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**Discover Sicily's Argimusco – a Holistic Approach to Heritage
 Management**

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ABSTRACTS



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Session I: Community Engagement

Adrian OLIVIER, *Institute of Archaeology, University College London*

Approaches to Community Engagement: International Conventions and Social Challenge

Many cultural heritage conventions recognise the importance of stakeholder participation and engagement, but most of these instruments focus mainly on management and professional standards in an administrative environment that is more regulatory than participative, and that, in the context of building public awareness, is essentially a one-way process from the 'expert' to the public, with the 'public' a more-or-less passive recipient of expert values.

Truly sustainable archaeological heritage management requires proper consideration of the significance of all the values when making decisions – including the non-material and non-expert values held by different 'public' communities (including, but not limited to stewards, local communities, and visitors). The challenge will be to develop a meaningful way of articulating or wrapping more conventional heritage management approaches, however well formulated, with the open, iterative, multi-disciplinary, people-oriented and essentially social concepts of cultural heritage (encapsulated in e.g. the Florence and Faro Conventions of the Council of Europe, the UNESCO Conventions on the protection and promotion of the diversity of cultural expressions, and for the safeguarding of the intangible cultural heritage, and the Council of Europe's recent Cultural Heritage Strategy for the 21ST century), and then operationalising this approach effectively so that it is embedded at all levels in management and decision-making.

Monique VAN DEN DRIES ⁽¹⁾ and **Jose SCHREURS** ⁽²⁾, 1) *Faculty of Archaeology, Leiden University*, 2) *Cultural Heritage Agency of the Netherlands*

A Glimpse into The Crystal Ball of Heritage Management

In heritage management, passing the memories of the past on to future generations is a prime motivation. It can be found in many national and international heritage policies, as cultural heritage and the memories attached to it are deemed significant for individuals' and groups' identity, both in the present and in the future. Most heritage professionals seem to believe in this objective, it is hardly ever questioned. At the same time, there is no evidence that we pay much (actual) attention to those we wish to bequeath, to their values and interests. This is not really a 'community' we address. From the value-based approach to cultural heritage, in which a lot of our work is grounded, this can be considered a contradiction because the future bequeathed are stakeholders that may be affected by present day heritage management decisions. Moreover, it may turn out to be a potential source of conflicts and heritage destruction, consciously or unconsciously. In this paper, the authors will reflect upon contemporary archaeological heritage management practices, in particular national monument selections, from the perspective and possible interests of future generations. We will discuss how we may complete the holistic approach by also thinking of involving the interest and values of the community of those we wish to bequeath.

Elizabeth ANDERSON-COMER, *The Johns Hopkins University and The Catoclin Furnace Historical Society, Inc.*

Heritage at Work: Hands-on Community Engagement

For over 100 years, Catoclin Furnace was a thriving iron-making community at the base of the Catoclin Mountains in northern Frederick County, Maryland. Enslaved blacks and European

immigrants comprised the labor force, relying on the iron plantation for jobs and the necessities of life.

Enslaved workers disappear from Catocin Furnace in the 1840s and 1850s, prior to the Emancipation Proclamation and freedom during the Civil War. An ongoing project is utilizing aDNA to reconnect descendants with ancestors buried in the cemetery of enslaved workers in the village. However, the social justice focus of the historical society recognized the need to establish a program for at risk students as full participants in ongoing restoration projects and thus reconnect with a previously lost heritage.

The program teaches time-honored skills, ideas and values of fine craftsmanship through intensive hands-on training in preservation trades such as carpentry, plumbing, electrical, plastering, roofing, window restoration, masonry, etc. Students gain marketable real world job skills that they can use to work in their community or begin their own business. The exceptional curriculum, master faculty and inspiring community encourage individual growth and curiosity, commitment to excellence and authenticity and technical mastery. The skills gained by the students help position them to work in well-paying and important jobs in their communities. Archaeology, living history, traditional culinary arts, and handicrafts are also part of the comprehensive training curriculum.

By engaging diverse young people in the hands-on work of restoration, CFHS is building the case for enjoying and preserving historic sites among the demographic we need to cultivate so that heritage tourism and related disciplines have a strong future.

Alban MORINA, *Kosovo - Cultural Heritage without Borders*

Heritage Starts with You

Kosovo has an ancient history and wealthy heritage, shaped for over eight thousand years. It consists a treasure illustrated by the diversity of architectural, archaeological, tangible and intangible heritage sites.

Nevertheless, this is not considered as a potential tool for the development of the country. This is especially the case among minority communities, who perceive the use of cultural heritage as a tertiary and unnecessary intervention field for sustainable development. This also relates to past events, when Kosovo in 2008, was declared a democratic and multi-ethnic country and the focus of the state policies was not in the field of cultural heritage. However, compiling the history and heritage can be contentious, political, and even sometimes painful. In many communities, diversity comprises of discrimination and fear of change, which results as a main reason for minority communities not to participate in the collective heritage.

Cultural Heritage without Borders, a local NGO has been working for the preservation and promotion of cultural heritage since 2001, and in the 2017 has launched a program which aims to help the new generations of three minority communities: Roma, Ashkali and Egyptians, to learn about their wealthy cultural heritage through educational site visits and interactive activities.

Youngsters of these three communities have become part of the cultural heritage, through discovering, understanding and advocating about the importance of the archaeological sites. One important site, given a focus by the young people of these communities also, that represents a new integrated concept of heritage values and sustainable utilization for social, economic and cultural benefits is the Prizren fortress, where CHwB has done the conversation, adaptive reuse and interpretation.

This paper will elaborate in details this process and how the minority communities of Kosova have been involved and benefited from the most important tourist attraction in our country.

Ellinor DUNNING, *ArchaeoConcept*

Salons Archéologiques: A Participatory Project Where Heritage is Co-Defined, Expressed and Shared

The “Salons archéologiques” project is a specific case of a participatory project. It is an innovative way to exchange knowledge on Swiss heritage, a qualitative research led in Switzerland and a concrete mean to bring together the population and archaeologists. A Salon archéologique brings together 15 participants, 2 archaeologists and 1 anthropologist during 3 hours in a private flat. Drinking tea and coffee, eating sweets, the participants are invited to answer some questions as they are encouraged to ask everything they want to the archaeologists. The anthropologist is moderating the meeting. Questions are divided in 6 themes: Private interests for the past, archaeology, heritage; “Archaeology” and “Heritage” (as fields); Functioning of archaeology; Participation in the management of archaeology; Transmission and uses of archaeological knowledge; and Social values of archaeology. As they are organised in privates living rooms, the Salons archéologiques are “safe-spaces”, where there is no “right” or “wrong” knowledge. They leave the multivocality on the past, its management in contemporary societies, and thus the archaeological discipline itself, be expressed and discussed by the participants. By experiencing an original way of socialisation, the outreach of what is discussed is particularly strong for them.

With this project, we aim to understand the representations of the population on heritage in 10 different cities across Switzerland. The Salons are organised every month from March to December 2018. These focus group discussions are all recorded and provide the data for the analysis. By October, 10 Salons will have been held and some results are going to be presented. They can be useful for professionals, associations, museum workers, cultural managers who want to develop and sustain their relationship with the publics. A knowledge on what people think about the past is essential to promote a sustainable and socially integrated management of archaeology.

Marta ALBERTI, *Newcastle University*

Community Engagement in Romano British Archaeology: volunteers and the participatory process

Recent theoretical works on archaeological heritage management often recommend increasing efforts to create participatory experiences. Such recommendations stem in part from one of the criticisms moved to Authorised Heritage Discourse (AHD). If archaeological heritage is not intrinsically valuable, and is instead imbued with meaning by the cultural processes that take place in or around site, then who can take part in such cultural processes? And most importantly, how?

In the following paper I will provide some practical examples of ‘meaning-making’ and participatory processes at archaeological sites in the UK. The paper will explore the role of volunteers in the processes of excavation, research and conservation of Romano-British archaeological heritage. In particular I will focus on the relationship between volunteers and the Frontiers of the Roman Empire World Heritage Site - Hadrian’s Wall. The case study of Vindolanda, an active excavation of a Romano British fort and settlement on Hadrian’s Wall, will be analyzed. The Vindolanda Trust’s volunteer engagement strategy will be explored, together with the practical steps taken by the Trust to encourage its volunteers into becoming core stakeholders. The Trust’s strategy will then be compared with that of university-led projects such as WallCap and that of sites such as Corbridge, managed on behalf of the UK Government by the English Heritage Trust. Such comparison will highlight advantages and disadvantages of diverse models of volunteer engagement and shed light on the practical implications of managing a participatory process.

B.Nilgün ÖZ, *Middle East Technical University*

Foreign Territories: Building Cross-Cultural Bridges During Archaeological Excavations in Turkey

Inclusiveness and community-based conservation are increasingly being recognized as intrinsic to archaeology and heritage conservation while local involvement in the conservation and monitoring of archaeological sites is considered to have great potential in generating a sense of ownership in local communities. In Turkey, there are growing efforts to engage communities in the conservation of archaeological sites, which is more commonly accomplished through public meetings during long-term archaeological excavations. More recently, however, there has been a visible move towards confidence building, empowerment and regional development as part of a heritage management approach.

In this context, this paper aims to explore community-related projects that take place during long-term archaeological excavations, and identify problems and opportunities for conservation and discuss the impact of such projects on site conservation. This will be achieved by examining projects carried out at a number of long-term foreign-run excavations, including Çatalhöyük, Kaman-Kalehöyük, Gordion and Sardis, Hattusha, and Pergamon.

Looking at the types of community projects, people who carry out these projects, funding sources, and their impacts, this paper will also discuss the environment and dynamics of engaging with a 'foreign' community and how different national archaeological traditions reflect themselves in their engagement with communities in Turkey, particularly at a time of the Ministry of Culture and Tourism's emerging interest in regulating community-related projects during excavations.

Amilcar VARGAS, *University of Barcelona*

Make World Heritage Sacred Again: an Opportunity to Engage Local People in Archaeological Conservation in Mexico

This paper analyses the issue of the participation of local people in sacred activities for heritage conservation of archaeological world heritage sites. Iconic archaeological sites all around the world have been destroyed by extremists with the intention of de-sacralise and sending a symbolic message for those who had an spiritual relationship with the sites. However, in some cases, management and conservation policies at a local level may have similar consequences on the heritage affection among the local people. This loose of sense of belonging may be an issue for the protection of archaeological evidence that is outside de control of sites managers and are vulnerable to destruction due the lack of emotional relationship of locals. This contribution discusses this global phenomenon with the case of the different consequences of the management policies at a local level in two archaeological world heritage sites in Mexico. The different policies during the last decades have generated distinctive processes in the affection of local people and in consequence a change in the awareness for heritage conservation. This paper proposes a more anthropological approach for management and a collaborative work for conservation under a sustainable development framework that includes the re-sacralisation of the sites for public awareness.

Alexandra CHAVARRIA, *University of Padua*

Participatory research in archaeology: recent experiences in Northern Italy

While the concept of Public Archaeology in Italy has had an important development in recent years, and today research projects tend to include communication of research to the wider public, few initiatives go further to include the active participation and interaction between

academics and local communities in projects that have to do with the knowledge and management of historical heritage.

During the last decade, the medieval archaeology team of the University of Padova has been developing strategies for including community participation in archaeological research at a local level in different regions of northern Italy (Veneto, Lombardy and Trentino). These strategies include projects in which local communities are intensively involved in the planning, research, communication and management of cultural heritage and particularly historical landscapes and historic architectures. Of particular interest is the "Summer school format", in which students from the University, local historians, associations and volunteers have developed research on a small territory during one or two weeks under the leadership of a local institution (generally a museum). Books, documentaries, and sometimes mobile applications have been produced from these summer schools, while some didactic resources to be used in the future are now being planned locally on the basis of the participatory research.

Our projects show that the success or failure of this approach depends on the characteristics of each community and their historical attachment to their own territory as well as the presence of local museums and institutions that take an active role as mediators between academics and local communities.

The paper will describe three different experiences (two in rural contexts and one in the historical city of Padova), evaluating the impact and future perspectives of this kind of approach.

Abdullah HALAWA, *ICCROM-Sharjah*

Cultural Heritage Management in Syria Before the Conflict

This paper aims to explore the modes of cultural heritage management in Syria before the conflict, with special focus on community participation. It is based on international literature, and the author's experience working on Syrian heritage between 2002 and 2012. It will also attempt to explore the changes of local communities' conception of heritage, especially in the built environment due to the conflict, and will conclude in some suggestions for the future. From the first stage of identifying heritage by relevant authorities in Syria, the Directorate General of Antiquities and Museums- DGAM, and throughout the management process, the public participation is limited to the minimum. Heritage significance assessment is, by law, the duty and responsibility of DGAM alone; article (2) of the Syrian heritage law states that 'Heritage authorities solely have the right to determine the antique character of things'. This has resulted in a kind of 'monopoly' over heritage. More often than never, people living in or near heritage sites would feel in conflict with the DGAM staff, who in turn alternate between enforcing conservation measures and educating the public on the significance of their heritage. In reality, many factors contribute to, and sustain this management mode, such as the lack of qualified staff, or lack of funding, but also underlying factors with deeper effects, such as the inadequacy of university programs, outdated legislation, and ineffective administration. The direct targeting of heritage properties in Syria by the so called Islamic State- IS had traumatic effect on the people. DGAM reports suggest that local communities in at least a few heritage sites succeeded in preventing similar destruction in their sites. The destruction of heritage, be it due to direct targeting or as collateral damage, proves that the previous management mode failed; local communities cannot be excluded from heritage management processes.

Helaine SILVERMAN, *University of Illinois at Urbana-Champaign*

Community Engagement and Exclusion at the Durham World Heritage Site, UK

The Durham World Heritage Site consists of a magnificent medieval Cathedral, Castle and Palace Green between them. The dramatic setting of the WHS on an elevated peninsula separates it from the surrounding countryside. This is not just a geographical fact, but symbolic and ideologically, politically and economically real. County Durham was once a rich coal mining area that underwrote much of the wealth of the Castle and Cathedral until the mines were depleted and ultimately closed by their owners and finally the government. The grand story of Durham that is told today at the WHS, however, marginalizes the mining heritage of Durham. Indeed, miners really are only present in body and narrative during the once yearly Gala, the renowned parade of members of the former mining communities into Durham. This paper examines the World Heritage Visitors Center at the entrance to the WHS, published scripts about the WHS, the history and discourse of the Gala, and presents ethnographic data about how former miners and their descendants relate or do not relate to the Cathedral (in particular), when they are engaged, how (or not) the Cathedral engages with them beyond the Gala, and the counter-narrative presented at the Durham Miners Association. Heritage scholars and practitioners are used to community engagement issues in developing countries. Yet community engagement can be very challenging in developed countries and particularly when the concept of “developed country” is not uniformly manifest across a national territory whose marginalized regions may be as underdeveloped and challenged as are parts of developing countries. Working with my colleague, Dr. Andreas Pantazatos at Durham University, we are trying to evaluate and redress the official WHS script and work with the communities and Durham Miners Association as stakeholders and to insert mining heritage and its often anguished history into the interpretation/representation of the Durham WHS.

Edita POVILAITYTĖ-LELIUGIENĖ, *Vilnius Academy of Arts*

Public or Closed Discourses about Archaeology and Heritage Research in Media: Case study of Vilnius Old Town

The archaeology due to the intensive development and huge amounts of the investors to new structures in the intensive growing urban cities sometimes or quite often is obscure from the communities, citizens and also heritage specialists. Even Vilnius (the capital of Lithuania) comparing with other Europe capitals or cities is not so big however the rich and invaluable archaeological, architectural heritage remains are sacrificing and destroying due to new projects especially in the territory of medieval old town. While there has been considerable research and discussions on the juridical and illegal actions with the heritage objects the analyses of the public presentations about the archaeological, architectural and other research processes as well as the opportunities of the more efficient community engagement has so far been neglected. In the presentation I will analyze what information of archaeological, architectural or complex research data are presented in the public discourse and how the media actualize or not the heritage protection aspects. Based on two the most relevant cases (the huge landslides of Gediminas hill and the risk of the Upper Castle's remains as well as archaeological layers; the new construction on the Misionieriai Hill where was the complex of the Misionieriai monastery) I will argue, that the deficiency of the public presentation lead to apathy to the historical values and how media could to activate the community engagement to discuss about the archaeological heritage preservation problems.

Jialing FAN, *Department of Archaeology and Museology, School of History, Capital Normal University*

Inside and Outside the Wall: a Holistic Management for Pingliangtai Site, Henan Province, China from the View of Local Culture

Sit in a village in Henan Province, China, the Pingliangtai site was first excavated in 1979 and was identified as a late Neolithic city site by archaeologists. To protect the site, archaeologists built a wall surround the whole site and make it an isolated island from the outside. It then became a site museum in 1996. And the planning of a national archaeological site park is undertaking recently. This is the official story of the site. On the other hand, there is an unofficial version of the understanding and appreciation of the site. The locals have a traditional belief in Fuxi, the legendary father of people who created writing system and the Eight Diagrams. The locals believe that this site was the city of Fuxi and spontaneously have a village fair around the wall on certain days. The fair has become a big economic and cultural event for the locals. Based on this case, this paper would argue that normally the research and management of archaeological sites as official heritage is a professional and scientific endeavor which overtops the forced interpretation and superstitions by the locals. Nevertheless, if we could expand our visions, the archaeological site as well as the Fuxi belief are part of the local history and local culture. It is reasonable to engage the locals and make a holistic understanding and management of these tangible and intangible, official and unofficial heritage.

Yang ZHANG, Jihao LOU, Xiaowei HUO, Zhao YAN, ZHAO, Yue QIN, Xiaobin ZHANG, Minhua LI, *Beijing Tsinghua Tongheng Urban Planning & Design Institute*

Huotang Plan—Educational and Community Engagement Practice Based on the Culture of Dong Ethnicity

The Dong minority is an ethnic group with a history of 2,000 years. This minority group mainly lives in southern China, where the provincial boundaries of Guizhou Province, Hunan Province and Guangxi Province meet. The architecture, clothing, art and the unique social management model of Dong minority are precious cultural heritages in our modern society. Since 2013, Gaobu village, where our activities carried out, has been listed in China world cultural heritage reserve list with other Dong village.

“Huotang Plan” is a heritage protection and community engagement plan which aims at promoting public participation in heritage protection, particularly focusing on youth heritage education. In the past four years, it has recruited more than 70 volunteers from 10 countries to record Dong minority culture, practice heritage protection and have face-to-face heritage communication with the stakeholders, core communities, and social organizations.

Through years of practice, we have made some achievements on the cultural heritage of the Dong minority. Meanwhile, we are also reflecting on how to promote these achievements to more people, especially to the youth group. The youth are our future. More importantly, they may also determine the future of heritage protection. During our exploration, we tried to combine education, media, and design, with public welfare. And now we have developed a profound promotion and education system which contains 5 elements: Huotang Workshop, Huotang Salon, Huotang Exhibition, Huotang Participatory Game, and Huotang-designed Products.

In consideration of heritage education to the youth and public participation in heritage protection, we are still exploring continuously. This article describes the practice process of our project, the research results of our study, and reflections on heritage protection and community involvement.

Li XIE, *ICOMOS CHINA*

Value Interpretation for the World Heritage Hailongtun Site

Taking Hailongtun world heritage site as a case, my presentation sets out to examine the effective ways for the interpretation of an archaeological site of a highest protection status. Apparently, the current world heritage framework is a powerful instrument, which yet expects to be fully implemented in terms of interpretation. However, historic literature, previous research and on-site interviews with various stakeholders suggest there exists a larger framework of multi-layered narratives that might help depict a fuller picture of the site by mobilizing all the related local cultural resources. I will thus analyse these two frameworks in comparison, and seeks to understand better the disconnections between the two, in hope of a more integrated interpretation prospect, for the benefit of both the sustainable development of the site itself and the its local socio-cultural settings.

Nekbet CORPAS, *Universidad Complutense de Madrid*

Archaeological heritage and channels of participation in Puebla (Mexico)

Participation is a main buzzword in international and national documents. Governments around the world have set up different bodies and mechanisms to try to involve citizens and communities in heritage management. The effectiveness of these mechanisms should be assessed: are we promoting participation for participation's own sake? What is the point of promoting participation? Part of the aim of this direct participation and involvement of different stakeholders is to make decisions regarding management of archaeological heritage on a consensus-base and in so doing to manage potential conflicts in a more democratic way. In fact, participation allows different stakeholders to put their views straightforwardly and therefore making collision between them more likely. During this summer, this project will explore the official mechanisms put in place for dealing with participation and conflicts in the World Heritage town of Puebla from the perspective of alternative conflict resolution works. Ethnographic work, observations and interviews will be key methodologies in this regard. Mechanisms such as the Consejo de Participación Ciudadana of the town (a participative body set up to articulate participation in those topics 'related to the common good') should work to create spaces to manage the competing views on archaeological heritage management in a positive and constructive way. This paper reflects on those mechanisms and the way they manage conflictive and competing views arising from direct participation.

Görkem, CIMEN, *Uppsala University*

Community Engagement at the Sanctuary of Labraunda

How significant is the community engagement for archaeological sites today? Should the locals be included in the archaeological activities at the excavations and if so, in which way? How are the archaeological sites perceived by the communities that are settled close to the sites? How would the community engagement practically work within archaeological heritage management at sites?

The aim of this paper is to discuss the presence and absence of the community engagement on a local level within archaeological heritage management, with a case study of the current excavations at the ancient sanctuary of Labraunda. This sanctuary is located approximately 700 m above sea level, in the inland of the ancient geographical region of Karia in what today is south-western Turkey. There are modern-day villages, located 8–15 km from to the sanctuary. The local population from these villages has a close relation to the landscape of the sanctuary and some of the workers employed at the excavations of Labraunda are local villagers. The understanding of Labraunda as landscape and archaeological site is, however, different between

the local population and the archaeologists. This difference is important to consider in order to discuss and understand the community engagement within archaeological heritage management. It is also important to consider the relation between locals, archaeologists and archaeological site, as the archaeologists and researchers work intensively, together with the local workers, during the regularly conducted excavation seasons at Labraunda. The contents of this paper are based on my own experiences as an archaeologist working in Labraunda and the interviews that I did with the locals.

Jason WOOD, *Heritage Consultancy Services*

Beyond the Castle: Mobilising Communities and Unlocking the Archaeology of Roman Lancaster

Between 2014 and 2016, the Beyond the Castle project in Lancaster (UK) engaged in an extensive programme of community mobilisation, staging lively events and exhibitions (including probably the world's first archaeological hackathon), developing new narratives and publishing digital archives and videos that reached out to national and international audiences, growing an online community through social media, supporting citizen-led interest groups and using crowd-funding to enable new work.

From the outset, this was a project that deeply engaged local people in imagining the future of the site using novel co-design and consultation techniques and, once implemented, sought to communicate in real time, bringing together professional archaeologists and the public, regularly sharing data, inviting participation in a range of activities and specifically providing training in archaeological excavation and other techniques.

This innovative work resulted in huge support for community-based archaeology invested in the site, explored opportunities to activate latent interest among local people, and made the process of archaeological discovery something anyone could participate in. Having said this, there were unexpected problems and delays owing to the break down of relations with one local community group, as well as issues stemming from changes in local authority management.

This paper will illustrate the mechanisms and specific results of the various engagement initiatives and highlight the issues and opportunities, advantages and disadvantages, of their implementation.

Kamyar KAMYAB and Eisa YOUSIF, *Sharjah Archaeology Authority*

Mleiha Archaeological Site, a Sample of Community Engagement

"Mleiha Archeological site is located in the Sharjah central area plane, west of the Hajar Mountain around 20 Km South of the city of Al Dhaid city and 50 Km east of the city of Sharjah. Mleiha is one of the most important and the richest archaeological sites in the Arabian Peninsula. The site includes burials, such as monumental tombs, multi chambered subterranean graves and tombs that contained camels and horses buried beside their master, monumental buildings, for example simple, houses or large multi roomed buildings with large interior courtyards. The other significance discoveries are the workshops in those workshops craft activities were carried out in specialized workshops, distributed within habitation areas. The grave stones that were found in Mleiha show that the Aramaic inscription came to Mleiha third century BC. Different materials were found in the Mleiha site for instance glass, bronze, gold beads, alabaster vessels, stone, iron arrow head, spear points, coins (Tetradrachms, Drachmas and Obols), a bronze bowl, bronze slags, Ceramic from Mleiha is abundant. A variety of types were recovered. Some of the pottery recalls Hellenistic types from eastern Arabia. Greek amphorae including stamped Rhodian handles bearing the magistrate's name 'Aristonos' along with that of the Rhodian month of manufacture 'Theomphorios' dating back to sometime

between 182 and 176 BC. Sherds of Greek black-glazed pottery were also found. The imported items attest to the fact that Mleiha was a part of a long-distance trade network.” (Heritage, 2018)

To protect this magnificent site, Sharjah Archaeology Authority has started fencing around this site. However, there are active farms on this site. Hence, for easing the farmers access to their properties gates were provided. But, some of them started vandalizing the fences and made shortcuts to their farms by illegal trespassing through the barriers.

Hence, several solutions proposed, such as the use of closed-circuit televisions, permanent guards, stronger fences, involving the Police, use of the mobile Royal Guards, and educating the farmers about the nature and significance of the area. This paper tries to compare the proposed methods to provide the solution justly.

Miki OKADERA, *Fukuoka Prefectural Government*

Community Engagement on the Sacred Island of Okinoshima and Associated Sites in the Munakata Region

The Sacred Island of Okinoshima and Associated Sites in the Munakata Region inscribed on the UNESCO World Heritage List in July 2017 is an exceptional example of the tradition of worship of a sacred island. The island of Okinoshima is located 60 km off the western coast of Kyushu island. The archaeological sites that have been preserved on the island are virtually intact, and provide a chronological record of how the rituals performed there changed from the 4th to the 9th centuries AD. In these rituals, votive objects were deposited as offerings at different sites on the island. Many of them are of exquisite workmanship and had been brought from overseas, providing evidence of intense exchanges between the Japanese Archipelago, the Korean Peninsula and the Asian Continent. Integrated within the Munakata Taisha Shinto shrine, the island of Okinoshima is considered sacred to this day.

In order to pass on the significance of this property to future generations, it is essential to work in tandem with the local communities who safeguard it. The Shinto shrine has a long history of over 1,500 years. Over the past centuries, the shrine staff and local people have played primary roles in preserving and managing the shrine facilities. Furthermore, through the process for the inscription on the World Heritage List from 2009 to 2017, many kinds of activities related each component sites have gotten started. One of the main activities is the volunteer guide that support visitor understanding the value of the property.

This case study shows the relationship between local communities and the property including archaeological sites that have become tourist attractions.

Jan MELANDER, *Anundshög Visitor Centre*

'Anundshög - Cooperation Between Local Community and Local Government

With 150,000 visitors during summer season the Anundshög site is one of the most important Viking age monuments in Sweden. It is listed in the “Council of Europe Cultural Route Follow the Vikings”.

Anundshög is maintained through cooperation between three local offices: the Cultural Amenities Department, the Job Training Programme for Disabled Persons and the Programme for Occupational Rehabilitation. The cooperation enables an area of 80 hectares with approximately 1,500 prehistoric graves to be kept in order to greet visitors.

The local community's engagement in the site is crucial for making it possible to receive visitors. Community members educate each other so they can do the regular site guiding. Guided tours by local community members are offered daily in the summer months. All guided tours are available in Swedish and English; other languages are available upon request.

The local historical society is a pivotal factor when it comes to arrangements at Anundshog. The Midsummer feast and other traditional days attract thousands of visitors each year. The archaeology day is a national day to enhance the importance of archaeological research. With the help of the local historical society news are presented from research done at the Anundshog site as well as other excavations.

What's in it for the local community with all of this? Pride and commitment to the area's success is obvious. It also means that the local community has the possibility to influence planning in and outside the archaeological area. The Cultural Amenities Department gives the local historical society financial support. The historical society has managed to attract new and younger members to the voluntary work which guarantees continuation of the work. Local politicians clearly see advantages in the local engagement. With this as a motivator it was possible to finance a visitor centre at the site. It's run by the local community in cooperation with the Program for Occupational Rehabilitation which runs the café.

Maria Louisa GERMANÀ, *Università di Palermo Dipartimento di Architettura*

Community Engagement in the Sustainable Management and Conservation of Architectural Heritage. Suggestions from the Hellenistic-Roman Quarter of Agrigento (IT)

In comparison with other architectural heritage, archaeological sites present specific difficulties in community engagement: they can be difficult to understand due to their incompleteness; physical barriers often underline that they are extraneous; they seem outside of Time, because contemporary life happens elsewhere.

The Hellenistic-Roman Quarter of Agrigento (selected as one of the case studies for a project funded by "Italie-Tunisie 2007-13" cross-border cooperation program) provides an opportunity to reflect on the evolution of relationships between archaeological remains and local communities. Many people have shown in Agrigento, until few years ago, an explicit hostility toward similar heritage, despite its immeasurable cultural value, due to concerns about preservation restrictions, considered as limitations to productive activities.

The managing body of the Archaeological and Landscape "Valle dei Templi" Park has implemented some strategies for community engagement in the last decade, aiming at heightening interest and a sense of belonging, especially by engaging families, children, and elderly. These efforts have been coherent with the general change in the paradigm of archaeology (considered previously an elitist field, restricted to few experts), which has contributed to a focus on emerging issues such as: communication; enhancement of understanding of remains; integration with anthropic and natural context. These experiences will be summarised, with an aim to explore if and how they have benefited relationships with local communities and suggesting some new possible initiatives to make further improvements. All of these changes were consistent with a general theoretical framework of social inclusion as one of the main preconditions for sustainable management of cultural sites.

Sustainable architectural heritage management and conservation require a holistic approach that includes: an intergenerational vision; a multi-scalar and multi-dimensional nature; respect for both tangible and intangible elements, and recognition of the intertwined whole of social, economical, cultural and environmental factors that should involve the local communities in multiple, parallel ways.

Brian BILLMAN⁽¹⁾, **Alicia BOSWELL**⁽²⁾, **Jesus BRICEÑO ROSARIO**, 1) *UNC Chapel Hill - MOCHE, 2) Inc, MOCHE, Inc and University of California Santa Barbara*

Case Studies in Community Heritage Preservation in the Moche Valley, north Coast of Peru, 1997–2017

Economically marginal communities on the edge of rapidly expanding urban centers can play a key role in successful heritage preservation programs. However, working with these communities presents many challenges. Here we present case studies of community-based heritage preservation projects in the peri-urban zone of the city of Trujillo, in the Moche Valley, on the north coast of Peru. From 1997 up to the present, we have established preservation partnerships with six peri-urban communities in the valley. In exchange for help with public health and education projects (such as construction of potable water systems, kindergartens, a medical clinic, and community centers), partner communities agreed to protect archaeological sites in designated community reserves. We examine two cases where our interventions failed to stop illegal land invasion of archaeological sites. These cases, as well as examples of successful interventions, illustrate five essential best-practices in community-based heritage preservation.

Jon KOHL ⁽¹⁾ and **Stephen McCOOL** ⁽²⁾, 1) *PUP Global Heritage Consortium, 2) University of Montana*

Book about Holistic Tourism Heritage Management and Planning: The Future Has Other Plans: Planning Holistically to Conserve Natural and Cultural Heritage (Fulcrum 2016)

Crisis has enveloped the more than 200,000 nationally and regionally protected natural and cultural heritage sites around the world. Plans are failing everywhere, and scarce resources are being spent on plans that not only fail to be implemented, but also fail to involve local communities or recognize the important intangible values of protected areas, such as spiritual and recreational uses. Heritage managers face an urgent need to confront this crisis, and each day that they don't, more of our planet's heritage disappears. Although heritage tourism management and implementation suffer from a lack of money, time, personnel, information, and political will, *The Future Has Other Plans* argues that deeper causes to current problems lurk in the discipline itself. Drawing on decades of experience in global heritage management, literature across numerous fields, and case studies from around the world, Jonathan Kohl and Stephen McCool provide an innovative solution for conserving heritage sites. Merging interdisciplinary and evolving management paradigms, they introduce a new kind of holistic planning approach — the first comprehensive application of Ken Wilber's Integral Theory to planning — that integrates the heritage management practice and conservation with operational realities.

The book journeys around an iceberg in search of simplicity on the other side of complexity. It begins at the waterline by illustrating how conventional planning assumes a Predictable, Linear, Understandable, and Stable (PLUS) world but fails to make change or implement plans. Its emphasis on scientific, top-down, empirical approaches that minimize community involvement lead to failure in a Dynamic, Impossible to Completely Understand, Complex, and Evolving (DICE) World. The book then introduces Integral Theory at the berg's deepest point and how interior and exterior dimensions explain much of conventional planning failure. The book concludes by defining Holistic Planning, its Principles, and how managers can transition toward this holistic paradigm. In the final chapter, readers surface on the other side of the iceberg.

Ming-Wei LIU, *University of Palermo, Darch; Nanjing University. Institution of Architecture and Planning*

The Epistemological Traces of Holistic Planning and Le Corbusier's Paradigm Shift to Social Urbanism

Instead of portraying Le Corbusier as a modernist heroic figure of the savage leader, in this research I am to illustrate Le Corbusier's humanitarian return, by displaying his latter phase of life motto kept in the «Final Testament».

As Foucault states, as epistemology. I found Le Corbusier, one of the most renowned architects active in the previous century, who is rather seen as a humanitarian [social] designer than a savage planner, with “barbarian oddness” authorship granted by the Parisian traditionalists in the 1920s (See Fishman, 1977, pp. 206-209). However, Le Corbusier has reversed from his 1920s-30s' heroic planning mottos — “planning a city is too important, we should not hand it to them.” (Le Corbusier, 1937, p. 4 after Hall) To that in the case in Chandigarh, he amended the monumental-stylish planning exercise to the similarities arrayed in the E. Howard's Garden City module within an attempt to engage the holistic, social, and humanitarian of the holistic harmony. That “with the enthusiasm of humanity” (Tuan, 1978, pp. 365, 369; 1991, pp. 486, 487, 692) of the ethical harmony met with their networks' connections. He found an answer for his early question —

“The great problem of to-morrow, dictated by collective necessities, put the question of ‘plan’ in a new form. Modern life demands, and is waiting for, a new kind of plan both for the house and for the city” (Corbusier, 1931/1967, p. 92).

Modern city of the disperse functions now has arrayed within the holistic city plan, including the blue/green-belt has marked emerged in the fill-in matrix grids to mark that new skill invested in keeping human perceptions, imaginations and reasons within one accord. (Moos, 1945, pp. 22-23) Whereas the public monument carries the tasks to contouring the collective memory and their identities, the erection of “secular monument” has performed a self-identification by means of their space making purposes to manifest the personal manifestation to the environments. In Peter Hall's comment, Le Corbusier's version of secular urbanism has started with

A shift from a planning style to an architectural style, meaning “a shift towards a preoccupation with visual form, symbolism, imagery and aesthetic rather than the basic problem of the Indian population. By concentrating on providing Indian architecture with forms suited to the Second Machine Age, the existing Indian situation could be more or less totally ignored.” (Hall, 2002, p. 229)

Le Corbusier drafted a holistic planning scheme in the case of Chandigarh, the north capital of India. He shared the process participatory planning process in the micro-scale of the [privately] making (sense) of space by constructing a more general sense of the public sphere.

Xiaodi ZHOU, Junfu CHANG, Rui XANG, Yang SHEN, *Architectural Design & Research Institute, Southeast University, China*

Practical approach for Cultural Heritage Protection and Living Environment Improvement of Archaeological Parks: Using the Case of Kele National Archaeological Park in China'

Chinese archaeological parks are mostly developed with government and private investment funding, thus forming a top-down development system. However, public opinions are carrying increasing weight, and the need for bottom up development have become increasingly prominent. Considering that rural areas in Southwest China are typically multi-ethnic and poor, there is an urgent need for the development of the Kele Archaeological Park. The government and investors outline the overall requirements for heritage protection and display, local community layout, as well as landscaping and general outlook. This differs from the concerns of

the society and local residents, who advocate for the expansion of living area and better living conditions, continuation and improvement of living and production arrangements, cultural preservation, and the restoration of cultural areas. Based on the varying demands of both parties, the final design and construction were coordinated and improved in three aspects. The first is the improvement of living environment, such as the remodelling of the existing buildings, better arrange and plan the residents' living quarters and livestock pens while improving hygienic conditions. The second is the improvement of the overall cohesiveness of the landscape environment, including the rearrangement of water-systems and the restoration of wetlands in river valleys, revision of traffic management and renovations of streets and lanes, as well as the expansion and optimization of public spaces. The third is the systematic display of historical and cultural resources. Current measures implemented include the protection of archaeological sites and the construction of exhibition halls, establishment of symbolic park entrances, environmental improvements, and the development of historical and cultural areas in the valley from the imagery of historical culture. The design and results of the Kele Archaeological Park demonstrate that through the inheritance of the local culture and the improvement local settlements, the local residents have shown stimulated cultural confidence, activated enthusiasm, while the different ancient archaeological sites and manifestations of local ethnic culture are integrated, bridging the gap between the display of archaeological sites and the continuation of local residents' everyday life. As such, the Kele case provides a practical model for the design and construction of similar archaeological parks in China.

Session II: ArchaeoAstronomy

Frank PRENDERGAST, *Dublin Institute of Technology*

Neolithic Landscapes, Skyscapes and the Irish Passage Tomb Tradition

Any attempt at searching for non-funerary meaning in Neolithic passage tomb architecture and orientation is fraught with difficulty, cultural conditioning and biases. Accordingly, this presentation will focus on the Irish corpus of these elaborate monuments and review the evidence for directed or non-random orientation at different landscape scales. While likely deliberate axial solar alignments on astronomically interesting declinations have been detected in a significant number of these monuments, other tangible targets of interest in the landscape have emerged as being of even greater symbolic importance. Consequently, extracting broader interpretative meaning and cosmological symbolism poses an even greater challenge. The presentation will also discuss recent initiatives by the author to highlight the impact of artificial light pollution in Ireland on skyscapes at landscapes of archaeological importance and for the cultural need for conservation of the darkness of the night sky at these locations.

Andrea POLCARO, *University of Perugia*

The Shepherd Became a Hunter: Study on the Iconography and Symbolism of the Orion Constellation in the Ancient Near East and Mediterranean

Due to its recognizable anthropomorphic shape and its luminous stars, Orion is one of the most attractive constellation, with a strong religious symbolism. Already known in ancient Mesopotamia, where it is named as the “Shepherd of Anu”, the celestial father of the gods, it is often associated with Dumuzi, one of the dying gods with strong similarities with the Levantine Tammuz. On the other hand, in ancient Greece, Orion was the main hunter of the goddess Artemis that made him killed because of her jealousy. So, what happened between the Near Eastern and Levantine traditions and the final Greek one? Why the shepherd became an hunter? The aim of this paper is to analyze the textual and iconographical evidence about the Orion constellation and its divine associations, from its first appearance in the 3rd millennium BCE, till the Iron Age and Persian Period (1st millennium BCE), when the Eastern tradition - Orion as a shepherd - could have been readapted and innovated in the West - Orion as a hunter.

Elizabeth RIORDEN, *University of Cincinnati*

Burden of Proof in Archaeoastronomy and the Case of the Temple of Despoina at Lykosoura

Archaeoastronomy is a field of study suffering disproportionately from a pendulum swing of highs and lows—the high of enthusiasm, perhaps even over-enthusiasm, and the low of derision and suspicion on the part of other scholars. Lionel Sims called for a collective reassessment in his essay “Where is Cultural Astronomy Going?” (SEAC 2011). Perhaps in the near future a more measured, productive interdisciplinary discourse can thrive, ultimately adding nuance to the public experience of sites, while contributing to science.

An issue for the prehistoric and proto-historic periods may be the perception that a higher burden of proof is required, when compared to, for example, theories of ancient economic activity. Many compelling hypotheses in prehistoric archaeology are based upon fragmentary and statistically insignificant data sets, yet those working in archaeoastronomy struggle with an expectation of absolute confirmation. Furthermore, the artefacts that reflect cosmology, whether cave paintings or temples, are about a belief system, perhaps increasing the discomfort of some scientists.

Can the following four techniques be sufficient, when combined? They are as follows: 1) a text contemporary with a living religious tradition in antiquity, 2) the architectural and sculptural setting for that tradition, 3) comparative religion, and 4) comparative art analysis. The Temple of Despoina at Lykosoura in Arcadia presents such an example. The second century CE travel writer Pausanias visited the Temple and described the experience of the inner sanctum, where the viewer had a very personal encounter with the cult images. The cult images, compared to personifications of heavenly bodies throughout a broad spectrum of ancient art, probably represent one of the best known series of constellations in the Northern Hemisphere. It can be argued that many initiates into the mystery cult of Despoina immediately understood what was being shown. The epiphany then happened because of the lighting, reflectivity and sequencing of the architectural space. The Lykosoura ritual performance was unique but also shared an aspect with other mystery cults, such as the Great Gods of Samothrace: that of personal transformation, even a sense of apotheosis—where religion and archaeoastronomy ought naturally to meet.

Tore LOMSDALEN, *University of Malta*

Cosmology and Monumental Visibility in Maltese Prehistoric Temple Period

The small Mediterranean Archipelago of Malta situated about 60 nautical miles south of Sicily offers some of the most unique megalithic monuments in the world. New data from coring analysis shows that the first Neolithic farmers arrived in Malta around 5,900 BCE, probably from Sicily (FRAGSUS 2018). They encountered a predominantly open and fertile land with a pleasant climate, but brought with them grazing animals and seeds for planting crops. Around 4,000 BCE the islanders started to erect extraordinary megaliths, usually known as ‘temples’, nowhere similar in the contemporary world.

Based on material culture and the archaeological record, this presentation explores the concept of cosmology, belief systems and worldviews through monumental positioning in the cultural landscape, apparent horizon features, and visibility and intervisibility between sites. In the ambiance of archaeoastronomy, it also considers rising and setting of celestial objects in relation to the monuments’ cardinal directions. The methodology is based on fieldwork, geographical information systems (GIS), digital terrain modules of Maltese horizon, and astronomical programs, rendering the observable sky and landscape back to the Maltese Temple Period.

Davide GORI⁽¹⁾, **Andrea ORLANDO**⁽²⁾, 1) *Amec Foster Wheeler Italia*, 2) *Istituto di Archeoastronomia Siciliana*

Kefaloidion, Halaesa and Alúntion Greek temples in Sicily: an Archeoastronomical Approach

In this paper we analyze the astronomical orientation of three isolated buildings of Greek age located in coastal towns and overlooking the Tyrrhenian Sea (northern Sicily). This study is part of the broader context of studies about the orientations of Greek temples in Sicily (e.g.: Salt, 2009; Hannah et al., 2016a,b; Hannah et al., 2017), a field still only partially explored and which is certainly very interesting for archaeology.

The megalithic building called Temple of Diana (5th-4th century BC) is located about 150 meters above sea level, on the imposing Cefalù Rock, the rocky hill about 300 meters high that dominates the namesake village and that stands on the Tyrrhenian coast to the eastern borders of the province of Palermo. The orientation of the front door of the megalithic temple, which leads directly to a corridor, has a clear direction: east-west (Gori and Orlando, 2016; Orlando and Gori, 2017).

On the acropolis of Halaesa Arconidea, founded by Arconide the Herbita's tyrant (5th century BC) on a narrow and elongated hill near the wide valley of Halaisos (now Tusa) a sacred area with the bases of two temples was partially studied, one of which was supposed to be dedicated to Apollo, probably the tutelary deity of the city. During the next excavation campaign (July 11th-20th 2018) organized by the Messina University the astronomical surveys will be performed.

On a rocky step overlooking the village of San Marco D'Alunzio, founded during the 4th century BC with the name of Alúntion, we find a Greek temple most likely used for sports activities related to the cult of Hercules. The astronomical surveys will be performed in the late spring 2018.

Maurizio CHIRRI ⁽¹⁾, **Ceddia MICHELE** ⁽²⁾, **Isabella ERCOLES** ⁽²⁾, **Giorgio MANZI** ⁽²⁾,
1) *Universita' Roma Tre*, 2) *Universita La Sapienza*

Differences between Initiatory Degrees and Corresponding Planetary Influences, in the Mithraic temples at Santa Prisca in Rome and Felicissimo in Ostia

In the field of Museology in the teaching course of Technologies for Restoration and Conservation of Cultural Heritage (a.y. 2014-2015), the project S.T.A.R. (Sites for Astronomical Tourism in Rome) museological work was developed regarding Mithraic temples of Santa Prisca in Rome and Felicissimo in Ostia. Both temples show differences about the usual planetary wardship of the first and fifth initiatory degree.

In Santa Prisca's case, our party refers specially to works of epigraphist Antonio Ferrua SJ, first scholar to analyse frescos and inscriptions between 1938-1940: his working conditions were surely better compared to the ones in Marten Vermaseren's research campaign in the late '50, which further validates the first interpretation for the didactic-liturgical reading of the inscriptions.

The Symbolical interpretation of Felicissimo's mosaic sequence, widely accepted in literature, lead to the previously mentioned differences in the planetary influences sequence, in contradiction with the Santa Prisca's study.

According to the well-known astronomical knowledge of the period, to a number of classic authors' witnesses in literature from the I to V century, and to archaeological findings, a possible iconographic reconsideration of the mosaics could allow to overcome the seeming contradiction, validating Santa Prisca's sequence.

Session III: Climate and Rapid Landscape Change

John PETERSON, *ICAHM*

World Heritage Sites in our Age of Climate Calamity: Vulnerability and Resilience Planning Models

World Heritage sites are found throughout the earth's regions and terrain and have a variety of exposures to impacts of climate change, from the coral reefs of Tubbataha in the Philippines to the Lhasa Tibetan sites in the Himalayas and desert sites along the Silk Road of Central Asia. Regional climate studies are becoming available with downscaled data and predictions that can generally be applied to places around the globe. The impacts are already being felt, from extreme weather to increasing sea level to aridity and disruption of global monsoonal rainfall patterns. Each site will be uniquely vulnerable, and each region variable in its capacity to adapt and promote sustainable and resilient patterns. Case studies from Nan Madol in Micronesia and the Pacific Rim of America to Asia are examined in the light of developing guidelines for predictive models and adaptive strategies.

Jeff ALTSCHUL and Keith W. KINTIGH, *Coalition for Archaeological Synthesis/SRI Foundation*

Convergence Research, Climate Change, and the Coalition for Archaeological Synthesis

Archaeological forays into the climate change debate have generally been through case studies that integrate archaeological, anthropological, and paleoenvironmental data into coherent, evidence-based narratives that document how cultural systems in a relatively small geographic region adapted to long-term climatic change. While these cautionary tales can play a valuable role in galvanizing public opinion, they generally have not influenced public policy. What is lacking are scalable inferences relating long-term cultural resilience and sustainability to social configurations and strategies for addressing environmental dynamics. Achieving these inferences demands that we move beyond case studies and leverage the vast amount of archaeological data captured in heritage studies in what US-based National Science Foundation has characterized as convergence research, "the deep integration of knowledge, techniques, and expertise from multiple fields to form new and expanded frameworks for addressing scientific and societal challenges and opportunities." The Coalition for Archaeological Synthesis was formed to foster and support precisely this type of collaborative synthetic research. This paper describes how, through such research, the Coalition has the potential to transform archaeological practice and to allow our results to be incorporated in public debates and policy initiatives on subjects such as climate change.

Alexandra RIEDEL ⁽¹⁾, Robert Neil MUNRO ⁽²⁾, 1) *QMPS-DAI-Cooperation Project Friedrich Hinkel Research Center German Archaeological Institute*, 2) *Institute of Climate & Society Mekelle University, Tigray, Ethiopia*

How to stop the sand blasting? - The impact of desertification on the royal cemeteries of Meroe/ Sudan

The royal cemeteries of Meroe in Sudan incorporate impressive pyramidal graves of the Meroitic kings and queens. More than 100 small and steep pyramids can be found east of the Royal City, the former capital of the Meroitic Kingdom. Apart from the remarkable collection of Meroitic funerary architecture, the royal cemeteries comprise the largest corpus of Kushite iconography with well-preserved reliefs and murals decorating offering chapels and subterranean grave chambers.

Since the late 1960s sand dunes have been accumulating in the area of the royal cemeteries, and adjacent valleys, and also causing enormous abrasion of the original sandstone surfaces of the

ancient monuments through sand blasting. In one case, documentation has shown the loss of 90 % of the reliefs on a chapel wall during a period of only six years. Along the Nile in northern Sudan, the impacts resulting from severe desertification and drifting aeolian sands has become a serious issue for archaeological sites.

At Meroe an assessment started as well as investigations regarding the sand movement in 2015, asking the questions: Where did the sands originate from? Why did sands start to overwhelm the site? Has this happened during historic and prehistoric times and what can we learnt from that? And how can we mitigate the problem in the future? Short term counter measures and regular maintenance were introduced and show first results. Using the investigated data, and adopting indigenous species, it is hoped to design and then to construct a series of irrigated shelter belts as a long-term solution.

The paper will present the effect of desertification and climate change on the pyramids at Meroe. An overview will be given regarding the approach applied, first assessment and investigations results; counter measures, potentials and challenges will be discussed.

Robert HOHLFELDER, *University of Colorado, Boulder*

Mitigating the Effects of Rising Sea Levels and Storm Surges: An Engineering Breakthrough from Ancient Rome

Two millennia ago, the emperor Augustus (27 BCE – 14 CE) began a massive program of building a maritime infrastructure to turn the Mediterranean Sea into the nexus of the empire Rome had acquired up to his reign. The key to the success of this massive project was a new building material that had first been used in the 1st century BCE. Through trial, error, observation and serendipity, Roman builders had discovered a mortar to which a variety of aggregates could be added to produce a marine concrete that some modern material scientists have called the most durable substance humankind has yet discovered.

A research project, the Roman Maritime Concrete Study (2002-2009) that I co-directed, was formed to core, collect, and analyze concrete samples from ancient harbor structures in Italy, Greece, Turkey, Egypt and Israel that are now at the interface of land and sea or underwater. The results of these investigations have revealed the unique chemical components of Roman marine concrete that account for its extraordinary longevity and durability (2000+ years).* With this knowledge, it will now be possible to augment or enhance modern Portland cement to effectively and dramatically extend the viability of modern marine beyond its current effective lifespan of 30-50 years.

One can now envision sea walls and other concrete installations, built to protect archaeologically significant sites vulnerable to the ravages of the sea, that could potentially have a millennial survival rate with only modest maintenance. This engineering breakthrough discovered by Roman builders is not the final or only answer to today's efforts to protect coastal sites in this era of dramatic climate change, but it certainly can be part of the solution.

* C.J. Brandon, R.L. Hohlfelder, M. D.Jackson, and J.P. Oleson, BUILDING FOR ETERNITY: THE HISTORY AND TECHNOLOGY OF ROMAN CONCRETE ENGINEERING IN THE SEA, Oxford, 2014.

Nelly ROBLES GARCIA, *Instituto Nacional de Antropología e Historia, México*

Between Two Earthquakes: Learning from Response Strategies and Conservation Efforts after Earthquakes at the World Heritage Site of Monte Alban

On September 30, 1999, an unusually long earthquake measuring 7.4 on the Richter scale ravaged the historical, vernacular, and archaeological sites of the southern Mexican state of Oaxaca, doing great damage to the historic district of Oaxaca de Juarez and the adjacent archaeological site of Monte Alban. The extensive damage plus threats to human life required

not only broad-based efforts for immediate response to the emergency but long-term attention to matters of site conservation and resilience. Of particular importance was a strategic decision to carefully monitor and document steps taken toward mitigation, reducing future risk of damage or injury, and efforts to include community members, site personnel, and other stakeholders in planning for possible future earthquakes.

On September 7th and 19th, 2017, severe earthquakes again struck southern Mexico. While once again a tragedy these earthquakes permit an assessment of the effectiveness and value of steps taken after 1999 to reduce site and human vulnerability. Part of this assessment is an analysis of structural rehabilitation, materials use, and other technical aspects of post-1999 restoration of buildings, platforms, and other components of the built environment. A new monitoring project contemplates the opportunity to apply new technologies and processes to assess damage. We are also addressing approaches for managing the presence of large numbers of visitors and personnel who might be at the site when an earthquake strikes. Not only did the 2017 earthquakes provide us a natural laboratory to study our responses to 1999 but they reinforce our desire to establish a technology and planning center at Monte Alban that may benefit other archaeological sites located in seismic areas around the globe.

William MEGARRY, Satish KUMAR, Ruth MORROW, *Queen's University Belfast*

Hidden Heritage and Climate Change – Riverine Landscapes as Living Laboratories for Climate Change Adaptation

The impact of climate change on cultural heritage cannot be understated. Rising sea levels, increased storminess and changing weather patterns, coupled with secondary pressures like migration and resource scarcity, are directly impacting the integrity and management of heritage sites globally. This impact is most acutely felt in the developing world and amongst small island developing states (SIDS) where resources to mitigate against landscape change are scarce. While modern technological solutions are valuable, many indigenous cultures have both lived with, and adapted to, rapid landscape change by utilising local resources and building designs. This is particularly the case with riverine cultures which have evolved around the annual flooding of their landscapes.

This paper will present preliminary results from the Hidden Heritage in Majuli Project, an interdisciplinary study into climate and landscape change, cultural adaptation and mitigation. Majuli is the largest inhabited riverine island in the world and is on the Indian tentative list of World Heritage Sites. Located in Assam in the Northeast of India, in the midst of the Brahmaputra River, the low-lying island is prone to annual flooding which submerges most of the island. It is also home to unique expressions of tangible and intangible culture including over 40 Satras, which are 15th century religious communities from the Neo-Vaishnavite tradition, and the oral and craft cultures of tribal cultures including the Mishing and Deori. Given the constant flooding, both Satras and tribes have had to move frequently, creating a transitional cultural and ritual landscape which is a living laboratory to better understand cultural heritage and climate change adaptation. Presented results will include mapping and inventory of sites, land change and land use change remote sensing techniques, documentary films and interviews.

Zlatan FILIPOVIC ⁽¹⁾, Felix BECKER ⁽²⁾, Hafsa TAMEEZ, ¹⁾ *American University of Sharjah, 2)* *New York University Abu Dhabi*

Non-Invasive Technologies: Decision support and Information Dissemination

Non-invasive technologies generate a wealth of information about archaeological heritage literally on and below the surface. In this paper, we address issues encountered when making these data available to decision makers and the general public. On the one hand, officials must

be able to retrieve relevant data easily in order to support decisions that must be made. On the other hand, the general public can develop a deeper understanding of the heritage represented by a particular site when interacting with these data.

We look at two particular technologies: drone-based photogrammetry to record data about the surface, and ground-penetrating radar to record data below the surface. First, we consider the many choices that must be made when deploying these technologies and the consequences of these choices. For instance, what methods produce the most detailed data and what are the challenges associated with more detailed data? Second, we consider what data-delivery platforms make the data most easily available. In particular, we look at virtual worlds (whether delivered through virtual- or augmented-reality platforms), the benefits they afford, and the challenges they pose.

The case study for this paper is a site rich in historical layers both underground and above ground, located in Sharjah, one of the seven United Arab Emirates. The virtual world created as part of this project serves as an index into data for public officials to use and as a virtual visitor center that provides the general public with a virtual point of entry into the site as well as a rich information resource. In this way, the paper lays out the possibilities and challenges inherent in these technologies.

Session IV: Heritage Tourism

Sanjin MIHELIC, *Archaeological Museum in Zagreb*

Seeing the Big Picture? On Convergence Versus Divergence of Stakeholder Goals in Archaeological Tourism

The paper focuses on the practicalities and realities of stakeholder engagement in archaeological tourism. To begin with, to facilitate discussion on the topic the author clarifies his standpoint regarding the nature of the relationship between archaeology and tourism, by raising the question of, first, the essence of, and subsequently also the objectives, effects and potential or real benefits resulting from this relationship. A range of typical stakeholder perspectives are addressed across the stakeholder spectrum, from operational to strategic, local to international, and specific to general, focusing on the intrinsic motivations characterizing different stakeholder types. Building on this theoretical classification, the topic of stakeholders' psychology, as a key factor determining the attitudes and opinions, and ultimately also the decisions and actions different stakeholders take, is further explored through a discussion of specific case studies from Croatia.

Marc KOCKEN, *MARC Heritage Consultants*

Strategic Storylines: linking culture, heritage and tourism successfully

International tourism has seen rapid growth and diversification over recent decades to become one of the leading economic sectors in the world. Certain European destinations are suffering under the strain of excessive tourism. Amsterdam is by no means the only European city where locals suffer from growing numbers of visitors.

Since 2015, NBTC Holland Marketing, uses storylines to distribute tourism across all seasons and the entire country. These storylines are an integral part of the national HollandCity strategy and criss-cross the country like imaginary metro lines. They connect different places through a specific cultural theme or interest. This helps showcase well-known landmarks while simultaneously the lesser-known sites are highlighted.

On a regional level, the Province of Drenthe developed a strategic narrative for the marketing of its heritage. A collection of overarching storylines brings focus and coherence in the presentation and marketing of Drenthe's past. The storylines are intended to assist in comprehending the past and communicating attractively and powerfully Drenthe's cultural and natural heritage to visitors.

This paper will examine the methods used as to promote cultural heritage, its pros and cons, and examines its usability in relation to cultural routes and itineraries.

Valerie HIGGINS, *The American University of Rome*

Changing Perceptions of Authenticity and the Impact on Narratives at Heritage Tourism Sites

Cultural heritage sites are attracting not only an increasing number of tourists but also an increasing diversity. Not all visitors are equally interested in the standard historical context, many are seeking to engage experientially or emotionally and some may even feel the site has personal significance in their lives. These visitors will have their own, often well developed, ideas on the "authenticity" of the site they are visiting, which may be more reflective of mass culture than traditional historical evidence. This paper will examine the debates and responses concerning such narratives and examine how far heritage professionals should engage with so-called prosthetic memory when constructing site narratives.

Elena PÉREZ ⁽¹⁾, **Vianney CUPICHE** ⁽²⁾, **Cecilia MEDINA** ⁽²⁾ and **Carmen GARCÍA** ⁽³⁾,

1) *Universidad Europea de Canarias (UEC)*/ 2) *Universidad Intercultural Maya de Quintana Roo*, 3) *Universidad Autónoma de Yucatán*

Cultural tourism management strategies: the social and cultural perception of the local population of the Mayan communities of Tihosuco and Sacalaca in Yucatan (Mexico)

This paper presents the preliminary results of the study of the social and cultural carrying capacity of two Mayan communities in Yucatán. Sustainable tourism activity must facilitate the well-being of the population and its cultural and natural resources. For this reason, tourism planning must be integral and the local people must be included in the processes of diagnosis and development of tourism in order to avoid undesirable impacts on their way of life and on their cultural and natural heritage. However, tourism strategies have not been prone to incorporate actions into their policy design, more focused on tourist accommodation and economic benefits. This work has worked with the local population in the development of a cultural tourism product called the Ruta Cultural de la Guerra de Castas, which affects several Mayan communities. During the research, qualitative methods were applied in Tihosuco and Sacalaca to know the social perception of the population with regard to tourism and its heritage. The results have allowed us to reflect and identify some indicators that could prevent undesirable impacts due to the implementation of a tourism strategy in the area. This study should, however, be complemented by other assessments and a more exhaustive register of both the premises and the visitors who are already arriving, and become a real management tool, and being accepted by the local government

This study forms part of the lines of action carried out by a network of multidisciplinary tourism studies (Red de Estudios Multidisciplinares en Turismo-REMTUR) in Yucatan (México), an international network of researchers in tourism and cultural and natural heritage management formed by various universities.

Janet PURDY, *The Pennsylvania State University*

Zanzibar: Diversity in Heritage, Challenges for Tourism

On the islands of Zanzibar in Tanzania, a unique cultural chaos developed over centuries through a fusion of African, Arab, Omani, Indian, Persian, European, and American elements and more. This extraordinary depth in diversity—partnered with a growing tourism industry, rich natural resources, heritage and archaeological sites, and increasing foreign investments—marks Zanzibar as an excellent case study for considering the relationships between tourism and heritage. This paper addresses the questions and debates posed by the conference focus on tourism and heritage, most especially the importance of promoting economic and social development for local communities while safeguarding aspects of heritage and supporting efforts in sustainable tourism.

Yi CHEN and Han BINGYAN, *Traditional Architecture Design Institute of Zhejiang Province*

The Challenges Brought by the Urbanization and Tourism Development to the Heritage Protection Work (take several cases around the West Lake of Hangzhou City as examples)

Hangzhou is a traditional tourist destination in China. The development of this city is closely related to tourism. In 2011, Hangzhou West Lake was officially inscribed in the “World Heritage List” in the 35th World Heritage Conference as cultural landscape. After that, Hangzhou's tourism has reached a new level. The city has become an important window for China to be open to the world. The Chinese government even held the G20 summit in Hangzhou 2016. The development of tourism has greatly stimulated the urban economy. Therefore, the government

and the citizens have paid more attention to the protection of local heritage and cultural traditions. These concern and enthusiasm have brought the corresponding pressures on the aspects as the restoration of historic landscapes, the construction of tourism facilities and the protection and development of new ruins. By the examples listed in this paper, we attempted to discuss the role of the professional works in such social projects.

Wenjing MA and Jia HU, *Beijing Tsinghua Tongheng Urban Planning & Design Institute*

Revival of Historic District with Heritage Hidden in Modern Construction: Taking Historic District around Cui Lake in Kunming City as Example

With the modernization of most countries in the world, areas with thickly historical heritage and prominent historical values are mostly drown in construction of modern cities. Intensive modern buildings obstruct the relationship between historical resources, and historical features are difficult to be perceived. How to maximize the value of historical culture and make the most of the historical resources are the biggest problems.

In this study, we take historic area around Cui Lake in Kunming City as an example to explore key points for solving such problems. Cui Lake district is the most core cultural space in Kunming City, which has witnessed the history of revitalization of modern China, enriching all kinds of historical resources from ancient times to modern times. However, the historical pattern of “three mountains and one lake” has been blocked, and the resources have been hidden in modern buildings. Poor tourism experience, poor quality of facilities, and complex land property, make Cui Lake area difficult to become good tourist destination.

By shaping the heritage path “Path of Modern Civilization of Kunming” with specially designed street furniture system and corresponding paving, we have connected 56 resources with great historical and cultural value. In addition, the historical pattern of “three mountains and one lake” is restored, and important historical sight corridors are guaranteed by land renewal on the basis of property right of land research. In addition to the emphasis on historical resources, the protection of ecological environment is also paid attention to. According to the characteristics of Cui Lake district as a bird habitat, the ecological environment is promoted and the lighting environment is specially designed, according to the migratory characteristics.

The cultural value of Cui Lake district has been revealed through outstanding implementation effect, which provides a typical reference for historical cities with similar dilemmas.

Noor ABDEL HAMID and Khalid DEEMAS, *Sharjah: Gateway to the Trucial States Management Office*

Redefining the Relationship between Heritage and Tourism in the Arabian Gulf

Cultural heritage assets in the Arabian Gulf territory have a distinct context within the Arab region, noting that most are largely unrecorded or at risk of being lost. Current conservation strategies attempt to visually ‘reinterpret’ historical places as mediums for preservation of cultural heritage amidst a rapidly modernizing context. Consequently, tourism in the Gulf emerged at local and small scales based on community engagement. A regional challenge is the highly context-based exploration of the balance between economic development of tourism and cultural continuity. As a result, tourism can be analysed under a different set of factors:

balancing preservation of cultural heritage assets with development and modernization, while posing the question of how is cultural heritage preserved in such contexts.

Although it is difficult to identify a common regional culture in the Arab world, the context of the Gulf led to the emergence of coastal, mountainous, and Bedouin societies, each having its distinct heritage assets. Tourism in the Gulf, particularly in Sharjah, is currently gravitating towards the coastal cities for their combination of commercial assets of the modern cities and the re-emerging relationship with the cultural resources of the local community. A comparative study between Al Bait Hotel and Sharjah Art Foundation in the Historic Town of Sharjah

presents strategies to balance economic sustainability and cultural continuity. The analysis demonstrates how modern functions are incorporated into a historic fabric and addresses challenges of tourism and community engagement within 'reinterpreted' heritage settings.

Atila ENGIN Namık Kemal DÖLENEKEN and Gaye CANSUNAR, *Gaziantep Metropolitan Municipality*

Communique Summary for Yesemek Stone Quarry and Sculpture Workshop

The Yesemek Stone Quarry and Sculpture Workshop, dated to the Late Hittite Period, is located in Yesemek Village, about 20 km south east of Islahiye- Gaziantep in the Southeastern Turkey. The basalt sculptures at Yesemek consist of unique examples of Ancient Near Eastern Art. These sculptures consist of roughly shaped gate lions, sphinxes, mountain gods and battle chariots. The quarry and sculpture workshop spread over an area of approximately 8 hectares. The first archaeological studies at Yesemek were carried out by Prof. Dr. Bahadır Alkım between 1955 and 1961. On behalf of the Gaziantep Archaeology Museum, archaeologist İlhan Temizsoy conducted excavations and landscaping works at the site between 1989 and 1991. Yesemek has been under protection of the Ministry of Culture and Tourism as an open-air museum. A recent inventory conducted at the site has identified more than 500 basalt sculptures. The site is a unique and exceptional archaeological center with monumental artifacts dating to the Iron Age, showing a high level of representative of the human creative genius with a significant portion of the UNESCO world cultural heritage criteria. Thus, Yesemek was subscribed into the UNESCO Tentative List of World Heritage due to these features in 2012. Gaziantep has a strong tourism component that includes important archaeological centers, nearly 20 museums and the city recently became part of UNESCO's Creative Cities Network for its gastronomy. Despite the negativities of the migration wave due to the Syrian civil war, the number of domestic and foreign tourists visiting the city in the last year are around 1.5 million. The presence of the Nemrud Dağ and Diyarbakır Fortress and Hevsel Gardens on the UNESCO World Cultural Heritage List as well as Yesemek's proximity to the centers in the tentative lists such as the Mardin Cultural Landscape and the Neolithic Temples of Göbeklitepe enhances the tourism potential of Yesemek. In cooperation with the Gaziantep Governorship, Gaziantep Metropolitan Municipality and Gaziantep University, a joint project is being prepared with the Ministry of Culture and Tourism in order to protect and preserve Yesemek for future generations and to present the site to the attention of the World. This project consists of archaeological excavations and surveys, non-invasive geophysical studies, establishment of an inventory data-base, conservation-restoration projects, and public archaeological studies for local community, publicity, environment and open-air museum arrangements.

Milena LOZANOVA, *University of Architecture, Civil Engineering and Geodesy, Sofia, Bulgaria*

The Megalithic Monuments in Strandzha Mountain as a Resource for Sustainable Development of Heritage Tourism

This paper examines the megalithic monuments in Bulgaria as a resource for sustainable development of heritage tourism. The focus of research is Strandzha Mountain as it is a territory with high concentration of such monuments and also a territory rich in natural heritage sites. Despite those resources, the potential it has and its proximity to the well-developed economically Black Sea coast of Bulgaria, Strandzha suffers from underdevelopment and is a highly depopulated area, with one of the highest degrees of internal economic migration in the country.

Subject of research are the megalithic sites located in Strandzha Mountain. The paper explores their current state, informational and physical accessibility, the current tourist interest in those sites and the actions taken in terms of their preservation and socialization. The legislative

measures concerning the preservation of natural heritage sites in the area are analysed as part of the measures for preserving the megalithic monuments in that area.

The megalithic monuments in Strandzha Mountain are considered to be a potential resource for the sustainable development of heritage tourism in the area. This paper looks at the positive and negative outcomes of the development of other megalithic sites into popular tourist attractions.

Nowadays the megalithic monuments in Strandzha provoke interest but only to a specific audience, which is insufficient in terms of activating the tourist potential that already exists in the area.

This paper explores the possibilities for instigating interest in the megalithic sites in Strandzha with respect to their outstanding universal value and regarding the natural sites located nearby. This paper considers the megalithic monuments in Strandzha Mountain as heritage sites that possess the needed qualities to be a resource for the development of tourism and especially cultural tourism in the researched area and a resource for the sustainable economic development of this area.

Ajmal HASAN ⁽¹⁾, **Cynthia DUNNING THIERSTEIN** ⁽²⁾, **Ellinor DUNNING** ⁽²⁾, **Eissa YOUSIF** ⁽³⁾, **Mahmoud AL SUWAIDI** ⁽¹⁾, 1) *Sharjah Investment and Development Authority(Shurooq)*, 2) *ArchaeoConcept*, 3) *Sharjah Archaeology Authority*

Spending a Wonderful Day in Mleiha! Bringing Tourists to Archaeology and While Having Fun

The cultural landscape of the Central region of Sharjah contains major archaeological sites of Southeast Arabia. Not far from Dubai or the city of Sharjah, it offers a unique jebel environment situated between the sandy desert and the rocky plains leading to the Hajar Mountains. Managed jointly by the Sharjah Archaeology Authority and the Sharjah Investment and Development Authority Shurooq, the archaeological park of Mleiha and its surroundings present a central tourism destination based on the discovery of Sharjah's Past and the exploration of this special desert landscape. Starting at the Mleiha Archaeological Centre, the visitor is guided to diverse places of interest corresponding to his wishes. Visiting Camel Rock while driving through the dunes, cycling on trails through the jebels, settling down to see the sunset in the desert or enjoying the natural ambience of an overnight camp are amongst a few of the activities proposed by the Centre. These are always accompanied by a guided visit to several archaeological sites taking the visitor back to the beginning of mankind and letting him discover how people managed to survive in past times in the harsh desert environment. Although archaeology and tourism often have opposed interests, this example shows how both authorities, driven by common values for a sustainable development of the Emirate, manage to work together and develop protection and enhancement projects for these unique sites destined to become one day a UNESCO World Heritage site.

Majed ALMUTAIRI, *Kuwait University*

A Neglected Iconic Cultural Landmark Failak Island in Kuwait as a Case Study

Failaka Island is one of the most important islands in Kuwait as well as the Arabian Gulf. Its strategic geo-political location has been marked as a bridge between the northern and southern shores of the Arabian Gulf. The island had witnessed a settlement of numerous groups over different historical periods throughout history. Each settlement left a rich heritage of archaeological sites dating back thousands of years. There are more than 100 different archaeological sites that have been recorded and mapped. They go back to different historical periods. The oldest site refers to the Dilmun civilization, which emerged around 2400 B.C. in Bahrain and extended to Eastern Arabian Peninsula and Failaka Island. The island has five sites

that traced their roots to the Dilmun Civilizations. These sites are F3, F6, G3, Alawazim and Al-Khedir.

The Greeks also settled in this island and used it as a base during the 4th century B.C. In this period archaeologists discovered three Hellenistic sites: Hellenistic Fort, Guest House and the Coastal Temple. There are other significant archeological sites in Failaka Island such as the Christian sites (Al-Qusur Churches) and the Islamic sites (Al-Zur fort and Al-Quraynia fort). They are considered the most valuable pieces of Kuwait's cultural heritage. The combinations of the historic sites along with the items recovered by the archeological missions have added a great value for the Failaka museum.

Despite the significant of the aforementioned archaeological sites, the vast majority of them are not properly preserved or being obscured from the public. In this paper, the researcher will focus on the poor management of these archaeological sites and will emphasize the significance of preserving them as iconic cultural landmarks in Kuwait. Therefore, it is critical in transferring the sites into tourists' attractions and educational centers. This could be embodied through the application of modern visual and audible technologies along with educational activities that these sites can be preserved.

Session V: Continuing the Africa Initiative

Zsolt VISY, *University of Pécs*

The African Initiative and Hungary

The central Africa Region is underrepresented in the World Heritage list, it accounts only 9 % of the WH properties. On the other side, African sites make up for 37 % of the World Heritage List in danger, caused by natural and manmade disasters, often being in conflict areas. Also the awareness of the African societies are low, to increase it and to support management activities several programs and initiatives have been developed. Also ICAHM joined to this initiative of UNESCO in 2011, and since then several activities have been executed. The base of the program for archaeological sites of the African initiative was created in Salalah (The Salalah Recommendation on archaeological parks and sites), and the Salalah Guidelines for the management of public archaeological sites was adopted by the ICOMOS GA held in Delhi in December 2017.

Hungary joined to the African Initiative of ICAHM, and at the same time it started several programs in Nigeria, Congo, Ivory Coast, Cameroon and Burkina Faso within the scope of the strategy of implementation of the World Heritage Convention in the African region. Hungary provided emergency support to restore tangible and intangible heritage in the Sukur Cultural Landscape in Nigeria, along with its archaeological remains. There are two other programs as well, to establish connection between Hungarian and African universities to support management knowledge, scientific issues in heritage preservation, and to prepare World Heritage Passport to increase knowledge and enhance awareness toward cultural heritage and World Heritage properties.

Kenneth AICHISON, *Landward Research Ltd & Heritage Management Organization*

What Are We Learning from Discovering the Archaeologists of Africa?

The Discovering the Archaeologists of Africa project was launched at the ICAHM Annual Meeting in Bagamoyo in 2017.

One year on, considerable data have been gathered that, for the first time, allow us to have properly quantified estimates of the numbers of archaeologists employed in all of the countries of Africa.

Furthermore, we can now map out where archaeology is being taught at universities in Africa - and where all capacity building has to take place in other countries.

As we look deeper into the make-up of the archaeological profession in Africa, this paper will offer insights into the nature of professional practice and thoughts on how this project can support better practice in the future.

Susan MBUTHIA and Stephen MUCHINA, *Karatina University*

Devolution and its Implication on Heritage Management: Perspectives from Kenya

Heritage scholars have argued that host communities being key stakeholders are best disposed in the management of heritage sites. Kenya's national government through its various agencies such as the National Museums of Kenya, the Ministry of Tourism as well as the ministry of arts and culture have in their capacity played the role of managing heritage resources, since Kenya's independence in 1963. The enactment of the Constitution of Kenya 2010, devolved governance of resources and several functions from national to devolved units. Specifically, a legal framework was provided which devolved the management of heritage sites to local authorities hence by extension local communities. These mechanisms have been in place since 2013. This paper therefore sought to determine gains that have accrued in the management of heritage sites in the proceeding period. A survey of all 47 counties was undertaken purposively sampling

ten counties, based on density of heritage sites and annual fiscal expenditure on tourism related economic activities. The paper sought to evaluate counties performance in terms of heritage policy formulation, budget allocation and expenditure, site mapping and participatory decision making by communities. It was found in most of the counties involved, these metrics have not been met. The study concludes that devolution of heritage functions is yet to spur anticipated action and results. The study recommends that continuous community empowerment through education and training of devolution system is crucial. County authorities concerned with heritage should strengthen and implement regulations which prioritize use and management of local and indigenous heritage resources.

This study is very significant as it outlines ratified efforts by county governments in Kenya, in involving local communities in the management of heritage resources and the way forward.

Jörg LINSTÄDTER⁽¹⁾, **Gregor BADER**⁽²⁾, **Bob Forrester**⁽³⁾, **Rosemary ANDRADE**⁽⁴⁾, 1) *Deutsches Archäologisches Institut, 2) Univerität Tübingen, 3) Swaziland National Museum*

Improving heritage-management infrastructure in Swaziland

The cultural heritage of Swaziland is managed by the Swaziland National Trust Commission (SNTC). The SNTC also includes the Swaziland National Museum. Since 2017 a joint group of institutions have been working on the improvement of the heritage-management infrastructure in Swaziland, amongst others the SNTC, the German Archaeological Institute, the University of Tübingen and the University of Swaziland (UNISWA). This initiative aims to establish a register of all archaeological material stored in the National Museum of Swaziland. This includes the proper storage of artefacts and the setup of a digital database. Furthermore, capacity-building measures are being conducted in which SNTC staff and students of the University of Swaziland (UNISWA) are being trained in the fields of archiving and digital data management as well as in the preparation and implementation of archaeological research, including surveys and archaeological excavations.

Charles AKINDE, *Cultural and Natural Heritage Foundation, Nigeria*

Participatory Approach to Archaeological Heritage Management, Oke-Idanre Cultural Landscape, Nigeria - A case Study

Oke Idanre Cultural Landscape supplies one of the most recent archaeological sites in Nigeria. Because of its importance, the Federal Government declared the site as a National Monument in 2014. The site has been on a tentative list of UNESCO World Heritage Centre since 2007. The site is situated in about 20 kilometres from Akure the Ondo State Capital. Its altitude is about 945m above sea level making it the highest point in Western part of Nigeria. In fact, it is one of the latest archaeological sites in Nigeria that need to be protected; the fact is that the place is the last abandoned mountain town in Nigeria. The importance of the site was first noticed in 1894 when the first European to visit the place predicted that it will in future be a veritable paradise for the botanist or naturalist (Sir Gilbert Thomas Carter GCMG. GCVO, 1894). Scientific studies had been made by several scholars in the past, one by Prof. Arne Schiøtz of Zoological Museum of Denmark who studied the amphibians of Western Nigeria, he visited Oke Idanre in 1963, he discovered a reptile he called *Bufo Perreti*. which he said was endemic to the place and could not be found elsewhere. (Arne Schiøtz 1963). The study was sponsored by Carlsberg Foundation of Denmark; several other studies had been made by local and international scholars which added to the importance of Oke Idanre Cultural Landscape as a haven for scientists. There were studies by Michael B. Gleave 1963, D.J. Hamblen 1961, Z. R. Dmochowski of Poland, 1972, Olugbenga Ige in 2011 are among the many scholars that have visited Oke Idanre Cultural Landscape and have made valuable suggestions. No archaeological study was made there during colonial period, the German explorer and scientist, Leo Viktor Frobenius who visited several places in Nigeria including Ile Ife over 100 years ago did not reach Idanre.

However, some attempts were made recently by Nigerian archaeologists, but their efforts are limited by lack of adequate funding. This paper hopes to achieve two tasks:- 1. to demonstrate how participation of all stakeholders helps in assuring the smooth running and protection of archaeological sites in Nigeria using Osun Osogbo World Heritage Site and Oke Idanre Cultural Landscape as examples. 2. to appeal to the sponsors of "Africa Initiative" to include organized archaeological study of Oke Idanre cultural landscape in their programmes before it is totally lost to humanity by human activities through tourism and natural influences.

Daniel PALESTRINA, *Joint Venture International*

Two Museums in a Dialogue

We are since end of 2015 in a process of development of the renewal and expansion of two museum institutions:

A) The Somali Museum of Archaeology and Anthropology Hargeysa (SMAAH) as a Socio-Cultural Center of Cultural History Science and Education:

Museum, archive, library, depot, laboratory, workshop, local educational and international research institution for anthropology, archaeology and cultural history of the region.

B) The Somali Museum of History Mogadishu (SMHM) as a Socio-Cultural Centre of History and Development

This we do local, regional and international with the development of the network.

The task includes the primary analysis in its context (cultural, social, political and economical), preparation of the realization, the management of an interdisciplinary planning of contents, urbanistic intervention, the integration of the projects into its urban context of both cities and architectural tasks, the preparation of the high professional scientific developed content of the exhibition.