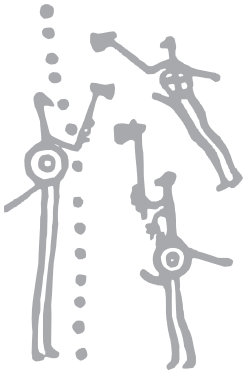
Future of experimental archaeology



In EuroREA we received the following question:

"Over the past century, Experimental Archaeology has resulted in the production of many publications, both large and small. Some of the older publications are still worth quoting, as much of the research has not been equalled since. Does this mean that the scope for future development in the fields is limited to refining past achievements? What are the goals and topics open to experimental archaeology over the next ten years?"

We approached a number of experimenters and organisations with this question. Here we would like to share their views on the future of experimental archaeology and the ways it should develop with you.

The list of experiments which are still waiting to be done is as long as the inventiveness and resourcefulness of people in the past was

■ Grzegorz OSIPOWICZ (Poland)

Finding an answer to the question of the future of experimental archaeology can cause problems to even its most dedicated followers. Experimental archaeology has a wide research scope and its goals (and related problems) are often generated by the nature of the activities themselves. Regional conditions, such as the approach taken in different reasearch centres, influence experimental archaeology greatly. Below I will try to briefly outline my views on the topic of the future of experimental archaeology and its main goals in the next few years, on the basis of the problems that experimental archaeology faces in Poland.

An answer to the question *'What is Experimental Archaeology?'* is not as easy as it looks. The definition says it should be understood as *"that branch of archaeology which seeks to interpret material culture, technology, or ways of life of the past by means of structured, scientific experimentation"* (*Callahan 1999*, p. 4). Instead it is understood by most Poles (including, incomprehensibly, professional archaeologists) as something very different. Generally it is not connected to research but in recent years to popular shows of 'living history' archaeoparks, which are springing up like mushrooms (Stone, Planel ed., 1999). Such ideas on the content of experimental archaeology can cause only one thing – to discredit it in the eyes of researchers and with this comes scepticism about accepting the results of even scientifically lead experiments. I do not want to lessen the educational importance of archaeoparks (as long as they operate within the realities of a given period) but the activities carried out there usually have nothing in common with scientific research (which is by definition the aim of experimental archaeology). Here I would like to remind ourselves of the words of the late Dr P. J. Reynolds whose views were very close to mine: *"it is a fundamental tenet that experiment has absolutely nothing to do with the exercises of 'living in the past', 'dressing in the period costume', 're-enactment of past events', or, indeed, the teaching of well understood techniques (…), like for example, lithic technology, pottery manufacture (…). It is extremely unfortunate that these activities have become generally subsumed under the overall title of experimental archaeology since their inclusion militates against the real value of experiment and its acceptance professionally"* (*Reynolds 1999*).

The fundamental goal of Polish (and surely not only Polish) experimental archaeology for the near future is in my opinion to return to its roots, return to true research. It might sound a bit backward as one of the questions which I received prior to writing this text: *"why do current experimental archaeologists quote older texts of 'old' authors?"*. If we want to return experimental archaeology to its rightful position within the world of science, we have to review our approach and consider its foundations. To do that, it is necessary to sort out the scientifically lead experimental works from the activities of other sorts.

I have to say that I have nothing against referring to the pioneers of the profession. I also do not think that continuing their work and repeating their experiments is a mistake. That is the idea of every experiment. For the results gained to become more probable, it has to be possible to carry out every experiment many times while considering the smallest variables. Is this 'repeating' the only goal of future experimental archaeologist? Has everything been already done? Without hesitation – no. J. Coles in one of his works wrote: *"(…) experimental archaeology provides a way, one way, of examining archaeological thoughts about human behaviour in the past."* (*Coles 1973*, p.13). Following this idea we have to say that the list of experiments which are still waiting to be done is as long as the inventiveness and resourcefulness of people in the past was. That is to say every object recovered by archaeologists brings theories on the topics of manufacturing, technologies use and purpose. Their verification will employ many generations of experimental archaeologists to come.

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The experimenters have to get together to finally design a common strategy of experimental research

■ Walter FASNACHT (Switzerland)

May I answer very spontaneously – and, I am afraid to say, not in favour of today's experimental archaeologists?

"Some of the older publications are still worth quoting, as much of the research has not been equalled since."

As long as every generation of experimental archaeologists needs to re-invent the wheel of archaeological experiments – and this is immanent to the system – we will never surpass our experimental forefathers. This is for the simple reason that they still knew from their childhood how to fell a tree or forge iron, they were eye witnesses to the real thing. We just patch the shoulders of our "copain expérimentateur", but we are not authentic lumber jacks. And if we finally try ourselves, we first need to get our crooked fingers off a laptop-keyboard and put them around an axe handle, be it ancient or modern.

In my own field of experimental research, the reconstruction of ancient copper smelting, I realized that I have to go through the labyrinth of 5,000 years of misleading tracks, errors and the successes of the ancients in order to understand the process in its development – and all this within one single lifetime, or what is left of it.

Experimenters have to get together to design a common strategy for experimental research – and not just line up experiments in their own little (s)melting pots.

"Some of the older publications are still worth quoting", but we dig our own experimental grave, if in 2006 we have already started to conserve our own experimental history with a preface like *"wobei der neuere Forschungsstand ab 1986 nicht mehr berücksichtigt werden konnte." "[where it hasn't been possible to consider research, from 1986 onwards"]*

The purpose of experimental archaeology serves not only the self-awareness of the test persons

■ Gunter SCHÖBEL, Pfahlbaumuseum Unteruhldingen (Germany)

Die Experimentelle Archäologie dient nicht nur der Selbsterfahrung der Probanden, sondern auch der Wissenschaft zur Entwicklung neuer Fragestellungen und nicht zuletzt der Öffentlichkeit, die dadurch einen lebendigen Eindruck in die Technologie und die Lebensumstände vergangener Zeiten erhält. Wenn das Vorgehen innerhalb der experimentellen Archäologie, ausgehend von definierten Befunden, Schritt für Schritt dokumentiert und somit nachvollziehbar und wiederholbar dargestellt wird, dann darf von einer naturwissenschaftlichen Methode die Rede sein. Geisteswissenschaftlich betrachtet dient die Experimentelle Archäologie unter gleichen Voraussetzungen als Verfahren zur Bildung von Modellvorstellungen, die, wissenschaftlich diskutiert, von großem Wert für archäologische Interpretationen und Prognosen in der Zusammenschau sein können.

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The purpose of experimental archaeology is to serve not only the self-awareness of the test persons but also the science in order to develop new approaches and last but not least the public that gains a lively impression of the technology and life of former times. If the proceedings in experimental archaeology, starting from definite proof, is documented step by step and, in this way, presented plausibly and repeatably, we can speak of a natural scientific method. From the social scientific view, experimental archaeology serves under the same conditions as a way to create model images which may be very worth while for archaeological interpretation and forecasts in the synopsis.

There is a wide field of topics in the reconstruction of the past daily life which can only be solved by structured experimental work

■ Sven-Hinrich SIEMERS, Bachritterburg Kanzach (Germany)

I am not an Experimental Archaeologist, so I can only refer to what goals and topics seem to be of interest from the point of view of a medieval period Living History-museum.

During the preparation of Living History-demonstrations the actors produce a lot of tools, clothing and other objects needed for daily life. These objects are usually not made for, but due to archaeological and historical research. After the production, most of the objects are used during Living History-demonstrations. This reproduction work should be backed up with experimental archaeological research - as it is already done in a few Living History-museums (e.g. Düppel). Otherwise it might be that unstructured experience made during Living History-demonstrations gains the status of archaeological "knowledge". And - as far as I can see - the experimental-archaeological research in the past years has shown clearly, how important structured scientific methods are in producing quotable knowledge.

There is a wide field of topics in the reconstruction of the past's daily life, which are rather unspectacular, but can only be solved by structured experimental work. In my opinion this is a topic of interest not only for archaeological and historical science, but for the public coming to Living History-museums all over Europe - not only for fun, but to get actual archaeological and historical knowledge in an easy to understand way.

I believe that without structure this research will soon stagnate and will wander in circles – but the domains and space of application of experimental research are immense

■ Christian CHEVILLOT, Beynac (France)

Pour ma part, je considère que l'archéologie expérimentale pour les années à venir doit, bien sûr, tenir compte des travaux précédents. C'est indispensable, mais le problème, et vous le savez bien c'est que nombre de ces travaux offrent les résultats d'une recherche très inégale.

Je m'explique :

- je ne suis pas sûr que tous les expérimentateurs ou chercheurs (malgré de bonnes intentions et étant de bonne foi...) aient toutes les connaissances et les qualités scientifiques requises pour mener un protocole de recherche „honnête" et donc constructif,
- il manque un cadre général pour la recherche archéologique expérimental, qui peut devenir un vrai „fourre-tout" avec des dérives comme on en connaît (exemple en septembre dernier.... à Anguillara),
- il est aussi important d'expliquer à certains „chercheurs" qu'il ne faut pas confondre une expérimentation, fondée sur un vrai protocole de recherche, visant à étudier et comprendre les techniques particulières de la fabrication de tel ou tel objet, avec une „démonstration", voire une simple animation...

Il y a donc, d'une part, la prise en compte des données anciennes, qu'il faut parfois vérifier ce qui est normal, mais je suis persuadé que sans structuration cette recherche va vite se scléroser et va tourner en rond, chacun reprenant le travail des uns et des autres dans son coin. Tout çà n'amène pas bien loin, hélas. Et qu'elle perte d'énergie pour rien!

Et pourtant, les domaines et les champs d'application de cette recherche expérimentale sont immenses et essentiels pour nous archéologues, pour éviter de dire des bêtises, et mieux comprendre les modes de pensée de ces populations qui nous ont précédées. Il y a encore des tas de domaines où cette recherche peut être utile et apporter beaucoup pour une meilleure connaissance des sociétés protohistoriques ou plus tardives. Mais sans un cadre bien défini, bien pensé à l'avance, les dérives, comme je le disais plus haut, sont inévitables et sous le vocable de „recherche expérimentale" se cache parfois tout et n'importe quoi. Et çà, je crois qu'il faut l'éviter pour les années à venir. La recherche expérimentale ne vise pas à produire une simple copie, mais à comprendre, avec toute sa chaîne opératoire, comment elle a été faite et comment elle s'intègre dans une société.

Peut-être serait-il possible d'envisager, par période, des grands thèmes de recherche et où des spécialistes pourraient mieux réfléchir à l'expérimentation et ce qu'on en attend?

En tout cas, je le répète les domaines sont immenses et il faudrait peut-être songer à inciter les chercheurs à étendre leurs travaux dans des domaines, peut-être moins spectaculaires, mais tout aussi intéressants et valorisants pour une bonne recherche.

Voilà les quelques réflexions que m'a inspirée votre question.

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Personally, I think that the experimental archaeology of the years to come has, of course, to consider the work of the past. Although necessary the problem, and it is well known, is that a number of these works provide the results of research of variable quality.

I shall explain:

- I am not sure that all the researchers (despite the best intentions and acting in good will…) have had all the knowledge and scientific qualities needed to create "honest" scientific and therefore constructive experiments.
- A general framework for archaeological experimental research is lacking, as a result it is possible to stick in "digressions" from the main subject.
- It is important to explain to certain "researchers" that they must not confuse experimentation, based on real research goals aiming to study and understand single techniques in the manufacture of such and such an object, with "demonstrations" or indeed simple re-enactments.

Therefore on the one hand we have to take into account old data, which it is necessary to verify, as is normal. On the other though, I believe that without a proper structure this research will soon stagnate and wander in circles as everybody repeats the work of others in there own corner. Unfortunately this would get us nowhere and all energy will be lost.

Nevertheless the domains and fields of application open to experimental research are immense and for archaeologists essential. So we must avoid talking nonsense and become better at understanding the modes of thought of past populations. There are many areas where this research can be useful and provide better knowledge of Prehistoric and later societies. Without a well defined, well thought out framework, the "digressions" mentioned earlier will be inevitable, and hide under the label of "experimental research" which then becomes a catch-all for everything. This I believe it is important to avoid in the coming years. Experimental research does not aim to produce a simple copy, but to understand not only the entire manufacturing process but how it fitted into the social system.

Maybe it would be possible to consider larger research themes by period and where specialists would reflect on experimentation and what is expected of it?

In any case, I repeat that the areas open to research are vast and it may be necessary to encourage researchers to spread their work into areas which although less spectacular, are also interesting and valuable.

Here then are some of my reflections inspired by your question.

Archaeological experiments should be simple to get a common useable basis of archaeological data

■ Wolfgang LOBISSER, Vienna Institute for Archaeological Science (Austria)

Es ist erfreulich, dass immer mehr Wissenschaftler bei offenen Fragen zu der Methode des archäologischen Experiments greifen. Ich bin davon überzeugt, dass in Zukunft die sogenannte Experimentelle Archäologie neben dem weiten Spektrum der Naturwissenschaften noch mehr Impulse für neue Erkenntnisse in den historischen Forschungsrichtungen bringen kann. Zu wünschen wäre, dass diese Ergebnisse in verstärktem Maß in die Forschungsarbeit der traditionellen Archäologie einfließen. Eine wichtige Vorraussetzung dafür ist sicherlich, dass die Experimente methodisch sauber und nachvollziehbar durchgeführt und dokumentiert und dass die Ergebnisse allgemein verständlich aufbereitet werden. Auch muss die Grenze zwischen echten Experimenten und anderen Aktivitäten wie die Errichtung von archäologischen Modellen mit modernen Mitteln oder museumspädagogische Präsentationen klar nachvollziehbar sein. Daran sollten wir verstärkt arbeiten.

Archäologie beschäftigt sich in erster Linie mit materiellen Hinterlassenschaften der Menschen, mit Gegenständen oder Fragmenten von diesen, sowie mit Bodenveränderungen, die von Menschen sei es beim Hausbau oder bei der Landwirtschaft vorgenommen wurden. Experimentelle Archäologie sollte sich vor allem diesen Themen widmen, denn hier liegen die Stärken der Methode. Wenn wir die Herstellung der Gegenstände und Gerätschaften von den Rohmaterialien bis zu den fertigen Produkten mit der zugehörigen Werkzeugkultur, sowie deren praktische Verwendung verstehen lernen, erhalten wir tiefe Einblicke in die Lebenswirklichkeit der Menschen.

Archäologische Experimente sollten einfach sein, um eine allgemein verwendbare Datenbasis zu erhalten. Ich finde man kann komplexe Prozesse, wie zum Beispiel die Errichtung eines Hauses nicht als ein Experiment betrachten, auch deshalb nicht, weil wir bei der Umsetzung aus unterschiedlichen Gründen immer wieder zu Kompromisslösungen gezwungen sind. Aber man kann den Aufbau in verschiedene Arbeitsschritte und Teilbereiche gliedern, von denen dann manche als echte Experimente durchgeführt werden können. Das gilt natürlich genauso für Experimente zur Landwirtschaft, zur Waldnutzung, zur Jagd und natürlich auch zu solchen über Erosionsverhalten des Bodens. Ich denke nicht, dass wir uns von bereits durchgeführten Experimenten der letzten Jahre eingrenzen lassen sollten, im Gegenteil stellen diese als Vergleichsmöglichkeiten eine wertvolle Datenbasis dar. Diese Vergleiche erlauben es unter Umständen auch, regionale Unterschiede im Hausbau, im Ackerbau oder im Handwerk herauszuarbeiten und so die Ursachen für diese besser zu verstehen. Auch sollten wir anstreben, die Ergebnisse unserer Arbeiten mehr in die Öffentlichkeit zu tragen und auf breiterer Ebene zu diskutieren. Dass wir bei unseren Arbeiten nachgebaute Objekte erzeugen, die bestens geeignet sind, die Menschen für Archäologie zu interessieren und zu sensibilisieren ist ein angenehmer Nebeneffekt.

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It is an encouraging fact that more and more scientists use the methods of experimental archaeology to find possible solutions to open questions. I am convinced that besides the wide range of natural sciences, experimental archaeology can bring a lot of impulses for a new understanding to historical research in the future. Let us hope that these results find their way into the bigger area of traditional archaeology. An important precondition is definitly, that the experiments are carried out in a proper methodical and a well documented way and that the presentation of the results is understandable. We must make a clear distinction between archaeological experiments and other activities, such as the building of archaeological models with modern tools or educational presentations in the museum. We should put more effort into this matter.

Archaeology deals with the material remains of the past, with objects or fragments of things, as well as with changes in the soil that are caused by man in the course of house building or agriculture. Experimental archaeology should work on these themes, because here we get to the strongest part of this method. If we learn to understand about the manufacture of objects and utensils, how to use the right tools from the raw materials up to the finished products, as well as the practical use of the things, we will get a reasonable view into the every day life of people in the past.

Archaeological experiments should be simple in order to get a common useable basis for archaeological data. I think that we should not estimate complex processes, for example the building of a house as one entire experiment, because there are many aspects and solutions within them. Besides, because of various reasons we are often forced to make some compromises in building work. We can however divide the whole construction project into different working steps and well defined components, from which some can be worked out as real experiments. This applies as well to experiments concerning agriculture, wood management, hunting and soil erosion. I do not think that we should feel restricted by experiments already carried out. I maintain the contrary – these experiments represent a good data basis with which to judge our own results better. Maybe this comparison permits us to work out regional differences in the ways of house building, in agriculture or handicrafts and to understand the reasons for improvements and refinements. We should make more effort to present the results of our work to the public at higher levels talks. It is also a pleasant side effect, that during our reconstruction work we produce objects, which are suitable to interest the public in archaeology.