FOOD, DRINK AND CULINARY PRACTICES IN ANCIENT TIMES

Report about the Food-Workshop on the 24. April 2013 in the Archaeon, Alphen/The Netherlands

by Rüdiger Kelm, Albersdorf

Introduction

Food and drink are basic needs for every human being. From the perspective of our modern culinary practices with all its specialities and (sometimes) strange customs the traditional cuisines and especially the pre- and protohistoric dishes seem not only very far away, but also very primitive and have a negative connotation. The “picture in mind” from the always meat-eating Stone Age hunter is very vivid in all of our heads …

There are a lot of different sources for the reconstruction of prehistoric diet: Harvesting-tools, hunting-weapons, traps, remains of oven-constructions, tools for eating, cooking-stones, pots, grinding-stones, bones, mussel-shells, carbonized plant- and food-remains, traces of fat etc. In some ancient periods we also have pictures or other figurative depictions (like the famous cave-paintings or Roman wall pictures). Very seldom we also have original recipes (like from the Roman cook Apicius from the 1st century AD or from medieval written sources).

Without a doubt we can observe that the prehistoric people in the different parts of Europe have developed food strategies in combination with acquisition, conservation and preparation techniques, where we still today can benefit from – also keeping in mind the countless “food disasters” since neolithic times like crop failure, cattle epidemics, wars and environmental catastrophes like heavy rainfalls.
We think that the (theoretical) knowledge and (practical) use of ancient food-preparation techniques resp. experiments about ancient food, drink and culinary practices gives a great opportunity to reflect about our own recent consumer behaviours with all its consequences for health, animal breeding conditions and (social and ecological) costs. So let us take a look into the many aspects of prehistoric cooking and the results of archaeological research and new starting-points of theoretical and practical work on this subject.

In the following text you will find a summarized report about the programme and the results (including some recipes) of the practical OpenArch-Workshop “Food, Drink and Culinary Practices in ancient times” as part of OpenArch Work-Package 4 (“The dialogue with skills”), which took place on 24. April 2013 in close cooperation and in a friendly and inspiring atmosphere in the open-air area of the OpenArch-partner museum Archeon in Alphen/Rijn in The Netherlands. The workshop included food-preparation skills and techniques in different pre- and protohistoric times (stone age, bronze age, iron age, roman times, medieval times) from different European regions and focussed on different methodological aspects from a theoretical and practical point of view.
The Scheme of the Workshop (24. 4. 2013)

Programme
9.00–15.00: Practical workshop (“cooking and looking”) parallel to the Open-Arch- and Workshop presentations, with accompanying discussions between the partners (who are changing between the different stations)
12.30–13.00: Lunch (with “regularly offered” food from the ARCHEON)
13.00–15.30: (Theoretical) Presentations/lectures
15.30–16.00: Discussion between the colleagues (with tasting of some of the products of the day in the medieval cloister gardens)

All presentations and demonstrations were documented in detail by pictures and film, which are available at www.openarch.eu!

Lectures/presentations
9.30–10.00: Introduction “Concept of the Future of Food” by Adjiedj Bakas (film-clips)
13.30–14.15: Prof. Dr. Alan Outram, Exeter University, England: Food and Fat in Prehistory: Some Examples from experimental Archaeology.
14.15–15.15: Prof. Dr. Bill Schindler, Washington College, Maryland, USA: Interpreting Prehistoric Foodways to the Public: An Opportunity and Responsibility

Plenary Discussion with Resume and Tasting of the products of the day

Practical stations (open to the public):

Archeon:
Mesolithic Time: cooking with hot stones;
Bronze Age (baking bread in clay oven, making soup of vegetables with apples, mushrooms and leek, smoking fish, boiling clams, “prehistorical café” with home brewed beer and mead and small appetizers like soft cheese, smoked fish, mealworms and roasted nuts);
Roman Period: Some recipes from ancient sources;
Medieval time: Team of bakers and monks in the “medieval town” with home bre-
ed beer, meat-balls on a pin, traditional bread, butter, raisins, bacon, cabbage, cumin-chicken etc.

Foteviken:
Viking Age: Making food in a earth oven (pit) with hot stones (meat, salmon, root
crops, onion, mushrooms).

Albersdorf:
Prehistoric Time: Herbs and spices – their use in food and medicine; production
of herbal teas (using herbs and spices from the Archeon open air area)
The activities of the OpenArch-partners were accompanied by a practical de-
monstration of Prof. Dr. Bill Schindler about fermentation processes of vegeta-
bles (with onions, raddishes, leek etc.).

Resumes of the Presentations:
Food, Drink and Culinary Practices in Ancient Times –
Introduction and Evaluation
(by Rüdiger Kelm, Archaeological-Ecological Centre Albersdorf, Germany)

In this presentation the lecturer introduced into the aim of the workshop with its
practical and theoretical parts and described in detail the evaluation of a questi-
onnaire, which has been sent round to different experts in prehistoric cooking and
answered by six specialists (from the OpenArch-partners and from external ex-
erts).
The main results are that more or less all Archaeological Open-Air Museums in
Europe have to face the same (organisational/financial/safety/hygienic) problems
in working with such activities, but that there is a big chance and challenge to fo-
cus in the future more on (former and recent) sustainability questions in connec-
tion with food and make comparisons between ancient and modern times, which
are of great meaning and daily importance for the general public. For this topic
there exist obviously the greatest awareness and best-practice-ex-
perience in Great Britain, from
where the institutions in other
countries can learn a lot in the fu-
ture.

Discussion themes following the
lecture of R. Kelm:
• There are common specifics
about cookery in archaeologi-
cal open-air museums (hint: prepare some time consu-
ming work/food always before the demonstrations to the public, so you can hold the interest of the visitors!).

- There are common problems which you have to face as a crafts person (f. e. to get the correct ingredients).
- There are Europe-wide strict regulations and restrictions looking on health and safety issues (hint from Eindhoven Museum: Let the school classes cook on their own and give them only the necessary information and ingredients, so they are responsible for themselves!).
- Modern questions and perspectives on sustainability in relation/combination with prehistoric food are major issues for future educational programmes in archaeological open-air museums and can give these programmes on ancient food a very actual/modern aspect.
- Hint: Start cooking with visitors using recipes of dishes which taste good (so you can evoke interest in the questions and issues belonging to ancient food production and preparation!).

Food and Fat in Prehistory: Some Examples from Experimental Archaeology
(by Prof. Dr. Alan K. Outram, Exeter University, England)

The principal ways in which experimental archaeology can inform us about past foodways are outlined, including some short examples. These examples are discussed in relation, not only to their scientific relevance, but the extent to which they can form useful demonstrations for the presentation of archaeological
science and ancient skills to the public. It is clear that some forms of experiment lend themselves much better than others to dialogue with the visitor, whilst others have greater power to answer scientific questions. Some require greater skills than others, too.

Experiments into prehistoric exploitation of fat resources are taken as the main case study. The importance of fat in the diet of hunter-gatherers and early farmers is explained, and the different ways in which we can archaeologically investigate fat exploitation and consumption are discussed. An experimentally based method for identifying bone marrow extraction and bone grease production is presented, before providing an example of its application to the archaeological record. This example compares prehistoric Paleoeskimo fat exploitation to that of the medieval Norse in Greenland and Iceland.

The value of experiments in bone fat exploitation is discussed in relation to the presentation of past skills to the public, alongside its use in educating visitors in relation to past diets and the formation of the archaeological record. It is concluded that this particular activity lends itself well to dialogues with science, the public and skills. It is a process that is active and can be demonstrated on an appropriate timescale. It demonstrates aspects of past diet that are lesser known today whilst producing a very visible and resilient physical signature that can be seen in the archaeological record. It requires some knowledge and skills that are largely lost in modern society.

Discussion themes following the lecture of A. Outram:

- There are indications from excavations that also bones have been roasted and used as ingredients for food (f. e. for stews) – "new", today nearly unknown old food ingredient.
- The results of archaeological excavations show that more or less all parts of an animal are used by prehistoric men (for food or for other purposes).
Interpreting Prehistoric Foodways to the Public: An Opportunity and Responsibility
(by Prof. Dr. Bill Schindler, Washington College, Maryland, USA)

We are continuously distanced from our food. No longer do we hunt and gather. No longer do most of us grow or raise our own food. In fact, most farmers no longer grow their own food and instead purchase the majority of their family food from grocery stores. In recent decades our relationship with food has deteriorated to the point where most of us do not even know the people that are raising, harvesting, butchering, packaging, shipping, or preparing our food. The interpersonal contacts we engage in to obtain the food that we consume, minimally three times every day, are often limited to a cashier at the grocery store or a waiter at a restaurant. While these transformations have been couched as progress, they have profound consequences that have, amongst many other consequences, resulted in making humans and our environment sick. It is within this dietary landscape, a landscape that is so drastically different than anything even remotely resembling subsistence patterns of the past that we attempt to interpret prehistoric and historic food ways to the public. It is my contention that an accurate portrayal of ancient subsistence practices may be the most important role that we can play in attempting to interpret the past. The ability to present food in context is an opportunity rather than an obstacle and the context created in an open-air museum is so powerful that it has the ability to shed people of their inhibitions regarding food. Modern society has much to learn from a true understanding of how we met our dietary needs in the past and, given the unique opportunity afforded us, I believe it is our responsibility to provide it. This presentation will discuss the numerous benefits of paleodietary subsistence practices and report on the authors experiences where in-context interpretation of prehistoric food ways to the public were successful.
Discussion themes following the lecture of B. Schindler:
• The different methods and problems of food conservation are discussed.
• B. Schindler gives interesting and amazing examples how difficult it can be to get the real (“prehistoric” ingredients for the) food, like for example raw milk (which is very often forbidden to sell to the public).
• There are some publications of B. Schindler about this themes and general food issues online and printed available.

“Concept of the Future of Food”
(by Adjiedj Bakas, The Netherlands)

Mr. Adjiedj Barkas is a motivational speaker and a trend-watcher, who has written several books on the present-day challenges concerning food production and consumption. For the introductory part of the workshop there are used different film-clips from his work to explain his concepts. Content: The film shows that the pressure on food increases today because of population growth on the one hand and environmental protection needs on the other hand at the same time. It is presented what can be done resp. what is necessary for the future to “feed the world” (f. e. development of new plants, increased use of organic and genetic food, “personalized food”, “guerilla gardening” in the cities with gardens on roofs etc., need of meat substitutes, more food consisting of vegetables, return to seasonal and regional food, use of food as medicine etc.). Because 60–80 % of the population of the future will live in cities there are new forms of living and food production needed; here future research will play a major role. It is sure that a shift will come for our future food (“shift happens!”).

In this context also archaeological research on food and experiments/demonstrations of ancient cooking can be very useful, as Jack Veldman from Archeon explains in a following discussion of the participating colleagues.

General Discussion themes on ancient food:
• There seems to exist always a personalised “taste in mind” (with aversions and preferations), which causes in ethnic background, traditions, food supplies in different regions, climate etc.
• One of the most interesting results of the workshop was the conclusion that “prehistoric food” tastes more real, deeper, more intensive than modern food.

Recipes (examples):

a) “Stone Age”
(modern recipes inspired by prehistoric supplies and used in the Archaeological-Ecological Centre Albersdorf, Germany):

1. Ragout of mushrooms with leek and bacon
   Ingredients: 750 g cepe-mushroom, 400 g wheat, 450 g leek, 300 g bacon,
200 g grease (pig), 300 g sour cream, 1 l bouillon, salt
Preparation: Let the wheat ca. 30 min. cook in the bouillon, thereafter let it swell for ca. 5–6 hours without heating. Cut the bacon into small pieces and let it fry for ca. 5 minutes in the hot grease. Then put the mushrooms (cut into slices) to it and continue with frying for further 10 minutes (with low heat). Put the swollen wheat-corns (without the rest-liquid) also to the bacon-mushroom-mix and continue for ca. 15 minutes. At last put the sour cream carefully to it and salt it.

2. **Stew made of fish with mussels, salmon and leek**
   Ingredients: 500 g mussels (without shell), 250 g salmon (cut into pieces), 2 l water, ca. 1 kg leek, horseradish (grinded), sour cream
   Preparation: Heat the water, put the leek to it and let it cook for 5 minutes. Put then the fish and the mussels to it and continue to cook ca. 5 minutes (low heat). Season it with horseradish and sour cream before serving. Serve with flatbread.

3. **Blackberries with honey and nuts**
   Wash the blackberries, put (little) honey on it and serve with grinded (hazel-)nuts.

4. **Marmelade of Rowan**
   Reap berries of rowan-bushes (after some weeks of frost – before much too bitter!). Mix with apples and peaches and cook it to a marmelade.

b) “Iron Age”
(modern recipe, used and delivered by Ciutadella Iberica, Calafell; Catalunya)

*Wholewheat flatbread*
Ingredients: water, wholewheat flour, sourdough (mixed wholewheat flour and water fermentation; left to stand 4 days) and salt.
Preparation of dough:
- Mix a spoonful of salt in a part of water and a part of wholewheat flour (measure: we use a small plastic coffee cup)
- Mix the dough with your hands
- Add a spoonful of sourdough and keep mixing until ingredients are all well combined
- Make a flat shape
- Put in the oven until it is well baked.
c) Roman Recipes for the spring season
(from M. G. Apicius cooking-book “De re coquinaria”, 1st cent. AD), delivered by Viminacium Roman Park (Serbia) in original Latin and translated into English

Spring

1. **PISA** (Green-beans) Apicius, Liber V, III, 1.
   Cook the peas, when simmered, lay leeks, coriander and cumin on top. Crush pepper, lovage, cumin, dill and green basilica, wine and broth to taste, make it boil; when done stir well, put in what perchance should be missing and serve.

2. **PVLLLO** (Chicken) Apicius, Liber VI, VIII, 2.
   Dress the chicken carefully and quarter it. Crush pepper, lovage and a little caraway moistened with broth, and add wine to taste. After frying place the chicken in an earthen dish pour the season over it, add laser and wine. Let it assimilate with the seasoning and braise the chicken to a point. When done sprinkle with pepper and serve.

3. **RAPAS SIVE NAPOS** (Turnip in honey or wine) Apicius, Liber III, XII, 1.
   Turnips are cooked soft, the water is squeezed out; then crush a good amount of cumin and a little rue, add Parthian laser or vinegar, stock, condensed wine and oil, heat moderately and serve.

d) Modern Recipes that Exemplify Prehistoric Food Processing Technologies and Nutrient Dense Foods from the Past
(tested, tasted and delivered by Dr. Bill Schindler, Associate Professor of Anthropology, Washington College, Chestertown, MD, wschindler2@washcoll.edu)

1. **Roasted marrow bones with arugula salad**
   Source: The Whole Beast: Nose to Tail Eating by Fergus Henderson.
   Marrow bones, about 3 inches long
   Kosher salt
   Vegetable oil
   Celtic sea salt
   Place the bones in a bowl of ice water to cover, add 2 tablespoons salt, and refrigerate for 12 to 24 hours, changing the water 4 to 6 times and adding 2 more tablespoons salt to the water each time.
   Preheat oven to 450 degrees. Drain the bones and pat dry. Stand them up in a lightly oiled roasting pan, and roast for 15 to 25 minutes, or until the marrow has puffed slightly and is warm in the center. To test, insert a metal skewer into the center of marrow, ten touch it to your wrist to see if it is warm. There should be no resistance when the skewer is inserted, and a little of the marrow should have melted and started to leak from the bones. While the bones are roasting, prepare the parsley salad, if serving it, and toast the bread.
2. Parsley Salad
3 cups mixed flat-leaf parsley, celery leaves, and arugula leaves
1 tablespoon finely diced shallot
2 teaspoons capers, rinsed and chopped
2 tablespoons olive oil
2 teaspoons freshly squeezed lemon juice
Kosher salt and freshly ground black pepper
Place the leaves, shallot, and capers in a medium bowl. Whisk together the oil and lemon juice in a glass measuring cup or a small bowl, then season very lightly with salt and generously with pepper. Toss the salad with the dressing and serve.

P. S. Something about prehistoric drinks (which are very often forgotten in this context): Water and (from neolithic times onwards) milk were the most important drinks through all times. Besides that we do not have to forget blood (also taken from living animals), beer in its different forms, honey-wine, wine, spiced wine, syrup and teas from different fruits, teas from herbs and birch-water (especially in scandinavia).
Here are two recipes for tea, which are used in Albersdorf and could have been also used in prehistoric time (by Tobias Kühne):

1. Nettle Tea:
   1 bucket of fresh and young nettle (*Urtica dioica*), 3–4 hands full of dandelion (*Leontodon*), 3 hands full of *Galium aparine*, 1 little ginger-piece, 30 g brewer’s yeast and 2 cups of brown sugar.
Cook the herbs carefully ca. 45 minutes in 8 l of water. Let this cool down and put the sugar and yeast to it. Hold it warm for ca. 8 hours, then take the foam away. Fill it into bottles and seal it.

2. “Coniferous Tea”

In wintertime you can make a tea rich in vitamins out of the needles of Picea, Abies and/or Pinus. Boil water (not cooking!) and put it to the needle-mix. If you cut the needles before to pieces the substances can easier develop its taste.

Impressions from the Workshop:
All photos are taken on the occasion of the Workshop on the 24. 4. 2013. You find photos and film-documentation from the food-workshop in the open-air area of the Archeon on the homepage of the OpenArch-Project (www.openarch.eu). More literature on food and experiments about prehistoric cooking you find online in the Exarc Journal (www.journal.exarc.net).

Bibliography

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