

Book of Abstracts

Regional Networks! Technological
Transfers?

Production and Consumption Patterns
in Roman Pottery of the Decapolis

1 March 2017

Organised by
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OUTLINE

Within the framework of the Danish-German Northwest Quarter Project and the research project Ceramics in Context a series of conferences are organized focusing on the pottery of Gerasa and the broader region. The third conference will focus exclusively on the Roman period pottery.

Studies of finds from Gerasa have a long tradition and several publications have been undertaken. However, most of these focus on late Byzantine and Early Islamic finds, while publications on the Roman period material are rather rare.

This one-day conference will focus on the less well published Roman period pottery from Gerasa, which was a high scale production centre of pottery at that time, to look at similarities and differences concerning chronological and typological queries in Gerasa itself, but also in comparison to other sites. An examination of undisturbed Roman contexts will be of central importance in order to achieve good results and get crucial information not only considering the chrono-typological aspects, but also changing production techniques and shifts in chronological developments of certain types from one site to the other. Did Jerash as a “mass”-production centre of pottery has an impact on other sites production and vice-versa, how far is the influence from “outside”?

The analyses of these closed contexts will feed into discussions about the broader regional understanding of the pottery from Gerasa in regards to the development of shapes (different influences/self-development) and changes in fabrics (different clay sources/manufacturing processes). Central questions to be addressed in this conference include: Do we see regional patterns? In which ways, if at all, do Roman imports have an impact on the local production? Of which nature was such an impact? Does the Roman pottery influence the post-Roman pottery concerning types and fabrics? Can we discern immediate changes in the transmission-phase from Roman to Byzantine times?

Intra-regional trade patterns will also be discussed in an interdisciplinary approach by employing archaeometrical analyses. In this connection the question whether we can trace an exchange of pottery products on a regional basis, locate the different production areas and embed the sites into network systems is also of central concern.

The one-day conference will offer international experts an opportunity to discuss these questions to get a fuller understanding of pottery, production patterns and interactions in Gerasa and the surrounding regions.

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PROGRAMME

10:30-11:00	Registration and coffee
11:00-11:10	Welcome and Introduction Achim Lichtenberger, Heike Möller, Rubina Raja
11:10-11:40	New Research in the Northwest Quarter of Jerash and its Impact on Roman Gerasa Achim Lichtenberger, Rubina Raja
11:40-11:55	Discussion
SESSION 1: Umm Qes/Gadara – Umm el Jimal Chair: Achim Lichtenberger	
11:55-12:25	Roman pottery from sanctuaries in Umm Qes/Gadara (Jordan) and its hinterland Lisa Berger, Bernd Liesen
12:25-12:40	Discussion
12:40-13:10	Ceramic trends at Umm el-Jimal: quantification, provenance and typochronology (Nabataean/Roman to Early Byzantine period) Elizabeth Osinga
13:10-13:25	Discussion
13:25-14:25	LUNCH
SESSION 2: Archeometry Chair: Heike Möller	
14:25-14:55	Ceramics found in Gadara – provenance studies using combined laboratory analyses Malgorzata Daszkiewicz
14:55-15:10	Discussion
15:10-15:40	Late Hellenistic to Late Roman Fine Wares in the Eastern Mediterranean Gerwulf Schneider
15:40-15:55	Discussion

15:55-16:25	Material Science Approaches to the Study of Pottery from Jerash Stephen Merkel, Michael Prange
16:25-16:40	Discussion
16:40-17:10	BREAK
SESSION 3: Jerash Chair: Rubina Raja	
17:10-17:40	Local ceramic productions at Jerash during the Early Roman Period (1st BC-1st-AD): influences and diffusion Anne-Michèle Rassin-Seigne, Jacques Seigne
17:40-17:55	Discussion
17:55-18:25	Roman Gerasa – New Results from the Danish-German Jerash Northwest Quarter Project – Contexts and Finds Georg Kalaitzoglou, Heike Möller
18:25-18:40	Discussion
18:40-19:15	GENERAL DISCUSSION
19:15	CLOSING REMARKS and END of WORKSHOP
20:00	Speakers' Dinner

ABSTRACTS

New Research in the Northwest Quarter of Jerash and its Impact on Roman Gerasa

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Since 2011 a Danish-German team from the universities of Aarhus and Bochum has been working in the Northwest Quarter of Gerasa located on the highest point within the ancient city walls. One aim has been to explore all periods represented in archaeological remains of the settlement within this area, which covers app. 5 hectares and to analyse the development and nature of the settlement quarters. Another aim has been to explore in which ways the Northwest Quarter related to the rest of the urban site.

The results of the geodetic and geophysical survey undertaken in 2011 and the following five years of strategic excavations have revealed numerous surprising results. Among other things Roman and extensive Late Roman remains have been uncovered ranging from larger representative buildings connected with the late Roman army of the Justinian period, installations for production purposes as well as domestic architecture. Furthermore work has been done on the infrastructure of the area and shows new results about the overall infrastructure of Gerasa in the Roman period. The Northwest Quarter was a thriving area for many centuries and was also used as an extensive stone quarry. What also has become clear is that settlement, at least in this part of the city, came to a halt with the earthquake of 749 CE and that the Northwest Quarter was left abandoned until the medieval period.

In this paper we will present an overview of the Roman and Late Roman periods as represented in the archaeology of the Northwest Quarter and relate these to the rest of the urban site in order to contextualise the Northwest Quarter within the broader urban history of Gerasa.

Roman pottery from sanctuaries in Umm Qes/Gadara (Jordan) and its hinterland

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At the same time as the theater-temple area intra muros Gadara has been in use, two extra-urban sanctuaries at Arqub-Rumi and Al Qabu have been existed. Excavations and surveys carried out by the Oriental Department of the German Archaeological Institute have revealed a huge amount of both fine and coarse wares. The comparative study of this pottery provides information on chronology, site function, and regional interaction. The vast majority is coarse ware. There is not much evidence for local production. The type series is strongly dominated by vessel types which are common in Galilee.

Ceramic trends at Umm el-Jimal: quantification, provenance and typo-chronology (Nabataean/Roman to Early Byzantine period)

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The town of Umm el-Jimal in the countryside of northeastern Jordan is renowned for its extant Late Antique basalt-hewn architecture; however, the settlement originated much earlier in the Nabataean/Early Roman period (c. mid-/late 1st century AD). The first few centuries of occupation have been comparatively little studied, due in large part to a paucity of stratigraphy or architecture dated to that period, save for military structures and poorly preserved remains in the village, southeast of the town. Renewed excavations at the site in recent years along with analysis of unpublished contexts has shed new light on these formerly obscured centuries.

This paper discusses the current ceramic evidence for the Nabatean/Roman through Early Byzantine period at Umm el-Jimal. Three key datasets will be interrogated: quantified deposits from recent excavations at House XVII-XVIII (mid-/late 1st- to early 6th century) and from the Commodus Gate area (mid-/late 1st to c. 300); and unquantified ceramics from an ashly dump in the northern quarter of the town (mid-/late 1st to c. 300), excavated in 1981.

There is no evidence of pottery production at Umm el-Jimal, and thus the ceramics used at the site were imported. The quantified datasets allow for a socio-economic investigation of trends in ceramic consumption, pinpointing key sources and transitions in pottery supply over time. In the Roman/Early Byzantine period, there is one important change— if still not precisely characterised or dated—in Umm el-Jimal's corpus: particularly in the first two centuries of settlement, the data suggest that the bulk of the common wares probably originated in the Hauran; beginning in the 3rd/4th century, however, non-basaltic pottery from Jerash and unknown production sites is present in greater quantities alongside the Hauranian ceramics and by the 5th century at the latest dominates the corpus.

Ceramics found in Gadara – provenance studies using combined laboratory analyses

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Hellenistic, Roman and Byzantine ceramic fragments were found in the Theatre-Temple Area of ancient Gadara (modern Umm Qays, Jordan) during the course of excavations undertaken by the Oriental Department of the German Archaeological Institute. Excavations were conducted by Claudia Bührig (Oriental Department DAI, Berlin) and Günther Schauerte (Prussian Cultural Heritage Foundation, Berlin).

Morphological/typological analysis of ceramics and the selection of samples for laboratory analysis was carried out by Bernd Liesen (LVR-Archäologischer Park Xanten / LVR-RömerMuseum). Laboratory analyses were conducted on sherds representing fine wares, common wares and kitchen wares.

The following analytical methods were used: MGR-analysis (Matrix Group by Refiring), chemical analysis by wavelength-dispersive X-ray fluorescence (WD-XRF) and thin-section studies using a polarising microscope. The use of these three methods enabled the ceramics recovered from Gadara to be defined in terms of their matrix type (the matrix being the plastic part of the ceramic body which hardens during firing – commonly referred to as ‘clay’) and chemical composition (known as the chemical fingerprint of the ceramic body from which a particular ceramic artefact was made) as well as their non-plastic inclusions (clastic material = natural or intentional temper).

The laboratory studies indicate that kitchen ware vessels recovered from the Theatre-Temple Area of Gadara represent goods made at various production centres and various workshops. Short-distance trade wares are numerous represented in Gadara. They consist of vessels made at ceramic workshops in the production centres of Galilee and Golan. Vessels made at workshops in production centres that have proved impossible to identify thus far are also relatively well represented. Goods produced at pottery workshops in Italy (Pompeian Red Ware) and Turkey (a baking dish – Phocaeen kitchen ware) provide evidence of long-distance trade. Hellenistic common wares are represented by local fabrics, products from the region of Antioch and from unknown workshops. Black or red slipped Hellenistic vessels represent local fabrics, such as common wares, or widely traded imports.

Late Hellenistic to Late Roman Fine Wares in the eastern Mediterranean

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During the last decades a large database on Hellenistic and Roman fine wares has been established using wavelength-dispersive X-ray fluorescence analysis (WD-XRF). Ten major elements and a series of up to 15 trace elements are detectable with good precision and accuracy. Published data by NAA and ICP-MS have also been checked for interlaboratory comparability. Some of our reference groups have been corroborated by thin-section studies and MGR-analysis. Widely traded black and red gloss pottery from production centres in Italy and the eastern Mediterranean can be securely identified chemically. Imports of, for example, Attic wares, Campana A, Eastern sigillata A, B, C and D have been confirmed at many sites in the Near East. Also the major centres producing African Red Slip wares have been chemically characterized, as have other Late Roman fine wares, among them Late Roman C and Cypriot Red Slip Wares. Other categories of widely traded Roman pottery whose provenances can be verified by WD-XRF include Pompeian Red Plates from Naples and cooking wares from Phocaea found, for example, at sites in Jordan.

Besides precision and accuracy, in order to achieve successful analysis results it is also crucial to determine the levels of certain key chemical elements. Magnesium, chromium and nickel are sufficient to distinguish most of the reference groups e.g. in bivariate scattergrams. It is, however, always necessary to check a total of about twenty precisely determined elements and to be careful when using multivariate procedures without looking at the original data set. This will be demonstrated using an example.

Material Science Approaches to the Study of Pottery from Jerash

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A series of analyses and experiments were carried out to explore the nature and material characteristics of pottery sherds found during the excavations of Jerash. The aims of these studies are to explore technological aspects and the raw materials of the Late Roman / Early Islamic pottery of Jerash, which may be useful in creating classifications and may provide insights into the provenance of the ceramics. Thin section petrography and scanning electron microscopy were carried out on orange, grey, red ware and amphora sherds to determine the mineralogical and morphological characteristics of the pottery. The same sherds were investigated by high resolution inductively coupled plasma mass spectrometry (HR-ICP-MS) to acquire major, minor and trace element compositions. Of the 18 sherds examined, 15 seem to be related and may be considered 'local', while three sherds are mineralogically and/or chemically distinct and appear to be from imported vessels. The 'local' ceramic type cross-cuts the various ware types (i.e. orange, grey, red and amphora). Supported by the refiring experiments of five sherds, differences in color seen in the grey, orange and red wares can be achieved by manipulating the redox conditions and temperature during firing. In the second part, the preliminary results of pilot study using a portable X-ray fluorescence analysis of pottery sherds from Jerash will be presented and evaluated.

Local ceramic productions at Jerash during the Early Roman Period (1st BC-1st-AD): influences and diffusion

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The archaeological excavations carried out by the French team on the sanctuary of Zeus in Jerash allowed to identify several local productions dating from the turn of the era.

Well dated by the stratigraphy, two of these local productions are particularly characteristic: the so-called semi-luxurious ceramic, imitation of sigillatas forms, and the molded patterned grey ceramic, attested by small vases and lamps.

Although the first production does not appear to have crossed the borders of Gerasa very much, the second finds many parallels in other sites in Jordan, such as Amman, Pella or Um Queis.

Roman Gerasa – New Results from the Danish-German Jerash Northwest Quarter Project – Contexts and Finds

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Gerasa was a high scale production centre of pottery already in Roman times. However we have to ask, if it as a “mass”- production center, had an impact on other sites productions and vice-versa and how far going was the influence from “outside” the town into the Gerasian potters’ production of vessels. The paper will focus on three different trenches from excavations undertaken in the Northwest Quarter of Jerash. The different contexts are chosen in order to give an overview of the variation of the Roman local and regional pottery production. Especially the imported wares found in those contexts should demonstrate the regional and supra-regional exchange patterns and help us to answer the question: Are they comparable to other sites?

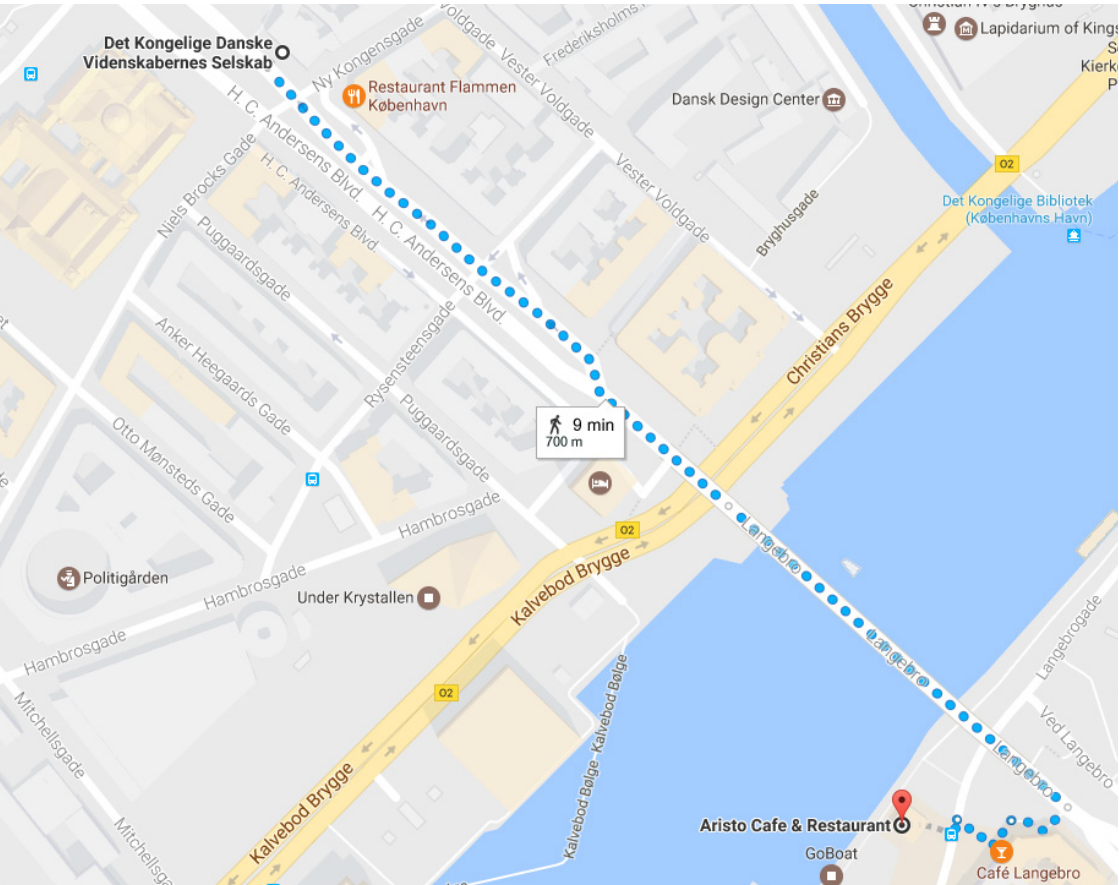
In 2014 the Danish-German Jerash Northwest-Quarter Project brought to light a complex of two caves (trench J and N). The staircase leading down to the northern cave was filled with a huge layer consisting almost exclusively of pottery. Even though the fill layer has been deposited in Byzantine times, the overwhelming majority of the pottery was of earlier production, produced at least in Late Roman times. Since the finds are very well preserved and cover all functional groups, this trench is chosen to give a general overview of the repertoire of vessels in Jerash in Late Roman times.

Another trench presented here was excavated next to the city wall (trench Q), during the field season in 2015. Several contexts yielded pottery of Roman date, among these seems until now – except some single finds – to be also the earliest material found in the Northwest Quarter.

The last years’ campaign brought to light several Roman cooking pots more or less intact in shape. They all stem from one trench (trench S) in which a huge cistern beneath a representative edifice was excavated. Some of the cooking pots were intentional deposited in the deliberate backfill, other were simply thrown in. A similar find situation was already met 2012 in trench A and 2015 deposits of single cooking pots were uncovered in trench Q next to the city wall. With a short description of the context situation, a typology of the deposited pots and further interpretation of the context, the last case study will close the Roman survey of the Northwest Quarter.



SPEAKERS' DINNERS



Wednesday 1 March at 20:00

Restaurant Aristo
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Regional Networks! Technological Transfers? Production and Consumption Patterns in Roman Pottery of the Decapolis

Organised by A. Lichtenberger (Westfälische Wilhelms-Universität Münster); Heike Möller (Aarhus Universitet) and R. Raja (Aarhus Universitet)

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