

REPORTS AND SUMMARIES OF SEMINARS

Short reports on some of the seminars are given in this Newsletter. Others have already been or are about to be published; details are given below.

Roger Jacobi's *Type List for the British Mesolithic* has recently been revised and is now available as an Occasional Publication from the Secretary.

An article by Robin Torrence on the Melos Obsidian Quarries has recently appeared in the *Journal of Lithic Technology*, Vol. VII, no. 3, Dec. 1979.

Alan Saville's report on the Grimes Graves flintwork is to be published shortly by the D.O.E., and full details of Frances Healy's work in East Anglia can be found in her London Institute of Archaeology Ph.D. thesis.

Stephen Green's Arrowhead typology has now been published in full as a BAR. (*The Flint Arrowheads of the British Isles*, 2 vols, BAR 75. 1980) A shortened version (basically an outline of his typology) will shortly be available as an Occasional Publication of the Society.

Hazel Martingell gave a very informative seminar on the illustration of lithic artefacts and this is summarised by her below. There is a deplorable lack of work dealing specifically with the illustration of stone objects so that this contribution is particularly welcome, though *Précis de Dessin Dynamique et Structural des Industries Lithiques Préhistoriques* by M. Dauvois is to be recommended. One of the more general but significant points to come out of the seminar was the need for the illustrator of lithic objects to have some understanding of the technology and possible function of stone tools, in order to be able to represent them meaningfully on paper.

DRAWING FLAKED STONE ARTEFACTS

Hazel Martingell

(Archaeological Illustrator, Essex County Council)

Materials

Drawing board
Graph paper
Tracing paper
Tracing film (e.g. Codatrace or permatrace)
(or Bristol board or good quality cartridge, but see No. 1 below)
Set square
Dividers
Blu-tack or plasticine
Masking tape

Pencils
Soft rubber
Pens: Barrel nib, e.g. Rotring or Staedtler
Crow-quill or mapping pens or Graphos pens

Reduction Factors

Worked flint and stone is usually drawn at one to one (1:1) for reduction to two-thirds (2:3) of its original size. Axes however are usually reduced to a half (1:2) when printed and microliths are often drawn

and printed at twice actual size (2:1).

Conventions, symbols, orientations and views (see also following note)

Light: top left hand corner.

Symbols: (see Figs. and following note).

Orientation and Views.

Only the retouched face (usually dorsal) is shown normally. When the retouch cannot be properly shown with a dorsal view only (e.g. an abruptly retouched scraper) an end or side view is drawn (see Fig. 4). If both surfaces require illustration the dorsal surface is shown first and the ventral view placed on the right. (Fig. 6). The bulbar or proximal end is usually at the bottom, although some people prefer to put the working edge uppermost. Microliths are usually drawn with the bulbar end up (Fig. 5).

METHOD

1. Introduction:

I personally find that the most convenient surface to work on is an A3 sized drawing board lined with graph paper. To this I attach an A4 sized piece of tracing paper (held in place with masking tape across corners). After completing pencil drawing of the pieces, (see below) I arrange the illustrations on a page ready for publication; and then and only then do I trace in ink the pencil drawings directly onto film as a finished page of illustrations. The combination of graph and tracing paper makes it simple to arrange a good layout, and eliminates the need for pasting up individual drawings though others do still prefer to use this method. Symbols may be added at this stage and the drawings are then numbered and a scale put on in the usual way.

2. Outline:

Place the artifact on the paper, bedding it in with plasticine or blu-tack if necessary. Draw (with a pencil) round the perimeter of the piece taking care to keep the eye directly above the edge and the pencil vertical; for thick objects it may be necessary to use a set square.

3. Main flake scars:

Key in the junction of the main flake removals and the points where they meet the perimeter (Fig. 1). These can often be drawn by eye so long as the volumes are measured with dividers (Fig. 2).

4. Retouch:

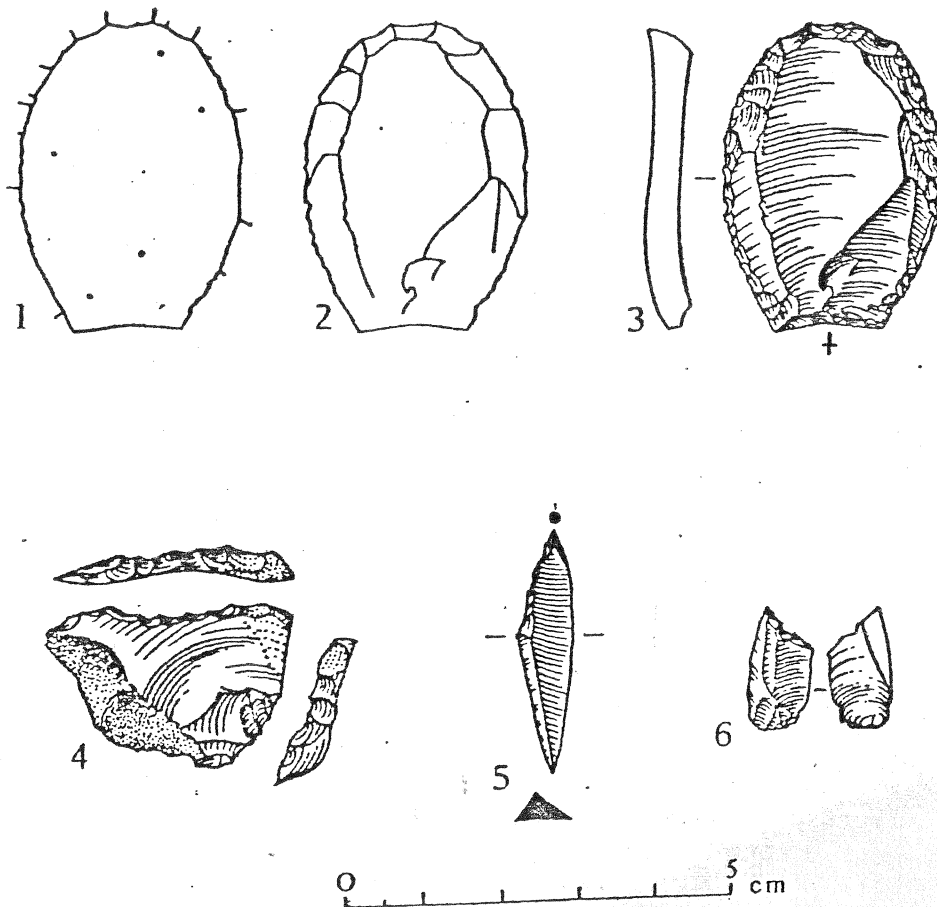
Once the main removals and proportions are established the retouch can be added. Here an understanding of the manufacture of stone tools is helpful as it is easiest to draw the flake scars in the order in which they were detached. In the case of pieces with steep sides fore-shortening must be allowed for. I find that the simplest way is to trace the artefact through a small sheet of glass or perspex held horizontally over it; this tracing is then added to the outline drawing to tie up with the key points.

5. Shading:

The final stage is the adding of lines of shading to suggest the overall depth of the piece and also the direction of the flake ripples in a graded, thick to thin line or a constant, even width line, which ever is preferred. The light source should come from the top left on to the artefact casting the darkest shadows at the bottom right. Follow the shadows with the thicker end of the line and grade it out into the highlights (Fig.3). Remember that the white spaces between the lines are as important as the lines themselves. It is also important to consider the reduction factor of the published drawing when shading.

6. Inking in:

Once the pencil drawing has been checked by the lithic analyst then a final inked version can be done, and symbols, scales, and numbers added.



CONVENTIONS

H.S. Green and E. Healey
(National Museum of Wales)

A number of varying conventions are already in use by Lithic Analysts (see for example M. Bell's 'Bishopstone' report in *Sussex Archaeol Coll.* Vol. 115, 1977. The list below summarises those in common use (we are grateful to Hazel Martingell for her comments on an earlier draft) and is currently undergoing trials with the illustrations for the National Museum of Wales Catalogue of the Stone Age Collections. It is hoped that eventually the Society will publish its recommendations, and comments are invited.

SYMBOLS.

-  bulb removed (Lehraset Key symbols sheet 2453)
-  bulb present. (Lehraset Key Symbols sheet 2453)
-  thermally fractured piece.
-  burin facet.
-  cortex, usually irregular stipple but more regular if cortex is smooth.
-  struck flake scar, flint and smooth stone.
-  struck flake scar, other stone.
-  thermal fracture, evenly spaced conchoidal rings.
-  polish or areas worn smooth, blacked in, on small implements, but left blank on axes.
-  gloss, light regular stipple (slightly denser on edge).

ORIENTATION AND VIEWS OF ARTEFACTS.

1. Axes: Butt to top of page. Transverse section at maximum width and longitudinal profile.
2. Maceheads: Narrow end to top of page. Transverse and longitudinal sections.
3. Scrapers: Scraping edge at top longitudinal view.
4. Arrowheads: Point up. Longitudinal section.
5. Burins: Burin edge at top and face view if necessary.
6. Awls: Point at top.

Other artefacts are drawn with the butt at the bottom.

Position of sections and profiles.

1. Transverse section - below.
2. Longitudinal profile. To right and located adjacent to edge drawn.
3. View of striking platform (e.g. if faceted, but rarely done) below.
4. Sections, 'diagonally hatched ///// or left open.

If both sides of a flake are drawn, the ventral surface is always to the right.

Scales.

All artefacts are drawn at 1:1 for reduction to $\frac{1}{2}$. except microliths which may be drawn at 2:1 for publication at 2:1.

A REVALUATION OF THE APPROACH TO LITHIC STUDIES IN BRITAIN TODAY.

In a paper entitled '*A Consideration of Lithic Studies in Britain*', a revised version of their lecture, Caroline Wickham-Jones and Rosemary Hope (National Museum of Antiquities of Scotland, Edinburgh) have highlighted the lack of methodology shown by British lithic analysts. Their main criticism is of what they call the 'morpho-taxonomic' approach shown at earlier meetings of the Lithic Studies Society and the fact that so called cultural types are isolated, often without references to the activities of a particular site and the assemblages as a whole. Instead they emphasise the need to go back to first principles and for careful assessment of the information potential of stone tools. They examine, at some length, the work of Bonnichsen (R. Bonnichsen, '*Models for Deriving Cultural Information from Stone Tools*' Archaeological Survey of Canada, Paper No.6, National Museums of Canada, Ottawa 1977) as a model for the establishment of a methodology and consequent construction of a typology. The main lines of Bonnichsen's argument is that lithic assemblages must be examined comprehensively on an intra-site level before any attempts are made at comparisons on inter-site levels. Intra-site analysis involves the examination of lithic industries both as entities in themselves and also in relation to other information from the site. The method of analysis is based on systems of attributes (some of which are mentioned in the paper but see also *Analytical Archaeology* by D.L. Clark). These can be combined to form a number of predetermined but interdependent levels or modes which in turn can be built into typologies.

Attributes pertaining to the following interdependent levels are suggested:-

- (i) raw material
- (ii) general technology and metrical data
- (iii) morphology
- (iv) function

Typologies can then be constructed as circumstances demand..