Outram, Alan: Publishing Archaeological Experiments:
a quick guide for the uninitiated,
EuroREA 2/2005, pp 107-109

www.eurorea.net

Iron Age bow shooting at the Lejre Experimental Centre, Denmark. ■

How to publish Experimental Archaeology?

• EuroREA is a magazine dedicated to publishing reports on experiment and education in archaeology. But what are the ways of publishing archaeological experiment? We asked this question and here we present the answers we received.

Publishing Archaeological Experiments: a quick guide for the uninitiated

Alan K. Outram, Department of Archaeology, University of Exeter, UK

As an academic archaeologist engaged in experimental archaeology, I frequently find myself frustrated by three different types of archaeological publication. The first are articles written by academic colleagues without an experimental or scientific background, who, despite lacking technical or practical knowledge, still insist upon speculating on issues of primitive technology. The second are archaeological scientists who know the technicalities well, but not

necessarily the practicalities, and tend to come to some archaeologically naïve interpretations. The third group are those who are involved in experimental work, reconstructions and primitive technology and have a vast practical working knowledge that could be a great value to archaeologists and scientists. However, they often do not publish much of their work and when they do it is not always in form appreciated by the other groups. I generalise, of course, as there are certainly some people with all-round ability and others who form mutually beneficial collaborations. However, I think most would recognise some of the problems I have outlined.

EuroREA and, in America, *The Bulletin of Primitive Technology* provide good forums for people to publish their experimental work. This short article provides some basic guidelines for those who are not so familiar with academic publishing. My aim is to encourage people to publish their work in a way that will be useful to the widest possible audience within the field of archaeology.

A standard experimental write-up in a scientific academic journal will usually have the following sections:

- Introduction and Aims,
- Materials and Methods,
- Results,
- Discussion and Conclusions.

They may not use those words in all cases, but all those sections are likely to be there. The introduction and aims will contain the background to the experiment and what will be achieved by carrying it out. A hard-line scientific paper will express the aims in terms of a very specific hypothesis that will be tested. Having read many experimental archaeology reports, I have found that it is the aims and rationale of the experiment that are frequently missing. It is often not clear why a given experiment was conducted and, as a result, it is rarely clear what we have learnt from it. The aims need not be expressed as a hypothesis, but the experiment and its publication will be far more useful and rewarding if carried out with some aim in mind. In many cases aims are missing from a report because the experimenter was really just trying something out they had not tried before, just to see what happened. Even so, one can still frame some questions about the process that will make it so much more worthwhile.

Setting clear aims will help produce a clear methodology. If one identifies questions, such as how long, hot or fast something will be, then that will lead to obvious need to record those variables. Within the materials and methods section, experimental accounts often lose their value because they are not specific enough. Scientists like to be able to repeat experiments. In fact, part of the scientific definition of an experiment is repeatability. Reports need to say how and where things were measured and what they were measured with. This may well require you to produce diagrams or take photographs to show how the equipment was set up. One also needs to be detailed about the precise materials used.

The results should be clearly discussed and displayed. Tables and graphs may well convey your results better than simple description. When using diagrams, pictures, tables and graphs, remember to give them suitable captions so that people know what they show and to number them so that you can refer to them from the text when their contents are being discussed. One thing that tends to be missing from a scientific paper is any kind of reflection on the experience of carrying out the experiment. This can

be very important to experimental archaeology, however. Archaeologists will be very interested in the experiential side of experiments. After all, they do study the human condition. So discussion about the difficulty, awkwardness, ease, speed, conditions, smells, technique, skill level, danger etc. of a process are interesting, just as in the same way as ethnographic accounts are interesting. The discussion and conclusions should, of course, relate back to the original aims and you should clearly sum up what you have found. It is at this point that it might be useful to identify future work that would take the study further or reflect upon better ways to carry out the experiment.

Academic papers are almost always referenced throughout. They will not only have a bibliography at the end, but will have references throughout the text that relate to the items in the bibliography. Referencing is invaluable to academics. It allows researchers to identify exactly where somebody obtained their information from so that they can locate those sources if they want to find out further information. It also gives the work credibility, by building upon the work of others. The most common system used in archaeological publications is the Harvard Referencing System. If anybody wants to find out about it, there are many guides available on the World Wide Web.

Checklist:

- Provide background information on the experiment and why it is interesting.
- Provide clear aims for the experiment.
- Be detailed in describing how the experiment was conducted, including recording methods and details of the materials used.
- Provide enough information to allow somebody to repeat what you have done.
- Use diagrams and photographs where necessary to explain aspects of the method that are not easily described in words.
- Use tables and graphs where appropriate to display results
- Make sure all figures have adequate captions and labels and number them so that you can easily refer to them from the text.
- Unlike a standard scientific report, feel free to reflect upon the experience of carrying out the experiment.
- Relate conclusions to the original aims
- Perhaps suggest the direction of future work
- Reference your work if at all possible, using the Harvard System.