

The background of the image is a circular stone mosaic floor. It features concentric rings of stones in various shades of brown, tan, and grey. The pattern is symmetrical and radiates from a central point. The stones are of different sizes and shapes, creating a textured, aged appearance.

# WORKSHOP SET IN STONE I, 2016

**Constructing monuments  
and perceiving  
monumentality**



## Workshop SETinSTONE I



This workshop is organized as part of the research project “SETinSTONE: A retrospective impact assessment of human and environmental resource usage in Late Bronze Age Mycenaean Monumental Architecture, Greece”, funded by ERC consolidator grant nr 646667 (2015-2020; [setinstone.eu](http://setinstone.eu)). The workshop is financially supported by the Faculty of Archaeology (Material Culture Studies) of Leiden University, and by the Leids Universiteits Fonds ([www.luf.nl](http://www.luf.nl)).

# Workshop SETinSTONE I, 2016

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## Workshop SETinSTONE I

### PROGRAM

#### *FRIDAY DECEMBER 9<sup>TH</sup> (VAN STEENIS BUILDING, ROOM E0.03B)*

Chair: Annelou van Gijn

1:30 – 2:00	Ann Brysbaert	Constructing monuments and perceiving monumentality
2:00 – 2:30	Elisavet Sioumpara	The monumentalization of the Athenian Acropolis at the beginning of the 6th c. B.C.
2:30 – 3:00	Yannick Boswinkel	Interpreting architecture from a survey context: recognizing monumental structures.

3:00 – 3:30 Break

Chair: Quentin Bourgeois

3:30 – 4:00	Roberto Risch	Fortifications and violence in the Mediterranean during the 3rd millennium BC
4:00 – 4:30	Lesley McFadyen	Outer Worlds Inside
4:30 – 5:00	Chris Scarre	Mounds and Monumentality
5:00 – 5:30	Discussion	

5:30 – 6:30 Drinks

#### *SATURDAY DECEMBER 10<sup>TH</sup> (LIPSIUS BUILDING, ROOM 307)*

Chair: Victor Klinkenberg

9:00 – 9:30	Jari Pakkanen	Documenting fragmentarily preserved architecture
9:30 – 10:00	Daniel Turner	Comparative Labor Rates in Cross-Cultural Contexts
10:00 – 10:30	Break	

Chair: Ann Brysbaert

10:30 – 11:00	Janet DeLaine	Economic choice in Roman construction: case studies from Ostia
11:00 – 11:30	Hanna Stöger	Mycenaean Movers and Shakers – Taking a second look at architecture and movement in Tiryns and Pylos
11:30 – 12:30	Final Discussion	

## Workshop SETinSTONE I

### PRACTICAL INFORMATION

#### Workshop venues:

Friday December 9<sup>th</sup>: Van Steenis Building room E0.03B

Saturday December 10<sup>th</sup>: Lipsius Building room 307

Lunch Friday (speakers): Van Steenis Building, Einsteinweg 2

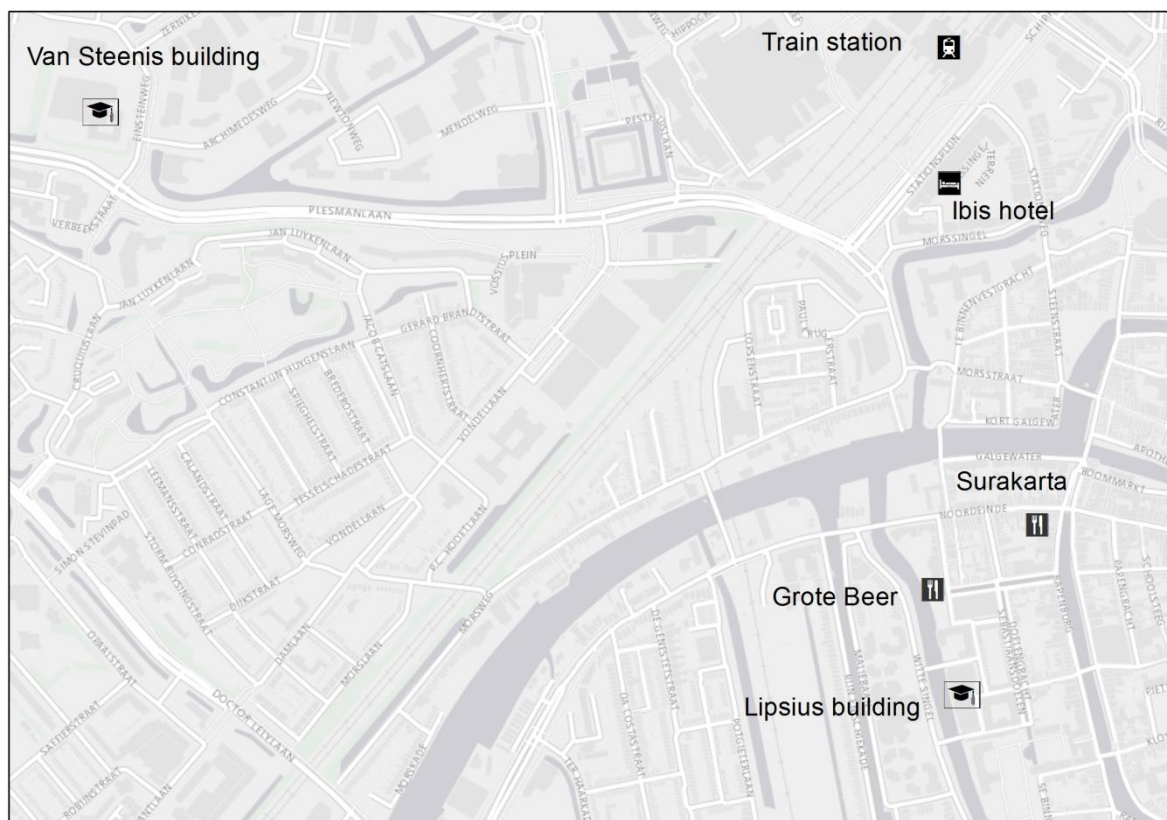
Dinner Friday (Speakers): Surakarta, Noordeinde 51

Lunch Saturday (Speakers): Grote Beer, Rembrandtstraat 27

Hotel: Ibis Leiden Centre, Stationsplein 240

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(See detailed map on back of booklet for the venues in the centre)

ANN BRYLSBAERT

## Constructing monuments and perceiving monumentality

Monumental buildings present in many societies are often associated with important (changing) socio-economic and political processes that these societies underwent and/or instrumentalised. Due to the large human and other resources input involved in their construction and maintenance, such monumental constructions form a regular research target in order to investigate both their associated societies as well as the underlying processes that generate something monumental. Therefore, monumentality can be understood as an ...'ongoing, constantly renegotiated *relationship* between thing and person, between the monument(s) and the person(s) experiencing the monument' (Osborne 2014: 3, original emphasis). A monumental construction may thus physically remain the same for quite some time, but the actual meaning that people, in whose lives this monument is embedded, associate with the monument itself may change continuously (Osborne 2014: 4). This is mainly due to changing contexts in which people perceived, assessed, and interacted with such constructions, over time. These changes of meaning may occur diachronically, geographically but also socially.

Realising that such shifts may occur forces us to rethink the meaning and the roles that past technologies may play in constructing, consuming and perceiving something monumental. In fact, it is through investigating the processes, the practices of building and crafting, and selecting the specific locales in which these activities took place, that we can argue convincingly that meaning may already become formulated *while* the form itself is still being created. As such, meaning-making and -giving may also influence the shaping of the monument in each of its facets spatially, materially, socially and diachronically.

Based at the Faculty of Archaeology, Leiden University, and funded by a 5 years ERC consolidator program the SETinSTONE project aims to assess how monumental building activities in the LBA Greece impacted on the political and socio-economic structures of the Mycenaean polities in the period between 1600 and 1100 BC, and how people responded to changes in these structures. Therefore, the project's first workshop on monumental architecture and monumentality seemed entirely appropriate. We highlight a relational approach to monumentality in which both humans and objects (i.e. the monuments) find a place in current archaeological interdisciplinary discourses. By bringing together world specialists in the field of monumental architecture and monumentality we look forward to discussing and sharing a wide range of aspects relating to this topic as summarised below:

- To discuss theoretical approaches in studying both architecture as a *material* culture expression and as taskscapes (see Ingold 2000) in context
- To share and discuss interpretive processes relating to perceiving landscapes dotted with or dominated by these monumental material expressions of past cultural groups
- To share and discuss current field methods in order to document monumental architecture in different contexts

Of importance in this context is the aspect of making and the role that 'making' as a series of processes and social practices has on (changing) perceptions of the material culture of monumental architecture in the landscape (see Ingold's use of taskscapes, 2000). We all agree

that the Palais du Versailles is monumental in every sense of the word (e.g. Duindam 2003). The 'end product' (if there is such a thing) is physically immensely impressive and is a clear example of conspicuous consumption, but its production and human creativity made obvious in the chosen technologies and materials at hand then (steam engines as prime movers only arrived c. 1850 AD, Forbes 1993: 80), evoke awe even more, especially in terms of manpower, organisational logistics, and know-how.

Equally interesting is the context in which Mycenaean large-scale and long-term building programmes took place from 1400 to 1200/1190 BC. Especially the last 50 or 25 years during which many physical efforts took place simultaneously in the Argolid, are spectacular. Towards 1200/1190 BC, such construction activities ceased to exist and coincided with the slow-down and the cessation of specific other craft activities too.

As Maran (2009, 2012) has argued convincingly, the Mycenaean citadels and other large-scale building works raised in the Argolid only one or two generations earlier were not perceived by the post-1200 BC elites in the way they were under the previous palatial socio-political structures. For example, a post-palatial banquet hall (Building T) of monumental scale was built *inside the ruined walls* of the most important locale of the earlier palatial elites, the Great Megaron, the latter which was the seat of the former elite rulership. Such locale-usurping act indicates that the new elites undermined the previously held perception of power by showing its failure so very blatantly. These post-palatial elites *did*, however, build again, by electing again the same locale and rooting it in known ancestral powerful presence, but now expressed differently technologically, materially and socially. Such strategies aimed at altering people's perception of where and how power was present under the 'new regime'.

Especially Scarre (2002) argues that past people's perceptions on the landscape surrounding monuments may be very different than modern ways (see also Brysbaert 2015a). Perceptions, thus, tend to be rather subjective, contextualised, and culture-specific since they express a personal viewpoint, and are based on experiences and expectations which vary for each of us. It is people's perception of monuments, the relationships between material cultural expressions in the form of large-scale architecture and us, humans, that create the perceptions of something that is more than the usual, something monumental, even if the actual item is not physically that impressive. Investigating such large-scale building complexes from a technical viewpoint can be adequately approached by means of employing architectural energetics, a promising method that has been tested out in multiple contexts (Abrams and Bolland 1994; DeLaine 1998; Pakkanen 2009). Such well-developed field techniques are indispensable in our efforts to understand the intense relationship between people and their material surroundings while they were building. Combining such interpretive processes with econometric and other field data collected on the monuments under study will lend value to both studies on monumental architecture and aspects of monumentality.

*ELISAVET P. SIOUMPARA*

**The monumentalization of the Athenian Acropolis at the beginning of the 6<sup>th</sup> c. B.C.**

As the main sanctuary of the city-state of Athens, Acropolis acquires its function as such from the late Geometric period, with a small format, in accordance with the architecture scale of the period in Greece as a whole. It is only at the beginning of the 6<sup>th</sup> c. B.C. and, to be more precise, during the second quarter of the 6<sup>th</sup> c. BC that this picture changes radically, owing to the implementation of a new building program, aiming at monumentalizing not only the sanctuary itself but also the city-state of Athens.

This program includes several components, as will be shown. Firstly, a monumentalizing building program with the erection of the archaic Parthenon, the first Doric Peripteral temple built entirely of stone in Athens, better known as the “Hekatompedon” or “H-Architecture” in the secondary literature, although it still remains controversial how big the temple was as well as whether it was erected at the site of the later Parthenon or on the Dörpfeld Foundations. The new investigation of all the remaining architectural members of the “Hekatompedon”, which had never been studied and published in detail, has afforded two fundamental findings, which contribute to a new topography of the sanctuary during this period: firstly, it has been made possible to submit a new reconstruction of a monumental temple, along with its architectural sculpture; secondly, it has been possible to ascertain the location of the temple itself, which was built at the same site where the Parthenon was later erected. With this study as a basis, the whole program of the monumentalization of the Acropolis will be analysed, discussing its multiple aspects, including the necessary terrain arrangements and the terraces which had to be made before the erection of the building; within the same framework, the question whether the simultaneous votives or certain categories of votives contributed towards the monumentalization of the Acropolis or not will also be addressed. All of the above are to be investigated in the light of one crucial factor, that is their correlation to the still standing Mycenaean wall, which at the time still defined the terrain of the Acropolis and the perception of the site as a whole.

Lastly, the socioeconomic and political processes of the beginning of the 6<sup>th</sup> c. BC at Athens, which certainly led to that program, are going to be examined more closely. It will be proposed that the close connection of the Hekatompedon with the tyranny of Peisistratus should no longer be maintained, and a new reassessment of the above described building and monumentalizing program with the constitutional reforms of Solon against the political, economic, and moral decline in archaic Athens will be ventured.



YANNICK BOSWINKEL

**Interpreting architecture from a survey context: recognizing monumental structures.**

Surveying ancient architecture usually involves large ruins of monumental structures, or nearly complete buildings still standing several meters high. By documenting such wonderful structures we can learn much about style, construction techniques and building methods from the past. However, how useful would it be to survey sites for architecture where stretches of walls are no higher than 2 meter or where the majority of the architectural remains comprise individual building blocks out of their original context? Would it still be possible to recognize structures? Or special zones within cities? Or, more in line with this workshop, monumentality?

Within the '*Ancient Cities of Boeotia Project*' a small team has been documenting the architectural remains from various sites to answer these and other questions. At Hyettos, Haliartos and Koroneia a large variety of architectural remains were found and documented. Some of these no more than a heap of rubble, but occasionally monumental *in situ* structures or foundations were encountered as well. In this presentation the focus will be on the site of ancient Koroneia. The majority of the documented material there comprised generic building material in the form of both roughly hewn as well as well-dressed stone blocks. This presentation will show the usefulness of such a survey, what kind of results it yielded and an attempt will be made to identify monumentality in out-of-context material. Using Trigger's definition of monumental as structures in which 'scale and elaboration exceed the requirements of any practical functions that a building is intended to perform', characteristics of monumentality will be sought in order to show whether monumental structures can be recognized in its individual pieces, or only by the sum of its parts.

*ROBERTO RISCH – (CRISTINA RIHUERE HERRADA, VICENTE LULL AND RAFAEL MICÓ)*

**Fortifications and violence in the Mediterranean during the 3rd millennium BC**

Around 3100/3000 BCE many Mediterranean societies engaged in a massive process of fortification of their living spaces. Settled areas were now delimited by stone constructions formed by walls, towers or bastions and occasionally also fortified gates. Interestingly, these defensive works were not restricted to particular regions, but scattered widely both in the eastern as well as the western Mediterranean. Such a wide spread phenomenon speaks for a crucial turning point in the history of the Mediterranean after which inter-communal aggressions increased and combat tactics and poliorcetics changed. Particularly in the Aegean, this development of defensive architecture and permanent settlement ended more or less abruptly by 2200 BCE. Precisely at that moment the first urban centre of the western Mediterranean was founded in the highly protected location on the hill of La Bastida (Murcia, SE Iberia). Recent excavations have shown that this settlement was carefully planned and defended by a fortification system characteristic of the eastern Mediterranean type. Consequently, the question about the circulation of concepts and persons throughout the Mediterranean in the 3<sup>rd</sup> millennium BCE needs to be carefully addressed again.

*LESLEY MCFADYEN*

**Outer Worlds Inside**

The precedent for SETinSTONE is a stable monument in a changing world, but what of an unstable monument? What of the associated societies and underlying processes that generate something mutable?

The focus of this paper is the unchambered long barrows of the Neolithic in southern Britain. I take the line that materials and forms shift through time; that they are immanent in unfolding practices (not given or transcendent); that the materials themselves allowed for specific kinds of shape shifting; and that often form follows from materials rather than vice versa. This is a study of an architecture that you cannot get back into, how it emerges through the process of construction, and the affects of that practice on those that participate in building work. As archaeologists, we therefore have to consider the kinds of body dynamics and politics involved in a more dependent building practice - an unequal architecture. Yet these practices were of short duration, and the physical inaccessibility of the architecture and its lack of stable form meant that inequality could not be repeatedly played out through an engagement with an architectural object. How then to understand social relationships negotiated on such inner terms?

*CHRIS SCARRE*

## **Mounds and Monumentality**

Mounds are a widespread feature of the archaeological record, appearing in a diversity of forms at different periods and in a range of social and cultural settings. Some of them are so modest in their proportions that they are easily overlooked. Others conversely are so massive that they would have demanded the resources and the administrative apparatus of early state societies for their construction. Mounds are a major component of the larger category of 'monuments' that by their nature fulfil a variety of objectives. They impress and commemorate; they also serve to cover things, very often the remains of the dead, hiding them from view and protecting them from disturbance. They also seal them away and may serve to protect the living from the powerful and dangerous things that are buried within them. In some cases, indeed, the addition of the mound may have been act of closure, marking the end of active mortuary deposition, turning a grave into a cenotaph. Finally, mounds not only cover, but also raise, reaching towards the heavens and lifting their tops beyond the realm of the everyday. Their elevation can be both practical and symbolic, in some instances providing a platform for special rituals half way between earth and sky. Drawing on a wide range of examples, but focusing on the prehistoric burial mounds of western Europe, this paper explores the symbolism of the mound, the visibility of the mound within its broader landscape, and the materials and processes involved in their construction.



*JARI PAKKANEN*

## **Documenting fragmentarily preserved architecture**

Due to recent development of hard- and software full three-dimensional documentation is fast replacing traditional means of recording both monumental and non-monumental architecture. Even though the cost of laser scanning can still be prohibitive, all fieldwork projects have access to good digital cameras and most to a reflectorless total station. Currently, the most cost-effective way of producing two-dimensional line drawings is combining photogrammetry with intensive stone-by-stone documentation with total stations: the benefits of the method include speed of production, much higher measurement density and precision compared to hand-made drawings. For large complexes drone photography can shorten the time needed in the field. Full 3D documentation of existing features allows for more precise reconstructions and subsequent analyses of the architecture. Students without previous experience of architectural documentation have been trained in short field courses up to the level of reaching a professional standard in their work.

In current publications architectural features are most often presented using line drawings and photographs: this might be about to change because of the advantages of employing photogrammetry. However, when precise line drawings are needed, reflectorless total station recording should be the preferred means of making these:

1. Using laser instead of infrared reduces the size of the team from two persons to one;
2. A dense network of laser backsights allows for fast changes of the instrument location and getting ideal views of all measured surfaces.
3. Abandoning the use of optical telescope and using the laser pointer instead gives a better idea of what exactly is recorded.

This method can in practice be described as directly 'drawing' the blocks in 3D with the total station. In the presentation the precision of the photogrammetry models will be compared with highly accurate total station models. The presented examples are derived from ongoing fieldwork projects of the Finnish Institute at Athens.

*DANIEL R. TURNER*

**Comparative Labor Rates in Cross-Cultural Contexts**

Studies in preindustrial logistics of construction rely on two major components: accurate measurements of the construction in question and defensible rates at which the work likely proceeded. Given the application of digital surveying methods, the former has far surpassed the latter in precision. Difficulties in designing and executing timed experimental trials in preindustrial construction methods have hindered the creation of new, potentially more accurate rates, and the perception of these studies as a niche pursuit for specialists has led them to suffer limited distribution. Rates cited in ethnographic reports or historical sources are often of only peripheral concern to the original author and can mislead with poor estimations or intentional boasting. Compounding these problems, the practice of selecting rates from previous studies, whether within the same region and time period or not, is often obstructed by their scattered occurrence within the literature. Secondary citation of rates results in them appearing one or two at a time, accompanied by a brief explanation that defers space to the wider implications of the case study at hand. To avoid perpetuating this critical weakness in modelling preindustrial labor, a compilation of existing rates must follow.

*JANET DELAINE*

**Economic choice in Roman construction: case studies from Ostia**

This paper investigates the possible role of economic factors in the exercise of choice in Roman construction at Ostia through three case studies, all focusing on the differential use of materials and construction techniques: the Horrea in via degli Aurighi (III.ii.6); the Mausoleum of Cartilius Pomicola; and a number of peristyle colonnades (the Horrea of Hortensius, the palaestra of the Baths of Neptune, and the *porticus post scaenam* of the theatre). Transport for local materials, and labour for the production of construction elements and their putting in place will be considered, together with the requirements in the latter two examples for special equipment especially lifting machines. The conclusions highlight the tension between strategies for minimising construction expenses and the requirements of the patron's self-presentation.

*HANNA STÖGER*

**Mycenaean Movers and Shakers – Taking a second look at architecture and movement in Tiryns and Pylos**

The Mycenaean Palatial architecture of Pylos and Tiryns has been extensively studied in terms of its underlying political structure. The traditional emphasis thereby has been on performative space, and politically and socially structured space, all of which feed into an idea of an elite culture forging its Mycenaean identity. However, if we take a more pragmatic look at palace architecture, new insights can be offered. By breaking down the palaces into their spatial components and looking into their internal organization with space syntax methods (Hillier and Hanson 1984, see also Thaler 2005), a different picture of palatial space and movement emerges. A preliminary study already reveals that the complexity of movement within the palaces extends beyond a singular linear approach leading to the palace's principal megaron (Tiryns). Alternative movement patterns privilege unexpected architectural spaces, suggesting different activities originating from diverse points (gates and functional centres). By taking the palaces at 'Space Value' we can question the traditional narrative of palatial movement in Pylos and Tiryns, and by incorporating the palaces' immediate cultural landscape (associated settlement and terrain) new research perspectives can be explored.



## Workshop SETinSTONE I

## NOTES

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**Train station**

**Ibis hotel**

**Surakarta**

**Grote Beer**

**Lipsius building**