

The Second International Work Seminar in Lithic Technology: Lejre, Denmark

by Caroline Wickham-Jones

From the 1st – 9th August 1981 the Second International Work Seminar in Lithic Technology took place at the Historical and Archaeological Research Centre at Lejre in Denmark. Participants were invited from all over northern Europe. Not all present were skilled knappers but everyone had a particular practical interest in the field of lithic technology and there were also several observers from the Archaeological Institute in Copenhagen.

The particular problem studied was that of the manufacture of the thin-butted Danish Square Axes of flint. These axes appear to have been flaked in stages. The quarrying of raw material and large scale production of basic rough-outs, that is stages 1 and 2, were usually undertaken together while the final flaking, stages 3 and 4, and then grinding, stage 5, seem to have been done on a smaller scale at separate sites as axes were prepared for particular tasks.

The first day was spent collecting flint and enjoying unstructured knapping exercises on the beach at Stevns Klint where there are high chalk cliffs rich with seams of beautiful flint. After this the structured experiment started, this was organised around the production stages with particular emphasis placed upon an examination of the resultant waste. At Lejre, in addition to the obvious interest and value of the research activities great care is taken to record and process the actual sites where they took place (e.g. Madsen 1981, 16-20). The site prepared for the seminar had been disturbed and divided into several areas by low turf walls. Each area was designated for different activities, some of which, by resident knappers for example, are of a much longer duration than the week long seminar. Those set aside for the experimental square axe work were gridded at 0.5 m intervals to facilitate the recording and mapping of flakes as they fell. Previous experimental work by Anders Fischel (1979, 16-21 & 41-2) has demonstrated that this size of grid provides an optimal recording level for flake scatters both ancient and modern.

Flaking was carried out in the different stages by separate knappers using different techniques. At the end of each exercise the experimental piece and all debitage was collected. Work upon subsequent stages used pieces prepared before the start of the seminar so that a complete reference collection of the various stages was built up. As well as close recording of the techniques – percussion, positions etc.– the distribution of waste after each exercise was mapped and the differences produced by different production strategies noted. The flakes themselves were examined both for differences characteristic of the various techniques and stages and for their suitability to provide the raw material for other items of the contemporary tool kit. An initial analysis of the day’s results was discussed and taped each evening.

After flaking some work was undertaken upon the grinding of the axes. This was carried out with good results upon sandstone slabs using water as a lubricant, adding no additional sand. Some ground axes were then hafted into replica hafts copying for example the one from Stevns, Sigralev Bog and these were used quite successfully in a variety of ways upon different hardnesses and thicknesses of wood. Among those present were several, including Errett Callahan, Hans de Hass, Peter Yang Petersen and Peter Yemmings Hansen, with great experience in using stone tools upon wood. This exercise with use was less structured than the main experiment as the axes selected were not complete replicas so that it had to be regarded as an experience rather than an experiment. True functional experiments would involve longer periods of time, but could form the basis of an entirely separate seminar in the future. To follow up the functional work at Lejre, however, a use wear examination is to be made by Debbie Clausen at Lund in Sweden.

In the past, experiment has largely been used to aid technological and functional interpretation but it may also be used to assist more basic
morphological or distributional interpretation on archaeological sites and this was one of the main aims at Lejre. The production, one afternoon, by Peter Yomning Hansen, of a collection of excavated waste flakes from the site at Bunda provided a chance for an instant comparison and evaluation of results although detailed analysis and publication of the experimental data will obviously take longer.

When a group of enthusiasts in any field meet there is always much information to be exchanged at Lejre, as well as the experimental work, much time was devoted to papers and practical demonstrations of particular specialisations. Some of the topics covered included: Solutrean Laurel Leaves (J. Pelegrin), Danish Daggers (K. Callahan), Lenticular Axes (J. Weiner), and Livvve de Bourre and Egyptian Daggers (P. Kalterborn). The discussion generated by these sessions was found to be of far ranging value.

There was another level to the meeting, however, and this was an examination of the position and future of experimentation in archaeology with particular reference to centres such as Lejre where there is a great emphasis upon public interpretation and display as well as upon more isolated research. To this end a colloquium formed part of the seminar and was attended by many interested prehistorians. The basic premise of the meeting was that archaeology is not only fieldwork and excavation but is also interpretation. It was generally felt that, after a somewhat shaky start, experimental archaeology had matured to a point where its scientific future to aid that interpretation should be assured. Experiment has a long history but has not always been well documented and was often carried out by laymen craftsmen who acquired an image of eccentricity. This image has now been broken and, with the increasing participation of trained archaeologists, together with careful scientific control and clear and prompt documentation and publication, experimental work has a recognised place within archaeology. One point that was emphasised both at the colloquium and by the experiences of the seminar, was the necessity within any such group for more than skilled craftsmen. Those prepared to undertake the detailed recording and processing of information play a very important role.

The seminar was most beneficial to all who attended. Even those who normally work in areas to which the main topic of interest did not appear at first to be relevant were able to see their own assemblages in a wider context and to discuss, compare and develop contemporary methodologies and techniques of study. Such meetings establish valuable contacts and are a concept that should be used more in Britain. To conclude, I would like to thank those who made this meeting possible: Everett Callahan who organised the seminar, the Denmark-American Foundation who funded the stay at Lejre, the staff at Lejre who provided facilities, accommodation and food during the week and, on a personal level, the Abercromby Fund and the Russell Trust who provided financial support for my own travelling expenses.

References

Postscript
The results of the experiment are being prepared for publication in Denmark by Bo Madsen and Everett Callahan but a paper is also due to be published in Britain in Scottish Archaeological Review, vol. 2, forthcoming.

MISCELLANEA

PUBLISHING SPECIALIST REPORTS: A CAUTIONARY TALE
The path of specialist reporting is fraught with dangers, not least in the act of getting into print. Lithicists, like other specialists, often find themselves contributing to large excavation reports in which their own section forms only a very small part. The complexity of such excavation reports, the demands of publication deadlines, and often the low-level of post-excavation finance available, all conspire to make it difficult for the specialist to see his or her own contribution through the press.

This happened to me recently in a situation where my text was submitted in advance of the illustrations which were prepared elsewhere.