Under the Patronage of HRH Prince El Hassan bin Talal

13th International Conference on the History and Archaeology of Jordan

Ethics in Archaeology

21st – 26th May 2016
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<td>140</td>
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</tbody>
</table>
Sponsors

ICHAJ

Jordan

Amana Amman Al-Khaleel

THE JORDAN MUSEUM

MIMAR

Ministry of Tourism & Antiquities

NIACOR

USAID

American Center of Oriental Research

ORIENTAL RESEARCH

United States Agency for International Development

From the American People
Introduction

The Department of Antiquities is pleased to welcome all participants of the 13th International Conference on the History and Archaeology of Jordan which will be held in Amman between 21st and 26th of May, 2016.

The title “Ethics in Archaeology” has been chosen for its importance and its role in the outcome of research through the archaeological excavations, surveys, restoration and maintenance work, as well as its role on the exhibited objects and finds in the museums. The ethics of an archaeologist are equally important as his valued research results. Thus the researcher gains respect and acknowledgement from all parties, especially in light of what is happening regarding looting, smuggling and destruction of cultural heritage subjects in any country. This is why we have to emphasize the importance of ethics and professionalism in archaeology.

About 200 researchers from different parts of the world will be participating in this conference. Their studies will be discussed in different topics such as: Excavation, survey, restoration, technology of archaeological work, analysis of inscriptions, historical and archaeological studies and the most recent discoveries which are a result of the researcher’s studies during the last years.

This guide includes details on the different sessions in the program according to subject, hall, session timing, names of the key-speakers and chair persons, research titles and their presenters as well as an index with the names of the participants and their titles. The opening ceremony will be held at the Jordan Museum in the middle of Amman at Ras Al-‘Ain in the evening of Saturday, 21st May, 2016. As for the actual lecture sessions from 22nd – 26th May, they will be held at the Princess Sumaya University for Technology which is located in the Jubaiha area/Amman. A number of halls have been set up for this event including simultaneous interpretation in both languages Arabic as well as English. we wish everybody a pleasant stay and wish them all the best and success for this event.
Organizing Institutions

Department of Antiquities of Jordan

The Department of Antiquities of Jordan (DoA) is the official institutional authority mandated by law with the responsibilities of studying, interpreting, conserving, developing, monitoring and protecting Jordan’s cultural heritage legacy including archaeological sites, monuments, and traditional architecture. DoA is also responsible for the establishment of and running of public archaeological museums. The first unit that took the role of a Department of Antiquities of Jordan was founded in 1923. Its main job was to supervise fieldwork, in cooperation with foreign expeditions and archeological missions, and to implement salvage excavations and limited consolidation and preservation works. Today, DoA provides comprehensive information on antiquities and presents assets in a manner that supports the national identity and serves the educational culture, while considering archaeological assets as a major factor for tourism attraction.

For further information visit http://doa.gov.jo/

Princess Sumaya University for Technology

Princess Sumaya University for Technology (PSUT), established in 1991, is a specialized, Non-governmental, Non-profit, Jordanian university, owned by the leading applied research centre in Jordan, the Royal Scientific Society (RSS). In less than twenty years, PSUT has become the leading university for the study of information and communication technology, electronics and computer engineering, and a center of educational excellence both in Jordan and the surrounding region. In recognition of its outstanding performance since its establishment in 1991 as well as its significant contribution towards building the business sectors, both at national and regional levels, HM King Abdullah II awarded PSUT the nation’s First Degree of Independence Decoration in 2014. The award also acknowledged PSUT’s introduction of unique new degree programs, its excellence in the scientific and research sectors, and emphasis on the culture of entrepreneurship amongst students. PSUT pays a huge attention to establishing the basis of understanding between PSUT and academic and economic institutions, and strengthen its relation with other
local and foreign institutions through programs and mutual visits, holding conferences and exhibitions and participating in their work in different fields.

For further information visit http://www.psut.edu.jo/

The Jordan Museum

The idea of a national museum that would present the treasures of Jordan’s archeological and cultural heritage was first raised in the 1960’s. In 1980 HRH Crown Prince El Hassan bin Talal held the first International Conference on the History and Archaeology of Jordan at the University of Oxford, where conferees recommended the establishment of a “National Museum”. He founded and chaired the Society of Jordanian Culture in 1989, which worked on issues that developed into general concepts for the museum. Then in 1999 a loan agreement was signed with the Government of Japan for financing the “Tourism Sector Development Project” of which a national museum was a sub-project. The Jordan Museum serves as a comprehensive national centre for learning and knowledge that reflects Jordan’s history and culture, and presents in an engaging yet educational way the Kingdom’s historic, antique and heritage property as part of the ongoing story of Jordan’s past, present, and future. The Jordan Museum aims to be a jumping off point for visitors to entice them to explore the cultural sites and cities in Jordan.

For further information visit http://jordanmuseum.jo/
Committees

Scientific Committee

Monther Jamhawi
Ghazi Bisheh
Zeidan Kafafi
Barbara Porter
Talal Al-Akasheh
Frauke Kenkel
Carol Palmer
Moawiyah Ibrahim
Nizar Al-Turshan
Omar Al-Ghul
Sulieman Farajat
Yahya Al-Shawabkeh
Mohammad Najjar
<table>
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<th>Name</th>
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<tr>
<td>1</td>
<td>Jehad Haron</td>
<td>1</td>
<td>Ahmad Al-Sulibi</td>
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<td>2</td>
<td>Ghassan Al-Deir</td>
<td>2</td>
<td>Saleh Shqirat</td>
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<td>Hanadi Al-Taher</td>
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<td>Mohammad Al-Qadaseh</td>
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<td>4</td>
<td>Samia Khoury</td>
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<td>Osama Jaber</td>
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<td>Arwa Massadeh</td>
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<td>Islam Al-Okour</td>
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<td>6</td>
<td>Ismaeel Melhem</td>
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<td>Yousef abu Quake</td>
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<td>7</td>
<td>Mahmoud Suboh</td>
<td>7</td>
<td>Loma Al-Sulibi</td>
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<td>Samar Habahbeh</td>
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<td>Samah Al-Awamleh</td>
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<td>Omar Nofal</td>
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<td>Nadja Qaisi</td>
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<td>Hamed Al-Ziarah</td>
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<td>Ahmad Albstanji</td>
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<td>Ahmad Musa</td>
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<td>15</td>
<td>Mahmoud Al-Kronz</td>
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<td>Ahmad Atea</td>
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<td>Mahmoud Suliman</td>
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<td>Mahmoud Abu Zaid</td>
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<td>Nour Karazon</td>
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<td>Tala Al-Masry</td>
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<td>21</td>
<td>Feda’a Al-Ibraheem</td>
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<td>22</td>
<td>Alaa Al-Kharabsheh</td>
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<td></td>
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<td>23</td>
<td>Yousef Humaymat</td>
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</tbody>
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Maps

Route Options from Jerusalem International Hotel to Princess Sumaya University for Technology

Approach to ICHAJ 13 Sessions’ Halls
Zoning Plan showing the location of The ICHAJ 13 halls- Princess Sumaya University for Technology - Amman
**Conference Events**

**21st May, 2016** The Opening Ceremony starting at 6:00 p.m. at the Jordan Museum/Ras Al 'Ain followed by a reception.

**22nd May, 2016** Dinner at the Jordan Museum

**23rd May, 2016** Dinner at Ward Restaurant from 8:00 to 10:00 p.m.

**24th May, 2016** Reception at the Italian Residence/Jabal Al-Luweibdah at 7:00 p.m.

**25th May, 2016 Optional:**
- Field trips from 10:00 a.m.-4:00 p.m. to Madaba, Jarash or the Citadel/ downtown Amman.
- Workshops at Princess Sumaya University for Technology
## Transportation Schedule

<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Day</th>
<th>Departure</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>21/05/2016</td>
<td>Saturday</td>
<td>Leaving at 5:00 p.m. to the Jordan Museum.</td>
<td>8:30 p.m. return to Jerusalem Hotel</td>
</tr>
<tr>
<td>2</td>
<td>22/05/2016</td>
<td>Sunday</td>
<td>08:00 a.m. from Hotel to University.</td>
<td>5:30 p.m. return to Hotel.</td>
</tr>
<tr>
<td></td>
<td>22/05/2016</td>
<td>Sunday</td>
<td>7:15 p.m. from Hotel to the Museum.</td>
<td>10:00 p.m. return to Hotel.</td>
</tr>
<tr>
<td>3</td>
<td>23/05/2016</td>
<td>Monday</td>
<td>08:30 a.m. from Hotel to University.</td>
<td>5:30 p.m. return to Hotel.</td>
</tr>
<tr>
<td></td>
<td>23/05/2016</td>
<td>Monday</td>
<td>Reception 08:00 – 10:00 p.m.</td>
<td>TBD</td>
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<tr>
<td>4</td>
<td>24/05/2016</td>
<td>Tuesday</td>
<td>08:30 a.m. from Hotel to University.</td>
<td>5:30 p.m. return to Hotel.</td>
</tr>
<tr>
<td></td>
<td>24/05/2016</td>
<td>Tuesday</td>
<td>6:15 p.m. from Hotel to Jabal Al-Luweibdah/Residence of the Italian Ambassador.</td>
<td>9:30 p.m. return to Hotel.</td>
</tr>
<tr>
<td>5</td>
<td>25/05/2016</td>
<td>Wednesday</td>
<td>10:00 a.m. from Hotel to Jarash, Madaba and the Citadel.</td>
<td>4:00 p.m. return to Hotel.</td>
</tr>
<tr>
<td>6</td>
<td>26/05/2016</td>
<td>Thursday</td>
<td>08:30 a.m. from Hotel to University.</td>
<td>3:30 p.m. return to Hotel.</td>
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- Please note: All participants are kindly requested to gather at the Jerusalem's courtyard according to the above schedule.
Program
# CONFERENCE PROGRAM

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Event</th>
<th>Venue</th>
<th>Introducer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Saturday</strong></td>
<td><strong>21st May 2016</strong></td>
<td>Opening Ceremony at 6:00 pm</td>
<td>Jordan Museum, Amman</td>
<td>Dr. Monther Jamhawi</td>
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<tr>
<td></td>
<td></td>
<td>Registration after Reception</td>
<td></td>
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</tr>
<tr>
<td><strong>Sunday</strong></td>
<td><strong>22nd May 2016</strong></td>
<td>Registration 8:30</td>
<td>Princess Sumaya University for Technology, Amman</td>
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<td></td>
<td></td>
<td><strong>Hall (1)</strong></td>
<td>(The Friendship Auditorium)</td>
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<tr>
<td></td>
<td>9:30-11:00</td>
<td>Keynote Speakers</td>
<td>HRH Princess Sumaya bint El Hassan, Dr. Mounir Bushnaki, and Prof. Gary Rollefson</td>
<td>Dr. Monther Jamhawi</td>
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</tbody>
</table>
### 11:00-12:00 Opening of the Posters Gallery and Coffee Break

#### SESSION (1)

**22/5/2016**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Chair</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 12:00 – 1:00 | History and Archaeology (Jarash)  | Hall (1) (The Friendship Auditorium) | Prof. Ziad Al-Saad       | Louise Blanke: Private Lives and Public Means: New Evidence for Urban Development in Late Antique Jarash, Jordan  
Koji Oyama: Heritage Trail along The King’s Highway: Networking Museums and Heritage Sites  
Bethany Walker: Understanding the Contours of Rural Life in the Middle and Late Islamic Period  
Dorothea Csitneki: Jerash Bowls, Chronology, Typology and Iconography  
Zeidan Kafafi: Who Owns the Past: Jordanian Archaeological Masterpieces at the International Museums  
Ian Jones: Miner Sins: Archaeological Evidence for Gambling at Khirbat Nuqayb Al-Asaymir, A Copper Mining Village in Faynan, Southern Jordan  
Thomas Lepaon: The Great Eastern Baths of Jerash/Gerasa: Balance of Knowledge and Ongoing Research  
Rebecca Banks: Left off the Map: The Forgotten Sites of Sir Aurel Stein  
Reem Al-Shqour: Aqaba Castle, Origin, Development and Evolution of Khans in Jordan: An Archaeological Approach  |

**Hall (2) (Training Hall- RSS)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Chair</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 12:00 – 1:00 | Museums and Private Collections | Hall (2) (Training Hall- RSS) | Dr. Frauke Kenkel        | Louise Blanke: Private Lives and Public Means: New Evidence for Urban Development in Late Antique Jarash, Jordan  
Koji Oyama: Heritage Trail along The King’s Highway: Networking Museums and Heritage Sites  
Bethany Walker: Understanding the Contours of Rural Life in the Middle and Late Islamic Period  
Dorothea Csitneki: Jerash Bowls, Chronology, Typology and Iconography  
Zeidan Kafafi: Who Owns the Past: Jordanian Archaeological Masterpieces at the International Museums  
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Reem Al-Shqour: Aqaba Castle, Origin, Development and Evolution of Khans in Jordan: An Archaeological Approach  |

**Hall (3) (Luai Shammout Auditorium)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Chair</th>
<th>Speakers</th>
</tr>
</thead>
</table>
| 12:00 – 1:00 | Islamic Studies | Hall (3) (Luai Shammout Auditorium) | Dr. Ghazi Bisheh       | Louise Blanke: Private Lives and Public Means: New Evidence for Urban Development in Late Antique Jarash, Jordan  
Koji Oyama: Heritage Trail along The King’s Highway: Networking Museums and Heritage Sites  
Bethany Walker: Understanding the Contours of Rural Life in the Middle and Late Islamic Period  
Dorothea Csitneki: Jerash Bowls, Chronology, Typology and Iconography  
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<table>
<thead>
<tr>
<th>Time</th>
<th>Session (2)</th>
<th>Location</th>
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<tbody>
<tr>
<td>1:00 - 2:00</td>
<td><strong>SESSION (2)</strong></td>
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<tr>
<td></td>
<td><strong>History and Archaeology (Jarash)</strong></td>
<td>Hall (1) (The Friendship Auditorium)</td>
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<tr>
<td>2:00 - 2:20</td>
<td>David Boyer</td>
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<tr>
<td>2:00 - 2:20</td>
<td>Gerasa of the Decapolis: The Third Field Season of the Jarash Water Project</td>
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<tr>
<td>2:20 - 2:40</td>
<td>Pierre-Louis Gatier</td>
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<tr>
<td>2:20 - 2:40</td>
<td>Jerosh Epigraphy: Eighty Years after Welles</td>
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<tr>
<td>2:40 - 3:00</td>
<td>Zakariya Na’imt</td>
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<tr>
<td></td>
<td>The Regional Context of Early Islamic Site of Shuqayr al-Gharbiyya, Karak</td>
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<td></td>
<td>(in Arabic)</td>
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<tr>
<td></td>
<td>Museum’s Collection Management.</td>
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<tr>
<td>2:00 - 2:20</td>
<td>Marta D’Andrea, A. Polcaro, S. Richard, D. Clark, G. Batocchioni, and L. Romagnoli</td>
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<tr>
<td></td>
<td>A New Model for Regional Museums: The Archaeological Museum of Madaba</td>
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<td>2:20 - 2:40</td>
<td>Abdelrahim Al-Dwikat</td>
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<tr>
<td>2:20 - 2:40</td>
<td>The Initiative of The Department of Antiquities in Organizing Private Archaeological Collections Museums and Private Collections. (in Arabic)</td>
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<td></td>
<td>Basem Al Mahamid</td>
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<td></td>
<td>Results of the Excavation Project at the Islamic Village of Jalul (in Arabic)</td>
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<td></td>
<td>Vanessa Guéno</td>
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<td></td>
<td>Mills in Ajlun Sanjan, and Qadí Du Haywân During the Ottoman Period: Historical, Archeological and Architectural Approach</td>
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<tr>
<td>2:40 - 3:00</td>
<td>Basem Al Mahamid</td>
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<tr>
<td>1:00 - 2:00</td>
<td><strong>SESSION (2)</strong></td>
<td></td>
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<tr>
<td></td>
<td><strong>History and Archaeology (Jarash)</strong></td>
<td>Hall (2) (Training Hall RSS)</td>
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<tr>
<td>2:00 - 2:20</td>
<td>David Boyer</td>
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<tr>
<td>2:00 - 2:20</td>
<td>Gerasa of the Decapolis: The Third Field Season of the Jarash Water Project</td>
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<td>The Regional Context of Early Islamic Site of Shuqayr al-Gharbiyya, Karak</td>
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<td></td>
<td>Museum’s Collection Management.</td>
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<tr>
<td>2:00 - 2:20</td>
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<td>The Initiative of The Department of Antiquities in Organizing Private Archaeological Collections Museums and Private Collections. (in Arabic)</td>
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<tr>
<td></td>
<td>Basem Al Mahamid</td>
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<td></td>
<td>Results of the Excavation Project at the Islamic Village of Jalul (in Arabic)</td>
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<td>Basem Al Mahamid</td>
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### SESSION (3)
#### 22/5/2016
**4:00 – 5:20 pm.**

<table>
<thead>
<tr>
<th>Time</th>
<th>Hall (1)</th>
<th>Hall (2)</th>
<th>Hall (3)</th>
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</thead>
<tbody>
<tr>
<td>3:00 – 3:20</td>
<td><em>Ina Kehrberg-Ostrasz</em></td>
<td><em>Jihad Kafafi</em></td>
<td><em>Norig Neveu</em></td>
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<td></td>
<td>Pottery and Lamps from The Foundation Trenches and Wall Constructions of the Gerasa Hippodrome. Excavations 1984-1996</td>
<td>The Jordan Museum Role in Safeguarding Jordanian Heritage Case Study: Hejaz Railway Wagon from Sheideyeh Station</td>
<td>Pilgrimage and Sanctuaries in Late Ottoman Southern Bilâd Al-Shâm</td>
</tr>
<tr>
<td>3:20 – 3:40</td>
<td><em>Cathrin Pogoda</em></td>
<td><em>Balsam Shaban</em></td>
<td><em>Michele Nucciotti and Lorenzo Fragai</em></td>
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<td></td>
<td>Necropoleis and Tombs of Jerash</td>
<td>The Jordan Museum Documentation System</td>
<td>Ayyubid Reception Halls in Southern Jordan: A Light Archaeology</td>
</tr>
<tr>
<td>3:40 – 4:00</td>
<td>Coffee Break</td>
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**SESSION (3)**

- **Hall (1)** (The Friendship Auditorium): History and Archaeology (Bronze – Iron Age)
  - Chair: Prof. Douglas Clark
- **Hall (2)** (Training Hall- RSS): Museums and Private Collections
  - Chair: Eng. Ihab Amarin
- **Hall (3)** (Luai Shammout Auditorium): Islamic Studies
  - Chair: Dr. Ismaeel Mellhem

**4:00 – 4:20**

- **Denyse Homes -Fredericq and Ingrid Moriah Swinnen**: Architectural Features and Settlement Planning at Al-Lahun in the Early Bronze Age II-III
- **Fabio Parenti**: Zarqa Valley Paleoanthropological Project 2015 Preliminary Report
- **Elisa Pruno and Raffaele Ranieri**: Medieval Pottery in South Jordan (The Case Study of HMPW in Shawbak Castle)
<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker and Title</th>
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<tbody>
<tr>
<td>4:20 – 4:40</td>
<td><strong>P.M. Michele Daviau and Stanley Klassen</strong>&lt;br&gt;Linking Iron I Sites on the Madaba Plain</td>
</tr>
<tr>
<td>4:40 – 5:00</td>
<td><strong>Lucas Petit and Zeidan Kafafi</strong>&lt;br&gt;Tell Damiyah: A Late Iron Age Sanctuary for Traders and Travellers?</td>
</tr>
<tr>
<td>5:00 – 5:20</td>
<td><strong>Luisa Goldammer-Brill</strong>&lt;br&gt;Trade and Cultural Exchange: Late Bronze Age Cypriot Imports from Tall Zirā’a</td>
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<td><strong>Yosha Alamri</strong>&lt;br&gt;Collection Management Policies</td>
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<td><strong>Lisa Yeomans</strong>&lt;br&gt;Analysis of the Faunal Remains from Shubayqa 1</td>
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<td><strong>Davide Bianchi</strong>&lt;br&gt;New Archaeological Discoveries in the Basilica of the Memorial of Moses, Mount Nebo</td>
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<td><strong>Alex Peterson</strong>&lt;br&gt;Ayyubid- Mamluk Evidence from the Danish-German Northwest Quarter Project Ceramics in Context</td>
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<td><strong>Elodie Vigouroux and René Elter</strong>&lt;br&gt;Khirbat Al-Dusaq: A Palatial Complex from the Middle Ages in Shawbak Hinterland</td>
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<td><strong>Micaela Sinibaldi</strong>&lt;br&gt;The Late Petra Project: Ceramics and Settlement in the Petra Region During the Islamic Period</td>
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<td>Time</td>
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<td>9:30–9:50</td>
<td>Ulrich Bellwald</td>
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<td>Jutta Häser</td>
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<td>Björn Anderson</td>
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<td>9:50–10:10</td>
<td>Lutfi Khalil</td>
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<td>Ditte Maria Damsgaard Hiort</td>
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<td>Leigh-Ann Bedal</td>
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<td>10:10–10:30</td>
<td>Gaetano Palumbo, Jehad Haroun, Angela Atzori</td>
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<td>Hanadi Al-Taher</td>
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<td>Will Kennedy, Zbigniew Fiema, Stephan Schmid, Bernhard Kolb</td>
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</table>
### SESSION (5)

**Date:** 23/5/2016  
**Time:** 11:20 am. – 1:00 pm.

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<tr>
<th>Time</th>
<th>Hall (1) (The Friendship Auditorium)</th>
<th>Hall (2) (Training Hall- RSS)</th>
<th>Hall (3) (Luai Shammout Auditorium)</th>
</tr>
</thead>
</table>
| 10:30 – 10:50 | **Stephanie Brown and Benjamin Porter**  
Integrating Archaeological Research and Site Management Responsibilities at Busayra | **Megan Perry**  
Ethics and the Research of Human Skeletal Remains in Jordan | **Ahmad Lash**  
Nabataeans and Petra in the Arabic Sources |
| 10:50 – 11:00 | Coffee Break                          |                              |                                     |
| 11:20 – 11:40 | **Rémy Crassard**  
The Globalkites Project in Harrat Al-Shaam | **Ruba Seiseh**  
Management of Heritage Sites in Jordan: Case Study- Tell Hisban | **Robert Wenning**  
Sculpture and religion. Approaches to Nabataean religion |
| 11:40 – 12:00 | **Peter Akkermans**  
Landscapes of Survival: New Research in the Jebel Qurma Region, North-East Jordan | **Dieter Vieweger**  
Sites after Excavation. National Parks and Public Education | **Laurent Tholbecq, Caroline Durand, Thibaud Fournet, Nicolas Paridaens**  
The Nabataeo-Roman Site of Wādī Sabrā: A New Topographical Survey |
<table>
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<tr>
<th>Time</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>12:00 – 12:20</td>
<td>Romel Gharib</td>
<td>Primary Report of the Results of the Archaeological Survey of Harrat Uweined: Description of the Project</td>
</tr>
<tr>
<td>12:20 – 12:40</td>
<td>Gyöző Vörös</td>
<td>The New and Authentic Monument-Presentation in Machaerus</td>
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<td>12:00 – 12:20</td>
<td>Thibaud Fournet</td>
<td>Bathing in the Nabataean world: New results from the field</td>
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<tr>
<td>12:20 – 12:40</td>
<td>Lorraine Abu Azizeh, Julie Bonnéric, Barbara Couturaud, Aurélien Stavy</td>
<td>Azraq Ayn Sawda Reservoir Project: Results Of The 2013-2016 seasons</td>
</tr>
<tr>
<td>12:40 – 1:00</td>
<td>Abdel –Rahman Serogy</td>
<td>Restoration, Maintenance and Display Kheranh Skeleton (The Oldest Skeleton in Jordan). (in Arabic)</td>
</tr>
<tr>
<td>12:40 – 1:00</td>
<td>Renel Francois</td>
<td>The so-called “B Building” at Petra: An Official building in connection with the temple of Qasr al-Bint</td>
</tr>
<tr>
<td>1:00 – 2:00</td>
<td>Stephen Bourke</td>
<td>The 2015 Field Season at Pella in Jordan: Exploring Urban Settlements of the Third Through First Millennia BC</td>
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<tr>
<td>1:00 – 2:00</td>
<td>Raouf Abujaber</td>
<td>Conservation and Management - Three Historic Sites Completely Destroyed in as Salt</td>
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<td>1:00 – 2:00</td>
<td>S. Thomas Parker</td>
<td>Nabataean and Late Roman Domestic Life on Petra’s North Ridge</td>
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<tr>
<td>Time</td>
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<td>Hall 1: History and Archaeology (Epigraphy)</td>
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<td>2:00</td>
<td>(6)</td>
<td>Marie-Jeanne Roche</td>
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<td>On graffiti and IIIrd Legio Cyrenaica</td>
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<td>2:20</td>
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<td>Jean-Baptiste Yon and Nabil Bader</td>
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<td>New Data on the Epigraphy of the Northern Decapolis &quot;Northwestern Jordan&quot;</td>
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<td>David F. Graf</td>
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<td>Central Jordan Epigraphic Survey</td>
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<td>3:00 – 3:20</td>
<td><strong>Julien Aliquot and Abdel Qader Al-Husan</strong></td>
<td>New Greek Inscriptions from Dafyana in North-East Jordan</td>
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<td>3:20 – 3:40</td>
<td><strong>Omar Al-Ghul and Nida'a al-Khazali</strong></td>
<td>New Late Aramaic Inscriptions from Ghor Al-Safi</td>
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<td>3:40 – 4:00</td>
<td><strong>Coffee Break</strong></td>
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<td><strong>SESSION (7)</strong></td>
<td><strong>Science and Technology in Archaeology</strong></td>
<td><strong>Islamic Studies</strong></td>
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<td>23/5/2016</td>
<td>(The Friendship Auditorium)</td>
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<td>4:00 – 5:20</td>
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<td><strong>Chair: Dr. Yahya Al-Shawabkeh</strong></td>
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<td><strong>Monther Jamhawi and Zain Hajahjah</strong></td>
<td><strong>Mohammad Al-Marahleh</strong></td>
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<td>IT Innovation and Technologies Transfer to Heritage Sites: The Case of Madaba</td>
<td>The Shrine of Abu Suleiman Al-Darani (in Arabic)</td>
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<td>4:20 – 4:40</td>
<td>Giuseppe Delmonaco, Luca Maria Puzzilli, Francesco Traversa</td>
<td>Engineering Geological Investigation for Conservation of the Temple of Winged Lions in Petra</td>
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<td>Abdel Qader Al-Husan</td>
<td>Arab Islamic Inscriptions from the South-eastern Desert. (in Arabic)</td>
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<td>Noor Mulder-Hymans</td>
<td>Water Management at The Nabataean/Roman Settlement of Khirbat Al Mudayna at Wadi ath-Thamad</td>
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<td>Sulieman Al-Farajat</td>
<td>The Nabataeans in heritage and Islamic Sources. (in Arabic)</td>
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<td>Atef Al-Shiyab</td>
<td>التقيقات الأثرية في موقع أم قيس الأثري “جذرين 2015” (in Arabic)</td>
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<td>The Archaeological Excavations at Umm Qais “Gadara 2015”. (in Arabic)</td>
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<tr>
<td>5:00 – 5:20</td>
<td>Mamoon Allan and Wesam Moubalideen</td>
<td>Internet of Things (IOT) Potential in the Context of Archeological Sites</td>
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<td>Guido Vannini</td>
<td>The Archaeological Missions: A New Cultural Approach, Beyond the Crisis. The &quot;Future&quot; Experience of the Italian-European Archaeological Mission 'Medieval Petra' of the University of Florence</td>
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<td>Bruce Routledge</td>
<td>The Reusable Landscapes of Tall Dhiban: Finding Simple Stories for Complex Sites</td>
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<td>9:30–9:50</td>
<td>Mohammad Waheeb</td>
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<td>Where is Aenon Near to Salem (New Discovery East of Jordan River In Southern Levant Near Site of Jesus Baptism )</td>
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<td>9:50–10:10</td>
<td>Suzanne Richard and Marta D'Andrea</td>
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<td>EB III at Khirbat Iskandar, Jordan: A Reappraisal in the Light of Recent Excavations</td>
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<td>9:50–10:10</td>
<td>Mohammad Najjar and Thomas Levy</td>
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<td>Bead Production as a Form of Craft Specialization and Social Complexity: A Case Study from PPNB Tellet-Ifdan / Southern Jordan</td>
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<td>9:50–10:10</td>
<td>Claudia Bührig</td>
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<td>Sanctuaries and the Integration of Landscape. Gadara/Umm Qays and its Hinterland</td>
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<td>10:10</td>
<td>Husam Hjazeen</td>
<td>Discovery of the Hercules Temple Stairs in Amman Citadel <em>(in Arabic)</em></td>
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<tr>
<td>10:30</td>
<td>Margreet Steiner</td>
<td>The Excavations at Tell Abu Sarbut 2012-2015: Three Seasons of Excavations</td>
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<tr>
<td>10:30</td>
<td>Andrea Polcaro and Juan Muniz</td>
<td>Preliminary Results of the 2014-2015 Spanish-Italian Excavation Campaigns at the Early Bronze Age I Settlement of Jebel Al-Mutawwaq, Middle Wadi Az-Zarga, Area C</td>
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<tr>
<td>10:30</td>
<td>Karin Bartl</td>
<td>Qasr Mushash: Site and Setting</td>
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<td>10:50</td>
<td>Gul Sen</td>
<td>The Transition Period in Jordan: Rethinking the Early Ottoman Period with Reference to Tall Hisban</td>
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<td>10:50</td>
<td>Bernd Müller-Neuhof</td>
<td>The EBA Colonization of the NE-Badia: Fixing the Chronological Framework</td>
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<td>10:50</td>
<td>Dörte Rokitta-Krumnow</td>
<td>Re-Evaluation of the Neolithic Settlement Eh-Sayyeh</td>
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**SESSION (9)**

24/5/2016
11:20 am. – 1:00 pm.

**Hall (1)** *(the Friendship Auditorium)*

*Islamic Studies*
Chair: Prof. Karin Bartl

**Hall (2)** *(Training Hall- RSS)*

*History and Archaeology (Bronze – Iron Age)*
Chair: Prof. Randall Younker

**Hall (3)** *(Luai Shammout Auditorium)*

*History and Archaeology (Pre - History)*
Chair: Prof. Hans Gebel
<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
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</thead>
</table>
| 11:40 – 12:00 | **Achim Lichtenberger and Rubina Raja**  
New Evidence for Byzantine and Islamic Jerash in the Light of Research of the Danish-German Jerash Northwest Quarter Project |
|            | **Robert Chadwick**  
The Building History of North Gate 100 at Khirbat al-Mudayna on the Wadi ath-Thamad |
|            | **Gary Rollefson**  
Late Neolithic Variability in Lithic Technology and Typology from Two Areas of the Black Desert of Jordan |
| 12:00 – 12:20 | **Robert Schick**  
The Decline of Christianity in Southern Jordan |
|            | **Thomas Levy, Mohammad Najjar, Matthew Howland, Brady Liss, Craig Smitheram**  
After the Late Bronze Age Collapse – Economic Opportunism in the Faynan Copper Ore District, Jordan |
|            | **Yorke M. Rowan, Gary O. Rollefson, Alexander Wasse, A.C. Hill, Morag Kersel**  
Investigations of Prehistoric Exploitation in Jordan’s Black Desert |
| 12:20 – 12:40 | **Andrea Vanni-Desideri, Silvia Leporatti, Dario Rose, Guido Vannini**  
Before the Crusaders, Light Archaeology at the Site of Al-Wu’ayra (Petra) |
|            | **Jérôme Norris**  
The Ancient North Arabian Inscription J.14202 (AMJ 2) in the Amman Museum: Signature of a Woman in the Wādī Ramm Desert |
|            | **Elizabeth Henton, Louise Martin, Andrew Garrard**  
Epipalaeolithic Gazelle Hunting in the Azraq Basin: The Contribution of Combined Zooarchaeology, Dental Isotope and Microwear Research |
| 12:40 – 1:00 | **Ignacio Arce**  
Al-Qastal Reconsidered |
|            | **Maysoon Al-Nahar**  
Tell Abu Suwwan: Neolithic Ritual Practices |
13th International Conference on the History and Archaeology of Jordan (21st – 26th May, 2016)

24/5/2016

**SESSION (10)**

**Hall (1)** (the Friendship Auditorium)

Illicit Trafficking and Heritage Protection  
Chair: Dr. Omar Al-Ghul

**Hall (2)** (Training Hall- RSS)

Local Community Engagement  
Chair: Dr. Angela Atzori

**Hall (3)** (Luai Shammout Auditorium)

Science and Technology in Archaeology  
Chair: Prof. Talal Al-Akasheh

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**SESSION (10)**

**Hall (1)** (the Friendship Auditorium)

**Robert Bewley**

Approaches to Endangered Archaeology in the Middle East and North Africa (EAMENA)

**Valentina Gamba, Konstantinos Politis, Mohammed Al-Qinna**

Reviving the Ancient Indigo Cultivation and Industry in Southern Jordan as a Source of Income for the Local Community: From Historical and Archaeological Evidence to a Modern Trial

**Yahya Al-Shawabkeh**

3D Digital Documentation of Heritage Sites Using Photogrammetry and Laser Scanning Techniques

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**Hall (2)** (Training Hall- RSS)

**Morag Kersel**

Getting Rich Quick?? Looting, Myth, and the Destruction of Archaeological Landscapes in Jordan

**Oystein LaBianca**

Archaeology Engaging the Anthropocene

**Khaled Al-Bashaireh**

Production Technology of Glass Bracelet from the West Cemetery of Umm El-Jimal in Northeastern Jordan

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**Hall (3)** (Luai Shammout Auditorium)

**Ismaeel Mellhem**

منهجية العمل الأثري في التصدي للتزييف  
Methodology of Archaeological Work in Addressing Falsification. *(in Arabic)*

**Maria Elena Ronza and Glenn Corbett**

From Workers to Partners: How Petra's Host Communities are Now Taking the Lead in the TWLCRM Initiative

**Hala Al-syoof**

حفظ وأرشفة الصور القديمة  
Documentation and Preservation of Old Photos. *(in Arabic)*
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<th>Time</th>
<th>Speaker(s)</th>
<th>Topic</th>
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<tbody>
<tr>
<td>3:00 – 3:20</td>
<td>Andrea Zerbini</td>
<td>Documenting and Protecting Jordan’s Endangered Archaeology: The First Year of EAMENA in Jordan</td>
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<td>Andrew Smith</td>
<td>The Rural Economy of Petra: Archaeology, Heritage, and Community Engagement at Bir Madhkur</td>
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<td>Ala’a Alshwaiter</td>
<td>Usability of Dense Image Matching Technique in Cultural Heritage Documentation; Examples from Jordan</td>
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<tr>
<td>3:20 – 3:40</td>
<td>Douglas Clark and Kent Bramlett</td>
<td>Who Owns this Part of the Past? Protecting Tall Al-Umayri’s Cultural Heritage</td>
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<td>Eman Abdassalam</td>
<td>Community Engagement at the Temple of the Winged Lions</td>
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<td>Oroub El Abed</td>
<td>The Deep Past as a Social Asset in the Levant</td>
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<td>3:40 – 4:00</td>
<td>Coffee Break</td>
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<tr>
<td>SESSION (11)</td>
<td>Hall (1) (The Friendship Auditorium)</td>
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<td></td>
<td>History and Archaeology</td>
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<td>Chair: Prof. Oystein Labianca</td>
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<td>4:00 – 4:20</td>
<td>Riham Miqdadi and Fatma Mari</td>
<td>The Line Between Antiquities and Heritage</td>
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<td></td>
<td>Angela Atzori</td>
<td>Local Communities’ Engagement in Umm El Jimal: A Case Study on Rural Women’s Empowerment Through the Management and Presentation of Cultural Assets in the North of Jordan</td>
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<td>Tobias Richter, Amaia Arranz-Otaegui, Lisa Yeomans</td>
<td>The Last Hunters and First Farmers in North-East Jordan? Five Seasons of Fieldwork in the Qa’ Shubayqa</td>
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<td>4:00 – 5:20</td>
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<td>Local Community Engagement</td>
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<td>Chair: Dr. Carol Palmer</td>
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<td>4:00 – 4:20</td>
<td>Hall (3) (Luai Shammout Auditorium)</td>
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<td>Recent Discoveries</td>
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<td>Chair: Prof. Mohammad Waheeb</td>
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<td>4:20 – 4:40</td>
<td>Bilal Khrisat</td>
<td>The Late Quaternary Landscape Evolution of the Jordan Rift Valley Through Geotectonic and Geomorphologic Changes as a Major Paleoclimatic and Paleoenvironmental Proxy in Central and Southern Jordan</td>
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<td>Paul Christians</td>
<td>Integrating Community, Archaeology, and Education at Umm El-Jimal’s Site Museum: Developing an Ethical Foundation for an Ancient Stone Superstructure</td>
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<td>Fawzi Abudanah</td>
<td>The Legend of the King’s Highway and Via Nova Traiana in Arabia Petraea: New Evidence</td>
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<td>4:40 – 5:00</td>
<td>Elizabeth Osinga</td>
<td>The Umm El-Jimal Project: Stratigraphy and Ceramics from the House XVII-XVIII Complex</td>
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<td>Debra Foran</td>
<td>Engaging the People of Nebo: The Khirbat Al-Mukhayyat Community Archaeology Program</td>
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<td>Robert Darby and Erin Darby</td>
<td>Recent Discoveries from the Roman Fort at ‘Ayn Gharandal (Arielde)</td>
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<tr>
<td>5:00 – 5:20</td>
<td>Younis Al-Shdaifat</td>
<td>حارثة الرابع (سياسته واستراتيجيته) Haritha the Fourth (His Policy and Strategy). <em>(in Arabic)</em></td>
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<td></td>
<td>Hans Georg Gebel and Talal Hamd Al-Amareen</td>
<td>Towards an Eastern Perspective on Heritage Awareness and Education</td>
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<td>Mark Driessen and Fawzi Abudanah</td>
<td>Udhruh Archaeological Project</td>
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<td>7:00 pm.</td>
<td>Reception at The Italian Residency - Jabal Al-Waibdeh</td>
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## Workshops and Trips

**Wednesday 25th May 2016**

**Venue:** Hall (3) (Luai Shammout Auditorium) Princess Sumaya University for Technology, Amman

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<th>Workshop (1)</th>
<th>The World Science Forum (WSF) 2017 – The Inter Disciplinary Relationship between Archaeology and the Sciences</th>
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<tbody>
<tr>
<td></td>
<td>Moderator: <a href="mailto:princess.sumaya@psu.edu.jo">HRH Princess Sumaya bint El Hassan</a></td>
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<td>(HE Prof. Khaled Touqan, Prof. Talal Akasheh, Prof. Nizar Abu Jaber)</td>
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<td>9:30 – 11:30 am.</td>
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| Coffee Break | 11:30 – 12:00 |

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<tr>
<th>Workshop (2)</th>
<th>Illicit Trafficking</th>
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<tr>
<td>12:00 – 2:00 pm.</td>
<td>Moderator: <a href="mailto:dr.moragkersel@psu.edu.jo">Dr. Morag Kersel</a></td>
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<td>(DOA Representative, Customs Representative, Interpol &quot;Jordan Representative&quot;, Anti - Corruption Commission, Anti – Drug and Counterfeiting Representative, Tourism Police Representative)</td>
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| 2:00 – 3:00 | Light Lunch |

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### Workshop (3)

**3:00 – 5:00**

**Education and Heritage: The Role of Jordanian Universities and NGO’s**

Moderator: **Dr. Mohammad Najjar**

*(HE Dr. Emad Hijazin, Representatives of The Jordanian Universities, PNT)*

### Trips and Tours

**10:00 – 4:00**

**Amman, Jarash, Madaba**

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### Thursday 26th May 2016

**Venue: Princess Sumaya University for Technology, Amman**

#### SESSION (12)

**26/5/2016**

**9:30 – 10:50 am.**

**Hall (1) (The Friendship Auditorium)**

**History and Archaeology**

(Madaba)

Chair: **Prof. Thomas Weber**

- **Randall Younker and Constance Gane**
  - Tall Jalul Excavation Results: Phase I

**Hall (2) (Training Hall- RSS)**

**History and Archaeology**

Chair: **Prof. Sultan Al-Ma’ani**

- **Harmen Huigens**
  - Pastoral Nomads of the 1st Millennium CE - An Archaeological Perspective from Jordan’s Black Desert

**Hall (3) (Luai Shammout Auditorium)**

**Recent Discoveries**

Chair: **Prof. Susanne Kerner**

- **Craig Harvey**
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<tr>
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<td>Elisabeth Lesnes</td>
<td>The Shrine of the Beheading of Saint John the Baptist and the Origins of Madaba</td>
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<td>10:10 – 10:30</td>
<td>Abdullah Nabulsi</td>
<td>Cremation Burials in Jordan: A Regional Perspective</td>
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<td>10:10 – 10:30</td>
<td>Paul Gregor</td>
<td>Water System at Tell Jalul</td>
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<td>10:30 – 10:50</td>
<td>Fawzi Zayadine</td>
<td>Gadora, Tal al-Jadour and the Poet Maleaser of Gadora</td>
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<td>10:30 – 10:50</td>
<td>Moritz Kinzel</td>
<td>Life and Death at Shkārat Msaied – News from the 2014 and 2015 Seasons</td>
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<td>10:30 – 10:50</td>
<td>Chang-Ho Ji</td>
<td>'Ataruz and the Ancient Road System</td>
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<td>10:50 – 11:10</td>
<td>Konstantinos Politis</td>
<td>The Discovery, Excavation, Study and Conservation of Khirbet Qazone in Jordan</td>
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<td>10:50 – 11:10</td>
<td>Saad Twaissi</td>
<td>New Issue on Ethics and Authenticity of CRM in Petra and the Case of Some Dated Medieval Graffiti</td>
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<td>10:50 – 11:10</td>
<td>David Vila</td>
<td>Between Here and There: Locating Abila of the Decapolis in the Past, Present, and Future</td>
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<td>SESSION (13)</td>
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<td>(13th May 2016)</td>
<td>(The Friendship Auditorium)</td>
<td>(Training Hall- RSS)</td>
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<tr>
<td><strong>History and Archaeology</strong> (Pre-History)</td>
<td><strong>Awareness and Education</strong></td>
<td><strong>Recent Discoveries</strong></td>
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<tr>
<td>Chair: Dr. Maysoon Al-Nahar</td>
<td>Chair: Prof. Abd Al-Hakim Al-Husban</td>
<td>Chair: Dr. Mohammad Najjar</td>
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<td>11:30 – 11:50</td>
<td>11:50 – 12:10</td>
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<td><strong>Juan José Ibáñez, Juan Muñiz, Eneko Iriarte, Luis Teira, Jonathan Santana, Martin Monik</strong></td>
<td><strong>Giorgia Cesaro, Giuseppe Delmonaco, Bilal Khrisat</strong></td>
<td><strong>Annlee Dolan, Steven Edwards, Debra Foran</strong></td>
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<td><strong>Lisa Maher and Danielle Mocdonald</strong></td>
<td><strong>Bill Finlayson</strong></td>
<td><strong>Susanne Kerner</strong></td>
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<td>Organization of Domestic Space at Kharaneh IV</td>
<td>Neolithic Cultural Heritage as a Community Asset</td>
<td>The Ritual Landscape of Murayghat</td>
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<td><strong>Hamzeh Mahasneh</strong></td>
<td><strong>Youssef Hilo</strong></td>
<td><strong>Cecilie Lelek Tvetmarken</strong></td>
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<td>The Substantial Architectural Remains of the ceramic Neolithic Site of Es-Sifiya Compared with those of the Contemporary Mega Sites in Southern Jordan</td>
<td>The Jordanian Tour Guides are Potential Efficient Rangers in Protecting and Safeguarding Our Cultural Heritage</td>
<td>Recent Excavations at the Late PPNA/EPPNB Site of Mushash 163 in North-Eastern Jordan</td>
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| 12:30 – 12:50| **Lorenzo Nigro**  
Khirbet Al-Batrawy – A City and its Palace in 3rd Millennium BC Jordan |
| 12:30 – 12:50| **Nizar Abu-Jaber**  
The Role of the Center for the Study of Natural and Cultural Heritage at the German Jordanian University in Linking Science with the Needs of Jordanian Society |
| 1:00 – 1:30  | **Closing Session**  
Chair: Dr. Monther Jamhawi |
| 1:30 – 2:30  | **Light Lunch** |

**Closing Session**

Chair: 

Dr. Monther Jamhawi
Abstracts

Abstracts are arranged alphabetically according to abstracts' titles.
Session 10, Hall 3, 24/5/2016, 2:00-2:20

3D Digital Documentation of Heritage Sites Using Photogrammetry and Laser Scanning Techniques
Yahya Alshawabkeh, Hashemite University
yahya.alshawabkeh@yahoo.com

Digital recording of cultural heritage sites is important for many purposes like archaeological documentation, conservation process, educational and site management. Accurate and realistic 3D results in terms of geometry and texture are expected from the adopted recording technique. During the last decade, terrestrial laser scanner (TLS) was the main tool for 3D data collection of the complex heritage objects, the system providing high data acquisition rates and high spatial data density. These systems are costly, need experts, and require long acquisition time in the field. Other limits such as the weight, size, and the limited range of the system are also available.

The recent improvements in the photogrammetric matching algorithms allow for an automatic producing of dense 3D point clouds. The algorithms apply the principles of standard photogrammetry but with full automation process in matching the images in wise pixel resolution. Acquiring 3D surfaces with image matching solutions has many advantages related to the flexibility, cost effective and need a short data collection time on the site without disturbance of the visitors. The system guarantee a realistic appearance of the final 3D model because of the possibility of collecting the images within the same day time, with flexibility to have close up shots for fine details surfaces.

The research will underline the possibility and the necessity to integrate dense image matching and laser scanning techniques in cultural heritage documentation. The combined approach will be used to optimize the geometric accuracy, the visual quality, time, cost and effort, to have a high resolution textured 3D model. The approach has been applied in documentation of different historical buildings and museum objects in Jordan.

Session 2, Hall 2, 22/5/2016, 2:00-2:20

A New Model for Regional Museums: the Archaeological Museum of Madaba

Marta D’Andrea, Sapienza Università di Roma
Andrea Polcaro, Università degli Studi di Perugia
Suzanne Richard, Gannon University
Douglas Clark, La Sierra University
Guido Batocchioni, Studio Strati
Laura Romagnoli, Studio Strati
dandreamarta1@gmail.com
Following a long American-Jordanian effort to endow Madaba with a new archaeological Museum, a joint Italian-American team, in cooperation with the Department of Antiquities of Jordan, has recently submitted a proposal for a new archaeological museum for the city. The focus of the new proposal is the choice of the Archaeological Park West as the new location for the exhibition currently held at the Archaeological Museum of Madaba. The project includes renovation and restoration of the area, famous for the Burnt Palace, partially excavated by the Franciscan School of Archaeology, a Byzantine building of the 6th century AD. It also includes the clearing and preparation of an open area, connected with the Roman street, the ancient “cardo” of the 2nd-3rd centuries AD. In particular, on the north-western side of the park, an Ottoman building (an example of 19th-century traditional architecture of Madaba) will be restored in order to host the new exhibition wings.

The project will address some of the main issues in the current ethical, theoretical and methodological debate on museology, such as raising awareness of cultural assets among local communities, community outreach through building capacity and training of local specialists, and finally the use of multimedia for valorization of cultural heritage and education. The project aims at realizing a model of museum set-up that might be adaptable to different projects and reproducible in different architectural contexts, which could, thus, serve as a model for regional museums in Jordan.

Session 8, Hall 2, 23/5/2016, 10:10-10:30

**A Series of Iron Age Domestic Buildings in Field C at Tall Jalul**

Paul J. Ray, Andrews University
rayp@andrews.edu

Excavations in Field C were begun in 1994, focusing on the remains of a pillared house, parts of which covered the original four squares of the field. Unfortunately, the western wall of this building was removed, due to stone robbing, not long after the building went out of use. In an effort to locate its southern end, an additional square was opened to the south, in 1996. Not only was this side of the building found, but two walls of another building were also unearthed. Hence, while the general contours of this pillared house have been known since the late 1990s, with most of it excavated to bedrock, the intriguing nature of the new building dictated that operations move laterally, to the south, where work in this field concentrated for several more seasons.

However, in the decade following the work in the northern part of the field, the elements eroded part of the previously-unexcavated balk, north of the pillared building, exposing several stones that appeared to be part of a wall, and in 2011 the last remaining section of this building, including its northern wall and entrance, were completely uncovered.

The results of these excavations are the discovery of two superimposed domestic buildings, the earliest one a traditional four-room house, on top of which two phases of a three-room house were built.
After the Late Bronze Age Collapse – Economic Opportunism in the Faynan Copper Ore District, Jordan

Thomas E. Levy, UC San Diego Levantine Archaeology Laboratory
Mohammad Najjar
Matthew Howland
Brady Liss
Craig Smitheram

At the end of the Late Bronze Age (LBA), a cluster of social, economic and environmental factors in the eastern Mediterranean region contributed to the collapse of civilizations such as the Mycenaean kingdoms in the Aegean, the Hittite empire in in Anatolia and northern Syria, and the Egyptian New Kingdom with its colonies in southern Syria and Canaan. How did local communities in the peripheries of these large-scale polities respond to the LBA crisis? For example, prior to this crisis, Cyprus was the main center of copper production for the eastern Mediterranean. Did communities in the periphery take advantage of the LBA economic disruption to create local mining industries to fill market voids? To investigate this problem, the Edom Lowlands Regional Archaeology Project initiated a new excavation project in 2014 at Khirbat al-Jariya (KAJ) in Jordan’s Faynan copper ore district. Preliminary radiocarbon dating at the site by our team indicated that the beginnings of industrial scale copper production in Faynan began at KAJ. This paper discusses the new KAJ data, the evidence ore procurement and processing, the organizing of the early copper industry and how it compares with the Iron Age peak of Iron Age copper production in Faynan during the late 10th and 9th centuries BC.

Analysis of the Faunal Remains from Shubayqa 1

Lisa Yeomans, University of Copenhagen
zhr605@hum.ku.dk

Excavations at Shubayqa 1, located in the Harrat al-Sham (Black Desert) in north-eastern Jordan, resulted in the exposure of several phases of architecture spanning the Early to Late Natufian. A thorough excavation methodology, including screening of sediments and an extensive program of flotation sampling, also provided large faunal and botanical assemblages from the occupation sequence. This paper presents results from the initial analysis of the animal bones focusing on discussion of the material from a large midden dating to the Late Natufian Phase of the sequence. Gazelle was the dominant species hunted by the occupants at Shubayqa 1 but they also targeted wild sheep indicating a greater geographical range for this species than previously known.
Occasionally onager, wild cattle, hare and fox were also hunted and tortoise supplemented the meat provided by the mammalian animals. An exceptionally large assemblage of bird bones provides important evidence for the presence of wetlands in the immediate vicinity of the site at the time of its habitation. These wetlands would have been visited by large flocks of waterfowl which were hunted on mass possibly by startling the birds into nets. The carcasses of the birds were often processed at the kill site with the large flight muscles, and the bones they were attached to, brought back to the settlement for consumption. Other bird bones were selectively brought back to be used to make beads for adornment for which we have clear evidence of manufacture.

Session 10, Hall 1, 24/5/2016, 2:00-2:20

Approaches to Endangered Archaeology in the Middle East and North Africa (EAMENA)

Robert Bewley, School of Archaeology, Oxford University

The paper will present the approach, initial results and future strategies for the EAMENA project, which began in January 2015. An open-access web-based information system has been designed, using the same Arches software as MEGA-J to allow basic information about each site to be easily accessible for anyone interested in understanding and preserving archaeological sites in the region.

Building on the work done by Aerial Photographic Archive for Archaeology in the Middle East (APAAME) and the Aerial Archaeology in Jordan project (see www.apaaame.org) the EAMENA project has initially chosen a number of key areas in Saudi Arabia, Syria, Iraq, Jordan, Libya and Egypt for its work.

The archaeological heritage of the Middle East and North Africa is of huge global significance. It includes very large, and often unrecorded landscapes, with significant prehistoric and historic sites, dating from all periods, up to and including twentieth century sites.

The biggest threats to these archaeological sites are agricultural activities, conflict zones, looting and the huge increase in urban expansion, as a result of the quickly rising populations.

Where significant sites are threatened by modern development (road building, town and village expansion, agriculture and looting) the team has worked with the local authorities in managing the threats and risk to archaeological sites.

The project has been funded by the Arcadia Fund (www.arcadiafund.org.uk) based at Oxford University in collaboration with Leicester University, UK.
Session 1, Hall 3, 22/5/2016, 12:40-01:00

Aqaba Castle, Origin, Development and Evolution of Khans in Jordan: An Archaeological Approach

Reem Al Shqour, Bonn University/Annemarie Schimmel Kolleg
reemss@hotmail.com

The origin and development of the khan, also known as caravanserai or roadside inns, is an area of research that has not been extensively addressed in the existing studies on the Islamic history and archaeology of Jordan. This is somewhat surprising considering both their historic importance as way stations for pilgrims undertaking the hajj and their ubiquitous presence throughout the Jordanian landscape. On top of that all of the previous studies on khans have been either very general or quite restricted in terms of geography and chronological/historical scope. Therefore my dissertation will involve a diachronic study of the development of Aqaba castle, an important Islamic khan at the junction of two major pilgrim routes, both based on ancient Arabic and Crusader sources and the results of the excavations undertaken by Ghent University in Aqaba in which I participated both as co-director and director.

The main objectives concerning the Aqaba castle project are defining a chronological sequence of occupation of the site and to provide a structural interpretation of the layout of both the standing remains and the underlying structures. This case-study will be framed within the results of a wider survey and study of the surviving khans in Jordan, the majority of which I have already undertaken. The combination of these studies will result in the first diachronic description and analysis of the origin and development of the khans in Jordan.

Session 10, Hall 2, 24/5/2016, 2:20-2:40

Archaeology Engaging the Anthropocene

Oystein Labianca, Andrews University
labianca@andrews.edu

The Anthropocene is the epoch in human history when the activities of humans begin to alter and eventually overwhelm the great forces of nature. This paper will discuss ways that archaeologists may engage the current discourse about the historical antecedents of and a way forward for humanity in the Age of the Anthropocene. To this end, recent efforts to narrate the past of Tall Hisban from the perspective of global history will be drawn upon as an illustration. Global history is a new kind of history that seeks to crystallize a new narrative of humanity’s past that focuses on the cumulative story of the impact of humans on the Earth’s ecosystem. The anthropological work initiated by the Heshbon Expedition at Tall Hisban already during
the seventies and eighties anticipated the research agendas embodied by global history and the Anthropocene. In particular, the crystallization of the food systems approach led to pioneering work (for historical archaeology in Jordan and the Southern Levant) in collection, analysis and interpretation of environmental, palaeobotanical, and zooarchaeological data. During the eighties research was expanded to include geographic information systems’ supported investigation of cycles of environmental degeneration and regeneration of the local environment that pointed to a pattern of cumulative environmental degradation linked to long-term cycles of boom and bust in the local food system. The paper will conclude by updating on current efforts to establish a visitor center at Hisban that will situate the long-durée story of Hisban within global history and the Anthropocene and that will foster dialogue about concrete actions that we today can take that will assure a sustainable future for future generations of Jordanians.

Session 3, Hall 1, 22/5/2016, 4:00-4:20

Architectural Features and Settlement Planning at al-Lahun in the Early Bronze Age II-III

Denyse Homès-Fredericq
Ingrid Moriah Swinnen

Our presentation will discuss the major architectural features dated to the Early Bronze II-III at al-Lahun and place them in a local and more regional context.
At the time Lahun was a large site, covering an area of approximately 15 acres, was built on top of an Early Bronze I village. The settlement is located in the vicinity of two natural water sources, the Wadi Lahun and the Wadi Mujib and is characterized by a huge defensive system, i.e., a fortification wall (“city wall”) and at least two joining rectangular towers. The area, surrounded by the Early Bronze II-III fortification system, comprises several clusters of buildings, mainly dwelling quarters, sometimes separated by 1.10 to 1.30 m wide streets and plazas or open spaces. The structures are largely contemporary with the construction of the city wall. By the arrangement of the houses and streets, along the surrounding wall and around the intramural water-reservoirs, it seems clear that the largest part of the Early Bronze Age town of al-Lahun was preplanned. Clearly not all the 60703 m² of the area of the settlement was utilized for dwelling compounds. The wall seemed to have been constructed prior to or simultaneously with the houses. Of major importance in a semi-arid area is the guarantee of adequate water supply. Al-Lahun’s water supply was guaranteed by cisterns and two large natural depressions with a total capacity of c. 12000 cubic meter water, undoubtedly functioning as water reservoirs. During the winter season this region knows little but powerful rainfall which results in considerable surface run-off. This necessitates the water to channel into the reservoirs. When looking at the settlement plan it is clear that the clusters of houses are all built in the immediate vicinity of or as close as possible to the water reservoirs, i.e. in the central or southern part of the “city”.

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‘Ataruz and the Ancient Road System

Chang-Ho Ji, La Sierra University
cji@lasierra.edu

‘Ataruz was a cultic center in the 9th-7th centuries BCE that was built and maintained by a national political entity. Further, the presence of a temple at ‘Ataruz led to the development of several highways to connect the city with other urban centers in the Dhiban Plateau and the Madaba region. For instance, the eastern road from Libb ran directly to ‘Ataruz, following a watershed through Jabal Hamidah via Rujm ‘Ataruz, while the western route followed the same course from ‘Ataruz to ad-Dayr as the modern road. During the Roman period a highway branched from this road at Machaerus and continued west to the Dead Sea. The discovery of Iron II cities along a modern road from Dhiban to Jabal Hamidah also shows that an Iron Age road from Dhiban led down to Sayl Haydan and then involved an ascent, bypassing Qariyat, to reach ‘Ataruz. In the Iron II-Roman eras, another route proceeded north from ‘Ataruz through Wadi Zarqa Main to the Jordan Valley. Equally salient, the team found authentic sections of the ancient roads in the Zarqa Main and Machaerus-‘Ayn Zara regions where we still can see how the roads were originally built and managed during the Iron II-Roman periods. These authentic pieces of the road system warrant preservation for tourism as well as future generations. Apart from recent findings at ‘Ataruz, this paper offers a vision, goals, and priorities for the archeological study and preservation of the historic and cultural resources at ‘Ataruz and its vicinity, including their ancient road systems.

Ayyubid Reception Halls in Southern Jordan: a Light Archaeology

(Michele Nucciotti, Florence University (SAGAS)
Lorenzo Fragai, Rome “La Sapienza” PhD candidate
Michele.nucciotti@unifi.it
lfragai@alice.it

Reception halls can be considered the most important architectural and often symbolic and ideological spaces in Mediterranean palace complexes of many historical periods. Whether aulae regiae of Roman times, medieval salae of European Carolingian ancestry, Sasanian iwans or, as is the case here, Ayyubid halls (qa’ah), the reception rooms reflect simultaneously functional requirements and elements of the palatine Protocol, both closely related to specific modes of the exercise of power.
The proposed analysis aims to illustrate the process of creating the space of manifestation par excellence of the top functions of Government, in Ayyubid southern Jordan, through the methods...
of Light Archeology used by the Medieval Petra Italian Archaeological Mission (University of Florence). The case studies considered will be those of castra/ Qal’ at Shawbak and Karak in the late 12th and mid-13th century, in order to highlight the relationship between Great and Little Traditions of building and architectural construction of princely building sites implanted on top of the vestiges of former Latin palaces of the 12th century Lordship of Transjordan.

Session 3, Hall 3, 22/5/2016, 4:20-4:40

Ayyubid-Mamluk Evidence from the Danish-German Northwest Quarter Project, Ceramics in Context

Alex Peterson, University of Aarhus
alex.h.peterson@cas.au.dk

Scholars researching the ancient city of Gerasa, modern day Jerash in Jordan, have typically focused on settlement patterns along its main street and/or on the city’s development during antiquity. This paper discusses how the excavations of the Danish-German Jerash Northwest Quarter Project over the last five years have contributed to the understanding of the Ayyubid-Mamluk periods, which in this area are much better represented than previously thought. During the 2012 campaign, a large courtyard house constructed at the top of the hill alongside smaller houses was discovered. Subsequent excavations found that in addition to isolated houses, an extensive complex was built. Mamluk style pottery found alongside repairs and modifications of the building complex indicate Mamluk settlement over several generations. The architectural layout and the extensive construction effort suggest that the complex must have been the product of a sizable community. This activity is reflected in the material culture through handmade geometrically-painted ware (HMGPW), which was a ceramic style generally associated with Mamluk activity and also known to have existed during the Ayyubid period. By analyzing the ceramics both empirically and in a wider regional context, the results impact the overall understanding of settlement history in the Northwest Quarter. It is now clear that both a well-planned node of Mamluk settlement existed in this area of the city and also that urban development during the Middle-Islamic period in Jarash was more extensive than previously thought. This paper will concentrate on presenting the ceramic material from the excavations.

Session 5, Hall 1, 23/5/2016, 12:20-12:40

Azraq Ayn Sawda Reservoir Project: Results of the 2013-2016 Seasons

Lorraine Abu-Azizeh, Ifpo Amman
Julie Bonnéric, Ifpo Beirut
Barbara Couturaud, ArScAn Nanterre
Aurélien Stavy, Paris
lorraine.abuazizeh@gmail.com
The Azraq reservoir is located in South Azraq, partially included into the Azraq Wildlife Reserve limits. The archaeological remains consist in walls, with buttresses on both sides, forming an irregular shaped enclosure covering a surface about 6.3 ha. The Eastern part of the architecture presents a platform below which – on the internal face – exceptional basalt blocks have been discovered. Their unusual shapes and the presence of bas-relief (animals, vegetal, human being, mythic creature) on some blocks made this discovery unique.

Although several fieldworks have been undertaken since the 80’s (DoAJ, Watson and Burnett, Vibert-Guigue), little is known concerning the function. However, it has been tentatively attributed to the Roman and/or Umayyad period, mainly relying on the bas-reliefs iconography and the presence of buttresses all along the walls.

Azraq Ayn Sawda Reservoir Project started in 2013 aiming to provide a renewed approach, putting the understanding of the architecture and the whole geological settings of the site at the center of the study. New excavations have been carried out and have provided new evidence allowing clarifying the questions of dating and function. Emphasis has been put in parallel on the study of the carved blocks, mainly exposed in Qal’at Azraq, using new technologies (photogrammetry and 3D printing) that improved successfully our understanding of the architecture and helped for its reconstruction.

Finally, special attention has been given to the sanitary assessment and the restoration of the archaeological remains as the site is threatened by important ground’s performance changes and external deterioration.

Session 5, Hall 3, 23/5/2016, 12:00-12:20

Bathing in the Nabataean World: New Results from the Field

_Thibaud Fournet_, Institut français du Proche-Orient (CNRS/MAEDI)
t.fournet@ifporient.org

Over the last decade a series of archaeological excavations and studies have changed dramatically our knowledge about baths and bathing history in the Eastern Mediterranean area, from the introduction of public baths in Hellenistic Egypt to the spread of Roman thermae in Middle East, before the gradual emergence of hammam during Late Antiquity and Islamic era. Even so several questions remained unsolved, in particular within the Nabataean sphere during the first decades of Roman Provincia Arabia. Fieldwork conducted in the past two years within the French Archaeological Project in Petra (L. Tholbecq dir.) on the newly discovered “panoramic bath complex” on top of Jabal al-Khubthah and on the well preserved and hitherto unknown bathhouse of Wadi Sabra, as well as the new architectural survey of the Khirbat adh-Dharih “Nabataean” baths (C. Durand in charge), allow us to reassess other ancient or recent thermal discoveries in the Nabataean world. These include “Great Temple” and “central” baths in Petra city centre, baths of Umm al-Biyara, private baths of Zantur, private baths of Wadi Musa and baths of Wadi Ramm. This renewed corpus of monuments fills a gap in the complex history of bathing practices and provides a better view of the central role played by public baths in and around Petra. Adoption and diffusion of the thermal phenomena in Nabataean and Roman
Arabia before the massive spread of “imperial thermae” in Severian and late Roman Near East will be analysed in this paper in its technical, architectural and social aspects.

Session 8, Hall 3, 24/5/2016, 9:30-9:50

Bead Production as a Form of Craft Specialization and Social Complexity – A Case Study from PPNB Tellet-Ifdan/Southern Jordan

Mohammad Najjar, Center for Cyber-Archaeology and Sustainability
Thomas Levy, University of California, San Diego, USA
m.najjar@joscapes.com

The early occurrence of craft specialization based on textile weaving, basketry and bead production often mirrors a dramatic shift in underlying social and political structures. Hence, craft specialization has served as a barometer of social complexity in a wide range of archaeological contexts. In the southern Levant, early farming in the Neolithic period, created surpluses of foodstuffs, often freeing certain members of the community from being involved directly in food production. Accordingly, they were available for undertaking other activities. Although most of researchers tend to agree on the role of craft specialization in explanations of social change, debates begin when it comes to whether specialization is the cause or the consequence of change. Studies of craft specialization have focused on the intensity, scale, location or context, and social relations between producer, consumer, and patron. Ways of identifying craft specialization in the archaeological record include studies of context and objects. The production of beads is often recognized as an organized practice that reflects a type of specialization.

Stone beads are exceedingly rare in pre-Natufian sites. From the PPNC onward, there are hints of expanding regional or social network of bead production and exchange. Tellet-Ifdan in southern Jordan’s Faynan copper ore district revealed unusually detailed evidence for manufacture of beads: debris, blanks, finished beads, and tools for drilling, sawing and abrasion. This site illustrates a particular form of ‘site specialization’, characterized by its location in a remote territory, away from the large Transjordanian highland Neolithic settlement centers, and focused on special materials and intensive production of prestige goods.

Session 9, Hall 1, 24/5/2016, 12:20-12:40

Before the Crusaders: Light Archaeology at the Site of Al-Wu‘ayra (Petra)

Andrea Vanni-Desideri, University of Florence
Silvia Leporatti
Dario Rose
Guido Vannini
vandesan@inwind.it
In 2011 the Medieval Petra Mission of the University of Florence started a new research at al-Wu’ayra (Petra) with the aim at clarifying the earliest archaeological phases of the site. The research pointed out the existence of a completely isolated Nabataean funerary area, whose articulated topography includes a number of rock cut tombs arranged in small groups, sometimes protected by gates and constantly connected with water channels and liturgical platforms. At that time the rock, later on used as the entrance to the castle, was sculptured in order to obtain a dome like shape and its inner cavity was probably used as a triclinium. During a Late Antique phase (Byzantine?) the function of the site radically changed, being transformed into an installation, maybe of military purpose, whose passive defence was obtained by increasing the isolation of the site and transforming the dome shaped rock into the entrance gate. The campaign also revealed that a complicated net of rock cut channels brought water from a small wadi to an artificial basin supplying an hydraulic counterweight machine possibly meant at transporting the limestone blocks from the processing area to the building yard of the installation. The paper exemplifies the scientific productivity of an ethically updated and “eco-friendly” archaeological methodology, based on a modified scale of operational priorities and a consequent modulation of the archaeological procedures, combining the sustainability of the research with the conservation of the site.

Session 8, Hall 2, 24/5/2016, 9:50-10:10

Between Collapse and Continuity: Late Bronze Age to Iron Age transition on Tall Zirā’a

Katja Soennecken, German Protestant Institute of Archaeology
soennecken@deiahl.de

Cultural transitions have always been of particular interest to scholars. In the southern Levant one of the most hotly debated topics is the nature of the transition from the Late Bronze Age to the Early Iron Age. That the transition involved considerable social and cultural changes is uncontroversial. While to the west of the Jordan River the period is usually connected with the destruction of Late Bronze Age cities by the Sea People, the lack of Egyptian territorial organisation, conflicts between Canaanite city states or the conquest by Israelite tribes, the area to the east of the Jordan is a different story and scholars of this region can explore the evidence free from these presumptions, which are mainly based on written evidence. The main archaeological questions are as follows: When did the Late Bronze Age city state system collapse? Is there evidence of the causes of this development? In what form did Late Bronze Age culture continue? Which continued and newly founded settlements can be identified in the Early Iron Age? Is it possible to identify social or settlement-related structures that shed light on the development from the Late Bronze to the Iron Ages? Apart from the collapse, was there continuity and in which way? This paper will suggest possible answers to some of these questions by presenting the excavation on Tall Zira’a where we have continuity and at the same time new beginnings during this
Between Here and There: Locating Abila of the Decapolis in the Past, Present, and Future

David Vila, John Brown University
dvila@jbu.edu

The archaeological work of the American-led Abila Archaeological Project is nearing 36 years of excavating at this important site in the north of Jordan. The work at Abila is now at a crucial juncture between excavating the site’s past history, publishing and displaying it's present status, and protecting and preserving it’s place in the future of Jordan’s archaeological heritage in the north. This paper will survey the archaeological history of Abila and the excavation of the site, noting in particular how recent efforts at the site are preparing the way for Abila to make a significant contribution to the archaeological development of northern Jordan in both our understanding of the archaeological history of the site and its environs and for the development of tourism in the region.

Central Jordan Epigraphic Survey

David F. Graf, University of Miami
dgraf@miami.edu

During 1996 and 1997, an epigraphical survey was conducted east of the Desert Highway in Central Jordan, between Sahab and Azraq east of Amman, and south past the Queen Alia Airport to Qatrana. The survey was conducted by the late Dr. Fawaz al-Khraysheh of Yarmouk University, Professor Emeritus George E. Mendenhall of the University of Michigan, and myself. The spur to this project was a cave covered with wusūm (tribal marks) and possible inscriptions found at Khirbet Ruseifeh by the Madaba Plains Project near Yadudah in 1992, and the discovery at Urainbah West in 1996 of
the lengthiest and most elegant Thamudic text by Dr. Michelle Daviau of Wilfred Laurier University in Canada, which was published in 2004. Other scattered lengthy texts have subsequently been found in the Ammonite-Moabite regions, suggesting more Ancient North Arabian texts in the region. The first season focused on the area between Muwaqqar and Khan Zebib, and around the Queen Alia Airport. The second season focused on the area between Sahab and Azraq. More than 150 North Arabian texts were found, most of which are in the “Thamudic E” script, with a few scattered texts in Safaitic. The texts include a few “Nabataean” Theophoric/Basilephoric names and half a dozen tribal names, most of which are new. The ones known, RWH and TTS, are both important. More significantly, it is now clear that “Thamudic” was the dominant script in the region during the early Roman era.

Session 3, Hall 2, 22/5/2016, 4:20-4:40

The Jordan Museum, Collection Management Policies

Yosha Alamri, Jordan Museum
yalamri@jordanmuseum.jo

Cultural heritage collections require a great deal of care and protection in order to ensure their safety from external loss or damage. They also require in-depth documentation to assist in tracking the life of the object within the holding institution. Collection management can be defining as “a process of information gathering, communication, coordination, policy formulation, evaluation, and planning”. Hosting institutions need to follow the collections management and collections care standards and practices. Collections care addresses the physical actions necessary to prevent or delay damages of cultural heritage. The Jordan Museum divided its collection into two main categories; archaeological and folklore collections. Archaeological objects are on loan from the Department of Antiquities of Jordan. DoA is the only source for archaeological objects on display at the Jordan Museum. The folklore collection was purchased from private owners and collectors, donations or they were partially offered to the Jordan Museum as a loan for a particular period. Jordan Museum has set strict and precise procedures in dealing with its continuously growing number of objects and artifacts. The Jordan Museum is maintaining the highest legal, ethical, and professional standards. Such policies support the JM mission and operations and guide the decision-making, give the administration, staff and public the opportunity to learn about standards and help the museum to fulfill its responsibilities as steward of the collection.

Session 10, Hall 2, 24/5/2016, 3:20-3:40

Community Engagement at the Temple of the Winged Lions:

Eman Abdassalam, SELA for vocational training and protection of heritage
hussieneman82@gmail.com
One Community Member’s Perspective: This paper presents the author’s experience as a community member working with the Temple of the Winged Lions Cultural Resource Management (TWLCRM) Initiative in Petra. Through the TWLCRM’s emphasis on vocational and specialized training, the author has been trained in archaeological and architectural documentation and, after three years, is now the project’s Documentation Specialist. The author will discuss her young career helping to document the temple, as well as her role in helping establish Sela, a new non-profit company founded by TWLCRM local team members that specializes in administering and managing cultural heritage vocational training programs.

Session 5, Hall 2, 23/5/2016, 12:40-1:00

Conservation and Management: Three Historic Sites Completely Destroyed in As Salt

Raouf Abujaber

Government executives involved with the different aspects of archeology including the management of the affairs of the Department of Antiquities when the Emirate was established in 1921 were definitely a learned and well-meaning group. The Vanguard amongst them had their University education during the thirties and forties of the 20th Century at either AUB or the Damascus University. Not one amongst them, to my knowledge studied. Archeology, but the late Dr. Abdul Karim Gharaybeh was the second Jordanian student to attend a university in England where he was awarded a Ph. D. in History by the London University.

Leading amongst this group was Mr. Wasfi Al-Tell who became Prime Minister on the 28th January 1969. There was then no Ministry of Tourism and the Department of Antiquities then directly attached to the Prime Minister’s Office. He and few of his colleagues lived in As-Salt for few years to follow up their school in the only secondary school built in 1924. They knew the town well and must have felt a duty towards modernizing it. Modernization then, meant to us, doing away with old ways of life including the demolition of old dilapidated buildings and the opening of New Wider Streets to accommodate the larger number of motorcars that were coming into the country.

And that is how the whole story started for the three oldest relics in town. These were in order of historical sequence, the castle (Al-Qalaa’), the water spring (Al ‘Ain) and the Government house (Saraya). What remained standing of the castle after four hundred years of intermittent service, was demolished together. Likewise the Saraya which was still being used by the Government Department was brought down to the ground. Al ‘Ain which use has come to an end after the water project in the town provided continuous municipal water supply through pipes to the population was neglected and later demolished.

This sad episode in Jordan’s history which happened during the second half of the twentieth century will be documented in this study. The history of each of the three sites will be presented and the events that witnessed their disappearance will be registered in detail. Photographs of the three sites during different periods of their life will also give the reader an idea about the historic and touristic grave loss that our hometown suffered ever since.
Conservation and Restoration of Two Churches and Two Winepresses at Khirbat Yajuz

Lutfi Khalil, University of Jordan
Khirbat Yajuz is located about 10 kms north of Amman. Since 1994, the Department of Antiquities and the University of Jordan carried many seasons of excavations, many architectural features and artifacts were revealed such as three churches, cemetery, two winepresses, an installation for weaving in the so called “palace” and building complexes for dwelling. They date between late Roman – Early Abbasid period. These buildings present many cultural values such as spiritual, scientific, historical and economic.

The site is subjected to many threats and deterioration agents such as biological, climatic and human. Conservation and restoration procedures took place during training the students of the CRM department in the summer courses of 2014 and 2015 at the chapel, the western basilica and the tow winepresses.

The conservation and restoration processes include environmental assessment, documentation and intervention treatment such as cleaning, gap filling and consolidation of mosaic floors. In addition, some walls of the two churches and two winepresses were vacuum cleaned and restored and their uppermost course were caped. Mixtures of stone and marble powders with lime were used as mortar in the operation.

Conservation and Restoration works of The Roman Nymphaeum in Amman: Phase 1-2015

Mohammed El Khalili, University of Jordan
Monther D. Jamhawi, Department of Antiquities of Jordan
Abeer Al-Bawab, University of Jordan
Ramadan Abd-Allah, University of Jordan
Yahya Al Shawabkeh, Hashemite University - Jordan
Nizar Al Adarbeh, Chief of Party USAID SCHEP Project, ACOR, Amman, Jordan
mohd_elkhalili@yahoo.com

This paper is part of the research project titled: “Restoration and Rehabilitation of Roman Nymphaeum in Amman” funded by the US Ambassador Fund for cultural heritage preservation 2014, implemented by the University of Jordan and in cooperation with the Department of Antiquities of Jordan. The purpose of this paper is to present and describe the conservation and restoration works carried out in the Roman Nymphaeum in Amman during the first season 2015. The project has gone through different stages of work started with documentation works and diagnostic works were performed to characterize the chemical composition of the
building material used in the construction of the whole building and to determine the chemical and physical deterioration factors affecting on the monument. The intervention works aimed to conserve and restore the architectural and ornamental elements based on the compatible materials, techniques and according to international charters and ethics. Thus, the cleaning processes in both mechanical and chemical methods were carried out to remove all the foreign deposits and crusts from the stone surface. The second process included the consolidation of the fragile parts of the monument to safeguard the existing structure. Reconstruction of some incomplete elements was performed to enhance structure’s stability and to enhance the interpretation and presentation of the site. This paper will focus on presenting the hands-on and applied solutions conducted and to highlight on the importance of urban space regeneration through cultural heritage preservation.

**Poster**

**Conservation of Ancient Theatres in Jordan and Modern Use, The Case of Bait Ras Roman Theatre**

*Rania Nazzal, Hashemite University*

Nazzal_rania@yahoo.com

Jordan has in total thirteen ancient Roman theatres. Conservation and restoration of theatres and Odea can encourage many activities. In fact reuse is currently used as a means of conservation as well as justification for the enormous costs that restoration and conservation entail. This study is concerned with reviving the ancient Jordan theatres according and respecting the internationally agreed standards charters and recommendations of some of the theatres international projects. Study focus on conservation of these ancient theatres, as it is one of the main schemes and solutions for their recovery of especially when these theatres are facing many natural and human decays and threats in their environments. Theatre conservation for modern use can achieve compatible and sustainable utilization.

The study, evaluate and assist the theatre history, architecture, existing conditions and modern use in Jordan, and how should we deal with theatre be used for modern activities after conservation. Bait Ras (Capitolias) theatre was taken as a case study for reconstruction, conservation, interpretation for future modern use. Bait Ras theatre and its architectural remains according to excavation reports is assessed, and investigated to understand its cultural significance.

The main aims of this thesis is to study the potential of conservation of Bait Ras theatre for reuse, while showing the success of other ancient theatre in Jordan which are reused for modern performances and activities( Jarash, Roman theatre in Amman). The study attempts to evaluate the risky decays and threats in Bait Ras theatre to make out how much is needed for conservation works. The revival by adapting the concept of compatible use of Bait Ras theatre, will have economic benefits on the country and on the village.

The study is supported by two questionnaire conducted questionnaires for the local community.
of Bait Ras about the potential for modern use and conservation, and the other general about modern use in ancient theatre in Jordan in order to determine the problems which are facing these theatres. These covered issues like studying the relation between theatre and local society, modern use and conservation, improvement of the acoustic qualities in ancient Roman theatres in Jordan. In addition to a 3D digital reconstruction of Bait Ras theatre. In addition, based in AgiSoft Photo Scan, as an advanced image-based 3D modeling solution for creating professional quality 3D content from still images, a 3D digital reconstruction for the first time was conducted for Bait Ras theatre.

Session 12, Hall 2, 26/5/2016, 9:50-10:10

Cremation Burials in Jordan: A Regional Perspective:

Abdullah Nabulsi, University of Hamburg
fbga023@uni-hamburg.de

There is a general perception that cremation burials were none existent during the long history of human activity in Jordan and lead in some cases to misinterpretations. This report presents a regional preview of the practice from the Neolithic to the Roman era in the light of latest excavations, reports and research. The relative low global frequency of this second most common to dispose of the dead, cremation burials were often used as indicators of population migration, cultural specificity and exchange. Concentrating on its emergence in the Near East and incidence in Jordan during the Roman period, the questions of where, when, how and why cremations were used. It is also suggests that communities practiced cremation “out of necessity”. It reintroduces “hygiene” as major factor for earlier and cultural influence for cremation burial.

Session 12, Hall 3, 26/5/2016, 10:50-11:10

Desert Kites and Neolithic Hunters Campsites in Jibal al-Khashabiyeh Area. New Results of the South Eastern Badia Archaeological Project

Wael Abu-Azizeh, Archéorient University
M. Tarawneh, Al-Hussein Bin Talal University
J.A. Sanchez Priego, Universitat Autonoma de Barcelona
R. Crassard, Archéorient - UMR5133
M.-L. Chambrade, Archéorient - UMR5133
waelabu@hotmail.com

Following preliminary investigations allowing the discovery of the first evidence of “Desert Kites” in the South Eastern Badia of Jordan (2013, 2014), away from their main concentration area in the basalt Harra landscape, work was resumed in 2015 in Jibal al-Khashabiyeh area, located at 90 km
east of the Jafr Basin. This fieldwork season focused on the excavation of a selection of “Desert Kites” part of a characteristic chain organization extending over almost 20 km long. The soundings carried out in circular cells located on the surroundings of the star-shaped enclosures of the kites provided valuable information allowing to clarify the architectural layout and dating, and confirming the hunting function of these Late Prehistoric mega structures.

In a second phase of the fieldwork season, work concentrated on the study of flint knapping workshops in close spatial relationship with the “Desert Kites”. They are characterized by exceptionally rich and diagnostic assemblages showing clear parallels with the Late Neolithic Tuwailan industry. A test sounding in one of these sites evidenced remains of a well preserved dwelling structure (with standing stones delimitating partitions, storage compartments, hearths, …) indicating that the flint knapping activity was actually achieved in a broader campsite occupation context.

As a working hypothesis, we suggest that these remains might constitute hunting outposts directly related to the “Desert Kites”. Clues supporting this far-reaching assumption will be brought forward following preliminary investigations allowing the discovery of the first evidence of “Desert Kites” in the South Eastern Badia of Jordan (2013, 2014), away from their main concentration area in the basalt Harra landscape, work was resumed in 2015 in Jibal al-Khashabiyeh area, located at 90 km east of the Jafr Basin. This fieldwork season focused on the excavation of a selection of “Desert Kites” part of a characteristic chain organization extending over almost 20 km long. The soundings carried out in circular cells located on the surroundings of the star-shaped enclosures of the kites provided valuable information allowing to clarify the architectural layout and dating, and confirming the hunting function of these Late Prehistoric mega structures.

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As a working hypothesis, we suggest that these remains might constitute hunting outposts directly related to the “Desert Kites”. Clues supporting this far-reaching assumption will be brought forward during this lecture.

Session 10, Hall 1, 24/5/2016, 3:00-3:20

Documenting and Protecting Jordan’s Endangered Archaeology: the First Year of EAMENA in Jordan:

Andrea Zerbini, Oxford University
andrea.zerbini@arch.ox.ac.uk

EAMENA, a project based at the Universities of Oxford and Leicester, was launched in early 2015 with the objective of using satellite imagery and historical aerial photography to document threats and disturbances to cultural heritage sites in the MENA region. Jordan, which was among the countries prioritised by EAMENA operations during the first year
of the project, is in many ways a unique case in the region for the quality of its country-wide SRM (MEGA-Jordan) as well as for the long-established Aerial Archaeology in Jordan project led by Prof. David Kennedy and Dr Robert Bewley (who is also the director of EAMENA), which has produced thousands of low altitude aerial photographs of sites of cultural significance. Moreover, a series of collaborative initiatives have been put in place with the Department of Antiquities of Jordan (DoA) to integrate remote sensing with ground survey – as in the case of the recent collaborative effort jointly led by EAMENA and the DoA to record cultural heritage sites in the periphery of Madaba, ahead of the construction of a ring road around the city.

Session 8, Hall 2, 24/5/2016, 9:30-9:50

**EB III at Khirbat Iskandar, Jordan: A Reappraisal in the Light of Recent Excavations**

*Suzanne Richard,* Gannon University  
*Marta D’Andrea,* Sapienza University  
richard@gannon.edu

Excavations at the site of Khirbat Iskandar, in the south-central Jordanian plateau, have gradually uncovered substantial EB III remains below the well-known EB IV layers at the site. The last three field seasons have concentrated on achieving a larger exposure of the Phase C EB III settlement that comprised a central structure, adjacent work areas, and a courtyard, within the fortifications. As a result of the discoveries of a new fortification line and an earlier EB III phase in 2013, we have a view of the construction history of the fortifications and the more extensive depth of EB III occupation at the site. With a firmer grasp on the phasing of the fortifications, it is possible to revisit the topic of EB IV fortifications on site. Moreover, for the first time, it will be possible to re-evaluate the EB III/IV transition, given the results of more recent findings from 14C determinations, in the context of the higher absolute chronology proposed for the 3rd millennium, BCE in the southern Levant. Thus, along with a review of the above new evidences, this paper will also present for the first time the ceramic evidence that provides additional new data for dating the EB III stratum. The paper will situate Khirbat Iskandar into the context of EB III in the central plateau of Jordan, as a possible key-site along with hitherto better known sites in the region.

Session 11, Hall 2, 24/5/2016, 4:40-5:00

**Engaging the People of Nebo: The Khirbat al-Mukhayyat Community Archaeology Program**

*Debra Foran,* Wilfrid Laurier University  
dforan@wlu.ca

Community-based archaeology programs have become an integral part of research projects as
archaeologists strive to respond to local communities’ rights to manage their own cultural heritage in the face of increasing involvement of outside development and resource management. The Khirbat al-Mukhayyat Community Archaeology Program (KMCAP) is inspired by North American approaches while recognizing the unique socio-political and economic setting of Jordan. The primary aims of this program are to solicit, and re-solicit, community feedback on the project at all stages, revisit the stated community wishes for the product deliverables, and maintain a transparency as to project methods and goals.

The 2014 season of the KMCAP aimed at investigating the capacity for community-based participatory research with the nearby village of Faysaliyah. This inaugural season aimed at gauging the larger research project’s ability to contribute to capacity, education, and knowledge-building within Faysaliyah. Subsequent seasons of the KMCAP will build upon the foundational introductions and conversations between project staff and community members in order to guide the program goals which are designed to facilitate and guide data collection, information reciprocity, and community feedback. These goals, if accepted by the community during the 2016 season, will enable discussions on how the project may dovetail with local education, knowledge, and economic objectives. In return, this information will aid in creating an ethnography of the site of Mukhayyat and make the project and site not only historically and archaeologically relevant but also socially pertinent.

Session 7, Hall 1, 23/5/2016, 4:20-4:40

Engineering Geological Investigation for Conservation of the Temple of Winged Lions in Petra

Giuseppe Delmonaco, ISPRA, Geological Survey of Italy
Luca Maria Puzzilli, ISPRA Italian Institute for Environmental Protection and Research – Geological Survey of Italy
Francesco Traversa, ISPRA, Italian Institute for Environmental Protection and Research – Geological Survey of Italy
giuseppe.delmonaco@isprambiente.it

Geological multi-discipline methods can help archaeologists in many aspects of excavation and conservation of cultural heritage, especially in a preliminary stage, in order to establish priorities that will result in optimization of cultural, budgetary and time benefits. In this perspective, an engineering geological investigation has been undertaken as support of ongoing ACOR’s Temple of the Winged Lions Cultural Resource Management Initiative (TWLCRM). The works have been focused on analysis of several aspects dealing with site geology and long-term conservation of materials forming the TWL such as mechanical deterioration of sandstone materials, structural deformation of architectural elements, reconstruction of local stratigraphy, analysis of potentially unstable areas. In detail, the following techniques were selected and implemented in the TWL area: Schmidt-hammer tests for in-situ assessment of mechanical strength of multi-blocks columns; passive tromography tests on the ground and on the top of columns for detection of the main resonance frequencies of soils and structures; active seismic tests (surface waves method)
for reconstruction of seismic properties of soil and Vs30 seismic profile; geoelectrical resistivity tomography for reconstruction of 2-D and 3-D high-definition stratigraphic setting; implementation of a geotechnical modeling of the SW quadrant for reconstruction of local slope stability; topographical monitoring of inclined columns and analysis of deformation vs. time. Integration of results derived from direct and indirect geotechnical and geophysical surveys have provided a valuable support for ACOR’s conservation strategies for present and forthcoming activities such as long-term consolidation of materials and structures, landscaping, programs of further excavation.

Session 9, Hall 3, 24/5/2016, 12:20-12:40

Epipalaeolithic Gazelle Hunting in the Azraq Basin: The Contribution of Combined Zooarchaeology, Dental Isotope and Microwear Research

Elizabeth Henton, UCL Institute of Archaeology
Louise Martin
Andrew Garrard
e.henton@ucl.ac.uk

The Jordanian badia hosted regionally unique Epipalaeolithic and Neolithic gazelle hunting sites, with evidence for vast aggregations in the former, and dedicated gazelle hunting and carcass-processing activities in the latter. These sites raise questions as to how hunting strategies were linked with the seasonality and mobility of wildlife in the distant past. These aspects of animal behaviour may have differed ecologically from those recorded in more recent historical records.

We first present zooarchaeological data from our Azraq Basin study sites, which shows how gazelles were culled and processed by hunter-gatherers; we then combine this with gazelle dental isotope and microwear data, which informs on animals’ seasonal mobility during life, and the season in which they were hunted. Together, these strands of archaeological science data allow us to explore models of hunter-gatherer use of the badia: whether groups practiced aggregation and dispersal within the area, hunting locally throughout the year, or whether they visited seasonally to intercept large gazelle herd migrations.

Session 4, Hall 2, 23/5/2016, 10:30-10:50

Ethics and the Research of Human Skeletal Remains in Jordan

Megan Perry, East Carolina University
perrym@ecu.edu

Archaeology has long focused on the excavation of mortuary features containing the physical remains of deceased human beings. However, disturbing the dead and studying their remains has become a contested issue in many areas of the world. The treatment of human skeletal remains from
archaeological contexts in Jordan has been diverse, with some remains reburied immediately, some left to languish unstudied in storage rooms, and some curated properly in laboratories and part of active research projects. Only a few scattered instances of descendant populations protesting the excavation of mortuary features have occurred in the country. Increased awareness in the past 50 years of ethical issues relating to research on or utilizing parts of human beings without their consent or the consent of their descendants in medicine, molecular biology, and art may inform the ethics of studying archaeological human skeletal remains in Jordan. In addition, the response of descendant communities in other parts of the world may – or may not – have applicability in this cultural context. The examination of these complex issues will be used to explore whether archaeologists working in Jordan should develop an ethical position on the treatment of archaeological human remains in this country.

Session 6, Hall 2, 23/5/2016, 2:40-3:00

Ethics in Conservation (Assessment in the Conservation Process in Rubble Fortification Walls)

Ala Alsaif, Department of Antiquities of Jordan
ala283jo@yahoo.com

Science and technology, often associated with conservation, require some clarification, as they are often taken to represent the goals or methods of conservation. The practice of conservation began with the study of the underlying causes of deterioration, the development the conservation laboratories and specialists, and we should understood limitations of the scientific method to generate certain kinds of data.

This paper discusses the rubble fortification walls haven’t had adequate concern with regard to the used material between the walls and the techniques of the implementation and the variation in the ways of implementation from place to another, taking in account that those rubble walls were wide spread in many parts of the world, although there were some studies that fortification walls, that studies did not concentrate on the conservation process of rubble fortification walls which are very limited or absent in Jordan and universally.

The highlight comprehensively the building material and the traditional techniques of building through integral scientific with archaeological studies about the fortification walls which are wide spread in Jordan and Palestine and studying the material used in building and symptoms of deterioration that are existing and discuss some geochemical methods. X ray and petrological analysis to take some result use as the base for future research and studies in conservation of rubble fortification stones wall.
Session 6, Hall 3, 23/5/2016, 3:00-3:20

Filling the Gaps: Revealing Early Hellenistic and Early Roman Pella

*John Tidmarsh*, University of Sydney
jtid@internode.on.net

Almost 40 years of work at the rich multi-period site of Pella of the Decapolis have revealed a flourishing 2nd century BC city with strong ceramic links to the Seleucid capital, Antioch. In the early 1st century BCE Josephus tells us that the city was destroyed - a fact seemingly supported by the thick destruction levels encountered on the main mound, dating to the time of the Jannaeus conquest. The absence of Early Roman (1st - 2nd century AD) material on the main mound attests to the thoroughness of the Jannaeus destruction while raising questions as to the source of Pella’s Early Roman burials and earliest coinage. Recent excavations on the adjacent hill of Tall al Husn have enabled us to resolve these apparent contradictions and, at the same time, have furnished new evidence for the Hellenistic

Session 12, Hall 2, 26/5/2016, 10:10-10:30

Gadora, Tall al-Jadour and the Poet Maleaser of Gadora

*Fwazi Zayadine*, Amman-Jordan

The poet Meleaser was well known under the Ptolemaic in third-second century B.C. He arrived to the Isle of known in Turkey but was one of Aesean, Greek, Hellenistic Isles. He wrote famous poems in Greek but revealed his Arabian origin, He used in his poems Arabic greetings words like “Salam”.

Session 2, Hall 1, 22/5/2016, 2:00-2:20

Gerasa of the Decapolis: the Third Field Season of the Jarash Water Project

*David Boyer*, Western Australia University
don.boyer@uwa.edu.au

The paper presents the preliminary results of the Jarash Water Project’s 3rd field season. The project is investigating the water management system to Gerasa and its hinterland in the Hellenistic-Byzantine period. Twenty-seven new sites were recorded; bringing to 80 the total number of sites recorded over three seasons. A number of new aqueduct elements and fossil spring sites were recorded, including sections of an aqueduct tunnel cut into a tufa cascade in central Jarash. An updated plan of the known aqueduct delivery system in the Jarash Valley will
be presented, along with commentary of the first radiocarbon dates obtained from key water installations outside the city and the implications of the recognition of significant fossil spring sites within the city and in the valley to the south.

Session 10, Hall 1, 24/5/2016, 2:20-2:40

Getting Rich Quick?? Looting, Myth, and the Destruction of Archaeological Landscapes in Jordan

Morag Kersel, DePaul University
mkersel@depaul.edu

Did you find any gold?” is the question most often asked of archaeologists by members of general public. There is a long association between the practice of archaeology and the prevailing assumption that there is gold to be found at every site worthy of investigation. The gold question is particularly salient in the Eastern Mediterranean where the myth of Ottoman Gold is legendary and persistent. People from all walks of life, from all over the region dig at sites within the ancient borders of the Empire with the purpose of finding the gold left behind by the fleeing Ottomans. This is not the only reason people carry out illegal excavations. This paper examines the motivations for unauthorized digging at sites in Jordan; motivations that include everything from the Ottoman Gold myth, notions of nationalism, long-entrenched traditional practice, get rich quick schemes, and consumer demand. Whatever the impetus the result is the same: a decimated landscape, a destroyed monument, a threatened cultural heritage. How do locals, NGOs, governments, and archaeologists protect the past when faced with the pernicious myth of the Ottoman Gold??

Poster

“Hands-on Exhibition” in Gadara/Umm Qays Transfer and Communication of Cultural and Natural Heritage for Children

Frank Andraschko, Hamburg University
Claudia Bührig, German Archaeological Institute
andraschko@uni-hamburg.de
Claudia.Buehrig@dainst.de

Since 2012 the German Archaeological Institute together with the Archaeological Institute of Hamburg University have started several activities in Gadara/Umm Qays in the area of cultural mediation for the local community – especially children and their families – and to promote sustainable cultural tourism. The major local target audience of the project are children and students. By learning about
their region’s history, they get sensitised for their own cultural and natural heritage. To realise these aims – as a first highlight – a “Hands-on Exhibition” was carried out in April 2015, which addressed school children in especially Umm Qays. The Project have been realised in very close cooperation with many local partners from Umm Qays (Gadara ‘Umm Qays’ Cultural Forum and the team of the „Royal Society for the Conservation of Nature” in Umm Qays)

In this “Hands-on Exhibition”, the work of archaeologists and building researchers in and around Gadara/ Umm Qays was presented. This included “treasures found in the garbage”, historic construction techniques and environmental history”. A booklet – a Children’s Guide – summarises the themes from the Hands-on Exhibition for children and their families and extends the topics further.

This paper summarises the first results of the first “Hands-on Exhibition” in Umm Qays and outlines further planned activities in the field of communication the rich cultural and natural heritage.

Session 1, Hall 2, 22/5/2016, 12:00-12:20

**Heritage Trail along the King’s Highway: Networking Museums and Heritage Sites**

*Koji Oyama, JICA Expert (Heritage and Tourism Development Advisor in Ministry of Tourism and Antiquities)*

The King’s Highway is one of the most important historical heritage routes running Jordan. Mentioned in the Bible, it runs area of Ammonite, Moabite and Edomite Kingdom. The Via Nova Traiana in Roman period, and the pilgrimage route to Mecca in the Medieval era also ran along the Kings Highway.

Ministry of Tourism and Antiquities and Japan International Cooperation Agency (JICA), with cooperation of Department of Antiquities, are currently planning to develop heritage trail along the King’s Highway. This plan is based on the experience of JICA heritage tourism project in Karak region including Karak Archaeological Museum, which contains presentation of history and archaeology of several sites along the King’s Highway in Karak area, and also experience of Eco-Museum in the Old City of Salt, where Core-Museum (Historic Old Salt Museum) and thematic trail connecting heritage sites has been developed. Under the plan of heritage trail of the King’s Highway, archaeological sites, natural heritage, traditional village will be networked with museums which play a role as information point of trail. Several museums along the route, such as Jordan Museum in Amman, and local museums in Madaba, Karak or Tafilah will be part of the trail.

It is expected that establishment of heritage trail along Kings Highway will bring benefit to local community in the region through heritage tourism, as well as promote awareness of local community to Kings Highway as heritage.
How Petra’s Host Communities are Now Taking the Lead in the TWLCRM Initiative

M. Elena Ronza, ACOR - American Center for Oriental Research
Glenn J. Corbett, ACOR - American Center for Oriental Research
gigele@yahoo.it

In recent years, the long-term sustainability of cultural heritage projects has become a major concern in archaeology, especially in a country like Jordan where the vast majority of projects have traditionally been led by foreign missions and specialists. In light of such trends, the Temple of the Winged Lions Cultural Resource Management (TWLCRM) Initiative has worked to actively engage Petra’s host communities, both through vocational training programs aimed at building local capacity in cultural resource management (CRM) and, more recently, by involving local team members in the development of project goals, strategy, and implementation. A major result of this engagement has been the establishment of Sila, a local non-profit company, founded by TWLCRM team members, that specializes in administering and managing CRM vocational training programs. This presentation describes Sila’s formation, the company’s first major awarded project to implement a training program at the Temple of the Winged Lions, and its prospects for long-term sustainability.

Poster

Hydroarchaeology Applied in Prehistoric Research. 5th Millennium BC/ Pre-Oasis Water-Management in Jordan’s Southeastern Badiya

Amer Salah al-Souliman, Hashemite University
amer_asuliman@hotmail.com

The badiya of Jordan testifies on many (palaeo-) climate and thus palaeoenvironmental changes affecting its water resources, forcing steady adaptations of living conditions. Especially the period from late Chalcolithic to The Early Bronze Age witnessed an extreme shift in land use in northwestern Arabia when climate became drier after 4000 BCE and many steppe environments vanished. This process forced the shepherds to adopt their experience with wells and canal-type trough systems adopt to new strategies in water management, leading to the oasis economy which helped survival and even permanent sedentary live under the extreme environmental conditions during the 4th millennium BC.

This contribution presents data of the Qulban Beni Murra/ Eastern Jafr Archaeological Project, explaining the nature of the desert’s hydraulic and hydrological features which are
often overlooked when not surveying with a archaeohydrological approach. The contribution explains the need and character of archaeohydrological work when doing desert archaeology. It also sheds light on the importance to study traditional (Bedouin) water management systems/techniques, as a source of help in understanding prehistoric water management and its adaptation to topography and geohydrological conditions. Furthermore, the contribution addresses the chances to learn from past experiences in desert water management for building up sustainable water management systems in the modern use of Jordan’s badiya.

Session 4, Hall 1, 23/5/2016, 10:30-10:50

Integrating Archaeological Research and Site Management Responsibilities at Busayra

*Stephanie Brown*, University of California, Berkeley  
*Benjamin W. Porter*, University of California, Berkeley  
brown.stephanie85@berkeley.edu

The Busayra Cultural Heritage Project (BCHP) integrates archaeological field research and site management responsibilities at the Iron Age Edomite capital of Busayra, located one hour north of Petra. After a hiatus of 40 years, the authors resumed research at the site in 2013. Topographic data were collected and integrated into a GIS environment and a site assessment was conducted of previously excavated trenches and exposed architecture. Limited excavations were conducted in 2014, and four new units were excavated in Area D in order to answer outstanding questions concerning the Iron Age IIC domestic residence excavated in the 1970s. Excavations in one room in Building A identified a large Iron IIB kitchen complex. In 2015, a geophysical survey of unexcavated areas was conducted to identify sub-surface architecture. This survey revealed, among other things, a previously unknown building complex west of Building A.

The BCHP has also carried out several site and community development projects in tandem with this research thanks to the support of the Sustainable Cultural Heritage through Engagement of Local Communities Project (SCHEP). Exposed collapsing architecture was stabilized and eroding trenches were backfilled to prevent further damage to cultural resources. Large spoil heaps from the previous team have been relocated off-site in order to improve visitors’ abilities to interpret the site’s monumental buildings. The team has also developed a school curriculum for all of Busayra’s secondary schools. After reviewing the outcomes of these projects, the authors will discuss some of their upcoming plans for research and development at Busayra.
Integrating Community, Archaeology, and Education at Umm al-Jimal’s Site Museum: Developing an Ethical Foundation for an Ancient Stone Superstructure

Paul Christians, Stanford University
pchrstns@stanford.edu

Can a place have ethics? It seems an odd question: after all people have ethics, not places. Right? But from a Lefebvrian viewpoint, place is made. Space is social. Hence places, as human constructions, might be imbued with character derived in part from the values of their makers. Maybe the soul of a museum lies in the people that give it life—not just the objects it houses. Archaeology continues to find itself at an ethical crossroads, increasingly reflexive but still struggling to fully integrate non-Western perspectives and values in research and conservation processes. And the spread of neoliberal attitudes toward archaeology as a vehicle for economic development can exacerbate gaps between outsider scholars and local communities in which they work. Yet while some have argued for adopting community-based principles as a matter of disciplinary survival, survival is an insufficient premise for ethical behavior.

The archaeological site and town of Umm al-Jimal, in northern Jordan, is undergoing a new phase of heritage conservation, educational outreach, and community development building on 40 years of academic research by the Umm al-Jimal Project. A major component of these efforts is the museum and visitor center currently under development there. What ethical theories could be applied to endow such a place with a character that encourages, rather than detracts from, its role as a center of knowledge, conservation, and conversation? And how can we translate community-rooted, cross-culturally integrated, and educationally-inclusive ethical principles into concrete actions that enhance its character as a vibrant, living space?

Internet of Things (IOT) Potential in the Context of Archeological Sites

Mamoon Allan, The University of Jordan

Wesam Moubaideen
mamoon1073@yahoo.com

It is acknowledged that the applications of Internet of Things (IOT) will play vital role in developing the different types of tourism supply, particularly the archeological attractions. IOT can connect the devices and employ many types of sensors in different archeological site which leads to enhance the efforts to protect, and sustain archeological sites and identify different kinds of carrying capacity for such sites in an on-going process. Additionally, IOT plays vital role in providing big data to the managers, marketers and visitors in a real time. Thus, this study
seeks to explore the potential of IOT applications in archaeological sites in Jordan and its role in enriching the visitor experiences and supporting the conservation and sustainability efforts for the archaeological sites. Examples and case studies will be provided to clarify the purposes of the current study.

Session 4, Hall 2, 23/5/2016, 10:10-10:30

**Interpretation of Archaeological Sites through the Name**

Hanadi AL-Taher, Department of Antiquities of Jordan
hanadi_taher@hotmail.com

Geographical names form the national identity of nations, they are proof and property to the land and make up the building of the modern state, its organization and planning, even down to conflicts between countries and cultures. This is the case with the name of an archaeological site, serving as a place of diagnoses and analysis for the researcher and archaeologist through interpretation, linguistic derivation, implications and historical sources attached to it. This study provides a new approach to interpretation through linguistic origin of heritage sites’ names in Jordan. Besides their Arabic derivatives, the Canaanite original names like Rabbat Ammon, the old name of Amman, mean a “high place”; the Aramaic name Madaba means “good land”; there are as well, Greco-Roman names like Philadelphia, Saltus, Lajjun. There are other sources deriving the name from: Religious and historical events that occurred on the site, as the case with Jabal Harun; and through popular mythology as Ataruz near Madaba, were the name was formed from a popular story about a jinni called Atta and his wife Rose. There is the topography of the place as well. Rujum al-Kursi (Rujum of Chair) for instance took its name from its topographical shape. Function and service of the site is important. Bir Dabbaghat (Well of Tanning) for instance, was originally a tannery. Historical sources are very important. They documented a lot of the names of archaeological sites, and these are invariably found in documents, artifacts, inscription and/or books.

Poster

**Interpreting Neolithic Building and Activity Areas through Combined Ethnographic, Phytolith and Geochemical Investigation**

Carol Palmer, Council for British Research in the Levant

The Neolithic in Southwest Asia (~11,700-7,800 cal BP) is a major transition in human history which saw the advent of sedentism and agriculture, including the use of sophisticated architectural forms within settlements. However, it is often difficult to interpret building elements and the use of space at Neolithic sites due to their ephemeral nature and the scarcity
of biological remains recovered from them. Here, we employ a combined ethnographic and scientific approach to determine if anthropogenic activities leave identifiable phytolith and geochemical signatures that aid in the recognition of building materials and activity areas in the archaeological record. We compare samples from recently abandoned traditional buildings in the village of Al-Ma’tan in the Tafilah governorate and Bedouin encampments in the Wadi Faynan in the Wadi ‘Araba with samples from Neolithic sites, such as Wadi Faynan 16 and ‘Ayn Ghazal, as well as sites at Wadi Jilat and Azraq. While taphonomic processes obscure recognition at some sites and for some types of ethnographically known deposits, others show promising results. In addition, through our community engagement, we are recording living memories and conducting scientific analyses of agricultural and pastoral ways of life encapsulated in building construction and everyday settlement activity.

Session 9, Hall 3, 24/5/2016, 12:00-12:20

Investigations of Prehistoric Exploitation in Jordan’s Black Desert

Yorke M. Rowan, (U. Chicago)
Gary O. Rollefson, (Whitman College)
Alexander Wasse, (U. East Anglia)
A.C. Hill, (U. Connecticut)
Morag Kersal

Research by the Eastern Badiya Archaeological Project since 2008 has concentrated on survey and excavation of two areas of the Black Desert: at the basalt-capped mesas in the Wadi al-Qattafi at the western edge of the Harra and at Wisad Pools at the eastern edge of the basalt desert. Results so far have demonstrated relatively intensive Late Neolithic occupation at both locations, although there are distinctions in terms of architecture, tool manufacture, and site organizations. Comparisons of the circumstances at Mesa 4 (“Maitland’s Mesa”) and Mesa 7 with each other and with Wisad Pools structures W-66, W-80, and W-110 are presented and interpreted. Recovered paleoenvironmental information strongly suggests a more heavily vegetated landscape than is currently the situation in the Harra.

Session 7, Hall 1, 23/5/2016, 4:00-4:20

IT-Innovation and Technologies Transfer to Heritage Sites: The Case of Madaba, Jordan

Monther D. Jamhawi, Department of Antiquities of Jordan
Zain Hajahjah, Jordan University of Science and Technology, Irbid, Jordan
Monther.Jamhawi@doa.gov.jo
zhajahjah@gmail.com
This research discusses an investigative study into the use of information and communication technology (ICT) for sustainable tourism development of the historical core of Madaba; one of the most important cultural and heritage tourism destinations of Jordan. It evaluates the effectiveness of ICT usage within this heritage site, through making an assessment for 11 dimensions including community involvement/social aspect of heritage site and link to ICT, ICT usage within heritage site; online presence, ICT Support of heritage attraction to employees in ICT related work, Level of ICT presence in heritage sites, Sharing of Information Electronically, E-COMMERCE, ICT ONLINE, and Technology for heritage interpretation, etc. This study was based on applying quantitative research methodology, using structured questionnaires, which were conducted for most of the relevant stakeholders in order to get a better understanding for the ICT situation in Madaba. The results show that using ICT technologies in the city of Madaba were not viewed as a tool neither for tourism management nor to deliver the visitors experience.

Accordingly, an interactive Virtual Tour 360° HD was designed including an online website and mobile application (sharing this technology will be part of the presentation). The main objective of designing these tours is to offer new ways to interact with the target groups that are the tourist that visit this region, meanwhile, to transfer of advanced technologies for the cities integrated management. A web GIS Map was produced as part of these tours.

Two workshops were organized with general public to raise their awareness and appreciation of cultural heritage and the contribution of technology in presenting it. The participants were offered an opportunity to use these technologies. Then an open discussion was carried out to evaluate the impact of this applied technology on their experience in visiting Madaba.

This research was supported by an EU funded project “Promoting socio-economic sustainable development through innovative technological actions for Mediterranean tourism-heritage and landscapes protection clusters– HELAND

Session 1, Hall 1, 22/5/2016, 12:20-12:40

Jarash Bowls, Chronology, Typology and Iconography

Dorothea Csitneki, Ruhr- Universität Bochum
dorothea.csitneki@rub.de

The so-called Jarash Bowls are one of the most important fineware-groups in Northern Jordan. My research includes the chronology, typology, but particularly their iconography. Since they are one of the most common finewares of this region in the early Byzantine until the early Islamic period, their systematic analysis and classification as well as dating is extremely important for the research in this region. My work will obtain the most accurate chronology which is created by morphologic devices as well as good datable archaeological evidences. In addition I want to enlarge the group and the definition of the Jarash Bowls. Furthermore the iconographic spectrum is in the focus of this research. The bichrome paintings on the interior of the bowls show a wide range of motifs. Human figurative scenes are as common as animals and floral decoration. Where does this motif have their provenience? Is it possible to divide workshops from the different painted bowls, are the main
questions of my work. Especially in the transitional period from the Late Byzantine to the Early Islamic period it is very important to have a further look at the iconographical change within the motifs. Do the motifs change? Do we have Jarash Bowls in this time or do they lose their importance? My material obtains finds from the North-West Quarter Project in Jarash, selected pieces from more then 20 years of French excavations in Jarash, as well as a selection of all published Jarash Bowls.

Session 2, Hall 1, 22/5/2016, 2:20-2:40

Jarash Epigraphy: Eighty Years after Welles

Pierre-Louis Gatier, Université Lumière Lyon-2 (Maison de l’Orient)
pierre-louis.gatier@mom.fr

Charles Bradford Welles (1901-1969) was in 1938 the publisher of the Greek and Latin inscriptions of Gerasa, inside C.H. Kraeling’s book, Gerasa, City of the Decapolis. Welles has not only published newly found texts but has been the author of a complete corpus of the inscriptions of the city. Although he is today best known as a papyrologist, this great scholar was a distinguished epigraphist, famous for his book on Royal Correspondence in the Hellenistic Period (New Haven 1934). Unfortunately, he never had the chance to visit Jarash before publishing the inscriptions of the site and was therefore highly dependent on the information and documents he received from the persons in charge of the excavations (1924-1934), and on the activity of his predecessors, in particular Arnold Hugh Martin Jones (1904-1970), another celebrity to be.

The corpus of Welles, although being a splendid work of scholarship, needs to be reassessed. It did not include the inscriptions of the Gerasene country; some inscriptions from the city itself had been left out; some fragments belonging to one and the same inscription had not been assembled. Since 1938, numerous inscriptions have been discovered in Jarash and the vicinity, by the DoA and by the different teams in charge of excavations. Some are still unpublished. These discoveries provide many information completing Welles. The aim of my paper is to give an up-to-date overview of the main discoveries made since the 1930’s, with a view to preparing the new volume of Inscriptions de la Jordanie, dedicated to Gerasa.

Session 3, Hall 3, 22/5/2016, 4:40-5:00

Khirbat al-Dusaq: a Palatial Complex from the Middle Ages in ash-Shawbak Hinterland

Elodie Vigouroux, Ifpo (French Institute for the Near East)
René Elter
elodie.vigouroux@gmail.com

The site of Khirbat al-Dusaq is located 5 km east of Shawbak Castle. This monumental complex
Khirbat Al-Batrawy – A City and Its Palace in Third Millennium BC Jordan

Lorenzo Nigro, Sapienza University Rome
Lorenzo.nigro@uniroma1.it

Archaeological investigations and historical interpretations dealing with the origins of urbanization in the Southern Levant, when made free from terminological bindings, either excluded or considered in a very hypothetical way the possibility that during the 3rd millennium BC such a phenomenon also involved Jordan. Even the successful definition by R. Schaub “walled-town culture”, arisen after the excavation of Bab adh-Dhra’, was sometimes questioned. Eleven years of excavations (2005-2015), surveys and studies by the Sapienza University of Rome at the 3rd Millennium BC fortified site of Khirbat Al-Batrawy, with the uncovering of an articulated defensive system, of a temple, and of a burnt public building (ranked “palace”), provided a large set of stratified materials useful for putting forward an updated description of the peculiarities of urbanism in Jordan during Early Bronze Age II-III (3000-2300 BC).

Control over raw materials distribution and long-distance trade, spreading innovations (potter’s wheels introduction), ceramic specialization, the connection with Egypt, labor organization, water and land territorial administration, overland tracks to Syria, Mesopotamia and Arabia are all elements participating into such an early urban experience.
Landscapes of Survival: New Research in the Jabal Qurma Region, North-East Jordan

Peter M.M.G. Akkermans, Faculty of Archaeology (Leiden University, The Netherlands)
p.m.m.g.akkermans@arch.leidenuniv.nl

Jordan’s north-eastern basalt desert (‘Black Desert’) appears to be astonishingly rich in archaeological remnants from many different periods. Recent, new research in the Jabal Qurma region, east of Azraq, revealed hundreds of previously unknown habitation sites and burial cairns as well as many thousands of petroglyphs. The ongoing surveys and excavations in the Jabal Qurma region aims to explore the social, political, economic and ideological strategies which allowed people to successfully exploit the often marginal and difficult-to-inhabit basalt desert through time. This paper presents insights derived from the new field work, with special reference to the distinct long-term punctuations in settlement in the region from the Neolithic to the pre-Modern era.

Late Neolithic Variability in Lithic Technology and Typology from Two Areas of the Black Desert of Jordan

Gary O. Rollefson, Whitman College
rollefgo@whitman.edu

Sizeable samples of Late Neolithic chipped stone tools, cores, and debitage from excavations at Mesas M-4 and M-7 in the Wadi al-Qattafi and from two structures at Wisad Pools at the eastern edge of the Harra reveal significant differences in the concentrations of particular types of tools and in the technologies used to produce them. Some of the variability is probably temporally related across a time span from ca. 6,500-5,400 cal BC, but contemporaneous variability among assemblages from the western and eastern edges of the Black Desert might reflect some degree of environmental diversity or even ethnographic differences in exploitation strategies.

Left off the Map: the Forgotten Sites of Sir Aurel Stein

Rebecca Banks, University of Oxford
In 1938 Sir Aurel Stein embarked on his ambitious archaeological project to document the Roman frontier in what was then Iraq and Transjordan. His manuscript (Gregory and Kennedy 1985) documents the intensive program of aerial and ground survey conducted, and was accompanied by some 600 aerial photographs taken by Stein flying with the Royal Air Force. The recent digitization of these photos by the Aerial Photographic Archive for Archaeology in the Middle East (APAAME) and the Endangered Archaeology in the Middle East and North Africa (EAMENA) has made them accessible and raised matters of interest. The collection provides an extensive early snapshot of Jordan’s heritage, including over 60 archaeological sites. Many of these are well known places but the collection includes many lesser known sites, such as ‘Rujm ash-Shid’, Khirbat Shubayka, and Qasr Mushaysh, and remote sites such as Ba’ir Wells and al-Qasir Ghadir. Many of them have received little or no attention, perhaps because of their remoteness or the vagueness of their location. Using a selection of choice examples, this study will explore these lesser-known places through the photographs, Stein’s documentation and what can be said today. The presentation will highlight the wealth of knowledge that can be mined from historical aerial photographs of landscapes often utterly transformed during the last half century. The Stein collection can be viewed and commented on at: https://www.flickr.com/photos/apaame/albums/72157652009016911

Session 12, Hall 3, 26/5/2016, 10:10-10:30

Life and Death at Shkarat Msaid – News from the 2014 and 2015 Season

Moritz Kinzel, University of Copenhagen

This contribution will present the latest findings and results from MPPNB-site of Shkarat Msaid. The continued excavations in Unit F have revealed an astonishing number of burials within the building. During the 2015 season three additional burials have been fully excavated and a series of another five potential locations for burials could be identified. Unit F was much more substantially modified during its use than known before. Besides an earlier blocked entrance and later added stone cists, more segments of a wall belonging to an earlier building phase have been re-covered. However, the foundation level of that wall has not been reached yet. The deep sounding made in Unit R gives a hint that we might have to expect a much longer occupation history than considered so far. The findings and finds in Unit R show a great variety of material culture, including bone tools, ground stone industry and chipped lithics.

Session 3, Hall 1, 22/5/2016, 4:20-4:40

Linking Iron I Sites on the Madaba Plain

P.M. Michele Daviau, Wilfrid Laurier University
Stanley Klassen
micheledaviaudion@yahoo.ca
Limited exposure of Iron Age I remains at Tall Jawa in central Jordan indicates the existence of a settlement that may be contemporary with other known Iron I towns on the Madaba Plain. With the recent excavation of an Iron I occupation level at Tall Madaba, the chronology of this period has become increasingly more complex. Some sites appear to have only one Iron I phase, whereas at Tall al-ʿUmayri and Hesban, multiple phases within the Iron I period have been identified. To better understand the chronology of the Iron I sites and the potting traditions operative on the central Jordan plateau, this paper presents a typological and technological study of the Iron I collared pithos rims from Tall Jawa in comparison to the collared pithoi found at other Iron I sites in the region. This study will be complimented with archaeometric analyses in the form of petrography to identify the technological choices made by the potters producing these vessels, highlight the regional diversity in their production and contribute to the discussion concerning settlement history.

Session 11, Hall 2, 24/5/2016, 4:00-4:20

Local Communities’ Engagement in Umm al-Jimal: a Case Study on Rural Women’s Empowerment through the Management and Presentation of Cultural Assets in the North of Jordan

Angela Atzori

Positioned on the UNESCO Tentative List of World Heritage Sites, the archaeological site of Umm al-Jimal has been identified as one of the best places for investment on preservation and economic development initiatives. As it is well proved and documented through best practices worldwide, cultural heritage sites act as important vectors of economic development and social cohesion, since they allow the creation of culture-related employment and income-generating opportunities. In Jordan, the creation, marketing and continuous upgrading of tourism services represent a unique source of incomes and open the way for business start-ups, especially for women, in line with the national trends that see women substantively employed in the cultural industries.

Umm al-Jimal is also one of the poverty pockets in Jordan, with 32% poverty rates and lowest Human Development Index. Unemployment is highest among women, who are affected by limited access to socio-economic resources and further limited by gender stereotypes and biases that their role confined to the domestic sphere. The archaeological site of Umm al-Jimal and its touristic development, thus represent a major resource for the community of Umm al-Jimal, and especially for women, as the most marginalized sector of the community.

The paper illustrates the project currently implemented by UNESCO in Umm al-Jimal, the emerging challenges and lessons learnt over two years of implementation. The paper further explores the link between cultural heritage and socio-economic development in Jordan, and explores the challenges and new frontiers of participatory, community-based cultural resources management and presentation in the country.
Management of Heritage Sites in Jordan: Case Study- Tall Hisban

Ruba Seiseh, Ruhr University- Bochum
rabyya22rabyya@gmail.com

Tall Hisban is located in the Hashemite kingdom of Jordan approximately 25 km south west of Amman, east of Jordan River about 30 km., and about 10 km north of Madaba. It is overlooking the northeast edge of Mount Nebo and Dead Sea, about 55 km east of Jerusalem, and stands 895m above the sea level.

Over the centuries Tall Hisban has been a Bronze Age settlement, an Amorite capital (900- 500 BC), a Hellenistic fortress (332- 363 BC), a Roman settlement called Esbus (63 BC- AD 350), a Byzantine ecclesiastical center (AD 363- 640), an Umayyad market town (AD 630- 750), a regional capital of the Abbassids (AD 750- 969), Fatimid (AD 969-1171), Ayyubid (AD 1174-1263), Mamluks (AD 1250-1516) and finally an Ottoman village (AD 1516- 1918).

The first part of the presentation will show: 1-The importance of Tall Hisban; 2-The geographical, historical, political, archaeological, cultural, social and natural values that distinguish the Tall; 3-The strength and weakness points 4- The threats and challenges faced by the site.

The second part of the presentation will focus on: 1-Several issues which are included in the heritage management plan of Tall Hisban. 2-Describe the role of the stakeholders from governmental and non- governmental institutions and their tasks in management heritage projects. 3-The importance of involve the local community in the process of preservation and development of the site; 4- Suggestions and recommendations.

Managing Public Awareness and Community Engagement on Landslide Risk at the Petra Archaeological Park: the Case of the “Petra Siq Stability Project”

Giorgia Cesaro, Department of Conservation
g.cesaro@unesco.org

Giorgia CESARO1, Giuseppe DELMONACO2, Bilal KHRISAT3 1 UNESCO Amman Office, 9,Yacoub Ammari St. Abdoun, 11181 Jordan (g.cesaro@unesco.org); 2 ISPRA, Italian Institute for Environmental Protection and Research – Geological Survey of Italy, Via Vitaliano Brancati 48, Rome 00144, Italy (giuseppe.delmonaco@isprambiente.it ); 3 Department of Conservation, Queen Rania Faculty of Tourism and Heritage, Hashemite University (bilal@hu.edu.jo) Keywords: Risk Management, Community Awareness, Community Engagement, Petra Archaeological Park, World Heritage Proposed theme: Awareness and Education Abstract: The Petra Archaeological Park, a World Heritage site since 1985, characterized by a spectacular landscape is also a fragile site facing a diversity of risks. Potential occurrence of rapid onset
natural phenomena (landslides, flashfloods, earthquakes) pose a major threat to cultural heritage and the visitors. The Petra Siq, a naturally formed gorge in the sandstone mountains is particularly at risk due to its narrow pathway, limited access points and recent active processes, which raised the attention to the geological conservation of the site and visitors’ safety. The UNESCO Amman Office, in partnership with the Department of Antiquities of Jordan and the Petra Archaeological Park has therefore engaged in a multi-year project aimed at the analysis of stability conditions of the Siq slopes through the installation of an integrated monitoring system for the detection and control of deformation processes and the definition of guidelines for implementation of mitigation measures against rock instability. Despite the technical nature of the project, a participatory approach towards different levels of stakeholders has been adopted, conscious of how the awareness of the environmental hazards threatening the site can be crucial to ensuring that risk can be appropriately managed and mitigated. This paper aims at demonstrating the essential role that local stakeholders and indigenous communities can play in the management of a World Heritage property, in particular in relation to disaster risk reduction, and how their involvement and awareness of the issues at stake can be vital for the long term management of the property. Main focus will be put on project activities undertaken, results achieved and suggestions for steps ahead, aiming to present a useful case study for stakeholders and community engagement leading to the sustainable management of the heritage site.

Session 4, Hall 1, 23/5/2016, 10:10-10:30

Managing World Heritage Sites in Jordan: from Practical Experience to Operational Guidelines

Gaetano Palumbo
Jehad Haroun, Department of Antiquities of Jordan
Angela Atzori

In recent years the Department of Antiquities of Jordan has developed a program to enhance in-house capacities to prepare and implement site management plans for its World Heritage properties. With the assistance of World Monuments Fund (WMF) and UNESCO, this program has facilitated the preparation of site management plans for the sites of Qusayr ‘Amra (2013-2014, with WMF) and Umm ar-Rasas (2015, with UNESCO). The planning process was based on a thorough analysis of present conditions and identification of factors affecting the conservation and proper management of the site, on the identification of all their values (beyond those already identified as Outstanding Universal Values in the World Heritage inscription process), and on a transparent participation of stakeholders. These documents are supported by specific Implementation Plans which provide detailed, step-by-step action items that guide the proper adoption of the recommendations they contain. Moreover the entire process of site management planning has been documented in order to generate a set of operational guidelines for the preparation of future management plans, both in World Heritage and in any site where these documents may be required. This paper will present the methodology adopted for the preparation of these plans, the main
characteristic of these plans, and will provide information on the structure and content of the operational guidelines which will become the document of reference at the Department of Antiquities for future planning activities.

Session 3, Hall 3, 22/5/2016, 4:00-4:20

**Medieval Pottery in South Jordan: The case-study of HMPW in ash-Shawbak Castle**

*Elisa Pruno*, Florence University (SAGAS) ‘Medieval’ Petra Italian Archaeological Mission

*Raffaele Ranieri*, Florence University (SAGAS) ‘Medieval’ Petra Italian Archaeological Mission

ranieriraffa@gmail.com
elisapruno53@gmail.com

The main aim of this work is to present recent acquisitions regarding the pottery consumption in ash-Shawbak Castle (Ma’an, Jordan) during the Crusader-Ayyubid period. A special focus is addressed at the relevant topic of HMPW, its periodization and some reflections about the link of its production and the local, semi-nomadic population. It must be emphasized that the research is based on all stratigraphical data of Shawbak pottery assemblages compared with the stratigraphical data from the al-Wa’ya pottery assemblages. To analyze this argument it appeared to be very stimulating some concept of anthropological archaeology, especially by the O. La Bianca’s works concerning Great and Little Traditions (La Bianca 2007). But it must be emphasized that the research needs more stratigraphical data coming from other sites to compare these preliminary reflections on ash-Shawbak pottery assemblages.

Session 2, Hall 3, 22/5/2016, 2:00-2:20

**Mills in ‘Ajlun Sanjaq and Qada’ du Hawran during the Ottoman Period: Historical, Archeological and Architectural Approach**

*Vanessa Guéno*, Ifpo Amman

The aim of this paper is to present a work in progress in Northern Jordan. Since the 80’s, Historians of the Ottoman period base their studies on local formal sources issues from the important administrative and judicial institutions. But as the textual sources are rich and plentiful, they keep meanings difficulties, gaps or oversight. Moreover, in Ottoman countryside orality and amicable contract (sulh) were a norm. In that way, architectural and archeological methodologies are relevant tools to understand how societies adapted agricultural, economic and legal systems to their own environment.
Miner Sins: Archaeological Evidence for Gambling at Khirbat Nuqayb al-Asaymir, a Copper Mining Village in Faynan, Southern Jordan

Ian Jones, University of California, San Diego
iwjones@ucsd.edu

Although gaming pieces are occasionally reported at Islamic period sites in the southern Levant, Islamic archaeologists have only rarely considered the social aspects of games of chance and gambling. This is especially true of rural sites, where gaming pieces are particularly uncommon. When discussed at all, the emphasis tends to be on the apparent contradiction of finding these objects in Islamic contexts, as gambling and games of chance are prohibited in Islamic law. This, however, explains little about how these objects were used and understood by their owners.

This paper reports on a small group of gaming pieces from Khirbat Nuqayb al-Asaymir, a Middle Islamic period copper mining village in the Faynan region of southern Jordan. After reviewing the connections between these objects and other contemporary gaming pieces, their implications regarding the social aspects of Middle Islamic gambling are explored. The Islamic prohibition on gambling — and, in particular, the Middle Islamic period debate over which games are included in this prohibition — while important, is only one consideration in this discussion, especially as religion and ethnicity are difficult to identify in the archaeological record. Understanding how this minor vice functioned in the social life of miners at Khirbat Nuqayb al-Asaymir requires looking beyond this to other aspects of Middle Islamic thought, and in particular understandings of “labor” and “leisure”.

Although gaming pieces are occasionally reported at Islamic period sites in the southern Levant, Islamic archaeologists have only rarely considered the social aspects of games of chance and gambling. This is especially true of rural sites, where gaming pieces are particularly uncommon. When discussed at all, the emphasis tends to be on the apparent contradiction of finding these objects in Islamic contexts, as gambling and games of chance are prohibited in Islamic law. This, however, explains little about how these objects were used and understood by their owners.

Poster

Mirror Anthropology in Archaeology

Aven Qatameen, University of Jordan
aven.mq@gmail.com

The theme of this study is about the role of Anthropology in detection fact of human through archaeology, so this study examined twelve of human skeletons analysis at the National Institute of Forensic Medicine.
The cases were classified into two categories: contemporary and non contemporary, it has been identified sex, age, diseases if found, all of this has to be known through certain marks that exist on the bones. On the basis of Anthropology of Osteology reveal latent information within the bones based on Forensic Anthropology Protocol.

The aim of this study is to highlight the importance of Anthropology, and address issues in Archaeology, because we hope to open the doors of Anthropology in particular in Jordan for the integration of these two sciences with each other.

This is because anthropology helps in building a complementary relationship between it and archaeology by showing the relationship between the biological structures on the one hand, and human behavior and culture on the other within the conceptual framework.

Poster

Modelling the ‘Ayn Ghazal Radiocarbon Chronology

Piotr Jacobsson, Council for British Research in the Levant

‘Ayn Ghazal remains of crucial importance to the study of the Neolithic in Jordan and southwest Asia in general. With a substantial collection of material from the Middle Pre-Pottery Neolithic B to the early Pottery Neolithic, the site provides a reference for much of the cultural changes happening throughout the eighth and seventh millennia cal BC and thus is indispensible to our understanding of these cultures. However, understanding any historical process requires not only the knowledge of its substance, but also of its chronology. In many Neolithic contexts radiocarbon dating offers the most straightforward way of achieving this.

There are over 50 individual radiocarbon determinations from ‘Ain Ghazal. Each of these, once calibrated, provides a date range for when the sample died. Alone, every single date range can be considered accurate, but at this stage the implicit interpretation is that these samples were deposited in the course of unrelated processes. This is not the case on most archaeological sites, where site formation processes are often interrelated to one another. To address such situations and obtain a meaningful chronology we need to bring the individual 14C dates under an overarching site model. It is through such site models that we are able to move from radiocarbon contents of samples to archaeological questions. The poster summarizes the background and the choices behind a chronological model for ‘Ayn Ghazal and outlines its importance in relationship to sites within Jordan and in the broader context of the southwest Asian Neolithic.

Session 4, Hall 2, 23/5/2016, 9:30-9:50

Monasteries in Northern Jordan with Special Regard to New Finds from Tall Zar’a

Jutta Haeser, Bergische University Wuppertal, Biblical Archaeological Institute Wuppertal
haeser@bai-wuppertal.de

Since the excavations and publication of the monastic complexes on Jabal Harun in Petra and Dayr ‘Ayn ‘Abaṭa in Ghawr aş-Ṣāfī a lot more is known about the monasteries in Southern Jordan. However, there is less information about monasteries in the North of Jordan. Therefore, the lecture will focus on monasteries in Northern Jordan with special regard to new finds from Tall Zar’a. At this site, more than 3500 sqm were excavated which show architectural remains of the Byzantine period. A recently unearthed mosaic inscription let assume that these structures belong to a large monastic complex. These building remains as well as the other monasteries in Northern Jordan will be compared to other excavated ones in Jordan and surrounding areas. This overview will help getting a deeper insight in the development of Christianity in Jordan and the economic significance of monasteries during the Byzantine period.

Session 5, Hall 3, 23/5/2016, 12:40-1:00

Nabataean and Late Roman Domestic Life on Petra’s North Ridge

S. Thomas Parker, North Carolina State University
thomas_parker@ncsu.edu

Although Petra has witnessed extensive excavation for nearly a century, virtually all the focus has been on its impressive rock-cut tomb facades and monumental structures. With one notable exception, Petra’s domestic structures, where most of its population presumably lived, have been sadly neglected. And even the one major exception, ez-Zantur atop a hill south of the city center, has proven to be an elite residential sector. Therefore the Petra North Ridge Project has focused on examining Petra’s non-elite population through excavation of simple rock-cut shaft tombs and non-elite domestic structures. This paper presents a preliminary synthesis from portions of several excavated domestic complexes. These domestic structures, located on the south slope of the North Ridge directly overlooking the city center, were established in the 1st century AD and then continually occupied until the late 4th century, when all were apparent victims of the 363 earthquake and never reoccupied. A wide range of architectural, ceramic, numismatic, faunal, botanical, and other evidence suggests a great deal about the non-elite population of Petra in the first four centuries AD, including changes in diet and the nature and extent of economic connections with the outside world. These changes in turn provide insight into how the indigenous urban Nabataean population transitioned from an autonomous folk within a Roman client kingdom to provincials under direct Roman rule.

Mechthild Ladurner, Deutsches Archaeologisches Institut
Fawzi Abudanah, The Nabataean Centre for Archaeological Studies al-Hussein Bin Talal University- Jordan
mechthild.ladurner@dainst.de

The modern landscape of the Jabal ash-Sharah in the hinterland of Petra is dissected by agricultural terraces, large clearance mounds, field demarcations and hydraulic barrages, and contains numerous archaeological sites and frequent occurrences of surface material, all bearing witness to the impact of intensive agricultural use on the area over the millennia.

The study presented here focuses on a specific type of built structures within the landscape of the Jabal ash-Sharah, which is associated with a characteristic range of surface finds and agricultural installations of various character and areas of potentially farmable land. These sites are interpreted as farmsteads, comprising a permanent building used both for living and working, as well as the surrounding agricultural hinterland. They are to be understood as autonomous entities, whose primary functions were agricultural production, processing and storage of produce.

Beyond the evaluation of previous fieldwork, this project, initiated by F. Abudanah and M. Ladurner in 2014, surveyed several sites during its first season, documenting architecture, landscape/topography and surface finds. So far, this data allows a first insight into the typology of architecture, its position within the landscape, surrounding installations, and its relation to the road network along the Jabal ash-Sharah. Furthermore, these sites serve as nuclei for this study on the spatial organization of the Jabal ash-Sharah. The study of spacing, size and layout of these farmsteads are integral aspects of the project.

Nabataeans and Petra in the Arabic Sources

Ahmad Lash, Department of Antiquities of Jordan
ahmadlash@yahoo.com

Most scholars agree that there is a lack of information about Petra and the Nabataeans in the Arabic sources, particularly in the early Islamic sources where Petra is not mentioned. However, this article shows that in the period between the diminishing of the Petra dominance in the region in the 4th, 5th and 6th centuries and the earliest Islamic historians in the 8th century, Petra had no ruler worthy of mention in the major battles of the Islamic conquests in the second quarter of the 7th century. However, Nabataeans were well known in many of Arabic sources by the name Nabaṭ and Annbaṭ. The Greek name for Petra was not used but its Nabataean name, Raqmu or
ar-Raqeem, was well known to the Arabs as a small city carved in rock as one unit, located not so far from Palestine and close to Ayla (Aqaba). The Holy Qur’an mentions many places in the Arabic peninsula, Mesopotamia, Egypt and in the Levant including ar-Raqeem in surat al-Kahf as a place where the miracle of the seven sleepers took place.

Session 2, Hall 1, 22/5/2016, 3:20-3:40

Necropolis and Tombs of Jarash

Cathrin Pogoda, Ruhr-Universität Bochum
Cathrin.Pogoda@rub.de

The necropolis and tombs extended across the breadth of the ancient city. Very few extramural remains have hitherto been explored and far fewer have been recorded. They are now under intense threat as the growth of the modern town rapidly encroaches into the area immediately beyond the ancient city walls. Neither the structure, organization nor the administration of the necropolis is well known thus far. The tombs of the Roman period in particular, do not seem to have been edified randomly. They were equipped with adjoining rooms, boundary fences and altars. The spectrum ranged from individual tombs and by way of multiple burials to collective graves. More than 100 limestone-sarcophagi derive from the necropolis and tombs of Jarash. They constitute a relatively select group within the Province of Arabia. The deposits of undisturbed burials – a wealth of pottery, glass finds and jewelry - provide an opportunity for ascertaining a precise dating. The knowledge about the different types of tombs, their structure and equipment will be an important contribution to the understanding of provincial societies in the Roman Empire and the self-representation of its local elites.

Session 13, Hall 2, 26/5/2016, 11:50-12:10

Neolithic Cultural Heritage as a Community Asset

Bill Finlayson, CBRL
billfinlayson@cbrl.org.uk

The Neolithic Heritage Trail is an initiative promoting a group of southern Jordanian Neolithic sites, Wadi Faynan 16, Ghuwayr 1, Shkarat Msaiad, Beidha, and Basta. One of the ambitions of the project has been to engage with local communities living along the trail. It is increasingly recognised that cultural heritage is important for the sustainable development, wellbeing and resilience of communities and their members (UNESCO 2013). Cultural heritage can be an asset for group cohesion, identity and social capital; diversity and resilience of local economies; and cultural inspiration and vibrancy. The successful mobilisation of cultural heritage as a social asset depends on a deep understanding of not just heritage assets but the social, economic, cultural and
political context of the communities involved, their institutional capacity and access to resources and education, and their current relationship with local cultural heritages. Unfortunately, all too often public-benefit projects around archaeology are poorly informed, leading to a poor return on investments in resources. Following initial work by Burtenshaw in Wadi Faynan, in 2015 we commenced a project examining how Neolithic sites contribute to local communities. Research into the contemporary impact of Neolithic heritage in the region has been overlooked in favour of classical, biblical and medieval heritage that is more tied into tourism. However, the Neolithic sites of the Levant offer a globally significant history, representing an asset for new perspectives on identity. These sites have potential to diversify the market and geographical spread of tourism.

Session 3, Hall 2, 22/5/2016, 5:00-5:20

New Archaeological Discoveries in the Basilica of the Memorial of Moses, Mount Nebo

*Davide Bianchi*, University of Milan
davide.bianchi2@unimi.it

The Franciscan Archeological Institute (Studium Biblicum Franciscanum) carried out archaeological surveys, from 2012 to 2014, during the re-roofing of the ruins of the church of the Memorial of Moses. This work allowed us to undertake further research into those parts of the basilica that were never the subject of prior archaeological investigations. Excavations in the central nave of the church have unearthed a burial tomb, completely intact. It was found to be empty, adorned with alabaster marble and placed on the highest point of the mountain. The tomb structure, which can probably be considered as a cenotaph, was built in the oldest sacred building erected on Mount Nebo, perhaps to remember the figure of the prophet beloved by God and people, Moses of blessed memory (Sir. 45:1) who according to the Bible died there. This discovery as well as the reassessment of previously published data, suggests a new approach to the first building constructed on Mt. Nebo, and a revised interpretation of the several layers of construction carried out on the monument over the centuries. Moreover, excavations under the synthronon have provided additional data on the last renovation of the building, undertaken presumably after the earthquake of 749 A.D. The findings have allowed us to better understand what was happening to the church and monastery during the transition between the Umayyad and early Abbasid era.

Session 6, Hall 1, 23/5/2016, 2:20-2:40

New Data on the Epigraphy of the Northern Decapolis “Northwestern Jordan”

*Jean-Baptiste Yon*, CNRS France, Lyon University
*Nabil Bader*, Yarmouk University
Greek and Latin inscriptions in the Northern Decapolis of North-Western Jordan (ancient cities of Pella, Abila, Gadara and Capitolias; part of the territories of Bostra and Adraha) are numerous and recent work in the region has proven especially fruitful. This epigraphy is characterized by its variety, with mosaic inscriptions, dedications of buildings (statues, theaters, churches), with the most common type being funerary inscriptions. Particularly conspicuous are epigrammes, that is poems in Greek, often associated with burial places. Other, mostly Latin, inscriptions evidence a strong presence of the Roman army during Antiquity. The conference is a good opportunity to present some examples of inscriptions, with new discoveries made during the preceding seasons of work, as well as drawing attention on less known documents. The paper will particularly deal with a new funerary epigramme found in the surrounding of Umm Qays and several building inscriptions. Our work, a contribution to the programme of the Greek and Latin Inscriptions in Jordan (‘Inscriptions de la Jordanie’), has begun in 2014.

Session 9, Hall 1, 24/5/2016, 11:40-12:00

New Evidence for Byzantine and Islamic Jerash in the Light of Research of the Danish-German Jerash Northwest Quarter Project

Achim Lichtenberger, Ruhr-Universität Bochum
Rubina Raja, Ruhr-Universität Bochum
lichtacw@rub.de

New evidence for Byzantine and Islamic Jerash in the light of research of the Danish-German Jerash Northwest Quarter Project

The Danish-German Jerash Northwest Quarter Project (Aarhus University and Bochum University) and has been working in Jerash since 2011. Through surveys and excavations it is clear that the Northwest Quarter was densely settled in the Byzantine and Early Islamic periods. Compared to that Roman presence is scarce, although some evidence has been found in the last two campaigns. This paper firstly presents a short overview of the general settlement history of the Northwest Quarter and moves on to new material attesting to the nature of the Byzantine and Early Islamic period settlements and relates this material to the broader settlement history of Byzantine and Early Islamic Jerash. The settlement history of the Northwest Quarter differs from that of the civic centre, as a clear break in settlement after the devastating earthquake of 749 AD can be observed in the archaeological material and no continuity into the Abbasid period can be traced. Only in the Ayyubid-Mamluk periods a noteworthy resettlement of the Northwest Quarter took place again. The results of this project contribute to our understanding of the character of Byzantine and Early Islamic Jerash and helps to bring new data into the discussion about continuity and change in this prominent area of Jerash.
New Greek Inscriptions from Dafyana in North-East Jordan

Julien Aliquot, University of Lyon, France
Abdel Qader al-Husan, Department of Antiquities of Jordan
julien.aliquot@mom.fr
alhousan@yahoo.com

The Greek inscriptions presented here have been found in the village of Dafyana (North-East Jordan) by the Department of Antiquities of Jordan, Mafraq Branch. All are simple epitaphs engraved on basalt stelae or lintels, like the inscriptions from the same place which were previously known. These documents provide new information on the settlement history and the burial customs in the southern part of Hauran under the Roman empire. One of them is particularly worthy of note, because it reminds of the foundation of a collective tomb by a junior officer of the Roman army who died in the Black Sea region and whose corpse was carried home by his servant in 312/313 AD. This inscription is one of the few epigraphical pieces of evidence on the Diocletianic province of Diospontus. It also confirms, by its date, that Dafyana belonged to the territory of Bostra, the capital city of Roman Arabia. While emphasizing the role of the members of the Roman army and administration in the area, it further increases the number of texts relating to the transportation of the remains of dead Roman soldiers or officers to their homeland.

New Issue on Ethics and Authenticity of CRM in Petra and the Case of Some Dated Medieval Graffiti

Saad Twaissi, Al-Hussein Bin Talal University
Saad.twaissi@ahu.edu.jo

Our information on the medieval history of Petra is still poor, for both lack of historical resources, and limited archaeological works in concern with the medieval period. Just recently some archaeological works started to focus on the socio – economic aspect of medieval Petra. Epigraphy could contribute to a better understanding for the nature of human settlement in medieval Petra, mainly when they are dating. This paper will introduce a number of dated medieval graffiti some of which are dated the early phase of the medieval period. These Baidha. They had been written in Arabic and in different styles and techniques. The transliteration, style, and the date of the graffiti will be demonstrated in this paper. This new evidence will shed some new light on the nature of Petra during the period concerned. Furthermore, the evidence will also rise new questions on this and authenticity of Petra CRM against ICOMOS codes, as some of the graffiti had been deleted during the cleaning and restoration of the Nabataean mural painting.
Session 6, Hall 1, 23/5/2016, 3:20-3:40

New Late Aramaic Inscriptions from Ghor al-Safi

Omar al-Ghul, Yarmouk University
Nida’a al-Khazali, Yarmouk University

The paper tackles three so far unpublished late Aramaic inscriptions from Ghor al-Safi. The three inscriptions are part of a group of 10 inscriptions kept at the depots of the Department of Antiquities that the presenters are currently studying. Dated to the period between the 3rd and 5th centuries AD, these tomb inscriptions display a rather stereotyped structure and phraseology. The name of the deceased, the date of his death, usually according to two different dating systems, and a blessing at the end of the inscription usually are the main components of the inscriptions.

The study will examine the language, the script, and the dating formulas of the inscriptions in comparison with the so far published inscriptions from the same genre. The presenters will also tackle the drawings on the stones and point out their significance. Special attention will be paid to the cultural and religious contexts of this group of inscriptions, pointing out the common features they share with inscriptions from Jordan that were written during the same period.

Session 6, Hall 1, 23/5/2016, 2:00-2:20

On Graffiti and IIIrd Legio Cyrenaica

Marie-Jeanne Roche, UFR 8584/ EPHE-LEM, Paris Sorbonne
mjse.roche@google.com

Recovering and preserving minor testimoniae is part of the responsibilities of scholars working in the field. Some graffiti appear sometimes in the propitious light. It was a Latin graffito of the IIIrd Cyrenaica Legion I was happy enough to notice by chance on the sandstone rock façade in the walk coming from the Dayr, in July 2009, while conducting a group in Petra. The abbreviated name of the legion is followed by an acclamation, a rare formula I found in two other places; one incomplete Latin inscription found at Humayma, in the Hisma (restored); and the other one in a Latin graffito Namara, south Syria, where the full inscription is easily legible, ending with Feliciter Invitta (sic). The issues of the presented evidence is the presence of the IIIrd Cyrenaica Legion in these three sites, presumably at an early time of the Provincia Arabia, but at different periods, and the circumstances in which this particular acclamation was accorded. This paper examines the three graffiti along with other related rock arts, and proposes interpretations.

Session 13, Hall 1, 26/5/2016, 11:50-12:10

Organization of Domestic Space at Kharaneh IV

Lisa Maher, University of California, Berkeley
Danielle Mocdonald,
maher@berkeley.edu
Excavations at the Epipalaeolithic aggregation site of Kharaneh IV have uncovered a wealth of archaeological remains including several structures dating to the Early Epipalaeolithic. These structures contain numerous artifacts, suggesting that people were actively living in these interior spaces and storing artifacts within them. The use and division of space in the Early Epipalaeolithic gives insights into the nature of social interaction in the Southern Levant prior to the advent of permanent architecture. This presentation presents results of the lithic and faunal analysis from Structure 1 at Kharaneh IV to explore the nature of domestic tasks within the structure. The distribution of faunal remains and lithics - linked with their function through microwear analysis - provides a mechanism for understanding the organization of domestic space during the Early Epipalaeolithic. Spatial patterns of refuse in the context of the built environment will illuminate how people organized space in an aggregated community prior to the advent of sedentism.

Session 12, Hall 2, 26/5/2016, 9:30-9:50

Pastoral Nomads of the 1st Millennium CE - An Archaeological Perspective from Jordan’s Black Desert

Harmen Huigens, Leiden University
h.o.huigens@arch.leidenuniv.nl

Recent archaeological fieldwork in the Jebel Qurma region of Jordan’s Black Desert has revealed rich archaeological remains of pastoral nomadic societies who inhabited the Black Desert during broadly the first millennium CE. These remains include nomadic campsites, funerary monuments, hunting installations, cultic sites, and ancient routes. The pastoral nomadic societies from which these remains originate have thus far mainly been approached through historical sources, such as Safaitic epigraphy and external historical documents. Alternatively, this paper presents an archaeological approach, which seeks to understand the use and arrangement of nomadic landscapes of the Black Desert, and chronological developments therein. It is thereby hoped to challenge some traditional views on economic strategies and social organization of pastoral nomadic societies of the Black Desert.

Session 2, Hall 3, 22/5/2016, 2:40-3:00

Pilgrimage and Sanctuaries in Late Ottoman Southern Bilad al-Sham

Norig Neveu, Ifpo
norigneveu@hotmail.fr

The network of sanctuaries was very dense in southern Bilad al-Sham at the end of the Ottoman period. Ottoman administration archives and accounts of Western travelers reveal a rich sacred topography and a large number of shrines dedicated to wali-s, who were highly respected by the inhabitants of the region. This presentation will shed light on the complex organization of the sacred topography in Southern Bilad al-Sham and show how its hierarchy was dominated by the two major mausoleums of Ja’far bin Abi Talib and Nabi Harun. A presentation of these
sites linked to tribal history and visited by Muslims as much as Christians, Bedouins and town dwellers reveal the complexity of social organization. These sites were locus of power where local notabilities and authorities used to mark their authority through renovation, donations or the organization of a pilgrimage.

As of the early 20th century, the Ottoman administration renovated some of these mausoleums, including that of Ja’far b. Abi Tâlib in 1906. These renovations were considered as a mean of symbolic investment of major religious site at the regional scale, during a period when Sultan’s Abdülhamid II intended to spread its pan-Islamic ideology. These reconstructions were accompanied by the establishment of new schools, which allowed the dissemination of a controlled religious education. This presentation aims to highlight how studying local sacred topography gives an opportunity to analyze official religious politics in Southern Bilâd al-Shâm and the ways local notabilities resisted them.

Session 8, Hall 1, 24/5/2016, 9:50-10:10

Plant Exploitation During the Early Natufian in North-Eastern Jordan: Preliminary Results from Shubayqa 1

_Amaia Arranz-Otaegui_, University of Copenhagen

_Tobias Richter_, University of Copenhagen

kch860@hum.ku.dk

richter@hum.ku.dk

In spite of southwest Asia being one of the areas in the world where archaeobotanists have worked longest, information regarding plant exploitation during the Natufian period is still patchy and more materials and well-sampled sites are needed. One of the problems faced by archaeobotanists working on this time period is the low density of plant remains preserved in archaeological sites. This largely contrasts with the extraordinary well-preserved archaeobotanical assemblage found at the Early and Late Natufian Shubayqa 1. In this paper, we present the preliminary results of wood charcoal and non-woody plant analyses from two in situ hearth structures, along with a summary of the available evidence at other contemporary early Natufian sites. In terms of past vegetation, the results show the presence of wetland species indicating a more forested and wet environment during the early Natufian, which is in accordance with the regional palaeoenvironmental evidence for the Bølling-Allerød period. In terms of subsistence, the analyses show the predominance of rhizome tubers from wetland species, followed by wild plants including wild wheat and barley. This evidence contrasts with that found at other Natufian sites such as Wadi Hammeh 27 or Hayonim, where wild plant seeds predominated. In fact, tuber remains are commonly absent from archaeobotanical assemblages, probably due to post-depositional processes and the type of recovery methods used. Thus, the archaeobotanical assemblage from Shubayqa 1 constitutes an important contribution in order to understand the subsistence patterns in a region and time period for which little evidence is so far available.
Pottery and Lamps from the Foundation Trenches and Wall Constructions of the Gerasa Hippodrome, Excavations 1984-1996

*Ina Kehrberg-Ostrasz*, The University of Sydney
ina.kehrberg-ostrasz@sydney.edu.au

The 1984-1996 hippodrome excavations, directed by A.A. Ostrasz, included the foundation trenches of the cavea chambers, arena and periphery, and exposed the twofold early history of the site. We recovered multiple materials for dating the foundation and construction phase as well as evidence of the makeshift construction method for the lower courses of the chamber- and podium walls. The other subject of this paper is the pottery manufactured at the site when it was still the south-west necropolis. The sizeable recovery of ceramic kiln waste and batches of 1st century BC/AD lamps in the various fills suggest that potters were already active at the hippodrome site long before 3rd century AD potters took over the circus building and made into the Potters’ Suq of Gerasa. It seems whereas the site went through several changes from burials to chariot racing to industrial outputs, the living at the site and the nature of their economic activities changed little. This presentation concludes the series of brief discussions covering the main occupational history and changes of the hippodrome and the site.

Preliminary Results of the 2014-2015 Spanish-Italian Excavation Campaigns at the Early Bronze Age I Settlement of Jebel al-Mutawwaq, Middle Wadi az-Zarqa, Area C

*Andrea Polcaro*, Università degli Studi di Perugia
*Juan Muniz*, Pontificia Facultad San Esteban
andrea.polcaro@unipg.it

The paper will present the excavation results of the 2014-2015 campaigns of the Spanish-Italian archaeological expedition to Jebel al-Mutawwaq, in areas C Center and C West. This excavation areas are located in the eastern sector of the Early Bronze Age I village, extended on the southern cliff of the mountain. During these campaigns an open courtyard with a storage area (L. 51) and a building of apsidal shape with two large circular installations (House 131), dated from the pottery materials to the end of the IV millennium BC, have been excavated: two main phases of use have been identified. The structures have been also inserted in a new topographical grid of the area, performed in 2015. The architectural features together with the findings, pottery and flint tools discovered in these campaigns will be analyzed in order to understand the nature of House 131 and its place in the social and cultural evolution of the EB I settlement of Jebel al-Mutawwaq.
Primary Report of the Results of the Archaeological Survey of Harrat Uweined

Romel Gharib, Department of Antiquities
besan_g@yahoo.com

The Works include the construction, completion and remedying defects of approximately 52.0 km, between Azraq city and the Saudi border crossing at Omary. On the 13th of July 2014, The Zarqa-Azraq-Omary Highway Section /2 (which started from Al- Muaqqar cross till the Saudi border crossing at Omary) has been inspected and surveyed by Zarqa Antiquities Directorate from the Department of Antiquities of Jordan, in order to verify the presence of any antiquities, both monuments and materials, in the highway road itself and what around in both sides of the road. The highway road has been carefully surveyed and checked following the Archaeological Systematic Survey ( 500 meter in both sides of the road) with the help of Dr. Gary Rollfson for three days, during the survey of this important road we recognized 44 archaeological sites like: late prehistoric and late Neolithic enclosures, cemeteries, tombs, flint artifacts, late prehistoric camp (village), huts and late Neolithic shrine distributed all over the Harra. During the survey we could make a complete documentation for Uweined Palace and the surroundings.

Private Lives and Public Means: New Evidence for Urban Development in Late Antique Jarash, Jordan

Louise Blanke, Aarhus University
lblanke@cas.au.dk

A century of excavations in Jarash in Northern Jordan has uncovered an impressive cityscape of colonnaded thoroughfares, temples, churches, theatres and bathhouses. As such, Jarash is among the best-known archaeological sites in Jordan. However, past excavators’ bias towards these Roman and Byzantine monumental remains have created a discrepancy in which our understanding of the city’s longue durée is inadequate and only little is known about the people who once called Jarash their home. A new archaeological initiative, the Late Antique Jarash Project, seeks to redress this imbalance. Focusing on a domestic area in the southwest quadrant of the site, the project examines the infrastructures of daily life and the city’s continuity into the medieval period. A survey of surface remain has revealed an occupational development from cemetery in the Hellenistic period to streets and larger domestic buildings aligned with the Roman grid system. In the medieval period, structures encroached onto the streets and finally, the area saw a transformation into field systems. Of particular importance is a water network comprised by a large open reservoir and at least nine cisterns that not only supplied the domestic houses, but also constituted the principal water system of the medieval town centre.
Production Patterns of Late Roman – Byzantine Locally Produced Reddish Ware (Danish-German Jerash North West Quarter Project)

Signe Bruun Kristensen, Aarhus University
signebruun@ofir.dk

Various ribbed wares dominate the general repertoire of the pottery assemblage found in the North West Quarter: cooking pots, amphorae, jug, etc. – the so-called plain household and storage wares. One of these wares is the Reddish/Red-Brown Ware, which will be the focal point of the proposed paper. The present paper will focus on this particular group of pottery and attempt to comprise the quantitative group of presumably locally produced Reddish Ware with emphasis on table wares from the Late Roman to Early Byzantine period.

The Reddish Ware material embraces a large spectrum of shapes, which induces the question of efficacy and function of the conventional ware type. The aim of the paper is to explore the question of production patterns and assumed functions by viewing the unexpectedly versatile find contexts of the ware, the immediate development of shapes and the regional counterparts. The aim of the paper is furthermore to investigate to which degree the substantial findings of Reddish Ware pottery from the 2012-2013 campaigns in the North West Quarter can help draw a picture of the production and functionality of Late Roman to Early Byzantine cooking ware in Jerash.

Cooking wares are often interpreted as being of merely practical usage; not serving more than a domestic purpose. Is this really the case? In Jarash, additional functions of these pots have been attested and a more careful study will permit a nuanced picture of the ware type and reveal its multi-functionality as well as underline its importance in the archaeological material.

Production Technology of Glass Bracelet from the West Cemetery of Umm el-Jimal in Northeastern Jordan.

Khaledal-Bashaireh, Yarmouk University
khaledsm@email.arizona.edu

SEM-EDX analysis is used in this study to investigate the production technology of 20 fragments of glass bracelets of uncertain dates uncovered from a reused tomb located in the west cemetery of Umm el-Jimal in northeastern Jordan. While six bracelets are complexly decorated with multi-colored glasses, the rest are plain and monocolored. Most of the bracelets are opaque and appear macroscopically dark colored or black. Styles and chemical analysis indicates an Islamic origin to the bracelets. Chemically, the bracelets are divided into natron, plant-ash and mixed-natron-plant-ash groups. Red, white, yellow-green opaque decorations were produced by dispersing micron-scale copper crystals, tin oxide and lead-tin oxides in the glass melt, respectively. The results indicate recycling of older glass for the production of some bracelets and use of metal and alloy by-products as glass colorants.
**Session 8, Hall 3, 24/5/2016, 10:30-10:50**

**Qasr Mushash: Site and Setting**

*Karin Bartl*, German Archaeological Institute  
karin.bartl@dainst.de

The early Islamic site of Qasr Mushash east of Amman is one of the so-called desert castles, which represent an exceptional group of monuments in Bilad al-Sham, in particular in Northern Jordan.

The site is characterized by a variety of different types of architectural units such as representative, domestic and hydraulic structures, distributed over two widely separated areas of settlement. The resumption of archaeological investigation carried out since 2011 by the German Archaeological Institute and the Department of Antiquities of Jordan are focused on the preparation of the topographical plan of the site and the complete documentation of the individual buildings. In addition, several soundings at the qasr and the bath yielded new information concerning the date and the characteristics of these building structures. The results so far show a complex settlement which developed from a small core with a fortification in Roman/late Roman period to a site which has been expanded significantly in the Umayyad period. However, the exact dating of the hydraulic installations needs further 14C analyzes which are currently being carried out. In structural terms, Qasr Mushash shows some similarities with neighboring desert castles as Umm el-Walid and Qasr al-Hallabat.

The data generated so far form the basis for the definition of the function of the site which might have been used as a caravan halt as well as a temporary residence for elites.

**Session 7, Hall 1, 23/5/2016, 4:40-5:00**

**Qusayr ‘Amra World Heritage Site: Conservation Activities, 2013-2015**

*Giovanna De Palma*, Istituto Superiore per la Conservazione ed il Restauro  
*Gaetano Palumbo*, World Monuments Fund  
*Asma Shhaltoug*, Department of Antiquities of Jordan

Since 2010 conservation and documentation activities at Qusayr ‘Amra World Heritage Site have included a wide range of technical solutions aimed at collecting different categories of data. Thermography, 3D laser scans, infrared and ultra-violet photography provided useful information in preparation of the conservation activities. 3D laser scans will be also useful in the preparation of virtual reality models to be used in the development of apps and on-site presentations.

Conservation activities, especially those concerning the painstaking removal of old chemicals applied over 40 years ago on the wall paintings, have taken stock of recent advances in the production of chemical compounds and technical procedures, resulting in the spectacular cleaning of the apodyterium and of the western aisle of the main hall of the bath house. The results, in many cases surpassing expectations, have allowed to re-define the importance of the site and to observe features and details of the iconography and of the paintings’ ancient execution techniques in ways that are bound to change our understanding of Umayyad art and technology.
Session 9, Hall 3, 24/5/2016, 11:20-11:40

Re-Evaluation of the Neolithic Settlement eh-Sayyeh

Dörte Rokitta-Krumnow, German Archaeological Institute, Orient-Department
d.rokitta-krumnow@gmx.de

Eh-Sayyeh is one of the few Neolithic sites known so far in Northern Jordan. Early investigations in the 1990s were followed by new excavations in 2013-2015 undertaken by the German Archaeological Institute under the direction of Karin Bartl. The site is important for our understanding of the transitional phases between the Early and the Late Neolithic (8th to 6th/5th millennium BC), the development and changes of the lithic industry, and the earliest appearance of ceramics.

The size covers an area of 11 ha but this is a result of what is known as a shifting settlement rather than the so called mega sites phenomenon.

The examination of the lithic assemblage has indicated links to the coastal areas during this period whereas the architecture shows affinities with sites in the eastern Badia in North-Eastern Jordan.

Session 11, Hall 3, 24/5/2016, 4:40-5:00

Recent Discoveries from the Roman Fort at ‘Ayn Gharandal (Arieldela):

Recent Discoveries from the Roman Fort at ‘Ayn Gharandal (Arieldela)

Robert Darby & Erin Darby, University of Tennessee
rdarby2@utk.edu

The fifth season of excavation at ‘Ayn Gharandal, Jordan took place from June 17th - July 29th, 2015. Areas within the Late Roman fort and bathhouse were investigated in order to further define the internal organization and layout of its rooms as well as to collect additional data regarding its stratigraphic and occupational sequences. During the course of this work several unexpected and spectacular discoveries emerged that shed further light on the history of the site in the 4th century CE. This paper presents our preliminary findings from the 2015 season and the on-going field work of the ‘Ayn Gharandal Archaeological Project (AGAP).
Recent Excavations at the Late PPNA/EPPNB Site of Mushash 163 in North-Eastern Jordan

Cecilie Lelek Tvetmarken, Deutsches Archäologisches Institut
Cecilie.Lelek-Tvetmarken@dainst.de

Mushash 163 is a late Pre-Pottery Neolithic A/Early Pre-Pottery Neolithic B (9,000-8,300/8,200 cal. BC) site located in the semi-arid desert steppe on the western edge of the Badiya in north-eastern Jordan. It was discovered during the 2012 season of the ongoing Qasr Mushash survey project, directed by Karin Bartl of the German Archaeological Institute, and excavations started at the site in 2014. Thus far, parts of three semi-subterranean stone structures and thick occupational deposits have been excavated, indicating that the settlement was occupied for some time. Of particular interest are also the possible symbolic elements incorporated into the architecture in two of the structures. Initial studies of the chipped stone material and recently obtained radiocarbon dates appear to confirm our initial suspicion that the site dates to the late PPNA/EPPNB, a hitherto little known period in the region. Mushash 163 is, therefore, important for our understanding of the human occupation of this area of Jordan during the early PPN.

Restoration and Rehabilitation of Byzantine Basilica of Moses Memorial at Mt. Nebo, Jordan. Mosaics and architectures

Franco Sciorilli, Franciscan Archaeological Institute Mount Nebo
francosciorilli@yahoo.it

In the summer 2007, the Franciscan Archaeological Institute Mount Nebo (Studium Biblicum Franciscanum, Jerusalem) launched the restoration project of the Byzantine Basilica at Mt. Nebo. Since the beginning of the excavation at Mt. Nebo in 1933 several interventions of conservation and restoration were implemented on the exposed architecture remains and the numerous mosaic pavements. Walls and standing structures were consolidated in the thirties and in 1963 a metallic shelter was built to protect the mosaics and allow pilgrims’ visits. Up to the eighties most of the interventions on the mosaic pavements were intended to preserve it and many of the mosaic were lifted and accommodate on concrete slab (a common practice at the time).

This paper aims to present the accomplishment of the large restoration campaign started in 2007 to implement a new sheltering (re-roofing) for the site and to preserve, restore and show the beautiful mosaic floors within the restored walls of the Byzantine basilica. The entire project was developed as a running workshop with a big local impact on the local community of the nearby village of Faysaliyyah. Several young men from the village were trained over almost a decade in best practices in mosaic restoration, using of new and traditional techniques and materials, as the installation of lifted mosaic on aluminum panels or the production of lime mortar from natural slaked lime.
Reviving the Ancient Indigo Cultivation and Industry in Southern Jordan as a Source of Income for the Local Community: From Historical and Archaeological Evidence to a Modern Trial

Valentina Gamba, UNESCO
Konstantinos D. Politis, Hellenic Society for Near Eastern Studies
Mohammed I. Al-Qinna, UNESCO expert in agriculture
v.gamba@unesco.org
kdpolitis@hsnes.org

Archaeological evidence and historical sources testify that indigo crops were cultivated and processed in the Jordan Valley since the early Islamic periods. Large-scale indigo processing facilities were identified in the area of Ghor el Safi, ancient Zoara, and in the Dead Sea region. Moreover, objects used for the indigo production were found during archaeological excavations in Ghor el Safi, including a large perforated jar and a copper crucible. This production must have continued at least until the beginning of the 19th century, when indigo and other natural dyes were replaced by synthetic dyes. Between 2013 and 2015, UNESCO started a pilot cultivation of Indigofera tinctoria in Ghor el Safi through the project “Empowering Rural Women in the Jordan Valley”. The aim of the pilot was to revive the ancient indigo cultivation and industry to provide income-generating opportunities for rural women and safeguard a traditional know-how. The pilot cultivation trial was established on one dunum of land with the application of several treatments meant to identify the best agricultural practices for the local environmental conditions. Since its establishment, the cultivation tolerated high soil salinity and provided multi-harvests per year. Dye extraction was achieved thanks to the support of experts from Oman, the sole country in the region where indigo is still produced according to traditional techniques. For the first time since its disappearance, the indigo dye was produced in Jordan and the blue colour is now used by the women of Ghor el Safi for the production of their textiles.

Ritual Immersion: Evidence for a Hasmonean Presence at Khirbat al-Mukhayyat

Annlee Dolan, San Joaquin Delta College
Steven Edwards
Debra Foran, Wilfrid Laurier University
adolan@deltacollege.edu
dforan@wlu.ca

Khirbat al-Mukhayyat is located approximately 2.5 km southeast of Mount Nebo, and has been identified as the ancient town of Nebo. Previous archaeological work at the site has revealed a rich occupational history ranging from the Early Bronze Age to the Byzantine Period. The Khirbat al-Mukhayyat Archaeological Project (KMAP) aims to build on this earlier work through targeted
excavations, off-site survey, and documentation of historic buildings and landscape features. The inaugural season of excavation took place in 2014, revealing mainly Late Hellenistic remains, and this paper summarizes the results of this work.

Of particular significance is the discovery of a Late Hellenistic stepped ritual bath or miqveh. The numerous wine presses documented in the vicinity of the mound, and the lack of evidence for a substantial settlement during this period, indicate that Mukhayyat was likely an agricultural site for the production of wine and possibly olive oil. Although these remains do not indicate a permanent Late Hellenistic settlement at Mukhayyat, they do suggest that there was a substantial amount of activity at the site during this time, some of which may have been religiously motivated. The relationship between the miqveh, wine production installations and a Jewish Hasmonean presence will be explored. It is hoped that an examination of the finds from Mukhayyat within the Late Hellenistic context of central Jordan may illuminate the nature of the rural population of this region.

Session 6, Hall 3, 23/5/2016, 2:40-3:00

Roman and Early Byzantine Ceramic Finds – New Results on Micro- and Macro Regional Patterns in Jarash's Northwest Quarter

Heike Möller, Aarhus University/Department of Culture and Society
Annette Højen Sørensen
Heike.Moeller@cas.au.dk

A tradition of nearly 100 years of excavation in Jarash, ancient Gerasa, brought to light immense amounts of finds, which have been published over the last decades in broader synthetic studies mainly focused on late Byzantine and Early Islamic periods. Within the frame of the Danish-German Jarash Northwest Quarter Project initiated in 2011, it is however possible to focus on earlier periods. An overview of local/regional produced and imported Roman and Early Byzantine finds from the excavations in Gerasa’s Northwest Quarter in 2014 and 2015 presented within this paper will for the first time give a coherent overview of earlier phases based on stratified finds. In other words, this material provides crucial information concerning typological queries and fabric studies of Roman and Early Byzantine pottery finds of local and regional production in Gerasa and beyond: The analyses of importations will help to understand the macro-regional structures and networks in which ancient Gerasa was embedded in from the earliest days until early Byzantine times. However recent analyzed finds will furthermore show strong trade relations to the Iberian Peninsula – the outermost Western Mediterranean World.

The results presented in this paper will not only illuminate Roman and early Byzantine Gerasa from its ceramical point of view on micro-regional basis, but its location within Western and Eastern Mediterranean trade patterns.

Session 8, Hall 3, 24/5/2016, 9:50-10:10

Sanctuaries and the Integration of Landscape. Gadara/Umm Qays and its Hinterland

Claudia Bührig, German Archaeological Intitute. Orient-Department
Claudia.Buehrig@dainst.de
Research in recent years at Gadara were characterised by clarifying the development of the Decapolis city. By observing the cityscape, the attention was directed towards the settlement history, exemplary in the so-called Theatre-Temple-Area, with the city’s main sanctuary. In this area it is possible to observe the development, change, and decline of one particular urban space in great detail. Focusing on this area, the significance and interaction of natural environmental and social determinants in the urban development of Gadara can be closely observed, the multiple adaptations and use of the urban space newly created.

During the last years, the research focus in Gadara/Umm Qays has been expanded by exploring the environs in relation to the ancient city as well as the settlement and climate development since the Stone Age. In addition to that, a specific emphasis is put on addressing questions of preserving the ancient remains and their presentation for cultural tourism and local visitors. New research of the ancient town of Gadara’s surroundings provided evidence of palaeolithic, neolithic and early Islamic settlement. Traces of two large, out-of-town sanctuaries were found. This paper shows the analysis of the interactions between Landscape – Sanctuary – and Settlement. Especially this relationship of the Landscape, Sanctuary and Settlement, promotes and shapes the formation of the unique cultural landscape in Gadara and its hinterland. The paper deals with the inner urban sanctuary in the Theatre-Temple-Area, with the extra urban sanctuary of Al Qabu and a kind of a “high place” on the top of Arqub Rumi. The key focus of this paper is on the functional, visual and spatial relationship of these three sanctuaries (visual, functional and spatial connections) in Gadara and its hinterland.

**Session 5, Hall 3, 23/5/2016, 11:20-11:40**

**Sculpture and Religion: Approaches to Nabataean Religion**

*Robert Wenning*, Muenster University  
robwenn@uni-muenster.de

In the early 20th century Brünnow and Dalman gave a first catalogue of monuments with figural sculptures at Petra and included remarks on Nabataean religion, but it was Jean Starcky in 1966 shaping the approach and conclusions about what we call “Nabataean religion”. His approach was based mainly on the epigraphic evidence. Everybody dealing with Nabataean religion is guided by this famous article although our knowledge is grown considerably in the meantime (cf. J. F. Healey 2001). Since the eighties of the last century Fawzi Zayadine introduced figural depictions of Nabataean deities into this topic of debate. He followed the common idea to identify the deities sculptured in Greek types as representing Nabataean deities in an interpretatio Nabataea. At the ICHAJ in Washington and in Berlin and in a couple of articles I had the opportunity to contribute to the topic in the last years. My approach is a bit different from the common approach and I reached some new conclusions, especially on the Petraean deities.

The remarks allows me to introduce the project “The Sculpture of Ancient Petra” (SAP), which I carry out for Muenster University in cooperation with The Jordan University (T. M. Weber) and with great support by the Department of Antiquities. The aim of the project is to document all figural sculptures from Petra. We started in September 2013 and have listed about 750 objects. I will give some information on the project and some insights into the Petraean sculpture.
Sites after Excavation: National Parks and Public Education

Dieter Vieweger, German Protestant Institute of Archaeology
vieweger@uni-wuppertal.de

The main tasks of archaeologists are the proper excavation of a site and subsequent publication of results. However, public societies need more to include archaeology in their everyday lives. This lecture will present one example of how the GPIA tends to sites after excavations. Without constant protection and care they go to rack and become unattractive. Archaeological sites don’t only benefit direct touristic needs (hotels and parking lots). In countries like Jordan, they form part of wider, long-term touristic concepts. However, they need protection and care first and will never become mere “cash machines”. As examples of cultural heritage they have a value of their own.

Didactical presentations of sites (signs with explanations, pathways, leaflets, brochures, 3D-reconstructions, movies) are necessary for all generations to understand historic science and make them willing to protect archaeological sites and spend taxes on scientific work. To achieve this public interest it is necessary to invest in:

- Awareness of the local public; acceptance of foreign people/tourists,
- State involvement in educated rangers (not only paid guards),
- Public facilities (ticket offices, toilets, litter boxes, shops).

Archaeological parks are helpful approaches to historical facts for locals and international tourists. Since they can never be totally protected, we should improve the attitude of locals and tourists alike regarding historical conscience. One way to evoke respect towards antiquities is educating children by means of age-appropriate books. One project of school material for own research work will close the presentation.

Tall Jalul Excavations Results, Phase 1

Randall Younker, Andrews University
Constance Gane, Andrews University
younker@andrews.edu

Excavations at Tall Jalul (5 km east of Madaba) have been conducted for a number of seasons since 1992. These excavations revealed an occupational history that runs from the Late Bronze Age to the Persian Period. This presentation will highlight the recovery and analysis of the architecture, ceramics, small finds (including inscriptions) that have enabled us to reconstruct the possible socio-cultural and political history of Jalul (including the site’s likely ancient identity) from the 13th to the 5th centuries B.C.
Session 9, Hall 3, 24/5/2016, 12:40-1:00

Tall Abu Suwwan: Neolithic Ritual Practices

Maysoon al-Nahar, University of Jordan
maysnahar@gmail.com

Tall Abu Suwwan is a Neolithic site located in the northern part of Jordan in Jarash. Tall Abu Suwwan was known as one of the Neolithic Mega-sites in Jordan. Six Excavation Seasons have been conducted at the site during the 2005-2008, 2014, and 2015. The site was continuously occupied during the MPPNB, LPPNB, PPNC and Yarmoukian periods. Tall Abu Suwwan included a large “grill building” type connected with a mud brick structure. The building included different types of plaster floors. The site produced enormous numbers of chipped stone artefacts, large number of Yarmoukian pottery, basalt artefacts, etc.

During the 2015 excavation season a MPPNB human skulls were discovered in the mud brick area under the mud clayish floor. The discovery included two male and female adults’ skulls, 5-6 infants’ skulls and c. eight years old child’s lower Jaw with full teeth. The appearance of such skulls is a clear evidence for ritual practices preformed during the MPPNB period at Tall Abu Suwwan. The focus of this paper is to analyze these ritual practices and connect it with other features uncovered at the site.

Session 3, Hall 1, 22/5/2016, 4:40-5:00

Tall Damiyah. A Late Iron Age sanctuary for Traders and Travellers?

Lucas Petit, National Museum of Antiquities, Leiden
Zeidan Kafafi, Yarmouk University
l.petit@rmo.nl
zeidan.kafafi@gmail.com

The speakers summarise the results of five seasons of excavation at Tall Damiyah, a small settlement mound that is located close to one of the few fords over the Jordan River. This village in the Jordan Valley seems to have played a crucial regional and interregional role during the Iron Age. Egyptian pharaoh’s were proud to have captured it, the Assyrians visited the site regularly and also the writers of the Old Testament knew this settlement by heart. Spectacular discoveries by the Dutch-Jordanian team have produced a wealth of information about Tall Damiyah and a possible answer to the question why this little hill was so popular in the first millennium BC.
Tell Irbid - Dar As-Saraya excavation: New Results

Ruba Abu Dalo, Researcher
rubaabudalo@yahoo.com

Tell Irbid is located in the center of the modern city Irbid, in north of Jordan. The Tell is considered to be one of the largest artificial tells in both Jordan and Palestine. It measures about 500m by 400m and is 578m above sea level. Unfortunately, during the last decades the site has been altered on sides as the city of Irbid has grown up. Since the second half of the nineteenth century, several individuals and archaeological expeditions have visited, surveyed and sounded several areas of the Tell. The site also includes some ancient tombs dated to the Bronze Ages, Iron Ages that were reused during the Roman periods. Apparently, the uncovered archaeological material at Tell Irbid indicated that it has been continuously occupied from the fourth till the middle of the first millennia BC. In 1995 the Department of Antiquities conducted an excavation in the courtyard of *Dar as-Saraya building on top of Tell Irbid, under the supervision of Ruba Abu Dalu. This presentation aims at presenting a report about the Late Bronze and Iron Age archaeological material in parallel with those excavated by earlier excavations at the site of Tell Irbid. The paper also focuses on the results of a deep examples of the excavated Late Bronze and Iron Ages architectures and pottery and other material culture Remains dated to different period.

Session 13, Hall 1, 26/5/2016, 12:10 - 12:30

The 2015 Field Season at Pella in Jordan: Exploring Urban Settlements of the Third through First Millennia BC

Stephen Bourke, University of Sydney
stephen.bourke@sydney.edu.au

The 2015 field season at Pella in Jordan investigated EBA I-II fortification walls and associated gateways on the eastern side of Tall al-Husn, a Middle to Late Bronze Age palatial residence on the south side of the main mound, and an Iron Age II civic building in the central tell. On al-Husn, work exposed two phases of EB I ‘pre-fortification’ domestic occupation, the first (EB IA/B in date) destroyed in a significant conflagration, and the second dismantled preparatory to the construction of the fortification platforms. On the southeast corner of Husn, a small direct-access paved gateway flanked by a large stone hollow tower, the third in sequence was found to underlie the small EB IB gate uncovered in 2011. On the southern slopes of Khirbat Fahl, excavations on the southern edge of the settlement uncovered two additional phases of the palatial residence, dating across the 17th and 18th centuries BC. Construction employed mudbrick extensively for lined water installations, pillar-supports and large areas of floor paving. Earliest wall footings structures were cut into 19th century BC midden deposits. Several seals/seal-impressions and extensive ceramic and ecofactual datasets
Excavations north of the palatial residence uncovered another seven rooms of the monumental (30 x 30m) civic building under excavation for much of the past decade. Rooms contained red slipped and painted ceramics, several different grindstone types, numbers of loom weights, and several beautiful glass, hard stone and ivory jewellery items, all sealed by a mid-9th Century BC conflagration which destroyed the site. The presentation will discuss architecture and objects for these three complexes, and place each in local and regional archaeological contexts.

Session 9, Hall 2, 24/5/2016, 12:20-12:40

The Ancient North Arabian Inscription J.14202 (AMJ 2) in the Amman Museum: Signature of a Woman in the Wadi Ramm Desert

Jérôme Norris, Université de Lorraine, Nancy, France
norris.jerome@gmail.com

In 1980, William Jobling deposited in the Amman Museum a Thamudic (Hismaic) inscription that he had discovered in a valley of the Wādī Ramm area in Southern Jordan. Because of the premature death of the discoverer, the text remained unstudied until nowadays. In the framework of the Wādī Ramm project, I had been allowed to examine and study it in December 2014. The aim of this paper is to propose a reading and an analysis of this inscription which shows two significant interests. Firstly, it has been engraved by a female author. Secondly, it contains an attestation of the feminine form of the relative pronoun ʿ. The discussion will focus on the linguistic aspect of this text as well as on the issue of women representation in Thamudic inscriptions from North-Western Arabia. This investigation contributes to the researches on the social background of the North Arabian nomadic tribes and the status of women in Pre-Islamic Arabia.

Session 7, Hall 2, 23/5/2016, 5:00-5:20

The Archaeological Missions: a New Cultural Approach, Beyond the Crisis. The ‘Future’ Experience of the Italian-European Archaeological Mission ‘Medieval Petra’ of the University of Florence

Guido Vannini, Florence University (SAGAS)
Guido.vannini@unifi.it

The recent consolidation of a structural crisis that hit the Mediterranean societies of the Near East, poses also the question of how to perform more efficiently, but also in a cultural context of higher ethics, the proper role of international archaeological missions. The sector of the archaeological Heritage, in particular, is today at the center of an unprecedented attack that, however, dramatically demonstrates the powerful contemporary role of archaeological science. “If true, the History of any period, is always contemporary” (B. Croce), and the same applies to archeology, as demonstrated by the martyrdom (a term which here recovers its ancient dignity) of Khaled al-Asaad in Palmira.
Given the current structural crisis, albeit with its Euro-Mediterranean specifics, to get out of it together, we need to propose better cultural models (more ethical-more efficient: between the two aspects, we believe, there is a consistent relationship) than those with which we entered it. In the case of archaeological missions in the Middle East (and not only), whose scientific productivity requires continuity, but in environmental conditions now critically unstable, there is the practical problem of how to redesign our activities in order to act virtuously in a new, difficult, situation, but that may reveal interesting points of view for both parties. The experience of our mission constitutes for us an experimental basis for a new configuration, among remodeling of archaeological readings, roles reformulation and relationships with local institutional (and non institutional) components, and the establishment of programs centered on the relationship between selection of scientific results and socially shared projects. In other terms, overcoming for good the classical structure of international archaeological missions, with its cumbersome legacy of a colonial origin.

Session 9, Hall 2, 24/5/2016, 11:40-12:00

The Building History of North Gate 100 at Khirbat al-Mudayna on the Wadi ath-Thamad

Robert Chadwick, Bishops University
robert.chadwick@ubishops.ca

North Gate 100 had a long building history which makes it unique among gates located east of the Jordan River. This paper will discuss the gate’s building history from its earliest phase as a four chambered structure to the addition of an earth-fill platform and six in-ground silos directly in front of the main entrance. These modifications blocked access to the gate for an undetermined period of time before a new threshold and entrance roadway were built and the gate was restored to its original function. Later in its building history, two rooms were added on to the south end enlarging the gate structure to six rooms. Once completed, two stone benches running in front of all six rooms were added on each side of the interior roadway. Finally, three additional rooms facing a large depression were added to the western side of the central gate structure, while two more were added on the eastern side. During its building history the gate was repeatedly enlarged and modified until in its final configuration it formed a central core structure of six rooms with five additional rooms attached to it.

Session 4, Hall 3, 23/5/2016, 9:50-10:10

The Cave Woman of the Petra Garden and Pool Complex

Leigh-Ann Bedal, Penn State Erie, The Behrend College
lbedal@yahoo.com

In 2013, an assemblage of artifacts associated with woman’s toiletry and personal adornment was uncovered from a cave associated with the Petra Garden and Pool Complex, the site of an elite garden (paradeisos) in the center of the Nabataean capital. The assemblage, which includes a jani-form perfume bottle, bronze bracelet, bronze cup, and ivory hook, is a rare example of
feminine material culture in a non-funerary context at Petra. This paper will provide a study of the individual objects and an analysis of the assemblage’s stratified context which places it in the late 3rd-early 4th century AD, a period of economic and urban decline which is exemplified by the transition of the luxurious pool and garden to an agricultural field. In addition to providing a glimpse at a woman’s personal possessions, the assemblage offers insight into the secondary use of the cave after the garden’s structures fall into disrepair and before their ultimate destruction in the 363 earthquake.

Session 6, Hall 3, 23/5/2016, 2:00-2:20

The Ceramic Inventory of an Extensive Early Roman Villa in Northern Jordan

Frauke Kenkel, German Protestant Institute of Archaeology (GPIA)
kenkel@bai-wuppertal.de

During excavations at Tall Zirā’a in north-western Jordan the remains of a Roman villa with three corner risalits had been revealed and analysed as part of a PhD-thesis. Tall Zirā’a is part of the Gadara Region Project, which is supervised by Dieter Vieweger and Jutta Häser. The tall is located in Wādī al-‘Arab, 4.5 km southwest of the Decapolis city Gadara. The villa can be dated within the 1st century BC and the 1st century AD. The building itself was destroyed; besides the fact that the area was backfilled and overbuilt in the following centuries the ground plan is still clearly recognizable. This paper will present the corresponding ceramic material. Even though the pottery related to the contexts of the villa was mixed due to the later construction phases, it was possible to distinguish the examples belonging to the villa. Furthermore, there were some areas with significant concentrations of certain vessel forms and fabrics. This is why a functional identification of individual rooms based on the ceramic material is possible. For the first time, the ceramic inventory of an early Roman villa from northern Jordan – an area strongly influenced by different cultural forces – will be presented and provides further insight into the cultural process that took place after the Roman conquest.

Session 9, Hall 1, 24/5/2016, 12:00-12:20

The Decline of Christianity in Southern Jordan

Robert Schick, University of Mainz
schickrobert@hotmail.com

For how long were sizable numbers of Christians present in southern Jordan (south of the Wadi Mujib) after the Muslim conquest of the 630s? Throughout the Umayyad period and the start of the Abbasid period, Christians continued to thrive, but historical references to Christians end in the late 8th century, while there is little archaeological trace of Christians beyond the 9th century. However, as soon as the Crusaders arrived in the early 12th century, evidence for local Christians picks up again, only to dwindle once the Crusader presence in southern Jordan ended after 1187. That situation leaves two gaps when few traces of Christians are to be found: a first gap of a couple
hundred years between the early Abbasid period and the start of the Crusades and a second gap between the end of the Crusades and the 19th century. But does the lack of evidence for Christians during those two gaps genuinely reflect their having dwindled to small remnant communities as early as the early Abbasid period or only our not yet having detected their presence?

Session 10, Hall 3, 24/5/2016, 3:20-3:40

The Deep Past as a Social Asset in the Levant¹

Oroub El Abede, British Research in the Levant

The Deep Past as a social asset research studies two villages in south Jordan which represent a period of change in people’s life 9000 years ago. This work questions the potential these highly significant Neolithic archaeological sites have to contribute to people’s live today and accommodated change through the participation in communal activities that serve the interest of the people, the sites and the villages.

These villages with their Neolithic sites have the potential to shed light on the cultural heritage of the present community and their modern practices that are often inspired from the past (Food, herds, architecture of houses gender relations). Yet, for this potential to blossom to generate benefit to the community. The contribution of the local community could encompass appreciating their past, safeguarding their heritage, passing knowledge to young generations and marketing the site and their cultural products.

This will also diversify both the market and the geographical spread of tourism.

¹ This is a British Academy funded fellowship, hosted by Council of British Research in the Levant, research conducted by Oroub EL ABED (PhD).

Session 12, Hall 2, 26/5/2016, 10:30-10:50

The Discovery, Excavation, Study and Conservation of Khirbet Qazone in Jordan

Konstantinos Politis, Hellenic Society for Near Eastern Studies
kdpolitis@hsnes.org

The ancient site of Khirbet Qazone was accidently found in 1996 by archaeologists working at the south-eastern shores of the Dead Sea in modern Jordan. A rescue archaeological project was then immediately mounted to retrieve as much information as possible of this unique site endangered by road works, agricultural activities and tomb-robbing. After additional excavations conducted in 2004 the finds were studied by experts and some material was conserved.

Khirbet Qazone is located in the modern agricultural town of Mazra’a in Jordan. It is comprised of a cemetery with over 5,000 burials dating from the 1st - 4th centuries AD according to Nabataean pottery, jewellery, inscribed tombstones and textiles discovered at the site. These latter finds include at least 53 identifiable Graec-Roman-style tailored clothes, many of which are complete. They are comparable to garments found at Fayum in Egypt, Palmyra in Syria and Masada in Palestine. But their exceptionally well-preserved condition makes them invaluable for study and
Historically Khirbet Qazone has been identified as Mahoza as mentioned in the 2nd century AD Babatha papyri discovered in the ‘Cave of Letters’ on the north-western shore of the Dead Sea. The manner in which the bodies were interned, in a metre and a half deep arcosolia under-cut to the east and tightly sealed with adobe bricks, is similar to the characteristic burial method of nearby Khirbet Qumran, which up until recently was considered unique. The last phase of the cemetery at Khirbet Qazone was clearly Christian as indicated by a different burial method, corpse orientation and inscribed crosses. This is now linked to the discovery in March 2015 of a church nearby.

Session 9, Hall 2, 24/5/2016, 11:20-11:40

The EBA Colonization of the NE-Badia: Fixing the Chronological Framework

Bernd Müller-Neuhof, Deutsches Archäologisches Institut – Orientabteilung
Bernd.mueller-neuhof@dainst.de

Intensive archaeological survey activities undertaken in the north-eastern Badia in recent years have revealed abundant evidence for Late Prehistoric, and especially Early Bronze Age, socio-economic activities. With regards to the evidence, the discoveries of several fortified settlements are of special interest. New 14C dates from these settlements, including newly obtained dates from the early occupation phase at Jawa, form the basis for a preliminary chronological framework for the EBA colonization of this arid region

Session 8, Hall 1, 24/5/2016, 10:30-10:50

The Excavations at Tall Abu Sarbut 2012-2015

Margreet Steiner, Groningen University
msteiner@freeler.nl

Three seasons of excavations have been conducted at the small mound of Abu Sarbut in the Jordan Valley by a Dutch team under the auspices of Groningen University. Earlier excavations (1988-1992) had uncovered a Mamluk village connected with the sugar industry as well as some remains from the Roman period. The new expedition had some surprising results. Excavated were a 2 m thick layer of Abbasid occupation, with walls, mud floors packed with Roman (!) pottery, bread ovens and complete pots. Underneath this layer some Early Roman buildings were found, destroyed by a fierce fire. Among the finds were complete jars, juglets, bowls and cooking pots as well as several kinds of lamps and a number of stone vessel fragments. A test trench underneath the Roman floors revealed earlier layers, possibly from the Hellenistic period. The occupational history of Tell Abu Sarbut thus seems to be much more fragmented than expected, with remains from the Hellenistic and Early Roman, Abbasid and Mamluk periods only. The Early Roman period was well represented in the East Jordan Valley survey, but the Abassid period was not, and Tell Abu Sarbut may have had a specialized function then.
The Global Kites Project in Harrat Al-Shaam

Rémy Crassard, CNRS
remy.crassard@mom.fr

In March-April 2015, the “Globalkites Project” carried out surveys and excavations in the Harrat Al-Shaam (Al-Mafraq province), near the modern town of As-Safawi. The goal of the project is to define the chronology, the variability and the functionality of the ‘desert kites’, which are mega stone structures made of long walls that converge into an enclosure flanked by several closed rooms, called cells. The kites are often considered as hunting traps, but their dating and how they were used remain unresolved questions. The Project is then proposing an interdisciplinary approach at the crossings of anthropology (archeology and ethnology), geomatics and geoarchaeological and bioarchaeological sciences.

More than 20 small soundings were opened, mostly in the kites’ cells, from five different kites and from one stone structure that was reusing stone blocks from a kite. These soundings in the cells appear to be particularly deep in most of the cases (sometimes deeper than 2 meters from the actual surface), showing a very different picture of what we knew from the satellite imagery only. The archaeological material from the soundings is most of the time absent, except rare ceramic sherds and lithic industries dating the kites from the end of the Neolithic to the Early Bronze Age. Effort has been developed to find any other way to date the structures, through geoarchaeological analyses. An important sampling of anthropogenic and natural sediments, as well as rocks from the kites has been carried out, in order to test geochronological techniques such as luminescence and radiocarbon.

The Great Eastern Baths of Jarash/Gerasa: Balance of Knowledge and Ongoing Research

Thomas Lepaon, University François-Rabelais (Tours)
thomas.lepaon@outlook.com

Only important monument built on the eastern bank of the Wadi Chrysorhoas in the ancient city of Gerasa, the thermal complex known under the name of great eastern baths impresses with its ruins preserved in places up to the level of the roofing tiles. Mentioned by all visitors from the beginning of the 19th century, this building never did the object of an in-depth study. Now lost in the middle of modern buildings, the remains of this thermal complex occupy an insulae of 204 m long and, at least, 116 m in width, yet a minimum area of 23 000 square meters thus making the “great eastern baths” the largest monument of ancient Gerasa. As part of a PhD thesis presented in 2012, a study of the remains in situ renewed understanding of the monument as well for the bathing practices than its social function. The latter, well understood thanks to the epigraphic and statuary discoveries found in the north hall and its annexes, raises many questions in regard to
civic life in the city of Gerasa in the 2nd-3rd century. This communication will attempt to take stock of our knowledge about this building and will feature the last morphological, usual and functional thermal complex hypothesis.

Session 12, Hall 3, 26/5/2016, 9:30-9:50


Craig Harvey, The University of Michigan
caharvey@umich.edu

This paper will present the initial findings from the excavation of the ‘Ayn Gharandal bathhouse’s heating system. After initial survey and excavation in 2009 and 2010, the 2015 field season has revealed the entirety of the bath’s heating system, allowing for its comprehensive study. This system represents one of the best preserved heating systems in the Roman East, and its analysis has significantly improved our understanding of how such heating systems were constructed. Of particular significance is the tubuli system, which remains extant in some places up to the top of the wall. This outstanding preservation has exposed the method by which these heating pipes were installed, something unclear in less preserved systems. The close study of the tubuli system has also proven the existence of multiple phases of the bathhouse. Finally, the collection of all ceramic building materials from the bathhouse has enabled a close study of the tubuli and hypocaust bricks, allowing them to be typed and sourced based on form and fabric. The study of this heating system is not only revealing a great deal of new information on the bathhouse and the site of ‘Ayn Gharandal, but it also has the potential to serve as a point of reverence for other, less preserved bathhouses in the region. This paper will highlight the most significant findings to date and will detail the direction of future work.

Session 12, Hall 1, 26/5/2016, 10:50-11:10

The Jordan Museum Documentation System

Balsam Shaban, The Jordan Museum
bshaban@thejordanmuseum.jo

With the rapid advancement of computer technologies, database and software programs became an integral part of the work of the Jordan Museum. The museum is adopting specialized database, for documenting objects information in a way that offer clear access to the data, in accordance with appropriate standards, and retrieval systems. The short-term objective of this work is to digitize all of the museum collection information, and The long-term objective is to develop and implement a special online thesaurus for the objects including photos and virtual videos. It Aims to allow visitors to explore all museum objects and to navigate through the history of Jordan. The paper will present the Jordan Museum’s experience in developing it’s own database system
that serves the museum and conveys new technologies.

Session 2, Hall 2, 22/5/2016, 3:20-3:40

The Jordan Museum Role in Safeguarding Jordanian Heritage Case Study: Hejaz Railway Wagon from Sheideyeh Station

Jihad, Kafafi, Jordan Museum
Jkafafi@Jordanmuseum.jo

The Jordan Museum Participated in the Great Arab revolt Project, the GARP is supported by Bristol University in the UK, King Hussien bin Talal University, The Department of Antiquities, the Jordan Museum, the Council for British Research in the Levant, and HRH Prince El Hassan. Sheideyeh Hejaz railway station was within the surveyed area where the Jordan Museum participant noticed the severe damage to the ottoman 100 years old wagon which was exposed to weather conditions and human ignorance of this important part of the Jordanian heritage.
From this point of view and due to difficulty to protect this wagon in its origin place, the Jordan museum decided to rescue that heritage by moving the wagon into the museum facility to be displayed in the museum garden in proper and suitable conditions.
All logistics were done between all parties responsible including Aqaba railway corporation, Ministry of public works and housing, Hejaz Railway Corporation, and permission was granted to move the wagon to the Jordan Museum site.
After the arrival of the wagon, conservation and restoration works were done by the Jordan Museum staff before settling the wagon into its final place in the Jordan Museum garden.
This paper is considered as a full documentation of a two year project and efforts made to protect part of the Jordanian heritage as one of the Jordan Museum roles.

Session 13, Hall 2, 26/5/2016, 12:10-12:30

The Jordanian Tour Guides are Potential Efficient Rangers in Protecting and Safeguarding our Cultural Heritage

Youssef Hilo, Arab Open University
yhilo@yahoo.com

The Jordanian Tour guides when well prepared through awareness and educational programs, as well as self development, would serve as efficient rangers in protecting and safeguarding our Cultural Heritage.
More than 1000 Tour guides are licensed by the Ministry of Tourism and Antiquities of Jordan, tour all over Jordan with their groups almost all year around visiting Archaeological, Historical and Cultural sites, and museums.
Although they come of different cultural backgrounds, receive different trainings, it is the case of how well they behave and react along with their group members when visiting an Archaeological site. Therefore, there are honorable tour guides who will always comply to best practice, while
there are so many other guides who allow their group members to climb over ancient structures (e.g., the Artemis temple in Jarash) or encourage tourists to buy ancient pottery and coins (e.g., in Petra and Jarash).
The paper showcases the ‘cause and effect’ to site abuse by visitors, adopts an analytical approach in understanding these causes and finally suggests solutions as an antidote to any form of a site abuse caused by man.
The methodology of this paper in providing data is based on a questionnaire targeting the tour guides. In addition, is the field experience of the author and scholarly approach in business and marketing studies as an undergraduate student of BSc.

Session 11, Hall 3, 24/5/2016, 4:00-4:20

The Last Hunters and First Farmers in North-East Jordan? Five Seasons of Fieldwork in the Qa’ Shubayqa

Tobias Richter, Department of Cross-Cultural and Regional Studies, University of Copenhagen
Amaia Arranz-Otaegui, University of Copenhagen
Lisa Yeomans, University of Copenhagen
richter@hum.ku.dk
Kch860@hum.ku.dk
Zhr605@hum.ku.dk

This contribution will present the results of five seasons of excavation at late Epipalaeolithic and early Neolithic sites in the Qa’ Shubayqa area of north-eastern Jordan. Fieldwork by the Department of Cross-Cultural and Regional Studies, University of Copenhagen, has revealed evidence for substantial late Epipalaeolithic and early Neolithic occupations, which critically enhance our knowledge about the Neolithisation process in the eastern part of Jordan. Excavations at the Natufian site Shubayqa 1 have revealed some of Jordan’s earliest stone-built architecture, a rich botanical and animal bone assemblage, as well as large amounts of artefacts, as well as human remains. At Shubayqa 6, excavations produced evidence for a substantial Pre-Pottery Neolithic A settlement with several buildings and a rich stone bead industry. Botanical and faunal evidence provides evidence for a substantial wetland that existed in the Qa’ Shubayqa during the late Pleistocene and early Holocene, which enabled the existence of these substantial settlements. Together Shubayqa 1 and 6 challenge the idea that the east Jordanian steppe and desert zone was a marginal zone for human settlement during the late Epipalaeolithic and early Neolithic, and sheds new light on the geographical distribution of the last hunting and gathering and first agricultural communities in Jordan.

Session 3, Hall 3, 22/5/2016, 5:00-5:20

The Late Petra Project: Ceramics and Settlement in the Petra Region During the Islamic Period

Micaela Sinibaldi, CBRL
Micaela.sinibaldi@gmail.com
The project is focused on the theme of settlement in Petra through the whole post-Byzantine period. In order to make a preliminary chronological distinction of the sites and being able to comment on settlement patterns over the Islamic period, the main archaeological tool employed in the project has been the study of ceramics, in particular those coming from stratified deposits. This paper presents the results of the study of ceramic assemblages from the Petra region, resulting from both excavations and surveys of several international archaeological teams, and some of the elements of methodology used in the design of a new system for the study of ceramics from this specific period and region. Some of the general findings include the concrete evidence that although the Petra valley was never completely abandoned, starting from the Byzantine period and for the duration of the whole Islamic period, most settlement clusters gradually moved outside of it, where better opportunities for water and agriculture could be found. The study of settlement patterns for the Islamic period in Petra must therefore necessarily take account of the whole region, and not be limited to the area of the valley only.

Session 11, Hall 1, 24/5/2016, 4:20-4:40

The Late Quaternary Landscape Evolution of the Jordan Rift Valley Through Geotectonic and Geomorphologic Changes as a Major Pale Climatic and Pale Environmental Proxy in Central and Southern Jordan

Bilal Khrisat, Queen Rania Institute of Tourism and Heritage Department of Conservation Sciences Hashemite University
bilal@hu.edu.jo

Geoarchaeological investigations in Central and Southern parts of the Jordan Eastern Highland have produced information important for understanding the macro-stratigraphic context of the Middle Paleolithic to Neolithic occupational components, as well as latest Quaternary environmental changes and landscape evolution in the Central and Southern parts of the Jordan Rift Valley. The Late Quaternary occupational periods in Wadi al Hasa and Petra areas in South Jordan are associated with geotectonic and geomorphologic processes synchronized with the formation of the Jordan Rift Valley. Apart from the paleoclimatic and paleoenvironmental Proxies’ along with the archaeological records which often incorporate important proxy records of climate, the geotectonic of the Rift Valley played important role in the relationship among climate, environment, and culture. The results of this research indicate that the paleoclimatic and paleoenvironmental Proxies’ as well as the wadi channel cut and fill surfaces and calcrete development are influenced by altitudinal variation within the landscape largely synchronous with subsidence sequences in the Rift Valley as well as location within individual wadi channels. Furthermore, more local and regional, well-dated, multi-proxy studies are much needed to obtain an accurate picture of impact of the Jordan Rift Valley geotectonic in the environmental change in respect of the Late Pleistocene and the Holocene periods of Jordan.
Session 11, Hall 3, 24/5/2016, 4:20-4:40

The Legend of the King’s Highway and Via Nova Traiana in Arabia Petraea, New Evidence

Fawzi Abudanah, The Nabataean Centre for Archaeological Studies al-Hussein Bin Talal University- Jordan
fawziabudanh@yahoo.co.uk

The paper reviews previous works on two ancient major roads in Arabia Petraea, the King’s highway and via nova Traiana. It also presents new archaeological evidence concerning the routes of both roads in the hinterland of Petra. The paper raises new questions and challenges previous hypotheses regarding the paths, the date and function of both roads in the study area. The results and the debate of this paper are based on a fieldwork project, Petra Hinterland Ancient Roads Project (PHARP), initiated in 2011 and 2014 by the Nabataean Centre for Archaeological Studies at al-Hussein Bin Talal University- Jordan.

Session 11, Hall 1, 24/5/2016, 4:00-4:20

The Line Between Antiquities and Heritage

Riham Miqdadi, United Arab Emiratis University
Fatma Marii, Sharjah Institute for Heritage

Different laws in the Middle East countries distinguish between antiquities and heritage in terms of their time intervals. While the international organizations, such as UNESCO, characterized heritage in different perspective.

This paper documents the different articles in these countries’ laws and discusses some study cases as examples of this separation and how specialists dealt with this confusion. Special attention will be paid to the antiquities and heritage in Jordan.

As a result of analysing various cases, the need to define the differences between antiquities and heritage for their timetable and their category all together is highly recommended.

Session 6, Hall 2, 23/5/2016, 3:20-3:40

The Nabataean and Roman Towns at Humayma: An Archaeological Overview

M. Barbara Reeves, Queen’s University
reevesb@queensu.ca

The Humayma Excavation Project, and its predecessor the Humayma Hydraulic Project, have now been carrying out archaeological excavations and surveys at the Nabataean through early Islamic site of Humayma in southern Jordan for three decades. Through this work, a great deal of
information has been collected about the appearance, chronology, and character of Humayma’s Nabataean and Roman towns. The purpose of this paper is to provide an overview of this archaeological evidence focusing on major structures (e.g. a community shrine, a Roman bathhouse), the building materials chosen (e.g. stone blocks, mudbrick), and the organization of the Nabataean and Roman towns (e.g. the location and orientation of structures, the location of roads, hydraulic features, tombs, and quarries). The archaeological evidence shows how life in Humayma’s towns developed during five critical periods in the site’s history: 1) the construction of the Nabataean town in the first centuries BCE and CE; 2) the imposition of a large Roman garrison in the early second century CE; 3) the departure of that large garrison in the late third century; 4) the return of a much smaller garrison in the early fourth century; and 5) the abandonment of the fort in the fifth century.

Session 5, Hall 3, 23/5/2016, 11:40-12:00

The Nabataeo-Roman Site of Wadi Sabra: a New Topographical Survey

Laurent Tholbecq, Université Libre de Bruxelles (ULB/Brussels) (Reader/Speaker)
Caroline Durand, (Ifpo / Amman)
Thibaud Fournet, (CNRS / Ifpo Amman)
Nicolas Paridaens, (ULB/Brussels)
laurent.tholbecq@ulb.ac.be
carolinedurand@yahoo.com
t.fournet@ifporient.org

Questions have been raised on the interpretation of Wadi Sabra, a satellite hamlet situated 6,5 km south of downtown Petra. The site, reached from the Wadi ‘Arabah through Wadi Sabra, lies besides perennial springs, at the bottom of Ras Sabrā and its deep slope towards Petra. A first general 1:50 mapping of the site, conducted in October 2014 by the French archaeological mission in Petra and a Belgian University (ULB), aloud to renew our understanding of its components. A second temple, associated to the precinct partially studied in 1992 by John P. Zeitler has been surveyed, along with its temenos and its associated bath complex. It is to early to characterize the nature of the dwellings that developed between the Nabataean and the Late Roman periods on a hill west of the precinct. The melting activities are better understood and dated. An enigmatic isolated building is tentatively interpreted as a caravanserai. The association between the rock-cut theatre and the sanctuaries is therefore enlightened.

Session 5, Hall 2, 23/5/2016, 12:00-12:20

The New and Authentic Monument-Presentation in Machaerus

Győző Vörös, Hungarian Academy of Arts
taposiris@hotmail.com

Seven years ago, since July 2009, the Hungarian Academy of Arts in collaboration with the Jordanian Department of Antiquities has been conducting architectural surveys, archaeological excavations and column-anastylosis restorations at Machaerus (modern Mukawir), on the hilltop-
The Northeastern Petra Project – An Assessment

Will Kennedy
Zbigniew Fiema, University of Helsinki
Stephan G. Schmid
Bernhard Kolb
zbigniew.fiema@helsinki.fi

This paper presents the latest results of the Northeastern Petra Project (NEPP), which began its investigations in 2011. The project is organized by Humboldt University in Berlin, funded by Deutsche Forschungsgemeinschaft, and co-directed by Stephan G. Schmid, Zbigniew T. Fiema and Bernhard Kolb. The area of investigation is located directly northeast of the confluence of the Wadi Mataha and the Wadi Musa drainages, west of the Palace Tomb, on the high ground overlooking the eastern end of the Colonnaded Street in Petra. The site measures ca 250x180 m. The project is concerned with the comprehensive documentation of the site, which, surprisingly, was never systematically surveyed, described and mapped. A number of large, often monumental and highly decorated buildings was recorded on different terraces in this area that offers a dominant view over the entire city center, from the outer Siq down to the Qasr al-Bint temple. Closest parallels for architectural solutions used in the construction and design of these structures as well as for the architectural decoration are provided by late Hellenistic royal palaces in the eastern Mediterranean, including the Herodian palatial residences. The results of the fieldwork support the hypothesis that the NEPP area was a separate, representational city quarter, which contained the Nabataean royal residence and the associated administrative infrastructure. In its appearance and the presumed function, the architectural complex in northeastern Petra resembles the basileia of the Hellenistic monarchs. Additionally, the project has generated a number of new ideas and propositions concerning the urban development of Petra, some of which will be presented here.
The Northwest Quarter of Gerasa: A New Established Urban Quarter

Georg Kalaitzoglou, Ruhr-University Bochum
gkalait@aol.com

Since 2012 the Danish-German Jarash Northwest Quarter Project provided evidence for a new city quarter on the highest point of ancient Gerasa, which was projected and realized during the late Byzantine and early Umayyad periods. Although the northwest quarter of Gerasa was integrated into the city walls since Roman times, the hill seems to have been settled only sparsely until Byzantine times. Most prominent are the remains of an open stone quarry and the large Roman cistern on the south slope of the hill. This paper wants to give an insight into the structure of the settlement, the architectural layout and the development of this new city quarter until the disastrous earthquake of 749 AD.

The Power of an Archaeology of Altars – Quantity, Locality, Visibility and Expressivity

Ditte Maria Damsgaard Hiort, Max Planck Institute for Social Anthropology International Max Planck Research School for the Anthropology, Archaeology and History of Eurasia (IMPRS ANARCHIE)
ditte_hiort@hotmail.com

The universality and importance of ancient-period altars have often been neglected in worldwide archaeological research. This fact partially explains why one of the principles of archaeological ethics, which concerns the public reporting and publication in the furthering of preservation and unified historical contexts, is often downplayed as well. In Gerasa, north-west Jordan, a vast number of altars are scattered around the site, of which many have never been publicly reported at all; several inscriptions are published, but never before has a collective study of all the altars from one of the largest and most important Decapolis-cities been initiated. From Gerasa itself, we have no fewer than at least 58 so-called horned altars, whose exact symbolic meaning is beyond academic reach. The altars are private donations set up in public space. None of those 58 examples present a secured in-situ situation. The altars are made from local limestone and are cut from one block with additional mouldings; the majority show four horns, which vary in execution. Around half is inscribed of which most carry Greek inscriptions; several show off additional decoration too. Gerasa is the only locality in the entire region, which has produced such an impressive number of altars, especially of the horned altar type. Thus in some respects, this seems to be a local phenomenon, which expresses a great wish not only to make oneself highly visible in society, but also to set up one particular type of altar, of which several aspects are worth to investigate in detail.
The Pre-Pottery Neolithic Site of Kharaysin (Quneya, Zarqa): Fieldwork in 2014 and 2015

Juan José Ibáñez, Spanish Research Council
Juan Muñiz
Eneko Iriarte
Luis Teira
Jonathan Santana
Martin Monik
ibanezjj@imf.csic.es

The site of Kharaysin (Quneya, Zarqa) was discovered in 1984 by Hanbury-Tenison (1986) and colleagues during the Jerash Region Survey (Edwards and Thorpe, 1986). It was considered as an extended PPNB site, with about 36 ha. The site was excavated by a Spanish team in two fieldwork campaigns: 2014 and 2015. As far as we currently know, and still lacking confirmation by radiocarbon dating, two phases of occupation can be distinguished. In CDEFG-55 and TUVX-60 zones, the presence of squared buildings built on surface with stone walls and plastered floors, burials inside the buildings under the plastered floors and the associated material culture (bipolar knapping technology, Jericho and Amuq points, sickle elements in bent sickles, figurines…) indicate a Middle PPNB chronology. In the IJ100 zone, some archaic trends (oval semi-sunken dwellings, decorated grooved stones, and abundant bladelets with pairs of notches) suggest an older chronology. The presence of a very well preserved architecture, including floor paintings, indicates that Kharaysin is an outstanding Neolithic site, which should be studied in detail in the coming years.

The Regional Context of Early Islamic Site of Shuqayra al-Gharbiyya, Karak

Zakariya N. Ben Badhann Na’imat, University of Bonn, Germany
znaimat@uni-bonn.de

Recent archaeological field research at Shuqayra al-Gharbiyya and environs in west-central Jordan has brought to light concrete evidence of Umayyad settlement. Traditional historical and archaeological reconstructions of the cultural progression in post-Islamic conquest central Jordan have always drawn a picture of abatement, perceiving no bona fide Umayyad intervention in the terra nigricata Mo’āb. Mu’tah University’s excavations at Shuqayra al-Gharbiyya have exposed parts of an imposing building, with architectural characteristics typical of a qaṣr (palace). A survey conducted in the surroundings of Shuqayra has documented evidence for the presence of several settlement elements with Umayyad associations representing what could be reckoned as a local socio-economic system, and some elements of this system represent an economic infrastructure.

This paper argues that the palace, which is assiduously located on the southern verge of the Karak
plateau thus benefiting from the economic potentials of two distinct bionetworks (Mo‘āb and al-Hasa) was the core of a local socio-economic system. Meager and enigmatic textual evidence from elsewhere in the Bilad ash-Sham tells that Umayyad palaces represent imperial communities, yet have not been thoroughly studied for their economic lead. The Shuqayra palace symbolizes imperial economic intervention in the supposedly peripheral area in the center of southern Levant. Shuqayra and its countryside is an exemplar of a state-run agro-economy during the eight century AD.

Session 7, Hall 3, 23/5/2016, 5:00-5:20

The Reusable Landscapes of Tall Dhiban: Finding Simple Stories for Complex Sites

Bruce Routledge, University of Liverpool
bruce.routledge@liv.ac.uk

Tall Dhiban is best known as the capital of Iron Age Moab, home of King Mesha and a town mentioned numerous times in the Hebrew Bible. However, this traditional evaluation of what is important about Tall Dhiban has proven to be a poor focus for research, development, public engagement and interpretation at the site. In particular, an Iron Age focus excludes most of the tall’s visible remains and masks the fragmented and complicated history of settlement made evident by on-going excavations at the site. In this paper we will propose the concept of Reusable Landscapes as means of integrating the goals of archaeological research and site development by making the complexity of Tall Dhiban central to the story being told. In particular, the long history of resettlement, reuse and recycling at Dhiban is something easily illustrated by the site’s visible remains. As a repository of cisterns, terraces, building stone and collective memories, all available for reclamation and reuse, Tall Dhiban emerged over time as a resource that allowed people to live flexibly in a difficult environment. The story of Dhiban as a reusable landscape is one that links together all the diverse historical periods during which Dhiban prospered and makes sense of its discontinuities and periods of fragmentation. It is, in this sense, “a simple story” based in the site’s complexity that is suitable for the coherent design of both research projects and site development plans

Session 6, Hall 3, 23/5/2016, 3:20-3:40

The Rites (Duties) of Worshipping Among the Nabataeans

Zeena as-Sultan, Lahaye University
Zeena.sultan1970@yahoo.com

This research has included many aspects listed under the title of “the rites of worshipping”; this starts right from the name of the rite to show the strong connection of these concepts that bind humans with gods. This can be done through many ways such as votive offerings, in which the worshippers strengthens his relation with the gods, thus best owing’s on him bounty and beneficence. On the other order hand, the worshipper has to commit to his duty by producing the offerings; (presents some things)to show the gods that he, the worshipper, has offered the most valuable thing he has in order to indicate his devotion, and the gods in return will not forget him. The sculptures and inscriptions have depicted the strong connection between the priest on one side and the gods and worshippers on the other. Some of the priests are only dedicated to express the gods’ satisfaction, when hearing the complaints of their worshippers .i.e. he is the spiritual intermediate, in certain seasons, months or even fixed day, which are already determined by the
priest, yet he is bound to visit sacred places like temples in order to be blessed by the gods by producing the offerings or performing the prayers which are dedicated to this occasion by the worshippers to their gods; these rites are also stipulated to certain months and seasons within the year and which the pilgrims have to perform.

Session 13, Hall 3, 26/5/2016, 11:50-12:10

The Ritual Landscape of Murayghat

Susane Kerner, University of Copenhagen/ToRS
kerner@hum.ku.dk

In Jordan several dolmen fields exist, concentrated in a strip from Northern to Central Jordan, of which many, including the field at Murayghat, are under threat of destruction. Murayghat, central Jordan, consists of a whole landscape with a central knoll, showing horse-shoe shaped, circular and rectangular stone structures, surrounded by dolmen, standing stones, and other stone structures. The dolmen (originally over 150) are nearly all visible from the central knoll. The central knoll with its megalithic structures is surrounded by smaller scale architecture, dating mostly in the MBA, but with pockets of EBA material in the lower levels. The hills also show many caves, many of which might have been used as burial places.

The immediate threat to the site (caused by stone quarries) is now stopped, but many dolmens have already been destroyed. The remaining fields and the central knoll of Murayghat have now been studied for two seasons.

The lecture will discuss the material evidence and present the structures studied so far. It will also discuss possible ways to present the results of survey and excavation, so that public interest and understanding of the dolmen fields can be increased.

Session 13, Hall 2, 26/5/2016, 12:30-12:50

The Role of the Center for the Study of Natural and Cultural Heritage at the German Jordanian University in Linking Science with the Needs of Jordanian Society

Nizar Abu-Jaber, German Jordanian University
nizar.abujaber@gju.edu.jo

CSNACH is a tool of the GJU for reaching out and helping turn theoretical knowledge into practical results. This takes place through a number of scientific, technical, educational and outreach projects. In this presentation, some of these activities will be presented to give an idea of the nature and scope of past and ongoing projects.

The MEDSCAPES Project is an EU ENPI initiative to introduce and promote the concept of Landscape Character Assessment as a tool for understanding landscapes and better planning processes. CSNACH was involved in the implementation of LCA in the Yarmouk River basin as well as developing training and tertiary educational materials for stakeholders and graduate students in relevant specializations.

The Ancient Terrace Project is funded by the SRTD II program through the Higher Council of
Science and Technology. The purpose is to apply modern hydrological modelling tools in the understanding the design characteristic of ancient terraces and how they modified the flow patterns on slopes and how much water was stored in sediments behind them. These terrace systems and prominent components of the landscape around Petra, and the Petra Development and Tourism Regional Authority has signed an MoU with CSNACH. This MoU will allow for the development of a better understanding of floods in the area and ways to mitigate them. These and other projects and activities will be highlighted in this presentation.

Session 10, Hall 2, 24/5/2016, 3:00-3:20

The Rural Economy of Petra: Archaeology, Heritage, and Community Engagement at Bir Madhkur

Andrew Smith, George Washington University
amsii@gwu.edu

The Bir Madhkur Project has surveyed extensively the central Wadi Araba to understand the economic relationship between ancient Petra and its hinterland. In addition to hundreds of sites recorded that illuminate that relationship, the project has also sought to contextualize the data better by conducting soundings at archaeological sites of clear economic significance. These include the Roman/Byzantine site of Bir Madhkur itself, a Nabataean caravanserai to south, and a local farmhouse to the west; and the evidence from this work shows the clear significance of Bir Madhkur along a network of trade routes linked to Petra. In an effort to make the data about the ancient economy relevant to the modern economy, in relation to Petra’s hinterland, the Bir Madhkur Incense Route Project was conceived and received support from ACOR-USAID SCHEP in 2015. The focus of this project (BMIRP) is to promote the heritage conservation of Bir Madhkur and sites in the region by engaging with the local community in economic development activities aimed at restoring some of the connectivity with Petra that Bir Madhkur and its inhabitants once had in antiquity. This paper is a summary of that work.

Session 4, Hall 3, 23/5/2016, 9:30-9:50

The Sculptural and Architectural Programme of Petra’s Tomb 70

Björn Anderson, University of Iowa
bjorn-anderson@uiowa.edu

Tomb 70 at Petra, situated prominently on the Street of Façades just beyond the Khazneh, is an imposing structure, a freestanding monolith over 15m tall and nearly 8m wide. This tomb boasts a complex mixture of architecture and sculpture; it is crowned by a frieze of articulated merlons, and both the north and east façades have elaborate decorative false doorways. Urns are carved in high relief as acroteria on the doorway pediments, and, on the north side of the tomb, the pediment is crowned by a sculpted relief of a draped female figure. Close examination of its features was carried out in May 2015 with the support of Jordan’s Department of Antiquities and the Petra Archaeological Park. The tomb is unfortunately badly weathered, the sculpture especially so, but
through the use of photogrammetry and 3D modeling it is possible to reconstruct the architecture and revive the appearance of the sculpted figure. My paper will present an assessment of the identity of this figure as well as an exploration of the overall architectural programme of the tomb, evaluating the significance of the combination of these elements and the role of the tomb in the wider context of Petra’s funerary and civic development.

Session 12, Hall 1, 26/5/2016, 9:50-10:10

The Shrine of the Beheading of Saint John the Baptist and the Origins of Madaba

Elisabeth Lesnes, Andrews University
elesnes@libero.it

Just over one hundred and thirty years have passed since the Christian tribes from Kerak arrived at the collapsed and scattered ruins of Madaba, once a thriving and important Christian town on the eastern edge of the Byzantium Empire. In this presentation about the Church of Saint John the Baptist, we will explore the region of Madaba from the perspective of its settlement history, as well as its visual and emotional impact on the nineteenth century explorers and missionaries who rediscovered it. We will assemble the appropriate historical, narrative and photographic materials that document the establishment of the town and the steps in the construction of its Latin church. Despite recent and intensive urbanization, some of the western hill caves used by the original migrants to Madaba have been preserved and incorporated into new constructions. A survey in this area has also led to the identification of a large cave which probably corresponds to the rock chapel used by the first Latin missionary. As for the archaeological remains discovered incidentally during some recent work in this church, they merely confirm the written testimonies of the missionaries in the late nineteenth century. These fascinating and wonderful discoveries only slightly pull back the curtain of history, providing us a peak of what yet lays hidden below the surface.

Session 5, Hall 3, 23/5/2016, 12:20-12:40

The so-called (B Building) at Pétra: An Official Building in Connection With the Temple of Qasr al-Bint

Renel François, Inrap / CNRS
francois.renel@inrap.fr

This paper propose to focus on the Nabataean Building adjoining the Qasr al-Bint temple on the east. First studied by W. Bachmann at the beginning of the 20th century, it has been excavated by the French Archaeological Mission at Petra since during its 1999, 2003 and 2012-2014 campaigns. The preliminary results confirm the importance of this complex belonging to the architectural programm of the Qasr al-Bint related to the reigns of Obodas III or Aretas IV. We propose, on the basis of architectural and archaeological remains, to associate this complex with the religious activities practiced in the sacred precinct.
The Substantial Architectural Remains of the Aceramic Neolithic Site of as-Sifiyya Compared with those of the Contemporary Mega Sites in Southern Jordan

Hamzeh Mahasneh, Mutah University
hamzeh1957@yahoo.co.uk

As-Sifiyya is one of the mega Neolithic settlements in Jordan with architectural remains extending over an area of 120 dunams. Five seasons of excavations were conducted at the site, revealing architecture with stone walls and burnished plastered floors with red ochre, human burials and enormous number of finds including: ground stones, chipped stones, bone tools, clay figurines and personal ornaments. Rich cultural layers provide typical Late PPNB industries with their evidence of specialized labor and crafts, devoted to a substantial part to the production of what was needed for the settlers of as-Sifiyya village.

The architectural remains uncovered at the excavated areas of as-Sifiyya are impressive, exhibiting a great investment of effort. Best known are the rectilinear houses with their plastered floors, door lintels and the unusual system of channels beneath the floors. The crafts of building and making plaster floors testify to the investment of great effort. The inhabitants of the site have left what appears to be their permanent settlement. From the material culture obtained from as-Sifiyya, it is obvious that we are dealing with well preserved dense terraced housing, comparable to that of present-day villages in areas of similar settings such as Dana near Tafila and Bathan near Karak. As-Sifiyya is related to an increasingly impressive number of contemporary sites in southern Jordan. The discovery of the building units of the site and the rest of the mega Neolithic sites of southern Jordan makes clear that these settlements represent a widespread phenomenon of building house units during the seventh millennium BC.

This paper also seeks to provide an overview of the nature of the first settled villages in southern Jordan, and the cultural connections that linked such sites to one another. The impressive achievements of the Neolithic of southern Jordan encompassing village life, crop domestication and animal husbandry, make the Neolithic period one of the most attractive and compelling objectives of an archaeological inquiry.

The Trajanic Auxiliary Fort at Hauarra (Modern Humayma), Jordan

John Oleson, University of Victoria, Canada
jpoleson@uvic.ca

The Roman fort at Hauarra, modern Humayma, was founded soon after the conquest of the Nabataean kingdom by Trajan in AD 106, and the establishment of the Provincia Arabia. This complex, one of the best preserved principate period forts in the Near East, was designed to accommodate auxiliary units detached from one of the legions stationed in the region after
the conquest. An inscription found in the associated civilian settlement mentions the Legio III Cyrenaica, but units from the Legio VI Ferrata may also have cycled through the fort. Preparation of the final report concerning the fort has lead to new conclusions concerning its design, construction, layout, history, and function, along with its relation to other military architecture in the region. The fort and its interior structures provide one of the clearest known examples of modular planning in Roman military architecture. The talk will present these new results and pose questions concerning the phasing of the fort and the part it was intended to play in the Roman occupation of the region.

Session 9, Hall 1, 24/5/2016, 11:20-11:40

The Transition Period in Jordan: Rethinking the Early Ottoman Period with Reference to Tall Hisban

_Gul Sen_, University of Bonn
gsen@uni-bonn.de

Tall Hisban has been one of the most long-standing archeological sites in Jordan since 1967. Findings from rural life contexts during recent excavations at this multi-period site in central Jordan directed by Bethany Walker may offer a new perspective on the life during the transition period from Mamluk to Ottoman rule. Thus, Tall Hisban can be considered a potentially rich source for the understanding of rural life during the transition period.

The authors project whose—outlines will be presented—envisages to supplement the investigation of ceramic assemblies, multifunctional caves, the cemetery and farmsteads, some of which have only been partly studied, with future results of the archeobotanical and—zoological analysis—a hitherto untried combination of approaches. The investigation of material artifacts from the transition period will be supplemented by written and archeological sources. I will discuss the potential of this interdisciplinary approach.

The investigation of Jordan during the transition period and its particular dynamics has the potential to help us rethink conventional perceptions of the transition period.

The paper is based both on features of an ongoing project on the transition period as well as on the recent archeological fieldwork at Tall Hisban in which the author has been involved.

Session 11, Hall 1, 24/5/2016, 4:40-5:00

The Umm el-Jimal Project: Stratigraphy and Ceramics from the House XVII-XVIII Complex

_Elizabeth Osinga_, University of Southampton
eaosinga@gmail.com

Two probes inside House XVIII were excavated in 1977, with the results later published by Robin Brown in Umm el-Jimal vol. 1. In 2012 and 2014, intensive archeological work (sixteen trenches)
and conservation was undertaken at both houses, under a grant from the U.S. Ambassadors Fund. The rich finds and stratigraphic record have confirmed the previously proposed Byzantine date for the structures, while also providing a much deeper and wider understanding of the alterations to the complex and its occupational history from its founding into the 20th century. The most striking discoveries were evidence of activity in the Roman period, which hinted at the existence of buildings now lost or incorporated into others, and the discovery of later occupation in the complex in the Middle/Late Islamic period.

Due to the presence of very few coins, ceramics are the primary tool for dating, both at this complex and in general for excavations at the site. Before 2012, pottery at Umm el-Jimal was not recorded by a strict methodology; thus, a ware/fabric system and typo-chronology was developed by the author during the course of the House XVII-XVIII excavations, which allowed for full quantification of the 2014 corpus and a better understanding of pottery sources over time. This paper will present the results of the excavations and outline the phasing of the structures, and also introduce some of the common types of pottery found at the site over its long history of occupation.

Poster

The Zizia Pottery Factory, Jordan

Maria-Louise Sidoroff, independent scholar
maria.sidoroff@gmail.com

Aware that modern containers and cook ware were replacing pottery, scholars in the last century undertook research to preserve technical and social details of the craft. The literature attests to a decline in both household and industrial operations but for decades the Zizia Pottery Factory in Jizza, central Jordan, has continued to be a resource for archaeologists and ethnographers interested in pottery manufacturing. This study offers empirical data and sociocultural observations of a modern industrialized system comprised of interconnected components: artisans, scale and technology of production, spatial and social organization, and distribution. Based on an intimate view of the factory workings during visits in 2012 and 2013, the author concludes that the Zizia achievements are due to a continued demand for domestic and decorative ceramic ware and the owner’s unique access to free resources. Also contributing to the success is a respectful hierarchical social structure within the factory and a standardized technology perfected over several decades.

Poster

Toward an Edomite Religious Iconography? An Overview of Figural Cult Images and their Archaeological Context in the Iron II

Erin Darby, University of Tennessee
edarby1@utk.edu
Artifacts from a number of sites within possible Edomite territory have been considered evidence for a unique Edomite religious iconography in the Iron Age. Although physical analyses of these objects and their archaeological context have problematized this schematization somewhat, the existence of an Edomite iconographic tradition is still in debate.

Many of these claims have rested disproportionately on objects excavated at shrine sites in modern Israel, but these shrine deposits are unique for a variety of reasons, including their specialized deposition and the possibly mixed nature of the sites’ inhabitants. When cultic artifacts excavated within Edomite sites in southern Jordan are compared with these shrines, the picture of “Edomite” religious artifacts becomes more complicated. While the objects uncovered in southern Jordan are not mentioned with the same frequency, they actually contribute a great deal to the overall picture of religious ritual within the boundary of Edom, especially for domestic religious practice. Thus, this paper will compare recently published and unpublished data from purported Edomite shrines with published objects uncovered from Edomite sites in southern Jordan to present a more complete picture of the range of Edomite religious iconography and to explore the extent to which this iconographic tradition is either homogenous or unique in the Iron II.

Session 6, Hall 2, 23/5/2016, 3:00-3:20

Towards a Conservation and Site Management Strategy at Umm al-Jimal

Bert de Vries, Calvin College
Muaffaq Hazza, Al el Beit University
dvrb@calvin.edu

Introduction: Ancient Umm al-Jimal includes an extensive naturally preserved Byzantine / Early Islamic set of ruins -constituting a major Jordanian and world heritage ‘treasure’ - located in the midst of the rapidly expanding village of Modern Umm al-Jimal. Recently, growing interest in the site has an urgent need to develop its facilities to (1) present the site for visitors in intelligible and attractive ways, (2) provide visitors with comfort, entertaining and market services, and (3) engage the modern community for their own economic benefit and heritage celebration.

The question posed in this paper is: How can the site be prepared to satisfy these modern development needs while also preserving it according to the international standards/rules for the conservation of antiquities?

Answer is developed in dialectic manner; i. e., through the posing of dilemmas/choices faced in Site Management Planning at Umm al-Jimal:
1. Conservation: Can strict standards of Preservation (muhafidhah) be accommodated to the popular desire for Reconstruction (tarmim)
   Interpretation: Can interpretive material be installed on the site be designed to serve diverse cultural communities, ranging from local to academic?
2. Site Uses: Should site use be strictly archaeological (e.g., museum) or may they include broader culture and amusement events (e. g., a music concert)?
3. Site management: Even though the DoA is the key site management agent, is it possible to engage non-DoA agencies such as local groups to carry out site management chores and services
Session 11, Hall 2, 24/5/2016, 5:00-5:20

Towards an Eastern Perspective on Heritage Awareness and Education

Hans Georg K. Gebel, Free University of Berlin
Talal Hamd al-Amareen, Cottbus University
hggebel@zedat.fu-berlin.de

Awareness and education activities in Near Eastern heritage work and archaeology mostly target local bearers of cultures as objects of intervention while the understanding of the reciprocal character of awareness raising and heritage education remains restricted. Professionals trained by foreign standards and values of cultural understanding and exchange appear to have such object dispositions rather than applying – the sometimes painful and long-term – embedded strategies in heritage/cultural work at eye-levels. While using the vanishing Bedouin material and cognitive heritage of South Jordan as an example, this contribution raises the questions of 1) how western or western-minded archaeologists, anthropologists, and other culture workers hitherto dealt with their responsibilities in front of a vanishing culture, why 2) western concepts of culture and heritage may have failed contributing to sustain protected cultural milieus, and 3) to what extent locals are ready to be part of such educational programs, particularly if they are designed by foreign initiatives?

Poster

Traces on Loom Weights, an Experiment and a New Loom Weight Typology for Transjordan

Jeannette Boertien, University of Groningen
jhboertien@gmail.com

Loom weights were used as stretchers on the warp-weighted loom. Because textile hardly survives in the Levant due to adverse soil and climatic conditions, the study of loom weights found in situ gives us the chance to reconstruct textile production. Iron Age loom weights are mostly made of raw clay and show a great variety in form. To distinguish between marks of manufacture and traces of use an experiment was needed to collect information about the shape and size of loom weights and to gather information on the marks manufacture leaves on different types of raw loom weights. Archaeological classifications of clay loom weights are usually based on morphological criteria. In this study on Iron Age loom weights from Transjordan attention is paid to a technological approach of the study of these artefacts. Like in technological pottery studies, this approach focuses on the reconstruction of the manufacturing technique based on the interpretation of technical characteristics followed by a simulation experiment. It gives an explanation for the various morphological loom weight types.
Trade and Cultural Exchange: Late Bronze Age Cypriot Imports from Tall Zira’a

Luisa Goldammer-Brill, Westfälische Wilhelms-University, Germany / GPIA Amman - Jerusalem

A complex system of trade relations, cultural exchange and interdynastic politics existed during the Late Bronze Age in the Mediterranean. Written testimonials, such as the Amarna letters allow us an insight into social and cultural aspects of societies, but finds are limited. For this reason, pottery and its wider distribution and daily use can help us to understand this system. A typical feature of Late Bronze Age pottery is a continuity of the pottery forms from the Middle Bronze Age on the one hand, and a new development of shapes on the other hand. An intensive contact within the Mediterranean world brought imports like Mycenaean and Cypriot vessels to Asia Minor, the Levant, ancient Palestine, and Egypt.

This paper focuses on one of these new developments, particularly on the Cypriot imports from Tall Zira’a the so-called Milkbowls. These hemispherical bowls with one handle, and the typical brownish or blackish vertical or horizontal painted geometric bands, were originally produced in Cyprus; however, they can be found elsewhere in the Mediterranean region. In order to better understand this important settlement in the northern part of Jordan, the trade relations of Tall Zira’a during the Late Bronze Age are examined, including surrounding sites and their role in these complex systems of cultural exchange.

Udhruh Archaeological Project

Mark Driessen, Faculty of Archaeology, Leiden University
Fawzi Abudanah, Al-Hussein Bin Talal University
fawziabudanh@yahoo.co.uk
m.j.driessen@arch.leidenuniv.nl

The Udhruh Archaeological Project is a joint venture between the Petra College for Tourism and Archaeology of Al-Hussein Bin Talal University (Jordan) and the Faculty of Archaeology of Leiden University (The Netherlands). The project – dealing with the site of Udhruh (South Jordan) and its surroundings – is an international and interdisciplinary research program that combines archaeology, geo-archaeology (e.g. non-destructive exploration techniques), sustainable tourism, heritage management and environmental sciences as irrigation and land degradation. In this paper we present the results of the 2011-2015 campaigns.
Poster

Umayyad Cultural Heritage Significance in Jordan and the Improvement of Mediterranean Territorial Cohesion Through the Setup of a Touristic-Cultural Itinerary Project

Naif Haddad, Hashemite University
Talal Akasheh, Hashemite University
Leen Fakhoury, Cultech, Jordan German University
Mohammad Dibajeh, Cultech
Bilal Khrisat, Hashemite University
Fardous Ajloni, Hashemite University
naifh@hu.edu.jo

The Umayyad period represents one of the most prosperous periods in the history of Jordan. Jordan has been the great stage for events that influenced Islamic history and the entire Mediterranean region. One such event was when the land of Jordan hosted the first confrontation between the Islamic people and the Byzantine people in the battle of Mutah near Karak. Another such event was the decisive battle of Yarmouk. Perhaps the most important event was when the 'Abbāsids launched the movement against the Umayyads. The Abbāsids used al-Humaymah, located in the hyper-arid region of southern Jordan as headquarters before going on to establish their succession in Baghdad.

Jordan was enriched with some of the finest examples of early Islamic architecture found anywhere, including caravan stops, bath houses, palaces and houses. The Umayyad period in Jordan sparked an expansion in urban and rural centers including Jerash, Amman and Tabaqat Fahl (Pella). These multi-functional structures were influenced by the emerging Islamic state’s ambition to strengthen the power and the economy of the newly established dynasty. They also demonstrate how deeply Umayyad culture had penetrated this early Islamic area.

Indeed, the majority of the architectural remains from the Umayyad golden age can be found in Jordan. Some of these remains have been preserved in astonishingly perfect condition. This demonstrates cultural characteristics of the Umayyads in the Middle East. In Jordan, one can discover that the Umayyad achievements are also reflected in the creative management and dynamic ability of the Muslim culture to expand far beyond urban centres, to exploit agriculture and trade potential of formerly marginal frontiers. In Jordan, though, the largest number of Umayyad sites in any given country can be a real attraction to tourists provided the right context and marketing strategy is employed.

On the other hand, the first Islamic dynasty has left an impressive cultural and architectural heritage throughout the Mediterranean, which unfortunately has been underestimated from a touristic perspective. The EU funded Umayyad Routs Project (2012-2015) Improvement of Mediterranean Territorial Cohesion through the Setup of a Touristic-Cultural Itinerary, could be a golden opportunity to promote this heritage as a new touristic product on a local and regional levels, as these suggested itineraries will have national and local touristic routes.

However, based on other existing tourism promotion package, it might not be successful on its own unless incorporated within other domain itineraries like Petra and Jerash, as some itineraries
to the Umayyad desert castles are included within other promotion packages.

Of prime importance in these routes is to appeal to different people with different religious and cultural backgrounds in a manner that makes Umayyad itineraries a special experience to each and every tourist. Therefore many considerations must be taken in to consideration and to be addressed and discussed, based on the Icomos Charter on Cultural Routes (2008), in which many aspects must always be evaluated in connection with other values of an intangible nature, such as the existing tourism promotion packages, religious tourism issues, the Umayyad sites readiness, willingness and unawareness, accommodation, food varieties that can be offered to the guests’ palettes, the Old Hajj which followed the ancient trade routes from Hejaz to Syria is an ancient landmark. In addition stakeholders to obtain their comments and criticisms.

This paper attempts firstly to define the cultural heritage significance of Umayyad Jordan, secondly to present and discuss the main results of Jordan case suggested Itineraries based on methodological approach and planning criteria, thirdly to define challenges and potentialities, the different initiatives connected to the itineraries that will be implemented, and fourthly to evaluate the views of public and private tourism sector organizations in developing such new niche product, and fifthly to suggest some recommendations.

**Poster**

**Understanding SCHEP**

*Nizar Al Adarbeh, SCHEP*

*Huda Kilani, SCHEP*

*Maria Trogolo, SCHEP*

*Sofia Smith, SCHEP*

*Zaid Kashour, SCHEP*

The Sustainable Cultural Heritage through Engagement of local Communities project (SCHEP) is a four- year USAID- funded project that takes unique approach to preserving, managing, and promoting cultural heritage resources (CHR) in Jordan through a community- first approach. It runs from 2014 to 2018 and is implemented by the American Center of Oriental Research (ACOR). Among the project’s many components, SCHEP utilizes a grass- roots model of site development, emphasizing the local communities as primary stakeholders. A concept new to Jordan, introduced by SCHEP, is the site steward program, in which a member of the host community acts as a liaison between the broader local communities and the projects and are involved in outreach efforts for the sites. At least eight sites in Jordan will receive SCHEP funding, and the goal is to raise awareness, both in the communities and throughout Jordan of these sites well as to provide training and employment opportunities. The posters on display at ICHAJ will explain the core concept of SCHEP and feature the project sites as well as capacity building activities on many levels including with the Department of Antiquities, universities, and Schools.
Understanding the Contours of Rural Life in the Middle and Late Islamic Periods

Bethany Walker, University of Bonn
bwalker@uni-bonn.de

Our archaeological understanding of rural society in the later historical periods in Jordan is quite limited. What distinguished a village from a town, how villages were structured and how they changed over time, and the character of their vernacular architecture and material culture are potentially rich topics of research that have yet to be systematically explored.
Phase III excavations of the Hisban Cultural Heritage Project began in 2013 to investigate the structure and development of village life in the medieval Islamic era. The three excavation seasons since then have focused on several clusters of vaulted, stone-built structures on the north, west, and south slopes of the tell. Identified as Mamluk-era farmhouse units, the clusters may represent extended family units, with their own water facilities, stables, and food storage. In support of the excavations, 3D laser mapping of the subterranean water systems began in 2014.
On-going analysis of the built structures, their associated water systems, their small finds (and particularly the Damascene jar burials of Field B), and palaeobotanical and zooarchaeological remains from stratigraphically relevant deposits suggest somewhat surprising patterns that challenge what we think we know about this period historically. Evidence of changes in local agriculture, food distribution, and restructuring of the village after the 14th century suggests ways in which local society was able to adapt to the economic, political, and environmental changes of the day. The results of the recent excavations will be evaluated against the backdrop of continuing textual analysis and current debates in Mamluk Studies.

Usability of Dense Image Matching Technique in Cultural Heritage Documentation; Examples from Jordan

Ala’a Al-shwaiter, Hashemite University Queen Rania faculty
allaa_shwater@yahoo.com

The archaeological heritage constitutes the basic record of the past human activities, where the documentation and management of archaeological heritage and historical sites have become very important issues. The uses of new efficient and accurate techniques are very important for achieving better documentation and management. Recently, archaeologists have started to note the importance of digital techniques, and have started to explore the possibilities of digital photogrammetry as a tool for documenting spatial data that is a three-dimensional optical model constructed from at least two photographs and can be accurately measured to give either graphical or digital results. The aim of this thesis is to solve some problems in graphic documentation such as time, efforts, that are needed, in addition to a specialist and high fund to deal with some instrument, for that, the researcher used a 3D software SURE in addition to other software to
create three-dimensional models of archaeological building, structure different statues in order to produce high realistic and accurate 3D modeling of the studied objects. This research applies the technique in different heritage structures and objects made by different materials and textures, after determines the suitable software parameters regarding the used software. The 3D processing of the data was run using different groups of collected images to find the final models. The result proved the effectiveness application of one of the photogrammetric techniques by using 3D model software’s: (SURE, Visual SFM, Cloud compare) in documenting archaeological heritage, and overcome problems that limit applying such a technique in the field of archaeological.

Session 4, Hall 1, 23/5/2016, 9:30-9:50

Wadi Al Jarra Dam Rehabilitation Project

Ulrich Bellwald, Petra National Trust
intrmeem@go.com.jo

The “Wadi Al Jarra Dam Project” aims at excavating, restoring at rehabilitating the entire flash-flood retention system in Wadi Al Jarra in order to protect and preserve the façade of the treasury from the impact of flooding. In a first step of a comprehensive, overall restoration and rehabilitation project, the actual project intended to excavate, restore and rehabilitate the area of dam 3 in the narrow eastern branch of the wadi. It was implemented from autumn 2011 to the end of 2014. During the field work the entire retention basin of dam nr. 3 was fully excavated, the outflow valve at the bottom of the dam and the outflow channel connecting the valve with the retention basin of dam nr.4 were cleaned and brought back to full function. The retention basin of dam nr.4 was partially excavated and the spill-over channels leading into the western branch of the wadi were also cleaned. The excavation revealed an enormous amount of finds, among them a great number of cautiously buried votive deposits of various ceramic vessels of which many were not even broken. The identification of the finds showed clearly, that all of them dated to a period between 25 BC and 80 AD. That means, the flash-flood retention system in Wadi Al Jarra was completed and in full operation at the beginning of the last quarter of the 1st century BC. This dating coincides perfectly with the construction period of the flash-flood retention dams excavated and restored in the Siq.

Session 7, Hall 3, 23/5/2016, 4:20-4:40

Water Management at the Nabataean/Roman Settlement of Khirbat al Mudayna at Wadi ath Thamad

Noor Mulder-Hymans, Independant Scholar
noor.mulder.2@home.nl

A Nabataean/early Roman site at Khirbat al Mudayna in Wadi ath-Thamad has been excavated in the past decades under auspices of Wilfrid Laurier University, Waterloo, Canada. The site is located at the foot of an Iron Age hill (Tell), c. 30 km south of Amman in northern Moab.
along a wadi.
An 11 x 16 m reservoir and a large farmhouse were excavated.
The reservoir was well-constructed and remodeled for domestic use in a second phase. An oven
was found with cooking pots and other pottery next to it.
Adjacent to the reservoir a complex of water-retaining walls was partially excavated.
The farmhouse consisted of two parts, a well-constructed building with a staircase leading to a
second floor and a couple of rooms around a courtyard. Outside the house a shallow pool was
excavated.
All the buildings were connected with water-retaining walls, which prevented the flooding of the
agricultural fields and protected the buildings against perennial rains.
An archaeological survey in the area has brought to light a system of more reservoirs, cisterns,
dams and water walls.
This paper will present the latest update and interpretation of this interesting agricultural compound
and its water management.
Noor Mulder-Hymans

Session 12, Hall 1, 26/5/2016, 10:10-10:30

Water System at Tall Jalul

Paul Gregor, Andrews University
pgregor@andrews.edu

For the last several years, excavations at Tall Jalul, Jordan, have focused on the ancient water
system in the southeastern quadrant of the tall. Initial investigations revealed an unusually large
water channel running slightly downslope away from a large depression (reservoir) inside the
ancient city, exiting through the southeast corner of the 10th century B.C. city wall, and draining
into a series of large ponds outside the city. The channel dates to the 7th century B.C. but the
large reservoir appears to derive from an earlier date, possibly 10th century B.C. Together, water
channel and reservoir, make one of the largest water systems from this period in Transjordan ever
discovered.

Session 8, Hall 1, 24/5/2016, 9:30-9:50

Where is Aenon Near to Salem (New Discovery East of Jordan River in Southern Levant
Near Site of Jesus Baptism)

Mohammad Waheeb, Hashemite University
mwaheeb@hu.edu.jo

The place of Aenon near to Salem must have been so well known, that John states the name with
great brevity, giving no further topographical reference. Recent survey and excavations on the
eastern side of Jordan River in the area of Ain Salem located close to the lower parts of Wadi
Hesban shed light on new archaeological evidences such as churches, water installations, hermits
caves, and active springs still running in the area, related to activities of John the Baptist during his ministry in Perea during the Roman Age.

Session 1, Hall 2, 22/5/2016, 12:20-12:40

Who Owns the Past: Jordanian Archaeological Masterpieces at the International Museums

Zeidan Kafafi, Yarmouk University
zeidan.kafafi@gmail.com

It is well known that during the nineteenth and the twentieth centuries several masterpieces archaeological objects from Jordan were taken to museums in Europe and the United States. From these, we may name the ‘Ayn Ghazal Statues (British and the Louvre Museums), the Mesha and the Shihan Stelae (Louvre Museum/Paris), Façade of Qasr Al-Mushatta (at the Pergamun Museum in Berlin), Dead Sea Scrolls and the Rizqa Idols at the Palestinian (Rockfeler) Museum in Jerusalem. In addition, many archaeological objects from other parts of the world need to be mentioned in this regard. The marble sculptures from the façade of the Parthenon, the great 5th century BC temple that crowns the Acropolis in Athens (British Museum), and The Egyptian Museum in Berlin holds the famous bust of the Egyptian queen Nefrititi.

However, after World War II, former colonies became independent states eager to uncover their own past and to control all matters related to their heritage. As a result of this, several questions arose such as, should antiquities acquired for western museums during and after the colonial era be returned back to their lands of origin?

We think that for the time being, one should ask how and why did these masterpieces archaeological objects get out from Jordan to the European and American Museums before asking to bring them back home? As a matter of fact, to answer his question we should know that not all of these objects were stolen from Jordan, but they got out through different ways: governmental agreements, presents, trade, treasure hunters and war.

1. Archaeological objects taken during the Ottoman reign on the Arab countries (earlier than 1921), examples from Mesha stone, and Mushatta Facade.
2. Archaeological objects taken outside Jordan according to agreements: Ayn Ghazal Statues, Tall as-Sa’idiyyah Jewelry Box and several other objects.
3. Jordanian Archaeological objects were on display at the Rockfeler Museum in Jerusalem before the 1967 war (Dead Sea Scrolls, Rizqa Idols, part of the Tulaylat al-Ghassul Fresco and some other pottery objects from Bab adh-Dhra’).

This paper aims first, at presenting archaeological information about those masterpieces and their values as a part of the Jordanian heritage. Secondly, it will bring a discussion about what is better for Jordan to ask the international museums to give those objects back to Jordan, or to keep them on display for large universal audience. If they will be returned, which the author is not in favor of, are we capable to protect, conserve and maintain them for the generations to come.
Who Owns this Part of the Past? Protecting Tall al-`Umayri’s Cultural Heritage

Douglas R. Clark, La Sierra University
Kent V. Bramlett, La Sierra University

Archaeological ethics cover a range of issues, interests, intentions. Among these, the concern over “ownership” of archaeological sites is significant. While not always at the center of attention in archaeological ethics conversations which are often concerned with illicit excavations and the illegal trade in artifacts, ancient tells and settlements hold high value as repositories of human cultural remains, without which modern scholarship is unable to reconstruct much of the past. Who “owns” these archaeological sites, this part of the past? Do they belong to private parties? To governments? To special-interest groups like foreign scholars? To the people of Jordan? To the world? Or is there some kind of formula to parcel out degrees or levels of ownership? This paper will trace the history of sorting through the issue of “ownership” of Tall al-`Umayri, explore legal and economic dimensions to the discussion, and raise the major ethical issues about ownership of “this part of the past.”

Zarqa Valley Paleoanthropological Project 2015 Preliminary Report

Fabio Parenti, Institute and Federal University of Parana
info@isipu.org

The third geoarchaeological and paleoanthropological mission in the Zarqa valley has been carried out between October 19th and November 12th, by a joint Italo-Brazilian team, composed by Fabio Parenti, Giancarlo Scardia and Felipe Variejao (State University of Sao Paulo), Walter Neves and Astolfo Araujo (Sao Paulo University), Danilo Bernardo (Federal University of Rio Grande, Brazil), Ahmad Mohammad Nayef Thaher) Irbid), with the help of Yousef Al-Shishani (Sukhna). From 1996 onward, the village of Sukhne, 5 km North of Zarqa, is known in scientific literature because the recovery of the oldest archaeological finds in Jordan, dated at about one million years. A new research project started in 2013, funded by the Fundaç.o de Amparo a Pesquisa do Estado de S.o Paulo (Brazil) and Ministero degli Affari Esteri (Italia), aiming to the study of the Dauqara formation, an alluvial lower Pleistocene sedimentary unit, 20 m deep, containing Oldowan and lower Acheulean stone tools. The main activities carried out in 2015 were: I) stratigraphy and chronology of the Dauqara formation; II) Excavations on site 334 and new archaeo logical sites; III) discovery of an elephant fossil tusk; IV) Jordan Valley geological survey.
إدارة المقتنيات المتحفية

مكتبة المتاحف المتحفية (بالإنجليزية)

Samia Khoury, Department of Antiquities of Jordan
Arwa Massadeh, Department of Antiquities of Jordan
samiakhouri@hotmail.com
arwaemile@yahoo.com

تعتبر المتاحف بوابة التاريخ لما تقوم به من دور هام في الحفاظ على التراث الحضاري، كما وتعد عاملًا أساسيًا في تقوية الانتماء والإعتراف بالتراث الأردني عبر العصور.

فالمقتنيات المتحفية، احتضانًا، معلومات دقيقة عن الحقب التاريخية والاستخدامات المتنوعة لها، مما يجعل زيارة المتاحف متعة علمية وثقافية.

سيتم من خلال هذه الورقة استعراض الأمور التالية:

- إيجاد ممارسات ادارية وسياسات للمتاحف تتوافق مع المعايير الدولية في إدارة المقتنيات المتحفية في أوقات السلام، وكيفية استخدام الطرق العلمية الحديثة في توثيق وتخزين وعرض المقتنيات المتحفية للارتقاء بمستوى العمل المتحف.
- غير أن المتاحف في الأردن تحتوي على المتاحف في الأردن بوبات على التاريخ. وقصص وحكايات تحاكي الماضي العريق للاردن وما هو معرض وما هو مخزون لا يقدر بثمن.
- وما أن القرن 21 مليء بالأوضاع السياسية الصعبة والكوارث الطبيعية المختلفة التي تؤثر بشكل سلبي على المقتنيات المتحفية، مما استدعى إلى ضرورة إيجاد خطة طوارئ شاملة وفريق مرصود على تنفيذ هذه الخطة لحماية المقتنيات المتحفية، بما في ذلك التعرض للاختيارات العمياء وال💥.
- وضع اسس للتعاون مع الجهات الرسمية في هذا المجال لتكتمل الحلقة.

قامت دائرة التراث في العديد من الجهات المختصة بعقد دورات تدريبية بالتعاون مع المتاحف في حالات الطوارئ وكيفية التعامل مع المقتنيات وقت الازمات وخاصة الكوارث الطبيعية والحرائق، بالإضافة إلى الامكانيات الأولى في حالات الحوادث.

إعادة ترميم وصيانة وعرض هيكل عظمي الخرانة (أقدم هيكل عظمي بالأردن)

Restoration, Maintenance and Display of the Oldest Skeleton in Jordan

Abdel-Rahman Serogy, Yarmuk University
xserogy@yahoo.com

يعتبر هيكل عظمي الخرانة واحدًا من أهم وأقدم القطع الأثرية الموجودة بمتحف التراث الأردني بكلية الآثار وال.Rows.

يستخدم هذا الهيكل متحف الخزانة رقم 1 ويعمل رم (5) وهو يعتبر دة متحف التراث الأردني. حيث أخذ هذا الهيكل العظمي إلى حوالي 14000 قبل الميلاد بطريقة Epi-Paleolithic。

Session 5, Hall 2, 23/5/2016, 12:20-12:40

Session 2, Hall 2, 22/5/2016, 2:40-3:00
لوحظ أن الهيكل تم ترميه من قبل وللأسف الشديد ليس هناك في سجلات المتحف أو سجل الحفريات ما يدل على من؟ أو

كيف قام بذلك؟ حيث لوحظ أنه قد تم تقوية وتنفيشه في استخدام مادة تقوية أغلب الظن أنها Polyvinyl

 دون تنظيفه قبل تقويته و بطريقة غير مناسبة و إسناد شديد في استخدام مادة التنظيف واللاصق.

تم تنظيف الهيكل بالكلام ميكانيكيك (Acetate (P.V.Ac)

 باستخدام أنواع مختلفة من فرش التثبيت واللاصق Mechanical Cleaning

 لإزالة أثر الأتار والإوساخ المتراكمة على العظم والتي كانت كبيرة و متراكمة نتيجة لعرض الهيكل داخل حفرة brush

 تشابهه و عدم اتحاد خزانة العرض عند الغلق بعد اجراة عملية التنظيف الميكانيكي والكيميائي تم التعرف على كثيرا من الأجزاء المكسورة والتي يمكن لصفها بإعادة

 تجميعها مرة أخرى. وقد تم تجربة إعادة صياغة جميع الأجزاء المكسورة باستخدام مادة البارالويد B 72 (Paraloid B)

(72% بتركيز 15%)

 و ذلك لضمان توفير الحماية المستقبلية Paraloid B تركز 3% وذلك لضمان توفير الحماية المستقبلية

 C10H14O (Mechanical Cleaning)

 تم تنظيف الهيكل بالكلام ميكانيكيك (Acetate (P.V.Ac)

 وبطريقة رقيقة و باستخدام فرشاة ناعمة و بحيث لا يبدى أي تعاون على العظام. كما تم إضافة مبيد الثيمول

 بتركيز 2% وذلك لمنع أي إصابة ميكروbióولوجية و كنوع من أنواع الصيانة المستقبلية.

Session 8, Hall 1, 24/5/2016, 10:10-10:30

إكتشاف درج معبد هرقل في جبل القلعة

Discovery of the Hercules Temple Stairs in Amman Citadel (in Arabic)

Husam Hjazeen, Department of Antiquities
husmhjazeen@doa.gov.jo

بعد جيل القلعة من المواقع الهامة في عمان وأن طبيعته الجغرافية جعل منه سبيبا لبناء قلعة عمان عاصمة العمانيين، وتبني أهميته التاريخية لتعاقب فترات الاستيطان التاريخي و تحديدا من العصر الحديثي حتى الفترات الإسلامية المتاخرة. خلال أعمال الحفريات الأثرية لعام 2004 و بالتالي في المنطقة التي تفصل الجزء العلوي للقلعة عن السفلي (مقطع25)

 أظهرت النتائج الأولى الكشف عن بقايا لمباني وأساسات هامة تعود للفترة الحديدية اليونانية والبيزنطية، كما

 أظهرت النتائج أيضاً بقايا لأساسات لدرج معبد هرقل الروماني والذي يعتبر من أهم المعالم الأثرية البارزة بالموقع، حيث

 تبين من خلال الإطلاع على نتائج الحفريات والدراسات السابقة التي تم تنفيذها من قبل المركز الأمريكي للإبحاث الشرقية

 دائرة الآثار العامة 1990-1989 بمنطقة المعبد أهمية هذا الاكتشاف و اencies التي بين البوابة الجنوبية والمرمر وصولا

 إلى حرم المعبد وهذا ما يميز النظام المعماري الروماني بتعامله مع القصور تشريذية عالية مما سهل عملية البناء في

 تلك الفترة و إعطاء الأهمية الدينية المطلقة للمعبد في مكان بارز للمصلين.
الأنباط في المشور والمصادر الإسلامية

The Nabataeans in Heritage and Islamic Sources (in Arabic)

Sulieman Al-Farajat, Consultant/ USAID
suliemanfarajat@yahoo.com

تتناول هذه الورقة موضوع الأنباط في المشور والمصادر الإسلامية القديمة حيث تحدث المؤرخون العرب أمثال الطبري وابن خلدون وغيرهم عن الأنباط كأمة مقلدة في زمن قديم، وعلى الرغم من المجد والشهرة الحضارية الكبيرة التي وصلت إليها دولته الأنباط على مدى قرون، والتي وثقها العديد من المؤرخين اليونان والرومان والبيزنطيين إلا أن تلك الأمجاد والأحداث التاريخية الهامة قد غابت من بطون مصادر الكتب الإسلامية، وربما يعود السبب في ذلك إلى التأخر في تطور وتعمق الكتابة العربية. وبالرغم من الإشارات التاريخية الشديدة الموجودة في بعض كتب المصادر الإسلامية حول الأنباط إلا أننا قد وفقنا بجمع معلومات لا بأس بها فننا بتقسيمها إلى عدة محاور من أبرزها:

1. الأنباط في كتب التفسير: احتوت كتب تفسير القرآن الكريم على العديد من الإشارات إلى الأنباط، وهذه الإشارات كانت في سياق الحديث عن الأمم السابقة إما من باب أخذ العبر أو سوق الأمثلة عن الأمم السابقة.

2. الأنباط في الشعر العربي.

3. الحياة الاقتصادية: وتضمنت تجارة الأنباط أهم الأسواق التجارية قبل الإسلام، وبعده ومن أبرزها سوق النبط في المدينة. كما تضمنت أهم الصناعات والحرف في المنطقة النبطية التي زارت في المصادر الإسلامية كبناء الطواحين والأقلية وصناعة الخمور والأجور والسروج والمجامير وغيرها، كما نتناولنا موضوع الزراعة واستخراج المياه وطبيعة الحياة اليومية في المجتمع.

4. الأنباط في معالم اللغة والآثار القديمة حول الكتابة النبطية قبل الإسلام.

5. المفردات النبطية في القرآن الكريم.

6. أسماء النباتات والكتابات النبطية.

7. الأنباط في العهد الجاهلي، النبوي، الراشدي الأموي والعباسي.

8. الأنباط في الأمثلة العربية.

التنقيبات الأثرية في موقع أم قيس الأثري "جادرا 2015"

The Archaeological Excavations at Umm Qais “Gadara 2015”

Atef Al-Shiyab, Yarmouk University
Atefshiyab@yahoo.com

يقدم هذا البحث معلومات عن أعمال التنقيب الأثرية في موقع أم قيس والتي أجريت من قبل الباحث منذ عام 2013 ولغاية 2015، وخاصة في المنطقة المحاذية لشارع الديكومانوس المتجمد من الشرق إلى الغرب، وقد كانت هناك مصادر الكتب الأخرى ما لم تكن حاضرة أو مكان عناصر أخرى في المنطقة النبطية.

الجدران النبطية من حجارة سريعة مشذبة ذات أحجام مختلفة، ينتمي إلى فترة لاحقة، وتعتبر جدار منصة المقصورة
لتشكل ربما جدران لغرف سكنية اضيفت لاحقاً. وقد دلت الجدران والإر ليات غير المرصوفة وغير المنظمة ومستويات المختلفة على وجود العديد من فترات الاستيطان في هذه المنطقة. وسيراً هذا البحث على المنصة (Podium) والتي تشكل جزءاً من بناء ضخم، وتمتد جدرانها في معظم المراعات الموجودة في المنطقة (Z، Z، Z). هذه المنصة مبنية من حجراء ضخم ومهيئات الشكل، وقد تبين أنها تعود للعصر الروماني، وربما يكون هذا البناء مقصورة ملكية أو معداً أو استراحة تطل من خلالها على بحيرة طبريا في الجهة الشمالية الغربية.

Session 8, Hall 3, 24/5/2016, 10:10-10:30

(Reqm=Al-Raqeem) في المصادر التاريخية والنقشية

(Reqm=Al-Raqeem) in Inscriptions and Historical Sources (in Arabic)

Zeyad Al-Salameen, United Arab Emirates University
zeyad.mahdi@gmail.com

يناقش هذا البحث الجذر (رقيم) الذي يرد في العديد من المصادر التاريخية والنقشية لدلالة على موقع جغرافي يُرجح أنه البترا. وقد تم حصر جميع الإشارات التاريخية المرتبطة بهذا الاسم الذي ورد بعدة صيغ هي: (ر.ق.م)، (ر.ق.م) (ر.ق.م)، و(ر.ق.م)، و(ر.ق.م). ووردت هذه الصيغ واستقاستها في العديد من المصادر وهي: العهد القديم، النقوش العربية الجنوبية، النقوش النبطية، كتاب فلبيوس جوديموس، وابن يهودا، ويباسبيس، وقصة الأسقف بارصوما إضافة إلى المصادر العربية والإسلامية. ويشمل البحث في المناقشة للأراء المتعلقة بهذا اللفظ واستقاستها والسياقات التي ورد فيها.

Session 11, Hall 1, 24/5/2016, 5:00-5:20

حارثة الرابع (سياسته واستراتيجيته)

Haritha the Fourth (His Policy and Strategy) (in Arabic)

Younis Al-Shdaifat, Mutah University
m.shdaifat@mutah.edu

تعد فترة حكم حارثة حكم الرابع (4 ق.م - 9 ق.م) من أطول وأهم فترات حكم المماليك الأنباط، والتي استمرت ما يقرب من نصف قرن، وكانت دولة أنعم في أقصى اتساع لها. واكترها الإذراع، ومعظم المواقع الأثرية الشامخة في البترا ومدنها صالحة بقين أو جدت في عهد هذا الملك. ولاحظ التوسع الكبير في التجارة واستخدام طرق جديدة بدلاً من الطرق القديمة، ووجود عسكري طبيعي مكاثر في المناطق الجغرافية (الجوف ومدن بلال صالح)، وتوسع كبير في المجال الزراعي، ودخول كثيف للقبائل العربية (الشامية والصوفية) إلى منطق فندق دولة الأنباط.

يقوم هذا البحث بمناقشة سياسته واستراتيجية حارثة الرابع فيما يتعلق بأساس الوجود العسكري الكثيف في المناطق الجنوبية، وأسباب التوسع في المجال الزراعي، وأسباب الاعتماد بشكل أكبر على طريق تجارة نجد (طريق وادي السربان) وأسباب دخول القبائل العربية إلى المنطقة. ودوى العلاقة التي تربط ما بين الأنباط والقوى المجاورة وبخاصة الرومان، وأثر كل ذلك على الوجود النبطي، وعلى دولة الأنباط.
حفظ وأرشفة الصور القديمة

Documentation and Preservation of Old Photos (in Arabic)

Hala Al-Syoof, Department of Antiquities of Jordan
halasyoof@yahoo.com

شرعت دائرة الآثار العامة منذ سنوات عديدة بالتعامل باهتمام مع الصور التوثيقية وتولي أهمية لرعايتها وحفظها وتوافرها كونها تمتلك مجموعات كبيرة منها وقد تم تحصيلها من خلال أعمال الحفريات والمسوحات الأثرية التي تم من قبل الخبراء، وباحثين تحت مظلة دائرة الآثار العامة الأردنية والتي يعود أقدمها لعام 1924م.

وقد كان لابد للمسؤولين في الدائرة من إيجاد آلية لحفظ جميع التقارير العلمية والصور المقدمة بهدف توثيق المعلومات وحمايتها، لذلك تم إنشاء قسم التوثيق والتسجيل الأثري في عام 1971، وكانت طريقة حفظه عبرة عن عمل قوائم وسجلات ديدوية، ومن ثم جرى العمل على تحويل المعلومات الأثرية بهدف التطور، وتحديث هذا القسم ورعايتها مجموعاته المتمثلة فيها في إدخال عدة برامج حسابية كان آخرها برامج حفظ وأرشفة الصور الكترونية في عام 2007 ضمن رؤية جديدة لمواكبة التكنولوجيا.

ولأن الصورة هي اللغة الصامتة التي لا تقل أهميتها عن الكلمة لتصف وتشرح وتوثق المعلومات والأنشطة والفعاليات بكافة التفاصيل والدقائق، والتي تمثل بدورها التراث الثقافي الأردني خاصه في مجال الآثار، وكون الدائرة تمثل الأداء من الصور الأيجابية السلبية فهي تحتاج لجهود كبيرة لحمايتها وراعيتها.

في ورقة العمل هذه سيتم تسلط الضوء على الصور والأحداث، وأساليب حفظها وأرشيفتها الكترونياً، وطرق التنظيم، وأسلوب التواصل المتبع في دائرة الآثار العامة، ضمن بنية أمانة تحفيز تطور المعلومات وتخصص سيولة الوصولWalking to صفحات الصور المستنسخة البسيطة ويسر وتمكن تداول الأصول من قبل الباحثين بهدف حمايتها ورعايتها.

مبادرة دائرة الآثار العامة لتنظيم المجموعات الأثرية الخاصة (المتاحف ومجموعات خاص)

The Initiative of the Department of Antiquities in Organizing Private Collections (Museums and Private Collections) (in Arabic)

Abdelrahim Aldwikat, Department of Antiquities of Jordan
abed_hazeem@hotmail.com

إن التسارع الحضاري الكبير وتداعياته في شتى أنواع العلوم هو من المؤشرات التي تتميز العالم اليوم، الذي تعيش عليه البشرية في الوقت الراهن، وعليه فهو عصر تقدمته وتطورها، وقد تقدمت وتطورت فيه العديد من وسائل الاتصالات التي اسهمت في رفع هذه الوعود وازادت التقارب المتزايد بين الأمور في نقل وتداول المعلومات، إن المنظومة السياحية تعمل في بيئة توصف بالحركة والغير و التدوير العضوي والتقنية حيث برقت قطاع السياحة من أكثر القطاعات تأثراً بالsetter المدن، وساهم العالمي من هذا المنطلق جاءت مبادرة دائرة الآثار العامة ترجمة لرؤى الملكية السامية وتوجهات الحكم الرشيدة وتوجهات الإدارة العليا في وزارة السياحة ودائرة الآثار العامة انطلاقاً من استراتيجياتها التي تشمل في تنظيم المجموعات الخاصة وفقاً لذلك لاقت صناعة متحف الصور الخاصة وتفايلاً NF للأثر التشريعي من خلال السماح بإنشاء متاحف الآثار الخاصة في الأفراد والمواجاة كافة أنواع المخاطر والتحديات التي تواجه الآثار المنقولة التي يحيى بين القطاع الخاص والمملوكة.
بطرق شرعية وفقاً لأحكام قانون الآثار الأردني النافذ. تأتي أهمية هذه المبادرة لأن المتاحف بشكل عام في وقتنا الحاضر تعد من أهم المظاهر الدالة على التقدم الحضري وإثارة الثقة الثقافية ومصدراً لقراءة ومعالجة تاريخ وخبرات الحياة عند المجتمعات والذين سابقة وتلبب دوراً بارزاً في تنمية واستدامة وجذب وتشينط المنشآت السياحية المختلفة. في موارد الحياة الاجتماعية والاقتصادية، ونظراً للأهمية المعنوية والمادية للأثار وجدت وتطورت التشريعات التي تنتظف كافة المسائل المتعلقة بها وحياتها ومحافظتها عليها ومنع الحدث بها وفرض العقوبات التي تقلح حميتها وحد من الاضرار التي قد تلحق بها نتيجة لعدة عوامل وظروف مختلفة باعتبارها رثة وثروة وطنية وتراثاً ثقافياً عالمياً مشتركاً.

Session 7, Hall 2, 23/5/2016, 4:00-4:20

مقدمة أبو سليمان الداراني

The Shrine of Abu Suleiman Al-Darani (in Arabic)

Mohammad Al-Marahleh, Department of Antiquities
Shoubak200@yahoo.com

يقع مقام أبو سليمان الداراني في قرية أبو مخطوب وعلى بعد (2 كم) إلى الجهة الشرقية من قلعة الشوبك، هذا المقام ذو طابع ديني وطراز البناء المعماري الإسلامي مميز بكتاباته وزخارفه التي تعود إلى الفترة الإيوبية المملوكية، بالإضافة إلى وقوعه قرب مقام ديني آخر وبنفس المنطقة وهو مقام النبي يشعيب (يشعيب) بالإضافة إلى وقوع مبنى آخر بعيداً عنه وهو قصر الدوسق أو (الدوشق) والذي يعود على الأغلب إلى الفترة الإيوبية أو الفترة العثمانية ويشكل عام نلاحظ أن هذه المواقع وقوعها في بعض وتبنيها في فترة تاريخية قريبة وطريقة البناء والطراز المعماري وتنوع الحجارة المستعملة في البناء هذه العوامل المشتركة جعلت بأن هناك صلة ربط هذه المباني بعضها البعض خاصة أن هذا المقام يحتوي على عدد من النقش والزخارف وأسماء الملوك والأمراء والسلاطين في القتال الإيوبية والمملوكية، وغلب هذه الأسماء وردت في نقش قلعة الشوبك، بالإضافة إلى نوعية الحجر المستعمل في بناء المقام والقلعة، وربما يدل ذلك على أن هذا المبنى كان جزءاً لا يتجزأ من قلعة الشوبك.

ومن خلال هذه الورقة البحثية حاولت تسليط الضوء على موقع هذا المقام وأهميته التاريخية والدينية والاجتماعية من خلال أعمال التنقيب والترميم و أعمال الحفر والتلقيب الأثري و الكتاتيب والنقش والزخارف بالإضافة إلى العادات الاجتماعية السائدة في المقام.

وبيكش عام فإن الموقع له أهمية ودور كبير عبر التاريخ بالرغم من قلة الدراسات التوثيقية العلمية والهندسية والاجتماعية.
منهجية العمل الأثري في التصدي للتزييف

Methodology of Archaeological Work in Addressing Falsification (in Arabic)

Ismeaal Melhem, Department of Antiquities of Jordan
ismealmelehem@yahoo.com

يشكل التزييف أحد أهم التهديات على الآثار وآثراً اقتصادياً بكونه أحد آثارات الإرادة العالميين. يأخذ هذا التزييف شكلاً مادياً متمثلًا في تزييف البقايا الأثرية والمضعات والكتابات لغات الكتب المالي، وشكل آخر غير مادي، يظهر في تزييف الحقائق التاريخية، من خلال الاستخدام على الآثار المادية المزيفة بهدف قلب الحقائق أو تسخيرها للغرض السياسي أو غيره. وكلاهما يأخذ بعداً جريمة ينبغي من يمارس العمل الأثري أن يتبع منهجياً عملياً في التصدي له لوقف ترويج القطع غير الحقيقية، والتي يقع المغلائن فيها فريسة سهلة بشرائهم لها، مما سبب اختلالات في الاقتصاد والدخل الفردي، وكذلك لوقف تغيير الحقائق التاريخية.

وتشكل المضبوطات الأثرية التي تم ضبطها في الأردن من خلال جهود دائرة الآثار العامة والأجهزة الأمنية والجماركية خلال السنوات الماضية مادة خصبة للبحث في هذا الموضوع، ستعرض البحث لامثلة منها.

إن منهجية العمل الأثري في التصدي للتزييف تعتمد في الدرجة الأولى على وجود الخبرة المهنية وتتوفر اجهزة الكشف الحديثة، واتباع المنهجية العلمية في البحث والاستنتاج وفهم جغرافية وتاريخ منطقة العمل، وإكفاية العمل الأثري في التنقيب والتحليل والتفسير للثقة والمصداقية العالية، كما ان توفير قاعدة بيانات في موضوع التزييف سيساعد في ضبط عمل التزييف ويحفظ الموروث الحضاري من التغير.

والتواصل الدولي بين الدول في ضبط عمليات التزييف ووقفها عبر الحدود سيضمن الحد من تلك الظاهرة الخطيرة.

الحفاظ على إصالة المخزون والمعرض من القطع الأثرية في المتاحف ومصداقية المعلومات المكتوبة من المكتشفات الأثرية لا يمكن ان يتحقق إلا في التصدي لأشكال التزييف جميعها وهي مسؤولية علمية واخلاقية، وتعتبر على رأس أولويات من يمارس عمل الأثري.

نتائج أعمال التنقيب في قرية جلول الإسلامية

Results of the Excavation Project at the Islamic Village of Jalul (in Arabic)

Basem Almahamid, Department of Antiquities of Jordan
basemmahamid@yahoo.com

الي الجنوب الغربي من مدينة عمان وعلى مسافة حوالي 30 كم، وعلى الشرق بمسافة 5 كم من مدينة مادبا تقع قرية جلول الإسلامية. حيث ظهرت أعمال المسح الأولي أنها تعود إلى الفترة الرومانية وأعيد استخدامها في الفترة البيزنطية ثم استخدمت في الفترة الإسلامية، وخاصة الفترة الأموية المهملة.

تم اختيار مجموعة من المواقع بناءً على المظاهر الخارجية السطحية، لتمكن من خلالها تحديد ما يلي:

1. الشكل العمالي الذي تشكله هذه التراكمات الأثرية.
تحديد الطبقات الأثرية وفترات الاستيطان.

لم يتم التحقق من منطقة جلول في الفترة المملوكية كانت تشكل أحد استراحات الحجاج على طريق الحج إلى الديار المقدسة.

والذي يجمع معرفة ما يلي:

1. هل هذه البقايا جزء من مكان أو استراحة على طريق الحج.

2. أن الطبيعة الجيولوجية للمنطقة تجعلها غنية بالكهوف الطبيعية وهذا الكهوف تم استغلالها خلال الفترات التاريخية.

لتلك توقف هذه الحفريات لمعركة علاقة هذه الكهوف بالمدى التي اقيمت فوقها.

تم الكشف أثناء أعمال الحفر عن مبنى أثرية ترجع إلى الفترة المملوكية تم بنائها من الحارة الرومانية والبيزنطية هذه المباني هي عبارة عن مجموعة من الغرف تحتوي بطريقة خارجية مكشوفة، وهذا النظام المتبقي غير منتشر في العماره المملوكية وهذا يدعم الاعتقاد بأن هذه البيات كانت في الفترة المملوكية.

استراحة للحجاء حيث من خلال المسح الأثري الذي تم في حي مدينة مادبا، تبين خروج مدينة مادبا، حيث اشترى مدينة من النصر الفئري، والمملوكية إن جلول كانت مدينة مزدهرة في الفترة المملوكية، وبذل وجود المبنى الأثري التي ترجع إلى الفترة المملوكية، بالإضافة إلى الثور على الكسفة الفلاحية المملوكية المميزة في منطقة جلول وهذا يؤدي إلى اعتقادات بأن جلول الإسلامية.

هو النبوية المملوكية.

Session 7, Hall 2, 23/5/2016, 4:20-4:40

نقوش عربية أسلامية مؤرخة من البادية الشمالية الشرقية

Arab Islamic Inscriptions from the South-Eastern Desert (in Arabic)

Abdel Qader Al- Husan, Department of Antiquities
alhousan@yahoo.com

يتضمن هذا البحث العلمي دراسة مجموعة هامة من النقوش العربية الإسلامية المؤرخة النادرة العائدة للعصر المملوكي، وتعتبر من أهمية مشهورة مشهورة وهو هارون بن جامع بن جماعه بن بن رجب الجشمي، ويتضمن دراسة النقوش من حيث أهمية مضمونها اللغوي، وكذلك الإحداث التاريخية الهامة التي تذكر دخول الخاقان تيمورلنك لبلاد الشام في العام (1400هـ - 2008م) مع دراسة تحليلاً لكل نص على حد لابن الهامة الخاصة لظهور اللغة الهامة، وعلاقتها البديلة منها، هذا ويستمتع بإفادة أول مرة لأن البحث. وتعتبر من خلالها إضافة إلى نقوش العربية الإسلامية، وتعتبر من خلالها إضافة.

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The aim of this paper is to present the results of the preliminary results of the research conducted at the Umayyad qasr of al-Qastal in the Jordanian Badiya. Al-Qastal has been the object of two main campaigns of excavation and research. The first one was conducted by Carlier & Morin in 1983-4, and the second by Ghazi Bisheh in 2000. The first campaign of excavation focused on the qasr, while the second and more recent one, was focused in the mosque and in the recently discovered bath-house found near the birka. Our research will be centred mainly on the Qasr and the mosque, presenting the hypotheses built on the results of our ongoing research:

On the basis of material evidence we will demonstrate the existence of two phases of construction at the Qasr, with an interruption of the works and a change of plan in the second phase (against the conclusion claimed by Carlier & Morin that l’identité des techniques de construction du château et de la mosquée nous font envisager une seule campagne de construction (Carlier & Morin, 1984, p.352).

This change of plan would have included a noticeable reduction in size in relation to the hypothetical original plan, and the availability of spolia and better quality materials for its construction, coming from a pre-existing Roman/Late Antique building, which would have existed in the immediate vicinity, and which would explain the reference to the two qastals (qastalain) in the Arab sources, and even the Latin origin, which almost all the authors give as explanation for the name itself of al-Qastal.

Besides, we will review the hypotheses regarding the entrance block and the domed throne hall built in the second floor. The hypothesis put forward by Carlier & Morin, consists in the direct transposition of the diwan or bawh from Khirbet el-Mafjar, resting on the entrance corridor which would have been covered (according to their hypothesis) by two domes on pendentives. We will review the problems and contradictions of these hypotheses in relation with the actual remains and the architectural structure itself of the building.

Finally we will present some further hypotheses on the original structure and appearance of the mosque of the complex, which would correspond to the second phase of construction of the Umayyad qasr.
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