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## The later prehistory of the Central Nile Valley: a view from its Eastern Hinterlands

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In spite of over sixty years of archaeological research in the Central Sudan, it is striking that there still appear to be some marked cultural hiatuses in the Nile Valley. One, between the radiocarbon-dated Early Khartoum (Mesolithic) and the Khartoum Neolithic, has been closed recently by a series of new dates from Saggai (Caneva 1983), Sorouab (Mohammed-Ali 1984), and from a midden at Shaqadud, in the western Butana (Marks 1984; Marks *et al.* 1985). Another two still remain; that between the end of the Khartoum Neolithic and the Meroitic and the one which falls after the Meroitic period. It is the first of these which is of concern here. At its least, based upon radiocarbon dates, this gap in the Nile Valley extends from about 2,800 B.C. — the latest dates from Kadada (Geus 1983) — to about 650 B.C., representing the earliest radiocarbon dates from Meroe (Bradley 1984); that is, for about 2,000 years (Fig. 1). While in Nubia this period can be filled with various known cultural developments and archaeological manifestations (Adams 1977), within the Nile Valley of Khartoum Province there are exceedingly few published archaeological remains which might fill this gap.

Even if the complex of occupations around Kadada (Geus 1980; 1981) prove to include some localities dating to after 2,800 B.C., as now seems likely, these few occurrences cannot be compared to the over 30 known Khartoum Neolithic sites in the Central Nile Valley. The apparent differences in settlement densities are particularly visible when it is considered that the Khartoum Neolithic (now well dated radiometrically), lasted perhaps no more than 600 years, while the temporal hiatus following it lasted about 2,000!

Based upon known site distributions, the present picture suggests that the Central Nile Valley may have been almost totally abandoned or, at least, saw a major decline in resident population during the 3rd and 2nd millennia B.C. Another possibility exists, however. It is possible that the nature of local adaptation changed sufficiently to bring about a major shift in settlement type and, with it, a marked decrease in archaeological visibility. In addition, one must consider whether the paleogeography

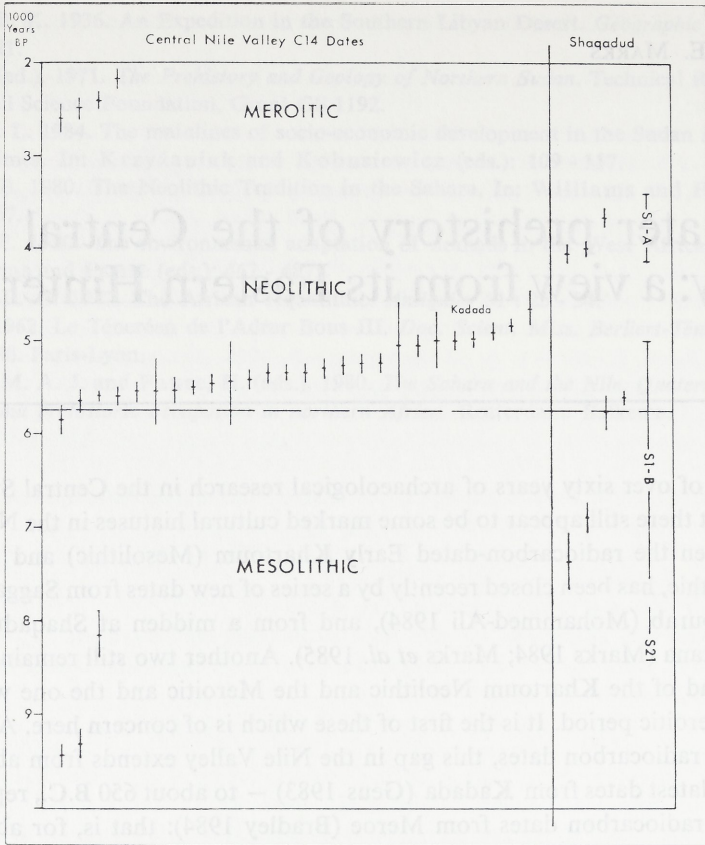


FIG. 1. Radiocarbon dates for the Central Nile Valley and the Eastern Sudan in the later prehistory

of the Central Nile Valley at that time influenced our present ability to locate sites which might have been present. Both of these possibilities, as well as others, need to be considered.

Although a change in settlement type, resulting from a postulated shift to pure pastoralism from a mixed economy, has been recently put forth to account for this seeming paucity of post-Khartoum Neolithic and pre-Meroitic sites in the Central Nile Valley (Haaland 1984), it is suggested that factors other than those mentioned might well account for what we now see. Some of these factors are hinted at from recent excavations in the Butana, to the east of the Nile Valley.

The new information comes from the work of the joint University of Khartoum/Southern Methodist University Butana Archaeological Project at the site of Shaqadud, located some 50 km southeast of the Nile Valley at Wad Ben Naga (Fig. 2). Ever since Otto's exploratory work there in the early 1960's (Otto 1963; 1964), it has been thought of as a Khartoum Neolithic site (*e.g.* Haaland 1981). In fact, Shaqadud

is a complex of sites which center around a small box canyon set into a sandstone plateau. Occupation seems to have begun in the 6th millennium B.C., during the Early Khartoum, and to have lasted, without serious break, until well into the Khartoum Neolithic (Marks and Mohammed-Ali 1984). Stratigraphically, there appears to have been a brief hiatus during the early 3rd millennium B.C., but this ended by at least 2,600 B.C. and occupation continued, without interruption, for another 600 years; that is to the end of the 3rd millennium B.C.

It is this later occupation, limited spatially to the cave and the area directly in front of cave which is of concern today. Shaqadud Cave contains over 3.5 m of cul-

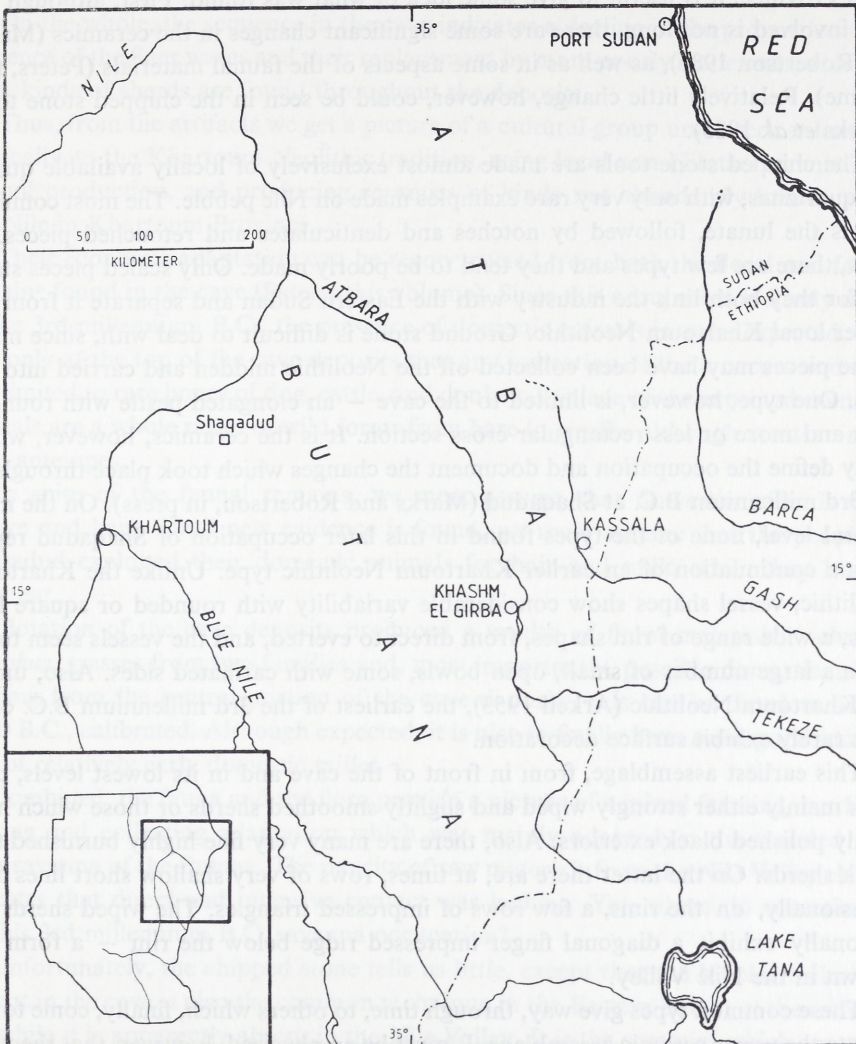


FIG. 2. Map of the Eastern Sudan

tural deposit, while the area in front contains about 1.5 m, as well as a plunge pool which probably made Shaqadud so desirable as a locus for occupation. The cave is relatively wide but with less distance from front to back (22 m wide but only 10 m front to back). It appears that considerable rock fall provided an outer wall, as well as a dam behind which a seasonal pond occurred at the very end of the occupation. Otherwise, the cave sediments accumulated very rapidly and the density of artifacts in the cave points to many ephemeral occupations over the 600 years in question (Marks *et al.* 1985).

Since cultural materials from the 3rd millennium B.C. are undescribed for Khartoum Province, it is useful to give some idea of what was found. First, although the time involved is not long, there are some significant changes in the ceramics (Marks and Robertson 1986), as well as in some aspects of the faunal materials (Peters, this volume). Relatively little change, however, could be seen in the chipped stone tools (Marks *et al.* 1985).

The chipped stone tools are made almost exclusively of locally available quartz and quartzites, with only very rare examples made on Nile pebble. The most common tool is the lunate, followed by notches and denticulates and retouched pieces. In short, there are few types and they tend to be poorly made. Only scaled pieces stand out for they both link the industry with the Eastern Sudan and separate it from the earlier local Khartoum Neolithic. Ground stone is difficult to deal with, since many of the pieces may have been collected off the Neolithic midden and carried into the cave. One type, however, is limited to the cave — an elongated pestle with rounded ends and more or less rectangular cross section. It is the ceramics, however, which really define the occupation and document the changes which took place throughout the 3rd millennium B.C. at Shaqadud (Marks and Robertson, in press). On the most general level, none of the types found in this later occupation of Shaqadud represents a continuation of an earlier Khartoum Neolithic type. Unlike the Khartoum Neolithic, vessel shapes show considerable variability with rounded or square bottoms, a wide range of rim shapes, from direct to everted, and the vessels seem to include a large number of small, open bowls, some with carinated sides. Also, unlike the Khartoum Neolithic (Arkell 1953), the earliest of the 3rd millennium B.C. ceramics rarely exhibit surface decoration.

This earliest assemblage, from in front of the cave and in its lowest levels, contains mainly either strongly wiped and slightly smoothed sherds or those which have highly polished black exteriors. Also, there are many very fine highly burnished thin black sherds. On the latter there are, at times, rows of very shallow short lines and, occasionally, on the rims, a few rows of impressed triangles. The wiped sherds occasionally exhibit a diagonal finger impressed ridge below the rim — a form unknown in the Nile Valley.

These common types give way, through time, to others which, finally, come to dominate the upper ceramic assemblage. It must be emphasized, however, that there are no abrupt changes: rather, change is continuous and smooth (Marks and Robertson

1986; in press). The middle and upper levels of the cave can be characterized by a wiped and burnished, unslipped group with rim decorations of incised lines forming chevrons, diamonds, or hachured areas; a fiber tempered group with an ephemeral buff slip; a fingernail impressed group which is unslipped; a streaky burnished group which has a brownish-black to buff slip; a combed unslipped group with parallel incised grooving of the body sherds and with various more complex rim treatments; and, a hachured combed incised group which has zoned parallel incised lines and rim treatments similar to those which are combed unslipped. In addition, there are a number of red slipped types, in which plain red slipped predominates over a cord marked varieties.

On the whole, the sequence in the cave indicates a decline in the proportional occurrence of the finer wares and their replacement by more poorly made ones, although both kinds of sherds are found throughout the deposits.

Thus, from the artifacts we get a picture of a cultural group unrelated, at least ceramically, to the Khartoum Neolithic tradition, using local non-Nilotic raw materials in tool production, and producing ceramics of kinds not abundantly known along the Nile in Khartoum Province.

Their economic adaptation can be reconstructed from both the floral and faunal remains found in the cave (Peters, this volume). Since this occupation is firmly dated to the 3rd millennium B.C., the presence of domestic animals is to be expected. Yet, it is only at the top of the cave deposits that any indication of them occurs and then it is limited to rare bones of dog, cattle, and donkey. In place of the expected domestic animals are a whole range of wild forms from hare to giraffe, although most animals were antelopes.

In spite of the faunal remains, we must assume that domestic animals were known and kept. Until new evidence is found, we must assume that the people at Shaqadud exploited their domestic animals for hair and milk, while they hunted for meat.

Flotation of the cave deposits produced a wealth of floral materials, including *Zizyphus*, grasses from two families and, most importantly, possible domestic millet. Coming from the central portion of the cave deposits, this can be dated to about 2,500 B.C., calibrated. Although expected, it is nice to finally have some good indication of relatively early domestic millet.

Combined, the fauna and the flora provide a picture of a mixed farming, herding, hunting and collecting adaptation which was mainly adapted to the wooded and grass savanna of the Butana. The paucity of raw materials from the Nile Valley clearly indicates that direct and intensive contact was lacking. Yet, where do contacts lie for this 3rd millennium B.C. savanna occupation?

Unfortunately, the chipped stone tells us little, except that the bipolar technique present in the cave is also the common technique in the Eastern Sudan at the same time, while it is apparently absent in the Nile Valley. It is the ceramics which are most informative. The lower cave ceramics have some affinities with the Abkan from Nubia

(Nordström 1972), but until detailed comparisons are made this should be considered unproven. Certainly, our Abkan ceramics at SMU differ significantly from the Shaqadud material, but our samples are small. On the other hand, the diagonal impressed ridge below the rim and the fine, short rows of shallow lines are both typical and characteristic of 3rd millennium B.C. ceramic assemblages in the area between the Atbara River and the Gash Delta (Fattovich *et al.* 1984; Marks and Fattovich, this volume).

The ceramics from the middle and upper levels of Shaqadud Cave continue to exhibit very close affinities in decorative techniques and motifs with contemporary assemblages in the Gash Delta (Fattovich *et al.* 1984) but less so with the somewhat closer Atbara River Valley. Yet, these later ceramics have also been found in the Nile Valley. Intrusive hachured grooved incised sherds (called Pan-grave) were found at Khartoum Hospital by Arkell (1949: Pl. 90, No. 3), and isolated sherds of Shaqadud Cave type ceramics have been reported as atypical sherds from a series of Khartoum Neolithic and Early Khartoum sites (*e.g.*, Arkell 1953; Haaland 1981; Caneva 1983). In addition, some assemblages of them have been noted near the Dal Cataract (Geus 1976) and near Shendi (Geus 1981). Yet, the number and density of such occurrences in the valley are much too low to postulate a Nilotic development of these types. Rather, it appears that these Nile Valley occurrences are the western extreme of what is basically an Eastern Sahel ceramic tradition, associated with a basic savanna adaptation. In this regard, the Nile itself probably held few charms for these people. More importantly, their adaptation called for utilization of a number of resources which might best be exploited in different places at different times. Particularly, the heavy emphasis on hunting steppe forms would not have been adaptive within the Nile Valley and the seeming disinterest in fishing might well have precluded intensive occupation of the Nile Valley, since the Khartoum Neolithic adaptation relied heavily on season fish exploitation (Haaland 1981). Therefore, whatever occupation there was in the valley might have been quite ephemeral leaving little behind, particularly when compared to the large, intensively occupied sites of the Khartoum Neolithic and the Meroitic. Without intensive, systematic surveys, such sites may have been overlooked because of both their paucity and their limited cultural remains.

This model gets some support from sites along the Atbara River dated to the 3rd millennium B.C. where fishing was not an important activity, although it was paramount at nearby sites which were contemporary with the Early Khartoum (Fattovich *et al.* 1984). The 3rd millennium B.C. Atbara river-edge sites, however, are very large and show evidence for intensive occupation. This suggests that the Atbara River area was within the core of this ceramic tradition, while the Nile Valley formed its western border during the 3rd millennium B.C.

The presence of even ephemeral occupations of this eastern cultural group within the Nile Valley raises the question of what happened to those folk who carried the Khartoum Neolithic tradition? The paucity of the eastern type ceramic occurrences indicates that there was neither wholesale replacement of, nor even much pressure

on, those who might have been living within the valley. What then happened to them? Although still in need of field testing, it is probable that the people of the Khartoum Neolithic tradition were already gone or were going by the early 3rd millennium B.C. While they may have become true pastoralists for reasons of conflict over land ownership (Haaland 1984), it is equally likely that environmental shifts put massive pressure on their complex adaptive strategies. Of most importance would have been the marked rapid fall in Nile River level beginning just at the end of the 4th millennium B.C. (Hassan, personal communication). Although there was no radical change in precipitation which would have effected the exploitation of plant foods or the availability of grass for grazing, this simple drop in Nile River level would have markedly decreased, if not actually ended, the Khartoum Neolithic people's ability to effectively exploit fish resources after the Nile floods. This alone well may account for their disappearance from Khartoum Province. Given the presence of peoples with a complex mixed economy only 50 km east of the Nile Valley during the 3rd millennium B.C., it seems difficult to accept that a pure form of pastoralism would have developed within the Nile Valley itself.

In spite of all the hypotheses presented here and elsewhere, it will take fieldwork to resolve the question. It is a problem worth resolution.

## References

- Adams, W. J. 1977. *Nubia: Corridor to Africa*. London: Allen Lane.
- Arkell, A. J. 1949. *Early Khartoum*. Oxford: Oxford University Press.
- 1953. *Shaheinab*. Oxford: Oxford University Press.
- Bradley, R. J. 1984. Meroitic Chronology. *Meroitica* 7 : 195 - 211.
- Caneva, I. 1983 (ed.). Pottery using Gatherers and Hunters at Saggai (Sudan): Pre-conditions for Food Production. *Origini*: 12.
- Fattovich, R., A. E. Marks, and A. Mohammed-Ali. 1984. The Archaeology of the Eastern Sahel, Sudan: preliminary results. *African Archaeological Review* 2 : 173 - 188.
- Geus, F. 1976. *Rapport Annuel d'Activité 1975 - 76*. Khartoum: Sudan Antiquities Service, French Archaeological Research Unit.
- 1980. *Rapport Annuel d'Activité 1978 - 79*. Khartoum: Sudan Antiquities Service, French Archaeological Research Unit.
- 1981. *Rapport Annuel d'Activité 1979 - 80*. Khartoum: Sudan Antiquities Service, French Archaeological Research Unit.
- 1983. *Rapport Annuel d'Activité 1980 - 82*. Khartoum: Sudan Antiquities Service, French Archaeological Research Unit.
- Haaland, R. 1981. Seasonality and Division of Labour. A Case Study from Neolithic Sites in Khartoum Nile Environment. *Norwegian Archaeological Review* 14 (1): 44 - 59.
- 1984. Continuity and Discontinuity — How to Account for a two Thousand Year Gap in the Cultural History of the Khartoum Nile Environment. *Norwegian Archaeological Review* 17 (1): 31 - 39.
- Marks, A. E. 1984. The Butana Archaeological Project: 1983/84. *Nyame Akuma* 24/25: 32 - 33.
- Marks, A. E., and A. Mohammed-Ali. 1984. The Prehistory of Shaqadud in Western Butana,

- Central Sudan: a Preliminary Report. *Norwegian Archaeological Review* 17 (1): 52 - 59.
- Marks, A. E., A. Mohammed-Ali, J. Peters, and R. Robertson. 1985. The Prehistory of the Central Nile Valley as seen from its Eastern Hinterland: Excavations at Shaqadud, Sudan. *Journal of Field Archaeology* 12 : 261 - 278.
- Marks, A. E., and R. Robertson. 1986. Shaqadud Cave: the Organization of the 3rd millennium B. C. Ceramics seen through Seriation. *Wissenschaftliche Zeitschrift der Humboldt-Universität zu Berlin Gesellschaftswissenschaftliche Reihe* 35 : 70 - 76.
- In press. The Classification of the 3rd millennium B. C. Ceramics from Shaqadud Cave. *Meroitica* 8.
- Mohammed-Ali, A. 1984. Sorourab I: a Neolithic Site in the Khartoum Province, Sudan. *Current Anthropology* 25 (1): 117 - 119.
- Nordström, H. 1972. *Neolithic and A-Group Sites*. The Scandinavian Joint Expedition to Sudanese Nubia, 3. Uppsala.
- Otto, K. H. 1963. Shaqadud: a New Khartoum Neolithic Site Outside the Nile Valley. *Kush* 11 : 108 - 116.
- 1964. Khartoum-Neolithikum am Jebel Shaqadud. *Varia Archaeologica* 16 : 9 - 13.