zadru: dr. sc. Zdenko Brusić (voditelj istraživanja), dr. sc. Mato Ilkić, zatim arheolozi Hrvatskog restauratorskog zavoda mr. sc. Irena Radić Rossi, Kruno Zubčić, studenti: Igor Miholjek, Martina Čelhar i Mate Parica. Konzervatorski nadzor obavljao je Andro Krstulović Opara iz Konzervatorskog odjela u Splitu.

Položaj na kojemu se predviđjela gradnja incidentnog preljeva nalazi se desetak metara istočno od ušća potoka Resnik. Prijašnjim je istraživanjima utvrđeno da se ovdje nalaze ostaci arhitekture i veća koncentracija pokretnih nalaza, u prvom redu ostataka keramičkih posuda, amfori i tegula. Tijekom tridesetak dana istraživanja najprije je vizualno pregledana čitava trasa budućeg iskopa u dužini od 100 m, a zatim se pristupilo postavljanju sonde veličine 2 x 2 metra preferirajući one dijelove gdje se moglo očekivati dublje slojeve s arheološkim ostacima. Otkriveni su, u nizu postavljeni, grubo klesani kameni blokovi nedaleko od obale. Slojevi su ispunjeni brojnim arheološkim materijalom, ali i organskim ostacima, koji su se mogli očuvati u specifičnim uvjetima kakav je mulj na morskom dnu. Riječ je o preko 7000 ulomaka keramičkih posuda, pedesetak metalnih nalaza - novčića, čavala, klinova, alkica i tuljaca.

8. siječnja 2007. godine otpočela su dugoočekivana zaštitna istraživanja koja su trajala do studenog iste godine.* To su najveća do sada poduzeta istraživanja, ne samo u Resniku, nego u Kaštelima općenito. Istraživanja su otkrila ostatke planski građenoga grada s pravilnim izduženim rasporedom kuća i ulica. Pronađeno je mnoštvo ulomaka keramike, 262 novčića (od toga ostava od 50 kasnoantičkih novčića), 813 posebnih nalaza, oko 4 tone amorfnih ulomaka amfora i tegula. U posebne nalaze su se svrstavali svi metalni, koštani i stakleni predmeti, odnosno njihovi ulomci kao i ulomci keramike koji po nečemu odskaču ili su cjelovite posude. Istraživalo se unutar 200 m duge i 5 m široke trase budućeg kolek-

* Na kopnenim arheološkim istraživanjima sudjelovali su:

Stručna ekipa:

Ivanka Kamenjarin, Ivan Šuta, Ivan Carev, Petar Dozan, Ivana Anterić, Marijeta Babin, Ivana Milošević, Vedrana Supan, Jasminka Brzović, Andrea Fabjanović, Marica Milić, Mario Mustapić, Ivana Klaić, Vedran Kos, Vedran Katavić, Nikolina Putica, Dominik Žanić, Silvana Juraga, Jelena Matijaca, Tomislav Jerončić, Mladen Popović

Fizički radnici:

Petar Kapov, Mario Matas, Ante Prančić, Ivan Boljat, Joško Fiamengo, Ante Boljat, Ivo Gusić, Ivan Penović, Ivo Svilan, Hrvoje Burić, Marin Banović, Tomislav Zoko, Jakov Karađole, Viktor Žižić, Soniboj Grgin, Neven Alajbeg, Ivo Živković, Ante Radnić, Marinko Garbati, Tonći Armanda, Hrvoje Sablić, Ante Kapov, Ivan Kapov, Rato Šamandan, Ante Šimović, Virgil Jureškin, Marin Anterić, Marin Pleško, Igor Cerjan, Petar Krivić, Mario Duplančić, Josip Milković, Kristofor Buzov, Dean Rajić, Boris Žižić, Ante Kesić, Antonio Rogulj, Miro Čota, Ivo Živković, Ante Krišto, Pave Begić, Ivan Radovčić, Ante Radovčić i Jozo Matijević.



Sonda zapadno od ušća potoka, istraživanja u rujnu 2007. god.
Trench west of Resnik stream in september 2007.

tora. Također smo istraživali zapadno od ušća potoka u rujnu iste godine. Prilikom izvođenja radova na polaganju cijevi kolektora, radnici su pronašli nekoliko dijelova stupova od prokoneškog mramora i dio korinskog kapitela. U dogovoru s konzervatorima obavljena su arheološka istraživanja i na ovom dijelu. Otežavajuća okolnost bila je blizina mora i njegova niska razina, stoga se istraživati moglo jedino uz stalnu upotrebu pumpi. Istraženo je ukupno 140 m², a pronađen je suhozid s dva lica, napravljen od krupnog kamena, dok je sredina bila ispunjena sitnim kamenom. Sačuvan je samo u visini jednog reda i sadržavao je brojne spolije. Najvažniji nalazi su korinški kapitel i ulomak dupina, koji upućuju o srušenom hramu, mogućem nimfeju (Kamenjarin-Šuta 2008, 458-463).

Na iznimnu važnost svega pronađenoga izvijestili smo nadležni Konzervatorski odjel u Trogiru, a preko njega i Ministarstvo kulture na čelu s tadašnjim ministrom Božom Biškupićem. Ministarstvo je formiralo stručnu komisiju koja je obišla lokalitet te se razmatralo kako spasiti tako vrijedno nalazište. Predlagalo se više rješenja, od demontaže arhitekture i polaganja cijevi ispod do premještanja trase. Na kraju se prihvatilo rješenje premještanja trase. Ovdje treba istaknuti zauzetost i upornost pročelnika Konzervatorskog odjela u Trogiru dr. sc. Radoslava Bužančića u ustrajnost na oču-

Long anticipated rescue excavations started on January 8 2007, and they lasted until November of the same year. These have been the most extensive excavations ever conducted not only at Resnik but in Kaštela in general. During the research, remains of a planned city with regular and elongated layout of houses and streets have been discovered. A lot of pottery fragments, 262 coins (50 of which a Late Antiquity hoard), 813 special finds and around four tons of amphorae and tegulae fragments have been discovered. Special finds included all of the metal, bone and glass made objects, or their fragments, as well as pottery fragments which were in some way different and pottery found completely preserved. Research took place within 200 metres long and 5 metres wide route of the future collector. In September of the same year, area west to the estuary of the stream was also researched. During pipelaying, the workers found several fragments of columns made of Proconese marble as well as one fragment of a Corinthian capital. In accordance with conservators, archaeological research was then conducted in this area as well. Aggravating circumstances were adjacency of the sea and its low level, so the research was only possible with constant pumping of the sea. A total of 140 square metres was researched, and a drystone wall with two faces, which was made of large stones and filled with small rocks, was discovered. Only one layer has been preserved,

and it contained numerous *spoliae*. The most important finds were a Corinthian capital and a fragment of dolphin, which indicates the existence of a wrecked temple, possibly a *nimpheum* (Kamenjarin-Šuta 2008, 458-463).

Conservation Department in Trogir, and through it also the Ministry of Culture and Božo Biškupić who was a Culture Minister at the time, were informed about extraordinary importance of all discoveries. The Ministry formed an expert committee which came to see the site, and there was a discussion on how to protect such a valuable site. Several solutions were proposed, from dismantling the architecture and laying pipes under it, to dislocation of the route itself. Dislocation of the route was finally accepted. In relation to this, it is necessary to acknowledge the effort and persistence of Radoslav Bužančić Ph.D., head of the Conservation Department in Trogir, which he showed when dealing with the ECO- Kaštela Bay Agency and Ministry of Culture in order to preserve the site.

Further research of the site at Resnik was conducted from the end of September till the middle of December of 2008. The aim of this research was to establish northern and western boundaries of the settlement so that a new route for the collector could be determined. Research in the north revealed 2,70 metres wide protective walls which could be traced, with some discontinuance, in length of around 80 metres. At the western side there is a stream and no certain remains of the walls could be found; at the southern side there is sea. Traces of walls have not been found at the eastern side, although this area was covered during the research of 2007.

At the end of 2008, by order of the Conservation Department in Trogir, architectural remains which were discovered during the research of 2007 were covered, first with geotextile and sand, and then with surrounding soil, up to the present passable level. One part, which merges with trench from 1991/1992, was left revealed, and together they form one unit.

At the beginning of 2011 the new future route of the collector was researched, and on that occasion one part of the northern protective wall, as well as one multi-layered road dated to 1st century AD and of north-south orientation, were found.

Upon the end of the research of 1991, this site was registered, at number 1358, in the Register of Immovable Cultural Monuments of the Republic of Croatia which had been maintained by the then Regional Institute for Conservation of Cultural Monuments in Split. In June of 2008 the registration has been coordinated under the provisions of law with the Register of Cultural Goods of the Republic of Croatia – List of protected cultural goods, and the conditions for preservation of the site have been established. This has set preconditions for preservation of this exceptional site, as well as for creation of archaeological park and for planning of the future researches.

vanju lokaliteta, kako kod Agencije Eko Kaštelanski zaljev, tako i u Ministarstvu kulture.

Daljnja istraživanja na lokalitetu Resnik obavljena su od kraja rujna do sredine prosinca 2008. godine. Cilj ovih istraživanja bilo je odrediti sjevernu i zapadnu granicu naselja kako bi se mogla trasirati nova trasa kolektora. Istraživanja na sjeveru dovela su do otkrića bedema širine oko 2,70 m koji se s prekidima može pratiti u dužini od oko 80 m. Sa zapadne strane je potok i nema sigurnih nalaza bedema, a s južne strane je more. S istočne strane nisu pronađeni ostatci bedema, iako je taj dio bio obuhvaćen istraživanjima 2007. god.

Prema nalogu Konzervatorskog odjela u Trogiru krajem 2008. godine pokrili smo arhitektonske ostatke pronađene istraživanjima 2007. godine geotekstilom te turjačkim pijeskom, a potom okolnom zemljom do sadašnje prohodne razine. Ostavljen je nepokriiven dio koji se spaja sa sondom iz 1991./92. i tvori jednu cjelinu.

Početkom 2011. godine istražili smo novu buduću trasu kolektora i tom prilikom pronašli još jedan dio sjevernog bedema, te višeslojnu ulicu iz 1. st. po. Kr. koja je imala smjer sjever – jug.

Lokalitet je po završetku istraživanja 1991. godine upisan u Registar nepokretnih spomenika kulture RH koji se vodio u tadašnjem Regionalnom zavodu za zaštitu spomenika kulture u Splitu pod rednim brojem 1358. U lipnju 2008. godine novim zakonskim odredbama usklađena je registracija Resnika u Registru kulturnih dobara Republike Hrvatske – Listu zaštićenih kulturnih dobara te su dani uvjeti zaštite lokaliteta. Time su stvoreni preduvjeti očuvanja ovog iznimnog lokaliteta, ali i stvaranja arheološkog parka i plana budućih istraživanja.

Povijesni okvir

Ivan Šuta

Okolica Kaštelanskog zaljeva tijekom 2. i 1. st. pr. Kr. poprište je dinamičnih zbivanja. Podaci iz pisanih izvora navode isejske Grke, Rimljane i Delmate kao glavne aktere. Svakako su u prvom planu bili sukobi s Delmatima, koji su od propasti ilirske države u ekspanziji koja dotiče i ovo područje.

Priobalni srednjodalmatinski prostor naseljavaju u ranijem razdoblju zajednice Hila, Bulina i Nesta. Dragocjene podatke o tim domorodačkim zajednicama nalazimo u Pseudo - Skilakovu Periplu (Suić, 1955., 136.). Prema opisu iz Peripla pretpostavlja se da su Bulini nastanjivali prostor okolice Kaštelanskog zaljeva. Ovdje je gradina Veli Bijać najveća željeznodobna aglomeracija s branjenom površinom koja prelazi 3,5 ha, što nesumnjivo upućuje na veliki značaj i snagu zajednice koja je nastanjivala gradinu. Stoga ne začuđuje što se Veli Bijać ističe kao jedno o mogućih središta bulinske zajednice (Čače, 1992., 39.).

Osnivanje grčkih kolonija na Visu i Hvaru početkom 4. st. pr. Kr. utječe i na obalu koja brzo ulazi u sferu grčkih interesa, prvenstveno isejskih. Oni su, prema sadašnjim spoznajama, za razliku od faroskih Grka, bili više orijentirani na trgovinu, što je podrazumijevalo učestale kontakte s domorocima. Stoga su trgovački punktovi na obali bili od vitalnog interesa za razvoj isejske države. Priobalna ilirska zajednica je i prije isejskog prodora, tijekom 4. i 3. st. pr. Kr. bila otvorena prema helenizaciji, što se vidi iz pokretnih nalaza s ovdašnjih gradinskih utvrđenja (Sutitija, Veli Bijać, Luko i Sutikva) i obalnih naselja (Trogir). Kraj 3. st. pr. Kr. je vrijeme koje većina autora navodi kao početak isejske penetracije na srednjodalmatinsko priobalje. Isejci su bili u savezništvu s Rimljanima, koji su koristili isejsku infrastrukturu za unapređivanje svoje bujajuće trgovine i stvaranje mostobrana za kasnije uspostavljanje formalne vlasti na istočnom Jadranu. Podatak koji jasno upućuje na organiziranu isejsku prisutnost u Traguriju i Epetiju potječe iz 158. g. pr. Kr. u poznatom Polibijevu navodu o delmatskim napadima (*Polibije, Povijest, XXXII, 9*). To je ujedno i prvi spomen Tragurija i Epetija u povijesnim izvorima.

Desetak godina ranije došlo je do konačne propasti ilirskog kraljevstva nakon pohoda rimskog pretora Lucija Anicija protiv Genicija, posljednjeg vladara ilirske države. Od 167. g. pr. Kr. Ilirija do-

Historical Context

Ivan Šuta

Surroundings of the Kaštela Bay were a stage for very dynamic events during the 2nd and 1st century BC. Data found in written sources introduce Delmatae, Romans and Greeks from Issa as main protagonists. In the forefront there were certainly the confrontations with Delmatae, who had, after the fall of the Illyrian kingdom, been expanding to this area too.

In the earlier period, mid-Dalmatian coast was inhabited by the communities of Boulinoi, Hylloi and Nestoi. Some valuable data can be found in the Periplous of Pseudo Scilace (Suić, 1955, 136). Based on description in the Periplous, it can be assumed that the Boulinoi inhabited the surrounding area of the Kaštela Bay. The Veli Bijać hill-fort is located here, and it is the biggest Iron Age agglomeration with a defendable area of more than 3.5 hectares (about 8.5 acres), which shows beyond any doubt the significance and strength of the community which inhabited the hill-fort. Thus it doesn't surprise that Veli Bijać stands out as one of the possible centres of the Boulini community (Čače, 1992, 39).

Foundation of Greek colonies on the islands of Vis and Hvar at the beginning of the 4th century BC has also had influence on the coast, which quickly became a point of interest for the Greeks, especially those from Issa. According to what we know today, they were more trade-oriented than Greeks from Pharos, which meant more contacts with native people. Because of this, trading points on the coast were of vital interest for evolution of the colony of Issa. Coastal Illyrian community was opened to Hellenization even before the expansion of Issa, which is evident from the movable finds found in the hill-forts (Sutitija, Veli Bijać, Luko and Sutikva) and coastal settlements (Trogir) of this area.

End of the 3rd century BC is a period which is reported by most of the authors as an outset of the influence of Issa on the mid-Dalmatian coast. The inhabitants of Issa were allies of Rome, which used their trading infrastructure to improve its flourishing trade and to establish a bridgehead for its future establishment of formal rule in the Eastern Adriatic. The fact which clearly points out to organized presence of people from Issa in Tragurium and Epetium dates back to 158 BC, and can be found in the famous quotation about the attacks of Delmatae made by Polybius (*Polibije,*



Značajnija naselja na srednjodalmatinskom području u 2. i 1. stolj. pr. Kr.
Significant settlements in the Middle Dalmatian area in the 2nd and 1st century BC

Povijest, XXXII, 9). This was also the first time ever that Tragurium and Epetium have been mentioned in historical sources.

The final fall of the Illyrian kingdom had occurred ten years before, after the military campaign of the Roman praetorian Lucius Anicius against Genthius, the last ruler of the Illyrian kingdom. Illyria fell under jurisdiction of Rome in 167 BC, and thus Rome became the real master of the Adriatic. The threat for Romans now came from mid-Dalmatian hinterland where Delmatae rose to power in the area of large karstic valleys. Although it is probable that in the earlier period this area was not politically integrated, it is evident

lazi pod jurisdikciju Rima, koji postaje stvarni gospodar Jadrana. Opasnost je Rimljanima sada prijetila iz srednjodalmatinskog zaleđa gdje oko velikih krških polja jačaju Delmati. Iako je vjerojatno da u starijem razdoblju ovaj prostor nije bio politički integriran, razvidno je da u 2. st. dolazi do formiranja saveza koji će omogućiti ekspanziju prema obali. Delmati već 181. g. pr. Kr., nakon smrti ilirskog kralja Pleurata, odbijaju priznati vrhovništvo njegovog sina Gencija. Spomenuti Polibijev navod o delmatskim napadima na Epetij i Tragurij 158. g. pr. Kr. povod je vojne intervencije Rimljana u kojoj je prodorom iz Narone uništen njihov glavni grad



Kliški prijevoj
The pass of Klis

Delminij. Preko Kliškog prijevoja, na salonitanskom prostoru, Delmati su i dalje tražili izlaz na more, a njihovu prisutnost na obali u kasnijem razdoblju potvrđuju Strabonovi podaci, koji početkom 1. st. pr. Kr. spominje Salonu kao delmatsko pristanište (*Strabon, Geografija*, 7, 5, 5). Tek će u dvogodišnjem ratu (78. -76. g. pr. Kr.) rimski prokonzul Gaj Koskonije konačno osvojiti Salonu i ostaviti Delmate bez važnog uporišta. Ono što se u kontekstu Salone mora naglasiti jest činjenica da se u ovom ranijem razdoblju naziv naselja navodi u množini. To upućuje na postojanje više naselja u solinskom bazenu. Strateška važnost položaja dopušta takvu mogućnost. Dakle, pored *Urbs Vetusa* izgledno je postojanje još jednog ili više naselja. Upravo zbog navođenja imena Salone u množini, mora se uzeti u obzir da jedno od naselja nije ni bilo u delmatskim rukama. Najznačajniji nalaz koji bi mogao doprinijeti ubiciranju druge Salone je novije otkriće arhitekture iz 2. st. pr. Kr. na Manastirinama (Marin, 1990., 461. – 463.). Nemirno i nesigurno okruženje na periferiji grčko - rimskog svijeta, nasuprot najratobornijem domorodačkom plemenu na istočnojadranskoj obali zacijelo jest bio ograničavajući faktor razvoja ovdašnjih naselja do rimske pacifikacije, no usprkos tome, u okolici Kaštelanskog zaljeva nalazimo živa, cvjetajuća naselja s urbanom fizionomijom.

Nova istraživanja antičkog naselja Sikuli pružila su nove podatke koji doprinose poznavanju dinamike naseljavanja okolice Kaštelanskog zaljeva tijekom 2. i 1. st. pr. Kr. Prema rezultatima istraživanja, u slučaju Sikula može se govoriti o naselju koje je planski podignuto oko polovice 2. st. pr. Kr. Prema sadašnjim rezultatima

that alliances were made in the 2nd century BC, which made the expansions towards the coast possible. In 181 BC, immediately after the death of Illyrian king Pleuratus, Delmatae refused to recognize the rule of his son Genthius. The mentioned quotation by Polybius tells us about the attacks on Epetium and Tragurium, carried out by Delmatae in 158 BC. This was an immediate cause for Roman military intervention, and in one breakthrough from Naronia they destroyed Delminium, the capital of Delmatae. Delmatae continued to seek an exit to the sea through the pass of Klis in the area of Salona, and their presence on the coast in later period is confirmed by Strabo, who mentions Salona in context of being a port of Delmatae at the beginning of the 1st century BC (*Strabon, Geografija*, 7, 5, 5). Only in the two-year war (78 – 76 BC) will the Roman proconsul Gaius Cosconius finally seize Salona and leave Delmatae without an important stronghold. What needs to be pointed out in context of Salona is the fact that the name of the settlement in this earlier period is stated in plural. This indicates the existence of multiple settlements in the Salona bay. Strategic importance allows for this possibility. Thus, along with *Urbs Vetus*, it is probable that there existed one or more other settlements. And exactly because of this plural version of the name of Salona, the fact that one of the settlements wasn't under the rule of Dalmatae needs to be taken into consideration. The most important find which could help with proving of the existence of the second Salona is more recent discovery of architecture at Manastirine, dated to 2nd century BC (Marin, 1990, 461 – 463). Turbulent and perilous environment in the periphery of

the Greco-Roman world, with the most belligerent native tribe on the other side, must have been a limiting factor for development of settlements in this area up until Roman pacification, but despite all of this we still find living and flourishing settlements with urban physiognomy in the surrounding area of the Kaštela Bay.

The latest excavations of the antique settlement Siculi provided new data which have contributed to our knowledge on the dynamics of settling in the surrounding area of the Kaštela Bay during the 2nd and 1st century BC. Based on results of the research, in case of Siculi we can talk about settlement which was built by design around the middle of the 2nd century BC. Based on the results of the excavations, connection with Issa and Tragurium is evident, primarily because of the mode of construction and organization of the settlement, and then also because of majority of movable finds, all of which points out to Issa as a founder of the settlement. On the other hand, based on the time of foundation it is necessary to point out to the role of Romans, who were closely connected with the inhabitants of Issa, not only by friendship but also because of their interests in the Adriatic area.

Roman presence is also evident from the extensive usage of coastal route which could have been controlled by them, as they were a rising force in the region. To be more specific, archaeological excavation at the cape Ploča near Rogoznica revealed a sanctuary of Diomedes which existed from the end of the 4th till the end of the 1st century BC. Analysis of movable finds showed that there was a significant rise in the amount of the finds, primarily that of pottery, during the 2nd century BC, which points out to intensification of naval transportation towards the Northern Adriatic (Čače-Šešelj, 2005, 167). Romans demonstrated their territorial claims on this area through foundation of prominent Latin colony of Aquileia in 181 BC, and immediately after that they strengthened their position by conquering Histri.

When we consider the fact that several settlements through which trade could have been conducted had already existed during the time of foundation of Siculi, then it is probable that the reason for foundation was not in establishing yet another trading point on the coast, but it can be said that the reason was of agricultural nature. The evolution of wine production on the Apennine Peninsula during the 2nd century BC is accompanied by the expansion of trade to the east, as well as to Gallia and to Illyria (Tchernia, 1986, 66 – 107). Fertile surroundings of the Kaštela Bay provided excellent conditions for development of the viticulture, so it is only logical to conclude that vineyards were built and wine produced in this area. After all, this was the main industrial branch in Issa, which is proved, among other things, by the representations of grapes, *kantharoi* and amphorae on the coins.

It is difficult to tell for now if the fact that Polybius doesn't mention Siculi in his quotations about the attacks of Delmatae in 158

istraživanja, prvenstveno načinu gradnje i organizaciji naselja, zatim i većem dijelu pokretnih nalaza, razvidna je povezanost sa Issom i Tragurijem, što upućuje na Issu kao na osnivača. S druge strane, nužno je upozoriti da se s obzirom na vrijeme osnivanja ne smije zanemariti i uloga Rimljana, koji su tijesno povezani sa lsejcima, ne samo zbog prijateljstva, nego i svojih interesa na jadranskom području.

Rimska prisutnost očituje se i kroz intenzivnije korištenje dužobalne pomorske rute koju su oni, kao regionalna sila u usponu, mogli kontrolirati. Naime, arheološkim istraživanjima na rtu Ploča u blizini Rogoznice otkriveno je Diomedovo svetište koje je egzistiralo od kraja 4. do kraja 1. st. pr. Kr. Analizom pokretnih nalaza utvrđeno je da tijekom 2. st. pr. Kr. dolazi do značajnog porasta količine nalaza, prvenstveno keramike, što upućuje na intenzifikaciju pomorskog prometa prema sjevernom Jadranu (Čače-Šešelj, 2005., 167.). Rimljani svoje pretenzije na tom području ističu osnivanjem isturene latinske kolonije Akvileje 181. g. pr. Kr., a neposredno nakon toga učvršćuju položaj pokoravajući Histre.

S obzirom na činjenicu da u vrijeme osnivanja Sikula u okolici postoji više naselja preko kojih se mogla obavljati trgovina, vjerojatno je da razlog osnivanja nije uspostavljanje još jednog trgovačkog punkta na kopnu, već se može govoriti i o zemljoradničkom razlogu osnivanja naselja. Razvoj proizvodnje vina na Apeninskom poluotoku tijekom 2. st. pr. Kr. prati i trgovačka ekspanzija prema istoku, Galiji i Iliriku (Tchernia, 1986., 66. – 107.). Plodna okolica Kaštelanskog zaljeva pružala je izvrsne uvjete za razvoj vitikulture, stoga se logičnim nameće zaključak da se i ovdje sade vinogradi i proizvodi vino. Isejcima je uostalom to i bila gotovo najvažnija privredna grana, o čemu svjedoče, između ostaloga, i prikazi grožđa, kantarosa i amfora na kovanom novcu.

Znači li nespominjanje Sikula u Polibijevu navodu o delmatskim napadima u 158. g. da tada naselje nije ni postojalo, zasada je teško reći. Ono se ne spominje niti u kontekstu kasnijih rimsko - delmatskih sukoba, iako su se događali u neposrednoj blizini, ali ni u događanjima za vrijeme građanskog rata između Cezara i Pompeja. Možda bi se to moglo objasniti zavisnošću naselja prema obližnjem isejskom Traguriju ili Saloni koja je bila važniji politički i ekonomski faktor. Otvoreno je pitanje kakav je odnos Sikuljana s domorodačkim stanovništvom koje se nalazilo na Velom Bijaču. Moguća rješenja tog pitanja ulaze zasada u sferu nagađanja, no potrebno je ponovno naglasiti da razlog osnivanja Sikula nije primarno uspostavljanje trgovačkog punkta na obali, nego je bila važna i plodna zemlja u okolici, što se moralo ticati i domorodaca.

Sikuli se prvi put spominju u Plinijevom opisu istočnojadranske obale i naselja. Ovdje autor, nabrajajući obalna naselja na istočnom Jadranu, donosi podatak da je car Klaudije u Sikuli naselio vojne veterane (*Plinije Stariji, Poznavanje prirode, III, 22*). Dakle, naselje i pripadajući teritorij je postojao otprije, no nove okolno-



Dio Peuntingerove karte sa prikazom okolice Kaštelanskog zaljeva.

Part of the Tabula Peutingeriana showing the surrounding area of the Kaštela Bay

sti nakon 42. g. po. Kr. pružile su mogućnost naseljavanja novog stanovništva. U okolici Resnika nalazi se više većih rustičnih vila, poput onih u Bijaćima, odakle potječe veći broj veteranskih nadgrobničkih natpisa. Stoga je vjerojatno da naseljavanje veterana nije koncentrirano samo na uži prostor starijeg naselja, nego su osnovane nove rustične vile u polju i uz obalu, unutar teritorija ranijeg naselja. Istraživanjima je utvrđeno da se život prve faze naselja prekinuo naglo, u drugoj polovici 1. st. pr. Kr. Novo naseljavanje na ruševinama starijeg naselja nije se dogodilo odmah, jer su temelji novih građevina uglavnom nevezani uz ranije, a i čitava organizacija naselja je drugačija.

Razvoj Salone tijekom 1. st. po. Kr., dolazak veterana i dugotrajan period mira, potiču razvoj brojnih rustičnih vila u polju. Poljoprivredna proizvodnja i blizina antičkog velegrada, mogućnost trgovine sa zaleđem preko Labinske drage doprinose razvoju Sikula tijekom prvih stoljeća poslije Krista. Kasnoantičko razdoblje donosi zamiranje života u Sikulima, prema pokretnim nalazima 5. st. ili najkasnije 6. st. vrijeme je prekida života u naselju. To je vrijeme kada se općenito napuštaju i rustične vile u salonitanskom ageru, te ponovno zaposjedaju prapovijesne gradine poput Birnja na Kozjaku ili Gradca u Labinskoj dragi i bolje utvrđena naselja kao što je obližnji Trogir.

BC means that the settlement didn't exist at the time. It is not mentioned even in context of later confrontations of Romans and Delmatae, although they took place in the immediate vicinity, as well as in context of the events that took place during the civil war between Caesar and Pompeii. That may be explained through dependence of settlements on the nearby Tragurium governed by Issa, or on Salona which was a more important economical and political factor. The question about relations of the inhabitants of Siculi with native people who resided in Veli Bijać also remains to be answered. For now the possible answers rest in a domain of guessing, but it is necessary to state once again that the reason for foundation of Siculi lies not in necessity of another trading point, but in the importance of fertile soil in the vicinity, which also had to be of some concern to native inhabitants.

Siculi has been mentioned for the first time in Pliny's description of Eastern Adriatic coast and settlements. When listing all the coastal settlements on the Eastern Adriatic coast, the author states that military veterans were settled in Siculi by the emperor Claudius (Plinije Stariji, *Poznavanje prirode*, III, 22). So the settlement and its pertinent territory had existed before, but the new circumstances after the AD 42 made it possible to settle new inhabitants. Around Resnik, a significant number of larger rustic villas can be found, such as those in Bijaći, and many of the veterans' tombstone inscriptions originate from them. It is thus probable that settling of the veterans didn't take place only in the restricted area of the older settlement, but that new rustic villas were also built in the field or by the coast, inside the territory pertinent to the older settlement. It has also been established by the excavations that the first phase of the settlement was ended abruptly, in the 1st century BC. New settling in the ruins of the older settlement didn't happen immediately, which is evident from the fact that in most cases the foundations of new buildings aren't connected to the earlier ones, and the whole organization of the settlement is different.

Evolution of Salona during the 1st century AD, arrival of the veterans and long period of peace stimulated development of numerous rustic villas in the surrounding field. Agriculture, vicinity of the Classical Antiquity metropolis and possibility of trade with hinterland through the cove of Labin contributed to development of Siculi during the first few centuries AD. In Late Antiquity life faded away in Siculi, and based on the movable finds, life of the settlement was ended in the 5th or 6th century AD at the latest. This is a time of general abandoning of rustic villas in the area around Salona, when people once again took possession of prehistoric hill-forts such as Biranj on mountain Kozjak or Gradac in the cove of Labin, as well as of the better fortified settlements such as nearby Trogir.



Donjekaštelansko polje
The Lower Kaštela field

Arheološka topografija okolnog područja

Ivan Šuta

Na širem prostoru oko Resnika nalaze se obradive plodne površine koje se pružaju prema sjeveru do pristanaka brda Trečanica. Zapadnije preko Planoga, kroz Labinsku dragu, vodi put prema zaleđu, odnosno prema selu Labin. Ovaj prijevoj prema unutrašnjosti nedovoljno je naglašen u kontekstu veza obala - zaleđe na srednjodalmatinskom prostoru, iako je preko njega vodio komunikacijski pravac prema Petrovu polju, Danilskom polju na zapad i prema istoku do Radošića i zakozjačkim pravcem prema Klisu. Preko prijevoja vodila je rimska cesta, o čemu svjedoče nalazi miljokaza južno od Velog Bijaća (Babić, 1991., 62.). Tragovi kolotečina rimske ceste naziru se u dnu drage pored Mujine pećine. Druga, teže prohodna komunikacija prema zaleđu vodi preko Rudina, Prosika, Opora i Labina, gdje se spajala na prvi pravac. Nužno je isticanje ovih komunikacijskih pravaca zbog Sikula u kontekstu trgovačkih veza prema zaleđu, odnosno, sagledavanja naselja kao trgovačkog punkta na obali. Često naglašavana važnost Kliškog prijevoja u kontekstu strateškog položaja Salone može se usporediti s odnosom Sikula i Labinske drage.

Okolica Kaštelanskog zaljeva sa splitskim poluotokom, odnosno priobalni prostor od Trogira do Stobreča, izdvaja se od uobičajenog krškog srednjodalmatinskog krajolika zbog geološke građe. Široki slojevi vodonepropusnih flišnih stijena vodu zadržavaju na površini i omogućuju postojanje brojnih potoka i manjih rječica koje izviru na granici s kršom koji je dominantna geološka formacija na ovom području. Glinasta zemlja bolje zadržava vlagu što pomaže bilju da preživi tijekom sušnih ljetnih mjeseci.

Kao i u cijeloj okolici Kaštelanskog zaljeva, oko Resnika nalaze se brojna arheološka nalazišta. Plodno polje, povoljan strateški položaj i dostupnost vode pružali su uvjete za intenzivno naseljavanje kroz različita razdoblja. Naselje na Resniku gravitiralo je plodnom i prostranom polju, koje je, uzmemo li u obzir cijeli prostor od Planog do Kaštel Kambelovca, površinom veće od trogirskog Malog polja ili hore grčkog Farosa. U radijusu 4 km od naselja nalazi se 25 km² obradive zemlje. Stoga nije iznenađujuće što se u neposrednoj blizini antičkog naselja, na morskom dnu ispred ušća potoka, nalaze ostaci naselja iz starijeg neolitika. Ovo je zasada jedino poznato stalno naselje na otvorenom iz neolitika na srednjodalmatinskom priobalju. Prostor naselja nije dosada istraživani, no

Archaeological Topography of the Surrounding Area

Ivan Šuta

In the wider area of Resnik there is cultivable land spreading to the north, all the way to the slopes of the hill Trečanica. The route to hinterland, or more specifically to the village of Labin, leads to the west, through Plano and then through the cove of Labin. This pass is not accentuated well enough in context of connecting hinterland and coast of mid-Dalmatian area, despite the fact that it used to serve as a communication route towards Petrovo polje, as well as towards Danilsko polje to the west and Radošić to the east and towards Klis through the roads which passed behind mountain Kozjak. A Roman road also passed through the pass, which is attested by mile-stones found south of Veli Bijać (Babić, 1991, 62). Traces of wheel tracks of the Roman road can be seen at the bottom of the cove near Mujina cave. The other, less serviceable route towards hinterland leads across Rudine, Prosik, Opor and Labin, where it merges with the first route. This accentuation of communication routes is necessary because it puts Siculi in context of trading routes with hinterland, or more specifically, it considers the settlement as a trading point on the coast. The importance of the pass of Klis in context of strategic position of Salona, which is often being accentuated, can be compared with this relation of Siculi and the cove of Labin.

The surrounding area of the Kaštela Bay, together with the peninsula of Split, or more specifically the coastal area from Trogir to Stobreč, is different from the usual karstic mid-Dalmatian landscape because of its geological structure. Wide layers of water-tight flysch rocks keep water on the surface and enable existence of numerous streams and smaller rivers which spring in the area where this structure borders with kars, which is a dominant geological formation in this area. Clay-like soil is better for keeping water inside, which helps vegetation to survive during dry summer months.

In Resnik, as well as in the whole surrounding area of the Kaštela Bay, there are numerous archaeological sites. Fertile soil, good strategic position and accessibility to water provided conditions for intensive settling during different eras. The settlement in Resnik gravitates towards the fertile and spacious field which is, if we take the whole area from Plano to Kaštel Kambelovac into account, larger in surface than Malo polje in Trogir or the chora

of the Greek Pharos. There are 25 square kilometres of cultivable land within the radius of 4 kilometres around the settlement. Thus it is not surprising that there are remains of an early Neolithic settlement at the bottom of the sea in front of the rivermouth in the immediate vicinity of the antique settlement. This is for now the only known open-air Neolithic settlement on the mid-Dalmatian coastline. The settlement hasn't been researched yet, but through archaeological reconnaissance wooden pylons and numerous fragments of pottery and cut and polished lithic artefacts were found (Brusić 2008, 76).

Besides Resnik, the most important site in this area is the hill-fort at Veli Bijać. Based on pottery finds, it was partly contemporary to the first phase settlement in Resnik. It is situated on the highest point of the ridge which stands out to the east from the southern slope of the hill Trećanica. A limestone-crag, shaped as an elongated arch opened to the east, stands out from the ridge and provides a good natural protection to the southern and western part of the hill-fort. This crag forms a small plateau at the highest point of the hill-fort, and here stands a small church of Saint Onofrio dated to the 15th century. From this position an excellent visual control over the surrounding area, especially the part between Plano and Kaštel Novi, is possible.

From the main fortress wall, at its north-eastern part, emerges another one, which was evidently used for protection of the northern entrance to the hill-fort. Š. Ljubić mentions the remains of a building at the eastern side of Veli Bijać, facing the neighbouring Mali Bijać, which were made of *brutally carved enormous rocks* (Ljubić 1879, 14). This description indicates the existence of megalithic wall, but in present there are no evident remains which would match this description. Defendable surface of the settlement was around 35 000 square metres, which makes it one of the largest hill-forts in the wider area. On the northern slope of the hill, outside of the fortified area, there is a visible smaller-scale supporting masonry which can probably be dated to the time when hill-fort was in use. Northern part of the hill-fort was in the most part cleared out to make place for cultivable land, and on the surface there are many fragments of pottery dated from the late Bronze Age to the end of the Iron Age.

Along the entire ridge which stands out of Trećanica there are 8 prehistoric tumuli which spread all the way to Radinska greda, at the bottom of which the Radinka cave is located. The cave is of smaller proportions, placed at the bottom of the cliff. The area in front of the cave, which is much larger in surface, is also very well protected and it could have been used as a part of prehistoric habitat. Archaeological excavations haven't been conducted here yet, but based on collected surface finds the cave was used in the Bronze Age. There are also numerous prehistoric tumuli at the very peak of Trećanica as well as more to the west at the location Zvečaj near the village of Opor.



Labinska draga
Cove of Labin

rekognosciranjem su pronađeni drveni piloni, mnoštvo ulomaka keramičkih posuda, cijepanih i glačanih litičkih artefakata (Brusić 2008., 76.).

Uz Resnik najvažnije nalazište je gradinsko naselje na Velom Bijaću. Prema keramičkim nalazima, djelomično je koegzistiralo sa prvom fazom naselja na Resniku. Smješteno je na najvišem dijelu hrbata koji se izdvaja prema istoku iz južne padine brda Trećanica. Vapnenački greben izduženog lučnog oblika, otvoren prema istoku, uzdiže se iz hrbata pružajući dobru prirodnu zaštitu na južnom i zapadnom dijelu gradine. Ovaj greben tvori manji plato na najvišem dijelu gradine na kojem se danas nalazi crkvice sv. Onofrija iz 15. st. Odavde je moguća izvrsna vizualna kontrola okolnog prostora, posebno dijela od Planoga do Kaštel Novog.

U sjeveroistočnom dijelu iz osnovnog bedema izdvaja se drugi, koji je razvidno imao funkciju zaštite sjevernog ulaza u gradinu. Š. Ljubić spominje ostatke građevine od *ogromnih kamena surovo izdijelanih* na istočnoj strani Velog Bijaća, prema susjednom Malom Bijaću (Ljubić 1879., 14.). Opis upućuje na postojanje megalitskog bedema, no danas nisu vidljivi ostaci koji bi odgovarali tom opisu. Branjena površina naselja iznosila je oko 35 000 m², što ga svrstava među veća gradinska naselja na širem području. Na sjevernoj padini brežuljka, izvan utvrđenog prostora, uočavaju se manji podzidi koji vjerojatno potječu iz vremena korištenja gradine. Sjeverni dio gradine je većim dijelom prokrčen zbog dobivanja obradivih površina, a površinski se nalazi dosta ulomaka keramičkog posuđa koje se datira od kasnog brončanog do kraja željeznog doba.

Na cijelom hrbatu koji se izdvaja iz Trećanice nalazi se 8 prapovijesnih gomila, koje se pružaju sve do Radinske grede, u dnu koje se nalazi špilja Radinka. Pećina je manjih dimenzija, smještena u dnu litice. Predšpiljski prostor, površinom znatno veći, također



Gradina na Velom Bijaću
The hill-fort at Veli Bijać

je dobro zaštićen i mogao je biti korišten kao dio prapovijesnog staništa. Do sada ovdje nisu rađena arheološka istraživanja, no prema sakupljenim površinskim nalazima, pećina je korištena u brončanom dobu. Brojne su prapovijesne gomile i na samom vrhu Trećanice i zapadnije na položaju Zvečaj u blizini sela Opor.

Nedavnim rekognosciranjem prostora zapadnije od Velog Bijaća otkriveni su ostaci rimskodobne kuće s torom (oborom). Površinski se jasno razabiru ostaci kuće i ogradnog zida. Na spomenuti ogradni zid nadovezuje se suhozid koji se može pratiti u ukupnoj dužini od oko 160 m. Radi se o antičkoj podjeli zemljišta, koje se tragovi mogu vidjeti i na padinama Trećanice. Ova podjela zemljišta ne može se vezati uz tragove centurijacije koji se jasno uočavaju u polju. Vjerojatno se radi o podjeli iz kasnoantičkog perioda (Šuta, 2007 a., 396.).

Prostor Labinske drage, važan zbog prirodne komunikacije prema zaleđu, također je bogat arheološkim nalazištima. Osim poznatog paleolitičkog nalazišta u Mujinoj pećini, ovdje nalazimo nekoliko devastiranih prapovijesnih gomila na položaju Batak, te ostatke srednjovjekovnih naselja Babe i Gradac i veliko brončanodobno naselje na položaju Gaj. Južnije od Gaja nalazi se velika Kneževa gomila, a na uzvišenju Plano još dvije prapovijesne gomile.

Rustične vile nalazile su se u premjerenom dijelu salonitanskog agera, u plodnom polju. U okolici Resnika nalaze se ostaci nekoliko ovakvih objekata koji su vezani uz prostornu organizaciju agera. Nažalost, osim novijih istraživanja rustične vile na Divulja-

Recent archaeological reconnaissance of the area west of Veli Bijać revealed the remains of a Roman house with a pen. It is easy to distinguish the remains of the house and the surrounding walls on the surface. There is a dry stone wall in extension to the mentioned surrounding walls, which can be followed in total length of 160 metres. This is a case of antique division of land, traces of which can be seen even on the slopes of Trećenica. This division of land cannot be associated with traces of centuriation, which are clearly visible in the field. This is probably a case of Late Antiquity division (Šuta, 2007a, 396).

The area of the cove of Labin, which is important because of its natural communication with hinterland, is also rich in archaeological sites. Besides the famous Mujina cave, there are a few devastated prehistoric tumuli at the location of Batak, as well as remains of medieval settlements called Babe and Gradac and a large Bronze Age settlement at the location of Gaj. More to the south from Gaj there is a big tumulus called Kneževa gomila, and on the high ground of Plano yet another two tumuli can be seen.

Rustic villas can be found in the measured part of the fertile field of Salona. Around Resnik, there are remains of several objects of this kind, which can be associated with special organization of the field. Unfortunately, beside the research of a rustic villa in Divulje and around church of St. Martha, there haven't been any serious excavations here. Numerous surface finds, which have been continually discovered during field works since 19th century, have pointed out to a high population density in this area du-



Ostaci rimskodobnog obora kod Velog Bijaća
Remains of a Roman fold near Veli Bijać



Kneževa gomila

ring Classical Antiquity. It seems that rustic villas, similar to those which were found on Vis and Hvar, didn't exist in the field in the 2nd and 1st century BC, during the first phase of Siculi. The life was probably concentrated within the walls of the settlement and in Veli Bijać. There is an interesting find of a tomb *stela* dated to the 2nd century BC which was found in the field of Kaštel Novi, next to the area of archaeological site in Miri (Brunšmid, 1897, 187). This find indicates that even some earlier buildings could have existed in the field, since Miri are around 1700 metres away from the sea. Anyway, it is certain that intensive construction of rustic villas starts in the 1st century AD. The rustic villa closest to Siculi is located near Javorski put, which follows the line 19th western *cardo* in the field of Salona, at the location of Knežine. There is a well preserved cistern with a barrel vault here. More to the north-west, on the southern traced slopes of Veli Bijać, some walls and a Late Antiquity amphora tomb of a child were found recently, while digging the earth for a septic tank. In the nearby area of cle-

ma i istraživanja kod crkve sv. Marte, nije bilo ozbiljnijih radova. Brojni pokretni nalazi, nalaženi pri poljoprivrednim radovima još od 19. stoljeća ukazivali su na veliku gustoću naseljenosti ovog prostora u antičkom dobu. U 2. i 1. st. pr. Kr., u vrijeme egzistiranja prve faze Sikula, čini se da u polju nije bilo rustičnih vila, kakve nalazimo na Visu i Hvaru. Život je najvjerojatnije bio koncentriran unutar bedema naselja i na Velom Bijaću. Zanimljiv je nalaz nadgrobne stele iz 2. st. pr. Kr. pronađen u polju Kaštel Novog, uz areal arheoloških iskopina u Mirima (Brunšmid, 1897., 187.). Ovaj nalaz indicira da je moguće i u polju očekivati ranije gradnje jer su Miri udaljeni oko 1700 m od mora. Ipak, sigurno je da od 1. st. po. Kr. dolazi do intenzivne gradnje rustičnih vila. Sikulima najbliža rustična vila nalazi se uz Javorski put, koji prati liniju 19 zapadnog karda salonitanskog agera, na položaju Knežine. Ovdje je dobro očuvana cisterna s bačvastim svodom. Sjeverozapadnije, na južnim trasiranim padinama Velog Bijaća nedavno su prilikom iskopavanja zemlje za septičku jamu pronađeni zidovi i dječji kasnoantički

Ostaci rustične vile u Divuljama na rtu Tarce
Remains of the rustic villa in Divulje on the Tarce cape





Rimska cesta na Pantani
Roman road at Pantana

grob u amfori. U okolnim krčevinskim gomilama nalazi se dosta ulomaka tegula i amfora, što upućuje na postojanje značajnije rustične vile na ovom položaju. Dalje prema zapadu uz rimski put prema zaleđu nalazi se ranosrednjovjekovna crkva sv. Marte, koja je nastala na temeljima rustične vile. Južno od zaseoka Ivkovići u Planome nalazi se nekoliko krčevinskih gomila u kojima se nalazi dosta klesanaca, ulomaka rimskodobnih tegula i amfora što ukazuje na postojanje sličnog tipa nalazišta. Rustične vile nalazile su se i na položajima Žabljak, Dumanščine i Sv. Lucija (Šuta, 2007., 291. – 308.).

Uz more, rustične vile nalazimo na položaju Bile u neposrednoj blizini kaštela Quarco i na spomenutom položaju Tarce u Divuljama. Zapadnije od Divulja na prostoru Pantane jasno se na zračnim snimkama uočavaju tragovi antičkih ili srednjovjekovnih solana, uz koje se nalaze ostaci rimske ceste Salona-Tragurij.

ared land piles a lot of fragments of *tegulae* and amphorae can be found, which indicates the existence of a significant rustic villa in this area. More to the west, along the Roman road to hinterland, there is an early-medieval church of St. Martha, built on the foundations of a *villa rustica*. South to the little village of Ivkovići in Plano there are a few cleared land piles where ashlar masonry and fragments of Roman *tegulae* and amphorae can be found, which points out to the existence of similar site. *Villae rusticae* were also located at the positions of Žabljak, Dumanščine and St. Lucia (Šuta, 2007, 291 – 308).

Villae rusticae located by the sea can be found at the position of Bile, in the immediate vicinity of castle Quarco, and at the mentioned position of Tarce in Divulje. More to the west of Divulje, in the area of Pantan, traces of antique or medieval salt works, together with the remains of Roman road Salona-Tragurium near them, can be distinguished on the aerial photographs.



Organizacija i arhitektura naselja iz 2. i 1. st. pr. Kr.

Ivan Šuta

Iako su istraživanja bila ograničena, uvjetovana obuhvatom građevinskog zahvata, dobiveni su bitni podaci o organizaciji i arhitekturi naselja iz 2. i 1. st. pr. Kr., kada je život u naselju bio najintenzivniji. Poznavanje urbanizma naselja iz ovog perioda na srednjodalmatinskom području je prilično slabo, što je, osim slabe istraženosti, posljedica činjenice da većina naselja ima kasnije intenzivne faze naseljavanja. Osim Issa, u Traguriju i Epetiju, ali i Saloni, kasnije gradnje su znatno devastirale najraniju urbanu fazu. Stoga Sikuli predstavlja izniman potencijal za daljnja istraživanja urbanizma 2. i 1. st. pr. Kr., koji se, prema rezultatima naših istraživanja, može povezati s grčkim načinom urbanog planiranja.

Naselje je planski izgrađeno uz obalu zapadnog dijela Kaštelanskog zaljeva, oko 4 km od Trogira. Smješteno je uz istočnu stranu ušća istoimenog potoka koji ima kratak, ali vodom bogat tok. Pretpostavljena površina naselja nije manja od 3,6 ha. Za usporedbu, površina Sikula je oko dvaput veća od Kaštel Starog, koji je najveće novovjeko utvrđeno kaštelansko naselje. Ova faza naselja, iako devastirana kasnijim gradnjama, otkrivena je na većini istraženog područja. Istraživanjem trase u dužini od 200 i širini od 5 metara 2007. god., dobiven je presjek kroz naselje približno u smjeru istok - zapad. Otkriveni raster pokazuje ortogonalni tlocrt sa 10 ulica položenih u smjeru sjever - jug i ukupno 11 dijelova blokova širine oko 13 m. Zanimljivo je da na cijelom istraženom dijelu nije utvrđeno postojanje komunikacija u smjeru istok - zapad, što upućuje na izrazito jednosmjerni aksijalni raster, blizak hipodamskom urbanizmu s primjenom skamnacije. Otklon naselja je oko 16° u pravcu zapada u odnosu prema sjeveru. Dosađanjim istraživanjima nisu pronađeni ostaci javnih građevina i javnih otvorenih prostora. Za očekivati je da će se takvi sadržaji pronaći uz centralnu ulicu, vjerojatno uz obalu blizu pristaništa, kao što je slučaj u Issi.

Život prve faze naselja prestaje sredinom ili krajem 1. st. pr. Kr., prema analizi pokretnog materijala i jasno izraženom stratigrafskom slijedu. Najvjerojatnije je došlo do naglog prekida, o čemu govore ostaci urušenja, pronađeni u gotovo svim kućama, a u pojedinim kućama je pronađen sloj ispod urušenja s većim količinama gareži, što ukazuje na to da su one izgorjele u požaru.

Organization and Architecture of the First Phase of the Settlement (2nd and 1st century BC)

Ivan Šuta

Although the excavations were limited and conditioned by the scope of construction work, important data on the organization and architecture of the settlement dated to the 2nd and 1st century BC, a period when life was most intensive in it, were collected. The knowledge about urbanism of mid-Dalmatian settlements of this period is relatively poor, due not only to low degree of exploration, but also to the fact that most of the settlements went through phases of intensive settling in later periods. Later constructions have significantly devastated not only the earliest urban phase of Issa, but of Tragurium, Epetium and Salona as well. Due to all this facts, Siculi represents an extraordinary potential for further research of urbanism in the 2nd and 1st century BC, which can, according to our research, be associated with Greek way of urban planning.

The settlement was erected by design on the coast of the western part of the Kaštela Bay, around 4 kilometres from Trogir. It is located at the eastern side of the rivermouth of a small, though rich with water, stream which bears the same name. The estimated surface of the settlement is no less than 3.6 hectares (9 acres). In comparison, the surface of Siculi is around two times bigger than surface of Kaštel Stari, which is the biggest fortified settlement of Kaštela in Modern History. Although it has been devastated by later constructions, this phase of the settlement was discovered across the major part of the excavated area. The excavation of the 200 metres long and 5 metres wide route provided a cross-section view of the settlement oriented approximately east-west. The grid plan which was discovered reveals an orthogonal layout with 10 streets of a north-south orientation and a total number of 11 parts of blocks which are around 13 metres wide. It is interesting that no communication of an east-west orientation has been discovered yet in the whole excavated area, which indicates an explicitly one-way axial grid plan, close to hippodamic urbanism with application of *scamnatia*. Dip of the settlement is 16° to the west, in reference to the north. The excavations haven't revealed any remains of public buildings or public open spaces yet. It is to be expected to find such buildings along the central road, probably at the coast near the pier, as it is the case in Issa.



Zapadni dio sonde istražene 2007. god.
Western part of the trench researched in 2007

Based on analysis of movable finds as well as on clearly observable stratigraphic sequence, the first phase of the settlement comes to an end in the middle or at the end of the 1st century BC. It was probably an abrupt ending, which is evident from the remains of implosions which were found in almost every house. Extensive burning marks were also found below the implosion remains of some houses, and that indicates that they were burnt down in a fire.

Blocks

The finds from specific blocks or *insulae* demonstrate a striking uniformity. Completely preserved amphorae, *pithoi*, dishes, grindstones, domestic altars and similar utilitarian materials indicate that these were residences for people. Considering that no transversal streets have been found yet, it is certain that blocks were very elongated. It hasn't been possible to define length of the blocks in direction north-south yet. In the nearby Tragurium the established proportion of an *insula* is 1:2.5 (Kovačić, 2002, 383), but here it must be over 1:4. All the blocks are around 13 metres wide in direction east-west and they are divided into 6.5 metres

Blokovi

Nalazi iz pojedinih blokova ili *inzula* pokazuju izrazitu uniformiranost. Cjelovite amfore, pitosi, kuhinjsko posuđe, žrvnjevi, kućni žrtvenici i slični utilitarni materijal upućuju na to da je riječ o nastambama. S obzirom da se dosada nije pronašlo poprečnih ulica, sasvim je sigurno da su blokovi bili izrazito izduženi. Zasada se nije uspjelo definirati dužinu bloka u smjeru sjever - jug. U obližnjem Traguriju utvrđen je omjer insula 1:2,5 (Kovačić, 2002.,383) , ali ovdje je taj omjer zasigurno preko 1 : 4. Svi blokovi imaju širinu od oko 13 m u smjeru istok - zapad i podijeljene su na prostorije od 6,5 m, koje su na nekim mjestima bile pregrađene na manje prostorije od 3, 25 m širine. Ovakva planska dosljednost podsjeća na podjelu parcela kolonistima za kuće i okućnice iz Lumbardske psefizme.

Zidovi su široki oko 45 cm, suhozidno građeni. U temelje zidova su stavljane krupnije stijene u cijeloj širini, a već se u drugom redu gradilo s dva lica, bez vezivnog sredstva. Ovakav način gradnje temelja pokazao se nekvalitetan, naročito na mekoj podlozi, odnosno, na humoznoj zdravici. Uglavnom se pri zidanju koristio pločasti kamen, fino bunjasto obrađen s obje strane. Prevladavaju izduženi pravokutni oblici, dok su rjeđi kvadratični ili nepra-



Skupina amfora i dio prostorije stradale u požaru u kvadrantima 16 i 17
A group of amphorae and one part of the room which was devastated in fire in quadrants 16 and 17



Sonda iz 1991. god. i dio sonde iz 2007. god., kvadrati 18 i 19
The trench from 1991 and one part of the trench from 2007, quadrants 18 and 19

big rooms, which were sometimes divided into 3.25 metres wide smaller rooms. This consistence in planning reminds of divisions of parcels for the houses and house plots among the colonists in the psefism of Lumbarda.

The walls are around 45 centimetres wide, made of a dry stone structure. Larger stones were put right across the foundations of the walls, but already in the second row the construction is double faced and without any mortar to bind it together. This type of construction has proven itself below-quality, especially on such soft ground, that is, on a humus-like fertile soil like this. During the construction, a plate-like stone roughly carved on both sides was used. Predominant shape is an elongated rectangle, as opposed to square-like or irregular shapes which are less usual. Wood was probably also used in combination with stone, which is indicated by pine-tree beams used in construction of the piers, which have been preserved in the sea. Smaller rooms were covered with so-called Laconian roof-tiles, which have been found above the flooring inside the caved-in houses, while no examples of them were found in the wider enclosed areas. These rooms were either not vaulted at all, and thus used as court-yards or gardens, or they were maybe vaulted with lighter organic materials which haven't been preserved. The question about the inner organization of a



Primjer načina gradnje zida kuće u kvadratu 15
Example of building a house wall in quadrant 15



Urušenje prostorije sa kupama tzv. lakonskog tipa u kvadratima 18 i 19
Implosion of the room with so called Laconian roof-tiles in quadrants 18 and 19

Popločanje prostorije u kvadratu 13
Flooring of a room located in quadrant 13



vilni oblici. Vjerojatno je u kombinaciji s kamenom za gradnju korišteno i drvo, na što upućuju u moru sačuvane borove grede korištene kao dio konstrukcije pristaništa. Manje prostorije su bile pokrivene kupama tzv. lakonskog tipa, koje su pronalazene u urušenjima nad podnicama, dok u širim ograđenim prostorima nisu pronađene. Ove prostorije ili nisu bile nadsvođene i bile su dvorišta ili vrt, ili su možda bile nadsvođene s lakšim organskim materijalom od kojeg nisu sačuvani ostaci. Otvoreno je pitanje kakva je bila unutrašnja organizacija bloka, odnosno, koliki je bio stambeni prostor pojedine obitelji. Manje prostorije često su popločane kamenom, a na nekoliko mjesta na podnici su pronađeni *in situ* ostaci amfora, dolija i ručnih žrvnjeva. Za nivelaciju podnica korištena je nabijena glina, crvenica i rjeđe morski šljunak.

Ulice

Ukupno je otkriveno 10 komunikacija usmjerenih približno u pravcu sjever - jug. Centralna ulica u kvadratima 24 i 25 imala je širinu od 4 m, dok su ostale bile široke od 2.5 do 2.8 m.

block, that is, about the size of the living area of each family, still remains to be answered. Smaller rooms were often stone-paved, and above the floorings at several locations the *in situ* remains of amphorae, *dolia* and hand grindstones were found. Packed clay, red soil and rarely even sea gravel were used to level up the floorings.

Streets

A total of ten communications directed approximately north-south have been discovered. The central street located in quadrants 24 and 25 was 4 metres wide, while the others were from 2.5 to 2.8 metres wide. In reference to the central street, five were on the west side and four on the east side. It is very probable that there were also five streets and one more block in the eastern part.

Along the eastern edge of a street there was usually a narrow pavement, while in the central part of a communication there was a rather small trench used to drain water. Along the western edge of a street there was often one row of stones used to regulate

Pogled na sondu 2/08
View of trench 2/08





Komunikacija u kvadratima 37 i 38
A communication in quadrants 37 and 38

the draining of water from the trench. All of the communications in the settlement were also used as waste dumps, which can be deduced from up to 50 centimetres thick layers rich in remains of animal bones, sea shells, pottery and ashes. In certain areas, for example on the western side of the main street in quadrant 23 (sector 2, stratigraphy unit 27), the layer of waste spreads even outside the parameters of the street, in other words, it enters inside the block, which could mean that this was an open public space near the main street. But it is necessary to conduct further research of this area to be clearer on the meaning of this.

Defensive walls

The settlement is not located at the position which could be called naturally sheltered. The northern and eastern sides are rather exposed, while western and southern sides are defended by a stream and the sea. It can be said that this type of a naturally poorly sheltered settlement is a novelty on mid-Dalmatian coast at the time (2nd century BC). In comparison with the position of Epetium which is located on a rocky peninsula, or of Tragurium which is located on an islet, it is clear that Siculi stands out from the usual practice in selection of the position of a settlement up to then. Naturally, the fact that in case of Tragurium there was an older native settlement in its place needs to be taken in consideration. There is a notable similarity with the position of Salona's Urbs Vetus, which also doesn't have suitable defensive characteristics or, according to past research, any previous phases of settlement. This can lead us to another conclusion which is that suitable natural defensive characteristics were of no crucial importance to the founders of the settlement. In case of selection of the location, the existence of a certain feeling of safety among the founders,



Komunikacija sa popločanjem u kvadratu 18
A communication with flooring in quadrant 18

U odnosu prema centralnoj ulici 5 ulica nalazilo se zapadno, a 4 istočnije. Vrlo je vjerojatno da se i na istočnom dijelu nalazilo 5 ulica i još jedan blok.

Uz istočni rub ulice najčešće se nalazi usko popločanje, dok se u centralnom dijelu komunikacije nalazio manji jarak kojim je otjecala voda. Uz zapadni rub često se nalazi red kamena, kojim je reguliran tok vode iz jarka. Sve su komunikacije u naselju korištene kao deponije otpada, o čemu svjedoče i do 50 cm debeli slojevi bogati ostacima životinjskih kostiju, školjki, keramike i pepela. Na pojedinim mjestima, npr. sa zapadne strane glavne ulice u kvadratu 23 (sektor 2, SJ 27) sloj otpada se nalazi i van ulice, odnosno ulazi u blok, što možda može značiti da je riječ o javnom otvorenom prostoru uz glavnu ulicu. No, biti će potrebna daljnja istraživanja u tom dijelu kako bi se jasnije utvrdilo o čemu je riječ.

Bedem

Naselje nije smješteno na položaju koji bi se mogao nazvati prirodno zaštićenim. Sjeverna i istočna strana su prilično izložene, dok pristup zapadnom i južnom dijelu naselja brane potok i more. Može se reći da je ovako slabo prirodno zaštićeno naselje u to vrijeme (2. st. pr. Kr.) novina na obalnom dijelu srednje Dalmacije. Usporedimo li položaj s Epetijem koji je na grebenastom poluo-toku, ili Tragurijem koji je na otočiću, jasno je da Sikuli odudara od dotadašnje prakse odabira položaja naselja. Naravno da je potrebno uzeti u obzir i činjenicu da se, naročito u slučaju Tragurija, mora računati i na postojanje ranijeg domorodačkog naselja. Uočljiva je sličnost s položajem salonitanskog Urbs Vetusa, koji također nema povoljne prirodne obrambene karakteristike i raniju fazu naseljavanja prema sadašnjem stanju istraživanja. U tom smislu se može ići i dalje s pretpostavkom da osnivačima prirod-



Pogled na dio bedema u sondi 1/08.

The view of one part of a defensive wall in trench 1/08

as well as integration into the processes of wider social and economical transformation during the 2nd century BC can be noted.

Defensive walls were discovered not during the first excavations in 2007, but at the end of 2007 in the area of the assumed northern edge of the settlement. Because of the previous construction of the bungalows, there were many facilities installed into the earth which has significantly devastated the remains. The excavations continued in 2008 and 2009, with a total of 7 explored trenches. In three of them the remains of a defensive wall were discovered, while in one of them it wasn't possible to conclude if it was also a wall because of the later devastation. No remains were found in rest of the trenches. Still, a general direction approximately 80 metres long was established. The walls are mostly preserved in their foundations, which are 2.7 metres wide, while the highest conserved point is at the height of 1 metre. Both sides are built of large, roughly carved rectangular blocks of stone. At one part of the inner side, in trench 1/08, the highest row contained some more delicately carved smaller blocks of stone. The cramming of the wall is mostly made up of more amorphous rocks which are



Temelj vanjskog lica bedema u sondi 1/08.

Foundations of the outer surface of a defensive wall in trench 1/08

ne defenzivne karakteristike nisu bile od presudnog značenja. U samom odabiru položaja može se prepoznati postojanje osjećaja sigurnosti u osnivača, ali i uključivanje u proces šire društvene i gospodarske preobrazbe tijekom 2. st. pr. Kr.

Bedemi nisu bili otkriveni prilikom prvih istraživanja 2007. g., već krajem 2007. g. na pretpostavljenom sjevernom rubu naselja. Ovdje je zbog ranije gradnje bungalova bilo dosta ukopanih instalacija kojima su znatno devastirani ostaci. Istraživanja su nastavljena 2008. i 2009. g., s ukupno istraženih 7 sondi. U 3 sonde otkriveni su ostaci bedema, dok se u jednoj sondi nije moglo sa sigurnošću utvrditi je li riječ o bedemu zbog kasnije devastacije.

Sjeveroistočni dio bedema salonitanskog Urbs Vetusa

North-eastern part of a defensive wall of Urbs Vetus of Salona





Pogled na sondu 3/08
View of trench 3/08

arranged more casually, although a more deliberate arrangement of the cramming can clearly be seen in trench 1/08.

In trench 3/2008, which is located furthest to the east, it can be observed that on many parts of the outer side of the wall a bedrock was carved afterwards to provide a better foundation. Thus it is clear that most of the stone which was used in construction of the wall was brought from the immediate vicinity of the settlement, which is abundant in regularly layered calcareous source rocks. In this trench, the annex of the wall at its inner side was also partially explored, and there are visible remains of *anathyrosis* here. Future research will show if this is a case of an inner tower. Based on direction of the central street more to the east from the trench 3/2008, the existence of the entrance to the settlement is to be expected. In the area that has been researched so far traces of buildings alongside defensive walls haven't been discovered yet. Traces of adaptation of the walls in the second phase of the settlement also haven't been found, so it is more probable that the stone from the wall was used for construction of other kinds of buildings. This is primarily indicated by large stone blocks which were used for construction of the later-period piers.

U ostalim sondama nije pronađeno ostataka. Ipak, okvirno je utvrđen pravac u dužini od oko 80-ak metara. Bedem je uglavnom očuvan u temelju, a širina iznosi 2, 7 m, dok je najviše sačuvan u visini od 1 m. Oba lica su građena od krupnih, grubo klesanih pravokutnih blokova. Na dijelu unutrašnjeg lica u sondi 1/08 najgornji red je sadržavao i finije klesane manje blokove. Ispuna zida bedema sadržava uglavnom amorfnije stijene koje su nemarnije raspoređene, ali se u sondi 1/08 jasno uočava i pravilnije slaganje ispune.

U sondi 3/08, koja je najistočnija od istraženih, primijećeno je na više mjesta na vanjskom licu priklesivanje živca za bolje temeljenje. Također, vidljivi su na više položaja tragovi vađenja kamena neposredno uz unutrašnju stranu bedema. Stoga je najvjerojatnije većina kamena korištena za izgradnju bedema donesena iz neposredne blizine naselja, gdje ima dosta pravilno uslojenih vapnenačkih matičnih stijena. U ovoj sondi djelomično je istražen i aneks bedema s unutrašnje strane gdje su vidljivi i ostaci anatiroze. Nastavak istraživanja pokazati će je li riječ o dijelu unutrašnje kule. Prema pravcu pružanja centralne ulice naselja istočnije od sonde 3/08 može se očekivati postojanje ulaza u naselje. Na dosada istraženom dijelu nisu pronađeni tragovi objekata uz bedem. Nisu pronađeni ni tragovi adaptiranja bedema u drugoj fazi naselja, već je tada najvjerojatnije za potrebe gradnje novih objekata drugačije namjene, korišten kamen s bedema. Na to upućuju ponajprije veliki kameni blokovi koji su korišteni za gradnju kasnijih pristaništa.

Organizacija i arhitektura druge faze naselja (1.-5. st. po. Kr.)

Ivan Šuta

Na ruševinama starijeg naselja u 1. st. po. Kr. niče novo naselje. Ostaci arhitekture iz ove faze znatno su slabije očuvani, ponajviše zbog kasnijeg krčenja i odnošenja kamena. Na zračnoj snimci ovog područja iz 1961. g. vide se dvije velike izdužene gomile, dugačke oko 100-ak metara, nastale krčenjem ruševina antičkog naselja. Zidovi objekata su očuvani uglavnom u temeljima, usmjerenja kao i zidovi iz prve faze naselja. Temelji pojedinih objekata su, za razliku od prethodne faze, dublje ukopani, čime je prilično devastiran raniji sloj. Bitno je naglasiti da novo naselje negira raster ranije faze naselja, većina ulica je prekinuta, a naseljava se i prostor van bedema. Pristanište ranijeg naselja se napušta i gradi se novo, veće pristanište 100-ak metara istočnije, ispred današnje hotelske plaže. Veliki blokovi od kojih je izgrađeno novo pristanište vjerojatno su bili dio bedema prvog naselja. Nekoliko većih kamenih blokova pronađeno je i uz ušće potoka, s istočne strane, prilikom podmorskih istraživanja na trasi incidentnog preljeva 2005. g.. Ovdje se na zračnim snimkama uočavaju i manja pristaništa, od kojih je jedno napravljeno od kamenih blokova, s kolcima zabodenim sa strane. Obalni dio zapadnije od ušća potoka, prema površinskim nalazima, također je korišten u drugoj fazi naselja. Pronalazak širokog suhozida sa ugrađenim spolijama sa zapadne strane potoka to potvrđuje. Čini se da je i obala nasipana, na što upućuju debeli slojevi sa amorfnim stijenama i otpadom, pronađeni istraživanjima na incidentnom preljevu.

Već smo naglasili da između prve i druge faze nema kontinuiteta u organizaciji naselja. Samo u jednom slučaju raniju komunikaciju preslojava komunikacija iz druge faze naselja. Riječ je o petoj komunikaciji zapadnije od glavne ulice naselja. Širina kamenom popločane komunikacije u drugoj fazi iznosi oko 4,9 m. Vjerojatno je ova faza, s obzirom na dugotrajnost, imala određene podfaze, no ovim dosadašnjim istraživanjima nismo ih uspjeli razdvojiti. Najveća koncentracija arhitekture iz druge faze je na području od kvadrata 6 do 22, dakle u zapadnom dijelu naselja. Ovdje su u kvadratu 12 pronađeni ostaci drvenog poda, što je rijedak nalaz na dalmatinskom području. Daske podnice su truljenjem stvorile zemlju tamnosmeđe boje širine između 8 i 12 cm, a prostor između dasaka, oko 1 - 2 cm širok, bio je žućkaste boje. Također su na više mjesta uočljivi i uzdužni krajevi dasaka.

Organization and Architecture of the 2nd Phase of the Settlement (1st-5th Century AD)

Ivan Šuta

In the 1st century AD a new settlement rose on the ruins of the older one. The remains of architecture from this period are significantly less preserved, due mostly to a later-period clearing up and taking of stone material. On the aerial photographs of this area made in 1961, two large, around 100 metres long, elongated clear land piles, which were created while clearing up the ruins of the antique settlement, can be seen. The walls of the buildings are preserved mostly in foundations, and they have the same orientation as the walls from the first phase of the settlement. The foundations of some buildings are deeper, as opposed to ones from the previous phase, so they have significantly devastated the older layer. It is important to point out that new settlement negates the grid street plan of the earlier phase of the settlement, so most of the streets are interrupted, and the area outside the walls is also populated. The piers of the previous settlement are abandoned, and new, bigger ones are built some 100 metres more to the east, in front of the present-day hotel beach. Large blocks of stone which were used in construction of new piers were probably parts of the first settlement's wall. Several large blocks of stone were found at the eastern side of the rivermouth of the stream during the underwater exploration at the trace of the planned Spill Containment System in 2005. On the aerial photographs several smaller piers can be seen, one of which is made of blocks of stone, with poles stuck by the sides of it. Based on the surface finds, the coastal area western to the rivermouth of the stream was also used during the second phase of the settlement. This is confirmed by a wide dry stone wall with integrated *spolia*, which was found on western side of the stream. The coast itself seems to have been filled up, which is indicated by thick layers of amorphous rocks and waste which were found during the research which took place at the construction site of the Spill Containment System.

It has already been stated that there is no continuity in organization of the first and the second phase of the settlement. Only in one case has the earlier communication been overlaid by the second phase communication. This is the case of the fifth communication to the west of the main street of the settlement. The stone-paved second phase communication is around 4.9 metres wide. Considering its long duration, this phase probably had certain



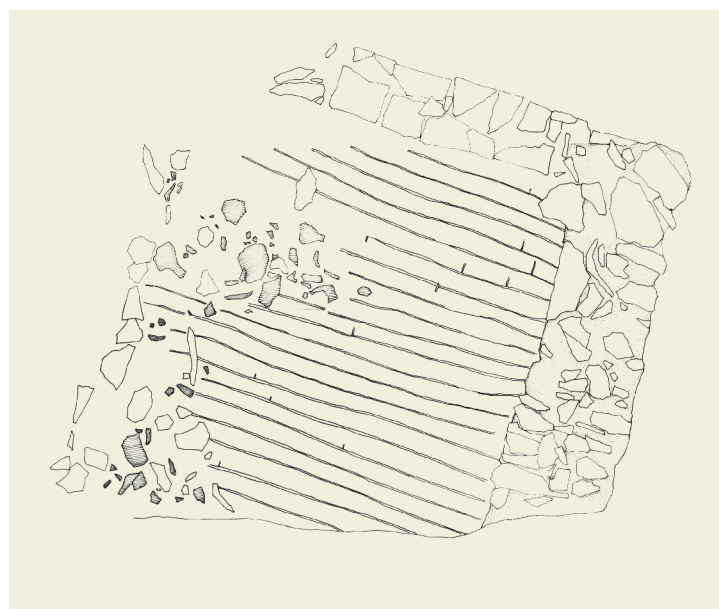
Siroki suhozid sa zapadne strane usca potoka
A wide dry-stone wall at the western side of the rivermouth of the stream

Istočnije, u kvadratima 13 i 14 nalazila se veća prostorija, od koje su sačuvani duboko ukopani suhozidni temelji, manja cisterna i ukopani objekt, nepoznate namjene. Od cisterne pravokutnog oblika sačuvana je polovica, jer je prilikom gradnje stare hotelske kanalizacije uništen sjeverni dio. Dobro je očuvano nekoliko slojeva hidraulične žbuke kojom je obložena unutrašnja strana. Drugi ukopani objekt nalazi se zapadnije i također je devastiran ukopavanjem hotelske kanalizacije. Vjerojatno čini cjelinu s cisternom. Unutrašnji zidovi su prekriveni samo jednim slojem žbuke, koja samo zatvara fuge između stijena. Ukopani objekt očito nije imao namjenu skladišne prostorije za tekućinu, moguće je da se radi o manjem skladištu za žito ili nečemu sličnome. Oba objekta su povezana s većim objektom južnije. Podnica prostorije tog objekta je sadržavala dosta raspršene žbuke i kasnoantičkih novčića. U ostalim je kvadratima teže definirati pojedine objekte. U kvadratu 19 pronađen je zidani grob koji čini cjelinu s istraženim grobovima iz sonde istraživane 1991. g. U kvadratima 23, 24, 25

sub-phases, but so far it hasn't been possible to distinguish them through the excavations. The largest concentration of the second phase architecture is in the area from quadrant 6 to quadrant 22, that is, in the western part of the settlement. Here in quadrant 12 the remains of a wooden floor were found, and that is a rare find in the Dalmatian area. Due to decay of the floor-boards a dark-brown layer of dirt, 8 to 12 centimetres thick, was created, and the space between the boards, around 1 to 2 centimetres wide, was of yellowish colour. In several places the longitudinal sides of the boards can also be seen. More to the east, in quadrants 13 and 14 there was a larger room of which only a buried dry stone foundations, a small cistern and a buried structure of an unknown purpose have been preserved. Only half of a rectangular cistern has been preserved, because its northern part was destroyed during the construction of the old hotel sewage system. A few layers of hydraulic mortar, which used to cover the inner side of it, have been preserved. Another buried structure is located more to the west and it has also been devastated during the construction of the hotel sewage system. It probably forms a separate unity with the cistern. The inner walls are covered with only one layer of mortar, which was used only to close the joints between the stones. The buried structure obviously didn't serve as a storehouse for liquids, so it is possible that it was used as a smaller storage for corn or something similar. Both structures are connected at their southern side with yet another, larger structure. Flooring of this structure contained a lot of dispersed mortar and Late Antiquity coins. In other quadrants it is more difficult to define specific structures. A tomb made of stone, which forms a separate unit with the tombs explored by trenching in 1991, was found in quadrant 19. Two walls from the second phase, one of which lies on the main street of the first phase settlement which clearly points



Ostaci drvenog poda iz kvadrata 12
Remains of a wooden floor from quadrant 12





Ostaci cisterne i ukopanog objekta u kvadratu 14
Remains of a cistern and a complete building in quadrant 14

out to discontinuity of settling, are located in quadrants 23, 24, 25 and 26. The walls belonging to the second phase can also be found in quadrants 29, 30, 31 and 32, but it is again difficult to say something about their function. In quadrants 33 and 34 a necropolis has been discovered, but it will be dealt with in more detail in a separate chapter.

The latest rescue excavations conducted at the beginning of 2011 in the north-western part of the settlement, outside of the area of the earlier settlement, have revealed a well preserved street built in the 1st century AD, as well as a complex of contemporary buildings on the western side, which is an important indicator of transformation of the settlement during the 1st century AD. With settling of the veterans in the area of Siculi, a new era in which life started to spread from the fortified area to the field, has begun. Javorski put, which has been interrupted when the airport was built, is actually an antique road, located on the cardo of the Salona's field, which was used to reach Resnik from Bijač. At the

i 26 nalaze se dva zida iz druge faze, od kojih jedan naliježe na glavnu ulicu naselja iz prve faze, što jasno upućuje na diskontinuitet naseljavanja. Zidove iz druge faze nalazimo još u kvadratima 29, 30, 31 i 32, no i ovdje je teško nešto više reći o funkciji. U kvadratima 33 i 34 pronađena je nekropola o kojoj detaljnije piše u zasebnom poglavlju.

Najnovija zaštitna istraživanja obavljena početkom 2011. g. u sjeverozapadnom dijelu naselja, izvan areala ranijeg naselja, otkrila su dobro očuvanu ulicu koja je napravljena u 1. st. po. Kr. i sklop istovremenih građevina sa zapadne strane, što je bitan pokazatelj transformacije naselja tijekom 1. st. po. Kr. Naseljavanjem veterana na područje Sikula započinje nova epoha u kojoj se život iz utvrđenog areala širi i u polje. Javorski put, danas prekinut gradnjom zračne luke, je antička cesta na cardu salonitanskog agera preko kojega se iz Bijača dolazilo u Resnik. Na položaju Križice, kako naziv upućuje, raskrižje s važnom antičkom cestom koja je vodila prema Labinu preko Planoga i Labinske drage. Dugotrajno

razdoblje mira, omogućava razvoj brojnih rustičnih vila koje niču u okviru agera, na rubovima centurija uz javne putove i potoke. Nedavno je na obližnjem rtu Tarce, sa zapadne strane potoka Slanac, otkrivena i djelomično istraжена jedna takva rustična vila.

position of Križice there is a crossroad with an important antique road which used to lead to Labin across Plano and the cove of Labin (this is evident from the name itself, since Križice can roughly be translated as a cross). A long period of peace enabled development of numerous *villae rusticae* which rose within the area of the field, at the edges of the *centuria*, along the main roads and streams. One partially researched *villa rustica* of this kind was discovered recently on the nearby cape Tarce, on the western side of the stream Slanac.



Cesta iz 1. stolj. poslije Krista, istraživanja 2011. god.
A road dated to the 1st century AD, research of 2011



Pogled na položaj na kojemu je izgrađen incidentni preljev.
View of the location where Spill Containment System was built

Istraživanja na incidentnom preljevu

Ivan Šuta

Tijekom proljeća 2005. godine obavljena su zaštitna arheološka istraživanja u podmorju ispred potoka Resnik, s istočne strane od ušća. Ovdje je planirana gradnja tzv. incidentnog preljeva, odnosno kanalizacijske cijevi u dužini od 92 m od obale na morskom dnu. S obzirom da je od ranije bilo poznato da čitavo podmorje, na potezu od hotelske plaže do dna uvale sa zapadne strane potoka obiluje nalazima, nužno je bilo istražiti trasu prije gradnje. Samo je istraživanje bilo otežano zbog rada u pličini, gdje je bila postavljena većina kvadrata dimenzija 2 X 2 m (Radić, Rossi 2006,

Research Conducted at the Location of the Spill Containment System

Ivan Šuta

In the spring of 2005 rescue archaeological research was conducted under the sea in front of the stream Resnik, on the eastern side of its estuary. Construction of the so called Spill Containment System, meaning a 92 metres long sewage pipe placed at the sea bottom, was planned at this location. Since it had been known from before that the entire underwater area from the hotel beach to the bottom of the bay, at the western side of the stream, was rich in archaeological material, it was necessary to conduct research of the area before the beginning of the construction. The



Istraživanja na incidentnom preljevu
Research at the Spill Containment System



Drveni češalj
Wooden comb

research itself was difficult to conduct because it took place in the shallow water, where the largest part of the 2x2 metres large quadrants were placed (Radić Rossi 2006, 355). The cultural level was approximately 1 meter thick and in the upper part it contained a layer of dumped amorphous rocks and sand. Closer to the coast several large and carved stone blocks were discovered and they could have belonged to the defensive walls of the first phase settlement. Bottom part contained less rocks and more compact argillaceous dirt. It also contained a better preserved movable material, as well as a significant amount of organic material, mostly tree branches and olive, cherry, peach and walnut seeds. Wooden dishes, a two-side comb and two drinking glasses made of glass also make interesting finds. Parts of fishing equipment are also common among the finds. Leaded fishing net weights, fish-hooks and fishing net needles indicate an important role of fishing within the economy of the settlement. The layers were created when the coast had been filled to gain a larger coastal area at the time of the settlement. Aerial photographs show that this part of the coast was filled up to the cliff which spreads parallel to the present time coast, at distance of approximately 40 metres. The coast line probably spread through this area during the first centuries AD. At the outer side of the cliff no traces of dam have been found, and the entire cultural level at this part is thin and contains less material. Around ten metres to the east from the researched trench a construction made of large carved blocks positioned vertically in relation to the coast, with wooden pylons stuck at both sides, was discovered. Analysis of the aerial photographs shows that this construction frames the eastern side of the dam.

Different kinds of well preserved vessels are represented among the pottery finds, and they are a proof of well developed trade with the wider Mediterranean area during the first few centuries AD. The majority of finds is comprised of North African red glazed pottery and amphorae, eastern *sigillata* B, pottery from Cnidus, stamped pottery from Pannonia, late pottery of thin walls, so called eastern rough pottery and different shapes of amphorae with a flat bottom.



Sjemenke maslina
Olive seeds

355). Kulturni sloj bio je deo u prosjeku oko 1 m i sastojao se u gornjem dijelu od sloja nabacanog amorfnog kamena i pijeska. Bliže obali pronađeno je više obrađenih većih kamenih blokova koji su možda prvobitno pripadali bedemu iz prve faze naselja. Donji sloj je sadržavao manje stijena, s više kompaktne glinaste zemlje. Sadržavao je bolje sačuvan pokretni materijal, a pronađeno je i dosta sačuvanog materijala organskog podrijetla, uglavnom grana drveća, sjemenki maslina, trešanja, breskvi i oraha. Zanimljivi su i nalazi drvene posude, dvostranog drvenog češlja i dvije staklene čaše. Česti su i nalazi dijelova opreme za ribolov. Olovni utezi za mrežu, udice i igla za pletenje mreže otkrivaju značajnu ulogu ribolova u ekonomiji naselja.

Slojevi su nastali nasipavanjem tadašnje obale, radi dobivanja kopnene površine. Na osnovu zračnih snimki primjećuje se da je obala na tom dijelu nasuta do kamene hridi koja se pruža paralelno s današnjom obalom, na udaljenosti od oko 40 m. Tu je vjerojatno bila obalna crta tijekom prvih stoljeća poslije Krista. S vanjske strane hridi nisu pronađeni tragovi nasipa, a čitav kulturni sloj u tom dijelu je tanak i sadrži manje nalaza. Desetak metara istočnije od istražene sonde pregledom je pronađena konstrukcija od većih obrađenih blokova posloženih okomito u odnosu prema obali, sa zabodenim drvenim pilonima s obje strane. Analizom zračnih snimki primjećuje se da ova konstrukcija uokviruje nasip s istočne strane.

Među keramičkim nalazima pronađenim pri istraživanjima zastupljene su razne vrste dobro očuvanog posuđa koje svjedoče o razvijenoj trgovini sa širim mediteranskim područjem tijekom prvih nekoliko stoljeća poslije Krista. Sjevernoafrička crveno glazirana keramika i amfore, istočna sigilata B, knidska keramika, panonska žigosana keramika, kasna keramika tankih stjenki, tzv. istočna gruba keramika i različiti oblici amfora s ravnim dnom sjevernotalijanske podrijetla čine glavninu nalaza.

Inv. broj 3792, kvadrat 13, svibanj 2005. g.

Nalaz: zdjela

Vrsta materijala: keramika

Opis: plitka zdjela s manjom prstenastom nogom i prema vani zadebljanim obodom polukružnog presjeka. Kvalitetna keramika svijetlo smeđe boje, gornji i unutrašnji dio stijenke tamnosmeđe boje. Zdjela je sastavljena iz 8 ulomaka.

Dimenzije: promjer 24 cm, vis. 6.3 cm

Datacija: 2. i 3. st. po. Kr.

Inv. number 3792, quadrant 13, May 2005.

Find: bowl

Material: clay

Description: shallow bowl with a small annular foot and a rim which is semicircular in cross section and thickened outwardly. High quality pottery of a light brown colour; upper and inner parts of the wall are of dark brown colour. The bowl has been reconstructed from eight fragments.

Dimensions: diameter 24 cm, height 6.3 cm

Datation: 2nd and 3rd century AD



Inv. broj 3793, kvadrat 12 i 14, svibanj 2005. g.

Nalaz: zdjela

Vrsta materijala: keramika

Opis: duboka zdjela s prstenastom nogom. Tijelo zdjele gotovo je okomito od oboda do oštrog pregiba prema dnu. Obod je koso zasječen prema unutra, a pregib je s vanjske strane profiliran s četiri manje istaknute linije. Keramika s narančasto-crvenim premazom i tamnijim poljima s unutrašnje i vanjske strane posude. Sjevernoafrička produkcija, najvjerojatnije varijanta Hayesove forme 15. Zdjela sastavljena iz više ulomaka pronađenih u dva različita kvadrata.

Dimenzije: promjer 20 cm, vis. 7.5 cm

Datacija: druga pol. 3. i 4. st. pos. Kr.

Inv. number 3793, quadrant 12 and 14, May 2005.

Find: bowl

Material: clay

Description: deep bowl with an annular foot. The body is almost vertical from the rim to the sharp crease towards the bottom. The rim is sharply inwardly cut, and the crease is profiled with two smallish protruding lines at the outer side. The pottery has an orange-red paint and darker areas on the outer and inner sides of the vessel. It is a North African production, most probably a variety of the Hayes form 15. The bowl has been reconstructed from several fragments found in two different quadrants.

Dimensions: diameter 20 cm, height 7.5 cm

Datation: second half of the 3rd and the 4th century AD.



Inv. broj 3794, kvadrat 14, svibanj 2005. g.

Nalaz: šalica s jednom ručkom

Vrsta materijala: keramika

Opis: šalica s jednom ručkom, trbušastog tijela i izvijenog oboda s profiliranim prijelazom iz tijela u obod. Prijelaz iz tijela u zaravnjeno dno malo naglašen. Ručka nije sačuvana, ali se nazire hvatište na trbuhu. Vanjska stjenka gotovo do dna uronjena u sivu smjesu koja ima metalizirajući sjaj. Keramika smeđa fino pročišćena i kvalitetno pečena, tankih stjenki sa slabo naglašenim rebrima. Istočnomediteranska produkcija.

Dimenzije: promjer oboda 9,3 cm, visina 10 cm

Datacija: 2./3. st. pos. Kr.

Inv. number 3794, quadrant 14, May 2005.

Find: cup with one handle

Material: clay

Description: a cup with one handle, a paunchy body and a buckled rim with a profiled transition between the body and the rim. The transition between the body and the flattened bottom is slightly prominent. The handle has not been preserved, but there is a trace of the vertex on the body. Outer wall has been dipped into a grey mixture of a metallic shine almost to the bottom. The pottery is brown, nicely consolidated and delicately fired, and of thin walls with slightly prominent ribs. It is an Eastern Mediterranean production.

Dimensions: diameter of the rim 9.3 cm, height 10 cm

Datation: 2nd/3rd century AD



Inv. number 3795, quadrant 14, May 2005.

Find: glass

Material: glass

Description: a glass on a bell-shaped leg. Transitions into a buckled rim and the bottom part of the body are decorated with two profiled lines. The glass is white with a significant amount of iridescence. The glass has been reconstructed from twenty fragments.

Dimensions: diameter of the rim 9.4 cm, height 9.5 cm

Datation: from the second half of the 1st century AD to the end of the 2nd century AD

Inv. number 3796, quadrant 13, May 2005.

Find: glass

Material: glass

Description: a glass on a biconical foot with a slightly buckled rim. Upper part of the body is decorated with two profiled lines. The glass is white with a significant amount of iridescence. The glass has been reconstructed from fifteen fragments; the leg is missing and it has been hypothetically reconstructed.

Dimensions: diameter of the rim 9.8 cm, height 9.1 cm

Datation: 2nd century AD

Inv. broj 3795, kvadrat 14, svibanj 2005. g.

Nalaz: čaša

Vrsta materijala: staklo

Opis: čaša na nozi zvonolikog oblika. Prijelaz u izvijeni obod i donji dio tijela ukrašen s dvije profilirane linije. Staklo bijele boje sa dosta irizacije. Čaša rekonstruirana iz dvadesetak ulomaka.

Dimenzije: promjer oboda 9,4 cm, vis. 9, 5 cm.

Datacija: od druge polovice 1. st. pos. Kr. do kraja 2. st. pos. Kr.

Inv. broj 3796, kvadrat 13, svibanj 2005. g.

Nalaz: čaša

Materijal: staklo

Opis: čaša na nozi bikoničnog oblika s blago izvijenim obodom. Gornji dio tijela ukrašen s dvije profilirane linije. Staklo bijele boje s dosta irizacije. Čaša rekonstruirana iz petnaestak ulomaka, nedostaje noga koja je hipotetski rekonstruirana.

Dimenzije: promjer oboda 9,8 cm., vis. 9, 1 cm.

Datacija: 2. st. pos. Kr.



Inv. broj 2572, kvadrat 14, svibanj 2005. g.

Nalaz: zdjela

Materijal: keramika

Opis: plitka zdjela ravnog dna. Obod je blago uvijen i naglašen. S unutrašnje strane prijelaz iz tijela u obod naznačen je s dvije urezane koncentrične linije. Dva pojasa s tri urezane koncentrične linije nalaze se i s unutrašnje strane dna zdjele. U sredini unutrašnjeg dijela dna utisnut je žig okruglog oblika s loše očuvanim križem ili rozetom. Zdjela pripada istočnoj sigilati B2 produkciji (forma Hayes 60).

Dimenzije: promjer 18,5 cm., vis. 4,5 cm.

Datacija: 1./2. st. pos. Kr.

Inv. number 2572, quadrant 14, May 2005.

Find: bowl

Material: clay

Description: shallow bowl with a flattened bottom. The rim is slightly buckled and prominent. The transition between the body and the rim on the inner side is indicated with two carved concentric lines. There are two bands with three carved concentric lines on the inner side of the bowl as well. In the middle of the inner part of the bottom there is a circular stamp with a badly preserved cross or rosette. The bowl is of the eastern *sigillata* B2 production (Hayes form 60)

Dimensions: diameter 18.5 cm, height 4.5 cm

Datation: 1st/2nd century AD



Inv. number 2500, quadrant 14, May 2005.

Find: bowl

Material: clay

Description: deep bowl with a flattened bottom which is slightly lifted up at the edge. The rim is buckled and thickened, on the inner side the rim is emphasised with a concentric circle. In the middle of the inner side of the bottom there is a circular stamp with a rosette. The surface glaze is of a dark brown colour; the core is brown. The bowl is of the eastern *sigillata* B2 production (Hayes form 76 B).

Dimensions: diameter: 24 cm, height: 6.5 cm

Datation: first half of the 2nd century AD



Inv. broj 2500, kvadrat 14, svibanj 2005. g.

Nalaz: zdjela

Materijal: keramika

Opis: duboka zdjela s ravnim dnom koje je na rubu malo uzdignuto. Obod izvijen i zadebljan, rub oboda s unutrašnje strane naglašen s urezanom koncentričnom linijom. Na sredini unutrašnje strane dna utisnut okrugli žig s rozetom. Boja površinske glazure tamnosmeđa, jezgra smeđa. Zdjela pripada istočnoj sigilata B2 produkciji (forma Hayes 76 B).

Dimenzije: promjer 24 cm, vis. 6.5 cm.

Datacija: prva pol. 2. st. pos. Kr.

Inv. broj: 2496, kvadrat 15, svibanj 2005. g.

Nalaz: vrč

Materijal: keramika

Opis: vrč vrećastog oblika tijela s manjim izdvojenim dnom i blago izvijenim visokim obodom koji se na vrhu opet malo uvija. Ručka elipsastog presjeka počinje od polovice oboda i završava na dijelu vrča. Unutrašnja strana narebrena, veći dio vanjske strane, osim donjeg dijela, prije pečenja uronjen u crvenkastosmeđu boju. Vrč pripada knidskoj keramičarskoj produkciji.

Dimenzije: promjer u obodu 9 cm, vis. 20 cm.

Datacija: 2. st. pos. Kr.



Inv. number 2496, quadrant 15, May 2005.

Find: jug

Material: clay

Description: jug of a bag-like body with a smallish detached bottom and a slightly buckled high rim which is buckled ones more at the top. The handle is ellipsoid in cross section; it starts in the middle of the rim and ends at one part of the jug. Inner side is ribbed; before the firing almost all outer surface has been dipped into red colour, except for its bottom part. The jug is a part of the pottery production from the Island of Cnidus.

Dimensions: diameter of the rim: 9 cm, height: 20 cm

Datation: 2nd century AD

Inv. broj: 2565, kvadrat 14, svibanj 2005. g.

Nalaz: posuda

Materijal: drvo

Opis: zdjela poluloptastog oblika s blago izvijenim obodom.

Dimenzije: promjer 12,2 cm, vis. 5.1 cm

Inv. number 2565, quadrant 15, May 2005.

Find: vessel

Material: wood

Description: a bowl of a semi-spherical shape with a slightly buckled rim.

Dimensions: diameter 12.2 cm, height 5.1 cm



Inv. broj: 2466, kvadrat 15, svibanj 2005. g.

Nalaz: češalj

Materijal: drvo

Opis: češalj s dva reda zubaca. Jedna strana ima šire, druga gušće raspoređene zupce. Krajevi i središnji dio zadebljani kako se tanki zubi ne bi raširili. Gušći red zubaca više oštećen.

Dimenzije: šir. 8, 5, vis. 4, 5, deblj. 1 cm

Datacija: 1. do 3. st. pos. Kr.

Inv. number 2466, quadrant 15, May 2005.

Find: comb

Material: wood

Description: a comb with two rows of dents. On one side the dents are wide, and on the other they are arranged more closely. The ends and middle part are thickened in order to prevent spreading of the thinner dents. The dense row of the dents is more damaged.

Dimensions: width 8.5 cm, height 4.5 cm, thickness 1 cm

Datation: 1st to 3rd century AD



Inv. broj: 3797, kvadrat 13, svibanj 2005. g.

Nalaz: posuda

Materijal: keramika

Opis: duboka zdjela s ravnim dno koje je na rubu malo uzdignuto. Obod izvijen i zadebljan, rub oboda s unutrašnje strane naglašen sa urezanom linijom. Po sredini tijela s unutrašnje strane urezane tri tanje paralelne linije. Veći dio dna je rekonstruiran. Boja površinske glazure tamnosmeđa, jezgra smeđa. Zdjela pripada istočnoj sigilata B 2 produkciji (forma Hayes 76 B).

Dimenzije: promjer 20 cm, vis. 6,2 cm

Datacija: prva pol. 2. st. pos. Kr.

Inv. number 3797, quadrant 13, May 2005.

Find: vessel

Material: clay

Description: deep bowl with a flattened bottom which is slightly lifted up at the edge. The rim is buckled and thickened; its inner side is emphasized with a carved line. In the middle of the inner side of the body three parallel lines have been carved. The bottom was mostly reconstructed. The colour of the surface glaze is dark brown, and the core is brown. The bowl is of the eastern *sigillata* B2 production (Hayes form 76 B)

Dimensions: diameter 20 cm, height 6.2 cm

Datation: first half of the 2nd century AD

Inv. number 3798, quadrant 13, May 2005.

Find: vessel

Material: clay

Description: a smallish deep bowl with a flattened bottom which is slightly lifted up at the edge. The rim is buckled and thickened; its inner side is emphasized with a carved line. Five thin concentric lines have been carved at the outer side of the bottom. In the middle of the inner side of the bottom there is a stamp shaped as a palmette.

The bowl is of the eastern *sigillata* B2 production (Hayes form 76 B)

Dimensions: diameter 15.5 cm, height 5.4 cm

Datation: first half of the 2nd century AD

Inv. broj 3798, kvadrat 13, svibanj 2005. g.

Nalaz: posuda

Materijal: keramika

Opis: manja duboka zdjela sa ravnim dno koje je na rubu malo uzdignuto. Obod izvijen i zadebljan, rub oboda sa unutrašnje strane naglašen sa urezanom linijom. Na dnu s vanjske strane urezano pet tankih koncentričnih linija. Sa unutrašnje strane dna, u središnjem dijelu utisnut žig oblika palmete.

Zdjela pripada istočnoj sigilata B2 produkciji (forma Hayes 76 B).

Dimenzije: promjer 15, 5 cm, vis. 5, 4 cm

Datacija: prva pol. 2. st. pos. Kr.



Inv. number 3799, quadrant 12, 13 May 2005.

Find: fishing net needle

Material: bronze

Description: a massive fishing net needle, broken at one side. The other part has been preserved, and it used to have an eye which was originally opened up at the top. Due to the fact that the entire needle has corroded, the eye is now closed.

Dimensions: length 13.5 cm, thickness 0.5 cm

Datation: 1st-3rd century AD

Inv. broj 3799, kvadrat 12, 13. svibanj 2005. g.

Nalaz: igla za pletenje mreže

Materijal: bronca

Opis: masivna igla za pletenje mreže, s jedne strane slomljena. Druga strana je očuvana, s ušicom koja je prvobitno bila otvorena na vrhu. Čitava je igla korodirana, zbog čega je ušica zatvorena.

Dimenzije: dužina 13, 5 cm, deblj. 0,5 cm

Datacija: 1.-3. st. pos. Kr.



Inv. number 3800, quadrant 9 A, 27 Apr 2005.

Find: fish net weight

Material: lead

Description: small leaded plate of an elongated rectangular shape, bent in half and with an additionally compressed edge.

Dimensions: length 6.8 cm, width 0.7 cm

Datation: 1st-3rd century AD

Inv. broj 3800, kvadrat 9 A, 27. 04. 2005. g.

Nalaz: uteg za mrežu

Materijal: olovo

Opis: olovna pločica izduženog pravokutnog oblika, presavijena na pola i dodatno stisnuta na rubu.

Dimenzije: duž. 6,8 cm, šir. 0,7 cm.

Datacija: 1.-3. st. pos. Kr.



Inv. broj 3801, 33-38 m, 20. 04. 2005. g.

Nalaz: uteg za mrežu

Materijal: olovo

Opis: olovna pločica izduženog pravokutnog oblika, presavijena do pola.

Dimenzije: duž. 8, 5 cm, šir. 2 cm.

Datacija: 1.-3. st. pos. Kr.

Inv. number 3801, 33-38 m, 20 Apr 2005.

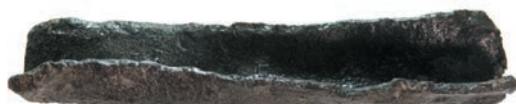
Find: fish net weight

Material: lead

Description: small leaded plate of an elongated rectangular shape, bent in half.

Dimensions: length 8.5 cm, width 2 cm

Datation: 1st-3rd century AD



Inv. broj 3802, slučajni nalaz, 11. 11. 2008. g.

Nalaz: udica

Materijal: bronca

Opis: udica u cijelosti sačuvana. Širok ubodni luk i dugi vrat na vrhu spljošten za privezivanje krene. Oštrica na vrhu udice je uvijena, bez zupca s unutrašnje strane.

Dimenzije: duž. 4,3 cm, šir. 2 cm.

Datacija: 1.-3. st. pos. Kr.

Inv. number 3802, accidental find, 11 Nov 2008.

Find: fish-hook

Material: bronze

Description: a completely preserved fish-hook. It has a wide stinging arch and a long neck which is flattened at the end to enable fastening of fishing thread. The blade at the top of the fish-hook is buckled, without a dent at the inner side.

Dimensions: length 4.3 cm, width 2 cm

Datation: 1st-3rd century AD





Istraživanje nekropole u kvadratima 34,35 i 36 2007. god.
Research of a necropolis in quadrants 34, 35 and 36 in 2007

Nekropole

Ivanka Kamenjarin

U istraživanjima, koja su vođena od 1991. do 2011. godine na lokalitetu Resnik, utvrdili smo postojanje dviju skupina grobova, a ukupno je do danas istraženo 11 grobova. Te su skupine udaljene jedna od druge oko 70 m. Možemo ih uvjetno nazvati istočna i zapadna nekropola. Obje nekropole nalaze se unutar naselja i vremenski pripadaju drugoj fazi. Zajedničko im je uz vrijeme trajanja i način ukopavanja (inhumacija) te vrsta grobova (zidane i u amforama). Također, može se kazati da grobovi nemaju jasnu organizaciju i red, različito su orijentirani. O postojanju resničkih nekropola prve podatke mogu nam dati dva ulomka stela koji se čuvaju u Arheološkom muzeju u Splitu, a pronađeni su početkom 20. stoljeća (Bulić, 1908, str. 64-65). Iz šezdesetih godina 20. st. imamo usmena svjedočanstva iz razdoblja prve gradnje hotelskog kompleksa. Svjedoci govori o grobovima u amforama na mjestu današnjeg trećeg i četvrtog paviljona. Slična situacija se ponovila i prilikom gradnje bungalov naselja i pripadajuće hotelske kanalizacije osamdesetih godina. Tada je Ivica Svilan upozoravao na grobove zapadno i sjeverno od četvrtog paviljona. I za ove grobove opisi su kao grobovi u amforama. Iz zaštitnih pod-morskih istraživanja 2005. godine pronađen je ulomak manje nadgrobne stele, odbačen u sloju šuta kojim je nasipavana obala. Istočna nekropola protezala se sjeverno i južno od trase istražene 2007. godine. Većih je dimenzija, iako je prilično devastirana gradnjom hotelskog kompleksa. Ipak, u budućnosti bi se moglo pronaći intaktnih grobova na sjeveru. Južna skupina nalazi se gotovo u srcu naselja prve faze i vjerojatno je bila manjeg opsega. Ostaje otvoreno pitanje smještaja nekropole prve faze naselja, iz doba 2. – 1. st. pr. Kr. Kako su u to vrijeme postojali strogi propisi i običaji o neukapanju unutar naselja, treba ga tražiti izvan poznatih area-l naselja, uz ulaz u naselje i pripadajuće komunikacije.

Istočna skupina grobova

Zaštitna istraživanja iz 2007. godine iznjedrila su 7 grobova, od toga 4 u amforama i 3 zidana, obiteljske grobnice, unutar kvadrata 34, 35, 36 i 37. Svi su ukopani u podnice kuća i komunikacije iz prve faze naselja. Različito su orijentirani, bez jasne organizacije i reda. Gradnjom hotelske kanalizacije devastirani su grobovi 5 i 6, koji su se nalazili uz južni rub sonde. Sa sjeverne strane su grobovi 4 i 7 djelomično izlazili iz okvira kvadrata, stoga se ovdje proširio

Necropolis

Ivanka Kamenjarin

Existence of two groups of graves was established during the excavations conducted from 1991 to 2011, and a total of eleven graves have been researched up to now. Those two groups are about 70 metres far from each other. They could be tentatively called eastern and western necropolis. Both of them are located within the settlement and they both pertain to the second phase of the settlement. What they have in common is their duration and burial manner (inhumation) as well as their type (masonry tombs or burial amphorae). It can also be stated that graves have no clear organisation and order; they are of different orientation. First information on the existence of the necropolises of Resnik was provided by two fragments of stelae from the Archaeological museum in Split, which were discovered at the beginning of the 20th century (Bulić, 1908, 64-65). There are some verbal testimonies from the 1960s, the time of construction of the hotel complex. Witnesses tell us about amphorae tombs found at the location of the present day third and fourth pavilion. Similar situation was repeated during the construction of bungalows and hotel sewage system in the 1980s. At that time Ivica Svilan pointed out to the graves west and north to the fourth pavilion. These graves were also described as amphorae tombs. During the underwater research of 2005, fragment of a small tomb stela, which has been thrown away into the pile of dirt which was being used to fill the coast, was discovered. Eastern necropolis spread north and south from the route researched in 2007. It is of larger dimensions although it has been significantly destroyed during the construction of the hotel complex. Nevertheless, a discovery of preserved graves in the north could still be possible in the future. Southern group is located almost at the heart of the first phase settlement, and it was probably of smaller dimensions. The question about the position of the necropolis of the first phase settlement, dated to 2nd-1st century, still remains to be answered. Since there were strict rules and customs related to non-burial within the settlement at that time, it should be searched for outside of the known area of the settlement, near the entrance and its pertaining road.

Eastern group of graves

Rescue archaeology excavations of 2007 brought to the surface seven graves, four of which are burial amphorae, and three are

family masonry tombs, found within quadrants 34, 35, 36 and 37. All of them have been buried into the floors of the houses and of the roads of the first phase settlement. They are of different orientations, without clear organisation and order. During the construction of the hotel sewage system, graves 5 and 6, which were located along the southern edge of the trench, were devastated. At the northern side, graves 4 and 7 partially spread outside of the parameters of the quadrant, so the trench had to be widened to the north. Graves 1, 2 and 3 are of rectangular shape with a stone-made architecture, plastered at the inner side. Grave 3 is the only one with a plastered floor. The upper part, which has been destroyed during the later-time processing, is missing from all of them. The number of burials varies, from single ones to as much as 14 individuals, which have been discovered in grave 3. This is obviously a case of a family tomb which was used for burials during a longer period. North to grave 7, one more grave has been spotted, but it has not been researched on this occasion. A child's skeleton from grave 4 has been placed in an amphora of a North African origin. The rest of the burials were individual.

Western group of graves

This group consists of four researched graves and two to three visible, but not researched graves. One of them was a burial amphora (Fadić, 1994, 159-164), and rest of them are masonry tombs of a so called *a pozzeto* type, meaning a masonry tomb of a rectangular shape with a barrel vault. There are no rules considering orientation and organisation in these examples as well. Despite being placed near each other, graves 1 and 2 (from 1992 excavation) are of different orientation and size. The first one is smaller and better preserved, while the other one is larger and more shallowly preserved. Burial amphora was placed less than 50 cm south to the grave 1, oriented North-South with an inclination.

Grave offerings include ceramic oil-lamps, bowls, fibulae, bronze and silver rings, bronze bracelets, beads made of glass paste, coins and earrings.

If we compare grave offerings from both groups, we notice that they are similar in architecture, with burial amphorae and masonry tombs, but in view of grave offerings, the eastern necropolis is chronologically older, with graves dated as early as the 2nd century AD.

Anthropological analysis of human osteological material was conducted by Mario Šlaus Ph.D., and it has provided information on gender, age at the moment of death, pathological changes and taphonomic characteristics.

iskop prema sjeveru. Grobovi 1, 2 i 3 su pravokutnog oblika sa zidanom arhitekturom, ožbukani s unutrašnje strane. Jedino grob 3 ima ožbukan pod. Svima nedostaje gornji dio, koji je uništen kasnijim obrađivanjem. Broj ukopa varira od pojedinačnih do čak 14 individua, koliko ih je pokopano u grobu 3. Tu se očito radi o obiteljskoj grobnici u koju se pokapalo kroz duži vremenski period. Sjevernije od groba 7 uočen je još jedan, najvjerojatnije zidani grob, koji ovom prilikom nije istražen. Dječji skelet u grobu 4 nalazio se u amfori sjevernoafričkog podrijetla. Ostali ukopi su pojedinačni.

Zapadna skupina grobova

Ova skupina sastoji se od 4 istražena groba te 2-3 vidljiva, no neistražena groba. Jedan grob je bio u amfori (Fadić 1994., 159.-164.), a ostala tri su zidane grobnice tzv. *a pozzeto* tipa, odnosno zidana grobnica pravokutnog tlocrta s bačvastim svodom. Ni ovdje nema pravila u orijentaciji i organizaciji. Premda su grobovi 1 i 2 (1992. godine) jedan do drugoga, imaju različite orijentacije, a i veličine su im različite. Prvi je manji i bolje očuvan dok je drugi veći i pliće očuvan. Grob u amfori bio je niti 50 cm južnije od groba 1, orijentiran sjever – jug s manjim odklonom.

Keramičke uljanice, zdjele, fibule, brončano i srebrno prstenje, brončane narukvice, perle od staklene paste, novčići i naušnice činili su priloge u grobovima. Usporedimo li grobne priloge iz obje skupine, uočiti ćemo da se radi o istoj grobnoj arhitekturi: grobovi u amforama i zidani grobovi, no s obzirom na grobne priloge, kronološki primat ima istočna skupina grobova, gdje nalazimo grobove već iz polovice 2. st. pos. Kr.

Antropološku analizu ljudskog osteološkog materijala napravio je dr. sc. Mario Šlaus, čime su dobiveni podaci o spolu, starosti u trenutku smrti, patološkim promjenama i tafonomijskim karakteristikama.

Inv. broj 3846, Pn 902, Resnik, S II, grob 1, visina 39, kvadrat 34, 19. 04. 2007.

Nalaz: zdjela

Materijal: keramika

Opis: Duboka zdjela ravnog dna. Nije izrađena na lončarskom kolu, grublja tamnosmeđa keramika s dosta primjesa kalcita. Grobni prilog uz desnu potkoljenicu.

Dimenzije: šir. 14.2 cm, vis. 5.3 cm

Datacija: 3.- 4. st. pos. Kr.

Inv. number 3846, special find 902, Resnik, trench II, grave 1, depth 39, quadrant 34, 19 Apr 2007.

Find: bowl

Material: clay

Description: Deep bowl with a flat bottom. It was not made on a pottery wheel. The pottery is rough and dark-brown, with a significant amount of calcite admixtures. It was a grave offering found along the right lower-leg.

Dimensions: width 14.2 cm, height 5.3 cm

Datation: 3rd- 4th century AD.



Inv. broj 3864, Pn 246, Resnik, S II, grob 2, visina 50, kvadrant 34, 08. 05. 2007.

Nalaz: prsten

Materijal: srebro

Opis: alka izduženog polukružnog presjeka s kockastom krunom koja sadrži šrafirane ureze s gornje strane.

Dimenzije: vanjski promjer 2 cm, unutrašnji promjer 1,7 cm

Inv. number 3864 special find 246, Resnik, trench II, grave 2, depth 50, quadrant 34, 08 May 2007.

Find: ring

Material: silver

Description: a ring of an elongated semi-circle in cross section, with a square crown with hatched cuts at the upper side.

Dimensions: outer diameter 2 cm, inner diameter 1.7 cm



Inv. broj 3867, Pn 240, Resnik, S II, grob 3, visina 106, kvadrant 35, 08. 05. 2007.

Nalaz: perla

Materijal: staklena pasta

Opis: perla valjkastog oblika, crne boje s bijelim linijama, jedan kraj naknadno koso zasječen.

Dimenzije: duž. 2,5 cm, šir. 1,6 cm

Datacija: 4. – 5. st.

Inv. number 3867, special find 240, Resnik, trench II, grave 3, depth 106, quadrant 35, 08 May 2007.

Find: bead

Material: glass paste

Description: cylindrical bead, black with white stripes; one end has been bevelled afterwards.

Dimensions: length 2.5 cm, width 1.6 cm

Datation: 4th – 5th century AD



Inv. number 3959, special find 205, Resnik, trench II, grave 3, depth 41, quadrant 35, 25 Apr 2007.

Find: bracelet

Material: bronze

Description: elongated ellipse in cross section; opened un-nailed ends with hardly visible bevels.

Dimensions: diameter 5.5 cm, width 0.5 cm

Datation: 4th – 5th century AD

Inv. broj 3959, Pn 205, Resnik, S II, grob 3, visina 41, kvadrant 35, 25. 04. 2007.

Nalaz: narukvica

Materijal: bronca

Opis: izduženi elipsasti presjek, otvoreni raskucani krajevi s loše vidljivim kosim urezima.

Dimenzije: promjer 5,5 cm, šir. 0.5 cm

Datacija: 4. -5. st.



Inv. number 3866, special find 242, Resnik, trench II, grave 3, depth 106, quadrant 35, 08 May 2007.

Find: earring

Material: silver

Description: small oval ring, circular in cross section, which at one side ends with a small bent hook.

Dimensions: length 2.5 cm, width 1.6 cm

Datation: 4th – 5th century AD

Inv. broj 3866, Pn 242, Resnik, S II, grob 3, visina 106, kvadrant 35, 08. 05. 2007.

Nalaz: naušnica

Materijal: srebro

Opis: karičica ovalnog oblika, kružnog presjeka koja na jednoj strani završava zavijenom kukicom.

Dimenzije: duž. 2,5 cm, šir. 1,6 cm

Datacija: 4. -5. st.

Inv. number 3868, special find 238, Resnik, trench II, grave 3, depth 106, quadrant 35, 08 May 2007.

Find: earring

Material: silver

Description: small oval ring, circular in cross section; at one end it ends with a small bent hook.

Dimensions: length 2.5 cm, width 1.6 cm

Datation: 4th – 5th century AD.

Inv. broj 3868, Pn 238, Resnik, S II, grob 3, visina 106, kvadrant 35, 08. 05. 2007.

Nalaz: naušnica

Materijal: srebro

Opis: karičica ovalnog oblika, kružnog presjeka koji na jednoj strani završava zavijenom kukicom.

Dimenzije: duž. 2,5 cm, šir. 1,6 cm

Datacija: 4. – 5. st.



Inv. broj 3865, Pn 230, Resnik, S II, grob 3, visina 106, kvadrant 35, 08. 05. 2007.

Nalaz: prsten

Materijal: srebro

Opis: alka kružnog presjeka koja prema elipsasto proširenoj glavi postaje deblja. Na glavi nejasan prikaz izveden tehnikom ukucavanja.

Dimenzije: šir. 0,6 cm, promjer 1,7 cm

Datacija: 4. – 5. st.



Inv. number 3865 special find 230, Resnik, trench II, grave 3, depth 106, quadrant 35, 08 May 2007.

Find: ring

Material: silver

Description: ring is circular in cross section and gets thicker towards the ellipsoidally widened head. There is an unclear representation on the head, and it was made with a hammering technique.

Dimensions: width 0.6 cm, diameter 1.7 cm

Datation: 4th – 5th century AD.



Inv. broj 3862, Pn 232, Resnik, S II, grob 3, visina 106, kvadrant 35, 08. 05. 2007.

Nalaz: narukvica

Materijal: bronca

Opis: kružni presjek, otvorenih raskucanih krajeva ukrašenih urezanim simetričnim paralelnim urezima s vanjske strane.

Dimenzije: promjer 5,5 cm, šir. 0,5 cm

Datacija: 4. – 5. st.



Inv. number 3862, special find 232, Resnik, trench II, grave 3, depth 106, quadrant 35, 08 May 2007.

Find: bracelet

Material: bronze

Description: circular in cross section, with opened un-nailed ends decorated with symmetrically carved parallel cuts at the outer side.

Dimensions: diameter 5.5 cm, width 0.5 cm

Datation: 4th – 5th century AD.

Inv. broj 3860, Pn 234, Resnik, S II, grob 3, visina 106, kvadrant 35, 08. 05. 2007.

Nalaz: narukvica

Materijal: bronca

Opis: lim pravokutnog presjeka, otvoreni krajevi. Vanjska strana ukrašena frizom, urezane linije formiraju pravokutna polja, koja sadrže utisnut Andrijin križ, jednu kružnicu s točkom i dvije kružnice s točkama.

Dimenzije: promjer 5,3 cm, šir. 0,7 cm

Datacija: 4. -5. st.



Inv. number 3860 special find 234, Resnik, trench II, grave 3, depth 106, quadrant 35, 08 May 2007.

Find: bracelet

Material: bronze

Description: sheet metal, rectangular in cross section, with opened ends. Outer side is decorated with frieze; carved lines form rectangular fields which contain an imprinted St Andrew's cross, one circle with a dot and two circles with dots.

Dimensions: diameter 5.3 cm, width 0.7 cm

Datation: 4th – 5th century AD

Inv. number 3869, special find 208, Resnik, trench II, grave 3, depth 65, quadrant 35, 26 Apr 2007.

Find: *lucerna* (oil-lamp)

Material: clay

Description: oval discus has a pouring hole for oil in the middle; open runnel leads to a semi-circular nozzle, at the shoulder of the discus there are two reinforcements with six imprinted circles on each of them. Shoulder of the discus is decorated with circular imprints and a multiple oval cymatium. There are oval imprints along the edge of the nozzle. Oval handle has a little hole inside of it, and it is double profiled; on the back, towards the bottom, there is a single profile with imprinted dots at the side. A ladder-shaped decoration spreads from the annular bottom towards the nozzle. Fine pottery of a yellowish-orange colour with a red-dish coating. There are visible burning marks on the nozzle.

Dimensions: length 12 cm, height 5.5 cm, width 8 cm

Datation: 4th – 5th century AD



Inv. broj 3869, Pn 208, Resnik, S II, grob 3, visina 65, kvadrant 35, 26. 04. 2007.

Nalaz: lucerna

Materijal: keramika

Opis: Disk ovalnog oblika ima po sredini otvor za ulje, otvoreni kanal vodi do polukružnog nosa, na ramenu diska dva ojačanja s po 6 kružnih otisnuća. Rame diska ukrašeno okruglim otisnućima i višestrukim jajastim kimationom. Po rubu nosa prate jajasta otisnuća. Ovalni držak s rupicom, po sredini dvostruko profiliran, sa stražnje strane prema dnu uljanice jednostruka profilacija s utisnutim točkama sa strane. Od prstenastog dna prema nosu vodi ljestvičasti ukras. Fina keramika žućkasto-narančaste boje s crvenkastim premazom. Tragovi gorenja vidljivi na nosu.

Dimenzije: duž. 12 cm, vis. 5,5 cm, šir. 8 cm

Datacija: 4. – 5. st.

Inv. number 3872, special find 225, Resnik, trench II, grave 3, depth 65, quadrant 35, 05 May 2007.

Find: *lucerna* (oil-lamp)

Material: clay

Description: pear-shaped oil-lamp. There is a small hole in the central part of the discus, as well as in the middle of the runnel which leads to the nozzle. There are concentric circles around the central hole in the discus, as well as a reinforcement which leads from the solid handle to the nozzle. There are concentric lines at the outer side of the reinforcement. Bottom is annular, with a relief line leading to the handle. Pottery is of a light-brown colour and of a low quality; the surface has been significantly worn-out.

Dimensions: length 10 cm, height 4.5 cm, width 7 cm

Datation: 4th – 5th century AD.



Inv. broj 3872, Pn 225, Resnik, S II, grob 3, visina 65, kvadrant 35, 05. 05. 2007.

Nalaz: lucerna

Materijal: keramika

Opis: Uljanica kruškolikog oblika. U centralnom dijelu diska rupica i jedna manja rupica na pola kanala prema nosu. Oko centralne rupice na disku koncentrične linije i ojačanje koje vodi od pune drške do nosa. S vanjske strane ojačanja nalaze se koncentrične linije. Prstenasto dno s reljefno izvedenom linijom koja vodi prema drški. Svjetlosmeđa keramika loše kvalitete, površina dosta istrošena.

Dimenzije: duž. 10 cm, vis. 4,5 cm, šir. 7 cm

Datacija: 4. – 5. st.

Inv. broj 3861, Pn 220, Resnik, S II, grob 4, visina 35, kvadrant 34, 08. 05. 2007.

Nalaz: narukvica

Materijal: staklena pasta

Opis: Cjelovita narukvica od tamnozelene staklene paste. Polukružan presjek, s dva manje izražena zadebljanja.

Dimenzije: promjer 5,4 cm, debljina 0,4 - 0,5 cm

Datacija: 3. - 4. st. pos. Kr.

Inv. number 3861, special find 220, Resnik, trench II, grave 4, depth 35, quadrant 34, 08 May 2007.

Find: bracelet

Material: glass paste

Description: Completely preserved bracelet made of dark-green glass paste. It is semicircular in cross section, with two small thickenings.

Dimensions: diameter 5.4 cm, thickness 0.4 - 0.5 cm

Datation: 3rd- 4th century AD.



Inv. broj 3863, Pn 725, Resnik, S II, grob 4, kvadrat 34 (pronađeno prilikom antropološke analize)

Nalaz: narukvica

Materijal: bronca

Opis: napravljena od tri uvijene žice okruglog presjeka, sačuvana dva veća dijela. Na polovici manje ojačanje od žice. Ušica nije sačuvana.

Dimenzije: promjer 5,6 cm, šir. 0,4 cm

Datacija: 4 - 5 st.



Inv. number 3863, special find 725, Resnik, trench II, grave 4, quadrant 34 (discovered during anthropological analysis)

Find: bracelet

Material: bronze

Description: it is made of three wrapped wires which are round in cross section; two larger parts have been preserved. There is a smallish wire-made strengthening in the middle. The eye has not been preserved.

Dimensions: diameter 5.6 cm, width 0.4 cm

Datation: 4th - 5th century AD



Inv. broj 3870, Pn 179, Resnik, S II, grob 4, visina 30, kvadrant 35, 17. 04. 2007.

Nalaz: lucerna

Materijal: keramika

Opis: Uljanica krušolikog oblika i izduženog nosa. Udubljeni disk je oštećen na mjestu rupica (očuvani samo tragovi). Reljef je zbog izlzanosti nejasan. Ramena su konveksna, ukrašena nizom ureza. Pločasta drška je puna i ukrašena s žlijebom na hrptu. Dno je blago udubljeno zaokružen plitkim žlijebom koji se otvorenim krajevima nastavlja prema dršci. Kanal je plitak, širok i otvoren prema nosu koji ima otvor za stijenj. Tragovi gareži na nosu. Nedostaje premaz. Vjerojatno se radi o sjevernoafričkoj crveno glaziranoj keramici.

Dimenzije: duž. 110 mm, vis. 46 mm, šir. 71 mm

Datacija: 4. - 5. st.

Inv. number 3870, special find 179, Resnik, trench II, grave 4, depth 30, quadrant 35, 17 Apr 2007.

Find: lucerna (oil lamp)

Material: clay

Description: oil-lamp of a pear-like shape and elongated nozzle. Discus is dented and damaged at the part where holes were placed (only traces have been preserved). Relief is unclear due to its worn-out state. Shoulders are convex and decorated with a row of cuts. Plate-like handle is full and decorated with a flute on the ridge. Bottom is slightly dented, and encircled with shallow flute with open ends which continue towards the handle. The flute is shallow, wide and opened towards the nozzle which has a hole for a wick. There are burning marks at the nozzle. Coating is missing. It is probably a case of the North African red-coated pottery.

Dimensions: length 110 mm, height 46 mm, width 71 mm

Datation: 4th - 5th century AD.

Inv. number 3871, special find 198, Resnik, trench II, grave 4, depth 30, quadrant 35, 24 Apr 2007.

Find: oil-lamp

Material: clay

Description: a pear-shaped oil-lamp partially reconstructed from around 20 fragments. Handle is without a hole; at the edge of the discus there is a badly visible palmette decoration on both sides. Annular bottom is profiled towards the handle. Surface is significantly worn-out; low quality pottery is of a light-brown colour.

Dimensions: width 7.1 cm, length 10.9 cm, height 5.3 cm

Datacija: 4th – 5th century AD.



Inv. broj 3871, Pn 198, Resnik, S II, grob 4, visina 30, kvadrant 35, 24. 04. 2007.

Nalaz: uljanica

Materijal: keramika

Opis: Uljanica kruškolikog oblika djelomično rekonstruirana iz 20-ak ulomaka. Držak bez rupice, na rubu diska s obje strane slabo vidljiv ukras palmete. Prstenasto dno profilirano prema drški. Površina dosta istrošena, keramika slabije kvalitete svijetlosmeđe boje.

Dimenzije: šir. 7,1 cm, duž. 10,9 cm, vis. 5,3 cm

Datacija: 4. – 5. st.

Inv. number 2638, special find 213, Resnik, trench II, grave 7, quadrant 35, depth 67, 30 Apr 2007

Find: fibula of a zoomorphic shape

Material: bronze

Description: arch-like fibula in shape of a horse which is stylized; head and neck are accentuated. On the head there are accentuated lips, ears are erect, small tail is realistically represented, and mane and stylized saddle are indicated with cuts. There is a joint mechanism for fastening; pin and joint tube of circular cross section which ends with a bulb have been preserved. Catch plate has not been preserved so the pin rests on the front foot.

Dimensions: length 48 mm, length of the pin 34 mm, height 30 mm

Datation: middle of the 2nd century AD.



Inv. broj 2638, Pn 213, S II, kvadrat 35, visina 67, grob 7, 30. 04. 2007.

Nalaz: zoomorfna fibula

Materijal: bronza

Opis: Lučna fibula u obliku konja, stiliziranog prikaza, glava i vrat su naglašeni, na glavi su izražene usne, uši uzdignute, maleni rep plastično prikazan, griva i stilizirano sedlo naznačeno urezima; mehanizam za kopčanje je zglobovi, sačuvana je igla i zglobovi tuljac koji je kružnog presjeka i završava lukovicom, držač igle nije sačuvan, već je igla počivala na prednjoj nozi.

Dimenzije: duž. 48 mm, duž. igle 34 mm, vis. 30 mm

Datacija: sredina 2. st. pos. Kr.

Inv. broj 3841, Pn 386, Resnik, S I, grob 8, kvadrat 19, visina 62, 21. 08. 2007.

Nalaz: fibula

Materijal: bronca

Opis: lukovičasta fibula gotovo u cijelosti očuvana, nedostaje samo dio igle. Ukasni dodatak šesterokutnog zglobnog tuljca uzdužno perforiran i narebren s gornje strane. Bočne lukovice zaobljene, lijeva malo otkrhnuta, a središnja spljoštena. Na luku i nozi urezan ljestvičasti ukras uz koji je samo na nozi s obje strane izveden motiv uvijenog slova C.

Dimenzije: šir. 6 cm, duž. 8.7 cm, vis. 2.8 cm

Datacija: druga polovica 4. st. pos. Kr.

Inv. number 3841, special find 386, Resnik, trench I, grave 8, quadrant 19, depth 62, 21 Aug 2007.

Find: fibula

Material: bronze

Description: a bulb-shaped fibula which has been preserved almost completely, only one part of the pin is missing. Decorative addition to the hexagon joint tube is transversally perforated and ribbed across the upper part. Lateral bulbs are rounded; left has been slightly chipped off and the middle one is flattened. A ladder-like decoration has been carved in the arch and the foot; on both sides of the ladder-decoration, but only on the foot, a motif of a twisted letter C has been made.

Dimensions: width 6 cm, length 8.7 cm, height 2.8 cm

Datation: second half of the 4th century AD.



Inv. broj 3845, Pn 903, Resnik, S I, grob 8, kvadrat 19, 20. 07. 2007.

Nalaz: zdjela

Materijal: keramika

Opis: Plitka široka zdjela s malo udubljenim dnom. Sjevernoafrička crveno premazana keramika (tip Hayes 55 B), ulomci sakupljeni po devastiranom grobu 8. Fina kvalitetna keramika narančaste boje s malo tamnijim premazom.

Datacija: druga polovica 4. st. ili početak 5. st.

Inv. number 3845, special find 903, Resnik, trench I, grave 8, quadrant 19, 20 Jul 2007.

Find: bowl

Material: clay

Description: A wide shallow bowl with a slightly dented bottom. North African red coated pottery (Hayes 55 B type); fragments have been collected within the devastated grave 8. This is fine pottery of high quality, orange with a slightly darker coating.

Datation: second half of the 4th century or the beginning of the 5th century AD.



Inv. number 3840, special find 488, Resnik, trench I, grave 8, depth 33, quadrant 19, 20 Jul 2007.

Find: pin

Material: iron

Description: circular in cross section, which grows thicker at the top; head has a rounded ring.

Dimensions: length 14.5 cm, diameter of the ring 1.5 cm

Datation: second half of the 4th century AD.

Inv. broj 3840, Pn 488, Resnik, S I, grob 8, visina 33, kvadrant 19, 20. 07. 2007.

Nalaz: igla

Materijal: željezo

Opis: kružnog presjeka koji u vrhu postaje deblji, glava s zaobljenom alkom.

Dimenzije: duž. 14,5 cm, promjer alke 1,5 cm

Datacija: druga polovica 4. st.



Inv. number 3839, special find 491, Resnik, trench I, grave 8, depth 33, quadrant 19, 20 Jul 2007.

Find: stylus (style)

Material: iron

Description: circular in cross section, with torsions in the upper part; flattened top has been slightly damaged.

Dimensions: length 14.5 cm, width 1 cm

Datation: second half of the 4th century AD.

Inv. broj 3839, Pn 491, Resnik, S I, grob 8, visina 33, kvadrant 19, 20. 07. 2007.

Nalaz: stilus (pisaljka)

Materijal: željezo

Opis: kružnog presjeka s tordiranim gornjim dijelom, spljošteni vrh malo oštećen.

Dimenzije: duž. 14,5 cm, šir. 1 cm

Datacija: druga polovica 4. st.



Inv. number 3842, special find 490, Resnik, trench I, grave 8, depth 33, quadrant 19, 20 Jul 2007.

Find: stylus (style)

Material: iron

Description: circular in cross section with torsions in the upper part, flattened top has been slightly damaged.

Dimensions: length 16 cm, width 1.5 cm

Datation: second half of the 4th century AD.

Inv. broj 3842, Pn 490, Resnik, S I, grob 8, visina 33, kvadrant 19, 20. 07. 2007.

Nalaz: stilus (pisaljka)

Materijal: željezo

Opis: kružnog presjeka s tordiranim gornjim dijelom, spljošten vrh malo oštećen.

Dimenzije: duž. 16 cm, šir. 1,5 cm

Datacija: druga polovica 4. st.



Fina kuhinjska keramika

Ivanka Kamenjarin

Fina keramika odnosi se na posuđe za posluživanje oko stola, odnosno za jelo, a ne kuhanje i skladištenje. Sam naziv govori o strukturi ovog posuđa: fina, bez vidljivih primjesa, tanjih stjenki.

Lokalitet Resnik najpoznatiji je po nalazima reljefne helenističke keramike (tzv. *megarske* čaše). To su polukonične čaše s rubom razvraćenim prema van. Služile su za ispijanje vina. Rađene su u kalupima, a dovršavane na lončarskom kolu. Prosječna visina i promjer otvora im je oko 9 cm, a imaju crnosivu ili crvenosmeđu boju. Reljefno bogato ukrašene čaše prikazuju biljne i životinjske motive, vezane uz Dionizijev kult. Osim čaša, ova vrsta keramike se izrađivala i u obliku kratera gdje je središnji dio tijela reljefno ukrašen. Prvi primjerci proizvedeni su u Ateni oko 320 g. pr. Kr. odakle se šire u Korint, Egipat, Delos, Albaniju, odnosno po cijelom istočnom Mediteranu te u južnu Italiju gdje su poslužili kao podloga za mnogo poznatiju rimsku inačicu *terra sigillata* iz Aretina. Datiraju od sredine 3. st. pr. Kr. do kraja 1. st. pr. Kr.

Nalaz kalupa helenističke reljefne keramike u Resniku postavlja hipotezu o radionici, no dosadašnja istraživanja nisu to potvrdila. Razlikuju se dva osnovna oblika čaša, oba zabilježena u Resniku. Prva i najbrojnija resnička skupina je visoka polukonična čaša s više redova ukrasa sivocrne ili smeđesive boje. Izgledom se vezuje uz Atenu i Korint. Druga, znatno manja skupina, nema oblik čaše, već je to široka plitka zdjela s motivima slobodno raspoređenim po vanjskoj površini posude. One su se proizvodile u Delosu, a ima ih u albanskim radionicama. Među ovom skupinom nema crnosive boje, već razne nijanse od crvenonarančastih do crvenosmeđih. Resnički primjerci mogu se uspoređivati s viškima gdje također postoji mogućnost proizvodnje. Resničke čaše možemo datirati u kraj 2. st. pr. Kr. do kraja 1. st. pr. Kr.

Dva gotovo istovjetna ulomka reljefne keramike s prikazom Menade pripadaju knidskoj reljefnoj keramici rimskog razdoblja. Proizvodili su se u dvodijelnim kalupima s dubokim reljefima i specifičnog oblika – cilindrične posude visokih uskih grla. Motivi se povezuju uz Dionizijev kult, Silene, Menade (kao u resničkom slučaju) te biljnim motivima vezanim uz vino. Ovo je još jedan primjer uvoza finijeg posuđa u svrhu pijenja vina (Brusić, 2000, 83-91) na Resniku. Iz ovoga možemo zaključiti da je, ako ne proizvodnja,

Fine Kitchen Ware

Ivanka Kamenjarin

Fine pottery refers to serving and eating dishes, and not to cooking and storage dishes. The name itself tells us about the structure of these vessels: it is fine, with no visible admixtures, and of thinner walls.

The site of Resnik is mostly known because of the Hellenistic relief pottery finds (so called *Megarian bowls*). These are semi-conical bowls with an outwardly flared rim. They were used for wine drinking. They were made in moulds and finished on pottery wheels. Average height and diameter of the opening is around 9 cm, and they are of black-grey or red-brown colour. Richly decorated in relief, these bowls carry representations of vegetal and animal motifs related to the cult of Dionysius. Besides bowls, this type of pottery was also made in shape of crates, decorated with relieves across the middle part of the body. First examples were manufactured around 320 BC in Athens, and from there they spread to Corinth, Egypt, Delos, Albania, in other words, across the entire eastern Mediterranean, as well as to southern Italy, where they became an inspiration for a more widely known Roman variety called *terra sigillata* from Aretino. They are dated from 3rd till the end of the 1st century BC.

Discovery of moulds for Hellenistic relief pottery at Resnik introduces a thesis on the existence of a workshop, but it has not been confirmed by any research conducted so far. Two major shapes of the bowls can be distinguished. First, and among Resnik group most numerous, consists of high semi-conical bowls with several rows of decorations made in grey-black or brown-grey colour. Based on their appearance they can be related to Athens or Corinth. The vessels in second, significantly smaller group, are not shaped as cups but as wide, shallow bowls with motifs which are freely arranged across the outer surface of the vessel. They were manufactured in Delos, but they can be also found in Albanian workshops. There are no examples of black-grey colour in this group, but there are different shades from red-orange to red-brown. The examples from Resnik can be compared to those from Vis, which could have had its own manufacture as well. The bowls from Resnik can be dated from the end of the 2nd century BC till the end of the 1st century BC.

Two almost similar fragments of relief pottery with representations of Maenads belong to Cnidian relief pottery of Roman era. They were manufactured in two-part moulds, with deep relieves of a peculiar shape – they are cylindrical vessels with high and narrow necks. The motifs can be related to cults of Dionysius, Selenene or Maenad (as it is the case with the example from Resnik) as well as vegetal motifs related to wine. This is yet another example of import of fine pottery used for wine drinking (Brusić, 2000, 83-91) at Resnik. This can lead us to conclusion that, if not manufacture, then wine consummation for certain, was developed at Resnik. They are dated from the end of the 1st till the end of the 3rd century AD. They spread across Eastern and Middle Mediterranean, in the Black Sea area and in Balkans.

Rest of the dishes from the fine pottery group pertains to usual repertoire of table dishes of that time – from glazed gray-black Hellenistic examples dated to first phase of the settlement to red-orange African production dated to second phase of the settlement. They consist of plates, bowls and saucers of different sizes, which were used both for eating as well as for serving.

Oil-lamps are among the most common finds at Classical Antiquity archaeological sites. They were omnipresent and used by everybody, from emperors to slaves. They were used to light both private (houses) as well as public spaces (of somewhat less). They had votive and funeral purpose (Mardešić, 2002, p. 351). The most common fuel for oil-lamps was olive oil, although the usage of bitumen at Sicily and linseed oil in Egypt are also known of. Vegetal and animal fiber were used as wicks (flax, wool, hemp).

Three elemental techniques of pottery lamp manufacture can be distinguished. The oldest manner of manufacture is hand-shaping. Next phase in production is manufacture on pottery wheels, and third phase is shaping in a two-piece mould. Every oil-lamp has a body, and oil is poured into it. To prevent spilling, the upper part is closed, and only a pouring hole is left opened. Main parts of an oil-lamp are: body, pouring hole, nozzle, discus, shoulder and handle.

The oil-lamps found at Resnik follow the basic cultural and historical division into Hellenistic and Roman ones. The oldest oil-lamp from Resnik was discovered at the pier. It is a transitional type, with a cylindrical body, big hole and wide nozzle attached at the top. There is no handle, and the pottery is of a distinctively red-orange colour.

Although they are not being represented among the pottery at this exhibition, there are also some fragments of Gnathian pottery among the finds discovered at Resnik, but they are very small. As it was already stated, Resnik was founded in the 2nd century BC and lasted until the turbulent period of great movement of peoples during the 5th and 6th century AD. The second phase of the settlement began in the 1st century AD, and it is curious

onda svakako konzumacija vina bila razvijena u Resniku. Datiraju od kraja 1. do početka 3. st. Vrlo su rasprostranjene po istočnom i središnjem Mediteranu, u crnomorskom kraju i na Balkanu.

Ostalo posuđe, koje pripada skupini fine keramike, pripada uobičajenom repertoaru stolnog posuđa svoga vremena – od helenističke sivo-crne glazirane iz prve faze naselja do crvenonarančaste sjevernoafričke produkcije u drugoj fazi naselja. Sastoji se od tanjura, zdjela i plitica raznih veličina koje su služile za posluživanje hrane kao i posuđe iz kojega se jelo.

Keramičke svjetiljke jedni su od najčešćih keramičkih nalaza na antičkim arheološkim lokalitetima. Sveprisutni su, koriste ih svi od robova do careva. Osvjetljavali su, kako privatne prostore (kuće), tako i javne prostore (nešto manje). Imaju i votivnu i funeralnu namjenu (Mardešić, 2002., 351.). Najraširenije gorivo u uljanicama je bilo maslinovo ulje, iako je poznato korištenje i bitumena na Siciliji, te laneno ulje u Egiptu. Kao stijenj su se rabila biljna i životinjska vlakna (lan, vuna, konoplje i sl).

Razlikujemo tri osnovne tehnike izrade keramičkih svjetiljki. Najstariji način proizvodnje je oblikovanje rukom. Iduća faza u načinu proizvodnje je izrada na lončarskom kolu, te je treća faza oblikovanje pomoću dvodijelnog kalupa. Svaka uljanica ima tijelo u koje se ulijeva ulje. Kako bi se spriječilo prolijevanje, gornja se strana zatvara i ostavlja otvor za ulijevanje.

Osnovni dijelovi uljanica su: tijelo, otvor za ulijevanje, nos, disk, rame i ručka.

Uljanice pronađene u Resniku slijede osnovnu kulturološko - povijesnu podjelu na helenističke i rimske. Najstarija uljanica pronađena u Resniku je iz pristaništa. To je prijelazni tip gdje se na valjkasto tijelo s velikim otvorom na vrhu lijepi široki nos. Nema ručke, a keramika je izrazito crvenonarančaste boje.

Iako na izložbi nisu prikazani među keramikom, na Resniku ima ulomaka gnathia keramike, no to su vrlo sitni ulomci. Resnik je, kako smo na drugom mjestu već kazali, nastao u 2 st. pr. Kr. i traje do nemirnih vremena seobe naroda 5. i 6. st. U 1. st. po. Kr. počinje život druge faze naselja i začuđuje da najpoznatija rimska keramika toga vremena u potpunosti nedostaje u Resniku. Radi se o aretinskoj *terri sigillati*. Do sada nije pronađen niti jedan ulomak ove keramike i to je vrlo čudno, posebno ako uzmemo u obzir Plinijev podatak da se u Sikulima sredinom prvog stoljeća naseljavaju veterani vjerni caru Klaudiju.

Finu keramiku tanjih stjenki vremenski možemo datirati od sredine 2. st. pr. Kr (kada se postavlja vrijeme osnivanja prvog naselja) do u kasno 4. st. kada naselje polako propada, da bi u nemirnim vremenima Seobe naroda u potpunosti zamrlo.

that the most famous Roman pottery of the time is completely nonexistent at Resnik. That pottery is the one called *terra sigillata*, from Aretino. Not a single fragment of this pottery has been found at Resnik so far, and this is very strange, especially if we take into consideration the information provided by Pliny, which states that veterans loyal to emperor Claudius settled in Siculi in the middle of the 1st century.

Fine pottery of thin walls can be dated from the middle of the 2nd century BC (the assumed time of the foundation of the first settlement) until the late 4th century, when the settlement started to deteriorate, so that it could completely come to an end during the turbulent times of migrations of people.



Inv. broj 3967, Resnik, S I, SJ 31/43, visina 83, kvadrant 19, 14. 08. 2007.

Nalaz: vrč (dekanter)

Materijal: keramika

Opis: više ulomaka vrča s dvije ručke. Trakaste ručke postavljene su jedna do druge. Obod razvučen sa zaravnjenim i blago prema vani nakošenim gornjim dijelom. Trakaste, blago profilirane koljenaste ručke nalijepljene su na tijelo posude, počinju ispod oboda i završavaju na trbuhu. Nedostaje dno posude. Keramika s dosta grumenčića bijele boje, na dodir se troši. Boja jezgre i površine ista - narančastožuta.

Dimenzije: promjer oboda 11,8 cm; visina 10,5 cm; debljina stjenke 0,5 cm

Dacacija: 2. polovica 1. st. pr. Kr.

Analogija: Corinth VII/III 749 (po tome dacacija 146. pr. Kr.)

Inv. number 3967, Resnik, trench I, stratigraphy unit 31/43, depth 83, quadrant 19, 14 Aug 2007.

Find: jug (decanter)

Material: clay

Description: several fragments of a jug with two handles. Band-like handles are placed next to each other. Rim is protracted, with a flattened and outwardly slanted upper part. Band-like and slightly profiled articulated handles are attached to the body of the vessel, starting below of the rim and ending at the belly. Bottom of the vessel is missing. Clay with a significant number of small lumps in it, it wears out to the touch. Both core and surface colour are the same – orange-yellow.

Dimensions: diameter of the rim 11.8 cm; height 10.5 cm; thickness of the wall 0.5 cm

Datation: 2nd half of the 1st century BC.

Analogy: Corinth VII/III 749 (according to it dated to 146 BC).

Inv. broj 3807, PN 587, S I, kvadrat 18, sj 40, visina 66 -76, 22. 08. 2007.

Nalaz: vrč

Materijal: keramika

Opis: Ulomak knidske posude s prikazom glave Menade, izrađene u dvodijelnom kalupu u visokom reljefu. Iznad glave rupica, okerasta boja keramike, premaz otpao. Nedostaje veći dio posude cilindričnog oblika.

Dimenzije: visina 10,6 cm; širina 6,1 cm

Datacija: 1. – 3. st.

Analogija: Brusić 1999, Pl. 73, 470

Inv. number 3807, special find 587, trench I, quadrant 18, stratigraphy unit 40, depth 66 -76, 22 Aug 2007.

Find: jug

Material: clay

Description: fragment of a Cnidian vessel with a representation of a Maenad's head, made in a two-part cast, in high relief. There is a little hole above the head; clay is of an ochre colour, and the coating has fell off. A larger part of the cylindrical vessel is missing.

Dimensions: height 10.6 cm, width 6.1 cm

Datation: 1st – 3rd century AD.

Analogy: Brusić 1999, Pl. 73, 470.



Inv. broj 3806, PN 568, S I, kvadrat 19, sj 43, visina 108, 20. 08. 2007.

Nalaz: vrč

Materijal: keramika

Opis: Ulomak knidske reljefne posude. Očuvana je prednja strana s prikazom glave Menade. Okerasta boja keramike, iznad glave rupica.

Dimenzije: dužina 46 mm; visina 20 mm

Datacija: 1. – 3. st.

Analogija: Brusić 1999, Pl 73, 470

Inv. number 3806, special find 568, trench I, quadrant 19, stratigraphy unit 43, depth 108, 20 Aug 2007.

Find: Jug

Material: clay

Description: Fragment of a Cnidian relief vessel. Front side with a representation of a Maenad's head has been preserved. The clay is of ochre colour, and there is a little hole above the head.

Dimensions: length 46 mm, height 20 mm

Datation: 1st – 3rd century AD.

Analogy: Brusić 1999, Pl. 73, 470.



Inv. broj 3965, PN 484, S I, kvadrat 14, dubina 130, devastirani sloj uz sjeverni profil, 18. 07. 2007.

Nalaz: plitica

Materijal: keramika

Opis: Sivozelena zdjelica s tragovima smečkastosivog premaza, prstenasta noga, konkavna u sredini iz koje se širi te uzdiže obod plitice s izrazitim prstenastim rubom.

Dimenzije: promjer 126 mm, visina 33 mm

Inv. number 3965, special find 484, trench I, quadrant 14, depth 130, devastated layer next to northern profile, 18 Jul 2007.

Find: plate

Material: clay

Description: greyish-green plate with traces of brownish coating, with an annular leg, concave in the middle; the rim of the plate, which has a distinctive annular edge, widens and rises from the leg.

Dimensions: diameter 126 mm, height 33 mm



Inv. broj 3966, PN 326, S II, kvadrat 36, visina 52, sj 7a (naboj keramike), 28. 04. 2007.

Nalaz: tanjur

Materijal: keramika

Opis: Očuvana je četvrtina tanjura na maloj prstenastoj nozi, na rubu ima više koncentričnih krugova. Rub se oštro lomi prema dolje. Boja keramike je Munsell 5YR 7/6, a premaz 7.5YR 3/3.

Dimenzije: promjer 19,5 cm, visina 46 mm

Inv. Number 3966, special find 326, trench II, quadrant 36, depth 52, stratigraphy unit 7a (rammed pottery), 28 Apr 2007.

Find: plate

Material: clay

Description: quarter of plate on a small annular leg has been preserved; there are several concentric circles on the rim. The rim breaks pointedly downwards. The colour of clay is Munsell 5YR 7/6, and coating is 7.5YR 3/3.

Dimensions: diameter 19,5 mm, height 46 mm



Inv. broj 3964, PN 650, kvadrat 19, sj 42, visina 113, 30. 08. 2007.

Nalaz: ukras

Materijal: keramika

Opis: Ukrasna keramika u obliku cvijeta s pet latica, s donje strane je šupljina gdje se najvjerojatnije spajalo na ostatak kompozicije. Narančaste boje.

Dimenzije: visina 50 mm

Datacija: 2 – 1 st. pr. Kr.

Analogija: Nardelli 2000, 74, 75



Inv. number 3964, special find 650, quadrant 19, stratigraphy unit 42, depth 113, 30 Aug 2007.

Find: decoration

Material: clay

Description: decorative pottery shaped as a flower with five petals; there is a hole in the bottom side, and this is probably the part where it was attached to the rest of the composition. The colour is orange.

Dimensions: height 50 mm

Datation: 2nd - 1st century BC.

Analogy: Nardelli 2000, 74-75.

Inv. broj 3873, S I, kvadrat 13,14, sj 24, visina 37-50, 22. 05. 2007

Nalaz: zdjelica

Materijal: keramika

Opis: Plitka noga sa zaobljenom vrpcom s unutrašnje strane. Na unutrašnjosti posude oko sredine ukras od ureza. Fina narančasta keramika (2.5 YR 7/8) s tamnosmeđim premazom. Očuvana otprilike polovica.

Dimenzije: promjer 14 cm; visina 35 mm

Datacija: kasno 1. ili rano 2 st.

Analogija: Agora XXXII, 1620

Inv. number 3873, trench I, quadrant 13, 14, stratigraphy unit 24, depth 37-50, 22 Apr 2007.

Find: small bowl

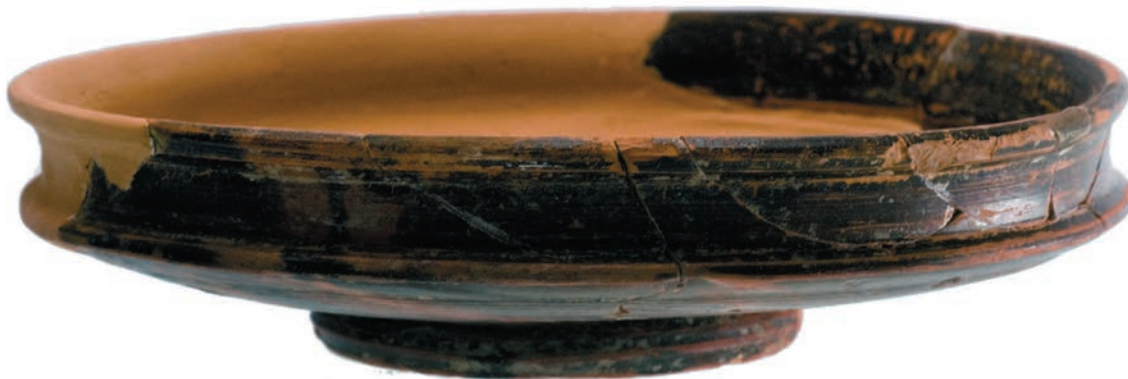
Material: clay

Description: shallow leg with a rounded band at the inner side. In the middle of the inner side of the vessel there is a decoration made of cuts. Clay is delicate and orange (2.5 YR 7/8) with a dark-brown coating. Approximately half of it has been preserved.

Dimensions: diameter 14 cm; height 35 mm

Datation: late 1st or early 2nd century AD.

Analogy: Agora XXXII, 1620.



Inv. broj 3875, S II, kvadrat 35, sj 7a, visina 60, 07. 05. 2007.

Nalaz: postolje/noga

Materijal: keramika

Opis: Ostatak postolja ili noge kratera koje se sužuje prema sredini s tri kružna prijelaza, rađeno na kolu. Keramika siva, a crnosivi premaz u tragovima.

Dimenzije: promjer dna 10 cm, visina 61 mm

Inv. number 3875, trench II, quadrant 35, stratigraphy unit 7a, depth 60, 07 Apr 2007.

Find: base/foot

Material: clay

Description: fragment of the base or the foot of a krater, which gets narrower towards the middle and has three circular transitions on it. It was manufactured on a pottery wheel. Clay is grey and only remains of black-grey coating have been preserved.

Dimensions: diameter of the bottom 10 cm, height 61 mm



Inv. broj 3879, 22. 05. 1991.

Nalaz: plitica

Materijal: keramika

Opis: Noga visoka, neznatno kosa unutrašnjost plitice. Rub širi i lagano prema dolje nakošen, fina faktura na kolu rađena, smečkastocrvene boje s nešto tamnijim premazom.

Dimenzije: promjer 116 mm, visina 25 mm

Datacija: kasno 2. – rano 1. st pr. Kr..

Analogija: Agora XXIX, 773

Inv. number 3879, 22 May 1991.

Find: plate

Material: clay

Description: the foot is high and the inner side of the plate is insignificantly slanted. The rim is wider and slightly slanted downwardly; delicate structure made on pottery wheel, brownish-red in colour with a slightly darker coating.

Dimensions: diameter 116 mm, height 25 mm

Datation: late 2nd – early 1st century BC.

Analogy: Agora XXIX 773.



Inv. broj 3878, PN 630, S I, kvadrat 16, visina 123-134, sj 49, 28. 08. 2007

Nalaz: zdjelica

Materijal: keramika

Opis: Prstenasta noga, udubljena, duboka uska zdjelica s obodom prema van čiji je rub nakošen prema dolje. Površina izlizana te se na rubu naziru dva ukrana žlijeba. Siva keramika s crnosmeđim premazom.

Dimenzije: promjer 91 mm, visina 47 mm

Datacija: 2. – 1. st. pr. Kr.

Analogija: Agora XXIX, 1106

Inv. number 3878, special find 630, trench I, quadrant 16, depth 123-134, stratigraphy unit 49, 28 Aug 2007

Find: small bowl

Material: clay

Description: annular leg; deep narrow bowl with an outwardly turned rim, the edge of which is slanted downwardly. The surface is worn out and there are two decorative flutes slightly visible at the edge. Grey clay with a black-brown coating.

Dimensions: diameter 91 mm, height 47 mm

Datation: 2nd – 1st century BC.

Analogy: Agora XXIX 1106.



Inv. number 3874, Resnik 2004, 120 cm east to Z9, 27 Aug 2004.

Find: small pouring jug

Material: clay

Description: small vessel with funnel at one side and traces of handle at the lateral side. Body is paunchy, with small neck, wide rim and an edge which rises upwardly. Funnel, handle and half of the rim have been chipped off. Clay is light-ochre, and across the middle part of the body and inside of the rim it is coloured in dark-brown. It could have been used for pouring oil into oil-lamps, or maybe as a toy.

Dimensions: diameter of the body 48 mm, height 44 mm

Datation: 2nd - 1st century BC.

Analogy: Kirigin 2008, 82.

Inv. number 3876, special find 325, trench II, quadrant 35, stratigraphy unit 7a, depth 60, 05 May 2007.

Find: lid

Material: clay

Description: wide leg with several fluted circles; a cylindrical tube rises from the middle. The top is missing. The lid is hollow, made on a pottery wheel. The clay is grey and of a thicker structure, with a dark-brown coating.

Dimensions: diameter of the bottom 12 cm, diameter of the tube at the top 3 cm, height 9 cm.

Datation: 2nd - 1st century BC.

Analogy: Agora XXIX 1329.

Inv. number 3877, quadrant 13, 14, stratigraphy unit 27, depth 65-75, 06 Aug 2007.

Find: small drinking cup

Material: clay

Description: round, flat and full leg with a body rising from it; the body is slanted halfway up and then it straightens towards the flat edge. The walls are very thin, and at the upper part they are decorated with a row of cuts, similar to those on the plates (inv. number ?). The clay is grey with a poor watery black-grey coating. Quarter of the upper part of the body is missing.

Dimensions: diameter 62 mm, height 45

Inv. broj 3874, Resnik 2004., 120 cm istočno od Z9, 27. 08. 2004.

Nalaz: vrčić za ulijevanje

Materijal: keramika

Opis: Sitna posudica s lijevkom na jednoj strani, a bočno tragovi ručkice. Loptasto tijelo s malim vratom te širokim obodom čiji se rub uzdiže prema gore. Otučeni lijevak, ručkica i polovica oboda. Svijetlo oker keramika, bojana preko sredine trbuha tamnosmeđom bojom, kao i unutrašnjost oboda. Moguće da je služila za ulijevanje ulja u uljanice, ali i kao igračka.

Dimenzije: promjer tijela 48 mm, vis 44 mm

Datacija: 2. – 1. st. pr. Kr.

Analogija: Kirigin 2008, 82

Inv. broj 3876, PN 325, S II, kvadrat 35, sj 7a, visina 60, 05. 05. 2007.

Nalaz: poklopac

Materijal: keramika

Opis: Široka noga s više užlijebljenih krugova, iz sredine se uzdiže cilindrični tuljak. Nedostaje vrh, poklopac šupalj, rađen na kolu. Siva keramika deblje fature, s tamnosmeđim premazom.

Dimenzije: promjer dna 12 cm, promjer tuljca na vrhu 3 cm, visina 9 cm.

Datacija: 2. – 1. st. pr. Kr.

Inv. broj 3877, kvadrat 13,14, sj 27, visina 65-75, 06. 08. 2007.

Nalaz: čašica

Materijal: keramika

Opis: Okrugla ravna puna noga iz koje ide tijelo koje je do pola koso, a potom se uspravlja do ravnog ruba. Vrlo tanke stjenke, u gornjoj polovici ukrašen nizom ureza istovjetan tanjurima. Siva keramika s lošim vodenaštim crnosivim premazom. Nedostaje četvrtina gornjeg dijela tijela.

Dimenzije: promjer 62 mm, visina 45 mm



Gruba keramika iz 2. i 1. stolj. pr. Kr.

Ivan Šuta

Keramičko posuđe grublje izrade je česta vrsta pokretnih nalaza pronađenih istraživanjima na Resniku i zastupljeno je kroz čitavo vrijeme egzistiranja naselja. Riječ je o materijalu koji arheolozi najčešće zanemaruju zbog brojnosti i „neatraktivnosti“ u odnosu prema finijim keramičkim vrstama. Uglavnom je služilo za svakodnevnu uporabu, odnosno pripremu, čuvanje, kuhanje i serviranje hrane i tekućine. Najčešće se izrađivalo za lokalne potrebe, i nije bilo namijenjeno trgovanju, što omogućava uvid u lokalnu keramičku proizvodnju u određenom periodu. Ovo je posuđe obično lošije kvalitete, pečeno na nižim temperaturama s dosta primjesa kalcita, pa se rjeđe nalaze očuvaniji primjerci. Bolje očuvani primjerci potječu iz unutrašnjosti kuća, poput vrča iz kuće u kvadratu 18, koji je pronađen uz amfore i pitose, odnosno iz sloja destrukcije prve faze naselja. Više primjeraka grubljih vrčeva pronađeno je i u staroj sondi koja je istraživana 1991. i 1992. g., te je naknadno čišćena 2004. g. za konzervaciju zidova.

Kroz odnos prema importiranim, obično finijim vrstama posuđa, mogu se prikupiti i bitni podaci o intenzitetu trgovačkih veza. Također, u odnosu prema importiranim posuđu, koje su najčešće i skuplje, može se pokušati i određivati socijalni i materijalni status korisnika. Primjerice, luksuzno reljefno posuđe iz 2. i 1. st. pr. Kr. nije korišteno za svakodnevnu uporabu i onaj tko ga je koristio, imao je zacijelo više materijalnih sredstava. Pronalazak kalupa za izradu reljefnih čaša upućuje na pretpostavku da su stanovnici Sicula imali razvijen keramičarski obrt, s afinitetom i prema finijem posuđu. Prilikom podmorskih istraživanja pristaništa pronađen je ulomak vrča grublje izrade koji je ukrašen urezanim okomitim linijama do vrata. Ovakav način ukrašavanja nalazimo kod finog gnathia posuđa, što je vjerojatno i inspiriralo lokalnog lončara. U ranijem naselju najčešće se radi o loncima i vrčevima. Vrčevi su slični finim sivoglaziranim vrčevima, što upućuje na isti radionički krug, no nalazimo i elemente koji upućuju na lokalne željezno-dobne tradicije.

Rough Pottery Dated to the 2nd and 1st Century BC

Ivan Šuta

Ceramic dishes of rough manufacture are common among the movable finds discovered during the research at Resnik, and they were present during the entire existence of the settlement. This material is neglected by archaeologists due to the fact that its large in amount and less attractive in comparison to more refined varieties of pottery. It was mainly used in everyday life, or more specifically, for preparing, conserving, cooking and serving of food and liquids.

It was usually manufactured to serve the local needs, not for trade, which provides an insight into the local pottery manufacture of some period. These vessels were usually of lower quality, fired at lower temperatures, with significant amounts of admixtures of calcite; this is why preserved examples are more rarely found. Better preserved examples were found inside of the houses; for example one jug from the house in quadrant 18, which was discovered next to amphorae and pithoi, in the destruction layer of the first phase of the settlement. A few examples were found in the old trench which was researched in 1991 and 1992, and cleaned in 2004 in order to conduct the conservation of the walls.

Comparison of this material with the imported, usually more refined types of vessels, gives an important data about the intensity of trading relations. Also, through comparison with imported vessels which are usually more expensive, social and material status of the owner can be determined. For example, luxurious relief vessels from the 2nd and 1st century BC usually weren't used in everyday life and the person who had used them must have been wealthy. Discovery of casts for manufacture of relief bowls indicates that the inhabitants of Siculi might have had a well developed pottery manufacture with an affinity towards more refined dishes. A fragment of roughly manufactured jug decorated up to the neck with vertical lines was discovered during the underwater research of the piers. This style of decoration can be seen on refined gnathian pottery, which was probably the inspiration for the local pottery maker. In the earlier settlement pots and jugs are the most usual. Jugs are similar to refined jugs with grey glaze, which indicates the same workshop, but there are also elements which indicate local Iron Age traditions.

Inv. broj 3803, Pn 900 (nova signatura, izdvojeno iz vrećice 62), Resnik, S I, SJ 31, visina 80, kvadrant 18, 17. 08. 2007.

Nalaz: Vrč

Materijal: keramika

Opis: Veći dio vrča spojen iz desetak manjih ulomaka. Trakasta ručka izdvaja se iz trbušastog tijela i izdiže iznad izvijenog oboda. Grublja izrada keramike bez lončarskog kola, tamnosmeđe boje s dosta primjesa kalcita. Na jednom rubu primjećuju se tragovi gorenja s unutrašnje i vanjske strane stjenke.

Dimenzije: promjer u trbuhu 16 cm, najveća sačuvana visina 14.1 cm

Datacija: 2. polovica 1 st. pr. Kr.

Inv. broj 3804, Resnik, sonda 91-92, pri čišćenju, 26.08. 2004.

Nalaz: posuda

Materijal: keramika

Opis: dio oboda i tijela dubokog lonca koji je oblikom sličan situli. Nodostaju donji dio i dno. Prijelaz iz ramena u obod naglašen je zadebljanjem trokutastog presjeka koje je ukrašeno nizom otisnuća načinjenih prstom. Obod je blago uvijen sa zaravnjenom gornjom plohom. Boja keramike varira od tamnosmeđe do crvenkastosmeđe. Dosta primjesa kalcita.

Dimenzije: promjer oboda 25 cm, sačuvana visina 12 cm, debljina stjenke 0,8 cm.

Datacija: 2./1. st. pr. Kr.

Inv. broj 3805, Resnik, sonda 91-92, dubina 266, 22.08. 2004.

Nalaz: posuda

Materijal: keramika

Opis: dio trbuha, oboda i ručka vrča. Obod izvijen s urezanom linijom na vrhu s unutrašnje strane. Vrat je kratak i iz njega se izdvaja trakasta ručka koja nadvisuje obod za kojeg je dodatno pričvršćena po cijeloj širini ručke. Ovo ojačanje s gornje strane ima manje otisnuće elipsastog oblika. Keramika s dosta primjesa kalcita i bijelih grumenčića. S vanjske strane površina smeđe, jezgra i unutrašnja površina narančastocrvena.

Dimenzije: šir. 16, vis. 12 cm.

Datacija: 2./1. st. pr. Kr.

Inv. number 3803, special find 900 (new inv. number, singled out from bag 62), Resnik, trench I, stratigraphy unit 31, depth 80, quadrant 18, 17 Aug 2007.

Find: jug

Material: clay

Description: a larger part of a mug reconstructed from around ten smaller fragments. A band-like handle starts in a paunchy body and rises over a buckled rim. Rough pottery made without a pottery wheel, dark brown in colour, with a significant amount of calcite admixtures. Traces of burning are visible on one edge, from the inside and outside as well.

Dimensions: diameter of the body 16 cm, longest preserved height 14,1 cm

Datation: middle of the 1st century BC

Inv. number 3804, Resnik, trench 91-92, during the cleaning process, 26 Aug 2004.

Find: vessel

Material: clay

Description: part of the rim and of the body of a deep pot similarly shaped as a situla. Its lower part and bottom are missing. Transition between the shoulder and the rim is accentuated with a thickening which is triangular in cross section and decorated with a row of finger made prints. The rim is slightly buckled and has a flattened upper surface. The colour of pottery varies from dark brown to red brown, with significant amount of calcite admixtures.

Dimensions: diameter of the rim 25 cm, preserved height 12 cm, thickness of the wall 0.8 cm

Datation: 2nd/1st century BC

Inv. number 3805, Resnik, trench 91-92, depth: 266, 22 Aug 2004.

Find: vessel

Material: clay

Description: part of the body, rim and handle of a jug. The rim is buckled, with a carved line at the top, on its inner side. The neck is short with a band-like handle protruding from it. The handle rises over the rim, and it is additionally fastened to it across its entire width. This strengthening has a small ellipsoid print imprinted in it. There is a significant amount of calcite and small white lumps in the pottery. The surface is brown on the outside, while the inside and the core are of orange-red colour.

Dimensions: width 16 cm, height 12 cm

Datation: 2nd/1st century BC



Inv. broj 1001, Resnik, sonda 91-92, 14. 05. 1991.

Nalaz: vrč

Materijal: keramika

Opis: plitki bikončni vrč s ravnim dnom i jednom ručkom četvrtastog presjeka koja izlazi iz oboda i završava u najširem dijelu trbuha. Obod uvijen i nenaglašen. Keramika grube fature s dosta kalcita i neujednačenog pečenja. Boja varira od svijetlosmeđe do tamnosive. Posuda najvjerojatnije nije izrađena na lončarskom kolu.

Dimenzije: promjer u trbuhu 22 cm, vis. 15, 5 cm

Datacija: 1. st. pr. Kr.



Inv. number 1001, Resnik, trench 91-92, 14 May 1991.

Find: jug

Material: clay

Description: shallow biconical jug with a flattened bottom and one handle, rectangular in cross section, which rises out of the rim and ends in the widest part of the body. The rim is buckled and not emphasized. Pottery is rough, with a significant amount of calcite, and unevenly fired. The colour varies from light brown to dark grey. The vessel was probably not made on a pottery wheel.

Dimensions: diameter of the body 22 cm, height 15.5 cm

Datation: 1st century BC

Inv. broj 2489, Resnik, sonda 91-92, 05. 05. 1991.

Nalaz: lonac

Materijal: keramika

Opis: Manji bikonični lonac sa izvijenim obodom i dvije nasuprotno postavljene drške potkovičastog oblika. Dno je zaravnjeno. Keramika grublje fature s dosta kalcita. Površinski sloj je s vanjske strane premazan bolje pročišćenom glinom. Sivkasta boja vanjske stjenke, unutrašnja blijeda crvenkastosmeđa.

Dimenzije: promjer u trbuhu 18 cm, vis. 15 cm.

Datacija: 1. st. pr. Kr.



Inv. number 2489, Resnik, trench 91-92, 5 May 2007.

Find: pot

Material: clay

Description: small biconical pot with buckled rim and two handles shaped as a horse shoe placed across to each other. The bottom is flattened. Pottery is rough with a significant amount of calcite in it. Outer surface is covered with more consolidated clay. Outer wall is greyish in colour, while the inner one is of a light reddish-brown.

Dimensions: diameter of the body 18 cm, height 15 cm

Datation: 1st century BC



Skupina amfora pronađena unutar kuće u kvadratu 18
A group of amphorae discovered within a house in quadrant 18

Amfore iz 2. i 1. st. pr. Kr.

Ivan Šuta

Proizvodnja amfora usko je povezana s proizvodnjom vina i maslinovog ulja na određenom području. Tijekom 2. st. pr. Kr. na Apeninskom poluotoku dolazi do intenzifikacije proizvodnje vina. Od ograničene proizvodnje za lokalne potrebe dolazi do šire komercijalne proizvodnje na posjedima. Iz izvora nam je poznato više predjela na kojima su zbog povoljnih prirodnih uvjeta proizvođena vrhunska vina koja su zadovoljavala potrebe viših slojeva društva.

U uspješnim pohodima rimska vojska porobljavala je veliki broj ljudi koji su uglavnom radili na takvim posjedima stvarajući robne viškove. Dostupnost velikog broja robova i okrupnjavanje posjeda dovodi do osiromašenja seljačkog sloja. Sve više stanovništva doseljava se u gradove, te se mijenjaju prehrambene navike. Od zobene kaše, koja je u ranijem periodu bila osnova prehrane stanovništva, vino u kombinaciji s kruhom postaje osnova obroka širih slojeva stanovništva.

Trgovina vinom cvate, a posebno je aktivna prema istoku Mediterana. Brodovi, kojima su održavali veze, bilo je u interesu da budu puni tereta u oba smjera. Na istok su prevoženi poljoprivredni proizvodi, dok su dovoženi robovi, mramor i predmeti umjetničkog obrta (Tchernia, 1986., 73.). I na zapadnom dijelu Sredozemlja, naročito u Galiji, konzumiraju se velike količine italiskog vina, o čemu svjedoče nalazi Dressel 1 amfora u galskim protourbanim utvrđenim naseljima.

Priobalno srednjodalmatinsko područje prosperiralo je u ovoj privrednoj konjunkturi zbog položaja na važnim pomorskim trgovačkim pravcima. Najvažniji lokalni politički faktor isejska država je imala snažnu vinogradarsku i vinarsku tradiciju, o čemu svjedoče navodi iz pisanih izvora i prikazi na kovanom novcu. Kroz trgovinu i dosta rano priklanjanje Rimljanima, širi svoj utjecaj i na obalno područje gdje nalazimo važne trgovačke, ali i produkcijske centre poput Sikula.

Značajan dio keramičkog materijala pronađen pri istraživanjima prve faze naselja Sikuli pripada amforama. Kao osnovni tip ambalaže za transport tekućina u antici, proučavanje amfora pruža mogućnost rekonstrukcije onodobne mreže trgovačkih putova i ekonomskih odnosa općenito.

Amphorae (2nd and 1st Century BC)

Ivan Šuta

The production of amphorae is closely related to wine and olive oil production in specific areas. During the 2nd century BC there was an intensification of wine production on the Apennine Peninsula. It evolved from limited production, which served only the local needs, to wider commercial production carried out on large land properties. Historical sources provide information about several areas of suitable natural conditions where exceptional wines for higher social classes were produced.

During its successful military expeditions, Roman army enslaved a large number of people, who were afterwards mostly employed on such properties, and the result was a creation of market surplus. A large number of available slaves and enlargement of properties led to impoverishment of rural population. More and more people moved to the cities and eating habits changed. Instead of oatmeal porridge which was a nutritional basis for most of the people, wine combined with bread became a primary meal for a very wide population.

Wine trade flourished, especially within the Eastern Mediterranean. It was in the best interest of ships, which were used to maintain trading relations, to be full of cargo in both directions. Agricultural products were carried to the east, and slaves, marble and various decorative objects were brought back (Tchernia, 1986, 73). Large amounts of Italic wine were consumed across the Western Mediterranean as well, especially in Gaul, which is evident from Dressel 1 type of amphorae found in Gaulish proto-urban fortified settlements.

Mid-Dalmatian coastal area has prospered from this agricultural conjuncture due to its position in the important trading routes. Issa, the most important local political factor, has had a strong wine and wine producing tradition, which is evident from written sources as well as from representations on coins. Through trade and early inclination towards Rome, it spread its influence to the coastal area, where we find important centres of trade, as well as producing centres, such as Siculi.

Significant amount of pottery found during the excavation of the first phase of Siculi pertains to amphorae. As this was a basic type of container for transportation of liquids during Classical Antiqui-



Amfora ovoidnog oblika iz kuće u kvadratu 19.
Amphora of an ovoid shape from a house in quadrant 19.

ty, the research of amphorae provides a possibility of reconstruction of trading routes at that time, as well as of economical relations in general.

The amphorae have been found at different locations within the settlement. Those found inside the buildings were better preserved, and there are several cases of them being completely preserved, usually when they were placed near the walls of the rooms. The fragments of amphorae were found not only inside of the houses, but in the floorings as well, where they were used for levelling and hydro-isolation of the floors. Still, the larger amount of them was found in the layers of the north-south communication, where they were placed as drainage or simply tossed away as waste. As opposed to well preserved amphorae found at underwater sites, whole examples are very rare at land sites. The finds are usually rather small fragments which don't allow precise reconstruction. The few examples of complete amphorae found in the settlement originate from the insides of the houses which were burnt down in a fire. It was possible to make reconstructions from three samples found in the house from quadrant 19, which is important because it gives context which determines the end of the first phase of the settlement.

Amfore su nalažene na različitim položajima unutar naselja. Bolje su očuvane unutar objekata, gdje su u nekoliko slučajeva nađene u cijelosti sačuvane, najčešće smještene uz zidove prostorija. Osim u kućama, ulomci amfora nalaženi su i u podnicama, gdje su imale svrhu nivelacije i hidroizolacije podova. Ipak, najviše ih je pronađeno u slojevima komunikacija u pravcu sjever - jug, gdje su korištene kao drenaža ili su jednostavno bile odbačene kao otpad. Za razliku od dobro očuvanih amfora iz podmorskih nalazišta, na kopnu rijetko nalazimo cijele primjerke. Najčešće se radi o manjim ulomcima koji ne daju mnogo mogućnosti za precizniju rekonstrukciju. Nekoliko cjelovitih primjeraka pronađenih u naselju potječu iz unutrašnjosti kuća koje su nastradale u požaru. Uspjelo se rekonstruirati tri primjerka iz kuće u kvadratu 19, što je značajno jer se radi o kontekstu koji određuje kraj života prve faze naselja.

Inv. broj 3730, SJ 43, S I, kvadrat 19, visina 76 - 111, 23.08. 2007.

Nalaz: amfora

Vrsta materijala: keramika

Opis: Lamboglia 2 tip amfore. Pronađena u prostoriji u *in situ* položaju i rekonstruiran. Na obodu pečat NIC.... Amfora sličnog oblika i žiga pronađena je u brodolomu s vanjske strane Čiova, kod crkve Gospe od Prizidnice. Boja površine blijedožuta, prema jezgri prelazi u blijedu crvenu.

Dimenzije: promjer u trbuhu 39 cm, vis. 84 cm., vanjski promjer oboda 16 cm.

Datacija: druga polovica 1. st. pr. Kr.

Inv. broj 3731, SJ 43, S I, kvadrat 19, visina 76 - 111, 22.09. 2007.

Nalaz: amfora

Vrsta materijala: keramika

Opis: Amfora ovoidnog tijela, kratkog vrata sa okomitim ručkama i zaobljenog oboda. Dno kratko s dugmetastim zadebljanjem. Oblik sličan tipovima Dressel 25 i Oberaden 83, a faktura slična Lamboglia 2 i Dressel 6A tipovima. Boja površine blijedožuta, prema jezgri tamnija nijansa.

Dimenzije: promjer u trbuhu 36 cm, visina 80 cm, vanjski promjer oboda 16 cm.

Datacija: druga polovica 1. st. pr. Kr.

Inv. broj 3732, SJ 31, S I, kvadrat 18 - 19, visina 55 - 90, 17. 08. 2007.

Nalaz: amfora

Vrsta materijala: keramika

Opis: Amfora blago naglašenog vrećastog trbuha, uskog vrata sa ručkama blago nakošenim prema unutra i prstenastim okomitim obodom. Oblik karakterističan za Lamboglia 2 tip. Boja površine i jezgre blijedožuta.

Dimenzije: promjer u trbuhu 37, vis. 93 cm, vanjski promjer oboda 16 cm.

Datacija: druga polovica 1. st. pr. Kr.

Inv. number 3730, stratigraphy unit 43, trench I, quadrant 19, depth 76 - 111, 23 Aug 2007.

Find: amphora

Material: clay

Description: Lamboglia 2 type of an amphora. Found in a room in an *in situ* position and reconstructed. Stamp NIC on the rim. One amphora of the similar shape and stamp was found in the shipwreck at the outer side of Čiovo, near the church of Our Lady of Prizidnica. Surface colour is light yellow which switches into pale red towards the core.

Dimensions: diameter of the body 39 cm, height 84 cm, outer diameter of the rim 16 cm.

Datation: second half of the 1st century BC.

Inv. number 3731, stratigraphy unit 43, trench I, quadrant 19, depth 76 - 111, 22 Sep 2007.

Find: amphora

Material: clay

Description: Amphora of an ovoid shape, short necked with vertical handles and rounded rim. Bottom is short with a button-like thickening. Shape is similar to Dressel 25 and Oberaden 83 types, and structure is similar to Lamboglia 2 and Dressel 6A types. Surface colour is light yellow, which switches to a darker shade towards the core.

Dimensions: diameter of the body 36 cm, height 80 cm, outer diameter of the rim 16 cm.

Datation: second half of the 1st century BC.

Inv. number 3732, stratigraphy unit 31, trench I, quadrant 18-19, depth 55 - 90, 17 Aug 2007.

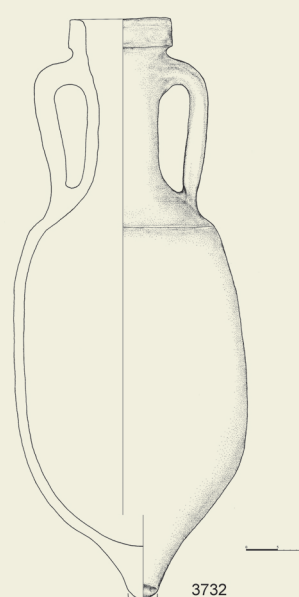
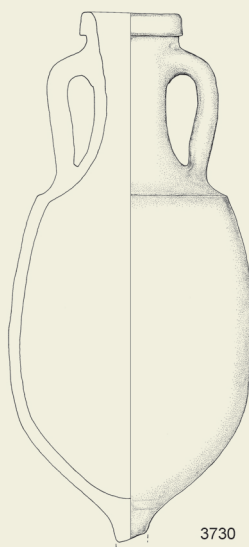
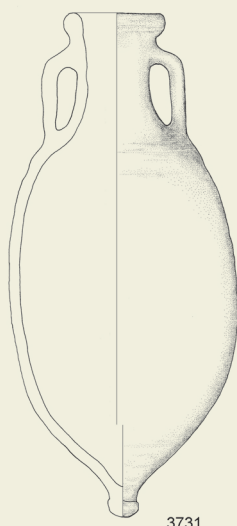
Find: amphora

Material: clay

Description: Amphora with a slightly accentuated bag-like body; narrow neck with slightly inwardly angled handles and vertical annular rim. The shape is characteristic of a Lamboglia 2 type. Colour of surface and core is light yellow.

Dimensions: diameter of the body 37 cm, height 93 cm, outer diameter of the rim 16 cm.

Datation: second half of the 1st century BC.



Greco – Italic type

Greco-Italic amphorae are the earliest type which can be found within the settlement. The main characteristics of their shape are the rim of a triangular shape in the cross-section view, short neck and a heart-like body. The beginning of manufacturing dates back to the end of the 4th century BC, with manufacturing centres in Magna Graecia and on Sicily (Horvat, 1997, 57). In time the manufacturing has spread and regional varieties have been created, and the first Roman commercial amphorae were of a late Greco-Italic type. On the Eastern Adriatic coast there was an assumed manufacturing centre in Issa, although there is still no plausible evidence to confirm that. The manufacturing of several types of amphorae which cannot be related to the Greco-Italic type was confirmed in Pharos, but those haven't been found among the amphorae from Resnik. Greco-Italic amphora is represented only by few rim fragments, which is almost irrelevant in comparison to later types.

Lamboglia 2

The most frequent type of amphora in the first phase of the settlement is Lamboglia 2, which was developed from the Greco-Italic type during the 2nd century BC. In comparison to the Greco-Italic type, this amphora is more massive, with a bag-like body, more elongated neck and in most cases with an annular rim. This type is characteristic of Adriatic, and underwater finds of shipwrecks with a cargo of Lamboglia 2 amphorae are the most common. Pottery workshops which were first discovered around the present-day Brindisi in Apulia are generally considered to be the source of later production which was widely spread along the Western Adriatic coast. Although it is completely evident that this type was manufactured even on the Eastern Adriatic coast, relatively poor degree of exploration has for now provided only indirect data about their production.

Dressel 6 A

This type is morphologically related to the Lamboglia 2 type, so it is sometimes difficult to make a distinction between them based only on a fragment of a vessel. Characteristic shape is an ovoid or pear-like body, strong and elongated foot and elongated neck with slightly outwardly angled handles. The rim usually has an annular thickening with more curved upper part, but it can also be vertical and rounded. Considering the fact that they were developed from the Lamboglia 2 type, these amphorae are also spread across the Adriatic area, with manufacturing centres in Picenum and the Po Valley. They were being used approximately from the second half of the 1st century BC until the middle of the 1st century AD.

Grčko - italski tip

Grčko - italske amfore najraniji su tip zastupljen u naselju. Osnovna karakteristika oblika je obod trokutastog presjeka, kratak vrat i srcoliko tijelo. Početak proizvodnje datira se u kraj 4. st. pr. Kr., s centrima proizvodnje u Velikoj Grčkoj i na Siciliji (Horvat, 1997., 57.). Vremenom se proizvodnja širi i stvaraju regionalne varijante, a prve rimske komercijalne amfore su kasni tip grčko - italskih. Na istočnojadranskoj obali pretpostavlja se proizvodnja u Issi, ali zasada nema pouzdanih podataka koji bi to i potvrdili. U Pharosu je potvrđena proizvodnja amfora nekoliko tipova koje se ne mogu povezati s grčko - italiskim tipom, a nisu prisutne među nalazima amfora s Resnika. Grčko - italska amfora zastupljena je tek s nekoliko ulomaka oboda, što je u odnosu prema kasnijim tipovima gotovo zanemarivo.

Lamboglia 2

Najčešći tip amfore u prvoj fazi naselja je Lamboglia 2, koja se razvija od grčko - italske tijekom 2. st. pr. Kr. Amfora je u odnosu prema grčko - italskoj masivnija s vrećastim tijelom, izduženijim vratom i najčešće prstenastim obodom. Ovaj tip karakterističan je za Jadran, a podmorski nalazi brodoloma s teretom Lamboglia 2 amfora su najčešći. Keramičarske radionice najranije otkrivene u okolici današnjeg Brindisija u Apuliji, smatraju se općenito za ishodište kasnije produkcije raširene duž zapadne jadranske obale. Iako je sasvim izvjesno da se ovaj tip proizvodio i na istočnojadranskoj obali, relativno slaba istraženost je rezultirala postojanjem zasada samo posrednih podataka o njihovoj proizvodnji.

Dressel 6 A

Ovaj tip morfološki je povezan s Lamboglia 2 tipom, stoga je ponekada teško razlučiti o kojem se radi samo na osnovu dijela posude. Karakterističan je oblik ovoidan ili kruškoliki trbuh, izdužena snažna nožica i izduženi vrat s malo prema vani zakošenim ručkama. Obod je najčešće prstenasto zadebljan s izvijenijim gornjim dijelom, ali može biti okomit i zaobljen. S obzirom da se razvija od Lamboglia 2 tipa, i ove amfore se rasprostiru na jadranskom području s centrima proizvodnje u Picenumu i Padskoj nizini. Vrijeme uporabe je približno od druge polovice 1. st. pr. Kr. do polovice 1. st. po. Kr.



Stamps

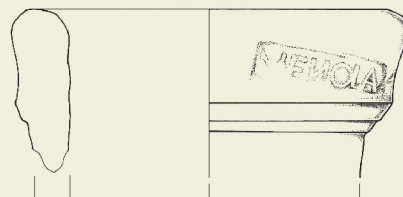
Preserved stamps on the amphorae from Resnik are usually located on rims, and more rarely on handles. Stamps are very usual on the amphorae of a Lamboglia 2 type, and on the Greco-Italic type they are very rare. Stamps are very important indicator for determination of the origin of an amphora. Greeks were the first to start with stamping at the end of the 5th century BC, and afterwards this practice has spread to Magna Graecia, Rome and Carthage. Greek inscriptions were generally simple, usually a monogram, one letter or a figural representation. By the end of Hellenistic period stamps have become more explicit and it became easier to distinguish the time or place of manufacture on them. A sign on the stamp showed quality and quantity of the contents, just like a "brand" of a sort. In shipwrecks we often find several different stamps, which points out to possibility of choice based on quality or price. Various stamps found in Resnik are a clear indicator of a very developed wine trade.

Žigovi

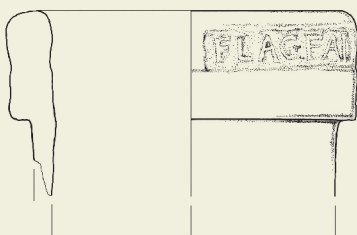
Sačuvani žigovi na resničkim amforama najčešće su na obodu i rjeđe na ručki. Žigovi na Lamboglia 2 amforama su učestali, dok su na grčko - italiskim rijetki. Žigovi su bitan pokazatelj koji pomaže pri identifikaciji podrijetla amfore. Grci prvi započinju s utiskivanjem žigova krajem 5. st. pr. Kr., nakon čega se ta praksa širi u Veliku Grčku, Rim i Kartagu. Grčki su natpisi općenito bili jednostavni, najčešće monogram, jedno slovo ili figuralni prikaz. Krajem helenizma žigovi postaju eksplicitniji i lakše je iz njih iščitati vrijeme i mjesto proizvodnje. Oznaka na žigu značila je kvalitetu i kvantitete sadržine, odnosno svojevrsan "brand". Često na brodolomima nalazimo više različitih žigova, što upućuje na postojanje mogućnosti izbora prema kvaliteti, odnosno, cijeni. Raznoliki žigovi prisutni na Resniku nedvojbeno su pokazatelj razvijene trgovine vinom.



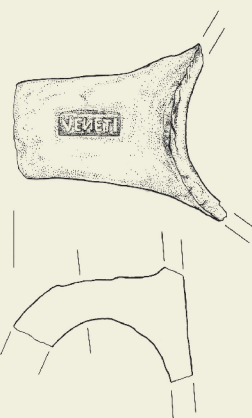
3734



3736



3733



3735

Inv. broj 3733, Pn 18, SJ 1, PS 2, visina 76, 8. 11. 2007.

Nalaz: ulomak oboda amfore.

Vrsta materijala: keramika

Opis: Ulomak oboda i početka vrata. Tip Lamboglia 2 ili Dressell 6 A. Žig pravokutnog oblika plitko utisnut i blago nakošen, zbog slabog utiskivanja nedostaje kraj žiga FLACFA. Površina na dodir glatka, bez vidljivih primjesa. Boja unutrašnje i vanjske površine blijedo žuta, jezgra crvenožuta. Dimenzije: promjer 17 cm, vis. 9.2. cm.

Datacija: 1. st. pr. Kr.

Inv. broj 3734, Pn 323, S I, SJ 26, visina 38, kvadrant 17, 31. 05. 2007.

Nalaz: ulomak oboda amfore

Vrsta materijala: keramika

Opis: Ulomak oboda i početka vrata. Na obodu žig u pravokutnoj kartuši oblika rubova sačuvan u cijelosti. Za razliku od većine žigova na kojima su slova u polju ispupčena, na ovom su još dublje utisnuta. Natpis MANI usmjeren od desno prema lijevo. Tip Lamboglia 2 ili Dressell 6 A. Površina na dodir glatka i mekana. Primjesi vrlo sitnih zrnaca kalcita. Boja unutrašnje i vanjske stjenke i jezgre ista, izrazito blijedosmeđa.

Dimenzije: promjer 16 cm, v. 8 cm

Datacija: druga polovica 1. st. po. Kr.

Inv. broj 3735, Pn 7/09, PS 3, visina 215, 13. 03. 2009

Nalaz: ulomak ručke amfore

Vrsta materijala: keramika

Opis: Ulomak ručke i tijela amfore. Na ručki utisnut u cijelosti sačuvan žig oblika pravokutne kartuše s natpisom VEIETI. Keramika blijedosmeđa s vidljivim primjesama crvenkastosmeđih grumenčića, jezgra tamnija sa tonom crvene boje.

Datacija: kraj 2. ili početak 1. st. pr. Kr.

Dimenzije: šir. 8.6, vis. 6 cm.

Inv. broj 3736, Pn 64, PS II, SJ 2, visina 57, 27. 11. 2007.

Nalaz: ulomak oboda i početka vrata amfore.

Opis: Ulomak oboda i vrata. Tip Lamboglia 2 ili Dressell 6 A. Unutrašnja strana blago narebrena. Pravokutni žig oblika pravokutne kartuše na obodu nagnut i pliće utisnut. Natpis MEIOLA. Slova na početku natpisa izlizana, kraj bolje očuvan. Površina blijedožuta sa primjesama krupnih crvenkastosmeđih grumenčića. Unutrašnja i vanjska površina blijedosmeđa, jezgra tamnija postupno prelazi u crvenkastu.

Dimenzije: promjer 17 cm, vis. 9.5 cm

Datacija: 2. polovica 1. st. pr. Kr.

Inv. number 3733, special find 18, stratigraphy unit 1, trial trench 2, depth 76, 8 Nov 2007.

Find: fragment of amphora rim.

Material: clay

Description: Fragment of rim and the beginning of neck. It is a Lamboglia 2 or Dressell 6 type. Stamp of a rectangular shape, shallowly imprinted and slightly angled. Due to shallow imprinting, the end of the stamp is missing FLACFA. The surface is smooth to the touch, free of any visible admixtures. The colour of inner and outer surface is light yellow; the core is reddish-yellow.

Dimensions: diameter 17 cm, height 9.2 cm

Datation: 1st century BC

Inv. number 3734, special find 323, Resnik, trench I, stratigraphy unit 26, depth 38, quadrant 17, 31 May 2007.

Find: fragment of amphora rim

Material: clay

Description: Fragment of rim and the beginning of neck. The stamp on the rim, which is placed in a rectangular cartouche of rounded edges, has been completely preserved. As opposed to most of the stamps which have protruding letters, this stamp has even deeper imprinted letters. The inscription MANI is oriented from right to left. It is a Lamboglia 2 or Dressell 6 A type. The surface is smooth and soft to the touch. There are admixtures of very small grains of calcite. The colour of inner and outer surface, as well as of the core is the same vivid light brown.

Dimensions: diameter 16 cm, height 8 cm

Datation: second half of the 1st century BC.

Inv. number 3735, special find 7/09, trial trench 3, depth 215, 13 Mar 2009

Find: fragment of amphora handle

Material: clay

Description: Fragment of handle and body of an amphora. A completely preserved stamp shaped as a rectangular cartouche with the inscription VEIETI stamped on the handle. Light brown pottery with visible admixtures of small reddish-brown lumps; the core is darker, with a shade of red colour.

Dimensions: width 8.6, height 6 cm.

Datation: end of 2nd or beginning of 1st century BC.

Inv. number 3736, special find 64, trial trench II, stratigraphy unit 2, depth 57, 27 Nov 2007

Find: Fragment of amphora rim and beginning of neck.

Material: clay

Description: Fragment of rim and neck. It is a Lamboglia 2 or Dressell 6 A type. The inner surface is slightly ribbed. The stamp is shaped as a rectangular cartouche which is angled towards the rib and more shallowly imprinted. The inscription says MEIOLA. The letters are worn out at the beginning, and the end is better preserved. The surface is light yellow with admixtures of large reddish-brown lumps. Inner and outer surface is light brown; the core is darker and it gradually switches to a shade of red.

Dimensions: diameter 17 cm, height 9.5 cm

Datation: second half of the 1st century BC.

Lids

Circular ceramic lids were probably used, together with stamps, to denote the content of an amphora. This is indicated by great variety of relief marks and inscriptions visible on them. According to manner of their manufacture, we can make distinction between the mould-made lids which usually bare marks, the lids made on pottery-wheels, and the simplest lids carved from broken amphorae or roof-tiles. Research has revealed a large amount of lids which are a valuable source of study, due to marks and inscriptions found on them. The marks usually bare simple motives such as crosses, squares, rectangular and circular protrusions, letters, straight and zigzag lines or various symbols.

Čepovi

Okrugli keramički čepovi amfora vjerojatno su uz žigove na amforama imali ulogu označavanja sadržine. Na to upućuje velika raznolikost reljefno izvedenih oznaka i natpisa na njima. Prema načinu izrade razlikuju se čepovi izrađeni u kalupu, koji i najčešće imaju oznake, zatim na lončarskom kolu i sasvim jednostavni nastali kresanjem polomljene amfore ili kupe. Istraživanjima je otkrivena velika količina čepova koji su vrijedan izvor za proučavanje zbog oznaka i natpisa na njima. Oznake na čepovima najčešće su jednostavni motivi poput križeva, kvadratnih, pravokutnih i okruglih ispupčenja, slova, pravocrtnih i cik - cak linija i raznih simbola.



3737



3738



3739



3740



3741



3742

Inv. number 3737, special find 608, trench I, stratigraphy unit 33, depth 123, quadrant 15, 27 Aug 2007.

Find: amphora lid

Material: clay

Description: A lid made in a two-piece mould. Clearly visible traces of mould separate the upper side into two fields. On one side there is a relief cross, on the other side there are two or three (it is damaged) circular protrusions. Pottery with admixtures of small dark brown lumps; a light grey colour with a light shade of green indicates a higher firing-temperature.

Dimensions: diameter 9.5 cm, thickness 1.5 cm

Dation: 1st century BC.

Inv. broj 3737, Pn. 608, S I, SJ 33, visina 123, kvadrant 15, 27. 08. 07.

Nalaz: čep amfore

Vrsta materijala: keramika

Opis: čep izrađen u dvodijelnom kalupu. Otisci kalupa jasno vidljiv dijele gornju stranu na dva polja. Na jednoj strani reljefno izveden križ, na drugoj 2 ili 3 (oštećeno) okrugla ispupčenja. Keramika sa primjesama tamnosmeđih zrnaca, svijetlo siva boja s blagim tonom zelene upućuje na pečenje na višoj temperaturi.

Dimenzije: promjer 9,5 cm, debljina 1,5 cm

Datacija: 1. st. pr. Kr.

Inv. broj 3738, Pn. 665, S I, SJ 57, visina 115, kvadrant 13, 03. 09. 07.

Nalaz: čep amfore

Vrsta materijala: keramika

Opis: Čep izrađen u jednodijelnom kalupu. Držak stožast sa zaobljenim vrhom. Na polovici radijusa reljefno izvedena kružnica uz koju je s unutrašnje i vanjske strane ravnomjerno raspoređeno deset manjih bradavičastih istaka. Rub na jednoj strani oštećen. Oker boja keramike ujednačena na površini i u jezgri.

Dimenzije: promjer 9.3 cm, debljina 1.5 cm

Datacija: 1. st. pr. Kr.

Inv. broj 3739, Pn. 423, S I, SJ 31, visina 76, kvadrant 19, 03. 07. 07.

Nalaz: čep amfore

Vrsta materijala: keramika

Opis: Čep izrađen u jednodijelnom kalupu, donja strana blago zaobljena. Plitak držak nepravilnog kružnog oblika. Po cijeloj površini raspoređene oznake T I X i vjerojatno M. Između I i T, te T i M nalaze se plitke okrugle istake. Oker žućkasta keramika pruža se jednolično po čitavoj površini.

Dimenzije: promjer 10.4 cm, debljina 1.5 cm

Datacija: druga polovica 1. st. pr. Kr.

Inv. broj 3740, Pn. 382, S I, SJ 31, visina 65, kvadrant 19, 20. 06. 07.

Nalaz: Čep amfore

Vrsta materijala: keramika

Opis: Čep izrađen u jednodijelnom kalupu. Držak stožastog oblika sa zaobljenim vrhom. Uz dio ruba reljefno izvedena cik - cak linija. S druge strane reljefno izvedena oznaka u obliku trozuba. Crvenkasta boja keramike je ujednačena na čitavoj površini.

Dimenzije: promjer 9 cm, debljina 1.5 cm

Datacija: druga polovica 1. st. pr. Kr.

Inv. broj 3741, Pn. 607, S I, SJ 43, visina 100, kvadrant 19, 24. 08. 07.

Nalaz: Čep amfore

Vrsta materijala: keramika

Opis: Čep izrađen u jednodijelnom kalupu, donja strana blago zaobljena. Istaknut držak stožastog oblika zaobljen pri vrhu. Sačuvan je natpis BATO koji se pruža polukružno. Keramika crvenkastosmeđe boje.

Dimenzije: promjer 9.5 cm, debljina 1.5 cm

Datacija: kraj 2. ili početak 1. st. pr. Kr.

Inv. broj 3742, Pn. 649, S I, SJ 42, visina 113, kvadrant 19, 30. 08. 07.

Nalaz: čep amfore

Vrsta materijala: keramika

Opis: Čep izrađen u jednodijelnom kalupu, dno blago zaobljeno. Držak je nepravilnog kružnog oblika iz kojega se radijalno pruža pet linija. Još dvije linije se ne pružaju radijalno, lome se približno na polovici dužine radijusa i pri kraju spajaju. Keramika se na dodir troši, boja varira od svijetlosmeđe do crvenkastosmeđe.

Dimenzije: promjer 9 cm, debljina 1.2 cm

Datacija: kraj 2. ili početak 1. st. pr. Kr.

Inv. number 3738, special find 665, trench I, stratigraphy unit 57, depth 115, quadrant 13, 3 Sep 2007.

Find: amphora lid

Material: clay

Description: A lid made in a one-piece mould. The handle is conical with a rounded top. At the middle of the radius there is a relief circle with 10 small wart-shaped protrusions evenly arranged at the inner and outer side of the circle. The edge is damaged on one side. The pottery is of ochre colour, which is homogenous both on the surface and in the core.

Dimensions: diameter 9.3 cm, thickness 1.5 cm

Datation: 1st century BC

Inv. number 3739, special find 423, trench I, stratigraphy unit 31, depth 76, quadrant 19, 3 Jul 2007.

Find: amphora lid

Material: clay

Description: A lid made in a one-piece mould, the bottom is slightly curved. It has a shallow handle of an irregular circular shape. Signs T I X and probably M are arranged across the entire surface. Between I and T, as well as between T and M there are shallow circular protrusions. Ochre-yellowish pottery spreads evenly across the entire surface.

Dimensions: diameter 10.4 cm, thickness 1.5 cm

Datation: second half of the 1st century BC.

Inv. number 3740, special find 382, trench I, stratigraphy unit 31, depth 65, quadrant 19, 20 Jun 2007.

Find: amphora lid

Material: clay

Description: A lid made in a one-piece mould. It has a conical handle with a rounded top. Along one part of the edge there is a relief zigzag line. On the other side there is a relief sign. Reddish colour of pottery is homogenous across the entire surface.

Dimensions: diameter 9 cm, thickness 1.5 cm

Datation: second half of the 1st century BC.

Inv. number 3741, special find 607, trench I, stratigraphy unit 43, depth 100, quadrant 19, 24 Aug 2007.

Find: amphora lid

Material: clay

Description: A lid made in a one-piece mould, the bottom is slightly curved. It has a protruding conical handle with a rounded top. The inscription BATO, which spreads in a semicircle, is preserved on it. The pottery is of reddish-brown colour.

Dimensions: diameter 9.5 cm, thickness 1.5 cm

Datation: the end of the 2nd or beginning of the 1st century BC.

Inv. number 3742, special find 649, trench I, stratigraphy unit 42, depth 113, quadrant 19, 30 Aug 2007.

Find: amphora lid

Material: clay

Description: A lid made in a one-piece mould, with a slightly curved bottom. The handle is of an irregular circular shape, with five radial lines spreading out of it. There are also two more lines which are not radial, but they break in the middle of the radius and merge at the end. The pottery wears out to the touch, and colour varies from light brown to reddish-brown.

Dimensions: diameter 9 cm, thickness 1.2 cm

Datation: the end of the 2nd or beginning of the 1st century BC.



Ostaci pitosa pronađeni u kući u kvadratu 19
Remains of a pithos discovered in a house in quadrant 19

Pitosi / Doliji

Ivan Šuta

Velike keramičke posude grčkog naziva *pithos*, a latinskoga *dolium*, korištene su za skladištenje većih količina hrane i tekućine. S obzirom na veličinu, izrada posude je zahtijevala vještinu i raspoloživu infrastrukturu (velike peći), ali i veće količine gline. Stoga je i vrijednost posude bila velika, a vijek trajanja i do 30-ak godina dugačak. Nekoliko olovnih spojnica kojima su popravljani razbijeni pitosi pronađeno je u naselju što samo potvrđuje njihovu vrijednost.

Ove glomazne posude rijetko su transportirane, odnosno unutar objekta imale su određeno mjesto, a često su i ukopavane. Pitosi, korišteni za skladištenje tekućine, s unutrašnje strane su impregnirani smolom ili voskom zbog sprječavanja poroznosti. U proizvodnji vina pitos je služio kao posuda za fermentaciju mošta, što je možda bila i funkcija pronađenih.

U Sikulima se razlikuju dva tipa posuda, prvi je zastupljen samo jednim primjerkom oboda i pronađen je u najranijim slojevima naselja, dakle u 2. st. pr. Kr. Za ovaj tip nismo pronašli izravne analogije, no očito je riječ o luksuznijoj posudi većih dimenzija. Sličan je primjerak pronađen u Farosu, i datira se u 4. st. pr. Kr. (Jeličić-Radonjić 1995, 82). Obod je gotovo okomit, pri vrhu s vanjske strane blago izvijen. Na ravnom gornjem dijelu oboda sačuvan je friz s motivom tzv. pasjeg skoka, dok je na ramenu izveden ukras valovnicom i viticom vinove loze ili bršljana. Isti su ukrasi i na ulomcima luterija koji su pronađeni u naselju, što upućuje na isto radioničko podrijetlo.

Drugi tip je učestaliji, i u uporabi je i u drugoj fazi naselja. Ukupno su pronađena 3 primjerka posude u *in situ* položaju. Dva su pronađena u istoj prostoriji (kvadrati 18 i 19), pored Lamboglia 2 amfora. U istoj prostoriji pronađen je i dio poklopca s ručkom. Sačuvani primjerci iz prve faze naselja su slični, imaju izduženi lop-tasti oblik, s ravnim dnom na manjoj nozi koja u sredini ima manje udubljenje. Promjer u trbuhu kod jedinog primjerka, koji se mogao odrediti, iznosi oko 75 cm, a izvijeni prstenasti obod ima vanjski promjer oko 40 cm. Na gornjoj zaravnjenoj strani oboda na rubovima urezane su dvije linije. Kapacitet pronađenih pitosa vjerojatno nije prelazio 200 litara. Jedan manji ulomak oboda tog tipa maslinaste boje dio je odbačenog prepečenog primjerka, što

Pithoi / Dolia

Ivan Šuta

A large ceramic vessel, called *pithos* in Greek and *dolium* in Latin, was used for storage of larger amounts of food or liquids. Due to its size, the manufacture of a dish required skill and available infrastructure (large kilns), as well as large amounts of clay. For this reason these vessels were very valuable, and they lasted for up to 30 years. Their value is additionally proven by few leaded clips used for repairing the broken *pithoi* which were found within the settlement.

These large vessels had rarely been transported, that is, they had a specific position inside a building, and very often they were even buried into the ground. The *pithoi* which were used for storage of liquids were impregnated on the inside with pitch or wax, in order to prevent porosity. In wine manufacture, *pithoi* were used as vessels for must fermentation, which could have been the function of those which were found here.

There are two types of vessels which can be distinguished in Sicily; first type is represented with only one example of the rim which was found in the earliest layers of the settlement, dated to the 2nd century BC. No direct analogies could be found for this example, but it was obviously a luxurious vessel of large dimensions. Similar fragment has been found in Pharos, and it is dated in 4th century BC (Jeličić-Radonjić 1995, 82). The rim is almost vertical, and slightly buckled at the top of the outer side. A frieze with a wave shaped motive on the flat upper part of the rim was preserved, and on the shoulder there is a decoration shaped like wave and grape or ivy vines. The same decoration can be seen on the fragments of louterions which were found within the settlement, which indicates that they originated from the same workshop.

Second type is more common, and it had been in use during the second phase of the settlement. Altogether three examples of these vessels were found in their *in situ* position. Two of them were discovered inside the same room (quadrants 18 and 19), next to an amphora of the Lamboglia 2 type. A fragment of a lid with a handle was found in the same room. Preserved examples from the first phase of the settlement are similar; they are shaped as elongated spheres with a flat bottom standing on a smallish leg with a small dent in the middle. The only example which could

be measured has 75 cm long diameter of the body, and the outer diameter of its buckled rim is around 40 cm long. There are two lines carved in the flattened upper side of the rim. The capacity of the discovered *pithoi* was probably no more than 200 liters. One smaller olive-colored fragment of a rim of this type is a part of discarded over-fired example which indicates the manufacture of *pithoi* at Resnik. But this assumption could be confirmed only if a kiln or deformed over-fired examples would be discovered.

The examples found in the first phase of the settlement are smaller in comparison to other known examples from mid-Dalmatia. For example, an estimated capacity of the perforated *dolium* which was found at the nearby Trstenik in Kaštel Sućurac is more than 1500 liters, which is close to the estimated capacity of one *pithos* from the Archaeological Museum in Split of which only one fragment of the rim is preserved (Kirigin, 2008, 178-180), and which is closer to the examples found in Siculi. Discovery of one fragment of a significantly larger *dolium* discovered in the second phase of the settlement proves that larger examples existed in Siculi as well.

upućuje na proizvodnju pitosa na Resniku. No, tek bi pronalazak peći ili deformiranih prepečenih primjeraka sa sigurnošću mogao potvrditi ovu pretpostavku.

Primjerci pronađeni u prvoj fazi naselja manji su u odnosu prema ostalim poznatim primjercima iz srednje Dalmacije. Primjerice, procjena kapaciteta perforiranog dolija pronađenog na obližnjem Trsteniku u Kaštel Sućurcu je veća od 1500 litara, što je slično i procijenjenom kapacitetu ulomka oboda pitosa iz Arheološkog muzeja u Splitu (Kirigin, 2008., 178.-180.), koji je kronološki bliži sikulskim primjercima. Da je većih primjeraka bilo i u Sikulima, potvrđuje nalaz ulomka oboda znatno većeg dolija, koji potječe iz slojeva druge faze naselja.

Inv. broj 3761, Pn. 710 (naknadno spojeni ulomak Pn 712) Resnik, SII, SJ 23, visina 67-84, kvadrant 39, 28.04.2007.

Nalaz: ulomak oboda i tijela pitosa

Materijal: keramika

Opis: blago izvijeni obod četvrtastog presjeka. Na zaravnjenom gornjem dijelu oboda friz s motivom pasjeg skoka. Na tijelu su vidljiva još dva friza s plitkom valovnicom i slabije vidljivom viticom vinove loze ili bršljana. Keramika blijedosmeđa s bijelim i crvenkastim grumenčićima.

Dimenzije: vanjski promjer oboda 38 cm, unutrašnji 34 cm, vis. 8 cm

Datacija: polovica 2. st. pr. Kr.

Inv. number 3761, special find 710 (subsequently joined fragment Special find 712), Resnik, trench II, stratigraphy unit 23, depth 67-84, quadrant 39, 28 Apr 2007.

Find: fragment of the rim and body of a *pithos*

Material: clay

Description: slightly buckled rim, square in cross-section. Frieze with a wave shaped motif on the flattened upper part of the rim. Two more friezes can be seen on the body, with a shallow wave shaped motif and a less visible grape or ivy vine motif. The pottery is light brown with small white and reddish lumps.

Dimensions: outer diameter of the rim 38 cm, inner 34 cm, height 8 cm

Datation: middle of the 2nd century BC



Inv. broj 3762, Resnik, S I, SJ 43, visina 76-111, kvadrat 19, 24. 08. 2007.

Nalaz: pitos

Materijal: keramika

Opis: Pitos rekonstruiran iz više ulomaka. Pronađen u *in situ* položaju unutar prostorije gdje su pronađene i Lamboglia 2 amfore. Donji dio s prstenastom nogom bolje očuvan, manji segment gornjeg dijela rekonstruiran. S vanjske strane otučen površinski dio stjenke. Keramika crvenkasta sa dosta bijelih i tamnocrvenih grumenčića.

Dimenzije: šir. 84 cm, vis. 82 cm, unutrašnji promjer oboda 28,5 cm, vanjski promjer oboda: 44, 5 cm, deblj. stjenke na obodu 3 cm

Datacija: druga pol. 1. st. pr. Kr.

Inv. number 3762, Resnik, trench I, stratigraphy unit 43, depth 76-111, quadrant 19, 24 Aug 2007.

Find: *pithos*

Material: clay

Description: a *pithos* reconstructed from several fragments. Found in an *in situ* position inside of the room where amphorae of Lamboglia 2 type were found. Lower part with annular leg is better preserved; a small segment of the upper part has been reconstructed. On the outer side surface has been chipped off. The pottery is reddish, with plenty of small white and dark red lumps.

Dimensions: width 84 cm, height 82 cm, inner diameter of the rim 28.5 cm, outer diameter of the rim 44 cm, thickness of the rim 3 cm

Datation: second half of the 1st century BC



Inv. number 3763, Resnik, trench I, stratigraphy unit 31, 75, quadrant 19, 14 Aug 2007.

Find: lid of a *pithos*

Material: clay

Description: a large fragment of the lid of a *pithos* with a preserved handle in the middle. The handle is of an elongated semicircular shape with imprints on both ends. The edge of the lid has not been preserved. The surface is dark brown and the core is reddish. There are significant admixtures of large dark red lumps.

Dimensions: the longest preserved diameter 31 cm, thickness 1.9 cm.

Datation: second half of the 1st century BC

Inv. number 3764, Resnik, trench II, stratigraphy unit 2, quadrant 30, 16 Jan 2007.

Find: rim of a *pithos*

Material: clay

Description: a smaller fragment of the rim of a *pithos*. There are two lines carved in the upper surface, near both edges. This is one of the smaller type *pithoi* which were commonly placed inside of the houses from the first phase of the settlement. Of this example only one fragment was discovered; it was over-fired, which is evident from the greenish colour of its wall and from its hardness. Traces of mortar can be seen on the outer part of the rim, which indicates that this fragment was used in construction work.

Dimensions: inner diameter 26 cm, outer 134 cm.

Datation: 2nd-1st century BC

Inv. number 3765, Resnik, trench II, surface find, 15 Jan 2007.

Find: rim of a *dolium*

Material: clay

Description: fragment of the rim of a larger *dolium*. The surface is rough and significantly damaged. Pottery is reddish with a significant amount of fairly large white and light brown lumps.

Dimensions: outer diameter of the rim around 70 cm, inner 48 cm, thickness of the wall 3.5 cm

Datation: 1st-3rd century AD.

Inv. broj 3763, Resnik, S I, SJ 31, vis. 75, kvadrat 19, 14. 08. 2007.,

Nalaz: poklopac pitosa

Materijal: keramika

Opis: veći ulomak poklopca pitosa sa sačuvanom ručkom u središnjem dijelu. Ručka je izduženog polukružnog oblika sa otisnucima na oba kraja. Nije sačuvan rub poklopca. Površina biljedosmeđa, a jezgra crvenkasta. Dosta primjesa krupnijih tamnocrvenih grumenčića.

Dimenzije: najveći sačuvani promjer 31 cm, debljina 1,9 cm

Datacija: druga polovica 1. st. pr. Kr.

Inv. broj 3764, Resnik, S II, SJ 2, kvadrat 30, 16. 01. 2007.

Materijal: keramika

Nalaz: obod pitosa

Opis: manji ulomak oboda pitosa. Na gornjoj plohi oboda urezane uz oba ruba dvije linije. Pripada tipu manjih pitosa kakvi se često nalaze unutar kuća prve faze naselja. Ovo je jedini pronađeni ulomak koji je prepečen što se vidi prema zelenkastoj boji stjenke i tvrdoći. Na vanjskom dijelu oboda tragovi žbuke upućuju da je ulomak korišten u gradnji.

Dimenzije: unutrašnji promjer 26 cm, vanjski 34 cm.

Datacija: 2.-1. st. pr. Kr.

Inv. broj 3765, Resnik, S II, površinski iskop, 15. 01. 2007.

Nalaz: obod dolija

Materijal: keramika

Opis: ulomak oboda većeg dolija. Površina neravna i dosta oštećena.

Keramika crvenkasta sa dosta krupnijih grumenčića bijele i svijetlosmeđe boje.

Dimenzije: vanjski promjer oboda oko 70 cm, unutrašnji 48 cm, debljina stjenke 3,5 cm

Datacija: 1.-3. st. po. Kr.



3765



3764



3763

Utezi za tkalački stan

Ivan Šuta

Dokaz upotrebe tkalačkog stana u prvoj fazi Sikula su keramički utezi koji su pridržavali niti osnove. Ostali dijelovi tkalačkog stana uglavnom su bili izrađeni od drva koje nije ostalo sačuvano. Ipak, u rekonstrukciji tkalačkog stana iz ranijeg grčkog doba pomažu nam prikazi na keramičkim posudama i pisani izvori. Vještina tkanja bila je iznimno cijenjena, zastupljena u mitologiji i književnosti.

Loom Weights

Ivan Šuta

Loom weights, which were used to hold threads on the loom in place, are the proof of existence of looms in the first phase of Siculi. Other parts of looms were made of wood, which was not preserved. Still, representations on pottery and written sources help us reconstruct the Greek period looms. Weaving craft was highly esteemed and represented through mythology and literature.



Prikaz okomitog tkalačkog stana sa keramičkim utezima
Representation of a vertical loom with pottery weights

Weaving on simple looms was obviously of great importance in Siculi, considering the numerous finds of different kinds of loom weights. The most common type is a circular weight of a rectangular cross-section, with two small holes in the top and a slightly flattened bottom. Pyramidal weights, as well as those of a circular shape with ellipsoid cross-section, are rare. Stamps were also found on one of the weights, and that indicates the need for marking the weights. Similar weights have been found in Tragurium, Pharos (Jeličić Radonjić 1995, 96) and Issa (Kirigin 2008, 128-131). In the second phase of the settlement loom weights are less common, and the only completely preserved one is of trapezoid shape with only one hole in the lateral sides.

Inv. number 3752, special find 557, Resnik, trench I, stratigraphy unit 39, depth 100, quadrant 19, 20 Aug 2007.

Find: loom weight

Material: clay

Description: Circularly shaped weight with a slightly flattened bottom. It is rectangular in the cross-section. There are two small circular holes and a carved X on one side. The clay is reddish-brown with extensive admixtures of small dark-red lumps.

Dimensions: diameter around 8 cm, thickness from 2.5 to 3 cm

Datation: the end of the 2nd or the beginning of the 1st century BC.

Inv. number 3753, special find 541, Resnik, trench I, stratigraphy unit 42, depth 82, quadrant 19, 17 Aug 2007.

Find: loom weight

Material: clay

Description: A weight of an irregular circular shape with a flattened bottom and elongated top with two small circular holes. The clay is reddish-brown with extensive admixtures of small dark-red lumps.

Dimensions: height 9 cm, width 7 cm, thickness 2.5 cm

Datation: the end of the 2nd or the beginning of the 1st century BC.

Inv. number 3754, special find 543, Resnik, trench I, stratigraphy unit 42, depth 82, quadrant 18, 17 Aug 2007.

Find: loom weight

Material: clay

Description: Circular weight with a slightly flattened bottom and rectangular cross-section. There are two circular holes next to the top of the weight. The clay is reddish with admixtures of small white and dark-red lumps.

Dimensions: diameter 9 cm, thickness 2.5 cm

Datation: the end of the 2nd or the beginning of the 1st century BC.

Inv. number 3755, special find 4/09, Resnik, trial trench 3, devastated layer, 12 Mar 2009.

Find: loom weight

Material: clay

Description: Circular weight with an ellipsoid cross-section. At one side, there are two small circular holes and two stamps. The stamps are circular and they represent an indistinctive symbol. The colour is brown with admixtures of small white and dark-brown lumps.

Dimensions: diameter 8.1 cm, thickness 2.3 cm

Datation: 2nd-1st century BC.

Tkanje na primitivnom tkalačkom stanu očito je imalo velik značaj i u Sikulima, s obzirom da su česti nalazi različitih vrsta utega. Najzastupljeniji tip je okrugli uteg pravokutnog presjeka, s dvije rupice na vrhu i blago zaravnjenim dnom. Rjeđe se javlja uteg piramidalnog oblika i okrugli uteg sa elipsastim presjekom. Na jednom su utegu pronađeni i žigovi što upućuje na potrebu označavanja utega. Slične utege nalazimo u Traguriju, Farosu (Jeličić Radonjić 1995, 96) i Issi (Kirigin 2008, 128-131). Utege za tkalački stan u drugoj fazi naselja rjeđe nalazimo, a jedini cjeloviti primjerak je oblika trapeza i ima samo jednu rupu na bočnim stranama.

Inv. broj 3752, Pn. 557, Resnik, S I, SJ 43, visina 100, kvadrant 19, 20. 08. 07.

Nalaz: uteg za tkalački stan

Vrsta materijala: keramika

Opis: Utteg okruglog oblika sa blago zaravnjenim dnom. Pravokutni presjek. Dvije okrugle rupice i urezan X na jednoj strani. Crvenkastosmeđa keramika s dosta primjesa tamnocrvenih grumenčića.

Dimenzije: promjer oko 8 cm, deblj. 2.5 do 3 cm

Datacija: kraj 2. ili početak 1. st. pr. Kr.

Inv. broj 3753, Pn. 541, Resnik, S I, SJ 42, visina 82, kvadrant 19, 17. 08. 07.

Nalaz: uteg za tkalački stan

Vrsta materijala: keramika

Opis: Utteg nepravilnog kružnog oblika sa zaravnjenim dnom i izduženim vrhom s dvije okrugle rupice. Keramika crvenkastosmeđa sa dosta primjesa grumenčića tamnocrvene boje.

Dimenzije: v. 9 cm, š. 7 cm, deblj. 2. 5 cm

Datacija: kraj 2. ili početak 1. st. pr. Kr.

Inv. broj 3754, Pn. 543, Resnik, S I, SJ 42, visina 82, kvadrant 18, 17. 08. 07.

Nalaz: uteg za tkalački stan

Vrsta materijala: keramika

Opis: Utteg okruglog oblika sa blago zaravnjenim dnom. Pravokutni presjek. Dvije okrugle rupe uz vrh utega. Crvenkasta keramika sa primjesama bijelih i tamnocrvenih grumenčića.

Dimenzije: promjer 9 cm, deblj. 2. 5 cm

Datacija: kraj 2. ili početak 1. st. pr. Kr.

Inv. broj 3755, Pn 4/09, Resnik, PS 3, 12. 03. 2009. devastirani sloj

Nalaz: uteg za tkalački stan

Vrsta materijala: keramika

Opis: Utteg kružnog oblika i elipsastog presjeka. Dvije okrugle rupice i dva žiga na jednoj strani. Žigovi okrugli sa prikazom nejasnog simbola. Smeđa boja, s primjesama bijelih i tamnosmeđih grumenčića.

Dimenzije: promjer 8.1 deblj. 2.3 cm

Datacija: 2. - 1. st. pr. Kr.



3752



3756



3754



3753



3758



3755



3759



3757

Inv. number 3756, special find 717, Resnik, accidental find in soil profile, quadrant 25, 24 Sep 2007.

Find: loom weight

Material: clay

Description: A pyramidal weight with two small holes in a slightly rounded top. The clay is ochre with a light-reddish colour of the core. There are admixtures of small dark-red lumps.

Dimensions: height 9.5 cm, width 4 cm

Datation: 2nd-1st century BC.

Inv. number 3757, special find 629, Resnik, trench I, stratigraphy unit 49, depth 134, quadrant 25, 28 Aug 2007.

Find: loom weight

Material: clay

Description: circular weight with flattened bottom and two small holes. The cross-section is rectangular. At one end there are five concave leaf-like marks with a smaller protruding form of the same shape in the middle. Similar motif can be seen on the pyramidal weights from Gravina. Clay is brownish with admixtures of small white and reddish lumps.

Dimensions: diameter 9 cm, thickness 2.5 cm

Datation: 2nd-1st century BC.

Inv. number 3758, special find 621, Resnik, trench I, stratigraphy unit 49, depth 134, quadrant 25, 28 Aug 2007.

Find: loom weight

Material: clay

Description: Circular weight with a slightly flattened bottom. The cross-section is rectangular. There are two circular holes next to the top of the weight. The clay is ochre and rather porous, probably due to organic admixtures.

Dimensions: diameter 8.5 cm, thickness 2.8 cm

Datation: 2nd-1st century BC.

Inv. number 3758, special find 306, Resnik, trench I, stratigraphy unit 24, depth 40, quadrant 13, 24 May 2007.

Find: loom weight

Material: clay

Description: Weight of a roughly rectangular shape with wider bottom. It is rather damaged; in the lateral sides there is one little hole and a poorly visible row of imprinted straight lines. One side is burnt. The clay is red with dark-grey traces on the burnt areas.

Dimensions: width 6.5 cm, height 11.5 cm

Datation: 1st-2nd century AD.

Inv. broj 3756, Pn. 717, Resnik, S I, slučajni nalaz iz profila, kvadrant 25, 24. 09. 2007.

Nalaz: uteg za tkalački stan

Vrsta materijala: keramika

Opis: Piramidalni uteg s dvije rupice na blago zaobljenom vrhu. Keramika oker boje sa blijedom crvenkastom bojom jezgre. Primjese tamnocrvenih grumenčića.

Dimenzije: vis. 9. 5 cm, šir. 4 cm

Datacija: 2-1. st. pr. Kr.

Inv. broj 3757, Pn. 629, Resnik, S I, SJ 49, visina 134, kvadrant 16, 28. 08. 2007.

Nalaz: uteg za tkalački stan

Vrsta materijala: keramika

Opis: Uteg kružnog oblika sa spljoštenim dnom i dvije rupice. Presjek pravokutnog oblika. Na jednoj strani nalazi se pet udubljenih listolikih oznaka sa manjim ispupčenim dijelom istog oblika u središnjem dijelu. Sličan motiv nalazi se na utezima piramidalnog oblika iz Gravine. Keramika je smečkaste boje s primasima bijelih i crvenkastih grumenčića.

Dimenzije: promjer 9 cm, deblj. 2,5 cm

Datacija: 2. - 1. st. pr. Kr.

Inv. broj 3758, Pn. 621, Resnik, S I, SJ 49, visina 134, kvadrant 15, 28. 08. 2007.

Nalaz: uteg za tkalački stan

Vrsta materijala: keramika

Opis: Uteg okruglog oblika s blago zaravnjenim dnom. Pravokutni presjek. Dvije okrugle rupe uz vrh utega. Keramika oker boje, dosta šupljikava, vjerojatno zbog organskih primjesa.

Dimenzije: promjer 8. 5 cm, deblj. 2. 8 cm

Datacija: 2. - 1. st. pr. Kr.

Inv. broj 3759, Pn 306, Resnik, S I, SJ 24, visina 40, kvadrant 13, 24. 05. 2007.

Nalaz: uteg za tkalački stan

Vrsta materijala: keramika

Opis: Uteg približno pravokutnog oblika sa širim dnom. Dosta oštećen, jedna rupica na bočnim stranama, gdje se slabo uočava niz utisnutih ravnih linija. Jedna strana nagorena. Tamno crvena keramika sa tamnosivim tragovima na nagorenim mjestima.

Dimenzije: šir. 6.50 cm, vis. 11.50 cm

Datacija: 1. - 2. st. po. Kr.

Žrtvenici

Ivanka Kamenjarin

Grci i Rimljani su svoje vjerske obrede obavljali na više načina: javno u hramovima, te privatno, najčešće u svojim kućama. Središte svakog bogoslužja bilo je prinošenje žrtve. Bogovima su prinošene žrtve paljenice, ljevanice, ali i kađenice. Također, ostavljani su darovi na žrtvenicima (oltarima). Nekrvne žrtve mogle su biti prvine plodova, jela, vino i kad. Žrtvene životinje bile su bez mane i nisu se smjele prethodno koristiti za rad. Svakoj žrtvi vjernik je pridodavao i molitvu koja je za svečane prigode imala određeni obrazac, a za manje značajne prigode vjernik je izgovarao molitvu nadahnut potrebom (Musić, 1910., str. 79., 155-160).

Žrtvenici pronađeni na Resniku pripadaju kućnim žrtvenicima. Zajednička im je pripadnost prvoj fazi naselja (2. - 1. st. pr. Kr.) kao i njihov pronalazak unutar kuća. Istraživanja iz 2007. godine obuhvatila su uski rov širine 5 m, što nije bilo dovoljno da se ustanovi točno mjesto kućnih svetišta unutar resničkih kuća. Za kamene žrtvenike nisu pronađene analogije, osim za Inv. br. 3969. Nekoliko istovjetnih njemu pronađeni su na Visu, jedan čak s natpisom (Pavić, 2010.).

Tragovi gareži na četiri od ukupno pet kamenih žrtvenika iz Resnika govore u prilog da se radi o žrtvenicima na kojima se nešto prinostilo. Moguće da su bili kadionici, ali i da se obavljala libacije (ulje, vino).

Druga dva keramička žrtvenika (Inv. br. 1000 i 3973) vrsta su kadionika, odnosno mjesto gdje se palio tamjan, ali i prostor za libacije. Analogije su pronađene u Pompejima (Pompeji 2001., 36).

Inv. br. 1000 ima s donje strane po sredini hrapavu kružnu površinu gdje je bila nalijepljena široka noga koja nedostaje.

Osam žrtvenika raznih tipova pronađenih u Resniku ipak nisu dovoljni da možemo donositi zaključke o religiji i vjerovanjima u Sikulima.

Altars

Ivanka Kamenjarin

Greeks and Romans performed their religious rituals in multiple ways: in public, in temples and in private, usually in their houses. The center of every worshipping was sacrifice. Burnt offerings, libations and burning incense were offered to gods. Gifts were also being left at the altars. Non-blood sacrifices could have been first fruits, food, dishes, wine and incense. Sacrificial animals had to be without flaws and not used for labor previously. To each sacrifice a believer would add a spoken prayer, which had a certain pattern during festivities, and on smaller occasions it was inspired by need (Musić, 1910, p. 79, 155-160).

Altars discovered at Resnik belong to domestic altars. What they have in common is their affiliation to the first phase of the settlement (2nd – 1st century BC) as well as the fact that they were discovered inside the houses. The excavations of 2007 covered a narrow, 5 m wide trench, which was not enough to determine the exact position of the domestic altars which were found inside the Resnik houses. No analogies for stone altars have been found. Except for Inv. no. 3969 where several similar examples, have been found on the island of Vis, one of which even has an inscription on it (Pavić 2010).

Burning marks on four out of five stone altars from Resnik speak to the fact that sacrifices were being offered at this altars. They could have been used as censers, or for libations (oil, wine).

The other two clay-made altars (Inv. no. 1000 and 3973) are a type of a censer, or more precisely a place for incense burning, as well as a place for libations. Analogies have been found At Pompeii (Pompeji 2001, 36).

Inv. no. 1000 has on the bottom side a rough circular surface in the middle where a wide base used to be attached to it.

Eight altars each of different types have been found at Resnik, which is still not enough to make conclusions on religion and beliefs at Siculi.

Inv. number 3971, special find 184, trench II, quadrant 35, depth 52, stratigraphy unit 7a, 18 Apr 2007.

Find: altar

Material: stone, domestic

Description: a massive column-like altar, decorated with shallow profiles, slightly narrowing towards the top. Crenellation is standing out and the focus is beaten, and there are visible traces of cracks which can be related to sacrificial burning. There is a square cavity (l x w: 1,7 x 1,7 cm, dept. 0,9 cm) at the bottom side of the circular base, and it can be assumed that it served to attach the stone to the lathe wheel when the altar was being made. Along the entire height of the altar about 2 cm wide burning marks are visible. Greater part of the base is damaged, but it was reconstructed.

Dimensions: height 13.9 cm; diameter (down) 10.4 cm; (up) 9.4 cm; focus (diameter / depth) 5,8 x 1,7 cm

Datation: 2nd – 1st century BC.



Inv. broj 3971, PN 184, S II, kvadrant 35, visina 52, sj 7a, 18. 04. 2007.

Nalaz: žrtvenik

Materijal: kamen, domaći

Opis: Masivni stupoliki žrtvenik, ukrašen plitkim profilacijama, neznatno se sužuje prema vrhu. Krunište se ističe, a sam fokus je otučen te su vidljivi tragovi napuknuća što se može vezati uz žrtveno paljenje. S donje strane okrugle baze ima kvadratno udubljenje (dužina x širina: 1,7 x 1,7 cm, dubina 0,9 cm), za koje se može pretpostaviti da je služilo za učvršćivanje kamena na tokarsko kolo prilikom izrade samog žrtvenika. Po čitavoj visini žrtvenika, a u širini od oko 2 cm, vidljivi su tragovi gareži. Oštećen je veći dio baze, ali je rekonstruiran.

Dimenzije: visina 13,9 cm; promjer (dolje) 10,4 cm; (gore) 9,4 cm; fokus (promjer / dubine) 5,8 x 1,7 cm

Datacija: 2. – 1. st. pr. Kr.



Inv. number 3968, special find 542, trench II, quadrant 25, depth 71, stratigraphy unit 12, 17 Aug 2007.

Find: altar

Material: stone, domestic

Description: The altar has a trapezoid base. There is a trapezoid cavity (2,00 x 1,5 cm; dept. 1,2 - 1,4 cm) at the bottom side of the base, which was used to attach it to the lathe wheel. There is a double torus rising from the base (the upper one is narrower than the bottom one), as well as one column which has a prominent rib on the lower half, and is

Inv. broj 3968, PN 542, S II, kvadrat 25, visina 71, sj 12, 17. 08. 2007.

Nalaz: žrtvenik

Materijal: kamen, domaći

Opis: Žrtvenik ima trapezoidnu bazu. S donje strane baze postoji trapezno udubljenje (2,00 x 1,5 cm; dubina 1,2 - 1,4 cm) za učvršćivanje na tokarsko kolo. Iz baze se uzdiže dvostruki torus (gornji je uži od donjeg), te stup koji na donjoj polovici ima istaknuto rebro, a prema vrhu se sužava (dolje: promjer 6,2 cm, gore: promjer 5,4 cm). Na vrhu stupa nalaze se dva prstena (anuli) na kojima počiva četvrtasti abakus, na kojem se nalazi

dvostruko profilirani okrugli fokus, konkavno udubljen. Tragovi gareži vidljivi su na jednom kraju fokusa. S jedne strane neznatno su oštećeni abakus i ugao baze.

Dimenzije: visina/dužina/širina: 18,4 x 10,4 x 9,6 cm; fokus (promjer/dubine): 7,8 x 1,5 cm

Datacija: 2. – 1. st. pr. Kr.

Inv. broj 3969, Resnik '08, kvadrat 19, u iskopu za kanalizaciju pri širenju sjevernog profila.

Nalaz: žrtvenik

Materijal: kamen vapnenac

Opis: Žrtvenik ima oblik uspravno položenog kvadra. Središnji dio bočnih ploha ukrašen je ukriženim linijama, te nalikuje na slova X. Samo prednja ploha ukrašena je ukriženim dvostrukim linijama. Pored toga, na visini sjecišta linija, obostrano su urezane i vodoravne linije. Na bridovima bočnih ploha u središnjem dijelu nalaze se po dva školjkasta udubljenja. Ispod i iznad središnjeg dijela urezane su po čitavoj širini vodoravne linije u međusobnim razmacima od cca 0,5 cm. Donji profil sastoji se od niske plinte mjestimično očuvanog ruba, postavljene na četiri nožice, od kojih je jedna djelomično očuvana i vidljiva, a ostale su otučene. Gornji profil ima istureni abakus, a fokus je udubljen. Dno i gornja površina su oštećene. Prednja površina ima tragove gareži.

Dimenzije: visina 11 cm; dužina/širina (dolje): 7,5 x 6,5 cm; (gore): 6,9 x 5,4 cm; fokus (dužina/širina/dubina): 4,9 x 3,6 x 0,5 cm

Datacija: 2. – 1. st. pr. Kr.

Analogije: Pavić 2010, 1

narrowing towards the top (down: Ø 6,2 cm, up: Ø 5,4 cm). At the top of the column there are two rings (anuli) with square abacus on top of them and a concave circular focus with double profile on top of the abacus. Burning marks are visible at one end of the focus. At one side there is a slight damage to the abacus and the corner of the base.

Dimensions: height/length/width 18.4 x 10.4 x 9.6cm; focus (diameter/depth) 7.8 x 1.5 cm

Datation: 2nd – 1st century BC.

Inv. number 3969, Resnik 2008, quadrant 19, in the sewage dig, during the widening of the northern profile.

Find: altar

Material: limestone

Description: The altar is shaped as a vertically aligned parallelepiped. The middle parts of the side surfaces are decorated with crossed lines which resemble the letter X. Only the front surface is decorated with crossed double lines. Besides that, horizontal lines were also carved at the height of the intersections of the lines. At the edges of the side surfaces, on their middle parts, there are pairs of shell-like cavities. Under and above the middle part horizontal lines with a 0.5 cm wide space between them were carved along the entire width. Lower profile consists of a low plinth with a sporadically preserved edge, posted on four legs, one of which is partially preserved and visible; the rest are beaten. Upper part of the profile has a protruding abacus, and the focus is concave. The bottom and the upper surface is damaged. Front surface has traces of burning.

Dimensions: height 11 cm; length/width (down) 7.5 x 6.5 cm; (up) 6.9 x 5.4 cm; focus (length/width/depth) 4.9 x 3.6 x 0.5 cm

Datation: 2nd – 1st century BC.

Analogies: Pavić 2010, 1



3969



3970

Inv. number 3970, special find 437, trench II, quadrant 22, depth 57, stratigraphy unit 37, 05 Jul 2007.

Find: altar

Material: stone, fine white marble

Description: Column-like altar with a damaged base. Plinth is entirely beaten, while double torus (the upper one is narrower than the bottom one) is almost entirely preserved. An undecorated column rises from the torus. The upper profile is identical to the lower one, but with a reverse arrangement, and it is more preserved. A raised focus is placed on it and it is circular in shape and slightly concave; a larger part of it is damaged. This altar doesn't have traces of burning like the rest of them. Lower part of the base is concave.

Dimensions: height/diameter (down) 11.5/ 8.3 cm; diameter of the column 6.3 cm; focus (diameter /depth) 6.2/1.4 cm

Datation: 2nd – 1st century BC.



Inv. broj 3970, PN 437, S II, kvadrat 22, visina 57, sj 37, 05. 07. 2007.

Nalaz: žrtvenik

Materijal: kamen, fini bijeli mramor

Opis: Stupoliki žrtvenik oštećene baze. Plinta je u cijelosti otučena dok je dvostruki torus (gornji je uži od donjeg) većim dijelom očuvan. Iz torusa se uzdiže neukrašeni stup. Gornji profil je identičan donjem, ali obrnutog rasporeda, te je bolje očuvan. Na njemu se nalazi uzvišeni fokus kružnog oblika i neznatnog udubljenja; većim dijelom je oštećen. Ovaj žrtvenik nema tragova gareži kao ostali. Donja strana baze je udubljena.

Dimenzije: visina/promjer (dolje) 11,5/ 8,3 cm; promjer stupa 6,3 cm; focus (promjer /dubine) 6,2/1,4 cm

Datacija: 2. – 1. st. pr. Kr.

Inv. broj 3972, PN 407, S II, kvadrat 22, visina 57, sj 37, 29. 06. 2007

Nalaz: žrtvenik

Materijal: kamen

Opis: Stupoliki žrtvenik, za bazu ima visoku kružnu osnovu profiliranu koncentričnim krugovima. Stup je gladak i bez ukrasa. Gornji profil je dvostruki astragal od kojih je donji širi. Fokus je kružan, udubljen, te ima 3 koncentrična kruga na rubu. Oštećeni su dijelovi astragala, te dio baze. Tragovi gareži nalaze se počevši od fokusa pa sve do baze.

Dimenzije: visina/promjer (dolje): 14,4 cm / 9,3 cm; focus (promjer): 7,3 cm

Datacija: 2. – 1. st. pr. Kr.

Inv. number 3972, special find 407, trench II, quadrant 22, depth 57, stratigraphy unit 37, 29 Jul 2007.

Find: altar

Material: stone

Description: Column-like altar with a high circular base profiled with concentric circles. The column is smooth and undecorated. The upper profile is a double astragal, lower of which is wider. The focus is circular, concave, with 3 concentric circles on the edge. Parts of the astragal and the base are damaged. Burning marks can be seen starting from the focus all the way to the base.

Dimensions: height/diameter (down): 14.4 cm / 9.3 cm; focus (diameter): 7.3 cm

Datation: 2nd – 1st century BC.

Inv. broj 3973, PN 209, S II, kvadrat 33,34, visina 57-62, sj 15a, 26. 04. 2007.

Nalaz: žrtvenik

Materijal: keramika

Opis: Četvrtasta plića posuda. Rubovi su obostrano ukrašeni reljefno izvedenom valovnicom, na uglovima s gornje strane nalaze se plosnate okrugle aplike s rupom po sredini. Gruba keramika, boja stjenke varira od tamnosmeđe do svjetlooker. Dosta primjesa krupnih zrnaca kalcita.

Datacija: 2. – 1. st. pr. Kr.

Dimenzije: dužina 22 cm, širina 21 cm, visina 65 mm, debljina stjenke 14 mm

Analogija: Pompeji 2001, 51, 52

Inv. number 3973, special find 209, trench II, quadrant 33, 34, depth 57-62, stratigraphy unit 15a, 26 Apr 2007.

Find: altar

Material: clay

Description: a shallow rectangular vessel. The edges are decorated with a relief wave-shaped motif at both sides, and at the upper side of the edges there are flat circular applications, each with a hole in the middle. The clay is rough and the colour of the wall varies from dark-brown to light-ochre. There is a significant amount of admixtures of larger lumps of calcite.

Datation: 2nd – 1st century BC.

Dimensions: length: 22 cm, width 21 cm, height 65 mm, thickness of the wall 14 mm

Analogy: Pompeji 2001, 51, 52



Inv. broj 1000, 22. 05. 1991.

Nalaz: žrtvenik

Materijal: keramika

Opis: Pravokutna plića posuda grube keramike s vidljivim primjesama kalcita. Rubovi su obostrano ukrašeni reljefno izvedenom valovnicom, na gornjim uglovima nalaze se plosnate okrugle aplike s rupom u sredini. Stjenke su deblje dok je dno blago zaobljeno i neravno s vanjske strane. Crvenonarančaste boje.

Dimenzije: dužina 28 cm, širina 21,5 cm, visina 8,5 cm

Datacija: 2. – 1. st. pr. Kr.

Analogija Pompeji 2001, 51, 52

Inv. number 1000, 22 May 1991.

Find: altar

Material: clay

Decoration: a shallow rectangular vessel made of rough clay with visible admixtures of calcite. The edges are decorated with a relief wave-shaped motif at both sides, and at the upper corners there are flat circular applications, each with a hole in the middle. The walls are thicker and the bottom is slightly rounded and uneven on the outer side. It is of a red-orange colour.

Dimensions: length 28 cm, width 21,5 cm, height 8,5 cm

Datation: 2nd – 1st century BC.

Analogy: Pompeji 2001, 51, 52





Rekonstrukcija luterija
Reconstruction of a louterion

Luteriji

Ivan Šuta

Ove su posude korištene za kultne i profane svrhe u grčkom (grč. *louterion*) i rimskom (lat. *labrum*) svijetu. Na grčkim keramičkim posudama često nalazimo prikaze osoba koje se peru uz luterij prije molitve, a često su bile smještene uz ulaze u sakralne objekte u funkciji škropionice.

Prilikom arheoloških istraživanja Sikula pronađeno je nekoliko ulomaka keramičkih luterija u slojevima prve faze naselja. Za razliku od podmorskih nalaza, na kopnu se rjeđe nalaze cjelovitiji primjerci. Imaju oblik velike plitke zdjele na visokoj cilindričnoj nozi i manje proširenim dnom. Promjer recipijenta često prelazi 60 cm, a visina iznosi u prosjeku oko 90 cm. Resnički primjerci ukrašeni su frizovima s motivima pasjeg skoka i lišća bršljana, koji se nalaze na dnu ili obodu posude. Sličan primjerak luterija čuva se u trogirskom muzeju (Kovačić, 2002., 391.), a blizak je i cjeloviti primjerak pronađen u podmorju otoka Lastova na položaju Donji Škoji. Ovdje je luterij bio dio brodskog inventara, odnosno, služio je kao brodski žrtvenik (Radić, 1988., T. 5).

Inv. broj 3749, Pn. 560, Resnik, S I, SJ 33, visina 68, kvadrant 16, 20. 08. 07
Nalaz: luterij

Materijal: keramika

Opis: Ulomak recipijenta i oboda luterija. Dosta oštećen površinski sloj, na obodu je slabo uočljiv friz s motivom pasjeg skoka. Gruba keramika crvenkaste boje s dosta primjesa tamnocrvenih i blijedosmeđih grumenčića.

Dimenzije: promjer oboda oko 60 cm.

Datacija: 2. - 1. st. pr. Kr.

Louterions (Labri)

Ivan Šuta

These vessels were used for cult and profane purposes in Greek (in Greek: *louterion*) and Roman (in Latin: *labrum*) world. Representations of people washing themselves next to *louterion* before prayer were common on Greek pottery, which was often placed near the entrances of sacral buildings and used as *dispersorium*.

During the excavations of Siculi, several fragments of ceramic *louterions* were found within the layers of the first phase of the settlement. As opposed to underwater finds, completely preserved examples are rarely found on land. They are shaped as a large shallow vessel standing on a high cylindrical foot with a less extended bottom. Diameter of the container often comes to 60 centimetres or more, and the average height is around 90 centimetres. The examples found in Resnik are decorated with friezes with wave shaped and ivy leaf motives, which are placed at the bottom or on the rim of the vessel. There is a similar example of *louterion* in the Museum of the City of Trogir (Kovačić, 2002, 391), as well as a completely preserved one found under the sea around the island of Lastovo at the position of Donji Škoji, which is also closely related to the examples from Resnik. This *louterion* was a part of a ship's inventory, or more specifically, it served as an altar on a ship (Radić, 1988, T. 5).

Inv. number 3749, special find 560, Resnik, trench I, stratigraphy unit 33, depth 68, quadrant 16, 20 Aug 2007.

Find: louterion

Material: clay

Description: Fragment of container and rim of a *louterion*. The surface is significantly damaged, with a poorly visible frieze with a wave shaped motif on the rim. The pottery is rough and of reddish colour, with small light-brown lumps.

Dimensions: diameter of the rim around 60 cm

Datation: 2nd-1st century BC



Inv. number 3750, special find 364, Resnik, trench I, stratigraphy unit 27, depth 60, quadrant 15, 18 Jun 2007.

Find: louterion

Material: clay

Description: Fragment of the bottom of a *louterion*. There are two friezes with relief decorations on it. The first frieze is wider and closer to the bottom, with motives of grape vines and leaves. The second is narrower and placed on the protruding profile at the joint with the vertical part of a cylindrical foot, and it is decorated with a wave shaped motif. The pottery is of reddish-brown colour with admixtures of small lumps of calcite.

Dimensions: diameter of the bottom around 45 cm, height 9.5 cm

Datation: 2nd-1st century BC

Inv. broj 3750, Pn 364, Resnik, S I, SJ 27, visina 60, kvadrant 15, 18. 06. 2007.

Nalaz: luterij

Materijal: keramika

Opis: Dio dna luterija. Sadrži dva friza reljefno utisnutih ukrasa. Prvi je širi i nalazi se bliže dnu, s motivom vitica i listova vinove loze. Drugi niz je uži, smješten na istaknutom profiliranom dijelu prijelaza u okomiti dio cilindrične noge, s motivom *pasjeg skoka*. Crvenkastosmeđa keramika sa dosta primjesa sitnih zrnaca kalcita.

Dimenzije: promjer dna oko 45 cm, vis. 9,5 cm.

Datacija: 2.- 1. st. pr. Kr.



Inv. broj 3751, Pn 635, Resnik, S I, SJ 49, visina 123-134, kvadrant 15, 28. 08. 2007.

Nalaz: luterij

Materijal: keramika

Opis: Veći ulomak šupljeg cilindričnog vrata i recipijenta luterija. Vrat je s unutrašnje strane blago narebren. Unutrašnja površina recipijenta dobro očuvana s tragovima gorenja, vanjska dosta oštećena. Svijetlosmeđa keramika bez mnogo primjesa.

Dimenzije: sačuvani promjer recipijenta 34 cm, visina oko 15 cm.

Datacija: 2. - 1. st. pr. Kr.

Inv. number 3751, special find 635, Resnik, trench I, stratigraphy unit 49, depth 123-134, quadrant 15, 28 Aug 2007.

Find: louterion

Material: clay

Description: A larger fragment of a hollow cylindrical neck and container of a *louterion*. The neck is slightly ribbed across the inner surface. The inner surface of the container is well preserved and bares burning marks; the outer surface is rather damaged. The pottery is light-brown with a very small amount of admixtures.

Dimensions: preserved diameter of the container 34 cm, height around 15 cm

Datation: 2nd-1st century BC





Prikaz načina rada s olintskim žrvnjem
Demonstration of working with an Olynthian grindstone

Žrvnjevi i nakovnji

Ivan Šuta

Žrvnjevi su čest inventar unutrašnjosti istraženih kuća. Bili su nužni zbog mljevenja žita, a njihova brojnost svjedoči o važnosti u svakodnevnom životu stanovnika. Osim mljevenja žita pretpostavlja se da su korišteni i za fino mljevenje rude u keramičarskoj proizvodnji (Popović - Kapuran, 2007., 89.). Uglavnom se radi o tzv. olinskom tipu ručnog žrvnja, koji je iznimno rijedak na istočnojadranskom području. Sličan tip žrvnja pronađen je pored Visa, u moru kod hridi Krava (Radić Rossi 2008., 465.). Koristio se na Bliiskom istoku, Maloj Aziji, na prostorima koja su kolonizirali Grci, u dolini rijeke Po i okolnom alpskom području. Rijetko se javlja u Laciju i Kampaniji (Frankel 2003., 107.).

Svi žrvnjevi pronađeni unutar naselja napravljeni su od kamena koji je vulkanskog podrijetla. Ova je vrsta stijene pogodna za izradu žrvnjeva ponajviše zbog čvrstoće i spužvaste strukture. S obzirom da na istočnojadranskom području, osim na pučinskim otocima, nema ležišta vulkanskih stijena, ova vrsta žrvnjeva importirana je vjerojatno iz južne Italije ili Grčke.

Pretpostavlja se da se ovaj tip razvija od primitivnog sedlastog ručnog žrvnja. Iako postoji nekoliko podtipova žrvnja, svi pronađeni unutar naselja su isti i pripadaju raširenijoj varijanti I/1 prema Frankelovoj klasifikaciji. Gornji kamen pravokutnog je oblika s otvorom u sredini. Na sredini užih strana gornjeg kamena su dva manja udubljenja u koja je uglavljivana drvena poluga, kojom se pokretao gornji kamen žrvnja. Za dodatno učvršćivanje poluge služilo je udubljenje na sredini užih bočnih strana. Donja strana gornjeg kamena je ravna, najčešće s dva niza kosih žlijebova pomoću kojih se pospješivalo mljevenje i olakšavalo uklanjanje brašna sa radne površine. S obzirom na habanje, žlijebovi su se često morali obnavljati. Donji kamen je veća pravokutna ploča, sa žlijebovima na habajućoj plohi.

Rotirajući ručni žrvanj mijenja olinski u rimskom dobu. Jedini cjeloviti primjer rotirajućeg žrvnja ipak je pronađen unutar prostorije iz prve faze naselja. U odnosu prema olinskom tipu, rotirajući žrvanj zahtijeva manje truda i prostora za korištenje. U kasnijoj fazi naselja ovaj tip žrvnja prevladava, no sačuvani su samo manji fragmenti. Ovaj tip žrvnja često se javlja i dugo traje, a koristili su ga vojnici rimskih legija koji su vjerojatno i raširili njegovu upotrebu (Frankel 2003., 107.).

Grindstones and Anvils

Ivan Šuta

Grindstones are a common part of the inventory found inside of the researched houses. They were necessary for grain grinding, and their number testifies to their importance in the everyday lives of the inhabitants of Siculi. They were probably used not only for grain grinding, but also for fine grinding of ore used for pottery production (Popović - Kapuran, 2007, 89). These are mostly manual grindstones of a so called Olynthian type, which is an extremely rare type in the Eastern Adriatic area. Similar type of grindstone was found near Vis, under the sea near the rock Krava (Radić Rossi, 2008, 465). It has been in use in the Middle East, in the areas of Greek colonization, in the Po Valley and in the surrounding Alpine area. It is a rare occurrence in Lazio and Campania (Frankel 2003, 107).

All of the grindstones found within the settlement are made of volcanic rocks. This type of rock is suitable for manufacturing grindstones mostly because of its strength and spongy structure. Considering that there are no volcanic rock deposits in the Eastern Adriatic area, except for the open-sea islands, this type of grindstone was probably imported from southern Italy or Greece. There are various sub-types of grindstones, but all the examples which were found within the settlement are the same, and they all pertain to the common I/1 variety according to Frankel's classification. The upper grindstone is of a rectangular shape with an opening in the middle. In the middle of shorter sides of the upper stone there are two minor grooves which were used for fixing the lever which was used to keep the upper grindstone in motion. The recess in the middle of shorter lateral side was used to additionally secure the lever. The bottom of the upper grindstone is flat, usually with two rows of slanting flutes which were used to enhance grinding and facilitate removal of flour from the working surface. The flutes used to wore out easily so they had to be renewed regularly. The bottom grindstone is a larger rectangular plate, with flutes carved in a deteriorating surface.

During the Roman period the Olynthian grindstone was replaced by a rotating manual grindstone. And still, only one completely preserved example of rotating grindstone was found inside one room from the first phase of the settlement. When compared to the Olynthian type, rotating grindstones require less effort and less space. This type of grindstone prevails in the later phase of

the settlement, but only smaller fragments were preserved. This type of grindstone was quite common and it lasted for a long period; it was used by Roman legionnaires, so they are probably meritorious for spreading it around (Frankel 2003, 107).

Among the stone tools found inside of the houses, large round stones made of volcanic rocks are very common. Due to their weight, these stones were often used as ship ballasts. Because of their solidity the inhabitants of Siculi used them as anvils, which is evident from the recesses created in them due to their continuous usage.

Inv. number 3760, special find 29, trench II, quadrant 19, excavated by dredge, 15 Jan 2007.

Find: upper grindstone

Material: volcanic rock

Description: the upper grindstone of an Olynthian type. It is shaped as a rectangular with a hole in the middle. On shorter sides there are grooves which were used to fix the lever which was used to keep the upper grindstone in motion. On the bottom side, there are slanting flutes which were used to enhance grinding and removal of flour. A dark-grey rock is of pronouncedly spongy structure.

Dimensions: length 44 cm, width 39 cm, height 6.5 cm.

Datation: 2nd-1st century BC.

Od kamenog oruđa često su unutar kuća nalaženi i veliki obluci od stijena vulkanskog podrijetla. Ovakve su stijene korištene zbog veće težine kao balastne stijene na brodovima. Stanovnici Sikula su ih zbog velike tvrdoće upotrebljavali kao nakovnje, o čemu svjedoče udubljenja na stijenama nastala dugotrajnom upotrebom.

Inv. broj 3760, Pn. 29, S II, kvadrat 29, otkop bagera, 15. 01. 2007.

Nalaz: gornji kamen žrvnja

Materijal: magmatska stijena

Opis: Gornji kamen olinskog tipa žrvnja. Pravokutan oblik sa otvorom u sredini. Na kraćim stranama nalaze utori za uglavljivanje poluge kojom se pokretao gornji kamen. Donja strana ima kose ureze pomoću kojih se pospješavalo mljevenje i uklanjanje brašna. Kamen tamnosive boje izrazito spužvaste strukture.

Dimenzije: duž. 44 cm, šir. 39 cm, vis. 6,5 cm.

Datacija: 2.-1. st. pr. Kr.





Inv. broj 3743, Pn. 192, S II, kvadrat 36, SJ 15 a, visina 53, 20. 04. 2007.

Nalaz: donji kamen žrvnja.

Materijal: magmatska stijena

Opis: Donji kamen olintskog tipa žrvnja. Pravokutan oblik, blago prema gornjoj plohi nakošene zaobljene strane. Čik - cak urezi na gornjoj habajućoj plohi. Donja strana neravna. Tamnosiva boja i izrazito spužvasta struktura kamena.

Dimenzije: duž. 55 cm, šir. 40 cm, vis. 11 cm.

Datacija: druga polovica 1. st. pr. Kr.

Inv. number 3743, special find 192, trench II, quadrant 36, stratigraphy unit 15, depth 53, 20 Apr 2007.

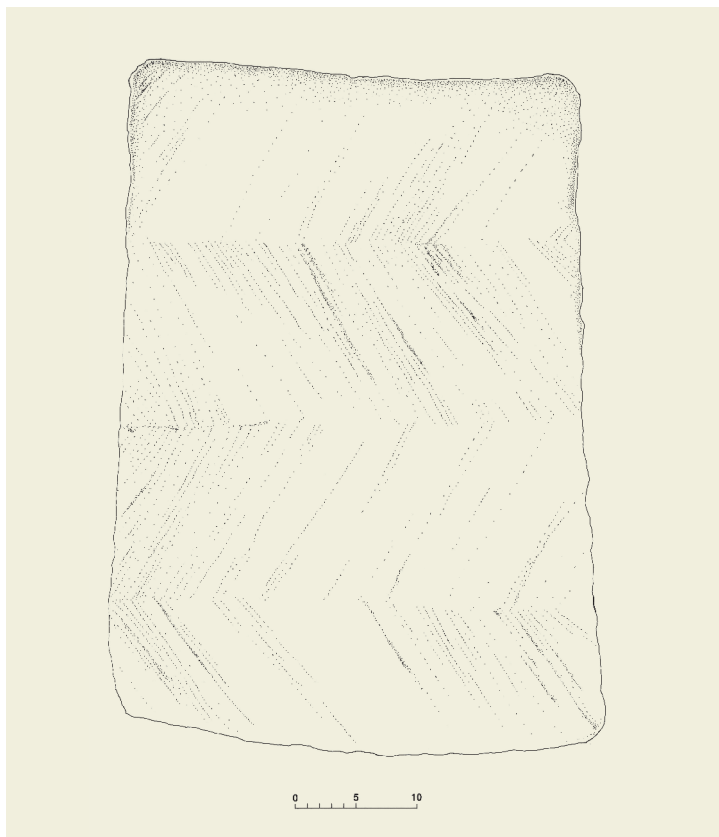
Find: lower grindstone

Material: volcanic rock

Description: Lower grindstone of an Olynthian type. It is shaped as rectangular with rounded side slightly slanted towards the upper surface. There are zigzag cuts in the upper deteriorating surface. The bottom is uneven. The colour is dark grey, and the structure of the rock is spongy.

Dimensions: length 55 cm, width 40 cm, height 11 cm

Datation: second half of the 1st century BC.



Inv. number 3744, special find 257, trench II, quadrant 34, stratigraphy unit 15, depth 67, 9 May 2007.

Find: upper grindstone of the rotating manual type

Material: volcanic rock

Description: Upper grindstone is worn out and repaired with lead in two places. The top of the upper surface is flat, with two opposite recesses for the wooden construction which was used to turn the stone. There are recesses on the lateral sides too. In the deteriorating bottom surface there are shallow slanted cuts and four deeper and wider straight cuts are also visible.

Dimensions: diameter 31.5 cm, height 9.5 cm

Datation: second half of the 1st century BC.

Inv. broj 3744, Pn. 257., S II, kvadrat 34, SJ 15 a, visina 67, 09. 05. 2007.

Nalaz: gornji kamen rotirajućeg ručnog žrvnja.

Materijal: magmatska stijena

Opis: Gornji kamen je istrošen i na dva mjesta popravljan sa olovom. Vrh gornje plohe je zaravnjen s dva nasuprotna udubljenja za drvenu konstrukciju pomoću koje se okretao kamen. Udubljenja su i na bočnoj strani. Na donjoj habajućoj plohi vidljivi kosi plitki urezi i četiri dublja i šira ravna ureza.

Dimenzije: promjer 31.5 cm, vis. 9.5 cm

Datacija: druga polovica 1. st. pr. Kr.



Inv. number 3745, special find 368, Resnik, trench I, stratigraphy unit 28, depth 60, quadrant 154, 19 Jun 2007.

Find: anvil

Material: volcanic rock

Description: Small anvil of a flattened circular shape, with a recess on one side. The other flattened side has been smoothed, and there are two symmetrically carved small circles on it. The object is slightly damaged on one lateral side. The objects of the same shape made of limestone have been found in Pharos, where they were interpreted as manual grindstones.

Dimensions: diameter 6.5, height 4 cm

Datation: 2nd-1st century BC.

Inv. broj 3745, Pn. 368, Resnik, S I, SJ 28, visina 60, kvadrat 154, 19. 06. 2007.

Nalaz: nakovanj

Materijal: magmatska stijena

Opis: Manji nakovanj spljoštenog kružnog oblika, sa udubljenjem na jednoj strani. Druga spljoštena strana je zaravnjena s dvije simetrično urezane manje kružnice. Predmet malo oštećen na bočnoj strani. Predmeti istog oblika izrađeni od vapnenca pronađeni su u Pharosu, gdje su interpretirani kao ručni žrvnjevi.

Dimenzije: promjer 6.5 cm, vis. 4 cm

Datacija: 2. - 1. st. pr. Kr.





Inv. broj 3746, Pn. 279, Resnik, S II, SJ 7a, visina 65, kvadrant 36, 12. 05. 07.

Nalaz: nakovanj

Materijal: magmatska stijena

Opis: Veći izduženi oblutak sa udubljenjem na jednoj strani. Vjerojatno se radi o brodskoj balastnoj stijeni koja je zbog tvrdoće sekundarno rabljena kao nakovanj.

Dimenzije: duž. 17 cm, šir. 11. 5 cm, deblj. 9 cm.

Datacija: druga polovica 1. st. pr. Kr.

Inv. number 3746, special find 279, Resnik, trench II, stratigraphy unit 7a, depth 65, quadrant 36, 12 Jul 2007.

Find: anvil

Material: volcanic rock

Description: A larger elongated round stone with a recess on one side. This was probably a ballast rock of a ship which was afterwards used as an anvil because of its solidity.

Dimensions: length 17 cm, width 11.5 cm, thickness 9 cm

Datation: second half of the 1st century BC.



Inv. broj 3747, Pn. 282, Resnik, S II, SJ 7a, visina 65, kvadrant 36, 12. 05. 07.

Nalaz: nakovanj

Materijal: magmatska stijena

Opis: Izduženi oblutak sa udubljenjima na četiri duže strane. Vjerojatno se radi o brodskoj balastnoj stijeni koja je zbog tvrdoće sekundarno rabljena kao nakovanj.

Dimenzije: duž. 13 cm, šir. 9. 5 cm, deblj. 7 cm

Datacija: druga polovica 1. st. pr. Kr.

Inv. number 3747, special find 282, Resnik, trench II, stratigraphy unit 7a, depth 65, quadrant 36, 12 Jul 2007.

Find: anvil

Material: volcanic rock

Description: Elongated round stone with recesses on four longer sides. This was probably a ballast rock of a ship which was afterwards used as an anvil because of its solidity.

Dimensions: length 13 cm, width 9.5 cm, thickness 7 cm

Datation: second half of the 1st century BC.



Inv. broj 3748, Pn. 256, Resnik, S II, SJ 15a, visina 65, kvadrant 33, 09. 05. 07.

Nalaz: nakovanj

Materijal: magmatska stijena

Opis: Izduženi oblutak sa udubljenjima na četiri duže strane. Vjerojatno se radi o brodskoj balastnoj stijeni koja je zbog tvrdoće sekundarno rabljena kao nakovanj.

Dimenzije: duž. 16 cm, šir. 11.5 cm, deblj. 6. 3 cm

Datacija: druga polovica 1. st. pr. Kr.

Inv. number 3748, special find 256, Resnik, trench II, stratigraphy unit 15a, depth 65, quadrant 33, 9 May 2007.

Find: anvil

Material: volcanic rock

Description: Elongated round stone with recesses on four longer sides. This was probably a ballast rock of a ship which was afterwards used as an anvil because of its solidity.

Dimensions: length 16 cm, width 11.5 cm, thickness 6.3 cm

Datation: second half of the 1st century BC.

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Koštani i artefakti od školjki

Ivanka Kamenjarin

Koštani predmeti najčešće su služili za osobnu higijenu, kao kozmetički pribor, nakit, alatke za izradu odjeće, razne drške (noževa, stilusa, britvi). Također se javljaju kao predmeti za igru, kazališne ulaznice, dijelove muzičkih instrumenata. Kost je bila dostupna, lako se obrađuje i relativno je jeftina, osim, naravno, slonovače. Može se nabaviti svugdje gdje ima životinja, odnosno gdje postoje stočarstvo i lov. Radionice za obradu kostiju nisu puno zahtjevnije, mogu se praktično otvoriti bilo gdje jer im ne treba skupa ni velika oprema. Manjkavost predmeta izrađenih od kostiju je dimenzija koja ograničava veličinu predmeta (Ivčević, 2002a, 334.-336.).

Igle - ukosnice od kostiju počinju se koristiti s Etrušćanima i preuzimaju ih Rimljani. Mlade rimske djevojke nose puštenu kosu niz vrat ili uvijenu u punđu, dok su starije, udane žene, nosile kompliciranije frizure. Nikada nisu nosile kratku kosu. Kosa se i bojala, a nosile su se i perike. Ukosnice su vrlo čest nalaz na rimskim lokalitetima kroz cijelo razdoblje. Brojnost u uporabi zavisila je od trenutne mode koja je u to vrijeme bila manje ili više komplicirana. Služile su i za raščešljavanje i dijeljenje pramenova, te oblikovanje frizura. Za ovo su najčešće korištene igle s jednostavnim malim glavicama koje se javljaju od ranorimskog do kasnoantičkog doba. Tragovi paljenja na vrhovima igala možda govore kako su se igle koristile i u kozmetičke svrhe, kod apliciranja nekog materijala koji je zahtijevao grijanje, možda vosak koji je držao kosu u redu.

Primjerci s ušiljenim kratkim dijelom na jednom ili oba kraja, koji je stanjivanjem izdvojen iz tijela, predstavljaju predmete koji se svrstavaju i u igle i u pisaljke i u šila. Dulji primjerci služili su kao ukosnice, ali i kao pomagala kod pletenja kose. Također su mogle služiti kao igle za kopčanje krajeva lagane vunene odjeće. Dugo traju nepromijenjeni te su teški za datirati (Koščević, 2008., 248.-249.). Primjerak s Resnika s tragovima metala na jednom kraju mogao bi svrstati ovu iglu u pisaljke.

Bone and Shell Artifacts

Ivanka Kamenjarin

Objects made of bone were usually used for personal hygiene, as cosmetic accessories, jewellery, tools for clothes making, and various handles (of knives, styluses, razors). They were also used for games, as theatre tickets or parts of musical instruments. Bones were available, easy to treat and relatively cheap, apart from ivory, of course. It was possible to acquire them at all places where animals existed, or to be more precise, in the areas where cattle breeding or hunting existed. Workshops for bone treatment were not very demanding, they could be established practically anywhere since they did not require expensive or large equipment. The bad side of bone-made objects are dimensions of bones which limit dimensions of the object (Ivčević, 2002a, 334-336).

Hair pins made of bone were first used by Etruscans and after by Romans. Young Roman girls wore their hair down or in a chignon, while older, married women wore more complicated hairstyles. They never wore short hair. The hair was sometimes dyed, and wigs were also in usage. Hair pins are very common find at Roman sites during the whole period. The number of pins in usage depended on current fashion, which was more or less complicated. They were also used for combing or dividing strands of hair, as well as to make a certain hairstyle. Pins with simple small heads which existed from early Roman to Late Antiquity period were usually used for this purpose. Burning marks at the end of some pins may be a proof of their usage for cosmetic purposes, for application of some materials which needed to be heated, maybe wax, which was used to keep hair in place.

Examples with short pointed tips, which have been thinned out of the body, at one or both ends represent the objects which could be pins, styles or awls. Longer examples were used as hair pins, and as aids for hair braiding as well. They could have also been used as pins for fastening the ends of light woollen clothes. They existed over a long period without changing, so they are difficult to date (Koščević, 2008, 248-249). The example found at Resnik has traces of metal at one end and it could have been used as a style.

Astragals

Astragal is a name of the bone which denotes an ankle joint and it originates from the Greek word *astragalos*, but in plural it means gambling. These bones were basis of many ancient games, as well as basis for prophesying. Astragal of a sheep or a goat is of smaller dimensions, square-shaped with round edges. Protrusions and recesses at each side of the bone are not big, but they are characteristic and easy to distinguish. Natural protrusions used to be removed in order to flatten the surfaces and equalize the probability of fall on each side. Different combinations with their names and values are known. These bones are more enduring due to their lack of bone marrow (Jurišić, 1996, 66). Perforations, which can often be seen on them, were usually used to thread the pieces on a string, as a pendant or to enable easier carrying. Perforated pieces, as well as one astragal painted red, were found at Resnik. This could be put in relation with prophesying and cult usage of the mentioned objects.

These objects existed in the Mediterranean area since Neolithic, but they were most common in the Roman period, and we can find them well documented in written sources. They were used for games during the Middle Ages, and they are still being used for that purpose in some cattle-breeding societies (for example in Mongolia where they are used to invoke fertility of the cattle (Bakarić 2008, 118)).

One bronze astragal that was discovered could have been used for prophesying since only the ones made of bone were mentioned as being game utensils by antique writers.

Astragali

Astragal je naziv za kost koja označava gležanj, članak i potječe od grčke riječi *astragalos*, ali u množini označava kockanje. Ove kosti su osnova mnogih antičkih igara, ali i osnova za proricanje. Astragali ovaca ili koza su manjih dimenzija, četvrtastog oblika sa zaobljenim stranicama. Izbočine i udubine niti na jednoj strani kosti nisu velike, ali su karakteristične i lako se razlikuju. Odstranjivane su prirodne izbočine na kosti kako bi se izravnale plohe i time ujednačila vjerojatnost pada na svaku od njih. Poznate su različite kombinacije sa svojim imenima i vrijednostima. Zbog nedostatka koštane moždine, trajnije su od drugih kostiju (Jurišić, 1996., 66.). Perforacije, koje nalazimo na njima, obično su služile za nizanje pojedinih komada na uzici, bilo kao privjesak, bilo zbog lakšeg nošenja. Na Resniku imamo također perforirane primjerke, ali i jedan astragal bojan crvenom bojom, što se može povezati uz proricanje i kulturnu ulogu.

Nalazimo ih na Mediteranu još od neolita, a najpoznatiji su u rimsko doba gdje su dobro dokumentirani u pisanim izvorima. Bili su dio igre i u srednjem vijeku, pa i do danas u nekim stočarski orijentiranim društvima (npr. Mongolija, gdje služe kod zazivanja plodnosti stoke (Bakarić 2008., 118.)).

Nalaz brončanog astragala mogao je služiti kod proricanja jer se kod antičkih pisaca spominju jedino koštani kao igrači pribor.

Inv. broj 2826, PN 293, S I, kvadrant 9, visina 140-150, SJ 21, 19. 05. 2007.

Nalaz: truba

Materijal: morski puž

Opis: Morski puž triton (Charonia Tritonis) sačuvan u cjelosti. Sekundarno upotrebljen kao puhači instrument probijanjem rupice na dnu pužnice.

Dimenzije: duž. 24 cm, š. 11. 5 cm

Datacija: 3 - 4 st pos. Kr

Inv. number 2826, special find 293, trench I, quadrant 9, depth 140-150, stratigraphy unit 21, 19.05. 2007

Find: horn

Material: Charonia Tritonis shell

Description: Charonia Tritonis shell preserved completely. It has been used secondary as a wind instrument by punching holes in the bottom of the cochlea.

Dimensions: length 24 cm, width 11,5 cm

Datation: 3rd-4th century AD



Inv. broj 2540, incidentni preljev 2005.

Nalaz: šivaća igla

Materijal: kost

Opis: vrh igle je neznatno zašiljen, tijelo igle je kružnog presjeka, pri vrhu šira nego na dnu, rupica je pravokutnog oblika. Nema šiljasto dno, nego je koso odrezana.

Dimenzije: duž. 83 mm

Datacija: Carstvo

Inv. number 2540, Incidental spillover system 2005.

Find: sewing needle

Material: bone

Description: tip of the needle is insignificantly pointed, body is round in cross section, wider at the top than at the bottom, little hole is of a rectangular shape. Bottom is not pointed but cut on the bias.

Dimensions: length 83 mm

Datation: Roman Empire

Inv. broj 2542, incidentni preljev 2005.

Nalaz: šivaća igla

Materijal: kost

Opis: vrh igle je zaravnjen i stanjen tako da je gornji dio pravokutnog presjeka, dok je donji kružnog. Ima tri rupice od kojih središnja ima oblik triju međusobno spojenih okruglih rupica, ostale dvije rupice su kružnog oblika. Dno igle nije šiljasto, već koso odrezana na jednoj strani.

Dimenzije: duž. 83 mm

Datacija: Carstvo

Inv. number 2542, Incidental spillover system 2005.

Find: sewing needle

Material: bone

Description: top of the needle is flattened and thinned so the upper part is rectangular in cross section, while the bottom part is circular. There are three little holes in the needle, and the middle one is shaped as three mutually connected holes, while the other two are of a round shape. The bottom of the needle is not pointed, but cut on the bias at one side.

Dimensions: length 83 mm

Datation: Roman Empire



Inv. number 3905, special find 121, quadrant 24, depth 61-71, stratigraphy unit 27, 16 Feb 2007.

Find: pin

Material: bone

Description: elongated spindle-shaped object pointed at one end, and broken at the other end. It gets wider from the top to the bottom; upper top is thickened and ends in a shallow cone.

Dimensions: length 95 mm

Datation: 1st-4th century AD

Inv. number 3902, special find 449, trench II, quadrant 23, depth 85, stratigraphy unit 43

Find: pin

Material: bone

Description: upper part is thickened, with a cone-like end; the other end was evenly broken. It is wider at one side and gets narrower towards the other end.

Dimensions: length 105 mm

Datation: 1st-4th century AD

Inv. broj 3905, PN 121, kvadrant 24, visina 61-71, SJ 27, 16. 02. 2007.

Nalaz: igla

Materijal: kost

Opis: Duguljasti vretenasti predmet zašiljen na jednom kraju, a drugi je puknut. Od vrha prema dnu se širi, gornji vrh je zadebljan i završava plitkim stošcem.

Dimenzije: duž. 95 mm

Datacija: 1. – 4. st po.Kr.

Inv. broj 3902, PN 449, SII, kvadrant 23, visina 85, SJ 43

Nalaz: igla

Materijal: kost

Opis: gornji dio zadebljan sa stožastim završetkom, drugi kraj je ravno puknuo. Na jednoj strani širi te se sužava prema drugom kraju.

Dimenzije: duž. 105 mm

Datacija: 1. – 4. st. po. Kr.



3905



3902

Inv. number 3901, special find 361, quadrant 18, depth 61, stratigraphy unit 29, 16 Jun 2007.

Find: hair pin

Material: bone

Description: fragment of a hair pin; only the upper part of the body and the head of the pin shaped as a bust of a woman standing on the round base have been preserved. Her hair is arranged in a high chignon.

Dimensions: width 52 mm, diameter of the head at its widest part 14 mm, diameter of the body 12 mm

Datation: second half of the 1st-2nd century AD

Inv. br. 3901, PN 361, 16. 06. 2007., kvadrant 18, dubina 61, sj 29

Nalaz: ukosnica

Materijal: kost

Opis: Ulomak ukosnice, sačuvan samo gornji dio tijela i glava ukosnice koja je u obliku poprsja žene na kuglastoj bazi. Kosa visoko podignuta u punđu.

Dimenzije: duž. 52 mm, pr. glave na najširem dijelu 14 mm, pr. tijela 12 mm

Datacija: 2. pol. 1. st. - 2. st po. Kr.



Inv. broj 3900, PN 380, S I, kvadrant 19, visina 65, SJ 31, 20.06. 2007.

Nalaz: igla

Materijal: kost

Opis: vretenasto oblikovano tijelo, uglučano, nedostaje glava, središnje ispupčenje je obilježeno oštrim rubom, te naglašeno suženo zašiljeno dno.

Dimenzije: duž. 101 mm

Inv. number 3900, special find 380, trench I, quadrant 19, depth 65, stratigraphy unit 31, 20 jun 2007.

Find: pin

Material: bone

Description: spindle-shaped body is polished, head is missing, the protrusion in the middle is marked by a sharp edge, and a narrower pointed bottom is accentuated.

Dimensions: length 101 mm



Inv. broj 3898, PN 597, S I, kvadrant 13, visina 96, SJ 45, 23.08. 2007.

Nalaz: ukosnica

Materijal: kost

Opis: vretenasto tijelo, neukrašena glava je kuglasta, nedostaje zaoštren vrh tijela.

Dimenzije: duž. 96 mm, promjer glave 6 mm,

Datacija: 3. – 4. st. pos. Kr.

Inv. number 3898, special find 597, trench I, quadrant 13, depth 96, stratigraphy unit 45, 23 Aug 2007.

Find: hair pin

Material: bone

Description: spindle-shaped body, round head is without decorations, pointed top of the body is missing.

Dimensions: length 96 mm, diameter of the head 6 mm

Datation: 3rd-4th century AD



Inv. broj 3899, PN 440, S I, kvadrant 20, visina 96, SJ 41, 06. 07. 2007.

Nalaz: privjesak

Opis: kost ptice, najvjerojatnije od krila, na zglobu pravilna kružna rupica.

Dimenzije: duž. 53 mm.

Inv. number 3899, special find 440, trench I, quadrant 20, depth 96, stratigraphy unit 41, 6 Jul 2007.

Find: pendant

Description: bone, birds, wings, a regular round hole at the joint.

Dimensions: length 53 mm



Inv. broj 3897, S I, PN 634, kvadrant 12, visina 122, SJ 59

Nalaz: stilus (pisaljka)

Materijal: kost

Opis: Ima vretenasto oblikovano tijelo koje ima središnje ispupčenje, cijeli je taj dio poprimio zelenu boju od bronce koja je očuvana u tragovima. Drugi kraj je otkinut.

Dimenzije: duž. 90 mm

Inv. number 3897, trench I, special find 634, quadrant 12, depth 122, stratigraphy unit 59

Find: stylus

Material: bone

Description: spindle-shaped body with a protrusion in the middle; the whole middle part has acquired green colour because of the bronze, only traces of which have been preserved.

Dimensions: length 90 mm



Inv. number 3903, special find 203a, trench II, quadrant 35, depth 35, gr 4, 24 Apr 2007.

Find: hair pin

Material: bone

Description: body is separated from the head with three horizontal cuts, the head is shaped as undecorated cone, and the end is broken.

Dimensions: length 68 mm

Inv. number 3904, special find 203b, trench II, quadrant 35, depth 35, gr 4, 24 Apr 2007.

Find: lid of a hair pin

Description: shaped as an acorn, it even has a little neck at the top; it is decorated with horizontal concentric circles. There is a regular round hole at the bottom, which was used to put the end of the pin in it.

Dimensions: height 17 mm

Inv. number 3906, special find 732, trench I, quadrant 19, 18, depth 76-83, 19, stratigraphy unit 31, 16 Aug 2007.

Find: handle

Description: semi-circular ring with a chipped-off end, oval in cross-section. There might have been a decoration at the outer side, but it is damaged, scraped.

Dimensions: diameter 32 mm, thickness 8 mm

Datation: Roman Empire

Inv. number 3890, quadrant 19, stratigraphy unit 31, Resnik 2007.

Find: spindle whorl

Material: bone

Description: a round biconical spindle whorl, with a hole in the middle; one side is polished and the other is worn-down. It is made of the head of a thigh bone (femur).

Dimensions: diameter 39 mm, height 26 mm

Inv. number 3913, special find 91, Resnik 2, trial trench III, depth 205, stratigraphy unit 10, 7 Dec 2007.

Find: pendant

Material: cockle shell

Description: half of a small shell with a hole in the upper part.

Dimensions: width 24 mm

Inv. broj 3903, PN 203a, S II, kvadrat 35, visina 35, gr. 4, 24. 04. 2007.

Nalaz: ukosnica

Materijal: kost

Opis: tijelo je odijeljeno od glave s tri vodoravna ureza, glava ima oblik neukrašene šiške, kraj je puknut.

Dimenzije: duž. 68 mm

Inv. broj 3904, PN 203b, S II, kvadrat 35, visina 35, gr 4, 24.04. 2007.

Nalaz: čep za ukosnicu

Opis: ima oblik žira, čak ima na vrhu mali vršak, ukrašen je vodoravnim koncentričnim krugovima. Na dnu je pravilna kružna rupa u koju se stavljao kraj ukosnice.

Dimenzije: vis. 17 mm

Inv. broj 3906, PN 732, S I, kvadrat 19,18, visina 76 - 83, SJ 31, 16.08. 2007.

Nalaz: ručka

Opis: Polukružna alka odlomljenog kraja, ovalni presjek. Moguće da je na vanjskoj strani bio ukras koji je oštećen grebanjem.

Dimenzije: promjer 32 mm, debljina 8 mm

Datacija: Carstvo

Inv. broj 3890, kvadrat 19, sj 31, Resnik 2007.

Nalaz: pršljen

Materijal: kost

Opis: okrugli bikonični pršljen za vreteno s rupom u sredini, jedna strana je uglačana a druga istrošena. Izrađeno od glave bedrene kosti (femur).

Dimenzije: promjer 39 mm, v. 26 mm

Inv. broj 3913, PN 91, Resnik 2, PS III, visina 205, SJ 10, 7. 12. 2007.

Nalaz: privjesak

Materijal: školjka srčanka

Opis: polovica male školjke s rupicom u gornjem dijelu

Dimenzije: š. 24 mm



3903



3904



3906



3913



3890

Inv. broj 3914, PN 512, S II, kvadrant 23, visina 80, SJ 27, 9.08. 2007.

Nalaz: privjesak

Materijal: školjka jakovljeva kapica

Opis: četvtina veće školjke s rupicom na gornjem izduženom dijelu.

Dimenzije: d. 72 mm, š. 56 mm

Inv. broj 3894, PN 451, S I, kvadrant 16, visina 78, SJ 33, 12. 07. 2007.

Nalaz: astragal

Materijal: kost

Opis: kost skočnog zgloba ovce ili koze koji je bio obojan crvenom bojom

Dimenzije: d. 34 mm, š. 22 mm, v. 17 mm

Inv. broj 3895, PN 727, S II, kvadrant 34, visina 40-57, SJ 9a.

Nalaz: astragal

Materijal: kost

Opis: kost skočnog zgloba veće životinje, probušen po sredini.

Dimenzije: d. 51 mm, š. 33 mm, v. 26 mm

Inv. broj 3892, PN 729, S I, kvadrant 18, visina 100-116, SJ 40, 7. 09. 2007.

Nalaz: astragal

Materijal: kost

Opis: kost skočnog zgloba manje životinje (ovce/koze) s rupicom probušenom po sredini

Dimenzije: d. 29 mm, š. 19 mm, v. 17 mm

Inv. broj 3891, PN 728, S II, kvadrant 23, visina 61-71, SJ 27, 16. 02. 2007.

Nalaz: astragal

Materijal: kost

Opis: kost skočnog zgloba manje životinje (ovce/koze) s rupicom probušenom po sredini

Dimenzije: d. 29 mm, š. 18 mm, v. 16 mm

Inv. number 3914, special find 512, trench II, quadrant 23, depth 80, stratigraphy unit 27, 9 Aug 2007.

Find: pendant

Material: *pecten jacobaeus* shell

Description: quarter of a largish shell with a hole in the elongated upper part.

Dimensions: length 72 mm, width 56 mm,

Inv. number 3894, special find 451, trench I, quadrant 16, depth 78, stratigraphy unit 33, 12 Jul 2007.

Find: astragal

Material: bone

Description: a bone from the ankle joint of a sheep or a goat, which used to be coloured red.

Dimensions: length 34 mm, width 22 mm, height 17 mm

Inv. number 3895, special find 727, trench II, quadrant 34, depth 40-57, stratigraphy unit 9a.

Find: astragal

Material: bone

Description: a bone from the ankle joint of a larger animal, with a hole in the middle.

Dimensions: length 51 mm, width 33 mm, height 26 mm

Inv. number 3892, special find 729, trench I, quadrant 18, depth 100-116, stratigraphy unit 40, 7 Sep 2007.

Find: astragal

Material: bone

Description: a bone from the ankle joint of a smaller animal (sheep/goat) with a little hole in the middle.

Dimensions: length 29 mm, width 19 mm, height 17 mm

Inv. number 3891, special find 728, trench II, quadrant 23, depth 61-71, stratigraphy unit 27, 16 Feb 2007.

Find: astragal

Material: bone

Description: a bone from the ankle joint of a smaller animal (sheep/goat) with a little hole in the middle.

Dimensions: length 29 mm, width 18 mm, height 16 mm



3914



3894



3895



3892



3891



5 cm

Fibule

Ivanka Kamenjarin

Fibula je sigurnosna igla koja pridržava nešivanu odjeću na jednom ili oba ramena. Koristila se od prapovijesti pa sve do kasnog srednjeg vijeka kada ju zamjenjuje dugme. Ipak, fibule nisu nikada nestale iz uporabe te ih i danas koristimo u obliku broševa i sigurnosnih igala.

Već u svojim počecima fibule se počinju ukrašavati i razvijaju se u raznim oblicima. Jako su dobro proučene te su izvrsni pomagači kod datiranja (Ivčević, 2002., 231.).

U antičko doba muškarci su obično pričvršćivali odjeću fibulom na jednom ramenu (desnom), a žene na oba s dvije ili više fibula. (Košćević, 1980., 7.) Fibule su se izrađivale tehnikom kovanja i lijevanja u dvodijelnim kalupima.

Nosile su se na vidljivom mjestu (prsima ili ramenima), te se razvijale u dva pravca – funkcionalnom i estetskom. Nezaobilazan su dio odjeće, te nam pomažu u proučavanju načina nošenja odjeće i estetskim navikama pojedinih društvenih slojeva kroz stoljeća. Izrađivale su se od različitih materijala: od željeza i bronce kao najčešćih, do srebra i zlata. Ukrašavale su se raznim tehnikama i s raznim materijalima kao dodacima. Veličina fibule je ovisila ne samo o dobi nositelja, već i o vrsti tkanine koju je kopčala. Grci su je nosili na hitonu, peplosu i hlamidi, a Rimljani na pali, sagumu i paludamentumu. Niti grčki himation (vrsta ogrtača) niti rimska toga nisu se kopčale fibulom.

Svi su tipovi fibula imali svoj vijek trajanja, pa se unutar šestotinjak godina egzistiranja naselja u Resniku izmijenilo više tipova od kojih su se neki i istovremeno upotrebljavali. Nalazimo ih u različitim kontekstima, a uglavnom se radi o ulomcima iz slojeva druge, rimske faze naselja. Do sada su u Resniku pronađeni slijedeći tipovi (kronološki poredani): kopljasta, tip Jezerine, aucissa, sidrasta, konj, prstenasta, lukovičasta, golubica.

U Resniku je najzastupljeniji tip Aucissa koja je općenito najrašireniji ranorimski tip, a dobio je ime po proizvođaču keltskog podrijetla koje se često nalazi na zaglavnoj pločici. Pojavila se u sjevernoj Italiji u sam početak nove ere s trajanjem tijekom cijelog 1. st. pos. Kr., a pojedine varijante do sredine 2. st. Opća obilježja ovih dvočlanih, a dijelom i višečlanih kopči svode se na visoki izvijeni luk s dekoracijom ili bez nje, zaglavnu, najčešće dekoriranu ploči-

Fibulae

Ivanka Kamenjarin

Fibula is a safety pin which was used to fasten unsewn clothes at one or both shoulders. It was used from Praehistorical times till the Late Medieval period, when it has been replaced by buttons. Still, fibulae have never been completely put out of usage, and we still use them today, as of brooches or safety pins. Even at the very beginning fibulae had been decorated and developed in different shapes. They have been thoroughly researched so they can help with dating of some objects (Ivčević, 2002., 231.).

During the Classical Antiquity men used to pin their clothes with a fibula at one shoulder (right one), while women pinned it at both shoulders with one or more fibulae (Koščević, 1980., 7.). Fibulae were forged or cast in two-piece moulds.

They were carried at visible places (chest or shoulders), and they developed in two directions – functionally and aesthetically. They were an inevitable part of clothing and they help us study different ways of carrying clothes as well as aesthetic habits of different social strata during centuries. They were made of different materials: from iron and bronze, which are the most common, to silver and gold. Different techniques and different additional materials were used to decorate them. Their dimensions depended not only on the age of the carrier, but also on the type of material they were used to fasten. Greeks would fasten a fibula on a *chiton*, *peplos* or a cloak called *hlamida*, and Romans on a *palla*, *sagum* or *paludamentum*. Neither Greek *himation* (type of a cloak) nor Roman toga was fastened with fibula.

Each type of a fibula had its lifespan, so within some six hundred years of the existence of the settlement at Resnik several types of fibulae, some of which had been used at the same time, had been in usage.

They can be found in different contexts, but they are mostly fragments found within the layers of the second, Roman phase of the settlement. Following types have been found so far at Resnik (listed chronologically): spear-shaped, Jezerine type, Aucissa, anchor type, zoomorphic (horse), annular, bulb-shaped, zoomorphic (dove).

Aucissa type, which is generally the most common Early Roman type, is also the most common type at Resnik. This kind of fibula

has been named after the manufacturer of a Celtic origin which is usually placed at the hinge plate. It first appeared in northern Italy at the beginning of the 1st century AD, and lasted throughout the whole century, some varieties existed even until the middle of the 2nd century AD. These pins have two, and partially even more joints, and their general characteristics include a high arched bow with or without decoration, a hinge plate (usually decorated) with a little tube for needle device which is usually made by folding the edge of the plate outwardly or inwardly, and a profiled extension into a foot which ends in a rounded knob. There are different varieties within the type itself, and stamps of manufacturers are also often visible (Ivčević 2002, 235-36).

Inv. number A3/78

Find: spear shaped fibula

Material: bronze

Description: Fibula with a spear shaped arch which, at its bottom, merges with a plate-like foot with upwardly bent edges. The arch is decorated with lines which get narrower towards the bottom. Behind the arch, there is an elongated extension decorated with cuts. Of the whole fastening mechanism, only the pin holder has been preserved.

Dimensions: length 65 mm, height 15 mm

Datation: 2nd/1st century BC

Analogy: Basler 1969, 70/2, 72/2



cu s cjevčicom za iglenu napravu načinjenu presavijanjem ruba pločice na vanjsku ili unutarnju stranu te profilacijama naznačen prijelaz u nogu koja završava kalotastim dugmetom. Unutar samog tipa zastupljene su različite varijante, a često su prisutni i žigovi proizvođača (Ivčević 2002., 235-36).

Inv. broj A3/78,

Nalaz: kopljasta fibula

Materijal: bronca

Opis: fibula kojoj je luk u obliku koplja te se na dnu spaja s pločastom nožicom čiji rubovi su savijeni prema gore. Ukrašen na luku su linije koje se sužuju prema dnu. Iza luka je duguljasti produžetak ukrašen urezima. Od mehanizma za kopčanje očuvan je jedino nosač igle.

Dimenzije: d. 65 mm, v. 15 mm

Datacija: 2./1. st. pr. Kr.

Analogija: Basler 1969; 70/2, 72/2



Inv. number 3918, PN 387, S I, quadrant 18, 65, 3 stratigraphy unit 31, 21 Jul 2007

Find: fibula of a Jezerine type

Material: bronze

Description: Fibula of a late Latenian layout – Jezerine type. The head has been damaged, and the prick of the pin is deformed. Wide band-like arch with one ridge across the middle and less distinctive ridges with cuts around the main ridge. There is reinforcement between the upper and lower part of the arch. Lower part of the arch, towards the foot, is rectangular. Catchplate has been damaged. There is a circular perforation in the foot. Dimensions: length 82 mm, width of the band 12 mm

Datation: end of the 1st century BC.

Analogy: Glogović 2007, 2; Gravina 1992, 1860

Inv. broj 3918, PN 387, S I, kvadrant 18, visina 65, sj 31, 21. 06. 2007.

Nalaz: fibula tipa Jezerine

Materijal: bronca

Opis: Fibula kasnolatenijske sheme – tip Jezerine. Glava oštećena, s deformiranim trnom igle. Široki trakasti luk sa središnjim rebrom oko kojeg su manje istaknuta rebra s urezima. Na dijelu između gornjeg i donjeg dijela luka nalazi se ojačanje. Donji dio luka prema nozi postaje pravokutan. Držak igle oštećen. Na nozi perforacija kružnog oblika.

Dimenzije: d. 82 mm, š. trake: 12 mm

Datacija: kraj 1. st. pr. Kr.

Analogija: Glogović 2007; 2, Gravina 1992; 1860



Inv. broj 3919, PN 569, SI, kvadrant 26, visina 71, sj 12, 21. 08. 2007.

Naziv: fibula tipa Jezerine

Materijal: bronca

Opis: Fibula kasnolatske sheme s trokutasto raskovanim lukom i dvostranom spiralom od četiri navoja koji su povezani iznutra (očuvana samo dva). Rubovi luka ukrašeni utisnutim crticama na bočnim stranama. Na dijelu prema nozi urezane tri crte. Na središnjem dijelu noge ukras izgleda valovnice načinjen utiskivanjem kraćih i dužih crtica.

Dimenzije: d. 75 mm, v. 12 mm

Datacija: 1 st. pr. Kr.

Analogija: Dizdar 2002, 184; Gravina 1992, 1861

Inv. broj 3917, PN 131, kvadrat 35, visina 3 - 20, 02. 03. 2007.

Nalaz: Aucissa fibula

Materijal: bronca

Opis: Vrpčasti luk fibule postupno se sužava prema nozi. Sredinom luka teče naglašeno rebro cijelom dužinom, ukrašeno nizom zareza. Krajevi luka blago su uzdignuti. Prijelaz u nogu naglašen je poprečnim urezom. Noga završava dugmetastim profiliranim ukrasom. Držak igle nedostaje. Pravokutna zaglavna pločica je oštećena. Nedostaje mehanizam za kopčanje i igla.

Dimenzije: d. 46 mm, v. 20 mm

Datacija: 1 st. pos. Kr.

Analogija: Ivčević 2002, 17; Košćević 2008, 12, 21

Inv. broj 3924, PN 77/11, S 8, visina 261-241, sj 17, 8. 02. 2011.

Nalaz: Aucissa fibula

Materijal: bronca

Opis: Neukrašeni luk fibule polukružnog presjeka sužava se malo prema nozi. Noga završava profiliranim dugmetastim ukrasom koji je otkinut. Zaglavna pločica je četvrtasta. Od zglobnog mehanizma za kopčanje sačuvan je zglobni tuljac i osovina s većim dijelom igle.

Dimenzije: d. 48 mm, v. 35 mm

Datacija: 1 st. pos. Kr.

Analogija: Košćević 2008, 17

Inv. number 3919 PN 569, SI, quadrant 26, depth 71, stratigraphy unit 12, 21 Aug 2007

Find: fibula of a Jezerine type

Material: bronze

Opis: Fibula of a late Latenian layout with a triangularly minted arch and a two side spiral consisting of four windings attached at the inner side (only two have been preserved). Edges of the arch are decorated with small lines imprinted in their side areas. Three lines were carved in the area towards the leg. At the middle of the foot there is a wave shaped decoration made by imprinting shorter and longer small lines.

Dimensions: length 75 mm, height 12 mm

Datation: 1st century BC.

Analogy: Dizdar 2002, 184; Gravina 1992, 1861

Inv. number 3917, PN 131, S II, quadrant 35, depth 3-20, 2 Mar 2007.

Find: Aucissa fibula

Material: bronze

Description: A band-like arch of the fibula gradually gets narrower towards the foot. An accentuated ridge decorated with an array of cuts flows across the whole length of the arch. The ends of the arch are slightly raised. Transition to the foot is accentuated with a transversal cut. The foot ends in a profiled knob-like decoration. Catchplate is missing. Rectangular hingeplate has been damaged. Fastening mechanism and pin are missing.

Dimensions: length 46 mm, height: 20 mm

Datation: beginning of the 1st century.

Analogy: Ivčević 2002, 1; Košćević 2008 12, 21

Inv. number 3924, PN 77/11, S 8, depth 261-241, stratigraphy unit 17, 8 Feb 2011

Find: Aucissa fibula

Material: bronze

Description: Arch of the fibula is not decorated; it is semi-circular in cross section and slightly gets narrower towards the foot. The foot ends in a profiled knob-like decoration which has been cut off. Hingeplate is rectangular. Of the whole joint mechanism, a joint tube and a shaft with majority of the pin have been preserved.

Dimensions: length 48 mm, height 35 mm

Datation: 1st century AD.

Analogy: Košćević 2008, 17



3924



3917



3919

Inv. number 3922 Pn 156, S II, quadrant 35, depth 38, stratigraphy unit 1a, 22 Mar 2007

Find: Aucissa fibula

Material: bronze

Description: Band-like arch of the fibula narrows down towards the foot, and it is separated from the foot by two transversal cuts. Arch is decorated with a double row of pricks across the edges of the arch. The edges of the arch have knob-like protrusions which have been cast together with fibula itself. There is a small hingeplate at the transition of the arch into the foot. The foot ends in a knob-like profiled decoration. Catchplate is triangular, pin is missing.

Dimensions: length 48 mm, height 9 mm, width 12 mm

Datation: 1st century AD.

Analogy: Ivčević 2002, 46; Košćević 2008, 15; Košćević 1980, 209

Inv. number 3916, PN 147, quadrant 33, depth 15, 14 Mar 2007

Find: Aucissa fibula,

Material: bronze

Description: Fibula with a two part arch made of two bands mutually connected with vertical joints. The foot ends in a knob-like decoration; catchplate is triangular, and there is a joint mechanism for fastening.

Dimensions: length 47 mm, height 26

Datation: beginning of the 1st century AD.

Analogy: Marović 1959, N 2047 i N 2091

Inv. number 3920 PN 304, SII, quadrant 20, depth 28-34, stratigraphy unit 34, 23 May 2007

Find: anchor type fibula,

Material: bronze

Description: Head of the fibula is shaped as an anchor with round ends. A profiled knob-like thickening bordered with rows of dots is placed on the arch. Simple massive foot slightly gets narrower and ends with a profiled knob-like decoration. Catchplate is triangular. Rectangular spiral pad as well as string and triangular string hook have been partially preserved. Six out of twelve windings of the spiral have been preserved. There are traces of silver at the upper side of the foot.

Dimensions: length 44 mm, height 21 mm

Datation: 2nd century.

Analogy: Košćević 2008, 24

Inv. broj 3922, Pn 156, S II, kvadrant 35, visina, 38, sj 1a, 22. 03. 2007.

Nalaz: aucissa fibula

Materijal: bronca

Opis: Vrpčasti luk fibule sužava se prema nozi od koje je odijeljen dvjema poprečnim urezima. Luk je ukrašen dvostrukim nizom uboda uz rub luka. Rubovi luka imaju dugmetasta ispupčenja koja su lijevana zajedno s fibulom. Na prijelazu luka u nogu je mala raskovana zaglavna pločica. Noga završava dugmetastim profiliranim ukrasom. Držac igle je trokutast, nedostaje igla.

Dimenzije: d. 48 mm, v. 9 mm, š. 12 mm

Datacija: 1 st. pos. Kr.

Analogija: Ivčević 2002, 46, Košćević 2008, 15; Košćević 1980., 209.

Inv. broj 3916, PN 147, kvadrant 33, visina 15, čišćenje otkopa, 14. 03. 2007

Nalaz: Aucissa fibula

Materijal: bronca

Opis: Fibula s dvodijelnim lukom, luk je izrađen od dvije vrpčice koje su međusobno povezane okomitim člancima. Noga završava ukrasom u obliku dugmeta, držac igle je trokutast, kopčanje zgloбно.

Dimenzije: d. 47 mm, v. 26 mm

Datacija: poč. 1 st. pos. Kr.

Analogija: Marović 1959, N 2047 i N 2091

Inv. broj 3920, PN 304, SII, kvadrant 20, visina 28-34, sj 34, 23. 05. 2007.

Nalaz: sidrasta fibula

Materijal: bronca

Opis: Glava fibule je u obliku sidra čiji krakovi završavaju kuglasto. Na luku je smješteno profilirano dugmetasto zadebljanje omeđeno točkastim nizovima. Jednostavna masivna noga lagano se sužava i završava profiliranim dugmetastim ukrasom. Držac igle je trokutast. Sačuvan je djelomično pravokutni štitnik spirale kao i tetiva te trokutasta kuka tetive. Od 12 navoja spirale sačuvano ih je 6. Tragovi posrebrejenja na gornjoj strani noge.

Dimenzije: d. 44 mm, v. 21 mm

Datacija: 2. st. pos. Kr.

Analogija: Košćević 2008, 24



3922



3916



3920

Inv. broj 3921, PN 277, S II, kvadrant 36, visina 65, sj 7a, 12. 05. 2007.

Nalaz: prstenasta fibula

Materijal: bronca

Opis: Zgnječena otvorena prstenasta fibula, izrađena od brončan žice četvrtastog presjeka. Jedan kraj je savijen prema van tvoreći krug, a drugi nedostaje. Igla je očuvana u cijelosti.

Dimenzije: promjer 17 mm, duž. igle 32 mm

Datacija: 3./4. st. pos. Kr.

Analogija: Ivčević 2002, 221; Koščević 2008, 40

Inv. number 3921, PN 277, S II, quadrant 36, depth 65, stratigraphy unit 7a, 12 May 2007

Find: annular fibula,

Material: bronze

Description: Open annular fibula which has been crushed, made of bronze wire of a rectangular cross section. One end has been bent outwardly, in shape of a circle; the other end is missing. Pin has been completely preserved.

Dimensions: diameter 17 mm, length of the pin 32 mm

Datation: 3rd/4th century AD.

Analogy: Ivčević 2002, 221; Koščević 2008, 40



Inv. broj A3/127, slučajni nalaz, poklon Ive Svilana

Nalaz: zoomorfna fibula

Materijal: bronca s tragovima posrebrjenja

Opis: Fibula u obliku ptice golubice ili grlice, tijelo je plastično prikazano, raširenih krila, na krajevima se nalaze ostaci ležišta za dragi kamen, rep naznačen urezima; nedostaje glava, a na vratu urezana crta; tragovi posrebrjenja na desnom dijelu tijela i krilu; sačuvan dio sistema za kopčanje, nedostaje igla.

Dimenzije: d. 32 mm

Datacija: 5./6. st. pos. Kr.

Inv. number A3/127

Find: fibula of a zoomorphic shape

Material: bronze with traces of silver

Description: Fibula shaped as a bird, possibly a pigeon or a turtle-dove. The body is realistically represented, with spread wings. There are remains of gem stone beds at the ends, tale is indicated with cuts, head is missing and there is a line carved at the neck. There are traces of silver at the right part of the body and the wing. Part of the fastening mechanism has been preserved but the pin is missing.

Dimensions: length 32 mm

Datation: 5th/6th century AD.





Oruđe i oružje

Ivanka Kamenjarin

Oruđe, odnosno alat, je morao biti čvrst te se izrađivao od željeza. Ipak, to je materijal vrlo podložan propadanju, te ga stoga istraživači usputno bilježe, naročito stariji. Jedan od glavnih razloga kod starijih istraživača je njegova neukrašenost, odnosno „običan“ je, neprivlačan (Gravina 1992., 236). Drugi razlog je velika korodiranost i njegova fragmentiranost. Mnogi oblici jednom stvoreni traju bez izmjena do danas, što otežava njihovu dataciju izvan strogo zatvorene cjeline. Ipak, važni su za poznavanje privrede u području u kojem su pronađeni. Resničko oruđe može se svrstati u grupu alata za obradu drva te poljoprivredu. Neka oruđa nisu se oblikom promijenila do danas (npr. kosir), možda tek u kvaliteti izrade, te ih je van konteksta teško datirati.

Oružje

Iako imamo kod Plinija zapis da su u Sikulima smješteni veterani, značajni primjerci oružja nisu do sada pronađeni. Nalaz tek dvaju primjeraka oružja možemo povezati s mirnim razdobljem bez vojnih akcija. Ostaje otvorenim pitanje načina prestanka života prve faze, koja je prema rezultatima istraživanja završila nasilno, te početak života druge faze, koja većim dijelom negira prethodnu.

Tools and Weapons

Ivanka Kamenjarin

Tools or implements had to be strong so they were made of iron. But still, this is a material prone to deterioration, so the researchers, especially older ones, noted them only sporadically. One of the main reasons for this neglecting among the older researchers lies in the fact that they are undecorated, or to be more precise, plain and unattractive (Gravina 1992, 236). The other reason is their corrosion and the fact that they are preserved only in fragments. Many shapes have remained the same till today, which makes hard to date them if they are not a part of a closed unit. Still, they are important because they provide an insight into the economy of the area in which they were discovered. The tools discovered at Resnik can be sorted within the group of tools used for wood treating and farming. Some tools (for example a hedging-bill) have not changed their shape till today, only the quality of their manufacture may be different, so it is difficult to date them outside of context.

Weapons

Although there are Pliny's records of veterans settling in Siculi, significant examples of weapons have not been found yet. Discovery of only two examples can be associated with a peaceful period without warfare. The question of termination of the first phase of the settlement, which had, according to research, ended violently, and the beginning of the second phase, which in most part negates the previous phase, still remains to be answered.

Inv. broj 3886, Pn 285, S II, SJ 35a, visina 76, kvadrant 34, 15. 05. 2007.

Nalaz: kosir

Materijal: željezo

Opis: Dobro očuvan kosir s rupom za dršku kružnog presjeka s izrezom, široko sječivo zakrivljeno pod kutom većim od 90 stupnjeva.

Dimenzije: duž. 26 cm, vanjski promjer 6 cm, deblj. 4 cm

Datacija: 1. st. pr. Kr.

Inv. number 3886, special find 285, trench II, stratigraphy unit 35a, depth 76, quadrant 34, 15 May 2007.

Find: hedging-bill

Material: iron

Description: well preserved hedging-bill with a hole for a handle which is round in cross section and has a cut; wide blade is slanted at an angle of 90 degrees.

Dimensions: length 26 cm, outer diameter: 6 cm, thickness: 4 cm

Datation: 1st century BC



Inv. number 3880, special find 616, trench I, stratigraphy unit 49, depth 134, quadrant 15, 28 Aug 2007.

Find: adze

Material: iron

Description: small elongated adze, rectangular in cross section; handle is missing.

Dimensions: length 16 cm, width t cm, thickness 2.5 cm

Datation: 2nd/1st century BC

Inv. number 3885, special find 153, trench II, stratigraphy unit 1a, depth 35, quadrant 35, 23 Mar 2007.

Find: adze

Material: iron

Description: well preserved adze, both body and handle are rectangular in cross section

Dimensions: length 18 cm, width 6.5 cm

Datation: 1st century BC



Inv. broj 3880, Pn 616, S I, SJ 49, visina 134, kvadrant 15, 28. 08. 2007.

Nalaz: tesla

Materijal: željezo

Opis: Manja izdužena tesla pravokutnog presjeka, nedostaje drška.

Dimenzije: duž. 16 cm, šir. 7 cm, deblj. 2,5 cm

Datacija: 2./1. st. pr. Kr.

Inv. broj 3885, Pn 153, S II, SJ 1a, visina 35, kvadrant 35, 23. 03. 2007.

Nalaz: tesla

Materijal: željezo

Opis: Dobro očuvana tesla, pravokutni presjek tijela i drške.

Dimenzije: duž. 18 cm, šir. 6,5 cm

Datacija: 1. st. pr. Kr.



Inv. broj 3881, Pn 450, S II, SJ 43, visina 85, kvadrant 23, 12. 07. 2007.

Nalaz: dlijeto

Materijal: željezo

Opis: Dlijeto pravokutnog presjeka. Blizu drške, koja nije sačuvana, presjek postupno postaje zaobljen.

Dimenzije: duž. 13,5 cm, šir. 3,2 cm

Datacija: 2./1. st. pr. Kr.

Inv. broj 3882, Pn 536, S I, SJ 42, visina 85, kvadrant 19, 17. 08. 2007.

Nalaz: dlijeto

Materijal: željezo

Opis: Dlijeto ili manja tesla kratkog tijela. Nasad za dršku kružnog presjeka s izrezom.

Dimenzije: duž. 12 cm, šir. 6 cm



Inv. number 3881, special find 450, trench II, stratigraphy unit 43, depth 85, quadrant 23, 12 Jul 2007.

Find: chisel

Material: iron

Description: chisel which is rectangular in cross section. Near the handle, which has not been preserved, it gradually becomes rounded in cross section.

Dimensions: length 13.5 cm, width 3.2 cm

Datation: 2nd/1st century BC

Inv. number 3882, special find 536, trench I, stratigraphy unit 42, depth 85, quadrant 19, 17 Aug 2007.

Find: chisel

Material: iron

Description: chisel or a smaller adze of a short body. The hole for handle fitting is round in cross section, and has a cut in it.

Dimensions: length 12 cm, width 6 cm



Inv. broj 3884, Pn 535, S I, SJ 42, visina 82, kvadrant 19, 17. 08. 2007.

Nalaz: sjekira (dolabra)

Materijal: željezo

Opis: po sredini rupa za nasad drške, jedan kraj pravokutnog presjeka, drugi koso odsječen.

Dimenzije: duž. 20 cm, šir. 6 cm, deblj. 5,5 cm, promjer rupe 3 cm

Inv. number 3884, special find 535, trench I, stratigraphy unit 42, depth 82, quadrant 19, 17 Aug 2007.

Find: axe (dolabra)

Material: iron

Description: a hole for handle fitting is in the middle, one end is rectangular in cross section, and the other end is cut on the bias.

Dimensions: length 20 cm, width: 6 cm, thickness 5.5 cm, diameter of the hole 3 cm



Inv. number 3889, special find 214, trench II, grave 7, depth 67, quadrant 35, 30 Apr 2007.

Find: unidentified

Material: iron

Description: rectangular shape, hole for handle fitting is round in cross section.

Dimensions: length 16,6 cm, width 2 cm



Inv. broj 3889, Pn 214, S II, grob 7, visina 67, kvadrant 35, 30. 04. 2007.

Nalaz: neidentificiran

Vrsta materijala: željezo

Opis: četvrtasti oblik, nasad kružnog presjeka.

Dimenzije: duž. 16,6 cm, šir. 2 cm

Inv. number 3887, special find 185, trench II, stratigraphy unit 6a, depth 60, quadrant 32, 18 Apr 2007.

Find: ballista bolt head

Material: iron

Description: rectangular widening at the middle, pointed top, with a hole for the thorn.

Dimensions: length 7.7 cm, width 2.5 cm

Inv. broj 3887, Pn 185, S II, SJ 6a, visina 60, kvadrant 32, 18. 04. 2007.

Nalaz: balistički projektil

Materijal: željezo

Opis: četvrtasto proširenje po sredini, zašiljeni vrh, s nasadom na trn.

Dimenzije: duž. 7,7 cm, šir. 2,5 cm

Inv. number 3888, special find 460, trench I, stratigraphy unit 39, depth 67, quadrant 14, 16 Jul 2007.

Find: sling bullet

Material: lead

Description: shaped as a double plumb bob.

Dimensions: length 4 cm, width 2 cm.

Inv. broj 3888, Pn 460, S I, SJ 39, visina 67, kvadrant 14, 16. 07. 2007.

Nalaz: zrno za pračku

Materijal: olovo

Opis: oblik duplog viska.

Dimenzije: duž. 4 cm, šir. 2 cm



Razni metalni predmeti

Ivanka Kamenjarin

Inv. broj 2639, PN 581, S I, kvadrat 15, sj 33, visina 72, 21. 08. 2007.

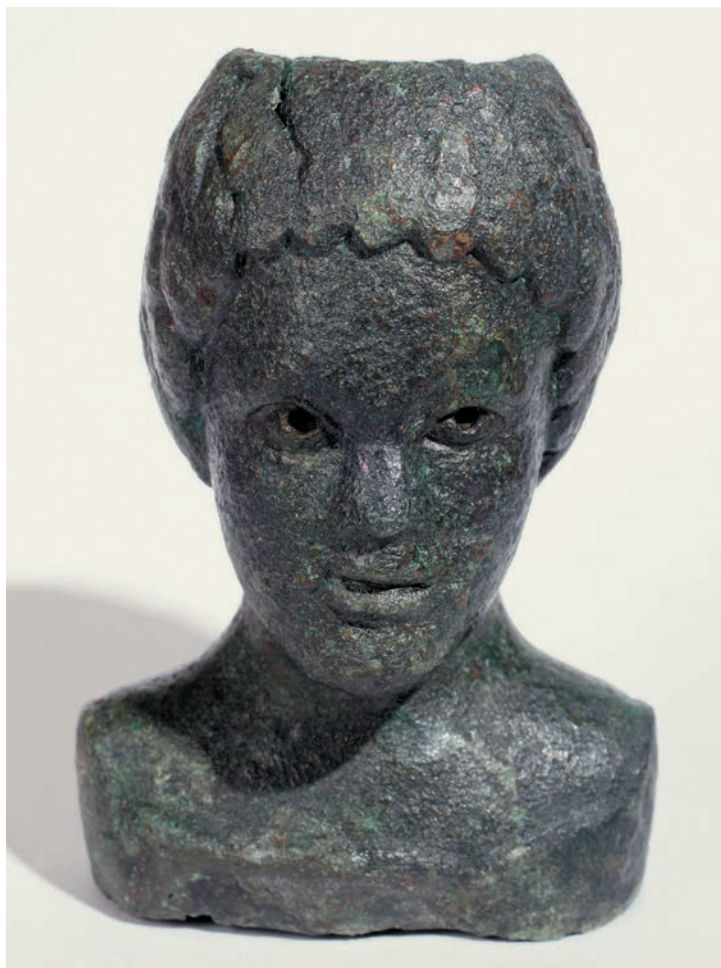
Nalaz: poprsje dječaka

Materijal: bronca

Opis: Glava dječaka s negroidnom kosom, ima izražene oči, nos je širok i plitak, a usne poluotvorene. Duguljasto lice i vrat, te tek naznačena ramena. Nema odjeće. Šuplje i bez dna. Okrugli otvor na vrhu glave s dvije nasuprotne rupe za vješanje. Uši se ne vide od kose.

Dimenzije: vis. 74 mm, šir. dna 51 mm, promjer otvora na glavi 20 mm, promjer glave 41 mm

Datacija: 2./1. st. pr. Kr.



Miscellaneous Metal Objects

Ivanka Kamenjarin

Inv. number 2639, special find 581, trench I, quadrant 15, stratigraphy unit 33, s72, 21 Aug 2007.

Find: bust of a boy

Material: bronze

Description: Head of a boy with negroid hair, distinctive eyes, wide and shallow nose and half opened lips. Face and neck are elongated, and shoulders only hinted. He has no clothes. It is shallow and without bottom. There is a round hole at the top of the head, with two holes across each other, used for hanging. Ears are not visible because of hair.

Dimensions: height: 74 mm, width of the bottom 15 mm, diameter of the head 41 mm

Datation: 2nd/1st century BC



Inv. number 3975, special find 172/2011, trench 9/8, depth 204-181, 04 Mar 2011.

Find: sewing needle

Material: bronze

Description: Needle for making or repairing fish nets, with eyes of a needle which are opened at both ends.

Dimensions: length 98 mm

Inv. broj 3975, PN 172/2011, S 9/8, visina 204-181, 04. 03. 2011.

Nalaz: šivaća igla

Materijal: bronca

Opis: Šivaća igla za pletenje ili krpanje ribarskih mreža, s otvorenim ušicama na oba kraja.

Dimenzije: d. 98 mm



Inv. broj 3976, PN 85, S I, kvadrat 11, visina 82 - 92, sj 14, 31. 01. 2007.

Nalaz: strugač

Materijal: bronca

Opis: Strugač manjih dimenzija koji se sastoji od šireg zakrivljenog lima, a najširi je po sredini, jedan kraj se sužuje i ravno završava, a drugi ima očuvane ostatke spoja od željeza, vjerojatno za ručku. Teško je kazati jesu li sitne neravnine na rubovima od korozije ili su ostaci sitnih zubaca.

Dimenzije: š. 21 mm, promjer 37 mm

Inv. number 3976, special find 85, trench I, quadrant 11, depth 82 - 92, stratigraphy unit 14, 31 Jan 2007.

Find: strigil

Material: bronze

Description: a strigil of smaller dimensions which is made of a curved sheet metal; it is widest in the middle, while one end gets narrower and has a straight ending. At the other end there are preserved remains of iron conjunctions, probably for a handle. It is difficult to say whether the small rough parts at the edges are made by corrosion or they are remains of small dents.

Dimensions: width 21 mm, diameter 37 mm



Inv. broj 3978, PN 30, Resnik 2, PS II, sj 2, visina 76, 13. 11. 2007.

Nalaz: ukrasna glava

Materijal: bronca

Opis: glava s urezanim svim dijelovima lica, bademastih očiju, označene obrve, najvjerojatnije prikaz ženskog lika, oko glave prikaz ukrasa za kosu ili dijademu, stilizirani prikaz kose uzdužnim urezima sa stražnje strane.

Dimenzije: v. 23 mm

Inv. number 3978, special find 30, Resnik 2, trial trench II, stratigraphy unit 2, depth 76, 13 Nov 2007.

Find: decorative head

Material: bronze

Description: a head with carved parts of the face, almond-shaped eyes, marked brows, probably representing a female figure; around the head there is a representation of hair decoration or diadem, stylized representation of hair with longitudinal cuts on behind.

Dimensions: height 23 mm



Inv. broj 3979, PN 145/2011, S 9, sj 41, visina 270-224, 23. 02. 2011.

Nalaz: zvono, tintinnabulum

Materijal: bronca

Opis: Zvono piramidalnog oblika, s četvrtastom osnovom, zaobljenih uglova, s nalemljenom okruglom ručkom. Iznutra ostaci držača njihala o željeza. Na jednoj plohi oštećenje.

Dimenzije: v. 36 mm, š. 28 mm

Inv. broj 3980, PN 28, kvadrat 7, sj 2, visina 198, 15. 01. 2007.

Nalaz: zvono, tintinnabulum

Materijal: bronca

Opis: Zvono oblika polovice kalote s 3 rupice na vrhu. Okrugla ručica je nalemljena. Nedostaje njihalo.

Dimenzije: v. 20 mm, promjer 22 mm



Inv. number 3979, special find 145/2011, trench 9, stratigraphy unit 41, depth 270-224, 23 Feb 2011.

Find: bell, *tintinnabulum*

Material: bronze

Description: pyramidal bell of a rectangular base and round edges, with a welded round handle. There are remains of an iron pendulum holder on the inside. One surface has been damaged.

Dimensions: height 36 mm, width 28 mm

Inv. number 3980, special find 28, quadrant 7, stratigraphy unit 2, depth 198, 15 Jan 2007.

Find: bell, *tintinnabulum*

Material: bronze

Description: a bell shaped as a half of the sphere, with three small holes at the top. Small round handle has been welded. Pendulum is missing.

Dimensions: height 20 mm, diameter 22 mm



Inv. broj 3981, PN 466, S I, kvadrat 17, sj 38, visina 117, 16. 07. 2007.

Nalaz: prsten

Materijal: bronca

Opis: Prsten ravnih preklapljenih krajeva bez ukrasa, a trakasta vrpca ima D profil.

Dimenzije: promjer 24 mm

Inv. number 3981, special find 466, trench I, quadrant 17, stratigraphy unit 38, depth 117, 16 Jul 2007.

Find: ring

Material: bronze

Description: a ring with straight folded ends without any decorations; a band-like stripe looks like a D in profile.

Dimensions: diameter 24 mm



Inv. broj 3982, PN 413, S I, kvadrat 17, sj 34, visina 82, 02. 07. 2007.

Nalaz: pinceta

Materijal: bronca

Opis: Duguljasta ručka s pravokutnim proširenjem na jednom kraju. Na užoj strani lom te luk za drugu ručku. Ukrašena cik-cak crtom cijelom dužinom.

Dimenzije: d. 99 mm

Inv. number 3982, special find 413, trench I, quadrant 17, stratigraphy unit 34, depth 82, 02 Jul 2007.

Find: tweezers

Material: bronze

Description: elongated handle with a rectangular widening at one end. There is a fracture at the narrower end, as well as a dent for the other handle. Decorated with zig-zag line along the handle.

Dimensions: length 99 mm



Inv. number 3983, special find 537, trench I; quadrant 19, stratigraphy unit 42, depth 82, 17 Aug 2007.

Find: grip

Material: lead

Description: a grip which has been preserved together with a fragment of pottery.

Dimensions: length 6 cm, width 0,8 cm

Inv. number 3984, special find 288, trench II, quadrant 34, depth 80, stratigraphy unit 35a, 15. 05. 2007

Find: repair clamp

Material: lead

Description: Type of lead repair clamp which consists of four elements: two plugs, round in section and two strips D-shaped in section that united the plugs. It was used to repair larger pottery (pithos).

Dimensions: length 11,5 cm, height 2,5 cm, width 3 cm



Inv. broj 3983, PN 537, S I; kvadrat 19, sj 42, visina 82, 17. 08. 2007.

Nalaz: stega

Materijal: olovo

Opis: Stega koja je ostala zajedno s ulomkom keramike.

Dimenzije: d. 6 cm, š. 0,8 cm

Inv. br. 3984, PN 288, S II, kvadrat 34, visina 80, sj 35a, 15. 05. 2007.

Nalaz: stega

Materijal: olovo

Opis: stega se sastoji od četiri dijela: dva valjkasta klina, koji su spojeni s dvije trake D profila. Služila je za popravak keramičkih posuda većih dimenzija (pithos).

Dimenzije: d. 11,5 cm, š. 2,5 cm, v. 3 cm



Inv. number 3912, special find 218, trench I, quadrant 34, depth 70, stratigraphy unit 8a, 2. 05. 2007

Find: astragal

Material: bronze

Description: exact reproduction of an ankle joint bone.

Dimensions: length: 25 mm, height: 13 mm, width: 10 mm

Inv. br. 3912, PN 218, S I, kvadrat 34, visina 70, sj 8a, 2. 05. 2007.

Nalaz: astragal

Materijal: bronca

Opis: vjerna reprodukcija kosti skočnog zgloba.

Dimenzije: d. 25 mm, š. 13 mm, v. 10 mm

Inv. number 3883, special find 15/2008, trench 4, 9 Oct 2007.

Find: weight

Material: lead, iron

Description: body shaped as a cylinder, gets narrower towards the bottom. Bottom is flat and beaten. At the top, there is an iron ring made of a wide band.

Dimensions: length: 17.4 cm, diameter of the widest part: 6.1 cm, weight: 3,34 kg

Inv. broj 3883, PN 15 /2008, S 4, 09. 10. 2008

Nalaz: uteg

Materijal: olovo, željezo

Opis: valjkasto tijelo se prema dnu malo sužava. Dno je tupo i istučeno. Na vrhu je alka od željeza izrađena od široke trake.

Dimenzije: duž. 17,4 cm, promjer na najširem dijelu 6,1 cm, težina 3,34 kg



Antički novac

Maja Bonačić Mandinić

Od velike količine antičkog novca nađenog u Resniku, za izložbu je odabrano 26 najbolje sačuvanih primjeraka. Tri su grčka iz 3. st. pr. Kr. Dva su emisije Isse – grčkog grada na Jadranu, na mjestu današnjeg grada Visa na otoku Visu, a jedan brončani novac je iz grada Arpi u Apuliji, u blizini današnje Foggie u Italiji. Šest primjeraka novca je iz doba Rimske Republike, dva brončana asa i četiri srebrna denara iz razdoblja 2.-1. st. pr. Kr. Osamnaest primjeraka pripada emisijama rimskih careva.

Carevi prvog stoljeća August (27. pr. Kr.-14. g.) i Tiberije (14.- 47. g.) zastupljeni su s po jednim asom, a Klaudije (41.-54. g.) s asom i kvadransom, te Vespazijan s dupondijem i asom. Iz drugog stoljeća odabrani su sestercij i dupondij Trajana (98.-117. g.), as što ga je emitirao Antonin Pij (138.-161. g.) s imenom Marka Aurelija, dupondij Marka Aurelija (161.-180. g.) i komemorativni sestercij nakon smrti Antonina Pija, što su je emitirali Marko Aurelija i Lucije Ver (161.-169. g.). Treće stoljeće predstavljaju sestercij Trajana Decija (249.-251. g.), te po jedan antoninijan Aurelijana (270.-275. g.) i Proba (276.-282. g.), a četvrto carevi Licinije (308.-324. g.) i Konstancije II., obojica s po jednim numusom. Konstancije II. je 324. dobio titulu cezara, a carem je postao 337. godine.

Jedan primjerak odabranog novca pripada rimskom provincijalnom novcu – emisija grada Hypaïpe u Lidiji, u današnjoj zapadnoj Anatoliji u Turskoj. Emitiran je u vrijeme carice Julije Domne, žene cara Septimije Severa (193.-211. g.) i majke budućih careva Karakale (198.-217. g.) i Gete (209.-212. g.).

ISA

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Ancient Coins

Maja Bonačić Mandinić

A number of twenty-six best preserved specimens of ancient coins found at the archaeological site of Resnik was selected for this exhibition out of a very large number of ancient coins found at this site. Three of them are Greek coins dated to the 3rd century BC. Two of them are emissions from Issa – a Greek city in the Adriatic, at the place of the present-day city of Vis on the Island of Vis, and one bronze coin came from the city of Arpi in Apulia, close to the present-day Foggia in Italy. Six examples of money are dated to the period of Roman Republic, two bronze asses and four silver denarii dated to the period between 2nd and 1st century BC. Eighteen coins are emissions of Roman emperors.

Emperors from the 1st century AD, Augustus (27 BC-AD 14) and Tiberius (AD 14-47) are represented with one as each, Claudius (AD 41-54) with one as and one quadrans, and Vespasian with one dupondius and one as. Chosen examples from the 2nd century AD are one sestertius and one dupondius of Trajan (AD 98-117), one as with the name of Marcus Aurelius which is the emission of Antoninus Pius (AD 138-161), one dupondius of Marcus Aurelius (AD 161-180) and finally a commemorative sestertius on the occasion of death of Antoninus Pius, which is an emission of Marcus Aurelius and Lucius Verus AD 161-169). 3rd century AD is represented with one sestertius of Trajan Decius (AD 249-251) and with antoniniani of Aurelian (AD 270-275) and Probus (AD 276-282), for each emperor one. 4th century is represented with the emperors Licinius (AD 308-324) and Constantius II, with one nummus of each. Constantius II gained the title of Caesar in AD 324, and he was named an emperor in AD 337.

One of the selected coins is an example of Roman provincial coinage – it is the emission of the City of Hypaipa in Lydia, in the present-day Anatolia in Turkey. It was emitted during the reign of empress Julia Domna, wife of the emperor Septimius Severus (AD 193-211) and mother of the future emperors Caracalla (AD 198-217) and Geta (AD 209-212).

ISSA

Towards the end of the 4th century BC Issa started with the emission of the autonomous coins with the legend ΙΣΣΑ on them.

These were bronze coins, with the head of a nymph on the front side (obverse), and an eight-pointed star on the back side (reverse). In the 3rd century BC they emitted bronze coins with the head of Athena on the front side, and a goat with the legend ΙΣΣΑ above it on the back side. Contrary to the emission of nymph/star coins, there are more varieties of dies for production of Athena/goat coins, which leads to conclusion that this emission lasted for a longer period. Smaller amount of the bronze nominal, with the same Athena/goat type on the front and the back side, was emitted in the second half of the 3rd century BC. At the end of the 3rd BC century Issa also emitted coins with the head of Athena on the front side and a deer and the legend ΙΣ or ΣΙ on the back side, as well as coins with the head of Hercules on the front side, and a deer or a kantharos on the back side. Emission of bronze coins with the heads of deities Dionysius and Athena on the front side and a cluster of grapes between the leaves of a wine grape on the back side can be dated to the end of the 3rd century BC. Around the year of 200 BC Issa issued bronze coins with a representation of amphora on the front side, and a cluster of wine grapes on the back side. The last emission of the mint Issa dates back to the 2nd century BC. These are bronze coins with a face of a man on the front side, and a kantharos with the legend ΙΣ on the back side. The mint Issa closed down in the middle of the 2nd century BC, due to beginning of Roman domination at the eastern Adriatic coast.

Roman Republican Coinage

The earliest examples of currency used in the area of the Italic peninsula around the 4th century BC were large, heavy and made in bronze. For the purpose of easier trade with other cities, at the beginning of the 3rd century BC Romans started to produce silver *didrachms* as well as somewhat lighter bronze coins – *liras*. Silver *quadrigati*, which got their name because of the representation of Jupiter driving a *quadriga* on the back side of the coin, were produced from around 225 BC to around 213 BC. A so called janiform head was depicted on the front side of the coin – a head of god Janus, with two faces facing the opposite sides, and Dioscuri, the twins Castor and Pollux, were depicted on the back side. Manufacturing of silver *denarius* and its half-value *quinarius*, as well as manufacturing of bronze coins of reduced weight, began with the end of the Second Punic War in 211 BC. Silver coins usually depicted the head of goddess Roma wearing a helmet, and on the back side there were Dioscuri on the horses, or goddess Luna, or Victoria driving a two-horse chariot. Besides that, the people or deities which were of some importance for the City of Rome or some episode from Roman history were also represented sometimes. The nominal values of bronze coins were *as*, with the head of god Janus; *semis*, with the head of god Saturn; *triens*, with the head of goddess Minerva; *quadrans*, with the head of Hercules;

te s legendom ΙΣ ili ΣΙ na naličju, kao i novac s prikazom Heraklove glave na licu novca, te jelena ili kantharosa na naličju. Emisija s brončanog novca s glavama božanstava Dioniza i Atene na licu i grozda među listovima vinove loze na naličju, može se datirati krajem 3. st. pr. Kr. Oko 200. g. pr. Kr. Issa izdaje brončani novac s prikazom amfore na licu, a grozdom na naličju novca. Zadnja emisija isejske kovnice datirana je u 2. st. pr. Kr. To je brončani novac tipa glava muškarca na licu, te kantharos i legenda ΙΣ na naličju. Dominacijom Rima na istočnojadranskoj obali, isejska kovnica se gasi sredinom 2. st. pr. Kr.

Rimski republikanski novac

Najraniji novac korišten otprilike od 4. st. pr. Kr. na području italiskog poluotoka bio je velik, težak i izrađen u bronci. Početkom 3. st. pr. Kr. Rimljani su, radi lakše trgovine s drugim gradovima, započeli s kovanjem srebrnih didrahmi i nešto lakšeg brončanog novca – litre. Od oko 225. pa do otprilike 213. g. kovani su srebrni kvadrigati, koji su ime dobili prema prikazu Jupitera u četveropregu na naličju novca. Na licu ovog novca prikazana je tzv. janiformna glava - glava prikazana poput boga Janusa. Po završetku 2. punskog rata, 211. g. započinje se s kovanjem srebrnog denara i polovice njegove vrijednosti kvinara, kao i brončanim novcem smanjene težine. Na srebrnom novcu najčešće je bila prikazana glava božice Rome, s kacigom, te na naličju Dioskuri na konjima, ili božica Luna ili Viktorija kako upravlja dvopregom. K tome, ponekad su prikazivane osobe ili božanstva značajna za grad Rim ili pak neka epizoda iz rimske povijesti. Nominale brončanog novca bile su *as*, s prikazom glave boga Janusa; *semis*, s prikazom glave boga Saturna; *triens* s prikazom glave božice Minerve; *quadrans*, s prikazom glave Herkulesa; *sestans*, s prikazom glave Merkura, te *uncia*, s prikazom glave Bellone, božice rata. Na naličju brončanog novca u pravilu je bio prikazan pramac broda. Ove vrijednosti novca zadržale su se praktički do kraja Republike, a nastavile su se, uz određene promjene, kovati i u početnom razdoblju Carstva.

Rimski carski novac

Novac kovan u prva dva stoljeća Rimskog carstva je zlatnik – *aureus*, te njegova polovica *kvinar*; srebrni *denar* i njegova polovica *kvinar*; brončani ili mjedeni *sestercij*, *dupondij*, *as* i *quadrans*. Početkom 3. stoljeća, car Karakala počeo je s kovanjem srebrnog novca *antoninijana* u vrijednosti od dva denara. S vremenom je njegova vrijednost, zbog inflacije, padala, a udio srebra u njemu se smanjivao, tako da je na kraju postao potpuno brončani, koji poznajemo po nazivu *radiatus*, a koji je dobio po zrakastoj kruni s kojom je prikazan car na licu novca. Car Dioklecijan vladao je od 284. do 304. godine, proveo je reformu novca, izdao je zlatnik *aureus*, srebrni novac *argenteus* i brončani *nummus*, koji se nekad

navodi i kao *folis*. Car Konstantin I., koji je vladao od 307. do 337. godine, ponovno je reformirao novčani sustav: smanjio je težinu brončanog numusa, umjesto zlatnika aureusa uveo je teži *solidus* te njegove frakcije *semis* i *skripulum*. Srebrni novac nazvan je *siliqua*. Sinovi Konstantina I., Konstans i Konstancije uveli su 346. godine veliki brončani novac *centenionalis*, ali njegovo je emitiranje trajalo oko 10 godina. Na licu carskog novca bio je prikazan portret cara ili portreti članova njegove obitelji, a na naličju likovi božanstava, personifikacije vrlina, određene građevine, ili pak prizori koji su se mogli povezati uz propagandu carske politike.

Rimski provincijalni novac

Novac kovan u istočnim provincijama Rimskog carstva, za gradove i oblasti uglavnom grčkog govornog područja. Na aversu ovog novca je prikazan portret cara ili carice, a na reversu lokalna božanstva, arhitektonski spomenici, personifikacije gradova, gorja ili rijeka.

sextans, with the head of Mercury and *uncia*, with the head of Bellona, goddess of war. A prow of a vessel was represented on the back side of a coin as a rule. This value of currency remained practically the same until the end of the Republic and, although with some changes, it was still being produced at the starting period of the Roman Empire.

Roman Imperial Coinage

The coins minted in the first two centuries of the Roman Empire were a gold coin – *aureus*, and its half-value *quinarium*; a silver *denarius*, and its half-value *quinarius*; a bronze or brass-made *sestertius*, *dupondius*, *as* and *quadrans*. At the beginning of the 3rd century the emperor Caracalla introduced minting of a silver coin *antoninianus* which was worth two *denarii*. In time, its value, as well as the portion of silver in it, decreased due to inflation, so in the end it became a completely bronze coin, known by the name *radiate*, which it got because of the radiated crown shown on the head of the emperor on the front side of the coin. Emperor Diocletian reigned from AD 284 to AD 304, and he brought about the reform of the currency system. He issued a gold coin *aureus*, a silver coin *argenteus* and a bronze coin *nummus*, sometimes called *folis*. Emperor Constantine I, who reigned from AD 307 to AD 337, reformed the currency system once again: he reduced the weight of the bronze *nummus* and instead of the golden coin *aureus* he introduced a heavier *solidus*, as well as its fractions *semis* and *scrupulous*. Silver currency was named *siliqua*. In AD 346 his sons Constans and Constantius introduced a large bronze coin *centenionalis*, but its emission lasted for approximately ten years.

On the front side of the imperial coins there was a portrait of the emperor or the members of his family, and on the back side there were representations of deities, personifications of virtues, certain buildings or scenes that could be associated with propaganda of the imperial politics.

Roman Provincial Coinage

Currency minted in the eastern provinces of the Roman Empire, mostly for Greek speaking cities and regions. On the obverse of these coins there are portraits of emperors or empresses, and on the reverse there are local deities, architectural monuments or personifications of cities, mountains or rivers.

GRČKI NOVAC

Inv. broj 3766, brončani novac, Issa, 3. st. pr. Kr.
 av/ glava Atene d.
 rv/ koza stoji d.
 bronca, 19,7x19,6 mm; 6,73 g; →
 nalazište: Resnik, SJ 43, □ 19, ▽ 100; N 246; 20. 8. 2007.
 Literatura: Brunšmid, 70

Inv. broj 3767, brončani novac, Issa, 3. st. pr. Kr.
 av/ glava Atene d.
 rv/ jelen d., iznad IΣ.
 bronca, 16,29x16,4 mm; 4,02 g; ↓
 nalazište: Resnik, SJ 27, □ 23, ▽ 61-70; N 42; 15. 6. 2007.
 Literatura: Brunšmid, 74

Inv. broj 3768, brončani novac, Arpi, Apulija, 3. st. pr. Kr.
 av/ glava Zeusa l., iza munja
 rv/ vepar d.
 bronca, 21,2x22 mm; 7,26 g; →
 nalazište: Resnik, S II, SJ 9a, □ 35, ▽ 67; br. 131; 8. 5. 2007.
 Literatura: SNG Cop, 603. – 605.



3766



3767

ANCIENT GREEK COINAGE

Inv. no 3766, bronze coin, Issa, 3rd century BC
 obv / head of Athena r.
 rv / standing goat r.
 bronze, 19.7x19.6 mm; 6.73 g; →
 site: Resnik, stratigraphic unit 43, □ 19, ▽ 100; find No 246; 20 Aug 2007
 Literature: Brunšmid 70

Inv. no 3767, bronze coin, Issa, 3rd century BC
 obv/ head of Athena r.
 rv/ deer r., above D IΣ.
 bronze, 16.29x16.4 mm; 4.02 g; ↓
 site: Resnik, stratigraphic unit 27, □ 23, ▽ 61-70; find No 42; 15 Jun 2007
 Literature: Brunšmid 74

Inv. no 3768, bronze coin, Arpi, Apulija, 3rd century BC
 obv/ head of Zeus l., lightning behind
 rv/ boar r.
 bronze, 21.2x22 mm; 7.26 g; →
 site: Resnik, probe II, stratigraphic unit 9a, □ 35, ▽ 67; find No 131; 8 May 2007
 Literature: SNG Cop 603-605



3768

RIMSKI NOVAC

REPUBLIKA

Inv. broj 3769, as, kovnica Roma, 2. st. pr. Kr.
 av/ glava Janusa
 rv/ pramac broda d., u odsječku (ROMA).
 bronca, 29x29,6 mm; 19,13 g
 nalazište: Resnik, S I; □ 23, površinski nalaz, N 136; 18. 5. 2007.
 Literatura: RRC ?



3769

Inv. broj 3770, as, kovnica Roma, 155. g. pr. Kr.
 av/ glava Janusa
 rv/ pramac broda d., iznad NAT, u odsječku (ROMA).
 bronca, 28,6x28,3 mm; 15,34 g; ↖
 nalazište: Resnik, S II; SJ 14, □ 25, s 52; ▽ 39; 30. 1. 2007.
 Literatura: RRC 200/2



3770

ANCIENT ROMAN COINAGE

ROMAN REPUBLIC

Inv. no 3769, as, mint - Roma, 2nd century BC
 obv/ head of Janus
 rv/ prow of a vessel r., in exergue (ROMA).
 bronze, 29x29.6 mm; 19.13 g
 site: Resnik, probe I; □ 23, surface find, find No 136; 18 May 2007
 Literature: RRC ?

Inv. no 3770, as, mint - Roma, BC 155
 obv/ head of Janus
 rv/ prow of a vessel r., above NAT, in exergue (ROMA).
 bronze, 28.6x28.3 mm; 15.34 g; ↖
 site: Resnik, probe II; stratigraphic unit 14, □ 25, ▽ 52; find No 39; 30 Jan 2007
 Literature: RRC 200/2

Inv. no 3771, denarius, mint - Roma, BC 128
 obv/ helmeted head of Roma r., behind a laurel wreath, (below ROMA)
 rv/ Victoria in a two-horse chariot r., below an ear of grain, in exergue T-CLOV(LI).
 silver, 17.9x19.3 mm; 3.23 g; ↑
 site: Resnik, probe I; stratigraphic unit 13, □ 25, ▽ 73; find No 241; 9 Aug 2007
 Literature: RRC 260/1



3771

Inv. broj 3772, denar, kovnica Roma, 76. g. pr. Kr.
 av/ glava Sola sa zrakama
 rv/ mjesec srp okružen sa sedam zvijezda, iznad TRIO, ispod L-LVCRETI.
 srebro, 19,6 mm; 2,54 g; ↗
 nalazište: Resnik, S I; SJ 43, □ 19, ▽ 91; N 244; 17. 8. 2007.
 Literatura: RRC 390/1

Inv. broj 3773, denar, kovnica Roma, 54. g. pr. Kr.
 av/ glava Libertas d., (iza LIBERTAS).
 rv/ Lucije Junije Brut u pratnji dva liktora, ispred njih *accensus*, u odsječku BRVTVS.
 srebro, 17,8x16,7 mm; 2,38 g; ↓
 nalazište: Resnik, S I; SJ 74, □ 9, ▽ 187; N 253; 13. 9. 2007.
 Literatura: RRC 433/1

Inv. broj 3774, denar, putujuća kovnica s Markom Antonijem, 32. - 31. g. pr. Kr.
 av/ brod, iznad ANT AVG, ispod III VIR R P C.
 rv/ *aquila* između dvije standarde, LEG XV.
 srebro, 19x18 mm; 2,96 g; ↑
 nalazište: Resnik, S II; □ 37, ▽ 33; br 115; 3. 4. 2007.
 Literatura: RRC 544/30

Inv. no 3772, denarius, mint - Roma, BC 76
 obv/ head of Sol with rays
 rv/ a crescent moon surrounded with seven stars, above TRIO, below L-LVCRETI.
 silver, 19.6 mm; 2.54 g; ↗
 site: Resnik, probe I; stratigraphic unit 43, □ 19, ▽ 91; find No 244; 17 Aug 2007
 Literature: RRC 390/1

Inv. no 3773, denarius, mint - Roma, BC 54
 obv/ head of Liberty r., (behind LIBERTAS).
 rv/ Lucius Junius Brutus accompanied by two lictors, in front of them an *accensus*, in exergue BRVTVS.
 silver, 17.8x16.7 mm; 2.38 g; ↓
 site: Resnik, probe I; stratigraphic unit 74, □ 9, ▽ 187; find No 253; 13 Sep 2007
 Literature: RRC 433/1

Inv. no 3774, denarius, mint travelling with Marcus Antonius, 32-31 BC
 obv/ vessel, above ANT AVG, below III VIR R P C.
 rv/ aquila between two standards, LEG XV.
 silver, 19x18 mm; 2.96 g; ↑
 site: Resnik, probe II; □ 37, ▽ 33; find No 115; 3 Apr 2007
 Literature: RRC 544/30



3772



3773



3774



CARSTVO

August

Inv. broj 3775, as, Roma, 19. - 4. g. pr. Kr.

av/ glava cara I.

rv/ () SC

bronca, 26x27 mm; 8,85 g; ↑

nalazište: Resnik, iskop bagera, □ 9, br 24; 18. 1. 2007.

Literatura: RIC I, str. 61. - 78.

Tiberije

Inv. broj 3776, as, Roma, 22./23. - 30. (?) g.

av/ DIVVS AVGVSTVS PATER, poprsja Augusta sa zrakasto krunom I.

rv/ PROVIDENT, S - C, altar.

bronca, 27 mm; 7,53 g; ↓

nalazište: Resnik, S I; SJ 23, □ 9, ▽ 148; N. br 17; 15. 1. 2006.

Literatura: RIC I, 81

Klaudije

Inv. broj 3777, as, Roma, 41. - 50. g.

av/ TI CLAVDIVS CAESAR AVG P M TR P IMP, poprsja cara I.

rv/ LIBERTAS AVGVSTA, Libertas stoji glave okrenute udesno, drži *pileus*.

bronca, 27 mm; 8,69 g; ↓

nalazište: Resnik, SJ 6, □ 16, ▽ 25-37; N. br 156; 23. 5. 2007.

Literatura: RIC I, 97

ROMAN EMPIRE

Augustus

Inv. no 3775, as, Roma, 19-4 BC

obv/ head of emperor I.

rv/ () SC

bronze, 26x27 mm; 8.85 g; ↑

site: Resnik, excavated by a dredge, □ 9, find No 24; 18 Jan 2007

Literature: RIC I, pp. 61-78

Tiberius

Inv. no 3776, as, Roma, AD 22/23-30 (?)

obv/ DIVVS AVGVSTVS PATER, bust of Augustus with radiated crown I.

rv/ PROVIDENT, S - C, altar.

bronze, 27 mm; 7.53 g; ↓

site: Resnik, probe I; stratigraphic unit 23, □ 9, ▽ 148; find No 17; 15 Jan 2006

Literature: RIC I, 81

Claudius

Inv. no 3777, as, Roma, AD 41-50

obv/ TI CLAVDIVS CAESAR AVG P M TR P IMP, bust of emperor I.

rv/ LIBERTAS AVGVSTA, Liberty standing with head turned to right, holding a *pileus*.

bronze, 27 mm; 8.69 g; ↓

site: Resnik, stratigraphic unit 6, □ 16, ▽ 25-37; find No 156; 23 May 2007

Literature: RIC I, 97



3775



3776



3777



Inv. no 3778, quadrans, Roma, AD 42
 obv/ TI CLAVDIVS CAESAR AVG, modii around
 rv/ PON M TR P IMP P P COS II, around S - C
 bronze, 17.6x18 mm; 2.41 g; ↓
 site: Resnik, probe II; stratigraphic unit 8a, □ 35, ▽ 53; find No 122; 19 Apr 2007
 Literature: RIC I, 90



Inv. broj 3778, kvadrans, Roma, 42. g.
 av/ TI CLAVDIVS CAESAR AVG, uokolo modija.
 rv/ PON M TR P IMP P P COS II, uokolo S - C
 bronca, 17,6x18 mm; 2,41 g; ↓
 nalazište: Resnik, S II; SJ 8a, * □ 35, ▽; N. br 122; 19. 4. 2007.
 Literatura: RIC I, 90

Vespasian

Inv. no 3779, dupondius, Roma, AD 71
 obv/ IMP CAES VESPASIAN AVG COS III, head of emperor with radiated crown r.
 rv/ ROMA, sitting Roma l., holding a wreath crown and parazonium, in exergue S - C.
 bronze, 27.3x27.5 mm; 11.74 g; ↓
 site: Resnik, probe II, □ 35, ▽ 40; find No 114; 2 Apr 2007
 Literature: RIC II, 476

Inv. no 3780, as, Roma, AD 72-73
 obv/ IMP CAES VESPASIAN AVG COS III, head of emperor r.
 rv/ eagle on a sphere, S - C.
 bronze, 25.3x25.6 mm; 10.04 g; ↓
 site: Resnik, probe I, stratigraphic unit 13, □ 12, ▽ 73-78; find No 37; xxxx.
 Literature: RIC II, 528

Vespazijan

Inv. broj 3779, dupondij, Roma, 71. g.
 av/ IMP CAES VESPASIAN AVG COS III, glava cara sa zrakasto krunom d.
 rv/ ROMA, Roma sjedi l., drži vijenac i parazonium, u odsječku S - C.
 bronca, 27,3x27,5 mm; 11,74 g; ↓
 nalazište: Resnik, S II, □ 35, ▽ 40; N. br 114; 2. 4. 2007.
 Literatura: RIC II, 476

Inv. broj 3780, as, Roma, 72. - 73. g.
 av/ IMP CAES VESPASIAN AVG COS III, glava cara d.
 rv/ orao na kugli, S - C.
 bronca, 25,3x25,6 mm; 10,04 g; ↓
 nalazište: Resnik, S I, SJ 13, □ 12, ▽ 73-78; N. br 37; xxxx.
 Literatura: RIC II, 528



3779



3780

Trajan

Inv. no 3781, dupondius, Roma, AD 116-117
 obv/ IMP CAES NERVAE TRAIANO AVG GER DAC P M TR P COS VI P P, bust of emperor with radiated crown r.
 rv/ SPQR OPTIMO PRINCIPI, Annona holding out a hand with two ears of grain above a boy, in the other hand holding cornucopia, in exergue ALIM ITAL; S - C
 bronze, 25.7x33 mm; 26.5 g; ↓
 site: Resnik, □ 35, ▽ 35; find No 112; 23 Mar 2007
 Literature: BMCRE III, 918

Trajan

Inv. broj 3781, dupondij, Roma, 116. - 117. g.
 av/ IMP CAES NERVAE TRAIANO AVG GER DAC P M TR P COS VI P P, poprsje cara sa zrakastom krunom d.
 rv/ SPQR OPTIMO PRINCIPI, Anona pruža ruku s dva klasa žita poviše dječaka, u drugoj ruci drži rog obilja, u odsječku ALIM ITAL; S - C
 bronca, 25,7x33 mm; 26,5 g; ↓
 nalazište: Resnik, □ 35, ▽ 35; N. br 112; 23. 3. 2007.
 Literatura: BMCRE III, 918

Inv. broj 3782, sestercij, Roma, 116. - 117. g.

av/ IMP CAES NER TRAIANO OPTIMO AVG GER DAC PARTHICO P M TR P COS VI P P, poprsje cara s lovorovim vijencem d.

rv/ REGNA (ADSIGNATA), car sjedi na visokom postolju, uz njega dva vojnika, pred postoljem tri kralja; Trajan pruža tjaru najbližem, u odsječku S - C

bronca, 32,3x33 mm; 26,10 g; ↓

nalazište: Resnik, S I; SJ 29, □ 19, ▽ 61; N. br 207; 16. 6. 2007.

Literatura: BMCRE III, 1043

Inv. no 3782, sestertius, Roma, AD 116-117

obv/ IMP CAES NER TRAIANO OPTIMO AVG GER DAC PARTHICO P M TR P COS VI P P, laureate bust of emperor r.

rv/ REGNA (ADSIGNATA), emperor sitting on a high throne, two soldiers next to him, in front of the throne three kings; Trajan giving out a tiara to the closest one, in exergue S - C

bronze, 32.3x33 mm; 26.10 g; ↓

site: Resnik, probe I; stratigraphic unit 29, □ 19, ▽ 61; find No 207; 16 Jun 2007

Literature: BMCRE III, 1043



3781



3782

Antonin Pij - Marko Aurelije

Inv. broj 3783, as, Roma, 148. - 149. g.

av/ (M AVRELI)VS CAESAR, poprsje Marka Aurelija d.

rv/ (TR POT III) COS II, S - C, Pietas stoji l., drži žezlo u l. ruci, a u d. ruci kutiju; do nje stoji dijete, u odsječku (PIETAS).

bronca, 26x24,7 mm; 11,25 g; ↓

nalazište: Resnik, □ 7, ▽ 153; N. br 13; 12. 1. 2007.

Literatura: BMCRE 4, 306, 1860*

Antoninus Pius - Marcus Aurelius

Inv. no 3783, as, Roma, AD 148-149

obv/ (M AVRELI)VS CAESAR, bust of Marcus Aurelius r.

rv/ (TR POT III) COS II, S - C, Pietas standing l., holding a sceptre in l. hand, in r. hand holding a box; next to her a child standing, in exergue (PIETAS).

bronze, 26x24.7 mm; 11.25 g; ↓

site: Resnik, □ 7, ▽ 153; find No 13; 12 Jan 2007

Literature: BMCRE 4, 306, 1860*



3783

Marko Aurelije i Lucije Ver

Inv. broj 3784, sestercij, Roma, 161. g.; komemorativni novac Antonina Pija

av/ DIVVS ANTONINVS, poprsje Antonina Pija d.

rv/ (CONSECRATIO), orao na kugli, (S - C).

bronca, 33x34 mm; 23,53 g; ↓

nalazište: Resnik, S I; SJ 28, □ 16, ▽ 60; N. br 212; 20. 6. 2007.

Literatura: BMCRE IV, 871

Marcus Aurelius and Lucius Verus

Inv. no 3784, sestertius, Roma, AD 161; commemorative coinage in honour of Antoninus Pius

obv/ DIVVS ANTONINVS, bust of Antoninus Pius r.

rv/ (CONSECRATIO), eagle on a sphere, (S - C).

bronze, 33x34 mm; 23.53 g; ↓

site: Resnik, probe I; stratigraphic unit 28, □ 16, ▽ 60; find No 212; 20 Jun 2007

Literature: BMCRE IV, 871

Inv. no 3785, dupondius, Roma, AD 173-174

obv/ M ANTONINVS AVG TR P XXIX, bust of emperor with radiated crown r.

rv/ (IMP VII) COS III, Jupiter sitting on a throne, holding Victoria and a spear, in exergue (S – C).

bronze, 25 mm; 7.47 g; ↑

site: Resnik, probe I; □ 13, ▽ 145; find No 251; 4 Sep 2007 (ninth layer north of the shaft)

Literature: BMCRE IV, p.636 †



3784

Trajan Decius

Inv. no 3786, sestertius, Roma, AD 249-251

obv/ IMP C M Q TRAIANVS DECIVS AVG, laureate bust of emperor r.

rv/ VICTORIA AVG, S – C, Victoria pacing l., holding a wreath crown and a palm branch.

bronze, 26.5x28.8 mm; 16.56 g; ↑

site: Resnik, □ 9, ▽ 103; find No 10; 11 Jan 2007

Literature: RIC IV/III, 126 D



3786

Probus

Inv. broj 3788, antoninijan, Siscia, 276. - 282. g.

av/ IMP C PROBVS P F AVG, poprsje cara sa zrakastom krunom d.

rv/ PROVIDENTIA AVG, Providencija drži kuglu i žezlo, d. u polju P, u odsječku XXI.

bronza, 22,9x22,8 mm; 3,73 g; ↑

Inv. broj 3785, dupondij, Roma, 173.-174. g.

av/ M ANTONINVS AVG TR P XXIX, poprsje cara sa zrakastom krunom d.

rv/ (IMP VII) COS III, Jupiter sjedi na prijestolju, drži Viktoriju i koplje, u odsječku (S – C).

bronza, 25 mm; 7,47 g; ↑

nalazište: Resnik, S I; □ 13, ▽ 145; N. br 251; 4. 9. 2007. (dev. sloj sjeverno od šahte).

Literatura: BMCRE IV, str.636 †



3785

Trajan Decije

Inv. broj 3786, sestercij, Roma, 249-251. god.

av/ IMP C M Q TRAIANVS DECIVS AVG, poprsje cara sa lovorovim vijencem d.

rv/ VICTORIA AVG, S – C, Viktorija korača l., drži vijenac i granu palme.

bronza, 26,5x28,8 mm; 16,56 g; ↑

nalazište: Resnik, □ 9, ▽ 103; N. br 10; 11. 1. 2007.

Literatura: RIC IV/III, 126 D

Aurelijan

Inv. broj 3787, antoninijan, Mediolanum, 271. - 273. g.

av/ IMP AVRELIANVS AVG, poprsje cara sa zrakastom krunom d.

rv/ PIETAS AVG, S – C, car i svećenik prinose žrtvu nad oltarom, u odsječku S.

bronza, 21,4x21,5 mm; 3,21 g; ←

nalazište: Resnik, □ 9, iskop bagera; N. br 25; 18. 1. 2007.

Literatura: RIC V/I, 138; Kos 688



3787

Probus

Inv. no 3788, antoninianus, Siscia, AD 276-282

obv/ IMP C PROBVS P F AVG, bust of emperor with radiated crown r.

rv/ PROVIDENTIA AVG, Providencia holding a sphere and a spectre, r. in the field of the coin P, in exergue XXI.

bronze, 22,9x22,8 mm; 3,73 g; ↑



3788

3789

3790

nalazište: Resnik, SJ 13, □ 10, ▽ 102-112; N. br 28; 20. 1. 2007.
Literatura: RIC V/II, 721

Licinije

Inv. broj 3789, numus, Siscia, 313. g.
av/ IMP LIC LICINIVS P F AVG, glava cara s lovorovim vijencem d.
rv/ IOVI CONSERVATORI, Jupiter stoji l., drži Viktoriju i naslanja se na žezlo,
do njega orao s vijencem u kljunu, l. u polju E, u odsječku SIS.
bronca, 19,7x21 mm; 2,62 g; ↑
nalazište: Resnik, S I, SJ 27, □ 14, ▽ 60; N. br 203; 11. 6. 2007.
Literatura: RIC VI, 232

Konstancije II

Inv. broj 3790, numus, Thessalonica, 326. - 328. g.
av/ FL IVL CONSTANTIVS NOB C, glava Konstancija II. s lovorovim vijen-
cem d.
rv/ PROVIDENTIAE CAESS, vrata logora, iznad zvijezda, u odsječku SMTSΔ.
bronca, 17,5x18,6 mm; 2,08 g; ↑
nalazište: Resnik, S I, SJ 27, □ 13, s 65; N. br 234; 18. 7. 2007.
Literatura: RIC VII, 158

site: Resnik, stratigraphic unit 13, □ 10, ▽ 102-112; find No 28; 20 Jan 2007

Literature: RIC V/II, 721

Licinius

Inv. no 3789, nummus, Siscia, AD 313
obv/ IMP LIC LICINIVS P F AVG, laureate head of emperor r.
rv/ IOVI CONSERVATORI, Jupiter standing l., holding Victoria and leaning
against a spectre, next to him an eagle with a wreath in its beak, in the
field of the coin E, in exergue SIS.
bronze, 19.7x21 mm; 2.62 g; ↑
site: Resnik, probe I, stratigraphic unit 27, □ 14, ▽ 60; find No 203; 11
Jun 2007
Literature: RIC VI, 232

Constantius II

Inv. no 3790, nummus, Thessalonica, AD 326-328
obv/ FL IVL CONSTANTIVS NOB C, laureate head of Constantius II r.
rv/ PROVIDENTIAE CAESS, gates of a military camp, above a star, in exer-
gue SMTSΔ.
bronze, 17.5x18.6 mm; 2.08 g; ↑
site: Resnik, probe I, stratigraphic unit 27, □ 13, s 65; find No 234; 18 Jul
2007
Literature: RIC VII, 158

RIMSKI PROVINCIJALNI NOVAC

Julija Domna

Inv. broj 3791, brončani novac, Hypaipa, Lidija, 185. ili 187. - 211. g.
av/ poprsje carice d.
rv/ kip Artemide *Anaitis*
bronca, 22 mm; 5,30 g; ↑
nalazište: Resnik, iskop bagerom, □ 10, N. br 23; 18. 1. 2007.
Literatura: Winsemann-Falghera 3, 1340

ROMAN PROVINCIAL COINAGE

Julia Domna

Inv. no 3791, bronze coin, Hypaipa, Lidija, AD 185 or 187-211
av/ bust of empress r.
rv/ statue of Artemis *Anaitis*
bronze, 22 mm; 5.30 g; ↑
site: Resnik, excavated by an excavator, □ 10, find No 23; 18 Jan 2007
Literature: Winsemann-Falghera 3, 1340





Perle, žetoni i geme

Ivanka Kamenjarin

Moglo bi se kazati da je najstariji i najrašireniji oblik ženskog nakita perla. Kroz razna razdoblja često nalikuju jedna drugoj te ih je izvan arheološkog zatvorenog konteksta teško datirati. Antičke perle najčešće su izrađene od stakla i staklenih pasta. Mogu biti jednoboje (često modre ili zelene) ili ukrašene višebojno različitim staklarskim tehnikama. U 1. - 2. st. pos. Kr. česte su tzv. *melon-shape* perle, odnosno perle u obliku dinje s uzdužnim kanelirima složene ili u narukvicu ili ogrlicu. Na Resniku su zastupljene u svim fazama života, tako da su najraniji primjerci iz 2. - 1. st. pr. Kr. do najkasnijih koje se mogu datirati u 6. st. pos. Kr.

Žetoni za igru bili su izrađeni od različitog materijala, pa tako i od stakla i njene paste. Zajedničko im je da su s jedne strane ravni, a s druge zaobljeni. Mogu imati neke ureze, ali češće su bez ukrasa. Uobičajeni su nalazi antičkog razdoblja, te se van konteksta datiraju okvirno 1. - 3. st. po. Kr.

Geme se dijele u dvije osnovne skupine prema načinu izrade. Motiv može biti u reljefu ispupčen ili urezan u površinu (udubljen). Osim što su imali ukrasnu funkciju, to su bili i pečati vlasnika kojim su potpisivali, odnosno pečatili pošiljke ili pisma. Nalazili su se na prstenu, ali ima i primjeraka gdje su se nosili kao privjesak oko vrata. Izrađivali su se od različitog materijala – najčešće od kalcedona.

Privjesci od neprozirnog tamnog stakla s reljefno utisnutim prikazom većina autora datira u kasnu antiku. Motivi su razni: od poganskih do kršćanskih, a resnički primjerak ima analogije s primjerkom iz Zbirke Franjevačkog samostana u Sinju (br. 44) koji Fadić (Fadić, 2008, 166) datira u kasnu antiku.

Pearls, Game Pieces and Gems

Ivanka Kamenjarin

It can be said that beads are the oldest and most common type of women's jewellery. They looked very similar to each other during different periods, so it is very difficult to date them without a closed archaeological context. Classical Antiquity beads were usually made of glass or glass paste. They can be monochromatic (often dark blue or green) or decorated in multiple colours by different glass making techniques. During the 1st – 2nd century AD so called *melon-shape* beads, or to be more precise, the beads shaped as melons with longitudinal flutings, arranged in bracelets or necklaces, were very common. At Resnik, they were represented during each phase of the existence of the settlement, so the earliest examples date back to the 2nd - 1st century BC, and the latest ones can be dated to the 6th century AD.

Game pieces were also made of glass or glass paste, among other materials. They are all similar due to the fact that they are all flat at one side and rounded at the other. They can have cuts, but they are usually without decorations. They are usual among the Classical Antiquity finds, and when out of context they are usually dated around the 1st – 3rd century AD.

Based on the manner of their manufacture, gems can be divided in two main categories. The relief motif can be convex or carved into the surface (concave). Besides having a decorative function, gems were also used as stamps by their owners, who used them to sign, or to be more precise, to stamp packages or letters. They were usually parts of rings, but there are also examples of them being pendants hanging around the neck. They were made of different materials – most frequently of chalcedony.

Most authors usually date pendants made of dark opaque glass with motives made in concave relief to the Late Antiquity. Motives are various: from pagan to Christian ones, and the example found at Resnik bears some similarities to one example from the collection of the Franciscan monastery in Sinj (N° 44) which Fadić dated to the Late Antiquity (Fadić 2008, 166).

Inv. number 3808, special find 126, trench I, 21 Feb 2007, excavated by a dredge
 Find: bead
 Material: glass paste
 Description: a melon shaped bead, with longitudinal flutings, turquoise in colour.
 Dimensions: diameter 12 mm, height 10 mm
 Datation: 1st- 2nd century AD

Inv. number: 3809, special find 72, trench II, quadrant 31, stratigraphy unit 17, 22 Jan 2007.
 Find: bead
 Material: glass paste
 Description: a bead made of glass paste, decorated with small imprinted circles.
 Dimensions: diameter 9 mm, height 7 mm
 Datation: 2nd – 1st century BC

Inv. number 3810, special find 161, trench II, quadrant 34, depth 38, stratigraphy unit 1a, 24 Mar 2007.
 Find: bead
 Material: glass paste
 Description: one half of a larger melon-shaped bead with longitudinal flutings, turquoise in colour.
 Dimensions: height 11 mm
 Datation: 1st- 2nd century AD

Inv. number 3811, special find 224, trench II, quadrant 34, depth 54, stratigraphy unit 9a, 05 May 2007.
 Find: bead
 Material: glass paste
 Description: a round bead with dark-red and green inlays.
 Dimensions: diameter 12 mm, height 9 mm
 Datation: 2nd- 1st century BC

Inv. number 3812, special find 159, trench II, quadrant 34, depth 38, stratigraphy unit 1a, 24 Sep 2007.
 Find: bead
 Material: glass paste
 Description: dark-red glass paste; the bead is elongated and pressed in the middle, which forms two halves. The bead is damaged at one side, around the small circular hole.
 Dimensions: width 12 mm, height 8 mm
 Datation: Late Antiquity

Inv. number 3813, special find 195, trench II, quadrant 34, depth 52, stratigraphy unit 12a, 21 Apr 2007.
 Find: bead
 Material: glass paste
 Description: a round bead of an indigo colour with dark-green inlays.
 Dimensions: diameter 12 mm, height 10 mm
 Datation: 2nd- 1st century BC

Inv. number 3814, special find 348, trench I, quadrant 13, depth 60, stratigraphy unit 27, 11 Jun 2007.
 Find: bead
 Material: glass paste
 Description: a green bead shaped as a long, thin tube.
 Dimensions: length 6 mm
 Datation: 1st-3rd century AD

Inv. broj 3808, PN 126, S I, 21. 02. 2007., iskop bagera
 Nalaz: perla
 Materijal: staklena pasta
 Opis: Perla oblika dinje, uzdužno kanelirana, tirkizne boje.
 Dimenzije: promjer: 12 mm, vis. 10 mm
 Datacija: 1.- 2. st. pos. Kr.

Inv. broj 3809, Pn 72, SII, kvadrant 31, sj 17, 22. 01. 2007.
 Nalaz: perla
 Materijal: staklena pasta
 Opis: perla od staklene paste ukrašena utisnutim kružnicama.
 Dimenzije: promjer: 9 mm, vis. 7 mm
 Datacija: 2. – 1. st. pr. Kr.

Inv. broj 3810, PN 161, SII, kvadrant 34, dubina 38, sj 1a, 24. 03. 2007.
 Nalaz: perla
 Materijal: staklena pasta
 Opis: Polutka veće perle oblika dinje s uzdužnim kanelurama, tirkizne boje.
 Dimenzije: vis. 11 mm
 Datacija: 1.- 2 st. pos. Kr.

Inv. broj 3811, Pn. 224, S II, kvadrant 34, dubina 54, sj 9a, 05. 05. 2007.
 Nalaz: perla
 Materijal: staklena pasta
 Opis: okrugla perla s inkrustacijama tamnocrvene i zelene boje.
 Dimenzije: promjer: 12 mm, vis. 9 mm
 Datacija: 2. 1. st. pr. Kr.

Inv. broj 3812, PN. 159, S II, kvadrant 34, dubina 38, sj 1a, 24. 09. 2009.
 Nalaz: perla
 Materijal: staklena pasta
 Opis: tamnocrvena staklena pasta, perla je duguljasta te je stisnuta po sredini stvarajući dvije polutke. S jedne strane okrugle rupice oštećenje.
 Dimenzije: šir. 12 mm, vis. 8 mm
 Datacija: kasna antika

Inv. broj 3813, PN 195, SII, kvadrant 34, dubina 52, sj 12a, 21. 04. 2007.
 Nalaz: perla
 Materijal: staklena pasta
 Opis: okrugla perla indigo plave boje s inkrustacijama tamnozeleno zelene boje.
 Dimenzije: 12 mm, vis. 10 mm
 Datacija: 2. – 1. st. pr. Kr.

Inv. broj 3814, PN 348, SI, kvadrant 13, dubina 60, sj 27, 11. 06. 2007.
 Nalaz: perla,
 Materijal: staklena pasta
 Opis: zelena perla izrađena u obliku duge tanke cjevčice.
 Dimenzije: duž. 6 mm
 Datacija: 1 – 3 st. pos. Kr.

Inv. broj 3815, PN 459, S I, kvadrant 14, dubina 65, sj 27, 13. 07. 2007.
 Nalaz: perla
 Materijal: staklo
 Opis: okrugla perla od zelenomodrog prozirnog stakla, neukrašena.
 Dimenzije: promjer 7 mm, vis. 5 mm
 Datacija: 1. 3 st. pos. Kr.

Inv. broj 3816, PN 221, SII, kvadrant 31, dubina 65, sj 31, 02.05.2007.

Nalaz: perla

Materijal: staklena pasta

Opis: polovica veće perle zelenkaste boje s ukrasom bijelih kružnica u kojima su plavom bojom krugovi, a jedna ima zrakaste linije iz vanjskog plavog kruga.

Dimenzije: promjer 20 mm, vis. 16 mm

Datacija: 2. – 1. st. pr. Kr.

Inv. broj 3817, PN 667, S I, kvadrant 13, dubina 134, sj 58, 03. 09. 2007.

Nalaz: perla

Materijal: staklena pasta

Opis: bikonična okrugla perla bez ukrasa, svijetloplava indigo boja.

Dimenzije: promjer 7 mm, vis. 4 mm

Datacija: 1-3 st. pos. Kr.

Inv. broj 3818, PN 79, S I, kvadrant 12, dubina 73-78, 29.01. 2007.

Nalaz: prsten

Materijal: bronca, staklena pasta

Opis: ulomak brončanog prstena s gemom. Gema je ovalnog oblika, žute boje, može se pročitati središnja dva slova VA.

Dimenzije: šir. 16 mm, duž. game 8 mm

Datacija: 1-4 st pos. Kr.

Inv. broj 3819, PN 137, SI, kvadrant 11, sj 20, dubina 122, 03. 03. 2007.

Nalaz: perla

Materijal: staklena pasta

Opis: polutka modre boje bez ukrasa.

Dimenzije: promjer 12 mm

Datacija: 1-5 st pos. Kr.

Inv. broj 3820, PN 363, SI, kvadrant 18, dubina 51, sj 30, 18. 06. 2007.

Nalaz: žeton

Materijal: staklene paste

Opis: Okrugli žeton zelenkaste boje, s donje je strane ravan, dok je s gornje strane zaobljen.

Dimenzije: promjer 13 mm

Datacija: 1.- 3. st. pos. Kr.

Inv. broj 3821, PN 358, S I, kvadrant 15, dubina 70, devastirani sloj uz N profil, 15. 06. 2007.

Nalaz perla

Materijal: staklena pasta

Opis: polovica perle modre boje s bijelim krugovima i plavom točkom u sredini.

Dimenzije: vis. 9 mm

Datacija: 2. - 1 st. pr. Kr.

Inv. broj 3822, Pn 600, slučajni nalaz, 23. 08. 2007.

Nalaz: žeton

Materijal: kamen

Opis: žeton ovalnog oblika izrađen od morskog oblutka. Ovalni oblik s jedne strane ima urezan klas, a s druge strane urezanu mrežu (niz okomitih i vodoravnih linija).

Dimenzije: duž. 16 mm, šir. 13 mm

Datacija: rimsko doba

Inv. number 3815, special find 459, trench I, quadrant 14, depth 65, stratigraphy unit 27, 13 July 2007.

Find: bead

Material: glass paste

Description: a round bead made of green-blue translucent glass, not decorated.

Dimensions: diameter 7 mm, height 5 mm

Datation: 1st-3rd century AD

Inv. number 3816, special find 221, trench II, quadrant 31, depth 65, stratigraphy unit 31, 2 May 2007.

Find: bead

Material: glass paste

Description: one half of a larger greenish bead with decorations of white circles with blue circles inside of them. One circle has radiating lines spreading from the outer blue circle.

Dimensions: diameter 20 mm, height 16 mm

Datation: 2nd- 1st century BC

Inv. number 3817, special find 667, trench I, quadrant 13, depth 134, stratigraphy unit 58, 3 Sep 2007.

Find: bead

Material: glass paste

Description: biconical round bead without any decorations, of a light-blue indigo colour.

Dimensions: diameter 7 mm, height 4 mm

Datation: 1st-3rd century AD

Inv. number 3818, special find 79, trench II, quadrant 12, depth 73-78, 2 May 2007.

Find: ring

Material: bronze, glass paste

Description: fragment of a ring with a gem. The gem is of oval shape, yellow in colour, and two letters, VA, are visible in the middle.

Dimensions: width 16 mm, length of the gem 8 mm

Datation: 1st-4th century AD

Inv. number 3819, special find 137, trench I, quadrant 11, stratigraphy unit 20, depth 122, 3 Mar 2007.

Find: bead

Material: glass paste

Description: one half of a dark-blue bead without any decorations.

Dimensions: diameter 12 mm

Datation: 1st-5th century AD

Inv. number 3820, special find 363, trench I, quadrant 18, depth 51, stratigraphy unit 30, 18 Jun 2007.

Find: game piece

Material: glass paste

Description: a round game piece of a greenish colour, flat at the bottom side, rounded at the upper side.

Dimensions: diameter 13 mm

Datation: 1st-3rd century AD

Inv. number 3821, special find 358, trench I, quadrant 15, depth 70, devastated layer by the N profile, 15 Jun 2007.

Find: bead

Material: glass paste

Description: one half of a dark-blue bead with white circles and a blue dot in the middle.

Dimensions: height: 9 mm

Datation: 2nd-1st century BC

Inv. number 3822, special find 600, accidental find, 23 Aug 2007.

Find: game piece

Material: stone

Description: oval game piece made of sea pebble. Its oval shape has an ear carved in one side, and a net (an array of vertical and horizontal lines) carved in the other side.

Dimensions: length 16 mm, width 13 mm

Datation: Roman period

Inv. number 3823, special find 402, trench I, quadrant 14, depth 65, stratigraphy unit 27, 28 Jun 2007.

Find: bead

Material: jet

Description: a round bead with a shallow elongated hole and two parallel relief lines at one side. Damaged on one side.

Dimensions: diameter 10 mm, height 6 mm

Datation: 1st-4th century AD

Inv. number 3824, special find 376, trench I, from the dirt waste, 20 Jun 2007.

Find: game piece

Material: jet

Description: game piece of an oval shape, one edge is damaged.

Dimensions: length 20 mm

Datation: 1st-4th century AD

Inv. number 3825, special find 444, trench I, quadrant 16, depth 60, stratigraphy unit 35, 10 Jul 2007.

Find: game piece

Material: glass

Description: oval game piece of a dark-blue colour, chipped at one end.

Dimensions: length 16 mm

Datation: 1st-4th century AD

Inv. number 3826, special find 337, trench I, quadrant 14, depth 60, stratigraphy unit 27, 3 Mar 2007.

Find: pendant

Material: glass

Description: one half of a pendant made of opaque black glass. Relief annular edge encircles a portrait of a profile of a woman, with a visible band which is keeping her hair pulled around her head. Back side is uneven.

Dimensions: length 10 mm, height 16 mm

Datation: Late Antiquity

Inv. broj 3823, PN 402, SI, kvadrant 14, dubina 65, sj 27, 28. 06. 2007.

Nalaz: perla,

Materijal: gagat

Opis: perla kružnog oblika, plitka, rupica je izdužena, te na jednoj strani ima dvije paralelne reljefne linije. Oštećena na jednom kraju.

Dimenzije: promjer 10 mm, vis. 6 mm

Datacija: 1. – 4. st. pos. Kr.

Inv. broj 3824, PN 376, S I, iz otpada zemlje, 20. 06. 2007.

Nalaz: žeton

Materijal: gagat

Opis: žeton ovalnog oblika, oštećen na jednom rubu

Dimenzije: duž. 20 mm

Datacija: 1. – 4. st. pos. Kr

Inv. broj 3825, PN 444, SI, kvadrant 16, dubina 60, sj 35, 10. 07. 2007.

Nalaz: žeton

Materijal: staklo

Opis: Ovalni žeton modre boje, odlomljena na jednom kraju.

Dimenzije: duž. 16 mm

Datacija: 1. – 4. st. pos. Kr

Inv. broj 3826, PN 337, SI, kvadrant 14, dubina 60, sj 27, 08. 06. 2007.

Nalaz: privjesak

Materijal: staklo

Opis: Polovica privjeska izrađena od crnog neprozirnog stakla. Reljefni prstenasti rub obrubljuje portret žene u profilu, vidljiva vrpca oko glave koja drži skupljenu kosu. Stražnja strana je neravna.

Dimenzije: duž. 10 mm, vis. 16 mm

Datacija: kasna antika

Inv. broj 3827, PN 27, kvadrant 7, sj 2, dubina 163, 19. 01. 2007.

Nalaz: perla

Materijal: staklena pasta

Opis: duguljasta perla svijetloplave indigo boje. Po sredini je bijela s crnim valovitim linijama.

Dimenzije: duž. 10 mm

Datacija: 2. – 1. st. pr. Kr.

Inv. broj 3828, PN 476, S I, kvadrant 13, dubina 75, sj 27, 17. 07. 2007.

Nalaz: perla

Materijal: staklena pasta

Opis: ulomak perle izrađene od tamnozeleno staklene paste ukrašene s ispupčenim kružnicama i duguljastom inkrustacijom crne boje.

Dimenzije: duž. 8 mm

Datacija: 2. – 1. st. pr. Kr.

Inv. broj 3829, PN 592, S I, slučajni nalaz, 22. 08. 2007.

Nalaz: perla

Materijal: gagat

Opis: mala kružna plosnata crna perla.

Dimenzije: promjer 9 mm

Datacija: 1. – 4. st. pos. Kr



3812



3811



3810



3809



3808



3813



3814



3815



3816



3817



3821



3820



3819



3818



3822a



3822b



3823



3824



3825



3826



3827



3828



3829



3830

Inv. number 3827, special find 27, quadrant 7, stratigraphy unit 2, depth 163, 19 Jan 2007.

Find: bead

Material: glass paste

Description: elongated bead of a light-blue indigo colour. It is white in the middle, with black, wave-like lines.

Dimensions: length 10 mm

Datation: 2nd - 1st century BC

Inv. number 3828, special find 476, trench I, quadrant 13, depth 75, stratigraphy unit 27, 17 Jul 2007.

Find: bead

Material: glass paste

Description: fragment of a bead, made of dark-green glass paste, decorated with convex circles and an elongated black inlay.

Dimensions: length: 8 mm

Datation: 2nd-1st century BC

Inv. number 3829, special find 592, trench I, quadrant 11, accidental find, 22 Aug 2007.

Find: bead

Material: jet

Description: a small flattened round bead of a black colour

Dimensions: diameter: 9 mm

Datation: 1st-4th century AD

Inv. number 3830, special find 299, trench I, stratigraphy unit 23, □ 16, depth 25-37, 22 May 2007.

Find: gem

Material: chalcedony

Description: oval gem with smooth edges and engraved representation of a shrimp.

Dimensions: length: 12 mm, width: 9 mm

Datation: 1st-3rd century AD

Inv. broj 3830, PN 299, SI, sj 23, kvadrant 16, dubina 25 - 37, 22. 05. 2007.

Nalaz: gema

Materijal: kalcedon

Opis: Ovalna gema, glatkih rubova, ugraviran prikaz kozice.

Dimenzije: duž. 12 mm, šir. 9 mm

Datacija: 1. – 3. st. pos. Kr.

Zooarheološka analiza (sažetak)

Jane Sanford

Uvod

U ovom poglavlju objašnjeno je na koji način je provedena analiza kostiju životinjskog porijekla nađenih na Resniku, te što su one otkrile o načinima uzgoja stoke i konzumaciji mesa na Resniku.

Što nam mogu otkriti životinjske kosti

Prilikom iskapanja arheoloških nalazišta nađene životinjske kosti najčešće se pronalaze s kamenim ili metalnim oruđem, keramikom, nakitom ili drugim vrstama nalaza. Da bi saznali što više informacija o životu i društvu prastanovnika nekog nalazišta, treba pregledati nalaze poput oruđa i keramike. Životinjske kosti nađene na nekom nalazištu može se isto tako promatrati kao nalaze koje treba pregledati da bi se bolje razumjelo život stanovnika tog nalazišta. Samo jedna životinjska kost daje nam malo informacija o životu ljudi koji su je tu ostavili (osim ako je izrezbarena ili obrađena na neki drugi način), ali cijela skupina kostiju rasprostranjenosti na neko nalazište, odnosno koštani materijal, značajno ukazuje na način na koji se jelo, kako se postupalo sa životinjama, koja je bila važnost lova u odnosu na uzgoj domaćih životinja te u kojim su djelovima (ako je takvih uopće bilo) obitavali pojedinci koji su se bolje hranili od ostalih.

Kosti pregledava zooarheolog kako bi otkrio što se jelo i kako se odnosilo prema životinjama na tom nalazištu. Zooarheolog je vrsta arheologa specijalizirana za identifikaciju i interpretaciju kostiju životinjskog podrijetla nađenih na nekom arheološkom nalazištu. Da bi se otkrilo vrstu, dob i spol (ako je to moguće) svake otkrivene kosti, njih se uspoređuje sa kosturima suvremenih životinja poznate vrste, dobi i spola. Sve kosti koje je moguće identificirati se vode kao BIU, ili Broj Identificiranih Uzoraka¹. BIU svake vrste i dobne skupine se onda može usporediti da bi se interpretirala prehrana na području tog nalazišta. BIU se koristi zajedno sa Minimalnim Brojem Jedinki ili MBJ². BIU može biti umjetno uvećan ako su životinjske kosti plomljene na komadiće ili fragmente. Ako bi se bedrenu kost, odnosno femur ovce prelomilo na pola, još uvijek

¹ Eng. NISP = Number of Identified Specimens (op.prev.)

² Eng. MNI = Minimum Number of Individuals (op.prev.)

The Zooarchaeological Analysis (summary)

Jane Sanford

Introduction

This section explains how analysis of the animal bones recovered from Resnik was conducted, and what these bones revealed about the patterns of livestock management and meat consumption at Resnik.

What Animal Bones Can Tell Us

During the excavation of an archaeological site, animal bones are generally found in conjunction with stone or metal tools, ceramics, jewellery, and other classes of artefacts. In order to gain information about the lives and society of the ancient inhabitants of a site, artefacts such as tools and ceramics are examined. In much the same way, animal bones from archaeological sites can be thought of as artefacts to be examined in order to gain a deeper understanding of the lives of a site's inhabitants. While a single animal bone provides little information about the people which deposited it in a site (unless it is carved or otherwise worked) an entire collection of bones laid down across a site, known as an *assemblage*, does tell us a great deal about what was eaten, how the animals were managed, the importance of hunting versus stock raising, and which areas of the site boasted individuals (if any) who ate better than others.

In order to determine what was eaten and how animals on a site were managed, the bones are examined by a zooarchaeologist. A zooarchaeologist is an archaeologist who specializes in the identification and interpretation of animal bones found on archaeological sites. The bones found on the site are compared to modern skeletons of animals of known species, age and sex to determine the species, age and sex (if possible) of each of the recovered bones. All bones that can be identified are counted as a NISP, or Number of Identified Specimens. The NISP for each species and age group can then be compared to interpret the diet of the site. NISP counts are used in conjunction with a calculation of the Minimum Number of Individuals, or MNI. NISP can be artificially inflated by the animal bones breaking into pieces, or fragments. If a sheep thighbone or femur breaks in half, then it is still one bone but would be counted as a NISP of two. A MNI counts only the number of non-repeating elements, such as the lower right

femur of a sheep. In this way, we can see how dominant a species was by looking at a comparison of both the minimum (MNI) and maximum (NISF) representation of each animal on a site.

Some Notes on Identification

In formal identification of an animal, scientist use the classification system developed in the 18th century by Linnaeus, using both the *species* (specific animal) and *genus* (group of the species). The genus traditionally is capitalized, while the species (given second) is not; thus, cattle are known as *Bos taurus*. While most animals can be easily identified to genus, it is very difficult to identify the specific species of fragmentary animal bones. For this reason bones of horse and donkey (both belonging to the genus *Equus*) are so similar in shape and identifying characteristics that the only way to differentiate them is by size of complete or mostly complete bones. The low representation of bones at Resnik does not allow for this; thus the bones are known only as *Equus* sp., or some animal belonging to the genus *Equus*. A similar problem is found in differentiating domesticated pigs from wild boar. While both may be present at Resnik, they are here only identifiable as their genus - *Sus*. Sheep, *Ovis aries* and goat *Capra hircus* belong to different genera but are for most bones so similar as to be indistinguishable. For this reason they receive a special genus in zooarchaeology - *OvisCapra*. Some fragmentary bones can be identified to bone but not to genus. These are given one of two size categories - 'small ungulate' (either sheep/goat, roe deer or small pig) and 'large ungulate' (large pig, cow, horse/donkey or red deer). For reference, all animals at Resnik are referred to by their Linnean (or Latin) names. These can be seen alongside the common names in Table 1.

The Animal Remains From Resnik

In order to determine the usage and consumption of animals at Resnik, we examined 6183 bones and fragments, 2725 of which could be identified and 3458 unidentifiable fragments. All of these bones were recovered from sectors I and II of the main excavation trench. Of the 2725 identifiable bones, the majority came from sheep and goat or 'small ungulate' (most likely also sheep and goat). If we take the extreme assumption that all small ungulate remains came from sheep and goats, then these animals made up 46.06% of animal remains. The next most common animal found at Resnik was the cow, at nearly 20% of remains. The 'large ungulate' category also makes up nearly 20% of remains at this site, and it is very likely (considering the representation of red deer and horse) that the majority of this is made up of cattle. If we take the extreme assumption here, as with sheep and goat, that this category is entirely consisting of cattle bones, then cattle make up a maximum of 39.19% of animal remains from this site. The next most common animal is pig, making up only

bi se radilo o jednoj te istoj kosti, ali onda bi se ona brojala kao dva BIU. MBJ zbraja samo one elemente koji se ne ponavljaju, poput donjeg desnog femura ovce. Na ovaj način, ako usporedimo minimum (MBJ) i maksimum (BIU) zastupljenosti svake životinje na nalazištu, možemo vidjeti koliko je neka vrsta tu bila dominantna.

Neka zapažanja vezana za identifikaciju

Prilikom formalne analize neke životinje znanstvenici koriste metodu klasifikacije koju je u 18. stoljeću razvio Linné i to na način da se koriste i vrsta (određena životinja) i rod (grupacija vrsta). Rod se obično piše velikim slovom, a vrsta (koja se navodi druga po redu) malim; tako se naprimjer govedo navodi kao *Bos taurus*. Rod većine životinja lako se može identificirati, ali samo prema ulomku kosti životinje vrlo je teško identificirati specifičnu vrstu. Iz ovog razloga su kosti konja i magarca (koji su oboje roda *Equus*) toliko sličnog oblika i identificirajućih karakteristika da ih se razlikovati može samo po veličini cjelovitih ili gotovo cjelovitih kostiju. Niska zastupljenost kostiju s Resnika ne daje nam mogućnost za ovakvu analizu; zbog toga su kosti identificirane samo kao *Equus* sp., odnosno kao neka životinja roda *Equus*. Na isti problem nailazimo pri pokušaju razlikovanja domaće od divlje svinje. Iako je moguće da su obje vrste bile prisutne na Resniku, jedino ih je moguće identificirati po njihovom rodu - *Sus*. Ovca, *Ovis aries*, i koza, *Capra hircus*, obje propadaju različitim rodovima, ali im je većina kostiju previše slična da bi ih se moglo razlikovati. Iz ovog razloga one u zooarheologiji pripadaju posebnom rodu *OvisCapra*.

Kod nekih fragmenata možemo identificirati o kojoj se kosti radi ali ne i rod životinje. Takvim primjercima se pripisuje jedna od dviju veličinskih kategorija - „mali kopitar“ (ovca/koza, srna ili mala svinja) ili „veliki kopitar“ (velika svinja, krava, konj/magarac ili jelen). Za usporedbu, sve životinje nađene na Resniku navode se prema binarnoj nomenklaturi (na latinskom). U tablici 1. uz latinska su navedena i obična imena.

Životinjski ostaci s Resnika

Da bi se utvrdilo kako su se životinje koristile i konzumirale na Resniku pregledano je 6183 kosti i fragmenata kostiju, od kojih je bilo moguće identificirati njih 2725, a 3458 su bili samo fragменти koje se nije moglo identificirati. Sve ove kosti otkrivene su u glavnoj sondi, u sektorima I i II. Od 2725 kostiju koje je bilo moguće identificirati, većina je pripadala ovcima, kozama ili „malim kopitarima“ (najvjerovatnije ovcima i kozama). Ako odemo tako daleko da pretpostavimo da su svi ostaci malih kopitara pripadali ovcima i kozama, možemo zaključiti da udio ovih životinja među životinjskim ostacima iznosi 46,06 %. Sljedeća najzastupljenija životinja nađena na Resniku je krava, na koju otpada skoro 20% ostataka. Blizu 20% ostataka na ovom nalazištu također otpada

na kategoriju „velikih kopitara“ i vrlo je vjerojatno (ako se uzme u obzir zastupljenost jelena i konja) da je većina njih pripadala govedima. Ako opet zaključimo, kao u slučaju ovaca i koza, da se ova kategorija u potpunosti sastoji od kostiju goveda, onda možemo zaključiti da na goveda otpada do 39,19% životinjskih ostataka s ovog nalazišta. Sljedeća životinja po zastupljenosti je svinja, čiji udio među ostacima iznosi samo 8,18%. Čini se da na Resniku divlje životinje nisu bile vrlo važne u prehrani. Kada zbrojimo ostatke svih divljih životinja, njihov udio među materijalom iznosi samo 5,53%.

Velik postotak ovaca i koza navodi na krivi zaključak o tome koja je životinja imala važniju ulogu u prehrani na Resniku. Iako je moguće da su ovce i koze klali na drugačiji način, ili da su na Resniku kosti zbog manje veličine pretrpjele gora oštećenja, zbog odlične očuvanosti na ovom nalazištu ipak je najvjerovatnije da otkriveni udio životinjskih kostiju zapravo ukazuje na veću važnost goveda u odnosu na sve ostale životinje u prehrani na Resniku. Jedna jedina netaknuta metakarpalna kost životinje roda *Bos* koja je nađena na Resniku duga je 226,0 mm. Iz ovoga proizlazi da je u razini hrbata visina krave iznosila 1,43 m, a bika 1,52 m. Jedina otkrivena metakarpalna kost životinje roda *OvisCapra* duga je 108,0 mm, što znači da je u razni hrbata visina koze iznosila 0,621 m, a ovce od 0,52-0,54 m. Iako ne možemo biti sigurni koliko je ova antička pasmina goveda nosila mesa na sebi, evidentno je da je govedo predstavljalo mnogo veću zalihu jestivog mesa od ovce ili koze. Gledajući iz te perspektive, veći postotak ostataka ovaca i koza na Resniku ne znači da su one bile i dominantni izvor hrane – ta uloga bila je rezervirana za goveda.

ROD	LINNAEAN	NISP	% NISP	MNI
Ovca / koza	<i>OvisCapra</i>	648	23,48	22
Mali kopitar	-	615	22,58	3
Svinja	<i>Sus</i>	223	8,18	10
Goveda	<i>Bos</i>	544	19,97	12
Konj / magarac	<i>Equus</i>	10	0,37	2
Veliki kopitar	-	524	19,22	8
Pas	<i>Canis</i>	7	0,25	1
Pile	<i>Gallus</i>	2	0,07	1
Guska	<i>Anser</i>	1	0,03	1
Jelen obični	<i>Cervus</i>	126	4,62	6
Srna	<i>Capreolus</i>	14	0,51	2
Kornjača	<i>Testudo</i>	8	0,29	1
Zec	<i>Lepus</i>	3	0,11	1
Ukupno	-	2725	100,00	-

Tablica 1: Proporcije životinja zastupljenih na Resniku

8.18% of remains. Wild animals appear to have been of only minor importance to the diet at Resnik. The remains of all wild animals combined only constitute 5.53% of the assemblage.

The greater percentage of sheep and goats is in this case misleading as to which animal had a greater significance in diet at Resnik. While it is possible that sheep and goats were butchered differently, or that their smaller bones suffered a greater rate of destruction at Resnik, it seems most likely given the excellent state of preservation at this site that the recovered proportions of animal bones actually represent a greater importance of cattle over all other animals in the diet at Resnik. A single recovered *Bos* intact metacarpal bone from Resnik measured 226.0mm in length. This gives us a height at withers of 1.43 m for a cow or 1.52 m for a bull. A single recovered *OvisCapra* metacarpal measured 108 mm in length, giving a height at withers of 0.621m for a goat and 0.52-0.54 m for a sheep. While we are not yet certain what this breed of ancient cattle would have yielded in terms of meat, it is easy to see here that cattle represent a much greater stock of consumable meat than a sheep or goat. If viewed from this perspective, the greater percentage of sheep and goat remains at Resnik is not enough to have made them the dominant source of food - that right is reserved for cattle.

Age Profiles and Herd Management

When examining the use of a given species at Resnik, we have to consider the ages of animals which produced our assemblage. In order to determine the age at which an animal was killed zooarchaeologists study recorded data for the rates at which the teeth erupt and the bones fuse (finish growing) in each species. By examining this data for the fusion of the ends of bones and the eruption and wear of teeth we can determine roughly at what age the animals of a given species were killed. As not all identified bones have areas of bone fusion or teeth not all can be aged. However, we are able to construct kill patterns for herd management and hunting based upon the proportions of bones found which can be aged, and the proportions of bones fusing at a given time are fused (meaning that the animal survived) or unfused (the animal was killed).

Some age patterns at Resnik are easy to identify. Of the 4 ageable horse bones identified at Resnik, two were foetal and three were from adult animals. This appears to indicate that while horses were kept at Resnik, they do not appear to have been killed for food. This is supported as well by the butchery evidence, which we will discuss later. The foetal horse bones from this site suggest that Resnik horses were stabled inside the city, where they would have had their foals or in at least one case - a miscarriage. Dog bones from this site tell a similar story. While we have no evidence of foetal dog bones, we do have only evidence of bones of adult animals. Once again, while this does not prove (as with horses) that dogs were never eaten at Resnik, the butchery evidence

combined with the age data does not show that they were. Wild animals were much more scarcely represented at Resnik, with 29 bones aged to adult animals. Four bones from younger red deer (*Cervus*) were found, representing animals of circa 12 months of age. Thus, while some animals were killed as yearlings most were hunted as adult animals.

For the more common domestic animals at Resnik, the age patterns are more complicated. Sheepgoats, pigs and cattle all show strikingly different age patterns from which we can infer three different patterns of animal management. As seen in Figure 1, the survivorship of pigs (*Sus*) indicates that a large proportion (75%) of the herd was killed before reaching one year. If an animal survived its first year, its chances of reaching age two were over 60%. However, by the age of three the animals were apparently all (or nearly all) killed off. Given that pigs do not produce additional commodities such as milk or wool (known as *secondary products*) the most efficient strategy for raising pigs for meat is to kill them when they have reached their full weight. Once a pig had reached, or nearly reached, its adult weight its continued feeding and management only detracts from resources which could be put into raising other pigs - without an increase in its meat yield. Pigs killed at a younger age may have also been more desirable for their more tender meat. The only segment of the pig population which it is beneficial to keep past this age of optimum meat weight are those sows kept alive for the purpose of breeding, and at least one male pig to breed with the sows.

The age at which this is reached depends largely on the breed of pig. In wild boars full adult size is reached at around eighteen months. In some modern breeds of pigs, the process can take as little as six months. It would appear that the pigs at Resnik reached their desired weight and size for slaughter sometime prior to two years, or possibly before 12 months of age. With regards to breeding sows, it would appear that the inhabitants of Resnik killed these (or nearly all of these) as well sometime before the age of three.

Cattle (*Bos*) management appears to have taken a greatly different form. The majority of cattle survive well past the age of four, with two noticeable times of a partial slaughter of the population. While cattle from Resnik had a nearly 70% chance of surviving past the age of four, we do see changes in the age pattern at under a year, and two to three years of age. Unlike pigs, cattle do offer several secondary products. Cattle are useful for milk and as traction animals (pulling carts and ploughs) as well as for their meat. It is these three uses which explain the age pattern seen at Resnik. A few cows seem to have been killed young in life. This may have been to control herd numbers during seasons of less food, or to eat as a delicacy, or also to allow the milk from the mother cow to be used totally by humans instead of sharing the milk output with the calf. It is most likely that calves at Resnik were killed as a result of some combination of all of these factors.

Dobni profili i uzgoj stoke

Kada smo proučavali korištenje određene vrste na Resniku, trebali smo uzeti u obzir i dob životinja od kojih se sastojao naš materijal. Da bi odredili u kojoj dobi je neka životinja ubijena, zooarheolozi proučavaju zabilježene podatke o brzini kojom izbijaju zubi i srastaju kosti (prestaju rasti) kod svake vrste. Pregledavajući ove podatke o srastanju kostiju na krajevima te o izbijanju i trošenju zubi, možemo otprilike odrediti u kojoj je dobi ubijena životinja neke vrste. Ali nemaju sve identificirane kosti srasle djelove ili zube, tako da se ne može svima odrediti dob. Unatoč tome, ipak smo uspjeli rekonstruirati načine na koje su životinje ubijane prilikom uzgoja stoke ili u lovu, i to temeljem zastupljenosti kostiju kojima se može odrediti dob i zastupljenosti sraslih (što znači da je životinja preživjela) i nesraslih (životinja je ubijena) kostiju neke dobi.

Neke dobne obrasce na Resniku je lako identificirati. Od 4 konjske kosti s Resnika kojima je bilo moguće odrediti dob, dvije su pripadale fetusima, a tri odraslim životinjama. Ova činjenica ukazuje na to da su se na Resniku konji uzgajali, ali se vjerovatno nisu ubijali zbog hrane. Ovu tezu podupiru i tragovi obrade mesa, o kojima će biti više govora kasnije. Kostii fetusa konja nađene na ovom nalazištu ukazuju na to da su konje držali unutar grada, gdje bi se i oždrijebili ili imali spontani pobačaj, što je vidljivo iz barem jednog slučaja. Pseće kosti koje su nađene na ovom nalazištu pričaju sličnu priču. Nema ostataka kostiju psećih fetusa, ali postoje ostaci kostiju odraslih životinja. Ovo nije dokaz (kao i u slučaju konja) da pse nikada nisu jeli na Resniku, ali tragovi obrade mesa u kombinaciji sa podacima o dobi ne dokazuju ni suprotno. Divlje životinje su mnogo rjeđe zastupljene na Resniku, sa 29 kostiju odraslih životinja. Nađene su četiri kosti mladih jelena (*Cervus*), oko 12 mjeseci starih. Znači, iako su neke životinje ubijene u dobi od jedne godine, većinom se lovilo odrasle životinje.

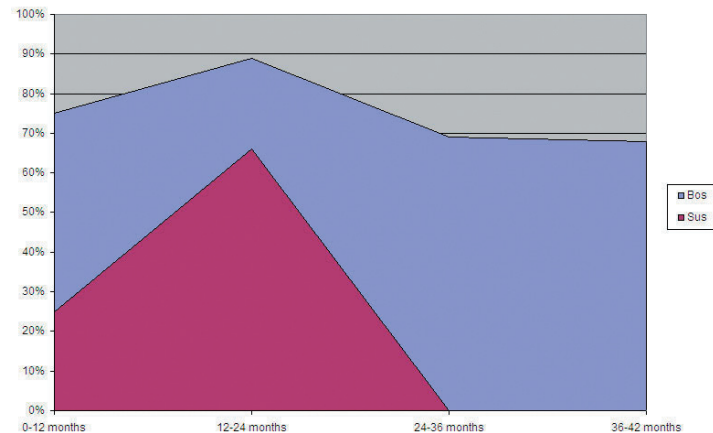
Dobni obrasci su mnogo kompliciraniji u slučaju običnih domaćih životinja sa Resnika. Ovce/koze, svinje i goveda pokazuju potpuno različite dobne obrasce, i iz njih možemo izvesti zaključak o postojanju tri različita načina uzgoja stoke. Kao što možemo vidjeti na Slici 1, doživljena dob svinja (*Sus*) ukazuje na to da je veliki udio (75%) stada ubijen prije nego što je bio godinu dana star. Ako bi životinja preživjela prvu godinu, šanse da doživi dvije godine su bile preko 60%. Međutim, do treće godine izgleda da su sve (ili gotovo sve) bivalne ubijene. Ako uzemo u obzir da svinje ne daju dodatne proizvode poput mlijeka ili vune (koji se nazivaju *sekundarni proizvodi*) najučinkovitija strategija njihovog uzgoja za meso je da ih se ubije kad dosegnu punu težinu. Kada svinja dosegne, ili skoro dosegne, punu odraslu težinu, nastavak hranjenja i uzgoja samo bi oduzimao od sredstava koje bi se mogla uložiti u uzgoj novih svinja – a time se ne bi povećala količina mesa koju ta svinja može nositi. Klanje svinja u mlađoj dobi može biti poželjno i zbog njihovog mnogo mekšeg mesa. Jedini dio svinjske populacije koji

se isplati držati na životu nakon što dosegne maksimalnu težinu su krmače, koje se koriste za rasplod, te barem jedna muška svinja da se pari s krmačama. Dob u kojoj se dosegne maksimalna težina ovisi najviše o pasmini svinje. Divlje svinje dosegnu punu veličinu oko osamnaestog mjeseca života. Kod nekih modernih pasmina svinja ovaj proces ponekad traje i samo šest mjeseci. Čini se da su svinje s Resnika dosezale željenu težinu i veličinu za klanje nešto prije dvije godine života, a moguće čak i prije dobi od 12 mjeseci. Što s tiče rasplodnih krmača, čini se da su većinu njih stanovnici Resnika ubijali nešto prije treće godine.

Uzgoj goveda (*Bos*) se izgleda odvijao na potpuno drugačiji način. Većina goveda bi preživjelo dabrano nakon dobi od četiri godine, s tim da se mogu primjetiti dva razdoblja parcijalnog klanja cijele populacije. Iako su goveda s Resnika imala gotovo 70% šanse da nadžive dob od četiri godine, zamjećuju se razlike među dobnim obrascima kod goveda mlađih od godinu dana te kod onih koji su stari od dvije do tri godine. Za razliku od svinja, od goveda se dobivaju i neki sekundarni proizvodi. Uz to što se koristi njihovo meso, oni se koriste se za dobivanje mlijeka te kao životinje za vuču (kola ili plugova). Ove uporabe objašnjavaju dobne obrasce na koje nailazimo na Resniku. Izgleda da je dosta krava bilo ubijeno još dok su bile mlade. Ovo se možda događalo radi kontroliranja broja životinja u stadu u vrijeme kada bi bilo manje hrane, ili možda da bi se jelo delikatesno meso, ili pak da bi ljudi mogli koristiti svo mlijeko bez da dio odlazi na mlado. No najvjerojatnije je da su na Resniku telad ubijali zbog svih spomenutih faktora zajedno. Nažalost, gotovo je nemoguće odrediti koliko je svaki od navedenih razloga bio bitan.

Sljedeću promjena u dobnom profilu vidimo kod goveda u dobi od dvije do tri godine života. Ovo je dob u kojoj su goveda dovoljno odrasla da imaju punu (ili gotovo punu) težinu u mesu. Za ovu grupu se može pretpostaviti da je bila zaklana zbog mesa. Ono što je iznenađujuće je količina životinja koja je doživjela starost. Ovaj stari (ili barem stariji) dobnii obrazac navodi na pretpostavku da su na Resniku gotovo jednaku (ako ne i veću) količinu goveda držali za vuču (kola i plugova) kao i za dobivanje mlijeka i mesa.

Slika 2 pokazuje dobnii profil ovaca i koza (*OvisCapra*) u usporedbi sa svinjama (*Sus*). Ovdje vidimo da je većina životinja doživjela dob od dvije godine, sa ravnomjernim opadanjem njihovog broja nakon toga. Ovo ukazuje da su ih koristili za dobivanje mesa (jer dob od dvije godine je, kao i kod goveda, generalna dob kada imaju najveću količinu mesa) ali možda i vune, pošto je dosta životinja doživjelo dob veću od dvije godine. Za očekivati je da će životinje koje se uzgajaju zbog vune, poput velikih stada ovaca za rasplod i proizvodnju vune, živjeti barem do dobi u kojoj dosegnu maksimalnu težinu mesa ili dulje. Međutim, ako se stado ovaca ili koza uzgaja samo zbog mesa, u dobi kada dosegnu punu težinu u mesu vidjelo bi se opadanje njihovog broja (kao što je bio slučaj kod svinja) zbog klanja viška mužjaka. Čini se da su se u ovom



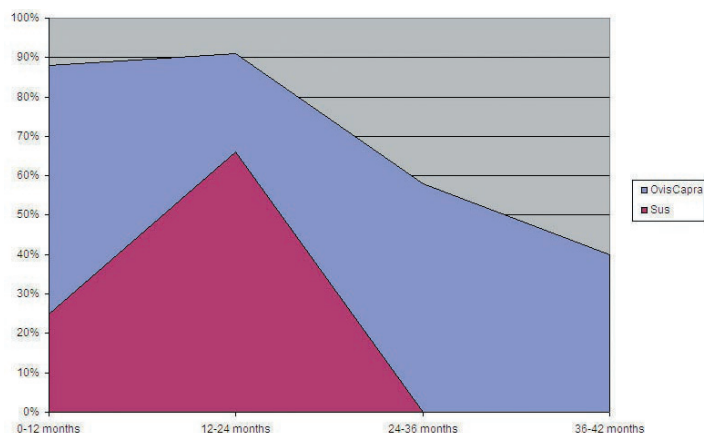
Slika 1: Komparativni dobnii profil za rodove *Sus* i *Bos* na Resniku

Unfortunately, it is nearly impossible to determine the value of each reason. The next change to the age profile is seen between two and three years of age. This is the age at which cattle are old enough to have a full (or nearly full) meat weight. This slaughter group can be assumed to have been killed for their meat. What is surprising is the number of animals surviving into old age. This old (or at least older) age pattern leads us to the suggestion that the cattle at Resnik were kept reasons of traction (carts and ploughs) at least as much (if not more so) as for milk and meat.

Figure 2 shows us the age profile for sheep and goats (*OvisCapra*) as compared with pigs (*Sus*). Here we see most animals surviving until the age of two, with a steady decline in numbers after that. This suggests an interest in meat (with two, as with cattle, being a general 'meat weight' age) but also potentially in wool, as so many animals survive both until and then past the age of two. Animals kept for wool, such as a large flock of breeding and wool-producing ewes would be expected to live to at least meat weight or longer. However, if a herd of sheep or goats is only being kept for meat, then a large drop would be seen at the age of meat weight (as seen with pigs) when the excess males were slaughtered. Here it seems that all animals were kept past the minimum age for ideal meat. If they were being kept largely for milk we would expect the slaughter of a much higher percentage of animals before one year of age. As we do not, this points to a combination of wool and meat production.

Butchery Practices

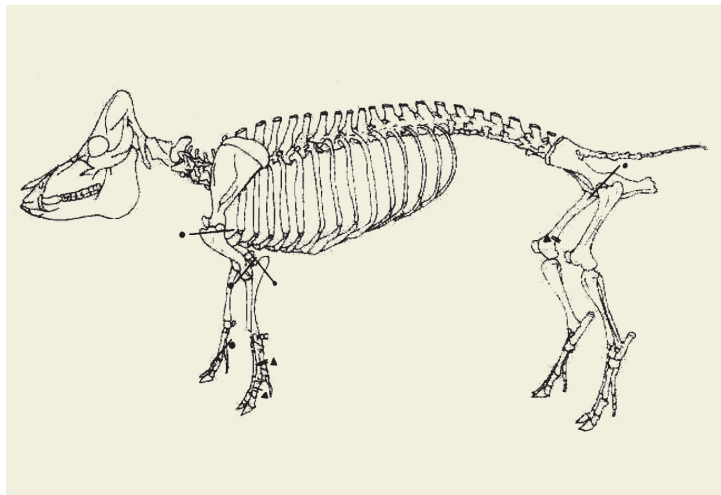
To add to the above discussion for the lack of evidence for the consumption of dogs and horses, the bones of these animals at Resnik do not display any evidence of butchery for consumption. Dog bones show no cutting or chopping marks at all, and horse bones show only small cut marks on one hoof bone from the removal of the skin. In contrast to this, figures 3-4 show the detailed evidence for the butchery of sheep, goats and pigs. In the following figures a code is used for the different types of



Slika 2: Komparativni dobni profil za rodove *OvisCapra* i *Sus* na Resniku

marks. A small square (such as the one on the cow horn) indicates the marks of a saw. A small circle indicates that the bone was chopped, as with a cleaver. Triangles indicate slicing cut marks, as would be made by cutting meat off with a knife. It is from these marks that we can see the way in which the animals at Resnik were butchered.

What is initially interesting is the regular nature of these marks. All three species were dismembered into regular parts, with some differences between the species. Pigs, for example, have no cuts to the head. This may have been roasted or boiled whole, or discarded altogether. The hind leg was cut free by chopping through the pelvis. The leg then shows little evidence of further butchery, as if it was roasted or preserved as a ham. The fore leg show was separated into upper and lower parts, and the hoof cut off at the metapodial. A similar pattern is seen for cattle, sheep and goats, but with greater detail. Unlike with pigs, we know that the heads of these animals were cut off, and cheek meat



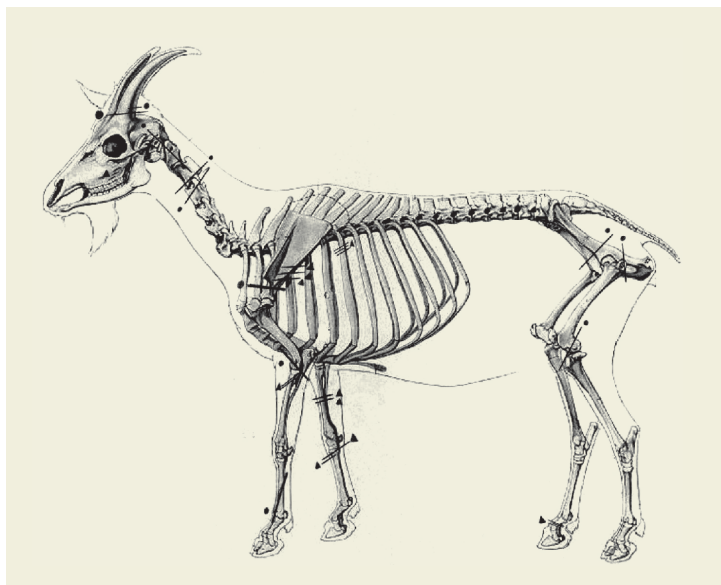
Slika 3: Raspored tragova obrade mesa na životinji roda *Sus*

slučaju sve životinje uzgajale i nakon minimalne dobi za idealno meso. Da su se uglavnom uzgajale za dobivanje mlijeka onda bi bilo za očekivati veći postotak klanja prije dobi od jedne godine. Kako to ovdje nije slučaj, sve ukazuje na kombinirani uzgoj zbog proizvodnje vune i mesa.

Postupci obrade mesa

Kao doprinos gornjoj raspravi o nedostatku dokaza o konzumaciji pasa i konja, navedimo da kosti ovih životinja ne pokazuju nikakve znakove obrade mesa u svrhu konzumacije. Kosti pasa nemaju nikakve tragove rezanja ili lomljenja, dok konjske kosti imaju samo male tragove rezova na jednoj kosti kopita nastalih prilikom odstranjivanja kože. U suprotnosti s ovim, Slike 3-4 pokazuju detaljne tragove klanja i obrade mesa ovaca, koza i svinja. Na idućim slikama koriste se znakovi za različite tipove tragova. Mali kvadrat (poput onog na kravljem rogu) označava tragove pile. Mali krug označava da je kost bila isječena, naprimjer mesarskom sjekiricom. Trokut označava tragove rezanja, nastalih naprimjer zbog rezanja mesa nožem. Iz ovih tragova možemo vidjeti na koji način se obrađivalo meso životinje na Resniku.

Već na prvi pogled zanimanje pobuđuje ravnomjernost ovih tragova. Sve tri vrste bile bi rasječene na ravnomjerne djelove, uz neke razlike među vrstama. Svinje naprimjer nemaju nikakvih rezova na glavi. Ona je možda bila pečena ili kuhana u komadu, ili potpuno odbačena. Nogu košute bi odsjekli tako da bi rasjekli karlicu. Osim toga nema mnogo tragova daljnje obrade noge, kao da su je pekli ili konzervirali kao šunku. Prednja noga bi se razdijelila na gornje i donje djelove, a kopito bi se odrezalo u razini metapodijalne kosti. Sličan, ali mnogo detaljniji obrazac vidi se kod goveda, ovaca i koza. Za razliku od svinja, znamo da su glave ovih životinja bivale odsječene, a meso s obraza i jezik odstranjivani (barem u slučaju krava). Rogovi su isto bili odstranjivani, vjerovatno za umjetničku obradu. I stražnje i prednje noge bile bi odsječene kod ramena i karlice, i podjeljene na gornje i donje djelove. Kao i kod svinja, kopita bi bila odsječena u razini metapodijalne kosti. Ova pravilnost u obradi mesa, u kombinaciji sa dosljednom preciznošću odvajanja udova upućuje na to da je možda postojao profesionalni mesar na Resniku. Ovo podupire i prisutnost svih djelova kostura svake vrste životinje na nalazištu, što upućuje na to da su se sve životinje klale i obrađivale unutar grada.



Slika 4: Raspored tragova obrade mesa na životinji roda Ovis/Capra

and tongue removed (at least for cows). The horns were also removed, presumably for craft work. Both fore and hind legs were chopped free at the shoulder and pelvis, and divided into upper and lower legs. As with pigs, the hooves were chopped off at the metapodials. This regularity of butchery, coupled with the consistent precision of limb disarticulation hints that there might have been professional butchers at Resnik. This is supported by the presence of all parts of the skeleton for each type of animal at the site, which suggests that the animals were being butchered in the town.



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CEFR – Collection de l'ecole Francaise de Rome, Rim

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GCBI – Godišnjak centra za balkanološka istraživanja, Sarajevo

GZM – Glasnik Zemaljskog muzeja u Sarajevu

HAG – Hrvatski arheološki godišnjak, Zagreb

Izdanja HAD-Izdanja hrvatskog arheološkog društva, Zagreb

KZ – Kaštelanski zbornik, Kaštela

Radovi JAZU-Radovi jugoslavenske akademije znanosti i umjetnosti, Zagreb

Obavijesti HAD-a – Obavijesti Hrvatskog arheološkog društva, Zagreb

OA – Opuscula Archaeologica, Zagreb

VAHD – Vjesnik za arheologiju i historiju dalmatinsku, Split

VAMZ – Vjesnik Arheološkog muzeja u Zagrebu, Zagreb

VHAD – Viestnik hrvatskog arheološkog društva, Zagreb