# Production Economy in Roman Greater Syria: Trade and Networks 8 February 2018

# **Book of Abstracts**

Organisers: PhD student Julia Steding (Aarhus University) Professor Rubina Raja (Aarhus University)



### **Outline**

Within the framework of the Palmyra Portrait Project directed by Rubina Raja and funded by the Carlsberg Foundation a series of one day workshops have been organised over the last years. The workshops in Fall 2017 and Spring 2018 focus on production economy as a main line of enquiry into understanding processes of production and economic patterns related to spheres of production related to sculpture in Roman Palmyra.

Sculptures, sarcophagi, and reliefs are well-studied remains of ancient societies, which provide information about identity, self-representations and status in ancient societies. However, only over the last decades focus in research has shifted to view these objects as lines of enquiry into other areas of ancient societies, such as production economy issues, which in turn give information about societal hierarchies and lines of production. The aim of the workshop to be held in February 2018 is, to bring researchers together, who focus on various aspects of trade networks and the supply of cities and their workshops with stone and other materials. The focus area is the region of Greater Syria. However, since material such as marble was not available locally, but imported, other relevant regions from which imports came are also included.

Research on networks and trade patterns have become central to research in the last years. However, there are still questions, which remain open. Some workshops resorted to local stone while others imported material from regions far away. Questions that can be addressed include those evolving around the transportation of material from the quarries to the production centres, be it from close by or far away. Transportation issues are connected to questions about infrastructure and trade routes, means of transportation and transportation costs as well as the question why specific materials were chosen by some people and not by others? The interplay between availability, costs and preferences of carvers and costumers is one aspect, which still needs consideration. How did matters of status expressions through costly (mostly imported?) materials and local preferences come together? Was a marble object in a region without natural marble sources an expression of value and thus of status? Would it in some locations have been more important to keep the costs low? Can we see a difference between the materials that were used in the public sphere and in the private sphere? Various materials would have needed different carving techniques and so carving techniques in themselves might also be considered as status expressions in some contexts.

Another reconsideration is the place of carving when focusing on material that was not quarried in the surrounding. If a specific material was not available in a region, did the workshops or costumers import only raw material that was then carved locally? Or did they import partly carved or complete carved portraits/sarcophagi/sculptures? Where would the final carving have taken place and may we trace transfer of carving techniques from areas with a natural deposit of a specific material to areas where the material was unknown?

The workshop will bring together all these aspects to create a comprehensive overview over the networks and trade in the region of wider Syria and behind during the Roman period.

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## **Programme**

8:45-9:15	Registration and coffee	
9:15-9:30	Opening Rubina Raja and Julia Steding	
9:30-10:00	The sculptors and school of Aphrodsias: A review Julia Lenaghan	
10:00-10:25	Discussion	
10:25-10:55	The trade of marble and other stone in the Eastern Mediterranean Marc Waelkens	
10:55-11:20	Discussion	Chair: Julia Steding
11:20-11:50	Sourcing the stone: State of techniques and implications Patrick Degryse	
11:50-12:15	Discussion	
12:15-13:15	Lunch break	

13.15-13.45	The logistics of stone transport in Roman Syria and Egypt Colin Adams	
13.45-14.10	Discussion	Chair: Rubina Raja
14:10-14:40	Les calcaires de Palmyre face aux autres roches de décoration architecturale et de sculpture Jean-Claude Bessac	
14:40-15:05	Discussion	
15:05–15:35	Coffee Break	ı
15:35–16:05	Palmyra, Syria and the supply with "imperial" marble Alfred Hirt	Chair: Rubina Raja
16:05–16:30	Discussion	
16:30-17:00	Syria, Palmyra, and marble trade Dagmara Wielgosz	
17:00-17:25	Discussion	
17:25-18:00	Final discussion and closing Rubina Raja and Julia Steding	
18:30	Speakers' dinner	

# **ABSTRACTS**

### The sculptors and school of Aphrodsias: A review

Julia Lenaghan (University of Oxford) julia.lenaghan@classics.ox.ac.uk

In this talk, I would like to discuss what we know about the sculptors of marble statuary at Aphrodisias and how this distinguishes them from sculptors of marble elsewhere. Since M. Floriani Squarciapino initiated a discussion of "la scuola di Afrodisias" in 1943, not only has a "Sculptor's Workshop" been excavated on site and the quarries in the region subjected to investigation but also more epigraphic evidence and more stylistic tendencies have emerged. This paper specifically intends. (1) to review the distribution of the signatures of Aphrodisian sculptors, both geographically and chronologically, and compare these distributions to marble sculptors from elsewhere, and (2) to note recognizable traits of Aphrodisian production.

#### The trade in marble and other stone in the eastern Mediterranean

Marc Waelkens (KU Leuven) marc.waelkens@kuleuven.be

The quarrying of stone for building or sculpture purposes was already practised on a large scale in several Mediterranean Bronze Age cultures. From the 7th century BC, Greek architecture was built in stone, resulting in improved extraction techniques, while marble came to be used for public monuments and statuary. For centuries, however, quarrying activity generally corresponded with specific commissions and was therefore time-limited. Towards the end of the Republic, the creation of Roman provinces in Northern Africa and the Greek East provided a tremendous boost to the taste for marble and other coloured stone among the aristocracy in the capital. There the first Roman emperor, Augustus, transformed marble and coloured stone into a powerful tool for imperial propaganda. His successors built on this potential by opening new quarries in Egypt. The early Imperial building projects in Rome rapidly initiated a building boom in many provincial towns. Although these initially relied mainly on local/regional materials, by the late 1st, early 2nd century AD, 'exotic' marble and other high-quality stone also became available to municipal and private markets.

The role of the Imperial administration in directly exploiting quarries throughout the provinces undoubtedly has been exaggerated in the past. Its almost exclusive involvement may have been restricted to the exploitation of high-quality stone in remote areas, such as the eastern Egyptian desert. Most other quarries were exploited by municipal authorities or private investors, sometimes working for or alongside the Imperial administration, which directly or indirectly controlled (other) parts of the same quarry. Improved techniques for quarrying and preparing materials for transportation, perhaps initiated in imperially owned/exploited quarries, spread rapidly across the Roman world.

This involved above all reducing the weight for transport. To this end – depending on the capabilities of stonemasons at the final destination – various stages of preliminary shaping were introduced, even for sculpture. However, except for blocks to be shaped into wall cladding slabs, it remains unclear to what extent there ever existed a market of 'prefabricated' building elements (esp. columns, capitals, bases).

This did happen, however, with certain types of tombs. From the 2nd century AD, sarcophagi became the most widespread type of burial in the Mediterranean. They were either produced locally or exported across wider areas. Some of the exported ones were just roughly shaped in order to facilitate transport to a specific foreign workshop (e.g. in Rome), not associated with a specific quarry. Especially in Asia Minor, quarry workshops produced semi-finished sarcophagi aimed at middle-class customers. This applied particularly to areas without a local tradition of marble working, including the Levant and Greater Syria. Upon arrival, many of these sarcophagi were never completed and were not even considered as semi-finished items anymore. Other workshops in the same study area served the upper end of the market, producing nearly finished sarcophagi with roughly shaped portrait heads, to be finalised at their destination. To what extent this was done by sculptors from the workshops accompanying the transport of sarcophagi to that destination or by local artists remains unclear.

These 'upper class' workshops seem to have produced sarcophagi on an almost industrial scale, employing a highly specialised work force that allowed for 'serial' production. Depending on their skills, they also produced other items, such as tombstones or votive sculptures, for a middle-class market. Other stonemasons or sculptors associated with high-quality marble quarries would travel to areas where marble did not naturally occur to finish pre-shaped building blocks (e.g. at Leptis Magna) or sculptures. Some even became settled in these locations, with later generations using their origins as a way of demonstrating their credentials.

### Sourcing the stone: state of techniques and implications

Patrick Degryse (KU Leuven) patrick.degryse@kuleuven.be

The scientific examination of archaeological and historical artefacts often relies on the assumption that there is a scientifically measurable property that will link an artefact to a particular source or production site (the provenance postulate). Traditional typo-chronological studies classify artefacts by their attributes, such as form, style, fabric, decoration... which can be so unique and identifiable, that a small fragment is all that is needed to recognize its origin. Characteristics change over time and vary from place to place, and while not an exact science, assist a trained archaeologist in deducing details of chronology, trade networks, or technology. The provenance determination of stone (and ceramics, considered an artificial rock) is often accomplished through combined chemical and mineralogical-petrographic analysis. It has long been recognized that no one method of analysis alone is sufficient for provenance studies, as overlaps are common when potential sources are compared. Combined thin-section studies and other techniques such as (but not exclusive to) elemental and isotopic analysis have proven very useful to trace artefacts. In general, many techniques from the geo- and other sciences are explored for provenancing purposes applied to archaeological materials. In provenance studies of stone and ceramics, since the introduction of petrography and geochemistry in the fifties and sixties, these techniques have been routinely used over the years, especially in the Mediterranean. In such studies, the analytical data from the artefact are compared to the geological characteristics of the potential raw material sources.



The story of ASMOSIA (Association for the Study of Marble and Other Stones Used in Antiquity), founded in 1988 to bring together archaeologists, geologists and geochemists to promote a better interpretation of data around stone provenancing, is a good example in this respect. Marble and other stone, especially from the Mediterranean, has received much attention since and many new methods and databases were developed. This paper will present an overview of the techniques available at this time, and give examples of their use in recent archaeological science and beyond.

### The logistics of stone transport in Roman Syria and Egypt

Colin Adams (University of Liverpool) Colin.Adams@liverpool.ac.uk

The presence of Egyptian marble from Syene in the buildings of Roman Syria prompts some important questions. As an importer of decorative stone, mostly from the Troad, it is significant that Egyptian granite, normally the preserve of emperors, can be found in Palmyra and Baalbek, among other sites. This paper will explore some of the logistic and administrative systems facilitating the transport of marble from these sites in Egypt, and potential logistical problems that may have been faced when it arrived in Syria. It will focus primarily on evidence preserved in a particularly important group of administrative documents from Tetrarchic Egypt, which might also incidentally shed light on other building projects in Syria such as Diocletian's fortress at Palmyra.

# Les calcaires de Palmyre face aux autres roches de décoration architecturale et de sculpture

Jean-Claude Bessac (CNRS Montpellier) j-c-bessac-cnrs@wanadoo.fr

À Palmyre, comme dans tout le Proche-Orient, l'aspect stylistique des monuments a toujours été privilégié par les archéologues au détriment des études techniques et économiques. Cette lacune sera longue à combler. C'est pourquoi, dès maintenant, il est indispensable de proposer quelques jalons pour faciliter le démarrage de recherches dans ce domaine

Diverses variétés de bons calcaires ont été extraites autour de la ville pour l'architecture et la sculpture. Les particularités techniques de chacune ont été exploitées pour des productions bien définies (colonnes, composantes mégalithiques, sarcophages, statues etc.). Dans la proche région de Palmyre, seule l'absence de véritables roches ornementales, surtout des marbres et granites, justifie l'importation de ces matériaux de luxe d'origines lointaines. Mais, par rapport aux roches locales, leur pourcentage est assez faible et limité aux variétés romaines connues comme étant les moins coûteuses. Il existe peu de témoignages archéologiques sur les professionnels de la pierre œuvrant sur place à l'apogée de la ville et aucune source antique ne les mentionne. Quelques indices permettent néanmoins de soupçonner l'intervention de nombreux artisans et artistes étrangers à Palmyre. Comme les grandes métropoles proches de la côte, la « Cité du désert syrien » a attiré ces spécialistes originaires de l'ensemble du Proche-Orient avec, semble-t-il, une plus forte proportion qu'ailleurs d'éléments venus de l'Est et c'est là une spécificité de Palmyre. En parallèle aux investigations stylistiques, cet aspect constitue un domaine de recherche qui ouvre de vastes perspectives inédites.

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Pour s'engager pleinement dans cette voie, il reste donc à développer les études techniques, anthropologiques et socioéconomiques autour du travail antique de la pierre.

### Palmyra, Syria, and the Supply of 'Imperial' Marble

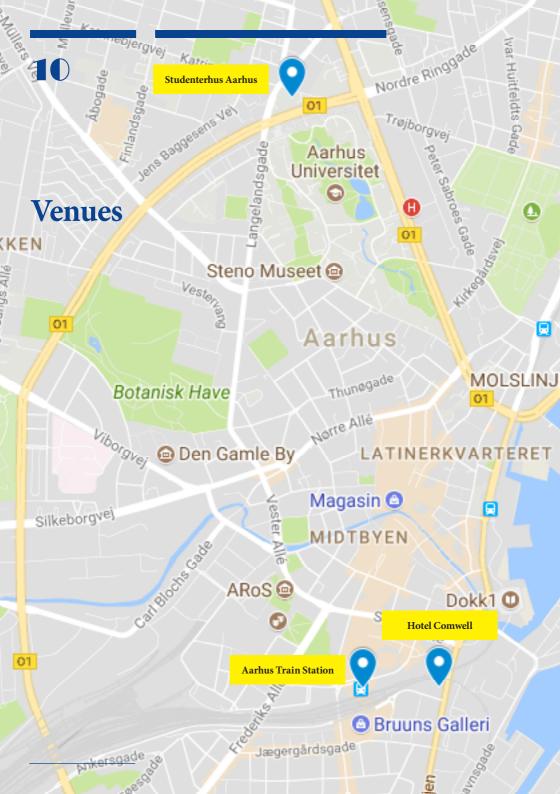
Alfred Hirt (University of Liverpool) A.M.Hirt@liverpool.ac.uk

The aim of the paper is to analyse the distribution of polychrome marble to Syrian cities such as Palmyra, Damascus, Baalbek, Gerasa, Laodicea ad Mare, etc. during the Principate and raise the question how these communities acquired these stones for the embellishment of their temples, theatres, baths, and other public buildings. Did the emperor award marble columns, capitals, and blocks as gifts from 'his' quarries to Syrian cities or merely grant access to these materials with costs carried by the communities themselves? A close examination of the archaeological and epigraphic record of Syria provides the basis for the evaluation of possible answers.

### Syria, Palmyra, and marble trade

Dagmara Wielgosz (University of Warsaw) dagmara.wielgosz@uw.edu.pl

In Roman times, the extraction of marble was a highly developed industry. Both as a raw material and artefacts, marble was widely distributed in the Eastern Mediterranean. The import of this precious sculptural and building material was often related to urban development of the cities and significant Romanization of areas. Palmyra, together with other cities of Roman Syria, benefited from this vast system of the marble trade. Honorific statues, mythological figures, sarcophagi, and architectural elements made of marble were displayed both in its private and public space to complete the sculptural landscape of the city.



## **Organisers**



PhD student Julia Steding Aarhus University

Phone: +45 8716 2543

Email: j.steding@cas.au.dk



Professor Rubina Raja Aarhus University

Phone: +45 2718 8390

Email: rubina.raja@cas.au.dk

Website: http://projects.au.dk/palmyraportrait/events/productioneconomy-parttwo/



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