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Typological notes: the Sudanese case

There is an increasingly felt need for a suitable typology of the prehistoric artefacts from the Central Sudan, firstly because of the amount of new finds available for studies on the relative chronology of sites and, secondly, because too many misunderstandings have accumulated as regards the description of the diffusion of such phenomena as the wavy line pottery and bone harpoons. In my opinion this is due to the use of typologies based on morphological stereotypes in classification consisting of elementary lists, both pottery and lithics, where the lack of hierarchy makes us miss the connection between the various elements analyzed.

For instance, none of the lithic typologies takes into account either the flaking procedures and aims as indicated by the waste, or the waste itself as possible ready-made tools. In theory, most scholars agree that retouched tools constitute only a part of the actual tool-kit. However, in practice their work still relies on lists of retouched objects only, with the ensuing risk of failing to seize the total significance of the assemblage.

In this respect, a different analytic approach was used for the material from the Early Khartoum site of Saggai (Caneva and Zarattini 1983). The approach was characterized by a fairly limited list of retouched tools and an extensive assemblage of pieces with sporadically retouched and unretouched flakes. By reconstructing the flaking procedure we thought that, among other things, we had understood the technical importance of what appeared to be the favourite flake shape, i.e. a lunate with a well elaborated back. As it appeared, crescentic flakes might have the same function as the retouched lunates. They were retouched apparently only slightly, either to correct the curve or steepness of the back, or the sharpness of the cutting edge. Bearing this in mind, a considerable part both of the body of waste and of what normally is confined to the class of undifferentiated retouched pieces became significant; the lunate was intepreted as the core of the assemblage and this provided us with an indication on how to classify all the retouched pieces without dividing them into a priori categories.

The only difference between the two layers of the Saggai settlement concerns the ratio of the lunates. Other lithic types reveal, indeed, a perfect parallelism. We reach the same parallelism, however, if we combine lunates and crescent-shaped retouched flakes thereby accounting for 61.6% in the upper layer and 62.9% in the lower layer. We, therefore, considered the difference in rates of lunates as not significant.

The same way of reasoning was applied to the pottery from Saggai (Caneva 1983) which is usually classified on the basis of decoration omitting other distinctive elements. While the techniques of decoration are more or less correctly studied and described, the basis of any present typology is either the motif or the tool assumed to have been used.

However, in the first case one relies on largely subjective visual impressions, using definitions such as "mat impressions", "dotted lines", etc. and, in the second case, one assumes the possibility of listing all the kinds of items which could have been used as tools for decoration. My opinion is that the aesthetic significance of the motifs, as well as the technical relevance of a single, perhaps occasional, tool, are beyond our possibility of evaluation.

Our proposal was therefore not to use these criteria of classification and our preliminary division was based on the technical aspects of decoration. It not only appeared to be more objective but also made it possible to group the operations which were similar for the potter in terms of work input.

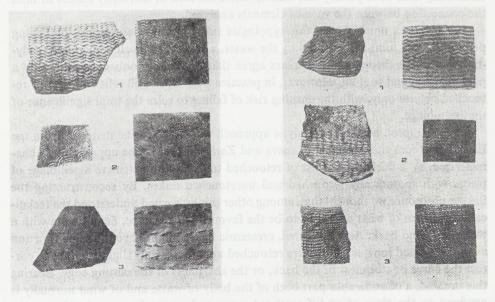


Fig. 1 Fig. 2

Three categories were thus formed according to the following hierarchy:

- 1. Technique of decoration;
- 2. General form of the tool employed;
- 3. Morphological details of the working edge of the tool, i.e. the different motifs.

When applying this system to the Early Khartoum pottery it appeared that there were two basic techniques of decoration: impression with a rocker, both comb and two-toothed tool (Fig. 1: 3; Fig. 2) and incision with a comb (Fig. 1: 1 - 2).

The next division took into account the motifs but in terms of their merely indicative value only. It seems to be difficult to classify the variety of patterns and particular decorative effects which are frequently either combined or fading into one another.

Within the rocker patterns a valuable distinction concerns the tool employed, either a double-toothed object (Fig. 1: 3) or a multi-toothed comb (Fig. 2). The latter shows, however, a great variety of patterns obtained by varying the spacing or direction of the impressions. Among these is the dotted wavy line, for which in the past the authors suggested very complicated production procedures (Arkell 1949; Camps-Fabrer 1966). On the contrary this pattern seems to be easily obtained by the technique of first pivoting the comb on one end until the edge has made a fan of impressions, and then by reversing the movement (Fig. 2: 1, 3).

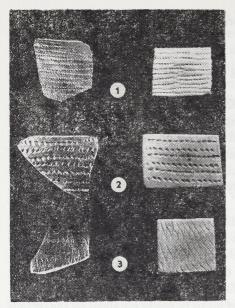
The ratio of rocker technique to the wavy line decoration appears to be a diagnostic stratigraphic element at Saggai, showing a gradual shift towards the predominance of the rocker technique. This can be seen throughout the cultural Khartoum sequence of the Early Khartoum and the Central Sudanese Neolithic cultures. The dotted wavy line decoration has its place in this trend, where it occupies an intermediate position (Arkell 1953; Bailloud 1966).

The situation concerning the Neolithic pottery is more complex. There are basic decoration techniques of this pottery: the rocker and the linear impression and the incision. The rocker, which is the most common technique, has two basis applications, depending on the tool employed: an object with a continuous edge, curved or rectilinear, which can be plain (Fig. 3: 3) or, more frequently, notched (Fig. 4), or a tool with a two-toothed edge, either thin or thick (Fig. 3: 2).

The first kind of comb provides innumerable different motifs depending on the number and size of the teeth, including the rows of opposed triangles or v's in which the continuous edge of the tool is interrupted in the middle by a single notch (Fig. 4: 1).

The second kind of comb produces couples of thin dotted lines which are often wrongly interpreted as linear impressions. The simple linear impression, which is lacking in Arkell's description and documentation (1953), consists of the horizontal application of a comb along parallel lines (Fig. 3: 1). Hence the patterns usually defined as "dotted parallel lines" can be obtained by means of two different techniques and tools, representing two different approaches to the operation. This differ-

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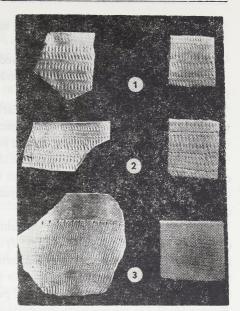


Fig. 3

Fig. 4

Neolithic ceramics from central Sudan: potsherds and laboratory replications

ence acquires more significance when we observe that the first technique, with the exclusion of the other, was to become the only impressed decoration to survive in the Late Neolithic of Central Sudan. The gradual disappearence of the rocker comb in favour of the two-toothed tool seems also to be documented by the fact that the Neolithic dotted wavy line is made with the latter technique and no longer with the usual rocker.

In conclusion, if it is true that a final "model" decoration was an aim of any operation, it is also true that this would have been accomplished in several ways: what then becomes significant in order to distinguish one group from another is the procedure through which this "model" was realized rather than the morphology of the final product, often too simple to be distinctive. Thus the reconstructed procedure could give an indication of the operator's gesture in which the quantity and quality of labour, the choice of tools and, finally, the style may be specified.

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