



BECAP 21

Pots in context: Vessels' use, function, and consumption,

research strategies and methodology

Belgrade, 01-02 February 2021

Book of abstracts

BECA3P
Belgrade Conference
on Archaeological Pottery



1838



BECAP – Belgrade Conference on Archaeological Pottery

BECAP 21

Pots in context: Vessels' use, function, and consumption,
research strategies and methodology

Belgrade, 01-02 February 2021

Book of abstracts

Edited by

Jasna Vuković and Vesna Bikić

Belgrade, 2020

Publishers

Faculty of Philosophy, University of Belgrade
Institute of Archaeology, Belgrade

BECAP 21

Organizers

Jasna Vuković, Department of Archaeology, Faculty of Philosophy, University of Belgrade
Vesna Bikić, Institute of Archaeology, Belgrade

Scientific Committee

Staša Babić, Department of Archaeology, Faculty of Philosophy, University of Belgrade
Nikos Efstratiou, Faculty of Philosophy, School of History and Archaeology, Aristotle University, Thessaloniki
Sauro Gelichi, Department of Humanities, Ca' Foscari University of Venice
Vujadin Ivanišević, Institute of Archaeology, Belgrade and Serbian Academy of Sciences and Arts
Sabine Ladstätter, Austrian Archaeological Institute, Vienna
Tihomila Težak-Gregl, Department of Archaeology, Faculty of Humanities and Social Sciences, University of Zagreb
James M. Skibo, Department of Sociology and Anthropology, Illinois State University
Athanassios Vionis, Department of History and Archaeology, University of Cyprus

e-publication: ISBN 978-86-6427-153-0 (FP)
ISBN 978-86-6439-058-3 (AI)

CONTENTS

Belgrade Conference on Archaeological Pottery.....	5
Programme.....	8
Abstracts: Oral presentations.....	13
Abstracts: Poster presentations.....	55

Belgrade Conference on Archaeological Pottery (BECAP) is an international biennial conference aiming at gathering specialists from the field of pottery studies, organized by the Department of Archaeology, Faculty of Philosophy, University of Belgrade and the Institute of Archaeology. Pottery is usually the most abundant material found on archaeological sites, and in many cases, it is the only evidence of different phenomena: lifestyle, every-day activities, communal gatherings, food habits, exchange and trade, religious and ritual practices, symbolic behavior, individual and group identities, and many other aspects of social relations, as well as relations between communities and their environment. BECAP meetings are conceived to explore variety of topics through themed conferences, aimed at addressing specifically formulated problems, from different theoretical and methodological perspectives. Published collections of double-blind peer-reviewed papers presented at the conference will be of significant interest to different fields of archaeology and anthropology: material culture studies, studies of technology, social archaeology, archaeometry, archaeological method and theory, and computer applications in archaeology.

BECAP 21 – Pots in context: Vessels’ use, function, and consumption, research strategies and methodology

Food processing, preparation, and consumption are initial and most important functions of pottery, from the adoption of ceramics

during the early prehistory until the present day. Food/drink processing and preparation have been in focus of pottery studies for several decades, especially after the development of laboratory methods which enabled the identification of foods/drinks prepared, and reconstruction of technological traits related to the intended use of pots. Instead of focusing on archaeometric analyses, however, BECAP 20 is aimed to address the topics related to pottery use and consumption based on archaeological evidence:

- spatial analysis of pottery distribution and the identification of activity zones related to food/drink preparation, storage, and consumption;
- social dimensions of food/drink processing and consumption based on pottery: individual vs. communal consumption, every-day vs. consumption during special occasions; the identity (group, gender, status) of „cooks“ and consumers/users of pots;
- analyses of quantitative data (vessels' sizes and frequencies) in order to make estimations on the number of users/consumers and population size, as well as to assess vessels' dimensional classes, as indicators of individual/group/communal usage of pots within the specific assemblage;
- use-alterations as markers of vessels' use and function;
- indicators of extended use of pots, as a consequence of (low) intensity of production or as an expression of

special „values“ of the pots related to their function or use(rs);

- methodological approaches in pottery analysis related to the above-mentioned issues; the development of methodology dealing with highly fragmented assemblages would be of special interest.

The contributors were invited to address some of the following issues:

- case studies of wide chronological and geographical span dealing with spatial analyses, analyses of quantitative data, and/or considerations about vessels' function;
- theoretical-methodological contributions related to pottery function and food/drink preparation and consumption;
- ethnoarchaeological case studies and experiments designed and conducted to resolve the issues related to pottery use and food/drink preparation.

PROGRAMME

Monday, February 1st

10.00 Official opening of the Conference

Introduction: Jasna Vuković and Vesna Bikić

Prof. Daniel Sinani, vice-dean, Faculty of Philosophy, Department of Ethnology and Anthropology

Dr. Snežana Golubović, vice-director, Institute of Archaeology

I Use alterations and actual use of pots

11.00 Olga Bajčev, How painted pots were actually used? A case study from the Early and Middle Neolithic of the Central Balkans

11.20 Clare Burke, An Integrated Methodology for Understanding the Life Cycle of Starčevo Pottery from Svinjarička Čuka, Southern Serbia

11.40 Pauline Debels and Julien Vieugué, Identifying the function of ancient pottery based on their use-wear: case studies from the European Neolithic (7th-3rd millennium cal. BC)

12.00-12.30 Break

12.30 Vanessa Forte, Use wear and actual use activities: new insights for the interpretation of household and funerary behaviours in Copper Age contexts of central Italy

12.50 Duška Urem-Kotsou, An experimental approach to the study of cooking pots

13.10 Mariusz Błoński, Waldemar Andrzej Moszczyński and Jolanta Sadowska-Topór, Pottery used for the wood tar production found in the Early Medieval settlement at Grodnia, Central Poland

13.30 Vanda Visocka, Storing tar in the pottery?: Striated-rusticated vessel from Vinakalns Late Bronze Age hillfort in the territory of Latvia

14.00-15.00 Lunch Break

II Volume and capacities of pots, and quantitative data as the indicator of function and use

15.00 Manca Vinazza, Calculating vessels capacity to understand pot's function

15.20 András Füzesi, Capacity as quantifiable data of the household activity. Neolithic case studies from the Great Hungarian Plain

15.40 Zsófia Masek, Food Storage Habits of the Late Sarmatian Period in the Hungarian Plain

16.00 Romyana Koleva, Figure out pottery usage

POSTER PRESENTATIONS:

16.20 Marie Philipe, Crossing manufacturing and use-alteration traces on vessels: contribution to a functional typology in Alsace at the dawn of the Iron Age

16.25 Sergio Taranto, Technological and functional traces on pottery husking trays: a research

16.30 Marcin Szeliga, Katarzyna Szwaczko, Marek Stankevič, Katarzyna Gawryjolek-Szeliga, Between the technology, form and function - some archaeochemical reflections on the using of neolithic (LBK) tableware in the upper Vistula basin

17.00 Keynote lecture

James M. Skibo, Illinois State University, **Understanding Pottery Function: Methodological Challenges**

Tuesday, February 2nd

III Integrated research in technology production and use/function

10.00 Marija Svilar, One size fits all: inverted-rim bowls in the Central Balkans

10.20 Ilia Palaguta, On the structure of archaeological and functional assemblages of Cucuteni-Tripolye sites: Precucuteni, Cucuteni A — Tripolye A, BI periods

10.40 Elena Starkova, On the structure of archaeological and functional assemblages of Cucuteni-Tripolye sites: Cucuteni A-B, B — Tripolye BII, CI periods

11.00 Andreja Kudelić, People Behind the Fragments: Use-Related Properties of the Late Bronze Age Pottery

11.20 Miklós Takács, Methodology of identifying regional groups of clay cauldrons in the Southern parts of the Carpathian basin

11.40-12.00 Break

IV Secondary and extended use of pots

12.00 Ina Miloglav, Repairing the pots – evidence of value systems in the past

12.20 Adela Kovács, Cucuteni support vessels, fruit-stands or binocular pots: between functionality and use possibilities

12.40 Mariya Manolova-Voykova, Ceramic forms used for portable lighting facilities in Bulgarian lands 10th – 11th centuries

13.00 Ágnes Kolláth, Foodways and pottery usage in Ottoman Buda

V Contextual and spatial analyses related to function, use, and consumption

13.20 Albert Ribera i Lacomba, Peculiar assemblages in Hellenistic and Roman Pompeii. From the ritual to the catastrophe

13.40 Platon Petridis, *Olla et domus*: Interpreting the history of Late Roman houses based on the study of the pottery

14.00 Sauro Gelichi, Baking bread in Italy in the early Middle Ages

14.20-14.30 Break

VI Vessel function and social relations

14.30 Daniel Albero Santacreu, Manuel Calvo Trias, David Javaloyas Molina, and Jaume García Rosselló, Entangled ceramics: Pottery, spaces and the construction of gender in contemporary rural communities from northern Ghana

14.50 Bianka Gina Kovács, From rural hut to royal castle – Pottery usage in late medieval Transdanubia (Hungary)

15.10 Guergana Guionova, Daily life in Sofia from 17th to 19th century through the ceramics

15.30 Pamela Armstrong, Rick Wohmann and Alessandra Ricci, How a proposed new typology of Constantinopolitan White Wares based on recent excavations at the Monastery of Satyros (Küçükyalı, Istanbul) might reflect changing dining habits

15.50 Biljana Đorđević, Making and Using Bread-Baking Pans on the Stara Planina Mountain

16.10 Goce Naumov, Darko Stojanovski. and Sofija Stefanović, Vessels as social containers: The Relationship between food and pottery in Macedonian Neolithic

16.30 Closing remarks

ABSTRACTS

Oral Presentations

Entangled ceramics: Pottery, spaces, and the construction of gender in contemporary rural communities from Northern Ghana

Daniel Albero Santacreu

ArqueoUIB - Research Group in Material

Culture and Archaeological Heritage

University of the Balearic Islands (Spain)

d.albero@uib.es

Manuel Calvo Trias

University of the Balearic Islands

manuel.calvo@uib.es

David Javaloyas Molina

University of the Balearic Islands

david.javaloyas@uib.es

Jaume García Rosselló

University of the Balearic Islands

jaume.garcia@uib.es

In this presentation, we introduce an ethnoarchaeological research focused on the multiethnic rural communities that inhabit Northern Ghana. By means of quantitative and qualitative analyses of all of the ceramics present in domestic contexts, as well as the study of the spatial distribution of the vessels, we will address the complex interactions existing between pottery (and its multiple uses) and certain functional spaces of the dwellings. Both elements allow us to address how the vessels (and the way in which they are used on a daily basis) are allied with certain spaces in these rural communities in order to actively participate in the construction of gender identity. In addition to addressing the role that utilitarian ceramics play in

such domestic spaces and in the construction of gender, we will pay special attention to two types of vessels that have particular functions: on the one hand, the shrines associated with animist rituals and, on the other hand, the trousseaus that women use to store their grain. These kinds of ceramics stand out due to their social, symbolic and biographical value, and have a high identity load closely associated with religion and the construction of gender. In short, this research has the aim to shed light, both in theoretical and methodological terms, in the study of the complex entanglements existing between pottery, space and social organization among the groups that currently inhabit Northern Ghana.

How a proposed new typology of Constantinopolitan White Wares based on recent excavations at the Monastery of Satyros (Küçükyalı, Istanbul) might reflect changing dining habits

Pamela Armstrong

University of Oxford

pamela.armstrong@campion.ox.ac.uk

Rick Wohmann

University of Oxford

rick.wohmann@gmail.com

Alessandra Ricci

University of Oxford

aricci@ku.edu.tr

The excavations at the monastery of Satyros, Küçükyalı yielded a plentiful and continuous sequence of ceramics from the ninth to the fourteenth centuries.

Early in the study, it became apparent that the assemblage included a considerable range of white-bodied table wares not previously noted elsewhere, and not part of the standard reference work for these wares, ceramics from the St. Polyeuktos excavations at Saraçhane in Constantinople. There is apparently a more complex spectrum of varieties at Küçükyalı.

Their presentation in a comprehensive manner required the establishment of a new typology independent of the Saraçhane typology, disregarding its primary division of the ceramics into glazed and unglazed. A study strategy was worked out whereby a fabric reference system was

established against which all the white wares from Küçükyalı could be referenced, without prejudice to form or decoration. This was achieved through a careful and thorough examination of fabrics of individual vessels. A provisional reference collection of 12 different fabrics was established macroscopically, although one of them accounted for about 70% of the white wares. It is thought that these might represent different productions within the city, with the largest probably made somewhere in the vicinity of the monastery.

For this presentation it is intended to present the ceramics from Küçükyalı within the context of the development of White Wares, in particular how the relationship between Glazed White Ware II of the Saraçhane typology and Late Roman red wares reflect similar dining patterns. However, with the establishment of 'Byzantine' domestic White Wares unrelated to Late Roman red wares there seems to be both a change in the way the vessels were consumed which in turn reflects a change in the perception of the identity of the consumers.

How painted pots were actually used? A case study from the Early and Middle Neolithic of the Central Balkans

Olga Bajčev

Institute of Archaeology, Belgrade

arheolga@gmail.com

Because of its elaborated ornamentation and visual expressiveness, Early and Middle Neolithic painted pottery of the Central Balkans is usually regarded as display pottery, or pottery used as tableware for serving and food consumption. A recent use-wear analysis of painted pottery from the site of Starčevo-Grad (5900 - 5500 BC) in Southern Banat, Serbia, challenged these assumptions, by showing that painted vessels had different roles in culinary practices. Presence of both abrasive and non-abrasive traces on the interior and exterior vessel surfaces suggested that in this community painted vessels were used in different activities of food processing including storage and food preparation. In this paper, I want to elaborate on this topic by introducing new results of the use-alteration analysis of painted pottery from four sites in Serbia: Grivac, Tečić, Pavlovac-Gumnište, and Pavlovac-Čukar.

Pottery used for the wood tar production found in the early medieval settlement at Grodnia, Central Poland

Mariusz Błoński

The Institute of Archaeology and Ethnology PAS (Polish Academy of Sciences)

mariusz.polon@wp.pl

Waldemar Andrzej Moszczyński

The Institute of Archaeology and Ethnology PAS (Polish Academy of Sciences)

amoszcz@iaepan.edu.pl

Jolanta Sadowska-Topór

The Institute of Archaeology and Ethnology PAS (Polish Academy of Sciences)

topor@iaepan.edu.pl

The village of Grodnia is located in the western part of Mazovian Voivodeship, about 100 km northwest of Warsaw. Near the village, on the age of morainic plateau, about 10 m above Skrwa River flat plane there is an early medieval settlement complex, consist of the stronghold and the external settlement. The excavations on both sites were carried out in the first half of the 1960 by Wojciech Szymański from the Institute of History of Material Culture of the Polish Academy of Science (contemporary Institute of Archaeology and Ethnology PAN). During those examinations over 100 features from the Bronze Age (Lusatian culture), the early Roman period and early Middle Ages were discovered.

The assemblage of pottery from Grodnia provided the basis for dating the stronghold to the 12th-13th century. The early medieval settlement functioned before the foundation of the stronghold (7th-8th century) and partly contemporaneous with it (11th-13th century).

On some of the early medieval ceramic vessels from the settlement at Grodnia, there are residues of a black tarry substance. Analogous accumulations occurred on several fragments of bases with punched holes. Such traces are commonly interpreted as the remains of wood tar. In the case of one vessel which contained porous lumps of pumice consistency, we presumably have here the final product of this substance. The described vessels did not differ in terms of fabric, form, and decoration from the other pottery found in Grodnia. The location of the features where vessels with traces of tar were found shows the area in the settlement used for wood tar production.

An Integrated Methodology for Understanding the Life Cycle of Starčevo Pottery from Svinjarička Čuka, Southern Serbia

Clare Burke

Institute for Oriental and European Archaeology

Austrian Academy of Sciences, Vienna

Clare.burke@oeaw.ac.at

The Neolithic period represents an immense time of socio-economic change in human development, including the introduction of new agricultural practices and settled ways of life, and importantly, the introduction and widespread use of fired ceramic containers which represent a new technological and cultural concept in relation to the use of clay.

This paper will present the integrated analytical methodology being utilised to understand the ceramic production and consumption of Starčevo pottery from the new excavations at Svinjarička Čuka, southern Serbia. The aim of this work is to not only characterise the production strategies of Starčevo potters, but to additionally examine the relationship between production and consumption through investigation of correlations between paste recipes, vessel types, and pottery use.

Although in its early stages, typological work has already highlighted a range of shapes with a clear prevalence of jar types within the assemblage, several examples of which display distinctive pitting and abrasion on the lower portions of their interior, most likely related to their use. Additionally, macroscopic observations have already indicated the presence of multiple ceramic pastes but with some degree of correlation between raw material

choice and particular vessel types offering us the opportunity to examine if these pastes relate to different learned potting methods and/or to the function of the pots they were used to make.

Our planned methodology will bring together typology, macroscopic examination, thin section petrography, scanning electron microscopy, residue analysis and spatial analysis of deposition to understand the full life cycle of the Starčevo pottery at Svinjarička Čuka, from its construction, decoration, and firing, to its use, and final deposition.

Making and Using Bread-Baking Pans on the Stara Planina Mountain

Biljana Đorđević

National Museum, Belgrade

b.djordjevic@narodnimuzej.rs

The bread-baking pans use on Stara Planina Mountain turned from a regular, almost daily activity, to an exotic, exclusive event organized occasionally. This is the result of the fact that the bread-baking pans have not been made for almost a half of the century, as well as there is a less woman with adequate knowledge to make this unique type of ceramic vessel and bake bread in it. Both require specific knowledge and skills recognized as vanishing elements of the intangible cultural heritage. The bread-baking pans production and use are also important for ethnoarchaeological researches that have been carried out in the village of Gostuša on Stara Planina Mountain several times. Some of the results of that researches are the topic of this paper.

**Identifying the function of ancient pottery based on their use-wear:
case studies from the European Neolithic (7th-3rd millennium cal. BC)**

Pauline Debels

Paul Valéry Montpellier 3 and Paris 1 Panthéon-Sorbonne Universities

pauline.debels@gmail.com

Julien Vieugué

CNRS, French Research centre in Jerusalem

Julien.VIEUGUE@cnrs.fr

Because they are likely to inform about food and medicinal practices as well as the craftsmanship of the prehistoric population, the uses of potteries have interested archaeologists early on. The functional studies of ceramic assemblages, based on the determination of use-wear traces have paradoxically not experienced the same spectacular development as those undertaken for bone and lithic industries. Appeared in the United States in the 1970s and 80s, this type of analysis did not really multiply in Europe until the 2010s.

We will present the results of the use-wear study of around thirty ceramic assemblages coming from European Neolithic (7th-3rd millennium BC). The analysis of a substantial number of ceramics (several thousands) combined with the construction of extensive experimental reference collections (around 50 vessels) have led to significant methodological advances, regarding the identification, the determination and interpretation of use traces formed on the potteries' surfaces. Whereas post-depositional alterations (erosion, encrusting...) cover the entirety of the surfaces and sections of shards, the use traces, are restrained on specific parts of the

shards, possibly leading to identification. A great variety of traces have hence been examined on the Neolithic potteries, among which the traces by addition of matter (external deposition of soot, internal carbonised residues, etc.), modification of surface (coloration and cracks) and removal of matter (abrasion, peeling, etc.).

The various visible traces on the archaeological record have systematically been examined on a macroscopic scale (to the naked eye and under binoculars) before being compared to the traces observed on the experimental pots, leading to a better understanding of their origins. This comparative lecture of traces has led to hypothesis on (i) the initial content of potteries, and moreover, the products consumed during the Neolithic (fermented beverages such as beer), (ii) on the *modus operandi* of potteries (mobile vs. still vases, hung vs. sitting vases, etc.). This gives insights on the modes of storage, transport and preparation of products.

**Use-wear and actual use activities: New insights for the interpretation
of household and funerary behaviours in Copper age contexts of
Central Italy**

Vanessa Forte

Department of Civilisations and Forms of Knowledge, University of Pisa

vanz.forte@gmail.com

This talk focuses on the application of use-wear analysis on ceramic vessels in order to investigate their use in household activities and funerary occasions. Only recently the study of traces associated to use activities on ceramic items is receiving growing attention in archaeology; conversely, several researches in the ethnoarchaeological field provided interesting data regarding alteration processes that can affect pottery surfaces after prolonged use. The archaeological ceramics are usually approached with descriptive analysis and this can limit the interpretation of the different use and post-depositional processes that actually overlap on the ancient ceramic vessels. This presentation discusses an approach which integrates the ceramic use-wear analysis with the principles of tribology in order to identify and interpret the main alteration processes on vessels in household and funerary contexts. The main reason to apply the tribological approach on pottery relies on achieving a wider comprehension of wear mechanisms affecting ceramic surface and minimize the risk of mistakes due to ambiguous traces morphologies, as for example with the abrasive wear; indeed, the latter is one of the most diffused class of traces found on pottery and can be caused by different use activities. To provide a detailed description of use-wear and ensure integration of these data with the

archaeological analysis, the results of a research study carried out on Copper Age communities of central Italy are presented. The dataset focuses mainly on the results of an experimental framework aimed to set a reference collection of use-wear devoted to reconstruct daily activities, ritual behaviours and social occasions of communities settled in the current area of Rome between the 4th and the 3rd millennium BC.

Capacity as quantifiable data of the household activity. Neolithic case studies from the Great Hungarian Plain

András Füzesi

Eötvös Loránd University, Faculty of Humanities, Budapest

fuzesia@gmail.com

The household as a basic social unit of prehistory involved different tasks including accumulation, preservation, reproduction and inheriting of material and non-material values. The same household as an analytical unit of archaeological research has many problems. Many of these derived from the projection of those processes into the material culture. The ceramic is one of the determinative parts of the material culture not only in quantity but also in quality. The exact definition of household units and the reconstruction of the complete range of household items are prevented in most cases by formation processes of archaeological assemblages, and the fragmentation of artifacts. Among the few fortunate cases, there are remains of burnt houses or intentionally constructed structural depositions.

The presentation tries to evaluate the compositions and changes of the Neolithic vessel inventories based on four assemblages came from different part of the Great Hungarian Plain. The first is a burnt house from the Early Neolithic site of Szajol-Felsőföld. The second is a two-storey building from the Late Neolithic tell of Berettyóújfalú-Herpály (House 11). The third is a special deposition of a Late Neolithic well came from the horizontal settlement of Polgár-Csószhalom, and the fourth example is the vessel collection of Öcsöd-Kováshalom (240 pieces), dated to the transition period from the Middle to the Late Neolithic. The comparative analysis of these assemblages provides an opportunity to outline the temporal changes

of the household activities. I focus on just one of the possible aspects of analysis. The measuring of the capacity of whole vessels results in quantifiable data. The main question is: how can we use the sequences of capacity data for identifying functional categories in vessel inventory, for estimation of household size or storage capacity, for reconstruction cooking processes or consumption opportunities?

Baking bread in Italy in the early Middle Ages

Sauro Gelichi

University of Ca' Foscari, Venice

gelichi@unive.it

Between Late Antiquity and the Early Middle Ages changes are recorded in the bakery industry. An archaeological trace of this change would be the increase in the number of *clibani* (portable ovens) in the archaeological record, even in urban areas. *Clibani* is not at all an unknown form in the Roman period, but its fortune seems to grow only since Late Antiquity. The aim of this contribution is to analyse this form and, through archaeological traces, to establish its exact function in the domestic economy. Then to verify its geographical distribution according to the type of context (urban/rural). Finally, to evaluate the possible diffusion of this typology outside the Italian peninsula, in particular in the areas of Byzantine culture.

Daily life in Sofia from the 17th to 19th century through the ceramics

Guergana Guionova

CNRS, LA3M, Aix-en-Provence

guionova@msh.univ-aix.fr

The study of the pottery found during archaeological excavations of urban areas allows discovering some aspects of the residents' daily life. Thus, the furniture of the 16th to 19th century of Sofia gives information on the food preparation, consumption, storage of water and food, heating modes and concern about the decoration which are illustrated through the forms of local production. Vessels that were coming from far away were part of the heritage and were used for special occasions, especially for table service. The rarity of certain forms or their lack lets guessing the use of other materials present in daily life. This data is comparable with the material known elsewhere in the Balkans from the Ottoman period.

Foodways and pottery usage in Ottoman Buda

Ágnes Kolláth

Research Centre for the Humanities, Institute of Archaeology, Budapest
kollath.agnes@btk.mta.hu

The paper presents the evaluation of thirteen, mainly Ottoman Age (1541–1686) pottery assemblages from the Szent György Square, the southern middle part of Buda Castle (Hungary). Emphasis will be on the varying percentage of certain vessel-types with different functions, on table sets (or whether they are identifiable in this material) and on traces of use, damage, and repair on the shards. These data supplemented by contemporary written sources and ethnographic observations can give us a better picture of the foodways and the role of pottery in Ottoman Buda.

Cucuteni support vessels, fruit-stands or binocular pots: between functionality and use possibilities

Adela Kovacs

Botoşani County Museum

adelakovacs.museum@gmail.com

Cucuteni culture is one of the well-known Neolithic cultures in Europe. The ceramic objects are very diverse and exceptional from the artistic point of view, and most of them wear traces of painted patterns. Several types of vessels on hollow feet with slightly modified shapes will be presented. The typological series for this particular type of vessel is not very large: they have relatively cylindrical body with a flaring rim. Most of them have symmetrically positioned perforations. Usually, these vessel types were associated with ritual or religious behaviour, and they are present in museums' collections and published papers and reports in a great frequency. In the spring of 2014, an archaeological experiment was conducted with the aim of reproducing this type of vessel. The experiment aimed at the reconstruction of their use was conducted on an experimentally produced vessel, as well as on the recently made replica obtained in a shop. By attaching leather on the vessels' rims, we made experiments for reconstructing possible production of sound, and consequently music. We argue that a possible function of these vessels could have been usage as a means for creating sounds, i.e. drums.

**From rural hut to royal castle – Pottery usage in Late Medieval
Transdanubia (Hungary)**

Bianka Gina Kovács

Research Centre of the Humanities, Institute of Archaeology, Budapest
kovacs.bianka@btk.mta.hu

The presentation will focus primarily on social aspects about late medieval pottery, with regard to one of the large regions of Hungary, Transdanubia. Since the last summary on this topic in 1987, we know a lot more ceramics from this era, thanks to excavations and recent publications. Were there differences between the cooking of the high and lower-class based on pottery? Do the ceramics tell us about any differences between the eating of social classes? Were there types of vessels that were only used by certain social strata? Were pots of the same size used in the rural and urban households or in castles? Among others, I will look for answers to these questions with the help of already published and new finds.

Figure out pottery usage

Rumyana Koleva

Department of Archaeology, Faculty of History

University "St. Kliment Ohridski", Sofia

rukoleva@gmail.com

Measuring capacity of vessels may contribute to the understanding of their usage. Although similar in shape jars differ significantly in their dimensions and capacity. The analysis of vessels' capacity and data about related site structures can help us suggest usage. The suggested report will present issues about the capacity and usage of vessels found at a Middle Byzantine settlement near the village of Zlatna livada, Bulgaria. Metric data can contribute to solving questions of some special ceramic forms function like candlesticks or lids. This will be presented too. Finally, dimensional data will be compared with the particularity of form and some suggestions about vessels' functionality will be made.

**People Behind the Fragments: Use-Related Properties of the Late
Bronze Age Pottery**

Andreja Kudelić

The Institute of Archaeology, Zagreb

andreja.kudelic@iarh.hr

The paper will present the research results concerning use related properties of the Late Bronze Age pottery from the area of northern Croatia. The analysis was carried out on findings from the remains of several Urnfield Culture settlements located in different micro-regions and dated between the 14th and 9th century BC. Since the tradition of processing the archaeological ceramics in these areas is deeply rooted in the culture-historical approach, the aim of the study is to apply a different strategy to the processing of the same material in order to gain insight into more social and economic aspects of prehistoric communities who made and used ceramic vessels. In that regard, the main objective is to identify functional performance characteristics considering the links between technology, morphology, vessels' sizes and function, as well as use-alterations as markers of vessels' use. However, pronounced variability in vessel shapes, as well as a high level of fragmentation, represent a limitation in carrying out such analysis, and the imbalance of the context and depositional processes of pottery findings make the interpretation more difficult. Therefore, in addition to the results, the methodological and interpretative challenges in pottery analysis related to the above-mentioned issues will be highlighted, especially those concerning the comparative and correlative considerations of the use-related properties of prehistoric pottery.

**Ceramic forms used for portable lighting facilities in Bulgarian lands
10th – 11th centuries**

Marija Manolova-Voykova

Varna Archaeological Museum

mara_manolova@yahoo.de

Ceramic lamps and candlesticks were almost unknown to Bulgarian culture until the end of the 10th century. The only exception was a small number of imported Byzantine lamps that reached mainly the towns on the Western Black sea coast and less frequently the capitals of the First Bulgarian Kingdom Pliska and Veliki Preslav. The complete lack of products that were designed especially for lighting fixtures raises the question of the ways in which an average Bulgarian home was illuminated in the early Middle Ages. One possible answer to this problem is given by a few ceramic vessels, additionally adapted for portable lighting facilities from Pliska, Veliki Preslav and the mediaeval settlement of Balchik on the Black Sea coast.

Food Storage Habits of the Late Sarmatian Period in the Hungarian Plain

Zsófia Masek

Institute of Archaeology, Research Centre for the Humanities, Hungarian
Academy of Sciences, Budapest
masekzso@gmail.com

The main idea of the presentation builds upon a complex evaluation of the ceramic material of a large scale rescue excavation of a settlement located on the left bank of the Tisza river (Rákóczifalva, Jász-Nagykun-Szolnok County, Hungary). The fact of continuous use of this site from the 4th until the 6th centuries is of particular importance. Moreover, the settlement material from these centuries has been already fully processed. The finds are characteristic for the central areas of the Hungarian Plain, but the tendencies of the transformation processes in the assemblage can be exceptionally analysed within the material of one single site.

The methodology of the pottery evaluation is based on the use of ceramic refitting. Analyses of quantitative data on vessel sizes imply to the drastic changes in the 5th century: transforming economic backgrounds and changing social dimensions. Distinct elements of this process are that the amount of storage vessels and bowls decreases significantly after the late Sarmatian period, while in the Gepidic period the ceramic material is dominated by pots. In general, the volume of vessels is significantly reduced, referring to that not only storage traditions but also practices related to food and drink processing and consumption have changed.

The practices of storage in the rural communities of the Sarmatian Barbaricum is methodologically poorly researched, even though vast quantities of features used for storage purposes have been discovered and one of the most common form type of pottery is the storage vessel from untempered fine ceramics. In the second part of the presentation, this issue would be addressed: the vessel functions, their use and their spatial distribution in the settlements. The better we understand this whole system, the closer its disappearance leads us to understand in depth the early medieval transformation processes of the rural settlements.

Repairing the pots – evidence of value systems in the past

Ina Miloglav

Faculty of Humanities and Social Sciences

University of Zagreb

imiloglav@ffzg.hr

In addition, to reconstruct and fully understand operational and behavioral chain in the life-cycle of an artefact it is essential to consider marks that indicate the life of an artefact in a secondary context, where it can no longer be used for the primary function. Reused objects affect the total assemblage interpretation and have to be considered as part of the economic, social and ideological context in which the technological choices were made. They continue to participate in a series of new activities and their life history enters in different stages of circulation which are often unrelated to their original purpose. Those marks are especially recognizable in repairing the pottery, which is often completely ignored and usually not even recorded when processing and interpreting ceramic assemblages. However, those signs of physical transformations make it possible to investigate changes in the social meaning of an object, about its value for the owner or community and gives us valuable information about changes in context and use of the artefact. The paper presents results and interpretation of pottery repairs from two sites in Eastern Croatia belonging to the Vučedol culture (Late Copper Age). The results have shown that the most frequently repaired form is the type of bowl which has the highest rate of standardization, production, and use. These bowls also require more labour input, and they are time-consuming for the potters. The fact that some

vessels were mended more frequently than others may indicate that they had a higher value for the individuals or society. It can be presumed that their value was not only in economic need for a specific product but more likely in a combination of social, aesthetic and technological values.

Vessels as Social Containers: The Relationship between food and pottery in Macedonian Neolithic

Goce Naumov
University Goce Delčev /Center for Prehistoric Research, Skopje
gocenaumov@gmail.com

Darko Stojanovski
Skopje
stjdrk@unife.it

Sofija Stefanović
Laboratory for Bioarchaeology, Department of Archaeology,
Faculty of Philosophy, University of Belgrade
sofijastefanovic17@gmail.com

The major function of pottery is associated with the food preparation and its consumption. But besides its primary roles the vessels are also representative items not rarely involved in social and symbolic actions where the status of the individual or community were emphasized. The food resources and ingredients were stored for its culinary purposes, but their accumulation in a dwelling was regarded as a reference for wealth that was commonly performed through the pottery used for their storage, cooking, serving, offering or display. Consequently an analysis of food remains in dwellings and those preserved inside vessels in the prehistoric settlements is necessary in order to determine the social relationship between food and pottery. In this regard such approach in Macedonian archaeology it is still in its early stage although analysis of food remains are part of the fieldwork and laboratory research since 1960s. Therefore this paper will give a general overview of prehistoric food remains in Macedonia and several case studies will be highlighted in order to demonstrate the relationship between food remains and pottery on particular Neolithic sites.

On the structure of archaeological and functional assemblages of Cucuteni-Tripolye sites: Precucuteni, Cucuteni A — Tripolye A, BI periods

Ilia Palaguta

Saint Petersburg Stieglitz State Academy of Art and Design, Faculty of Design, Art History department, St. Petersburg
ipalaguta@yandex.ru

In the ceramic studies, it is possible to distinguish the terms “functional” and “archaeological assemblage”, which may be referred to as the set of pottery used for economic and cultic activities vs. the total amount of pottery deposited in a settlement stratigraphic level.

The functional sets within archaeological assemblages may differ: the proportions of different pottery shapes from the layers and from individual settlement structures may be different and depend on the deposition processes. Therefore, when comparing materials from different sites and settlement structures one can come upon assemblages that are widely different in content. There are some regularities in the distribution linked with the quantitative proportions of different pottery shapes.

Functional assemblage of Precucuteni time is formed by the influence of containers of non-preserved organic materials, such as bark and wooden containers, and baskets. It can be traced by the presence of different kinds of “technical” ornamentation. This was the basic set of pottery that evolved during the further periods of Cucuteni-Tripolye culture, and is related to the household activities and economy.

The changes occur during the Cucuteni A – Tripolye BI period. They are a consequence of the change in pottery technology, the processes of

differentiation of local groups, and of the influence of Balkan-Carpathian region.

Studying of the pottery technology also gives possibilities to define the substrate components of an assemblage, imitative products and “imports”. Examples from different local variants of Cucuteni A – Tripolye BI sites demonstrate the mixing of different ceramic traditions within a common functional assemblage. The pottery with shell admixtures (of ‘Cucuteni C-type’) indicates the presence of bearers of non-common tradition in Cucuteni-Tripolye sites or an exchange processes with the cultures of the Steppe zone.

Olla et domus: Interpreting the history of Late Roman houses based on the study of the pottery

Platon Petridis

National & Kapodistrian University of Athens, Department of Archaeology
and the History

ppetrid@arch.uoa.gr

A stereotypical approach to the ceramic material, however precise it may be, can easily lead to incorrect conclusions. Architecture and Pottery are two aspects of the same coin that we cannot see separately. The historical information deriving from the study of the pottery from use-related or discard contexts of a residential complex should be directly linked to the investigation of its stratigraphy and the careful interpretation of all the data provided by an excavation. This becomes more critical for periods such as the second half of the 6th and a part of the 7th century, or as we call it, *The Period of Transformations*, while Late Roman society is gradually transformed into Medieval. Starting with the case-study of two houses with different stratigraphy and quite common ceramic findings, we will try to show how the study of pottery cannot be distanced from the study of stratigraphy for the interpretation of the historical evolution of residential spaces.

Peculiar assemblages in Hellenistic and Roman Pompeii. From the ritual to the catastrophe

Albert Ribera i Lacomba

Institut Català d'Arqueologia Clàssica, Valencia

ariberalacomba@gmail.com

About Pompeii we could show a lot of peculiar pottery assemblages. They cover the long time from the Samnite/Hellenistic period until the very famous eruption of the Vesuvius. After 15 years of experience at a big Insula in the Regio VII, very near the forum and the macellum, we propose to present some different groups of pottery.

The most of the pottery from Pompeii come from the layers that covered the town in 79 AD. But before there are a lot of histories that we can explain by the study of pottery assemblages.

The older is a part of a large pit, whose fill dated to de mid-2nd century BC. It was excavated in 2011. The pit had been dug in the geological layer. It does not appear to be a domestic rubbish tip, owing to the conspicuous repetition of certain Italic cooking and table ware types, indicating a specific use/consumption and selection. Besides, the reiterative presence of some peculiar faunal remains (a great amount of goat/sheep horns), would point to a kind of ritual feast. In this moment the space around was empty of buildings and it would be dedicated to public and religious functions. This big deposit must be connected with the end of a sacred area and the beginning of economic activities related to the perfumes production.

In this area other ritual assemblage was related to the ceremonies of the end of the perfumes manufacture. This group fulfilled a small pool. A

white gloss *lagynos* had been placed in the bottom and a lot of vessels of black gloss pottery appeared as well. The end of the 2nd century B.C. must be the date of this intentional deposition.

We can relate other not intentional big assemblages with an unknown earthquake dated in Claudian period and with the well-known of Neronian phase.

On the structure of archaeological and functional assemblages of Cucuteni-Tripolye sites: Cucuteni A-B, B — Tripolye BII, CI periods

Elena Starkova

State Hermitage Museum, Department of Archeology of Eastern Europe and
Siberia, St. Petersburg
astarkova2012@yandex.ru

The formation of culture during the Cucuteni A-B, B — Tripolye BII, CI periods occurred under the influence of complex processes of inner migrations when during the middle of the 4th millennium BC the population from the Siret-Prut interfluvium moved to the territory of the Upper and Middle Dniester and Bug-Dnieper interfluvium. As a result, a large-scale cultural community was formed, one of the main indicators of which was pottery with polychrome and monochrome painting.

By the period of Tripolye BII, the Tripolye-Cucuteni ceramic assemblage consisted of two main pottery groups, which, according to technological features, can conditionally be divided into a painted and a “kitchen” ware. The ceramic assemblage of Tripolye BII-CI included a functional set of pottery for household and ceremonial usage. The percentage of painted pottery significantly prevails over the “kitchen” ware. Coarse “kitchen” vessels, apparently, were intended exclusively for the preparation and short-term storage of food. Statistical analyses of pottery types of Tripolye BII-CI settlements revealed the dominance of 4 painted vessel shapes: “amphoras” for liquids, beakers and conical bowls for personal use, and pear-shaped vessels with lids for long-term storage. Ceremonial pottery (zoomorphic vessels and “binoculars”) are unique finds.

The completeness of the sample, excavated area, the spatial distribution of finds in dwellings, pits and in layers, and the specifics of selection of material for museum collections should also be considered during the statistical analyses. The percentage of pottery shapes within the buildings can vary significantly due to the peculiarities of the cultural layer formation processes.

There are some differences between ceramic assemblages of the certain region expressed by the ratio of pottery shapes. There are some specifics of so-called “contact zones”, where sometimes there is a mixture of the Tripolye population with the population of neighboring cultures. Thus, the ceramic assemblage is the most revealing indicator that reflects all the cultural and economic processes, which took place during the development of Tripolye society.

One size fits all: Inverted-rim bowls in the Late Neolithic of the Central Balkans

Marija Svilar

Belgrade

marijasvilar@yahoo.com

One of the most characteristic ceramic forms in Late Neolithic pottery assemblages are medium-sized shallow bowls, with an inverted rim. Although they may be considered a subtype of hemispherical bowls, since they share the same basic shape, the essential difference is in the slightly restricted orifice, apparently designed to avoid food spilling. Therefore, it is generally considered that their primary function was related to the preparation and consumption of foodstuffs. It is further reasonable to assume that due to their high prevalence in Central Balkans (frequencies range from 60 to 70 percent of the total ceramic assemblage) such artifacts played an important role in both daily life and ritual activities. Thus, the emergence of inverted-rim bowls in Late Neolithic, which seem to have remained largely the same in both size and form throughout the phase of Vinča D, is an issue of particular importance. Moreover, the fact that there is considerable uniformity in terms of shape, rim diameter and wall thickness deserves special attention, since these features may also directly relate to their function and use. This study presents the results of an analysis of inverted-rim bowls from two Late Neolithic pottery assemblages at the territory of the central Balkans. The vessels are analyzed from a functional perspective, which includes an examination of morphological and formal attributes, use-wear traces, and contextual analysis.

Methodology of identifying regional groups of clay cauldrons in the Southern parts of the Carpathian basin

Miklós Takács

Inst. of Archaeological Science, Catholic University Péter Pázmány
Institute of Archaeology Eötvös Loránd, Research Centre for Humanities
Takacs.Miklos@btk.mta.hu

The aim of our presentation is to give an overview of one aspect of the regionally based analysis and interpretation of the 11th - 13th c. clay cauldrons formed on slow potter's wheel. The archaeological material of the Southern parts of the Carpathian basin gives an excellent ground for the analysis of given type as there are four groups of clay cauldrons in the given area, to be separated according to the shape of the two halves of their body, the way how the rounded bottom and the side walls were joined together, as well as the form of the rim and the handles for suspension. These four groups are characteristic for four little geographical regions. The first two groups contain findings of cauldron from Banat. The cauldrons from the south-eastern part of the Banat form the first; the cauldrons from its south-western parts form the second group. The third group is characteristic for the Northern and the Middle parts of the Bačka. The fourth group is actually a southern edge of a bigger region of the central parts of the Great Plain with an emphasis on the river Tisza as the axe of the given region. The cauldrons of this fourth type appear in Northern Bačka and Banat, and also till the line of the city of Szolnok in the middle valley of the Tisza

The last part of our presentation will deal with the problems of usage, as well as the chronology of the vessels belonging in one of the described four groups. We will also raise the question of whether these regional groups are to be interpreted as markers of the purchase areas of

specified workshops our groups of workshops. Similar questions were formulated during the evaluation of two regional groups of the central parts of the Carpathian basin, having the middle course of the Danube or Tisza as the axe of their spread.

An experimental approach to the study of cooking pots

Duška Urem-Kotsou

Democritus University of Thrace, Department of History and Ethnology
durem@he.duth.gr

The systematic study of neolithic pottery from the settlements in Northern Greece points to gradual changes in cooking and consumption practices in the course of the Neolithic period in this area, indicated by changes in pottery morphology, use, and overall style. In contrast to the later phases, cooking pots are rarely reported in assemblages dated to the early period of the Neolithic in Northern Greece. Regardless of the period, however, Neolithic vessels used over fire are not always readily identified, despite of developed methodology for their identification. This paper presents the results of experimental study on ceramic cooking pots and the use-alteration traces that different cooking techniques and foodstuff leave on internal vessels' walls. The aim of the experimental study was twofold: a) to better understand cooking practices in the Neolithic period when ceramic vessels began to be used for processing of food, b) to record the variety of use-alteration traces formed by different foodstuff and thus facilitate the identification of vessels used for cooking food. Experimental vessels were used for boiling variety of food of plant and animal origin, either separately or together, for baking bread and parching wheat. In addition, soot depositions on the vessels' external walls produced by fuel were also monitored in order to approach the variability in temperatures the vessels were exposed and thus the food was cooked.

Calculating vessels' capacity to understand pots' function

Manca Vinazza

Faculty of Arts, Department of Archaeology, University of Ljubljana

manca.vinazza@ff.uni-lj.si

In our paper, we will represent the method of calculating vessels' capacity based on the 3D model. A simple procedure can help us to deal with numerous examples. Our study case is Bronze and Iron Age settlement pottery from well-known sites in Nord-eastern Italy, Western Slovenia and Istria in Croatia. We will try to recognize changes through time and explain them on the basis of social criteria and limitations of archaeological data.

**Storing tar in the pottery?: Striated-rusticated vessel from Vīnakalns
Late Bronze Age hillfort in the territory of Latvia**

Vanda Visocka

Faculty of History and Philosophy

Institute of Latvian History

University of Latvia

vanda.visocka@lu.lv

The poster is dedicated to ceramic vessels with striated-rusticated surface treatment in the collection of the Vīnakalns hillfort, located in the Lower Reaches of river Daugava, Latvia. Striated-Rusticated pottery are vessels whose surface has been “smoothed” with a tool like a small brushwood bundle which makes it striated and afterwards thin clay paste has been added on the top of it. This kind of surface treatment is not typical in the settlements of Lower Reaches of river Daugava overall. In the ceramic assemblage of Vīnakalns, there are three sherds with such a surface treatment found. From visual properties and context, these sherds come from one vessel. As this vessel is unique in the assemblage, it was thought to be very beneficial to determine the function and the properties of this vessel. In this paper, the function and the structure of the clay matrix, as well as tempering traditions of this vessel, are analysed and compared. Two analytical methods are used for this purpose - the molecular analysis of the absorbed residues by GC-MS and ceramic petrography.

ABSTRACTS

Poster Presentations

**Crossing manufacturing and use-alteration traces on vessels:
contribution to a functional typology in Alsace at the dawn of the Iron
Age**

Marie Philippe

ANTEA-Archéologie

UMR 6298 ARTEHIS

marie.philippe@antea-archeologie.com

Basing typologies on drawings of sherds deletes the most important facet of these objects of the everyday life: their utility. A statistical analysis of Hallstatt ceramics from Alsace demonstrates however that morphology, technology, and decoration are linked together (Philippe 2018 et 2019). They are a cluster of evidences, which combination leads to a global and intuitive partition of the containers.

Relying on these demonstrations, a huge set of 11900 sherds from a settlement in the north of Alsace is classed into 13 groups (Vergnaud *et al.*, in progress). This typology reflects potters' intended function (Skibo 2013) and consumers' demands. Moreover, an unexpected result is that use-alteration traces are related to the types. It confirms the adaptation of technology and aesthetics to the actual function of the vessels.

Similar use-alteration traces are observed on the same kind of containers on other settlements in eastern France; it suggests that this typology could be used at a regional scale.

Between the technology, form, and function - some archaeochemical reflections on the using of neolithic (LBK) tableware in the upper Vistula basin

Marcin Szeliga

Institute of Archaeology, Maria Curie-Skłodowska University in Lublin
marcin.szeliga@poczta.umcs.lublin.pl

Katarzyna Szwaczko

Department of Organic Chemistry, Maria Curie-Skłodowska University in Lublin
katarzyna.szwaczko@poczta.umcs.lublin.pl

Marek Stankevič

Department of Organic Chemistry, Maria Curie-Skłodowska University in Lublin
marek.stankevic@poczta.umcs.lublin.pl

Katarzyna Gawryjołek-Szeliga

Lublin Museum

One of the most characteristic features of the LBK pottery from the drainage basin of the upper Vistula is the clear distinction between the so-called table and kitchen vessels. They differ in the methods of their production and technological properties, as well as in the diversities of their forms and types of used ornaments. Table pottery associated with the LBK is generally thin-walled, having good technological parameters and carefully shaped external surfaces, which are usually adorned with various compositions of incised ornaments. Although these vessels are not typologically diversified (mainly cups and, slightly less frequently, bowls),

their sizes (and capacity) are highly varied. These features allow us to suspect various possibilities of their use and their actual purposes.

In order to check the potential relationships between the technology and form of the thin-walled vessels, and their actual purpose and use, a series of ceramic finds from the LBK settlement in Tominy (southern Poland) was analyzed using the GC-MS method. Easily accessible organic compounds such as fats, from the surface of ceramics, were extracted with organic solvents (e.g. CHCl₃, MeOH, hexane), followed by hydrolysis using strong bases (e.g. 0.5 M KOH in MeOH / H₂O).

Our method, including saponification, esterification, and gas chromatography/mass spectrometry analysis, allowed us to detect on the surface of ceramics a wide range of oxygenated degradation products including fatty acids, mono- and dihydroxy fatty acids. These results corroborate the assumption that the thin-walled table pottery was used for various purposes connected with the preparation, processing, and consumption of animal and plant products. Despite the preliminary character of the obtained data, they appear to indicate that there are clear correlations between the forms and, especially, sizes of the thin-walled vessels and their actual use.

The research was funded by National Science Centre, granted pursuant to decision No DEC-2015/19/B/HS3/01720.

Technological traces and use-wear on pottery husking trays: a research

Sergio Taranto

Autonomous University of Barcelona in joint research with Sapienza
University of Rome
Sergio_taranto@alice.it

The poster will introduce methodology adopted to investigate the *chaîne opératoire* and the actual use of a pottery shape known as the “husking tray”, the subject of the author’s doctoral research.

The term “husking tray” refers to large trays with a scored internal surface that were used by the Late Neolithic communities of the entire Near East.

Their surfaces were crossed by a large variety of patterns, incisions, impressions, or grooves. This peculiarity has aroused the curiosity of many scholars who have suggested several hypotheses about their functions. Combining experimental archaeology and traces analysis made it possible to verify them. The ongoing research gives insight that this pottery shape could have likely been used for baking bread.

CIP - Каталогизација у публикацији
Народна библиотека Србије, Београд

903/904:738(100)(048)(0.034.2)

BELGRADE Conference on Archaeological
Pottery (2021)

Pots in context: Vessels' use, function, and
consumption, research strategies and methodology
[Elektronski izvor] : book of abstracts / Belgrade
Conference on Archaeological Pottery BECAP 21,
Belgrade, 01-02 February 2021 ; edited by Jasna
Vuković and Vesna Bikić. - Belgrade : University
of Belgrade, Faculty of Philosophy : Institute of
Archaeology, 2020 (Belgrade : University of Belgrade,
Faculty of Philosophy : Institute of Archaeology).
- 1 USB fleš memorija

Sistemski zahtevi: Nisu navedeni. - Nasl. sa naslovnog
ekrana. - Tiraž 50.

ISBN 978-86-6427-153-0 (FP)

ISBN 978-86-6439-058-3 (IA)

a) Керамика - Археолошка истраживања - У свету
- Апстракт

COBISS.SR-ID 28133385