

Session title: EXPERIMENTING THE PAST. THE POSITION OF EXPERIMENTAL ARCHAEOLOGY IN THE ARCHAEOLOGICAL PARADIGM OF THE 21ST CENTURY

Organizers: Dragos Gheorghiu, National University, Bucharest, Romania
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Discussant: George Nash, Bristol University, UK

Time: Thursday all day

Room:

Session abstract:

In the second part of the 20th century, experimental archaeology gradually grew as a sub-discipline of archaeology. It often finds a mixed acceptance in mainstream academia, as different people mean different things when they use the term 'experimental archaeology'. Whereas many flint knapping experiments have greatly enhanced the understanding of the lithics *chaînes - opératoires* of certain sites and traditions, house 're'-constructions are often criticised for reducing the complexity and potential variables found in the archaeological record.

Experimental archaeology has a vast potential to test our practical hypotheses. However it can also unlock the sense world of the past, as well as uncover problems and unforeseen aspects of our theoretical arguments. These issues need to be engaged with in an interdisciplinary way.

The present session intends to put together some of the current trends in European experimental archaeology, and will try to identify emergent original trends within the present paradigm. Theoretical papers are encouraged as well as traditional experimental case studies. We are especially interested in the way the young generation of European archaeologists approach experimental archaeology today and what the future of the discipline might hold.

Additionally we will encourage those who would like to present part of their experimental work in a workshop organised alongside the session.

Paper abstracts:

THE EXPERIMENTATION OF TECHNOLOGIES LINKED TO VEGETABLE FOOD: THE PRODUCTION OF FLOUR AT BILANCINO (FLORENCE ITALY) 30,000 BP

Biancamaria Aranguren, Soprintendenza per I Beni Archeologici della Toscana – Firenze, Italy
Anna Revedin, Istituto Italiano di Preistoria e Protostoria – Firenze, Italy

The open air settlement of Bilancino (Mugello Valley, Florence, Italy) was a temporary seasonal camp, characterized by a lithic industry of Gravettian type, and dating back to about 28,000 cal BC.

The interdisciplinary study of the Bilancino complex has been carried out by means of the typological, technological and functional classification of the lithic industry, the analysis of raw materials and palaeoenvironmental data, ethnographic comparisons, and experiments. This procedure has allowed us to propose a functional interpretation of the site as a seasonal camp dedicated to the exploitation of plant resources.

On the living floor, not far from hearth A, we found two fragments of a sandstone pebble. These were used as grindstone and pestle-grinder respectively as confirmed by use-wear analysis.

The discovery on both grindstone and pestle-grinder of starch belonging to different plant species (e.g. *Typha* and *Sparganium*) constitutes the earliest evidence of a technique used in the preparation of flour based on wild plants.

On the basis of these results, a search for ethnographic comparisons got under way aimed at identifying possible food preparation techniques using the plants found at Bilancino, especially *Typha*.

Furthermore, an experiment was carried out in order to verify the technique for using the grindstone and pestle-grinder. We used two fragments of sandstone of similar size and shape to those from Bilancino. We were able to show that, in order to extract flour from the rhizomes properly dried and peeled as suggested by ethnographic comparisons, it is first necessary to use the active tool (pestle-grinder) like a pestle for opening up the fibres, and then like a grinder to extract the starch. The flour was then mixed with water and baked over an experimental hearth similar to the structured hearth found in Bilancino, obtaining in this way some edible cakes.

GROUND STONE TOOLS: QUALITATIVE AND QUANTITATIVE METHODS IN EXPERIMENTAL TECHNICAL ANALYSES

Andrew Thomas Young, University of Exeter, UK

This paper considers the role of experimental replication studies which generate technical schemes for the ground stone tools of later prehistory. Whilst considerable research has historically focussed on flaked stone tool analysis there is a corresponding lack of research into methods applicable to ground stone tools. Almost invariably the literature discusses their manufacture from a theoretical perspective or on the basis of very limited studies. The author manufactures full replicas using authentic methods derived from the technical analysis of archaeological material. A series of qualitative and

quantitative methods have been devised as appropriate for extracting data derived through the experimental reproduction of full replicas of a broad variety of elaborate types of tool. This paper discusses methods which can contribute to a better understanding of the nature of ground stone tools and their manufactory schemes by introducing ways abrasion reduction, morphological control through pecking and surface topography analysis can be useful for generating models which better illustrate the ways by which these artefacts might have been manufactured and perceived by prehistoric people. In collaboration these analyses provide valuable new insights into this under-researched technology and illustrate how experimental archaeology can contribute to a better understanding of past behaviours.

FLINT TOOLS IN ANTLER WORKING

Bernadeta Kufel, Institute of Archaeology University of Wrocław, Poland

Antler finds dated back to the Upper and Late Palaeolithic are rare in the European Plain due to preservation conditions. Recent models of antler working are still based on theories created long time ago (Rust 1943; Feustel 1973).

Two important issues – antler working and flint tool utilization are considered separately in the Palaeolithic studies. What types of flint tools were used in antler working? Were they multi-purpose or a man needed at least two or more types of tools in every stage of work? Use-wear analysis of flint artefacts show traces of antler and bone working mostly on burins, scrapers and *Zinken*. Microscopic analysis gives information concerning worked material but do not discuss what type of tools was engaged in particular stage of antler working. Experimental method allows understanding how flint tools were used and what kind of tool edge is required in particular activity. It also helps to determine efficiency of hafted and unhafted tools. In this paper I would like to discuss the use of burins and *Zinken*, which are very common in the Magdalenian and Hamburgian assemblages. According to A. Rust burins were used for making grooves and *Zinken* for antler blade separating. Experimental research and use-wear analysis show that they were rather multi-purpose tools.

EXPERIMENTAL ARCHAEOLOGIES OF EMERGENT NOVELTY AND THE INHERENT PLURALITY OF LIFE FORMS AND CULTURES

Stephanie Koerner, University of Manchester, UK

The last decades have seen a sea of change in perspectives on how best to understand an 'experiment,' especially in fields inquiring into emergence of novelty amongst life forms and cultures, which go against the grain of presuppositions that science: (1) is concerned above all with regularities (2) will eventually discover (some even claim 'master') all embracing explanations of the mechanisms governing the origins and evolution universe, and of relations between reality and intelligibility. Importantly, the implications are not restricted to critique. The implications are not restricted to critique, but open space for appreciating

(for instance) that: (1) emergence novelty is an inherent dimension of life forms and cultures, and (2) human beings are especially able to understand things subject to change.

The broad aim of my contribution is to consider in light of archaeological research on Mesolithic Scandinavia something of the backgrounds and implications of these developments for shifting centre of gravity in experimental archaeologies towards the emergence of novel events and processes, and the inherent plurality of life forms and cultures.

POTTERY DECORATION: A COMBINED USE-WEAR, RESIDUE AND INCISION ANALYSIS WITH CASE STUDIES FROM MEDITERRANEAN NEOLITHIC SITES

Maria Rosa Iovino, Centro Internazionale di Sperimentazione, di Documentazione e di Studio per la Preistoria e l'Etnografia dei Popoli Primitivi , Siracusa, Italy

Pottery artefacts, besides their functional meaning, are considered as markers of cultural identity. Their shape and decoration give information on distinct cultural traditions involved as well as on their evolution and change through time and space. Decoration is often an essential aspect adjunct to form. Among pottery decoration, incision is a frequently used technique. Incised motifs on Neolithic pottery of western and eastern Sicily were hypothetically executed by different tools, probably made by bone and wooden spatulas and combs and maybe also by sharp lithic instruments. From the visual analysis of Mediterranean early Neolithic pottery (i.e. Stentinello, Sicily, and Yumuktepe, Turkey) the incisions show various styles: they are more or less deep, wide and narrow, regular, with different kind of section. To each different kind of section may correspond a specific instrument, supposedly rounded, straight or pointed in shape. The identification of the used action, of the shape and of the potential raw material of these instruments can be useful to elucidate the technical and cultural tradition of Neolithic pottery makers. According to the typological analysis, complex decorative pattern, among which impressed and incised motifs, are most seen on fine fabric pottery. The present research aims to understand some technological processes of pottery decoration by experimental replication of incisions on pottery. The experimental activity is especially carried out by lithic instruments (obsidian and flint). Bone and wooden tools will be also considered in order to compare eventual different choices during the technological processes. Problem connected with the pottery body fabric and the content of inclusions in fabric are tested to better understand if it is possible a correlation between the fabric of pottery and the style of decoration. Finally, but not less important, an evaluation of micro wear traces and residue analysis on the experimental tools will try to better address the feasibility of recognising pottery workshop areas through the modern approach to lithic studies.

EXPERIMENTS AND TECHNOLOGICAL ANALYSES ON THE NEOLITHIC CERAMICS OF PIANA DI CURINGA (LAMEZIA TERME_ CALABRIA)

Rocco Purri, C/da Terravecchia, Lamezia Terme CZ,
Simona Scarcella, École des Hautes Études en Sciences Sociales, Paris, France

This paper shows the experimental work realized for the first time with the pottery of the facies of Stentinello developed in Calabria and Sicily in the VI millennium B.C. The project has considered the reproduction of the Neolithic vases preserved in the Museum of Lamezia Terme and deriving from the site of Piana di Curinga, excavated by Ammerman in the seventies. The objective of the project was to understand the *chaînes-opératoire* of the realization of the most common form of the whole ceramic complex from Piana di Curinga: the globular vase with uniform colouring and a perfect polish of the interior.

The project observed three assumptions: the exclusive use of materials that were available in prehistory, the experimentation of the whole ceramic process; examination of the archaeological fragments, collecting of the clays and their preparation, forming, decoration, finishing, drying and firing; and, for each of these phases, the verification of all the possible processes in order to recognize the most proper method for an accurate reproduction.

The effectiveness of the experiment is assured by the similar typology among the reproduced objects and the original ones, but also by the results of the mineralogical analyses (Thin Section, X Ray Diffraction) that confirm the exact correspondence between the selected clays used for the experimentation and the archaeological fragments.

TRACES OF FIRE AND PIECES OF CLAY: A PRELIMINARY LANDSCAPE APPROACH THROUGH THE REMAINS OF NEOLITHIC BURNT HOUSES

Styliani Kaltsogianni, Aristotle University of Thessalonica, Greece

Trying to reconstruct a prehistoric collapsed house, following the evidence that the preserved structural clay fragments offer may resembles a jigsaw-puzzle. Even if you have all the pieces that you need, so that you can guess the final picture, it is always a matter of fruitful hypotheses where you place each one of them. But there is always a unique position for them and this is the reason that finally only one result is acceptable. This kind of reconstruction is not an experiment in the strict sense of the word, but it works in a similar way, regarding the way you use the available material in an attempt to attain a specific result.

The present paper constitutes an effort to combine both the outcome of such a reconstruction and the bibliographical data concerning the conducted experiments on whether the fire that usually destroyed Neolithic houses, thanks to which their remains were preserved, was deliberate or not. It is argued that in the light of such an approach it is feasible to reach an elementary conception of the surrounding landscape, as far as it is possible to have an idea of the *physiognomy* of the built environment and its symbolic or not conception of its inhabitants.

EXPERIMENTING WITH AN OBJECT IN CONTEXT

Dragos Gheorghiu, National University, Bucharest, Romania

The experimentation with an ancient object requires a set of operations which relate it, more or less, to its physical environment. In general this relationship is neglected during the act of experimentation, the attention of the operator being focused mainly on the de-contextualized object.

The case study presented here (the construction and deconstruction of a Chalcolithic habitat) proposes a methodology of experimentation, and implicitly of interpretation, of the complexity of prehistoric material culture, in its natural and cultural contexts.

THE FUNERARY ROLE OF THE COMBUSTION OF THE HOUSE: EXPERIMENTS WITH FIRING A CARCASS

Romeo Dumitrescu, Arheolityk Foundation, Romania

Chalcolithic houses, especially within the Gumelnita tradition were used for funerary rituals and based on the archaeological evidence have a long history. Generally the bodies interred in houses are children, but there were also adults or osteologic fragments of adult skeletons such as skulls which may have had the role as foundation offerings. Until recently there is was tangible data for the incineration of corpses within fired buildings; the absence of this phenomenon however can be explained. One hypothesis postulates the complete incineration of the body after the collapse of the walls over the funerary pyre; the combustion process would have continued for several days until the complete transformation of the skeleton into charred bone and ash. Later on, after the levelling of the house, the fired-remains were collected or crushed and later would have transformed into thin layers of dark charred earth, frequently found during the excavations of fired Chalcolithic houses. Taking this into consideration, along with the combustion qualities of architectural features I experimented with the burning of the carcass of a sheep which arguably has the same combustion qualities as a human torso. The paper describes the process of pyrolysis which produces a charcoal-like residue and compares the results with archaeological data.

AN EXPERIMENTAL APPROACH TO THE EARLY COPPER TECHNOLOGY OF SOUTH-EASTERN EUROPE

Julia Wiecken, University of Exeter, UK

The transition from the Neolithic to the Bronze Age in the Carpathian Basin represents one of the most profound technological changes in later prehistory. In my own research

I am trying to investigate these issues through the experimental exploration of early copper technology.

The most suitable artefacts to study for this purpose are the copper hammer-axes and axe-adzes, as they are emblematic of this period and region and provide a good sample size. Little consensus exists regarding their production technology, even though many attempts have been made to answer questions such as: 'were they cast in open or closed moulds?', 'were they forged or cast?' Having looked at a large proportion of these objects I have come to the realisation, that there might have been a variety of production techniques which were used to make these objects. This has obvious implications for the social and cultural interpretation of the societies making these objects. I will explore these and other issues by presenting some new experimental results while engaging at the same time with some theoretical issues of experimental archaeology.

AN ARCHAEOLOGY OF COASTAL SALT INDUSTRY: THE INESCAPABLE PART OF EXPERIMENTS

Marie-Yvane Daire, CNRS UMR 6566 "CReAAH" "Centre de Recherche en Archéologie, Archéosciences, Histoire", Rennes, France

Catherine Bizien-Jaglin, Ce.R.A.A. « Centre de Régional d'Archéologie d'Alet », Saint-Malo, France

Anna Baudry, CNRS UMR 6566 "CReAAH" "Centre de Recherche en Archéologie, Archéosciences, Histoire", Rennes, France

Axel Levillayer, CNRS UMR 6566 "CReAAH" "Centre de Recherche en Archéologie, Archéosciences, Histoire", Rennes, France

Our knowledge of salt production during the Late Prehistory profits from the contributions of thorough archaeological research (surveys, excavations, analysis...) developed on the French coasts of the English Channel and the Atlantic since about thirty years. The research programs and excavations, carried out mainly on Iron Age coastal sites of Western France, considerably improved our knowledge on the architecture of the workshops and the production structures, on the organization and the role of the salt production in the socio-economic context, and on the circuits of exchanges of second half of the first millennium BC.

However, there are several aspects of the problems which neither the fieldwork data nor the results of analysis in laboratory can answer.

Therefore, this paper aims to demonstrate why and how the recourse to the experiments appears fundamental here:

- To validate the assumptions relating to the technological and quantitative aspects of operation of the kilns,
- To analyze the duration and the rates/rhythms of the cycles of firing/evaporating, the output of fuels,
- To observe the taphonomic conditions of deposit and abandonment of the installations.

Such experiment program, in the process of development, clearly shows that the experimental step is not limited to an amusing and educational demonstration for schoolboys and schoolgirls; experiment takes a full part in the scientific process and is of a fundamental contribution to determine the ergonomic and technological conditions of this pre-Roman craft industry, and its environmental impact, in the field of the interactions between man and environment.

EXPERIMENTING WITH ANCIENT LIGHT AND SHADOW INTERACTION

Emília Pásztor, Matrica Archaeological Museum, Hungary

Man has always been mystically attracted to light. The use of sunlight to highlight the importance of a building has been both a natural and a self-evident choice for architects of all times.

The symbolic value of light reaches its highest level in sacral architecture or at sacral places. Either having a deep look into the carefully orientated cave system of a tomb from the Amarna-age in ancient Egypt or examining the contemporary Japanese Tadao Ando's Church of the Light, one can have a strong impression of the vital role that natural light plays in our built environment.

In the presentation, the author would like to offer possible reconstructions of ancient light and shadow interactions at some places from prehistoric Europe. Our question is whether the light coming from celestial objects on particular occasions interacts with the building or place in a way that could have been used as an 'architectural' or/and intentionally employed element to enhance proceedings taking place inside it.

DAILY PRACTICES OF PREHISTORIC EUROPE DURING THE MESOLITHIC / NEOLITHIC TRANSITION

Jacqui Wood, Saveok Water Archaeology, Savok Mill, Greenbottom, Cornwall, UK

Of all the transitional periods in European Prehistory the Mesolithic/Neolithic one is the most revolutionary. To suddenly acquire the skills of farming and animal husbandry as explained in countless school text books is just too simplistic to contemplate. This paper will detail some of the results of an experiment conducted at Biskupin in Poland in September 2007. I have taken a team to the archaeological festival at Biskupin over the last ten years, to experiment and demonstrate Iron Age cooking techniques. This time however, I worked in an area between the Mesolithic reconstruction and the Neolithic one. I wanted to discover through experimentation what it would have been like to

have such new commodities as grain and cultivated linen twine to ascertain just how those two items might have been used in a domestic context. The twine was made into various fish traps and nets to accompany our fishing experiments using a dug out canoe. The grain was used in cooking, but without any ceramics so as to replicate a Mesolithic camp utilizing the new foodstuff, but without any new cooking equipment. I will demonstrate using pictures and video clips the results of our experimentation. The period of transition I feel between the Hunter Gatherer and the well established mixed farming homesteads of the Neolithic would have been a very gradual process. I believe they would have taken on board more and more new technologies whilst at the same time keeping a considerable amount of the old ones in daily use.

LINKING GENERATIONS: BONE BEADS AS FUNERAL OFFERINGS IN THE FINAL NEOLITHIC OF HUNGARY

Alice Choyke, Medieval Studies Department, Central European University, Hungary

The length of time a particular object was used is an extremely difficult thing to measure on archaeological objects. Separating intensity of use and longevity presents almost insurmountable difficulties. However, as has been pointed out in the literature, objects can be imbued with meaning that goes far beyond simple function and their straightforward economic importance in a particular cultural setting (Choyke 2006). Human beings ascribe meaning and value to things, as Mauss has said, giving them 'fairy-like qualities' (Mauss 1924) based on who uses them, in what context and the materials they are made from. In previous papers I have argued that long-term use of particular objects by individuals or groups lends them a special meaning.

Elsewhere I have noted in the Final Neolithic of Hungary there is a particular kind propeller-shaped bead that was given to women and girls as parts of hair ornaments, bracelets and necklaces. The different degrees of wear on the beads strongly suggest that these ornaments were prepared for the moment of the funeral. It also suggests that these beads did not belong to the deceased in life but had been used over long periods by related people in the community. An experiment is underway in which eight of these propeller shaped beads and several simple dog canine and round bone beads were strung onto a leather thong. This necklace has been continuously worn for over a year, dismantled only to measure what type and degree of wear has occurred on their surfaces compared to the single bead kept aside for comparison purposes. Although the author's intention is to keep using this necklace for at least ten more years, the preliminary results showing how little worn these beads actually are after one year of continuous wear will be presented here.

EXPERIMENTAL ARCHAEOLOGY AND THE POTTERY WHEEL: A CRITICAL REVIEW

Caroline Jeffra, University of Exeter, UK

Experimental archaeology has served as a valuable tool for the study of the introduction of the potter's wheel, and continues to do so. A number of research projects have already been conducted using various combinations of ethnographic, experiential, and experimental data. The incorporation of such approaches into examinations of ceramic formation processes has greatly expanded the current understanding of choices made by potters in technologically transitional periods. By reviewing the past and current use of experimentation and other approaches in this line of study, their strengths and weaknesses can be highlighted. Additionally, the implications of their results can be critically evaluated. In doing this, a more generalised picture of the state of our knowledge can be generated. Most importantly, our understanding of the appearance of and impetus for technological change may be seen.

EXTENDING THE PARADIGM TO ANSWER THE 'UNANSWERABLE': A CASE STUDY USING ROMAN DYEING

Heather Hopkins, Bradford University, UK

Through the application of experimental archaeology and the inclusion of engineering techniques new to archaeology, this work answered previously 'unanswerable' questions. The original classics question of the scale of manufacturing in Pompeii had been subject to fierce debate: Moeller (1976) argued that the dyeing industry was large enough to export; Jongman (1988) stated that Pompeii relied on imports. Previous studies had a theoretical approach. This study used a new approach: the relevant parts of the industry were reconstructed to gauge the parameters and capacity of the apparatus.

Following the construction of a full-scale replica to establish operating parameters, the most complete survey to date of the remains *in situ* was undertaken. The human skeletal data from Herculaneum was examined and an ergonomic assessment of each apparatus undertaken to assess the practical aspects of the apparatus and the efficiency with which each could be operated. This approach was new to experimental archaeology and to this question.

However, to understand the physical limitations of a complete artefact it is necessary to understand the internal physical processes, an approach that is new to experimental archaeology but fundamental to engineering. A computer simulation of the apparatus was constructed using the design, cycle time and temperature data from the physical remains and the experimental replica. The inclusion of Finite Element Analysis allowed a determination of physical changes in the materials during heating, the mode of failure of the apparatus and the time span within which this occurred. It led to an understanding of the system and scale of manufacture within Pompeii, demonstrating that the dyeing industry was smaller than the theoreticians thought.

The study was sequential, taking a theoretical classics problem through replicative experimental archaeology into Finite Element Analysis, thereby allowing the exploration of a problem by those from differing disciplines. This new approach answered specific 'unanswerable' questions and provides a case study illustrating the successful application of a new technique.

ROMAN PERIOD WHEEL-MADE GREY POTTERY IN EXPERIMENT

Halina Dobrzańska, Institute of Archaeology and Ethnology, Polish Academy of Sciences, Kraków, Poland

Andrzej Kielski, Krystyna Wodnicka, Jan Piekarczyk, Faculty of Materials Science and Ceramics, University of Mining and Metalurgy, Krakow, Poland

In Central and Eastern Europe north of the Roman *limes* wheel-made pottery was manufactured from the 1st c. to the beginning of the 5th c. AD. Common feature of that ceramics (fine and coarse) is even grey colour attributable to firing in a reducing atmosphere. Waste pottery is discovered in double-chamber updraft kilns with controlled heat energy.

Due to small number of archaeological evidences for kilns in the study area archaeologists suggest possibility of the use of more simple forms of firing structures. This paper presents the result of experimental firings in a reducing atmosphere carried out in "pit" firing structure and in single-chamber updraft kiln as contribution to the discussion.

The work was carried in Vadastra village (in 2007 and 2008) in the frame of a joint Polish-Romanian project.

EARLY SLAVIC ROASTER IN THE LIGHT OF EXPERIMENTATION

Bartłomiej Sz. Szmoniewski, Institute of Archaeology and Ethnology, Polish Academy of Sciences , Krakow, Poland

Early Slavic roasters are basin-like, shallow vessels with moderately thick to very thick walls, the reconstructed roasters being rectangular or, less frequently, round or oval in shape. The function of this type of clay vessel has been a subject of much discussion among researchers dealing with Early Middle Ages.

In 2007 the author participated in archaeological experiments with roasters at the Experimental Centre in Vadastra (Romania). The main goal of experimentation was to recognise possible ways in which they could have been used. The results of the Vadastra experimental programme have been compared with the analysis resulted from earlier tests, and the concept of roasters being used as vessels during the thermal processing of grain products have been proved. Grain which had been subjected to high temperatures had a good taste and was well-prepared for the next set of thermal processes. A basic conclusion based on these experiments is the clay basin-type objects were used for drying grain and roasting.

STORING VESSELS IN THE MEDITERRANEAN AREA IN LATE MIDDLE AGES. ETHNOGRAPHIC AND HISTORICAL APPROACH IN RECONSTRUCTING TECHNICAL DEVICES

Marta Caroscio, (Fellow) Museo Nacional de Cerámica y Artes Suntuarias “González Marti”, Valencia, Spain

This paper would like to draw theoretical attention on the “ethnographic” approach in experimenting the past concerning pottery making in late Middle Ages and early Modern times. As a case study, the technical devices in manufacturing big vessels for storing or transporting goods in the 14th-16th centuries will be analysed. As the manufacturing process remain the same up to the late 1970s, by combining different approaches, it was possible to reconstruct the all process: from getting raw materials to firing the finished vessels. Interviewing the last craftsmen, who still used the “old” techniques, was the starting point of this research, which has been carried out by at least two generation of archaeologists. By combining this information with those present in Medieval and Renaissance treaties, as well as those in archive sources, it was possible to draw new light into the technical devices employed.

BETWEEN RESEARCH AND TOURISM: A CASE OF INTEGRATED EXPERIMENTAL ARCHAEOLOGY IN SARDINIA

Maria G. Melis, Ramona Cappai, L. Manca, S. Piras, Dipartimento di Scienze Umanistiche e dell’Antichità, University of Sassari, Italy

This contribution intends to introduce some new aspects on experimental archaeology in Sardinia. This project involving the University of Sassari and a private farm holidays, was borne because of the necessity for the agro-tourist enterprise to diversify its own tourist offer and for the University to realize a laboratory of experimental archaeology. The product of this collaboration is the reconstruction of a prehistoric village and its different handcrafts activities. The choice of the location is extremely important because it is placed in a much frequented territory during the Prehistory strictly connected with the pond of Cabras, one of the most important Sardinian damp zones. A big contribution is given by the current ethnographic data, as for the use of vegetable essences in the architectural techniques and for the activities connected to the pond (fishing, molluscs gathering).

The objectives of the project are several: scientific (creation of an experimental archaeology laboratory that allows the group of research to verify technological studies made on prehistoric materials); didactic (formation of university and specialized students, doctoral candidates but also primary and secondary schools students); tourist / economic (offer of tourist packets that not only foresees the food and the lodging, but also the participation to experimental stage and the prehistoric village visit to the and to the products of the experimental archaeology); occupational (creation and occupation of specialized figures, not ordinary tourist guides, that can introduce the activities of experimental archaeology and the runs of the prehistoric search to the public.

THE ROLE OF EXPERIMENT AS AN EDUCATIONAL APPROACH IN MARITIME ARCHAEOLOGY

Francesca Oliveri, Soprintendenza del Mare, Palermo, Italy

Experimental archaeology is a useful teaching tool in educational projects involving young school students: the “Soprintendenza del Mare”, the only public department in Italy working in the field of Maritime Archaeology, believes in the importance of cultural heritage learning at school age.

Sicilian teachers and students live the experience of an underwater archaeological excavation field: the simulation allows the participants to observe from the surface of the sea the archaeologists at work. Others carry out the assistant role and assist to the activities from a motorboat through a *bathyscope*, a special magnifying glass.

The school project "A scuola di catalogazione" (School of cataloguing) allows the participants to catalogue, photograph, draw and study, true archaeological objects of underwater origin (amphora, plates, anchors, etc) like real archaeologists do. Also during laboratory activities students practise their skills creating objects related to their theoretical classes themes.

As a way to sense the life and habits of the past, “archaeological cuisine” plays an important role: by following Apicius’ cooking book (*De re coquinaria*) some students have been able to prepare (and eat) delicious meals from the past, demonstrating that food and dining are actually an intercultural means of communication, valid across the centuries.

Poster abstracts:

THE BOUNDARIES OF A “VALID” EXPERIMENTAL ARCHAEOLOGY

Elizabeth Cory-Lopez, University of Edinburgh, UK

For the past thirty years experimental archaeology has been used successfully to help answer questions about the Chalcolithic period of Cyprus (c 3900 – 2400 BC)(Croft, et al. 1999; Goring 1992; Peltenburg 1991, 1998a, b; Thomas 2005). In seeking to construct a *chaine opératoire* for the stone carving traditions during the middle phase of this period (3500-2800 BC) (Knapp 1993: 90), I sought to demonstrate via an experimental approach how an adaptation of an older methodological technique might be effectively used to provide the basis for future research. However, in the course of the work I began to uncover *experiential* elements that might also open up potential areas of new research; but how valid are these avenues when taken in to consideration with the demand for hard, empirical evidence?

This poster presentation will introduce the work accomplished in my MscR and test the boundaries of what can be termed “valid” experimental archaeology.

MEAT SALTING EXPERIMENTS: A BETTER KNOWLEDGE OF MEAT PRESERVES PRACTICES AND TRADES DURING IRON AGE

Anna Baudry, UMR 6566 “CReAAH” “Centre de Recherche en Archéologie, Archéosciences, Histoire”, Rennes, France

The ancient texts such as those of Strabo testify the practice of salting meat for conservation and trade during the Iron Age. However, it is very difficult to assess the resort to this practice on the basis of archaeological remains. An experimental process has been constructed in order to look for possible macroscopic, microscopic and crystalline modifications of the faunal remains put in contact with salt for several months. With that aim, pieces of meat were salted during several months and then buried. These remains are now under study and analysis.

The first involvements of this experiment are to be able to compare results acquired by experiments with archaeological data and to answer questions such as:

- Do these bone remains derive from fresh meat or from salted meat?
- Do salt production and preserves preparation take place in the same place?

This poster introduces different stages of the experimental process as well as the preliminary results of this research.

EXPERIMENTING LIGHT AND SHADOW. A PERFORMATIVE APPROACH TO A PROSPECTIVE ARCHAEOLOGY OF IMMATERIALITY

Adrian Serbanescu, Doctoral Centre, National University of Arts, Bucharest, Romania

My poster intends to present the many analogies existing between art and archaeology, using performance, an instrument of contemporary art, to approach the immaterial element of the Past which is *space*.

Space can be perceived as the result of a play between light and shadow or darkness, and the experimentation of their relationship could offer to the performer a sensorial experience similar to that of the people of the past.

In several visual examples resulting from a series of performances, I will try to present how natural or architectural spaces could be animated through the play of natural or artificial light, the projected shadows being also a metaphor for the people and things that no longer exist.