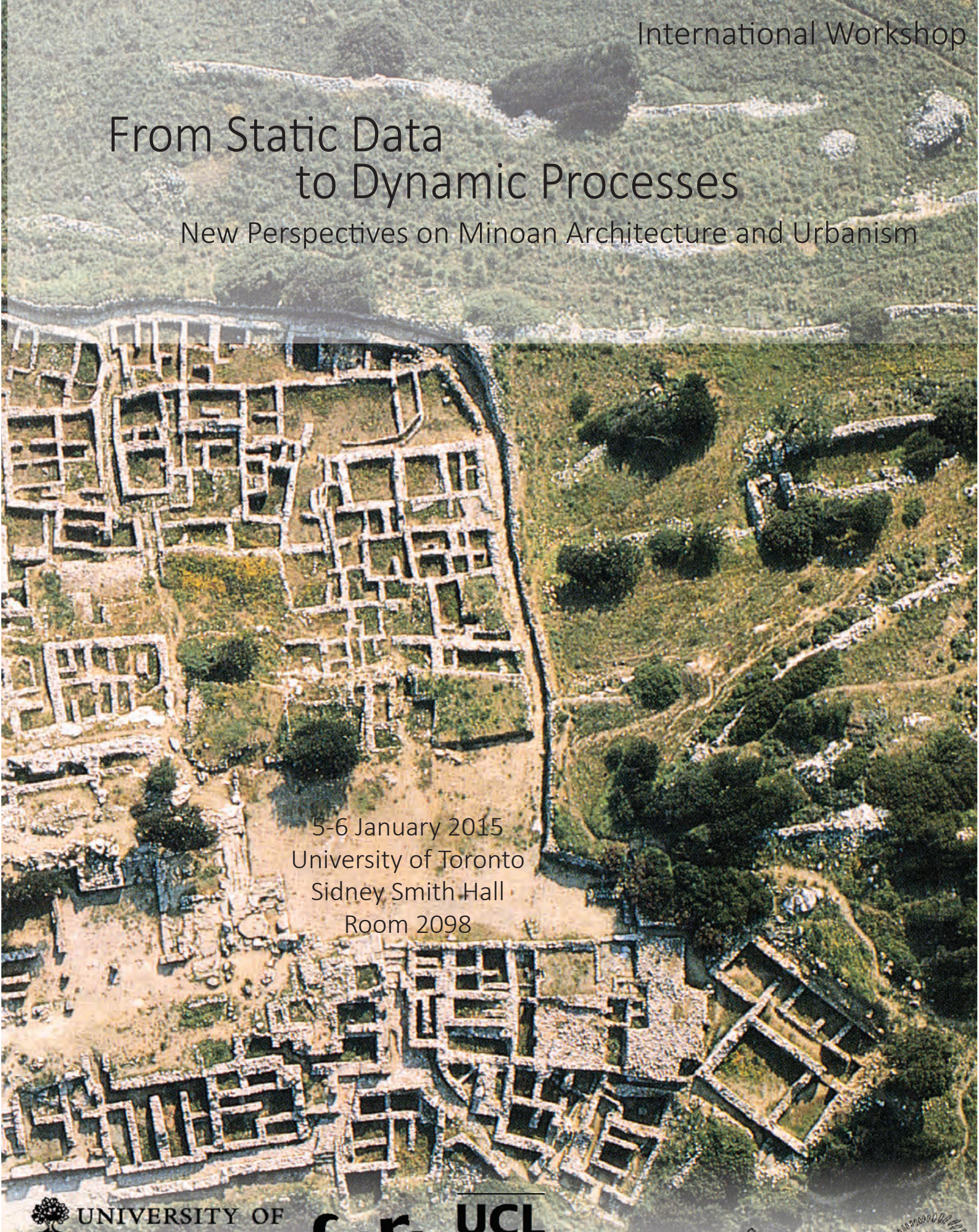
International Workshop

From Static Data to Dynamic Processes

New Perspectives on Minoan Architecture and Urbanism



5-6 January 2015
University of Toronto
Sidney Smith Hall
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From Static Data to Dynamic Processes

New Perspectives on Minoan Architecture and Urbanism

International Workshop

5-6 January 2015

University of Toronto
History Conference Room
2098 Sidney Smith Hall

The workshop is co-organized by Dr. Quentin Letesson (Department of Art, University of Toronto & Département d'archéologie et d'histoire de l'art, Université Catholique de Louvain) and Pr. Carl Knappett (Department of Art, University of Toronto).

The workshop is supported by the Social Sciences and Humanities Research Council (SSHRC – Canada) and the Fonds National de la Recherche Scientifique (FNRS – Belgium). It also received the generous support of University of Toronto's Graham/ Thompson Chair (Knappett), Department of Art, Aegean Material Culture Laboratory and Archaeology Centre; and of Université Catholique de Louvain's Institut des Civilisations, Arts et Lettres (INCAL), Centre d'Étude des Mondes Antiques (CEMA) and ARC (A World in Crisis? Archaeological and Epigraphical Perspectives on the Late Bronze Age (13th c. B.C.) Mediterranean Systems' Collapse: a case study approach under the direction of Pr. Jan Driessen; Communauté française de Belgique – Actions de Recherche Concertées) of which the workshop is also a satellite event.

Overview

This international workshop brings together specialists of Cretan Bronze Age architecture and urbanism with scholars from outside the field of Minoan archaeology to critically assess the current state of research, stimulate fruitful cross-disciplinary approaches, and outline promising agendas for future research. Since Sir Arthur Evans' excavations at Knossos at the dawn of the 20th century (Evans 1921-1935), Minoan Crete (c. 3100-1200 BCE) displays one of the most idiosyncratic and distinctive built environments of the ancient world (McEnroe 2010; Papadopoulos 2011). Consequently, Cretan Bronze Age architecture and urbanism have attracted a lot of scholarly attention. Although this long tradition of studies of the Minoan built environment clearly laid solid bases, ongoing excavations and new field projects provide us with a tremendous amount of new data. Simultaneously, new interpretive frameworks for examining the socio-political organization of Bronze Age Crete are opening up (Driessen et al. 2002; Hamilakis 2002; Schoep et al. 2012), while theoretical and computational approaches to ancient space, adapted from the fields of urban studies, geography, and complexity science, are gaining ground (Bevan and Lake 2013; Knappett et al. 2011; Letesson 2013; Paliou et al. 2014). A forum to allow the sharing of recent results and new methods is therefore particularly timely. Ongoing research on architectural configuration (Hillier 1996) and the current emergence of a new science of cities (Batty 2013; Bettencourt 2013) indeed invite us to go beyond static descriptions of our data, and to generate a more dynamic understanding of Minoan buildings and urban environments in terms of flows of people, matter, energy, and information.

Program

Monday 5th January

9:00 [INTRODUCTION] **Quentin Letesson** and **Carl Knappett**
Minoan built environment: recent perspectives, future challenges

9:45 **Todd Whitelaw** (University College London)
Minoan urbanism as a dynamic process: context, structure and change

10:30 Coffee

11:00 **Joseph Shaw** (University of Toronto)
The Middle Minoan Slipway for Ships at the Kommos Harbor, and Harbor Development in Prehistoric Crete

11:45 **Matthew Buell** (Trent University) and **John McEnroe** (Hamilton College)
Community Building/Building Community at Gournia

12:30 Discussion

1:00 Lunch

2:30 **Tim Cunningham** (Université catholique de Louvain)
Best Laid Plans: An Archaeology of Architectural Errors in Bronze Age Crete

3:15 **Jan Driessen** (Université catholique de Louvain)
'The House of the Mother as Fact and Symbol'. Understanding in-House Minoan relationships.

4:00 Coffee

4:45 [KEYNOTE] **Michael E. Smith** (Arizona State University)
Minoan cities in the context of comparative urbanism

5:30 General discussion

Tuesday 6th January

9:00 **Maud Devolder** (Humboldt-Universität zu Berlin)
Architectural Energetics and Cretan Bronze Age Architecture. Measuring the Scale of Minoan Building Projects

9:45 **Clairy Palyvou** (Aristotle University of Thessaloniki)
Group Design Formations in the Minoan Era

10:30 Coffee

11:00 **Andrew Bevan** (University College London)
Computational models of settlement and their relevance to Bronze Age Crete

11:45 **Eleftheria Paliou** (University of Heidelberg)
Spatial interactions and socio-political change before the first palace of Phaistos: modelling the evolution of regional settlement hierarchies in South-Central Crete

12:30 Discussion

1:00 Lunch

2:30 **Louise Hitchcock** (University of Melbourne)
Lost in Translation: Urbanism in Mycenaean Crete at the end of the Bronze Age: A View from the East

3:15 **Rodney Fitzsimons** (Trent University)
Taking a Seat at the Minoan Banquet: An Architectural Approach to the Minoanisation of the Aegean Islands

4:00 Coffee

4:45 Final Discussion

Overall Goal & Objectives

For more than a century now, the archaeology of the built environment of Bronze Age Crete has thrived: many excavations initiated at the beginning of the 20th century have either continued or been revived, providing detailed descriptions of numerous settlements of various sizes; new projects have unearthed fascinating buildings; and many regions of the island have now been systematically surveyed. As a consequence, Minoan archaeologists have at their disposal an impressive and ever-expanding dataset. Of course, this wealth of information has produced a broad range of studies and invaluable syntheses. Nevertheless, although it is now clear that during the Minoan period (ca. 3100-1200 BCE), the island of Crete was characterized by a very distinctive architectural landscape (McEnroe 2010) and saw the development of the first urban settlements of Bronze Age Europe (Whitelaw 2001; 2011), our understanding of these phenomena has long been hampered by rather static approaches. Indeed, for decades, studies in Minoan architecture and urbanism were mostly concerned with materials and techniques (Shaw 2009), basic formal descriptions and functional evaluations (Hägg and Marinatos 1987; Hägg 1997).

In recent years though, many Minoan scholars began adopting innovative approaches in their architectural or urban studies (Bevan 2010; Bevan and Wilson 2013; Cunningham 2001; 2007; Devolder 2013; Driessen 2001; Knappett 2009; Letesson 2013; 2014; Palyvou 2009; Shaw 2011; Whitelaw 2001; 2011). First, new excavations and intensive surveys allowed detailed regional approaches, often undermining a monolithic narrative that was unilaterally applied throughout the island. Second, these fine-grained analyses were often strengthened by a diachronic focus, with distinct developmental stages of the built environment carefully identified. Third, the multi-scalar nature of the built environment was more systematically explored, with scholars seeking to articulate the micro-scale of individual buildings (households) with the meso-scale of settlement (communities) and the macro-scale of island-wide spatial organizations (polities). Finally, many of these studies were also characterized by the adoption of analytical tools and methods, often borrowed from other disciplines such as urban studies and complexity science.

These advances have clearly helped improve our understanding of various aspects of Minoan built environments. Nevertheless, they have usually been confined to a limited number of sites and explored by a handful of researchers remaining relatively isolated from one another. It is surprising that, for more than a decade, no formal

event has fostered a pooling of these new studies and methodologies and a critical assessment of the new research perspectives they open up. Our workshop seeks to remedy this situation by bringing together advocates of diverse approaches, to explore how they can be integrated more effectively and applied to a wider range of evidence. More fundamentally, the workshop also aims to build connections with architectural and urban studies beyond Minoan archaeology and across disciplinary boundaries. Our argument is that to make the most out of the promising on-going research on the Minoan built environment we need to pay closer attention to recent advances in the science of cities, and to resolutely envision buildings and urban environments as inherently dynamic processes. For years, the active potential of architectural space has been demonstrated, whether focused on patterns of movements and interactions materialized in its configuration (e.g. Hillier 1996), or on the phenomenological and cognitive dimensions of its recursive interplay with human beings (e.g. Leatherbarrow 2008). The study of urban environments, though, is now characterized by extremely innovative approaches, mostly fueled by the contribution of complexity science (Lane et al. 2009; Batty 2013; Bettencourt 2013). Although some of its core ideas emerged as early as the end of the 1980's and early 90's (e.g. Castells 1989; Batty and Longley 1994; see also van der Leeuw and McGlade 1997 for an early application in archaeology), this new view of cities is made possible today by increasing opportunities to collect and share a wide range of data on various aspects of city life (such as land use, urban infrastructure, and rates of socioeconomic activity). Mobilizing these tremendously large sets of data allows specialists to go beyond formal descriptions of spaces and places, and "expose locations as patterns of interactions acting as the glue that holds populations together through flows of material, people, and information" (Batty 2013: 8). Studies of urban scaling have been particularly successful, with the evolution in a city's size now known to have a direct correlation with many characteristics such as the number of patents it produces to the total length of its roads or the number of social interactions its inhabitants enjoy (Bettencourt 2013). The success of a city can then be understood as the right balance between large and dense social webs and extensive and cost-effective infrastructures. In other words, interactions and flows can grow – and a city be productive and prosper – only if the social, spatial and infrastructural networks that enable people, things and information to meet across the urban space are adapted to the extent of the city in question. This perspective indeed conveys a more dynamic understanding of cities; one could almost say an urban agency. As Bettencourt (2013) puts it, cities are "social reactors": they attract people and accelerate social interaction and outputs.

But how exactly could this help us to understand ancient built environments and Minoan architecture and urbanism more specifically? By creating a sense of buildings and cities doing something (i.e. working, operating, and functioning), this perspective is actually a very powerful heuristic device: it invites us to mobilize our relatively static data (i.e. remains of buildings and settlements) into a more dynamic framework. We argue that, in archaeology, thinking of the active potential of architectural configuration and of flows and networks in an urban environment can be both exploratory and explanatory. In such a perspective, the first step is, of course, to collect as much data as possible but, more fundamentally, to present and analyze such data in ways that enable us to think of buildings and urban environments as dynamic processes. Often, built environments have been partially recorded, and data collection varies from extremely detailed at some sites to almost nonexistent for the large-scale early excavations of the beginning of the 20th century. This meeting will therefore allow us to explore what sort of evidence can most effectively be documented in similar ways, or can be salvaged from older excavations to allow comparisons. Of course, various valuable interpretations and insights on the specificities and development of built environments have been made. Nevertheless, at the junction between data collection and interpretation, that is to say at the intermediate stage of data processing or description, there is much room for improvement. Therefore, the core concern of this meeting is to foster the adoption of a systematic and detailed analysis of architectural as well as urban morphology, a research agenda recently championed by Michael E. Smith, our keynote speaker and principal discussant, in an influential series of papers on the forms of ancient cities. Smith has recently demonstrated that the streets, buildings and open spaces that constitute ancient urban environments can be analyzed in a systematic fashion (Smith 2007; 2011; forthcoming), that particular forms of spatial organization recurrent in urban fabrics such as blocks and quarters can provide invaluable information on neighborhoods and districts, their socio-economic and political counterparts (Smith 2010a), but also, together with the pioneering work of Fletcher (1995), that issues of urban density and growth can be inferred from the archaeological record (Smith 2010b).

Combined with ongoing studies of the Minoan built environment, a critical assessment of our current datasets and a deep commitment to the description of architectural and urban morphologies would allow us to raise new questions but also to re-consider recurrent issues in novel ways. Where architecture is concerned, is there a place for a renewed typological approach? How can we successfully address issues of models and variations? Can we devise a research program to encompass both polite and vernacular architecture? How can we explain and approach settlement growth? Can general patterns and principles of Minoan urban

planning be identified? And, if so, how do they differ from or recall contemporary urban features from the Mediterranean or the Near East? How can we develop an integrated approach to settlement distribution and hierarchy? How can we simultaneously deal with the micro-scale of buildings and the meso-scale of towns? We believe that by considering buildings and towns as processes rather than products – for example, by focusing on the ways in which buildings, streets, and open spaces create opportunities for movement, occupation and interaction between people or by analyzing how the progressive development of urban infrastructures might have contributed to trigger and ultimately sustained particular dynamics (innovative behaviors, competitive emulation, increased flow in the exchange of goods) – that we can more satisfactorily address crucial issues of socio-political organization across time and space. As stated in a recent collaborative manifesto (Kintigh et al. 2014), understanding the transformation of small-scale human communities into spatially and demographically larger and politically more complex entities is among the "grand challenges for archaeology" – and it is certainly a central concern of our workshop.

As rich as our dataset is, it remains almost totally underexploited beyond the disciplinary boundaries of Aegean archaeology. In recent years though, many scholars have been at pains to underline the importance of comparative studies of ancient cities for research on modern urban issues (Smith 2010a; 2010b; York et al. 2010). By promoting an analytical and dynamic perspective, the workshop therefore aims at aligning studies of the Minoan built environment with ongoing analyses of the urban phenomenon over thousands of years across many parts of the globe (Marcus and Sabloff 2008). As advocated by Smith (2012), only this approach can allow us to make sense of the high variability of towns and cities throughout the ages and provide a long-term and world-wide perspective on the urban phenomenon that may well help scholars and policy-makers to understand issues relating to modern cities and environmental changes.

Abstracts

Bevan, A. (Institute of Archaeology, University College London)

Computational models of settlement and their relevance to Bronze Age Crete

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This paper reviews the range of computational approaches that can now be used to address settlement form, function, location and spatial configuration, with a particular focus on our understanding of Bronze Age Crete. Traditional 'predictive models' of site location are a rather dry, often-criticized, and sometimes rather poorly-targeted method for exploring these issues, but they nonetheless have a track record of over 20 years' application in archaeology which offers many lessons about the challenges associated with settlement and other site datasets. Beyond these, there are now a host of further approaches that, for example, can jointly model the factors affecting settlement location, growth and decline in settlement hierarchies, or spatial interactions between human communities. We can also choose to be either more or less explicit when it comes to the realism with which we endow such models, with respect for example to topographically-sensitive route networks, geographically-plausible settlement hinterlands, colonization and abandonment dynamics, or human decision-making processes. Finally, we need to grapple with chronologically uncertain and unevenly-recovered settlement records. Despite these challenges and a sometimes bewildering array of computational choices, there is good reason to be optimistic about how such methods can now support our wider archaeological explanations and narratives.

Buell, M. (Department of Ancient History and Classics, Trent University) &
McEnroe, J. (Department of Art History, Hamilton College)

Community Building/Building Community at Gournia

With its winding streets, blocks of closely packed houses, small palace, and plateia ("Public Court"), Gournia has served as the archetypical example of a Minoan town since its original excavation by Harriet Boyd-Hawes more than a century ago. Yet, despite the town's familiarity, basic questions remain: What were the relationships among the palace, the houses, the street system, and the plateia? How did each of the residential blocks change over time? What can the study of these urban features tell us about the community's socio-political composition, organization, and relationships? As part of the Gournia Excavation Project, under the direction of L. Vance Watrous, we launched a new examination of the architecture at Gournia in 2010. To date, we have completed a new GIS-based plan of the site and have begun a 3-D model of its existing remains. In this paper, we will show how we are using these tools to unravel the complex, four-century process of construction at the site. Looking closely at the diachronic development of the town, we believe, will provide the key to understanding how the various architectural components came to embody Gournia as an evolving social community.

Cunningham, T. (Département d'archéologie et d'histoire de l'art,
Université catholique de Louvain)

Best Laid Plans:
An Archaeology of Architectural Errors in Bronze Age Crete

Understandably, approaches to Minoan architecture have long focused on its positive qualities, especially its complexity and grandeur, but also its innovativeness, safety (against earthquakes) and ingenuity. This paper proposes instead to consider two related issues of architectural errors or failure - first, at a larger scale, at failure in design and then at failure in execution. For the former I will focus on certain archetypal forms, e.g. the 'Minoan Halls» and «Lustral Basins» as well as issues of circulation within buildings and settlements. For the latter I will examine various remains from Palaikastro where we can see specific failures of materials and execution. While in no way trying to argue against the prevailing opinion of Minoan architecture as worthy of respect and praise, I will try to show that there are significant insights to be gleaned by approaching the subject with an open mind and a critical eye.

Devolder, M. (Exzellenzcluster Topoi, Humboldt-Universität zu Berlin)

Architectural Energetics and Cretan Bronze Age Architecture. Measuring the Scale of Minoan Building Projects

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The presentation focuses on an alternative approach for measuring the scale of Minoan architecture by assessing the time necessary for a crew of workers to erect a Cretan Bronze Age building. Based on various data mainly outsourced from ethnographical works, pre-mechanical engineering and the observation and replication of architectural tasks, the method provides for an accurate estimation of the man-hours generated by the construction of a Minoan building along different techniques and with various materials. We present the results of the application of such method to a large sample of edifices ranging from domestic structures to 'palatial' ones, putting emphasis on methodological and interpretive issues. These concern especially the detailed organization of the building project – i.e. how the working crew is adapting to a specific construction sequence –, the impact of the socio-political context on the scale of the building program and the ways in which the energetic parameters influence the builders' technical and material choices.

Driessen, J. (Département d'archéologie et d'histoire de l'art,
Université catholique de Louvain)

'The House of the Mother as Fact and Symbol'. Understanding in-House Minoan relationships.

In earlier work, attempts were made to appreciate larger Minoan residential remains as the architectural reflection of corporate groups which would have constituted the primary units of production and consumption in society and which would have defined themselves through their locus-boundness and intergenerationality. Although membership and internal organization of these 'Houses' may have fluctuated temporally and spatially, and affiliation may have been ruled by differing criteria, it seems evident that men and women formed their major constituent components, necessary to assure the endurance of the group.

Through the possible identification of a gender-based division in Late Minoan IIIB residences and by stressing maintenance activities and commensality practices as avenues to understand in-House relationships, the role of men and women as producers and consumers is explored as are their associations with ritual. Working backwards, the potential internal organization of earlier Minoan residences along gender-based division lines is then considered. Moreover, I explore how basic in-House relations influenced internal and external aspects of Minoan residential architecture and how they incited other dynamics which structured the society which we know as 'Minoan'.

Fitzsimons, R. (Department of Ancient History & Classics, Trent University)

Taking a Seat at the Minoan Banquet: An Architectural Approach to the Minoanisation of the Aegean Islands.

The dissemination of "Minoanizing" cultural traits throughout the Aegean in the second half of the second millennium B.C. has long been of interest to archaeologists working in this region of the ancient world, with recent scholarship stressing the active, rather than passive, nature of the role played by the indigenous inhabitants of the various regions participating in this process. While much emphasis has rightly been placed on the adoption and adaptation of the wide range of "imported" artefactual, artistic, administrative, and technological cultural traits throughout the region, comparable changes in the built environment that resulted from the same phenomena of "Minoanisation" have received relatively little attention to date beyond basic enumeration. This paper seeks to address this lacuna in current scholarship by reassessing the evidence for and significance of the adoption and adaptation of Minoan-style architectural motifs in the southern and eastern Aegean. The focus of this study will fall not on the ultimate origin of "imported" architectural elements, but rather on the significant changes that the adoption and adaptation of such motifs wrought on the local physical (i.e. visual impact, circulation patterns), economic (i.e. levels of labor investment), and socio-political (i.e. introduction of new and/or modified behavioural patterns) landscapes.

Hitchcock, L. (School of Historical and Philosophical Studies,
University of Melbourne)

Lost in Translation: Urbanism in Mycenaean Crete at the end of the Bronze Age: A View from the East

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Rectangular halls with two column bases form the core of important elite complexes at Late Minoan IIIA Quartier Nu at Malia and in building CD at nearby Late Minoan IIIB Sissi in Crete. Yet, they are different types of buildings. Most scholars acknowledge that by IIIC, Crete was inhabited by a mixed population of local and migrant elements, neither purely Mycenaean nor Minoan. While there may have been an attempt to affiliate as Mycenaean, by IIIC, megaroid structures formed part of the material culture of a mixed population. Taking a comparative approach, this paper will consider what urbanism, reorientation, and curation meant in the context of post-palatial IIIC producing cultures of the Bronze to Iron Age transition.

Paliou, E. (Zentrum für Altertumswissenschaften, University of Heidelberg)

Spatial interactions and socio-political change before the first palace of Phaistos:

modelling the evolution of regional settlement hierarchies in South-Central Crete

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The political organization in Bronze Age Crete just before or at the time of the appearance of the first Minoan palaces has been a continuous focus of discussion in Minoan archaeology in recent years. To what degree had Phaistos dominated its surrounding landscape? When looking at the regional scale can we identify a hierarchical political structure with a single centre of power or a picture of greater socio-political complexity that suggests the existence of more than one competing local centers? To date, Aegean Bronze Age scholars have attempted to answer these questions looking into evidence deriving from comparative material culture analysis, excavation and archaeological surface surveys. Nonetheless, these attempts have often been hindered by the very fragmentary state of the archaeological record. This paper builds on recent work on computational analysis and the modelling of dynamic geographic networks (Bevan and Wilson 2013) to study the evolution of regional settlement hierarchies in South-Central Crete (Mesara and Asterousia regions) at the period just before the emergence of the palace of Phaistos. The model seeks to contribute new evidence to the archaeological debate by predicting the flow of people and/or goods between settlements, and the likely distribution of settlement sizes, which may be indicative of urban growth and the accumulation of political, economic and ideological power at the regional and micro-regional scale.

Palyvou, C. (School of Architecture, Aristotle University of Thessaloniki)

Group Design Formations in the Minoan Era

There are four levels of design of the man-made environment: a) architectural design applies to a single building and its immediate environment; b) urban design or group design refers to a number of interrelated buildings and all the open-air spaces, private and public, that relate to their function; c) town-planning deals with public space and land use at the level of a settlement; and d) regional planning encompasses economic and social issues besides architecture and settlement patterns. Minoan sites offer ample material for the study of all four. What is of special interest, however, is the second category for it describes well the process of formation of the so-called Minoan Palace. Urban design – or group design as Giedion preferred it – was raised to high levels of sophistication in the Neopalatial period, involving ingenious design concepts and manipulation of public spaces, based on forces of attraction and repulsion that aim at creating a harmonious whole, while respecting the formal individuality of each component.

Shaw, J. (Department of Fine Art, University of Toronto)

The Middle Minoan Slipway for Ships at the Kommos Harbor, and Harbor Development in Prehistoric Crete

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In 1985, excavation below the Central Courts of Minoan Buildings T and AA, revealed a long (18.40 m) but narrow (1.40 m.), segment of slab pavement heading west, sloping down toward the sea. At the time, and later, in our Volume V (2006), we had also identified the MM I-IIA pavement as having served as a "walkway" of the type commonly encountered in the West Courts of Minoan Palaces. Some think such walkways were used for processions, appropriate for the palatial buildings at Kommos after MM IIA. Since then, the writer had an opportunity to independently examine Minoan walkways, so that I realized that our "walkway" was certainly something else. This is because it differs from the usual "walkways" by having shallow gaps 0.15-0.20 m. wide, set every 2- 2.60 m. Into each gap was set something, most likely wooden, which had simply disappeared. Our thought, proposed here, is that wooden beams were set in the gaps, projecting up slightly above the stone slabs, and functioning as "sleepers" upon which ships could slide when being hauled up or down the slope of the shoreline. This makes our "walkway" into a slipway -- perhaps a unique find of naval architecture in the Aegean, but with parallels in the slipways with similar sleepers within the later Classical Greek ship sheds.

Smith, M. E. (School of Human Evolution & Social Change and School of Geographical Sciences & Urban Planning, Arizona State University)

Minoan cities in the context of comparative urbanism

I examine how key traits of Minoan cities compare to premodern cities in other parts of the world. After an introduction on the definition and identification of ancient cities, I will focus on the following topics: population size and density; palaces; housing and households; neighborhoods; and the urban economy. These traits at Minoan cities provide new insights on fundamental urban dynamics, particularly the nature of top-down and bottom-up social processes. Some components of Minoan cities—particularly the economy and interactions with palaces—seem strongly shaped by the top-down actions of rulers and state authorities. Other traits, such as housing and neighborhood organization, seem more strongly influenced by generative (bottom-up) social processes. Extensive excavations and analyses of spatial organization and planning are particularly informative about top-down and bottom-up dynamics. I will discuss two perspectives for each topic: how comparative and theoretical research can help illuminate the nature of Minoan urbanization; and how the Minoan case contributes to a broader understanding of premodern cities and urban processes.

Whitelaw, T. (Institute of Archaeology, University College London)

Minoan urbanism as a dynamic process: context, structure and change

Assessments of Minoan urbanism have been descriptive and ad hoc, informed neither by general models of urban structure, nor comparisons with other early urban centres. They largely follow the dominant approach to Minoan history, amalgamating evidence across the palatial period, or extrapolating backwards from the better documented later phases to the earlier, generating a largely static picture extending over more than six centuries.

Increased spatial and chronological resolution of the patterns of development at various sites, while variable in detail, allow a reconsideration of these static views. Perhaps most significant is the recognition that while the urban centres at Malia and Phaistos stabilize or even contract after the Protopalatial period, Knossos continues to expand, reaching twice the extent of any other community in the Aegean by the end of the Neopalatial period. This required significant expansion of its support territory, with fundamental political, economic, logistical and potentially demographic re-structuring of regional settlement patterns as Knossos incorporated formerly independent neighboring polities in central Crete, developing the regional hierarchical structure of a territorial state.

In this process, Knossos became a unique social and economic environment, a crucible for social competition and innovation, generating emergent social and material behaviours which diffused across Crete.

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