Welcome Address by Pascale Barnes

Hello, my name is Pascale Barnes and I am the current Chair of EXARC.

For those of you not already familiar with EXARC, our organisation
- Has been around since 2001 and has grown from very humble beginnings into the organisation that we are today – a vibrant, dynamic growing international cultural heritage network with over 350 members in over 40 countries.
- Our MISSION is to make the archaeological past widely accessible and includes facilitating both research and education.
- EXARC has 4 LEGS: Ancient & traditional Technology, Experimental Archaeology, Museum Practice and Interpretation & Education.
- EXARC has 4 TARGET GROUPS: Museums, Higher Education Centres, Organisations and Individuals who are working in the fields connected with our 4 LEGS.
- I am very proud to say that EXARC is an inclusive organisation. We are a great example of how a society, based in academic research, has opened itself to a diverse range of members from professors of archaeology to professional craftspeople, from historical interpreters to students of experimental archaeology.
• We are active within the world of museums, as an affiliated organisation with ICOM - the International Council of Museums and as a member of NEMO the Network of European Museum Organisations.

• EXARC connects people – We organise several cooperation projects, such as our Fellowship with the Colonial Williamsburg Foundation, our own Twinning Programme and collaborate on various EU projects.

• We host a variety of national and international events including Experimental Archaeology Conferences and specifically themed meetings,

Which brings me to the reason why we have all gathered virtually today.

It is my great pleasure to welcome you to this online conference focusing on the specific topic of ‘Documentation Strategies in (Archaeological) Open-Air Museums’. This 2-day event hosted by EXARC and the Museumsdorf Düppel, Berlin has become our first on-line event, replacing our previously scheduled meeting in Berlin on the 26th and 27th of March 2020.

Like our hosts in Berlin, I was looking forward to seeing many of my EXARC colleagues and meeting new ones in person, but we must be pragmatic in the face of this coronavirus pandemic.

EXARC joins many other organisations looking to the internet as the best way in which to interact with one another. While borne of necessity, this opportunity provides us with a new way in which to communicate with one another AND through open access, the possibility to reach a broader audience than previously imagined – this, together with the fact that we are reducing our carbon footprint is actually quite exciting!

Unfortunately, what it does not allow for is the magical first-hand experience of the archaeological open-air museum in Düppel - but I’m sure that my colleague Dr Julia Heeb will give you a fantastic virtual tour.

Having previously worked for an archaeological open-air museum and education centre, I am genuinely interested in the subject of documentation strategies for AOAMs. We are here today because we all agree that there is a wealth of information, tangible and intangible, contained in our museums which is at risk of being lost.

But how do we extract and share this information?

Where do we start?

What tools are already at our disposal?

What new tools are being developed?
Over the course of the next 2 days, we will be joined by a range of experts ready to share practical strategies and methodologies from across the globe, with the aim of unlocking and preserving the very essence of our museums to further research, education and for the enjoyment of future generations of visitors.

In order to participate in the conference, please visit our website and please take time to comment and interact!

exarc.net/meetings/berlin

I would like to thank all of the expert participants from across Europe, the UK, Scandinavia, Africa, Saudi Arabia, Australia and America for providing video presentations in order to allow this virtual conference to take place.

The last minute changes to the conference has meant a lot of additional work for the organisers and I would like to extend very special thanks to the people behind the scenes:

Our Director Dr Roeland Paardekooper and Magdalena Zielińska, our Designer & Administrator and the special team of Volunteers recruited to bring you this conference.

I would also like to thank Dr Julia Heeb and her team from the Museumsdorf Düppel in Berlin who had everything so well organised for our visit in Germany. I imagine that I am not alone in hoping that we will be able to visit your museum in the not-too-distant future.

I hope that you will find this conference interesting and thought-provoking, and ultimately that it will provide you with useful contacts, tools and insights for the continued development of your museums.

Please keep following EXAR C on our website and on Social Media and share our news.

If you would like to join us as a new member or support us by making a Donation via our paypal account: paypal@exarc.net, we would be most grateful.

Enjoy the conference.

Thank you.

[Signature]
Approaches to the Documentation of Houses in Archaeological Open-Air Museums - Results from a Seminar at the FU Berlin in Summer Term 2019
by Enrico Lehnhardt & Stefan Solleder
Freie Universität Berlin (DE)

The seminar was divided into two parts. One group professionally documented the long-term experiment “House 1” in the Museums Village Düppel for the first time. The house was built in the 1970s and left to decay in 1990. The area was freed from vegetation and photographed at regular intervals. The second group reflected on the continuous documentation of reconstructed houses in archaeological open-air museums with the aim of developing a proposal for binding documentation guidelines as well as practicable documentation forms. This contribution is intended as a thought-provoking catalyst.
Preserving Building Crafts – a Tradition in the ASTRA Museum
by George Tomegea
ASTRA Museum (RO)

Session 1
Paper 2

Over 60 years of experience in safeguarding traditional crafts and handing them down to future generations led the ASTRA Museum to adjust its strategy of recovery for old traditional crafts according to the reality of the 21st century. In the field of crafts related to traditional building, the ASTRA Museum created a database of active craftspeople and engaged their skills by including them in reconstructions and restorations of monuments along with museum professionals or other people willing to improve their knowledge. During field research that results in the transfer of monuments to the open-air museum, the museum’s specialists try to identify and involve craftspeople and teams of local craftspeople in the entire process, from deconstruction to reconstruction. At the same time, the museum engages in local community life by preserving and restoring traditional buildings in situ, recommending craftsmen or initiating learning programs for traditional crafts.
Building in Open-Air Museums: Propositions Towards a Universal Template to Record the Specific Data Inherent to our Activity(ies)
by Ulysse Douillon & Nathan Schneider
Randa Ardesca (FR)

Session 1
Paper 3

Experiments conducted by open-air museums produce a substantial amount of knowledge. Why are these data seldom shared between the numerous French entities involved? We can witness the conditions that are detrimental to such sharing. To cite only the main ones: the lack of an established network able to create links between the diverse actors, the lack of will to thoroughly study, conserve and share these data, the lack of skills within some open-air museums, especially when private, or the impracticality of allocating time to a task that is not directly profitable or useful to an open-air museum’s operations. Randa Ardesca faces this last situation. In order to solve this issue, it seems important to us to list analysis criteria which are synthetic, accessible and useful to all, and adaptable to different skill levels. With this aim, we will suggest a template based upon an already existing building from the open-air museum. Once completed, the diffusion of this template could offer an opportunity for communication between EXARC and the French open-air museums, hopefully providing a better incentive for them to join an international network.
Towards a Taxonomy of Ancient Technology? Insights into the Application of Conceptual Maps to Documentation Strategies in Archaeological Open-Air Museums

by Lara Comis (Irish Research Council GOIPG17 Scholarship - PhD Candidate) UCD (IE)

During the qualitative analysis of an online survey launched to investigate best practices in experimental archaeology and archaeological open-air museums (presented at the EAC11, Trento, May 2019), an interesting conceptual map emerged from the study of ancient technology activities. The respondents included in the open answers very detailed descriptions which allowed the analysis to delve into a visual representation of causal relationships and connections among different ancient technologies as they developed in time. In comparison to the conceptual map describing observations on experimental archaeology, ancient technology seemed to be clearer and more structured because no gap in knowledge was addressed. Could this “map”, if adequately implemented, be of use to strategize the collection of data from archaeological open-air museums? In other words, would it be possible to speak about a possible taxonomy for ancient technology? This paper attempts to tap into this argument by highlighting some aspects which could be useful to create a database structure for the collection and recording of data as a day-to-day activity in an archaeological open-air museum. Finally, it will also explore ways in which this model could also be expanded to include contributions from both academia and the public in experimental archaeology data collection strategies.
Session 2  
Paper 5  

**Digital Saryazd:**  
*Increasing Tourist Engagement Using Digital Documentation*  

by Kristy-Lee Seaton & Miglena Raykovska  
Gigascan Bulgaria Ltd. (BG)

Saryazd Castle is located in Yazd Province, Iran. The castle dates to the Samani era, with later expansion during the Safavid era. Constructed entirely of mud-brick, Saryazd was continuously used up to the mid-20th century as a vault, protecting both people and their property. Earthenware structures require continuous renewal in order to maintain their structural integrity. Today, visitors can witness traditional construction techniques at the site, albeit with some newer materials. The site has a magical quality which is enhanced by the current caretaker, Mr Hosein. The lighting of the fire, the serving of tea, and his warm hospitality breathe life into the castle and make this a special visit for guests. The castle has developed into an open-air museum and is unique within the region. Considerable restoration work has occurred in recent years with the desire to increase the number of visitors. Recent weather patterns and excessive rain have created challenges in maintaining the integrity of the castle’s structure. A project to digitally document Saryazd Castle was undertaken in December 2019 and aimed to document the castle as it currently stands. The techniques used were close-range photogrammetry, high-resolution photography and the creation of a 360-degree virtual tour. This documentation can be used in the future for preservation, conservation and popularisation of the monument. This paper aims to raise a discussion among professionals about living museums and to suggest guidelines for enhancing their potential as open-air museums.
Sustaining the Immaterial – Methods and Experiences in Knowledge Transfer of the educational projects in the Stone Age Park Dithmarschen

by Rüdiger Kelm
Stone Age Park Dithmarschen (DE)

Session 2
Paper 6

Since 1999, the Stone Age Park Dithmarschen has offered a wide variety of archaeological activities and educational programs for different visitor groups ranging from kindergarten-aged children to senior visitors, from school classes to “Stone Age Parties” for enterprises. This presentation will show how the Stone Age Park keeps the experiences of the educational programs vivid and transfers knowledge from one “generation” of educators to the next. Also, different methods for introducing new educators to practical work in the park are shown, for example with special courses, a system of direct contact between experienced and new educators in their work, and a lot of “open space” — seminars for discussions and exchange. The important role of the Support Society of the Park is presented, particularly in relation to the integration of new staff. The skills of the handicraft and infrastructure-maintaining specialists are also discussed at the end. Although there are many different methods of knowledge transfer, it remains a general problem to sustain the experiences of the diverse types of work, educational activities and responsibilities in a complex archaeological open-air museum, leading to new ideas and methods necessary for the future.
The Register for Archaeological Experiments: Sharing Unpublished and Published Experiments simply and quickly

by Caroline Jeffra

University of Amsterdam (NL)

Experimental archaeology is practiced in a variety of contexts which are broadly divisible by the structural incentives for generating publications. To a certain extent, this divide separates the activities undertaken at open-air museums from those within academia. Within academia, the culture of ‘publish or perish’ results in a publication record, which is in itself positive for the incremental development of experimental research programmes. On the other hand, the comparatively sparse coverage of non-academic experiments is decidedly negative – the absence of any accessible record beyond word-of-mouth for completed experiments leaves the field all the poorer. This paper launches the Register of Archaeological Experiments as a live, open-access and multiple-authored repository. The Register was developed in order to create a better sense of the ongoing path of research within experimental archaeology and to provide a resource for its future. Rather than acting as an alternate publication venue, the Register provides the opportunity to record completed experiments irrespective of their present or future publication status. The result is a rich repository of user-submitted experiments which allows participants in the field to establish whether their hypotheses have been addressed before and thus build new questions of their own.
**Analysis of Dumat al-Jandal, Saudi Arabia**
for UNESCO World Heritage Listing Requirements

by Hisham Mortada
AIA, King Abdul Aziz University, Jeddah (SA)

Dumat al-Jandal is an ancient site in the north of Saudi Arabia. Several civilizations have left their footprints and impacts on the urban and architectural components of this site. In general, Dumat al-Jandal consists of 3 components. The first is a castle which dates back to Roman times, while the second is a mosque that is believed to have been constructed in the 8th century AD. The third part of the site is the al-Dira’ district, whose date of emergence is uncertain, although physical evidence indicates that it is 400-700 years old. This research analyses the urban and architectural aspects of the three components of Dumat al-Jandal. It also discusses their construction materials and the modifications to each building or component throughout history. The historic and architectural characteristics of this site are then considered alongside the registration criteria of the UNESCO World Heritage List as well as similar examples that are already on the List.
Dissemination of Contextualized Archaeological Data through Digital Interfaces
by Peter Inker
The Colonial Williamsburg Foundation (US)

Archaeological excavation of 18th-century Williamsburg began in the 1920s. Since then, a huge amount of data has been collected in a wide variety of forms. This paper will discuss the ways in which these data have been managed and contextualized through GIS and 3D environments as a possible model for future data contextualization at open-air museums. Initially, archaeologically recorded footprints of structures and land properties were combined with historical and architectural research. The subsequent database was output through an ArcGIS interface, providing a spatio-temporal timeline for each dataset for each year of the 18th century. Combined with this, a level of spatio-temporal uncertainty was also applied to each of the vectors to indicate the validity of each vector. Subsequently, select buildings were projected into 3D, producing a virtual environment in which to further explore these datasets. The ways in which we capture diverse sets of data and how they are observable through varied modes of access in virtual environments will be discussed. The opportunity for socio-temporal and spatial research within virtual environments is immense. Many data sets can be combined to allow researchers to gauge contextualized correlations between data sets, assessing them across levels of time, space or structural types.
Session 3  Seminar 1  Discord

Local Action for global Sustainability in Museums

by Caitlin Southwick¹, Rebecca Thonander², Maria Josefina Villanueva³, Peter Inker⁴, Luke Winter³ & Rebecca Thonander³

¹ Ki Culture (NL)
² NEMO - Network of European Museum Organisations (DE)
³ EXARC
⁴ The Colonial Williamsburg Foundation (US)
⁵ Historic Concepts Ltd (UK)

Are you interested the UN’s 17 Sustainable Development Goals (SDGs)? Do you work with them every day? Do you have no knowledge of what they are? Don’t know why you should care? This session is for everyone to informally share thoughts, questions, and feedback.

In our increasingly connected world, what you do today will likely affect someone else tomorrow. On its Sustainable Development Goals webpage, UNESCO states: “These objectives form a program of sustainable, universal and ambitious development, a program of the people, by the people and for the people…”

Three professionals from widely different backgrounds invite you to take part in a conversation about the UN’s Sustainable Development Goals. Whatever your relationship with the SDGs, if they are unknown to you or if you are currently working with them, we want to hear from you. Should museums care about them, and if so, what can you do about it? The goal of this session is to open an informal discussion regarding this broadly complex topic and to enable you to have a conversation with your peers about your understanding of and experiences with SDGs. Our aim is for everyone attending this session to leave with a better understanding of the SDGs, to think about what their role is in supporting them, and to learn from other museums’ successes.
The Realisation of an Open-Air Archaeological Itinerary from the Musealisation of three Medieval Cemetery Areas of Valcuvia (Northern Italy)

by Marta Licata, Omar Larentis, Ilaria Gorini, Paola Badino, Roberta Fusco, Chiara Tesi

University of Insubria, Varese (IT), Rosagemma Ciliberti, University of Genoa (IT)

We present our current research project, which is part of a larger study planned by our research centre concerning the enhancement and promotion of the archaeological heritage of Valcuvia (Lake Maggiore, northern Italy). The general goal of our project is to give priority to the redevelopment of some open-air archaeological sites in Valcuvia, still unknown to date, but which have an extraordinary historical, artistic and archaeological potential, as well as potential for tourism. The operations envisaged by this original proposal will generate a synergistic development aimed at creating new tourism systems. Specifically, our centre has been involved in the archaeological and anthropological study of the following archaeological sites in recent years: Sant’Agostino Caravate, San Biagio in Cittiglio, Sant’Eusebio and Antonio di Azzio. The sites, partly already investigated from an archaeological and anthropological point of view, present strong potential for thematic and territorial connection. Our current project aims are to conclude the study of the entire osteoarchaeological sample of the sites and to establish a museum of anthropological assets within archaeological sites destined to become “open-air museum sites” that can be inserted into an already planned archaeological itinerary organised by theme. Indeed, the musealization of the osteological findings will be offered as a model for similar arrangements: laboratories of physical anthropology set up directly on the archaeological sites of necropolises which could make their operations more visible through the restoration and museum display of osteoarchaeological findings.
Blogging, Bushcraft and Book-keeping
by Marc Cox
Newhaven Coppice (UK)

As a non-academic not fully associated with any one museum or institution, recording and publishing experimental archaeological construction work has seemed daunting and beyond the scope of a self-employed woodworker. However, it has been extremely worthwhile and sometimes necessary to document the range of projects that have come along over the years. Using a number of very recent examples, one will begin to witness how out-of-the-ordinary media, 21st-century digital avenues and the ever-looming eye of funding bodies can make sure that lessons we learn from one build are not forgotten on the next. This paper will draw on experiences from across the UK, starting with the Avalon Marshes Centre in Somerset, the Out of Eden Stone Age Centre in mid-Wales, the newly constructed Wessex House at the Sylva Centre in Oxfordshire, and finishing with Newhaven Coppice in the South West of England. This presentation aims to examine and showcase the ways in which all professionals, whether archaeological, curatorial or craft-based, can take steps toward contributing to the knowledge base of experimental archaeology. It is also an opportunity to critique and reflect on the shortcomings of being outside the ‘system’ and ways that individuals can still be relevant and accountable.
Keeping up Appearances: The Visual Documentation of Re-Building Roundhouses at Castell Henllys Iron Age Village

by Delun Gibby & Liz Moore

Pentref Oes Haearn Castell Henllys / Castell Henllys Iron Age Village (UK)

Session 4
Paper 12

Castell Henllys is an established visitor centre and heritage site near Newport in North Pembrokeshire where the visitor can immerse their senses in prehistoric life. It is the only reconstructed Iron Age village in the UK where the roundhouses and granary have been built on the sites of the original post holes. The site has undertaken a number of projects, namely the archaeological excavation and experimental reconstruction of various Iron Age structures as well as developing an educational programme including ancient crafts. Over the last three years, the first two reconstructions built in the 1980s have been taken down and rebuilt. Although the processes of research, rebuilding, maintenance and decay have been documented in different ways over the last 39 years, we found that visual documentation (photographs/video) proved the most beneficial. This is a very simple way of documenting work that can be digitally stored, accessed and shared widely and does not require a specialist skill. A picture can say a thousand words: in this paper, we will discuss how we use a visual documentation strategy to not only record and disseminate information about our work (projects, maintenance, crafts etc.), but also how, in reviewing this documentation, we can make informed decisions for the future care and direction of the site.
Session 4  
Seminar 2

*Introduction to Databases for Museums*

by Joseph Davis

As an archaeologist and ICT specialist, Joseph Davis will give a presentation about this subject. This talk assumes no previous database experience, and is not dependent upon any specific database software. It is designed for complete beginners who may need to create databases for their own projects.

Are you not a database developer? Have to build a database anyway? This talk will cover the fundamentals of relational databases, such as: What is a relational database, and how does it differ from a flat file (spreadsheet, CSV)? What is a primary key, and what is a foreign key? How does database normalization protect data integrity?

By the end of this talk, you should be able to look at your spreadsheets or other flat data and understand how to uniquely identify each row, what data should be broken out into a table of its own, and how to relate the tables to one another using primary keys and foreign keys.
The Viking Ship Museum has been involved in the experimental archaeological reconstruction of boat and ship finds for over thirty years. During this time, a multi-disciplinary research environment has developed around the Museum boatyard, striving towards collaboration between craft specialists, sailors and academics. Built from 1982-84, the Skuldelev 3 reconstruction, Roar Ege, was the Museum’s first Viking ship reconstruction. The documentation carried out during that project laid the foundation for an internal archive of experimental archaeological documentation that has grown with each new reconstruction project. The focus of this documentation has shifted over the years. When constructing Roar Ege, the building team were very much focused on ‘re-discovering’ Viking Age ship-building techniques. With each subsequent build, the boatbuilders’ fluency in these techniques increased, eventually becoming second nature: and so, documentation focused more on the chronological stages of building projects rather than the thought process and immaterial actions involved in each step. In 2016, Roar Ege was retired on land, and in 2017, work began on a new reconstruction of Skuldelev 3, creating an opportunity to reflect on how we document and why. This paper will present the development of the documentation methods and approaches used today at the Viking Ship Museum boatyard from the perspective of both the boatbuilder and archaeologist. It will detail past successes and – perhaps more importantly – failures, while also exploring the inherent connection between experimental archaeological reconstruction and the intangible cultural heritage of traditional wooden boatbuilding.
Butser Ancient Farm has been at the forefront of experimental archaeology in Britain for over 45 years. The pioneering work of Peter Reynolds defined the experimental evaluation of Iron Age structures and agriculture in the UK and has had an international impact. Butser Ancient Farm has in more recent years extended its remit beyond the Iron Age. The expansion commenced in 2003 with a Romano-British villa and has proceeded rapidly since 2014 to encompass the Neolithic and Anglo-Saxon periods. The site now has 12 major experimental buildings with numerous ancillary structures. The pace of expansion has necessitated the careful consideration of strategies to document, record and store key information about the archaeology from which the buildings are derived; the rationale and processes involved in their construction; their interpretation and usage; and the recording of subsequent phases of research, including the documentation of their decay and of the archaeological data derived from their demise. Beyond the obvious material considerations, we are also developing methodologies for capturing the experiential impressions of those involved in the construction and later use of the building. Key to this system, which is still at the implementation stage, is consistency, clarity, and ease of access. This presentation will seek to illustrate the processes and provide examples of their outcomes in the hope of contributing to a system through which information may be stored and shared on a broad, consistent, international platform.
Bede’s World began as a museological project aiming to showcase the results of Dame Professor Rosemary Cramp’s excavations (1963-1978) at St. Paul’s monastery in Jarrow (UK). The museum opened in 1974 inside the 1785 manor house on the site with a permanent exhibition dedicated to early medieval Northumbria, monastic life and the Venerable Bede. Later, the display was updated, first in 1979 on completion of the excavations, and again on construction of a new multimillion-pound building which currently houses the museum and its collections. Included within this redevelopment, former industrial land adjacent to the new museum was reclaimed to reproduce an agricultural landscape with a selection of experimental buildings showcasing elements of Anglo-Saxon architecture based upon Northumbrian archaeological finds.

In 2016, Bede’s World closed down due to financial difficulties and reopened as Jarrow Hall Anglo-Saxon Farm, Village and Bede Museum under the new management of Groundwork STAN, an environmental charity. Among the difficulties of adopting an existing, neglected, archaeological open-air museum, conserving experimental buildings may be the most complicated. The staff, with a team of dedicated volunteers, is currently committed to documenting this process, and the aim of this paper is to present Jarrow Hall and the new plans to develop its reconstructed buildings and support research in experimental archaeology.
EXARC makes the archaeological past accessible by means of archaeological open-air museums, ancient crafts and stories, with experimental archaeology playing an important role.

We embrace going Digital to help others to improve.

This online conference was made possible thanks to the effort of many volunteers.

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