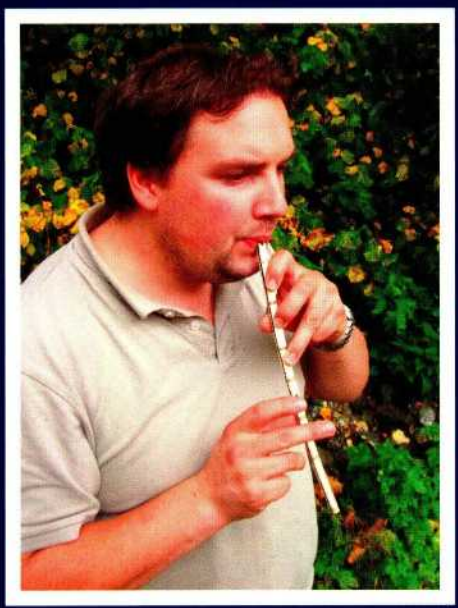
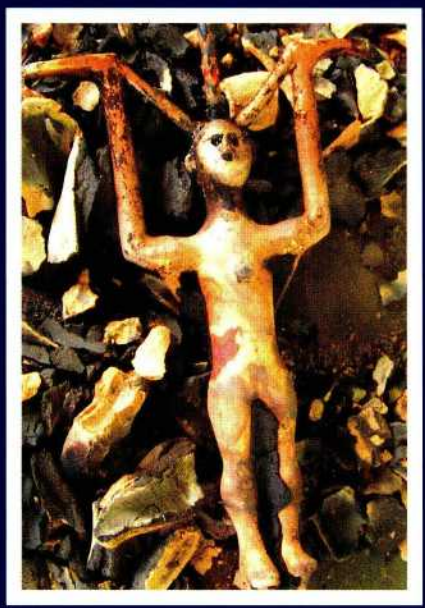
EXPERIMENTELLE ARCHÄOLOGIE

in Europa

BILANZ 2013





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Inhalt

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Itinerary of an apprenticeship and the development of public event archaeological presentations

Pierre-Alain Capt

Zusammenfassung – Wegbeschreibung einer Ausbildung und die Entwicklung von archäologischen Präsentationen vor Publikum. *Die Entwicklung einer Vermittlungsaktivität im Bereich der Geschichte und Archäologie ist ein langer Prozess. Ziel ist es, zwei Tätigkeiten zusammen auszuüben, die sehr unterschiedliche Kompetenzen verlangen. Es ist ein langer Weg vom freien Forscher und Handwerker, der geheim in seiner Werkstatt arbeitet, bis hin zur öffentlichen Person, die ihr Know-how zeigt, das Interesse an der Geschichte weckt, sich gerne vor Publikum präsentiert und ihre Arbeit vorführt.*

Perfecting a public event presentation in the domain of history and archaeology is a long and complex process. It requires mastering three vastly different professions, each with specific competences, and melding them into one coherent presentation. It is a long path from independent archaeological researcher to a craftsman working in the seclusion of a studio, to the role of public presenter, demonstrating both the craft and inspiring an interest for history, while valorising and promoting the work.

Developing professional competences

Archaeology was not my first profession, no more than potter or cultural mediator. Through my interest for ancient history and archaeology, I became intrigued by the craftsmen of the past. Because of my curiosity about the history of the Swiss Romand region, I visited many pre-Roman and Roman habitation sites, collecting surface finds of pottery sherds that were brought up during winter ploughing. This meticulously preserved collection of sherds, while being interesting in and of itself, somehow appeared less fascinating to me than the history of the craftsmen who made these objects and people who used them. Little by little the idea germinated to attempt to reproduce the gestures of these craftsmen – to rediscover their working methods.

In 1995, modern research about ancient pottery techniques was only in its beginnings, but through consulting various publications on the subject, I discovered excavation reports about ancient potter's workshops and most notably, plans of Gallo-roman pottery kilns. I decided, therefore, to try it. Without any previous knowledge of modern pottery techniques, the endeavour promised to be vast… At first, the project advanced through trial and error, relying on a rather empirical, self-taught method. This first independent learning period allowed me to discover the rudiments of wheel turned and hand modelled pottery techniques, as well as how to use wood fired kilns.

By 1998, the first contacts were made with archaeologists and pottery researchers, notably those from the University of Lausanne. Although completely embryonic, the results I had already obtained incited the interest of ancient pottery specialists, and I was cordially invited to further my research by having the most recent pertinent scientific works put at my disposal.

I thus spent the following years looking for more precise archaeological and historic sources and refining pottery techniques and firing methods, plus testing different types of potter's wheels and reconstructions of ancient kilns. Through increasing contacts with archaeological researchers and experience, what started as hobby, became my principal activity from 2006 on.

Research

One of the major problems I was constantly confronted with, besides the acquisition of specific skills for reproducing ancient ceramics, was researching antique sources. Regardless of type – iconographical, epigraphic or archaeological – these sources form the basis of the research. Yet at best, they are lacunary or prone to errors of interpretation by inexperienced researchers. These source documents are rare, sometimes not very legible, and some have never been published. In order to clearly see the various types of difficulties, each category is treated individually.

Iconographical sources

Greek and Roman iconography offer a few representations of potters at work, with sufficient indications for identifying precisely the type of potter's wheels used during the period (*Fig. 1*). (D'Anna et al. 2003, 14-19) For the Celtic Iron Age and the Gallo-Roman periods, there is absence of visual representations of potters. In Europe, this lack of iconographical information is also a problem for the

Fig. 1: A potter from Pompeii shown on a wall painting. Regio II, Insula III, entry 9. – Töpfer auf einer Wandmalerei von Pompeji. Regio II, Insula III, Eingang 9.

Fig. 2: A Medieval potter's stick powered wheel. – Mittelalterliches Töpferrad, das mit einem Stock in Drehung versetzt wurde.

beginning of the fourth century CE through to the end of the thirteenth century CE. But for the Late Medieval period, fourteenth and fifteenth centuries CE, the images show that the equipment had evolved very little during the course of history.

Only two types of potter's wheels are pictured. The slow or hand-wheel, the first to be perfected, covers all historical periods, and is still used today. The stick turned fast-wheel (*Fig. 2*), consists of a large wheel of wood or stone propelled by a stick, appeared in Europe during the Roman period. This type traverses all periods and continues to be the basic technique used by rural potters in southern Asia. While working routinely with these two types of potter's wheels, I noticed that modern European potters do not easily master these ancient turning techniques. A little experience with these types of ancient wheels shows that, not only are these mechanisms are perfectly adapted to mass production, but stick powered turning offers the significant advantage of high speed rotation, comparable to modern electric potter's wheels.

The potter's kick wheel (*Fig. 3*) has two parts; the bottom section or flywheel is close to the ground and propelled by the feet, the second part is the head or the bat, which is at work height, and offers the undisputable advantage of allowing the potter to have both hands free. This type is too often represented in reconstruction or explanation attempts showing antique potters, even though it appears for the first time in Italy during the fifteenth century. It was adopted in Northern Europe only much later; in France under the name of "the Italian wheel", later in Germany under the name of "the French wheel" and finally in Eastern Europe, under the name of "the German wheel". A different type of potter's wheel, though not with a kick wheel mechanism with two parts linked by

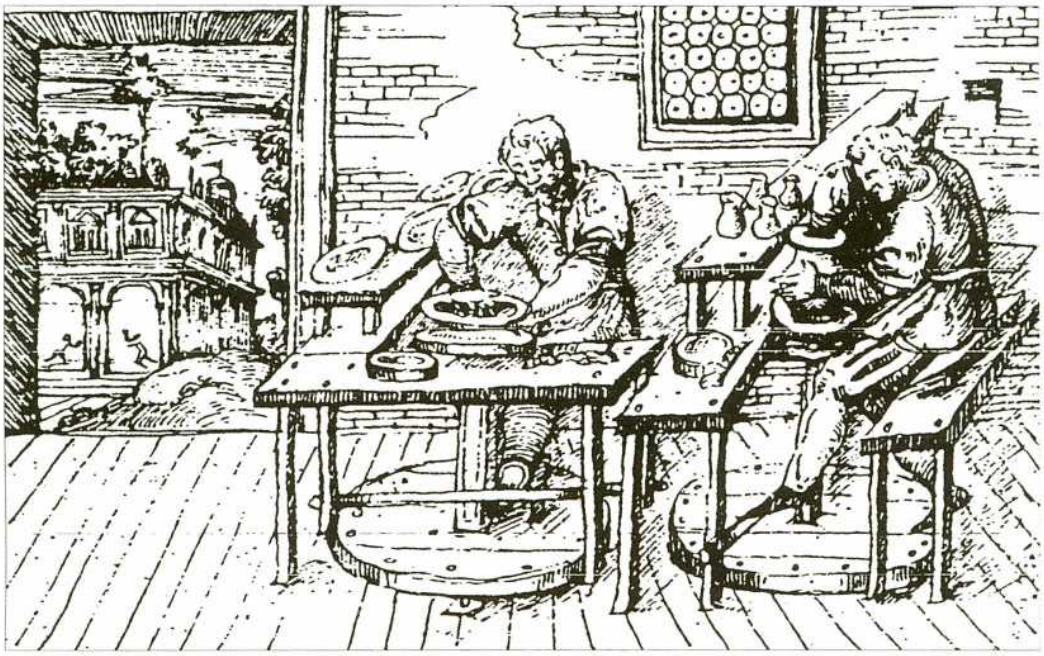

Fig. 3: The oldest known image of a potter's kick wheel, Italy, 16th century. – Die älteste je bekannte Drehscheibe mit Fußantrieb. Italien, 16. Jh.

Fig. 4: Potter's workshop. Face B of a black figure Corinthian pinax, c. 575-550 BCE. From Penteskouphia. – Töpferwerkstatt auf einem korintisch schwarzfigurigen Pinax, um 575/550 v. Chr. Gefunden in Penteskouphia.

bars, was nevertheless developed as early as the end of the fourteenth century in Germany and Eastern Europe.
Among the images from the Greek antique world are several images of potter's kilns as well as the various operations relating to firing pottery (*Fig. 4*). These representations systematically show beehive shaped kilns, leading many researchers to assume that all kilns had a fixed vaulting. Though beehive updraft kilns were present between the seventh and sixth centuries BCE, and are necessary for the production of red and black wares, the majority of kilns, notably in the Gallo-romaine area, did not have a permanent vaulted cover. They were cylindrical kilns in which the wares were simply covered with a layer of sherds that kept the heat in.

The written sources

Literary sources are sparse and uninformative. The artisanal character of potter's work, their social status and the commonness of their occupation inspired very few authors to write about the subject. Diodorus Siculus (Biblioteca Historica, Lib. IV, 76) attributes the

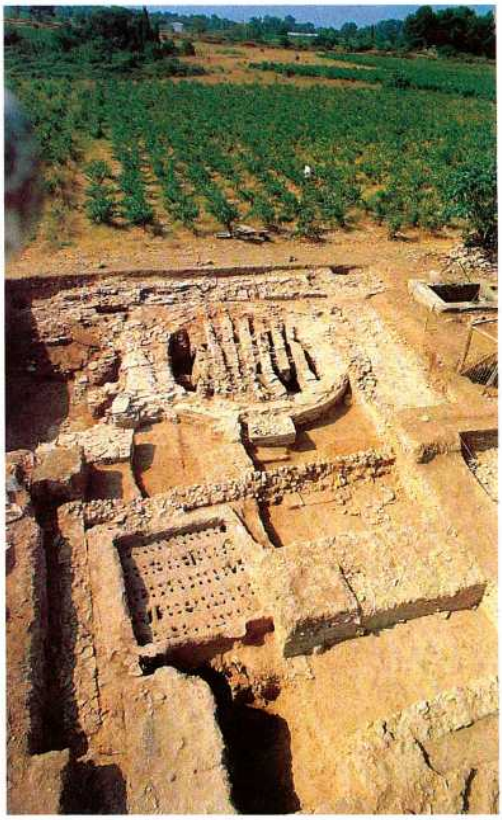

Fig. 5: Aerial view of two kilns for the workshop excavated at Sallèles d'Aude, FR. – Luftbild von zwei Öfen der Werkstatt in Sallèles d'Aude, Frankreich.

invention of the potter's wheel to Talus or Calos, Daedalus's nephew. Posidonios and Seneca (Seneca, Epist. LXXI) quote Anacharsis as inventor of the potter's wheel. Pliny the Elder, in his Natural History, quotes Choraebus of Athens as discoverer of pottery, and equally Anacharsis the Scythian but also Hyperbius the Corinthian as inventor of the potter's wheel (Book 7, LVII.7). None of these authors enter in the detail about the profession, the techniques or the materials used, though Pliny does describe the various types of pottery in his book 35, XLV and XLVI as well as art of sculpting clay, but does not discuss working methods.

Fig. 6: Workshop from the oppidum at Gondole, France, Puy-de-Dôme. LTD2b. – Werkstatt des Oppidums von Gondole, Puy-de-Dôme, Frankreich. LTD2b.

Archaeology

The bulk of the sources are archaeological. Many ancient pottery kilns have been excavated and well documented. At Sallèles d'Aude, FR, for example, seven large potter's kilns were found, intended for firing amphorae at an almost industrial output level (*Fig. 5*) (LAUBENHEIMER 1995, 19-34) The numerous working stations, located inside and outside of the buildings, reveal that a large work force was associated with the production, notably the turning potters.

Although more rare, production workshops, containing wheel throwing stations and installations intended for clay preparation, have also been archaeologically investigated and fully researched (*Fig. 6*) (www.arafa.fr) The recovery of tools linked to production and decoration is exceptional. Many tools were made in perishable materials such as wood, and are practically never preserved.

The excavation reports are a source of essential information in the form of the illustration plates of pottery sherds, regardless if these pieces were kiln misfires or important collections of wares from domestic refuse sites. Since the descriptions, notably of the clay bodies, are abstract and somewhat subjective, direct personal examination of the sherds remains an essential source of information.

Ethno-archaeology

To compensate for the gaps in the ancient sources, it is necessary to look further afield among ethno-archaeological studies, notably in Asia for wheel thrown techniques and in Africa for modelling techniques (*Fig. 7*). In most of the developing countries, wood firing techniques are still used, often in kilns that are sometimes similar to antique installations. Both

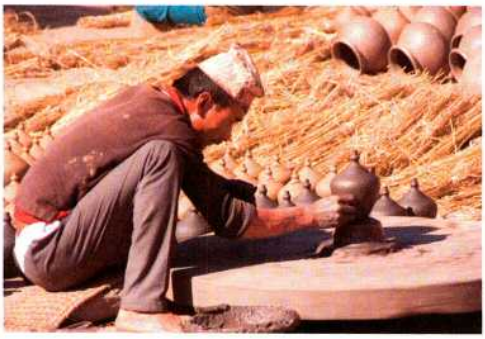

Fig. 7: The stick powered wheel is still in use today, Bakhtapur, Nepal. – Drehscheibe mit Stockantrieb heute in Bakhtapur, Nepal.

mound and pit open air kiln firing techniques leave very fleeting traces, similar to those from ancient civilizations that occupied Europe.
An ethno-archaeological research project in Nepal, directed by the University of Lausanne, permitted the acquisition of new data on working and firing techniques. This information specifically confirmed the fact that certain firing installations, such as covered mound kilns, leave no traces after firing.

Experimentation

Assembling sufficient documentation and experience is a work of patience covering many years. With time, I have been able to progressively refine the accumulation of knowledge of how to produce reproductions of ancient pottery:

- Selection of clay bodies, testing preparation, refining and wedging.
- Hand modelling, wheel thrown or mould made or copies of ancient models.
- Control and mastering of drying time, choosing the right moment for retouching the shapes by wheel trimming, surface polishing and burnishing.
- Pots can be decorated by the following techniques:
  a) with a broken pebble for grooves
  b) with a polishing stone for burnished ware
  c) making small cuts with a chatterer (vibrating blade)
  d) stamped impressions with awls or stamps
  e) stamped impressions with a decorating wheel
  f) by excision, cutting or gouging out material
  g) by applying engobe with a nozzle
  h) sprigging, application of pre-moulded decoration elements
  i) painting with coloured slips before firing.
- Before firing, the piece can be covered with a fine slip applied after a second drying phase (Samian ware and imitations).
- Firing techniques. The type of kiln and firing method is of first importance (*Fig. 8*).
- After firing, unloading and sorting out the successful pieces from the failures.

Some failed pieces are carefully kept as reference material since they reveal fabrication errors.
Reconstructing the chaîne opératoire has been an immense work that sometimes demanded a considerable amount of research, and necessitated a long apprenticeship of controlled fine hand movements. Learning from a master requires diligence, discipline and willpower from the student. Starting without a teacher and from almost zero to rediscover the gestures and mostly forgotten practices of an ancient craft demands multiple competences that have little in common. Carrying out research and gathering together the necessary documents, constructing kilns, firing the kilns, making the necessary tools, learning the potter's craft, all means that one is transformed into a sort of "Mac Gyver" of archaeological recon-

Fig. 8: Reduction firing by the author. Switzerland, 2011. – Reduzierende Brandphase, Ofen vom Autor. Schweiz, 2011.

struction.
The research work, acquisition of skills and historical knowledge is, at this point, not finished and probably never will be. Each new archaeological discovery can serve to increase the knowledge base, but can just as easily introduce doubt about established ideas. In spite of this, the current state of knowledge has become sufficient for presenting to the public.

Adapting for public presentation

But where to start? The art of working with clay is so vast that it requires making choices about the possible presentation subjets. Learning the craft demands many years of work. The information presented to the public must be necessarily limited to a selection of activities such as throwing a pot or firing a kiln. Therefore, I have adapted certain types of activities for the public to view or participate in (*Fig. 9*).
The long and complex work process of reproducing a piece of ancient pottery can take up to ten days, including drying time. It is necessary to select the most interesting and illustrative stages while choosing the type of pottery that will serve as an example. The presentation must also be adapted since it is not possible to present all at once modelling, decoration, firing, or the social status of craftsmen in the ancient world. One is obliged to make precise objectives.

Identifying the targeted public

Identification of the audience is one of the first tasks to be taken into account for an

Fig. 9: Throwing demonstrations at the Römerfest Augusta Raurica. Large public events are an ideal opportunity for spectacular demonstrations of throwing a clay pot on a stick turned wheel. – Drehdemonstration am Römerfest in Augusta Raurica. Solche großen Events geben einen perfekten Kontext für eine spektakuläre Demonstration.

event or presentation. Action and discourse must be adapted in according to the circumstances and the type of public, its main interests and knowledge levels.

An interactive activity for students requires a totally different structure and presentation than what can be shown in a museum based public event or a themed festival open to the general public. For small groups of school children the emphasis is placed on the repetition of gestures, which is a basic learning technique. Through this, all the students can work together on making a large object, such as a vase. For the wider public events, I find it preferable to put on a more entertaining show of how the "Pompeii" type stick turned wheel is used for throwing large vessels.

Introductory courses, either for learning the basics or improving already existing skills, are an excellent means of communication for various levels of the public. These may range from a novice wishing to learn a technique to the archaeologist specialised in pottery who would like to improve his understanding of the material through practical experience. Thus, in the context of the specialists, I can present the reasons for the preparation methods and selection of different clays according to the vessel's function, such as cooking jars and pots, but also the large storage vases or fine table wares. Through explaining certain technical details about decoration methods, I can share information that permits specialists to better classify recovered pottery sherds and to refine the descriptive parameters for artefacts to be published in future reports.

Managing the essential points

Location and context play an important role in public events. An event that takes place in a museum offers the classic example in which a demonstration of pottery techniques alongside the collection of ancient artefacts allows a balance between the practical and the scientific approaches. Throwing and raising a very large vessel such as a dolium can, for example, raise questions that lead to various levels of constructive discussions with the visitors, who gain a new understanding of the ancient pottery on display.

Outside this sort of ideal situation, it is necessary to work within the available space. In the case of a historical reenactment festival, the quality of showmanship during the demonstration is of primary importance, as shown in *figure 9*. Through capturing the visitor's attention by a spectacular display of the stick turned potter's wheel in use, the surprise of a never before seen activity creates a visual shock as well as inciting interest, thus engaging the visitors to discover more about the subject. The accompanying exhibit presents reproductions of local ancient ceramic types and informative literature, as well as discussions with the public. Presentations and activities for school organizations also require specific

Fig. 10: Workshops organised for school children, aged 8-10 years old, at Brig-Gamsen, Switzerland. Upper right inset: two vases made by the students. – Interaktive Einführung für Schulklassen in Brig-Gamsen, Schweiz. Das Bild zeigt zwei Vasen, die mit 8- bis 10-jährigen Schülern realisiert wurden.

approaches. For young children, the pots should be linked to common objects in daily use. The demonstrations and activities must be adapted both in content and structure for a younger audience.

Setting goals

One of my objectives is to show the importance of the local historical heritage through the use of reproductions of ancient pottery found in the region. For presentations and events linked to a specific region and historical period, I research the archaeological finds, specifically looking for locally produced ancient wares for types unique to the region and period. These will serve as models for reproductions that highlight the importance of the region within the larger scope of the historical period. As an example, the Iron Age black burnished wares documented in the pottery catalogues from the excavations at Bibracte FR, would be produced for an open day event at the site. An event for a Roman legionary's camp would require presenting Samian and coarse wares used by Roman soldiers reconstructed from the sherds found at the site.

Regardless of the type of public, the goal of the presentation is that the visitors or participants are introduced to the basics of pottery production in the antique world. The emphasis and breadth of the subject is adapted to the type of public but it can also evolve in relation to their own experiences and capacities. For workshops, the participant's personal experience is of inestimable value. Through making their own pots, assisting to the loading of the kiln, surveying the firing and then the experience of unloading the fired wares, creates a vivid experience of the entire operating process that is not easily forgotten (*Fig. 10*).

Inspiring a sense of wonder and surprise in the minds of the visiting public through demonstrating the practical actions of ancient craftsmen seems to me to be essential for clear communication. This approach works well for younger as well as adult audiences for encouraging comprehension. Through creating a positive first impression of history, further interest is certain to be developed by reading, visiting museums, etc.

Looking to the future

Carrying out research and taking the time to develop an in depth knowledge is essential. If a craftsman aims to provide useful information for the scientific community through archaeological experimentation, then it is necessary that he is as rigorous in research methodology as he is in practising the craft. The occupation of public presenter and communicator are vast fields that are not always easy to explore for a craftsman. In the mindset of our modern world, driven by advanced technology, consumerism and overproduction, the decision to explore the forgotten and outdated profession of pot-

ter implies a certain degree of lunacy. In general, potters are probably a bit potty. A wise potter would shut down his kiln, but for me, the fires continue to burn and have no sign of going out. Each step forward helps me to glimpse the long path still to be travelled and documented. During the past twenty years, I have had the inestimable support of the University of Lausanne. I do not mean financial support, but something with a higher value: the moral and material encouragement, availability of documentation, and the genuine interest. This has helped to keep the fires burning.

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Fig. 6: Photo ARAFA 2006
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