

Excavations at El Kadada and the Neolithic of the Central Sudan

El Kadada is situated in the Sudan, in the district of Taragma, some 200 km. north of Khartoum (Fig. 1). An extensive archaeological site was discovered there in April 1976. As it was being destroyed for the setting of an irrigation project, a rescue excavation was immediately organized. This gave such results that it was followed by three other excavation campaigns, for a total length of approximately eight months. It since became the main research project of the French Archaeological Research Unit of the Directorate General for Antiquities and National Museums in the Sudan¹.

The site lays on the right bank of the Nile, in an area where the river flows from west to east. It is still used by the inhabitants of the surrounding villages as their burial place. This, together with the poor quality of the local ground, certainly explains why it was left uninhabited and uncultivated. It would have been safe from destructions if not chosen for the construction of the pump, of the starting point of the main canal and of the staff buildings of the irrigation project.

During the first campaign, which we first thought would be the only one, the site was divided into 50 m. squares, numbered as from 1, ten for each E-W strip, starting therefore from the N-E corner (Fig. 2). These main squares are divided into 2 m. squares, which are referred to with their co-ordinates: A-Z from east to west (I not included); 1 - 25 from north to south. So far three main areas have been investigated: 12 - 22 - 32; 75 - 76 - 85 - 86; 107. The three of them include remains of a Neolithic layer as well as Neolithic, Meroitic and Post-Meroitic graves².

12 - 22 - 32 was first appearing as a large low mound, the northern part of which had been destroyed for preparing the site of the pump. At the same time the remaining

¹ The preliminary results of the campaigns are published every year in an illustrated report issued by the French Unit and distributed free of charge. Anyone interested should send his address to: French Archaeological Research Unit, Directorate General for Antiquities and National Museums, P.O. Box 178, Khartoum, Sudan.

² Geus, 1976; 1977; 1978; 1980a; 1980b; Geus and Reinold, 1979.

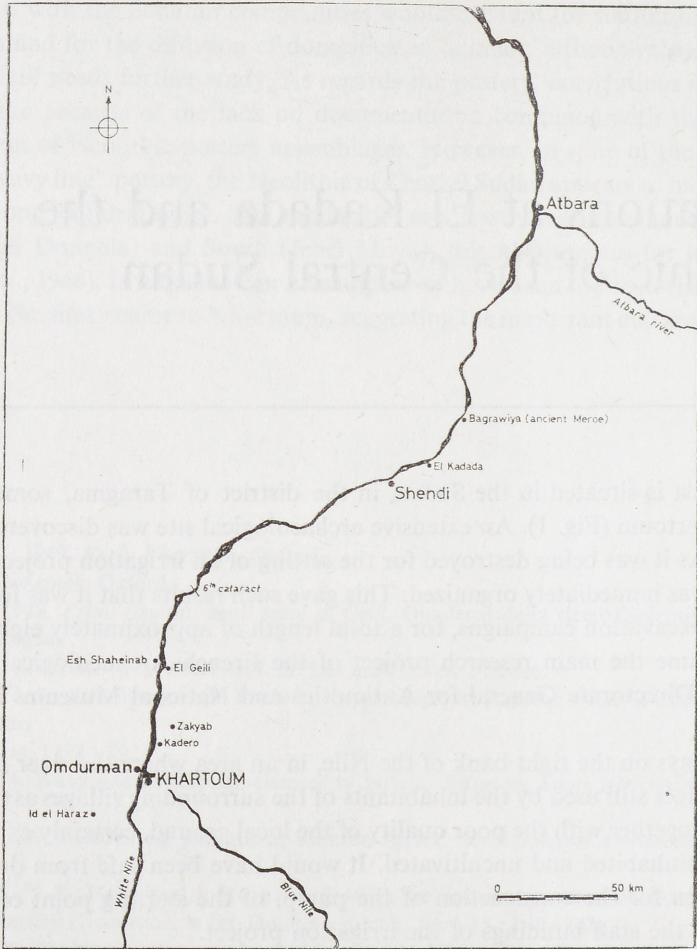


FIG. 1. Major sites in the Central Sudan

part had been superficially disturbed and, as a consequence, a lot of archaeological fragments were appearing on the surface. The mound was thought to be a settlement site. The excavations quickly showed that it was also an important burial ground.

The settlement remains appear as a rather thick light grey layer, containing a lot of archaeological fragments. No stratigraphy may be worked out, as it has been disturbed since the Neolithic occupation by the digging of graves. One area seemed to be better preserved, but it was found too late in the campaign and it could not be excavated before the final destruction of the site, in February 1977. Most of the material collected from the layer, which is packed in thousands of bags, is now under study. So far we may express only some preliminary impressions:

- no habitation structures found;

- lithic industry characterized by (a) numerous sandstone grinding tools, (b) heavy quartz and chert flaking associated with few finished or retouched pieces;
- bone harpoons (Fig. 3: 1 - 3); shell fish-hooks (Fig. 3: 4 - 6); amazonite, carnelian, bone and ostrich egg-shell beads;
- large quantity of pottery sherds, mainly black wares, plain and decorated;
- large quantities of shells and fragmentary animal bones.

The graves include pot burials and pit burials. Pot burials (Fig. 3: 7 - 8;) were used for newborn children and infants. The pots containing the burials are ge-

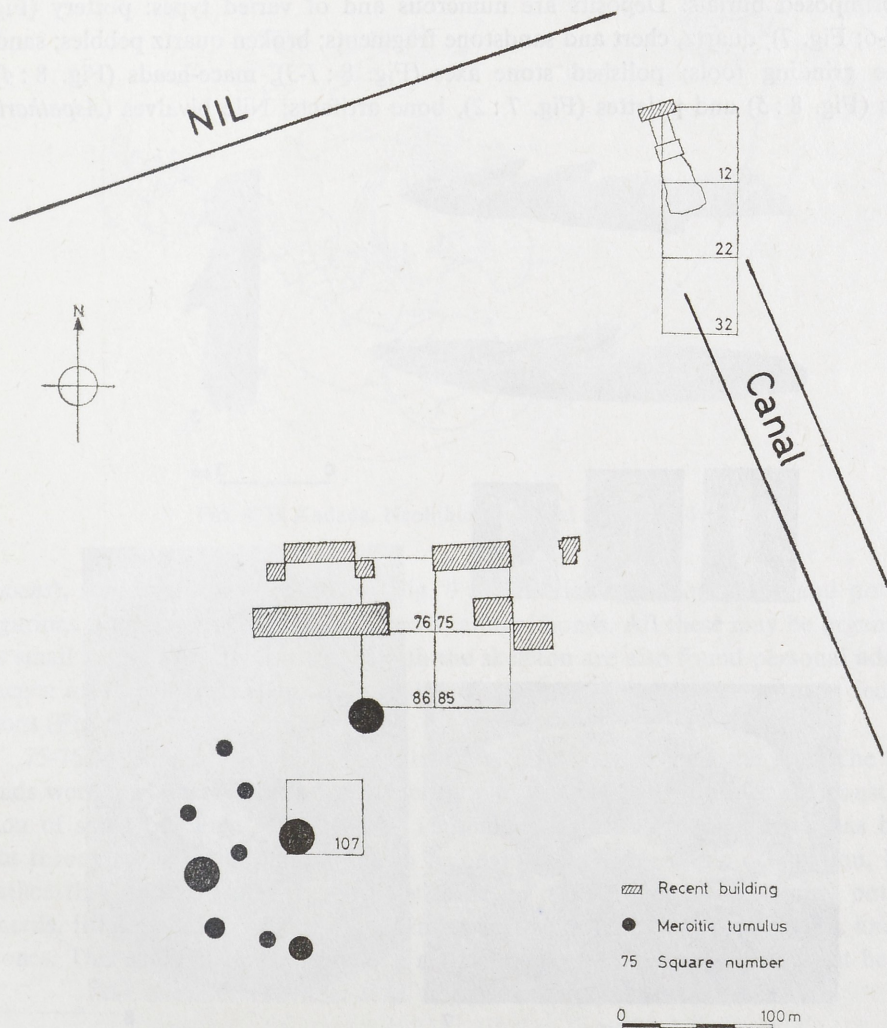


FIG. 2. El Kadada. Distribution of archaeological areas

nerally large, hemispherical, decorated. Some offerings may be found inside and outside the pot: pottery vessels, ostrich eggs, Nile bivalves (*Aspatharia rubens*), beads. In several cases one pot contains the bones of several individuals. Pot burials are most often disturbed.

In the other type of burial the pit is circular or subcircular. Sometimes it is shapeless, as a result of successive diggings for superimposed burials. The skeleton lays generally on its side, in a more or less contracted position, without any specific orientation (Fig. 5). Traces of red ochre may be found on the bones and sometimes the light remains of what may have been a mat helps differentiating between two superimposed burials. Deposits are numerous and of varied types: pottery (Fig. 6 : 1-6; Fig. 7); quartz, chert and sandstone fragments; broken quartz pebbles; sandstone grinding tools; polished stone axes (Fig. 8 : 1-3), mace-heads (Fig. 8 : 4), discs (Fig. 8 : 5) and palettes (Fig. 7 : 2), bone artifacts; Nile bivalves (*Aspatharia*



FIG. 3. El Kadada. Neolithic bone harpoons (1 - 3), shell fish-hooks (4 - 6) and pot burial viewed from side (7) and top (8)

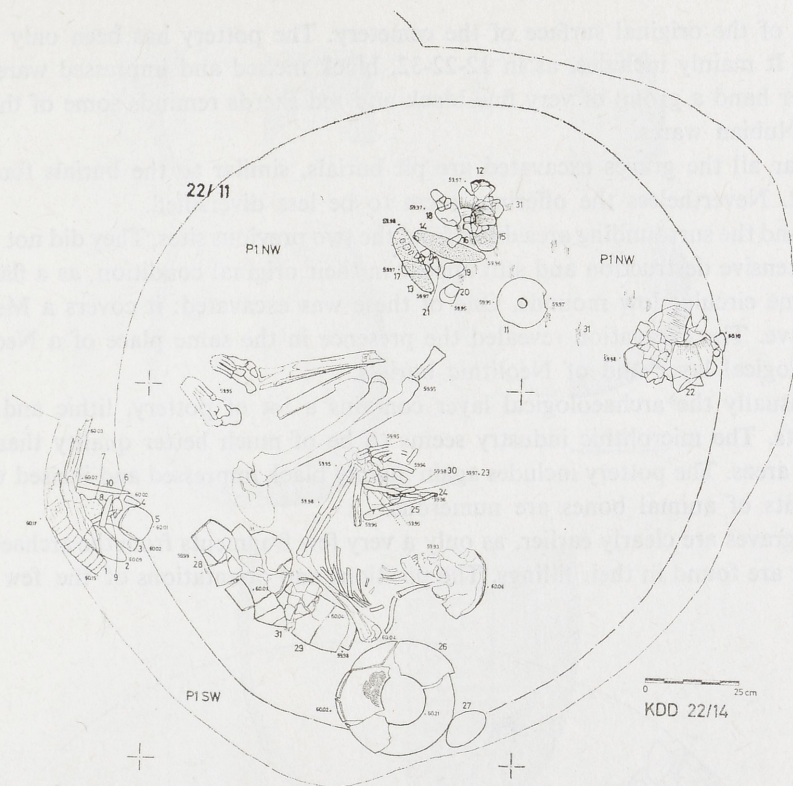


Fig. 4. El Kadada. Neolithic pot burial KDD 22/14

rubens), some with serrated edges (Fig. 9 : 1); ostrich eggs; sandstone and pottery figurines (Fig. 9 : 2); red ochre fragments; animal bones. All these may be organized as small heaps. Directly associated with the skeleton are also found personal adornments: amazonite, carnelian, bone and ostrich egg-shell beads; lip or nose decorations (Fig. 9 : 3-5); ivory rings³.

75-76-85-86 had already been flattened when we discovered the site. The first finds were made near foundation trenches, which were being dug for the construction of some buildings. On this site a homogenous archaeological layer has been cut through by burials, most of them belonging to the Neolithic occupation. It is rather thin and contains fragmentary grinding tools made of sandstone, pottery sherds, lithic material with a higher index of finished or retouched pieces, animal bones. This suggests that it may be a settlement layer, but it could also just be the

³ In squares 75 - 76 - 85 - 86, although some of the rings are of ivory, others have been identified by A. Gautier (Gent University) as being made out of large sea shells (Fig. 9 : 6 - 7).

remains of the original surface of the cemetery. The pottery has been only partly studied. It mainly includes, as in 12-22-32, black incised and impressed wares. On the other hand a group of very fine black and red sherds reminds some of the best of the Nubian wares.

So far all the graves excavated are pit burials, similar to the burials found in 12-22-32. Nevertheless the offerings seem to be less diversified.

107 and the surrounding area differ from the two previous sites. They did not suffer from extensive destruction and still appear in their original condition, as a flat area with some circular low mounds. One of these was excavated: it covers a Meroitic cave grave. The excavation revealed the presence in the same place of a Neolithic archaeological layer and of Neolithic burials.

As usually the archaeological layer contains a lot of pottery, lithic and bone fragments. The microlithic industry seems to be of much better quality than it is in other areas. The pottery includes again mainly black impressed and incised wares. Fragments of animal bones are numerous.

The graves are clearly earlier, as only a very few fragments from the archaeological layer are found in their fillings. The positions and orientations of the few exca-

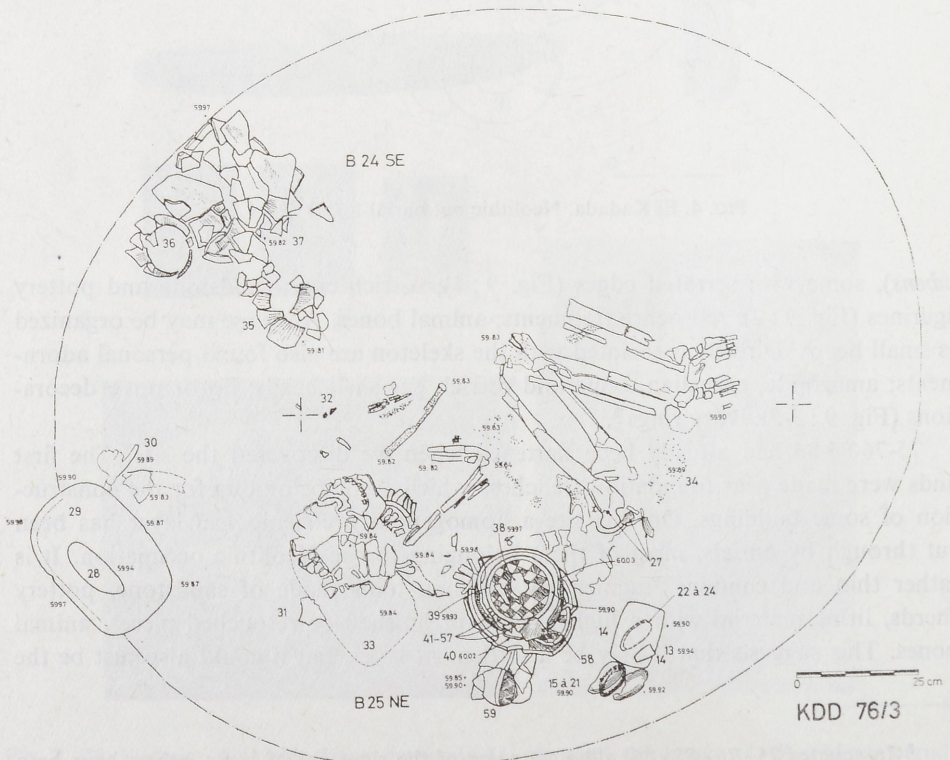


FIG. 5. El Kadada. Neolithic pit burial KDD 76/3

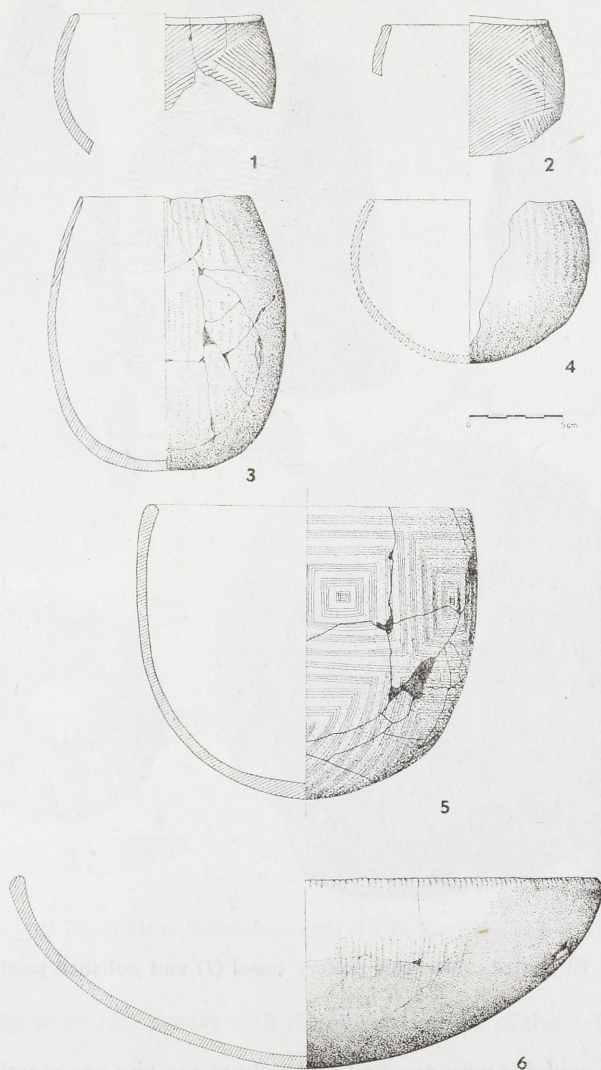


FIG. 6. El Kadada. Neolithic pottery vessels

vated burials are as in the other areas, but only single inhumation were found so far with only a few pottery vessels as deposits. These vessels differ from the pottery found in the other graves.

This short and incomplete description of our discoveries at el Kadada gives an idea of the extension of the archaeological site and of its complexity. Years of field and laboratory research will still be necessary to obtain a reliable picture of the Neolithic occupation. So far our work concerned mainly the Neolithic and Meroitic

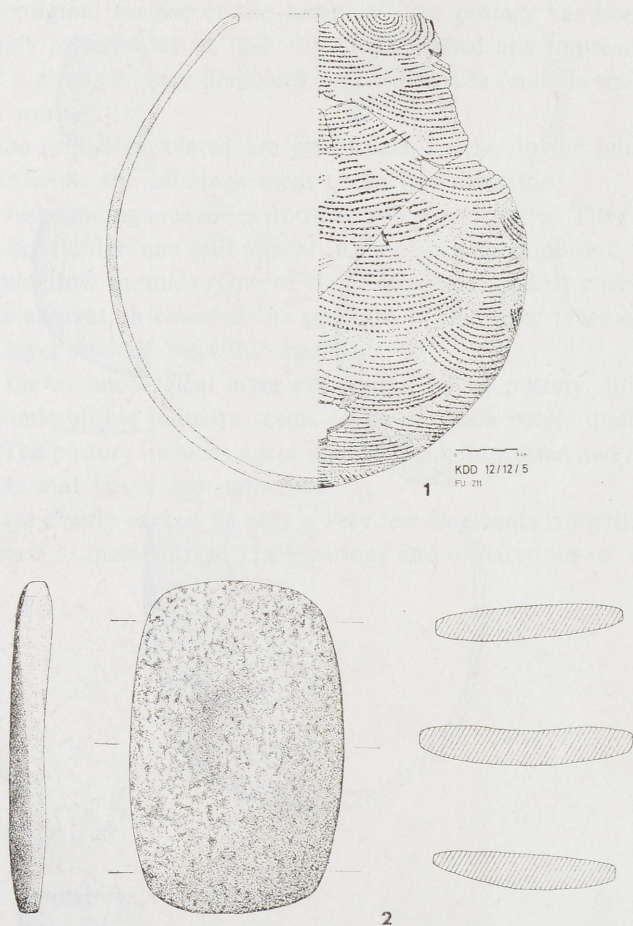


FIG. 7. El Kadada. Neolithic pottery vessel (1) and polished palette (2)

burials and this explains why our first ideas about the site are mainly based on the material culture and on the funerary customs.

Most of the material found at el Kadada shows that it belongs to a late and brilliant development of the Central Sudanese Neolithic, presenting a number of affinities with the A-Group and C-Group cultures of Lower Nubia. The only C-14 datation we got so far ($4,630 \pm 60$ B.P., uncalibrated-conventional)⁴ shows that this

⁴ This date has been obtained from a sample of river shells (*Aspatharia rubens*) from inside a grave (Geus, 1980a : 15). A new date ($4,830 \pm 50$ B.P.) has since been obtained from shells of the same type found inside a pot burial.

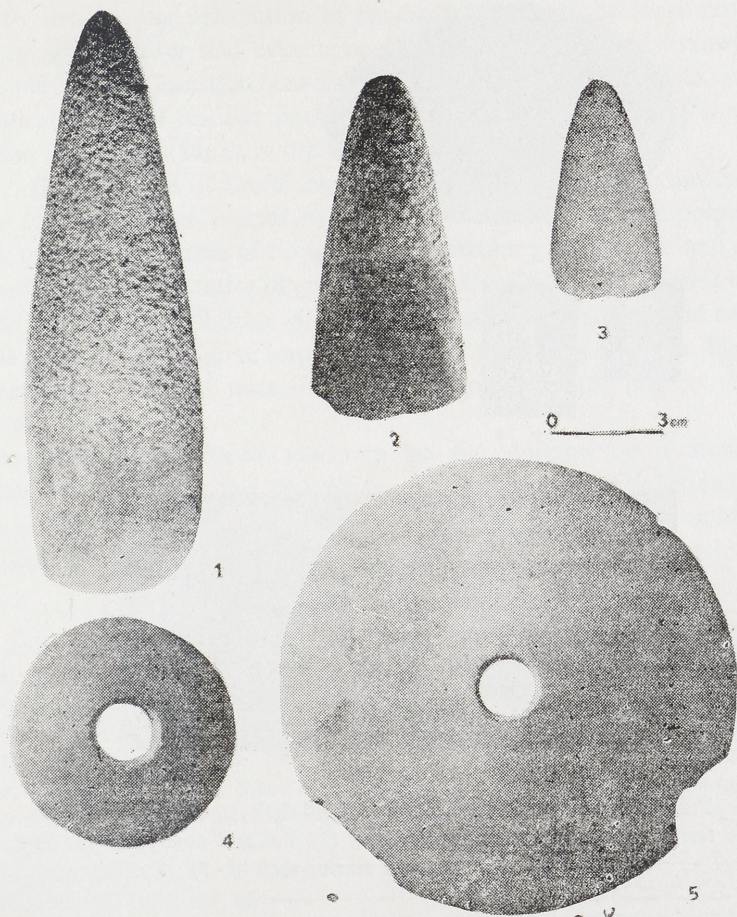


FIG. 8. El Kadada. Late Neolithic polished axe-heads (1 - 3), mace head (4) and perforated disc (5)

development must be contemporary with the classical phase of the A-Group in Lower Nubia⁵.

The similarities with the Shaheinab Neolithic are mainly due to the presence of some specific objects: serrated Nile bivalves (*Aspatharia rubens*), amazonite beads, lip-plugs, barbed bone harpoons, shell fish-hooks. For the rest the differences are numerous. On one hand, although they show affinities, the ceramic assemblages of the two sites differ: at Esh Shaheinab the bulk of the pottery is made of burnished red and brown sherds, with mostly impressed decorations, whereas at el Kadada, although a dark red wash is sometimes used, on rippled pottery mostly, black wares

⁵ Ollson in Nordström, 1972: 251. For the classic A-group the weighted mean value of the four C-14 determinations is $4,655 \pm 80$ B.P. (uncalibrated - conventional).

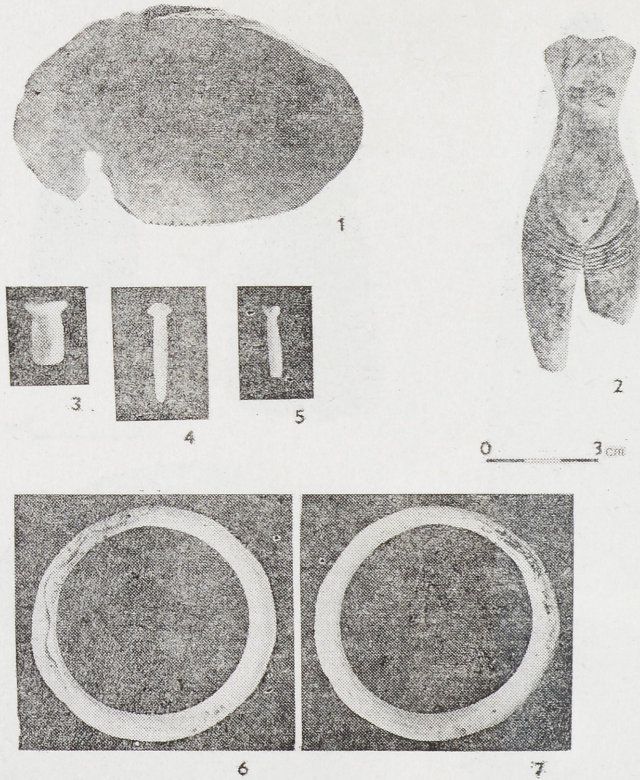


FIG. 9. El Kadada. Late Neolithic serrated shell *Aspatharia rubens* (1), terracota figurine viewed from front (2), lip- and nose-plugs (3 - 5) and rings made of marine shell (6 - 7)

with both impressed and incised designs predominate. On the other hand at el Kadada microliths are few and hard stone polished implements of excellent quality numerous, whereas at Esh Shaheinab the situation is just the opposite⁶. Another point to be considered is the total absence at el Kadada of the gouge, a typical tool of Esh Shaheinab.

Funerary customs and pottery show more affinities with the burials found at Esh Shaheinab and near Omdurman Bridge, which Arkell thought to be possibly of Protodynastic date⁷. Nevertheless here again differences are striking: at Esh Shaheinab, where a good number of graves have been excavated, although grave shafts

⁶ Polished artifacts made from hard stone are few and their types differ from those found at el Kadada, except for some fragments of discs which Arkell do not associate with the main occupation of the site.

⁷ Arkell (1953 : 82) insists on the differences between the graves of the two sites, concluding that the Esh Shaheinab ones are possibly earlier.

are generally circular, the orientation of the bodies seems to be more precise, the offerings are much poorer and superimposed burials are few and limited to two individuals only. In fact recent excavations at el Geili, where some graves containing goods identical to the el Kadada finds have been found, show that it is a specific culture which extended as far as in the Khartoum area⁸.

In the A-Group graves of Lower Nubia the grave goods are less diversified and burials are following more precise orientations. Nevertheless they present many similarities: frequent occurrence of circular or sub-circular grave shafts⁹ and of superimposed burials¹⁰, large quantity of grave goods inside the shafts. On the other hand many of the objects show affinities with the el Kadada material: polished hard stone discs¹¹ and palettes¹², sandstone lower grindstones¹³, pottery figurines. The shapes, surface treatments – rippled ware – and decorations¹⁴ of the pottery show also a number of affinities.

These are much fewer with the C-Group, but the common use of circular grave shafts in the early C-Group, the abundance at el Kadada of black incised pottery, sometimes with white filling, show that they should by no means be excluded¹⁵ as should not be excluded a comparative study with the cultures of Predynastic Egypt¹⁶.

⁸ The graves excavated at el Geili contain goods which are exactly similar to those found at el Kadada: hard stone palettes and perforated discs; pottery with incised decoration. They are still unpublished, but photographs of some of them were presented in a temporary exhibition, held in Khartoum National Museum in 1980. On the other hand finds from Kadero include a palette of the same type (Chittick, 1955 : 79 - 81 and Pl. VII) and Arkell, found at Zakyab, Id el Haraz, Omdurman Bridge, Khartoum Hospital and Esh Shaheinab fragments of perforated discs which he did not associate with any precise occupation of the sites (Arkell 1949 : 135; 1953 : 50).

⁹ Nordström, 1972 : Pl. 64, 78.

¹⁰ Nordström, 1972 : Pl. 131, table 4.

¹¹ Reisner, 1910 : Pl. 62c, 2 - 4 and 10 - 12; Pl. 63d, 5, 10. The el Kadada perforated discs are of various sizes, the maximum diameter found so far being 24 cm. Profiles may differ. We could not yet precise what they were used for. We are using here the term „mace-head” for related objects which look more like rings, although the passage from a disc to a mace-head remains still to be defined.

¹² Firth, 1927 : Pl. 21d, 3 and 9 - 12; Nordström, 1972 : Pl. 137, 13.

¹³ Reisner, 1910 : Pl. 26c; Firth, 1912 : Pl. 14b; Firth, 1915 - Pl. 5f.

¹⁴ Semi-circular patterns (Firth, 1927 : Pl. 19c - f; Nordström, 1962 : Pl. XI); rocking impressions (Adams and Nordström, 1963 Pl. Ia; Nordström, 1966 : p. 6 and fig. 1); superimposed horizontal lines of triangles (Firth, 1927 : Pl. 19a - b).

¹⁵ C-Group graves contain also pottery figurines (Firth, 1912 : Pl. 39a - b), sandstone grindstones (Steindorf, 1935 : Pl. 68), bone tools (Steindorf, 1935 : Pl. 16), Nile bivalves (Steindorf, 1935 : Pl. 68).

¹⁶ Although this point does not need to be developed here, the following resemblances may be mentioned for the pottery: usual shapes (Brunton, 1937 : Pl. XVII); rippling (*id.* : 28, Pl. XII and XIV); beakers with flaring openings (*id.*, Pl. XII). Similar beakers have also been published for Lower Nubia: Firth, 1915 : Pl. 27f (archaic pottery); 1927 : Pl. 25a, 3 (Early C-group). For the stone palettes see also Chittick, 1955 : 80 - 81.

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