

ESF Exploratory Workshop on

# The Neolithic of Arabia

## New paradigms and Future Perspectives

Lyon (France), 24-27 April 2012

Convened by:  
**Rémy Crassard<sup>①</sup> and Philipp Drechsler<sup>②</sup>**

① Centre National de la Recherche Scientifique (CNRS – UMR 5133, FR)

② Universität Tübingen (Institut für Ur- und Frühgeschichte, DE)

---

# Scientific Report

---

## 1. Executive Summary

### Workshop background

The Neolithic represents one of the most momentous advancements in human prehistory. It co-incident with the beginning of the Holocene and saw the advent of a food producing economy as opposed to a hunting and gathering based economy in several areas of the world.

Based on several years of archaeological fieldwork in southern Arabia, Maurizio Tosi claimed for a different view on the origin of food production in Arabia in 1986. The peninsula should not be considered as *cul de sac* for more prosperous civilizations to the north, but as a region of its own developments that ultimately led to the establishment of independent civilizations. Since that time, two different research schools dominated the scientific debate on the origin and development of the Neolithic on the Arabian Peninsula, one favouring the dominance of indigenous developments, the other emphasizing influence from abroad.

Dissatisfied with the present stagnating discourse on the Neolithic on the Arabian Peninsula, both organizers of the workshop had the vision that bringing together all researchers from different schools and institutions would both stimulate the development of new paradigms and contribute to the establishment of a comprehensive and coherent image of the Neolithic of the Arabian Peninsula.

### Workshop organisation

The workshop was convened by Rémy Crassard (CNRS, Lyon, France) and Philipp Drechsler (University of Tübingen, Germany), both at the early stages of their academic careers. The workshop took place in the *Amphithéâtre Benveniste* at the CNRS' *Maison de l'Orient* in Lyon on 24-27 April 2012. The participants were staying at the Hotel du Simplon and Hotel des Savoies, both located a 10 minute walking distance from the workshop venue. A total of 29 participants (including ESF representative) from 7 ESF and 5 non-ESF countries attended the workshop. One of the participants included in the final programme (D. Fleitmann) while unable to attend due to last-minute family emergency, sent his paper and presentation, which was delivered by a collaborator.

Participants were invited to send extended abstracts of their papers a few weeks before the workshop. Given the highly interdisciplinary nature of the workshop, this provided an opportunity for the participants to familiarise themselves with the topics/problems to be addressed by the fellow participants and facilitated the discussions following each session. The workshop consisted of 6 sessions each focusing on specific type of evidence, specific regions and various methodological approaches. Each session included 3 to 5 papers of about 20 minutes.

All communications were in English. Although originally it was intended to hold a discussion following all papers in each session, it soon became clear that discussion of each paper after it was given was preferred by everyone.

The workshop ended with an overall discussion session on the state of the art in the field, follow-up activities such as a publication and prospects of further meetings.

The workshop was held in the main *Maison de l'Orient* seminar room which provided for a congenial atmosphere. The coffee breaks and lunches were organised in the adjacent *Maison de l'Orient* Library Hall, which provided a more relaxed setting for the continuation of discussions between the sessions and for interactions of scholars from very different fields. Lunches and dinners also greatly contributed to additional interaction.

The general atmosphere of the meeting was very enthusiastic and congenial. The participants arrived ready to learn and many of them commented in their communications after the workshop that they took away a lot of very useful information

---

and most importantly new contacts that will be extremely useful in the future for sharing data. The discussions proved the most important component of the workshop for developing future collaborative research; they extended ideas and concepts more fully, offered opportunities for participants to combine their fields of expertise, and allowed all to reassess their own knowledge with fresh perspectives and a deeper understanding of other evidence and methodological approaches.

## **2. Scientific Content of the Event**

The following report will provide an overview of the scientific content of the Exploratory Workshop on the "Neolithic of Arabia", held in Lyon in April 2012. It will summarize the individual contributions shortly, embed them into the current scientific debate, and give a review of subsequent discussions.

The workshop was kindly opened by Anne Schmitt and Emmanuelle Vila, representatives of the *Maison de l'Orient et de la Méditerranée* and the *Archéorient* CNRS laboratory at Lyon. In their welcoming notes, both representatives highlighted the long history of fruitful conferences and workshops that took place at *Maison de l'Orient*, expressing their hope that the ESF Exploratory Workshop will open up a creative debate and stimulate the establishment of joint research projects.

A second welcome and a short introduction into the general program of the workshop and the workshop's goals have been provided by **Rémy Crassard** and **Philipp Drechsler**, conveners of the Workshop. It was followed by the introductory lecture entitled "The Arabian foragers in the Middle Holocene – Trade and alliance as post-Pleistocene adaptations to scarcity and uncertainty", held by **Maurizio Tosi**. Being one of the pioneers in Arabian archaeology, Prof. Tosi highlighted the strength of personal alliances as a strategy against environmental scarcity and their contribution for the establishment of complex societies, providing a new few on the idea of independent developments during the prehistory of the Arabian Peninsula.

The second day of the workshop started with an introduction to the European Science Foundation representative, Prof. **Pléh Csaba**. In a short presentation, Prof. Csaba kindly presented the major responsibilities of the European Science Foundation, and referred to the aims of Exploratory Workshops in particular.

In the following, the first session of the workshop entitled "The Neolithic of Arabia: theoretical and epistemological frame" was opened with a talk given by the conveyors of the workshop, **Rémy Crassard** and **Philipp Drechsler**. The title of this talk "Multiple pathways for the Arabian Neolithic" has been meant programmatically, as both authors pointed towards a multitude of developments towards the Neolithic on the Arabian Peninsula. With this talk they delineated also the demand of the workshop: To overcome old paradigms and to avoid the pitfalls of too simplistic models.

These ideas have been sized by **Abdullah al-Sharekh** (King Saud University of Riyadh) in the following talk, who called for a long term strategy for the study of the Arabian Neolithic. At first demonstrating the lack of knowledge in most parts of the Peninsula, he clearly expressed his personal hope and support for the establishment of a research plan following high scientific standards in all GCC countries.

One of the most controversial points in current scientific debates, the origin of the Neolithic on the Arabian Peninsula, was addressed during the following two presentations given by **Vincent Charpentier** together with **Rémy Crassard**, and **Hans-Peter Uerpmann**. Although considering the emergence of the Neolithic from two different points of view – stone artifacts (Charpentier & Crassard) and faunal remains (Uerpmann), both presentations revealed an influence from the Fertile Crescent where plants and animals have been domesticated at the onset of the Holocene, but also highlighted the role of independent indigenous developments in Arabia.

Followed by a coffee break that allowed for further discussions, the second session entitled "Dispersal, trade, and settlements from the Yemeni Highlands" started with a presentation of **Heiko Kallweit** about archaeological sites in the Yemen Highlands and their natural environment. Although focusing the talk on Neolithic settlement remains, the increasing destruction of archaeological sites even in more remote rural areas became evident during the presentation, clearly indicating the urgent need for heritage management projects on the Arabian Peninsula.

Neolithic settlement remains in the Yemen highlands were also the focus of a talk given by **Francesco Fedele**, who could clearly demonstrate that choice of places for Neolithic settlements and intra-site structures was driven by environmental factors.

The following presentation shed light on a very different aspect of the Neolithic in the Yemeni Highlands. Considering the geochemical composition of both obsidian sources in the Yemen highlands and obsidian artifacts from Neolithic sites across the Arabian Peninsula, **Lamy Khalidi** was able to demonstrate regional obsidian distribution pattern as well as interregional contacts as far as between present day Kuwait and Yemen.

Lunch break at a small restaurant close to *Maison de l'Orient* offered both highly enjoyable meals accompanied by fruitful discussions, and time for a rest.

The afternoon session explored the interplay between palaeoenvironments and human actions during the early and mid-Holocene. **Anne-Marie Lezine** emphasized the sensitivity of Arabian palaeoenvironments to climatic change, considering her own work at al-Hawa (Yemen) and a wide variety of additional archaeobotanical and geomorphological data. This presentation was well supplemented by two papers given by **Adrian Parker**, who presented his own work as well as a paper submitted by **Dominik Fleitmann** who was not able to join the workshop personally. Both presentations revealed changing climatic conditions in Arabia during the early and mid-Holocene as an important factor for human subsistence and settlement pattern.

The influence of changing environmental conditions on human societies in a regional scale was discussed by **Jean-Francois Berger** and colleagues in the following presentation. Minute geomorphological examinations both at archaeological sites and natural exposures along the coast of the Gulf of Oman provided well-grounded explanations for changes in settlement pattern and exploitation schemes of a variety of environmental resources. Strategies of plant exploitation and the distribution of plant species during the Neolithic was the focus of a presentation given by **Margareta Tengberg**. Pointing towards many open questions concerning the origin of oasis agriculture and plant use in Arabian Prehistory, Tengberg ultimately called for the intensification of archaeobotanical studies Arabia.

The thematic spectrum of presentations within this session spans a broad arc from global climatic pattern to changes in local environments. Although it became clear that various dependencies existed between human behavior and changing environmental conditions, human groups developed a multitude of strategies to cope with these new situations.

The conclusive session of the day has been chaired by **Paolo Biagi**, who started the discussion with a presentation about recent research on shell middens of the Las Bela coast and the Indus delta in Pakistan. Although beyond the immediate scope of the workshop, this presentation helped significantly to widen the perspective and to stimulate the following discussions on the debates of the day.

The day ended in a traditional restaurant, located in the old city of Lyon, with a delicious meal and many discussions about the different presentations during the day.

With her presentation entitled "The Neolithic in Arabia: a view from the South", **Joy McCorriston** opened the morning session of the third day of the workshop, that dealt with the South Arabian Neolithic beyond the highlands. Considering the results from her

---

field work in Southern Jol (Yemen), she pointed towards the difference of individual achievements and the social power of community work, highlighting pilgrimage and sacrifice as long standing social strategies in Arabia. This presentation was well complemented by a talk of **Juris Zarins** about Neolithic sites in the Dhofar Nejd. Although a very different geomorphology of the region has a negative impact on site preservation, a substantial Neolithic peopling could have been ascertained.

A completely different approach to was chosen by **Jeffrey Rose** and colleagues, who considered the influence of Late Pleistocene hunter gatherer groups on the development of the Neolithic on the basis of genetic evidence. Although this study is based on present mitochondrial DNA lineages in Dhofar that clearly demonstrate evidence for relict Pleistocene mtDNA lineages throughout Arabia. The archaeological approval of this finding was presented in the following paper held by **Yamandu Hilbert**. He reported jaunty about the archaeological sequence at Khumseen Rockshelter, a recently excavated Early Holocene site in Dhofar. This site shows a stratigraphic succession of archaeological layers that a point towards a direct transition from the Late Paleolithic to the Neolithic.

Before and during coffee break, a very active discussion arose about the possibilities and value of further genetic studies in Arabia. It has been suggested by different researchers to extend these studies from relict human populations towards domesticated sheep, goat and cattle to find out more about their origin in Arabia.

After coffee break, the geographic focus of session five shifted towards the Oman Peninsula that shows a wealth of coastal Neolithic sites. Being at least in parts inhabited by mobile populations; these sites are characterized by an intense exploitation of marine resources during a yearly migration cycle. During the first presentation of this session, **Sophie Méry** and **Vincent Charpentier** introduced in their work at the Umm al Quwain lagoon in the U.A.E., and compared their results with excavations along the coast of the Gulf of Oman. The paper highlighted a number of common features in the material culture as well as a similar chronology, indicating close cultural relationships. The next presentation by **Mark Beech** and colleagues focused on the exploitation of marine resources. While shellfish gathering and fishing of small fish always played an important economic role at the coastal sites, Beech presented growing evidence for specialized shark hunting and the specialized exploitation of dugong.

The last two presentations of the session focused on Neolithic settlement patterns and funerary practices in Oman from the 6<sup>th</sup> to the 4<sup>th</sup> millennium BCE. In the first one, **Fabio Cavulli** presented the results from excavations at a repeatedly occupied Neolithic site at Ras al Khabbah (KHB-1) that shows a wealth of both remains of small huts or shelters, and categories of finds. The second presentation by **Olivia Munoz** presented the analysis of Neolithic graveyards of Ras al Hamra (RH-5), as well as funerals at KHB-1 and Wadi Shab (GAS-1). Excellent conditions for preservation allowed her to demonstrate different aspects of mortuary practices, such as the pre-burial body treatment and burial structure, as well as conclusions about spatial relationships between the living and the dead.

Excellent lunch at a nice small restaurant near the conference venue allowed for recreation and ongoing debates before the last session of the workshop entitled "Gulf Neolithic and the 'Ubaid influence" started. A first paper held by **Philipp Drechsler** introduced in the archaeological record of the Central Gulf region during the 5<sup>th</sup> millennium BCE and reconsidered the evidence for contacts between southern Mesopotamia and this region on the basis of both recent field investigations and published sources. An increasingly diverse pattern of "'Ubaid-related" sites in this region makes the case for complex social relationships between coastal and inland populations. The 'Ubaid pottery from Dosariyah, K.S.A., as the material manifestation of cultural relationships between the Central Gulf area and southern Mesopotamia were the focus of a presentation given by **Christine Kainert**. In her talk she convincingly argued for well-established and intense coastal interaction. The following two presentations by **Richard Cuttler** and **Lucie Dingwall** considered marine transgression in the Arabian Gulf as a major mechanism for enforced migration and cultural contacts between the Central Gulf

---

and 'Ubaid Mesopotamia. While Cuttler presented new evidence for an 'Ubaid-related settlement in northern Qatar, Dingwall presented a pioneer study using acoustic seabed characterization for the analysis of submerged landscapes around the Qatar peninsula. This session was very well concluded by **Robert Carter's** presentation about social practices in Eastern Arabia during the 'Ubaid period. Suggesting feasting and social display as driving forces for the distribution of 'Ubaid pottery from southern Mesopotamia, Carter placed the 'Ubaid phenomenon into a much broader social context.

Shortly adjourned by a coffee break, discussions about the presentations of the last session led over to the concluding session moderated by **Rémy Crassard** and **Philipp Drechsler**. Major topics that have been addressed during discussions concerned the urgent need to broaden the data basis, e.g. more field investigations and excavations of Neolithic sites in Arabia to fill the major geographic gaps, especially in Central Arabia. Further, more transparency was claimed by the auditorium in respect of lithic terminology and dating. A second point that was discussed concerned present and future research agendas. While current research projects often have a very local focus, the need for regional studies clearly arose during the concluding discussions. Finally it has been decided to turn the ESF Exploratory Workshop at Lyon into a starting point for future meetings in a biannual cycle under the title ISNAP for "International Symposium on the Neolithic of the Arabian Peninsula".

The workshop ended with a delightful conference dinner aboard a boat on the Saône and Rhône rivers.

### **3. Assessment of the Results, Contribution to the Future Direction of the Field, Outcome**

The main goal of the workshop was to have a written trace of our debates and results. This will be the case thanks to successful negotiations with editor Daniel T. Potts (University of Sidney) for the publication of the Exploratory Workshop papers in a special issue of the international peer reviewed journal *Arabian Archaeology and Epigraphy* (Wiley-Blackwell Editions; ranked INT1 by ESF). A selection up to 20 or 25 papers will be published in May 2013, with a deadline for manuscripts October 30, 2012.

Another project was to create a Neolithic Atlas of the Arabian Peninsula. This project has received a mitigated response by the participants, as such an atlas requires extra funding and sometimes sensitive data than scholars don't necessarily want to share. This project is nevertheless not totally abandoned, as some of the participants, including co-convenor P. Drechsler, have proposed to develop it as an independent work, at least at a preliminary stage.

Finally, this ESF Exploratory Workshop allowed the informal foundation of a scientific group of archaeologists and other scientists interested in Arabian Neolithic. The acronym ISNAP (International Symposium on the Neolithic of the Arabian Peninsula) has been preferred to design such a group. It has been proposed to organize a meeting every two years, the next one being organized in 2014, most probably in Abu Dhabi, UAE. The future symposiums will allow a wider group of attendants than in Lyon, and will get also involved in wider perspectives, such a neighbouring regions and periods (e.g. Paleolithic and/or Bronze Age).

## **4. Final Programme**

### **TUESDAY 24 APRIL 2012**

*Afternoon / evening Arrival*

#### **INTRODUCTION**

- 18.00-18.10 Anne SCHMITT & Emmanuelle VILA (CNRS, France): Welcoming by the *Maison de l'Orient et de la Méditerranée* and the *Archéorient* CNRS laboratory (UMR 5133)
- 18.10-18.25 Pléh CSABA (ESF Representative – BME Department of Cognitive Science, Budapest, Hungary): Presentation of the European Science Foundation
- 18.25-18.40 Rémy CRASSARD (CNRS, France) & Philipp DRECHSLER (University of Tübingen, Germany): Welcoming by the co-conveners, presentation of the general programme, and workshop's goals
- 18.40-19.30 Maurizio TOSI (University of Bologna, Italy)  
Plenary session – Introductory lecture:  
*"The Arabian foragers in the Middle Holocene - Trade and alliance as post-Pleistocene adaptations to scarcity and uncertainty"*
- 20.00 *Welcoming dinner*

### **WEDNESDAY 25 APRIL 2012**

#### **SESSION 1: The Neolithic of Arabia: theoretical and epistemological frame**

- 09.30-09.50 Rémy CRASSARD (CNRS, France) & Philipp DRECHSLER (University of Tübingen, Germany)  
Multiple pathways for the Arabian Neolithic
- 09.50-10.10 Abdullah ALSHAREKH (King Saud University, Saudi Arabia)  
Towards a long term strategy for the study of Arabian Neolithic
- 10.10-10.30 Vincent CHARPENTIER & Rémy CRASSARD (CNRS, France)  
Back to Fasad... and the PPNB controversy
- 10.30-10.50 Hans-Peter UERPMANN, Margarethe UERPMANN & Adelina KUTTERER (University of Tübingen, Germany)  
The Neolithic in the central region of the Emirate of Sharjah (UAE)
- 10.50-11.15 Questions and discussions with all speakers and audience
- 11.15-11.30 *Coffee Break*

#### **SESSION 2: Dispersal, trade and settlements from the Yemeni Highlands**

- 11.30-11.50 Heiko KALLWEIT (University of Birmingham, UK)  
Yemen Highlands Neolithic - The example of the Wadi Dhahr
- 11.50-12.10 Francesco FEDELE (University of Naples, Italy)  
Neolithic settlement of the eastern Yemen Plateau: an exploration of locational choice and site structure
- 12.10-12.30 Lamyia KHALIDI (IMF-CSIC, Spain), Marie-Louise INIZAN & Bernard GRATUZE (CNRS, France)  
Considering the Arabian Neolithic through a reconstitution of interregional obsidian distribution patterns in the region
- 12.30-13.00 Questions and discussions with all speakers and audience

13.00-14.30 *Lunch*

**SESSION 3: Palaeoenvironments and food production**

14.30-14.50 Anne-Marie LEZINE (CNRS, France)  
Sensitivity of Arabian environments to climate change: hydrological and vegetation data

14.50-15.10 Dominik FLEITMANN (Bern University, Switzerland)  
Neolithic climate and environmental variability recorded in lacustrine sediments and stalagmites from Arabia

15.10-15.30 Adrian PARKER (Oxford Brookes University, UK)  
Understanding the evolution of climate and the influence of the Wet Holocene Phase in Arabia

15.30-15.45 *Coffee break*

15.45-16.05 Jean-François BERGER, Vincent CHARPENTIER, Rémy CRASSARD, Gourguen DAVTIAN & Chloé MARTIN (CNRS, France)  
Neolithic settlements strategy and rhythmicity along the Oman coast, versus palaeogeographical and palaeoenvironmental fluctuations

16.05-16.25 Margareta TENGBERG (National Museum of Natural History, France)  
Vegetation cover and plant exploitation strategies in Neolithic Arabia - the archaeobotanical evidence

16.25-17.00 Discussions and debates with all speakers and audience

17.00-18.00 **CONCLUSIONS OF THE FIRST DAY**

Paolo BIAGI (University of Venice, Italy)  
The shell middens of Las Bela coast and the Indus delta (Arabian Sea, Pakistan)  
Discussions on the debates of the day between chairmen and the audience

20.00 *Dinner*

**THURSDAY 26 APRIL 2012**

**SESSION 4: South Arabian Neolithic**

09.00-09.20 Joy McCORRISTON (Ohio State University, USA)  
The Neolithic in Arabia: a view from the South

09.20-09.40 Juris ZARINS (Missouri State University, USA)  
The neolithic of the Dhofar Nejd: The Example of Hailat Araka

09.40-10.00 Jeffrey ROSE (University of Birmingham, UK), Abdul-Rahim AL-ABRI, Riad BAYOUMI & Victor CERNY  
Genetic evidence of relict Pleistocene mitochondrial DNA lineages in Dhofar, southern Oman

10.00-10.20 Yamandu HILBERT (University of Birmingham, UK)  
Khumseen Rockshelter: the archaeology of the Early Holocene in Dhofar

10.20-10.45 Questions and discussions with all speakers and audience

10.45-11.00 *Coffee Break*

**SESSION 5: Oman Peninsula coastal Neolithic**

11.00-11.20 Sophie MERY & Vincent CHARPENTIER (CNRS, France)

- 
- 11.20-11.40 Neolithic cultures in the Arabian Gulf and Oman: chronology, specificities  
Mark BEECH (ADTCA, UAE), Vincent CHARPENTIER (CNRS, France) & Sophie MERY (CNRS, France)  
From the shark hunters of the Arabian Sea to the dugong exploiters of the Arabian Gulf
- 11.40-12.00 Fabio CAVULLI (University of Trento, Italy) & Simona SCARUFFI  
The Neolithic period in Oman: occupation phases and patterns of KHB-1 settlement
- 12.00-12.20 Olivia MUNOZ (University of Paris 1 Panthéon-Sorbonne, France)  
Funerary practices in Oman during the 5<sup>th</sup> - 4<sup>th</sup> millennium BC
- 12.20-12.45 Questions and discussions with all speakers and audience
- 12.45-14.20 *Lunch*

### **SESSION 6: Gulf Neolithic and the Ubaid influence**

- 14.20-14.40 Philipp DRECHSLER (University of Tübingen, Germany)  
The Central Gulf area during the 5<sup>th</sup> millennium BC
- 14.40-15.00 Christine KAINERT (Free University Berlin, Germany)  
Evidence for coastal interaction? The pottery from Dosariyah
- 15.00-15.20 Richard CUTTLER (University of Birmingham, UK)  
Considering marine transgression as a mechanism for enforced migration and the coastal Ubaid phenomenon
- 15.20-15.40 Lucie DINGWALL (University of Birmingham, UK)  
Using acoustic seabed characterisation and geophysical signatures for the analysis of the submerged landscape and Ubaid-related settlement patterns within the marine environment of northwestern Qatar
- 15.40-16.00 Robert CARTER (UCL Doha, Qatar)  
Feasting, social display and social identity in the eastern Arabian Neolithic during the Ubaid period
- 16.00-16.30 Questions and discussions with all speakers and audience
- 16.30-16.45 *Coffee Break*
- 16.45-19.00 **CONCLUSIONS AND DISCUSSIONS OF FOLLOW-UP ACTIVITIES**
- Publication
  - Informal foundation of ISNAP
- 20.00 *Conference Dinner*

### **FRIDAY 27 APRIL 2012**

Morning      Departure

## **5. Final List of Participants**

### **Convenors:**

1. Rémy CRASSARD, CNRS – UMR 5133, France
2. Philipp DRECHSLER, Eberhard-Karls-Universität Tübingen, Germany

### **ESF Representative:**

3. Pléh CSABA, BME Dept of Cognitive Science, Hungary

### **Participants:**

4. Abdullah ALSHAREKH, King Saud University, Saudi Arabia
5. Mark BEECH, Abu Dhabi Tourism and Culture Authority, United Arab Emirates

- 
6. Jean-François BERGER, CNRS - UMR 5600, France
  7. Paolo BIAGI, Università Ca' Foscari Venezia, Italy
  8. Robert CARTER, UCL Qatar Doha, Qatar
  9. Fabio CAVULLI, Università di Trento, Italy
  10. Vincent CHARPENTIER, Inrap, France
  11. Richard CUTTLER, University of Birmingham, United Kingdom
  12. Lucie DINGWALL, University of Birmingham, United Kingdom
  13. Francesco FEDELE, Università degli Studi di Napoli, Italy
  14. Yamandu Hieronymus HILBERT, University of Birmingham, United Kingdom
  15. Christine KAINERT, Freie Universität Berlin, Germany
  16. Heiko KALLWEIT, Freiburg Universität, Germany
  17. Lamya KHALIDI, Consejo Superior de Investigaciones Científicas, Spain
  18. Anne-Marie LEZINE, CNRS - UMR 1571, France
  19. Joy MCCORRISTON, The Ohio State University, USA
  20. Sophie MERY, CNRS - UMR 7041, France
  21. Olivia MUNOZ, Université Paris 1 Panthéon-Sorbonne, France
  22. Adrian PARKER, Oxford Brookes University, United Kingdom
  23. Jeffrey ROSE, University of Birmingham, United Kingdom
  24. Margareta TENGBERG, Muséum national d'Histoire naturelle, France
  25. Maurizio TOSI, Università di Bologna, Italy
  26. Hans-Peter UERPMANN, Eberhard-Karls-Universität Tübingen, Germany
  27. Margarethe UERPMANN, Eberhard-Karls-Universität Tübingen, Germany
  28. Juris ZARINS, Missouri State University, USA

## 6. Statistical Information: Participants

Despite archaeological research in the Arabian Peninsula is largely dominated by male scholars, the organisers tried to respect the ratio of 1/3 female/male. Unfortunately two female participants cancelled their coming and had to be replaced by men. The workshop included young scholars, some still writing their PhD. Most participants came from France (7), the UK (5) and Germany (5). Other European countries represented were Italy with 4 participants, and, with 1 participant each, Spain, Hungary and Switzerland. Imperative was the participation of 5 scholars from outside Europe: 1 from Saudi Arabia, 1 from the USA, 1 from the United Arab Emirates, 1 from Qatar and 1 working parallel in Oman and the USA.

**Age:** 60-70: 3 (11,1%) / 50-60: 7 (25,9%) / 40-50: 9 (33,3%) / 30-40: 6 (22,2%) / 20-30: 2 (7,4%).

**Gender:** 9 women (31%), 20 men (69%)

**Countries:** 24 participants' affiliations are from 7 European countries:  
France: 7 / Germany: 5 / Hungary: 1 / Italy: 4 / Spain: 1 / Switzerland: 1 / UK: 5

And 5 participants' affiliations are from 5 non-European countries:  
Oman: 1 / Qatar: 1 / Saudi Arabia: 1 / United Arab Emirates: 1 / USA: 1

**Specialties:** TOTAL of 9 different specialties:  
Archaeology (generalists): 9 / Archaeology (lithic analyses): 8 /  
Archaeology (ceramic analyses): 2 / Dating sciences: 1 / Geomorphology:  
2 / Palaeo-Botany: 2 / Palaeo-climatology: 3 / Physical anthropology:  
1 / Zoo-archaeology: 1