SUPPLY AND CONSUMPTION OF TERRA SIGILLATA IN ROMAN DACIA: STATE OF ART

TERRA SIGILLATA DATABASE TRAINING INTERNATIONAL WORKSHOP
2ND-5TH OF MAY 2017
LIBRARY OF THE FACULTY OF HISTORY AND PHILOSOPHY,
CONSTANTIN DAICOVICIU ST. NO. 2, CLUJ-NAPOCA

PROGRAM

SUPPLY AND CONSUMPTION OF TERRA SIGILLATA IN ROMAN DACIA: STATE OF THE ART
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2ND of May 2017
Faculty of History and Philosophy
Aula Regele Ferdinand, Napoca st., no. 11

9:00-09:30 Registration
09:30-10:00 Opening Session
- Felix-Florin Marcu (General Manager of the National History Museum of Transylvania);
- Marius Bucur (Vice-Dean of the Faculty of History and Philosophy, Babeș-Bolyai University);
- Coriolan Opreanu (Deputy Director of the Institute of Archaeology and History of Art of the Romanian Academy).

Chairman: Sorin Nemeti (Babeș-Bolyai University)

10:00-11:00 Geoffrey B. Dannell (University of Leeds), Brenda M. Dickinson (University of Nottingham), Allard W. Mees (Römisch-Germanisches Zentralmuseum Mainz), The Mainz digital research infrastructure Samian research, Romania and its collaborative research network.

Debate
11:00-11:15 Coffee break


11:45-12:15 Luciana Nedelea (Babeș-Bolyai University, Cluj-Napoca), Pontic sigillata at Potaissa. New data regarding the import of fine ware in Roman Dacia at castra legionis V Macedonicae.

12:15-12:45 Florin-Ovidiu Botiș (Babeș-Bolyai University, Cluj-Napoca), Imported terra sigillata from Apulum: a comparative analysis of contexts and chronologies in the legionary camp and town.

Debate
12:45-13:15 Dávid Petruț (Babeș-Bolyai University, Cluj-Napoca), Observations regarding the import and consumption of terra sigillata in the military environment of Dacia Porolissensis. The case of the fort in Buciumi.

Debate
13:30-15:00 Lunch break

Chairman: Viorica Rusu-Bolindeț (National History Museum of Transylvania, Cluj-Napoca)

15:00-15:30 Mariana Egri (Babeș-Bolyai University, Cluj-Napoca), Sigillata tableware in funerary contexts. The case of the eastern cemetery at Ulpia Traiana Sarmizegetusa

15:30-16:00 Ionuț Bocan, Cătălina Neagu (National History Museum of Romania, Bucharest), Terra
sigillata discovered in the Roman fort at Micia from the National History Museum of Romania collections.

16:00-16:30 Vlad-Andrei Lăzărescu (Institute of Archaeology and History of Art of the Romanian Academy, Cluj-Napoca), Work smarter, not just harder! Using statistics and GIS as tools for studying ancient pottery.

Debate
Closing session

3\textsuperscript{rd} - 5\textsuperscript{th} of May 2017
Library of the Faculty of History and Philosophy, Cluj-Napoca,
Constantin Daicoviciu st., no. 2, 2\textsuperscript{nd} floor

Workshop with Allard Mees about editing aspects of the Mainz database, with Geoffrey Dannell and Brenda Dickinson.

9:00-9:30 Geoffrey Dannell and Allard Mees, Managing and editing the database.
9:30-10:30 Brenda Dickinson, The problems of identifying Gaulish stamps correctly. How to make good rubbings of stamps and decorated vessels.
10:30-10:45 Coffee break
10:45-12:30 Practical aspects of the database editing
12:30-13:30 Lunch break
13:30-15:30 Practical aspects of the database editing
15:30-15:45 Coffee break
15:45-17:00 Practical aspects of the database editing
17:00 Closing session by Brenda Dickinson, Geoffrey Dannell and Allard Mees

Note: Access to the practical aspects of the workshop (regarding the editing of the database, the rubbing and identifying of terra sigillata) is limited to the places available in room of the library and of the technical and material aspects of the training.

Organisers: National Museum of History of Transylvania, Faculty of History and Philosophy of Babeş-Bolyai University, Cluj-Napoca
Partner: Institute of Archaeology and History of Art of the Romanian Academy, Cluj-Napoca
Organizing Commitee:
Viorica Rusu-Bolindeţ
Liliana Suciu-Mateescu

Secretaryship:
Cristian-Aurel Roman
Gabriela Gheorghiu
Monica Gui
Dana Gheorghe-Şerban
Florin-Ovidiu Botiş
Linca Kucsinschi

ABSTRACTS

GEOFFREY B. DANNELL, BRENDA M. DICKINSON, ALLARD W. MEES

THE MAINZ DIGITAL RESEARCH INFRASTRUCTURE SAMIAN RESEARCH, ROMANIA AND ITS COLLABORATIVE RESEARCH NETWORK.

The internet database of Samian Research comprises ca. 250'000 stamped vessels from the corpora "Names on Terra Sigillata", published by Brian Hartley and Brenda Dickinson, and the "Corpus Vasorum Arretinorum", published by August Oxé, Howard Comort and Philip Kenrick. Additionally, many hitherto unpublished stamps have also been digitally recorded. The database has been developed at the Römisch-Germanisches Zentralmuseum (RGZM) and is available at http://www.rgzm.de/samian.

The advantages of enhancing access to the dataset via the internet are clear. A major problem with the paper publication of corpora is that once published, such works are rarely updated and quickly become outdated. With internet access it is possible to design data entry forms for specialists to make new entries, and for both specialist and general users to interrogate the data from remote locations. Apart from the classical search routines on potter stamps and forms, there are also sophisticated explorative research tools available, which are deepening the understanding of the underlining structures in marketing and consumption patterns in the Roman period. Besides distribution maps allowing for in depth analysis of weighted distributions, time charts can be generated for a whole range of sites to analyze the beginning and end dates of sites, e.g. the intensity of Samian consumption in a particular site or region. The internal organizational structures of the production sites are another area of research, where the additional explorative tools such as correspondence analysis of potter workshops are offering great, hitherto unavailable, opportunities. A pilot GIS-project on least cost routing is implemented on the project website as well, enabling the study of least transport costs from e.g. the Baetica to England or South Gaul to the Danube area and will be continued on an interactive platform.

The Grande Stratégie behind this collaborative research project is that any progress is dependent on a win-win situation: if an archaeologist is interested in evaluating the Terra Sigillata from a specific site he/she is working on in a superregional context, one is forced to enter the data into the system. Only in that way, will one be able to study the site in a European context (the context in which the export of Terra Sigillata in Roman time was happening anyway), e.g. by comparing the site dating curve with other sites. For this purpose, a full set of editing masks has been made available for the researcher, with the end effect, that his or her material will become available for the research community as well.

The only requirement is, that for any researcher who is willing to do editing work on (his/her) Sigillata material, they undertake a one day compulsory introduction course on how to add or edit records, such as the current workshop, organized by the Muzeul Național de Istorie a Transilvaniei Cluj Napoca, the Babeș-Bolyai University at Cluj Napoca, the RGZM at Mainz and Brenda Dickinson and Geoffrey Dannell during May 2nd-5th 2017. The staff at Mainz is responsible for supervising
technical support and further development of this international research infrastructure. Regional "Centurios" are thought as the responsible persons for keeping an eye on the data integrity for their region.

The current number of participants in this research infrastructure is encouraging enough to continue work on this unique European cooperation.

Viorica Rusu-Bolindeț

**SUPPLY AND CONSUMPTION OF TERRA SIGILLATA IN ROMAN DACIA: AN OVERVIEW**

The aim of the paper is to present the state of research on the imported and local Samian ware supply in Roman Dacia. Despite the fact that the information referring to the *terra sigillata* imported in our province grew in numbers along with new archaeological excavations performed according to modern techniques, the absence of a synthesis work at the level of the entire province hinders the possibility of having a general overview of ceramic imports from Dacia, and of the *terra sigillata* ware in particular.

For a better understanding of the phenomenon of the supply and consumption of *terra sigillata* in the province, I made a comparison between the two main periods in the history of Roman Dacia, marked by significant urban development and an intense economic and social life, namely the Antonine dynasty and that of the Severi.

During the Antonine dynasty the picture of imported Samian ware looks similar to the situation of the entire province: the products from Central Gaulish workshops, especially Lezoux dominate the Dacian market (66%), followed by South Gaulish products, respectively by the earliest products of the workshops from Eastern Gaul and Germania Superior (La Madeleine, Lavoye, Blickweiler, Heiligenberg, Trier, Chémery, Ittenweiler) and the ones produced at Rheinzabern (7% each). On the last position one finds the late Italic products, made in the Late Padanian workshops (3%). The situation can be explained through the production period of the workshops: some of them (in Italy and Southern Gaul) were in their final phase of production, others at the peak of their activity (those in Central Gaul), while others just at the beginning of theirs (the ones from Eastern Gaul and Germania Superior).

During the Severan dynasty, unlike the previous period, the Central Gaulish sigillata is now strongly competing with that coming from the large production center at Rheinzabern – the Lezoux products represent only 9% during this chronologic interval, in comparison with a ratio of 42% coming from Rheinzabern. The workshops in Westerndorf and Pfaffenhofen were active in the same time as the latter, but their products are less frequent finds on the sites from Roman Dacia (20% for Westerndorf and 5% for Pfafenhofen). On the other hand, *terra sigillata* produced in the workshops from Viminacium-Margum, Upper Moesia, is present, especially in the southern part of the province (5%).

The analysis of the supply and consumption of *terra sigillata* in Roman Dacia during the Severan dynasty reveals two interesting aspects: on one hand a decrease of the imports coming from the
western production centers can be noted, and on the other an intensification of the activity of the local workshops. In both cases, the situation from Dacia is similar to the one observed in the Danubian provinces, which experienced the same economic development correlated with the decrease of imported sigillata in parallel with a growth of the local production.

LUCIANA NEDELEA
PONTIC SIGILLATA AT POTAISSA. NEW DATA REGARDING THE IMPORT OF FINE WARE IN ROMAN DACIA AT CASTRA LEGIONIS V MACEDONICAES

The lack of imported terra sigillata and even local terra sigillata at Potaissa has been discussed in several articles in the past, all trying to give their explanation for this phenomenon. The main fine ware groups identified so far for this legionary fortress were: imported terra sigillata with relief motifs, local stamped pottery and local terra sigillata with relief decorations, all in very small quantities. The absence of large quantities of fine ware at a legionary fortress seemed bizarre, and none of the explanations seemed satisfactory. After analyzing all the pottery from the Roman fort, this issue seems to be solved, and we are now able to talk about the presence of more groups and classes of fine pottery at Potaissa: imported plain sigillata, local plain sigillata and Pontic sigillata. All these groups went unnoticed in the past. While discussing this issue, we will try to make a comparison between fine ware products from the Roman fort and the Roman settlement, describing in detail the characteristics of locally produced fine ware, that provide an indisputable chronological value, due to the short time frame they are “frozen” in (168 – 274 AD). The number of imported terra sigillata products rose considerably, with the preponderance of plain sigillata taking completely over all other fine ware imports or locally produced ware, and for the first time we can observe Pontic sigillata on this site pertaining to the Pontic Sigillata C group. Also, based on new data related to fine ware, especially Pontic sigillata discovered at Troesmis, we will try to make a connection between the former basecamp of Legio V Macedonica, and the new basecamp at Potaissa, but also a connection between the province of Roman Dacia and fine ware/Pontic sigillata production in the province of Lower Moesia.

FLORIN OVIDIU BOTIȘ
IMPORTED TERRA SIGILLATA FROM APULUM: A COMPARATIVE ANALYSIS OF CONTEXTS AND CHRONOLOGIES IN THE LEGIONARY CAMP AND TOWN

This paper aims to present the state of the art in the terra sigillata studies for the Roman settlements from Apulum, the modern city of Alba Iulia. But at the same time we will try to make some observations about terra sigillata consumption in the legionary fort and the civilian environment and see if we can notice some differences. Unfortunately, our study is limited to the Samian ware discovered almost completely in the rescue excavations, because both ancient settlements – municipium Septimium and colonia Aurelia – are overlapped by the modern city, and the legionary fort was overlapped by the Medieval fortress and after that by the Vauban fortress at the beginning of the 18t century AD.

Despite all these inconveniences, the terra sigillata discoveries are relatively numerous. One good reason is the presence of legio XIII Gemina and of the two civilian settlements, which, during the
Severan dynasty, become some of the most prestigious in Dacia. Terra sigillata products discovered at Apulum have a great variety, both in shape and as proveniences. Thus, the discoveries include a limited number of Italian-type sigillata fragments, but the vast majority represent the Central Gaulish, East Gaulish and some South Gaulish sigillata products. The South Gaulish products are from La Graufesenque and Banassac, all this corresponding to the date when legio XIII Gemina arrives at Apulum and in the legionary canabae. As for the Central Gaulish products, the most variety comes from Lezoux. The East Gaulish sigillata is represented by products from Lavoye, but the big majority are from Rheinzabern. In matter of quantity, the Lezoux products are equaled to those from Rheinzabern, given the fact that Lezoux at end of the 2nd century AD ends its activity, and starting from now on the terra sigillata supply is covered by the products of Rheinzabern and later those from Westerndorf and Pfaffenhofen, Apulum being one of the few consumers of Westerndorf and Pfaffenhofen sigillata products in Roman Dacia.

DÁVID PETRУT

OBSERVATIONS REGARDING THE IMPORT AND CONSUMPTION OF TERRA SIGILLATA IN THE MILITARY ENVIRONMENT OF DACIA POROLISSENSIS. THE CASE OF THE FORT IN BUCIUMI

The long-debated issue of supply is crucial for our understanding of the way in which the Roman army functioned as well as for the everyday life of the troops. Supply can be understood as the conjunction of local production and the import of various goods. The presentation intends to highlight the composition of the imported terra sigillata assemblage from the Roman auxiliary fort of Buciumi (Dacia Porolissensis), against the backdrop of pottery supply patterns on the Dacian limes and the internal forts of the province. The fort in Buciumi was extensively investigated between 1963 and 1976, which resulted in the complete excavation of four barracks blocks from the praetentura of the fort. Although the old excavation techniques employed and the subsequent reports did not produce high resolution contextual data, the recently undertaken detailed analysis of the pottery finds has the potential of enhancing our knowledge regarding the garrison life in this fort. The relevance of the presentation resides mainly in the fact that the terra sigillata supply of the forts on the limes of Dacia has not benefited hitherto from comprehensive research, although it has the potential of revealing important aspects concerning local and regional patterns of supply.

MARIANA EGRI

SIGILLATA TABLEWARE IN FUNERARY CONTEXTS. THE CASE OF THE EASTERN CEMETERY AT ULPIA TRAIANA SARMIZEGETUSA

The paper is going to discuss some patterns of sigillata consumption in the funerary environment using the assemblage of sigillata tableware recovered from the eastern cemetery of the Roman city Ulpia Traiana Sarmizegetusa as a case-study. The analysis will take into consideration the morphological and functional characteristics of these vessels, as well as their origin. A contextual approach, bringing into discussion the functional structure of each funerary inventory, will be
employed to identify the role of these vessels in the funerary environment.

The cemetery was first investigated archaeologically in the 1930s and again in the 1980s, but the most systematic, extensive investigations have been carried out between 2001 and 2008. The latter series of archaeological campaigns unearthed a large number of funerary features, including graves and non-burial pits, masonry and timber structures. Several graves were either robbed in ancient times or damaged by later-dated agricultural works. In other cases, the funerary inventories were completely preserved, allowing the identification of various aspects related to the funerary rites and rituals.

Although several categories of tableware are commonly encountered among the grave-goods, only around one quarter of the total number of graves contains sigillata vessels having different origins. Aside from these graves, this kind of tableware is also encountered in a few non-burial pits associated with a couple of funerary precincts, and between and on top of the graves. The latter group of finds is characterised by a higher degree of fragmentation in comparison with the vessels recovered from graves and other pits. Some of these highly fragmented vessels surely come from damaged graves, but others could have been the result of various commemorative practices that were carried out in the cemetery.

Typologically, there is a marked preference for “open” forms – plates, dishes and bowls – whereas the “closed” forms are rather scarcely represented. Regarding their origin, the local production of sigillata predominates, since only around one quarter of the total number of vessels originates from other provincial production centres in the Roman Empire.

From the point of view of the funerary ritual, there is a strong correlation between the presence of sigillata tableware and the total number of vessels included in the funerary inventory of a given grave, since this ceramic category is most commonly included in larger assemblages. Sigillata tableware was also included in a dining set most likely used during a funerary banquet, which was recovered from one precinct. The functional structure of these larger assemblages resembles the one encountered in the case of many graves from early Roman provincial cemeteries in the eastern Alpine region and southern Pannonia.

IONUȚ BOCAN, CĂTĂLINA NEAGU

TERRA SIGILLATA DISCOVERED IN THE ROMAN FORT AT MICIA FROM THE NATIONAL HISTORY MUSEUM OF ROMANIA COLLECTIONS

The collections of the National History Museum of Romania include a large quantity of ceramic material, almost unknown, from the Roman fort at Micia. The study of the material aspects in the military centres from Roman Dacia has progressed a lot over the past two decades by the publishing of monographs which put in a new light the importance of the forts in the economic life of the province. This context requires both the valorisation and the scientific circulation of this important museum collection originating from the Roman fort at Micia. Thus, this study is dedicated to the analysis of a special category within the archaeological material, namely the terra sigillata ware, discovered in the auxiliary fort at Micia and preserved in the collections of the National History Museum of Romania.
During 1976–1987, a team of the National History Museum of Romania, coordinated by Liviu Petculescu, carried out archaeological research in the Roman fort at Micia. 26 excavation units were investigated, thus determining the exact dimensions of the Roman fort: 360 × 189.5 m. These investigations revealed an important lot of Samian ware consisting of 60 items.

An important aspect in studying the *terra sigillata* ware is represented by the assignment of this type of material to its manufacturing workshop. Thus, following the stylistic analysis (in the case of items with relief decorations) made in conjunction with the typological analysis and the study of the fabrics of samples analyzed in this study (in the case of plain sigillata), both imports and local *terra sigillata* were found. Regarding the provenance of pottery analyzed in this study, the situation could be expressed as follows: Southern Gaul – 3% (2 items); Central Gaul (Lezoux) – 60% (37 items); Rheinzabern – 18% (11 items); Westerndorf – 3% (2 items); local terra sigillata – 5% (3 items); undetermined – 11% (7 items).

The forms most commonly found in this assemblage are the Curle 11 and 15, Déch. 72, Drag. 18, 30, 31, 33 and 46, which show a pattern similar to the one of other archaeological sites. In contrast, on the decorated vessels, we highlight the good representation of the form Drag. 37 and rarely of the trays Drag. 39.

**VLAD-ANDREI LĂZĂRESCU**

**WORK SMARTER, NOT JUST HARDER! USING STATISTICS AND GIS AS TOOLS FOR STUDYING ANCIENT POTTERY**

Although strongly linked with the historical disciplines through its main goal of deciphering the ancient past, archaeology is not seen nowadays as a humble *ancilla historiae*. Having its own methodology that is evolving along with the scientific progress of various disciplines, archaeology focuses upon multiple aspects of ancient human activity trying to better understand and contextualize the 'ancient mind' as well as the remains that everyday archaeologist faces on an everyday basis. The permanent and constant development of the employed methods generated the emergence of new concepts and interpretative tools hoping to better understand the past societies.

The statistical processing of archaeological data is an indispensable interpretive tool for a modern scientific approach, the quantity and diversity of data resulting from the archaeological excavations being perfectly adapted to such attempts. At the same time, the contextual analysis of these data contributes in essence to the identification of 'statistical patterns' that can generate new interpretations, once passed through the critical reason filter. Archaeological ceramics can be regarded as the best suited type of artefact for such analysis due to both its diversity and considerable amount.

The main purpose of this lecture refers to the comparative analysis of two ceramic assemblages coming from closed archaeological contexts, namely two of the largest necropolises belonging to the cultural environment known as Sântana de Mures - Černjachov: Barlad-Valea Secă, County Vaslui (547 Graves) and Mihălași, Botoșani County (520 tombs). Both their relative chronological stages overlap giving more consistency to the archaeological interpretation of the statistically processed data.
variation.

The database required for such an approach consists of 1646 whole or complete ceramic vessels (Barlad-Valea Seacă = 660 vessels, Mihălășeni = 1012 vessels) that were individually compared using specially designed software, the similarities/dissimilarities between each of them being expressed by what we might call the 'distance' between the analyzed individuals. The ultimate effort of such a "big data" approach materialized in the form of a matrix of $1646 \times 1646$ individuals (summing up approximately 1.4 million unique matrix elements) statistically processed through several methods (such as Cluster Analysis, Principal Component Analysis etc.) which revealed the existence of interesting differences in the two archaeological sites that can be also highlighted by means of GIS spatial analysis clustering at the individual level of each site.