The late prehistory of the Gash Delta (Eastern Sudan)

Since 1980, the Italian Archaeological Mission to the Eastern Sudan of the Department of African and Arabian Studies, Instituto Universitario Orientale, Naples, has been carrying out a systematic archaeological reconnaissance of the Gash Delta in the Kassala Province. The investigated area includes the whole delta from Jebel Gulsa on the Ethiopian border to Eriba Station and the adjacent plains from Jebel Tukulabab to Shurab el-Gash. Up to now 140 sites have been recorded. They cover a time-span from ca 6,000 B.C. to 1,800 A.D. These remains document most of the temporal phases and spacial facies of the historic-cultural sequence of the Eastern Sudan, which was made evident by the combined field-work of the I.U.O. Mission in the Gash Delta and the Joint UoK/SMU Butana Archaeological Project at Khashm el-Girba in the middle Atbara valley (Fattovich et al. 1984; Marks and Fattovich 1984).

At present nine main groups of sites can be described: 1. Amm Adam Group (ca 6,000 - 4,000 B.C.); 2. Malawiya Group (ca 5,000 - 4,000 B.C.); 3. Butana Group (ca 4,000 - 1,000/500 B.C.); 4. Gash Group (ca 3,000 - 1,000 B.C.); 5. Agordat Group (ca 2,500 - 1,500 B.C.); 6. Jebel Mokram Group (ca 2,000 - 1,000/500 B.C.); 7. Hagiz Group (ca 1,000/500 B.C. — 300/400 A.D.); 8. Khatmiya Group (ca 300/400 - 600/700 A.D.); 9. Gergaf Group (ca 1,500 - 1,800 A.D.). Moreover, a Christian site (ca 1,100 - 1,200 A.D.) and a number of tumuli and other stone structures of early historical and/or later times were identified (Fattovich 1981; 1984a; 1984c; Fattovich and Piperno 1986; Constantini et al. 1983; Coltorti et al. 1984; Sadr 1984).

A detailed analysis of the collected data is still in progress. Therefore in this paper I shall give some information on the preliminary results concerning the late prehistoric and protohistoric period (ca 6,000 B.C. - 400 A.D.).

Amm Adam Group

This group of sites represents the earliest certain evidence of the peopling process of the Gash Delta. It corresponds to the so-called Pre-Saroba sites in the Khashm el-Girba area. Two possible ceramic sites (GS1, JTef 1) were also recorded near Kas-

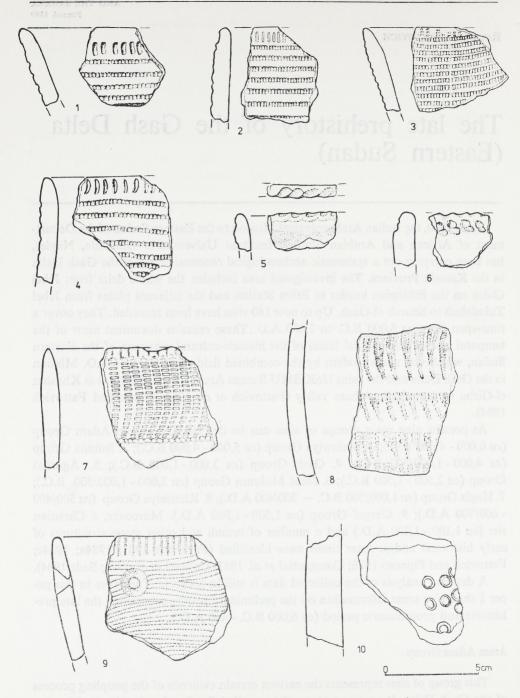


Fig. 1. Amm Adam Group, AAS 1 site. Selected potsherds

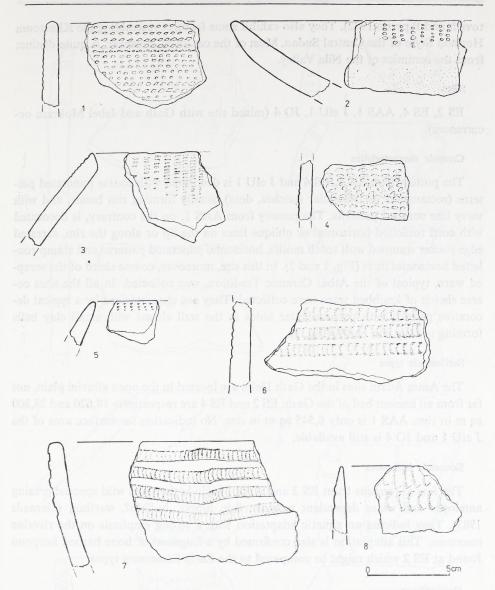


Fig. 2. Amm Adam Group, AAS 1 site. Selected potsherds

sala. They might indicate an older stage of the process in the area, but the evidence is still too scanty for a positive statement.

The area includes three sites in the northern delta and some sites near Jebel el-Ukheiderat and Jebel Ofreik to the west of the delta (Fattovich 1984b). They may be ascribed to two interacting cultural units, linked by the typical knobbed ware (Fat-

tovich and Piperno 1982). They also exhibit some features resembling the Khartoum Horizon Style of the Central Sudan. Most of the ceramics, however, is quite distinct from the ceramics of the Nile Valley.

Sites

ES 2, ES 4, AAS 1, J elU 1, JO 4 (mixed site with Gash and Jebel Mokram occurrences).

Ceramic characteristics

The pottery from ES 2, ES 4 and J elU 1 is decorated with coarse punctated patterns (rectangular or triangular notches, dots) usually forming rim bands, and with wavy line combed patterns. The pottery from AAS 1, on the contrary, is decorated with cord rouletted horizontal or oblique lines on the lip or along the rim, serrated edge rocker stamped wolf tooth motifs, horizontal punctated patterns and stamp rouletted horizontal lines (Fig. 1 and 2). In this site, moreover, coarse sherd of the scraped ware, typical of the Atbai Ceramic Tradition, was collected. In all the sites coarse sherds of knobbed ware were collected. They are characterized by a typical decorative pattern with perpendicular holes in the wall closed with small clay balls forming usually rim bands (Fig. 3).

Settlements types

The Amm Adam sites in the Gash Delta are located in the open alluvial plain, not far from an ancient bed of the Gash. ES 2 and ES 4 are respectively 18,620 and 28,800 sq m in size. AAS 1 is only 6,545 sq m in size. No indication for surface area of the J elU 1 and JO 4 is still available.

Economic indicators

The faunal remains from ES 2 and AAS 1 include the same wild species: grazing antelopes and water dependent animals: fish, hippo, buffalo?, warthog (Geraads 1983). They indicate an aquatic adaptation with a strong emphasis on the riverine resources. This adaptation is also confirmed by a fragment of bone barbed harpoon found at ES 2 which might be compared to the Early Khartoum types.

Comparisons

Some fragments of wavy line pottery with interrupted motifs like the Early Khartoum specimens from Saggai were collected at ES 2. Two fragments of unpatterned punctated ware identical to specimens from the sites of the Malawiya Group in the Khashm el Girba and Shurab el Gash area were found at AAS 1. Knobbed potsherds have been also found in the Pre-Saroba and Malawiya sites to the south, in Early and Middle Kerma assemblages of the central Nile Valley, and at Wadi Shaw and Gilf Kebir in the Lybian Desert.

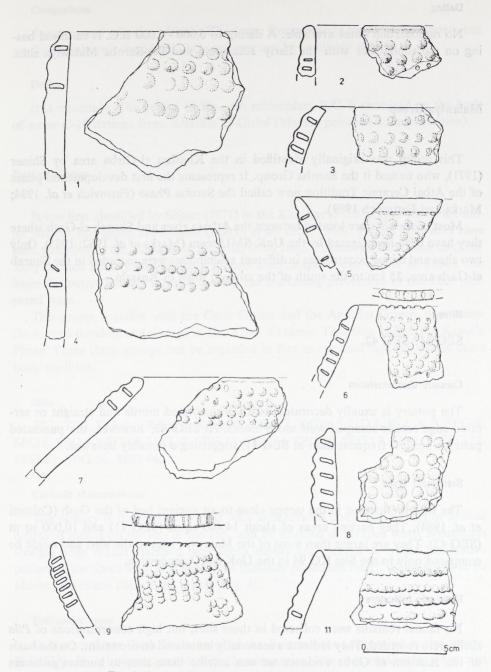


Fig. 3. Amm Adam Group, AAS 1 site. Knobbed ware

Dating

No radiocarbon dates available. A dating to 6,000 - 4,000 B.C. is surmised basing on the similarities with the Early Khartoum and Pre-Saroba Malawiya sites.

Malawiya Group

This group was originally identified in the Khashm el-Girba area by Shiner (1971), who named it the Saroba Group. It represents the first developmental phase of the Atbai Ceramic Tradition now called the Saroba Phase (Fattovich *et al.* 1984; Marks and Fattovich 1989).

Most of the sites are located between the Atbara river and Shurab el-Gash where they have been investigated by the UoK SMU team (Marks et al. 1982; 1983). Only two sites and minor occurrences in different assemblages were recorded in the Shurab el-Gash area, 35 km to the south of the modern town of Kassala.

Sites

SEG 11, SEG 42.

Ceramic characteristics

The pottery is usually decorated with jab punctated motifs and straight or serrated edge rocker stamped wolf tooth motifs. At SEG 42, however, the punctated patterns are less frequent than at SEG 11, suggesting a possibly later age.

Settlement types

The sites are located in the steppe close to an ancient bed of the Gash (Coltorti et al. 1984). They occupy areas of about 14,400 sq m (SEG 11) and 10,000 sq m (SEG 42). They are larger than most of the Malawiya sites to the west and might be compared only to the Site KG 94 in the UoK SMU concession.

Economic indicators

No faunal remains were collected in these sites, but high concentrations of *Pila* shells were recorded. They indicate a seasonally innudated environment. On the basis of the Khashm el Girba evidence we can ascribe these sites to hunters/gatherers exploiting the local savanna and riverine habitats in conformity with the aquatic adaptive strategy.

Comparisons

Some general affinities with the Khartoum Horizon Style could be mentioned, but no direct link with the Middle Nile cultures can be positively stated.

Dating

It is uncertain. The period of 5th - 4th millennium B.C. is surmised on the basis of some C-14 datings from Khashm el-Girba (Marks, personal communication).

Butana Group

It was first identified by Shiner (1971) in the Khashm el-Girba area where the major sites of this group are located (Marks et al. 1982; 1983). Twenty four sites have been recorded in the plains near Kassala, from Jebel Tukulabab to Shurab el-Gash. They include both typical and late Butana assemblages (Fattovich et al. 1984). The basic distinctive feature between them is the increasing percentage of the fiber tempered ware.

This group, together with the Gash Group and the Agordat Group, documents the second developmental stage of the Atbai Ceramic Tradition called the Kassala Phase. These three groups can be regarded in fact as regional variants of the same basic tradition.

Sites

JT 1, JT 2, KGar 1, KGar 2, KGar 3, KGar 4, KGar 5, UD 1, K 2, K 8, SEG 4, SEG 6, SEG 8, SEG 10, SEG 12, SEG 13, SEG 14, SEG 16, SEG 17, SEG 19, SEG 21, SEG 37, SEG 56, SEG 64.

Ceramic characteristics

The pottery is dominated by pots with undecorated body and zig-zag or fishtail engraved motifs on the top of the rim, and by brushed or scraped ware. Sometimes straight edge rocker stamped wolf tooth motifs are present. A typical decorative pattern in the Shurab el-Gash area is the fishscale punctated motif, which seems to be absent in western sites of the group (Fig. 4).

Settlement types

In the southern Gash Delta most of the Butana sites are located in the steppe. K 2, JT 1, JT 2, however, are close to the mountains. The sites usually do not exceed 4,000 - 5,000 sq m in size. Only SEG 14 and SEG 56 are large mounded sites, respectively 7,000 sq m and 9,000 sq m in size. They suggest major residential villages sur-

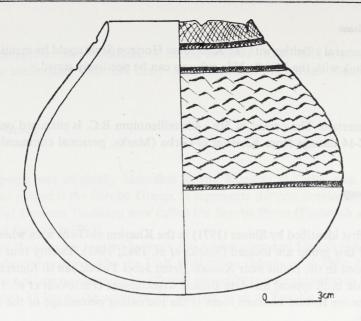


Fig. 4. Butana Group, SEG 8 site. Complete pot

rounded by smaller seasonal settlements and temporary camps. This pattern differs considerably from the one of the western area, where only huge sites of 9-15 ha have been found.

Economic indicators

No sure evidence is available as yet. In the Khashm el-Girba area, however, the Butana sites can be ascribed to hunters/gatherers and cattle breeders. The late Butana sites in particular might be attributed to mixed farmers.

Comparisons

The fishscale punctated motif on the pottery from Shurab el-Gash can be compared to a typical decorative pattern on potsherds from Wadi Shaw (Laqiya Oasis) in the Western Desert.

Dating

It is still uncertain. A dating to 4,000 - 1,000/500 B.C. has been tentatively suggested, on the basis of the Khashm el-Girba evidence.

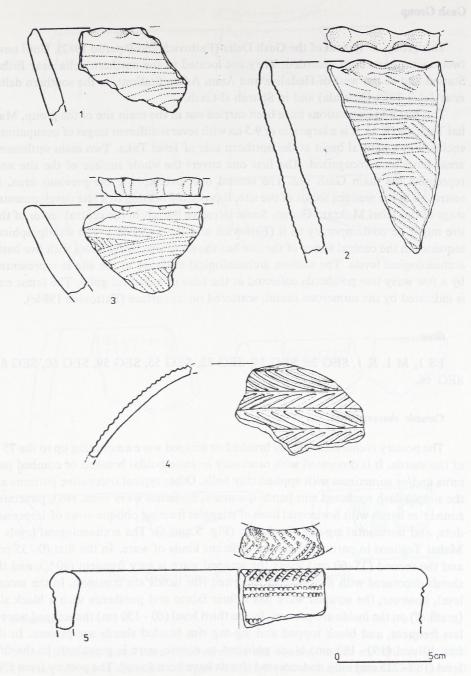


Fig. 5. Gash Group, K 1 site. Selected potsherds

Gash Group

This group is typical of the Gash Delta (Fattovich and Piperno 1982). Until now twelve sites have been recorded. They are located in the northern delta near Eriba Station and to the west of Hadaliya and Amm Adam Stations, in the southern delta near Jebel Taka (Kassala) and in Shurab el-Gash.

Test pits and excavations have been carried out in the main site of the group, Mahal Teglinos (K 1). It is a large site of 9.5 ha with several different stages of occupation, enclosed in a natural basin at the northern side of Jebel Taka. Two main settlement areas have been recognized. The first one covers the whole surface of the site and represents the main Gash site. The second one, overlapping the previous area, is restricted to the western sector of the site. It probably belongs to a late developmental stage of the Jebel Mokram Group. Some intrusive burials in the central sector of the site might be contemporary to it (Fattovich and Piperno 1982). The stratigraphical sequence in the central sector of the site has shown fifteen living floors with five basic archaeological levels. The earliest archaeological evidence at the site is represented by a few wavy line potsherds collected at the base of a natural gully. The latest one is indicated by the numerous tumuli scattered on its surface (Fattovich 1984c).

Sites

ES 1, M 1, K 1, SEG 26, SEG 34, SEG 52, SEG 55, SEG 59, SEG 60, SEG 65, SEG 66.

Ceramic characteristics

The pottery is characterized by brushed or scraped ware amounting up to the 75% of the sherds. It is decorated with randomly or rhomboidal brushed or combed patterns and/or sometimes with applied clay balls. Other typical decorative patterns are the simple dash rouletted rim bands (commas, horizotal wavy lines, etc.), punctated zoned rim bands with horizontal lines of triangles framing oblique rows of impressed dots, and horizontal zig-zag rim bands (Fig. 5 and 6). The archaeological levels at Mahal Teglinos in particular exhibit different kinds of ware. In the first (0 - 35 cm) and the second (35-60 cm) levels the scraped ware is very frequent (80%), and the sherds decorated with simple dash rouletted rim bands are common. In the second level, however, the scraped ware has a finer fabric and potsherds with a black slip (graffite?) on the inside are present. In the third level (60 - 150 cm) the scraped ware is less frequent, and black topped and zig-zag rim banded sherds are present. In the fourth level (150 - 180 cm) black polished or coarse ware is prevalent. In the fifth level (180 - 215 cm) only undecorated sherds have been found. The pottery from ES 1 in turn is comparable to the one from the third level of K 1, suggesting a contemporaneity between them.

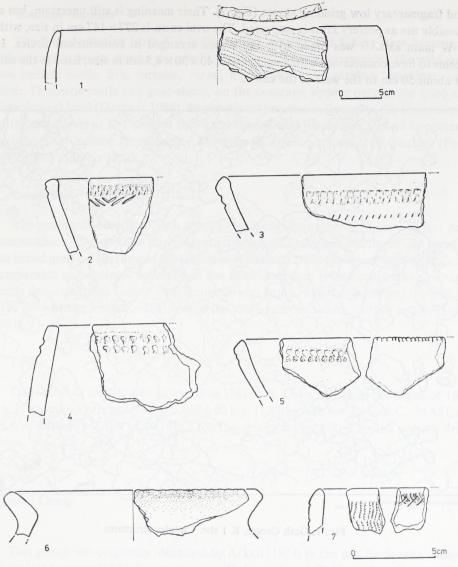


Fig. 6. Gash Group, K 1 site. Selected potsherds

Structures

Stone structures have been discovered in the central sector of Mahal Teglinos (K 1). They belong to the main occupational stage of the site documented by the first archaeological level. They are some circles of stones and an oval cairn. The circles of stones are 80 - 100 cm in diameter. They were originally filled with many upper

and fragmentary low grinding stones (Fig. 7). Their meaning is still uncertain, but a possible use as pottery kilns is suspected. The oval cairn is 277×147 cm in size, with E-W main axis. It was made with big stones arranged in concentrical circles. It seems to have connections with a small stela, $40 \times 30 \times 4,5$ cm in size, fixed in the soil at about 50 cm to the west of the cairn.

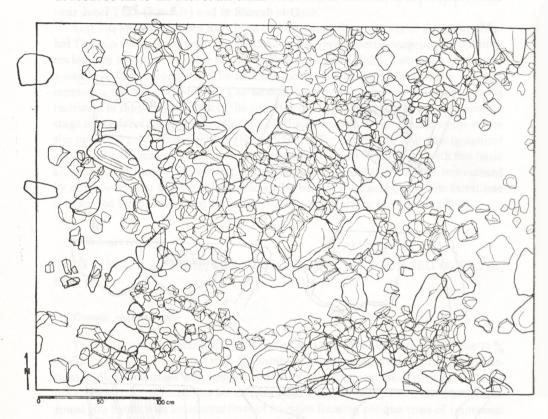


Fig. 7. Gash Group, K 1 site. Circular structures

Settlement types

Most of the sites are located in the open alluvial plains. Only K 1 is located at the base of Jebel Taka. They occupy areas ranging from 5,000 sq m to 95,000 sq m. Usually they are 10,000 - 30,000 sq m in size. The largest sites are K 1 (95,000 sq m) and ES 1 (93,000 sq m). They might reflect large residential villages, temporary settlements and seasonal camps.

Economic indicators

The faunal remains from K 1 indicate that hunting and fishing were important subsistence activities during the whole period of the site's occupation. The wild species include shells, fish, tortoise, varan, hippo, warthog, gazelles, antelopes, and birds. Domestic cattle and goat-sheep, on the contrary, appear only in the third archaeological level (Geraads 1984). Some vegetal remains collected in the lower strata of the third level at K 1 suggest that gathering of wild plants was still an important activity. They include Zizyphus sp., Hordeum sp. and Leguminosae (?) Gen. sp. (Fattovich and Piperno 1982).

Comparisons

The potsherds decorated with zig-zag rim bands from the third level of K 1 are comparable to C-group and Early Kerma specimens. The finger nail impressed sherds, the broad grooved sherds and the coarse coiled sherds from the upper level at K 1 are comparable to potsherds collected in the Shaqadud cave (Northern Butana). Fragments decorated with simple dash rouletted rim bands, like the specimens from K 1, have been finally traced to Erkowit, to the south of Port Sudan (Callow and Wahida 1981).

Dating

One charcoal sample was collected in 1981 at K 1 in a hearth at the depth of 155 cm. It was radiocarbon dated to $3,860\pm60$ b.p. $(1,910\pm60$ b.c.=2,180 B.C., MASCA cal.). A dating to 2,500 - 1,000 B.C. for this group is supported by the pottery evidence.

Agardat Group

This group was originally identified by Arkell (1954) in the middle Baraka valley, where it is represented by four main sites (Kokan, Ntanei, Shabeit, Dundaneit). Two sites in the northern delta can be ascribed to it on the basis of the pottery evidence. They were previously assigned to the Amm Adam Group (Fattovich and Piperno 1986), but this identification is no longer tenable.

Sites

ES 3, M 2. ES 3 only is a settlement site, M 2 is a tumulus, ca 20 m in diameter.

Ceramic characteristics

The typical decorative patterns are complex linear carved designs, fishscale punctated motifs, complex rouletted body decors. Scraped ware with applied clay balls and knobbed ware are also present.

Settlement types

ES 3 is ca 100,000 sq m in size, but as it had been washed by water, the original surface might have been much smaller. Many stone rings are visible on its surface. This might suggest that the site specialized in rings manufacture.

Economic indicators

The faunal remains indicate that hunting and fishing were still important activities. They include shells, fish, hippo, bovids, antelopes.

Comparisons

The knobbed ware can be compared to the evidence from AAS 1 and Kerma. This might suggest that this kind of ware survived in the northern delta until the late 3rd - 2nd millennium B.C.

Dating

It is uncertain. The affinities with the sites near Agordat and some elements like the Gash Group might suggest a dating to 2,500 - 1,500 B.C.

Jebel Mokram Group

This group was originally identified in the Gash delta (Fattovich and Piperno 1986). It seems to be an intrusive cultural unit, though it shares some common features with the Butana and Gash Groups. In the Gash delta it is represented by forty three sites scattered over the area stretching from Jebel Mokram to Shurab el-Gash. They include both typical and late assemblages. The late ones are distinguished by the increasing frequency of fiber tempered ware. Moreover, they share many features with the late Butana sites in the Shurab el-Gash area, suggesting a certain degree of interaction (Fattovich 1984c).

Sites

JM 2, JM 3, GS 3, GS 4, GS 7, GS 8, K 1 NW, K 2, K 10, K 18, K 19, K 20, K 21, JAG 1, AG 1, AG 2, Eg 1, Eg 2, Eg 3, Eg 4, T 1, SEG 1, SEG 2, SEG 3, SEG 5, SEG 7, SEG 9, SEG 15, SEG 18, SEG 20, SEG 22, SEG 27, SEG 32, SEG 35, SEG 40, SEG 43, SEG 47, SEG 48, SEG 50, SEG 53, SEG 54, SEG 58, WG 1.

Ceramic characteristics

Most of the pottery is undecorated. The distinctive decorations include linear carved or combed patterns (channeled ware), simple straight line incised patterns, crossing lines incised patterns (grid incised ware), cord-wrapped paddle stamped patterns (mat impressed ware). The pottery of this group is also characterized by flat horizontal handles and cylindrical lugs decorated with crossed lines on the top (Fig. 8).

Settlement types

Most of the sites are located in the open steppe. Only two sites (K1NW, JAG 1) are close to the mountains. They range from 5,000 sq m to 100,000 sq m in size. They usually occupy an area of 2 - 3 ha, but three measure 6 - 8 ha and one (JAG 1) ca

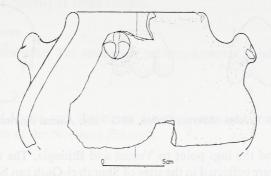


Fig. 8. Jebel Mokram Group, SEG 7 site, Fragmentary pot

10 ha in size. In many sites it is possible to recognize separated assemblages of materials, which might indicate single compounds of small villages. Only JAG 1, at the base of Jebel Abu Gamal, and K 1 NW may be regarded as large residential sites. At SEG 9 in particular 130 hearths have been recorded over a surface of ca 6,000 sq m, suggesting a specialized function (pottery kilns?)

Economic indicators

Impressions of domestic sorghum have been traced in clay fragments of hearths collected at JAG 1 and SEG 9, tentatively dated to the late 2nd — early 1st millennium B.C. (Constantini et al. 1983). Figurines of animals have been moreover collected in some sites (Fig. 9). Such evidence might indicate a mixed farming subsistence economy.

Comparisons

The grid incised ware and the mat impressed ware can be compared to specimens of the Middle and Classic Kerma in the Central Nile Valley. Some potsherds of mat impressed ware in particular are identical to Middle Kerma fragments from Kerma.

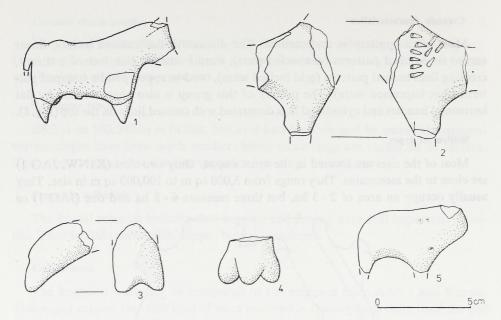


Fig. 9. Jebel Mokram Group, SEG 7 site. Animal figurines

The flat handles and the lugs point to Yemen and Ethiopia. The undecorated, grid tempered orange ware collected in the sites of Shurab el-Gash can be safely compared to the late prehistorical and pre-Axumite ware of Northern Ethiopia. Fragments of channeled ware finally have been traced near the lake Tana ((where they are dated back to the mid-1st millennium B.C.) and along the White Nile.

Dating

It is uncertain. On the basis of the pottery evidence dating to the 2nd - 1st millennium B.C. can be suggested.

Hagiz Group

This group represents the final stage of the Atbai Ceramic Tradition presently named Jebel Taka Phase. It was originally named Jebel Taka Group (Fattovich and Piperno 1986). In the Gash delta it is documeted by seventeen sites scattered over the Jebel Mokram to Shurab el-Gash area.

Sites

K 2, K 3, K 4, K 6, K 9, K 10, K 14, K 15, K 16, K 17, JM 5, SEG 25, SEG 28, SEG 36, SEG 63, KT 1, JE 1.

Ceramic characteristics

The pottery seems to be a coarser development of the Gash Group type. It reminds some pre-Axumite types. The typical decorative patterns include scraped rhomboidal motifs (scraped ware), complex linear carved motifs, thumbnail punctated patterns, simple stamp rouletted rim bands, cord-wrapped paddle stamped decors (mat impressed ware), appliqued knobs and chains.

Settlement types

The sites are located both at the base of the outcrops and in the open plain. They occupy areas between 1,600 sq m and 126,000 sq m, with average size of 2-4 ha. In the largest sites, moreover, we can distinguish separate assemblages, which might indicate single compounds of small villages.

Economic indicators

No evidence available. The settlement pattern, however, might suggest a mixed farming economy.

Comparisons

The appliqued knobs and chains are directly comparable to the pre-Axumite decorative patterns of the Northern Ethiopia.

Dating

It is uncertain. On the basis of the pottery evidence, however, a dating to 500 B.C. -200/300 A.D. might be suggested (Fattovich 1984c).

Any attempt to outline the socio-economic transformations in the Gash Delta during the late prehistory and protohistory is still premature. At the present stage of research, however, it seems that until the 3rd millennium B.C. hunting, gathering and fishing were important components of the subsistence economy. In the late 3rd millennium B.C. domestic animals (cattle, goat/sheep) were introduced into the region. By the 2nd millennium B.C. mixed farmers were probably living in the Gash delta and in the adjacent plains. In the late 3rd millennium B.C., in turn, large residential sites appeared in the area. The contacts with the Nile valley probably started in the 6th/5th millennium B.C. They were more intense during the 3rd and 2nd millennium, and apparently ended at the beginning of the 1st millennium B.C. In the later period there were some possible contacts with the Northern Ethiopia.

References

Arkell, A. J. 1954. Four occupation sites at Agordat, Kush 2:33-62.
Callow, P. and G. Wahida. 1981. Fieldwork in Northern and Eastern Sudan 1977-1980.
Nyame Akuma 18:34-36.

- Coltorti, M., A. d'Alessandro, R. Fattovich, P. Lenoble and K. Sadr. 1984. Gash Delta Archaeological Project: 1984 Field Season. Nyame Akuma 24/25: 20 22.
- Constantini, L., R. Fattovich, M. Piperno and K. Sadr. 1983. Gash Delta Archaeological Project: 1982 Field Season. *Nyame Akuma* 23:17-19.
- Fattovich, R. 1981. Ricerche archeologiche nel delta del Gash, Provincia di Kassala (Sudan).

 Africa 36 (2): 315 327.
 - 1984a. Possible Christian Remains in the Kassala Province, Sudan. Annali Instituto Universitario Orientale Napoli 44 (3): 399 405.
 - 1984b. Inedited Prehistorical Sites in the Kassala Province, Sudan. Annali Istituto Universitario Orientale Napoli 44 (4): 573 582.
 - 1984c. The Gash Delta between 1,000 B.C. and 1,000 A.D. Proceedings of the 5th International Conference of Meroitic Studies Rome 1984. Berlin: in press.
- Fattovich, R., A. E. Marks and A. M. Ali. 1984. The Archeology of the Eastern Sahel, Sudan: Preliminary Results. *The African Archaeological Review* 2:173-188.
- Fattovich, R. and M. Piperno. 1986. Archaeological Researches in the Gash Delta, Kassala Province (1980 1981 Field Seasons). In: Krause, M. (ed.), Nubische Studien. Proceedings of the Symposium of the International Society of Nubian Studies, Heidelberg 1982: 47 53. Mainz.
- Geraads, D. 1984. Faunal Remains from Archaeological Sites in the Gash Delta, Sudan. Nyame Akuma 23:22.
- Marks, A. E., A. M. Ali, T. R. Hays and Y. Elamin. 1983. Preliminary Report of the Butana Archaeological Project: The 1982/83 Field Season. Nyame Akuma 22:26-27.
- Marks, A. E. and R. Fattovich. 1989. The later prehistory of the Eastern Sudan: a preliminary view. This volume.
- Marks, A. E., T. R. Hays, Y. Elamin and A. M. Ali. 1982. Butana Archaeological Project: Interim Note. Nyame Akuma 21:38-40.
- Sadr, K. 1984. The Gergaf Group: the latest archaeological phase in the Southern Atbai, East Central Sudan. Nyame Akuma 24/25:33-35.
- Shiner, J. L. 1971. The Prehistory and Geology of Northern Sudan. Dallas: Report to the National Science Foundation Grant GS 1192.