

SUDAN & NUBIA

The Sudan Archaeological Research Society



Bulletin No. 8

2004



Cemetery R12 and a possible periodisation of the Nubian Neolithic

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The excavation at R12 (Figure 1) has been in progress for the last four years, thanks to an agreement between SARS and the Centro Veneto Studi Società Classiche e Orientali (Ce.Ve.S.C.O.) (Salvatori and Usai 2001; 2001a; 2002; 2002a; in press). The last field season took place in November-December 2003 and benefited from a contribution from the Michela Schiff Giorgini Foundation. About 170 graves in the cemetery were excavated.

The mound, originally 1750m², could not be completely explored, and the south periphery remains to be excavated. Another 50/60 graves may remain uncovered. However, the sample we have may give a reasonable picture of a Neolithic Nubian society and may contribute to unravelling problems about the cultural and chronological sequence of the Neolithic in Nubia.

The cemetery, according to C¹⁴ determinations, has been used for about 400 years with the excavation revealing different grave layers, in spite of a strong erosive process which especially affected the northern and southern periphery. This long use was responsible for the frequency of graves cutting into each other and for other disturbances. Apart from the risk of some material admixture, a careful stratigraphic control often confirmed a chronological order among the different inhumations. An additional result was that, unfortunately, many skeletons were found incomplete.

Erosion was also responsible for causing considerable damage both to the skeletal and archaeological materials. As wind/water action removed soil from the mound, some of the graves appeared on the surface with the bones in a very fragile state and the pottery abraded to such a point that the original surface treatment sometimes was hardly recognisable (Plate 1).

A lot can be learnt about arts, crafts and society, from these 170 graves. After a brief description of the graves we will focus on the problem of dating the Neolithic period of this area taking a short look at the central Sudan region.

The graves are simple pits dug in the Nile sediment preserved in the form of a yardang. The pits, when very deep, appear larger at the bottom where the deceased is buried, otherwise, they are strictly ellipsoidal in shape. Sometimes they are filled with Nile silt and small pebbles, other times small pebbles were used to create a sort of bed for the burial. Graves mainly hold one body, but a few double burials were also encountered. Sometimes the same pit was used for different inhumations, and, when this was the case, there was an attempt not to disturb the previous burial.

The bodies were in a contracted position. When tightly contracted, it is possible to argue that they were tied and wrapped in a linen fabric. The deceased lay mostly on their left sides, orientated west-east, facing north or north-east. Other positions were recognised, but these are those more statistically meaningful. The population of the graveyard, using provisional data, consists of 34% males, 27% children and 21% females plus 10% unidentifiable adults with 6% unrecognised.¹

Almost all graves were accompanied by their goods, which in some cases indicate the special status of the deceased.

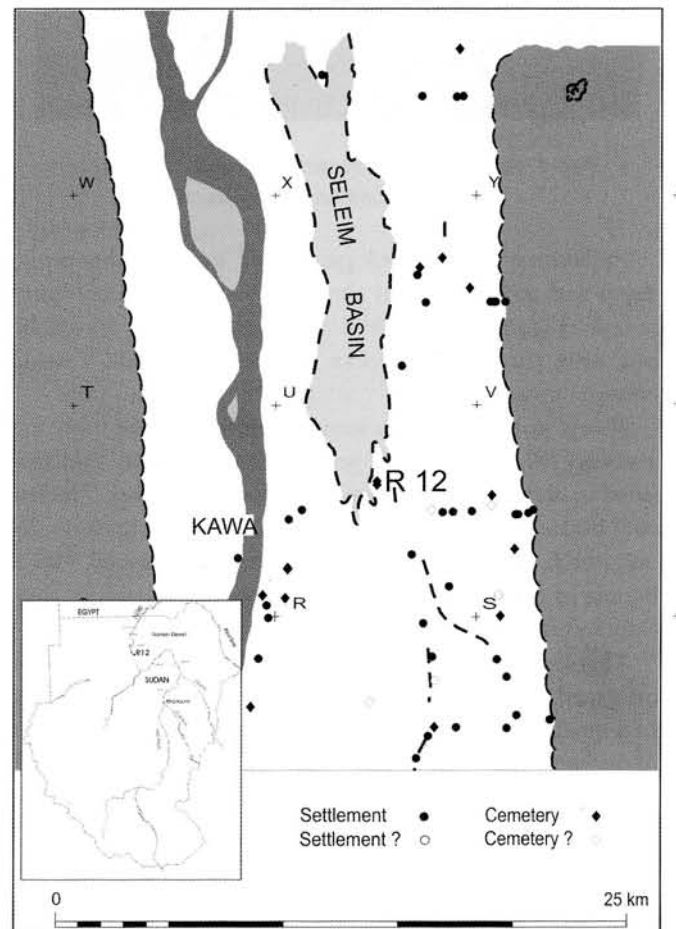


Figure 1. Location of R12 Neolithic cemetery on the edge of the Seleim Basin.

The association between grave goods and sex and/or age has not yet been studied, but it is likely that objects, in certain cases, were related to particular activities which the dead had practised in life. Widespread was the habit of putting one or more "bucrania" in the grave.

This graveyard was used by one of the many groups living in the Seleim Basin during Neolithic times.² They were probably mainly herders, but hunting was still practised.

¹ Provisional anthropological data are provided by Federica Crivellaro. We thank her for this contribution.

² See Welsby 2001 (Vol. II), 569-572 and Fig. 14.1.

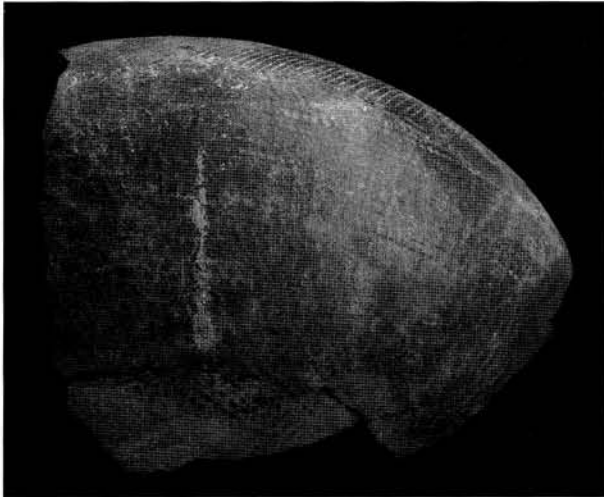


Plate 1. Ripple-ware bowl fragment: the surface treatment is partially obliterated by erosion.

Preliminary archaeozoological work³ indicates that cows, sheep and goats represent almost 50% of the animal bone sample (Figure 2). Some kids were found in the graves. In one case the deceased was holding the small animal between its arms.

Sheep/goat long bones were modified to make tools for everyday life, and in some graves “raw materials” and finished or almost finished tools were found together. Thicker cow bones and ribs were transformed into perforators. In one burial, alongside the vertebrae of the deceased, was a bundle of cow ribs that could not be counted because they were in powdery condition.

Thanks to the “re-cycling” taking place at the site, we are informed of the subsistence and economy of R12. The list of animals present in the bone sample also includes gazelles of different sizes, hippopotami, elephants and birds obtained through hunting. Bracelets made of ivory and containers made of hippopotamus tusks, pins and needles, are just some of the items appearing in the inventory of objects recovered from the graves (Plate 2).

Whether this pastoral society was utilising the rich environment of the Seleim Basin all year round or was there only seasonally, as modelled by some researchers for the Sudanese Nile Valley (Haaland 1987), is an open question. This lush environment would seem to have had a good carrying capacity for supporting a population all year round, and it would not be unreasonable to assume that this was the case.

We tried to confirm this by analysing the mortuary practices of the group. We considered the orientation of the body and face as well the side on which the body was placed. It has been pointed out in the literature more than once that

³ We wish to thank Nadja Pöllath, University of Munich, Institut für Paläoanatomie, for providing us with these provisional data. The faunal material is still under study and it will be published soon.

the side of deposition of the dead was not casual, even though this specific trait can convey different meaning. In some cases it was linked to gender and clan or group membership, that is to say to the system of social organisation (Hodder 1982, 165; Ucko 1969, 271-2) or to concepts related to where the spirits of the dead reside (White 1967; Gruber 1971, 71). When the orientation of the face prevails, it is often said to be related to the direction that the group’s mythic complex gave to the here-after (Hodder 1982, 165-167; Merbs 1968; 1969; Ucko 1969; Bowen 1976, 48) or to the clan or totem of the deceased (Johnson 1912; Gruber 1971, 71; Hodder 1982, 166). It seems certain that the modality of the corpse position can represent crystallised directional messages towards different cultural spheres and perhaps can be grouped under two main labels:

- A) religious ideology
- B) social ideology (possibly a reflection of the social system)



Plate 2. An ivory bracelet and cosmetic(?) container in Grave 116.

At the present state of the research on the R12 cemetery we can only suggest preliminary lines of inquiry. If body and face orientation are in accordance with the time of death and the group’s funerary practice dictated that the face was orientated towards the point of sunrise or sunset on the horizon, then we can reasonably speculate on seasonal or permanent patterns of settlement in the area. In short, if the R12 group was staying in that place all the year round and its behaviour was such as to place the face of the deceased towards the sunrise, we would expect a normal distribution in the western quadrants. The statistics of the R12 graveyard showed that the west-east body orientation, with faces looking north, north-east and east, occurred most frequently (Figure 3). The pattern would indicate a time of death clustering around the spring and summer months of the year. In fact 4% of all graves follow the winter sunrise-sunset path so there is a possibility that part or most of the group spent the winter in another place,

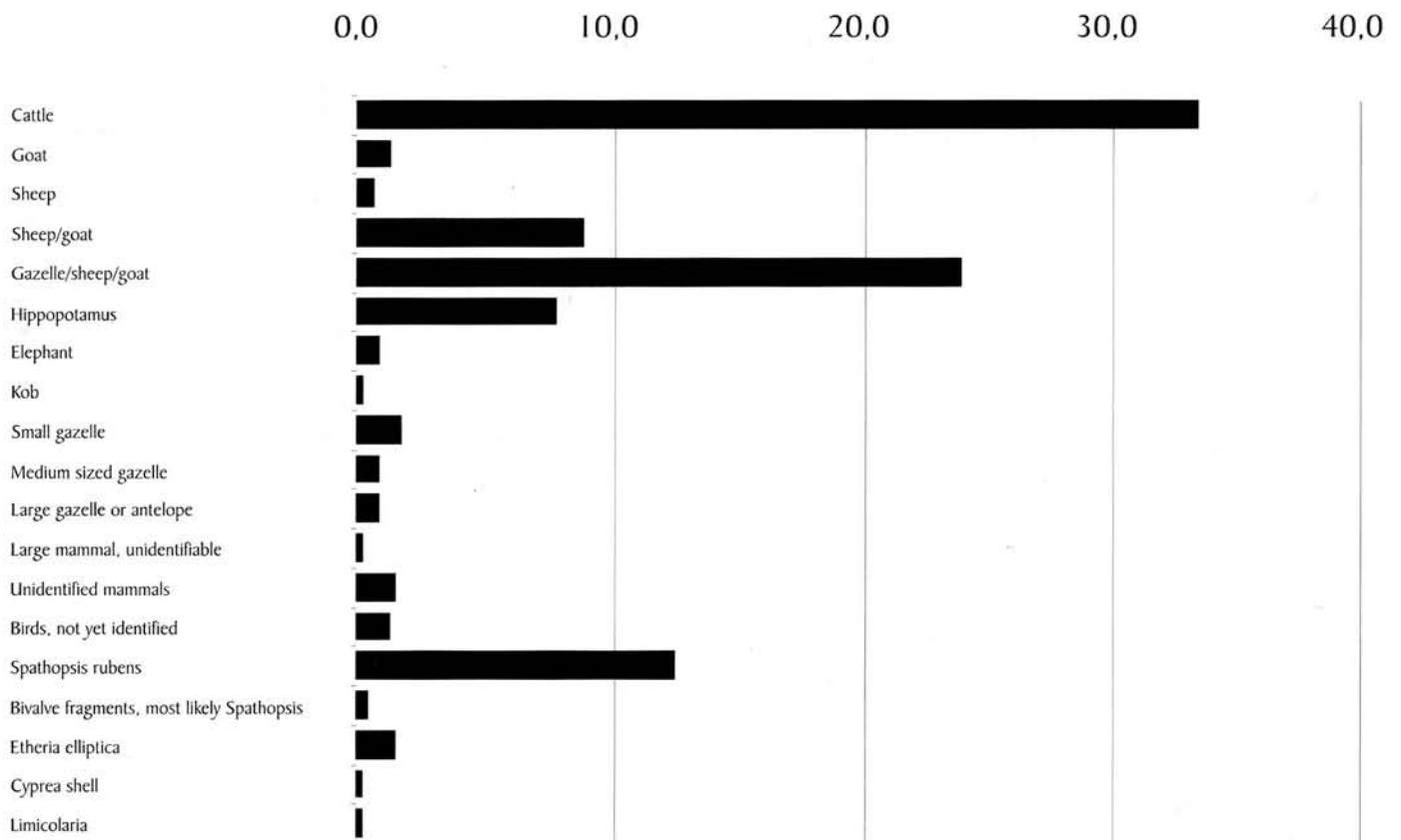


Figure 2. Faunal remains distribution at R12.

maybe devoting this period to animal grazing outside the basin and/or hunting.

What the nature of their utilisation of the more remote desert areas may have been is unclear. It may perhaps relate to the necessity of reducing the grazing pressure on the basin or to the fact that the basin was used for agriculture during the winter. Grinding stones found in some graves may suggest that seeds were also part of their diet. The presence of some domestic wheat in one of the Kadruka cemetery graves (Reinold 2000), located in this same region but a little to the north, also seems to point to a form of agriculture-based society.

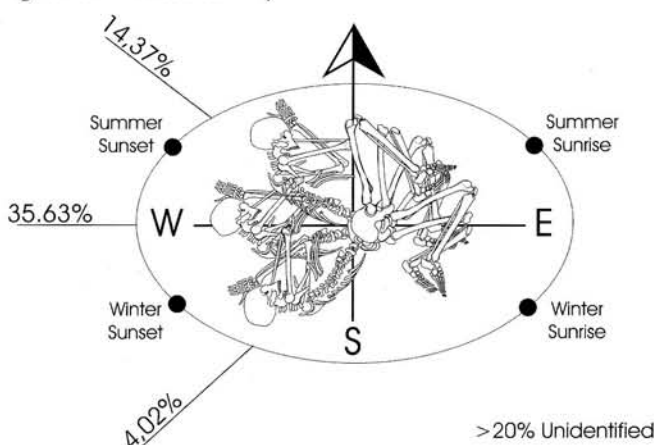


Figure 3. Burial orientation patterns and seasonality.

Different lines of inquiry relating ideological behaviour to mating rules, as an explanation of body orientation and deposition side, can be explored only when sex and age determinations are firmly established by a physical anthropologist.

Even though the subsistence system, and part of the material culture, do not seem to change much in the 400 years of use of the site, these people, apparently so static, expressed their artistic development through pottery making. It is possible to distinguish at least three different “style” phases, more or less confirmed by the set of C¹⁴ dates available.

Most pots are fully or partially decorated except in the last phase when the decoration is limited to the rim of the pot. The shapes of pots are also a distinguishable characteristic of this last phase even if a certain differentiation began in the second identified phase. Some decorative patterns seem to last longer and merge in the following phase. This study is only at its preliminary stage and, as another researcher pointed out (Reinold 2004), there is a marked regional differentiation in Neolithic society and this sequence may need considerable refinements.

The oldest graves excavated so far at R12 fall between 5900-5800 BP.⁴ The body of some of the pottery found in one of the more ancient graves was decorated with dotted

⁴ R12 Grave 18, 5910±50 BP; R12 Grave 33, 5860±80 BP.



impressions running parallel to the rim or oblique to it (Figure 4). It is hard to understand how this impression was produced after coating and burnishing were applied to the surface. Rocker technique or cord impression may have produced this pattern. This decorative pattern continues to be employed until the undecorated pottery phase. One of these graves produced the only clear Ripple Ware pot (Colour plate XX). It seems that this kind of surface treatment is elsewhere associated with similar ancient dates. One particular case is that of Kadruka 13, dated to 5990 ± 60 BP and 5810 ± 60 BP (Reinold 2004).

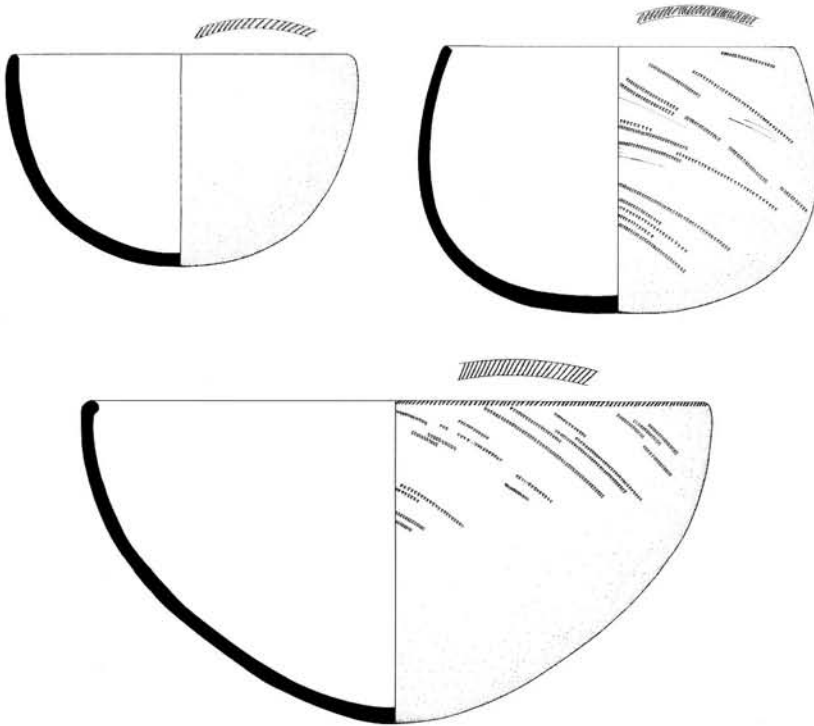


Figure 4. Examples of pottery dating to around 5900 BP (scale 1:4).

The second phase is marked by pottery decorated with rocker zig-zag, plain or dotted, covering the whole body, as the example found in Grave 136 dated to 5790 ± 60 BP, or limited to its upper part (Colour plate XXI). Together with this decoration we see the appearance of simple combed impression, mostly arranged in a herringbone pattern (Colour plate XXII), limited to the upper part of the body or extended to all of it, for example, the pots found in Grave 138, dated to 5740 ± 70 BP.

The simple comb impression was still in use in Grave 111 dated to 5660 ± 80 BP where a carefully executed caliciform beaker was found (Colour plate XXIII).

Later the pottery produced changed greatly becoming very fine,⁵ with a simple burnishing outside and decoration limited to the rim, for example a rocker zig-zag motif or combed parallel oblique lines. The burnishing sometimes gave the pot an almost metallic appearance. New shapes

were introduced such as the biconical jars, cylindrical or sub-cylindrical containers with flat bases or convex ones and carinated bowls (Colour plate XXIV).

These ceramics were also found at one of the Kadruka cemeteries⁶ and, recently at el-Multaga, a site located close to the ed-Debba area, which produced dates similar to those of R12,⁷ around 5500 BP (Geus and Lecoite 2003; Geus pers. comm.).

Closing this list, it would be worth mentioning a fragmentary conical pot with a flat base black-topped and rippled (Plate 3), with a fabric different from all the other pots found in the R12 cemetery. It was discovered during the first field season inside a disturbed pit. Were there A-Group related people at R12? It is also worth mentioning that fragments of Pre-Kerma vessels, whose identification was confirmed by Francis Geus, were found in the cemetery.

The intricate grid of relationships between the many “neolithics” recognised in the Nile Valley is probably ripe for revision, thanks to new excavations (Geus 2002; Geus and Lecoite 2003) and some interesting work that revisits the oldest data collected during the late 1960s and 1970s (Gatto 2002).

The Nubian Neolithic Tradition, represented by the Abkan, named after the Myers excavation at Abka IX, is poorly known, or mainly known for its lithic industry rather than for its pottery production. From Abka IX there is a date, normally discarded due to its wide range, 5960 ± 400 BP (Myers 1960, 181), which happens to fall in the range of the oldest pottery found in the cemeteries of the Kadruka region and at R12. The few descriptions of Abkan pottery fit with the brown

rocker decorated type of pottery found at R12. But where the similarity is greatest is within the lithic industry, with the same core processing technique and similar tool production.

While the term Abkan is limited to the groups identified in the Second Cataract region, it seems that they have a lot in common with those of the Kadruka, R12 areas and, moreover with the so-called Karat Group of the Old Dongola Reach and the Letti Basin, which also have similar lithic and pottery production (Usai 1998). Research in the Fourth Cataract has highlighted sites with similar cultural material (Usai 2003). So it seems we have different groups with similar traditions, probably as much as in modern times. Greater differences appear when considering the sites of central Sudan where the Rippled Ware, for example, is dated, at el-Kadada, one millennium later, around the first

⁶ KDK 1 (Reinold 2004).

⁷ R12 Grave 111, 5620 ± 80 BP; R12 Grave 107, 5570 ± 60 BP.

⁵ No change in the fabric is registered.



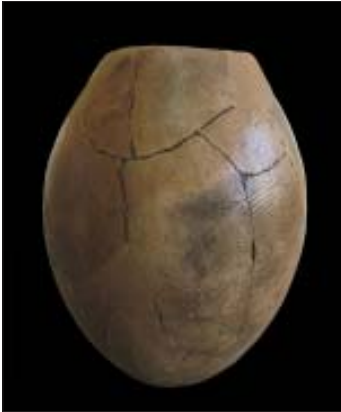
Plate 3. Black-topped ripple ware fragment from a conical flat-based pot.

centuries of the fifth millennium BP.

Nevertheless it must be pointed out that the dotted or plain rocker zig-zag decorated pots found at R12 appear to be dated similarly at el-Ghaba cemetery (Geus 1986, Pl. VI), also located in Central Sudan. Most of the Early Neolithic sites of Central Sudan are actually dated to the first half of the sixth millennium BP, but an incomplete publication of all the data collected at some of these sites prevents the possibility of clarifying the complex set of relationships among them and with the Nubian region.

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*Colour plate XX. Cemetery R12
Ripple-ware pot from Grave 33
dated 5860 ± 80 BP (scale 1:4).*



*Colour plate XXI. Cemetery R12.
Rocker dotted zig-zag decorated
bowl from Grave 136, dating
around 5700 BP (scale 1:4).*



Colour plate XXII. Cemetery R12. Examples of comb-impressed pottery (scale 1:4).



*Colour plate XXIII. Cemetery R12. Caliciform
beaker, grave 111 (scale 1:4).*



Colour plate XXIV. Cemetery R12. Burnished decorated pottery from graves dating around 5500 BP (scale 1:4).