



## 11th conference, Oldenburg (G) 11th - 13th October 1997

D. Olthof  
VAEE – Netherlands

---

### Twelve years of experience in experimental archaeology the 11th International Conference on Experimental Archaeology

[ed.: where possible, the original summary is added]

#### Introduction

The International Conference on Experimental Archaeology ("Tagung") returned for its jubilee session, the 11th time, to the "Landesmuseum für Natur und Mensch" in Oldenburg, Germany, where it all started. The *Tagung* took place from October 11 - 13, 2002 and attracted about 100 archaeologists for the theme: "twelve years of experience in experimental archaeology".

The lectures presented were very different, both theme as in quality. The general theme of the *Tagung* was not always presented that clearly by the speakers. Simply said, the presentations can be divided into four categories:

1. Experiments
2. Reconstructions
3. Education
4. Miscellaneous

#### Experiments

##### Experimental Archaeology in Forchtenberg

Wolfram Schier (D) (*Institut für Archäologie der Universität Würzburg*)

Beginning in 1998, the University of Würzburg conducts interdisciplinary experimental research towards forms of extensive agriculture, as these could have been applied in the early Neolithic around the Lake Constance. Botanical research revealed actually numerous interruptions in the succession of culture plants in this area. Further, in different soil samples, large quantities of charcoal have been measured. This could point to a kind of "slash-and-burn" agriculture, in which time after time areas of wood were cut down and burnt for making fields, which were kept in use for 1 to 3 years.

Subsequently, they remained unused for many years in order for the forest to recover. After the vegetation had regenerated enough, the process would start from the beginning again. These cycles of cultivation and reforestation might have taken 15 - 25 years.

To test this theory, a plot of forest near Forchtenberg was divided into 34 pieces of 30 x 30 metres in order to be able to investigate different stages and aspects of the exploitation cycle. For example, different ways of working the soil were investigated (with a hack or an ard), different ways of sowing (in rows or spread broadly), the yield of different crops, the chopping down with stone axes, the appearing sequence of different plants at fallow land, the influence of fire on the ecosystem et cetera. The provisional results make clear that such a kind of extensive agriculture yields many advantages. Thanks to the burning down of the forest, most weed seeds burn, making the weeding process in the first year hardly necessary. Furthermore, the burning down results in a higher quantity of minerals in the soil. All this leads to higher yields compared to unburned fields. The second and third year however, show diminishing yields and an increased concentration of weeds. It might take less effort to exploit a new plot of land compared to intensely fighting the weeds. Another possibility is to burn down the field repeatedly in the second and third year. Than again, one has to get the fire wood from another location: a lot of effort.

The experiment is far from ready: only four of the 15 - 25 years of the slash and burn cycle have passed. This means, we can export more and more definite results in the future to come.

## **Laboratory for Archaeobotanics: carbonisation trials with culture plants**

*M. Rösch, Tanja Märkle (D) (Landesdenkmalamt Baden-Württemberg, Archäologische Denkmalpflege)*

*[Summary: Between the cultivated plants are millet, poppy and linen in charred condition usually hardly represented. With systematic carbonization experiments the question was followed under which conditions it comes to a carbonization at all and thus to a preservation chance.]*

Carbonised plant remains can yield interesting information about, among others, cultural crops, vegetation and patterns of nourishment of the past. However, not all plants carbonise equally well. Researchers realised, millet is hardly ever found in carbonised condition as it changes between 250-400° Celsius into an unrecognisable, amorphous mass. Uncarbonised millet is however often found in latrines and comparable finding circumstances. Poppy seed and linen do not carbonise well either. This can lead to a distorted image of the past.

The goal of the experiment was to investigate under which circumstances millet, linen and poppy seed carbonise and subsequently remain conserved for posterity. To find this out, small quantities of seeds were heated in small jars a modern laboratory oven to different temperatures, both covered with aluminium foil and uncovered (to imitate reducing circumstances).

The conclusion was, that those seeds are destructed at much lower temperatures than for example wheat. Under reducing (oxygen poor) atmosphere, they can carbonise at a higher temperature than in a oxygen rich atmosphere. The in the experiment imitated situation is not completely comparable to prehistoric situations in which corns and seeds carbonised (for example fire, roasting of corns et cetera) as no open fire was used.

## **The functional Interpretation to ceramics and the special role of the experiment**

*Anja Naschinski (D) (Lübeck)*

*[Summary: The lecture throws light on the large realization potential of experiments and ethnographic researches for the function Interpretation at ceramics: Micro attitudes studies bring Impulses for a new understanding of function and for the future source development.*

*It will be introduced:*

- 1. Experiments of the lecturer to basic questions of the emergence of traces of usage.*
- 2. Examples for the use of experiments in published function interpretations at ceramics*
- 3. Use of experimental and ethnographic realizations won from the context of an analysis of damages at early modern ceramics.]*

Ceramics were and are used for many purposes. Of course it is interesting to archaeologists to find out what the function of certain pottery ware has been: cooking, eating, storage et cetera. The use of a pot leaves traces, which can give insight in the function of the piece. Shapes of pottery are however multi functional; this can cause problems in the analysis.

The researcher's question was twofold:

- is multi functionality recognisable in the use wear traces on the ceramics?
- is it true, the last use of it is determinative for the analysis?

To answer this question, she had five identical replicas of a post medieval cooking pot made for her. One served as a reference, one was used to cook milk, another to first cook milk, than roast corn, the third was used to cook milk, roast corn and again cook milk. In the fourth, after all these actions, also butter was stored.

The conclusion was that the colour of the sherds (reduced or oxidised) does not show how many functions the pot had. The deposits tell much more. Unfortunately, she was not very clear about this. For the analysis of the deposits and food remains, she had her hope set on future DNA analyses.

These should, however, become drastically cheaper if they are ever to add a substantial contribution to the research into shapes and functions of ceramics.

## **Qualitative and quantitative differences in ceramic sherds as a result not only of secondary additives but as well because of differential treatment of the clay itself**

*Gunter Böttcher (D) (Museumsdorf Düppel, Berlin)*

This was a very theoretic lecture on additives in medieval pottery of the 12th and 13th century near Berlin. The ceramics, more precisely cooking vessels, were made of clay with 20 - 25% of sand

added. Furthermore, the clay contained organic material. The question is whether these were added by the ceramist or were of natural occurrence.

The amount of additive needed was decided upon by the ceramist by checking the elasticity of the clay.

Preferably, sand with little chalk was used as additive. Presumably, this sand was found in the surrounding of Berlin. The region has namely a lot of swampy areas with acid soil from which chalk is soled.

Experiments showed that medieval cooking vessels do not last long when using them for cooking. The question remains if this mirrors the original situation or if the reconstructions or the use of them are flawed.

## Reconstructions

### The Ötzi Find seen from experimental archaeology

*Harm Paulsen (D)*

Mr Paulsen reconstructed different pieces of the gear of the glacier mummy "Ötzi" and tested them on usability. For example was shown that the grass cloak was no cloak at all, but more something like a matting.

The axe which Ötzi carried with him was made of copper, hafted in a shaft of oak wood and fastened with birch pitch and strips of skin. The theory, this axe was very special and unfit for use should be let go of. In the Alpine area, where the man originated, copper is a mineral which occurs often, so it should not be considered as a luxury product. Mr Paulsen copied the axe and used it for felling trees and making Ötzi's bow. The tool functioned very well, if the user knows how to handle it (and therefore does not use it to chop boorishly!).

The bow and arrow as well as the arrow case were reconstructed. During this process it stood out that the glacier man was carrying a different arrow, which was longer than his own arrows and had been made by a left handed person. The latter fact was observed on the direction of winding with which the arrow head was connected to the shaft. Ötzi's own arrows were made by a right handed person. That the shorter arrows were his own appeared of the length of the arrow case: the longer arrow did not fit. The arrow case was made very ingeniously, with a system of two lids to keep the arrows in their place and protect them against weather influences. Only one single size of arrows fitted in.

When testing the bow, it appeared to function very well: one could pierce a human completely when using it. The fact that the arrow head in Ötzi's shoulder bone had pierced only 2,5 centimetres, points to the fact that the arrow had been fired from a large distance or was slowed down by the backpack he was carrying.

The backpack was made of a branch of a hazel tree which was bent, with two transverse sticks, on which a leather bag was connected. The reconstructed exemplars functioned perfectly.

### Reconstruction of the wagon from the royal grave of Hochdorf

*Tiberius Bader (D) (Keltenmuseum Hochdorf):*

*[Summary: The reproduction of the splendour wagon of Hochdorf clarifies particularly well the function of experimental archaeology. Based on the realizations of the excavation and restauration the forging techniques of the building of the iron-disguised wagon are found out by numerous experiments.]*

In the village of Hochdorf, near Stuttgart, Southern Germany, a long while ago a cemetery of the Iron Age was excavated (Hallstatt to La Tène period). In one particular grave there were different rich gifts and the construction of the grave stood out. Originally it was a hill with a diameter of 60 m, among which a stone circle and a circle of posts was added. The man, buried here 2,400 years ago, lay on a bronze couch. Further he had, among others, a four wheeled wagon and a bronze vessel which originally must have contained about 500 litres of honey wine. It is for a reason, this grave is called the royal grave of Hochdorf.

The new wagon was constructed as an assignment of the Keltenmuseum in Hochdorf. It was made of wood and dressed with very artistic worked iron work. It took a modern smith quite some effort to reproduce this prehistoric piece of splendour! In the end, the wagon was even functioning well. This has been point of doubt for a long time because the front axis of the wagon could not turn, apparently making the wagon hard to steer. The contrary was the case.

## **Smiting of weapons and tools from bog iron loupe**

*Bernd Lychatz, Rosemarie Leineweber (Landesamt für Archäologie - Landesmuseum für Vorgeschichte - Sachsen-Anhalt)*

*[Summary: The contribution deals with the production and processing of iron under the conditions of early smelting. In a, after excavation findings reconstructed, furnace, iron was produced and the influence of the Operation of a furnace on the material properties was examined. In order to examine the possibility of working on and the formation characteristics in heat of the iron, the Luppen were divided, forged, twisted, fire-welded and forged again into ingots. Fire-welding and twisting serve the equability of the material and improve thereby the quality of the final product wrought-iron. From these semi-materials different weapons and tools were forged after historical model.]*

A description of the process one has to follow to turn a loupe, the whimsical shaped clump of iron which remains after the process of producing iron in a so called "Rennofen", into tools or weapons. The conclusion is that the iron is hammered out many times to get a homogeneous result. This way, a loupe of 4,5 kilo ends up as a sword of 660 grams!

## **Reconstruction and trials of the boat find Ralswiek 2 in the open air museum Groß Raden**

*Trixi Gülland (D) (Freilichtmuseum Groß Raden)*

*[Summary: It deals with the question, to what extent reproduction and testing of a boat-find can represent an archaeological experiment (based on the topic of the last Conference and our poster shown there).]*

In 1993 the medieval boat Ralswiek 2 was excavated and conserved. Here we talk of a oak wood sailing ship which could as well be rowed, dating to 977 AD. In 1997 one started the reconstruction of this boat. This was mainly executed with modern tools to save time. The old techniques were maintained as much as possible. The planks, for example, were hand made by splitting trunks and cut them into shape. Also the pins to connect the planks were self made. One tried to use as much as possible original kinds of wood. However, this was not always possible. Also rope and the sail were constructed in an original way.

After this the boat was (or actually boats, two of them were built) tested: it was sailed and rowed on lakes and the open sea. The boat appeared to function well, especially after changing the rudder, which was based on a British find but didn't function that well. The sailing experiments led to more insight into medieval sailing techniques. This differ from modern techniques because medieval ships had a square instead of a triangular sail as nowadays. The experiments learn that the original crew must have been well trained.

The abrasion of the boats through the years was subject of investigation as well. Chinks started to form between the planks because the wooden pegs were drawn inside by the pressure. Near the ore holes, the ship's side started to crack and some parts made of willow even started to sprout! Maybe, some of these defects can be blamed on using the wrong kinds of wood. It is the meaning to go back to the original ship to see where it was repaired and to compare those to the newly constructed boats. This should give insight into the use and life time of such kind of boats in the early Middle Ages.

## **Tar from coal - an attempt of the 18th century**

*Andreas Kurzweil (D) (Hahn-Meitner-Institut, Berlin):*

In the 17th and 18th century, enormous quantities of wood were used for the production of charcoal, wood tar, potassium, as construction wood, ship wood and as fire wood. Wood was expensive so one started to look for alternatives. According to an 18th century text, it was apparently possible to produce tar from coal.

Mr Kurzweil has executed an experiment following this text and he was successful. The use of this experiment is to produce material for comparison with which archaeological finds can be compared and roughly be dated. If between the planks of a shipwreck tar from coal is found, it must date to the 18th century or later.

## **The first colouring attempts with Armenian Cochenille**

*Margarethe Siwek (D) (Museumsdorf Düppel, Berlin)*

*[Summary: I need the sun for natural colouring, the way the early people did it most probably. It will be worked with old methods.*

*I want to show a poster and make a short presentation, i.e. Strand- and fleece wool, coloured with scale insects or roots, circa 2./3. Century A.D. (series of experiments 2002) Quite different colours violet; bright-, middle-, dark colour spectrum.]*

In a bog near Oldenburg, a so called 'prachtmantel' (a cloak) was found, dating about to 300 AD. Chemical analyses have shown it was originally painted violet / blue ("Fliederfarbe mit Blaustich"). Mrs Siwek wanted to copy this colour and started to experiment with Armenian Cochenille, a kind of lice. In the end it led to the right colour. It remains however the question of this kind of colouring was available in Northern Germany in the 3rd century AD, making the use of this reconstruction unclear.

## **Education**

### **Twelve years of experience in experimental bronze casting - archaeology and education**

*Ernest Mols (NL) (Buitencentrum Wilheminaoord)*

Wilhelminaoord is a centre for environmental education in a broad sense. The program for school children encompasses the development of the relation of prehistoric hunters to their environment up to the modern city man. Schoolchildren come here for a whole week and a part of the program is to cast bronze. To do this with children, first Mr Mols had to learn how to cast bronze himself to learn to know and to be able to avoid all dangers and traps.

Children make their moulds themselves, by cutting the wished design out of a piece of plaster. They can melt the bronze themselves too. The casting is not without danger because of which Mr Mols does that himself. This way, the children get insight into and possibly respect for an aspect of Bronze Age society, being the casting of bronze and everything necessary for it (getting your materials, making a design, making fire end getting it hot enough to melt the bronze et cetera). Furthermore, they learn something about the present as well, because a bronze (or other) item of the past still has a certain meaning to them.

### **10 years of experimental archaeology in Bavaria - looking back**

*Lothar Breinl (D):*

*[Summary: Experiences with the mediation of historical knowledge in schools, museums or other institutions. ]*

The title of this lecture was somewhat deceptive as it was not about experimental archaeology but about archaeological education. This last branch of archaeology is being executed for the last ten years or so in a serious manner in Bavaria. In 1992, because of the Landesgartenschau (a [commercial] show of gardens to the public), a 'prehistoric' house was built used for demonstrations of different aspects of life in the old days. After this, with more institutes, interest was aroused in this form of education. Museums in Munich and Nürnberg have special programs for children and a number of (pre)historic open air museums have opened. There are even different evening courses (at "Volkshochschulen") "Archaeology to experience", during which the participants learn things like making fire, flint knapping, spinning wool et cetera. The quality can be subject of discussion. According to Mr Breinl, the educational archaeological world should prevent the public to become overfed with each time more of the same activities: more and more open air museums and everywhere the same activities. People's money comes to an end at a certain moment and they cannot visit museums 100 times per year. It gets about time to pay more attention to quality in archaeological education. A good theoretical introduction for the participants is for example something one cannot do without, so the educational programs do not end up being tinkering without obligations.

### **Prehistoric relations between man and environment in the museum education**

*Ulrike Braun (D) (Archäologisches Zentrum Hitzacker)*

*[Summary: Arrangement of three ranges of topics for the Man-Environment-relation in the Bronze Age*

*in an open air museum. Idea and practice-test, archaeo-ecological contexts Nature-teaching-path - pond biotope - experiment of building fields. ]*

In the archaeological centre at Hitzacker, a 'Bronze Age' settlement is constructed. It is the meaning to use these houses and their environment to teach the public something about the relationship between man and environment in prehistory. That is why three aspects are highlighted and given special attention: agriculture, hunting & gathering and water.

On the fields, three year research has been executed into different methods of agriculture, yields, weeding et cetera.

To illustrate the hunting and gathering, a number of edible plants and bushes have been planted which should paint an image of an open forest, rich in food. These kinds are among others wild apple and hazel. Unfortunately, the soil does not allow all kinds.

Water was in Prehistory, just like now, very important: to drink, as a means of transport et cetera. To make this clear to the visitor, a pond was dug in which one originally could sail in a wooden canoe. However, the pool soon got too shallow, making sailing impossible nowadays. There are now many interesting plants and animals near the water, adding to the educational value.

For groups, specific programs and tours are set up during which the relationship between man and environment in Prehistory is made clear. Educating tourists gets more difficult.

August 2002, the archaeological centre was flooded. The water was up to the roofs of the houses! The damage, however, seemed to be not that bad. Well dried wattle and daub walls have survived the flood very well, recently built walls and walls made of sods not. The bottom of the roofs did not want to dry that well either. This can lead to problems in wintertime as the chance of the roofs to start rotting increases. In that case, they have to be replaced, making the damage rather costly in the end.

## **Half a year experience with the Middle Ages in the Historical Open Air Museum Eindhoven**

*Anneke Boonstra (NL) (Historisch Openluchtmuseum Eindhoven)*

From April 2002 on, the Historisch Openluchtmuseum Eindhoven, has besides the old 'Iron Age' settlement a 'medieval' little town with a farm, a crafts house and an inn, where one can eat and drink. For schools, three medieval programs have been developed which all take three hours each.

- The crafts program: the children learn about the origination of professions and crafts and can make their own purse, weave a rope, write with a quill and cast a coin of tin;

- The farming program: the children get information about farmers and serfs in the Middle Ages after which they make candles, chop wood, make rope, felt bracelets and bake waffles;

- The play - and theatre program: the class is divided into five groups, each of which has to study a scene of a play. Clothes to dress up and attributes are present.

Recreational incidental visitors can buy so called "children activity cards". The owner of such a card can do the laundry, hang the laundry wit wooden pegs, cut a wooden plate, do a very traditional Dutch game, mint a coin which can be spent in the inn on something to drink or eat. For adult groups, companies et cetera, programs have been developed as well.

To attract enough visitors over the year, different events are organised like a Viking market, musical days et cetera.

## **Miscellaneous**

### **Archaeometry and experimental Archaeology - a comparative description**

*Gerhard Schulze (D)*

This was a very theoretic lecture on the possibilities of archaeology by experiment and archaeometry. It is impossible to verify a hypothesis by means of an experiment. At most, the possibility or workability of the hypothesis can be shown. Falsifying a hypothesis is, however, possible. Often, demonstrations of traditional crafts and abilities are presented to the public as "archaeology by experiment". This is wrong. These demonstrations might be based on scientific experiments, they themselves are solely of educational character.

Archaeometry is a 'joint venture' between natural science and humanities: the application of natural scientific methods in cultural historical research, for example in archaeology, history of art and anthropology. Archaeometry comprises things like analysis of material, research after provenance of materials, dating methods and the investigation into the authenticity of artefacts and objects of art. In

all cases, the material is the focal point, just like in archaeology by experiment. Thus, archaeometry can provide important information for the execution of experiments.

## **Experiences from within: Life and thought of a woman in a TRB house**

Véronica Veen (NL)

*[Summary: Experience from within: a woman's life and thoughts in a TRB-house Experimental archaeology as we know it yields a wide range of factual knowledge. Mostly, however, this doesn't exceed the level of material culture from a technical point of view. Residing as an "archeotolk" (archaeological interpreter) in the TRB-house of an archaeological park, the Dutch Archeon, dra. Veen became aware of a possible method to "revive" or "re-member" women's life and inner world, more specifically the underlying symbolic system of their culture. Urged by the daily explanations to the visitors, an interaction developed between their reactions and knowledge, her own theoretical and empirical background in the field of archaeology and symbolic anthropology and her "neolithic" daily chores. All this resulted more and more in a new kind of meaningful story, almost like a "spiritual journey", able to provide new clues about how a world view can manifest itself in material culture.]*

Mrs. Veen worked in Archeon and tried to imagine the existence of a woman in the Funnel Beaker (TRB) Culture as well as she could. The basis of this were the readers which Archeon provides to its employees (known by the name 'archaeo-interpretators'). These readers hold scientific information concerning the different (pre)historic periods. To offer the public a more human / more personal image of the past, Mrs. Veen thought up her own story concerning her personal role in TRB-society, namely being a medicine woman. This was amongst others based on the story which was / is told in Archeon about the grave at the back of the 'Flögeln' house, where an older woman was supposed to be buried with between her grave goods a small collar-necked bottle. The latter was interpreted by Mrs. Veen as a medicine bottle.

To test her story, she decided to go get information from the excavator of the TRB-house, Mr. Zimmerman. And what was the case? There was no skeleton in any grave, let alone she being a woman. The collar-necked bottle was not excavated either. Honestly, it is not 100% positive a grave. The only items which actually were found in the back room of the house were two pots and amber beads in a pit.

This seems a useful warning for me to all who work in archaeological theme parks: check every now and then the original archaeological material, test your sources, update your knowledge! It is the park's task to provide the public a right image of the past, based on the actual scientific insights, not on one's own fantasies.

## **Damaging fire in the "medieval" house of the tar maker**

Dieter Todtenhaupt (D) (Museumsdorf Düppel, Berlin):

*[Summary: Design of the house, cause of the fire, fire-fighting, conclusions from the fire, fire-prevention.]*

Ten years ago, in the Museumsdorf Düppel in Berlin, a medieval house was constructed which served as accommodation for the "Teerschwelle", the people who produce birch pitch. All those years, the house functioned well and fire was lit there regularly. One day, however, a fire broke out unexpectedly. The fire started in the roof, possibly in the sooted spider webs or so. The fire was extinguished using powder extinguishers (which were not fit for this job), water and the fire department. The fire inside the roof could not be extinguished without pulling the reed off and extinguishing it on the ground.

In the end, the damage turned out to be not that large. The reed of the roof had to be changed, but the wooden roof construction was hardly damaged. Probably, in the Middle Ages, such a fire would have caused more damage.

The lecture was meant as a warning to other archaeological parks. Do not be too slack with open fires in houses! The best is to install something to catch the sparks, made of skin or wooden beams, over the fire place. Birch wood burns very bad, making this very fit for the job. Possibly, the roof can be rubbed on the inside with loam, solved in water. This provides with a protecting layer. Furthermore it is important to check the roof regularly on spider webs et cetera. Plumes of reed which stick out on the inside can catch as well soot and dust and have to be removed. Fire can easily be caught unnoticed in such dirt. Wood species which cause a lot of sparks (like soft wood) are unfit as fire wood. A last useful hint: keep Saint Florin happy, because he is the saint of fire!

## **The story behind the product. What about archaeological open air centres?**

*Roeland Paardekooper (NL) (Historisch Openluchtmuseum Eindhoven)*

[Summary: What about archaeological open air centres? Why do archaeological open air centres belong at the "Tagung" and in experimental circles? Isn't it all just about education, what happens at archaeological open air centres? What makes them different from the average visitor of the "Tagung"? What is the specific role of such a centre? Should we make a discernment between 'good' and 'bad' centres and who is the judge? What is the influence of 'our' centres and how can they stand stronger together? ]

In Europe, there are about 400 archaeological open air centres. Many of them are only little scientific, experimental or even archaeological. They use often the phrase of experimental archaeology, but what is that then again? Often, more of the following subjects are regarded as such:

- reconstructions
- education for children and adults
- demonstrations for the public
- incidentally trying out a certain technique
- scientific experiments (not fit for public)

Actually, only the last category falls under experimental archaeology, the rest fits more under archaeological education.

And what are archaeological open air centres then really, or better, what are they not?

- it are no museums, as a rule, there is no museum collection present, no original archaeological finds, just replicas
- it are no children's farms
- it are no amusement parks, even though the commercial aspect plays an important role (for example by having a restaurant)
- it are no workshops, like they are often called in Denmark
- it is not about "ancient technology"

But what is it then anyway? All the aforementioned items play a role in open air centres, but the whole is more than that. Archaeological open air centres are about

- education;
- experiments and experience; good and experienced people are necessary, both craftsmen and people with sufficient archaeological background and knowledge;
- "leisure", spare time, tourism: enough visitors are necessary to keep the centre going.

Why now this lecture at this conference?

European archaeological open air centres have united in the association EXARC. They can find each other easily and can learn from each other. The scientific archaeology by experiment in Europe is heavily depended on individual persons and is not embedded in more traditional structures. That is why international cooperation could be a good idea. The archaeological open air centres should offer room and facilities for scientific experiments and the archaeological craft-specialists on their turn should offer knowledge to the centres. Maybe it would be a good idea if these parties would cooperate in the future?

## **Discussion**

The closing discussion of the *Tagung* was spent for a large deal on the quality of the conference. In the future, a clear distinction must be drawn between archaeology by experiment and education in archaeology. The scientific level must be maintained as well. Further, there is a clear request for a summary of the theoretical basis of archaeology by experiment: the literature on this subject is - just like in the field - very scattered.

During the *Tagung*, the wish was expressed to get the conference more international by, for example, inviting colleagues from Scandinavia as well. If this is indeed a serious ambition, the organisers should think carefully about the official language of the *Tagung*: English might be a better choice than German.





## EXAR

During the conference, the founding of a new doming organisation for European experimental archaeology was announced. This is called EXAR, "*Europäische Vereinigung zur Förderung der Experimentellen Archäologie*" or "*European Association for the advancement of archaeology by experiment*". The goal of this association is: "...the advancement of works of experimental archaeology, the advancement of contacts between scientists, experimentators as well as cultural and scientific institutes and the public and the advancement of education of the public on both a national and a European level".

To make the international character of the association come true, members of the board have to originate from three different European countries. In the present board those countries are Germany, the Netherlands and Switzerland.

Both natural and legal persons can become member of EXAR. Members receive yearly the magazine "*Experimental archaeology in Europe / Experimentelle Archäologie in Europa*", in which among others the lectures of the Tagung are published. The future relation between EXARC and EXAR is unclear.

© EXAR [www.exar.org](http://www.exar.org)