

surface sites with similar archaeological material were found, generally rock-shelters but also sites on the edge of springs and on the plain. At the present stage of research, the culture at the site of Fanfannyegene I seems to be well represented in the area of the "Parc National de la boucle du Baoulé"; however to the present day, in the region surrounding the park, only the rock-shelter of Kouroukorokale (Szumowski 1956) has so far been found to contain similar material.

To our knowledge, this cultural facies has no similarities with the neighbouring groups of "guinean neolithic" nor the "civilisation of dhar Tichitt-Oualata," and, except for several isolated elements, there is no basis for comparison with the different subsaharan neolithic remains, nor those of Tenere, nor those of Tilemsi.

On the other hand, despite differences in ceramic tradition, the stone artefacts suggest a relationship towards the west with the "dune neolithic" of the Cape Vert peninsula, dated between the beginning of the third and the middle of the first millennium B.C. (Lame, 1981). The ceramic material calls to mind the lacustrine neolithic as observed to the northeast on the banks of the Malian palaeolakes. This relatively ancient culture evolved between the end of the seventh and the beginning of the second millennium B.C. (Raimbault 1983, Commelin 1983).

Thus our studies indicate that the cultural facies of Fanfannyegene I is quite original in West Africa; consequently, we named it "neolithic facies of the Baoule." With all the usual reservations we can suggest that the probable origin of this cultural facies may be certain neolithic groups who a millennium before were still living on the banks of the Malian palaeolakes; a possible cause for this migration would have been the start of the present arid period.

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■ SUDAN

The Archaeological Mission of the University of Geneva to Kerma (Sudan): Final Report of the 1989-90 Season

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Excavations at Kerma by the Swiss Archaeological Mission to the Sudan took place between 10 December 1989 and 18 January 1990, with research and final measurements continuing until 28 January. Between fifty and eighty workmen were employed under the direction of the rais Gad Abdullah and Saleh Melish.

Because of plans for an exhibition in Geneva in the second half of 1990, particular attention was given to the site of the ancient town. We considerably widened our knowledge of the town through extensive area excavations and the investigation of part of the northern defensive ditches. New building activities in the modern town forced us to take urgent action. Particularly interesting was the discovery of a Classic Kerma temple (c. 1600 B.C.) and a secondary building. It was possible to protect the temple and a Meroitic cemetery found in the same area as an archaeological site. A Meroitic communal tomb, with a burial chamber six m long, was also excavated in the ancient town. This was the first time that a well preserved example of such a tomb had been found at Kerma, and it gave us the opportunity to increase our knowledge of the late cemeteries. Further information was provided by the remains of a pyramid, built of mud brick, which was discovered very close by.

The Ancient Town

On the northern edge of town, traces of dry ditches mark the site of one of the entrances, with a large rectangular ditch, 3-5 m deep, extending into the town. Brick and stone foundations indicate the approximate position of part of the fortification walls which surrounded the ditch. Hundreds of post holes were found in the southwest corner of an area of sloping ground that represents the remains of a system built to protect the base of the walls. In the fill that had gradually built up within the ditch were considerable quantities of clay stoppers, used to seal wooden or pottery containers. Unfortunately, poor preservation hindered their study; on only a few of them could the traces of a seal still be made out.

Twelve houses were excavated. Even though they were built over a relatively short period (final Middle Kerma period, c. 1800 B.C./early Classic Kerma period, c. 1700 B.C.), they had very diverse plans. We now understand better the organization of the quarter situated to the north of the religious centre. The access roads are irregular, avoiding the inhabitants and their yards. Particularly interesting is the

presence of a chapel with an annex that was attached to a house. Access from the house led directly into the courtyard of the cult building, which seems to have been a private one.

The Southern Temple

Fifteen years ago, the remains of an extraordinary circular stone structure of the Final Kerma period were found to the south of the modern town of Kerma. In the area around this building, many ancient remains have been preserved under rubbish dumps and old houses. The site of one of the highest mounds was going to be used to build new houses and so it was necessary to clear the area in order to reveal the nature of archaeological remains covered by the mound.

We established the plan of the foundations of a temple which had an elongated sanctuary with two annexes of similar shape, one on each side. The monument had a north-south axis and was entered on the southern side through a sort of pylon, marked by the traces of a floor of large stone blocks. A transverse vestibule gave access to the holy of holies. At the back of the building narrow areas were perhaps reserved for a staircase or storerooms. The general proportions of the building, which was mainly constructed from mud brick, were like those of the Egyptian temples of the New Empire, and not like those of the Kerma cult buildings. However, the walls were decorated with pieces of faience identical to those found on the western *Deffufa*.

A few metres away was found what seemed to be a small cult building, again of elongated shape and with a mud brick floor. A wooden structure of similar shape was located outside it.

Several Meroitic tombs and a later tomb had been dug into the same mound but were not excavated. Authorization was obtained for the creation of a protected site, and a wall was built to isolate the remains.

The Meroitic Cemetery

A careful excavation was made of a long burial vault. This type of tomb was

previously unknown in the region where the vaults are generally only two or three metres long. The tomb had only been slightly disturbed and the position of eight of the total of thirteen burials could be verified. The grave goods were of the Meroitic period: a bronze bowl, a faience amulet representing Bes, a chalice-shaped pottery vessel and carnelian and glass beads.

The superstructure of the narrow burial vault was reconstructed as a pyramid with nine-metre sides. Potsherds found in pillagers holes were dated to the first century A.D. We assume that many of the tombs of the Meroitic cemetery were surmounted by mud brick pyramids. The latest finds, which extend the known area of the tombs by 2 kilometres, indicate that the cemeteries spread over vast areas.

Late Neolithic Pottery in the Gezira, Sudan

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The second author is preparing a Ph.D. thesis in the regional Geography Department of the Ghent State University dealing with the Late Quaternary palaeochannels of the Gezira, Central Sudan, including mapping with the aid of remote sensing. Mapping is done essentially on the basis of MSS images row 50, path 173 as produced by the fifth satellite. Ground truth investigation was carried out during a field season lasting from November 1986 to January 1987. During this period samples from mineralogical and pedological analyses was collected in the Gezira. Various archaeological occurrences were also noted and a restricted number of artefacts were collected including grinding stones, bored stones, beads, lip plugs, and ceramics.

The latter were submitted for preliminary analysis to the first author. The objects collected could be broadly related to Mesolithic "dotted wavy line" cultures, to entities dated in the region to the third millennium B.C. and to the Meroitic Medieval and later periods. The cultural and chronological attribution of these materials was done on the basis of previous work in the region, namely, the excavations at Rabak (Haaland 1987), Jebel Tomat (Clark 1984: 122) and Jebel Moya (Addison 1949), as well as the recent re-examination of the prehistoric material from Jebel Moya by Caneva (in press b) and some new chronometric information from the same site (Zoheir H. Babiker personal communication).

The third millennium occurrences deserve our special attention since no cultural remains of this period have been found in the Nile Valley north of Khartoum and not much is known about the distribution of this culture in the Gezira region. The materials were collected on the left bank of the palaeochannel system, which runs north of the Managil Ridge through Nueila El Ugda, Goz Sheikh Mansour, and joins the White Nile at El Gutena, Garasa, and Wad El Zaki. The exact locations are indicated in Fig. 1 by the numbers 1 and 2. The potsherds seem to belong to what is called the "Jebel Moya tradition" (Haaland 1987: 46-47). They are slightly burnished and decorated with impressed patterns using both simple comb impression and rocker techniques (Fig. 2).

The same type of pottery was found in several other sites in the Gezira, all consistently dated to the third millennium B.C. This type of pottery shows close similarities with pottery from the so-called Atbai tradition in the Butana regions (A. E. Marks personal communication), dated, there too, to the third-second millennium B.C. (Fattovich et al. 1984).

These findings are considered by Haaland to support her original hypothesis that climatic deterioration during the fourth millennium B.C. had seriously altered the environment in the Khartoum area, forcing the agro-pastoral populations to migrate to wetter areas (1987: 34). This model was later