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A-Group settlement sites from the Laqiya region (Eastern Sahara, Northwest Sudan)

Introduction

In 1982 and 1983 two field seasons of the B.O.S.-Project of the University of Cologne (Kuper 1986; 1989) were carried out. They comprise the excavations and surveys in Wadi Shaw and Wadi Sahal in the Laqiya region (Fig. 1). A large number of archaeological sites were found containing ceramics of different chronological phases (Schuck 1988; 1989). Some of these sites yielded pottery of the A-Group: rippled sherds, red polished blackmouthed sherds and sherds with decorations of zigzag and herring-bone patterns. In his article on the excavations in Wadi Sahal, Erwin Czesla already noticed „some striking parallels in the pottery of the Nubian A-Group“ (Czesla 1986: 144). During the research performed in the course of my Ph.D. thesis on ceramic material from the Laqiya region more sites with A-Group ceramics (and additionally a copper awl and three stone palettes which also appear to be of A-Group origin), were studied. Altogether 18 areas (found during excavation or survey) from 10 sites (Fig. 2) yielded sherds of the A-Group, ranging from a single sherd or single pot at survey sites to excavated settlement with several hundreds sherds. This paper aims at presenting the ceramics of some of the more important of these sites and the results of an examination of their fabrics, wares and decorations. The sherds originate from settlement contexts and they are too eroded, in most cases, to allow a reconstruction of the vessel form.

Definition of fabrics and wares

The only A-Group ceramic material from a settlement context published in detail comes from the sites of the Scandinavian Joint Expedition (SJE) in the Nile Valley (Nordström 1972). Therefore it was necessary to classify the ceramics from the Laqiya region in a way that is compatible with these finds. To

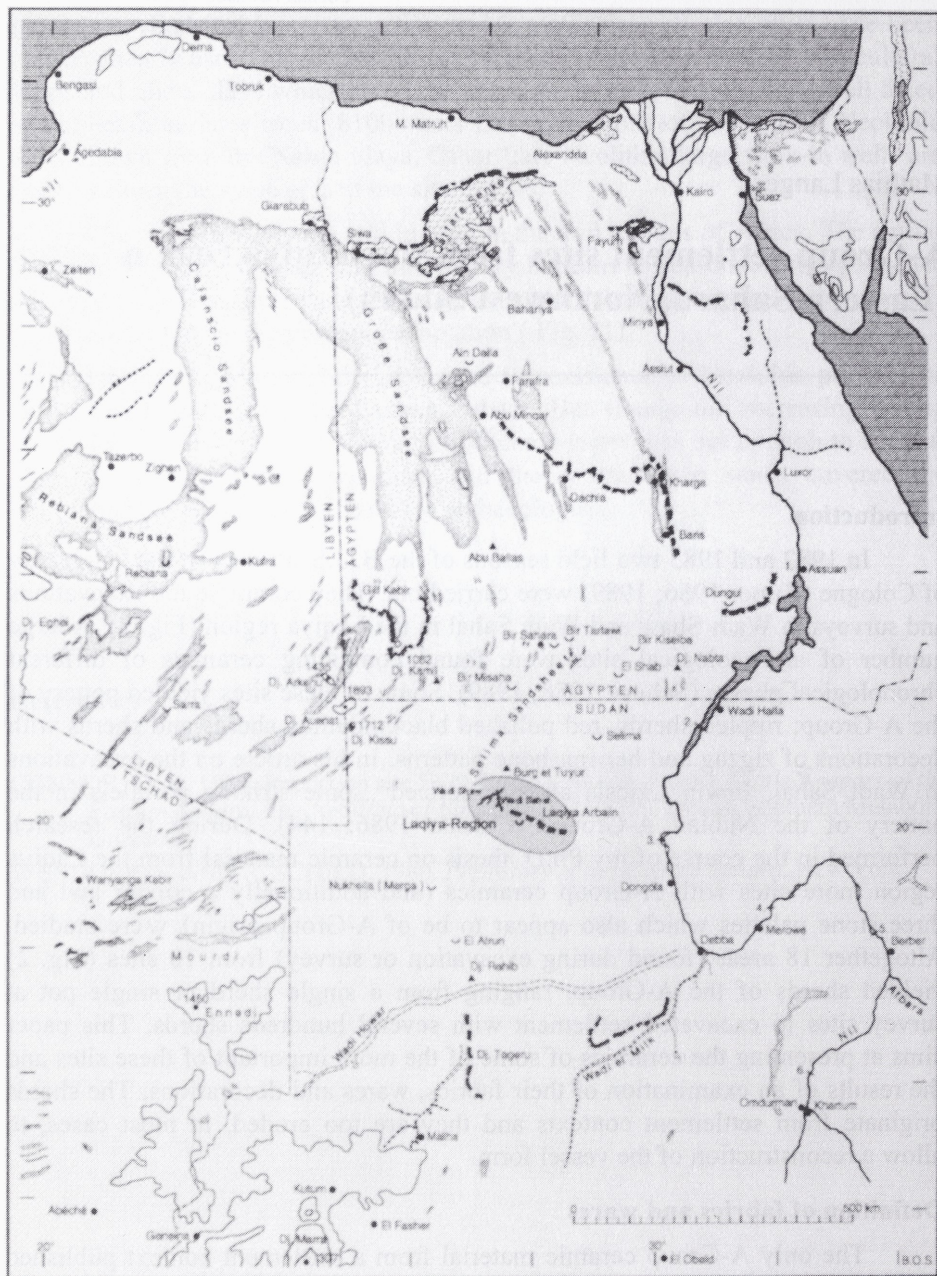


Fig. 1. Map of Northeast Africa with the Laqiya region.

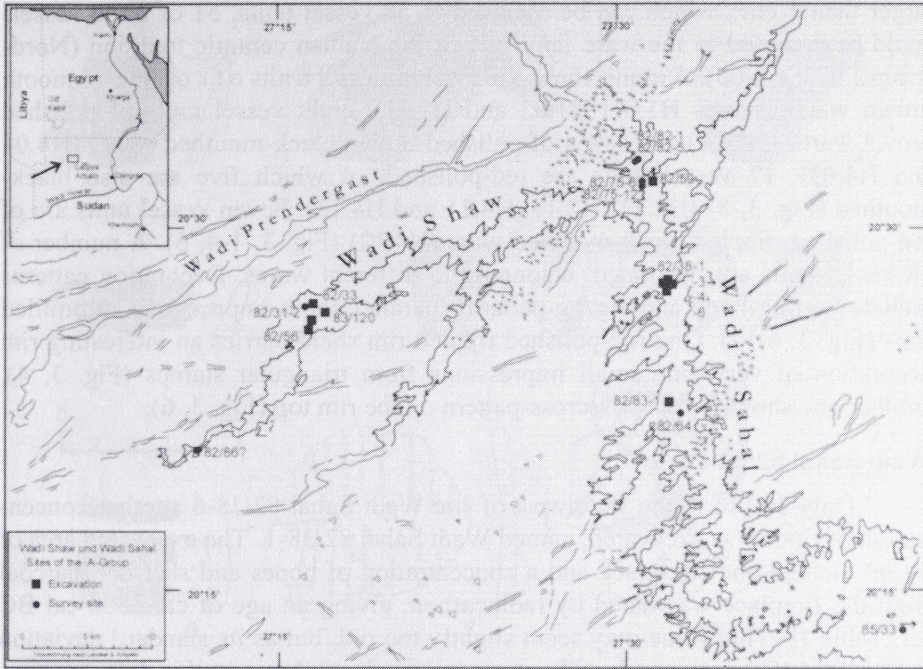


Fig. 2. A-Group sites in the Laqiya region.

describe the fabrics of the pottery, a method developed by Hans-Åke Nordström for the systematic classification of the Nubian ceramics was used (Nordström 1972). To avoid biasing, the fabrics as defined by Nordström were not used. Instead, new fabrics were defined by classifying the sherds from the Laqiya region according to their common technical properties. However, as it later turned out, the fabrics obtained by this procedure are largely identical to the fabrics described by Nordström for the Nile Valley (Nordström 1972: 48-57). Thus, it is possible to apply Nordström's system of ware classification to the ceramics of the Laqiya region (Nordström 1972: 57-68). This has permitted to compare the assemblages directly.

Wadi Sahal 82/38-6

The largest excavated area with A-Group ceramics from the Laqiya region is found in the middle part of Wadi Sahal, about 60 km northwest of the Oasis Laqiya Arbain. In an excavated area of 104 m² several fireplaces with charcoal were found. The results of radiocarbon dating have median values ranging from 3200 to 3100 cal BC (cf. Table 1). The ceramic material consists of 341 sherds

larger than 1 cm², which can be assigned to 58 vessel units. 51 of these vessels could be assigned to the ware family H of the Nubian ceramic tradition (Nordström 1972: 60-66). Among these are twelve vessel units of coarse or smooth brown wares (wares H1.01, H1.02 and H1.11), eight vessel units of polished brown wares (H2.01) and seven of polished brown black-mouthed wares (H4.01 and H4.03). 17 vessel units are red-polished, of which five are also black-mouthed (Fig. 3, 5) (H2.11, H2.13, H4.11 and H4.13). Seven vessel units are of red-polished, rippled black-mouthed ware (H4.12) (Fig. 3, 1-4, 6). A number of 18 vessel-units are decorated, belonging to different wares. Decoration patterns include herring-bone and zigzag-patterns, parallel comb impressions and milled rims (Fig. 3, 6-12). One red-polished rippled rim sherd carries an interesting rim decoration of very fine small impressions from triangular stamps (Fig. 3, 4), another one shows a fine crisscross-pattern on the rim top (Fig. 3, 6).

Wadi Sahal 82/38-1

Only 330 m to the southwest of site Wadi Sahal 82/38-6 another concentration of finds was excavated, named Wadi Sahal 82/38-1. The excavated area of 80 m² yielded one fire-place and a concentration of bones and sherds. Charcoal from the fireplace was dated by radiocarbon, giving an age of ca. 3800 cal BC (cf. Table 1). This value may seem slightly too old, but as its standard deviation is of ± 200 14C-years, we should not put too much emphasis on this date.

The ceramics from this site consist of only 48 sherds which can be regrouped to give 22 vessel units. 21 of these can be assigned to ware family H. Besides brown coarse or smooth wares (H1.01: n=5) and brown polished wares (H2.01: n=2, H4.01: n=2) there are also red-polished (H2.11: n=1) and red-polished black-mouthed vessel units (H4.11: n=3). The red-polished black-mouthed rippled wares (Fig. 4, 1-4) are quite abundant with six vessel units. Decorations occurring are plain herring-bone patterns (n=4) (Fig. 4, 7-9), dotted herring-bone and zigzag impressions (Fig. 4, 6) (n=1) and parallel comb-impressions (Fig. 4, 5) (n=1). Two of the rippled vessels have milled rim tops, one shows a very fine plain zigzag (Fig. 4, 2) and the other a regular herring-bone pattern which is slightly eroded (Fig. 4, 3).

Wadi Sahal 82/38-2

About 150 m to the east of site Wadi Sahal 82/38-1 (Cziesla 1986) a skull of domestic cow (*Bos primigenius f. taurus*) (Uerpmann and Van Neer 1989: 331, fig. 6) was found at site Wadi Sahal 82/38-2. Unfortunately this was an isolated piece not associated with any archaeological finds. A radiocarbon date obtained from this skull gave a value of approximately 3000 cal BC (cf. Table 1). This is an important information for the reconstruction of the subsistence pattern in this time and it points to a pastoral way of life relying on cattle herding.

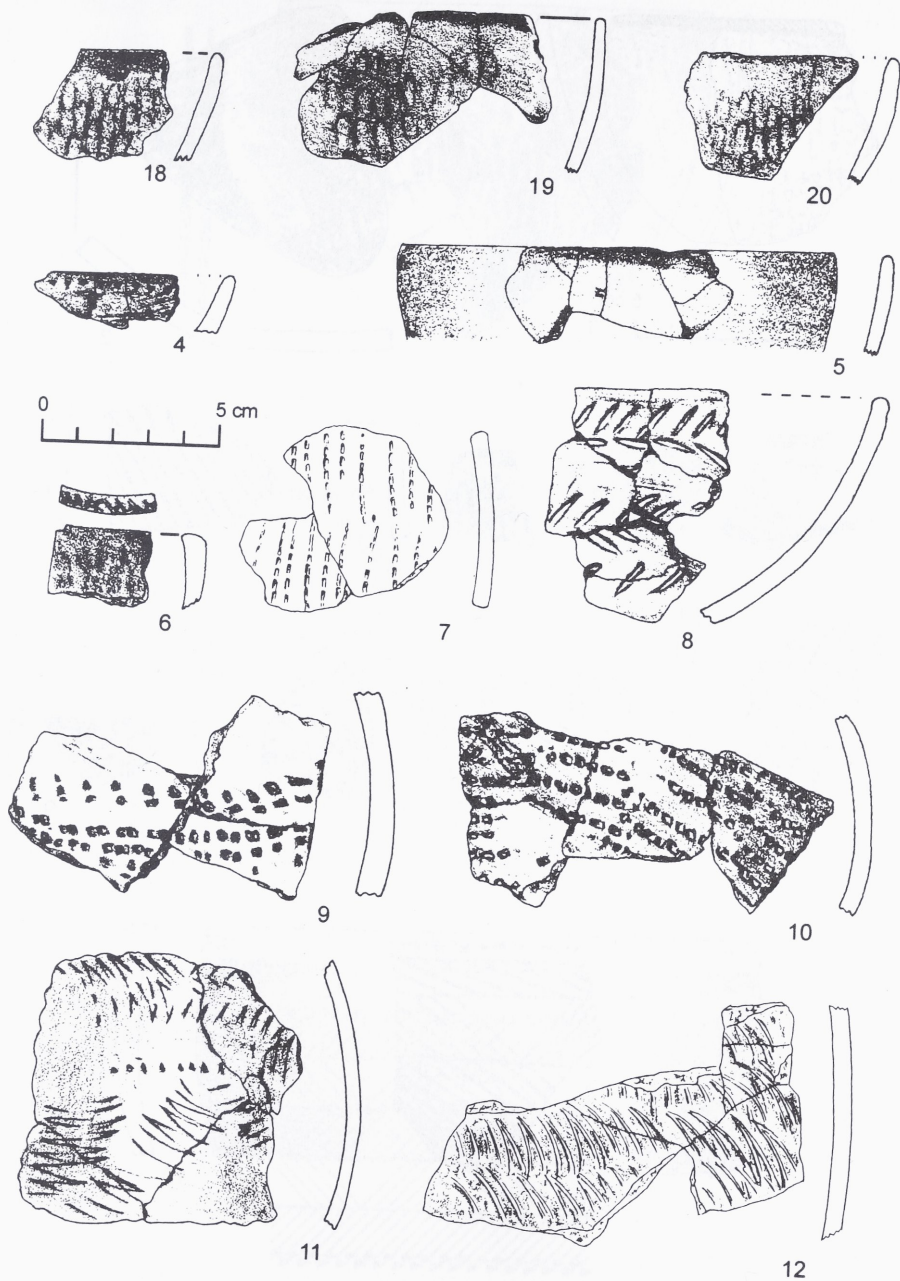


Fig. 3. Wadi Sahal 82/38-6. 1: VU 3; 2: VU 4; 3: GE5; 4: VU 6; 5: VU 10; 6: VU 12; 7: VU 47; 8: VU 44; 9: VU 45; 10: VU 46; 11: VU 48; 12: VU 49.

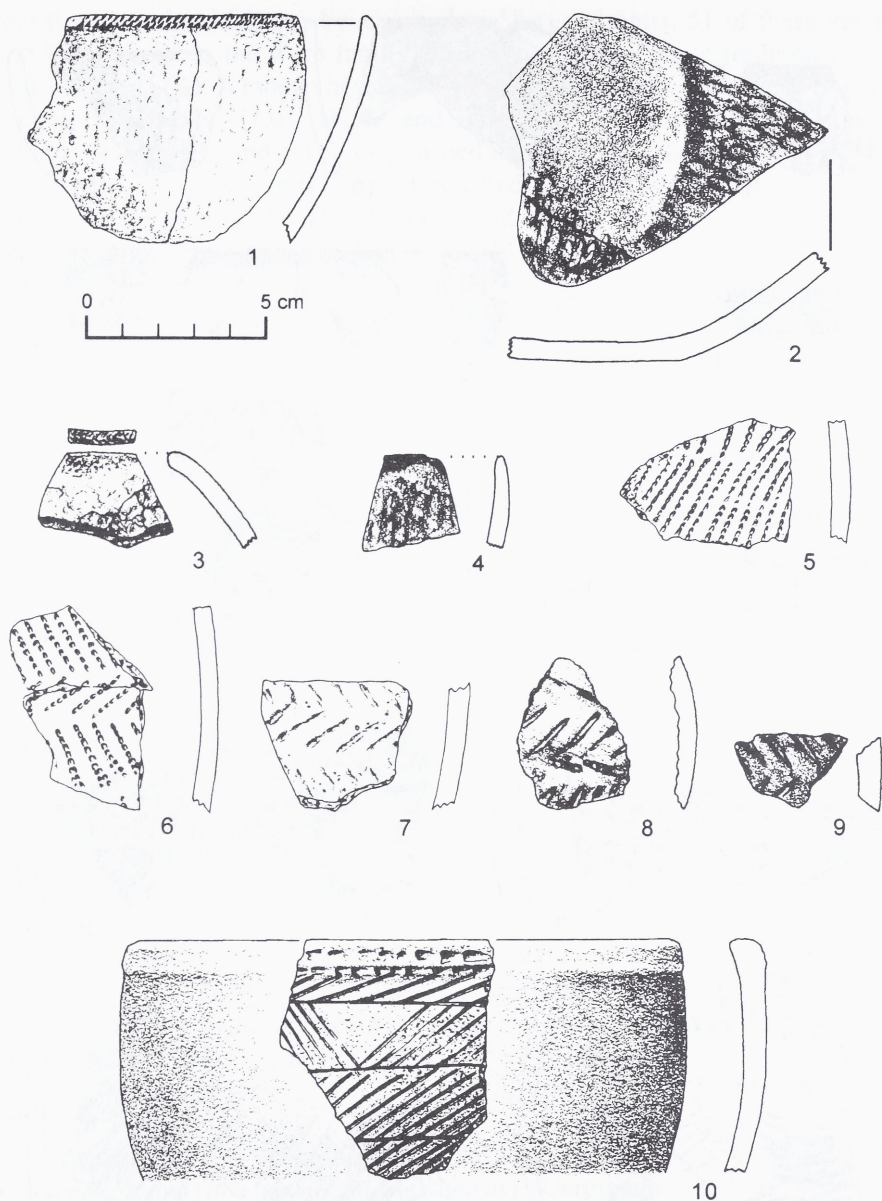


Fig. 4. Wadi Sahal82/38-1. 1: VU1; 2: VU 3 (bottom); 3: GE (rim); 4: VU 10; 6: VU 9; 7: VU 12; 8: VU 13; 8: VU 15. Wadi Shaw 83/120. 10: VU1.

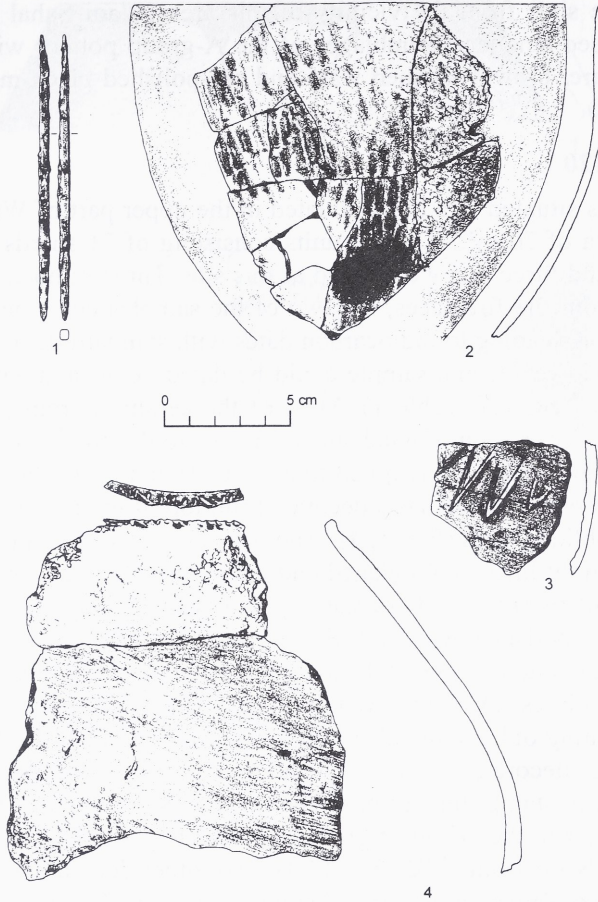


Fig. 5. Wadi Shaw 83/120. 1: cooper awl; 2: VU 5; 3: VU 8; 4: VU 7.

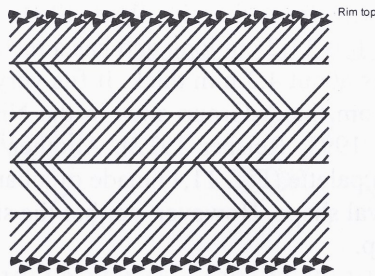


Fig. 6. Wadi Shaw 83/120, vessel unit 1. Schematic reconstruction of the decoration system: Incised lines combined with double pronged, alternately pivoting stamp.

Two more sites from the vicinity of this area (Wadi Sahal 82/38-3 and 82/38-4) comprised smaller assemblages of the A-group pottery with sherds of brown coarse ware, brown polished ware and red-polished black-mouthed ware (cf. Cziesla 1986).

Wadi Shaw 83/120

This site is situated in a basin situated in the upper part of Wadi Shaw. In an excavated area of 70 m² 10 vessel units consisting of 71 sherds were found. Two fireplaces and three pits were noted at this site. Three radiocarbon samples were obtained from the fireplaces, but two of the samples contained only small amounts of carbon, leading to radiocarbon dates with standard deviations of over 500 14C-years. However, one sample could be dated better and gave an age of ca. 3000 years cal BC (cf. Table 1). Most of the ceramics from this site were heavily destroyed by erosion of wind and sand. Due to the erosion of the surfaces only six vessel units could be assigned to a ware. Two are of a brown coarse or smooth ware and one of these has a decorated rim top of impressed straight lines combined with oblique lines (Fig. 5, 4). Another vessel with a rim top decoration of impressed straight lines is red-coated and may either belong to ware H1.11 or ware H2.13. Apart from two red-polished rippled vessels (ware H2.12) (Fig. 5, 2) there is also a red-polished vessel (H2.11) with an interesting decoration pattern (Fig. 4,10), consisting of several bands of incised oblique lines, divided by incised horizontal lines (cf. Fig 6). Within these bands plain triangles are formed by setting alternating oblique bundles of five incised lines each. Both the top and the base of this decorated zone are bordered by rows of double pronged alternately pivoting stamp impressions. The rim top is very broad. This vessel is surprisingly similar to the vessel of grave 4 in cemetery site 277 from the SJE at Halfa Degheim (Nordström 1972: Pl. 174:3). Two other decorated vessels of this site show plain zigzag patterns, either straight or curved (Fig. 5, 3) (cf. also Schuck 1989: Fig. 3,2, showing another sherd from this site with a curved zigzag decoration).

About 80 m away from the site Wadi Shaw 83/120 a single, isolated copper awl was found. It is 11,2 cm long and has a rectangular cross-section (Fig. 5, 1). Its thickest part is about 4,3 mm thick. It fits very well to the known examples of copper awls from the A-Group sites in the Nile Valley (e.g. Nordström 1972; Williams 1986; 1993; Reisner 1912). Another remarkable find from the vicinity of this site is a palette (Fig. 11,1) made of a banded siltstone, ca. 14x13,5 cm in size and of an oval shape. However, neither the size nor shape resemble the palettes of the A-Group.

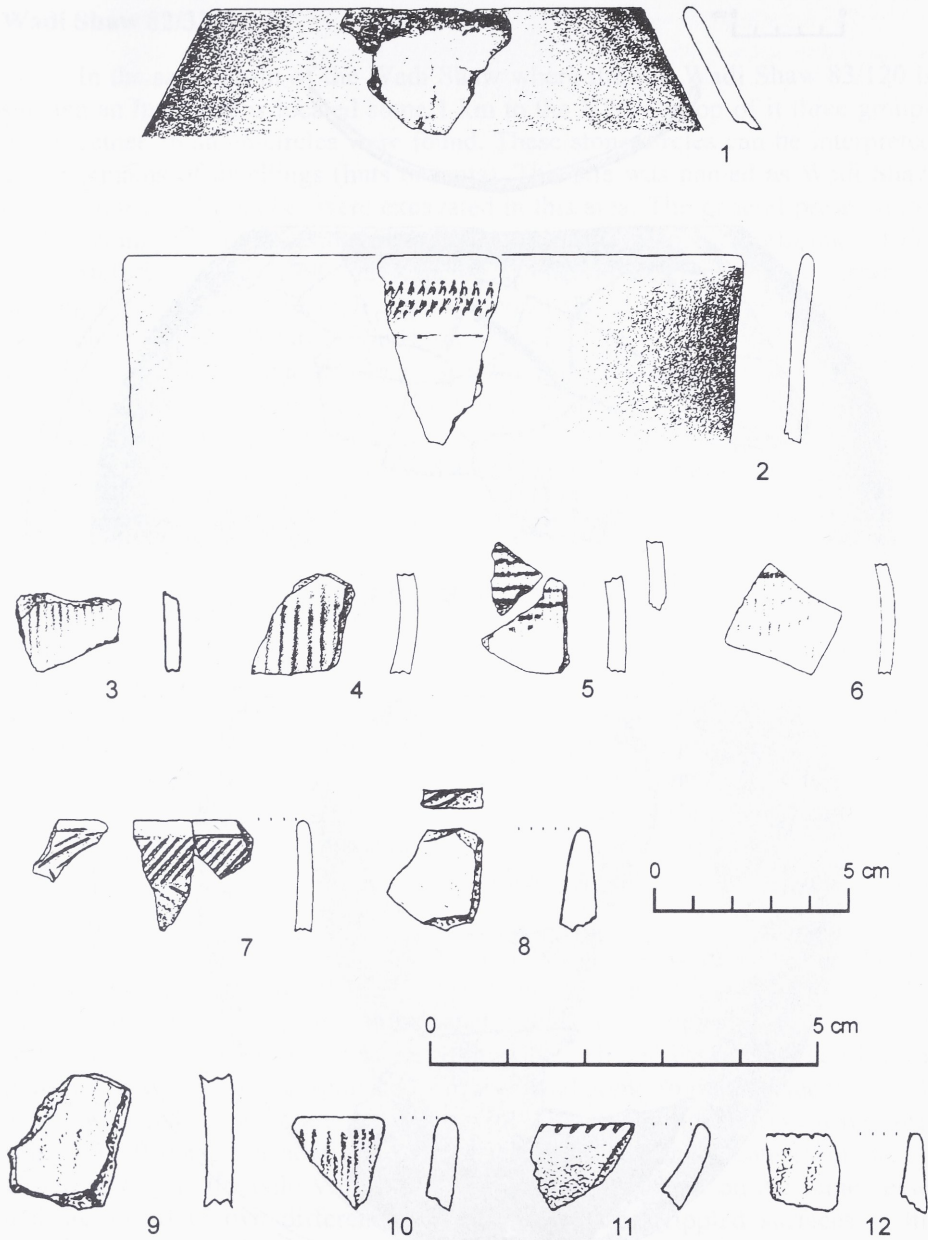


Fig. 7. 1: Wadi Shaw 82/33-5, VU 1; 2: Wadi Shaw 82/33-12, VU 1; 3: Wadi Shaw 82/33-8, VU 1; Wadi Shaw 82/33-41. 4: VU 1; 5: VU 4; 6: VU 5, 7: VU 16; 8: VU 2; 10: VU 6; 11: VU 47; 12: VU 48. 1-8: Scale 1:2; 9-12 Scale 1:1.

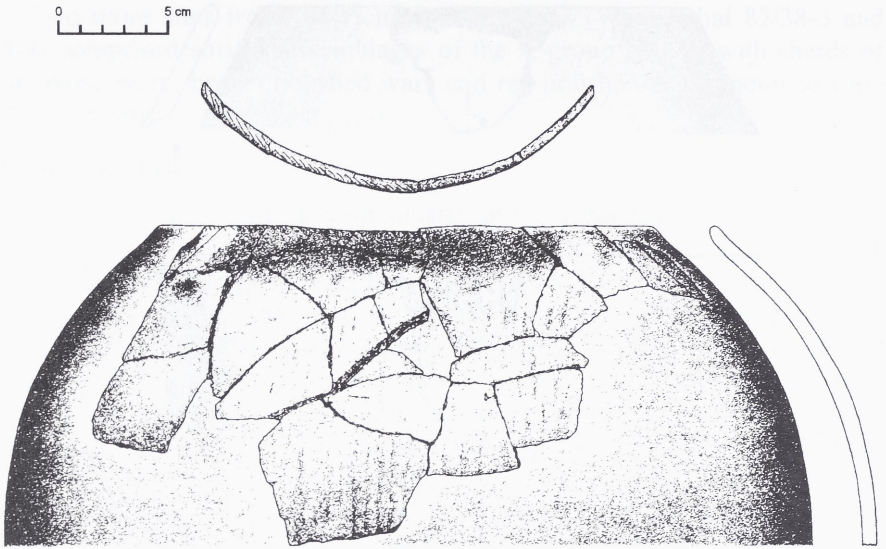


Fig. 8. Wadi Shaw 82/82-1.

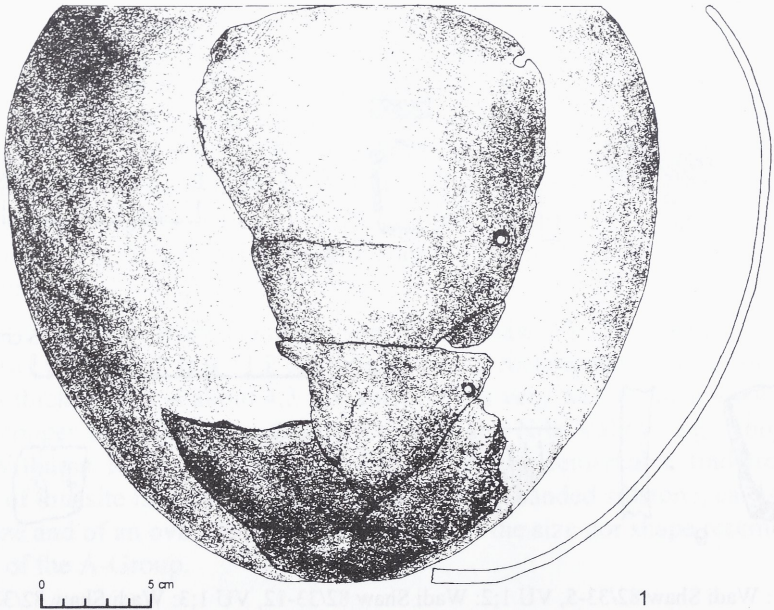


Fig. 9. Wadi Shaw 82/83-1; 1: VU 1. Scale 1:3.

Wadi Shaw 82/33-41

In the same basin of the Wadi Shaw where the site Wadi Shaw 83/120 is situated an Inselberg is located some 1 km to the NW. On top of it three groups of altogether 36 stone-circles were found. These stone-circles can be interpreted as the remains of dwellings (huts or tents). This site was named as Wadi Shaw 82/33. Four small trenches were excavated in this area. The general preservation of the ceramics from this site is very poor. On the evidence of refittings of the stone artefacts (Schuck 1990: 521), the occurrence of different types of ceramics (among these was a sherd with a decoration of the „Laqiya-Type“, presumably much older than the A-Group finds, cf. Schuck 1989: 423) as well as from the 14C-data, it is thought that this area was settled several times. It is assumed that a particular topographic situation of the Inselberg has attracted prehistoric people more than once and over a longer time. This resettlement plus the exposed position on top of the Inselberg have led to a heavy deterioration of the ceramics from this site.

In an excavation area of 71 m² around stone circle No. 41 several concentrations of charcoal particles and ash lenses were found. These can be interpreted as representing (at least) three fireplaces. Among the ceramic 218 sherds were found in a better preserved state and could be joined to give 49 vessel units. Due to the overall bad preservation only 16 vessel units can be assigned to the ware family H of the Nubian wares. Apart from the occurrence of coarse to smooth brown Wares (H1.01 and H1.02: n=3) and polished brown wares (H2.01: n=3), also red-polished wares (H2.11: n=2; H2.13: n=2; H4.11: n=2) and rippled wares (Fig. 7, 9-10) were found (H2.02: n=1; H2.12: n=2). There are herring-bone motifs (Fig. 7, 7), decorated rim tops with straight indentations (thumbnail impressions) (Fig. 7, 11-12) and one wall-herd with parallel impressions of straight spatulas.

Another interesting group of vessel units shares a lot of surface properties with the wares of ware family H, but was made of a sandy fabric. Vessels of this sandy fabric do not appear in any other site of the Laqiya area. A common feature of these vessels are their very thin walls. These vessels also had brown-polished or sometimes red-polished surfaces, and some rippled surfaces (Fig. 7, 4-6). Two rippled sherds are decorated with a painted design of thin wavy-lines (Fig. 7, 5). Rippled surfaces and painted designs are typical features of the A-Group pottery in the Nile Valley, but they usually occur not on the same vessel and are found in two different chronological phases (rippled surfaces in the middle A-Group and painted surfaces in the late A-Group). On the other hand, the pot No. 9 from grave 62 in the cemetery site Halfa Degheim 277 is a rippled vessel with painted horizontal bands; this combination appears therefore also in the Nile Valley (Nordström 1972: 211).

To conclude, it can be said that at site Wadi Shaw 82/33 a thin-walled, polished and sometimes painted and/or rippled pottery was made, which is comparable to the so-called „egg-shell wares“ of A-Group-pottery except for the fact that it does not contain organic temper in recognisable portions. Perhaps this should be regarded as a local development.

Three more stone circles at site Wadi Shaw 82/33 have been excavated, but the amount of sherds found in these areas was very low and their state of preservation was very poor. Among this material sherds of red-polished black-topped ware (Fig. 7, 1) and red-polished rippled ware (Fig. 7, 3) have been recognised. One sherd shows a rim decoration of dotted zigzag in a rocker-stamp technique (Fig. 7, 2).

Wadi Shaw 82/59

This site is situated in the crossing between Wadi Shaw and Wadi Sahal. In an excavated area of 32 m² three fireplaces and a shallow pit were found. The pit contained a lower grinding stone. It became evident that the two concentrations of stone artefacts result from different stone-knapping activities. Two charcoal samples from the sediment could be dated by radiocarbon, giving median ranges around ca 3150 cal BC. The preservation of the pottery was rather bad. 82 sherds larger than 1 cm² could be combined in seven vessel units. Due to the erosion of the surfaces, the vessel units could not be securely assigned to wares. Probably, all were of brown coarse or smooth ware (H1.01). One of these was decorated with a plain zigzag and another shows a rim top decoration of impressed fingernails.

Single finds

Apart from the above mentioned four excavated sites, in several parts of the Laqiya region single vessel units of A-Group-provenience have been found. One jar of red-polished rippled black-mouthed ware with a milled rim (zigzag-pattern) comes from the northern part of Wadi Sahal (Site Wadi Sahal 82/82-1) (Fig. 8). This was unfortunately a single find with no related material, although a considerable concentration of finds was not more than 50 m away. Probably this vessel was originally left upside down because the rim sherds were preserved best. Another rippled sherd was found some 2,5 km southeast during a survey (Site Wadi Sahal 82/75-6). From Site Wadi Sahal 82/83-1 in the lower part of the Wadi Sahal (ca. 7.5 km south of Wadi Sahal 82/38-6), comes a single vessel (Fig. 9) which was a part of a small, loose scatter of artefacts. An excavation of 2x2 m around the sherds of this vessel showed that some of the sherds were still embedded in situ in the playa sediment. The vessel itself is a very thin-walled jar of approximately 29 cm maximum diameter. It was made of a brown polished ware (Ware H2.01). Another red-polished sherd with incised decoration showing

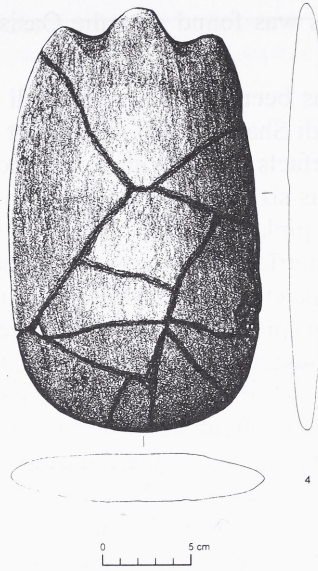


Fig. 10. Wadi Shaw 82/56. 1: Palette.

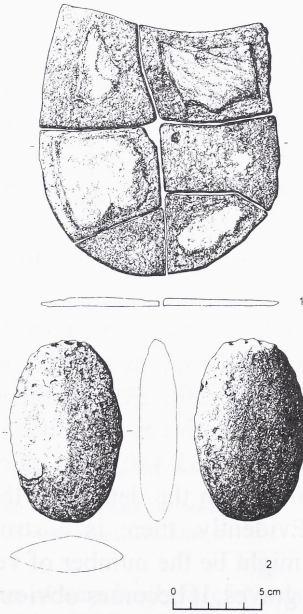


Fig. 11. 1: Wadi Shaw 83/120, palette; 2: Wadi Shaw 82/31-2, palette. Scale 1:2. 1: VU 1.

oblique and straight lines was found near the Oasis of Laqiya Umran (Site 85/33-1).

Another palette has been found at site Wadi Shaw 82/56 (Fig. 10), ca. 2 km southwest of site Wadi Shaw 83/120. It was not associated with any ceramic finds, the only other artefacts found with it are about 30-40 small pebbles and five beads of carnelian. Its size is 24 by 14 cm with a maximum thickness of 18 mm; the raw-material is pink sandstone. It has an oval shape. At one end two elaborate, concave, symmetric notches are worked out very carefully. This shape reminds the zoomorphic palettes of the Nagada culture, especially those with two antithetic birdheads. Our piece would then appear as a local copy of the Nagadian examples, because the raw material is, in all probability, a local one. On the other hand, it has no similarities with the palettes of the A-Group which are mostly of an oval or rhomboid shape and are made of quartzite (Nordström 1972: 120). Such a typical palette of the A-Group has been found at site Wadi Shaw 82/31-2, also situated in upper Wadi Shaw. This example is made of a coarse white quartzite and has an oval shape (Fig. 11,2). At the same site red-polished and red-polished rippled sherds were also found, but this site, belonging to the settlement area of "Camp 49" (Franke 1986), was clearly reoccupied and therefore needs further examination, especially through intra-site spatial analysis, in order to distinguish different settlement phases.

Comparisons

This short survey has demonstrated that there is a number of sites with A-Group pottery in the Laqiya region, more than 400 km southwest from the 2nd Cataract, which has been traditionally considered the southern border of the A-Group. In order to interpret this new situation, I would like to compare the assemblages from the Western Desert with those from the Nile Valley. As the preservation of the ceramics from the Laqiya region does not allow to compare the vessel forms, the wares and decorations are the only kind of evidence for comparison.

For the sites in the Nile Valley: Serra East 303 (Area 2), Debeira 340, Abka 414 and Abka 430 the frequency of sherds from each ware is given in a table (Nordström 1972: 142, 156, 230, 235). The percentage of ware family H from the settlement sites and cemeteries as described in Nordström's catalogue of A-Group sites (Nordström 1972: 133-440) was calculated and plotted by this writer in curves and compared with the data from the settlement sites from the Laqiya region (Fig. 12). Evidently, there is a strong similarity between the curves. A major difference might be the number of vessels made of ware H4.12, but, in comparison with the graves, it becomes obvious that the value of ca. 15 % is within the range of the A-group.

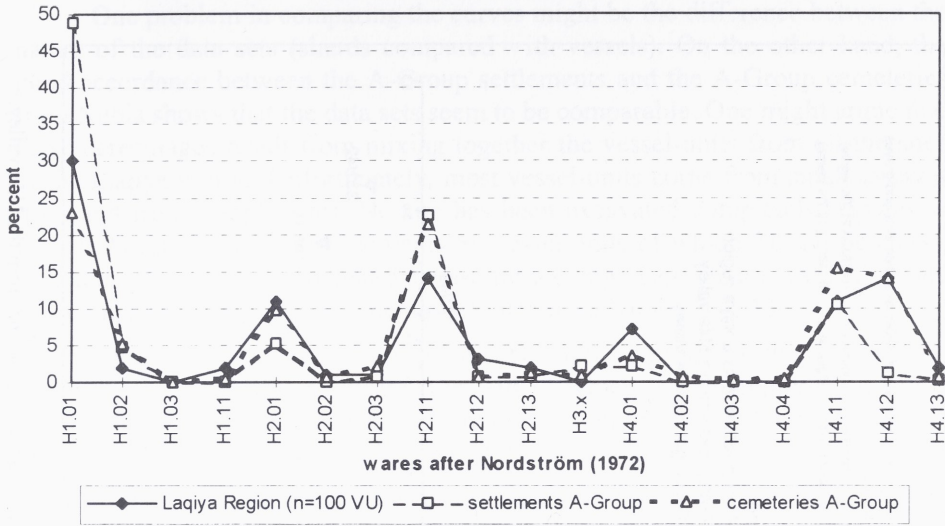


Fig. 12. Frequency of the wares of ware family H (cf. Nordström 1972) in the pottery of the Laqiya region (n=100 vessel units) in comparison to its frequency in the settlements and graves of the A-Group in the Nile Valley.

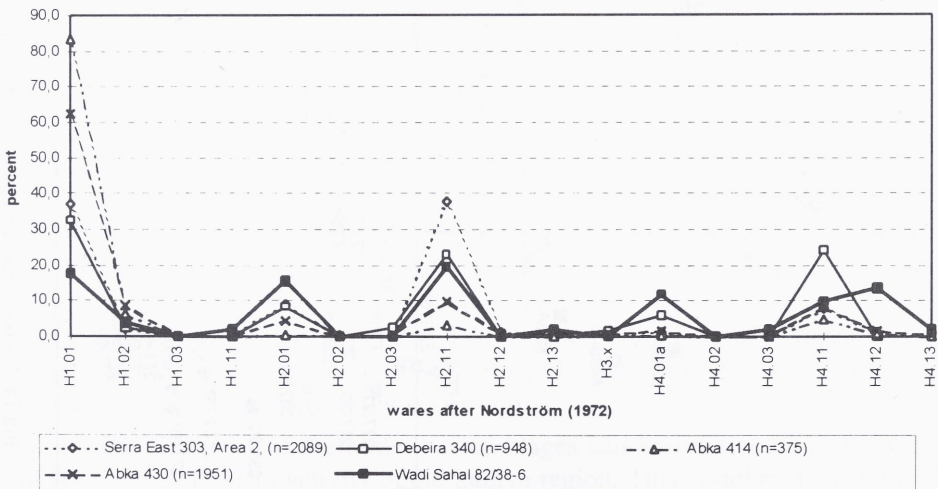


Fig. 13. Frequency of the wares of ware family H (cf. Nordström 1972) in the pottery of site Wadi Sahal 82/38-6 (n=51 vessel units) in comparison to its frequency in the sites Serra East 303 (Area 2), Debeira 340, Abka 414 and Abka 430.

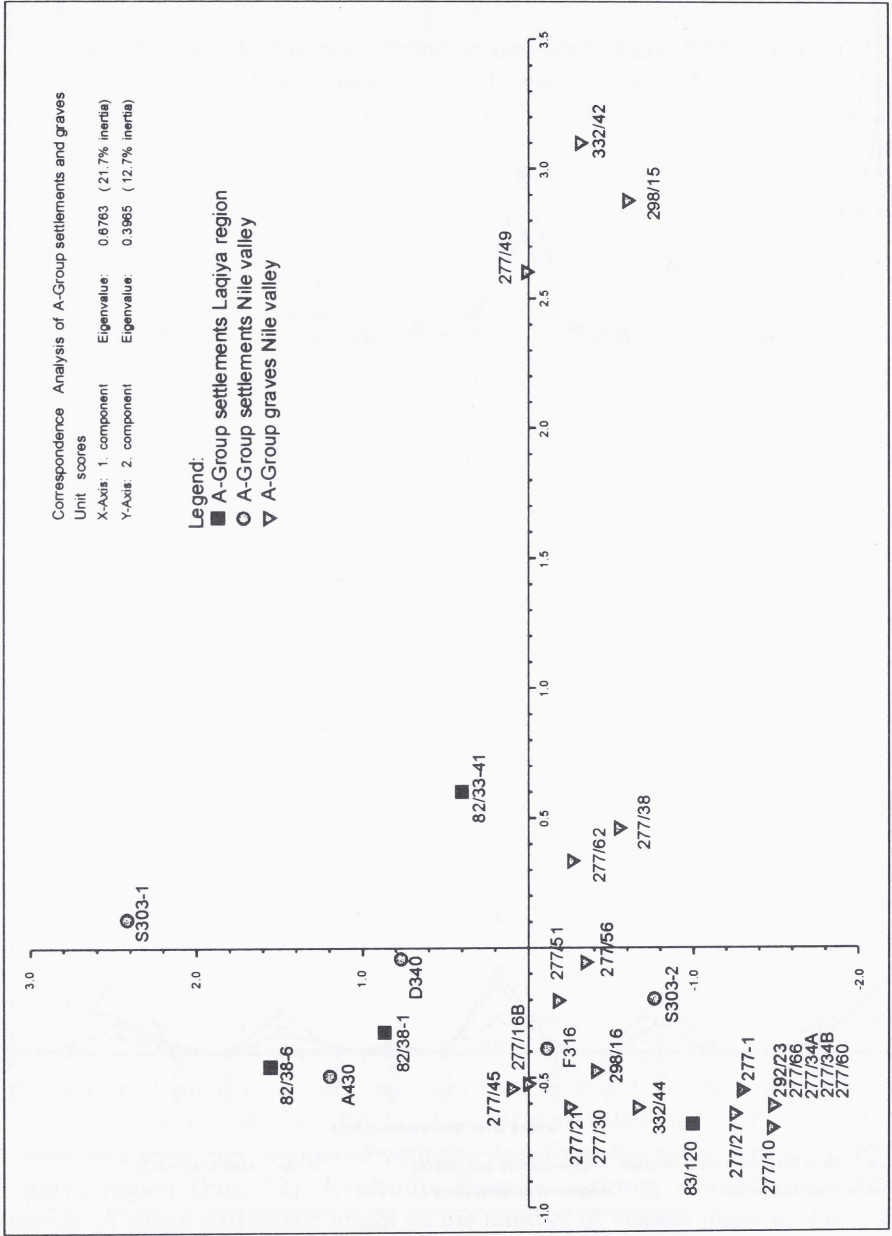


Fig. 14. Correspondence analysis of A-Group settlements and graves from Laqiya region and from the Nile valley.

One problem in comparing the curves might be the difference between the nature of the data sets (sherds compared with vessels). On the other hand, the good accordance between the A-Group settlements and the A-Group cemeteries from Nubia shows that the data sets seem to be comparable. One might argue that these percentages result from mixing together the vessel-units from all the sites of the Laqiya region. Unfortunately, most vessel-units come from small excavations and from sample sites. No site has been excavated completely. However, the site Wadi Sahal 82/38-6 contains 58 vessel-units of which 51 can be classified, thus providing a sufficient database for a comparison on site level. This site was compared with the above mentioned sites from Nubia (Fig. 13).

Again, there is a good agreement between the curves. All the curves show peaks for the same wares, except ware H4.12 which is over represented in the Wadi Sahal site. On the other hand there are also quite large differences between the four settlement sites of the A-Group in the Nile Valley.

To compare the decorations of the ceramics from both regions, correspondence analysis was used. Settlement sites of the A-Group from the Nile Valley and the Laqiya region were chosen as well as graves from some of the cemeteries in Nubia. The sites were compared by regarding the combinations of motifs appearing on the vessels of each settlement site or grave. The result of the correspondence analysis can be seen from the diagram showing the first and second component (Fig. 14). The settlement sites of both the Laqiya region and the Nile Valley form a cluster in the left part of the diagram, together with graves of the middle A-Group. On the right side three graves of the Late A-Group are set off from these by their different combinations of decorations and wares, expressing the chronological depth of the sample of chosen features. The main result of the correspondence analysis lies in the fact that it shows a high degree of similarity between the assemblages of the A-Group ceramics from the Laqiya region and the Middle A-Group sites from the Nile Valley.

Conclusion

The examination of the wares and decorations of the assemblages from both the Laqiya region and the Nubian Nile Valley has shown that these two regional groups of pottery cannot be distinguished. This - plus the appearance of copper finds and palettes - can be interpreted in the way that both groups of archaeological sites belong to the A - Group.

The similarity of the pottery assemblages can be interpreted as the result of A-Group settlement activity in the Laqiya region. This is rather different from what have been known till recently about the A-Group. But, as Maria Gatto has pointed out, cattle-keeping was a major part of the A-groups subsistence, especially in its southern part (Gatto 1997). It seems then that some groups of the A-

Group populations spread out from the Nile Valley into the present desert - in those days a semi-desert or even savannah - leading a semi-nomadic or nomadic life and relying on the rainy season. Their subsistence can be of a sort of trans-human, seasonal movement of pastoral groups, starting during or shortly after the rainy season, when fresh pasture started to be available in the Eastern Sahara and grazing areas in the Nile Valley became flooded by the seasonal inundation.

An interesting phenomenon is lack of Egyptian imported pottery in the Laqiya region. Egyptian pottery does not seem to occur here before the times of the late 4th or early 5th Dynasty; to this time period are dated sherds of an Egyptian Maidum-bowl found at site Wadi Shaw 82/52 (Lange in press). But on the other hand, the frequency of Egyptian pottery is very low and variable in the settlements of the A-group in the Nile Valley. Nordström gives percentages of the Egyptian wares in some of the settlement sites. The figures vary between 0 % and 12,8 % in the highest case, but are below 3% in most cases (cf. Table 3). Furthermore, Gatto (1997) has shown that the percentage of Egyptian pottery in the A-group assemblages in the Nile Valley decreases from north to south, so one should not expect much Egyptian pottery in the far away Laqiya region. This region seems to be situated at the outmost frontier of the A-Group culture, as no finds of the A-Group pottery have been made in the Wadi Hariq and Wadi Howar to the south of Laqiya.

Result of this study suggests a huge extension of the settlement area of the A-Group. Until recent by, no finds of the A-Group have been reported outside the Nile Valley. The only exception might be the grave cairn excavated in Grassy Valley by W.B.K. Shaw during his expedition in 1935. In this grave a black-topped pot with a rippled (?) surface was found together with some carnelian beads. This pot could be of A-Group origin (SHAW 1936: 47- 48). Most recently Maria Gatto identified pottery from the Egyptian site of Bir Sahara tested in 1973 by the Combined Prehistoric Expedition as belonging to the A-Group (Gatto 2001). It seems then that the A-Group culture was over a much larger area, comprising not only the Nubian Nile Valley but also the present deserts to the south west of it.

One might ask why the A-Group populations have moved to the south instead of going westwards. One reason for this could be the better quality of grazing land to the south. Furthermore, west of the Nile Valley in northern Nubia the Egyptian limestone-plateau stretches from North to South over several hundred kilometres. This area probably was a poor grazing land much less attractive to the herders. Also, herders could have relied in the south-west on a system of oases like Nabta Playa, Bir Kiseiba, Bir Tarfawi and Bir Abu Hussein. Another area where one could expect settlement of the A-Group is the region around the Selima Oasis. This area would be roughly in the middle way from the

Laqiya to the Nile Valley. More research in the Laqiya region seems to be necessary in order to save the sites from erosion and to enlarge the database.

It also seems that the research in the Laqiya region might help in solving the question of the archaeological hiatus between A-Group and C-Group in Nubia. If this hiatus resulted from the warfare of early Egyptian rulers against the Nubians, as it is suggested by the Egyptian inscriptions from Jebel Sheikh Suleiman (Nordström 1972: 31-32; Cialowicz 1998) the Laqiya region could have served as a refuge area of the post A-group people. The already mentioned site Wadi Shaw 82/52 also yielded red-polished pottery indicating that this assemblage was part of the Nubian A-Group tradition of pottery-making. This is the only excavated site in this area dating to the time of the Old Kingdom. The Palermo stone reports aggressive actions of the Egyptians continuing into the Old Kingdom when King Snofru (4th dynasty) had slain Nubia and captured 7000 slaves and 200,000 head of cattle and goat (Zibelius-Chen 1988: 52; Adams 1977: 139). If these figures are correct, they would indicate a heavy loss of population in Nubia. Furthermore, they show the importance of pastoralism for Nubians. A continued repressions of the Egyptians may have prevented the Nubian population from using the Nile Valley in the same way as before the Egyptian invasion. Although the Laqiya region was too arid to serve as a year-round settlement area at this time (Neumann 1989: 134-135), it could keep its role as a supplementary grazing area for the Lower Nubian populations. The main area of refuge though would have to be searched in the areas to the south of the second cataract, as already proposed by Nordström (1966: 67-68), and perhaps even as far in the south as Kerma.

The finds of the A-Group and the site of Wadi Shaw 82/52 show far-reaching implications for the archaeology of the Laqiya region. They not only yield information on the development of the Eastern Sahara, but may also contribute to the archaeology and early history of Nubia.

Table 1. Radiocarbon dates from Wadi Shaw and Wadi Sahal sites related to the A-Group finds.

Site	sample nr.	material	lab. nr.	$\delta^{13}\text{C} \text{ ‰}$	^{14}C -age BP	calBC *
Wadi Sahal 82/38-1	C-59, C-225	charcoal	KN-3013	non det.	5000±170	3801±171
Wadi Sahal 82/38-2	C-60	bone	KN-3014	non det.	4350±320	2973±423
Wadi Sahal 82/38-3	C-223	charcoal	KN-3177	non det.	4390±160	3074±224
Wadi Sahal 82/38-4	C-206	charcoal	KN-3144	non det.	4990±150	3794±148
Wadi Sahal 82/38-4	C-262a	ostrich- eggshell	KN-3190	non det.	4590±55	3317±154
Wadi Sahal 82/38-4	C-122	charcoal	KN-3081	-26,08	4660±60	3459±78
Wadi Sahal 82/38-4	C-260	ostrich- eggshell	KN-3189	non det.	4720±75	3502±99
Wadi Sahal 82/38-4	C-123	charcoal	KN-3330	non det.	5400±700	4168±802
Wadi Sahal 82/38-6	C-124	charcoal	KN-3083	-24,47	4470±50	3173±120
Wadi Sahal 82/38-6	C-128	charcoal	KN-3101	non det.	4480±75	3169±134
Wadi Sahal 82/38-6	C-127	charcoal	KN-3147	non det.	4410±120	3111±174
Wadi Shaw 82/33-41	C-109	charcoal	KN-3091	non det.	4320±60	2960±67
Wadi Shaw 82/33-41	C-110	charcoal	KN-3138	non det.	4850±55	3622±70
Wadi Shaw 82/33-41	C-261	ostrich- eggshell	KN-3188	non det.	4360±60	3005±80
Wadi Shaw 82/59	C-115	charcoal	KN-3145	non det.	4410±130	3110±182
Wadi Shaw 82/59	C-114	charcoal	KN-3171	non det.	4480±130	3168±179
Wadi Shaw 83/120	C-458	charcoal	KN-3415	non det.	4400±400	3013±511
Wadi Shaw 83/120	C-457	charcoal	KN-4103	-21,96	4340±70	2995±89
Wadi Shaw 83/120	C-460	charcoal	KN-4104	non det.	5400±1400	

* Calibration with program „Calpal“, Version 1999, by Bernhard Weninger, Cologne, using calibration data by Stuiver, Reimer et al. 1998.

Table 2:

Frequency (in percent) of wares of ware family H according to the classification by Nordström (1972) in the settlement sites and cemeteries of the A-Group in the Nile Valley and the Laqiya region.

ware	Laqiya region	A-Group in the Nile Valley (Sites of SJE)	
	n=100 VU = vessel-unit percent	settlements n=5363 sherds: percent	cemeteries n=636 VU = vessel-units percent
H1.01	30	48,9	23,0
H1.02	2	4,8	5,2
H1.03	0	0	0
H1.11	2	0	0,5
H2.01	11	5,2	9,8
H2.02	1	0,1	0,6
H2.03	1	0,7	2,0
H2.11	14	22,5	21,2
H2.12	3	0,7	0,6
H2.13	2	0,8	1,1
H3.x	0	2,2	0,9
H4.01	7	2,0	3,7
H4.02	0	0	0,6
H4.03	0	0	0,2
H4.04	0	0	0,5
H4.11	11	10,5	15,4
H4.12	14	1,1	14,0
H4.13	2	0,3	0,8
sum	100	100	100

Table 3.

Frequency (%) of sherds of Egyptian ware in the settlements of the A-Group in the Nile Valley.

Site	% Egyptian sherds	Nordström (1972): page
Faras East 316	„a few sherds“	135
Serra East 303-1	2,7	140
Serra East 303-2	8,2	142
Debeira 340	12,8	156
Abka 371	0	225-226
Abka 414	1,1	230
Abka 430	0,2	235
Abka 365	0	243

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