

**THE ORIGIN AND RELATIONSHIPS
OF THE
NUBIAN A-GROUP**

by

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A Thesis submitted in conformity with the requirements
for the degree of Doctor of Philosophy
Graduate Department of Near and Middle Eastern Civilizations
University of Toronto

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For
KATHY MARAJ,
with love and devotion
always.

THE ORIGIN AND RELATIONSHIPS OF THE NUBIAN A-GROUP

Ph.D., 1999

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ABSTRACT

Since the discovery of the A-Group culture in 1907, much emphasis has been given to A-Group relationships with the Egyptian Nile civilizations of Upper Egypt. As a result, very little discussion has been ventured about Sudanese interconnections or Eastern and Western Desert relations for the A-Group. This work compensates for that lack by demonstrating that the A-Group was very much a part of the Saharan and Sudanese traditions as evidenced primarily by the types of impressed and incised decorative motifs in A-Group ceramics. A comparative analysis of ceramic designs throughout the Sudan shows that the Khartoum Neolithic motifs are widely represented amongst the A-Group ceramic repertoire, as they are in those Khartoum-related industries north of the Khartoum region. This situation likely represents a northward diffusion of ceramic traits from the Khartoum area into Lower Nubia through the Dongola Reach. Furthermore, I suggest the possibility of direct southeastern connections for the A-Group with the people of Shaqadud in the Butana, based on the presence of shared pottery designs between Shaqadud and the A-Group that do not appear in the Dongola Reach.

A-Group relationships in the Shendi Reach are only weakly suggested by ceramic traits, but other types of evidence such as the dog burial and the infant pot burial at Kadada may strengthen the

arguments for A-Group/Shendi Reach interconnections. Ceramic evidence strongly suggests the existence of A-Group links with the Western Sudan that appear to have been independent of the Khartoum area. New material from the Lower Wadi Howar, which connected with the Nile in Neolithic times, indicates that this region may have been a route of exchange between Lower Nubia and the Western Sudan. Western Desert connections for the A-Group are also minimally suggested by the ceramics, however, I have proposed a Western Desert origin for certain A-Group ceramic motifs.

Unfortunately, the evidence for Eastern and Nubian Desert links with the A-Group is still sparse, but the discoveries of burial material and rock drawings are very promising for defining cultural links once these areas become better known archaeologically.

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I devote this space to thanking a few key individuals who have contributed to the successful completion of my work.

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CHAPTER 1 - INTRODUCTION

1.1. RATIONALE FOR THE STUDY OF A-GROUP RELATIONSHIPS

The primary purpose of this work is to attempt to define the A-Group culture in terms of the developmental sequence of cultures throughout the Neolithic and post-Neolithic Sudan. The main themes selected for this purpose are comparative aspects of ceramics, lithics, and burial, with some consideration given to economic and subsistence strategies, and other aspects of material culture. The emphasis is certainly on the pottery, as this is perhaps the best-published aspect of the A-Group material culture. The geographic areas from which material will be drawn for comparison are those detailed in Chapter 2 below, i.e., Lower Nubia, including the Nubian Desert, Egypt's Eastern and Western Deserts (including the oases), the Dongola Reach, Central Sudan, the Butana, the Atbai, the Gash Delta, the Wadi Howar, Wadi Shaw, and Laqiya region. Some mention is made throughout the thesis of links further abroad in Tibesti and the Ennedi area of eastern Chad. The problem of A-Group origin will also be addressed within the context of earliest A-Group relationships.

It is possible to reconstruct, even with the incomplete data base that we now possess, a widespread series of related Neolithic and post-Neolithic traditions across northeastern Africa, of which the A-Group formed a small but significant part. It must be emphasized that the tradition has been to view the A-Group as primarily influenced by Egypt to the north, and not at all or much affected by the Central Sudanese cultures to the south or by those cultures east and west of the Nile. For this reason the emphasis here is on indigenous (Lower Nubian) and Sudanese relationships of the A-Group.

Furthermore, it is my opinion that most or all that can (currently) be said about A-Group and Nile Valley Egyptian relationships has already been published. This alone justifies the need to examine the evidence for A-Group indigenous interconnections, and to define these relationships if only to a limited degree.

The treatment of northeast Africa as a homogeneous cultural unit is not new,¹ but the consideration of the A-Group within this larger context is practically non-existent. It is only recently, with the discovery of new archaeological assemblages in such regions as the Butana, the Atbai, and the Wadi Howar, that the networks of cultural exchange between Nile and non-Nile environments in the Sudan have been somewhat elucidated. However, the detailed analytical and comparative work that would define these types of interconnections have not generally been undertaken. A preliminary study of A-Group interconnections may only now, I think, be reasonably well attempted. As this is the earliest comprehensive work of its kind, I suggest that its content in terms of the inter-cultural comparisons be treated as an introduction only to the topic. With the growing bodies of data still accumulating and still being processed from the regions around the former A-Group territory, the results presented here will undoubtedly be subject to further refinement and addition in the future.

This work begins with an examination of the history of A-Group study in some detail (Chapter 2), with critical assessments of the archaeological methodologies where applicable. Criticism of some interpretations of the A-Group culture is provided where this is applicable. While not every A-Group

¹See for example, J. L. Forde-Johnston, 1959, *Neolithic Cultures of North Africa: Aspects of One Phase in the Development of the African Stone Age Cultures*, and C. B. M. McBurney, 1960. *The Stone Age of Northern Africa*.

site could be listed,² it is hoped that the reader will gain a good understanding of precisely what type of cultural material relevant to the A-Group has been collected in the past. Cultural areas peripheral to the A-Group territory are also examined here in terms of their discovery and early interpretation. Chapter 3 summarizes the material culture of the A-Group with the aim of facilitating the cultural comparisons attempted in Chapter 4. The material culture has been adequately dealt with by many authors in numerous site reports and it is not the aim of this work to reiterate all of this material here. Rather, I have considered some aspects of A-Group material culture in new analytical ways that will hopefully allow for re-interpretation of some concepts in the future. Chapter 4 represents the main work of the thesis, presenting the comparative data that may be taken as possible evidence for A-Group interconnections with all archaeologically known areas of the Sudan and the Egyptian deserts. Chapter 5 represents a synthesis of all the data and attempts to decide which aspects of shared A-Group traits may be taken as 'real' indications of A-Group relationships and which may not.

1.2. DEFINITION OF TERMS AND A-GROUP CHRONOLOGY

The A-Group was first identified by Reisner³ at the Shellal cemetery, just south of Aswan. The southern geographic limit is still problematic, but the territorial range of the A-Group extended roughly from Kubanieh, north of the First Cataract, to Melik en-Nasir (Figure 1), between the Second and Third

²This applies to individual graves and cemeteries, the numbers for which are vast, however, A-Group habitation sites are dealt with on a more individual basis.

³G. A. Reisner, 1910a, *The Archaeological Survey of Nubia: Report for 1907-08, Volume I*, and 1910b, *The Archaeological Survey of Nubia: Report for 1907-1908. Plates and Plans Accompanying Volume I*.

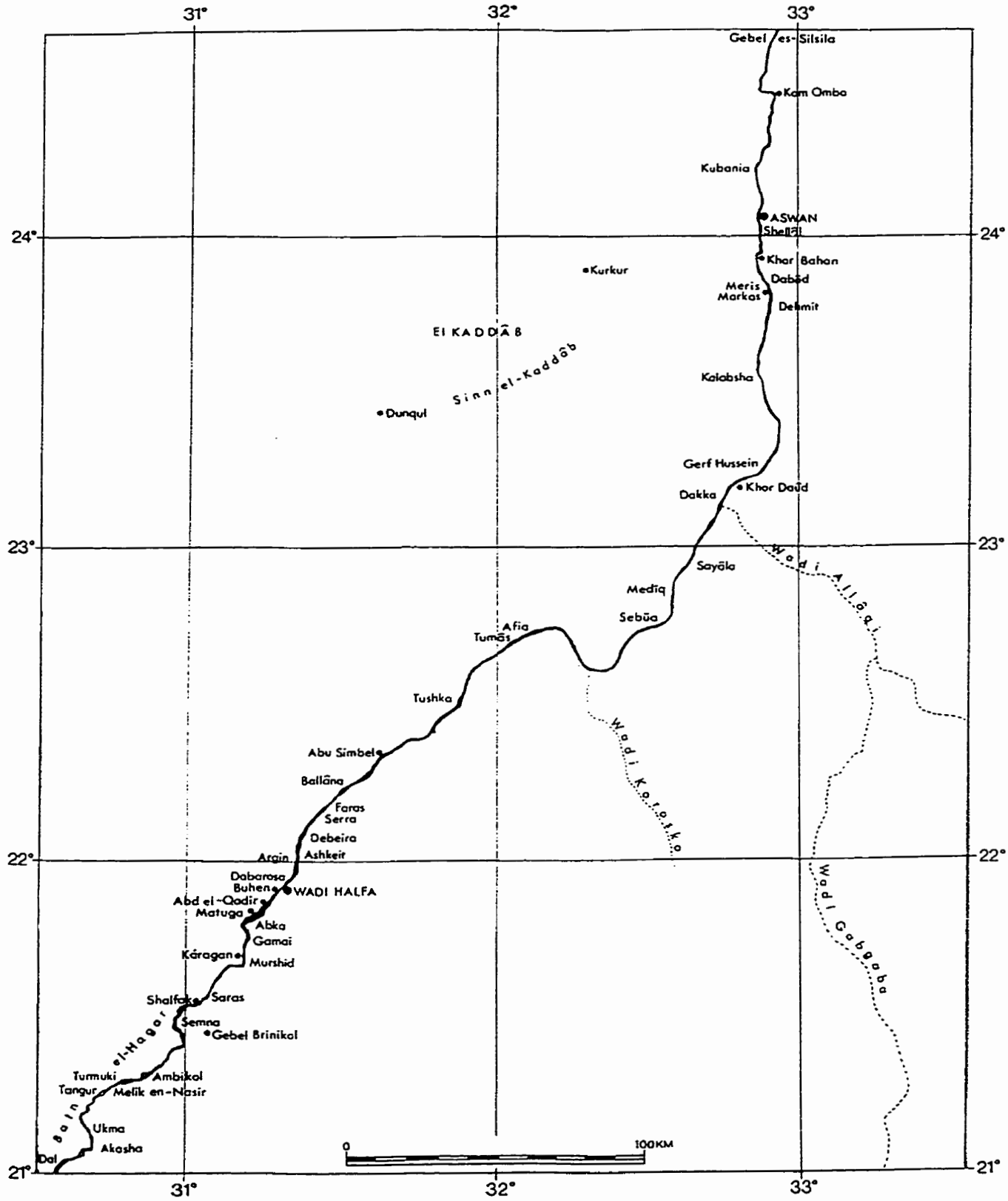


Figure 1. General map of Lower Nubia showing main A-Group sites.

(From: H.-Å. Nordström, 1972, *Neolithic and A-Group Sites*, vol. 3.2, Plate 2).

Cataracts. Recent surveys even further south in the Turmuki area (Figure 1) have revealed there the presence of A-Group grave sites, which unfortunately have not yet been published.⁴ According to Adams, the uniqueness and importance of the A-Group may be defined by four important characteristics, which

“...serve to distinguish the culture...from its Neolithic predecessors: the definite cultivation of cereal grains, the beginnings of domestic architecture, the making of a distinctive black and red pottery, and the practice of interring material offerings with the dead.”⁵

A number of alternative terms for the A-Group have been proposed. The ‘A-Horizon’ was suggested by Adams,⁶ and Junker is known to have used the term ‘A-Period.’⁷ Even Reisner and the other members of the First Archaeological Survey were not consistent in referring to the A-Group as such, even after it was formally named by Reisner. Thus, the early terms of ‘Late Predynastic,’ ‘Early Dynastic,’ and ‘Archaic,’ were all synonyms for A-Group remains. However, in the end, it seems that Reisner’s original designation of ‘A-Group’ has prevailed, and most scholars use this term today. This is the terminology used here. Later, various schemes arose for naming the phases of the A-Group, but Nordström’s terminology of Early, Classic, and Terminal A-Group has become the preferred choice. Trigger called the Early A-Group ‘Early Nubian Ia,’ the Classic A-Group ‘Early Nubian Ib,’ and the Terminal A-Group “Early Nubian III.” Williams proposed ‘Early, Middle and Late’ for the three phases, which is clearly not

⁴H.-Å. Nordström, 1972, *Neolithic and A-Group Sites*, vol. 3.1, p. 17.

⁵W. Y. Adams, 1977, *Nubia: Corridor to Africa*, p. 119.

⁶*Ibid.*

⁷H. Junker, 1921, “The First Appearance of Negroes in History,” *Journal of Egyptian Archaeology* 7: 123.

much different from Nordström's nomenclature.⁸ Williams's alternative seems not to have caught on because I think it was proposed too long after Nordström's had already taken root. I am inclined to agree with Mohammed-Ali that Trigger's scheme tends to confuse the issue of nomenclature.⁹ The same may be said of Adams's and Junker's terminologies for the name of the culture.

Chronologically, past studies (for example Trigger's)¹⁰ have equated the three A-Group phases with Kaiser's chronology for Egypt¹¹ as follows: (1) the Early A-Group, contemporary with Egypt's Naqada Ic and IIa-d phases, (2) the Classic A-Group, equivalent in time to the Naqada III culture, and (3) a Terminal A-Group, thought to be contemporary with the unification of Egypt in the First Dynasty.¹² The A-Group is well documented chronologically for the Classic and Terminal phases but not for the Early A-Group phase. It would seem that Nordström's dates for the Scandinavian Joint Expedition site 332/V, a fireplace or hearth at Ashkeit, should belong to the Early A-Group because its dates are younger than the Abkan and older than the Classic A-Group according to the dates reported by Nordström.¹³ However, the excavators have not assigned the hearth specifically to the Early A-Group or to

⁸For a good comparative summary of these classification schemes, with references, see B. B. Williams, 1986, *Excavations between Abu Simbel and the Sudan Frontier*, Keith C. Seele, Director. Part 1: *The A-Group Royal Cemetery at Qustul: Cemetery L*, p. 19.

⁹See A. Mohammed-Ali, 1982, *The Neolithic Period in the Sudan, c. 6000-2500 BC*, British Archaeological Reports International Series, S139.

¹⁰B. G. Trigger, 1965, *History and Settlement in Lower Nubia*, pp. 68-79.

¹¹W. Kaiser, 1957, "Zur inneren Chronologie der Naqadakultur," *Archaeologia Geographica* 6: 69-77.

¹²For the controversies surrounding the A-Group dissolution see the discussion below on the A-Group demise, Section 3.5.

¹³See H.-Å. Nordström, 1972, *op. cit.*, p. 251, Table 38.

any other phase, and the site description does not clarify the issue.¹⁴ I have therefore left its phase designation as questionable in my own Table (1-1, below), which gives all the published dates for the Classic and Terminal A-Group. The primary sources for the remaining dates are the three important sites of Afia, Halfa Degheim, and Debeira. The considerable number of dates produced for the Classic and Terminal A-Group from these sites makes these phases well dated. According to Hassan, "at least three dates from any single occupation are necessary for a reliable estimate of the time-range of that occupation."¹⁵

The varied ages obtained even from the same sample are the result of many factors. One is the inconsistent reporting of dates in B.P. and B.C. Some dates are calibrated or corrected, while others are not. The use of a different half-life is also a problem. The Libby half-life of 5568 years is normally used, which counts back from 1950, however the half-life of 5730 years is now considered more accurate.¹⁶ Nordström uses this in his Table 38 as well as the Libby half-life, and thus presents us with two different sets of dates for each of his samples. The use of different methods of correction (calibration curves, etc.) is another significant problem. Soper informs us that "...there is as yet no general agreement on a standard calibration."¹⁷ Furthermore, radiocarbon samples are variously treated, washed, handled, and stored, with little consistency between laboratories. Because of these and other problems

¹⁴For this information see *ibid.*, p. 172 ff.

¹⁵F. A. Hassan, 1986a, "Chronology of the Khartoum 'Mesolithic' and 'Neolithic' and Related Sites in the Sudan: Statistical Analysis and Comparisons with Egypt," *The African Archaeological Review* 4: 96-97.

¹⁶It is calculated by multiplying the Libby age by 1.03, yielding another B.P. date. See R. C. Soper, 1974, "New Radiocarbon Dates for Eastern and Southern Africa," *Journal of African History* 15 (no. 2): 15.

¹⁷*Ibid.*

TABLE 1-1. PUBLISHED A-GROUP RADIOCARBON DATES

PERIOD	SITE	SAMPLE NUMBER	UNCORRECTED DATES (B.P.)	CORRECTED DATES (B.C.)
?	SJE ¹⁸ 332/V-Ashkeit, all charcoal samples.	U-821 ¹⁹	5510 ± 170/160	3560 ± 160 ²¹
		U-2427	5290 ± 80	3340 ± 80
		U-2493	5210 ± 80	3260 ± 80
		U-4004	5060 ± 155	3110 ± 155
		W.A. ²⁰	5250 ± 50	3300 ± 50
Classic A-Group	SJE 277/65: 4. Halfa Degheim, cow hide samples with hair removed.	U-819	4630 ± 120	2410 ± 120 ²²
		U-818	4700 ± 110-100	1930 ± 420
		U-807	3880 ± 440-420	3470 ± 1000
		U-806	5420 ± 1140-1000	2750 ± 100
		W.A.	4655 ± 80	2705 ± 80 and 3415 ± 20 ²³
Terminal A-Group	SJE 277/49: 12. Halfa Degheim, cowhide samples.	U-835	4620 ± 90	3295 ± 120 ²⁴
		U-834	4360 ± 150	
		W.A.	4555 ± 75	
	SJE 340/SE II: 5. Debeira, charcoal sample.	U-2426	4440 ± 90	3155 ± 145 ²⁵ and 2490 ± 90 ²⁶
		W.A.		2210 ± 55
	SJE 340/SE II: 4. Debeira, charcoal sample.	U-2425	4240 ± 70	2290 ± 70 ²⁷
		U-2491	4060 ± 80	2110 ± 80
		W.A.	4160 ± 55	2805 ± 115 ²⁸

¹⁸Scandinavian Joint Expedition, followed by the site number and name.

¹⁹All dates for 'U' samples (not 'UW'), including their weighted averages are SJE dates, which are the conventional radiocarbon dates, where $T_{1/2}$ is 5570. For another set of dates with $T_{1/2}$ as 5730, see Nordström, 1972, vol. 3.1, Table 38, p. 251.

²⁰Weighted average or weighted mean value.

²¹This and the following four dates are in H. S. Green, 1975, "Sudanese Radiocarbon Chronology: A Provisional Date List," *Nyame Akuma* 6: 16.

²²*Ibid.*

²³This date is from F. A. Hassan, 1986a, *op. cit.*, p. 92.

²⁴*Ibid.*

²⁵*Ibid.*

²⁶This and the following date are from H. S. Green, 1975, *op. cit.*

²⁷*Ibid.*

²⁸This date is from F. A. Hassan, 1986a, *op. cit.*, p. 92.

TABLE 1-1, con't.

PERIOD	SITE	SAMPLE NUMBER	UNCORRECTED DATES (B.P.)	CORRECTED DATES (B.C.)
Terminal A-Group, con't.	Afia. Sample not specified.		4500 ± 120 ²⁹	
	Afia, AFH-7	TF-47	4380 ± 115 ³⁰	2430 ± 115 ³¹
		TF-48	4290 ± 120	2340 ± 120
		W.A.		3025 ± 120 ³²
	Afia, AFH-1	UW-30	4660 ± 100 ³³	2710 ± 100 ³⁴
				4535 ± 205 ³⁵
	Afia, Charcoal			4510 ± 120 ³⁶
4415 ± 115				
4650 ± 123				

²⁹The origin of this date is not clear. Nordström quotes Lal 1967: 109, but these are not the dates given by Lal (see the last set of three dates in this Table). Nordström also gives a weighted average for this and the following three dates in this column as 4458 ± 114 B.P.

³⁰This pair of dates is from S. Kusumger, D. Lal, and R. P. Sarna, 1963, "Tata Institute Radiocarbon Date List I," *Radiocarbon* 5: 279. See also R. M. Derricourt, 1971, "Radiocarbon Chronology for Egypt and North Africa," *Journal of Near Eastern Studies* 30 (no. 4): 283.

³¹This and the following date are from S. Kusumger, *et. al.*, 1963, *ibid.* See also C. Flight, 1973, "A Survey of Recent Results in the Radiocarbon Chronology of Northern and Western Africa," *Journal of Near Eastern Studies* 14 (no. 4): 536.

³²F. A. Hassan, 1986a, *op. cit.*

³³A. W. Fairhall, W. R. Schell, and J. A. Young, 1966, "Radiocarbon Dates at the University of Washington III," *Radiocarbon* 8: 502.

³⁴C. Flight, 1973, *op. cit.*

³⁵F. A. Hassan, 1986a, *op. cit.*

³⁶This and the final two dates are from B. B. Lal, 1967, "Indian Archaeological Expedition to Nubia, 1962: A Preliminary Report," in *Fouilles en Nubie, 1961-1963*, p. 109.

involved in reporting dates it is difficult even to give an average date range for the A-Group. Hassan has given 3400 to 2900 B.C. for the entire A-Group and estimates that "the acceptable dates for the Classic A-Group yield an average of 3240 ± 70 BC and those for the Terminal A-Group yield an average of 3070 ± 70 ."³⁷ A more recent and perhaps more accurate source has expanded Hassan's date range in both directions, giving 3700 to 2800 B.C. in the form of the following breakdown by phase:

- (1) Early A-Group: 3700 – 3250 B.C.
- (2) Classic A-Group: 3250 – 3150 B.C.
- (3) Terminal A-Group: 3150 – 2800 B.C.³⁸

This yields the following average age estimates for the three phases of the A-Group:

- (1) Early A-Group: 3475 B.C.
- (2) Classic A-Group: 3200 B.C.
- (3) Terminal A-Group: 2975 B.C.

³⁷F. A. Hassan, 1986a, *op. cit.*, p. 92.

³⁸C. Bonnet in D. Wildung, ed., 1997, *Sudan: Ancient Kingdoms of the Nile*, p. 37.

CHAPTER 2 – CRITICAL REVIEW OF THE A-GROUP LITERATURE

2.1. DISCOVERY AND STUDY OF THE A-GROUP TO 1969

There can be no doubt that the discovery of the A-Group is linked directly with the archaeological discovery of prehistoric Nubia. The main eras in the history of archaeological exploration in Nubia were prompted by the need for salvage operations associated with dam construction and enlargement in the First Cataract region of the Nile Valley. The periods of time in between these huge salvage projects saw a severe reduction in archaeological activity in Nubia, a situation that did not change until recently, when systematic exploration following the third and greatest survey (the High Dam Campaign) began in selected regions of Upper Nubia and the Sudan.

A. The First Archaeological Survey – 1907-1911

The knowledge of Nubian prehistory and history was extremely sparse at the start of the First Archaeological Survey. The existence of the pan-grave culture was known as a cultural and temporal unit that existed sometime between the Middle and New Kingdoms.¹ It was suspected but not confirmed that there may have existed predynastic people in Nubia because of the presence of a thin black-topped polished ware and a coarse incised ware in Nubian contexts that were similar, yet distinct from early Egyptian types. However, not a single predynastic Nubian site was known or recognized prior to 1907, which is not surprising given that no deliberate effort had yet been

¹The pan-grave culture was discovered by Petrie and Mace at the site of Hu. See W. M. F. Petrie and A. C. Mace, 1901, *Diospolis Parva: The Cemeteries of Abadiyeh and Hu, 1898-9*, Chapter 11: 45-49.

made to recover such remains. This was still the age when archaeological emphasis was placed largely upon visible and monumental remains such as temples, and this attitude is clearly reflected in Arthur Weigall's fieldwalking survey.² This was the only extensive archaeological work to be conducted in Lower Nubia before the First Archaeological Survey.³ Not only does Weigall's work show a lack of interest in and awareness of prehistoric Nubian sites, but it also shows a lack of basic recognition when these types of sites were encountered in the course of survey. The pottery drawings, for example, show clearly that some A-Group types were present,⁴ and some of the graves Weigall describes, albeit briefly, sound suspiciously like A-Group burials. For example, one excerpt reads:

"As regards the other cemeteries of Lower Nubia, little requires to be said here...the graves...are always oval or circular and are cut in the hard earth or marl. All the sites are hopelessly plundered."⁵

Furthermore, the fact that no excavation was carried out by Weigall implies that these graves must have been very near the surface in order to have been spotted, a very distinctive and common feature of the A-Group cemetery when affected by denudation. Lack of awareness of predynastic Nubia is also reflected in the account of Nubian history given by Weigall,⁶ which is based

²A. E. P. Weigall, 1907, *A Report on the Antiquities of Lower Nubia (The First Cataract to the Sudan Frontier) and their Condition in 1906-7*.

³It should be noted that I have not included here the earlier so-called historical studies conducted by various travellers and scientists at or around the turn of the century, as these studies have no direct bearing on the archaeology of the A-Group in Lower Nubia. Some are, however, of great interest. For a short summary of the contributors see B. G. Trigger, 1965, *History and Settlement in Lower Nubia*, pp. 36-37.

⁴See Plate A and the 'rocker stamp' decoration in Plate 87, A. E. P. Weigall, 1907, *op. cit.*

⁵*Ibid.*, p. 31.

⁶*Ibid.*, pp. 4-24.

entirely upon Egyptian contact with Nubia beginning in the Third or Fourth Dynasty.

Despite the drawbacks of Weigall's survey, it did set the precedent for large-scale survey in Nubia, which it was intended to do in preparation for the expansion of the original Aswan Dam.⁷ Weigall states that one of the objectives in his brief survey was "...to give some idea of the work which will have to be undertaken in that part of Lower Nubia which will be flooded when the Barrage is raised."⁸ Because of the lack of knowledge about prehistoric Nubia, one of the primary aims of the first survey was to establish a chronological series of cultures for Nubia, with emphasis on prehistory, as had been accomplished for Egypt. This preference for early sites was well justified, and according to Adams, "...based on the sound principle of concentrating on the least-known periods."⁹ The area extended from the head of the First Cataract to about the village of Derr (Figure 2), some 250 kilometers, and also included the sides of the valley and floodplains of the Nile, to a height of about nine meters above the then present reservoir water level of 106 metres.¹⁰

It was during the first season of the First Archaeological Survey that the A-Group culture was discovered at Shellal. The discoverer and sole director of the project in its first year, George A. Reisner, concentrated his efforts on the

⁷The dam was already five years old at the time of the First Archaeological Survey, having being built between 1899 and 1902. There was no large scale archaeological campaign associated directly with the building of the dam, but when the Egyptian government decided in 1907 to increase the volume of water stored in the dam's reservoir in order that new lands might be reclaimed, funds were set aside for an extensive survey.

⁸A. E. P. Weigall, 1907, *op. cit.*, p. 1.

⁹W. Y. Adams, 1977, *Nubia: Corridor to Africa*, p. 71.

¹⁰The height of the dam was increased by seven metres to a total height of 113 metres. Therefore the height of the survey's investigation exceeded the new height of the dam by two metres.

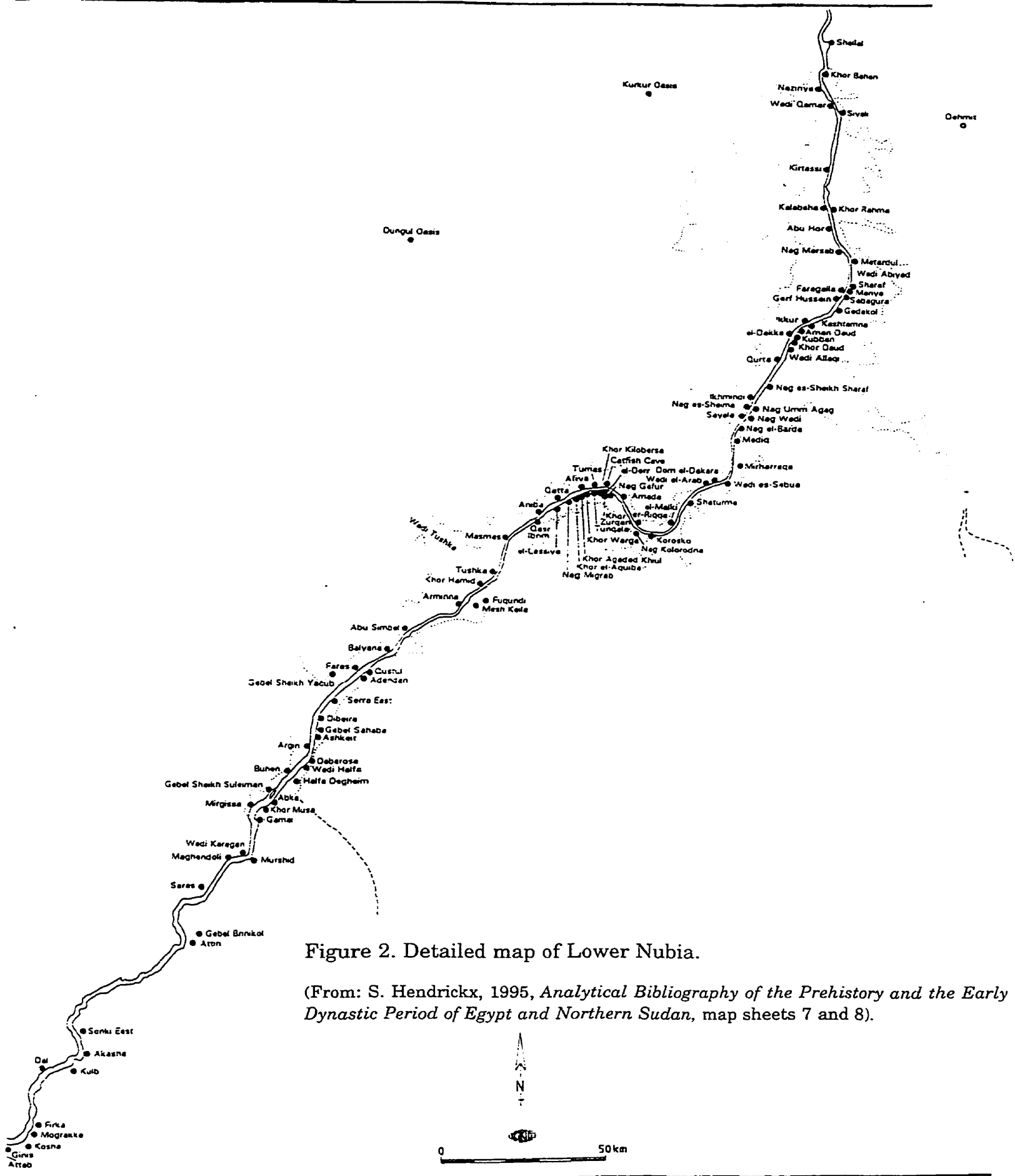


Figure 2. Detailed map of Lower Nubia.

(From: S. Hendrickx, 1995, *Analytical Bibliography of the Prehistory and the Early Dynastic Period of Egypt and Northern Sudan*, map sheets 7 and 8).

discovery and exploration of predominantly prehistoric sites between Shellal and Wadi es-Sebua (Figure 1) along the Nile Valley. Reisner's assistant in the first year, C. M. Firth, took over the project's direction and publication in its subsequent three seasons. The end result was that five major volumes of reports were produced, supplemented by seven smaller bulletins. Reisner's publications were the first of each series¹¹ to set the precedent for the survey's publication to 1911 and beyond.

Given that prehistoric sites were the primary target for exploration, it is perhaps surprising to find that all of the first survey's reports describe in detail much of the later material overlying or cutting into A-Group deposits, such as C-Group, Middle Kingdom, New Kingdom, Ptolemaic/Roman, Byzantine, Christian, and Moslem remains. Thus, it is important to note that no comprehensive account from this early period of archaeological work has been devoted solely to the A-Group culture. The predominant type of A-Group evidence found was grave sites,¹² with the additional discovery of three early habitation sites, which included the "Archaic Camp"¹³ at Cemetery 41 (Meris, Figure 1), found by Reisner in the first season, and dated to the Late Predynastic Period, and two settlements discovered by Firth in his second¹⁴ and third¹⁵ seasons.

¹¹See G. A. Reisner, 1910a, *The Archaeological Survey of Nubia: Report for 1907-1908. Volume I. Archaeological Report*; 1910b, *The Archaeological Survey of Nubia: Report for 1907-1908. Plates and Plans Accompanying Volume I*; 1907-1908, *Bulletin of the Archaeological Survey of Nubia 1 (1907-1908)*.

¹²This, incidently, was true for all periods. For example, the only non-A-Group habitation remains found by Reisner was a single Roman camp at Shellal (G. A. Reisner, 1910a, *op. cit.*, pp. 72-73). Firth found in his first season a mud-brick fort at Ikkur or Kuri (C. M. Firth, 1912a. *The Archaeological Survey of Nubia: Report for 1908-1909. Volume I*, pp. 22-25).

¹³For details of this site see G. A. Reisner, 1910a, *ibid.*, pp. 215-218.

¹⁴C. M. Firth, 1915, *The Archaeological Survey of Nubia: Report for 1909-1910*, pp. 9-10.

¹⁵C. M. Firth, 1927, *The Archaeological Survey of Nubia: Report for 1910-1911*, p. 152.

The Archaic Camp as described by Reisner has now been designated as the typical temporary A-Group structure having no permanent structural features such as stone walls or mud floors.¹⁶ Reisner estimates that this settlement may have housed about a dozen families, and was therefore quite small. The presence of sixteen hearths or fireplaces indicated that the area may have been occupied for some length of time, although Reisner could not determine the length of occupation beyond a period longer than "...a few days."¹⁷ He argues, however, that a lengthy occupation is "...supported by the fact that near by was a small cemetery of nineteen graves of the same date, apparently the cemetery of this camp."¹⁸ There was also some speculation by the author that it may have been a funerary camp where feasts were held for the deceased who were buried in the adjacent cemetery. However, as Reisner claims, such a theory does not account for the apparent sudden abandonment of the site. Furthermore, as far as I know, the existence of this type of funerary camp is not attested to elsewhere in any A-Group context, and it is unlikely that Reisner's estimation of the site is correct.

In addition to this habitation site, Reisner reported the possibility that there may have been a settlement associated with Cemetery 17 at Khor Bahan (Figure 1), the oldest burial site of A-Group date. But Reisner seemed uncertain of this, saying:

"...these conclusions can only be received with caution, owing to the manifest incompleteness of our material. At cemeteries 13 and 17, a great deal of ground has been washed away by

¹⁶Trigger first designated the type, while Nordström further added to this category. See B. G. Trigger, 1965, *History and Settlement in Lower Nubia*, p. 76; H.-Å. Nordström, 1972, *Neolithic and A-Group Sites*, vol. 3.1, p. 20. This type of structure is discussed in further detail below, as an example was also found by Griffith at Faras during this same archaeological era.

¹⁷Reisner, 1910a, *op. cit.*, p. 215.

¹⁸*Ibid.*

torrents...the *sebakh*-diggers have practically destroyed the graves.”¹⁹

The first settlement area described by Firth was clearly associated with the A-Group cemeteries of Dakka (Figure 1). Firth gives a disappointingly small amount of information, but the habitation area appears to have remained in use until the very latest stages of the A-Group’s duration. When reading Firth’s assessment of its duration, it must be remembered that the A-Group population was considered at this time to be Egyptian and distinct from the ‘degenerative’ and more ‘negroid’ Nubian B-Group.²⁰ Firth writes about the settlement:

“The small pioneer settlement, of which the graves form the earlier portion of Cemetery 103, was succeeded by a thriving population at about the time of the First Egyptian Dynasty, which buried its dead in that modification of the Predynastic manner which is peculiar to Nubia, and appears to have been retained in use until the Third Dynasty, with very little change beyond that general degeneration in the quantity and quality of the funerary offerings, significant of the decline in prosperity which is represented by the B-group graves.”²¹

Firth’s claim of a Third Dynasty survival for such a colony is not verified by any material evidence, and it is difficult to accept based on the evidence we now possess about the A-Group’s duration. If the colony did indeed survive into the Third Dynasty, it must have been one of the few A-Group settlements to do so. The entire matter of the A-Group demise is dealt with fully below (Section 3.5). The settlement itself is described as follows:

“Traces of the settlements of the Early Dynastic population of Dakka were found between the cultivation and the cemeteries along the desert edge. The lower parts of rubble walls,

¹⁹*Ibid.*, p. 114.

²⁰We now know that the B-Group is a late component of the A-Group. A full treatment of this development is given below.

²¹C. M. Firth, 1927, *op. cit.*, pp. 7-8.

deposits of ashes, potsherds, and the bones of animals which had been used as food, covered a considerable area which at first sight appeared to be a cemetery plundered by the *sebbakhîn*. The flint flakes, ashes, and the great quantity of stone chippings and axes in all stages of manufacture, point conclusively to the place having been occupied by the living rather than the dead."²²

The second of Firth's habitation sites was found at the A-Group cemetery behind the village of Qurta (Figure 2), and is also given only a cursory description. Firth writes:

"The ground occupied by Cemetery 120 was a long stretch of alluvial soil capped with gravel and sand. The site was first occupied by an archaic settlement. Bones, ashes, broken pottery and small ground stone axes of the Early Dynastic and Old Kingdom periods were found scattered over a large area. The site could not have been that of a cemetery on account of the deposits of ashes and broken animal bones, and the stone axe-heads were found in every stage of manufacture."²³

Of the total data base of grave sites recovered by the First Archaeological Survey, 2,106²⁴ A-Group burials were found, this number representing about 25.6 per cent of all graves found by the Survey. Sites and areas yielding A-Group material during Reisner's first season were: Shellal, Khor Bahan, Khor Ambukol, Naziria (Dabod), Ras Um Salim or Risqalla, Khor Meris, Siali, Dahmit, Khor Berastod, Shem Nishai, Bugga, Metardul, and Sekuti.²⁵ A-Group sites found by Firth in the subsequent three seasons were, for the most part, in the Gerf Husein and Dakka districts, and in the Koshtemna region.

²²*Ibid.*, pp. 9-10.

²³*Ibid.*, p. 152.

²⁴This and the following percentage are derived from Adams' totals (1977, *op. cit.*, p. 72) using the B-Group numbers as well.

²⁵Most of these sites may be found in Figure 2, but some occur in Figure 1 as well. Note that the spelling of many place names varies between publications and authors. This applies to all maps cited in this work.

These were: Moalla, Dakka, Koshtamna, Khor Nugdi, Gedekol, Meqîq, Ikkur or Kuri, Aman Daûd, Wadi Abiad, Kubban, El Alagi or Wady Alagi, Qurta, Sayala, Naga Wadi, and Gebel Um Simbela.²⁶ In addition, modest numbers of animal graves were discovered, but these generally occurred in association with human burials, such as with the graves at Cemetery 17 (Khor Bahan) and at Cemetery 23 (Naziria).²⁷

The method of recording graves in the survey's publications was by means of a short descriptive paragraph, giving (1) the shape and dimensions of the burial chamber, (2) overall condition of the burial, (3) orientation with regard to head position and the side on which the body lay, (4) contents of graves, and (5) often, but not always, a sketch-plan of the burial. In addition, a photographic record was published for a small corpus of graves. The longest descriptions were for those graves containing many grave goods, in which case each item was listed. Reisner's field methodology of using a single index card for each tomb is worthy of mention because it was the first example of this form of systematic recording, which proved to be extremely successful during this and the subsequent years of the First Archaeological Survey. Modern authors still commend the methodology, such as Trigger, who writes:

"His system, which marked a great advance over previous field methods, led to a clear and thorough record of the work which the survey accomplished and set the standard for subsequent work in Nubia and elsewhere. The uniformity, and hence comparability, of the reports of these surveys, which constitute much of the total data available for Nubia, makes for an ease in dealing with this material that is worthy of the highest praise."²⁸

²⁶The same reference as above (note 25).

²⁷For details see G. A. Reisner, 1910a, *op. cit.*, pp. 139-140 and p. 168 respectively.

²⁸B. G. Trigger, 1965, *op. cit.*, p. 38.

In spite of having excavated new A-Group cemeteries and two early settlements, Firth's work added little that was new to the knowledge of the A-Group culture. Although Firth claims to "confirm and illustrate"²⁹ Reisner's findings, there is some suggestion in his writing of a departure from Reisner's A, B, and C-Group sequence toward a view that the C-Group culture displaced rather than evolved from the B-Group. Firth implies from this that he sees no evidence of continuity between the so-called B-Group population and that of the C-Group, but he does instead argue in favour of some type of relationship between the Predynastic Egyptian culture and the C-Group on the basis of ceramic affinities.³⁰ Such a view cannot be verified even by current evidence, but one sees already for the first time since Reisner's work, a questioning of the A, B, and C-Group continuum that was originally postulated. Firth must also be given credit for being willing to consider both indigenous and non-indigenous origins for the C-Group, if not for the A-Group, even though lack of evidence prevented this matter from being settled. He writes:

"The sudden appearance of the C-Group culture would...seem to imply a sudden occupation of this part of the Nile Valley...by a race who, for some cause, had been compelled to leave their original home. It is however, always possible that a direct connection and sequence may be established between the late Early Dynastic and the C-Group periods, and that the latter culture is of indigenous development and not introduced, but at this stage of the inquiry the evidence would certainly seem insufficient to support such a hypothesis."³¹

The importance of this earliest of systematic surveys cannot be underestimated, as it not only saw the discovery and definition of the A-Group,

²⁹C. M. Firth, 1927, *op. cit.*, p. iv, Preface.

³⁰*Ibid.*, pp. 11 and 14.

³¹*Ibid.*, p.14.

but generated a data base that forms the basis of most of our knowledge of the A-Group (and other cultures) to the present day. It will be seen that the number of A-Group discoveries made since then have been meagre by comparison, and have only somewhat embellished Reisner's original assessment of the A-Group complex. Perhaps the most serious fault to be found with the fieldwork campaign is that it concentrated too heavily upon mortuary remains, to the general exclusion of other types of evidence, such as habitation or other activity sites. Admittedly, domestic A-Group sites were not found in abundance even after the first survey, but one wonders if an early attention to such site-types would not have altered our present knowledge and perception of the A-Group complex. Adams has pointed out another shortcoming of the work of the First Archaeological Survey, this being the extent of the publication of results. He writes:

“Neither the *Bulletins* nor the *Reports* are in any sense comprehensive accounts of the work of the First Archaeological Survey. Some sites were never described in print, and in many other cases we remain ignorant of how much was done or was not done.”³²

It should be noted that other cultures subsequent to the A-Group and unknown to archaeologists at the time were also discovered by Reisner and ordered chronologically following the A-Group. These are: (1) the already mentioned B-Group, thought to have been contemporary with the Old Kingdom, (2) the C-Group, which is now well accepted as being coeval with the First Intermediate Period and the Middle Kingdom, (3) the D-Group, contemporary with the New Kingdom, although this terminology has now completely dropped out of use in the literature, and (4) the X-Group, a transitional phase between the Meroitic kingdom and the beginning of the

³²W. Y. Adams, 1977, *op. cit.*, p. 74.

Christian period, now known alternatively as the Ballana culture.³³ Together these groups form a more or less continuous cultural sequence in Lower Nubia to the beginning of the Christian era.

Reisner and Firth's expeditions were not the only ones to enter the field at the time of the First Archaeological Survey, and in fact two other contemporary projects contributed to the knowledge of the A-Group. The first was the Oxford Expedition headed by Griffith, which conducted excavations between 1910 and 1913 at the sites of Faras and Sanam. It was the site of Faras (Figure 2), the first site to be excavated in Sudanese Nubia, that yielded A-Group material in the form of both a small settlement and a more substantial burial ground. The settlement is of the same type as the Archaic Camp described by Reisner. Griffith most unjustly, I think, devotes only a single short paragraph to the habitation site,³⁴ while the remainder of the article is devoted to the cemetery site. The former is described as having "...no depth of remains, nor are there any traces of brick or stone construction."³⁵ The remains are further described as

"...evidently the site of a primitive settlement of which the houses perhaps had no mud or brick walls, and consisted merely of such materials as the tamarisk branches, palm sticks and straw of which the modern cattle shelters and temporary huts in Nubia and Egypt are built."³⁶

Unfortunately there is no mention of the number of such houses represented at the site. The finds that were recovered from this settlement included

³³Reisner also designated the Christian Period remains as 'Y-Group,' and the period following the X-Group as the 'W-Group' (see B. G. Trigger, 1965, *op. cit.*, p. 38), but both terms are no longer recognized today.

³⁴F. Ll. Griffith, 1921a, "Oxford Excavations in Nubia," *University of Liverpool Annals of Archaeology and Anthropology* 8: 4-5.

³⁵*Ibid.*, p. 4.

³⁶*Ibid.*

potsherds, flint flakes, one polished celt, a copper piercer, a cylinder seal, and one C-Group bracelet, whose presence at this site was deemed as “probably accidental.”³⁷

Evidence for this type of settlement has become only a little more abundant since these early days of its discovery, but it is now recognized as the most common type of temporary A-Group shelter. This type of structure leaves very little trace in the archaeological record, perhaps only a few scattered bits of wood and the occasional post hole. This may perhaps explain the brief treatment given to the houses found by Griffith. Based on examples found by the Scandinavian Joint Expedition in the 1960’s, Nordström reconstructs their forms as:

“...simple reed huts, erected on a light wooden framework, [which] formed the basic house units...where property could be stored and shelter provided.”³⁸

Griffith’s comparison of the Faras structures to the modern type in Egypt and Nubia is well justified and confirmed by later scholars. Nordström has in fact applied the modern term *rakuba* to this house type.³⁹

The cemetery at Faras showed evidence of 116 graves, almost all of which were badly denuded, as is typical of A-Group cemeteries. Only sixteen of the graves (13.8 per cent of the total) were described in any detail, but the criteria governing the choice for description were not given. Perhaps one may assume that these sixteen graves were the only ones that produced human remains and for the same reason they were the only ones to have been published.⁴⁰ In contrast with the projects of Reisner and Firth, no anatomical studies were

³⁷*Ibid.*, p. 5: note 3.

³⁸H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 20.

³⁹*Ibid.*, p. 141.

⁴⁰See Plate II of Griffith’s report, 1921a, *op. cit.*

conducted on the human remains. Furthermore, there appears to be nothing extraordinary about the material recovered from both A-Group site-types at Faras. The pottery collection yielded the typical combination of Egyptian imported wares and Nubian indigenous types, such as the variegated haematitic wares and the black-mouthed varieties. The excellence of some of the Nubian examples was acknowledged by the excavator, who writes:

“...while much is altogether of miserable quality, decorative and artistic aims were still studied by the potter in Nubia with brilliant results.”⁴¹

In addition, it should be noted that the influence of Reisner’s contemporary work on the A-Group was clearly evident from Griffith’s statements about the racial make-up and the demise of the A-Group population. Griffith assumed without question that the Nubian predynastic people were of Egyptian origin, and that their disappearance

“...may be sought in various possibilities – the growth of prosperity and activity in Egypt may have attracted the colonists back, they may have retired before famine or pressure by barbarous foes, or perhaps Egypt was alienated from its half-breed cousins and raided them to destruction.”⁴²

A second project contemporaneous with the First Archaeological Survey was Junker’s expedition at Kubanieh South, which took place between 1910 and 1912. Junker excavated a large and important A-Group cemetery containing about 175 A-Group and B-Group graves.⁴³ Of this number, eighty graves were assigned to the B-Group, and most of these were found in the northeastern part of the cemetery. A great proportion of the total number of

⁴¹*Ibid.*, p. 7.

⁴²*Ibid.*, p. 11.

⁴³For a complete list of the burials see H. Junker, 1919, *Bericht über die Grabungen der Kaiserliche Akademie der Wissenschaften in Wien auf dem Friedhöfen von el-Kubanieh-Süd, Winter 1910-11*, pp. 122-158.

graves was badly plundered and not assignable to any period. Junker relied heavily upon Reisner's evaluations of the A and B-Group graves as well as Reisner's interpretations, but there were some notable differences in Junker's analyses. For example, Junker was very critical of Reisner's Egyptian origin theory for the A-Group, preferring instead to view the population of Lower Nubia as indigenous from about the time of the Middle Prehistoric period. His argument reads as follows:

“Nehmen wir nun an, wie es Reisner tut, daß Rasse und Kultur in Ägypten und Nubien auch noch während der ganzen Mittelprähistorie, ja bis zur I. Dynastie völlig gleich waren, so kann ich mir nicht denken, daß in einer verhältnismäßig so kurzen Zeit wie die Spätprähistorie ein so durchgreifender Einschnitt erfolgen konnte, daß ihn der in unserer Gegend bald stark einsetzende ägyptische Einfluß nicht mehr zu überbrücken vermochte.

Ganz anders aber wenn diese Absonderung schon lange vorher bestand, wenn sich ein völkischer und kultureller Gegensatz schon weiter hinauf konstatieren läßt. Dann ließe sich das Beharren in der althergebrachten, heimischen nubischen Kultur auch hier verstehen, trotz der Einflüsse Ägyptens, und es fände in den moderen Verhältnissen die beste Parallele.”⁴⁴

Junker was also very critical in his dating of certain of the graves, and he tended to question Reisner's placement of the B-Group graves to the period following the A-Group. Despite this questioning he was unable to correctly order the B-Group chronologically, as he placed some B-Group graves before the A-Group on the basis of the general poverty of some B-Group burials at Kubanieh. Junker writes:

Ich glaube, daß eine Anzahl von Gräbern, die man der B-Epoche zuteilte oder unbestimmt ließ eben in diese Zeit vor der A-Periode zu setzen ist.”⁴⁵

⁴⁴*Ibid.*, p. 5.

⁴⁵*Ibid.*, p. 26.

It is therefore not surprising to find that many graves that Reisner and others would have ascribed to the B-Group have been classified by Junker as belonging to the late Predynastic period. This result was found by Smith in his later re-assessment of the B-Group (see below) to be justified, although it still did not properly account for all of the B-Group graves at Kubanieh. It should be noted that otherwise, Junker's treatment of the material recovered from the Kubanieh cemetery was exemplary, with his classifications of graves types, wares, and object types corresponding very closely with those of Reisner.⁴⁶

Of the five other teams in the field at the time of the First Archaeological Survey (the University of Pennsylvania, the Oxford University, the Vienna Academy of Sciences, the Meroë Expedition, and the Wellcome Excavations), only the Wellcome Expedition would contribute further to the knowledge of prehistoric Nubia, albeit not to the knowledge of the A-Group. Most of their work was conducted at the site of Jebel Moya in the area of Gezira (Figure 3), well to the south of Lower Nubia.⁴⁷ Generally the other four projects also contributed to the knowledge of much later periods of Nubian history, such as the Christian and Meroitic periods. Reisner himself, who was absent from the field after 1907, returned in 1913, but only to carry out work in the historic, not the prehistoric past. He was, however, indirectly involved in later A-Group

⁴⁶All of these aspects of A-Group material culture are examined in Chapter 3 below.

⁴⁷Jebel Moya was the first Neolithic occupation excavated in the Sudan, long before the discovery of early Khartoum by Arkell in 1944 (discussed below). However, Jebel Moya had a very late occupation (c. 1000 B.C. to c. 400 B.C.) in comparison with the A-Group area to the north, and there is nothing to suggest A-Group links with this particular culture of the Blue Nile region. There has been much controversy over the site because of the manner of its excavation and the very late date of publication (See F. Addison, 1949, *The Wellcome Excavations in the Sudan: Jebel Moya*, 2 vols.), but the story of its excavation makes for interesting reading. The site was the only project of its scale in the Sudan to have been privately funded, and thus its aims and methods stand in marked contrast to those of the government surveys of Nubia. In the new archaeological climate of that time, it should probably be noted as one of the last examples of how archaeology used to be done.

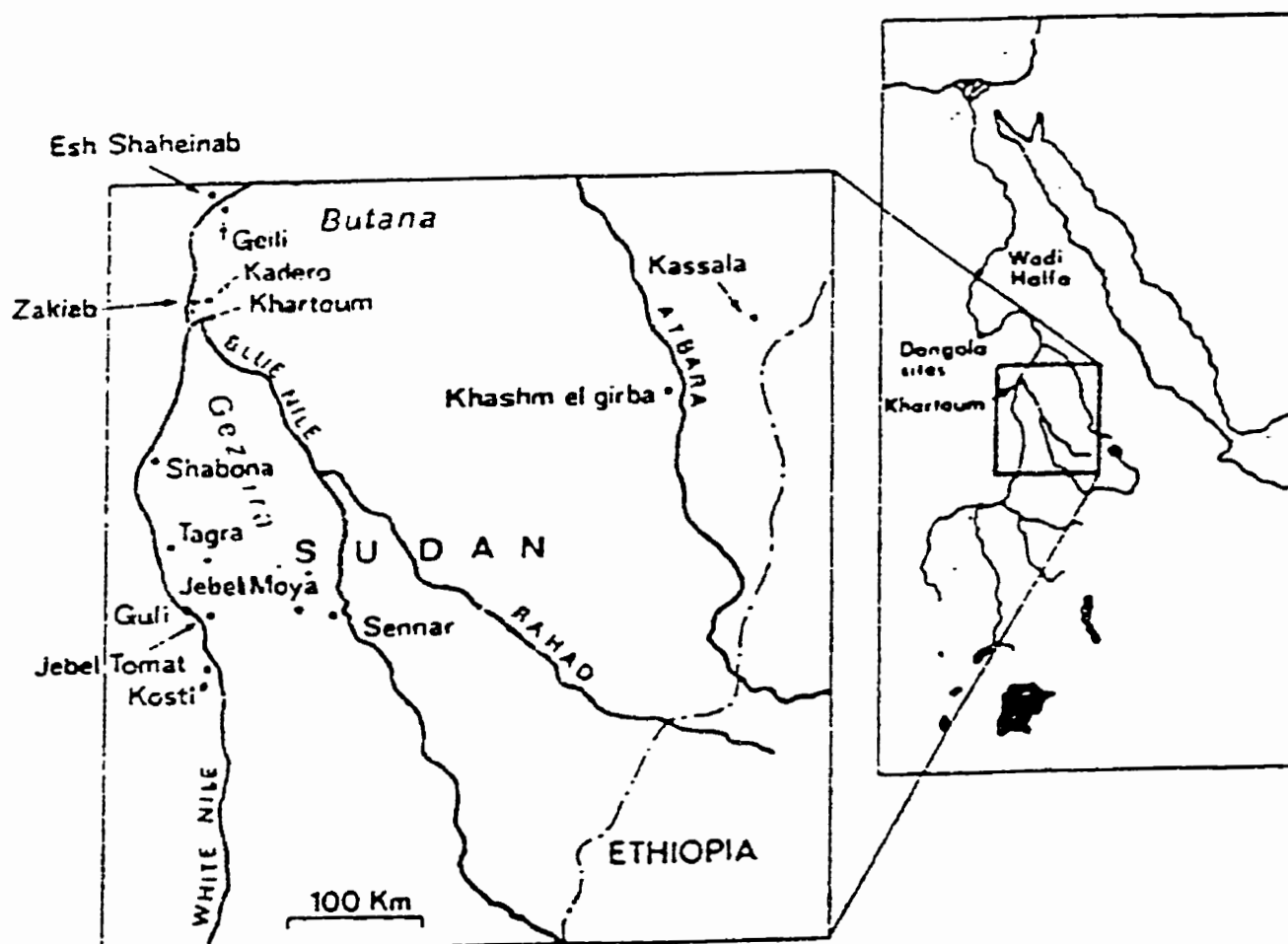


Figure 3. Map of the Blue and White Niles showing sites mentioned in the text.

(From: J. D. Clark, 1989, "Shabona: An Early Khartoum Settlement on the White Nile." In *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and L. Kobusiewicz, p. 387).

work, and his influence in the field continued to be felt beyond the First Archaeological Survey.

Although the first survey ended in 1911, a meagre amount of work was conducted in Nubia after that time until the start of the Second Archaeological Survey. It is surprising to find that even during the first great war, a few scholars managed to remain in Nubia to continue with archaeological investigation. One team in particular, the Metropolitan Museum of New York, made significant A-Group discoveries at the site of Gamai (Figure 1), which was the second of only two A-Group sites to be excavated in Sudanese Nubia before the third archaeological salvage campaign of the 1960's. The site was excavated by O. Bates and D. Dunham at the suggestion of Reisner, between October of 1915 and January of 1916. Only the first few pages of the archaeological report are devoted to the A-Group remains at the site,⁴⁸ but what was found was significant.

Four small cemeteries dating to the A-Group period were discovered, although three of these were in such a state of disarray that little could be said about them. Of these three, two were located on the Gamai plain, while the other occurred near Abka (Figure 1), which lies to the north and west of Gamai. The two Gamai cemeteries yielded forty-six and twenty two graves respectively, the first of which was described as

“...completely cleaned out. The surface was strewn with shards of typical archaic wares, the outlines of the circular and oval graves were well defined, and an occasional fragment of bone was found in the disturbed filling of a grave. No single object was found intact: not a bone was found in its original position; and after five days' work the site was abandoned.”⁴⁹

⁴⁸ O. Bates and D. Dunham, 1927, “Excavations at Gammal,” in *Varia Africana IV*, Harvard African Studies, Vol. 8, edited by E. A. Hooton and N. I. Bates, pp. 7-13.

⁴⁹*Ibid.*, p. 7.

Similarly, the early cemetery at Abka, which contained seventeen graves, “...was so hopelessly plundered and cut about”⁵⁰ that it warranted only a cursory investigation. However, a fourth cemetery (No. 600) was found to contain fifteen largely unlooted graves of the type already described by Reisner and Firth. These Gamai graves were enumerated and described in the same manner as was done by the First Archaeological Survey, and although they were not spectacular in terms of size or content, they did yield two unprecedented finds, namely feather garments in the form of a cap and a cloak.⁵¹ Both of these were found *in situ* on bodies in two separate graves, and they represent the first such items known in Nubia. Hitherto only feather fans and plumes, presumably for caps, have been discovered in A-Group contexts. Another noteworthy feature of these Gamai sites is that they represented at the time “...the most southerly proto-dynastic occupation yet recorded, the nearest point to the north where similar remains have been recorded being at Faras,”⁵² as already noted.

From the presence of ceramic and other remains on the surface, and the material recovered from the graves, the authors maintain that Gamai was occupied during Late Predynastic and Early Dynastic times. There was no mention of habitation remains having been found at the site, but a group of circular storage pits was found to the north of one of the Romano-Nubian cemeteries. They were found to contain “...a few late Romano-Nubian pots and cups.”⁵³ For this reason and because of their proximity to the Romano-Nubian cemetery, it is difficult to understand the authors’ estimation of them as

⁵⁰*Ibid.*, p. 13.

⁵¹See *ibid.*, Plate IV, Fig. 3, and Plate V, Fig. 2, although the photographs are of rather mediocre quality.

⁵²*Ibid.*, p. 12.

⁵³*Ibid.*, p. 13.

“grain stores”⁵⁴ of the Late Predynastic or Proto-dynastic period. If they are indeed A-Group storage bins for grain, then their significance to A-Group agriculture deserves a far fuller treatment than that given to them in this publication. They were described simply as

“...pits slightly narrower at the top than at the base. They averaged about 200 cm. (mean diameter) by 150 cm. deep, and had their sides carefully mud-plastered wherever there was a crack or fault in the alluvium.”⁵⁵

It is unclear on what grounds the authors call these pits grain stores, as there is no mention of any remains of grain having been found, or indeed of any parallels for this type of feature in another A-Group context. To my knowledge, no such feature was yet known (at that time) amongst the A-Group corpus of sites, and it is therefore quite possible that the authors were premature in their estimation of both the date and the type of feature that these pits represent.

Also before the start of the Second Archaeological Survey we have a report from J. W. Crowfoot that testifies to the fact that he was collecting potsherds in the east-central Sudan, near the vicinity of Kassala (Figure 3) in 1926.⁵⁶ Although this area is today becoming well known archaeologically, very little was known about it at that time, and this would remain the case until well after the Second Archaeological Survey. The only other projects in the area at the time of Crowfoot’s sherd-collecting expedition were the German and Italian teams at Axum and Eritrea respectively, both

⁵⁴*Ibid.*

⁵⁵*Ibid.*

⁵⁶J. W. Crowfoot, 1928, “Some Potsherds from Kassala,” *Journal of Egyptian Archaeology* 14: 112-116. This location has now been designated as the site of Mahal Teglinos, (discussed below) and has recently received much archaeological attention.

investigating predominantly late-period remains.⁵⁷ Crowfoot did uncover material that was comparable to the types found by both German and Italian missions, but more importantly for the present work, is his discovery of early sherds that showed for the first time, possible connections between the eastern Sudan and Lower Nubia in roughly A-Group times. He mentions in particular, the absence of handles, spouts, and knobs for suspension, which "...is a feature of early Nubian ware and, with some qualifications, of predynastic Egyptian pottery."⁵⁸ In addition, he found sherds showing the presence of red black-topped ware, which we now know to be representative of the indigenous A-Group wares, as well as sherds showing the unmistakable rocker stamp decoration. It is a credit to him that he recognized the implications of this material for ancient Sudanese/Nubian cultural relationships. He writes:

"The evidence quoted...suggests that the relationship between Kassala and Nubia is very similar to the relationship between Kassala and Axum, and it seems to me that a parallel to those relations can be found in the Southern Sudan to-day."⁵⁹

He further suggests that Kassala not only had links with other eastern Sudanese centres such as Axum, but it was likely linked with the Nile Valley as well.⁶⁰ Recent research has indeed shown the latter to be true, and that such links extended farther back than Crowfoot envisioned, being in fact contemporary with the existence of the A-Group to the north. The possible implications of these Kassala–Nile relationships to A-Group relationships are developed below (Chapter 4).

⁵⁷For references to their work see *ibid.*, p. 114.

⁵⁸*Ibid.*

⁵⁹*Ibid.*, p. 115.

⁶⁰*Ibid.*, p. 116.

B. The Second Archaeological Survey - 1929-1934

This archaeological project was initiated by another raising of the Aswan Dam (to 122 metres above sea level) and the subsequent flooding of the area between Wadi es-Sebua and Adindan. The project, directed and published in part by W. B. Emery, with the assistance of L. P. Kirwan,⁶¹ resembled the first survey in many respects. The organisation of the project followed that of Reisner's very closely, in that the archaeological work was assisted by an anatomist, in this case, Batrawi, who published an analysis of the human remains from all periods.⁶² Furthermore, like the first survey, prehistoric mortuary remains of all periods were intended to be the primary target of investigation, but this ceased to be the case once the important sites of Qustul and Ballana (Figure 2) were discovered in the third season. Thenceforth, for the remainder of the survey, the royal X-Group cemeteries became the primary focus of attention, to the overall exclusion of other sites and the other periods in Nubian history and prehistory. Trigger writes:

“It is unfortunate that the finds at Qustul and Ballana required so much attention that they prevented the completion of a systematic survey of the east bank prior to flooding...It is, for example, particularly regrettable that cemetery 207...was merely noted to contain graves of the

⁶¹W. B. Emery and L. P. Kirwan, 1935, *The Excavations and Survey between Wadi es-Sebua and Adindan, 1929-31*, 2 vols. See also the preliminary reports by Emery, one for each of the four seasons of excavation: (1) 1930, “Preliminary Report of the Work of the Archaeological Survey to Nubia, 1929-1930,” *Annales du service des antiquités de l'Égypte* 30: 117-28, (2) 1931, “Preliminary Report of the Work of the Archaeological Survey of Nubia 1930-1931,” *Annales du service des antiquités de l'Égypte* 31: 70-80, (3) 1932, “Preliminary Report of the Work of the Archaeological Survey of Nubia 1931-1932,” *Annales du service des antiquités de l'Égypte* 32: 38-46, (4) 1933, “Preliminary Report of the Work of the Archaeological Survey of Nubia, 1932-1934,” *Annales du service des antiquités de l'Égypte* 33: 201-207.

⁶²A. M. el Batrawi, 1935, *Report on the Human Remains*.

‘Early Dynastic, C-Group, and New Kingdom periods’ and not a single grave described.”⁶³

As for A-Group material, only the first and second seasons of work revealed sites of that period. Although this survey yielded more habitation remains than the first survey, only one, unfortunately, was of A-Group date. This was a small settlement near El Diwan, which had been extensively cut into by graves of a New Kingdom cemetery. Very little was written about the settlement, perhaps because so little was left of it. Emery remarks:

“All traces of the Archaic huts had disappeared, but a number of pots which had been sunk into the flooring were found in position, together with three fine celts.”⁶⁴

The total contribution this survey made to the knowledge of the A-Group was that 222 new graves were discovered within a collection of sixteen sites,⁶⁵ a paltry amount compared with the over 2,000 graves found by the First Archaeological Survey. Locations of the A-Group cemeteries were at Kasr Ibrim, Amada, Masmara, and Abu Simbel.⁶⁶ The majority of these cemeteries was extremely small, compared with the larger burial grounds uncovered by the First Archaeological Survey. Cemetery 218,⁶⁷ although very large, was badly denuded, with only the very bottoms of the graves preserved. By far the most important site was Cemetery 215,⁶⁸ not only because of its relatively large size, but because of the fact that its graves represented much of the A-Group time horizon. Many graves were designated as belonging to the period

⁶³B. G. Trigger, 1965, *op. cit.*, p. 41.

⁶⁴W. B. Emery, 1930, *op. cit.*, p. 124.

⁶⁵As before, this is based on Adams’s totals using both A-Group and B-Group figures. Adams, 1977, *op. cit.*, p. 76.

⁶⁶All sites shown in Figure 2.

⁶⁷W. B. Emery and L. P. Kirwan, 1935, *op. cit.*, vol. 1, p. 478.

⁶⁸*Ibid.*, pp. 450-476.

of the late B-Group or early C-Group, which we now understand to represent the very latest phase of the Terminal A-Group. It must also be noted that in Cemetery 215, many graves contained the same thin variegated haematitic ware found by Griffith at Faras, which would later be typed by Nordström as one of the most distinctive and evolved forms of Nubian ceramic art.⁶⁹

In general, assessment of the cemeteries and their graves was extremely minimal, often a result of limitations imposed by their poor states of preservation. In some cases the so-called Early Dynastic cemeteries could not be described at all. Cemetery 162, for example, a small Early Dynastic burial-ground in Korosko (Figure 2), was described simply as "...completely plundered and unworthy of excavation."⁷⁰ In this and similar cases the location of the cemetery was merely indicated on a survey map, thus leaving only this thinnest of evidence that these sites once existed. In cases where graves could be enumerated and described, this was done in much the same manner as for the First Archaeological Survey. Sketch-plans were produced for a small selected corpus of the burials.

Other early material was found at the fortress of Kuban (Figure 2), which was excavated completely by this project, and which dates to the Middle Kingdom. However, the site yielded one Late Predynastic wavy-handled jar, "...which was found on a high level, and one complete pot and seven fragments of Old Kingdom ware,"⁷¹ but the excavators seem to have assigned very little significance to these items. Furthermore, there is mention of three sherds of Old Kingdom pottery recovered from a ditch below one of the houses, along with flints and celts "...found sporadically over the site,...perhaps of an early

⁶⁹This pottery type is dealt with in its proper context below (Section 3.3).

⁷⁰W. B. Emery and L. P. Kirwan, 1935, *op. cit.*, p. 51.

⁷¹*Ibid.*, p. 26.

date.”⁷² In spite of these assorted materials, any possibility of use or occupancy of the site before the Middle Kingdom is denied, and rather, the authors argue for reuse and possibly manufacture of some of these objects at the site in Middle Kingdom times.

Despite the obvious advantages of having more sites added to the A-Group corpus, there can be no doubt that these discoveries added little to the overall knowledge of the A-Group. In the words of the directors themselves:

“The archaeological material of this early Nubian period discovered by the expedition has been of no great value and in no way alters or adds to the conclusions set forth by the previous excavators in this field.”⁷³

The only other contributor to the A-Group data base during the Second Archaeological Survey was G. A. Steindorff, who held the concession for the site of Aniba (Figure 2). Most of Steindorff’s work was undoubtedly concerned with the C-Group, but a small important A-Group cemetery, designated NN, was discovered near the large C-Group cemetery N, in the 1930/31 season. Thirteen graves were discovered and described briefly,⁷⁴ using the layout employed originally by Reisner. Human remains were fragmentary and disturbed, but where it was possible to determine the burial position, the characteristic contracted (hocker) position was represented. Most of the graves had been covered with sandstone slabs. Enough whole vessels were recovered from the graves⁷⁵ to allow Steindorff to construct the first classification of A-Group wares.⁷⁶ Seven broad categories were defined based largely upon the external characteristics of the vessels, such as the presence

⁷²*Ibid.*

⁷³*Ibid.*, pp. 1-2.

⁷⁴See G. Steindorff, 1935, *Aniba*, pp. 26-27.

⁷⁵See Plate 77, *ibid.*, for representations of the full collection.

⁷⁶*Ibid.*, pp. 24-26.

or absence of slips, decoration, and the overall colour or combination of exterior colours. In most cases the temper of the pottery was also described. Although this work represents a rudimentary classification based upon a small sample of A-Group wares, it would later be used by Nordström to construct a larger typology for all the known A-Group ceramic forms. It should be noted that Steindorff also conducted morphological studies on the human remains for the C-Group population, but not for the A-Group because of the overall lack of skulls or other diagnostic remains. The morphological work on the C-Group Aniba population resembled very closely the previous and contemporary work of Smith, Derry, Wood Jones, and Batrawi (see the discussion below).

The Controversial Issue of Nubian Race

Mention must be made of the anatomical or physical anthropological work done by the two surveys, especially as it played an important role in the adoption of the Egyptian migration theory (by Reisner) to explain the origin of the A-Group. During the First Archaeological Survey, the bodies were aged, sexed, and typed, where possible, according to racial affiliation, for example, Negroid, Egyptian, etc. These racial assessments were originally derived by G. E. Smith and F. Wood Jones,⁷⁷ whose interpretations must now be considered highly suspect, as their results were based primarily on length and breadth measurements of skulls only. Another serious drawback of these early reports is that the descriptions of the human remains were often highly subjective,

⁷⁷For their work see: (1) G. E. Smith and F. Wood Jones, 1910a, *The Archaeological Survey of Nubia: Report for 1907-1908. Volume II. Report on the Human Remains*, and (2) G. E. Smith and F. Wood Jones, 1910b, *The Archaeological Survey of Nubia: Report for 1907-1908. Plates and Plans Accompanying Volume II*.

such as: “high-bridged nose,” “short broad face,” “a typical foreign woman,”⁷⁸ etc., with no mention of standard or comparative norms for such traits. However, despite these drawbacks, the anatomical work is informative, and gives a good overall impression of the physical make-up of the predynastic population, with the greatest emphasis of the work being placed on human pathologies.⁷⁹ It was assumed by the authors⁸⁰ that the racial type in Nubia during the time of the A-Group was the same as that in contemporary Egypt, i.e., non-Negroid, and this view was maintained throughout this and the subsequent survey.

Batrawi’s work on the human remains during the Second Archaeological Survey added little new data about the physical or anatomical attributes of the A-Group population. The author himself writes:

“The subject of the modes of burial and treatment of the body...has been very fully dealt with by Dr. Wood Jones and...our cemeteries have added little to his conclusions...With regard to the anatomical and pathological conditions, there is little to add to Dr. Wood Jones’s lengthy and instructive treatment of them.”⁸¹

Batrawi’s notes for each burial, in cases where actual remains were found, recorded a long series of measurements for the bones that were present, in addition to the sex of the individual and any pathologies with which the bodies were afflicted. His assessment of the physical attributes of the A-Group population⁸² is not original and obviously limited by the same racial biases evident in the work of his predecessors of the First Archaeological Survey. If taken by themselves, without any of the racial interpretations applied to them,

⁷⁸G. E. Smith and F. Wood Jones, 1910a, *ibid.*, p. 45.

⁷⁹Pathologies are discussed in some detail in Section 3.2 below.

⁸⁰G. E. Smith and F. Wood Jones, 1910a, *op. cit.*, p. 15.

⁸¹A. M. el Batrawi, 1935, *op. cit.*, pp. VI-VII.

⁸²*Ibid.*, pp. 162-163,

the data are useful, as they show such statistics as the specific average heights of the male and female populations, and overall dimensions of the skulls. Based on these and the collection of earlier measurements taken during the first survey, it had become generally well accepted by this time that the A-Group Nubians bore a significant resemblance to earlier and contemporary populations in Egypt. It is also significant to note that based on this so-called racial type alone, and the length of its survival, the author advocates a survival of the A-Group until well into the Third Dynasty. Such a claim, based largely on subjective interpretation is, of course, unreasonable. Batrawi writes:

“A distinct human type inhabited both Upper Egypt and Lower Nubia in the early Predynastic times. At the late Predynastic period and early Dynastic, that early race had undergone an appreciable modification owing to mixture with an alien type coming into Upper Egypt from the North and another alien negro type introduced into Lower Nubia from the South. The negro element was, however, at first very small, but in the Third Dynasty it suddenly became more pronounced, although it was still relatively slight in amount. This process of intermixture proceeded quietly from the Third Dynasty onward, the population of negroes gradually increasing and a comparatively homogeneous blend of the Predynastic Egyptian and the Negro types is produced in the time of the New Kingdom.”⁸³

Thus we have these racial ideas applied to populations well beyond the time of the A-Group, this application being the culmination of the work of anatomists since the First Archaeological Survey, beginning with Smith, assisted by Wood Jones, and then Derry. Recently these theories have been reviewed and criticized by Adams, as follows:

“Elliot Smith and Derry had no difficulty in recognizing racial differences among the skeletons from the various Nubian grave types. The people of the ‘A-Group’ they believed

⁸³*Ibid.*, p. 160.

to be identical with the predynastic Egyptians, while in the 'B-Group' they perceived a much stronger Negro strain. This element was still believed to be present, although much diluted, in the 'C-Group'...The anatomical work of Smith and Derry can be criticized on a number of grounds. Even with the best of intentions and under the best conditions, the methods available to them at the beginning of the twentieth century were primitive and highly subjective. Heavy emphasis was placed on a small number of characteristics, such as the much abused cephalic index, and many of them were morphological features which could not be verified by measurement...It was in many respects a pseudo-science, [and] a far cry from today's scientific study of population dynamics."⁸⁴

The application of these naive methodologies had powerful consequences nonetheless, as they resulted in a limited conception of the origin of the A-Group. Reisner's migration theory for the Nubian A-Group, already alluded to above, was based almost exclusively upon Smith's assessment of the racial type in Nubia in late predynastic times. In short, since the population looked Egyptian they could only have originated in Egypt. Similarly, the invention of the B-Group, as a separate cultural entity, racially inferior because of its allegedly negroid traits, was another error caused directly by the early ideas about Nubian race.

The evolution of physical anthropological studies toward a more reasonable facsimile of reality was begun, surprisingly, by Batrawi himself, who published a couple of repudiations concerning Smith's ideas about race.⁸⁵ It appears that about ten years following the close of the survey he

⁸⁴W. Y. Adams, 1977, *op. cit.*, pp. 91-92.

⁸⁵A. M. el Batrawi, 1945, "The Racial History of Egypt and Nubia: Part I. The Craniology of Lower Nubia from Predynastic Times to the Sixth Century A.D.," *Journal of the Royal Anthropological Institute* 75: 81-101; 1946, "The Racial History of Egypt and Nubia: Part II. The Racial Relationships of the Ancient and Modern Populations of Egypt and Nubia," *Journal of the Royal Anthropological Institute* 76: 131-156.

realized that his own results during the Second Archaeological Survey did not confirm the conclusions reached by his predecessors, and they were not the outcome of a scrutinizing study of the data. Batrawi's reassessment of the anatomical data is based upon statistical analyses, which were significantly lacking in all original reports of the First and Second Archaeological Surveys, including his own. He writes that these early results

“...were based mainly on qualitative appreciation of the features of the specimens. A more adequate statistical analysis of the measurements is made in the present study.”⁸⁶

Batrawi's most important contribution through this work was to demonstrate the extremely low degree of cranial variability within the A-Group population in comparison with the degrees of cranial variability for other Nubian populations, i.e., C-Group, New Kingdom, Meroitic, and the X-Group.⁸⁷ Not only was the A-Group population shown to have been the least variable amongst the Nubian populations, but it was also demonstrated that:

“There is no evidence of a progressive change in variability corresponding to the chronological sequence of populations.”⁸⁸

The implication of this, which has also been verified by statistical application is that:

“The A-Group cranial type relates to the earliest known inhabitants of Lower Nubia and hence it is considered as the parental stock for the later populations.”⁸⁹

⁸⁶A. M. el Batrawi, 1945, *op. cit.*, p. 81

⁸⁷See the ratios of variabilities presented in Tables VI and VII. *Ibid.*, pp. 88-89.

⁸⁸*Ibid.*, p. 91.

⁸⁹*Ibid.*, p. 99.

These results are, of course, in direct opposition to the views of the first survey, which argued for increasing variability from the time of the B-Group, by means of the gradual introduction of Negoid traits.

In his second report Batrawi was more direct in his criticism of the anthropological methods of his time, particularly in his estimation of G. E. Smith's work, which was so influential in Reisner's A-Group origin theory. Smith is criticized for his heavy dependence upon so-called "biological characters rather than on...metric data,"⁹⁰ except "as an adjunct to the main lines of...investigation."⁹¹ Furthermore, and more importantly for today's A-Group origin theory, Batrawi writes that

"...the contention of Elliot Smith that some of the individuals were not indigenous in the Nile Valley does not seem to be well founded. He admits that their alien nature was only established in his mind after the discovery, in 1908, of the early Christian cemetery 5, at Shellal."⁹²

In Egypt itself the population was defined by two distinct groups, which in early Neolithic times consisted of a northern type in Middle Egypt and a southern type in Upper Egypt.⁹³ Although the types continued to be morphologically and geographically distinct during the Predynastic Period, the Upper Egyptian group is believed to have spread southward into Lower Nubia at this time. This situation, if true, creates a dilemma for the A-Group indigenous origin theory, as it is difficult to explain this type of migration while still upholding the indigenous origin view. Furthermore, Batrawi gives no indication of how this situation may be resolved using the anatomical data,

⁹⁰A. M. el Batrawi, 1946, *op. cit.*, p. 133.

⁹¹*Ibid.*

⁹²*Ibid.*, p. 135. It was at Cemetery 5 that Smith found what he called an "alien type," which he thought originated in Syria.

⁹³*Ibid.*, p. 154.

or if indeed it can be adequately explained. However, his insightful work began a new era toward a truer understanding of the A-Group population, the physical make-up of which is now understood as "...a single and remarkably stable genetic pool from beginning to end."⁹⁴

C. World War II and the Postwar Years – 1935-1958

Following the close of the Second Archaeological Survey in 1934, archaeological work in Nubia was conducted on a less monumental scale, but with a greater degree of involvement from both foreign archaeological missions and the Sudan Antiquities Service. The latter, at this time, shifted its archaeological focus from the conservation of standing or otherwise visible monuments to the pursuit of active research into all periods of Sudanese prehistory and history. The primary result was that the Neolithic period of the Sudan became much better known through newly discovered sites, particularly in the area of Khartoum in the central Sudan. Furthermore, there grew a much greater awareness of cross cultural links, as it became known that the prehistoric cultures of the central Nile Valley bore striking resemblances to the A-Group culture to the north, and to those cultures to the east and west of the central Nile Valley. It seems that many of the areas of the Sudan that are today the focus of attention were opened up archaeologically at this time.

Early sites investigated under the auspices of the Sudan Government Antiquities Service, and which are summarized here included: Khartoum, Omdurman Bridge, Shaheinab, El Qoz, and Abka. Those sites investigated by

⁹⁴W. Y. Adams, 1977, *op. cit.*, p. 92.

non-Sudanese expeditions were Kadero and various locations in the Ennedi region of Chad.

Khartoum and Omdurman Bridge⁹⁵

Khartoum was the first undertaking of the Sudan government in 1944-45, and its excavation was actually a salvage campaign associated with the proposed extension of the Khartoum Civic Hospital. A. J. Arkell, being then the Commissioner for Archaeology and Anthropology in the Sudan government, was able to excavate the site, which was fortunate, for as he states, "...as the war was not yet over, it was impossible to interest archaeologists from outside the Sudan in its excavation."⁹⁶ The site consisted of a mound forming the highest point in Khartoum, which contained in its earliest deposits, evidence of Neolithic occupations. There was, in addition, evidence of later use of the site as a burial ground in Meroitic, Pan-grave, Napatan, and even recent times during the seige of Khartoum. As the discoverer of the earliest known occupation in the Sudan, Arkell had the privilege of naming the complex, to which he applied the term 'Wavy Line Culture,' but which he later changed to the Khartoum Mesolithic. Although Crawford challenges the use of the term "Mesolithic,"⁹⁷ Arkell justifies it as follows:

"I use the term 'Mesolithic' in the sense used by J. G. D. Clark in his *Mesolithic Settlement of Northern Europe*, where nothing more is implied by it than that it flourished in the

⁹⁵For most of the Khartoum area sites see Figure 4 below.

⁹⁶A. J. Arkell, 1947, "Early Khartoum," *Antiquity* 21: 172.

⁹⁷He suggests that the wavy-line label should be retained, but his argument seems to have had little effect. 'Khartoum Mesolithic' is the predominant choice in today's literature. See O. G. S. Crawford, 1954, "Some Notes on the Sudanese Neolithic," *Kush* 2: 88-90.

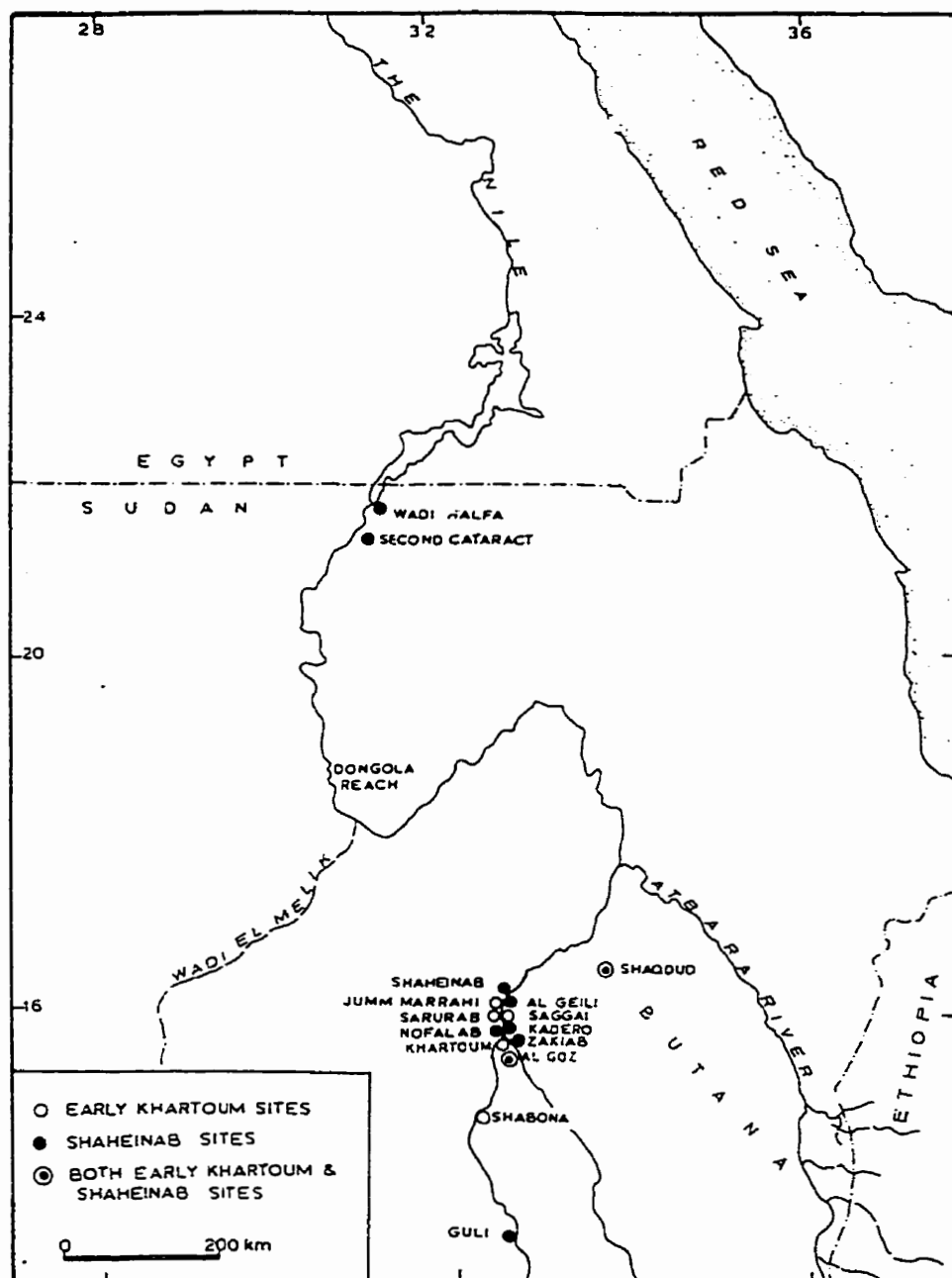


Figure. 4. Map of the Central Sudan, showing archaeological sites mentioned in the text.

(From: A. M. Khabir, 1987, "New Radiocarbon Dates for Sarurab 2 and the Age of the Early Khartoum Tradition," *Current Anthropology* 28 (no. 3): 379).

main in point of time between the Palaeolithic and the Neolithic, and that it was applied to food-gathering cultures (hunters, fishers and collectors) one at least of which had pots with pointed bases.”⁹⁸

Although all of Arkell’s terminology is somewhat justified, most scholars now use the label ‘Early Khartoum’ when referring to the original culture or industry of the Khartoum Hospital site, and this is the term used throughout this thesis.

The culture is best defined by a distinctive ware having a combed decoration made with the spines removed from the local variety of catfish. The process of making the comb and applying the decoration is described as follows:

“The spine was broken twice—not an easy thing to do—and the smaller teeth were rubbed off the back of the spine so as not to injure the hand of the potter...three...varieties of decoration...were made by the early potters with these cat-fish spine combs, viz.—lines of dots, broken lines, and irregular scoops...the general principle was to apply the spine serrated edge downwards into the clay and to move it gradually to one side by lifting first one end of the spine and then pressing it into the clay again before lifting the alternate end of the spine, and then repeating the process indefinitely.”⁹⁹

The effect of this decoration was apparently to imitate variations of basketwork patterns. Other distinguishable characteristics of the ware were its very hard texture and the high proportion of fine angular quartz grains in its clay. The normal colour was brown, but variations occurred in black or bright red. Commonly a slip of brown colour was applied to the interior and exterior of the vessels before firing, and the inside surfaces were often smoothed. Burnishing does not seem to have been performed at all.

⁹⁸A. J. Arkell, 1949c, “The Excavation of a Neolithic Site at Esh Shaheinab,” *Sudan Notes and Records* 30: 219.

⁹⁹A. J. Arkell, 1949a, *Early Khartoum*, pp. 177-178.

Economically the Early Khartoum industry is characterized by a hunting and fishing subsistence base, with absolutely no evidence of either agricultural production or animal domestication. It must be noted that Arkell did have the remains of flora and fauna analyzed with specific attention to the possibility of domesticated forms. Faunal specimens, combined with the remains of tool kits, indicate that the following animal species were hunted for food or otherwise killed: crocodile, porcupine, hippopotamus, buffalo, warthog, python, river turtle, tortoise, mongoose, water mongoose, antelope, wildcat, oribi, field rat, spiny field rat, white-nosed rat, Nile lechwe, white-eared cob, equine, black rhinoceros, African elephant, Egyptian wolf-jackal, and numerous varieties of fish and mollusca.

Remains of seventeen human burials were recovered from the Neolithic occupation area. All were fragmentary and in no case was an entire individual preserved. Even complete skulls when found *in situ* were broken into numerous pieces. The burials were described by Arkell as tightly contracted,¹⁰⁰ but there does not seem to have been any preference for a particular orientation of the body, or for the inclusion of specific grave goods. However, as Arkell has pointed out, the lack of grave goods "...is only negative evidence and in the disturbed state of the site by no means conclusive."¹⁰¹ Personal means of adornment were, however, found on a few bodies, such as ostrich egg shell necklaces and beads. The human remains, unfortunately, were given to Derry for physical analysis, which means that they were subjected to the same racial biases as we have already seen in the First Archaeological Survey. However, Derry's description of the population as a

¹⁰⁰*Ibid.*, p. 31.

¹⁰¹*Ibid.*

negroid race has been accepted by modern scholars¹⁰² even though we may no longer uphold the anthropological methodologies of his day. It should perhaps be noted that Arkell seemed completely accepting of Derry's results.

The only evidence of habitation remains at the site consisted of small amounts of burnt clay fragments from wattle and daub constructions, showing impressions of reeds and ropes. The author speculates that huts or windcreens were made by this wattle and daub technique, but the impressions of rope further indicate that "...the early people were skilled in plaiting fibre into cord, which could have been used for nets or fishing-lines as well as for bowstrings."¹⁰³

It is difficult at this point to make a summary assessment of the Early Khartoum industry, until the cross cultural comparison is done (Chapter 4), but its primary value (here) is as a type of tradition that is a precursor to the Neolithic and post-Neolithic cultures of the Sudan, of which the A-Group forms a significant part. Arkell, at this early stage, was not able to assign a date to the site,¹⁰⁴ but an estimation given by him was "...before 4,000 B.C."¹⁰⁵ More importantly, it was realized by him that the culture had widespread eastern, western, and northern cultural links. He writes:

¹⁰²O'Connor, for example, writes that the Sahara had a "...comparatively large and mobile population, which included Negroid and Negro physical types, as did the communities living near modern Khartoum." (D. O'Connor, 1971, "Ancient Egypt and Black Africa – Early Contacts," *Expedition* 14 (no. 1): 2). For a wider discussion of the subject see G. Billy, 1977, "Population Changes in Egypt and Nubia," *Journal of Human Evolution* 6 (no. 8): 697-704.

¹⁰³A. J. Arkell, 1949a, *op. cit.*, p. 78.

¹⁰⁴It must be remembered that this was just before the advent of radiocarbon dating.

¹⁰⁵A. J. Arkell, 1947, *op. cit.*, p. 180.

“Wavy line sherds have been found in the Sudan as far west as the Wadi Howar area, as far east as Kassala, and as far north as the Wadi el Gaab west of Dongola.”¹⁰⁶

Furthermore,

“At that time the climate was such that the southern Sahara was no barrier to communications, and it looks as if there may have been a common culture right across north Africa, which had pottery well made in the imitation of baskets to contribute to the civilization that was to arise in the Near East. It looks as if the Badarian culture of Egypt with its combed and rippled pottery, at present dated to about 4,500 B.C., was an intermediate step in that direction.”¹⁰⁷

Of greater significance (to A-Group relationships) from the Khartoum area was the discovery of the two cultures later than the Early Khartoum culture, known as (1) the Gouge Culture,¹⁰⁸ contemporary with the Egyptian predynastic period, and (2) the so-called Omdurman Bridge Culture, which is contemporary with the Egyptian protodynastic period and the Nubian A-Group. The Gouge Culture was so named because of the presence of tools known as gouges,¹⁰⁹ which according to Arkell “...are typical of Miss Caton-Thompson’s Fayum Neolithic B, and some other implements of that culture, although other typical tools are apparently missing.”¹¹⁰ The distinctive pottery decoration of this culture has been compared with that seen in the C-Group pottery, i.e.,

¹⁰⁶*Ibid.*, p. 188.

¹⁰⁷*Ibid.*, p. 181.

¹⁰⁸Later renamed by Arkell the Khartoum Neolithic, which is the term used predominantly by scholars today (and throughout this thesis). Khartoum was not the type-site for the Gouge Culture, but rather, the early sites excavated by Caton-Thompson and Gardner in the Fayum. See *The Desert Fayum*, 1934, 2 vols.

¹⁰⁹Examples are illustrated in Plate 88, Fig. 3, in A. J. Arkell, 1949a, *op. cit.*

¹¹⁰*Ibid.*, p. 93.

“...sherds of black ware decorated with patterns of chevrons alternately plain burnished and hatched with impressions of comb teeth.”¹¹¹

The use of the comb decoration of the Early Khartoum culture seems to have continued into the Khartoum Neolithic, but one also sees the use of a zigzag pattern,¹¹² which apparently had a long duration, at least to the Second Intermediate Period. Unfortunately the Khartoum Neolithic does not seem to be represented in any form in this area other than by the few sherds and gouges found at various locations at Khartoum.

The Omdurman Bridge culture is far more promising for defining A-Group links as far south as Khartoum because it is directly contemporary with the A-Group and has direct parallels in terms of ceramic decoration. But unfortunately, the culture is known from only two graves. Nothing else of the Omdurman Bridge “complex” was exhibited in the Khartoum area at this time, and the two graves yielded only a limited amount of finds, including various other ceramic types and further evidence of the earlier Khartoum Neolithic. No human remains were recovered.

Other than suggesting the relative sequence for these three cultures, Arkell offered no other discussion concerning the nature of their inter-relationships, no doubt because of the small amount of material found to represent the latter two cultures (the Khartoum Neolithic and the Omdurman Bridge Cultures). It should further be emphasized that Arkell did not actually excavate the Omdurman Bridge site or even a small part of it in any detail. He states in a later publication that he “...only rescued the contents of two protodynastic graves dug into the edge of the earlier site and partly excavated

¹¹¹See Plate 89 for examples, *ibid.*

¹¹²Plate 90, *ibid.*

by the military.”¹¹³ Furthermore, the author seemed more interested in establishing relationships for the Early Khartoum industry, and in so doing he argued for a “...common fishing and hunting culture spread by negroid people right across Africa at about the latitude of Khartoum,”¹¹⁴ of which the Wavy Line Culture formed an integral part.

Shaheinab and El Qoz

The next significant archaeological undertaking of the Sudan government was the site of Esh Shaheinab (henceforth just Shaheinab), also excavated by Arkell, in January and February of 1949. The excavation was undertaken in order to “...bring to light as much as possible about what in *Early Khartoum* was named the Gouge Culture...renamed the Khartoum Neolithic.”¹¹⁵ At this early stage of radiocarbon dating it could only be confirmed that the Khartoum Neolithic was indeed a predynastic culture, and some key issues still remained to be settled, such as its temporal and cultural relationships to the Badarian, Gerzean, Amratian and the Faiyum Neolithic. Like the early Khartoum site, the Shaheinab mound was reused for later burials by the Meroitic, Christian, and Moslem inhabitants of the area. The site is a low, largely unstratified mound located on a gravel ridge that no doubt represents the ancient riverbank. Being about 4.5 metres above the highest recorded flood level at the time of excavation, it also attests to the higher level of the Nile in Neolithic times. Although some dotted wavy line ware of the late Early Khartoum sequence was found, the predominant culture represented at the site was the Khartoum Neolithic, and the gouge was one of the most

¹¹³A. J. Arkell, 1956, “Some Notes on the Sudanese Neolithic,” *Kush* 4: 85.

¹¹⁴A. J. Arkell, 1949a, *op. cit.*, p. 112.

¹¹⁵A. J. Arkell, 1953a, *Shaheinab*, p. vii.

abundant tool types found at the site. In addition, the introduction of the burnishing technique for pottery further characterized this newly discovered Khartoum Neolithic culture. Where stratification did occur, primarily in hearth contexts, it suggested that the Early Khartoum culture preceded the Khartoum Neolithic, because of the occurrence of the dotted wavy line ware toward the bottom of the strata. However, this sequence was not yet considered definite. Perhaps the most fascinating evidence to emerge from Shaheinab is that of animal domestication, the earliest known indications of the domestication of animals in the Sudan. It is equally significant to note that it does not appear to have been combined with plant domestication, as there is no evidence that any species of plant was cultivated at this time. The zoologist D. M. Bate of the British Museum was able to identify a dwarf goat, and some possible sheep fragments that show signs of domestication.¹¹⁶ Together these finds comprise about two per cent of the entire faunal assemblage at Shaheinab. Despite the expectation that domesticated dog would be found, given the presence of other domesticates, Bate was unable to confirm this theory from the faunal material at hand.¹¹⁷ Concerning the goat domesticate, she writes:

“Since the dwarf Goat of Esh Shaheinab cannot have been domesticated from local stock it must have been imported, and it would be of great interest to discover from whence it came, and from what wild stock it originated.”¹¹⁸

In pursuit of these goals, Bate's intention to compare faunal samples from Badari, Mostagedda, and the Faiyum was, unfortunately cut short by her untimely death, and thus this important work was left unfinished. However, it

¹¹⁶For her report see *Shaheinab*, 1953a: pp. 11-19.

¹¹⁷*Ibid.*, p. 12.

¹¹⁸*Ibid.*, p. 15-16.

did appear to her that the goat and sheep species represented at Shaheinab were entirely different from those seen in Egypt, and furthermore that neither of these species was related to the local fauna. This led her to propose a connection with the Algerian “neolithic,” from where “...the dwarf goat of Esh Shaheinab may have reached the Khartoum area from Algeria via Ahaggar and Tibesti.”¹¹⁹

The Neolithic occupation left virtually nothing behind in terms of habitation remains, and thus Arkell speculates that “...the houses must have been flimsy constructions of grass.”¹²⁰ Furthermore, there were no traces of post holes, which if present “...should have shown clearly in the black clay on which the settlement was first made.”¹²¹ There was, however, much more evidence for cooking or other activities that may have required the use of fire, than at Khartoum. Arkell writes:

“Numerous hearths were found, some paved with small lumps of sandstone, and mostly containing sherds, bone fragments, shells and artifacts; and where these hearths were situated at the bottom of the occupation debris on the surface of the black alluvial clay that formed the natural soil, there was often a shallow oval hole made in the natural soil, making it permissible to compare these hearths with the fire-holes characteristic of the Fayum Neolithic.”¹²²

The paving done with the lumps of sandstone had exact parallels with hearths in the eastern Sudan in Arkell’s day, from which it was possible to deduce that these hearths were likely used for cooking meat by placing it on red-hot stones inside the hearth.¹²³

¹¹⁹*Ibid.*, p. 18.

¹²⁰A. J. Arkell, 1949c, *op. cit.*, p. 213.

¹²¹A. J. Arkell, 1953a, *op. cit.*, p. 102.

¹²²A. J. Arkell, 1949c, *op. cit.*, p. 213.

¹²³*Ibid.*

Concerning the burial practice of the early settlement, very little can be said, as there was not a single cemetery found that may be considered contemporaneous with the settlement. There is certainly a change from the Early Khartoum industry in that there was a "...cessation of regular burial within the settlement,"¹²⁴ with the exception of one child burial, which is not likely to have been contemporary with the occupation. Arkell writes:

"...the method of their disposal is a mystery. It seems improbable that they were buried, for if this had been the case with the eroded state of the modern surface of the surrounding country we ought to have found the cemetery. It seems more likely that corpses were thrown into the river or exposed for the hyenas to eat."¹²⁵

Although a description of the stone, bone, and shell tool industries will not be given here,¹²⁶ it is important to understand the use of this evidence by Arkell to argue for Central Sudanese links with the Faiyum, both of which he claims show contact with the Tibesti area to the west of the Sudan. Even the difference in radiocarbon dates between the Faiyum Neolithic and the Khartoum Neolithic seemed untenable to the author because he claimed the temporal gap indicated by the dates was too wide. The average of the two dates obtained for Shaheinab¹²⁷ was 5253 ± 415 B.P. (or c. 3300 B.C.), compared with 6095 ± 250 B.P. (or 4145 ± 250 B.C.) for the Faiyum Neolithic. Arkell protests:

¹²⁴A. J. Arkell, 1953a, *op. cit.*, p. 79.

¹²⁵*Ibid.*, p. 102. Arkell's assessment of Shaheinab burial is now likely not to be true given the fact that cemeteries have been found at other Khartoum Neolithic sites such as Kadero, El Ghaba, and El Kadada. It is perhaps more reasonable to assume that cemeteries associated with the Shaheinab settlement have, for some reason, not yet been found. For a general discussion of the Khartoum Neolithic burial see J. Reinold, 1991, "Néolithique soudanais: Les coutumes funéraires," in *Egypt and Africa: Nubia from Prehistory to Islam*, edited by W. V. Davies, 16-29.

¹²⁶Arkell covers these well (See A. J. Arkell, 1953a, *op. cit.*, Chapters V, VI, and VII).

¹²⁷*Ibid.*, p. 107.

“But there are too many archaeological connexions between the Fayum Neolithic and the Khartoum Neolithic for it to seem reasonable to accept a difference of 800 years between the two cultures. Possibly some error has crept in somehow to upset calculations.”¹²⁸

This may very well be the the case, as these dates were certainly amongst the earliest dates to have been calculated using Libby’s new dating technique, and one should perhaps allow for some degree of error. However, a later date for the Faiyum Neolithic is suggested by the presence of both agriculture and developed arrowheads with tanged bases in that culture, which are entirely absent in the Khartoum Neolithic. Arkell writes:

“Indeed it is the absence of these last two features in the Khartoum Neolithic, which particularly seems to suggest that the Khartoum Neolithic, although related to the Fayum Neolithic, is somewhat the earlier of the two cultures.”¹²⁹

On the other hand, a close temporal relationship between the two areas may be evident from the range of features common to both the Khartoum and Faiyum Neolithic. These features include:

“use of fireholes and very flimsy habitations,
disposal of the dead outside the settlement, ? by a method
other than burial, [now questionable for Shaheinab]
the domestication of animals,
the flaked and partly polished stone celt and stone gouge,
the burnishing of pottery, and
the manufacture of beads from microcline felspar (amazon
stone).”¹³⁰

These features, Arkell claims, shared a common origin to the west, where they exist also in the region of Ténéré in Niger (Figure 5). Furthermore, one of the two known sources of the amazon stone (amazonite) occurs in the Eghei mountains north of Tibesti (Figure 5), which is known to have been quarried

¹²⁸*Ibid.*

¹²⁹*Ibid.*, p. 104.

¹³⁰*Ibid.*

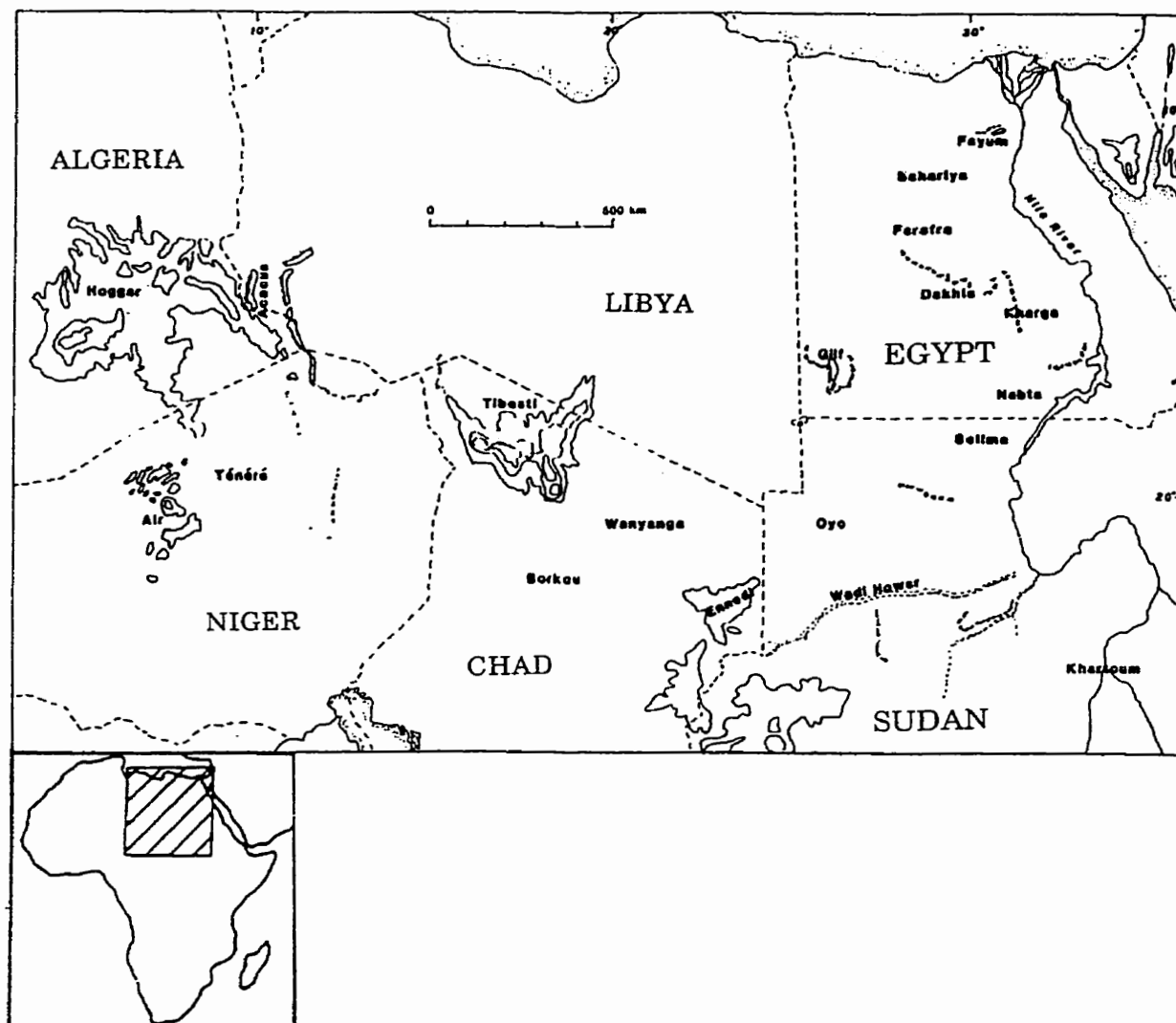


Figure 5. Map showing archaeological sites and regions west of the Sudan, in Chad, Libya, Niger, and Algeria.

(From: M. M. A. McDonald, 1992, "Neolithic of Sudanese Tradition or Saharo-Sudanese Neolithic? The View from Dakhleh Oasis, South Central Egypt," in *An African Commitment: Papers in Honour of P. L. Shinnie*, ed. by J. Sterner and D. Nicholas, p. 53).

in antiquity.¹³¹ In addition, stone gouges are well attested in various areas surrounding Tibesti, such as Bilma, southwest of Tibesti, and Erassou in southeastern Tibesti.¹³² The ceramics in these areas also bear remarkable similarities with the Nilotic wares, particularly those examples from the area of Ennedi (Figure 5),¹³³ to the southeast of Tibesti. It should also be noted that Caton-Thompson favoured the view that Tibesti may indeed have been the source of certain materials used in the Faiyum Neolithic.

The site of El Qoz must be added here, as it was instrumental in confirming beyond question the relative sequence of the Khartoum Mesolithic followed by the Khartoum Neolithic. It seems that it was not until Arkell discovered the correct stratigraphic sequence at this site that he ceased to question the relative order of the two cultures. Investigated during the last few days of the Shaheinab expedition, it was found that both the Early Khartoum and Khartoum Neolithic ceramics occurred at this site, and in such a sequence that showed without doubt the Khartoum Neolithic wares developed from the dotted wavy line ware of the late Early Khartoum culture, which in turn evolved from the earlier wavy line ware of the Early Khartoum. Arkell writes:

“...though disturbance due to erosion and subsequent grave-digging has resulted in the mix-up of the occupation debris typical of eroded occupation sites in the Sudan, it was found...that at El Qoz the bulk of the sherds typical of the Gouge Culture occurs above the bulk of the Wavy Line Sherds with the bulk of the Dotted Wavy Line sherds between them. This can only mean that the sequence in time was Wavy Line, Dotted Wavy Line, and then Gouge Culture.”¹³⁴

¹³¹The other source of the stone is the Jebel Migif in the eastern desert of Egypt, which is not discussed by Arkell at all. See *ibid.*

¹³²For references to this material see *ibid.*

¹³³This site and the ceramic similarities are dealt with separately below.

¹³⁴*Ibid.*, p. 102.

Abka

The Gordon Memorial College was also responsible for excavations at Abka. A licence for work at the site was granted to O. H. Myers in two separate periods, first from 1947-1948 and secondly from 1957-1958. The purpose of the work according to Myers was

“...to find rock-drawing sites associated with the debris of human occupation and to excavate the latter in order to throw further light on the drawings wherever debris and drawings could be collated.”¹³⁵

Whether or not this aim was achieved is difficult to assess from the archaeological reports,¹³⁶ but some of the material found by Myers must be considered here, as it is contemporary with the Nubian A-Group. Samples were obtained for radiocarbon dating when Myers returned to the site in 1957, as this was, in fact, the primary purpose for reopening the later investigations. Although it was hoped that Abka would reveal the presence of the Wavy Line Culture as defined by Arkell, the excavator was disappointed in this regard, and it appeared that the rock drawings and most of the deposits belonged to a preceramic microlithic industry, “...possibly related to the Sibilian found by Vignard at Kom Ombo.”¹³⁷ However, a wide range of dates was obtained from various types of samples, ranging from 9450 ± 400 ¹³⁸ to 0 ± 150 , through a range of six levels at the site. The author, being seemingly most concerned with the earliest levels and the people who made the earliest rock drawings, has asserted that the early dates confirm

¹³⁵O. H. Myers, 1960, “Abka Again,” *Kush* 8: 174.

¹³⁶In my opinion the archaeological material is inadequately and confusingly published. The only interpretive work is the report cited directly above (note 135). The stratigraphic evidence seems to have been of little help in dating the rock drawings, or perhaps was not adequately used to date the drawings.

¹³⁷O. H. Myers, 1958, “Abka Re-excavated,” *Kush* 6: 135.

¹³⁸Should one assume B.C., as all other dates are given in B.C.? *Ibid.*

“...the hypothesis that the drawings show affinities with the Mesolithic of Spain rather than with any other known group and were probably made by invaders from there or by a group from a common source, more probably the former.”¹³⁹

According to the author the route of the alleged invaders is likely to have been the North African coast and the Nile Valley, but his claim of an invasion by this route is unsupported by any archaeological or other evidence and it is simply not believable as it is presented. The question of whether these early people were part of a Mesolithic or a Neolithic tradition is also inadequately addressed, but it should be noted that Vaufrey has argued here for a Neolithic in the Capsian tradition based on an analysis of some lithic material from the site.¹⁴⁰ He claims that this tradition as seen in the Abka stone implements represents “...l’industrie la plus fréquente de l’Ouest à l’Est du Sahara et du Soudan.”¹⁴¹

Three dates were obtained for the predynastic levels sampled by Myers (Levels 4 and 5). These were: 4500 ± 350 from a sample of charcoal, 4470 ± 300 from ostrich eggshell, and 5960 ± 400 ¹⁴² from another sample of shell. The first two indicate that these levels were contemporary with the early A-Group. Some confusion concerning Level 4 is created by the fact that the author states in another page of the article that “...we find that Level 4 is about 2500 B.C., that is about the time of the beginning of the C-Group invasion.”¹⁴³ There is some indication that certain rock drawings may be contemporary with and

¹³⁹O. H. Myers, 1960, *op. cit.*, p. 180.

¹⁴⁰See R. Vaufrey, 1958, “Industrie d’Abka,” *Kush* 6: 142-143.

¹⁴¹*Ibid.*, p. 143.

¹⁴²I have assumed all dates are B.C. again.

¹⁴³O. H. Myers, 1960, *op. cit.*, p. 178. It seems the solution is to consider these levels as having a date range between 4000-2500 B.C. See for example W. Y. Adams and H.-Å. Nordström, 1963, “The Archaeological Survey on the West Bank of the Nile: Third Season, 1961-62,” *Kush* 11: 18.

even related to archaeological material found by Bates and Dunham in their earlier excavations of Cemetery 600 at Abka (see above). Myers writes:

“The apparently earliest representations of human beings were found at a site not excavated and were about a metre high each showing people full face, more than one male and almost certainly a female, though the latter was not so certain as the former. Some seemed to wear an extinguisher hat similar to that made of feathers found nearby in a cemetery (probably of later date) by Bates and Dunham.”¹⁴⁴

Beyond these possibilities it is difficult to make archaeological comparisons between the culture represented at Abka and the A-Group culture based on Myers' reports. Although a short statistical description is given of the finds in one publication,¹⁴⁵ there appears to have been no stylistic analyses of the potsherds and other artifacts recovered by him from the site. Descriptions of the pottery, where given, were extremely brief and general, for example:

“The most numerous sherds...came from simple bowls, about 60 cm. in diameter, made of sandy Nile-mud ware, with the surface very crudely combed or perhaps wiped with grass. The colour was variegated from black to fawn.”¹⁴⁶

Kadero

This period between surveys also saw the discovery of the site of Kadero, by Read and Mackenzie in 1954.¹⁴⁷ The importance of the two occupation mounds was fully appreciated at the time of their discovery, and this early report gives a very good assessment of the site. Chittick's publication has also been the basis of much later (and ongoing) work conducted primarily by

¹⁴⁴O. H. Myers, 1960, *op. cit.*, pp. 175-176.

¹⁴⁵O. H. Myers, 1958, *op. cit.*, p. 137-141.

¹⁴⁶O. H. Myers, 1960, *op. cit.*, p. 176-177.

¹⁴⁷But published by H. N. Chittick, 1955, “Two Neolithic Sites near Khartoum,” *Kush* 3: 75-81.

Polish scholars. An outstanding feature of the site is that it was little disturbed since Neolithic times, although the surfaces, especially the outer edges of the mounds, had suffered some erosion. Significant differences noticed between the material from both mounds, such as the paucity of gouges in Site I compared with Site II,¹⁴⁸ led the author to conclude that the former represented an earlier period of occupation. The pottery from both sites was extremely similar to those noted by Arkell for Shaheinab, with impressed ware being the most commonly represented type between both sites. Incised ware was very rare at Site I, but common at Site II, as were the black-topped red ware and burnished ceramics.

The distinctive palette found at the site¹⁴⁹ is said by the author to resemble the palettes of the B-Group graves originally found by Reisner. However, based on this find alone, the author was reluctant to consider a date for the site that is contemporary with the A-Group because of the essentially neolithic nature of the remains. In short, no other material has been found datable between the Neolithic and the Meroitic periods. Chittick preferred to link the Kadero palette with Faiyum and Merimde examples, although what this implies about cultural links between these sites and the Central Sudan was not addressed. However, the possibility of an A-Group connection with Kadero, through this and later finds is now possible and is discussed below within the context of later work at the site.

¹⁴⁸Scholars now refer to these two sites as Kadero 1 and Kadero 2.

¹⁴⁹*Ibid.*, pp. 79-81 and Plate VII.

The Wadi Howar and Laqiya Regions, Western Sudan¹⁵⁰

These areas of the Sudan have had the most varied history of exploration beginning in the seventeenth century, attracting all manner of early adventurers for purposes other than archaeology.¹⁵¹ One of the earliest reports to mention archaeological remains comes from Major H. C. Maydon who undertook a hunting expedition for addax, leucoryx, and sheep from North Kordofan to the Wadi Howar.¹⁵² His report shows no awareness of the antiquity of the archaeological remains, yet clearly the surface scatters of potsherds and the presence of numerous burial cairns indicated a lengthy history of habitation in the now inhospitable region. Maydon's puzzlement at these early remains is clear from the following account:

“Although there were no recent traces of man—and how should there be in that waterless desert?—yet I was surprised at the number of fragments of broken burmas we found in certain areas. Sometimes a dozen or so would be found unbroken all together. They were very old, and a different sort of clay from the common had been used in their manufacture...

There is a myth that once there was water in the Wadi Howar, and that part of that country was fertile. But perhaps fugitives from northern Darfur in the Mahdi's time had fled north-west across the desert, carrying what water they could in burmas.”¹⁵³

Other early explorers of the 1920's would, however, take a more scientific approach that would lay the groundwork for modern archaeological research

¹⁵⁰For the location of the sites mentioned in the Western Sudan see Figure 6 below.

¹⁵¹The hunting of wild desert game seems to have been the main earliest attraction of the region.

¹⁵²H. C. Maydon, 1923, “North Kordofan to South Dongola,” *The Geographical Journal* 61: 34-41.

¹⁵³*Ibid.*, p. 40.

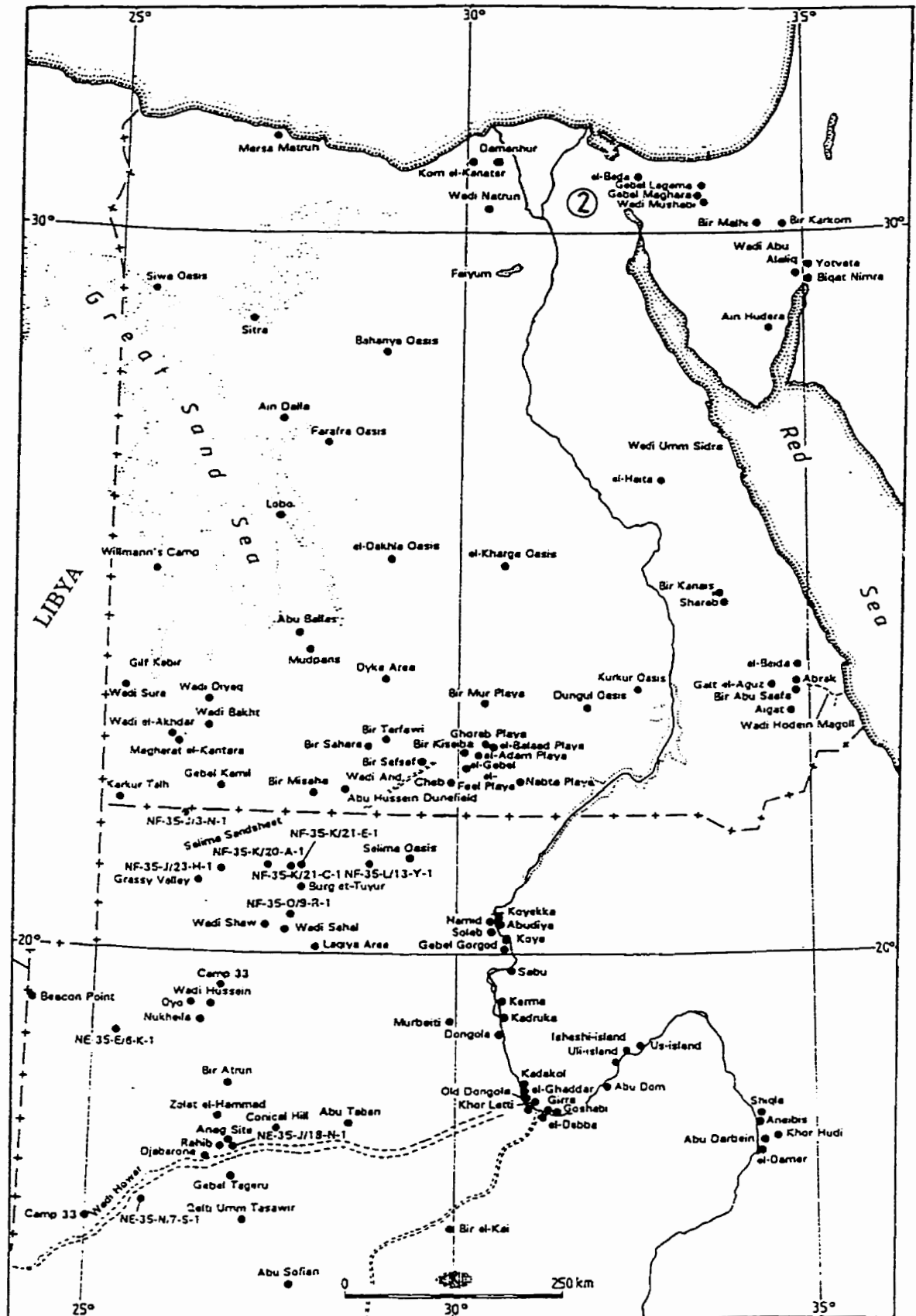


Figure. 6. Archaeological sites and regions in the Eastern and Western Deserts of Egypt and in the Western Sudan.

(From: S. Hendrickx, 1995, *Analytical Bibliography of the Prehistory and the Early Dynastic Period of Egypt and Northern Sudan*, map sheet 10).

in these regions. Newbold and Shaw,¹⁵⁴ for example, produced some excellent accounts of the rock drawings and the archaeology of the Libyan Desert, and we are indebted to them for the earliest knowledge of Wadi Howar and Laqiya area archaeology. Moving northwest from the Wadi el Melik to the Wadi Howar and beyond to the Selima Oasis, Newbold visited sites not yet seen by any European, and noted their antiquities. The greatest strength of his work lies in his attempt to cross date the archaeological remains with the rock drawings, primarily for the purpose of dating the latter. Newbold was also particularly anxious to throw some light on the route of the Libyan migrations in North Africa, having envisioned a route from Cyrenaica and Fezzan to Kordofan, and through Kufara, °Uweinat, Nukheila, Bir Natrun, Zolat el Hammed, and Jebel Tageru. In the words of the author, his main discoveries may be summarized as follows:

“It will be sufficient at present to classify the Libyan Desert rock-pictures into four rough groups:

- (a) Bushman; late palaeolithic or early neolithic.
- (b) Early Libyan, neolithic, pre-dynastic, Old Empire.
- (c) Middle Libyan; Middle and Late Empire, down to the introduction of the camel into the Sudan, i.e. early Meroitic period.
- (d) Roman, medieval, and modern.”¹⁵⁵

The Neolithic evidence came from the areas of °Uweinat, Nukheila Oasis, Zolat el Hammad, all north of the Wadi Howar, and Umm Tasawir, southeast of the Wadi Howar. In addition, the numerous cairns that had long been observed over the landscape received some comment, but no illumination was provided concerning their possible date. Lithic material was noted at a

¹⁵⁴D. Newbold, 1928b, “Rock-pictures and Archaeology in the Libyan Desert,” *Antiquity* 2 (no. 5): 261-291; W. B. K. Shaw, 1936a, “An Expedition in the Southern Libyan Desert,” *The Geographical Journal* 87 (no. 3): 193-221; W. B. K. Shaw, 1936c, “Two Burials from South Libyan Desert,” *Journal of Egyptian Archaeology* 22: 47-50.

¹⁵⁵D. Newbold, 1928b, *op. cit.*, pp. 288-289.

number of sites, such as at ʿUweināt, Abu Ballas, Erdi, Nukheila, and throughout the Wadi Howar area. One site in particular was described as follows:

“A prehistoric site was found by Shaw in a water-bearing depression which we named Wadi el Anag...about twenty miles north-east of Nukheila lake; it is very like the Wadi Howa sites. There were the usual grindstones, broken pottery, ostrich egg-shells, a grooved sandstone polisher for arrows or bone implements...and another of the green axeheads. On a hill above the site were two crude rock-pictures of the type described above.”¹⁵⁶

Shaw’s two 1936 publications already show advances from Newbold’s work, particularly in the knowledge of the Neolithic remains. Through survey and excavation in the Laqiya Oasis (untouched by his and Newbold’s earlier investigation) Shaw established that this region bore striking resemblances to the Wadi Howar in terms of their Neolithic occupations. Thus the Wadi Howar and Laqiya areas became archaeologically linked and have remained so today. Two of the enigmatic cairns were finally excavated,¹⁵⁷ one at the so-called Grassy Valley and another at the site designated as Camp 49, to the southeast of the former. Both cairns were found to contain contracted burials, and the Grassy Valley burial was complete with grave goods, including black-topped pottery, burnished and lightly combed ware with notched (milled) rims, and carnelian and other types of beads. The pottery, Shaw noted, was typical of the Badarian of Egypt, and both burials were thought to be typical of Egyptian predynastic interments. However, Shaw notes that “the body position differs from that usually found in Predynastic graves, where the head is nearly

¹⁵⁶*Ibid.*, p. 280.

¹⁵⁷W. B. K. Shaw, 1936c, *op. cit.*

always to the south and the body on its left side, but in the case of burials in the Nile Valley the direction of the river was the deciding factor.”¹⁵⁸

Concerning the probable contemporaneity of the Laqiya and Wadi Howar region, Shaw writes:

“...At Camp 49...were many objects of the types found in abundance along the banks of the Wadi Howar towards the southern edge of the desert, *viz.* polished axes of diorite of the type that seems to be peculiar to the Libyan Desert, fragments of ostrich shell, sherds of incised pottery, etc. There were also many animal bones and heaps of ash, indicating past habitation of the depression. The skull and the other remains are not, of course, in a proved association, but there is a strong probability that they are contemporary.”¹⁵⁹

It was also finally realized by Shaw that the palaeoenvironment had to have been wetter than it is today in order to support the habitation of (especially) the Wadi Howar region,¹⁶⁰ a fact that has only recently been established by geological work. A further valuable contribution of Shaw's work was his assessment of a primarily pastoral mode of existence for the inhabitants of the Wadi Howar region, with cattle-keeping as one of the main economies.¹⁶¹ This hypothesis is still adhered to today, although there is not much new direct evidence to substantiate the theory beyond doubt. Shaw's interpretation was based in part upon the discovery of cattle remains in association with human burials, as in one Gebel Rahib cairn.¹⁶² The author further suggests, from the presence of cattle depicted in the rock drawings throughout the Libyan Desert, that the area may have been the African centre for the indigenous

¹⁵⁸*Ibid.*, p. 48.

¹⁵⁹*Ibid.*, pp. 49-50.

¹⁶⁰*Ibid.*, p. 50.

¹⁶¹See W. B. K. Shaw, 1936a, *op. cit.*, p. 206.

¹⁶²*Ibid.*, p. 204.

domestication of cattle. Concerning the rock art in the Gilf Kebir plateau Shaw writes:

“The pictures, some twenty-five in all, are painted in red and white and show a few human figures and a number of animals. The latter appear to be of the species *Bos africanus*, the cattle of Predynastic and Old Kingdom times in Egypt, which were later replaced by *B. brachyceros*. That they were domesticated here is indicated by the collars or halters shown on some, by their spotted coats, and by the prominence given to the udders.”¹⁶³

If Shaw is correct then the domestication of cattle in the Gilf Kebir region would certainly have impacted all of northeastern Africa, and I think it may account in part for some of the cultural unity seen in the inhabited areas of Laqiya, the Wadi Howar, and to a lesser extent, the Nile Valley. However, the issue of an indigenous Saharan domestication for cattle is far from settled, and the theories of a Nile Valley origin or an Asian origin for cattle are still equally viable. McHugh, writing some decades after Shaw, notes that

“...there is no longer any valid reason to adhere to the belief that the domestic cattle of the Sahara were derived from the Nile Valley. The demonstrable archaeological priority for the presence of domestic cattle lies in the central Sahara and not in the Nile Valley. The case for an independent domestication of indigenous wild cattle in Saharan Africa has become increasingly strong in recent years, although the traditional views that domestic cattle were introduced into Africa from southeast Asia or were domesticated in and spread from the Nile Valley to the rest of North Africa still retain the greater support.”¹⁶⁴

¹⁶³*Ibid.*, p. 195.

¹⁶⁴W. P. McHugh, 1975, “Some Archaeological Results of the Bagnold-Mond Expedition to the Gilf Kebir and Gebel ‘Uweinat, Southern Libyan Desert,” *Journal of Near Eastern Studies* 34 (no. 1): 60.

Ennedi, Republic of Chad

Under the auspices of the University of London, the British Academy, and the Royal Anthropological Institute, a British expedition was organized to conduct a small-scale survey of the Ennedi region of Chad in 1957. Arkell, a member of the expedition, published the results,¹⁶⁵ which relate the discoveries made in selected regions around Ennedi and the Great and Little Wanyanga. Unfortunately nothing was excavated, but the presence of both occupation and burial sites was noted throughout these regions. The purpose of the survey, to find possible western links with the Early Khartoum and Khartoum Neolithic cultures, led to some illuminating results, the most important of which permitted an extension of the known western limit of the Early Khartoum culture. It will be remembered that when Arkell published *Early Khartoum* about a decade earlier, his 'Wavy Line Culture' was known to extend westward only to the Wadi Howar region (see pp. 47-48 above). The evidence for a greater range for the Early Khartoum industry is given by the author as follows:

"The discovery of Dotted Wavy Line ware, the later form of Khartoum Mesolithic pottery, in the vicinity of Wanyanga (following on the discovery by M. G. Bailloud of the same ware in Ennedi) shows that Khartoum Mesolithic pottery had a range from E. to W. of over 1000 miles. This suggests that it is a very early pottery, and, since the earliest form (simple Wavy Line) is at present confined to the Khartoum area, that possibly pottery was invented in the Nile Valley not far from Khartoum."¹⁶⁶

¹⁶⁵A. J. Arkell, 1959, "Preliminary Report on the Archaeological Results of the British Ennedi Expedition, 1957," *Kush* 7: 15-26. The survey region is to the north and west of the Wadi Howar. See map, p. 17, *ibid.* See also A. J. Arkell, 1964, *Wanyanga and Archaeological Reconnaissance of the South-west Libyan Desert: The British Ennedi Expedition, 1957.*

¹⁶⁶A. J. Arkell, 1959, *op. cit.*, p. 26.

Burnished dotted wavy line wares identical to those seen in the early stages of the Khartoum Neolithic at Shaheinab were also found (in the Great Wanyanga), but unfortunately there was no trace of the gouge industry typical of the Shaheinab culture. It was hoped by the members of the expedition to establish some relationship between the Khartoum Neolithic known from the Faiyum and the Khartoum areas and this area west of the Nile Valley. An assumption of such relationships is reasonable based on the fact that

“This gouge type has been found over a wide area west of Tibesti stretching from Ténéré, NW of Lake Chad through Bilma and Djado to Tummo about 350 miles west of Eghei, a north-eastern outlier of Tibesti.”¹⁶⁷

However, until a transitional site is uncovered (speaking temporally and geographically) it still remains to be established that the Sudanese gouge did indeed originate in the area west and southwest of Tibesti, as Arkell assumed. The mechanism, also, of its transference from that possible area of origin is still an unsolved question.

D. The High Dam Campaign - 1959-1969

The announcement of the intended construction of the Aswan High Dam in 1959¹⁶⁸ initiated the third large-scale salvage campaign in Nubia and

¹⁶⁷*Ibid.*, p. 15.

¹⁶⁸It must be noted that the initial proposal for the dam took place in 1955, and before the main fieldwork campaign began in 1960 there was much preparatory work, principally in the form of a preliminary ground survey, which took place between 1955 and 1956. This work was carried out on behalf of the Sudan Antiquities Service by J. Vercoutter, then Commissioner for Archaeology, and T. H. Thabit, Senior Inspector of Antiquities. Both banks of the Nile between the Egyptian frontier and the Second Cataract were surveyed, resulting in the discovery of twenty-five new sites, none of which were of A-Group date. In addition, the ground survey was followed by an aerial survey between 1956 and 1957, which produced aerial photographs that would later be invaluable in targeting specific sites for further study. For more information on these preliminary projects, see W. Y. Adams, P. E. T. Allen, and G. J.

ushered in the greatest era in the archaeological history of Nubia. The scale of this project cannot be underestimated. The construction of the High Dam was such a large project that it warranted an equally large archaeological salvage campaign, one that was quite beyond the scope of the Egyptian Survey Department and the Service des Antiquités to handle, as in the past. As a result, UNESCO engineered the project, making a worldwide appeal for resources and archaeological personnel with unprecedented success. The result was that archaeological teams around the world claimed concessions along the Nile from Faras to the Dal Cataract. The Dongola Reach area was also tapped archaeologically, even though it was not affected by the dam's floodwaters. The results obtained from this area would have important implications for A-Group studies. Adams sums up the contributions made as a result of the entire High Dam Campaign as follows:

"All in all the sum of archaeology accomplished in Nubia since 1959 not only exceeds that from all previous periods; it is probably also greater than would have been achieved in the next two or three centuries without the stimulus of the High Dam."¹⁶⁹

However, despite the vast scope of this survey, the contributions made to the knowledge of the A-Group were disappointingly small in comparison with the bodies of data recovered for other periods in Nubian prehistory and history. Adams has listed the various projects involved in the High Dam Campaign,¹⁷⁰ but it must be realized that publications from some of these projects are still forthcoming. Much material has yet to be studied, synthesized, and published. It is possible to speculate that some A-Group material recovered through this campaign will never see publication, because

Ververs, 1961, "Archaeological Survey of Sudanese Nubia," *Kush* 9: 7-8 and 11-14.

¹⁶⁹W. Y. Adams, 1977, *op. cit.*, p. 81.

¹⁷⁰*Ibid.*, pp. 83-86.

we are now far removed from the completion of the survey. The site of Afia (Figure 1) is one example of this lag in publication, but it is by no means the only one. This important site, which has yielded perhaps the only evidence to date for permanent A-Group habitations, is represented by only one preliminary report.¹⁷¹ The important grains from the site, which may clarify the nature of plant domestication in A-Group times, have yet to be analysed and published, despite the author's claim that

“A detailed examination by an expert of the entire material is under way and the technical report, it is hoped, be included in the final publication on the subject.”¹⁷²

Perhaps one of the greatest benefits of the High Dam Campaign to the knowledge of prehistoric Nubia is that it made scholars aware, for the first time, of the vast potential for exploration in Upper Nubia, which, at that time, had not yet received extensive exploration comparable to that seen in Lower Nubia. The area of Sudanese Nubia (as opposed to Egyptian Nubia), hitherto known only through the sites of Faras and Gamai, would now receive full attention from scholars.

Turning now to the work itself and its organization, we see that the entire survey area, from Faras to the Dal Cataract was divided in half from (1) Faras to Gamai and (2) from Gamai to the Dal Cataract (Figure 1). The task of all expeditions involved in the archaeological work was to survey and/or excavate the first “leg,” i.e. from Faras to Gamai before 1964, when the inundation waters of the new dam would begin to flood this area. The second half would

¹⁷¹B. B. Lal, 1967, “Indian Archaeological Expedition to Nubia, 1962: A Preliminary Report,” In *Fouilles en Nubie, 1961-1963*, 95-118. There is actually a second, more “popular” version of the project in B. B. Lal, 1963, “The Only Asian Expedition in Threatened Nubia: Work by an Indian Mission at Afyeh and Tomas,” *The Illustrated London News* April 20: 579-581.

¹⁷²B. B. Lal, 1967, *op. cit.*, pp. 106-107.

be surveyed once the first half was completed and after inundation had begun. The task of the second half was simply to keep ahead of the rising flood waters. In addition, the work of the two halves of the survey was divided amongst the various expeditions between the east and west banks. The teams on either side of the Nile attempted and seemed to manage to keep pace with one another as the work proceeded southwards. The expeditions involved in the discovery, survey, and excavation of A-Group remains were the Sudan Antiquities Service, the Scandinavian Joint Expedition, Columbia University, Southern Methodist University, the University of Colorado, Humboldt University of Berlin, the Egypt Exploration Society, the Indian Expedition at Afia, the USSR Academy of Sciences, the University of Chicago Oriental Institute, the Franco-Argentine Archaeological Mission, and the Finnish Archaeological Society. Only these projects and their relevant A-Group discoveries are dealt with here, but it should be realized that the vast majority of remains uncovered during this survey were not of A-Group date. All periods to the time of Christian Nubia were represented by the work of this survey.

The Sudan Antiquities Service: Faras West to Gamai West

The first four seasons of the Sudan Antiquities Service's survey was restricted to the west bank due to the occupation of the east bank by various other expeditions. The site of Faras, previously excavated in part by Griffith between 1910 and 1913 was the first object of the new campaign. It was targeted in January of 1960 with the aim of carrying out "...limited test excavations designed to supplement the preliminary survey of 1955-56."¹⁷³ It was the intention of the Sudan Antiquities Service to leave larger-scale excavation to the various foreign missions, as the Antiquities Service "...was

¹⁷³W. Y. Adams, P. E. T. Allen, and G. J. Verwers, 1961, *op. cit.*, *Kush* 9: 8.

quite unprepared to tackle several of the larger unexcavated sites.”¹⁷⁴ The members of the original fieldwork team were appointed by UNESCO, and included archaeologists who would contribute much to the prehistoric discoveries of the High Dam Campaign. These included W. Y. Adams, L. P. Kirwan, G. J. Verwers, and H.-Å. Nordström, only the last of whom would remain with the Sudan Antiquities Service to the end of the campaign.

Many of the Faras sites reported earlier by Griffith were not only re-examined during this first season, but all were assigned a number in accordance with the new numbering system that had now been devised by the Sudan Antiquities Service.¹⁷⁵ In addition, twenty new sites were discovered at Faras, two of which were new A-Group cemeteries yielding about ten graves in total. These were briefly described by Verwers¹⁷⁶ as very badly preserved, so much so that even the shapes of the graves could not be properly discerned. Nothing new in terms of types of A-Group material was obtained from the graves. The examples of red-polished black-mouthed ware were already well known from the work of the First Archaeological Survey and from Griffith’s

¹⁷⁴*Ibid.*, p. 9.

¹⁷⁵This numbering system would be used by some, but not all expeditions throughout the High Dam Campaign. Those who did not adhere to this system invented their own. It should be noted that many sites in the various site reports are often identified by their site numbers alone. Sudanese maps of the appropriate area at 1:250,000 were used to invent the following system (using the Wadi Halfa map as an example):

“...it was decided to divide this map into twenty-four equal sections, each covering 15 min. of longitude and latitude. These units are designated by the numbers from 1 to 24, reading in horizontal rows from left to right. Each 15-minute unit is subdivided into twenty-five squares of 3 minutes each, and these are designated by the letters from A to Y, again reading horizontally from left to right.

Within each 3-minute section archaeological sites are numbered in the order of discovery, beginning with 1. For all sites the discovery number is preceded first by the number of the 15-minute section, and second by the letter of the 3-minute section. The complete site number thus always comprises three elements, as 24-E-7 and 6-B-22.” (*Ibid.*, p. 8).

¹⁷⁶*Ibid.*, pp. 15-16.

earlier discoveries at the site. In addition, there occurred the usual Egyptian imports (jars) that are typically found in A-Group burial contexts.

By the start of the second season (October 1960) the Sudan Antiquities Service had expanded its goals to "...complete the exploration and mapping of all archaeological remains on the west bank of the Nile between the Egyptian frontier and Gemai."¹⁷⁷ This involved a detailed investigation of those sites that warranted more than just a brief exploratory excavation, such as large habitation sites or well stratified sites. This work could not reasonably be attempted until the entire concession area had been surveyed first as planned. By the end of the second season only about half of their targeted area had been given the exploratory survey. Although fifteen new A-Group sites were added this season¹⁷⁸ to the corpus of A-Group material, they contributed no new information to the knowledge of the A-Group. Even the "...fine red-on-orange painted pottery"¹⁷⁹ was previously known from Firth's work during the First Archaeological Survey. The only summary text written about the A-Group finds of the Sudan Antiquities Service up to the second season was the following:

"Seventeen A-Group sites were investigated during the first two seasons, of which fourteen were cemeteries. The remaining three were concentrations of sherds and other habitation refuse without accompanying structural remains. The failure to discover any dwellings of the protohistoric people, who clearly lived in considerable numbers all along the west bank of the Nile, has been one of the disappointments of the survey to date.

¹⁷⁷W. Y. Adams, 1962, "The Archaeological Survey on the West Bank of the Nile: Second Season, 1960-1," *Kush* 10: 11.

¹⁷⁸For descriptions of this material see the reports of: (1) G. J. Verwers, 1962, "The Survey from Faras to Gezira Dabarosa," *Kush* 10: 19-33, and (2) H.-Å. Nordström, 1962, "Excavations and Survey in Faras, Argin and Gezira Dabarosa," *Kush* 10: 34-58.

¹⁷⁹W. Y. Adams, 1962, *op. cit.*, p. 13.

About 100 A-Group graves have been excavated, of which all but a handful had been plundered. Finds have been largely restricted to pottery and a few objects of ground stone. This material conforms closely to previously known A-Group finds of the Protodynastic and Early Dynastic periods, and has added little to our knowledge of the people and their culture.”¹⁸⁰

The very important work of A-Group ceramic classification was also performed at this time. Although Adams indicated that an “...analysis of C-Group, and possibly also of A-Group, pottery will be attempted as more material comes to hand,”¹⁸¹ Nordström did not wait for the accumulation of further material. He in fact expanded the classification of A-Group wares based on Steindorff’s earlier typology. Nordström’s typology is now recognized as the final A-Group ceramic classification.¹⁸²

The third season of the Sudan Antiquities Service saw the completion of the first leg of the intended survey to Gamai, but it witnessed the discovery of only six new A-Group sites. These occurred at Mirgissa (Figure 2), Shagir I, Abu Sir, and Matuga (Figure 1). As the survey had now moved into the Second Cataract region and to the northern limit of the *Batn el Hajar*, Nordström noticed a definite change in the A-Group distribution pattern on the east bank, from that seen in Lower Nubia. He writes:

“Cemeteries with unmistakably A-Group pottery, so abundant on the west bank between Buhen and Faras, are completely lacking within the rather extensive area between Abd el Qadir and Gemai West.”¹⁸³

¹⁸⁰*Ibid.*

¹⁸¹*Ibid.*, p. 16.

¹⁸²To be discussed below, Section 3.3. For the early work by Nordström, see H.-Å. Nordström, 1962, *op. cit.*, pp. 51-56.

¹⁸³W. Y. Adams and H.-Å. Nordström, 1963, “The Archaeological Survey on the West Bank of the Nile: Third Season, 1961-62,” *Kush* 11: 16.

Furthermore, pottery types in the newly discovered sites were found to differ in many respects from the A-Group ceramics to the north, while they showed remarkable similarities with certain types to the south, even as far as Shaheinab. Many sherds, for example, were irregularly polished with a pebble, giving a slightly burnished effect, as had already been described by Arkell for some material at Shaheinab. Furthermore, what Nordström described as “sandy mud ware”¹⁸⁴ with a number of variants, he thought was “...probably similar to the pottery from Myers’ site IX at Abka.”¹⁸⁵ The latter occurred in Levels 4 and 5 at Abka, i.e., those levels contemporary with the A-Group. However, Nordström warns against assuming a direct cultural relationship between the A-Group and the Shaheinab culture based on this evidence alone, as “patterns of that simple kind might be developed independently by tribes and communities living under similar conditions.”¹⁸⁶ An attempt to date these new sites in relation to the A-Group to the north was not attempted at this early stage of discovery, although Nordström designated them tentatively as belonging to the early phase of the A-Group culture. More in favour of cross-cultural relationships is his statement that

“...if more complex material from this period comes to light in the course of the Nubian campaign, it might eventually be possible to establish a direct connexion along the Nile Valley between Prehistoric Nubian and the Neolithic cultures in the central Sudan.”¹⁸⁷

¹⁸⁴*Ibid.*, p. 18.

¹⁸⁵*Ibid.*

¹⁸⁶*Ibid.*

¹⁸⁷*Ibid.*

The Sudan Antiquities Service: Gamai to the Dal Cataract

The first season of this second leg of the survey, i.e., the fifth of the entire survey¹⁸⁸ involved a quick reconnaissance survey from Gamai to Dal, a region that was still, at the time, little known archaeologically. The reader will recall Bates and Dunham's early work at Gamai, in which A-Group material was unearthed, but one should also be aware of Reisner's work at the later Pharaonic fortresses of Semna (Figure 1), Kumma, Uronarti, and Shelfak (Figure 1). These investigations were begun in 1923 by the Harvard-Boston expedition, of which Reisner was a member. Beyond these few projects, the Gamai-Dal region remained untouched, thus justifying the need for a rapid initial survey in order to obtain an idea of the region's archaeological potential. The first season of this phase of the project saw the replacement of Adams as director by A. J. Mills, although Adams continued to assist "...with the great problems of archaeological tactics and logistics, [and] with innumerable small details."¹⁸⁹ Nordström meanwhile, continued to serve in the same capacity as before. The publication resulting from the initial reconnaissance¹⁹⁰ consisted largely of a list of the newly discovered sites associated with the thirteen villages in the survey area. A brief glance will show that the large majority of sites belonged to the Christian and X-Group periods. Only one A-Group site (11-L-10) was found, and described briefly as "a

¹⁸⁸The fourth season was not dealt with here because it did not involve the discovery or investigation of any A-Group sites. Rather, the two late period (Christian) sites of Kasanarti and Meinarti were excavated in some detail. For further information see W. Y. Adams, 1964, "Sudan Antiquities Service Excavation in Nubia: Fourth Season, 1962-63," *Kush* 12: 216-250.

¹⁸⁹A. J. Mills and H.-Å. Nordström, 1966, "The Archaeological Survey from Gemai to Dal: Preliminary Report on the Season 1964-65," *Kush* 14: 2.

¹⁹⁰A. J. Mills, 1965, "The Reconnaissance Survey from Gemai to Dal: A Preliminary Report for 1963-64," *Kush* 13: 1-12.

small, denuded A-Group settlement site."¹⁹¹ No excavation was performed on this or any other site during this season.

A more intensive investigation of the areas of Gamai West, Saras West, Saras East, and Murshid West was undertaken in the second season (1964-65), resulting in the discovery of three A-Group campsites (11-M-7, 11-M-15, and 11-L-14)¹⁹² and one A-Group cemetery (11-H-6).¹⁹³ The tendency to find an increasing number of A-Group settlement sites was continued in the fourth season, when work became concentrated at Saras East. Six new settlement sites were found, but only two were discussed in minor detail, these being 11-Q-72 and 11-Q-11. The former was noted as a campsite "...of an exceptional nature"¹⁹⁴ because its stratigraphy was preserved to a depth of 2.10 metres. Six levels at this site were all of A-Group date, and a number of whole vessels, at that time rare finds, were found. Considering the exceptionally deep deposit at this site it is very unfortunate that the site was not excavated in further detail, as it is undoubtedly one of the few such deeply stratified A-Group sites ever known. A single burial site, 11-Q-76, was found, consisting of a few shallow, oval graves, all but one of which lacked human remains and grave goods. Otherwise, the remaining habitation sites were described as

"...denuded of structural remains. In fact,...they consist simply of a layer of refuse on the surface of the ground which varies from ten to twenty-five centimetres in depth. These layers contain the normal occupation debris of animal bones, stone tools and the debitage of the tool industry, ash and

¹⁹¹*Ibid.*, p. 4.

¹⁹²A. J. Mills and H.-Å. Nordström, 1966, *op. cit.*, pp. 5-7.

¹⁹³*Ibid.*, pp. 7-8.

¹⁹⁴A. J. Mills, 1967-68, "The Archaeological Survey from Gemai to Dal: Report on the 1965-1966 Season," *Kush* 15: 201.

charcoal, and pottery which is generally of a coarse, domestic type."¹⁹⁵

Because of the discovery of greater number of habitation sites, it was now finally possible to compare A-Group settlement and burial sites, and a noteworthy distinction was that there existed a difference in the pottery types represented at each type of site. The red-polished plain wares, the red-and-black rippled wares, and the hard grey and red Egyptian wares were common in the cemeteries, whereas the habitation sites were largely represented by utility wares such as the brown coarse and brown polished ceramic types. An important feature of both site-types is that potsherds and other material of A-Group date were often found in association with material of later periods, especially C-Group. This has led to the underlying, but unproven assumption that there may have been continuity from A-Group to C-Group periods at these sites. The evidence has, however, led to contradictory opinions. Nordström in one instance noted that:

"There seems to exist a fairly clear line of development from the classic Early Dynastic A-Group to a C-Group-like assemblage, especially in the two camp sites 11-M-7 and 11-L-14 in Saras, reported above. The least we can say is that the two groups have occupied the same site in more than one case and that there is no evidence of any break in the occupation."¹⁹⁶

But in another instance Mills writes concerning the sites discovered in the fourth season:

"Three of the campsites yielded purely A-Group material and three of them had C-Group graves dug into them. No A-Group campsite had any trace of C-Group habitation on it. These facts tentatively point to a lack of direct continuous connexion between the A-Group and the C-Group cultures. That the C-Group peoples would bury their dead on the

¹⁹⁵*Ibid.*

¹⁹⁶H.-Å. Nordström, 1966, "A-Group and C-Group in Upper Nubia," *Kush* 14: 63.

ground of an A-Group habitation indicates that there was sufficient lapse of time between the two for any structural remains to vanish and the refuse to level off and possibly the site even to become overgrown.”¹⁹⁷

Although these two passages represent a difference of opinion, there can be no doubt that by this time the A-Group and C-Group ceramics were indicative of some as yet undefinable cultural link, whether the two cultures were directly continuous or not.

The Scandinavian Joint Expedition: Faras to Gamai

This project was a joint effort between Denmark, Finland, Norway, and Sweden, whose combined responsibility was a concession on the east bank of the Nile that included the districts around Faras, Serra, Debeira, Ashkeit, Sahaba, Abka, and Gamai.¹⁹⁸ Their fieldwork campaign followed the same pattern as that of the Sudan Antiquities Service, with an exploratory fieldwalking survey in the first season (supplemented by a few trial excavations), followed by a more extensive excavation regime in the subsequent seasons. The four seasons of the Scandinavian Joint Expedition (1961-1964) were headed alternatively by two (or more) directors, but it was Säve-Söderbergh who was the sole publisher of the preliminary reports. Of all the A-Group discoveries made since those of Reisner in 1917, their work was perhaps of the greatest importance to the knowledge of the A-Group. Their sites certainly yielded some of the most valuable and most varied A-Group material that would be found. The only negative aspect of the work was that its

¹⁹⁷A. J. Mills, 1967-68, *op. cit.*, p. 202.

¹⁹⁸For the location of all sites see Figure 2. It must be noted that the inhabited areas *per se* were not included in their concession. (T. Säve-Söderbergh, 1963, “Preliminary Report of the Scandinavian Joint Expedition: Archaeological Investigations between Faras and Gemai, November 1961-March 1962,” *Kush* 11: 48).

study, analysis, and final publication would take a number of years following the fourth and final season of the Expedition, primarily because of the large volume of finds to be processed. The end result was the 1972 publication of *Neolithic and A-Group Sites* by Nordström, which has come to be regarded as the most authoritative source on the A-Group culture. It is impossible (and unnecessary) here to give details on all of the A-Group finds made by this expedition, but the material is summarized for the sake of its contributions to A-Group knowledge.

Settlement sites in this region were found in greater numbers than ever before, and they yielded at last, traces of actual houses or hut structures. This led to the first recognition of the *rakuba* type of habitation that was discussed above. A mixture of other pottery types with those of the A-Group also emerged as a feature of some settlement contexts in this region. Säve-Söderbergh writes:

“...at Farki (13 km. south of Wadi Halfa), there were hut floors with a mixture of ‘Khartoum Neolithic’ and A-Group pottery as well as animal bones (e.g. fish).¹⁹⁹

The occurrence of Khartoum Neolithic pottery with A-Group ceramics led to the growing suspicion that both these cultures were not only contemporaneous but “linked up”²⁰⁰ in some way, and it was ventured that “it already seems...admissible to assume that there is no cultural break between our ‘Khartoum Neolithic’ and the A-Group.”²⁰¹ But it should perhaps be noted that in many instances the Khartoum Neolithic and A-Group pottery

¹⁹⁹T. Säve-Söderbergh, 1967-68, “Preliminary Report of the Scandinavian Joint Expedition: Investigations between Faras and Gemai, November 1963-March 1964,” *Kush* 15: 226.

²⁰⁰*Ibid.*

²⁰¹*Ibid.*, pp. 226-227.

occurred quite apart in some unconnected contexts, where no evidence of a relationship could be construed.

This type of evidence was supplemented by the discovery of rich and varied burial material, which comprises many of the best known examples of A-Group material culture. The cemetery of Halfa Degheim (Figure 1), for example, yielded the two famous clay figurines from a single burial, one representing a steatopygous woman, the other a young girl.²⁰² Other important finds included ostrich feather fans and leather garments, which were found on or near interred individuals. Perhaps the best example occurred at Sahaba, where a single burial contained an ostrich feather fan over the chest of the deceased and a leather cap on the head.²⁰³ In another tomb nearby an individual was found still 'wearing' leather sandals with a type of impressed pattern.²⁰⁴ A few of the Egyptian wine and beer vessels that were found in some of the tombs had seals bearing seal impressions,²⁰⁵ the design elements of which are now believed to have Mesopotamian as well as Egyptian parallels.²⁰⁶ The rare find of an incense burner was also made, the only other two examples known at this time being from Faras.²⁰⁷ In addition, two new pottery types were identified for the A-Group, "...both with patterns

²⁰²For more recent photographs of these, which are somewhat better than the original photographs from the site report, see H.-Å. Nordström, *Neolithic and A-Group Sites*, vol. 3.2, Plate 197, and D. Wildung, ed., *Sudan: Ancient Kingdoms of the Nile*, 1997: 41.

²⁰³T. Säve-Söderbergh, 1967-68, *op. cit.*, p. 229.

²⁰⁴*Ibid.*

²⁰⁵Discussed below, Section 3.3. See also T. Säve-Söderbergh, 1964, "Preliminary Report of the Scandinavian Joint Expedition: Investigations between Faras and Gemai, November 1962-March 1963," *Kush* 12: Fig. 2, p. 27.

²⁰⁶For this discussion see H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, pp. 117-118.

²⁰⁷T. Säve-Söderbergh, 1964, *op. cit.*, p. 29.

obtained with polished or painted strips.”²⁰⁸ Vessels bearing these designs often contained remnants of food.

The Columbia University: Gamai to Firka

This project differed from the previous two in that the expedition specifically targeted the earliest sites in Nubia while taking into account their geological settings. Later sites such as those belonging to the C-Group, although found in their concession and noted by them, “...were not within the licence of the expedition to explore.”²⁰⁹ The approach was decidedly geological as well as archaeological. The goals of the expedition were defined as follows:

“The primary purpose of the initial geological-archaeological investigations of Prof. J. de Heinzelin and Mr. Paepe, was to locate and identify as many prehistoric (Palaeolithic and Mesolithic) sites as possible in order to try to interpret their stratigraphic and chronological position in the geological framework of this region.”²¹⁰

Some A-Group sites were noted in the 1961-62 season, although not all of them were described in any detail, let alone excavated. These included three habitation sites, one cemetery, and four sites within the floodpool of the new reservoir. The habitation sites and the investigations made of them were described as follows.

“At Saras three ‘A-Group’ habitation sites were found (S5, S28, and S35). Test excavations were undertaken at two of them (S28 and S35). At S28 excavation revealed an ‘A-Group’ habitation site which had been badly pitted by a later ‘C-Group’ cemetery. At S35, however, a small undisturbed ‘A-Group’ habitation site was found with deposits of cultural material extending from 0.85 m. to 1.25 m. in depth. A small

²⁰⁸T. Säve-Söderbergh, 1967-68, *op. cit.*, p. 228.

²⁰⁹R. S. Solecki, ed., 1963, “Preliminary Statement of the Prehistoric Investigations of the Columbia University Expedition to the Sudan, 1961-62,” *Kush* 11: 90.

²¹⁰*Ibid.*, p. 73.

test pit at this site yielded numerous plain ware 'A-Group' sherds, some reddish burnished sherds, quartz artifacts, and animal bones. The third 'A-Group' site, S5, was not tested by excavation. A surface collection from it indicated that some 'C-Group' material was also present."²¹¹

The single A-Group cemetery was, unfortunately, not excavated at all. It is described simply as follows:

"North of Saras, at Murshid, a large cemetery (M4) was found on the fluvial terrace. Although the great majority of the recognizable graves were of 'C-Group' type, a surface collection showed that about half of all potsherds collected were typical 'A-Group.'"²¹²

In addition, the existence of two or more A-Group sites southeast of Saras Fort was surmised from the presence of large amounts of worked quartz at sites S8 and S50. Although not dated, the authors note that "...they appear to be similar to the quartz specimens which are numerous on both 'A-Group' habitation sites in the Batn el Hagar."²¹³ Other areas were observed to have late prehistoric and protohistoric remains, but virtually nothing was written about these. The three most notable of these areas were Saras East,²¹⁴ Kulb East (Figure 2),²¹⁵ and the region around Aksha (Figure 2).²¹⁶ It should be noted that the authors' indication that A-Group settlement in general does not extend beyond the area of Saras is true only if settlement sites are meant and not burial sites. There is in fact one known (but unpublished) cemetery at

²¹¹*Ibid.*, p. 84.

²¹²*Ibid.*

²¹³*Ibid.*, p. 83.

²¹⁴*Ibid.*

²¹⁵*Ibid.*

²¹⁶*Ibid.*, pp. 83-84.

Turmuki (Figure 1),²¹⁷ although this is not likely to have been known by this expedition at this time.

Southern Methodist University Expedition: Dongola Reach

During the 1966-67 field season, the Southern Methodist University began an expedition outside the threatened area "...which planned to fill the gap between the known prehistoric remains of the Second Cataract and the known prehistoric material from Subsaharan Africa."²¹⁸ It should be noted that this work was quite separate from the work of their previous field season (1965),²¹⁹ in which sites belonging to the Nubian Early Stone Age, Upper Stone Age, and the Final Stone Age were examined. This earlier project had a different staff, and appears to have been discontinuous with the 1966-67 campaign. The later campaign would be significant for its discovery of ceramic cultures in the Dongola Reach that are not only contemporaneous with the A-Group in Lower Nubia, but with the Khartoum Neolithic of the Central Sudan. These assemblages were designated by the expedition as (1) the Karat Group, which has been "cross-dated"²²⁰ with the A-Group, (2) the Tergis Group, contemporary with the Khartoum Neolithic, (3) the El Melik Group, which is broadly similar to the Abkan, and (4) a culture apparently related to the Early Khartoum industry, called the Early Khartoum Related Group but later

²¹⁷H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 17.

²¹⁸A. E. Marks, T. R. Hays, and J. de Heinzelin, 1967-68, "Preliminary Report of the Southern Methodist University Expedition in the Dongola Reach," *Kush* 15: 165.

²¹⁹For the report see F. Wendorf, *et. al.*, 1966, "The 1965 Field Season of the Southern Methodist University," *Kush* 14: 16-24.

²²⁰A. E. Marks, T. R. Hays, and J. de Heinzelin, 1967-68, *op. cit.*, p. 187 and Fig. 2, p. 175. The cross dating was obtained from comparisons of the material cultures, not from radiocarbon dating.

known as the Karmakol industry.²²¹ In chronological order these Groups were summarily described as follows:

- “1. Early Khartoum Related. The presence of Wavy Line pottery and Dotted Wavy Line pottery and the absence of typical Khartoum Neolithic indicates a general contemporaneity with the earliest known ceramic sites in the Sudan.
2. The Tergis Group. While the pottery appears to be distinct from that found at Shaheinab, the presence of stone rings and gouges suggests that it is later than the Early Khartoum Related Group and might well be synchronous with the main stage of the Khartoum Neolithic.
3. The Karat Group: The lithic industry is quite distinctive, but the presence of numerous thin burnished sherds with a ‘wolf tooth’ decoration points to connexions with both the upper levels at Shaheinab and the Early A-Group of the Second Cataract.
4. El Melik Group. This group shows a definite decline in stone technology, and numerous rough sherds of plain and incised ware seem to be later than any known ‘Khartoum Neolithic’ or A-Group types. Thus, it is now postulated that this group is the latest of the prehistoric ceramic groups in the area.”²²²

While earlier non-ceramic sites belonging to the Early, Middle, and Late Stone Ages were discovered, it is significant that these sites are very few in number in comparison with the numbers of ceramic sites. In fact, sites of the Karat Group were the most numerous type within the concession area, a total of nineteen having been uncovered.

The concession area yielding these new cultures extended from Ed Debba to the village of Korti, a distance of about eighty kilometers. It must be noted that geological work was also conducted (by J. de Heinzelin) in conjunction with the archaeological investigations. All archaeological periods in the concession

²²¹The latter terminology was first applied in a later publication edited by Shiner. See T. R. Hays, 1971a, “The Karmakol Industry: Part of the ‘Khartoum Horizon Style,’” in *The Prehistory and Geology of Northern Sudan*, p. 84 ff.

²²²A. E. Marks, T. R. Hays, and J. de Heinzelin, 1967-68, *op. cit.*, p. 173.

region were firmly linked with various geological formations. The early ceramic sites, for example, were largely restricted to the so-called Girra pediments between the villages of Girra and Ganetti, while the earlier Pleistocene sites were found in the Goshabi Formation.

The University of Colorado: Gamai West to Firka

This expedition targeted all of the prehistoric periods from the Palaeolithic to the Neolithic over the course of the four seasons, and only the third season was significantly devoted to the investigation of A-Group remains. Their goals for this season read very much the same as those of other expeditions working in the High Dam Campaign, i.e.:

“...to discover, map, collect from, and where feasible, to excavate in exploratory fashion prehistoric sites in a section of the Nile Valley which had not yielded much prehistoric evidence in previous reconnaissance efforts.”²²³

Perhaps one of the most significant realizations to be drawn from the discovery of A-Group and earlier sites in this area, is that the inhospitable regions of the *Batn el Hajar* were indeed inhabitable in early prehistory. Hewes speculates that “...the climate may have differed from its present almost total aridity.”²²⁴ There seems little doubt that wild game inhabited the area in ancient times.

The expedition contributed eight new A-Group sites to the existing corpus of sites, these being from various localities in Murshid West, Saras West, and Attiri (Figure 2, all sites). Specifically, these sites²²⁵ were: (1) from Murshid West, 11-D-20, 11-I-16, 11-I-17, 11-I-18, 11-I-19, (2) from Saras West, 11-

²²³G. W. Hewes, 1966, “Prehistoric Investigations on the West Bank in the Batn el Hagar by the University of Colorado Nubian Expedition,” *Kush* 14: 25-43.

²²⁴*Ibid.*, p. 42.

²²⁵All are described in *ibid.*, pp. 29-39.

L-20, 11-U-5, and (3) from Attiri, 16-J-18. The evidence from these sites indicates that the A-Group way of life must have been fairly homogeneous throughout this concession area. Most sites share an apparently common lithic industry of crude quartz flakes, chert and agate flakes, and pebble cores. In addition, most sites contained Early A-Group potsherds, ostrich egg shell fragments, bones of small and/or large mammals, reptile bones, fish bones, and bovid teeth and/or bones. Site 11-I-16 was by far the most distinctive, as it contained multiple hearth remains that testify to a settlement having existed at the site. Charcoal from this hearth material has been dated to 2985 ± 130 B.C. The nature of the A-Group occupation of the Káragan Valley²²⁶ as suggested by this site alone is summed up as follows:

“...around 3,000 B.C., the western edge of 11-I-16 was the residence of a pottery-using, seed-grinding people with a very crude quartz tool kit who hunted small game such as gazelle, and either wild ass or zebra, and may have kept small goats. No evidence of agriculture or fishing was noted. Ostriches were fairly abundant at this period, judging from the amount of broken egg-shell; whether ostriches had been rarer previously, or the earlier big-game hunters did not bother to collect their eggs, is undetermined.”²²⁷

The importance of the site is further attested by a fuller treatment of it in a separate report by R. L. Carlson.²²⁸ A single hearth from the site was excavated and all of the material from its interior (charcoal, ash, burned bones, ceramics, and stone artifacts) was described in some detail. From this single feature an entirely new cultural phase, called the Káragan phase was

²²⁶The Káragan Valley or the Wadi Káragan was the name given by the expedition to the valley in which most of the sites were found. Hitherto, it had not been named on published maps. The name was apparently assigned “...after the local name of a cluster of houses near its northern outlet.” (*Ibid.*, p. 25).

²²⁷*Ibid.*, p. 42.

²²⁸R. L. Carlson, 1966, “A Neolithic Site in the Murshid District, Nubia,” *Kush* 14: 53-62.

defined as that which "...would appear to be on the very frontier of attaining a Neolithic status, if not already at that point."²²⁹ A summary of the culture based on the evidence from the hearth, and its relationships to the A-Group is given as follows:

"The origins of the Káragan phase are probably local...The pottery...is generically similar to that of the ceramic horizon of the 4th millennium B.C. which stretches from lower Egypt to Khartoum, but is more specifically Nubian than anything else.

The Káragan phase is judged to be immediately pre A-Group in time in the region of the Second Cataract, although it could well be contemporaneous with the A-Group of regions further north. The Káragan phase may well belong in the same cultural continuum as the local A-Group, but differs in lacking the elements of Egyptianization found in A-Group. A-Group is a marginal Bronze Age phase or culture, whereas the Káragan phase is considered to be Neolithic without metallurgy."²³⁰

Humboldt University (Berlin) Expedition: Shaqadud

The Berlin concession, under the direction of F. Hintze, was centered primarily at Musawwarat es Sufra. During the course of the work there, the important site of Shaqadud (Figure 7) was discovered in 1961 and described very briefly in a single preliminary report.²³¹ No interpretive material was given of the remains, but the importance of the site was certainly realized at once, and the potential of information to be derived from the site was clearly elucidated. The two most significant features of Shaqadud were its location away from the Nile (35 miles east), and the abundant occurrence of potsherds of the Khartoum Neolithic type. Until the discovery of Shaqadud, the

²²⁹*Ibid.*, p. 61.

²³⁰*Ibid.*, p. 62.

²³¹K.-H. Otto, 1963, "Shaqadud: A New Khartoum Neolithic Site Outside the Nile Valley," *Kush* 11: 108-115.

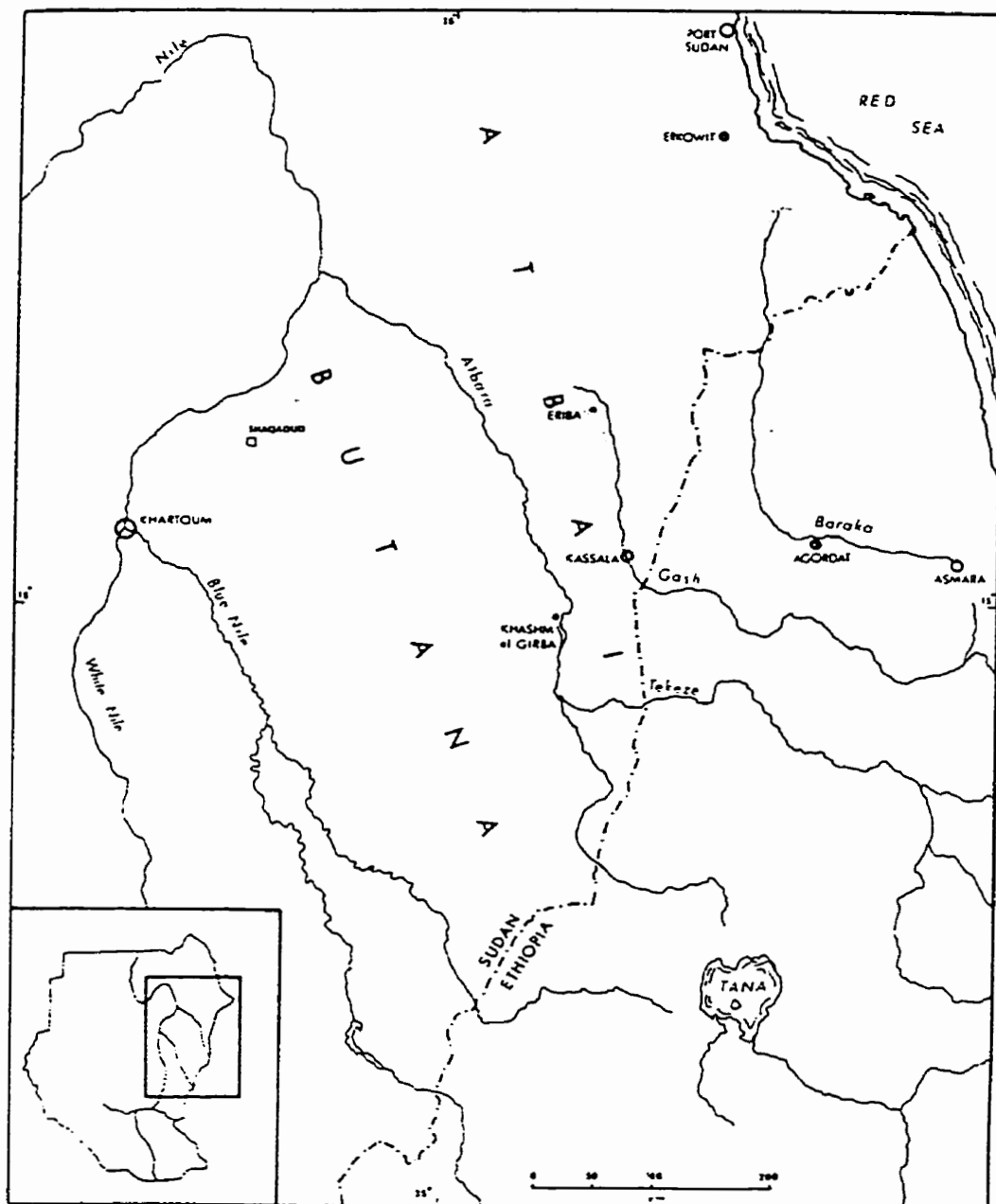


Figure. 7. The Butana and Atbai regions, Eastern Sudan.

(From: R. Fattovich, A. E. Marks, and A. Mohammed-Ali, 1984, "The Archaeology of the Eastern Sahel, Sudan: Preliminary Results," *The African Archaeological Review* 2: 175).

Khartoum Neolithic was known to exist only in the Nile Valley between Jebel Aulia and the Sixth Cataract. Otto writes:

“Beyond this region, so far only two sites yielding surface finds of this culture were known, viz. Fukhakhira, nearly a hundred miles further north on the west bank of the Nile opposite Kabushiya, and Idd el Haraz, approximately ten miles west of the Nile (see A. J. Arkell, *Shaheinab*, 1953, pp. 106-7, fig. 57).”²³²

The pottery decorations described, drawn, and photographed by Otto clearly illustrate the similarity of the Shaqadud sherds to those of the Khartoum Neolithic. In addition, “rim outlines of the pottery originating from the site...fit in well with the general picture of what is known of Khartoum Neolithic vessels.”²³³ The oldest sherd type was the unburnished dotted wavy line ware as defined by Arkell. Although some stone implements were found, such as sandstone disk rubbers and sandstone rings, there appeared to be no evidence of the gouge tool that is typical of the Khartoum Neolithic. Human remains were also observed on a terrace above the main occupation, and graves were discovered that appeared to be associated with the settlement. Further excavation and an analysis of the known material promises to reveal a number of things: (1) a better chronological sequence of the site, (2) the anthropological type of the Shaqadud population, and (3) possibly a clarification of the origins of the Khartoum Neolithic. Although the author did not express the site’s potential for clarifying Nile/Butana relationships, the potential certainly is there. It will be seen that recent and ongoing work at the site has contributed much in this regard.

²³²*Ibid.*, p. 108.

²³³*Ibid.*, p. 114.

The Egypt Exploration Society: Wadi El-Arab to Adindan

The Society's expedition, directed by W. B. Emery, represented the British response to the UNESCO appeal. In addition to Emery, the research team consisted of H. S. Smith, who published the preliminary reports,²³⁴ H. F. Smith, D. O'Connor, M. A. P. Minns, and A. H. Effendi. Two seasons of work were undertaken beginning in 1960, with the purpose of exploring, mapping, and recording

“...all sites of archaeological importance for the history of Nubia from the beginning of the ancient Egyptian dynasties onwards that were to be found below River Level 180.”²³⁵

This category of sites obviously included A-Group remains because numerous cemeteries and habitations of A-Group date were noted. Rock drawing sites were also listed, but virtually none of them were dated. In total, “over fifty previously unknown cemeteries and twenty settlements of the dynastic and post-dynastic periods were examined, recorded and mapped.”²³⁶ The preliminary reports consist largely of annotated lists of the newly discovered sites by area, with recommendations for further study in only a very few instances. As a result the only record we have of most of the A-Group sites found by this expedition is a short descriptive paragraph. The following is a list of these remains:²³⁷

Cemeteries:	241	West Bank, Ballana
	243	West Bank, Ballana
	254	West Bank, Ballana; assigned to B-Group
	268	West Bank, Tunqala West
	269	West Bank, Tunqala West
	274	West Bank, El Riqa

²³⁴H. S. Smith, 1962, *Preliminary Reports of the Egypt Exploration Society's Nubian Survey*.

²³⁵*Ibid.*, p. 3.

²³⁶*Ibid.*

²³⁷For site locations see Figure 2.

Cemetery with Camp:	263	West Bank, Masmas
Isolated Tumuli:	–	West Bank, El Riqā
Settlements:	A. 1	West Bank, Ballana
	A. 2	West Bank, Ballana
	A. 3	West Bank, Ballana
	A. 4	West Bank, Abu Simbel
	A. 5	West Bank, Afia
	A. 6	West Bank, Abu Simbel
	A. 7	West Bank, Toshka North
Un-numbered camp:	–	West Bank, El Riqā
Painted Rock Shelter:	–	Korosko East

The most important discovery by far was the site of Afia,²³⁸ which this expedition did not excavate in full, but which they recommended for complete excavation. It would later become better known through the work of the Indian Expedition, directed by Lal (see below). Emery's team placed test pits over the Afia site, finding that the occupation debris extended to a depth of up to fifty centimeters. Traces of stone walls and A-Group pottery were also found in their test trenches. The important aspects of the Afia settlement remains were described as follows:

“The walls were built as follows: the outer and inner faces were constructed first, of courses of dry laid freestone masonry, then the whole was filled with sand and Nile mud. Their average width was 80 cms. and they were preserved to a height of 55 cms. The external corners of the building are thicker (1.3 m) and slightly rounded, while the internal corners are roughly rectangular. Inside the rooms there was an uneven beaten mud floor at a depth of about 50 cms., over which was a layer of occupation debris of 20-30 cms. In this and the sand-fill above it were found a miscellany of objects...pounders of quartz, grey granite and sandstone grinders...a pebble poulder...a quartz palette...a granite palette...a whetstone...flint tools...shell palettes...shell and bone ring-beads; a bone finger-ring; a bone spindle whorl; a fragment of schist bracelet;...a fragment of an alabaster bowl...model mud vases...[and] a heavily oxidised copper chisel...”²³⁹

²³⁸H. S. Smith, 1962, *op. cit.*, pp. 59-61, and Plate VII.

²³⁹*Ibid.*, pp. 59-60.

By comparison, the other A-Group settlement sites were disappointing, although it should be noted that it cannot be determined by the report if all of these received even rudimentary excavation. It is clear, however, that a thick occupational layer did not guarantee the existence of structural remains, as in the case of site A.1. Here the remains were about one metre deep, consisting mostly of ash, charcoal, and other burnt material. However, “no walls, hearths, or other architectural features were uncovered.”²⁴⁰ As with most of the sites, further work was not recommended at settlement A.1. The only other occupation site to have received detailed attention was the painted rock shelter at Korosko. The site was essentially a cave formed by a large boulder that projected outward from the face of the cliff that overlooks Khor Fum Atmur. The site provided occupational evidence in the form of both paintings (depicting primarily long-horned cattle) and artifacts. The latter consisted of A-Group and C-Group remains, largely potsherds and vessels. Because of the mixed nature of the material evidence, the excavators were unable to decide upon a likely date for the paintings. Smith writes:

“The question of whether the A-Group or the C-Group people were responsible for the paintings must be left an open one until an expert in rock-drawings can examine the shelter for differences in technique and instances of super-imposition. Their general character, particularly the preponderance of cattle, suggests strongly that they are in the main C-Group: the find of a grindstone showing traces of red ochre in the A-Group level must, however, induce caution.”²⁴¹

As with Afia, the expedition recommended a proper investigation of this site, in this case a two-week epigraphic survey of the paintings.

The only A-Group cemetery to receive full attention was site 268 at Tunqala West, which was considered by the expedition to have been the “most

²⁴⁰*Ibid.*, p. 27.

²⁴¹*Ibid.*, p. 89.

interesting find of the season.”²⁴² Smith writes that the main interest of the site

“...lay in the fact that for the first time well-preserved superstructures not unlike those of the C-Group were found with burials firmly dated to the A-Group by their pottery. Furthermore, there was offering pottery associated with these superstructures in several cases, and at Grave 12 there appears to have been specially constructed offering places on the west and south sides of the superstructure.”²⁴³

Only one grave (no. 10) was published, although all tombs were excavated, with the remainder of the results being promised in a future final publication. The superstructure of grave no. 10 consisted of seven courses of masonry built up around the burial pit.²⁴⁴ The interior area was then filled in with rubble and sand. Below the rubble the grave opening had been covered with five large stone slabs, placed transversely across the opening. The slabs had obviously been shaped to fit the grave opening. Three individuals were interred inside, one adult male and two females. Grave goods included a bowl representing the variegated haematitic ware, a palette, red polished ware, an ostrich feather fan, hard pink wares, burnished pink ware, and burnished brown ware. The significance of this type of ‘tumulus’ grave in A-Group times was not addressed by the excavators, but one wonders how typical of A-Group tombs these superstructures may have been. Our general lack of comparative A-Group superstructures makes it impossible to decide. Although I initially thought that the Tunqala West graves might be distinctive or unusual in other ways, in terms of larger than normal size, for example, I have found this not to be the case, or at least not determinable from the published evidence.²⁴⁵

²⁴²*Ibid.*, p. 64.

²⁴³*Ibid.*

²⁴⁴See the plan and section, *ibid.*, Fig. 14, p. 65.

²⁴⁵Smith, unfortunately, uses a ratio scale (1:25) and not the bar scale. The former

Furthermore, the grave goods given for the single tomb are not particularly suggestive of an 'elite' or wealthy burial. The significance of this is that if this was a normal Terminal A-Group burial (Terminal A-Group is suggested by the presence of the variegated haematitic ware), with a possible grave size of about 1.6 m x 0.7 m,²⁴⁶ then it suggests that elaborate superstructures could have been used in normal A-Group graves by the Terminal A-Group phase, and perhaps earlier. Smith does give the dimensions of the superstructure as 3.12 m x 4.62 m.²⁴⁷

The Indian Expedition at Afia

The site of Afia was further excavated by the sole Indian expedition to the Sudan, which was given the concession "...a little to the north-east of the village of Afyeh."²⁴⁸ The site was known from the Egypt Exploration Society's previous survey of the area as an A-Group settlement, and its importance was fully recognized at that time.²⁴⁹ Afia has been instrumental to our understanding of the A-Group culture not only because of the presence of carbonized domesticated grains, but because it has yielded the best evidence to date of permanent A-Group house structures. The new remains found by this expedition consisted of the lower courses of stone walls²⁵⁰ made of sandstone rubble, which had apparently been quarried from the bedrock adjacent to the site. Traces of mortar were found, consisting of Nile mud mixed with sand. In

type is, of course, misleading if the original drawing was reduced or enlarged in size in the process of publication.

²⁴⁶Measurements taken directly from the published plan, Fig. 14, p. 65 of Smith, 1962, *op. cit.*

²⁴⁷H. S. Smith, *ibid.*, p. 64.

²⁴⁸B. B. Lal, 1967, *op. cit.*, p. 98.

²⁴⁹See again H. S. Smith, 1962, *op. cit.*, p. 61.

²⁵⁰B. B. Lal, 1967, *op. cit.*, Plate III.

addition, there was some indication that plastering was used for the walls. The floors were made of small pebbles covered with the same mud and sand mixture used for the mortar. No evidence of roofing has survived, although it is speculated that based on modern ethnographic parallels, "...perishable materials like wooden rafters, etc.,"²⁵¹ might have been employed. The area occupied by the settlement was small, only 1500 square metres, although the author gives no estimation of its approximate size in terms of population.²⁵² Two occupation phases are likely to have transpired at the site, phase 2 being the more prominent. The time-span represented by these two phases, either separately or combined, is not indicated. The author describes the features associated with the houses of each phase as follows:

"Not many structures were encountered [b]elonging²⁵³ to the earlier Phase, and the reason is obvious, for in the areas of overlap, they had mostly been disturbed or destroyed by the builders of Phase 2. Thus, ascribable to Phase 1 were: a couple of courses of the walls of a house with two recognisable rooms, one of which had a small clay-lined pit; a portion of a circular platform; a few odd bits of wallings here and there; and about half-a-dozen post-holes. Of Phase 2, however, many more structures were recognisable. The most noteworthy amongst them was a house, extant to a maximum height of 75 (*sic*)²⁵⁴ metre[s], which consisted of at least six rooms in the complex (Pl. III). It covered an overall area of about 200 square metres. In one of the rooms of the house was noted a circular clay-lined pit, with a diameter and depth of about 1 metre and 25 (*sic*)²⁵⁵ metre[s] respectively. To the north-east

²⁵¹*Ibid.*, p. 105.

²⁵²This, I think, is a grave shortcoming of the report. Reisner, it will be recalled, has estimated settlement size for temporary habitation sites that have left far less material evidence behind.

²⁵³Some typographical corrections had to be made to the text.

²⁵⁴This surely must be a gross error. The author must mean 0.75 metres, but there is no way to check the exact measurements. Some idea of them may be gleaned from the photographs, and from H. S. Smith's earlier report.

²⁵⁵This probably should read 0.25 metres.

of the house, at a distance of about 5 metres, was another clay-lined pit, irregular in shape and much longer in size (about 2 metres across and 1 metre in depth). Though no definite evidence was obtained regarding the use of these pits, it is quite likely that the last-mentioned one might have been used for storage of grains, etc.”²⁵⁶

In two cases, evidence of rooms having single-leafed doors complete with door sockets was also found.²⁵⁷

Unfortunately, far less may be said about the grains from the site based on the contents of this report. The author writes that “...the occurrence of a large amount of carbonized specimens in an area close to a house attests to the cultivation of at least wheat, barley, lentils, gram, peas, etc.”²⁵⁸ The photograph of the grains²⁵⁹ adds little to this narrative. The presence of chert blades with a highly siliceous sheen on their cutting edges would seem to support the possibility of the reaping of domesticated grain, but it should be noted that wild grain reaped with these types of blades could also account for the siliceous sheen. The presence of saddle querns and mullers indicates that grain, whether domesticated or not, was ground. The remainder of the stone tool kits recovered from the site, in addition to the pottery and personal items of adornment, are typical of what one would expect from an A-Group complex. The only other data of extraordinary significance are the radiocarbon dates that were obtained from charcoal samples, which have yielded what are now recognized as Terminal A-Group dates. These are: (1) 4510 ± 120 B.P., (2) 4415 ± 115 B.P., and (3) 4650 ± 123 B.P.²⁶⁰

²⁵⁶Lal, 1967, *op. cit.*, pp. 105-106.

²⁵⁷See *ibid.*, Plate IV.

²⁵⁸*Ibid.*, p. 106. By “lentils gram” one assumes Lal means lentils.

²⁵⁹*Ibid.*, Plate V.

²⁶⁰As listed in Table 1-1 above (p. 8).

The USSR Academy of Sciences: Khor Daoud

A very unusual A-Group site was discovered by the Russian expedition, which occupied a concession between Gerf Hussein and Kurta on the east bank of the Nile from 1961 to 1963. Khor Daoud (Figure 1), although called a settlement by Piotrovsky,²⁶¹ did not actually have any evidence of habitation, but rather, contained 578 storage pits of which 74 (about 13 per cent) had whole vessels that were placed upside down at the bottom of the pits. The author estimates the site to date to about 3,000 B.C., which makes it of Terminal A-Group date. Piotrovsky's interpretation of the site as direct evidence for cattle breeding has come under a great deal of criticism. In fact, more has been written about Piotrovsky's interpretation than about the site itself, particularly about his statement that the site was

“...the place to which the breeders brought milk to be processed and...dairy produce was then ferried over the opposite bank of the Nile w[h]ere the chief settlements and fields were situated.”²⁶²

The arguments used by Piotrovsky to support his claim have been labelled by Adams as “...a classic specimen of Marxian [dialectic], based not on empirical evidence but on a supposed analogy with early Mesopotamia.”²⁶³ Adams's criticism goes on at length, but what is more valuable perhaps is the reassessment of the site that has been done, based on the material evidence alone. This evidence included in brief, large Egyptian storage jars, such as the wavy-handled type, black-topped red-polished wares, the relatively few examples of indigenous Nubian wares, flint tools such as knives, scrapers, blades, and pins, a fragment of a bronze chisel, clay beads, date pits, ostrich

²⁶¹See B. Piotrovsky, 1963, “The Early Dynasty Settlement of Khor-Daoud and Wadi-Allaki, the Ancient Route of the Gold Mines,” *Fouilles en Nubie, 1961-1963*, pp. 127-140.

²⁶²*Ibid.*, p. 131.

²⁶³W. Y. Adams, 1977, *op. cit.*, p. 126.

eggshell fragments, and remains of wheat and barley. Negative evidence, which is valuable for illustrating the errors in Piotrovsky's interpretation, includes the lack of animal remains, especially cattle bones, and a lack of settlement remains or settlement features such as hearths. On the basis of these combined elements, Nordström has now reinterpreted Khor Daoud as an exchange or redistribution point for goods, or perhaps "...a [riverine] bartering place for cattle pastoralists living in the tract between the Red Sea hills and Lower Nubia."²⁶⁴ He adds that "participation in a cattle trade may have been one of the keys to the relative prosperity of the A-Group."²⁶⁵ Further points brought out by Nordström that cannot be gleaned from Piotrovsky's report are that (1) the site is located in "...one of the richest A-Group areas in Lower Nubia,"²⁶⁶ a fact that would tend to support its use as a redistribution or trade centre, and (2) more than two-thirds of the entire ceramic collection is composed of Egyptian imported wares. To date, Nordström's reinterpretation of the site has not been challenged.

University of Chicago Oriental Institute

The Oriental Institute of Chicago obtained a concession for both banks of the Nile between Abu Simbel and the Egyptian/Sudanese border. Excavation began at Qustul in January of 1963, under the direction of K. C. Seele. Other members of the expedition, but by no means all, included J. E. Knudstad, A. J. Hoerth, L. Habachi, O. J. Schaden, S. Ericson, M. A. El-Razeh, L. V. Žabkar, and F. Yakoub. It was Seele's intention to target the early remains in those same areas excavated by Emery during the Second Archaeological Survey

²⁶⁴H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 26.

²⁶⁵*Ibid.*

²⁶⁶*Ibid.*

because of his conviction that "...Professor Emery's preoccupation with the royal tombs [of Ballana and Qustul] had probably led him to ignore or neglect other ancient remains in the vicinity."²⁶⁷ Nonetheless, much of Seele's first season of work (1962-63) concerns itself with X-Group, Meroitic, or other relatively late material, as test pits placed around Emery's tumuli continued, not surprisingly, to show remains that were contemporary with those vast tombs. However a few significant A-Group remains were found in 1962-63, the first of which was a large group of pits at the easternmost edge of Emery's Cemetery 220. Emery's description of the cemetery, in conjunction with Cemetery 219, was extremely brief, giving no indication of A-Group remains. They were described simply as "...great mound cemeteries of the Byzantine period on both banks of the river at a distance of nine kilometres south of Abu Simbil."²⁶⁸ Seele's reinvestigation of the area resulted in the following discovery of the A-Group remains:

"There was an impressively large number of round pits in this region, apparently A-group in date but without human remains. One of them, however, contained a group of five fine jars of hard pink ware with rippled surfaces and milled edges; their shallow pit was plainly unconnected with a burial. These A-group pits were unrelated to others found farther to the west, in the midst of the meroitic graves."²⁶⁹

There now seems to be no doubt that these pits are analagous to the pits found by Piotrovsky at Khor Daoud. It is most unfortunate that Seele did not mention the position in which the pots were found. Could they originally have rested mouth down in the pits like the Khor Daoud examples? Another similarity

²⁶⁷K. C. Seele, 1974, "University of Chicago Oriental Institute Nubian Expedition: Excavations between Abu Simbel and the Sudan Border, Preliminary Report," *Journal of Near Eastern Studies* 33 (no. 1): 2.

²⁶⁸W. B. Emery and L. P. Kirwan, 1935, *The Excavations and Survey between Wadi es-Sebua and Adindan, 1929-31*, p. 479.

²⁶⁹K. C. Seele, 1974, *op. cit.*, pp. 7-8.

between these pits and the Khor Daoud features is the inclusion of Egyptian imported vessels, namely the jars of hard pink wares. Williams has written about this type of pit in general, saying:

“Groups of circular pits occur frequently the in A-Group. The large fields of such pits found at Khor Daud were clearly intended as caches rather than burials...such pits are so often found alone as at Khor Daud, Cemetery Q (220) at Qustul, and site 187 in the Scandinavian concession in the Sudan. In most cases where these contained bodies, the burial was probably secondary; a convenient pit, perhaps one used for family storage but no longer needed, was appropriated for the purpose. In some cases, groups of pits actually contained entire cemeteries...the storage pits are probably to be connected with trade, at least in part.”²⁷⁰

Despite Williams’s opinion that these pits were connected with trade, and Nordström’s similar theory regarding the Khor Daoud pits, the theory is still not adequately proven. Given that we think trade was so important to the economic survival of the A-Group, one wonders why so few sites of this type have been found. Interestingly, this type of feature is also known to occur in Egypt at a time contemporary with the A-Group. Williams’s comparative study of such ‘cache fields’ as he calls them,²⁷¹ shows a predominance of such sites in Lower Egypt, hence his consideration of them as a Lower Egyptian tradition. Sites exhibiting this feature are Helwan, Omari, Maadi, Haraga, and Sedment. One Upper Egyptian site displaying the phenomenon is Armant. To this selective list may be added the newly discovered Pre-Kerma complex, which exhibits storage or grain pits with downturned vessels (see the discussion below on Pre-Kerma). Since so little of the Pre-Kerma material

²⁷⁰B. B. Williams, 1986, *Excavations between Abu Simbel and the Sudan Frontier*, Keith C. Seele, Director. Part 1: *The A-Group Royal Cemetery at Qustul: Cemetery L*. Vol. 3 of The University of Chicago Oriental Institute Nubian Expedition, pp. 16 and 18.

²⁷¹B. Williams, 1982, “Notes on Prehistoric Cache Fields of Lower Egyptian Tradition at Sedment,” *Journal of Near Eastern Studies* 41 (no. 3): 213-221.

has been analyzed by itself, comparatively little more may be ventured at this time, but I should not be surprised to find parallels being made with other storage pit sites in the future. Williams's study also demonstrates that there are some differences in the types of pottery in the caches that he studied, even between the Egyptian sites. The significance of this is unknown. Little of the pottery from Egyptian caches resembles that in the A-Group storage pits, and certainly none from Sedment "...resemble that of any local group in Nubia and certainly not that of any group that entered Egypt."²⁷² The lack of parallels in the contents of many pits is at best, puzzling, but perhaps it indicates different uses for the pits in storing widely varying goods. Williams has not addressed this issue.

A related A-Group find made during the first season of the Chicago Oriental Institute was a group of graves and pits in Cemetery VF, also at Qustul. Seele writes:

"...the much disturbed area of Cemetery VF...was to present us with further surprises in the form of several large A-group graves, one with a spacious side-burial chamber. From it we obtained some stone palettes, one with four legs, a grinding stone, jewelry, several kinds of pottery, including the delicate thin ware with red basket-weave patterns painted on a buff background and polished black interior—a foretaste of what we were to discover on a large scale in the following season. Near the largest of these graves we unearthed the partially underground pits of two A-group houses (?) one five meters in length, with a stone transverse wall near the north end which may have served as a step down to the floor level of the structure. A number of simple circular pit graves in the vicinity indicated that this area concealed an A-Group cemetery more extensive than we were able to detect owing to the disturbed terrain."²⁷³

²⁷²*Ibid.*, pp. 214-216. By the latter part of this statement he seems to be referring specifically to the C-Group.

²⁷³K. C. Seele, 1974, *op. cit.*, pp. 19-20.

From what is now known about A-Group houses, it seems highly unlikely that the partially subterranean pits represent house structures, but rather, more storage pits of the type described above. Even at Afia, whence permanent house structures are known, there is no evidence of pits having being dug. Unfortunately there is no direct evidence to support the idea that the pits in Cemetery VF are storage pits. There is also no evidence of what may have been stored within them.

Seele's second and final season (1963-64) began on the west bank near Ballana, and later moved to Adindan. Most of this season was devoted to the excavation of A-Group remains, and this was when the two major cemeteries (L and W-1) were discovered. Final publication of this material was much delayed due to the death of Seele in 1971 while he was preparing his main publication. The results were eventually released under the authorship of B. B. Williams in the form of the publication already cited.²⁷⁴ Because of the late publication, this project of the High Dam Campaign had the advantage of having access to already published results of the other Campaign's expeditions, and this is clearly reflected in the interpretation of Seele's material.

Cemeteries L and W-1 were so vastly different that the only obvious conclusion was that "...the people buried in Cemeteries L and W-1 belonged to different economic levels."²⁷⁵ Cemetery W-1 appears richer than normal by known A-Group standards, but Cemetery L, which appears to represent the burial place of a wealthy, socially prestigious elite, has no known A-Group

²⁷⁴*Supra*. Williams, 1986. In addition, Cemetery W-1 was published separately in B. B. Williams, 1989, *Excavations between Abu Simbel and the Sudan Frontier, Keith C. Seele, Director. Parts 2, 3, and 4: Neolithic, A-Group and Post A-Group Remains from Cemeteries W,V,S,Q,T, and a Cave East of Cemetery K*. The University of Chicago Oriental Institute Nubian Expedition. Vol. IV.

²⁷⁵Seele, 1974, *op. cit.*, p. 41.

parallel. The evidence from the cemetery that demonstrates the special nature of the site consists of: (1) a small size for the cemetery (twenty-five tombs), suggesting that only a limited number of individuals from this A-Group population were eligible for burial here, i.e., an elite class, (2) a very large size for the graves, the largest being about thirty feet long, (3) the special nature of some of the grave goods, such as the incised incense burner from tomb L-24, (4) bowls bearing designs with Mesopotamian-like designs, and (5) gold necklaces around the necks of the individuals in tombs L-24 and L-17. Seele and Williams have made much of the decoration of the Qustul incense burner, saying that certain elements, such as the palace-facade design, are indicative of a royal status for the individuals in Cemetery L, particularly in tomb L-24. Williams has in fact postulated a Nubian origin for the Egyptian First Dynasty on the basis that the incense burner and other material showing royal iconography allegedly predate any such known evidence in Egypt. These theories will be scrutinized and assessed in Chapter 3 below.

Other interesting finds from Cemetery L were the seven or eight cattle burials which Seele claimed to be indicative of "...the A-group people as agricultural cattle owners."²⁷⁶ But elsewhere Seele stated that these cattle had been identified "...as belonging to a wild species."²⁷⁷ No faunal analysis has been published for these remains. It is difficult to give any satisfactory explanation for the interment of cattle at this site or for their peculiar manner of burial, although Williams calls the cattle pits "sacrifice burials."²⁷⁸ It should be noted that most of the cattle buried in Cemetery L had their heads removed, in contrast to other animals buried in other A-Group cemeteries,

²⁷⁶*Ibid.*, p. 35.

²⁷⁷*Ibid.*, p. 29.

²⁷⁸B. B. Williams, 1986, *op. cit.*, p. 15.

which have been buried whole. In spite of much indirect evidence suggestive of agriculture, such as the presence of large storage jars (possibly for grain), querns, and grinding stones, one cannot safely assume that this A-Group population practiced plant domestication.

Cemetery W-1 was given only a cursory treatment by Seele, although Williams has given it a fuller treatment in his second volume. Unlike Cemetery L, most of the graves were intact, and it was thus possible to see a full representation of grave goods (mostly pottery) in these tombs. By their contents the graves were described as having belonged "...to persons of greater than average wealth,"²⁷⁹ although they were clearly not of the same elevated standard as the tombs in Cemetery L. In addition, Cemeteries V, S, and T, although representing later periods for the most part, each contained a few scattered A-Group burials, usually in very poor condition. Cemetery Q, which contained burials of the Meroitic, X-Group, and Christian periods, was found to have cache pits that were of A-Group date. Williams sums up these cemeteries as follows:

"The A-Group remains discovered in Cemeteries W, V, S, and T are richer than those found in most A-Group sites. For example, more A-Group painted vessels were found in these burials than occur in much larger groups of cemeteries...moreover, the cemeteries, though hardly crowding the desert edge, appear to have been arranged hierarchically in relation to Cemetery L...an arrangement that has numerous, approximate parallels in the royal cemetery areas of Egypt."²⁸⁰

²⁷⁹B. B. Williams, 1989, *op. cit.*, p. 13.

²⁸⁰*Ibid.*, pp. 42-43.

The Franco-Argentine Archaeological Mission: Aksha

This Mission, directed by A. Rosenwasser and J. Vercoutter, occupied a West Bank concession that overlapped slightly with that of the Sudan Antiquities Service. Thus, the five cemetery sites excavated by the Franco-Argentine Mission had previously been recorded and partly excavated by the Sudan Antiquities Service. No A-Group habitation sites were recorded by the Franco-Argentine expedition. Site AA-1 (S.A.S. site reference 24-I-22) was described as follows:

“...a very small cemetery of the A-Group period...The graves, simple circular pits in the form of beehives, were cut in the silt. We excavated seven more graves, all of which were plundered. They did not yield anything but a few sherds of A-Group pottery.”²⁸¹

In this case no indication was given of whether this new investigation of the site constituted a complete coverage of the remains. The second site, AA-2 (S.A.S. site reference 24-I-23) was another small cemetery yielding the usual sherds of black-topped red pottery as well as the important finds of two seal impressions on mud stoppers.²⁸² In addition the graves of this cemetery were noted as the beehive type, circular in shape. Ten of these were excavated by this Mission, but no other information has been given about them. Site AA-3 (S.A.S. site reference 24-I-24) was an A-Group cemetery with forty-one graves, twenty-four of which were examined by the Franco-Argentine Mission. These were described as follows:

“...circular and rectangular graves dug in silt. The skeletons, when undisturbed, were in the contracted position, head to the south. The bodies seem to have been wrapped in goat skins, remains of which were found in several graves, and

²⁸¹J. Vercoutter, 1963, “Excavations at Aksha, September 1961–January 1962,” *Kush* 11: 137.

²⁸²Discussed below, Section 3.3.

one of the bodies was still covered by the skin. Although much plundered, Cemetery AA-3 has yielded a number of objects such as lozenge-shaped palettes of alabaster and quartzite; pointed jars of buff pottery; large dishes with undulating line decorations in red on buff, as well as a small four-legged cup of alabaster, a quern of quartzite; beads and a few copper implements.”²⁸³

Site AA-4 (S.A.S. site reference 24-I-25) consisted of twenty-seven A-Group graves, thirteen of which were excavated by the Franco-Argentine Mission. C-Group graves were intermingled with the A-Group graves. The A-Group graves were not described, with the exception of the following statement: “All the graves had been robbed in ancient times and not a single object was found besides the usual sherds of A-Group pottery.”²⁸⁴

The site designated as ACS (S.A.S. site reference 24-M-6) seemed to be the most significant and at least important enough to warrant another season of excavation. The preliminary description given to the archaeological features was the following:

“They consist of rectangular or oval shaped graves—with a few circular ones—dug into the silt. There is no evidence of any superstructure,...we found a few samples of the black topped red pottery; most of the vases we discovered were of the red on buff type. They were chiefly big jars and large dishes, lozenge-shaped palettes of alabaster and quartzite, beads, a few copper implements and an ivory object.”²⁸⁵

The Combined Prehistoric Expedition

This expedition has an involved history of development,²⁸⁶ but in 1962, under the new direction of F. Wendorf, the project received a concession as

²⁸³J. Vercoutter, 1963, *op. cit.*, p. 138.

²⁸⁴*Ibid.*

²⁸⁵*Ibid.*

²⁸⁶For which see, F. Wendorf, ed., 1965, *Contributions to the Prehistory of Nubia*, p. iii. For the long list of their distinguished staff see p. v.

part of the High Dam Campaign. The region included the entire reservoir area of the west bank and on the east bank south of the Second Cataract, and thus their area overlapped with that of other concessions. Their goal was to target primarily prehistoric material. According to Wendorf:

“Our purpose was to obtain statistically significant collections which would permit adequate definition of the various prehistoric industries evident in Nubia, many of which were apparently unique to this area, to place these industries precisely in the geological sequence, to describe the geologic history of the Nile, [and] to date the industries and the related geologic sequence by radiocarbon or other analyses...”²⁸⁷

Although much of their work deals with periods too early to be directly relevant to A-Group studies, they did define and date the Nile geological sequence with which the A-Group was associated. This comprises the Qadrus Unit, which was the last of the series of Nile sequences that followed the pattern of alternating desiccation and aggradation episodes. It is defined as:

“A fourth, and final interval of aggradation of Nile silts and sands to a maximum of 5 m. above the flood plain, or an elevation of 126 m..., with a subsequent and significant interval of erosion, followed by aggradation of the modern flood plain.”²⁸⁸

Cultural industries and their dates associated with the Qadrus Unit were described as follows:

“...late Neolithic and early Historic (A and C Group). Several other expeditions have excavated a large number of sites occupied during this interval, and our work has yielded only two dates. The first sample, dated 3270 ± 50 years B.C., is on charcoal at site DIW-5. The associated pottery is late Neolithic, and possibly affiliated with A-Group. Shell from site DIW-4, and associated with C-Group pottery dated 1420 ± 50 years B.C.”²⁸⁹

²⁸⁷*Ibid.*, p. iv.

²⁸⁸*Ibid.*, p. xv.

²⁸⁹*Ibid.*, p. xviii.

University of Vienna: Sayala

An Austrian team led by K. Kromer and W. Ehgartner held a concession from Sayala to Khor Nashryia (Figure 2), including Khor Sobakha on both banks of the Nile. The A-Group discoveries made by them were not numerous, but they were very significant. The Sayala area yielded a new type of A-Group habitation site in the form of rock shelters, with an assortment of associated rock drawings. These so-called 'settlements' were located at Khor Nashryia, where both the "rock shelters and the crevices between the rocks were used as habitations."²⁹⁰ In their preliminary season (1961-62) the expedition uncovered five rock shelters and two 'rooms' between the rocks, of which one example of each has been described as follows:

"In front of a protective rock roof a semi-circle of stones was placed on the natural rock. Probably the shelter had been originally covered by a shed-roof, connecting the stone work with the shelter roof. A narrow entrance between the large rocks led to another inhabited room (Room 1). Here a semi-circular fire place was sunk into the stone work, within the limits of which three more fire places were found. In the shelter room, a grey layer was revealed with traces of occupation and implements. On one block of the stone work, there was discovered the partial representation of a giraffe in an upside down position, and the following finds were made: a big mortar of sandstone, fragments of stone vessels, fragments of pottery vessels of black-topped ware, black-mouthed ware and mottled ware, shells of ostrich eggs, stone implements and toilet palettes cut from sherds, mortars and grindstones, as well as many flint implements."²⁹¹

Some of the rock drawings found within these shelters were immediately datable to the A-Group habitations, especially where there occurred representations of fauna that were extinct in Lower Nubia by the time of Early

²⁹⁰K. Kromer and W. Ehgartner, 1963, "Austrian Excavations in the District of Sayala (Lower Nubia-U.A.R.)," in *Fouilles en Nubie (1959-1961)*, p. 72.

²⁹¹*Ibid.*

Dynastic Egypt. These species included, in addition to giraffe, elephants and ostriches.

The Finnish Nubian Expedition: Gamai East to Nag Sigaga

Brief mention should be made of this small project, which was privately funded by the Finnish Archaeological Society. Members of the expedition were G. Donner, director, M. Donner, C. Flander, R. Holthoer, and T. Lindquist. The small concession granted to them stretched from Gemai East to Nag Sigaga along the east bank only. As far as I am able to determine, only one season of work was conducted by this team, from 1964-65. Of the fifty-one sites investigated by them, only three or four²⁹² were of A-Group date, with the remaining number being divided between the C-Group, Kerma, Pharaonic, Meroitic, X-Group, Christian, and Moslem periods. Three Neolithic ceramic sites, which predate the A-Group were also found. The pottery from one A-Group habitation site, described as having a "sandy ferruginous fabric,"²⁹³ was thought to resemble the Early Khartoum types. On another site, pottery was found that likely represents "...a link between Arkell's Es-Shaheinab and Nubian A-Group."²⁹⁴ The A-Group sites were given a short collective description as follows:

"All the three A-Group sites were habitation sites. The pottery from two of them displays the 'wolves-teeth' associated with Es-Shaheinab. There cannot be any doubt about the relationship between the two groups. It is interesting to note that one of the sites had been inundated and covered by 20 cm.

²⁹²There is a discrepancy in the report. Table 1 gives four, but the text mentions only three sites. See G. Donner, 1967-68, "Preliminary Report on the Excavations of the Finnish Nubian Expedition, 1964-65," *Kush* 15: 72-73.

²⁹³*Ibid.*, p. 72.

²⁹⁴*Ibid.*

of Nile silt into which a C-Group cemetery had subsequently been dug.”²⁹⁵

Despite the scarcity of the Neolithic and A-Group sites, the author considers these sites to have been the most valuable of the material uncovered by the expedition. He writes:

“The most notable discovery of the expedition is, in our opinion, the presence of Early Khartoum like pottery...and the contact between Es Shaheinab and A-Group on the one hand and between A-Group and C-Group on the other hand. Also the discovery that this forbidding area has been populated practically continuously is important. The narrowness of the inhabitable area makes it possible for us to assume that most of the sites have been found, a fact that adds to the significance of the results.”²⁹⁶

Smith’s B-Group Work

Smith’s important clarification of Reisner’s A, B, and C-Group sequence also belongs to this great era of research into Nubia’s prehistory. As already noted, the identity and assessment of the B-Group was one of the few mistakes made by Reisner. One suspects that his desire to fill the hiatus between the A and C-Group cultures led him to construct the B-Group for the sake of completion and convenience. Smith has demonstrated that the B-Group sites envisioned by Reisner as a separate complex were poorer, more impoverished manifestations of A-Group culture,²⁹⁷ and indeed, discoveries made since Reisner’s work have supported Smith’s observations. It should be noted that Smith’s idea that the B-Group was not an archaeological reality was not completely original. I have already shown above that Firth contributed some original thoughts surrounding this topic in the latter part of his work for the

²⁹⁵*Ibid.*, p. 73.

²⁹⁶*Ibid.*, p. 78.

²⁹⁷H. S. Smith, 1966b, “The Nubian B-Group,” *Kush* 14: 69-124.

Survey, although he did not realize the extent to which the B-Group could be questioned. Säve-Söderbergh, upon failing to find B-Group sites in the Scandinavian concession, had stated directly that “the B-Group may, after all, only represent a poorer social stratum of the A-Group.”²⁹⁸ Junker, as noted, was equally direct in his criticism of Reisner’s B-Group, and he felt justified in placing some of the Khor Bahan B-Group graves before the A-Group on the basis of their extreme poverty.²⁹⁹ However, Junker stopped short of criticizing the existence of the entire B-Group complex, and furthermore, according to Smith, his “...work of re-analysis has not...been followed up in print, principally no doubt because little material has been assigned to the B-Group since 1919, the date of his publication.”³⁰⁰ This then, left room for Smith’s formal analysis and questioning of the B-Group complex, and it seems that the academic community was more than ready to accept his critical review as an item long overdue.

The main premise of Smith’s reanalysis was that Reisner based the existence of the B-Group on extremely tenuous evidence, much of which he interpreted to suit his own needs. Reisner based the B-Group’s existence on a single cemetery containing sixty ‘diagnostic’ graves which he claimed were “uniform in character”³⁰¹ and which presented “distinct differences from the Early Dynastic groups.”³⁰² Reisner also claimed that these graves were sufficiently similar to the Early Dynastic (A-Group) graves to be close to the A-Group complex in date. In addition, he indicated that because the graves

²⁹⁸T. Säve-Söderbergh, 1964, *op. cit.*, p. 29.

²⁹⁹H. Junker, 1919, *Bericht über die Grabungen der Kaiserliche Akademie der Wissenschaften in Wien auf dem Friedhöfen von el-Kubanieh-Süd, Winter 1910-11*, p. 26.

³⁰⁰H. S. Smith, 1966b, *op. cit.*, p. 70.

³⁰¹G. A. Reisner, 1910a, *op. cit.*, p. 42.

³⁰²*Ibid.*

occurred in small uniform groups they must be of one community and of the same date. According to Smith, "the argument is not a model of clarity."³⁰³ Smith began his work by pointing out that Reisner did not demonstrate effectively the uniform character of the graves. A simple comparison of the basic features of certain graves³⁰⁴ clearly brings out their non-uniformity. All the graves compared may in fact be placed into the Predynastic, A-Group, or C-Group periods. Reisner's comparisons between his B-Group cemetery and an A-Group cemetery, which he made in order to establish a later date for the B-Group, cannot be considered valid because the B-Group graves are so dissimilar amongst themselves. In short, they did not represent a group and could not be used for comparison with another group. Smith also showed that the differences Reisner quoted between the A-Group and B-Group graves may just as well be indicators of a pre-A-Group date for the B-Group as much as a post A-Group date.³⁰⁵

Furthermore, in his assessment of the grave goods, particularly the pottery, Reisner was misleading and his results not conclusive with regard to a post A-Group date for the alleged B-Group complex. His claim that the B-Group graves lacked Predynastic pottery is not valid when one considers that most of the graves were badly plundered. Using Reisner's own descriptions of the wares, Smith showed that much of the material may in fact be classified as Predynastic.³⁰⁶ Much of the pottery appeared not to be homogeneous, and according to Smith, "...nor does it reveal that contrast with Nubian Predynastic and A-Group wares which Reisner considered entitled him to

³⁰³H. S. Smith, 1966b, *op. cit.*, p. 75.

³⁰⁴*Ibid.*, p. 77.

³⁰⁵*Ibid.*, p. 79.

³⁰⁶*Ibid.*, p. 80.

attribute to it a later date.”³⁰⁷ Of the other types of grave goods that are datable, all may be assigned easily to a known period, such as A-Group, pre-A-Group, or C-Group, without having to take recourse to the invention of a B-Group culture in order to explain their existence. Smith’s further contribution was to review every cemetery excavated by Reisner, Firth, Emery, and Junker, which was attributed to the B-Group (a prodigious feat) in order to show that their ‘B-Group’ assessment was based on fragile evidence. In most cases the cemeteries were too badly plundered and often too sparse in grave goods to allow for any reasonable estimate of their age. Smith also found that all too often the B-Group category became a convenient pigeon-hole into which graves and cemeteries were placed when no distinctive attributes of any particular time period were present. Firth, in his early work, for example, placed into the B-Group period

“...any grave which appeared to him on the basis of stratigraphy or grave type to be earlier than the C-Group, providing it contained no distinctive grave goods;...[and] graves which he considered showed signs of decadence.”³⁰⁸

Even Junker was guilty of pigeon-holing sites into the B-Group category when it appeared that all other possibilities for dating them were ruled out. Concerning a cemetery in the northeastern area of Kubanieh South, in which 98 per cent of the graves were plundered and 66 per cent were empty, Smith says: “Junker’s positive reasons for considering the graves to belong to the ‘B-Group’ are very frail.”³⁰⁹ The conclusions reached by Smith from the total analysis, which are now considered definitive, are as follows:

³⁰⁷*Ibid.*, p. 81.

³⁰⁸*Ibid.*, pp. 95-96.

³⁰⁹*Ibid.*, p. 117.

“The examination of these cemeteries has shown...(i) that the evidence from them does not suffice to support the hypothesis that a distinct indigenous population group with a definable culture was settled in Lower Nubia during the Old Kingdom period, (ii) that there is no single grave among them which can be demonstrated to belong to a date between the mid Ist and VIth Dynasty.”³¹⁰

As a result of Smith’s work it became accepted that there was a hiatus between the end of the A-Group period in Lower Nubia and the beginning of the C-Group, although the precise nature of this hiatus is now being questioned. Existing theories that attempt to explain the so-called hiatus are examined below. However, Smith did not doubt that this hiatus was real, that is, a real reflection of the archaeological record. He noted:

“Lower Nubia from Aswan to Semna up to River Level 180 has now been archaeologically surveyed from end to end, by far the greater part of it by the exhaustive methods outlined by Reisner in the first Nubian Survey volume...it is in fact doubtful whether any area comparable in size has been so completely examined, even in western Europe or the United States.”³¹¹

2.2. RESEARCH SINCE 1969 AND CURRENT STATE OF RESEARCH

No new A-Group sites have been discovered since the close of the High Dam Campaign, for it must be remembered that the known territory of the A-Group is now permanently flooded and essentially unavailable for future archaeological study. This presents the unsettling scenario that what is currently known about the A-Group is close to all that will ever be known about it, unless perhaps studies in the areas peripheral to the A-Group territory may shed some light on A-Group relationships with the rest of

³¹⁰*Ibid.*, p. 118.

³¹¹*Ibid.*

Neolithic and post-Neolithic Sudan. Indeed, since 1969 work has extended to the areas south, east, and west of the A-Group territory.³¹² These areas and the sites relevant to them are summarized only briefly within this section of the present work, as the material evidence from these sites will be utilized heavily in Chapter 4.

The Pre-Kerma Culture

The site of Kerma, located just south of the Third Cataract, was originally excavated by Reisner beginning in 1913. Recent work by the Swiss Mission (University of Geneva) directed by C. Bonnet, has uncovered a cultural phase that predates the known Kerma culture and which is partly contemporary with the A-Group culture.³¹³ The excavators have dubbed this new culture 'Pre-Kerma.' Discovered in 1986, a full description of the culture is still being formulated, and its full temporal range is not yet certain. Since it precedes the Kerma culture in the same region, a likely terminal date is c. 2500-2400 B.C. Identification of the culture was possible due to the presence of distinctive ceramic material collected from graves in area CE 12, at the centre of the eastern necropolis. This pottery is described as having a regional character, but showing affinities with both the A-Group and C-Group wares. It also shows affinities with the earliest pottery of the Kerma occupation (the Old Kerma phase) at the site. I think the resemblance of some sherds to the Lower Nubian pottery, and their appearance at Kerma, raises some questions as to whether the A-Group culture may have spread further south than is currently thought, or whether we have evidence of a distinct population that

³¹²This is not to imply that these new areas have been opened up specifically with the aim of elucidating A-Group relationships. Rather, this has occurred as a part of the natural archaeological growth of the Sudan.

³¹³C. Bonnet, 1988, "Les fouilles archéologiques de Kerma (Soudan)," *Genava* 36: 5-20.

perhaps had contact with the A-Group people and whose territorial limits are not yet known.

Privati has done a brief analysis of the Pre-Kerma ware,³¹⁴ from which the following characteristics emerge: (1) the pottery was fired at lower temperatures than the later Kerma wares, and is usually more fragile, (2) no Egyptian sherds have yet been found in the assemblage, which indicates a solely regional manufacture for the wares, (3) there are three vessel types, i.e., wide-mouthed shallow bowls, regular bowls of the Old Kerma type, and jars without necks or collars, (4) the common A-Group and C-Group type of sherd was red black-topped ware with a polished exterior, (5) beige or brown examples were also fairly common, (6) rippling of the surface was another common feature,³¹⁵ with varying degrees of rippling over the body, and (7) the rarer A-Group eggshell or variegated haematitic ware was also present. In the absence of radiocarbon dates, it is this ceramic analysis that has led to the conclusion that the Pre-Kerma culture represents a group that is without doubt contemporary with the A-Group. I think one might speculate about a possible movement of A-Group people southward into the Kerma area after about 3,000 B.C., at the time of the alleged hiatus in the occupation of Lower Nubia. The latter part of the temporal range for Pre-Kerma coincides with the hiatus in Lower Nubia. This fact is crucial for our understanding of this hiatus because the Pre-Kerma complex is the only certain indication so far that not all of Nubia was abandoned after the demise of the A-Group in Lower Nubia.

Other important implications of the existence of the Pre-Kerma cultural phase are that it pushes the known Kerma occupation back to the third

³¹⁴B. Privati, 1988, "La céramique de l'établissement pré-Kerma," *Genava* 36: 21-24.

³¹⁵See *ibid.*, figs. 1/3, 1/4, and 2/11.

millennium B.C., and it could shed light on the origin of the Kerma culture, about which very little is known. Since all of the Pre-Kerma material to date has come from the Old Kerma cemetery, Privati suggests that the cemetery was initiated in the immediate area of the town at the end of the third millennium B.C., and that the Kerma occupation has been continuous since then.

Settlement features of Pre-Kerma date have also been found. These include a rectangular area containing post-holes and circular hut enclosures, as well as cavities that may have served as granaries or storage pits. One pit contained two jars, which may have held a liquid product. Grain has recently been found in association with these pits and jars in support of the granary theory.³¹⁶ The huts were of wood and straw construction, with an estimated life span of about fifteen to twenty years. There is evidence, from the number and arrangement of some of the post-holes, of a succession of huts in one location over time. Hut diameters were generally four to five metres, but some reached a size of eight metres. Average post-hole diameters were twenty centimetres, at a spacing of forty to fifty centimetres for the larger structures. Work at the site and analyses of the material remains are ongoing.

Kadero (Central Sudan)

In 1972 a Polish expedition led by L. Krzyżaniak reopened the site of Kadero, which had lain untouched since Chittick's initial investigation in 1954. The new project was sponsored by the Polish Centre for Archaeology in Cairo and the Archaeological Museum in Poznan, Poland. The first nine seasons of work proceeded uninterrupted until 1980, after which there was an

³¹⁶See C. Bonnet, 1992a, "Excavations at the Nubian Royal Town of Kerma; 1975-91," *Antiquity* 66 (no. 252): 613.

intention to return to the site following a three-year break for publication. Not only was this accomplished, but publications based on the numerous seasons of work continued to be made regularly to the present day. However, the reports stemming from the excavations are scattered between a number of journals. This is complicated by the fact that a number of specialists have published under separate title on a variety of aspects of the site, such as: (1) the human remains, by Dzierżykray-Rogalski, (2) the pottery, by Chlodnicki, (3) the faunal material, by Gautier, (4) the plant remains, by Klichowska, (5) the population demographics, by Prominska, and (6) the fieldwork results themselves, by Krzyżaniak.

The first eight seasons of work (1972-1979) involved the excavation of the two settlement sites (middens), one each on the northern and southern mounds, and two burial grounds that were clearly associated with the settlements. Initial emphasis seemed to have been placed on the site's neolithic subsistence strategy. Radiocarbon dates, three for each of the settlement mounds,³¹⁷ showed that the northern midden was about 300 years older than the southern settlement, despite the director's assumption that the settlements were contemporaneous.³¹⁸ The central part of the site was devoid of any settlement, although Krzyżaniak indicates that it may have been used as a burial ground and/or an area for the corralling of animals.³¹⁹ The former

³¹⁷For both sets of dates see L. Krzyżaniak, 1986, "Recent Results of Excavations on the Neolithic Settlement at Kadero (Central Sudan)," In *Nubische Studien*, edited by M. Krause, p. 123.

³¹⁸*Ibid.* It should be remembered, however, that Chittick, in his 1955 publication, quite clearly indicated that one of the mounds was earlier than the other. See again H. N. Chittick, 1955, "Two Neolithic Sites near Khartoum," *Kush* 3: 75.

³¹⁹Only one basic sketch-plan exists for the site in a number of publications. See for example: (1) L. Krzyżaniak, 1986, *op. cit.*, p. 126, and (2) L. Krzyżaniak, 1984, "The Neolithic Habitation at Kadero (Central Sudan)," in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 310.

theory is now known to be the correct one, as it has been borne out by excavation.³²⁰ The uncalibrated dates, with their standard deviations, average 5190 ± 83 B.P. for the southern mound and 5497 ± 63 B.P. for the northern mound. These dates place Kadero firmly within the Khartoum Neolithic tradition of the central Sudan, and also help to better define the site, especially in relation to the site of Shaheinab. A temporal link with the A-Group is also now beyond question. After the third season of excavations Krzyżaniak wrote:

“It now seems that Kadero, site no. 1, partly fills the gap which exists in the archaeological spectrum of the Sudan, between the time of Esh Shaheinab and the Meroitic period. This most probably extends the Khartoum Neolithic temporal development to become contemporaneous with that of the A-Group in Lower Nubia.”³²¹

The most significant features of the site to emerge from the early work were the remains of domesticated animals and possibly domesticated plants, the total yield of animal specimens being far greater than the evidence for domestication at Shaheinab. The presence of the three primary domesticates, cattle, sheep, and goat, which together comprise a large proportion of the faunal assemblage,³²² suggests a primarily pastoral economy with other types of economies such as fishing, hunting, and collecting of shellfish, as supplements. On the basis of the faunal assemblage Gautier suggests that the site was a “...permanently occupied settlement.”³²³ The claim that the occupants of the site were cultivating domesticated sorghum and millet must

³²⁰For a comprehensive report on this area see L. Krzyżaniak, 1991, “Early Farming in the Middle Nile Basin: Recent Discoveries at Kadero (Central Sudan),” *Antiquity* 55 (no. 248): 515-532.

³²¹L. Krzyżaniak, 1974, “Polish Excavations at Kadero,” *Nyame Akuma*, 5: 32.

³²²See the report by A. Gautier, 1984b, “The Fauna of the Neolithic Site of Kadero (Central Sudan),” in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, pp. 317-319.

³²³*Ibid.*, p. 319.

still be considered somewhat questionable. The conclusions are based only on the numbers or counts of plant impressions on pottery and the numbers of grinding stones found at the site,³²⁴ and in no way constitutes direct evidence of cereal cultivation. It should further be noted that some of the plant impressions from Kadero have been examined by scanning electron microscope for more certain evidence of domestication, but the results are still inconclusive.³²⁵

Concerning the human skeletal material, Neolithic remains were recovered from numerous graves in two separate areas of the site, yielding some interesting data about social differentiation at Kadero. Concerning the graves already excavated, Krzyżaniak has written:

“The considerable differences in furnishing suggest the existence of an élite, and it seems that the dynamics of this élite may also be visible. It was in existence from the earliest phase of the Early Neolithic interments and its earliest members were buried in the richest cluster of graves found in the cemetery in the northeastern part of the mound, away from the middens. In the next stage but still in the Early Neolithic the members of the élite started to be buried in the central part of the mound, between the two middens in a clearly secluded place. The wealth of their grave furnishing and construction of the grave pit now became more sophisticated. The élite continued to be buried in this place until the beginning of the Late Neolithic...The cemetery of the élite may have been used, therefore, for several hundred years.

The Kadero élite burials were of adult men and women but also included children. Adult men, however, seem to have

³²⁴See the report by M. Klichowska, 1984, “Plants of the Neolithic Kadero (Central Sudan): A Palaeoethnobotanical Study of the Plant Impressions on Pottery,” in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, pp. 321-326.

³²⁵See A. Stemler, 1990, “A Scanning Electron Microscope Analysis of Plant Impressions in Pottery from the Sites of Kadero, El Zakiab, Um Direiwa and El Kadada,” *Archéologie du Nil Moyen* 4: 87-105.

played a dominant social role as their grave furnishing indicates.”³²⁶

The only fault with the burial work is that the manner of interpretation of these remains show, surprisingly, that the techniques of physical anthropology that were in use during the First and Second Archaeological Surveys are still being employed for Kadero. Dzierżykray-Rogalski defined the Kadero population as the “black variety,” a term he preferred over the “negroid” label used in the past. This classification was based largely on a visual examination of the bones for traits such as prominent prognathism³²⁷ and other features of the bones. His interpretations have received direct criticism from a few scholars not directly associated with the Kadero excavations, most notably, J. H. Robertson, R. J. Bradley, G. J. Armelagos, and D. L. Greene. Their criticisms are centered around the facts that the racial ‘typing’ of populations from skeletal material alone is no longer a valid method today, and that defining racial characteristics is not necessary for the reconstruction of any given cultural group. Robertson and Bradley write:

“...most current osteological research indicates that ‘race’ cannot be determined from the skeleton...and this is perhaps more important—it should be realized that such determinations are probably not significant. Such terms as Caucasoid, Mongoloid, and Negroid are suspect in the present and cannot be meaningfully extended into the past.”³²⁸

In addition, Armelagos and Greene add that Dzierżykray-Rogalski fails to take into account any other explanation for the alveolar prognathism in the

³²⁶L. Krzyżaniak, 1991, *op. cit.*, p. 527.

³²⁷See T. Dzierżykray-Rogalski, 1977, “Neolithic Skeletons from Kadero, Sudan,” *Current Anthropology* 18 (no. 3): 585-586, and 1978b, “On the Black Variety at Kadero, Sudan,” *Current Anthropology* 19 (no. 2): 406-407.

³²⁸J. H. Robertson and R. J. Bradley, 1978, “On the Presence of the Negro in the Nile Valley,” *Current Anthropology* 19 (no. 1): 178.

Kadero population, such as the possibility that it may represent an adaptation to the environment. It is possible, for instance, that based on the morphological studies on some Mesolithic Nubian populations,³²⁹ prognathism may be an "...adaptation to stress in the masticatory process, which selects for large teeth and faces."³³⁰ The use of antiquated racial ideas for the site of Kadero is most regrettable, for as Robertson and Bradley have pointed out, the site is so important for our understanding of the Neolithic of the Nile Valley. Their appeal to the site specialists reads as follows:

"Indeed, before Krzyżaniak and colleagues label a skeletal population as 'Negro,' let them consider the problem in the context of the modern Nile Valley: Since there have never been barriers to gene flow in the Nile Valley, no 'racial' boundary can be defined. Instead, there is a series of clines. For example, as one goes up the Nile one finds darker and taller people...If Kadero is to add to our knowledge about the ancient inhabitants of the Nile Valley, new approaches are called for that provide reliable information."³³¹

Despite this appeal for a new approach, Dzierżykray-Rogalski has maintained his position and defended himself based on his original claims.³³² As a result, the human skeletal material has not been significantly re-studied.

The second stage of excavation and interpretation of the site (1980-1989) has involved an assessment of its relationships with other sites in its immediate vicinity in the central Sudan. Krzyżaniak has envisioned three types of Neolithic adaptive strategies, each having its own type-site, with Kadero typifying a valley/plain type of adaptation. The author sums these up as follows:

³²⁹For references see G. J. Armelagos and D. L. Greene, 1978, "On the Interpretation of the Kadero (Sudan) Neolithic Population," *Current Anthropology* 19 (no. 2): 412.

³³⁰*Ibid.*

³³¹J. H. Robertson and R. J. Bradley, 1978, *op. cit.*

³³²T. Dzierżykray-Rogalski, 1978b, *op. cit.*

- “1. Riverbank Adaptation: subsistence based on fishing, collecting and hunting, supplemented by small-scale animal husbandry (possibly only of the ovicaprids). Type-site: Esh Shaheinab,
 2. Valley Plain Adaptation: subsistence based on large-scale animal husbandry (mainly cattle) of pastoral character combined with the intensive...collecting of seeds of wild tropical cereals, other grasses, tree fruits, molluscs, and some hunting. Type-site: Kadero,
 3. Wadi Adaptation: subsistence based probably on pastoralism, hunting, and collecting...Type-site: Sheq ed Dud?”³³³

It should be added that attempts to define Kadero within the broader context of Neolithic Sudan are now ongoing.

Zakiab (Central Sudan)

This site has been closely linked with Kadero not only because of its geographic proximity to Kadero (Figure 4), with only four kilometres between them, but because of the excavators' belief that Kadero functioned as a seasonal base camp for satellite sites, of which Zakiab may have been one. Zakiab was first excavated in 1978³³⁴ by R. Haaland and A. Tigani El Mahi, both from the University of Bergen. Kadero at this time had not yet been evaluated as a permanent settlement, and Haaland argued that Kadero was a seasonal occupation inhabited only during the rainy season. She then postulated that Zakiab owes its existence to the movement of the Kadero population in the dry season, as they

“...followed the retreating Nile and settled in smaller fishing camps along the river. In these camps they would also have

³³³L. Krzyżaniak, 1984, The Neolithic Habitation at Kadero (Central Sudan),” in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 314.

³³⁴It was initially known from Arkell's investigation's in the region, but not excavated by him. See A. J. Arkell, 1953a, *Shaheinab*, p. 106 (map, Fig. 57), and p. 108.

kept...cattle because of the availability of pasture and water.”³³⁵

The problem with Haaland’s model of a single rainy-season base camp (Kadero) surrounded by or interconnected with dry-season camps is that Zakiab is the only example of the latter site type found to date. Furthermore, it seems that the material remains of Zakiab, while resembling those of Kadero are not extensive enough to support the idea that the two sites were occupied by members of a single population. The radiocarbon dates obtained from Zakiab from Nile oyster (for example, 5350 ± 90 B.P.)³³⁶ does indicate contemporaneity with Kadero, but the preponderance of fishing tools at Zakiab is in marked contrast with Kadero, where no fish hooks were found. A further difference between the two sites is the absence of potters’ tools (burnishers, etc.) at Zakiab, which are abundant at Kadero. Haaland unconvincingly, I think, quotes this as further evidence of interconnections between the two sites, saying that “...pots were made at the base site Kadero and brought to Zakiab when needed in the dry season.”³³⁷ Grinding stones were also scarce at Zakiab, but common at Kadero, about which Haaland says: “I interpret this to reflect that cultivation was practised at the Kadero site.”³³⁸ It should be noted that Haaland accepts as evidence for plant domestication and cultivation, the numbers of plant impressions on pottery and the numbers of grinding stones, which, as already noted, are not conclusive evidence of

³³⁵R. Haaland, 1978, “The Seasonal Interconnection between Zakiab and Kadero: Two Neolithic Sites in the Central Sudan.” *Nyame Akuma* 13: 32. See also the flow-chart/model on p. 34.

³³⁶For additional calibrated dates see A. T. El Mahi, 1984, “An Interpretation of the Faunal Remains from El Zakiab Site (Central Sudan),” in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 307.

³³⁷R. Haaland, 1978, *op. cit.*, p. 33.

³³⁸*Ibid.*

themselves. In short, it seems that the only similarities between the two sites are in the pottery types, "...both as regards to clay, surface treatment, firing and decoration."³³⁹ The absence of dotted wavy line ware is, as at Kadero, a feature of the Zakiab ceramic assemblage.

The analysis of faunal remains by El Mahi from Zakiab was done in an "...attempt to correlate some evidence which indicates the seasonal status of El Zakiab...and to investigate the suitability of the settlement during the rainy seasons."³⁴⁰ El Mahi's work concentrates on the high percentage of lungfish, which the author claims is an indication of a dry season occupation of the site. El Mahi writes:

"...the lungfish is known for its habit of aestivation in sleeping nests in the absence of water. At many localities in Africa, the lungfish is caught (especially in dry seasons) by digging up the sleeping nests. This explains the high occurrence of the fish—70%. Thus it is possible to conclude that the fishing activity at El Zakiab took place in the dry season."³⁴¹

The author also adds that "the absence of human burials on the site can be explained by its seasonal status,"³⁴² and "the relatively small size of this site...indicate[s] the possibility that El Zakiab...was not an 'independent' site."³⁴³ This, of course, is merely speculation, and it should be noticed that the entire argument for Zakiab existing as a satellite site of Kadero is based upon Zakiab existing as a dry season occupation. The alternative view that Zakiab could be an independent, small seasonal camp, is not considered by the excavators, despite its dissimilarities with Kadero. An independent status for Zakiab would explain its differences in material culture from that of Kadero,

³³⁹*Ibid.*, p. 32.

³⁴⁰A. T. El Mahi, 1984, *op. cit.*

³⁴¹*Ibid.*, p. 308.

³⁴²*Ibid.*

³⁴³*Ibid.*

while its contemporaneity with Kadero, which is undisputed, allows it to share with Kadero certain features of the Khartoum Neolithic tradition. Furthermore, the interpretative model proposed by Haaland and the evidence presented by El Mahi in support of the model, is now in direct conflict with the analysis of Kadero as a permanent occupation. Also, if Kadero functioned as a base camp, why has only one associated seasonal camp been found in its immediate environs?

Nofalab and Islang (Central Sudan)

These two sites, located on the west bank of the Nile (Figure 4) north of Omdurman, were discovered and excavated by El-Anwar in 1979. To my knowledge only one short report has been published concerning them.³⁴⁴ Nofalab quite clearly belongs to the Khartoum Neolithic tradition judging from the preponderance of burnished wares and the presence of a few sherds having the dotted wavy line design at the site. Burnishing tools and the catfish spines used in making the combed decoration were also recovered from the site. The stone tools were typical of the types found at Shaheinab, and include scrapers, lunates, borers, groovers, arrowhead fragments, and broken gouges. Some of the grinding stones showed evidence of having been subjected to fire. The presence of fish-hooks (made of shell) and fish remains other than the catfish spines attest to an economy based in part on fishing. Plant (seed) and animal remains were also found, but the former are still undergoing examination. Impressions of seeds were also found on some of the pottery. El Mahi, who examined the faunal remains, has shown that hippopotami, sheep,

³⁴⁴S. El-Anwar, 1981, "Archaeological Excavations on the West Bank of the River Nile in the Khartoum Area," *Nyame Akuma* 18: 42-45.

goat, and gazelle were exploited, but there is no mention of whether the sheep and goat may have been domesticated.

The site of Islang has been compared by El Anwar to El Qoz,³⁴⁵ in that the pottery exhibited both wavy line and dotted wavy line impressions in separate levels at the site. A single radiocarbon date of 5770 ± 100 B.P. (4760 \pm 170 B.C.) has been obtained from Nile oyster. The lunates found at this site were generally larger in size than those at Nofalab, and furthermore, most of the Islang lithics were made of rhyolite, in contrast to the use of quartz at Nofalab. Otherwise, it seems that the amount of material recovered from Islang is too meagre to allow for further assessments or inter-site comparisons. Nonetheless, based on this evidence, the author proposes that the relationship between Nofalab and Islang is exactly parallel to the Kadero/Zakiab relationship. To quote El-Anwar:

“The writer thinks the Nofalab site was a permanent base site. This argument is based on the large size of the site, the huge amount of lithic waste, availability of most of the lithic raw-material in the vicinity of the site or else within a reachable distance, proximity to a permanent source of water and the faunal evidence which reflects a variety of species. On the other hand, Islang seem[s] to have been occupied as a seasonal fishing camp site. This is based on the amount of fish remains,...the small size of the site and the scarcity of pottery and lithic tools.”³⁴⁶

El Kadada and Environs: (Shendi Reach)

Shortly after the third archaeological campaign the need for salvage operations on a comparatively small scale arose in the district of Taragma, as a result of a new local irrigation project. Salvage work was begun jointly in

³⁴⁵*Ibid.*, p. 94.

³⁴⁶*Ibid.*, p. 45.

1976 by F. Geus of the French Archaeological Research Unit and the Sudan Antiquities Service, resulting in the discovery of the important site of El Kadada. Continued excavation in the Shendi Reach resulted in the later discovery of numerous other Neolithic remains at El Ghaba, El Atra, El Kudra, El Ushara, and at Shendi itself.³⁴⁷ Work was then extended by J. Reinold into the Kerma Basin in the region of Kadruka (Figure 6).

Excavation at Kadada showed the presence of Neolithic remains consisting primarily of burials in the form of either child pot burials or normal adult inhumations in grave pits. No remains of habitations were found, although finds were collected from what is likely a settlement area.³⁴⁸ The combined remains show an intriguing combination of features from the Khartoum Neolithic, the A-Group, and the C-Group complexes. Two radiocarbon dates obtained from shell samples (4630 ± 80 B.P. and 4830 ± 50 B.P.), indicate a definite contemporaneity with the A-Group to the north.³⁴⁹ The similarities with the Shaheinab Neolithic are not numerous, but at the same time, they cannot be ignored. These include "...serrated Nile bivalves...amazonite beads, lip-plugs, barbed bone harpoons, [and] shell fish-hooks."³⁵⁰ Important differences between Kadada and Shaheinab occur in the pottery decoration³⁵¹ and in the complete absence of the gouge at Kadada. Similarities with the A-Group are far more numerous because of the

³⁴⁷For the location of all sites see Figure 8 below.

³⁴⁸F. Geus, 1980b, "Franco Sudanese Research in the Sudan (1975-1979)," *Nyame Akuma* 16: 44.

³⁴⁹For additional dates showing A-Group contemporaneity see Table 1 in F. Geus, 1982b, "Franco-Sudanese Excavations in the Sudan (1981-1982)," *Nyame Akuma* 21: 34.

³⁵⁰F. Geus, 1984a, "Excavations at El Kadada and the Neolithic of the Central Sudan," in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 369.

³⁵¹See *ibid.*, pp. 369-370.

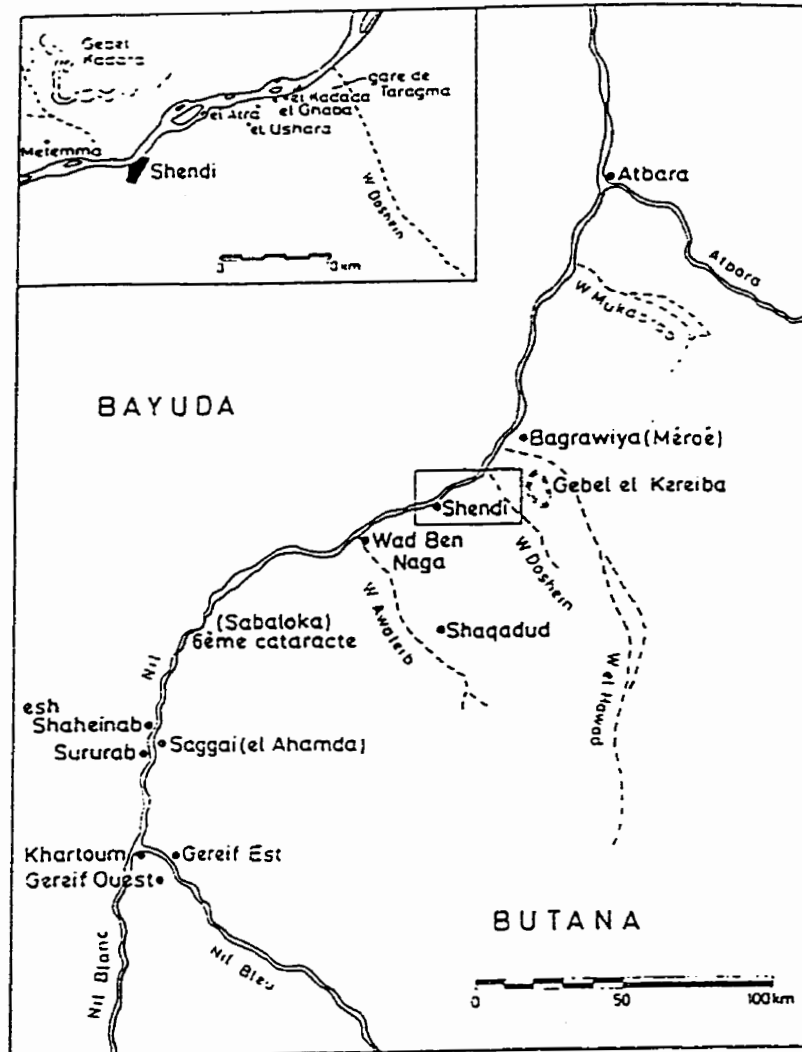


Figure. 8. Shendi Reach sites mentioned in the text.

(From: P. Guibert, C. Ney, and M. Schvoerer, 1991, "Datation croisée thermoluminescence/radiocarbone de cultures néolithiques de la vallée du Nil, Soudan: sites d'el Kadada et d'el Ghaba." *Archéologie du Nil Moyen* 5: 130).

“...frequent occurrence of circular or sub-circular grave shafts and of superimposed burials, large quantity of grave goods inside the shafts...polished hard stone discs and palettes, sandstone lower grindstones, pottery figurines...and decorations of the pottery.”³⁵²

Typical C-Group characteristics evident in the El Kadada material culture are the abundance of black incised pottery, sometimes with white filling, as well as the presence of the circular grave shafts that are typical of the early C-Group. It may well be wondered how the site of Kadada was assessed given these cross-cultural characteristics. Geus proposes that the culture be viewed as “...a late and brilliant development of the Central Sudanese Neolithic, presenting a number of affinities with the A-Group and C-Group of Lower Nubia,”³⁵³ but he also cautions against adopting Arkell’s terminology too literally for this site.³⁵⁴

An important aspect of the work at Kadada is the analysis and interpretation of the burial material by J. Reinold. He has utilized the combined evidence from the cemeteries of Kadada and El Ghaba to argue a case for the practice of human sacrifice in Neolithic times. His comparisons of double and triple inhumations show an apparent evolution of burial practice over time,³⁵⁵ where, in the case of the triple inhumations, there are indications that a second individual was ‘sacrificed’ and buried at the same time as the primary occupant of the tomb. The probability of a sacrificed individual is somewhat substantiated by the fact that no grave goods accompanied this second individual, which contrasts markedly with the

³⁵²*Ibid.*, p. 371.

³⁵³*Ibid.*, p. 368.

³⁵⁴See F. Geus, 1980b, *op. cit.*, p. 44.

³⁵⁵The claim of a chronological development is not supported by any radiocarbon dates, and it is not possible otherwise to determine whether the triple burials with their attending characteristics followed the double burials, or vice-versa.

wealth of material accompanying the primary burial. Also, the supposedly sacrificed body was contained in a sack, making the remains very tightly contracted, as opposed to the more loosely contracted position of the main burial. Furthermore, the second burial was placed on the legs and on the pottery deposit of the first individual. Reinold implies that this position and the physical containment of the second body in the sack is parallel with the character of the other funerary goods belonging to the main occupant of the tomb.³⁵⁶ Thus it seems that the second individual served in the capacity of an offering in the burial of another. The third inhumation in the triple burial was clearly not contemporary with the other two, and appears not to have been sacrificial. However, it seemed to have had some significance in relation to the primary individual. Reinold writes:

“Dans la tombe d’un personnage que l’on peut considérer comme plus important, est déposé un individu, probablement sacrifié lors des cérémonies de l’enterrement. Plus tard un membre de la famille est enterré dans cette sépulture, où se fait alors la recherche de l’emplacement précis des inhumés précédents.”³⁵⁷

Evidence of the re-opening of the graves in order to accommodate this third burial is reasonably well documented by the archaeology, thus confirming this sequence of events. The fact, for example, that the three bodies were directly superimposed tends to confirm the relationships of which Reinold writes.

The double graves, it should be noted, do not show the simultaneous burial of two individuals, but show instead a reopening of the graves for the placement of a second body. There is some speculation, as yet

³⁵⁶J. Reinold, 1986a, “La nécropole néolithique d’el Kadada au Soudan central: Quelques cas de sacrifiés humains,” in *Nubische Studien*, edited by M. Krause, p. 161.

³⁵⁷*Ibid.*

unsubstantiated,³⁵⁸ that the practice of animal sacrifice (of dogs) seen in the double burials may have replaced or may have been replaced by the practice of human sacrifice.

The implications of Reinold's interpretations may be far-reaching enough to affect the way that other Neolithic burials and even some A-Group burials are perceived. Reinold writes that Kadada is not an isolated example of apparent sacrificial burial, although he quotes only a little comparative material.³⁵⁹ It may be that parallels exist in the royal A-Group tombs at Qustul as well as in Egyptian contexts. He writes:

“La publication récente d'un brûle-parfum décoré, découvert à Qustul dans les tombes 'royales' du Groupe A (cimetière L) permet de penser à la pratique du sacrifice humain durant cette période... Emery pensa avoir retrouvé à Saqqara, dans une tombe thinite, les indices d'un tel rite, également observés par Petrie à Abydos.”³⁶⁰

The possibilities for A-Group and Egyptian human sacrifice are examined and compared in some detail below (Section 3.2).

El Ghaba was assessed as a “...cemetery of a population related to the Shaheinab neolithic.”³⁶¹ It is now known from the types of burial goods in the more recent graves at El Ghaba that this site was directly ancestral to the cemeteries at Kadada. In the course of two seasons of work, numerous Neolithic graves were cleared,³⁶² and some shell material obtained amongst

³⁵⁸This seems to be due to the weak stratigraphic association of the Kadada material, (p. 162, *ibid.*), which hinders proper interpretation.

³⁵⁹See, for example, note 17, p. 164 (*ibid.*) for some references to Reisner's work during the First Archaeological Survey.

³⁶⁰*Ibid.*, p. 163.

³⁶¹F. Geus, 1981a, “Franco-Sudanese Excavations in the Shendi Area (1980),” *Nyame Akuma* 18: 40.

³⁶²For the plan see Y. Lecoq, 1987, “Le site néolithique d'el Ghaba: Deux années d'activité (1985-1986),” *Archéologie du Nil Moyen* 2: Fig. 3, p. 72.

their contents have yielded two radiocarbon dates,³⁶³ which, after calibration range from about 4500 to 3800 B.C. This makes the later phase of the site contemporary with the Early A-Group. The graves at El Ghaba differ markedly from the graves of the other Khartoum Neolithic sites of Shaheinab, Kadero, and Zakiab, because of the high proportions of grave goods at El Ghaba. Geus writes that “jamais, jusqu’à présent, un ensemble de sépultures de cette période aussi dense et aussi riche n’a été trouvé. En une saison a été constituée une collection unique de vases complets.”³⁶⁴

Another point of contrast between El Ghaba and other Khartoum Neolithic sites is that the ceramic decoration of impressed triangles executed with the gouge was notably absent at El Ghaba. However, one fragment of a gouge tool (of rhyolite) was recovered from the surface of the site. Two unexpected finds were also made, i.e., a beaker with a flared rim and a large blade of exceptional worked quality.

The site of El Atra received a preliminary survey during the 1982-83 field campaign,³⁶⁵ at which time it was found to contain a number of tumuli bearing sherds of Neolithic wares. One sondage was taken into a pillaged tomb, in which a skeleton was located in the contracted position. The only grave goods recovered were some beads and a vase fragment. Excavations at this site must be considered still in their preliminary stages.

The site of El Kudra may be summed up very briefly from a 1982 publication by Geus, following shortly upon its discovery. Geus reports:

³⁶³See F. Geus, 1986a, “Des tombes contemporaines du néolithique de Khartoum a El Ghaba (Taragma),” in *Nubische Studien*, edited by M. Krause, p. 67.

³⁶⁴*Ibid.*

³⁶⁵See F. Geus, 1986b, “La section française de la direction des antiquités du Soudan travaux de terrain et de laboratoire en 1982-1983,” *Archéologie du Nil Moyen* 1: 21.

“This new area appears to be a settlement of the Dotted Wavy Line culture. It has been disturbed by burials of Napatan date. On the other hand, sherds of an unknown culture, which are also found on other parts of the site, are mixed with the Dotted Wavy Line material. Many of them are of a fine black and red ware, similar to the A-Group and Kerma wares. The three periods of occupation found in this area confirm that el Kadada was occupied for a very long time during Neolithic and historic periods.”³⁶⁶

Similarly the site of El Ushara was described briefly as follows:

“During the campaign at el Kadada a sounding was organized at the threatened site of el Ushara, situated between el Kadada and Shendi. Only 10m² were excavated. The archaeological layer is about 40cm thick, with no clear stratigraphy. The pottery sherds are similar to those found at el Ghaba. Samples of shells have been collected for ¹⁴C dating.”³⁶⁷

The other site, Shendi, was subjected to a single test excavation, and yielded large amounts of ripple ware,³⁶⁸ indicating perhaps a greater affinity with the A-Group culture. Very little of the Neolithic graves could be examined, as they were badly disturbed by later (Moslem) burials.

It should be noted that much of the material from the Kadada site and region has undergone analysis, including (1) the classification of the El Ghaba material, by Y. Lecointe, (2) the petrographic and chemical analyses of the pottery, by P. De Paepe, (3) the faunal analysis by A. Gautier, (4) thermoluminescence dating to supplement the radiocarbon dating, by M. Schvoerer, and (5) the ongoing burial analysis by J. Reinold.

In the 1985-86 seasons, the French-Sudanese unit extended their investigations into the Kerma Basin. A survey of the district of Kadruka has

³⁶⁶F. Geus, 1982b, “Franco-Sudanese Excavations in the Sudan (1981-1982),” *Nyame Akuma* 21: 34.

³⁶⁷*Ibid.*

³⁶⁸F. Geus, 1981a, *op. cit.*, p. 41.

revealed the presence of late Neolithic remains similar to those seen at Kadada, in addition to deposits very similar to the Old and Classic phases of the Kerma culture. About fifteen sites were found distributed on either side of the Kerma Basin,³⁶⁹ with the Kerma-like sites on the western side, and the Neolithic sites on the east. The Neolithic burials have been summarized briefly from an examination of eight burials of this time period. They show nothing surprising in comparison with the Kadada or other Neolithic burials. The bodies were contracted on the left side, with the head oriented to the east except in one case only. In terms of funerary goods, the graves were generally poor, and six undisturbed tombs had no pottery accompanying the deceased. In those graves containing material, pottery was, however, the most abundant type of object.³⁷⁰ Other materials found in the graves included beads, ivory fragments, palettes, perforated discs, and items of personal adornment, such as ivory bracelets. Some of the Kadruka material, such as the fauna and the human bones have been studied, but much still remains to be done.³⁷¹

El Geili to Kabbashi, Including Saggai (Central Sudan)

The survey of El Geili (or Geili) was begun in 1970 by the Italian Mission for Prehistoric Research in Egypt and the Sudan, under the directorship of the late S. M. Puglisi. At this time, according to Caneva, "...Puglisi's 'Geili project' was the first systematic prehistoric research undertaken in the region"³⁷²

³⁶⁹See J. Reinold, 1987a, "Les fouilles pré-et proto-historiques de la section française de la direction des antiquités du Soudan: Les campagnes 1984-85 et 1985-86," *Archéologie du Nil Moyen* 2: Fig. 6, p. 36.

³⁷⁰For depictions of a few vessel types see *ibid.*, Figs. 10, 11, and 12, pp. 49, 51, and 53 respectively.

³⁷¹For a preliminary report on the fauna see "Annexe 2," *ibid.*, pp. 61-62, and on the human remains, "Annexe 3," *ibid.*, pp. 63-67.

³⁷²I. Caneva, 1988, ed., *El Geili: The History of a Middle Nile Environment, 7000 B.C.-A.D. 1500*, p. 11.

since the pioneering work of Arkell at the Khartoum Hospital site and at Shaheinab. It should be noted that Arkell was aware of the existence of El Geili and of the fact that it bore a rich Neolithic occupation, but he did not undertake work there.³⁷³ Actual excavation of Geili did not begin until 1972, and lasted until 1981. This was followed by two seasons of post excavation work, which lasted until 1983. The main results have been published by Caneva, but numerous specialist reports have been produced by various individuals on every desirable aspect of the site.³⁷⁴ In this regard the work at El Geili parallels that of Kadero.

The site was found to be heavily and continuously occupied from the Early Neolithic to the Islamic period, with a complex stratigraphic sequence of over two metres in depth. The main features of the Neolithic occupation include a settlement and a cemetery. Although the latter has not been radiocarbon dated, it is certainly later than the settlement, which yielded a date from a shell sample of 5570 ± 100 B.P. Caneva writes:

“The settlement at Geili yielded an amount of potsherds and lithic implements which constitute a very typical Khartoum Neolithic assemblage. The lithic industry includes quartz microlithic tools (crescents, borers, end-scrapers...). A number of rhyolite tools are also represented, mostly scrapers, points and polished gouges...Grinding equipment is characterized by small grinding and pounding stones. Among the bone objects a pottery comb and a few harpoons and perforators were found.”³⁷⁵

The cemetery, which has been assigned the ‘protodynastic’ designation, has been noted to have direct parallels with Kadada burials as well as with the

³⁷³A. J. Arkell, 1953a, *op. cit.*, p. 8.

³⁷⁴See for example the list of contributors in I. Caneva, 1988, *op. cit.*

³⁷⁵I. Caneva, 1984, “Early Neolithic Settlement and Later Cemetery at Geili (Central Sudan),” in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 355.

protodynastic of Shaheinab. I will show (Chapter 4 below) that some of these similarities extend into the A-Group as well. Caneva writes:

“The most ancient assemblage represented in the necropolis at Geili can clearly be ascribed to the Late Neolithic culture, originally identified by Arkell at Omdurman...These graves at Geili are oval. They were very shallow because of surface erosion. The skeletons lie in a contracted position, on the right side, oriented roughly W/E or E/W...The bones were always in very bad condition, but not fossilized. As far as these features are concerned, the evidence from Geili corresponds exactly to that of ‘Protodynastic’ graves from Shaheinab...Grave goods include pottery, necklaces of carnelian, amazon stone and ostrich-egg [shell] beads and pendants; there are also quartz-diorite palettes and rhyolite, disk-shaped mace-heads...Recent excavations at el-Kadada have revealed graves apparently belonging to the same culture. Such features as grave shape and the position of the skeleton are broadly similar to those observed at Geili; grave goods are sometimes identical...”³⁷⁶

From 1979 to 1982, during the course of the work at El Geili, the Italian Mission conducted investigations in the Saggai region, about 38 kilometres north of Khartoum. The site of Saggai 1,³⁷⁷ a large low habitation mound, was found to be typical of the Early Khartoum tradition, yielding lithics, ceramics, and a ground stone industry typical of that culture. Soundings of the mound revealed strong components of both a fishing and hunting economy. Caneva and Zarattini write:

“One of the soundings revealed two levels, extraordinarily rich in findings, including bone harpoons together with fish and crocodile bones and fresh water mollusca shells. The other one showed a different stratigraphical situation, yielding a quantity of big mammal bones, mostly antelope. Close by there was a very interesting hunting and butchering tool-kit including chopping tools, hammerstones, and microlithic quartz crescents. The number of animals

³⁷⁶*Ibid.*

³⁷⁷Not to be confused with other sites near Saggai village, namely Saggai, Esh Shemalyia, and Saggai el Betellab, which are small sites and not extensively known. See Caneva, 1988, *op. cit.*, p. 340.

represented suggests that this could have been a special activity area within the village limits, rather than a simple kill site. The presence of pottery in this area and the proximity of the other area...confirms this theory."³⁷⁸

The lithics consisted almost entirely of microlithic crescents and borers, which the authors claim were used for "...arrow heads or barbs, or...for working wood and bone, [and] for perforating skin and other materials."³⁷⁹ Pottery bearing the wavy line design was most predominant, although one sherd with the dotted wavy line decoration was found. Much attention was devoted by the excavators to the ground stone industry at this site, as pounding and grinding tools seemed to exist in greater abundance here than in other contemporary sites in the Khartoum area. This evidence is suggestive to the excavators of the earliest stages of plant domestication. It is proposed that:

"While digging sticks (stone rings) and querns are only indirect evidence of the exploitation and manipulation of roots and vegetable crops, their presence coupled with the emphasis put on pottery...testifies to the attention of these communities to vegetable food and could suggest an effective approach to it in view of an incipient domestication of plants. Lacking evidence of cereal domestication in Sudan in such an ancient time, we have probably to speak of vegiculture. This kind of agriculture, chiefly grown in the Tropics, began to develop with different practices of 'protection' of roots and trees, of controlled harvesting and not necessarily re-planting."³⁸⁰

A second important site uncovered during the course of the work at El Geili was El Kenger. It actually has three components and is considered by the excavators as three sites, East Kenger, West Kenger, and Middle Kenger. All three sites were excavated late in the Geili campaign, in 1984. Middle and

³⁷⁸I. Caneva and A. Zarattini, 1982, "Late Hunter-Gatherers of Central Sudan: The Site of Saggai," in *New Discoveries in Nubia*, edited by P. Van Moorsel, p. 6.

³⁷⁹*Ibid.*

³⁸⁰*Ibid.*, p. 7.

East Kenger are two of the few Late Neolithic sites excavated by the Italian Mission, the latter of which has yielded a radiocarbon date from shell of 5290 ± 80 B.P. West Kenger belongs to the Early Khartoum tradition. Unfortunately, very little seems to be known about these sites and it is doubtful whether any further information is forthcoming, since the two Late Neolithic sites have been largely destroyed by bulldozer. Concerning the nature of the Middle and East Kenger sites, Caneva has written:

“Soundings made in the 1984 season revealed in both of them a deposit only 20-30 cm deep, containing a very ‘light’ tool kit: small pots, no grinding stones, very few lithic tools...Animal remains were very badly preserved, which would indicate temporary occupation, not long enough for them to be buried. They include a great number of domestic sheep/goat and cattle, together with a few wild animals...Aquatic resources were absent and the faunal remains, overall, were not abundant. All these features are fairly typical of a highly mobile pastoral group, living in seasonal campsites and consuming the products of the herd (milk, blood) rather than the meat. Given the scarce visibility of such sites, due to their small size and the few artefacts found, we cannot exclude that there may be many of them in the region, which have not been discovered simply because it is difficult to find them.”³⁸¹

In 1985, upon completion of the main body of work at Geili, the Italian Mission expanded its research goals toward a more regional approach. This involved a survey of the area south of Geili to Kabbashi, in which about twenty-three new sites were located.³⁸² One of the ultimate aims of this new approach is to better define the settlement pattern of the Khartoum region. More specifically, “the aim was to record the complete range of water, food and stone resources, the basic geomorphological features and, finally, the aspect and general location of sites...”³⁸³ Most of the new sites are of Early Khartoum

³⁸¹I. Caneva, 1988, *op. cit.*, p. 335.

³⁸²For an annotated list of all sites see *ibid.*, pp. 337-343.

³⁸³*Ibid.*, p. 321.

date and are known from surface finds consisting of wavy line sherds, grinding stones, stone rings, lithics, bone, and shell. Two sites in particular are worthy of mention, as they show promise for future investigation: (1) el Ansar, "...which is known to exist, even if it is now buried under the Nile silt,"³⁸⁴ and (2) Tamanyat, classified as Early Neolithic. It is hoped that further work will continue to shed light on the Early and Late Neolithic in this important region of the Sudan.

The Gash Delta, Kassala Province

Systematic fieldwork was begun in this area in 1980 with the formation of the Italian Archaeological Mission, sponsored by the Istituto Universitario Orientale (I.U.O.) in Naples. Their research is conducted within the framework of the Gash Delta Archaeological Project, whose goals are "...to reconstruct the dynamics of the ancient peopling of the delta and to elucidate the role it played in the cultural history of northeastern Africa."³⁸⁵ Their publications originate from a number of authors, but the most prominent are R. Fattovich, followed by M. Piperno, two of the founders of the Italian Mission. Other contributors to the project and the publications in the course of more than a decade of work include S. Durante, L. Constantini, E. Pardini, K. Sadr, M. Coltorti, A. D'Alessandro, P. Lenoble, S. Vitagliano, A. C. D'Andrea, and Y. Tsubakisaka.

A preliminary survey of the Gash Delta region in 1980³⁸⁶ revealed a long sequence of occupation, ranging from the sixth or fifth millenium B.C. to the

³⁸⁴*Ibid.*, p. 329.

³⁸⁵L. Costantini, R. Fattovich, E. Pardini, M. Piperno, 1982, "Preliminary Report of Archaeological Investigations at the Site of Mahal Teglinos (Kassala), November 1981," *Nyame Akuma* 19: 31.

³⁸⁶Published in two reports: (1) S. Durante, R. Fattovich, M. Piperno, 1980, "Archaeological Survey of the Gash Delta, Kassala Province," *Nyame Akuma* 17: 64-

first millenium A.D. Early attention to the palaeo-geography of the area led to the quick identification of Neolithic sites, which were found to be located near the ancient branches of the delta watercourses, i.e., west of the present courses. It was established at the outset that the cultural sequence of the Gash Delta appeared to be distinct from that of both the Nile Valley and the known Ethiopian complexes. The authors have insisted upon "...the discovery of a new cultural identity, distinct from previously recognized ones."³⁸⁷ This does not suggest, however, that interconnections did not exist between the Kassala region and the areas of the Nile and other parts of Africa. It is now apparent that

"...the peoples living in the Kassala region...played an important rôle in the long distance trade between Egypt and the southern regions of the Horn of Africa and Southern Arabia in the third-second millennia B.C."³⁸⁸

The main site excavated by the Italian Mission, Mahal Teglinos, has yielded extensive deposits that are contemporary with the A-Group of Lower Nubia. The site, near Kassala (Figure 7), has a surface area of about eleven hectares and a stratigraphic depth of over two metres, and consists of a large settlement and its associated cemeteries. It is also the same site from which Crowfoot collected surface potsherds in 1917 (see above, p. 30), although it has only recently been recognized for its full archaeological potential. Excavations began there in 1981 shortly after its rediscovery. From the presence of a few wavy line sherds, it seems that the site may have been occupied since the Early Khartoum period, but most of the remains belong to the Gash and Gebel

71, and (2) R. Fattovich and M. Piperno, 1981, "Survey of the Gash Delta, November 1980," *Nyame Akuma* 19: 26-30.

³⁸⁷R. Fattovich and M. Piperno, 1981, *ibid.*, p. 28.

³⁸⁸R. Fattovich, 1991a, "At the Periphery of the Empire: The Gash Delta (Eastern Sudan)," in *Egypt and Africa: Nubia from Prehistory to Islam*, edited by W. V. Davies, p. 40.

Mokram Groups, the former of which is contemporary with the A-Group. The Gash Group may be subdivided into a number of phases,³⁸⁹ only the first two of which are relevant here. These are the Proto-Gash Group, dating to c. 3300-3000 B.C., and the Early Gash Group, from c. 3000 to 2300 B.C. Radiocarbon dates obtained from Mahal Teglinos, which range from 3780 ± 90 B.P. to 4220 ± 90 B.P.,³⁹⁰ confirm the existence of these two phases at the site. The ceramic material from these phases are typified by some rather different wares from those seen so far in the Nile Valley, for example:

“...brushed ware with rhomboidal patterns covering the whole surface of the sherds and pinched rims...dark brown ware with black slip on top of the rim, decorated with impressed geometrical patterns (horizontal strips of triangles framing oblique rows of dots); violet slipped ware with black slip on the inside surface, decorated with patterns like the previous one; brown ware with smooth surface, decorated with incised geometrical patterns along the rim (commas, vertical wavy lines, etc.).”³⁹¹

Other items of great interest were cylinder seals and clay sealings that date to the Early Gash Group occupation. It has been suggested that the seals, which later developed into tokens, may indicate that

“...an administrative system arose at Mahal Teglinos in the mid-third millennium BC. It becomes more complex in the late third millennium BC., when at least three different types of seals and tokens were used...”³⁹²

³⁸⁹For all phases see *ibid.*, p. 45.

³⁹⁰For the other dates see R. Fattovich and S. Vitagliano, 1989, “Radiocarbon Dates from Mahal Teglinos, Kassala,” *Nyame Akuma* 31: 40.

³⁹¹R. Fattovich and M. Piperno, 1986, “Archaeological Researches in the Gash Delta, Kassala Province (1980-1981 Field Seasons),” in *Nubische Studien*, edited by M. Krause, p. 49.

³⁹²*Ibid.*, p. 46.

The excavators also argue for a centralized political system "...most likely at the chiefdom level"³⁹³ during the Early Gash sequence at the site.

The Butana and the Atbai, Eastern Sudan

In addition to the Gash Delta Archaeological Project, the 1980's witnessed the start of another new large-scale project, this one in the Butana of the eastern Sudan. The name of the project is somewhat misleading, as it has a wide geographical range that extends even further eastward into the Atbai steppe. In addition to excavating specific sites in the Butana, the project has conducted survey and test excavations in the little known regions of the Atbai. The Butana Archaeological Project is a joint venture between the University of Khartoum, the Southern Methodist University of Dallas, and the North Texas State University. The directors and principal authors of the project's results are A. E. Marks, T. R. Hays, A. Mohammed-Ali, and Y. Elamin. Their long-term goals for the Butana are:

"...to elucidate the role played through time by the huge grasslands of the Butana, either as a barrier to or as a conduit for culture contact between the Nile Valley and the trans-Atbara region of the eastern sahel."³⁹⁴

The short-term goals for the first two seasons were to

"...locate sites on both the eastern and western fringes of the Butana and to acquire as complete a temporal sequence for each area as possible."³⁹⁵

Work first began in 1980 with a reconnaissance survey of the northern Butana,³⁹⁶ in which the sites of Shaqadud in the western Butana and

³⁹³*Ibid.*

³⁹⁴A. E. Marks, A. Mohammed-Ali, T. R. Hays, and Y. Elamin, 1982a, "Butana Archaeological Project: 1981 Field Season," *Nyame Akuma* 20: 47.

³⁹⁵*Ibid.*

³⁹⁶Published in A. E. Marks, A. Mohammed-Ali, T. R. Hays, and Y. Elamin, 1980,

Khashm el Girba (Figure 7) in the eastern Butana were targeted immediately. Excavations began at Shaqadud in 1981. The site, it will be recalled, was investigated briefly by Otto after its discovery in 1961. It would now become known that the site is not a single entity, but rather "...a complex of sites covering an area of no less than 28,000 sq. m."³⁹⁷ Nonetheless, the principal components of the main occupation are still the ones noted by Otto, i.e., a large undisturbed and well-stratified midden, now known to have a depth of about 2.5 metres, and a stratified cave deposit of about 3.5 metres in depth. The combined radiocarbon dates from midden and cave areas³⁹⁸ show that Shaqadud represents the longest known stratigraphic sequence of ceramic occupation in the Sudan, encompassing the period from about 7500 B.P. to 3500 B.P. Thus, the later levels of the site may be defined loosely as "post-Shaheinab" or post-Shaheinab Neolithic,³⁹⁹ which makes them contemporary with the Early A-Group in Lower Nubia. Furthermore, A-Group-type assemblages and Kadada-like material were noted in the later contexts of the site. The ceramics found in the cave are described as "...at first, contemporary to A-Group further north, with black burnished wares, burnished red slipped wares, and only rare impressed surface decoration."⁴⁰⁰

"Survey of Northern Butana," *Nyame Akuma* 16: 30-35.

³⁹⁷A. Mohammed-Ali, and A. E. Marks, 1984, "The Prehistory of Shaqadud in the Western Butana, Central Sudan: A Preliminary Report," *Norwegian Archaeological Review* 17 (no.1): 54.

³⁹⁸Six dates are now available. See A. E. Marks, 1984, "Butana Archaeological Project: 1983-84," *Nyame Akuma* 24/25: 32. It should be noted that the dates published earlier than 1984 are incorrect, and that these dates represent the correct and final forms.

³⁹⁹A. E. Marks, A. Mohammed-Ali, T. R. Hays, and Y. Elamin, 1982a, *op. cit.*, p. 48.

⁴⁰⁰A. E. Marks, 1991a, "Relationships between the Central Nile Valley and the Eastern Sudan in Later Prehistory," in *Egypt and Africa: Nubia from Prehistory to Islam*, edited by W. V. Davies, p. 34.

In addition, the Khartoum Neolithic and the Khartoum Mesolithic as defined by Arkell are well represented by the remaining stratigraphy.

However, in addition to having these various Nilotic components represented at the site, there is also clear evidence of a much different steppe-dwelling adaptation that is not seen anywhere in the Nile Valley. The midden and cave for example, have produced lithics that are made almost entirely of local quartz and quartzite, with very few specimens made from the Nile stones such as agate and rhyolite. Similarly, the pottery, while having the Khartoum wavy line zigzag and straight impressed decoration, also shows large amounts of banded motifs not known anywhere in the Nile regions. Furthermore, the cave ceramics appear to have developed in part out of the Khartoum traditions, but "...they do show clear similarities with slightly earlier ceramics found to the east in the Gash Delta."⁴⁰¹ This and other evidence has led to the conclusion that

"...at Shaqadud people had adapted primarily to grasslands and were not merely Nilotic folk exploiting the savanna after the summer rains as had been postulated."⁴⁰²

Furthermore,

"...there is relatively little evidence for riverine exploitation, in spite of the presence of both the Atbara and Gash rivers in the core area."⁴⁰³

The authors speculate that Shaqadud is probably one of many yet undiscovered sites that shows this grassland adaptation, and that it was likely part of a larger tradition that spread eastward from the Butana steppe all the

⁴⁰¹A. Mohammed-Ali, and A. E. Marks, 1984, *op. cit.*, p. 57.

⁴⁰²A.E. Marks, A. Mohammed-Ali, J. Peters, R. Robertson, 1985, "The Prehistory of the Central Nile Valley as Seen from its Eastern Hinterlands: Excavations at Shaqadud, Sudan," *Journal of Field Archaeology* 12: 261.

⁴⁰³*Ibid.*

way to the Ethiopian border. But until more of the Butana and the Atbai are probed, very little more may be said of their true nature or their Nilotic links. However, because of the work already completed in the eastern Sudanese steppes, it is no longer realistic to view sites such as Shaqadud as merely "...eastern outliers of a Nilotic adapted culture,"⁴⁰⁴ or as places to which Nile herders moved their livestock after the rainy season. We are now faced with the larger problem of explaining why large stratified sites exist in the Butana and the Atbai and how they relate to contemporary occupations in the Nile Valley.

The site of Khashm el Girba, although targeted during the reconnaissance survey, has not received as much investigation and publication as Shaqadud. The reason appears to be that the earlier survey work of J. L. Shiner,⁴⁰⁵ upon which the current researches are based, is in need of and is receiving "serious revision."⁴⁰⁶ In 1966/67 Shiner led a team of researchers (the Combined Prehistoric Expedition) into this unexplored region of the Sudan, with an agreement from the Sudan Antiquities Service to conduct only surface collection and test excavations to determine the archaeological potential of the area, if any. Despite the excellent yield of neolithic and other cultural remains and the best intentions to return to the site again in the 1967 season, work was never resumed after the single preliminary season due to the advent of the Arab-Israeli war. Shiner writes:

"From the early summer of 1967 through the summer of 1970 repeated efforts were made to obtain visas for the Sudan. Several times it nearly came to be, but threats of war and

⁴⁰⁴A. E. Marks, 1991a, *op. cit.*, p. 31.

⁴⁰⁵J. L. Shiner, ed., 1971, *The Prehistory and Geology of Northern Sudan*, Part 2, pp. 293-435.

⁴⁰⁶A. E. Marks, A. Mohammed-Ali, T. R. Hays, and Y. Elamin, 1982b, "Butana Archaeological Project: Interim Note," *Nyame Akuma* 21: 39.

actual political coups intervened. It finally became clear to us that we should not be able to continue the field work under the same grant...

During the fall of 1970 and the spring and summer of 1971, the sites and assemblages were described and classified in what we consider to be our final thought on the areas as a team. Each of the participants has since become concerned with other areas."⁴⁰⁷

As a result of these unfortunate circumstances the information presented in Shiner's groundwork publication for the area is generally inconclusive, and the investigators were not able to flesh out a solid chronological sequence for the four industries they identified. These included (1) an unnamed preceramic stage, (2) the first evidence of a ceramic industry in the area, the Saroba industry (now known to have been preceded by the ceramic Pre-Saroba stage), (3) the Butana industry, and (4) the El Hagiz Group. Only two of these cultural stages were radiocarbon dated by only one provisional date each: a pottery kiln site (N125) of the Butana industry produced the date of 2460 B.C.,⁴⁰⁸ and a charcoal sample from El Hagiz yielded 1100 ± 90 B.C.⁴⁰⁹ Since Shiner viewed these cultures as representing a continuous sequence of development from the Saroba to the El Hagiz, the Saroba would be pre-2400 B.C., and thus contemporary with the A-Group in the Nile Valley.

Returning to the current focus of work at Khashm el Girba, it appears that no full-scale excavations have yet been conducted, although many new surface collections have been made and some new sites found. Corrections to the ceramic traditions that were defined by Shiner have also been made based on these new surface collections. The pottery analyses are still in their preliminary stages. According to the authors:

⁴⁰⁷J. L. Shiner, ed., 1971, *op. cit.*, Part 1, p. 14.

⁴⁰⁸No margin of error was given. Shiner, *ibid.*, Part 2, p. 381.

⁴⁰⁹*Ibid.*, p. 398.

“It is already apparent that there are basically two ceramic traditions, one of which he [i.e., Shiner] called the Saroba, the Butana, and the El Hagiz. It seems that he may have been seeing phases within a single tradition but analyses so far indicate continuous development of basic ceramic forms.”⁴¹⁰

Further discoveries made to date are located on the western side of the Atbara River (the Butana proper), and on the eastern side of the Atbara (the Atbai proper). In the latter area, numerous ceramic sites have been found in which the ceramics exhibit the following characteristics:

“...thick sherds from unslipped open bowls which have decorations formed by regular scraping of the interior, exterior, or both. Less regular wiping is also characteristic at many sites. Others include very fine black burnished wares, rare red burnished wares, unburnished wares with incised lines (rather like sherds from Shaqadud cave), sherds with exterior burnished decorations, sherds with interior burnished decorations, and even ripple ware. Sherds with zoned decorations are present at some sites, while those with impressed decorations are found at most sites.”⁴¹¹

These ceramic assemblages are now defined as part of the so-called Southern Atbai Tradition. Radiocarbon dates from this material are still being processed, but based on these descriptions it will not be surprising if some dates are found to be contemporary with the Nile Neolithic traditions. In addition, the western region of the Atbara, i.e., the Khashm el Girba area, has produced a series of temporary camp sites, but these are likely to be quite late, post-dating the Southern Atbai Tradition. Radiocarbon dates are forthcoming from this collection of sites. Preceramic sites are also known from the Atbai, which show a developed blade tradition that is indicative of a big game hunting and fishing economy.

⁴¹⁰A. E. Marks, A. Mohammed-Ali, T. R. Hays, and Y. Elamin, 1982b, *op. cit.*, pp. 39-40.

⁴¹¹*Ibid.*

The Wadi Howar and Laqiya Regions, Western Sudan

Also contemporary with the start of the Gash Delta and Butana Archaeological Projects was the *Besiedlungsgeschichte der Ost-Sahara* (B.O.S.), a joint venture between the Universities of Berlin and Cologne. One of the principle aims of the new work is to clarify

“...the history of human settlement in the Eastern Sahara with special emphasis on the inter-dependence between cultural and economical behaviour and the changing climate of the last 10,000 years.”⁴¹²

In 1980 work was begun in the northeast section of the Wadi Howar and the region west of the Laqiya Oasis (Figure 6), building heavily and directly on the work of the early explorers, Newbold, Shaw, and others. All of the areas discovered by the early explorers are currently being reinvestigated, with considerable advances in knowledge having resulted. For example, the cairns whose burials Shaw thought were akin to Predynastic Egyptian interments are now known to be analogous to some Kerma burials uncovered by Bonnet. Radiocarbon dates have also been obtained from some of the skeletal material, and are consistent with the time period of the Kerma culture.⁴¹³ New cattle remains have also been uncovered at Djabarona, site 84/13 (Figure 6), but interpretations about them have not been produced. Keding writes:

“Site 84/13 shows evidence for repeated occupations which caused the artefact scatter, the large area of the site and the pits filled with pottery and bones of cattle which show no traces of butchering.”⁴¹⁴

⁴¹²R. Kuper, 1986, “Wadi Howar and Laqiya: Recent Field Studies into the Early Settlement of Northern Sudan,” in *Nubische Studien*, edited by M. Krause, p. 129.

⁴¹³See W. Schuck, 1989, “From Lake to Well: 5,000 Years of Settlement in Wadi Shaw (Northern Sudan),” in *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and M. Kobusiewicz, pp. 427-428.

⁴¹⁴B. Keding, 1993, “Leiterband Sites in the Wadi Howar, North Sudan,” in *Environmental Change and Human Culture in the Nile Basin and Northern Africa until*

Even lacking illustrations and photographs of the remains the account is perhaps suggestive of a ritualistic burial of cattle without (necessarily) any connection with sacrificial practices. The Djabarona pits with pottery and bovid remains certainly seem analogous to the cattle burials of the Qustul A-Group. A ritualistic treatment of cattle in the Wadi Howar area is reasonable based on the probability of cattle pastoralism, accompanied in all likelihood, by a great value having been placed upon the animals.

The western regions of the Wadi Howar are now known to have had a long and continuous sequence of human occupation until about two thousand years ago when the population began to decline to its nearly unpopulated state today. All archaeological assemblages uncovered to date are ceramic, with no evidence for the existence of aceramic cultures. However, the Wadi Howar complexes have provided ample comparative material for assessing its links with the rest of the Sudan. The Wadi itself, which stretches from Ennedi in eastern Chad to Dongola on the River Nile is now recognized as having "...constituted a natural connection between the mountains of...Eastern Chad and the lowlands of the Nile Basin during periods of favourable climatic conditions."⁴¹⁵ Richter summarizes the new archaeological focus in the Wadi Howar area as follows:

"Main areas of investigation have been the Wadi Howar valley west of the Djebel Rahib and the southern slopes of the Djebel Rahib in 1980 and the Wadi Howar banks and valley from Djebel Rahib to Djabarona in the West in 1984. Surveys led the expedition to the dune sites east of Rahib Wells, to Dongola (following up the course of the Wadi Howar), to the Djebel

the Second Millennium B.C., edited by L. Krzyżaniak, M. Kobusiewicz, and J. Alexander, p. 378.

⁴¹⁵J. Richter, 1989, "Neolithic Sites in the Wadi Howar (Western Sudan), in *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 431.

Tageru and to Mellit in the South (crossing the Gizzu grasslands)."⁴¹⁶

The material recovered from these regions is suggestive of extensive cultural links over a wide geographic area from the Central Sudan to the northwestern Sudan and even to the Western Desert of Egypt. During initial survey work in 1980, a site designated 80/73 near the Jebel Rahib (Figure 6) yielded potsherds resembling the Khartoum Variant tradition known from the site of Abudiya and described by Geus.⁴¹⁷ These types have rows and planes of single dots and wavy lines combined with a notched rim. Two radiocarbon dates obtained from the site so far have given 5370 ± 75 B.C. and 2900 ± 60 B.C., both uncalibrated. The latter date is contemporary with the Terminal A-Group. The rest of the assemblage of site 80/73 appears very similar to the Nilotic traditions to the east, and includes fishbones, bones of warthog, hippopotamus, crocodile, turtle, and antelope, as well as quartz artifacts, microliths, combed ware, and ostrich eggshell. A second site, not named or numbered, has yielded a date contemporary with the Early A-Group, i.e., 3630 ± 60 B.C. No excavation was conducted at this site, but hippopotamus bones and snails have been recovered, the latter having provided the radiocarbon sample.

The Laqiya Oasis, especially chosen for excavation because of its potential as "...a contact zone between the cultural complexes of S. Egypt and N. Darfur,"⁴¹⁸ has proven rewarding along these lines. Three areas have been surveyed and probed by means of test excavation: (1) the Wadi Shaw, (2) the Laqiya Valley, and (3) the Wadi Sahel. From Schuck's 1989 report it was noted

⁴¹⁶*Ibid.*, p. 432.

⁴¹⁷F. Geus, 1979, *Rapport annuel d'activité 1978-1979*, p. 28.

⁴¹⁸R. Kuper, 1986, *op. cit.*, p. 131.

that ninety sites are now known in the Wadi alone.⁴¹⁹ The earliest known and most important site, Camp 49 (Figure 6) in the Wadi Shaw, which was reinvestigated in 1982, showed evidence of a large settlement area by the presence of ceramics, lithics, faunal remains, ostrich eggshells, grinding stones, and axes on the surface. One site, designated 82/31,

“...showed distinctive circular find-concentrations, distributed over a surface of about 100 to 300 metres...their arched surface stood out a little from the surrounding plain giving the impression of particular living sites within a larger settlement.”⁴²⁰

A range of dates was obtained from material in fireplaces at this site, some early (pre-A-Group) and some late (post A-Group), but one charcoal sample has yielded a date of 3720 ± 65 B.C., contemporary with the Early A-Group.

More limited excavations have been conducted at the Wadi Sahal (Figure 6) than at the Wadi Shaw. Numerous sites have been located and numbered to date,⁴²¹ and the character of the remains suggests a few marked differences at these sites in comparison with the Wadi Shaw sites. The Wadi Sahel site 82/38-2 has yielded an almost complete skull of what the excavator claims is a domesticated cow of the long-horned variety. It represents the first find of an animal domesticate in the Sahara, and its date of 2190 ± 320 B.C. (uncalibrated) is contemporary with the C-Group culture in the Nile Valley. No faunal report has yet been published for these remains. Four other radiocarbon dates have been obtained from charcoal samples from sites 82/38-1, 82/38-4, and 82/38-6. The date of 3050 ± 170 B.C. from site 82/38-1 is

⁴¹⁹W. Schuck, 1989, *op. cit.*, p. 423.

⁴²⁰U. Francke, 1986, “Camp 49 Re-examined,” in *Nubische Studien*, edited by M. Krause, p. 137.

⁴²¹For six of the earliest known sites see E. Cziesla, 1986, “Excavations at the Wadi Sahal,” in *Nubische Studien*, ed. by M. Krause, pp. 143-149.

contemporary with the Terminal A-Group.⁴²² On the basis of the artifactual evidence and the radiocarbon dates it has been concluded that

“...during the whole range of the third millennium climatic conditions at Wadi Sahal were favourable enough to enable repeated settlement in that area, probably in connection with an economic subsistence which included cattle-breeding.”⁴²³

The Centro Recherche sul Deserto Orientale Expedition

An exciting new area that has recently been opened up by this Italian expedition is the Nubian Desert and the area of the Red Sea Hills. A. Castiglioni and A. Castiglioni⁴²⁴ began survey in this archaeologically unknown region in 1989, but intensive excavation is only now beginning in selected areas. Already the Nubian Desert appears to hold some promise for probable A-Group interconnections. The investigators have noted a surprising number of discoveries in the areas surveyed, most notably,

“...many surface finds of Mesolithic pottery, evidence of gold mining in Predynastic times, archaeological remains possibly of Blemmyes or the Beja of the first millennium AD, and evidence for a veritable gold rush during the Medieval Islamic period. Unpleasant discoveries included the almost industrial scale of grave-robberies in this forlorn part of the world.

Also surprising is the enigmatic absence of the Pan-Grave culture...”⁴²⁵

The Mesolithic pottery bears the same decorative patterns seen in the Early Khartoum sites,⁴²⁶ but it seems that until a formal ceramic analysis is done it

⁴²²For the complete list of dates see *ibid.*, p. 144.

⁴²³*Ibid.*, pp. 144-145.

⁴²⁴The other team member is K. Sadr, whose Ph.D. work dealt with the study of nomadism in this area. See K. Sadr, 1991, *The Development of Nomadism in Ancient Northeast Africa*.

⁴²⁵K. Sadr, A. Castiglioni, and A. Castiglioni, 1995, “Nubian Desert Archaeology: A Preliminary Report,” *Archéologie du Nil Moyen* 7: 204.

will not be known whether or not Neolithic assemblages are also represented. The richest sites yielding Mesolithic material to date are Nasb Atiliya, Wadi El Ku, and Deraheib in the Wadi Alagi headwaters. It is hinted by the authors that the latter two sites may have been satellite sites of the central site of Nasb Atiliya.⁴²⁷

The presence of possible Neolithic tumuli has been noted in the hundreds across the Nubian Desert. Dating these graves is problematic. The authors write:

“In the absence of any directly datable materials we have unfortunately no indication of their exact age. The only possible indication of an age are three greenstone beads which are apparently not unlike examples associated with the Neolithic in the Kerma Basin...”⁴²⁸

From this statement it would appear that these graves may post-date the A-Group in the Nile Valley, and furthermore there is little to suggest by the burial method that they show any sign of A-Group influence, contact, or migration into this area. The two graves excavated show signs of the skeletons having been disarticulated before burial. This suggests that the bodies had lain exposed at ground surface before burial. Another interesting feature of these tumuli is that they appear isolated and not grouped into cemeteries, suggesting “...a none-too-sedentary population,” a further aspect of contrast between these and A-Group burials.

However, a tumulus designated as D5.1 in Wadi Elei appears, by the inclusion of a certain vessel and a pendant, to be possibly affiliated with the Early A-Group, and also with the Egyptian Badarian culture. However, a date

⁴²⁶*Ibid.*, Fig. 3, p. 205.

⁴²⁷*Ibid.*, p. 206.

⁴²⁸*Ibid.*

from charcoal from within the grave, quoted as “around 4500 BC,”⁴²⁹ is too early for the earliest phase of the A-Group. Continued probing into various parts of the mound eventually revealed some badly disturbed and fragmentary human remains, which “...had originally lain in a tightly flexed position on the left side with head to the west.”⁴³⁰ This was the only grave found by this expedition in which the body was on its left side, a feature noted as “...shared by A-Group and Badarian graves as well.”⁴³¹ Another significant feature of D5.1 that makes it comparable with A-Group burials is the inclusion of large amounts of grave goods, especially pottery. In this respect the grave differs from all other tombs excavated in the area. The implication of these parallels are not yet known, but the authors speculate:

“Although gold trade between the Desert and the Nile Valley via the Nubian A-Group has been postulated,...solid evidence has been lacking. The findings from D5.1 remain to be confirmed by excavation of other similar graves in the area. It would then be interesting to test whether the population interred in the D5.1 style graves was indigenous to the desert, or visiting from the Nile Valley.”⁴³²

It should be added that graves resembling those of the C-Group have also been located in the Eastern Desert, although they suffer badly from severe plundering. Their interpretation, however, is still problematic because although the ceramics suggest C-Group affinities, the radiocarbon dates have not confirmed this.

⁴²⁹*Ibid.*, p. 207.

⁴³⁰K. Sadr, A. Castiglioni, and A. Castiglioni, 1995, *op. cit.*, p. 210.

⁴³¹*Ibid.*

⁴³²*Ibid.*

E. Summary

The history of archaeological exploration in Lower Nubia and the Sudan has been characterized by only two major eras: (1) the period of salvage exploration, from 1907 to 1969, and (2) the era of large-scale research projects, from 1969 to the present. It may be argued that the true "research age" did not begin in the Sudan until 1980, with the simultaneous arrival of the Gash Delta Project, the Butana Project, and the Wadi Howar research team. The projects undertaken jointly by the French and the Sudan Antiquities Service on the one hand, and the Polish Expedition on the other, may be seen, I think, as the earliest beginnings of the present age of long-term research ventures in the Sudan. A-Group archaeology, as has been demonstrated, fits only into the age of salvage exploration in Lower Nubia, as everything that is known about this culture had to be obtained before the flooding of the A-Group territorial expanse. Despite the continuation of exploration in the areas bordering all sides of the A-Group territory, no complete archaeological assemblages have been found that correspond exactly with those already known for the A-Group. Yet numerous A-Group characteristics have appeared in the material remains of other cultures. In short, virtually all cultures now known to have been contemporaneous with the A-Group show likely links with the A-Group through various degrees of similarities in their material cultures. These circumstances, i.e., the lack of complete A-Group assemblages outside of Lower Nubia, and the shared A-Group features in other cultures, point to a diffusion of A-Group traits rather than a movement or movements of the A-Group people themselves. That such cultural diffusion was not hindered by physical barriers such as the *Batn el Hajar*, as has been suggested, must now be considered obvious, although the mechanisms of such diffusion are still not

yet understood. The new age of research, characterized as it is by a multidisciplinary approach to analysis, could, in time, solve this problem of apparent A-Group cultural diffusion.

CHAPTER 3 – ANALYTICAL DESCRIPTION OF A-GROUP CULTURE WITH EMPHASIS ON EGYPTIAN RELATIONS

3.1. ECONOMIC AND SUBSISTENCE STRATEGIES

Knowledge of A-Group subsistence derives largely from about forty excavated settlement sites, only about half of which have been published. Of these, Afia is the most important, providing direct and indirect evidence for agriculture in the form of cultivated food remains as well as an 'agricultural' tool assemblage. A-Group graves have provided only a minimum of additional evidence for A-Group subsistence strategies, which is surprising given the variety and wealth of material found in A-Group burials. The most important contribution of the burial material to the knowledge of A-Group economy is the presence of leather garments associated with human remains, such as caps, girdles, small coats, and penis sheaths. These items constitute indirect evidence for the presence of domesticates in or around the A-Group cultural sphere.

In addition to agriculture and animal husbandry, other A-Group subsistence strategies included hunting, gathering, fishing, and fowling. Tool assemblages associated with these activities show without doubt that the lithic and other industries of the earlier Stone Age were still in use, although the quality of the stone tool technology underwent a marked decline from the preceding Abkan culture. Faunal remains and tool types indicate the exploitation of ostrich, gazelle, molluscs, fish, and various waterfowl. In addition, A-Group people relied on certain imported food items from Egypt, and it has long been thought that much of the impetus for agricultural pursuits was derived from contact with Egypt.

Thus, the combined picture is one of a varied or mixed economy becoming increasingly efficient in food-production. It is still difficult to assign specific economic developments to particular periods in A-Group history, but it is clear that economic development took place within the context of increasing sedentism, as attested by the growing population in Lower Nubia throughout A-Group times. Certainly by the time of the Classic A-Group, the population was grouped into small semi-permanent communities.¹ A-Group cemeteries are an equally good testimony to increasing sedentism, as aggregation took place in one location over long periods of time.

Agriculture and Pastoralism

A close look at the evidence for A-Group agriculture and pastoralism reveals far too many gaps and uncertainties in the data and in the interpretations deriving from them. As a result, the extent to which agriculture and pastoralism was practised is still not fully known, and it is also not certain which was more economically significant. It must be emphasized that the case for plant domestication rests almost entirely on the Afia plant material, but I have yet to see a single report that proves the genetic alteration of these grains that would confirm their domesticated status.² Yet it

¹See B. G. Trigger's discussion of his Early Nubian sequence, in *History and Settlement in Lower Nubia*, 1965: 67-79.

²See Stemler and Falk's discussion of the diagnostic differences between wild and domesticated cereal grains, in A. Stemler and H. Falk, 1984, "Evidence of Grains from the site of Wadi Kubbaniya (Upper Egypt)," *Origin and Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, pp. 130-133. They write:

"...the most clear-cut morphological indicator that a cereal has been fully domesticated is that it has lost its natural ability to disperse its grain (Fig. 2). All wild plants form an abscission or dividing zone between the parent plant and the fruit that facilitates the release of seeds...

If we define a fully domesticated cereal as one that has been modified by human selection so that it has lost its natural ability to disperse its grain, then we

seems unanimously accepted that the carbonized emmer wheat (*Triticum dicoccum*) and barley (*Hordeum*) were cultivated species.

A surprising amount of grain has been found in burials in Lower Nubia, but none of it, as already noted, has been analyzed to determine whether it was wild or domesticated. In addition to providing evidence for a subsistence pattern based partially on grain, the grain in burials also indicates, I think, some (unknown) ritualistic function of grain in funerary contexts. Perhaps the most striking example is the discovery of "...a bunch of grain with the ears on the stalks"³ on the body of a child. This was in an undisturbed grave at Shellal. Other examples of grain in burial contexts involves the placement of grain inside of pots, as in Grave 36 at Wadi Qamar,⁴ and in Grave 39 in the same cemetery.⁵ Grain husks were found in association with some pottery in Grave 41, again at Wadi Qamar.⁶ In yet another grave (no. 31) at this site an adult male "seems to have lain on the stalks of some cereal."⁷

In addition to wheat and barley, it is suspected, but not confirmed,⁸ that root vegetables and green produce were grown, as was the case in Egypt. These varieties would have included onion, garlic, leek, radish, and lettuce. Since 1962 similar material from other sites has strengthened the Afia

must investigate the grain-bearing portion of the plant, the inflorescence, in order to determine whether a cereal will have smooth scars where abscission zones were formed to facilitate seed dispersal. Fragments of a domesticated cereal will have rough fracture zones where the inflorescence broke as a result of threshing..."

It must be added that in time, domesticated cereals will show an altered form of "the genes involved in the formation of abscission zones." *Ibid.*, p. 131.

³G. A. Reisner, 1910a, *The Archaeological Survey of Nubia: Report for 1907-08. Volume I. Archaeological Report*, p. 39 (Grave 235).

⁴*Ibid.*, p. 192. See Figure 2 for the site's location.

⁵*Ibid.*, p. 193.

⁶*Ibid.*, p. 194.

⁷*Ibid.*, p. 193.

⁸H.-Å. Nordström, 1972, *Neolithic and A-Group Sites*, vol. 3.1, p. 19.

evidence. The preponderance of grinding implements such as milling stones or grinders, mortars, and serrated sickle blades completes the basic agricultural assemblage. The sickles characteristically show a siliceous sheen on the single cutting edge, while the other edge is blunted and grooved. This suggests they were set into a long wooden handle for use in the reaping of grain.⁹ I emphasize that grinding implements and the lithic sheen are only indirect evidence of agriculture. They could just as easily be construed as evidence of the reaping of wild, not domesticated grain.

It is generally assumed that the knowledge of agriculture was derived from the contact of A-Group people with Egyptians, or was the result of trait diffusion from Egypt. This assumption is based on the fact that the same species of emmer wheat was also cultivated in Egypt.¹⁰ Although the exact form of the Afia barley is not yet known, it is known that various forms of barley, such as *Hordeum distichum* (two row) and *Hordeum hexastichum* (six row) were cultivated in Egypt since the Neolithic period.¹¹ It is also known that these particular forms were fairly easy to cultivate. According to Endesfelder,

“the forms of wheat and barley which have been found in the oldest Neolithic cultures of Upper and Lower Egypt required only shallow planting and no additional irrigation. The single, but radical moistening of the soil by the yearly highwater was, as a rule, sufficient for an average crop.”¹²

⁹B.B. Lal. 1967, “Indian Archaeological Expedition to Nubia, 1962: A Preliminary Report.” In *Fouilles en Nubie, 1961 - 1963*, p. 207.

¹⁰H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 23.

¹¹*Ibid.*

¹²E. Endesfelder, 1984, “Social and Economic Development towards the End of the Predynastic Period in Egypt,” in *Origin and Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 96.

Perhaps because of the similarity of cereal grains between Nubia and Egypt, the early researchers, notably Reisner, have assumed a pattern of mixed agriculture in Nubia similar to that in Egypt, but not as well developed. That agricultural development did not match the Egyptian scale is suggested by the comparatively small size of A-Group settlement sites. It is generally agreed that topographical limits in Nubia, i.e., the absence of natural basins prevented the development of basin agriculture, and that the growing of crops was restricted to the narrow Nile floodplain. This implies a dependence on the season of inundation, which, as Endesfelder has pointed out, was sufficient for the growth of emmer wheat and barley. Thus Nordström defines A-Group agriculture as *seluka* cultivation, "...i.e., utilization of the floodplain, which is annually inundated and fertilized by the Nile, and this would permit...small-scale agriculture in practically every district of Nubia."¹³ Lack of evidence for a centralized economy based on the production and redistribution of grain, seems also to support the idea that agriculture did not develop beyond a small scale. This characteristic sets Nubia apart from the Near East at this time, where the development of agriculture had major social and economic repercussions. Thus it is generally concluded that "the gathering of cereal grains, which in the Near East portended a cultural and social revolution, in Nubia was never more than an unimportant dietary supplement."¹⁴

Pastoralism may well have played a similar role to agriculture in A-Group culture, that of a supplementary strategy to the main Stone Age economies of hunting and gathering. As with the evidence for agriculture, there is little direct evidence and little diagnostic material, in this case, faunal remains. Of the analysed remains, results are often inconclusive. In addition,

¹³H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 23.

¹⁴W.Y. Adams, 1977, *Nubia: Corridor to Africa*, p. 117.

there are the inevitable morphological problems in identifying early domesticates. Although Nordström writes that "...there are a few osteological remains that have been positively identified as originating from domesticated animals,"¹⁵ I have yet, again, to see a faunal report for A-Group remains that attests unequivocally to this. The source of this information is thus obscure, but Nordström lists goat (*Capra*), sheep (*Ovis*), and cattle (*Bos*) as those species so identified.¹⁶ It is generally assumed that the A-Group people continued with the exploitation of the small domesticated goat (*Capra hircus*) from the earlier Neolithic periods. Fortunately the existence of this species is supported by one small shred of evidence, i.e., a metapodial fragment of this goat from a Terminal Abkan context.¹⁷ Other domesticated remains in A-Group contexts include those of dog,¹⁸ but very little has been written about the physical remains themselves.

There is, however, much indirect evidence that has created some discussion about the true nature of pastoralism in A-Group contexts. This includes (1) the possession of leather garments and other items (listed above) by A-Group people, (2) the unique site of Khor Daoud, which may have been an exchange point for cattle, (3) the presence of dung temper in one class of A-

¹⁵H.-Å. Nordström, 1972, vol. 3.1, *op. cit.*

¹⁶*Ibid.*, pp. 23-24.

¹⁷Site AS 6-G-25, excavated by Nordström, but the faunal remains of which were analyzed by D. Perkins in "Three Faunal Assemblages from Sudanese Nubia," *Kush* 13 (1965): 56-61. The reader should note that there is a discrepancy in the date given for this site. Perkins indicates it is of early A-Group date, while Nordström assigns it to the Terminal Abkan. Nordström should be taken as the final word here, since he excavated the site. His field notes for the site are apparently unpublished. See H.-Å Nordström, 1972, vol. 3.1, *op. cit.*, p. 16. In addition to *Capra hircus* found at this site, Perkins also reports the presence of catfish, Nile perch, ostrich, Egyptian goose, gazelle, wild bovid, and the Nubian wild ass (Perkins. *op. cit.*).

¹⁸See the following section (below, 3.2.) on burial, for specific examples of dog remains.

Group wares, which has led Nordström to conclude that "...domesticated cattle and not wild cattle were present, at least during parts of the year,"¹⁹ (4) the definite presence of livestock in the C-Group culture, which suggests that the A-Group should represent the stage of a formative pastoral economy,²⁰ and (5) the Egyptian text that lists cattle and goat as booty during the Fourth Dynasty reign of Snofru. This text, on the Palermo Stone, reports that King Snofru carried off seven thousand people and two-hundred thousand head of cattle during a raid on Nubia, and this 'evidence' has been used to argue for large-scale pastoralism in both the Old Kingdom²¹ and by inference, in A-Group times.²² Although Adams warns that the numbers in the text must be greatly exaggerated, and that "no sedentary people could raise livestock on such a scale in the Nile Valley,"²³ he maintains that the text should be taken as an indicator that "pastoral nomadism must already have been developed in Nubia in Sneferu's time."²⁴ While this may well be true, it must be remembered that the text of Snofru post-dates the A-Group culture and cannot accurately be used to extrapolate events back to that time, especially if one assumes a probable A-Group demise in either the First or the Second Dynasty. Furthermore, Sadr, in a recent study of nomadism in northeast Africa,²⁵ concludes that even with the combined evidence for pastoralism, no definite statements can be made in support of the existence of A-Group pastoralism on

¹⁹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 24.

²⁰W. Y. Adams, 1977, *op. cit.*, p. 125. This assumes, of course, some cultural continuity between A-Group and C-Group.

²¹*Ibid.*, p. 139.

²²See for example, I. Hofmann, 1967, *Die Kulturen des Nils von Aswan bis Sennar vom Mesolithikum bis zum Ende der Christlichen Epoch*, p. 123.

²³W. Y. Adams, 1977, *op. cit.*

²⁴*Ibid.*

²⁵K. Sadr, 1991, *The Development of Nomadism in Ancient Northeast Africa*.

any scale. The author's final assessment is that "indeed there is no strong evidence for any pastoral production by the A-Group: the presence of cattle is inferred only from ox-hides and possibly the dung tempered pottery...whether the A-Group had a pastoral economic sector thus remains an open question."²⁶ However, despite the doubts created by the lack of direct evidence, it seems generally accepted by most other scholars that the A-Group was at least a minimally pastoral society.

Hunting, Gathering, Fishing and Fowling

One is faced with the same types of problems in attempting to define these economies, especially those of fishing and fowling. It is important to note that faunal remains of even wild species (birds, fish, and mammals) were not frequently found in settlement sites as would be expected, but it is very unlikely that this is a true reflection of the archaeological record. It must be remembered that only half of the known settlement sites have been published, and of the material that is present, proper analyses are noticeably scarce.

Skeletal material of several wild animal species has been found in graves, notably those of gazelle,²⁷ crocodile,²⁸ antelope,²⁹ hippopotamus,³⁰ a

²⁶*Ibid.*, p. 90.

²⁷This was listed as a possible skeleton of a gazelle, an intrusive burial into Grave 20 at Siali. Reisner, 1910a, *op. cit.*, p. 237.

²⁸This was found in Grave 87 in Cemetery 79 at Mediq, and consisted of a crocodile skull with a human burial. C. M. Firth, 1912a, *The Archaeological Survey of Nubia: Report for 1908-1909. Volume I: Part 1. Report on the Work of the Season, 1908-1909. Part II. Catalogue of Graves and their Contents*, p. 137.

²⁹Antelope horn has been found occasionally in graves, as in Grave 275 at Shem Nishai. Reisner, 1910a, *op. cit.*, p. 267, Plate 66: b9.

³⁰Tooth fragments have been found in Grave 110 at Kubban. See Firth, 1927, *The Archaeological Survey of Nubia: Report for 1910-1911*, p. 51. In addition, armlets and bracelets were made of hippopotamus tooth. See Reisner, 1910a, *op. cit.*, pp. 239 and 134, and Firth, 1912a, *op. cit.*, p. 111.

large but unidentified carnivorous animal,³¹ and the tortoise, whose shell was often used for bracelets, armlets, and even rings.³²

Indirect evidence consisting of drawings of animals in rock shelters and on pottery indicates that A-Group people co-existed with elephants and giraffes. The presence of the antelope is confirmed by the rock drawings, but it is difficult to assess the food value, if any, of all of these animals. It is likely that elephants and hippopotami were hunted for ivory in order to supply the Egyptian demand for Nubian specialty items at this time. The Nubians certainly used some of this ivory themselves for bracelets, beads, and other items of personal adornment. Whether the carcasses of the tusk-bearing animals were utilized is unknown. It is also not possible to assess the overall importance of meat in the A-Group diet. Relying on modern ethnographic parallels, Nordström suggests that meat was likely consumed on special occasions only, rather than on a daily basis.³³ Clark, however, presents a rather different alternative, based on the idea that the hippopotamus may have played a greater economic role in the Early Khartoum cultures than is currently appreciated. Although not directly applied to the A-Group, I think his theory opens up a realm of speculation for that culture. He notes that hippopotamus bones were quite common in Early Khartoum campsites and that “the importance of this animal appears to have been underplayed due, no doubt, to the difficulty of estimating numbers of kills when animals are butchered where they were killed, often away from the camp sites.”³⁴

³¹Its fangs were pierced for suspension. See for example, Firth, 1912a, *op. cit.*, pp. 137 and 188.

³²See G. A. Reisner, 1910a, *op. cit.*, pp. 135, 136, 252, and 213 for examples.

³³H.-Å. Nordström, 1972, *op.cit.*, vol. 3.1, p. 19.

³⁴J. D. Clark, 1984b, “The Domestication Process in Northeast Africa: Ecological Change and Adaptive Strategies,” In *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 29.

Furthermore, their importance in terms of meat value "...is equalled only by that from an elephant."³⁵ Two modern groups are known to exploit the hippopotamus, thus presenting a good ethnographic model for ancient populations. Clark writes:

"The Wayto hippo hunters of Lake Tana and other parts of Ethiopia provide an ethnographic analogue for these waterside sites of the central Sudan, if allowance is made for the greater abundance of fish in the latter region. The Wayto were probably originally Nilotes and much more widely distributed (on the Takazze, for example) than today...Their way of life in all aspects was based upon the hippopotamus...The dense populations of hippo on Lake Tana led to relatively large groupings and extended Wayto permanent settlements. An adult hippo weighs between 1524 and 2540 kgs so that a single animal will provide a large amount of meat and, which is particularly important for hunter/gatherers, of fat that would feed a Wayto village of 50 people for a considerable time. A similar, though less well documented population that concentrated on hippo hunting existed on Lake Abaya in the southern Ethiopian Rift."³⁶

Evidence that may suggest the importance of the hippopotamus to A-Group people are the representations of the animal in sculpted form. The hippopotamus is the only undomesticated animal known from A-Group contexts to have been rendered in this manner. Williams has uncovered three fragments of clay hippopotamus statues, each from a different sculpture, and one tiny limestone carving of the animal.³⁷ The finest piece in this small collection is the sculpted hippo head from tomb L19.³⁸ It is finely modelled, showing "...the ears, raised eye with bordering ridges, and snout with the two

³⁵*Ibid.*

³⁶*Ibid.*

³⁷For descriptions see B. B. Williams, 1986, *Excavations between Abu Simbel and the Sudan Frontier*, Keith C. Seele, Director. Part 1: *The A-Group Royal Cemetery at Qustul: Cemetery L*. Vol. 3 of The University of Chicago Oriental Institute Nubian Expedition, pp. 150-151.

³⁸For a drawing see *ibid.*, p. 315.

tusks of the lower jaw almost protruding through the upper lip. This clearly is intended to represent a great male hippopotamus.”³⁹

Admittedly, hippopotamus bones are not represented with the same high degree of frequency in A-Group contexts as in Early Khartoum contexts, but it is difficult to conceive of even a partial hunting/gathering economy exploiting such large animals only for ivory tusk, while discarding the meat. Indeed, given the likelihood of A-Group trade in ivory tusks, we must assume a greater consumption of meat than what Nordström has suggested. On the other hand, the tool kits employed by A-Group people in the hunting of wild game, although remarkably consistent with those of the earlier Neolithic cultures, were often not as well executed. This suggests that less reliance was placed on hunting as the main food source, and it is not surprising that the decline in tool quality coincides with the appearance of agriculture. Typical tool types found in habitation areas include scrapers, burins, bifacial points, wedges, denticulates, lunates, backed blades, and less often, axes and chisels.⁴⁰

Evidence for food gathering is scarce, but what little is known comes, surprisingly, from graves. Date pits attest to the gathering of wild dates, there being no evidence to suggest palm domestication in A-Group times. Reisner reported two date seeds from Grave 107 at Shellal,⁴¹ and a “...hard mass of date stones”⁴² underneath the burial remains in Grave 15 at Khor Ambukol. Date pits have been found in habitation contexts as well, but these are very often isolated finds.⁴³ It is apparent that fruit and nuts were gathered rather

³⁹*Ibid.*, pp. 150-151.

⁴⁰See Section 3.3 below for a fuller discussion of stone tools.

⁴¹G. A. Reisner, 1910a, *op. cit.*, p. 21.

⁴²*Ibid.*, p. 143.

⁴³See for example, Site 406 in the Scandinavian concession, where one date stone

than cultivated, but it is possible that some varieties may have been obtained through trade with Egypt. From Grave 7 at Khor Bahan, Reisner reported that “seven flat oval baskets lay before the face of A [one of the bodies] containing seeds and fruits.”⁴⁴ And from Grave 262 at Shellal a large nut that may be from the dom palm was discovered, along with a single small seed.⁴⁵

From the abundance of ostrich egg shells in habitation sites and graves, it is evident that ostrich eggs formed a significant part of the A-Group diet, but whether or not the bird itself was hunted is somewhat more difficult to decide. The making of ostrich feather fans is, I think, the closest indication that the bird was caught, but it is possible that the feathers, like the eggs were simply collected from the ground. The gathering of oysters and water molluscs is well documented by the large number of shells found in habitation sites and to a lesser extent, burial sites.

The practice of fishing is known from fish bones usually found in small numbers, and from the presence of basketry used as fish traps. Reisner reported the discovery of two fish bones at the Archaic Camp at Meris Markos,⁴⁶ as well as basket remains from Shellal. The latter are described as follows: “Remains of basket, woven in present-day Nubian manner, with some red strips to make red and white pattern.”⁴⁷ As with hunting practices, the trapping of fish continued in the same manner as in Abkan times, but the appearance of the fish hook for the first time, indicates the use of a new fishing technique. The earliest hooks found are made of copper, and are thought to be Egyptian imports. One example was reported from a Late

was found amidst other debris. H.-Å. Nordström, 1972, *op.cit.*, vol. 3.1, p. 224.

⁴⁴G. A. Reisner, 1910a, *op. cit.*, p. 116.

⁴⁵*Ibid.*, p. 42.

⁴⁶*Ibid.*, p. 216.

⁴⁷*Ibid.*, p. 38.

Predynastic grave at Dahmit.⁴⁸ Presumably the knowledge of how to use hooks was obtained from Egypt as well. Shell fish hooks have also been found, but they are just as rare as the copper hooks.⁴⁹

The occurrence of harpoons implies the practice of fishing from boats or rafts, although no actual remains of such water craft are known. Two copper harpoons have been found,⁵⁰ as well as a bone harpoon from Cemetery 45 at Shem Nishai.⁵¹ In addition to infrequent depictions of boats, the only possible indication that boats were known is the model of an “unbaked mud boat”⁵² from a grave at Mediq.

Unfortunately no faunal studies on fish have been done to indicate what species may have been exploited by A-Group people. This is most unfortunate since such studies have been undertaken for other contemporary cultures as, for example, in the Khartoum area. This situation will greatly limit the comparative analysis of subsistence bases between the A-Group and other cultures of the Sudan.

Nordström writes that “...wildfowling still played a supplementary role in the A-Group subsistence economy,”⁵³ but here again, the nature of the evidence is largely indirect. Bird remains are extremely scarce in both habitation and burial sites. In one grave at Metardul (Figure 2) Reisner

⁴⁸*Ibid.*, p. 251, and G. A. Reisner, 1910b, *The Archaeological Survey of Nubia: Report for 1907-1908. Plates and Plans Accompanying Volume I*, Plate 65: a1 (Cemetery 43, Grave 78).

⁴⁹For examples, see I. Hofmann, 1967, *op. cit.*, Plate 1: 5.

⁵⁰See the discussion below on “Copper Implements and Items” for references.

⁵¹G. A. Reisner, 1910a, *op. cit.*, p. 267 (Grave 275).

⁵²Firth, 1912a, *op. cit.*, p. 138, with accompanying sketch (Grave 92).

⁵³H.-Å. Nordström, 1972, *op. cit.*, vol.3.1, p. 24.

reports the "...bones of a small rodent or bird,"⁵⁴ placed as an intrusive burial under one set of human remains in the tomb.

Imported Subsistence Items

The very active trade between the Nubians and the Egyptians undoubtedly accounts for the great material wealth of the Nubians in A-Group times. Evidence of this wealth comes almost exclusively from graves rather than from habitation sites, and the cemeteries attest to the fact that Egyptian luxury items were sought by the Nubians. It is tempting to extend the parallel to food items, and to suppose that luxury subsistence items were sought as well, but this would reflect an ethnocentric view that only imported foods were considered specialty items. The preponderance of Egyptian wine and beer vessels in A-Group contexts certainly indicates that these beverages were not uncommon in Nubia, and they may indeed have been everyday subsistence items. One argument against this is that the trade business may have been rather tightly controlled by Nubian chiefs who had become dependent upon Egyptian luxury items. If this was the case, it suggests a careful redistributive system,⁵⁵ which perhaps did not make all items available to the general population. There is not enough evidence available on A-Group social and political organization to allow for exact statements regarding redistribution. Furthermore, in order to assess the amounts and types of food items obtained from trade, what is needed, ideally, are functional analyses of vessels containing their original products. Such evidence is not commonly found, as the Egyptian wares evidently underwent continuous re-use once the original contents were emptied or consumed. It is certain,

⁵⁴G. A. Reisner, 1910a, *op. cit.*, p. 291, Grave 62.

⁵⁵B.G. Trigger, 1965, *History and Settlement in Lower Nubia*, p. 75.

however, that the large narrow-necked jars with conical bases were used for transporting wine and beer. Nordström speculates that wavy-handled and cylindrical Egyptian vessels initially held oils, cheeses, and honey.⁵⁶ It is thought⁵⁷ that the wide-mouthed open bowls of Egyptian manufacture may have been used for the transport of dry foodstuffs, and possibly other types of dry goods, but there is no direct evidence to support this claim. The only other A-Group food item of possible Egyptian origin is bread. Possible bread remains have been discovered at Shellal by Reisner,⁵⁸ but it is the only known occurrence. It seems surprising that this item should have been imported, given the existence of agriculture, but perhaps the small-scale cultivation did not make bread-making feasible. There is certainly no conclusive evidence for bread-making or for the knowledge of it in A-Group contexts.

3.2. A-GROUP BURIAL

The distribution of A-Group cemeteries occurs in three broad regions from north to south in the A-Group territory. According to Williams these lie between Kubanieh and Dahmit, between Gerf Hussein and Mediq, and between Abu Simbel and Gamai.⁵⁹ Isolated cemeteries are also known to occur between these three regions. Williams adds that this pattern of distribution gives the erroneous impression of "...a short, rather sparse occupation,"⁶⁰ which, it should be added, is not helped by the truly sparse distribution pattern of A-Group habitation sites. In terms of the general sizes of A-Group cemeteries, Williams writes:

⁵⁶H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 25.

⁵⁷*Ibid.*

⁵⁸Grave 15 at Khor Bahan. G. A. Reisner, 1910a, *op. cit.*, p. 128.

⁵⁹B. B. Williams, 1986, *op. cit.*, p. 9. All sites located in Figure 2

⁶⁰*Ibid.*

“A-Group cemeteries...do not reach the enormous size of some Predynastic Egyptian burial grounds. Many cemeteries contained fewer than thirty tombs, and isolated graves and small groups are common. The larger cemeteries are often in the northern part of Lower Nubia, Khor Bahan (Cemetery 17) with about eighty-five tombs, Metardul (Cemetery 50) with about eighty-seven, and Cemetery 166 with about the same number. The cemetery at Faras with over 150 tombs is actually two cemeteries.”⁶¹

Grave Types and Structure

The categorization of grave types and burial types by Reisner has not been altered significantly by subsequent researchers, although many have produced their own mini-typologies based on their sites and/or concessions. However, accounts of grave types can, I think, be too generalized and thus misleading, such as Adams’ assessment of only two grave types.⁶² Reisner’s original typology, which is the most complete,⁶³ defined no less than six main types plus four subtypes as follows:

“Archaic type Ia:	Oval graves, nearly circular.
Archaic type Ib:	Oval graves.
Archaic type IIa:	Broad rectangular graves with rounded corners.
Archaic type IIb:	Broad rectangular graves with square corners.
Archaic type III:	Circular graves.
Archaic type IVa:	Circular beehive graves.
Archaic type IVb:	Rectangular beehive graves.
Archaic type V:	Double beehive graves.
Archaic type VIa:	Recess grave with sunk chamber.
Archaic type VIb :	Simple recess grave.” ⁶⁴

⁶¹*Ibid.*

⁶²W. Y. Adams, 1977, *op. cit.*, p. 128. These include the simple circular grave with or without the recessed burial chamber.

⁶³It should be noted that not even the Scandinavian concession contained all of the following grave types. See H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 57.

⁶⁴Slightly modified from G. A. Reisner, 1910a, *op. cit.*, pp. 300-301.

Most of these grave types are virtually identical to the Predynastic and Early Dynastic types seen in Egypt, however, after these time periods there was a temporary departure from such a close resemblance between Nubian and Egyptian grave types until the end of the C-Group occupation. The A-Group graves are characterized by an evolution of types with time, with the broad oval or rectangular pits (Types I and II), and the recess graves (Type VI) occurring in the Early A-Group and Classic A-Group periods in Nubia, and the rectangular pits occurring predominantly in the Terminal A-Group. The only A-Group grave types not represented in Egypt were the beehive and double beehive forms, although Reisner writes that the double beehive type "...recalls the tombs of the First to Second Dynasties in Egypt with additional chambers and small magazines."⁶⁵ Firth adds that the double beehive type may have "derived from some form of granary."⁶⁶ The lack of development of the beehive type of grave in Egypt seemed to be a result of the softer soil conditions there in comparison with the hard mud present in Nubia. To compensate for the softer soil, one sees in Egypt at this time a development of the mud-brick lining for tombs, a feature completely unnecessary and absent in Nubia. Reisner also writes that in Nubia

"the beehive form undoubtedly came in as a result of the practice of covering the graves with stone instead of wood. The hole to be covered was smaller, and slabs of sufficient size were more easily obtained."⁶⁷

It should be added that although the mud-brick lining was not used in Nubia, it was not uncommon to see the practice of plastering the interior walls of the grave with mud.

⁶⁵*Ibid.*, p. 324.

⁶⁶C. M. Firth, 1927, *op. cit.*, p. 16.

⁶⁷G. A. Reisner, 1910a, *op. cit.*, p. 324.

Due to the severe denudation of A-Group cemeteries, superstructures have not generally survived. In addition to closing the grave with slabs of stone, Firth suggests that a “temporary fence superstructure of reeds or sticks, as found in Egypt”⁶⁸ may have been built on top of the grave. Much of our knowledge of superstructures comes from those that were preserved at Cemetery 268 at Tunqala West, excavated by the Egypt Exploration Society during the High Dam Campaign.⁶⁹ The relatively high level of this cemetery and its position away from the nearby wadis have prevented the usual denudation. Concerning the superstructures, Smith provides the following additional details:

“...there were found (i) tumuli built of courses of dry undressed stone over the mouth of the grave, of approximately circular shape; (ii) an offering place constructed of upright stones placed at right angles to the tumulus containing offering pottery; (iii) what were in all probability uninscribed grave stelae.”⁷⁰

We cannot know to what extent the Tunqala West tombs are representative of all A-Group graves, and some scholars such as Nordström think that these superstructures may have been an exception rather than the rule.⁷¹ On the other hand, Reisner advocates the presence of the above-ground offering-place in Nubian tombs on the basis of comparison with Egyptian tombs. He writes:

“The Egyptian tomb always, from earliest predynastic times down to the present day, appears to have consisted of two parts corresponding to the two functions of a grave—a burial-place and an offering-place...The offering-place was usually a

⁶⁸C. M. Firth, 1912a, *op. cit.*, p. 13.

⁶⁹Their work and the superstructures have already been discussed above (Chapter 2).

⁷⁰H. S. Smith, 1966b, “The Nubian B-Group,” *Kush* 14: 124.

⁷¹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 27.

superstructure above ground, such as the mastaba with its offering chapel..."⁷²

Burial Types

Five types of human burial have been identified by Reisner,⁷³ based on the varying degrees of bodily contraction. These types may be summarized briefly as follows:

Type I: Body loosely contracted, usually on left side, with the left leg drawn up a little higher than the right leg. Hands are in front of the face.

Type II: The body is on its left side, knees drawn up close to the chin and sharply bent, with the heels close to the pelvis. Hands are in front of the face, or one is placed on one of the legs.

Type III: Body on left side, thighs are almost at a right angle to the spine, and the heels are very close to the pelvis. The relative position of the legs occur in two variations, one resting on top the other, or the left knee closer to the head than the right knee.

Type IV: The body is on its right side and the thighs form an obtuse angle with the spine. The heels are lower than the knees. This type is uncommon in the A-Group.

Type V: The body is on its left side. The thighs are at the same angle as in Type IV, but the heels are close to the pelvis. This type occurs most commonly in Reisner's B-Group.

According to Reisner, these burial types fall into two broader categories:

"(a) those unhampered by the size of the grave (types I and IV), and (b) those cramped by narrow grave walls (types II, III, V). The types II, III, V are much more common in the later B-and C-groups, because the graves of those periods are smaller and narrower."⁷⁴

⁷²G. A. Reisner, 1910a, *op. cit.*, p. 313.

⁷³See *ibid.*, pp. 310-311.

⁷⁴*Ibid.*, p. 311.

In addition to the contracted position, the use of linens, goat skins, and matting to wrap or cover the body was a universal feature throughout A-Group times. Matting could be used to line the grave and cover the body, while hides and/or cloth were employed in wrapping the deceased. Nordström cautions that “it is generally difficult to distinguish between clothes and body wrappings (the latter being employed only for burial).”⁷⁵ He also adds that “many graves display the remains of leather or fur pelts that can occasionally be identified as wrappings of the dead, while some bodies were placed on plaited mats of reed or grass.”⁷⁶ The use of coffins, pots, or other containers in adult burials was extremely rare, although a few instances are known to have occurred. One particularly unusual example was Grave 7 at Cemetery 17 (Khor Bahan), an undisturbed grave containing two male burials, one of which was in a wooden box. The box was “...open on the bottom and covered with a lid of boards held together by three cross-pieces on top. The body lay on pierced matting and both body and box were covered with pierced matting.”⁷⁷ This must surely be one of the earliest examples of a ‘coffin burial’ known from either Nubia or Egypt. Reisner also lists for adult pot burials, Grave 52 in Cemetery 23,⁷⁸ and Grave 406 from Cemetery 41.⁷⁹

In Early and Classic A-Group times, head orientation was almost always to the south or local south, with a preference for grave orientation along the north-south axis, but by Terminal A-Group times there was a noticeable change in head orientation to either the north or the west. In Early and Classic A-Group times, the body was usually placed on the left side, but this

⁷⁵H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 19.

⁷⁶*Ibid.*, p. 27.

⁷⁷G. A. Reisner, 1910a, *op. cit.*, p. 116.

⁷⁸*Ibid.*, p. 158.

⁷⁹*Ibid.*, p. 220.

was by no means universal. By the Terminal A-Group period the body was placed on either the left or right side, with no apparent preference. In all A-Group periods the hands were generally in front of the face, although it was not uncommon for the hands to be touching the face. A common alternative arrangement for the hands is one placed before the face, and the other on one of the legs, which Reisner claims is a modification of his Type I burial, "necessitated by lack of room."⁸⁰ It should be noted that Williams has reported from Qustul a few other variants in the position of the hands, which include (1) arms extended straight before the side, (2) arms bent, with the hands before the base of the pelvis, and (3) arms bent, with the hands before the upper pelvis or chest.⁸¹

Multiple and Human Sacrificial Burial

Multiple A-Group burials are known to have occurred in groups of two to four, but as Smith and Wood Jones indicate, there is "little uniformity concerning the number or the sex of the bodies which were buried together."⁸² The following combination of individuals is known for multiple burials: two adult women, three adult women, two adult men, three adult men, one adult man with one adult woman, two adult men with one adult woman, two women and one man, two men and two women, one man and one child, a woman and a child, a man with a woman and a child, and two children. From

⁸⁰*Ibid.*, p. 310. Some specific examples of such burials are also listed by Reisner.

⁸¹B. B. Williams, 1989, *Excavations between Abu Simbel and the Sudan Frontier*, Keith C. Seele, Director. Parts 2, 3, and 4: Neolithic, A-Group and Post A-Group Remains from Cemeteries W, V, S, Q, T, and a Cave East of Cemetery K, p. 45. For representations of these positions and the others mentioned above see H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 58, Hc-e.

⁸²G. E. Smith and F. Wood Jones, 1910a, *The Archaeological Survey of Nubia: Report for 1907-1908. Volume II. Report on the Human Remains*, p. 185.

the combinations alone, it is difficult to tell if families are represented in the multiple grave, except perhaps in the case of a man, woman and child multiple burial. One may speculate that familial closeness may have been the motive for the multiple burial. Murray thinks that this was certainly the case in Amratian multiple burials, about which she writes: "The multiple burials show a strong family feeling, the members of a family being united in death as in life. This is not found at any other period in Ancient Egypt except under foreign influence."⁸³

The occurrence of the multiple burial has led to only a minimum of speculation about the possibility of human sacrifice in the A-Group culture. However, the topic cannot be ignored because of the new interpretations of Reinold at Kadada concerning the simultaneous double burials,⁸⁴ which indicate that human sacrifice may have been taking place in that area. This raises the remote possibility that if the A-Group material were to be re-examined it could lead to similar conclusions as have been derived from Kadada. However, until this is done the evidence for sacrificial human burial in the A-Group is only superficial. Arguments for A-Group multiple burial began with F. Wood Jones, who quoted one example of a burial that was suggestive of a human sacrifice made at the same time as a main burial. The violent nature of the death of one of the individuals was suggestive to Wood Jones of a sacrificial burial. He writes:

"In Cemetery 43, at Bugga el Gharb, a grave (No. 25) of the middle Predynastic period was found which contained the bodies of two adult women buried in such a position that the right hand of body A was lying underneath the right scapula

⁸³M. A. Murray, 1956, "Burial Customs and Beliefs in the Hereafter in Predynastic Egypt," *Journal of Egyptian Archaeology* 42: 90.

⁸⁴The subject of double burials at Kadada has already been introduced above (p. 131ff, Chapter 2).

of body B, whilst the right femur of A was crossed over B's right ilium. Both these bodies were quite intact, and they were quite free from any disturbance after burial, so far as could be seen. This case yielded another point of great interest, for the body of the woman A showed all these signs that we have come to regard as being such reliable evidences of death by violence. Most of the ribs, all the cervical and dorsal vertebrae, both clavicles and scapulae were deeply stained with blood, and upon the inner surface of the left ribs was a large mass of food that had been within the stomach at the time of death. There were no bones actually broken, and no softer tissues were left to show the evidences of wounding, but the diagnosis of death by violence is definitely established."⁸⁵

Smith, however, in a postscript to Wood Jones' writing, was wary of the latter's implication of human sacrifice, cautioning that "there are so many obvious alternative explanations of such a state of affairs...that we are not justified in resorting to such a hypothesis as the existence of sacrificial practices."⁸⁶ The only other direct claim for a sacrificial burial has come more recently from Williams, who argued that one of the tombs in Cemetery L (L15), which contained the partial remains of an adult male and female, may represent the sacrifice of one of the individuals in the burial of the other. The evidence for a simultaneous burial is not convincing, although Williams' attempts to argue a case for it. He writes:

"Approximately the northern half of L15 contained objects still in their original positions, although a number of objects, such as the small pile of vessels near the head of the burial, had been disturbed..., and the legs and pelvis of the burial had been scattered or removed. The burial was made in typical A-Group fashion on the left side, head to the south, the larger storage vessels at the northern end. This left more than half the shaft unoccupied by any remains in situ; this is the area where most small objects would be placed had the burial been made alone. Likewise, had the burial been made alone, it would have been put in the center of the shaft or even the

⁸⁵G. E. Smith and F. Wood Jones, 1910a, *op. cit.*

⁸⁶*Ibid.*, p. 186.

south end. Remains of a mature male were found in this area, and, had the burials been made at different times, the first would have been made in the center of the shaft and the second would either have been made above it or disturbed it. The only plausible explanation for the presence of the two burials in these circumstances is that they were simultaneous. It is very likely that simultaneous main and sacrifice burials were made in L15.”⁸⁷

Williams’s logic does not allow for the simpler possibility that the first burial could well have been disturbed by a later intrusive burial represented by the adult male remains. The fact that the female body lay to the side of the trench could indicate that it was pushed aside to make room for the later burial. This is known to have happened elsewhere in A-Group burials, and not infrequently.⁸⁸ Alternatively, or perhaps additionally, the grave was likely disturbed by tomb-robbers, as had most of the Cemetery L tombs, and thus the intact vessels at the north end of the tombs could indicate only partial plundering or the lack of interest on behalf of the robbers in the storage vessels. Even if one burial had been sacrificial, the circumstance of tomb-robbing alone would make Williams’ argument void. In short, the evidence for human sacrifice here is not secure enough to be convincing, however well it is argued. It must be added that some authors have continued to express concern for the general lack of direct evidence for A-Group human sacrifice. Trigger, for example, has written that “there is no evidence of retainer sacrifice at this time that might otherwise account for...multiple burials.”⁸⁹

⁸⁷B. B. Williams, 1986, *op. cit.*, p. 303.

⁸⁸See for example, Grave 4 in Cemetery 137 at Sayala. C. M. Firth, 1927, *op. cit.*, p. 209.

⁸⁹B. G. Trigger, 1976, *Nubia Under the Pharaohs*, p. 37.

Animal Burial

The nature of animal burial in the A-Group is very little understood. While the French scholars have begun to provide detailed accounts and analyses of sacrificial dog burials at Kadada,⁹⁰ this type of work has not yet been undertaken for the A-Group. However, a brief look at the evidence has allowed me to define two basic types of animal burials for the A-Group, the sacrificial burial, and what I will call the independent animal burial. The former occurs within the context of a human burial, while the latter is comprised of a single or multiple interment of animals alone. Multiple animal burials are quite analogous to human multiple burials, although grave offerings were not included. This generalization excludes the rather exceptional cases of the Qustul cattle burials (discussed below). Animals that have been interred in A-Group contexts include dogs, goats, sheep, oxen, one partial crocodile⁹¹ and a mouse. The general character of these burials may be summed up in a few brief points. Animals seem never to have been buried in separate cemeteries, but rather, in the case of the independent burial, in graves that were interspersed throughout human burial grounds. Multiple animal burials were not infrequent. For example, Reisner listed for Cemetery 7 at Shellal, one double dog burial, one triple dog burial, and one combined dog and goat burial.⁹² There appears to have been no preference for body positions and head orientation in animal burials, and numerous positions have been

⁹⁰See for example, C. Bonnet, L. Chaix, P. Lenoble, J. Reinold, and D. Valbelle, 1989, "Sépultures à chiens sacrifiés dans la vallée du Nil," *Cahier de recherches de l'Institut de papyrologie et d'égyptologie de Lille* 11: 25-39.

⁹¹See above, p. 166, note 28.

⁹²G. A. Reisner, 1910a, *op. cit.*, p. 43.

noted such as “left side, head 30° west of south,”⁹³ “right side, head 30° north of west,”⁹⁴ etc.

The sacrificial animal burial has not been described in detail for the A-Group, and its practice seems to have been taken for granted by the reporters of the early archaeological surveys of Nubia as an Egyptian importation. It seems that the only deciding factor in whether an animal burial was sacrificial was its inclusion in the grave at the same time as the human burial. Reisner described this practice as a “universal Egyptian custom.”⁹⁵ A-Group examples include Graves 41 and 50 at Cemetery 17 (Khor Bahan). In these cases the animal burial was alluded to simply as “bones of a sacrificed animal”⁹⁶ in the first case, which were found under some vessels within the grave, and “a number of animal bones (goat)”⁹⁷ in the second case. Bones of the mouse mentioned above were also found inside one of the vessels in Grave 50.

Fortunately, a little more may be said about the independent animal burial, which Reisner was careful to distinguish from the sacrificial animals, especially in it being “not visibly connected with any one human grave.”⁹⁸ Dogs were given especially careful treatment when buried in their own graves, being protected by matting in the great majority of cases, and having leather leashes and leather collars around their necks. In one case very fine linen was found in association with a dog burial. This burial from Khor Bahan was described as follows:

⁹³Goat burial, Grave 232 at Shellal, *ibid.*, p. 38.

⁹⁴Dog burial, Grave 228 at Shellal, *ibid.*, p. 37.

⁹⁵*Ibid.*, p. 139.

⁹⁶*Ibid.*, p. 129.

⁹⁷*Ibid.*, p. 120.

⁹⁸*Ibid.*, p. 139.

“...contracted on right side, head 25° east of north. Covered with matting over very fine linen. Around neck, leather collar, ends knotted, into which a leash 120 cm. long of twisted leather is tied.”⁹⁹

It certainly appears, from their apparent preferential treatment, that dogs may have had a special significance to the A-Group people. This idea may have been paralleled in Egypt at this time, where in certain Amratian burials there are indications, according to Murray, of a “special sanctity of the dog.”¹⁰⁰ She writes:

“In the filling of a grave were found the bones of a dog. This, however, may have been only with the idea that the dog should accompany his master, as seems to have been the case in the tomb of King Udimu at Abydos. But there was also found a pit in which were buried the remains of at least twenty dogs. This suggests the beginning of the special sanctity of the dog, which in the later periods resulted in large cemeteries of dog mummies.”¹⁰¹

Reisner has expressed a similar view with regard to the independent A-Group animal burial, indicating that they are difficult to understand unless one assumes they are analogous to the sacred animal burials in Egypt.¹⁰² I suggest that for the A-Group dog burial we may be seeing not only indications of a cherished pet, but indications that the animal was perhaps otherwise treasured, perhaps for some unknown but useful function it may have performed for its owner(s) in life. Petroglyphs in the Western Desert of Egypt that show dogs pursuing wild animals has led me to wonder whether dogs may have played a key role in hunting, both in the desert and in the Nile

⁹⁹Grave 4, Cemetery 17, *ibid.*, p. 137.

¹⁰⁰M. A. Murray, 1956, *op. cit.*, p. 92.

¹⁰¹*Ibid.*

¹⁰²G. A. Reisner, 1910a, *op. cit.*, p. 139.

Valley. McHugh has described some scenes, which are not dated, but which, by their content may well be contemporary with the A-Group. He writes:

“The engraved scenes feature wild animals (giraffes, ostriches, Barbary sheep, scimitar oryx) cattle, dogs, and some crude, armed human figures. Cattle are rare in engraved scenes with wild animals, but many engraved scenes depict only cattle. The dogs are commonly shown pursuing wild animals.”¹⁰³

It should be noted that the burial treatment given to dogs was not extended to other types of animals interred independently, not even oxen or sheep (except at Qustul). Grave 33, also at Khor Bahan, was described simply as the burial of a “young ox, on left side, head 20° west of south,”¹⁰⁴ having no contents in its grave.

A peculiar variation of the independent burial is the later introduction of an animal into an already existing earlier human burial. One such example, Grave 8 at Khor Bahan, was described as follows:

“Burial: Bones of dog wrapped in matting. Beside and *under* this burial were...pots and other objects...These certainly belong to an older (Early Predynastic) plundered burial. The dog burial lay comparatively undisturbed in the débris of this older grave. Under the dog was fur, brown (black) and yellow (white), with the hair down, possibly from the dog, and a twisted leather thong (leash?).”¹⁰⁵

This type of situation appears to be very similar to secondary human burials, which were introduced into earlier primary human burials. The significance of the secondary dog burial eludes us. Could a secondary animal burial be interpreted in the same manner as a secondary human burial, i.e., that the

¹⁰³W. P. McHugh, 1975, “Some Archaeological Results from the Bagnold-Mond Expedition to the Gilf Kebir and Gebel-^cUweinat, Southern Libyan Desert,” *Journal of Near Eastern Studies* 34 (no. 1): 57.

¹⁰⁴G. A. Reisner, 1910a, *op. cit.*, p. 138.

¹⁰⁵*Ibid.*, p. 137.

secondary 'individual' may have had some significance to the human originally buried in the tomb?

There are indications as well that A-Group cattle may have been treated or regarded ritualistically, although perhaps in a manner quite different from that of dogs. It should be noted, however, that such evidence comes only from Qustul, Cemetery L, where at least one animal was decapitated (tomb L6). This animal and the other cattle at the site were interred with grave goods. Grave goods have not been included with cattle or other animal burials at any other A-Group site. Furthermore, the material interred with the Qustul cattle burials parallels those found in human graves at this and other A-Group sites. In the case of tomb L6,¹⁰⁶ which is considered the most important of the seven or eight cattle burials from Qustul, these included several large storage vessels, shell hooks, and lipstuds (or some other type of stud). Due to the disturbed nature of the remains only one burial (L20) provided evidence of the original manner of burial, with the body of the animal folded into the grave.¹⁰⁷ Williams has labelled four of the burials (L3, L6, L7, and L27) as cattle sacrificial burials, not, it seems, because of the circumstance of decapitation, but because of their alleged association with human graves. The group L3, L7, and L27 for example, were described as "...apparently associated with L2 and L5,"¹⁰⁸ both of which were human tombs directly to the north. However, I am not convinced that Williams's criterion of association alone is enough to show that these burials were sacrificial, and the cattle burials in fact do not appear convincingly close enough to the human burials to be automatically construed as sacrificial. The distribution of graves in Cemetery L could easily be

¹⁰⁶B. B. Williams, 1986, *op. cit.*, pp. 233-236. The burial appeared to have been undisturbed.

¹⁰⁷*Ibid.*, p. 333, and Plate 108a. No plan was made of the burial.

¹⁰⁸*Ibid.*, p. 377. See also the plan of the cemetery, *ibid.*, Plate 4.

interpreted as a random arrangement of both animal and human graves. Furthermore, the cattle burials could alternatively be viewed as completely independent burials quite comparable to the human graves in terms of size, grave contents, and ultimately in their importance. It seems to me that if the cattle burials were meant to be sacrificial they would have been more closely associated with or even attached to a human grave. And certainly no case is known at Qustul where an animal was buried simultaneously with a human. In addition, Williams has not addressed the issue of why some cattle burials appear to be 'sacrificial' and others were not. Grave L20, for example, was described as "...not convincingly related to any one royal tomb or pair,"¹⁰⁹ by which one presumes that it was not convincingly related enough to be deemed sacrificial. Similarly L33 was isolated from any human grave, but it was also the only tomb in the entire cemetery to have an east-west, rather than a north-south orientation. No explanation for this has been offered.

In addition, Williams has offered no explanation for the removal of some cattle heads. He writes simply that "most cattle buried in Cemetery L had the heads removed; animals were buried in other cemeteries, often intact."¹¹⁰ The latter statement implies that animals from other A-Group sites were not generally decapitated, but a few instances are known to have occurred. Furthermore, if there was some ritual significance to the removal of animal heads, it is quite possible that it was not restricted to cattle, and certainly not restricted to Cemetery L at Qustul. Examples of burials that support this were uncovered by Reisner. These include two dog burials at Shellal,¹¹¹ and one goat burial, also at Shellal,¹¹² all with their heads missing. All three cases

¹⁰⁹*Ibid.*, p. 333.

¹¹⁰*Ibid.*, p. 16.

¹¹¹G. A. Reisner, 1910a, *op. cit.*, p. 37, Graves 223 and 224.

¹¹²*Ibid.*, p. 49 (Grave 144).

appear to have been independent animal burials. An A-Group grave near Gebel Um Simbela is known to have contained the opposite situation, in which an animal's head, quite possibly a goat's, was present, but the body was missing. Firth describes one combined human and animal head burial as "apparently a B-group burial in an earlier pit. Skeleton contracted on R. side, head S., accompanied by skull of a large goat or similar horned animal."¹¹³

Child and Infant Burial

Except for the occasional occurrence of an infant pot burial, children were generally given a burial treatment similar to that of adults. Generally older children were buried in pits, albeit in much smaller graves than those used for adults. As already indicated above, children were also buried with male and/or female adults, with no evidence of what the factors were in the choice of this type of burial over the independent child burial. It is especially difficult to understand the true nature of adult and child burials that appear to have occurred simultaneously in the same grave, as in Grave 59 at Qurta,¹¹⁴ where a child was buried in front of the lower ribs of an adult. This could be a case of a mother and child burial, but unfortunately the sex of the adult was not given, and it seems that it was uncertain whether the child represented a foetus. Therefore the possibility of the death of mother and child during childbirth cannot either be supported or rejected here. Another example may be quoted in which the remains of a child were found at the feet of an adult in the same grave (Grave 1 in Cemetery 142 at Naga).¹¹⁵ Both burials in the grave appear to have been made simultaneously. Given this type

¹¹³C. M. Firth, 1927, *op. cit.*, p. 223. Fig. 148: 24 on the same page shows the association of the human burial and the goat's head.

¹¹⁴*Ibid.*, p. 141.

¹¹⁵*Ibid.*, p. 124.

of evidence can we postulate that sacrificial burial existed with regard to children as well as, possibly, adults? The question is not answerable given the sparse amounts of data available and their fragmentary nature. However, it does appear that the choice of simultaneous child and adult burial was quite distinct from the secondary burial of a child into a grave of an adult. This situation was found in Grave 4 in Cemetery 147, at Sayala,¹¹⁶ where part of the adult skeleton and some of the grave furnishings were pushed aside in order to make room for the later infant burial, “possibly Old Kingdom in date.”¹¹⁷ It should be added that the reverse is also known to be true, where an adult burial was added to the earlier grave of a child.¹¹⁸

Multiple burials of children only are also known, as in Grave 15 in Cemetery 73 near Gerf Husein temple, where two infants were buried together in a single grave.¹¹⁹ Multiple burials of children did not always constitute the simultaneous burial of both together, and secondary child burials are known to have occurred into already existing child burials. A rare example is from Cemetery 79 at Mediq (Grave 17),¹²⁰ where the skeleton of a female child was found overlying that of an infant. Despite this variety of examples, multiple child burials cannot be described as common for the A-Group. Also, no complete cemeteries seem to have been entirely devoted to child burials alone, although at least one case is known where children’s graves were clustered together in a separate part of a cemetery, i.e., apart from adult burials in the same cemetery. This was found at Debeira (Figure 1) by the Scandinavian

¹¹⁶*Ibid.*, p. 209.

¹¹⁷*Ibid.* One may assume Terminal A-Group here.

¹¹⁸C. M. Firth, 1912a, *op. cit.*, Grave 41, p. 131, Cemetery 79 at Mediq.

¹¹⁹*Ibid.*, p. 100.

¹²⁰*Ibid.*, p. 139.

Joint Expedition.¹²¹ An area of about 6 x 11 m. was found to contain seventeen small pits, whose smaller size is immediately noticeable because of the larger burial pits for adults to the north. Of the four burials that were described by Nordström,¹²² two of the bodies had their heads removed,¹²³ although it is not known if this was a deliberate act. The significance of the missing heads, if any, is not commented upon by the author. However, I think this type of incident may have been ritualistically significant. The only comparative evidence for missing heads in burials comes from contemporary Egypt, although I venture only with caution that similar interpretations from the Egyptian material may be applied to the A-Group. Murray lists two examples of Amratian (Naqada) burials in which heads were missing from adult skeletons, i.e., burial 31 at Ballas, which was described as "body complete including finger and toe bones, but no head."¹²⁴ The other example was burial 1388 at Naqada, in the "usual contracted position,"¹²⁵ but with no head. Murray views this practice of skull removal within a larger context of dismemberment of the corpse, features of which include the separation and stacking of long bones within the tomb, which she interprets as evidence for cannibalism. The phenomenon also includes the removal of ribs, and the deliberate displacement of certain body parts within the tomb. The skull, for example was sometimes moved to a position between the knees or in front of

¹²¹For the overall plan and for sections of some of these burials see H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 70. The accompanying text is contained in vol. 3.1, pp. 151-153.

¹²²*Ibid.*, pp. 152-153, Graves 2-5.

¹²³There is no indication that these burials were disturbed. Nordström writes that the cemetery contained "25 mostly undisturbed graves" (*ibid.*, vol. 3.1, p. 151), of which the four child burials are a part.

¹²⁴M. A. Murray, 1956, *op. cit.*, p. 90.

¹²⁵*Ibid.*

the chest. In some cases the skull was replaced by a rounded object such as a pot or an ostrich egg. It should be noted that none of these features, except for the complete removal of the skull, occur in the A-Group. However, for the Amratian burial Murray writes:

“It is obvious that there was some special feeling towards the skull of a dead person. I suggest that these persons had been regarded during life as being possessed of supernatural powers. When the person had been beneficent or much beloved, the skull had been removed to the family hut or village for worship; and it should be noted that the missing skulls were largely female. If, on the other hand, the person had a reputation of evil, the skull was so placed that it could not be joined to the body and so rendered the evil person powerless.”¹²⁶

It is difficult to imagine in the case of the child burial that the individual was conceived of as evil, but since in the A-Group the children’s skulls were completely removed rather than displaced, we may assume that the former reason may more readily apply, i.e., that the skulls were kept by the living for sentimental reasons. It should be added that there is no certain case of the deliberate removal of an adult head from an A-Group burial. Although many burials have been found without heads, this can be attributed to the disturbed nature of graves and their contents in most, if not all cases.

I would further add that the importance of the head in the modern and broader context of Africa has received comment from scholars, although it is not yet possible to define when or where ideologies concerning the head began, or how they evolved through time. Green and Yurco have written:

“The importance of the head is significant throughout Africa. It is often considered the seat of a person’s wisdom and life. In many areas of Africa, knowledge is equated with power.

¹²⁶*Ibid.*, p. 92.

The possession and control of knowledge is, therefore, a form of empowerment."¹²⁷

Furthermore, the use of headrests, which is well-known in ancient Egyptian and Nubian contexts (although not known for the A-Group) is significant because headrests "...cradle, comfort, and protect one's head during life and sometimes into the afterlife."¹²⁸ The fact that the use of headrests has persisted into modern times throughout Africa suggests the persistence of ancient attitudes about the head. Within this context it is therefore difficult to dismiss the missing heads from A-Group contexts as merely accidental.

In terms of the position of the body and the contents of the graves, there is nothing to suggest that children were given a more inferior treatment in burial than adults. Where grave goods occur, they include the usual leather fragments, presumably of clothing and/or body wrappings, pottery vessels, faience beads, textile fragments, and items of personal adornment such as bracelets, anklets, and necklaces. Particularly striking in terms of the amount of grave goods is Grave 3 at Cemetery 136 near Sayala,¹²⁹ a tomb of a young girl. The most significant items in the grave included a steatopygous pottery figurine, gold beads, distinctive examples of Nubian ceramics, and locally made palettes. This grave certainly indicates that children were not necessarily regarded as having a lower status than adults.

Turning now to the pot burial, it seems to have been reserved almost exclusively for very small infants, with the exceptions of the two adult pot burials already noted above. We have no way of knowing, at present, what determined the choice of a pot burial over a normal infant pit burial. The

¹²⁷R. L. Green and F. J. Yurco, 1991, "African Headrests," In *Egypt and Africa*, edited by T. Celenko, p. 47.

¹²⁸*Ibid.*

¹²⁹C. M. Firth, 1927, *op. cit.*, pp. 200-201.

practice is known to have continued into the C-Group and beyond, where in the C-Group, pot burials were made outside the family tomb. Firth suggests that this was merely a matter of convenience. He writes:

“Burials of newly born infants appear to have been often made in household bowls, filled with sand, charcoal and earth, and these bowls were then buried just outside the superstructure wall of the family tomb. No doubt it was not thought worth while to unseal the doors to the funerary chambers for the sake of an infant.”¹³⁰

This explanation may also be valid for the A-Group, because no example is known of a secondary pot burial in the grave of an adult. However, A-Group infant pot burials did occur in direct association with an adult burial, such as in Grave 60 at Cemetery 148 near Gebel Um Simbela.¹³¹ A newly born infant was placed in a thin red-polished bowl at the feet of the adult in the grave. Both burials appear to have been made simultaneously. Again, unless one advocates the sacrificial burial, this type of situation can only indicate a death of the mother during childbirth in which the infant was stillborn. Unfortunately the sex of the adult was not assessed by the excavators.

It is difficult to ascertain whether there was any consistency regarding the treatment of newborns. Cases of independent foetus burials (in pits, not in pots) are known, such as Grave 126 at Shellal, described as being “in a contracted position on the left side, head 26° south of east. Trace of matting.”¹³² Alternatively, foetuses are known to have been buried apparently simultaneously with their mothers, but not in a pot, as in Grave 4 in Cemetery 73 at Gerf Husein.¹³³ In this case the adult burial was identified as female,

¹³⁰*Ibid.*, p. 49.

¹³¹*Ibid.*, p. 228.

¹³²G. A. Reisner, 1910a, *op. cit.*, p. 141.

¹³³C. M. Firth, 1912a, *op. cit.*, p. 104.

with the bones of the foetus at the pelvis. Because of this variety of data for the infant burials, it is difficult to ascertain which, if any, of these customs reflect ritually significant differences. The only definitive statement that can be made is that foetuses and very small infants were sometimes and for some unknown reason(s), buried in pots, and that furthermore, this type of burial seemed not to be used for older children. It is especially confusing that the normal pit inhumation was also used for small infants and foetuses.

A further note should be added about the rather unusual custom of placing ostrich eggs, sometimes decorated, together with pottery strainers, in the graves of children. The combination does not always occur, that is, it is possible to find ostrich eggs without the pottery strainers in children's graves, but not, it seems, the other way around. Nordström was the first to comment upon the association in a few graves in the Scandinavian concession, and he quotes a few other examples where the association has occurred in the A-Group.¹³⁴ He writes that "this appears to be an interesting combination which may reflect a religious or social custom connected with childhood."¹³⁵ Nordström further comments on the uniqueness of the combination of ostrich eggs and child burials. He writes:

"The custom to place decorated or plain ostrich eggs in burials with children (in one example also perhaps a goose egg according to Firth 1915, 60) appears to be confined to the A-Group culture in Nubia—no definite combination of this kind has been met with by the present writer in the published material of the C-Group...In Egypt proper evidence of this custom seems yet to be unknown as regards the Predynastic or Early Dynastic periods, although parts of ostrich eggs were used in the Badarian culture as bowls..."¹³⁶

¹³⁴See H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 122 for all references.

¹³⁵*Ibid.*

¹³⁶*Ibid.*

Ostrich eggs are used similarly in the A-Group outside of the burial context, and furthermore, eggs are known to occur in graves of adults. Therefore it would appear that the association of eggs alone with A-Group child burials may not be as significant as the combination of eggs, pottery strainers, and child burial. Unfortunately, the paucity of known examples does not allow an assessment of how significant the custom may have been in terms of religious or funerary ideology.

A-Group Pathology

Despite the great quantity of A-Group human material recovered from Lower Nubia, only a few reports have been produced regarding the skeletal remains. The main works are not devoted in their entirety to the A-Group, as the approach has been to consider Nubian pathological evidence from all periods together, for comparative purposes. The work of Smith and Wood Jones¹³⁷ was the first and is the most comprehensive, although the authors were very selective in their study material, and only a small portion of the total A-Group material available was analysed. Nonetheless, their report seems to be a reliable assessment of the general physical condition of the A-Group people, and infinitely more reliable than their racial analyses. The other works dealing with A-Group pathology were Vagn Nielsen's two reports,¹³⁸ which examined the human remains recovered from the concession area of the Scandinavian Joint Expedition. Vagn Nielsen's reports, however, did not

¹³⁷G. E. Smith and F. Wood Jones, 1910a, *op. cit.*, and 1910b, *The Archaeological Survey of Nubia: Report for 1907-1908. Plates Accompanying Volume II.*

¹³⁸O. Vagn Nielsen, 1970a, *Human Remains: Metrical and Non-Metrical Anatomical Variations*, and 1970b, *The Nubian Skeleton through 4000 Years (Metrical and Non-Metrical Anatomical Variations)*. Both of these publications are virtually the same, and stemmed from the author's doctoral thesis work. The former is considered to be the final version of the publication.

add significantly to the knowledge of A-Group pathology as already outlined by Smith and Wood Jones, but consisted primarily of anthropometric calculations for the purposes, again, of inter-group comparison.

Smith and Vagn Nielsen's studies have both revealed the fact that two diseases were most predominant in the A-Group population, osteoarthroses and alveolar abscesses. The former condition manifests as degenerative lesions in the bones and joints of the spinal column, hip, knee, shoulder, elbow, and jaw, but it should be noted that this condition was not restricted only to the A-Group population. Vagn Nielsen writes for his data-set that "all groups...from the A-Group...to the Christian series are loaded with osteoarthroses."¹³⁹ It seems, moreover, to have been a common affliction in ancient populations all over the world.¹⁴⁰ In conjunction with this disease it is not uncommon to see dislocations, healed fractures, and fusions (especially of vertebrae) in the bones, as a result of their osteoarthritic condition. The cause of the affliction in the A-Group is now more easily understood within the context of modern studies of osteoarthritis. According to Nordström,

"It is now believed that 'wear and tear of increasing age' and 'oft-repeated slight trauma' are the principal causes...From the archaeological point of view,...it would be possible to derive these common ailments in ancient Nubia from the recurrent strain on joints and bones brought about by many years of hard and rough physical labour."¹⁴¹

Nordström adds that it remains to be discovered "...whether there are any significant correlations between the various manifestations of osteoarthroses,

¹³⁹O. Vagn Nielsen, 1970b, *ibid.*, p. 109.

¹⁴⁰*Ibid.*

¹⁴¹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 19.

on the one hand, and social groups (for example sex and age) and subsistence activities, on the other.”¹⁴²

Alveolar disease, although very frequently found in all A-Group populations, is not found in association with dental caries. It was Smith who originally noted this situation, writing that “both in Nubia and Egypt the ordinary form of dental caries is exceedingly rare in predynastic and protodynastic people, and among the poorer classes it never became at all common until modern times.”¹⁴³ Also, it seems that “...dental caries became common as soon as people learned luxury.”¹⁴⁴ The high rate of abscesses without caries is easily explained by the consumption of coarse food mixed with sand, which resulted in attrition that gradually exposed the pulp cavity. This in turn resulted in such severe infection that it spread to the alveolar bone itself, so that “...the root is the only part of the tooth left.”¹⁴⁵

In addition to these common afflictions the following diseases and physical abnormalities have been noted in the A-Group population: (1) the complete obliteration of all skull sutures, (2) ossicles in the sagittal and lambdoid sutures of the skull, (3) facial fissures, (4) mal-eruption of the teeth or the eruption of additional teeth, (5) gaps in the dental series, (6) the assimilation of the atlas vertebra with the occipital bone, (7) reductions in the number of rib-bearing vertebrae and hence the ribs, (8) an increase in the number of dorsal vertebrae and thus sometimes an extra portion of rib,¹⁴⁶ (9) the presence of lumbar ribs,¹⁴⁷ (10) reduction in the number of lumbar

¹⁴²*Ibid.*

¹⁴³G. E. Smith and F. Wood Jones, 1910a, *op. cit.*, p. 281.

¹⁴⁴*Ibid.*

¹⁴⁵O. Vagn Nielsen, 1970b, *op. cit.*, p. 110.

¹⁴⁶Only one example has been documented, from Shellal, Grave 140. See G. E. Smith and F. Wood Jones, 1910a, *op. cit.*, p. 246.

¹⁴⁷Very rare. One example has been noted. *Ibid.*

vertebrae, (11) an increase in the number of lumbar vertebrae, (12) a reduction in the number of sacral vertebrae, (13) an increase in the number of sacral vertebrae, (14) a flattening of the sacrum, (15) a complete ossification of the pelvis, but in males only, (16) an odd shaping of the ribs,¹⁴⁸ (17) congenital fusion of the ribs, (18) bifurcation of the distal end of a rib, (19) perforated sternum, possibly due to wounding,¹⁴⁹ (20) congenital perforations in the scapula, (21) a notch on the outer border of the patella, (22) retroversion of the upper end of the tibia, and (23) cranial ulcerations, which Smith speculates may have been caused by the custom of carrying weights on the head.¹⁵⁰ This theory is somewhat supported by the fact that the affliction was more common in females than in males, and that today women in this part of the world are known to carry water-jugs and other items on their heads. The authors write that because of this “at the present day ulcers of the scalp are not uncommon.”¹⁵¹ The great frequency of bodily fractures, already alluded to above, and the fact that many of them were healed before death, leads to the belief that there was some method of setting fractures for healing purposes, but whatever method was used is not known. Smith speculates that splints were likely employed, although there is no direct evidence for the treatment until Fifth Dynasty times.¹⁵² The particularly high frequency of broken forearms (both radius and ulna), has led to speculation that the sport of fencing with the *naboot* was the chief cause of such injuries, as the *naboot* is used in Nubia for such purposes. To quote Smith and Wood Jones:

¹⁴⁸See Figs. 44 and 45, *ibid.*, p. 250.

¹⁴⁹*Ibid.*, p. 251.

¹⁵⁰*Ibid.*, p. 285.

¹⁵¹*Ibid.*

¹⁵²At Biga, Cemetery 5. *Ibid.*, p. 293.

“For all ordinary purposes of offense and defense—short of those of actual warfare—the Nubian...is in the habit of using a stout staff called the *naboot* and in domestic affairs it is apt to be the final appeal of authority.

In fencing with the *naboot*—a very favourite pastime—the staff is grasped in both hands, and blows are given and parried as in a quarterstaff; but the *naboot* has a much wider range of utility than the use in these ordered bouts of fencing, and the women in these ancient burials show a high proportion of fractured forearms.

Blows aimed at the head with such a stick are naturally received, in the instinctive guarding of the head and face, upon the ulnar side of the forearm, and the left forearm is the one that most often fends the blow.”¹⁵³

In addition, Smith has noted that there is a significant absence of three diseases, tuberculosis, syphilis, and rickets, and that the Nubians as a whole appear not to have been the “...subjects of any malignant disease.”¹⁵⁴

The cause of death is not usually determinable from A-Group remains, except in the rather uncommon instances where serious ante-mortem wounds have been observed. This type of trauma usually involved wounds to the head, as in the case of the adult male in Grave 257 at Shellal. Smith and Wood Jones write:

“Death was brought about by a great violence inflicted on the left side of the face. The bones which remained were very freely stained with blood, and several portions of the displaced fragments were found within the cranial cavity, clotted into a solid mass with blood and wisps of hair. Practically the whole of the facial portion of the skull was carried away; the mandible was fractured in two places, and parts of it were missing, although the whole of the head as it lay in the grave, was wrapped in goatskin...”¹⁵⁵

In addition to these wounds the individual had received a cut to the right side of the skull, likely from a bronze or copper axe, judging from the green

¹⁵³*Ibid.*, p. 297.

¹⁵⁴*Ibid.*

¹⁵⁵*Ibid.*, pp. 331-332. See also G. A. Reisner, 1910a, *op. cit.*, p. 41.

staining on the exposed bone. Other instances are known where individuals show evidence of this type of violence having been inflicted on various parts of the body, as in Grave 8 at Wadi Qamar.¹⁵⁶ The skull of this individual was badly smashed, as were the ribs and vertebrae, the latter of which showed evidence of blood-staining. It should perhaps be noted that death by such violent causes may well be gender-specific in the A-Group population, as no female remains show evidence of severe ante-mortem wounding. Due to the limited amount of data available, this may however, be too premature a generalization.

Batravi, who otherwise added little to the knowledge of A-Group pathology, has noted one case of hydrocephaly in an A-Group individual. It was a youth of indeterminable sex, about sixteen years of age, from Grave 54 in Cemetery 215 (near Abu Simbel). The "diagnosis of hydrocephaly"¹⁵⁷ was based on the following observations:

"...the excessive height of the skull,...the presence of several sutural bones which...is considered as a sign of intra-cranial pressure...[and] the deviation of the sagittal sinus from the middle line to its left side. This last mentioned fact suggests that the enlargement of the right ventricle of the brain was more marked than that of the left ventricle."¹⁵⁸

Social Differentiation

Although a few scholars still maintain that the A-Group had an egalitarian society,¹⁵⁹ the concensus, according to Nordström, is that "...a

¹⁵⁶G. E. Smith and F. Wood Jones, 1910a, *op. cit.*, p. 331.

¹⁵⁷A. M. Batravi, 1935, *Report on the Human Remains*, p. 185.

¹⁵⁸*Ibid.*

¹⁵⁹F. Geus, 1991, "Burial Customs in the Upper Main Nile: An Overview." In *Egypt and Africa: Nubia from Prehistory to Islam*, p. 59.

certain degree of social differentiation existed.”¹⁶⁰ The challenge has been to define the precise nature of A-Group class differentiation using the sparse information available from cemetery and habitation sites. Traditionally, the sites of Sayala (Cemetery 137) and Afia have been used to argue for the existence of a chiefdom class, which likely acquired power and prestige from its control of the Nubian-Egyptian trade circles and from the redistribution of Egyptian goods in Lower Nubia.¹⁶¹ If a chiefdom class did exist, it is important to understand its likely nature at this early stage of Nubian cultural history. Adams writes:

“The implications of the term ‘chief’ require some qualification. The rather primitive technology and society which is revealed by the material remains of the early Nubians makes it unlikely that they had achieved anything like a hereditary monarchy as we now understand the term. Probably, like most primitive peoples, they continued to be governed very largely through the institutions of kinship. If any individual or lineage wielded more formal authority, it was probably authority of the highly restricted (and frequently elective) sort which we are apt to find among Neolithic farmers and herdsmen, and which is exemplified today by the ‘rain chiefs’ of the Upper Nilotic tribes.”¹⁶²

Cemetery 137, originally excavated by Firth,¹⁶³ is well known for its large and prosperous A-Group graves, which may well indicate that such leaders existed. Trigger writes that “Firth believed this cemetery to be the burial ground of an important local leader and his family and Helene Kantor has

¹⁶⁰H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 26.

¹⁶¹This idea was first proposed by Trigger, 1965, *op. cit.*, pp. 74-75. See also I. Hofmann, 1967, *op. cit.*, p. 123.

¹⁶²*Ibid.*

¹⁶³C. M. Firth, 1927, *op. cit.*, pp. 204-212.

dated the richest grave to the early part of the First Dynasty.”¹⁶⁴ Trigger summarizes the Sayala material as follows:

“The graves were large and of a form common to all the more prosperous interments in Nubia at this time. They consisted of sub-rectangular pits dug into the alluvium and roofed over with sandstone slabs of considerable dimensions...The funerary offerings of the richest grave included several stone vessels, a number of heavy copper axes, bar ingots and chisels of copper, a dipper made of banded slate, two immense double-bird-shaped palettes, a lion’s head of rose quartz covered with green glaze, a mica mirror, and two maces with gold plated handles.”¹⁶⁵

However, as will be seen below (Section 3.4), the A-Group settlement pattern is not characterized by a clustering of village sites that one would expect if a chiefdom system prevailed. Nordström writes:

“The general impression of the A-Group settlement pattern is...that there were no villages in Lower Nubia or in Batn el-Hagar which can be pointed out as social or political centres. At Dakka, with its large A-Group cemeteries, there are scattered remains of camps which cover a considerable area between the plain and the desert edge, indicating a relatively large population but not displaying any clear and specific clustering.”¹⁶⁶

Although Afia has been quoted as possible evidence of a chief’s habitation,¹⁶⁷ such implications are too problematic because the site is the only one of its kind. Thus, even with the combined habitation and burial evidence it is possible to advocate at best, “a loose organization around a framework of several large kin-groups.”¹⁶⁸ An alternative explanation applied to the richer than average graves from Sayala, is that they represent the existence of

¹⁶⁴B. G. Trigger, 1965, *op. cit.*, p. 42.

¹⁶⁵*Ibid.*

¹⁶⁶H.-Å. Nordström, 1972, *op. cit.*

¹⁶⁷*Ibid.* See also the discussion below.

¹⁶⁸*Ibid.*, p. 27.

successful middlemen in the Nubian-Egyptian trade who also would have acquired wealth through regulation of trade and the redistribution of goods. Adams and Trigger are both proponents of this idea. With regard to a particular burial at Sayala, Adams writes:

It is also possible...that the individual buried at Seyala was not a political leader at all. He might have been nothing more than an unusually successful middleman in the growing Nubian-Egyptian trade—one of those ‘culture brokers’ who regularly appear, and who rapidly acquire authority when alien cultures come into contact.”¹⁶⁹

Trigger envisions the leaders of small bands or family groups acting as middlemen.¹⁷⁰ He also postulates that a designated number of localities along the Nile may have acted as trading centres. Except perhaps for the still problematic site of Khor Daoud, there is very little evidence that such centres existed. Trigger writes that

“...the difficulties involved in dealing with strangers required elaborate diplomacy and exchanges of presents. All parties would have found it advantageous for the experienced leaders of the bands living closest to the trading centres to regulate the trade that went on at them. These leaders were perhaps also able to monopolize the tolls on goods that passed through their territory. By distributing most of the goodwill presents they received among their followers, such leaders would have greatly enhanced their prestige with these people. Eventually, such activities may have transformed autonomous bands into broader economically linked tribal units. The leaders of such groupings and their families were able to display their superior status by living in more elaborately constructed houses and having more lavish grave goods than did other members of the A-Group.”¹⁷¹

Williams’s proposed model of a Nubian kingship far exceeds the simple chiefdom structure outlined above, and it has, of course, forced a

¹⁶⁹W. Y. Adams, 1977, *op. cit.*, p. 130.

¹⁷⁰B. G. Trigger, 1976, *op. cit.*, p. 43.

¹⁷¹*Ibid.*

reconsideration of A-Group social structure. His interpretation, based on the so-called royal cemetery at Qustul, has received much critical comment from scholars, however, the existence of the great tombs at Qustul cannot be ignored within the context of discussion about A-Group social stratification. I propose that what is needed now is a re-interpretation of the Qustul material, although this is most problematic in light of the site's uniqueness. Although scholars have been quick to criticize Williams's interpretations, few have proposed viable alternative explanations for the great tombs and their rich and varied contents.

Williams argues for a threefold class system based on tomb sizes at Qustul, which is perhaps reasonable except for the 'royal' label used for the uppermost class. The remaining two categories were the patrician tombs and commoner burials.¹⁷² The last category represents the smallest tombs, which, according to Williams "were simple oval or straight sided pits with rounded ends about one and a half to two meters in length."¹⁷³ This information corresponds well with Reisner's, which gives dimensions for the same type of pit of about "80 x 60-70 cm to about 220 x 160...cm."¹⁷⁴ This tomb size may then be considered the 'average' for A-Group tombs, and by far the most common in terms of dimensions. The so-called patrician tombs were described as larger than the average A-Group tomb, but more distinguishable because of the wealth of grave inclusions, most notably the numbers of storage jars. Their features were summarized as follows:

"Tombs of this type were found in cemeteries W and V; among them were long trenches with depressions at the corners, a feature that indicates a bed burial was made. Burials of this

¹⁷²For plans and sections see B. B. Williams, 1986, *op. cit.*, p. 15, Figure 1.

¹⁷³B. G. Trigger, 1976, *op. cit.*, p. 16.

¹⁷⁴G. A. Reisner, 1910a, *op. cit.*, p. 315.

class generally occurred elsewhere in small numbers among tombs of ordinary size. Exceptions can be noted at Meris, cemetery 41.418, which contained at least thirteen large graves to perhaps two ordinary tombs...Cemetery 292 was also largely of this class, containing eight of this type to three or four ordinary tombs...The most common shape of tomb in this class was simply a large rectangular pit with rounded ends; less common were the bed burial and the trench with side chamber."¹⁷⁵

Williams argues that because most of the patrician tombs were found north of the Second Cataract, this indicates "with the cemeteries at Qustul, that the major center of A-Group wealth was in this area."¹⁷⁶ However, he failed to recognize the existence of Cemetery 137 at Sayala, possibly a deliberate oversight on his part in order to add weight to his argument. Williams's so-called royal tombs were the largest,¹⁷⁷ consisting of "a trench up to ten meters long, with an oval chamber dug from the floor and side wall, usually near one end of the trench."¹⁷⁸ This chamber, the burial chamber, was up to five metres long, three metres wide and two-and-a-half metres in depth. As Williams correctly asserts, these are the largest known A-Group tombs, having no other Nubian parallel and only one known Egyptian parallel in a tomb at Hierakonpolis.¹⁷⁹ Smaller versions of this tomb type are also known at Qustul, these being about five to six metres in length "with a correspondingly smaller chamber."¹⁸⁰ According to the author, "several were found in Cemetery L, two in Cemetery V...one in Cemetery 142 at Sayala [and] one...at Hierakonpolis in Egypt."¹⁸¹

¹⁷⁵B. B. Williams, 1986, *op. cit.*, p. 14.

¹⁷⁶*Ibid.*

¹⁷⁷*Ibid.*, Table 5, p. 16 for a breakdown of royal and 'quasi-royal' tombs by size.

¹⁷⁸*Ibid.*

¹⁷⁹*Ibid.*

¹⁸⁰*Ibid.*

¹⁸¹*Ibid.*

Up to this point, I think Williams's interpretations are excellent, but judging from the grave sizes at Qustul, I would argue for an upper, middle, and lower class in A-Group society,¹⁸² thus replacing Williams's royal class with an upper class. No doubt Qustul has been important in providing a broader view of social stratification than we have been able to obtain from all the combined A-Group sites thus far. However, Williams's interpretations of the upper class as a Nubian royalty,¹⁸³ which he claims predated and gave rise to the Egyptian pharaonic system make it difficult to view the Qustul material in another light. Williams bases his theory on the artistic and iconographic elements of specific objects from the Cemetery L graves, particularly the so-called Qustul incense burner¹⁸⁴ from the largest grave, L24. His interpretations that the decorative elements on this incense burner are consistent with many known aspects of Egyptian kingship are not disputed. The depiction of the procession of three boats, for example, shows one figure wearing the white crown of Upper Egypt, which is partially preserved, and the *serekh* in front of this figure, surrounded by a falcon, is also

¹⁸²A statistical social status analysis of the graves would help to settle the issue here, however, the interpretations derived from this may be limited given the fact that most of the Cemetery L tombs were disturbed. It should perhaps be added that Nordström is only now attempting the first ranking of A-Group tombs beginning with the Halfa Degheim cemetery, but not including the Qustul material. See the abstracts of the latest Nubian conference, T. Kendall and P. Der Manuelian, eds., 1998, *International Society for Nubian Studies Ninth International Conference August 21-26, 1998: Abstract of Papers*, pp. 29-30.

¹⁸³It should be noted that Seele, not Williams, was the original proponent of the idea at the time the site was first excavated. Concerning the largest tomb (L24) and its contents, Seele wrote that it belonged to "...a person of lofty rank, perhaps a prince or king, if such existed in Nubia at the beginning of the Egyptian First Dynasty." (K. Seele, 1974, "University of Chicago Oriental Institute Nubian Expedition: Excavations between Abu Simbel and the Sudan Border, Preliminary Report," *Journal of Near Eastern Studies*, 33 (no. 1): 38).

¹⁸⁴Thirty or more incense burners were, in fact, recovered from Cemetery L, (B. B. Williams, 1986, *op. cit.*, p. 108) but this one has been singled out by Williams because it is the best decorated. For a depiction of the object, see *ibid.*, Plates 34 and 38.

unmistakable. Williams maintains that these artistic elements and the tomb in which the object was found, were “some generations earlier”¹⁸⁵ than similar finds in Egypt. He writes:

“Apart from other ‘firsts’ in representation and art, the Qustul incense burner stands out at this writing, not as a provincial imitation of some unknown Egyptian monument but as the first self-evident pharaonic monument from the Nile Valley, the first unequivocal representation of a pharaoh in his person, the first definite linking of the pharaoh’s figure with the Horus falcon, palace facade, and boat that later became the sacred bark...”¹⁸⁶

A serious flaw in Williams’s thesis is that his claim of a pre-First-Dynasty date for the Qustul incense burner and even Cemetery L itself, is not substantiated by direct and indisputable evidence such as a radiocarbon date. Although most of the cemetery dates to the Terminal A-Group period, no aspect of the site of Qustul has been scientifically dated: not a single archaeological context, feature, or object. Williams himself states that he ‘dates’ the material relevant to his discussion merely by “...comparison to Egyptian materials, and by following the occurrence of objects and practices within the cemetery itself.”¹⁸⁷ Thus it is clear that all references to dates are speculative and built on relative estimates of age only. Williams has also attempted to argue that the Qustul incense burner was of Nubian origin, and made of local quartz and clay,¹⁸⁸ but even this has met with criticism. Grzymski indicates that some scholars think “...the censer was made of limestone, which would suggest at the very least an Egyptian origin of the raw material, if not the object itself.”¹⁸⁹ He further adds that “it is therefore

¹⁸⁵*Ibid.*, p. 2.

¹⁸⁶*Ibid.*

¹⁸⁷*Ibid.*, p. 165.

¹⁸⁸*Ibid.*, p. 110.

¹⁸⁹K. A. Grzymski, 1990, Review of *Excavations between Abu Simbel and the Sudan*

incomprehensible that no X-ray diffraction was undertaken on this very censer, while two others were analyzed using this technique.”¹⁹⁰

There are further problems with Williams’s Nubian kingship theory and his methods in developing it, to which much discussion could be devoted. The following brief list can only outline some of the issues of concern:

- (1) Most or all of the tombs in Cemetery L were plundered, a fact that Williams himself concedes in his description of them as “...heavily pillaged.”¹⁹¹ Therefore, it must be questioned whether any of the funerary material was found *in situ*, a possibility that he appeared to have largely overlooked. He does admit in one case (tomb L30) that the plundering of this tomb “...may have caused some contamination”¹⁹² of L28 and L29 nearby.
- (2) The Qustul incense burner, in particular, has been criticized for its imprecisely provenanced designation.¹⁹³ Bothmer writes that “Williams throws no light on the circumstances of the find, nor does he identify the objects associated with it.”¹⁹⁴ Williams’s own discussion of the provenance of the object¹⁹⁵ makes it abundantly clear that it is not a reliable item for dating or interpretive purposes. Bothmer has further emphasized the fact that the incense burner was found in “widely scattered”¹⁹⁶ fragments, and “since many of them were never found at the site the question arises

Frontier, Keith C. Seele, Director. Part 1: The A-Group Royal Cemetery at Qustul: Cemetery L, by B. B. Williams. Journal of the American Research Centre in Egypt 27: 232.

¹⁹⁰*Ibid.*

¹⁹¹B. B. Williams, 1986, *op. cit.*, p. 163.

¹⁹²*Ibid.*, p. 167.

¹⁹³Especially by Adams, 1985, “Doubts About the Lost Pharaoh,” *Journal of Near Eastern Studies* 44: 188.

¹⁹⁴B. V. Bothmer, 1979, “Ancient Nubia and the Northern Sudan: A New Field of Art History,” In *Africa in Antiquity, Meroitica* 6, p. 180, note 6.

¹⁹⁵B. B. Williams, 1986, *op. cit.*, p. 375.

¹⁹⁶Bothmer, 1979, *op. cit.*

whether the cylinder ever formed part of the original burial in grave L24.”¹⁹⁷

(3) A further problem is that Williams’s artistic interpretations of the incense burner rest on the reconstruction of its fragmentary scenes. It is thus important to question how much of this reconstruction may have been based on conjecture. Williams writes:

“Most representations are fragmentary or on damaged surfaces that required extended and repeated examination under varied conditions to recover the outlines and masses of figures; various possible parallels had to be applied in combination with possible templates for restoration. The outlines of figures are often faint or hardly discernible against a broken or deteriorated surface. However difficult to detect, some of the representations were of such importance that even doubtful details must be included in their presentation, accompanied by the notation that the recovered or restored detail is conjectural to some degree.”¹⁹⁸

(4) Williams did not consider alternative explanations for the source of the decoration on the incense burner. Shinnie has suggested that the royal designs seen on the object could have been imported from Egypt,¹⁹⁹ and obviously this situation could apply whether the censer itself was of Nubian manufacture or not.

(5) Furthermore, it should be emphasized that Williams did not actually excavate the site himself. His efforts at reconstructing the field notes of others, some years after they were recorded and after the death of the director, K. Seele, are at times painfully obvious. His interpretations must therefore be viewed in this light.

¹⁹⁷*Ibid.*

¹⁹⁸B. B. Williams, 1986, *op. cit.*, p. 138.

¹⁹⁹P. L. Shinnie, 1996, *Ancient Nubia*, p. 51.

Perhaps the most compelling argument I have seen against Williams's theory is that of Wegner,²⁰⁰ who emphasizes that there is no evidence in Lower Nubia of a development toward the institution of kingship that Williams claims is evident at Qustul. Williams's theory implies, according to Wegner, that "the A-Group utilization and adaptation of pharaonic imagery and use of Egyptian-style royal titulary and, possibly hieroglyphic symbols in connection with that kingship emerged full-blown in the Classic/Terminal [A-Group] period."²⁰¹ This is in direct contrast with Egypt, where "the development of pharaonic iconography and symbols and the hieroglyphic writing system is firmly rooted in the indigenous cultural and social process in Egypt."²⁰² Wegner adds that "Williams's A-Group monarchy hypothesis is the latest in a long history of models that have sought to place the impetus for the development of the pharaonic Egyptian state outside of Egypt itself."²⁰³ It may be added that all the evidence reviewed above for social stratification comes from late or Terminal A-Group contexts, i.e., the Sayala tombs, the Afia house structures, Tunqala West, and Qustul itself. There is no evidence whatsoever of any degree of social diversity in either Early or Classic A-Group times. Within this context it is extremely difficult to imagine, as Wegner has stated, a complex kingship system with all of its political and social ramifications having developed so suddenly in the Terminal A-Group phase.

How then, do we reasonably interpret the Qustul material? Here again I think Wegner has part of the solution that may best approximate reality. It

²⁰⁰J. W. Wegner, 1991, "Interaction between the Nubian A-Group and Predynastic Egypt: The Significance of the Qustul Incense Burner," In *Egypt and Africa*, edited by T. Celenko, pp. 98-100.

²⁰¹*Ibid.*, p. 99.

²⁰²*Ibid.*

²⁰³*Ibid.*

seems reasonable to suggest that the A-Group did not begin the process of complex social and perhaps political diversification until late Classic or Terminal A-Group times, although it is not possible to say exactly when in the latter stages of the culture this began. However, at Qustul, and only at Qustul, a small group of individuals began to take on the trappings of Egyptian kingship, which, until more precise evidence informs us otherwise, we must assume was borrowed from the emerging pharaonic civilization to the north. The late emergence of pharaonic imagery in Nubia is directly parallel with the late emergence of social stratification within the A-Group. This imitation, as it were, is suggestive to me of one important corollary: The elite class at Qustul, whether they represented the local chiefdom or very wealthy middlemen (or both), may now have felt themselves politically powerful enough to vie for control of some or all of the Upper Egyptian domain. The adoption of Egyptian royal regalia could well have served to display their intentions of attaining goals of Egyptian-like leadership. Because of the very close trading relationship between Nubia and Egypt, it is not inconceivable that Nubia eventually emerged as a political threat to the Egyptians. Wegner writes:

“A considerable body of archaeological evidence exists showing that during the late Predynastic Period Egypt was involved in dynamic cultural, social, and economic interaction with its neighbors in northeastern Africa and the Near East. This interaction included shared and borrowed iconography—especially visible between Mesopotamia (Elam and Sumer) and Egypt in the late Predynastic Period...The Qustul incense burner, and other material from the Cemetery L royal tombs, has demonstrated that the A-Group was also an integral part of these dynamic cultural developments. The Lower Nubian A-Group was closely tied to the emerging Predynastic kingdoms of Southern Egypt, probably competitively as well as through trade and other modes of interaction. That culture appears to have adopted and used aspects of the pharaonic Egyptian royal

iconography in a way similar to the later Napatan and Meroitic adoption and transformation of pharaonic iconography.”²⁰⁴

Direct competition between Nubia and Egypt could easily explain the sudden and still mysterious demise of the A-Group,²⁰⁵ as the Egyptians could well have viewed the political and social diversification of the A-Group as reason enough to eradicate them. According to Wegner, “this [postulated] eradication of the A-Group culture becomes extremely difficult to explain if the A-Group kings themselves were the cultural progenitors of the pharaonic civilization.”²⁰⁶

3.3. A-GROUP MATERIAL CULTURE

Ceramics

As already indicated, it was Nordström who did the definitive and final analysis of the A-Group ceramics. This classification of wares is now quite extensive, and it encompasses the Egyptian types also found in A-Group contexts. Nordström’s first attempt at the typology began in the early 1960’s during the work of the Nubian High Dam Campaign. His preliminary classification of A-Group wares²⁰⁷ was based on material in the un plundered graves at Gezira Dabarosa (Figure 1), which, although not copious, was enough to justify a preliminary classification. In it, Nordström incorporated and cross-referenced Steindorff’s seven-fold classification system²⁰⁸ into his

²⁰⁴*Ibid.*

²⁰⁵See below, Section 3.5. for a fuller discussion.

²⁰⁶J. W. Wegner, 1991, *op. cit.*

²⁰⁷See H.-Å. Nordström, 1962, “Excavations and Survey in Faras, Argin and Gezira Dabarosa,” *Kush* 10: 51-56.

²⁰⁸Discussed above, Chapter 2, pp. 35-36.

own. Because of the greater amount of information available later from the concession of the Scandinavian Joint Expedition, Nordström's final designation of ceramic types is much altered from his preliminary typology of the 1960's.

The description that follows is a much contracted version of Nordström's work, with emphasis on the Nubian indigenous wares that are most distinctive of the A-Group culture. The purpose of this exercise is to qualify the nature of A-Group ceramics in order to facilitate comparison with the ware types of other cultures. I have condensed the Nubian ceramic types into a table format (Table A-1, Appendix), in which the letter and number system developed by Nordström has been applied. This system requires a brief explanation. For example, for the typical appellation H1.03, H1 is the general group designation. The first number after that represents the absence or presence of a surface coating (0 or 1), and where a coating is present, this number also represents the type of coating, for example, 1 = red ochre, 2 = a white clay slip, etc. The second number following the first indicates the specific type of texture or other external surface properties of the vessel. All other aspects of the ceramics are dealt with by Nordström, including (1) shapes and forms of rims, bodies, and bases, (2) fabrics or temper types, and (3) fabric inclusions. In addition, Nordström has created the 'type group,' which he defines as:

“...an entity characterized by a single ware or by a set of closely related wares of the same ware family—these are confined to a certain geographical area and to a specific chronological phase. The A-Group pottery is here divided into 14 type groups, AI-AX, comprising the wares of Nubian provenance (Ware Family H), and AXI-AXIV, including the

wares of Egyptian origin (Ware Families D and N, in addition to Egyptian 'Rough Wares')."²⁰⁹

Of the five ware 'families' developed by Nordström (K, M, H, N, D, and W), only Family H is of truly indigenous origin. Family H is described in broad terms as "hand-made wares of Nubian tradition, tempered with ashes or cattle dung, usually with black fractures and a porous body."²¹⁰ In addition, there exists a shell-tempered ware, which has not been classified into a family of wares, but which is completely indigenous to Lower Nubia. This group is described as follows: "A local group of wares, recovered from Abkan and A-Group sites in the Wadi Halfa reach, [is] characterized by abundant inclusions of mollusc shells (Fabric III)."²¹¹

The most distinctive of the Family H wares is undoubtedly type H4.01b, which is the equivalent of the so-called variegated haematitic ware mentioned on several occasions above, and so widely praised by excavators in the past. Nordström's description of it emphasizes its value in relatively dating A-Group contexts with some degree of precision. He writes:

"This ware is the finest exponent of the A-Group pottery in Nubia. It appears to be more common in the cemeteries in the southern part of Egyptian Nubia and in Sudanese Nubia...

On the basis of the find combinations, it is reasonable to suggest that this ware is confined to a rather brief phase of the A-Group pottery development. Most of the vessels of Ware H4.01b have been found in tombs belonging to the Terminal A-Group."²¹²

In addition to its eggshell thinness this ware is most characterized by the frequently applied painted decoration of geometric designs in red, which were

²⁰⁹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 81. For illustrations of all type groups see *ibid.*, vol. 3.2, Plates 36-48.

²¹⁰*Ibid.*, vol. 3.1, p. 57.

²¹¹*Ibid.*

²¹²*Ibid.*, p. 64.

intended to imitate basket-work patterns.²¹³ Otherwise the basic colour of the exterior is light or pale brown, with a blackened rim. The exterior surfaces are usually very evenly polished to a high or moderate degree of lustre, and the interior is generally black polished. The fabric of this ware is comprised of a dung-tempered paste, Nordström's IIB fabric type.²¹⁴

The blackened rim on the H4.01b ware is actually the basis of a small sub-series of types within the general ware group H4. Nordström writes:

“This group is made up of an extensive series of Nubian black-topped or black-mouthed wares dating from Classic A-Group times to the Terminal A-Group. It is also represented to a significant degree in the Kerma culture and in the Pangrave culture. The brown-and-black wares of this group, with or without a coating of red ochre on the exterior, were probably developed from the black-topped Abkan pottery (Ware Group M4), which may have been strongly influenced by similar Predynastic pottery wares (Ware Group N4).”²¹⁵

The wide temporal and geographic range of the black-topped and black-mouthed wares has made them the object of some attention from scholars. Their usefulness here will be in establishing A-Group interconnections not only throughout the Sudan, but in Egypt, where the types are also known. A distinction must be made between the terms “black-topped’ and black-mouthed,” for although Nordström does not emphasize it, there is a distinct, and loosely chronological difference between the two varieties. Firth is of much help here. He writes:

“Finely levigated mud mixed perhaps with a little Aswan clay and burnt in an open hearth, produces the thin smooth red ware which when painted with haematite and not polished is termed smooth (E.D.) red ware red-washed and when the

²¹³For an example in colour, see S. Wenig, ed., 1978, *Africa in Antiquity II: The Arts of Ancient Nubia and the Sudan. The Catalogue*, Plate 6, p. 119.

²¹⁴H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 51

²¹⁵*Ibid.*, p. 63.

piece is in addition polished we get the thin (smooth) red-polished ware. When pieces of this type are fired, mouth down, on the hearth, the red-polished black-mouthed ware...is produced, which is the successor or degeneration of the red-polished black-topped...ware of the Predynastic period.”²¹⁶

Furthermore, the black-topped variety was fired in the manner just described, with an “abundance of fuel,”²¹⁷ while the black-mouthed wares were fired with a “minimum of quickly burning fuel.”²¹⁸ The result is a somewhat different appearance of the blackened rim, with a much darker, more pronounced blackening in the black-topped varieties and a narrower and often less dark colouration in the black-mouthed wares. In the black-mouthed wares the dark colour is often more closely confined to the rim area of the vessel, while in the black-topped varieties the black may extend in varying degrees down the length of the vessel, sometimes covering the whole pot.²¹⁹

It must be noted that the black top or mouth of such vessels does not, in itself, constitute the total decoration of the vessel, and that decoration could be applied in the form of impressed, incised, or painted patterns. Some A-Group vessels are most distinctive for their painted designs, and they represent the first occurrence of paint on vessels in Lower Nubia. Designs occur as broad horizontal or vertical bands, thin horizontal lines, crossed-hatched lines, two variations of basketwork patterns, and upright or inverted triangles, either painted in a solid colour or filled with hatched lines.²²⁰ Concerning the patterns and their application, Nordström writes:

“Most patterns of this group consist of a paint of red ochre applied on the vessel before the firing...Two techniques of

²¹⁶C. M. Firth, 1912a, *op. cit.*, p. 51.

²¹⁷*Ibid.*, p. 52.

²¹⁸*Ibid.*

²¹⁹See for example the black-topped vessels depicted in Reisner, 1910a, *op. cit.*, p. 325.

²²⁰For illustrations see H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 25, Group 4.

application may be distinguished...one is characterized by relatively broad bands or streaks which may have been applied by a finger and then partially wiped off, leaving different shades of red on the surface...The typical feature of the other technique is a distinct, relatively thin line, probably applied by a brush-like instrument."²²¹

The types and variety of A-Group painted designs seem, for the most part, to have been restricted to the A-Group. There is certainly no comparative material of this sort from elsewhere in the Sudan, but I have noted a few examples of similar designs from Upper Egypt. In particular, the two motifs of painted cross-hatched lines and filled triangles are common on Egyptian predynastic vessels.²²² It should be added that only the motif types, not their arrangement, are shared by Nubian and Egyptian wares. Habachi's description of one decorated pot from Abydos,²²³ may provide some insight into the meaning of some A-Group painted motifs. The pot bears painted red ochre designs of triangles filled with solid paint, placed upright in a single row, which Habachi interprets as hills. Their arrangement is different from A-Group examples in that there is only one row, as opposed to multiple stacked rows in A-Group layouts. In addition, the Abydos pot shows the cross-hatched motifs, which have been interpreted as nets or fences. This seems reasonable since animals are depicted in the register below, hence the logic of fences, presumably to contain them. A more direct association of the cross-hatched design with animals is seen on a second pot from Naqada.²²⁴ Clearly, it is difficult to ascertain whether or not these motifs may have been borrowed

²²¹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 77.

²²²For some examples see W. M. F. Petrie, 1921a, *Prehistoric Egypt: Corpus of Prehistoric Pottery and Palettes*, Vol. 32 of the British School of Archaeology in Egypt, Plate 35.

²²³L. Habachi, 1939, "A First Dynasty Cemetery at Abydos," *Annales du service des antiquités de l'Égypte* 39: 770.

²²⁴*Ibid.*, p. 771.

by the Egyptians from the Nubians, but I think the possibility is a good one given that these motifs are shared by the so-called white cross-lined pottery,²²⁵ also seen in Egypt at this time. It is fairly certain that this pottery is of Sudanese origin, which Arkell pinpointed as having originated in Khartoum Neolithic times.²²⁶ If the Egyptian examples discussed here are indeed of Nubian origin then this would represent an uncommon example of trait diffusion from Lower Nubia to Egypt. The reverse direction of cultural flow was generally the norm.

In addition to the painted vessels, the A-Group ceramics display a wide range of impressed and incised patterns on bodies, rim bands, and rim tops of vessels.²²⁷ These types of motifs also have extremely few Egyptian parallels, and furthermore, Egyptian incised motifs are significantly distinct from those of Nubia. However, herring-bone motifs have been noted amongst the finds from Merimde. Baumgartel writes:

“For Merimde’s lowest stratum a hard, red polished pottery is typical, and an incised decoration of the herringbone design around the mouths of the pots. This decoration marks in Upper Egypt the beginning of Naqada II when a hard, red polished ware also exists...”²²⁸

It is not inconceivable that this and other such vessels were direct Nubian imports into Egypt. Nubian vessels and sherds, while not abundant in Egyptian contexts, have occurred with enough frequency to confirm the two-

²²⁵This is Petrie’s term for this ware type. Arkell called it black incised ware. Both terms refer to the distinctive and striking contrast formed by white lines on a black background. For numerous examples see W. M. F. Petrie, 1920, *Prehistoric Egypt: Corpus of Prehistoric Pottery and Palettes*, Vol. 31 of the British School of Archaeology in Egypt, Plates 10 to 16.

²²⁶A. J. Arkell, 1953c, “The Sudan Origin of Predynastic ‘Black Incised’ Pottery,” *Journal of Egyptian Archaeology* 39: 76-79.

²²⁷See H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plates 24-26 for all decorative motifs.

²²⁸E. J. Baumgartel, 1952, “Some Notes on the Origins of Egypt,” *Archiv Orientalní* 20 (nos. 1-2): 285.

way exchange that existed between Upper Egypt and Lower Nubia.²²⁹ Other rare examples of incised A-Group-like designs in Egypt are (1) triangles filled with hatched lines, especially on rim bands of vessels,²³⁰ and (2) parallel horizontal lines covering the bodies of two pots from Amrah.²³¹

Perhaps the most distinctive of the A-Group impressed designs (not seen in Egypt) is the rocker stamp zigzag motif, which has a number of diagnostic variants. It was formed by rocking a fragment of shell or some other object over the surface or rim of the vessel, forming a continuous 'V' design. Stamp design varied according to the desired effect. There is therefore some variation in the spacing between the V's and in their length.²³² The design has a long temporal range in Nubia, being common in the Abkan and extending well beyond the end of the A-Group. Nordström writes that one pattern in particular "...is widely spread both geographically and chronologically, occurring in the A-Group, C-Group and Pangrave pottery...and also in the early ? Kerma pottery from the northern part of the large cemetery at Kerma (unpublished specimens in the National Museum, Khartoum)."²³³

Examples of the stamping tools themselves are known from A-Group contexts, and it should be added that their use was not restricted to the zigzag motif only. One stamp, from the habitation site 11-M-7 at Saras, was described as follows:

²²⁹Williams lists examples of A-Group pottery at Armant, Naqada, and Hierakonpolis. For references see B. B. Williams, 1987, "Forebears of Menes in Nubia: Myth or Reality?," *Journal of Near Eastern Studies* 46 (no. 1): 19.

²³⁰W. M. F. Petrie, 1921a, *op. cit.*, Plate 36: 74d.

²³¹*Ibid.*, Plate 19: 83A and 83B.

²³²H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 25, Group 1: 16-22. For the accompanying text see vol. 3.1, p. 76.

²³³*Ibid.*, vol. 3.1, p. 76.

“A portion of a pottery stamp was found in Layer 2 of one of the test squares. It is made of a potsherd of hard greenish-grey ware (so-called Qena ware) and has a number of teeth ground or cut into a thin edge with an elliptic outline. This object is a true rocker-stamp, i.e. a dotted line is produced on a green or leather-hard clay surface by moving the tooth-edge rocker-wise.”²³⁴

Mention must also be made of those decorative motifs that occur only sparsely in the A-Group, but which are abundant in C-Group ceramics. These ceramics are not discussed here in detail, but they suggest to me the presence of transitional elements in the A-Group that somehow survived the dissolution of the culture, and which argue for some degree of cultural continuity between the A-Group and the C-Group. Nordström calls these designs complex patterns, and they include herring-bone panels of dotted lines, lozenges, triangles filled with dotted lines, and rhomboid patterns, also filled with dotted lines.²³⁵ The author writes: “This group is characterized by a combination of impressed or incised patterns and red-polished or black polished bands, squares or lozenges being integrated into the design. This type of decoration is common in the C-Group but is also represented on a few bowls and cups of A-Group date.”²³⁶

Lithics

Surprisingly, A-Group lithics have not yet been studied quantitatively or typologically as a whole. The Combined Prehistoric Expedition²³⁷ and the Scandinavian Joint Expedition²³⁸ have produced detailed lithic studies for all

²³⁴A. J. Mills and H.-Å. Nordström, 1966, “The Archaeological Survey from Gemai to Dal: Preliminary Report on the Season 1964-65.” *Kush* 14: 6.

²³⁵Illustrations in H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 26, Group 5.

²³⁶*Ibid.*, vol. 3.1, p. 77.

²³⁷See F. Wendorf, ed., 1968, *The Prehistory of Nubia*, vol. 2, pp. 535-953.

²³⁸H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, pp. 95-116.

cultures preceding the A-Group, up to and including the Abkan. Nordström has, admittedly produced good detailed descriptions of A-Group lithics from the Scandinavian concession habitation sites, but it should be noted that no other author has given such a thorough treatment of A-Group lithic material. Generally the approach has been to list the broad categories of tool types present on A-Group sites, but not to quantify them. Nordström's approach, while good, still does not produce a summary report of the lithic material over the entire concession. A comparative analysis of A-Group lithics with other Lower Nubian industries is also presented by the SJE, but it is not complete with regard to all A-Group sites in the Scandinavian concession. Furthermore, no statistical summary analysis has been conducted for A-Group lithics that would provide such information as a representative proportion of tool types and material types relative to cultures outside of Lower Nubia.

Using Nordström's descriptions and the brief data available from other A-Group sites, it is possible to define A-Group lithics to a limited degree. A summary of the lithic data from the Scandinavian Joint Expedition sites is presented below (Table 3-1). Fortunately, no new tool types were introduced by the A-Group at the time of its appearance in Lower Nubia, and the classification terminology already provided for the earlier cultures has been applied successfully to the A-Group. Nordström does provide some summary statements about A-Group lithics, derived from the Scandinavian concession results only. He writes:

"It is evident that the lithic tool technology developed by the hunting-gathering groups of the Nubian Final Stone Age underwent a significant deterioration during the Terminal Abkan and the Classic A-Group. This is illustrated by the assemblage of Site 430 (Pls. 4-5), where nearly one-third of the tools do not fit into any of the well-defined tool categories of the

TABLE 3-1. QUANTITATIVE SUMMARY OF MAIN A-GROUP LITHIC TYPES
(PERCENTAGES)

	SITES (SJE NOS.)							
	303	316	340	366 ^a	371	408 ^b	414 ^c	430
Total Scrapers	11.1	16.7	—	25.3	25.5	8.8	36.4	25.9
Groovers	—	5.6	—	—	18.4	17.6	13.5	10.1
Flake Points	—	—	—	—	10.2	—	—	1.1
Total Notched Tools	33.3	5.6	—	9.9	10.2	2.9	12.2	11.9
Denticulated Tools	—	16.7	—	8.5	8.2	5.9	2.7	8.3
Borers	—	—	—	—	4.1	14.7	9.5	3.6
Burins	—	—	—	—	2.1	—	1.3	2.2
Total Lunates	—	—	—	—	6.1	2.9	2.7	1.1
Total Truncations	—	—	—	5.6	—	20.6	—	4.0
Total Blades	—	—	100.0	—	2.0	—	—	—
Scaled Pieces	—	—	—	—	1.0	5.9	—	—
Retouched Flakes	40.8	55.6	—	40.8	—	—	—	—
Microlithic Tool Index	—	—	—	—	54.1	—	84.0	68.5
Blade Tool Index	—	—	—	—	2.0	—	5.2	0.4
Blade Index	—	—	—	—	0.4	—	—	0.3

^a This is an Abkan and A-Group habitation site, therefore not exclusively A-Group.

^b The same reference as above.

^c The same reference as above.

Khartoum Variant or the Abkan. There is a high proportion of groovers and denticulates that show the decline of lithic workmanship...It is also significant that very few lithic artifacts, apart from grinding tools and hammer stones, were found on Site 340, a habitation site of Terminal A-Group date, located at Debeira...Nevertheless, in the A-Group material from Lower Nubia, there are a few well-made specimens of tools on blades or flakes, mainly of Egyptian flint..."²³⁹

Most A-Group lithics have been found in habitation sites, although not all habitation sites contain lithic material. Flint flakes are the only lithic type commonly found in graves, although they do not occur in large numbers in any given grave. One or two represents the norm, whether the tomb is large, small, rich or poor. Numerous examples are finely serrated and undoubtedly represent sickles.²⁴⁰ It is important to emphasize that the technological decline of which Nordström writes was already apparent in the preceding Abkan culture when compared with the Qadan technology. Shiner has written: "Abkan technology, as regards stone flaking and chipping, shows a strong decline from that of the Qadan industry. There are also significant changes in the proportions of the types of tools."²⁴¹ Therefore any summary treatment of A-Group lithics should expect a similar shift in the proportions of tool types when compared with the Abkan.

Only three habitation sites (371, 430, and 414) in the Scandinavian concession have a large collection of lithics,²⁴² but even with this combined sample and the remaining lithic poor sites, certain patterns emerge. Perhaps the most noticeable is that Nile pebble is the most dominant material type in all categories, i.e., of finished tools, cores, and debitage. According to Shiner,

²³⁹*Ibid.*, p. 21.

²⁴⁰See for example, G. A. Reisner, 1910a, *op. cit.*, pp. 123, 235 and 286.

²⁴¹J. L. Shiner, 1968b, "The Cataract Tradition," In *The Prehistory of Nubia*, vol. 2, edited by F. Wendorf, p. 626.

²⁴²These are the richest A-Group sites known, in terms of lithics.

Nile pebble consists of chert, jasper, agate, quartz, and quartzite,²⁴³ but it should be noted that Nordström treats quartz and quartzite in categories separate from Nile pebble. Shiner also indicates that chert and jasper are not of local (Nubian) origin, but they “...enter the Nile between the Third and Fourth Cataracts.”²⁴⁴ Quartz and quartzite, on the other hand, are of Nubian origin. This high percentage of Nile pebble in the A-Group lithic material is entirely consistent with the industries of Shiner’s ‘Cataract Tradition’ of the Wadi Halfa area. Shiner writes that “within the Cataract Tradition, the overwhelming majority of the stone tools is made of Nile pebble. The pebbles may be obtained from gravel accumulations on both banks of the river.”²⁴⁵ Elsewhere the author indicates that ninety-five percent of Abkan lithics is composed of Nile pebble.²⁴⁶ Comparable figures, though not quite as high, may be quoted for the A-Group Site 430, which has 80.8 per cent finished tools of Nile pebble, 82.4 per cent cores of Nile pebble, and 73.4 per cent in debitage of Nile pebble. It should be noted that at Sites 371 and 430, quartz comprises a large proportion of the raw material, but only for debitage (47.4 per cent for Site 371 and 18.8 per cent at Site 430). Even those sites with considerably fewer lithics have a very high representation of Nile pebble, such as Site 316. Concerning this site Nordström writes: “Lithic artifacts were collected in Areas 2 and 4, all being made of Nile pebble (chert, jasper, agate, etc.)...Quartz is utilized in the debitage, but Nile pebble is predominant.”²⁴⁷

²⁴³*Ibid.*, p. 540.

²⁴⁴*Ibid.*

²⁴⁵*Ibid.*

²⁴⁶*Ibid.*, p. 614.

²⁴⁷H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 135.

The technological and typological indices of tool types²⁴⁸ indicates that scrapers are by far the most abundant, representing about one fourth of all tool types at Sites 371 and 430, and over one third of tool types at Site 414.²⁴⁹ In addition, the microlithic tool index is still moderately high but variable for A-Group lithics (54.1, 68.5, and 84.0 for Sites 371, 430, and 414 respectively). Following scrapers, in decreasing order of frequency,²⁵⁰ the most common tool types represented in the A-Group are: groovers, flake points, notched tools or notches, denticulated tools, borers, burins, lunates, truncations, bifacial points, backed blades, and scaled pieces. Less commonly found lithic types and cores in no particular order of frequency are: wedges, points, exotic scrapers (made of Egyptian flint), sickle flints, flint cores, flint blades, circumference cores, flake cores, irregular cores, retouched flakes, and triangles.

Functions of lithic types are not generally known, except perhaps in the case of scrapers, which were used in the scraping of animal hides. However, we are far from understanding the subtle functional differences between the various types of scrapers. Concerning the end-scrapers, Shiner writes: "While a specific function cannot be attributed to end-scrapers with any degree of confidence, ethnographic analogy from Sub-Saharan Africa points to their use in the preparation of skins..."²⁵¹ Concerning the groover within the Abkan context, Shiner has written:

"The great increase in the frequency of groovers cannot be explained in terms of a known activity. Logically, we might

²⁴⁸Calculated by dividing the number of items within one particular tool type by the total number of tools in the assemblage and multiplying by 100, i.e., a percentage. See Shiner, ed., 1971, *The Prehistory and Geology of Northern Sudan*, p. 104.

²⁴⁹The scraper category includes the total of the numerous types of scrapers, such as side scrapers, end scrapers, multiple edged scrapers, concave scrapers, convex scrapers, concave/convex scrapers, straight scrapers, and scrapers made on cores.

²⁵⁰This precise order will vary according to the site, therefore this list is generalized.

²⁵¹J. L. Shiner, ed., 1971, *op. cit.*, p. 273.

expect a tool of such high frequency to be connected with the major economic pursuit; in this case, probably fishing. The groover may be connected with fishing, but in what way?

A remote possibility is suggested by the fact that some American Indians use a somewhat similar tool for separating the strands of fibrous leafed plants in the process of making nets, baskets, and other fabrics. To date, no fabrics have been found with the Abkan industry.”²⁵²

Fabrics are, however, known in the A-Group, and therefore the explanation given by Shiner may be more easily applied to the A-Group. Elsewhere, Shiner has suggested that lunates might have been used as barbs on arrows or spears.²⁵³ According to Hester their use in Egypt to bore or drill alabaster and other stone vessels may be ruled out,²⁵⁴ and hence the same conclusion may be applied in the Nubian context. In addition, Shiner has suggested that denticulates in the Butana Industry of the Khashm el Girba region “...may have been used as rough scraping tools,”²⁵⁵ and that “wear patterns tend to give minor support to this hypotheses.”²⁵⁶ It is not clear, however, if this function should be implied for all denticulates.

Toilet Articles and Ornaments

These categories of objects include beads, bracelets, anklets, combs, hairpins, amulets, pendants, and other jewellery consisting of rings and necklaces. The evidence for most of these items is much too numerous to list individually, but these types of objects are known almost exclusively from grave contexts. Nordström sums up their nature as follows:

²⁵²J. L. Shiner, 1968b, *op. cit.*, p. 627.

²⁵³J. L. Shiner, ed., 1971, *op. cit.*, p. 287.

²⁵⁴T. R. Hester, 1976, “Functional Analysis of Ancient Egyptian Chipped Stone Tools: The Potential for Future Research,” *Journal of Egyptian Archaeology* 3: 349.

²⁵⁵J. L. Shiner, ed., 1971, *op. cit.*, p. 343.

²⁵⁶*Ibid.*

“In respect of personal adornments, there have been numerous finds of beads, simple pendants and amulets of different shapes and materials, such as shell (mainly ostrich egg-shell), bone, ivory, stone, metal (gold) and blue or green faience that originate from necklaces, bracelets, anklets and also most probably, ornaments attached to garments of various kinds. This group of objects occurs in most graves of the A-Group, in connexion with burials of...men, women and children. Bracelets and anklets of shell and ivory are found in many graves dating from this period, while finger rings, combs and ‘hair-pins’ are relatively rare...There are also some round, oval or rhomboid plates of shell or stone that were probably fastened to the dress...”²⁵⁷

Nordström adds that “there is no definite evidence that nose plugs or earrings were worn by A-Group people,”²⁵⁸ although Firth has reported a shell nose stud from Cemetery 137 at Sayala.²⁵⁹ Unfortunately no detailed description or illustration of the object was provided. Williams has reported the presence of some items from Qustul that may be lip plugs.²⁶⁰ He also indicates that they seem to have direct parallels with similar objects called lip plugs at Shaheinab, but otherwise he calls them ‘tokens.’ They are described as “small nearly cylindrical objects...cut from short lengths of shell hooks...some tokens are simply a length of shaft. Most have one waist in the center often with a rounded head at one end, and a flat base at the other; some have two waists, making a double-ended object. In some cases they are simply two grooves near the end of the shafts.”²⁶¹ According to Williams, these objects have no known Egyptian parallel.²⁶² An object described by Nordström as “a stud-like

²⁵⁷H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 20.

²⁵⁸*Ibid.*

²⁵⁹C. M. Firth, 1927, *op. cit.*, p. 210 (Grave 5).

²⁶⁰B. B. Williams, 1986, *op. cit.*, p. 117.

²⁶¹*Ibid.* See also Figs. 134 k, l, 189 d, and Plate 54.

²⁶²*Ibid.*, p. 118.

specimen of a black rock material²⁶³ from Ashkeit looks almost identical to the lip plugs described by Williams, although the Ashkeit example is made of stone. In this regard, the Ashkeit example more closely resembles the Shaheinab lip-plugs, as many of those are also made of stone.²⁶⁴

Another class of object, which Williams calls studs, has been reported from Qustul, but it is not indicated what type of stud he thinks they were. They seem to be rare not only in Nubia, but in Egypt as well. Williams describes them as "...oval plates of shell with a long pointed spike curved around the back from one end. They appear to have been made from gastropod shells, the spike cut from the column formed by the axis of growth."²⁶⁵

The small amounts of gold jewelery recovered from A-Group contexts (with the exclusion of Qustul, which had large amounts) is no doubt due to the severe plundering of tombs. However, a few scattered finds show that gold was not entirely absent outside of Qustul. A necklace of gold beads was found at Shellal, "...with 6 ball beads and 1 large bead of coiled spiral wire welded together,...all of gold."²⁶⁶ Reisner compares the small beads with examples from the First to Third Dynasties in Egypt. Other finds of gold beads were made at Cemetery 136²⁶⁷ and at Cemetery 137,²⁶⁸ both in Sayala. Seele reported a pendant of sixty gold beads with a gold fly pendant from grave L17 at Qustul,²⁶⁹ but strangely, this item was not discussed or illustrated by

²⁶³H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 20, and vol. 3.2, Plate 52, D8.

²⁶⁴For the Shaheinab lip-plugs see A. J. Arkell, 1953a, *Shaheinab*, Plate 5, Fig. 11.

²⁶⁵B. B. Williams, 1986, *op. cit.*, p. 119. See also Fig. 134 j, and Plate 54.

²⁶⁶G. A. Reisner, 1910a, *op. cit.*, p. 51, Plate 68: b4 (Grave 190).

²⁶⁷C. M. Firth, 1927, *op. cit.*, p. 201 (Grave 3).

²⁶⁸*Ibid.*, p. 212 (Grave 23). See also Plate 21.d.3.12.

²⁶⁹K. Seele, 1974, *op. cit.*, p. 33.

Williams, merely listed.²⁷⁰ In addition, a gold bracelet was found in this tomb.²⁷¹

Gold was not the only metal used for jewelery, as copper bracelets have also been found in graves, often still on the arms and wrists of the deceased. Usually they are made of thin copper wire, although rare examples of thick copper bracelets are known.²⁷² Copper finger rings have also been found, but they are very rare.²⁷³

Mica sheets used (probably) as mirrors should be added to this category, although their remains are not abundant. Nordström lists two "...irregular plates of mica (of the lustrous grey muscovite variety) found on Sites 277 and 298."²⁷⁴ The shape of one fragment is triangular, like some examples recovered at Qustul. Williams's description of the latter suggests that they may have been shaped in specific forms, whether human or animal, is indeterminable. He writes: "The shapes from L11 appear originally to have been parts of seated figures with limbs,...but the irregular edges of the sheets will not permit the certain identification of shapes."²⁷⁵ A mica mirror with a suspension hole was recovered from Cemetery 136 at Sayala,²⁷⁶ and Firth has reported other, largely fragmentary examples of such mirrors.²⁷⁷ It must be added that one example only of a bronze or copper mirror has been found in

²⁷⁰B. B. Williams, 1986, *op. cit.*, p. 306.

²⁷¹*Ibid.*, pp. 306-7 and Plate 65j.

²⁷²C. M. Firth, 1912a, *op. cit.*, p. 112.

²⁷³*Ibid.*, p. 139 and G. A. Reisner, 1910a, *op. cit.*, p. 219.

²⁷⁴H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 20, and vol. 3.2, Plate 190: 1.

²⁷⁵B. B. Williams, 1986, *op. cit.*, p. 115 and Plate 68.

²⁷⁶C. M. Firth, 1927, *op. cit.*, p. 201 and Plate 21f.

²⁷⁷*Ibid.*, pp. 209, 210, and 212.

an A-Group context, from a grave at Shellal.²⁷⁸ It was described as “...slightly concavo-convex,”²⁷⁹ and was found resting on a fold of linen.

Palettes

Palettes have been found in numerous quantities in both habitation and burial sites, often stained with green malachite or black galena pigments, which were used cosmetically. Williams writes that in one example at Qustul, “...grooves about 3 mm wide in the caked residue show the method of picking it up on the brush or applicator.”²⁸⁰ Most locally made palettes were made of quartz or quartzite, although limestone, sandstone and other rocks such as schist, diorite, and breccia were occasionally employed in their manufacture. Williams reports that one example from Qustul was made from a reused alabaster plate or bowl.²⁸¹ He also informs us that “special palettes, those given the finest finish, were made of rarer forms of quartz, ‘amethyst,’ milky quartz, and rose quartz.”²⁸² In addition, Nordström reports the reuse of potsherds to make palettes.²⁸³ The general method of manufacture for all palettes seems to have been to peck them into shape and then grind the surfaces to varying degrees of smoothness, with the finer palettes being ground to a highly polished finish. Shapes occur in oval, sub-rectangular, rhomboid, diamond-shaped, asymmetrical, and the so-called cushion-shaped forms. The zoomorphic slate palettes seen often in A-Group contexts were imported from Egypt. Their forms include the double bird head, fish-shaped

²⁷⁸G. A. Reisner, 1910a, *op. cit.*, p. 46, Plate 65: d1.

²⁷⁹*Ibid.*, p. 46.

²⁸⁰B. B. Williams, 1986, *op. cit.*, p. 115.

²⁸¹*Ibid.*, p. 114.

²⁸²*Ibid.*

²⁸³*Ibid.*, p. 120.

palettes with or without a hole for suspension, tortoise or turtle shaped with or without a hole for suspension, and hippopotamus-shaped with a hole, although the hippopotamus form is the least common. One turtle palette with a suspension hole in the tail also has an inlaid eye,²⁸⁴ although this treatment is rare for any palette type in an A-Group context. Nordström has noted that the imported palettes "...appear to be common in the northern part of Lower Nubia, between Kubbania and Sayâla,"²⁸⁵ with none having been found south of Cemetery 137 at Sayala. Within the Scandinavian concession it has been observed that quartzite palettes in association with copper awls have occurred in undisturbed graves of adult females.²⁸⁶ Where two palettes were found in the same burial, two awls were also to be found. No explanation has been ventured for this association.

A rather distinctive looking palette found in the Scandinavian concession²⁸⁷ resembles a similar example found many years earlier by Chittick at Kadero.²⁸⁸ Nordström tentatively dates his example (from Abka) to the Terminal A-Group, and describes it as sub-rectangular in shape, "...with rounded corners and slightly convex sides. In the lateral aspect it is flat, with parallel sides and rounded ends. The material is a hard, polished porphyritic rock, with a dark and dense groundmass in which distinct, light-coloured crystals are embedded."²⁸⁹ Both Nordström and Chittick give the rather erroneous impression that this palette type is rare, but Firth has reported a

²⁸⁴Reisner, 1910a, *op. cit.*, p. 132 and Plate 63: b9, from Grave 66 at Khor Bahan, item no. 59,

²⁸⁵H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 20.

²⁸⁶*Ibid.*

²⁸⁷*Ibid.*, vol. 3.2, Plate 137: 13.

²⁸⁸This palette has been mentioned above, Chapter 2, p. 60. See H. N. Chittick, 1955, "Two Neolithic Sites near Khartoum," *Kush* 3: 75-81.

²⁸⁹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 120.

number of similar examples (about twenty in all) from Qurta, Sayala, Naga^c, and Gebel Um Simbela. Many examples, unfortunately, were never photographed or drawn, and only brief descriptions have been produced. However, it can no longer be thought that this type of palette is rare in A-Group contexts. The following list of Firth's examples should settle the issue:²⁹⁰

- (1) "Broken black and white speckled stone palette." (p. 142).
- (2) "Black and white porphyry cushion shaped palette." (p. 201).
- (3) "Black and white porphyry stone palette." (p. 202).
- (4) "Black and white speckled porphyry palette." (p. 210).
- (5) "Another." (p. 210).
- (6) "Rectangular black and white porphyry palette. Pl. 21.d.11. (p. 210).
- (7) "Black and white stone palette." (p. 210).
- (8) "Black and white speckled stone palette." (p. 210).
- (9) "Cushion shaped grey and white stone palettes." (p. 211).
- (10) "1, 3, 4, Speckled black and white stone palettes." (p. 211).
- (11) "Palette black and white speckled stone. Pl. 21.d.10." (p. 212).
- (12) "1, 3, 4, Speckled black and white stone palettes. Pl. 21.d.3.12" (p. 212).
- (13) "Large oval speckled stone palette with green malachite stain." (p. 215).
- (14) "Speckled stone palette." (p. 215).
- (15) "Black and white stone palette with green malachite stain." (p. 223).
- (16) "Black and white stone rectangular palette." (p. 224).

²⁹⁰All descriptions are from Firth, 1927, *op. cit.*, with the relevant page numbers indicated after the text.

In addition, Reisner's discovery of a similar speckled rectangular palette must be added to the list.²⁹¹ It is most interesting to note that the vast majority of these (nos. 1–11 or sixteen of the twenty-one palettes) originated from cemeteries in the Sayala region. A detailed study of the distribution of these palettes and their association with other objects may well reveal some as yet unknown significance of these items. I suggest that they may have been considered more of a specialty item than other palettes, hence the occurrence of some examples in the larger and richer graves at Sayala. One grave alone in Cemetery 137 contained four of the above examples (nos. 4, 5, 6, and 7 above).

Copper Implements and Items

Although there is no direct evidence of copper working in A-Group contexts, Reisner has indicated that the art existed in Nubia and may have been very well advanced by Terminal A-Group times. He writes:

“Especially noteworthy as a mark of the period are the copper objects, a scorpion, a dog, a bracelet, and a heavy harpoon, showing a knowledge of copper working far in advance of that of the Predynastic period, and using forms of the Egyptian Early Dynastic period.”²⁹²

The harpoon was 19.3 centimetres long and showed signs of having been set in a shaft. Only one other example of a copper harpoon has been found, from Cemetery 137 at Sayala.²⁹³ It should be noted that none of these types of items is common in the A-Group.

²⁹¹G. A. Reisner, 1910a, *op. cit.*, Plate 63: c18.

²⁹²*Ibid.*, p. 233. For the objects mentioned in order of the text, see Grave 73 at Cemetery 40, Siali, pp. 240–41 and Plate 65: a6; Grave 33, Cemetery 40, p. 238, Plate 65: a7; Grave 3, Cemetery 40, p. 234, Plate 65: a8; Grave 14, Cemetery 40, p. 236, Plate 65: b5.

²⁹³See Firth, 1927, *op. cit.*, p. 208 (Grave 1), Plate 22: b15.

In addition to the copper awls associated with palettes in female burials, awls have been recovered from A-Group habitation sites. It is likely that they were set into handles of wood or bone, as some surviving awls have remains of such handles attached to them.²⁹⁴ One example appears to have been enclosed in a wooden case.²⁹⁵ Generally awls range in size from about six to ten centimetres in length, and are pointed at one end and rounded at the other. There are a few examples of rectangular or quadrangular awls, but these are not common.²⁹⁶ Their function does not seem to have been consistent with the name 'awl,' and Nordström writes that "the term 'awl' appears to be somewhat inadequate since the excavation data point to an association with cosmetic palettes with pigments used for skin decoration."²⁹⁷ Although associated almost exclusively with the Terminal A-Group, "...their simple and limited...variation does not permit any chronological subdivision."²⁹⁸

Copper adzes, chisels, and axes have been found in A-Group contexts far less frequently than awls. Two types of adzes are known, a short rounded type with a rounded butt,²⁹⁹ and a longer more slender type with a straight butt.³⁰⁰ Petrie has classified similar types from Egypt.³⁰¹ Nordström writes:

²⁹⁴See for example H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, Plate 192: 6. This example has a bone handle, although it is probably not the original handle. Firth reports one example that has remains of a wooden handle attached to it. See Firth, 1912a, *op. cit.*, p. 146.

²⁹⁵C. M. Firth, 1912a, *ibid.*, p. 157.

²⁹⁶See Firth, 1927, *op. cit.*, p. 144 and Firth 1912a, *ibid.*, pp. 141, Plate 38: c3, and p. 195. The latter example was found wrapped in linen.

²⁹⁷H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 123.

²⁹⁸*Ibid.*

²⁹⁹*Ibid.*, vol. 3.2, Plate 113/277: 47-2.

³⁰⁰*Ibid.*, Plate 193: 1.

³⁰¹W. M. F. Petrie, 1917b, *Tools and Weapons*, p. 16.

“According to Flinders Petrie the adze with the straight butt, Types Z60-65, occurs in finds from the Predynastic period to the beginning of the First Dynasty, while the round-butted type, Z69-75, began with the Early Dynastic period.”³⁰² Copper chisels are known primarily from the find material of the First Archaeological Survey. None, surprisingly, were found by the Scandinavian Joint Expedition or by the Qustul crew. Grave 1 in Cemetery 137 at Sayala is particularly significant for having three copper chisels.³⁰³ This was the same grave that yielded the famous gold plated mace handles with impressed animal designs. One copper axe also occurs in this same grave,³⁰⁴ and another fine example comes from Faras,³⁰⁵ while two are known from the Scandinavian concession.³⁰⁶ Nordström’s descriptions of axes are typical of all. He writes of one: “The shape of the blade is nearly rectangular, with a straight butt and straight, parallel sides which turn slightly outwards at the edge. The length is 8.4 cm.”³⁰⁷ The other was of “more slender proportions,”³⁰⁸ with the sides “converging towards a slightly convex butt.”³⁰⁹ These types of axe blades are known in far greater abundance in Egyptian contexts, which Petrie has dated to the Late Predynastic period or to the First Dynasty.³¹⁰

³⁰²H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 124.

³⁰³C. M. Firth, 1927, *op. cit.*, Plate 22b.

³⁰⁴*Ibid.*, Plate 22b: 12.

³⁰⁵F. Ll. Griffith, 1921a, Oxford Excavations in Nubia: The Earliest Periods at Faras,” *University of Liverpool Annals of Archaeology and Anthropology*, 8: Plate IV: 11.

³⁰⁶H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 193: 1.

³⁰⁷*Ibid.*, vol. 3.1, p. 124.

³⁰⁸*Ibid.*

³⁰⁹*Ibid.*

³¹⁰See *ibid.* for references.

Copper needles are also frequent occurrences in grave contexts. Not all have intact eyelets, but in the few examples that do, it has been possible to determine that the eye was made by simply turning over one end of the needle.³¹¹

Miscellaneous copper items that have no readily explainable function include: (1) copper rivets,³¹² which in one instance Reisner indicates may have come from a decayed horn also found in the grave,³¹³ (2) a piece of thin copper ribbon-wire,³¹⁴ (3) fragments of oxidised copper,³¹⁵ (4) a copper tube,³¹⁶ (5) a long quadrangular copper bar,³¹⁷ and (6) a strip of rolled up copper.³¹⁸

A rare specimen in A-Group contexts is the copper knife blade, one example of which is known from the Scandinavian concession,³¹⁹ and another from a grave of a girl in Cemetery 136 excavated by Firth.³²⁰ The first example looks more like the axes just described than a knife, however, Nordström indicates that the blade is very thin and that all of the edges are sharp. The tang at one end presumably indicates the area onto which a handle was hafted. Firth's example was, according to Nordström, designated by Petrie as a flaying knife, although Nordström writes that "Petrie's

³¹¹See for example a thick specimen from Sayala, in Firth, 1927, *op. cit.*, p. 202 (Grave 5, Cemetery 126).

³¹²Copper rivets were often used to mend broken pots, and many examples of vessels have been found with pairs of rivets along either side of a break. However, it appears that their function was not so restricted.

³¹³G. A. Reisner, 1910a, *op. cit.*, p. 126.

³¹⁴*Ibid.*, p. 128.

³¹⁵*Ibid.*, p. 222.

³¹⁶Firth, 1927, *op. cit.*, p. 105.

³¹⁷*Ibid.*, p. 208.

³¹⁸*Ibid.*, p. 133.

³¹⁹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 123 and vol. 3.1, Plate 193: 1.

³²⁰C. M. Firth, 1927, *op. cit.*, p. 201.

interpretation of the function as a flayer used for ‘the safe removal of skins from animals,’ is very doubtful.”³²¹

A most unusual object is a copper spearhead from Qustul.³²² As far as I can ascertain it is the only published spearhead from an A-Group context. Williams describes it as follows: “A small but rather thick triangular spearhead from L24-34 has a distinct ridge down the center of the blade and this blade curves to a flat rectangular tang with two rivet holes.”³²³ The author ventures no Egyptian (or other) comparative information about the object. In addition, Williams has reported a copper papyriform finial, probably from a bed, a copper cap for a furniture leg, and a copper tray,³²⁴ none of which have A-Group parallels.

Stone Vessels and Stone Implements

Included in this category are all manner of stone vessels such as jars, bowls, and cups, in addition to incense burners, mortars, pestles, hammerstones, and maceheads. Vessels of stone are relatively rare in A-Group contexts, with the exception of Cemetery L at Qustul, from which more than a hundred complete and incomplete vessels were recovered. This vastly exceeds the combined corpus of stone vessels from all other A-Group sites. The most distinctive of this class are the very small Egyptian ointment jars, such as the example from the Scandinavian concession,³²⁵ which measures only 6.3 centimetres high. It is distinctive for its barrel shape, the two horizontal handles, and especially the variegated granite of which it is made.

³²¹H.-Å. Nordström, 1972 *op. cit.*, vol. 3.1, p. 123.

³²²B. B. Williams, 1986, *op. cit.*, p. 128, and Plates 64b and 65b.

³²³*Ibid.*, p. 128.

³²⁴For all see *ibid.*, Plates 64 and 65.

³²⁵H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 119, and vol. 3.2, Plate 192: 1.

Nordström notes that “...the rock material used for the beautiful ointment jar..., with its inclusions of green, grey and black minerals, appears to be quite rare in both Egyptian and Nubian collections, the most common rocks used being limestone, calcite alabaster, and basalt.”³²⁶ Parallels in this vessel type that are made of the commoner materials have been located at Khor Bahan,³²⁷ Dabod,³²⁸ and Sayala.³²⁹ Alabaster cups and bowls occur equally late in the A-Group, examples having been found at Serra East,³³⁰ Kubbania,³³¹ and Gerf Hussein.³³² The forms seen in A-Group contexts are well known from Egypt. Nordström writes: “Alabaster cups or bowls of the same general size and shape have been found in First Dynasty tombs in North Saqqara...Similar forms with flat bases may have been developed during the Late Gerzean (Negadeh III) period, well before the First Dynasty.”³³³ It should be noted that the stone vessels found at Qustul introduce no new shapes, forms, or materials. Williams writes that “as in Egypt, almost all vessels are calcite or Egyptian alabaster; two are breccia, one is diorite, one is a fine hard black stone, and a few are slate.”³³⁴ The black stone referred to by Williams may well be basalt. Three black basalt vessels are known elsewhere

³²⁶*Ibid.*, vol. 3.1, p. 119.

³²⁷G. A. Reisner, 1910a, *op. cit.*, p. 128 and Plate 64 e.

³²⁸*Ibid.*, p. 159, Plate 64 f, g.

³²⁹C. M. Firth, 1927, *op. cit.*, p. 192. Plate 21b, from Cemetery 134. Another example from Sayala was published by Bietak and Engelmayer, 1963, *Eine frühdynastische Abri-Siedlung mit Felsbildern aus Sayala-Nubien*, p. 20, Plate XIV: 2.

³³⁰H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 119, and vol. 3.2, Plate 192: 2.

³³¹H. Junker, 1919, *Bericht über die Grabungen der Kaiserliche Akademie der Wissenschaften in Wien auf dem Friedhöfen von el-Kubanieh-Süd, Winter 1910-11*, Type VI, Abb. 45.

³³²C. M. Firth, 1912a, *op. cit.*, p. 100.

³³³H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 119.

³³⁴B. B. Williams, 1986, *op. cit.*, p. 123.

from Khor Bahan,³³⁵ and basalt was also a common material used for stone vessels in Egypt.³³⁶

As with stone vessels, incense burners were relatively rare in A-Group contexts until the publication of the Qustul material. Williams writes: "About nine have been published from other sites...and thirty or more were found at Qustul in whole or fragmentary condition, all but two in Cemetery L."³³⁷ The latter two specimens were recovered from a grave and a storage pit in Cemeteries W and S respectively.³³⁸ Both of these items lacked decoration and were not distinctive in their forms. Although the Qustul incense burner is the best decorated example, a number of other incense burners bear fragmentary designs of linear patterns, such as one uncovered at Serra East by the Scandinavian Joint Expedition.³³⁹ This type of design, however, although typical of the decorated incense burners, does not approach the elaboration of design seen in the Qustul incense burner. Nordström indicates that incense burners on the whole tend to come from burials having a rich collection of material, and only from graves that date to the Terminal A-Group period.³⁴⁰ A general functional description given of the category has been produced by Williams, who writes:

"A-Group incense burners are round stone objects with oval truncated-conical or cylindrical profiles, varying in size from

³³⁵G. A. Reisner, 1910a, *op. cit.*, p. 119, Plate 64: a4; p. 125, Plates 64: a3 and 64: a2.

³³⁶See A. Lucas, 1930, "Egyptian Predynastic Stone Vessels," *Journal of Egyptian Archaeology* 16: 200-212 for this material and all other material types used for stone vessels in Egypt.

³³⁷G. A. Reisner, 1910a, *op. cit.*, p. 108. See p. 135 of this same volume for references to the original nine. For a register and survey of the decoration of the thirty Cemetery L burners see *ibid.*, Tables 23 and 24, pp. 109 and 111.

³³⁸B. B. Williams, 1989, *op. cit.*, pp. 36, 70, and 103. See also Figs. 34e and 60c.

³³⁹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plates 68: 4 and 192: 3.

³⁴⁰*Ibid.*, vol. 3.1, p. 120.

8 to 9 cm in height by 10 to 14 [cm] in diameter, although they are occasionally slightly larger. Each has a depression in the top, either a simple concavity or an actual flat-bottomed depression, about 5 mm deep with a well-defined rim about 1.2 to 2 cm wide. Generally, part or all of the depression and sometimes the rim and side are blackened; several are deeply cracked toward the center, indicating that smoky fires of fairly considerable intensity were frequently set there. In addition, many of the tops are stained with red that surrounds the black and can occasionally be seen through it. It would appear that a reddish-brown substance was ground or crushed on the top and then burned in a heap in the center, giving off a good deal of smoke. The designation, incense burner, is entirely appropriate.”³⁴¹

With regard to function, Nordström suggests that in some cases only the grinding of pigment may have taken place in some incense burners, or alternatively that they may have been used as lamps.³⁴² As evidence of these claims he presents the following:

“A small quartzite grinder was found on top of the gypsum specimen from grave No. 42 at Gezira Dabarosa...³⁴³ A ‘lamp’ of steatite with traces of paint pigment was recovered from an A-Group grave in the concession area of the Chicago Oriental Institute in Egyptian Nubia (Cemetery L, tomb L1; communication 1971). These observations suggest that at least some specimens of this type were perhaps rather used for grinding soft pigments, such as charcoal and red ochre.”³⁴⁴

Mortars and pestles³⁴⁵ occur with great frequency in the A-Group, and there is no evidence to suggest that they were ever an imported class of item. Most mortars are made from either sandstone, quartz, or quartzite, although

³⁴¹B. B. Williams, 1986, *op. cit.*, p. 108.

³⁴²H.-Å. Nordström, 1972, vol. 3.1, *op. cit.*

³⁴³For this item see again H.-Å. Nordström, 1962, *op. cit.*, p. 58.

³⁴⁴H.-Å. Nordström, 1972, vol. 3.1, *op. cit.* The so-called lamp of steatite does not appear to have been published at all.

³⁴⁵Pestles are alternatively called grinders or grinding stones by some authors.

one example of gypsum is known.³⁴⁶ They have shapes that vary from round, to oval, to rectangular or sub-rectangular. The latter version often has rounded corners. There are examples of flat bases,³⁴⁷ but most are rounded, with the sides of the mortar curving upward to form a small rim. Williams reports that some examples from Qustul have beveled rims,³⁴⁸ although this is not a common feature. Their method of manufacture is probably identical to that of palettes, i.e., having been pecked into shape and then polished to various degrees of lustre. In many cases, especially with the flat mortars, they can be indistinguishable from palettes. Apart from the occasional unusual choice of material, the only anomaly appears to have been the inclusion of "four stubby feet"³⁴⁹ on one example from Qustul. All mortars are undecorated with the exception of two examples from tomb L3 at Qustul, which were "...each decorated with a large spiral carved around the entire surface."³⁵⁰ Functionally, it should be noted that most were used for the grinding of pigments, not grains. Abundant evidence exists for this in the preservation of pigments of various colours adhering to the surfaces of both mortars and pestles. The examples that have been linked unequivocally with the grinding of grain form a short list: (1) the so-called saddle-quern and muller from Afia,³⁵¹ (2) a mortar from Khor Bahan,³⁵² (3) a sandstone millstone from Dahmit,³⁵³ (4) a mortar and pestle pair from Wadi Alagi,³⁵⁴ and (5) another such pair, of sandstone, also from Wadi Alagi.³⁵⁵

³⁴⁶H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 121 and vol. 3.2, Plate 190: 5.

³⁴⁷The gypsum mortar just cited is flat.

³⁴⁸B. B. Williams, 1986, *op. cit.*, p. 113.

³⁴⁹*Ibid.*

³⁵⁰*Ibid.* See also p. 224 ff. of the same publication for the tomb itself.

³⁵¹B. B. Lal, 1967, *op. cit.*, p. 107 and Plate VII.

³⁵²G. A. Reisner, 1910a, *op. cit.*, p. 125.

³⁵³*Ibid.*, p. 251.

Pestles or grinders usually occur in a one to one association with mortars, and are made primarily from the same materials. Williams reports the presence of "...two related objects...of pumice (?) and diorite,"³⁵⁶ but these materials are rare for this type of object. Williams describes the Qustul examples as follows:

"The stones were worked into a biparabolic shape, ca. 9 to 18 cm in length by 4 to 9.5 cm in transverse section. Originally they were almost circular in section but the sides became almost faceted or flattened with use."³⁵⁷

The size and shape given above are typical of pestles from other sites, although Nordström reports "one exceptional specimen"³⁵⁸ from the Scandinavian concession of twenty-seven centimetres in length.

Hammerstones are easy to confuse with pestles because of their similar appearance, but the chief differences are in their shape and the slightly smaller size of the hammerstones. According to Nordström, "they are generally round or totally oval, ranging in size between 7 and 12 cm."³⁵⁹ The pitting characteristically observed on one or two sides is presumably due to their primary function of striking rather than grinding. They are made from the same materials as mortars and grinders, and are equally common in A-Group contexts.

Maceheads were not uncommon in the A-Group, although most examples originate from the graves at Khor Bahan. The discovery of one

³⁵⁴C. M. Firth, 1927, *op. cit.*, p. 102.

³⁵⁵*Ibid.*, p. 108.

³⁵⁶B. B. Williams, 1986, *op. cit.*, p. 114.

³⁵⁷*Ibid.*

³⁵⁸H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 121.

³⁵⁹*Ibid.*

example from the Archaic camp at Meris Markos³⁶⁰ indicates that they were not necessarily restricted to burial contexts. Two types of maceheads are known from A-Group contexts, the disc-shaped and the pear-shaped varieties,³⁶¹ the latter of which was associated with ceremonial use in Egypt. Cialowicz writes: "It should be emphasized that in the Naqada IId the function of maces was distinctly changed. They ceased to be weapons and became symbols of power. At that time they must have been put into the graves of tribal chiefs."³⁶² It is not known whether a similar function was attached to the pear-shaped maceheads in Nubia, but Cialowicz has drawn attention to their occurrence in the richer Nubian graves and thus implies a special use in Nubia also.³⁶³ Numerous types of stone were employed in their manufacture, such as diorite, alabaster, breccia, porphyry, quartz, quartzite, and marble. Handles, usually made of wood, are rarely found attached to maceheads, although they may be found scattered throughout the same grave, as in Grave 88 at Khor Bahan, which contained a number of separated maceheads and handles.³⁶⁴ One suspects that many often unidentified fragments of wood in graves could have come from mace handles, especially where there is no evidence of a wooden burial tray having been built for the deceased.

³⁶⁰G. A. Reisner, 1910a, *op. cit.*, p. 216.

³⁶¹Cialowicz defines a total of six known types from Egyptian and Nubian contexts combined. The A-Group disc shaped type is the equivalent of his conical mace-head, either with a convex top or a flat top. The other types are the conical type, the conical pear shape, the true pear shape, and the double pointed maceheads. See K. M. Cialowicz, 1989, "Predynastic Mace-heads in the Nile Valley," in *Late Prehistory of the Nile Basin and the Sahara*, Fig. 1, p. 262.

³⁶²*Ibid.*, p. 264.

³⁶³*Ibid.*

³⁶⁴G. A. Reisner, 1910a, *op. cit.*, p. 126.

Seals and Mud Sealings

Evidence in this category is fairly abundant and consists of cylinder seals of clay, ivory, and steatite, as well as mud sealings with or without seal impressions. It is not certain whether the Nubians made their own cylinders or imported them from Egypt, but Nordström implies that the cylinders made of pottery may be of Nubian manufacture. He writes, "...it should be noted that the Egyptian parallels are as a rule of ivory or wood, not...of pottery."³⁶⁵ If the ivory cylinders in A-Group contexts were imported, it attests to indirect cultural links with Mesopotamia via Egypt. There is certainly no evidence of direct A-Group links with Mesopotamia. It is clear from Nordström's discussion of the seals and impressions found in the Scandinavian concession that some of the designs ultimately have Mesopotamian origins, while others are of Egyptian origin. The author writes:

"It is generally assumed that the cylinder seal is an early Mesopotamian invention which was introduced into Egypt during the later part of the Predynastic period...and the motives on the earliest cylinders and impressions found in Egypt show close affinities to the Jemdet Nasr glyptic...From a compositional point of view, our cylinder (303/A2: 46) and the impression (332/42: 9) show the rhythmic accentuation by means of vertical dividers or panels which is common in the Jemdet Nasr glyptic. The herring-bone dividers of the seal cylinder have their counterparts on a late Gerzean seal from Naga ed-Der...which Kantor...regards as one of the most conclusive pieces of evidence of early Mesopotamian relations with Egypt."³⁶⁶

A list of known seals and impressions from A-Group contexts and their interpretations (where possible) is as follows:

³⁶⁵H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 117.

³⁶⁶*Ibid.* For H. J. Kantor's discussion see 1952, "Further Evidence for Early Mesopotamian Relations with Egypt," *Journal of Near Eastern Studies* 11 (no. 1): 239-250.

(1) Fragmentary seal impressions from Siali (Figure 2), which, when pieced together show a man on a chair with what is likely a cow, and two dogs behind him. The remainder of the design has been interpreted variously, first by Reisner, the discoverer, who sees the design of rectangles as "...a tree surmounted by a hawk, above a row of objects (possibly birds)."³⁶⁷ Williams, who calls the collection the Siali Sealings, interprets the designs as royal Nubian iconography. He writes:

"...the central element is an early form of the A-Group *serekh* of nested rectangles surmounted by a 'prehistoric'-type Horus falcon.

A human figure to the left facing the palace facade sits on a chair with the seat facing out. He leans slightly backward, his right arm bent at the elbow toward the muzzle of a bovine (?) behind him which is standing on a pedestal. The man has some sort of flail in his lap (alternatively, blood spilling into a jar) and wears a tail that dangles over the back of the chair. His left hand is upraised over an archaic bow that is above a small rectangular object located between his shin and the palace facade. This combination can hardly be interpreted as anything but a writing of *t3-sti*. The entire central group would then refer to pharaonic rule in Ta-Seti, which is specifically associated with the bovine on a standard.

"...Considering their pharaonic character and their consistency of style and shape, these seals may well have been assigned to officials and used in much the same way as the seals of later officials were used in the First Dynasty."³⁶⁸

(2) Reisner has reported "half of a seal-cylinder of red pottery, engraved with spirals."³⁶⁹ No illustration or photograph is available for the object.

(3) Three cylinders of pottery, one of which has a green glaze. The pattern on all three consists of incised lines.³⁷⁰

³⁶⁷G. A. Reisner, 1910a, *op. cit.*, p. 331.

³⁶⁸B. B. Williams, 1986, *op. cit.*, p. 170-171.

³⁶⁹G. A. Reisner, 1910a, *op. cit.*, p. 128 (Grave 15 at Khor Bahan).

³⁷⁰C. M. Firth, 1912a, *op. cit.*, Plate 37a: 1-3. Firth also reports the discovery of a "small model green-glaze seal cylinder" from Gerf Husein, not illustrated or photographed. *Ibid.*, p. 102.

(4) Impression showing *nfr* and *m3ct* signs.³⁷¹

(5) Ivory cylinder showing a seated figure with possible false doors.³⁷² The design from this cylinder has been given two entirely different interpretations. Griffith writes:

“...the design...is of two false doors (the stand or *serekh* of the royal hawk) alternating with two compartments in one of which is a figure which may perhaps be interpreted as a woman seated on the ground painting her eyes with kohl from a shell seen above her, in the other a smaller *serekh* with a symbol resembling the pole and crossed arrows of Neith but set on its side instead of upright...”³⁷³

Williams, who calls the cylinder the Faras Seal, interprets the design as follows:

“...three palace facades of the same type as the building on the Qustul incense burner. One is lower than the others and has a six-pointed rosette above it, perhaps equivalent to the rosette on the Qustul incense burner. Between the two larger palace facades is a man, seated with his legs in front of him, a lock of hair or spurt of blood extending backward from his head. The left arm is behind his back...The elements above and in front of the man are...difficult to interpret. An irregular circle is shown above a line. The V-shaped line below could be either (a) the man’s arm (raised in supplication or salutation if he is a prisoner); (b) the man’s arm holding a flute...or (c) an arm extended from the line to smite the prisoner...At this point the most plausible interpretation is that the man is a supplicating prisoner who bleeds from the head and is labeled *t3-?*”³⁷⁴

(6) Steatite cylinder with seated figure and hieroglyphs.³⁷⁵

(7) Ivory cylinder with a standing figure in a boat from Grave 16 at site AS 11-H-6 at Saras West.³⁷⁶ The design was not interpreted by the original

³⁷¹H. Junker, 1919, *op. cit.*, p. 121.

³⁷²F. Ll. Griffith, 1921a, *op. cit.*, Plate II, Grave 4.

³⁷³*Ibid.*, p. 12.

³⁷⁴B. B. Williams, 1986, *op. cit.*, pp. 167-168.

³⁷⁵Emery and Kirwan, 1935, *op. cit.*, p. 471 and Fig. 443: 4.

excavators, but Williams, who has called it the Saras West Seal, has used it to add substance to his Nubian royalty theory. He interprets the boat as a royal bark with a stepped throne inside, which indicates to him "...royal connections for the representation of this seal."³⁷⁷

(8) Ivory cylinder with a pattern of incised lines from AS 6-G-18 at Gezira Dabarosa.³⁷⁸ This item appears entirely unpublished.

(9) Two impressions from a cemetery (Site AA-2) between Aksha and Serra West.³⁷⁹ They were described simply as "...two very clear seal impressions on mud stoppers. These impressions can be dated by the designs on the seals to the Ist or IInd Dynasty."³⁸⁰ No illustration or photograph of the designs was produced.

(10) One cylinder made of pottery from site 303 in the Scandinavian concession.³⁸¹ The design consists of a herring-bone pattern of lines with a standing human figure.

(11) Impression from site 332 in the Scandinavian concession, an undisturbed tomb.³⁸² The sealing covered a wine jar dated to the Classic or Terminal A-Group. It shows a standing human figure with arms hanging down at the sides and a grid of vertical and horizontal lines beside him. It is interpreted as "...a man standing in front of a double door with one leaf open."³⁸³

³⁷⁶Mills and Nordström, 1966, *op. cit.*, p. 8 and Fig. 3: 15.

³⁷⁷B. B. Williams, 1986, *op. cit.*, p. 169.

³⁷⁸H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 118.

³⁷⁹J. Vercoutter, 1963, "Excavations at Aksha: September 1961–January 1962," *Kush* 11: 137.

³⁸⁰*Ibid.*

³⁸¹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1. p. 117, and vol. 3.2, Plates 55 and 189: 1.

³⁸²*Ibid.*, p. 117, and Plates 55, 188: 4, and 189: 4-5.

³⁸³*Ibid.*, p. 117.

(12) Impression from site 308 in the Scandinavian concession,³⁸⁴ also associated with an Egyptian wine jar, and dated to the Classic A-Group. The designs consist of a walking man, a goat or gazelle, and a dog or hyena under what may be a depiction of a bird. Above the bird is a round hole.

(13) A damaged ivory cylinder seal from tomb L17 at Qustul,³⁸⁵ designated as a 'glyptic' by Williams. The author describes the design as follows:

"The preserved decoration includes a group of birds. A row of three tall waders precedes two shorter birds, one above the other. The foot and leg of a fourth tall wader appear below a break immediately behind. Above the group is a harpoon. The position of the weapon in this context indicates that it was intended as a label. At the rear of the procession is a human figure. Although most of the leg..., the body, and the head were destroyed, the figure is clearly in the dress and pose of the greeting man on the Qustul incense burner...The left arm is bent upward in the gesture of presentation, worship, or salutation...In style, this seal very much resembles the Qustul incense burner; the human figure and harpoon are also important links."³⁸⁶

(14) An ivory cylinder seal from tomb W2 at Qustul.³⁸⁷ The design of this seal consists of a herring-bone pattern remarkably similar to the Scandinavian find listed above (item no. 10). However, I do not agree with Williams in his claim that this seal is similar to the Faras and Siali seal and impressions, simply because the design of the W2 seal is not clear enough to be interpreted as a probable kneeling human figure. Williams writes:

"The representation on the W2 seal, though simpler, probably illustrates the same kind of event that appears on a seal from

³⁸⁴*Ibid.*, pp. 117-118, and Plates 55 and 189: 2-3.

³⁸⁵B. B. Williams, 1986, *op. cit.*, p. 157-158 and p. 167. See also Figs. 57, p. 157 and 58c, p. 168.

³⁸⁶*Ibid.*, pp. 157-158.

³⁸⁷B. B. Williams, 1989, *op. cit.*, pp. 40-41, Fig. 146, p. 47, and Plate 136.

Faras...This same combination of a (bleeding?) man and palace facade forms the basic composition of sealings from Siali as well. All of these seal compositions can be considered representations of the early sacrificial ritual, a theme most completely revealed on the Qustul Incense Burner and in the Hierakonpolis Painted Tomb.”³⁸⁸

Miscellaneous Objects and Items

Items that have occurred infrequently in A-Group contexts, or finds that have been restricted to one or a few sites only include bread models, various wooden objects, certain bone implements, faience vessels, game boards and pieces, ivory spoons, and ivory cones. The so-called bread models from Qustul are simply flat oval lumps of mud found in tomb L23. Their exact function seems uncertain, and their purpose as bread models is not at all verified by any other type of associated evidence. Williams writes:

“The mud from which these were made had been mixed with large amounts of straw (dung?) and very lightly fired so that the outside is tan to pinkish, the interior black, but with some of the chaff remaining. It has been assumed that these are bread models, but this does not explain the large amounts of chaff present. One model of this type was found in Cemetery W.”³⁸⁹

This type of object is not known in any other A-Group context.

In addition to wooden handles belonging to copper awls and maceheads, various wooden objects occur in the form of wooden bowls, or dishes, although examples are not abundant. Nordström reports one such bowl from Grave 29 at Halfa Degheim.³⁹⁰ In addition, a possible pot made of wood was found at Shellal,³⁹¹ and elsewhere, a small wooden dish.³⁹² The variety of other,

³⁸⁸*Ibid.*, pp. 40-41.

³⁸⁹B. B. Williams, 1986, *op. cit.*, p. 131. See also Fig. 161b and Plate 69c.

³⁹⁰H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 131, and vol. 3.2, Plate 108.

³⁹¹G. A. Reisner, 1910a, *op. cit.*, p. 27, Grave 335.

largely isolated items made of wood include a broken wooden needle,³⁹³ a possible hairpin from the grave of a child,³⁹⁴ wooden spoons,³⁹⁵ a necklace made of wood or twigs,³⁹⁶ and a decayed item listed as a possible bow-stave.³⁹⁷ The Scandinavian expedition also discovered fragments of a wooden tubular object with incised lines,³⁹⁸ a probable purpose of which was not given. In addition, Williams reports from Qustul, a fragment of a furniture leg in the form of a bovine limb from tomb L10. He speculates that the leg may have originated from a bed.³⁹⁹ Wooden rim pieces, possibly from a tray or trays were also found, as well as bits of wood in the copper finial mentioned above.

Although bone jewelery is common (bracelets and beads) along with tools such as awls and needles, certain items made of animal bone occur less frequently. Two examples of bone 'spatulas' have been reported by Reisner,⁴⁰⁰ both made from sheep tibia, but the function of such implements is uncertain. Another similarly unusual item was a bone implement made possibly from the tibia of a gazelle,⁴⁰¹ whose purpose is equally obscure. A unique find was a bone tubular case for a needle, in fragments.⁴⁰² One may surmise that this type of item should have been more numerous than the archaeological record suggests, given the preponderance of needles in A-Group contexts.

³⁹²*Ibid.*, p. 116, from Grave 7 at Khor Bahan.

³⁹³*Ibid.*, p. 35, Plate 66: b53. From Shellal, Grave 209.

³⁹⁴*Ibid.*, p. 41, Plate 66: b52. From Shellal, Grave 254.

³⁹⁵A few examples are known, See Firth 1912a, *op. cit.*, pp. 119 and 194.

³⁹⁶G. A. Reisner, 1910a, *op. cit.*, p. 47 (Grave 119 at Shellal).

³⁹⁷Firth, 1927, *op. cit.*, p. 216 (Grave 6 at Naga^c).

³⁹⁸H-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 129.

³⁹⁹B. B. Williams, 1986, *op. cit.*, p. 123.

⁴⁰⁰G. A. Reisner, 1910a, pp. 40 and 50. Both items are from the site of Shellal.

⁴⁰¹C. M. Firth, 1912a, *op. cit.*, p. 199.

⁴⁰²G. A. Reisner, 1910a, p. 125, Plate 66: a11.

Faience vessels are known from Qustul only, and the isolated nature of these finds suggests they were imported, i.e., of Egyptian origin. Williams reports one complete vessel and fragments belonging to two others. They are described as follows:

“The earliest, from L22-7, is part of a straight-sided jar with interior ledge rim, with a suspension hole pierced through the wall of the vessel. On the exterior is a crisscross lattice pattern of incised lines. The other vessels, from L5-4 and L2-28, are of more familiar types. These are simple bulged jars with ribbing that consists of a single spiral deeply engraved on the body and a band at the rim that has an incised zigzag. A groove or ledge in the rim has holes for suspension drilled into the interior.”⁴⁰³

Qustul again has yielded the only evidence of gaming boards, in A-Group contexts. Two long rectangular boards of limestone have been found in tombs L23 and L24, one of which has sixteen transverse grooves. The other “...now incomplete is 8.5 x 11 cm with two holes at one end, for mounting legs (?) or for suspension, and a series of eight transverse grooves.”⁴⁰⁴ Williams thinks that a series of balls discovered in the tomb, made of faience, carnelian, amethyst, and another unidentified stone, may have been gaming pieces for the boards. He also estimates that “together with the ivory rods and blocks found in L24, we probably have evidence for two of the three games shown in the tomb of Hesy.”⁴⁰⁵ It should be added that Reisner has reported a porphyry block from a grave at Khor Bahan, which may be from a game, but this seems uncertain.⁴⁰⁶

⁴⁰³B. B. Williams, 1986, *op. cit.*, p. 128, and Plates 60a-c, and 61 a-b.

⁴⁰⁴*Ibid.*, p. 130 and Plates 66 and 67.

⁴⁰⁵*Ibid.*, p. 130.

⁴⁰⁶G. A. Reisner, 1910a, *op. cit.*, p. 133 (Grave 76), Plate 62: c9.

Four examples of ivory spoons are known from A-Group contexts, although Nordström lists and discusses only three specimens.⁴⁰⁷ One complete specimen was found in the Scandinavian concession, dated to the Classic A-Group phase. The spoon⁴⁰⁸ is "...made in one piece of banded ivory, its length being 14 cm. The handle is 10 cm in length and is slightly tapering...towards the end...The spoon itself is shallow with an oval shape."⁴⁰⁹ Other examples, which are fragmentary, occur in graves in Cemetery 40 at Meris-Markos,⁴¹⁰ Cemetery 79 at Mediq,⁴¹¹ and in Cemetery 73 at Gerf Hussein.⁴¹² Nordström notes that of the three examples examined by him, all "...show affinities with the simple ivory spoons of the Gerzean in Egypt."⁴¹³ It may therefore be assumed that Egypt was the ultimate origin of this type of item in Lower Nubia, and that such objects were not locally produced, but this has yet to be satisfactorily verified.

A small cone-like object of ivory, which Nordström calls an ivory cone has been found at Ashkeit in the Scandinavian concession,⁴¹⁴ with an additional example coming from Khor Bahan.⁴¹⁵ Their function is not known, and in the first example the source of the ivory is not known, whether elephant or hippopotamus. There are certain differences between the two examples, which may perhaps be related to varying functions. The Ashkeit specimen is open at both ends, while the other is closed at one of its ends and

⁴⁰⁷H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 122.

⁴⁰⁸See *ibid.*, vol. 3.2, Plate 193: 2.

⁴⁰⁹*Ibid.*, vol. 3.1, p. 122.

⁴¹⁰G. A. Reisner, 1910a, *op. cit.*, p. 236 (Grave 15), and Plate 66: b25.

⁴¹¹C. M. Firth, 1912a, *op. cit.*, p. 137 (Grave 88).

⁴¹²*Ibid.*, p. 101 (Grave 22).

⁴¹³H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 122.

⁴¹⁴*Ibid.*, p. 121 and Plate 193:2.

⁴¹⁵G. A. Reisner, 1910a, *op. cit.*, p. 123 and Plate 66: a9.

pierced with a number of holes at the other. Nordström writes that in terms of shape, the latter "...displays a superficial resemblance to the tusk figures which occur in Egypt during the Predynastic period."⁴¹⁶ Functional possibilities for the Ashkeit example may have been as a penis sheath, a small case, or "it may have formed an attachment to a object of wood or of some other organic material."⁴¹⁷

3.4. A-GROUP SETTLEMENT PATTERN AND HABITATIONS

The only comprehensive study of A-Group settlement is still B. G. Trigger's dissertation work, published as *History and Settlement in Lower Nubia* in 1965, and already quoted extensively above. Written during the height of the Nubian High Dam Campaign, the study utilized the (then) newest A-Group data and the data of other periods for a reconstruction of settlement patterns throughout Nubian history and prehistory. This involved at the time a total of 500 sites of all periods between Shellal and Wadi Halfa. The only shortcoming of Trigger's work on the A-Group is that it could not take into account all of the A-Group sites, since many results of the High Dam Campaign were not yet published. His "sample"⁴¹⁸ of sites is therefore no longer representative of all A-Group settlement data. The present work attempts to fill in the blanks of missing habitation sites and thus to extrapolate Trigger's results in full.

Trigger's method was to classify his sample of sites "...according to function, phase, and geographical location."⁴¹⁹ In doing so he developed his

⁴¹⁶H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 121.

⁴¹⁷*Ibid.*

⁴¹⁸B. G. Trigger, 1965, *op. cit.*, pp. 42-54.

⁴¹⁹*Ibid.*, p. 42.

own chronological sequence, which has already been outlined above (Chapter 1).⁴²⁰ Trigger also designated two additional sequences, each based on the single sites of Khor Bahan and Gezira Dabarosa, called the Bahan and Dabarosa phases. His justification for creating these phases is that these very early cultures were already in place before the Classic A-Group phase began, the Bahan phase being an Egyptian culture in northern Lower Nubia, and the Dabarosa phase being a Nubian Neolithic component to the south. According to Trigger the A-Group then evolved as a gradual and distinctive blending of these two early cultures. This model is still largely adhered to by scholars today.

Whether one classifies it as an A-Group or a pre-A-Group site, the cemetery of Khor Bahan represents the earliest known site of Neolithic date in Nubia. It also shows the earliest evidence for the domestication of both goat and cattle. Trigger indicates, however, that there is no reason to suppose that animal husbandry and agriculture had not arrived at an even earlier date in Nubia.⁴²¹ He writes:

“In view of what we know about the spread of pastoralism in the nearby desert, and the arrival of the first domestic goats in the Khartoum area about 3300 B.C., a date of about 3500 B.C. seems appropriate for the beginning of food production in this area.”⁴²²

The culture represented by the Khor Bahan cemetery is summarized as “...a small community living at the mouth of Khor Bahan and perhaps also using the fertile areas of Khor Ambukol and Khor Gudhi.”⁴²³ Trigger considered

⁴²⁰In the following discussion of Trigger’s model of settlement expansion, I have converted from the author’s terminology to Nordström’s Early-Classic-Terminal system of classification.

⁴²¹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 68.

⁴²²*Ibid.*

⁴²³*Ibid.*, pp. 68-69.

this cultural phase, whose material culture Reisner has shown was largely identical with contemporary Egyptian culture,⁴²⁴ to be the forerunner of subsequent groups that would spread southward during the time of the Early A-Group. The lack of other Nubian cultures of this date indicates that this phase was confined to northern Lower Nubia and did not constitute a large population. Trigger proposed a similar type of existence for the village site of Gezira Dabarosa, which he argued may have been contemporary with the Bahan phase. He advocated a primarily indigenous tradition at this site based on the pottery, which shows similarities with the Early Khartoum and Shaheinab cultures, and the presence of microblades.⁴²⁵ In short, "all of this seems to be part of a Sudanic tradition that was indigenous to the middle reaches of the Nile and the southern fringe of the Sahara and apparently persisted in these areas for a considerable length of time."⁴²⁶

Trigger's analysis of the A-Group settlement pattern subsequent to these early phases emphasizes a temporal and cultural continuity from Early A-Group times to the Terminal A-Group period, as well as a gradual southward expansion from north to south. Of the Early A-Group sites examined by him, i.e., eighteen cemeteries and one habitation, the majority occur in the north, with only three cemeteries having been found south of Korosko. The distribution of the other sites is as follows:

"Eight are in the Gerf Husein-Dakka region, and two more are just south at Seyala. Six lie between Gerf Husein and Shellal."⁴²⁷

⁴²⁴See Reisner, 1910a, *op. cit.*, p. 319.

⁴²⁵Defining these indigenous characteristics of the A-Group is the primary focus of Chapter 4 of the present work.

⁴²⁶B. G. Trigger, 1965, *op. cit.*, p. 69.

⁴²⁷*Ibid.*, p. 71.

In the subsequent phase, the Classic A-Group, the distribution and number of sites did not change greatly from the preceding phase, with seventeen out of twenty-two sites occurring north of Korosko. However, Trigger writes that “despite the small increase in the total number of sites, a study of their distribution by localities suggests that the population was considerably greater at this time.”⁴²⁸ There is also a partial degree of areal overlap between the Early A-Group and the Classic A-Group sites, with about half of the latter sites occurring in new areas not previously settled. This observation contributes significantly to the model of population expansion in the manner described by Trigger. Similarly, in the Terminal A-Group “the localities that were inhabited in the Early Nubian Ib phase remained inhabited, while at least a dozen other localities show indications of being newly settled.”⁴²⁹ Moreover, the southward A-Group expansion was accompanied by a reduction in the size of the northern sites as well as increasing poverty in those same sites. This is attributed to Egyptian interference in the area of northern Lower Nubia, which significantly affected the further development of the A-Group. Trigger writes:

“It would seem that the Egyptians had removed or driven out the Nubians living in the vicinity of the First Cataract in order to be able to quarry there without hinderance. These raids may have resulted in a shift in the center of population further south, where the Early Nubian II culture flourished relatively far removed from Egyptian interference.”⁴³⁰

Trigger noted that the visible cultural decline of the Terminal A-Group phase, or Reisner’s B-Group, was exhibited by a number of factors: (1) a decrease in the number of sites and their size, (2) a decline in the prosperity

⁴²⁸*Ibid.*, p. 72.

⁴²⁹*Ibid.*, p. 74.

⁴³⁰*Ibid.*

and amounts of grave goods, (3) a decline in the number of copper tools, (4) a decrease in the number of trade goods, (5) a total absence of amulets and blue-glazed beads, (6) the rarity of carnelian beads and shell beads, and (7) the disappearance of the fine indigenous haematitic ware. In terms of settlement pattern, there seems to have been no expansion into new territory, and Trigger writes that "Early Nubian III cemeteries are usually small and appended to earlier ones."⁴³¹ The only habitation site belonging to this period has been described briefly by Firth and has been dealt with above (Chapter 2).⁴³²

Turning now to the subject of A-Group habitations, I have compiled a complete list of such sites in Table A-2 (Appendix), with a summary of the data in Table 3-2 below.

TABLE 3-2. SUMMARY OF A-GROUP HABITATION SITES⁴³³

SITE TYPE	MAXIMUM NUMBER	PERCENTAGE
I. Temporary	53	86.9
II. Permanent	5	8.2
III. Rock Shelters	3	4.9
TOTAL	61	100

These data represent a much updated version of Trigger's analysis of habitations, in which he utilized a sample consisting of eighteen sites,⁴³⁴ compared with the sixty-one sites now known. Although it was Trigger who

⁴³¹*Ibid.*, p. 78.

⁴³²See also C. M. Firth, 1927, *op. cit.*, p. 152.

⁴³³This Table is a quantitative summary of Table A-2, Appendix, in which each site is listed individually.

⁴³⁴B. G. Trigger, 1965, *op. cit.*, p. 76.

originally designated the three basic habitation types, Nordström added a fourth, the storage pit site,⁴³⁵ which I do not consider here to have been a settlement type. As already seen from the discussion of these pits at Khor Daoud and Qustul, they were not clearly associated with either a habitation site or cemetery. A-Group habitations may now be classified in the following manner: (1) type I, the *rakuba* or simple habitation without structural features. I have included in this category, workshop or other activity sites, fishing camps, and other temporary camp-sites; (2) type II, habitations of a more permanent nature, having structural features such as stone walls; (3) type III, the rock shelter, usually a cave site.

Perhaps the most significant contribution of the new compilation is that it shows that continued excavation subsequent to Trigger's work has resulted in an increase in the number of type I settlements known, while the other categories have not been added to significantly or at all. Thus, instead of 66.7 per cent (twelve out of Trigger's eighteen) of habitations being of type I, now about 87 per cent are of that type. According to Trigger these sites typically contain

"...ash deposits, broken animal bones, and artifacts, which vary in thickness from superficial to over a meter thick. In many of them no hearths were distinguished."⁴³⁶

Trigger's analysis has held up well with time, but with a few important exceptions. Some deposits were up to two metres thick or more, and several of the more significant type I settlements were found to contain hearths or fireplaces, and these generally received more attention at the time of their excavation than other type I sites. Settlement A.2 at Ballana, for example, in addition to having hearths, showed evidence of having been a manufacturing

⁴³⁵H.-Å. Nordström, *op. cit.*, vol. 3.1, p. 21.

⁴³⁶B. G. Trigger, 1965, *op. cit.*

site for carnelian beads. Many small worked points were found at the site in addition to a particularly well-worked bead of carnelian. A well-travelled road leading from the site into the Western Desert was found to be carefully marked with cairns, suggesting that the carnelian was accessed directly from this site.

Two type I sites from the Scandinavian Joint Expedition concession are worthy of mention, 316 and 332/V. The former was found to contain no less than nine fireplaces, ranging in size from about 0.3 m to about 1 m in diameter. Most were disturbed and described as consisting of “rounded or angular stones, in some cases associated with ash layers and pieces of burned clay...and...carbon-coloured spots.”⁴³⁷ Other interesting finds from this site consisted of “pieces of un-baked clay, probably from a wattle-and-daub structure.”⁴³⁸ Site 332/V was a single fireplace within a cemetery of A-Group, C-Group and Late Nubian date. Material from the interior of the hearth has yielded an important series of radiocarbon dates (see Table 1–1 above). The feature was described as follows:

“The hearth formed a shallow depression c. 0.15 m deep...This depression, measuring about 1 m in diameter, was filled by a sooty soil, intermixed with small concentrations of carbonized wood, the latter mainly found in the bottom layers and at the edges of the hearth...On the top of the filling a number of small sandstone slabs were found, measuring 0.05 – 0.1 m across. The edges of the pit were marked by reddish sand, burned by the heat from the fire-place.”⁴³⁹

The existence of the type II settlement, the more permanent type of structure, is certainly evidence of an increasing tendency toward sedentism in A-Group times. However, the small percentage of this type of site, 7.7 per cent,

⁴³⁷H.-Å. Nordström, *op. cit.*, vol. 3.1, p. 135.

⁴³⁸*Ibid.*, p. 134.

⁴³⁹*Ibid.*, p. 173.

may be taken as evidence that this process was in its early stages of development in Lower Nubia in A-Group times. Alternatively Trigger has viewed the houses at Afia as evidence of an elite status. If correct, this would explain the low frequency of houses. Trigger claims they are representative of the residences of a local ruler because of their rectangular rather than circular form. This is based on the observation that "in Egypt, rectangular houses developed later than circular ones, and they seem to be associated first with an elite or urban class."⁴⁴⁰ The type II sites at El-Riqa, Dakka, Argin West, and Abu Simbel have been assessed only minimally in comparison with Afia. Smith devotes a brief paragraph to El-Riqa as follows:

"A low bank north of Nag^c Saqyet Yusuf showed the remains of a few much denuded round huts built of crude boulder stones...Excavation revealed that they had been much disturbed, and that the occupation debris was only a few cms. thick. Fragmentary weathered sherds of A-Group pottery were recovered from the spoil and sufficed to date the site."⁴⁴¹

Concerning the remains of permanent habitations found by Firth at Dakka, Trigger has written:

"In his description of Dakka, Firth...reported traces of Early Nubian settlements lying between the cultivated area and the cemeteries along the edge of the desert. 'The lower parts of rubble walls, deposits of ashes, potsherds, and the bones of animals...covered a considerable area.'"⁴⁴²

Site 6-B-6 also contained remnants of stone, but unfortunately it was given only a cursory description by Nordström, who informs us that:

"6-B-6 is formed by a heap of sandstone slabs and granite blocks lying about 10 to 30 cm. beneath the surface over an area of about 3 x 15 m. with its widest part lying north-west to south-east. No structural order could, however, be traced

⁴⁴⁰B. G. Trigger, 1965, *op. cit.*, p. 77.

⁴⁴¹H. S. Smith, 1962, *op. cit.*, p. 71.

⁴⁴²B. G. Trigger, 1965, *op. cit.*, p. 77.

among these remains. The finds...consist mainly of sherds...of A-Group."⁴⁴³

The final site in this category, A.4, is not entirely definitive of a permanent habitation, but it is difficult to comprehend the true nature of the remains because of the terse description given by Smith. I have incorporated it into the type II category because Smith mentioned the presence of boulder stones across part of its surface, a feature consistent with the other settlements listed for this category. Smith writes:

"To the north of Cemetery 252...a small patch of mud terrace is strewn with boulder stones, among which microlithic points of flint and carnelian and a few sherds of A-Group pottery were discovered. There was no depth of deposit. One well-made palette of quartz...was found on the surface. The site appears to be of the type of Ballana A.2."⁴⁴⁴

Notwithstanding the last statement, Smith gave no explanation for the presence of boulders at the site.

Of the third type of habitation, the rock shelter, Trigger mentions only two of three known examples, i.e., the painted rock shelter at Korosko, already detailed above, and site 24-H-4 at Serra West. The latter was summarized by Verwers as follows:

"One cave in the eastern slope of the jebel (24-H-4) contained a layer 70 cm. thick, consisting of fine sand mixed with charcoal, vegetable remains such as wood, bones (mostly animal, but some human) and stones. Pieces of mud with basket impressions, some pieces of worked wood, a rough pottery cup and potsherds were found. The latter, including sherds of red-brown polished thick ware with a broad black band along the rim, and a few black polished sherds with pebble marks, point to the A-Group period. As the whole layer

⁴⁴³H.-Å. Nordström, 1962, *op. cit.*, p. 44.

⁴⁴⁴H. S. Smith, 1962, *op. cit.*, p. 45.

was redeposited by wind, no traces of the actual places of habitation remained.”⁴⁴⁵

The third rock shelter not accounted for by Trigger was the very important site of Sayala, where a number of cave habitations were uncovered by the Austrian team (the University of Vienna) during the High Dam Campaign. These habitation sites have already been described above (Chapter 2).⁴⁴⁶

Another unexplained feature of the A-Group settlement pattern is the lack of larger agricultural communities, which one would expect of a culture even in the early stages of agriculture. Little may be said about this except that agriculture had not developed enough to warrant a large centralized settlement or series of such settlements. However, settlement sites are nonetheless far more numerous than in any other period in Nubian prehistory. Trigger attributes this to an overall increase in the population of Lower Nubia, which he places at about 8,000, based on a maximum village size of about one-hundred persons. This increase in population and numbers of settlements can only be attributed to a more efficient economy brought about by early agricultural practices. Adams views the A-Group habitation pattern as one of a continued process of “settling down”⁴⁴⁷ into a semi-nomadic type of existence.

3.5. THE DEMISE OF THE A-GROUP

The cause of the A-Group disappearance from Lower Nubia is still not known, but the subject has been steeped in speculation since the discovery of

⁴⁴⁵G. J. Verwers, 1962, “The Survey from Faras to Gezira Dabarosa,” *Kush* 10: 22.

⁴⁴⁶For photographs of the cave sites and excellent copies of the rock drawings see M. Bietak and R. Engelmayer, 1963, *Eine fröhdyastische Abri-Siedlung mit Felsbildern aus Sayala-Nubien*, Plates 4-7, Plan 3, and Plates 25-30.

⁴⁴⁷W.Y. Adams, 1977, *op. cit.*, p. 123.

the culture. The only fact of which we are certain is that the A-Group did disappear abruptly, and according to Nordström, without a period of cultural decline prior to its termination. Nordström writes that this demise “occurs at a stage when the Nubian A-Group displays an upward curve of socio-economic development—there is no evidence of stalemate, no period of degeneration.”⁴⁴⁸ This statement comes as somewhat of a surprise. I fail to understand why Nordström does not consider Reisner’s description of an impoverished B-Group (or the Terminal A-Group) as evidence of such a decline. Nordström may be correct in his assumption of a sudden decline, but the old B-Group should surely be viewed as a culture in the imminent stages of collapse, whether sudden or not.

There is no agreement amongst scholars about the termination date for the A-Group. Some have argued for a First Dynasty, Second Dynasty, Third Dynasty, and even a Fifth Dynasty end,⁴⁴⁹ and the general lack of evidence surrounding the issue makes most theories equally viable. The most compelling argument for a First Dynasty demise is, as Nordström has pointed out, that “...in a Terminal A-Group context there are hardly any ceramic products of Egyptian manufacture that can be positively dated later than the transition between Kaiser’s Negadeh IIIb and the First Dynasty.”⁴⁵⁰ The area of contention is in the word “hardly,” because there are important exceptions of A-Group material occurring in contexts that date beyond the First Dynasty.⁴⁵¹ It must also be remembered that it is often problematic to date

⁴⁴⁸H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 31.

⁴⁴⁹For this latter and least likely possibility see O. Vagn Nielsen, 1970b, *op. cit.*, p. 15.

⁴⁵⁰H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 29.

⁴⁵¹Adams claims that “no Egyptian articles datable to a reign later than the Second Dynasty have been found in Nubian ‘A-Group’ graves” (W. Y. Adams, 1977, *op. cit.*, p. 132). In addition, a serious problem is posed by the site of Buhen, in which A-Group sherds have been found at the Old Kingdom Egyptian settlement. (For the original

Egyptian predynastic objects to begin with, either within or outside of Egyptian contexts.

A look at the development of the theories regarding the A-Group demise shows that at first the earliest ideas about Nubian race were used to explain the event, although this approach is no longer tenable. Firth has written:

“This decay [of the A-Group] may be ascribed to two main factors: The economic poverty of Nubia as an agricultural country, and a considerable infusion of negro blood...The result was a complete stagnation in the evolution of the local early dynastic culture, and the decay of all that was best in the predynastic tradition.”⁴⁵²

More recently, historic texts and inscriptions have been used to support the theory of an A-Group demise through Egyptian military intervention. In most cases these texts are not conclusive evidence of the manner and timing of the A-Group demise because of the numerous possible interpretations of them. One such inscription occurs on a wooden label of King Aha,⁴⁵³ which Trigger has assessed as follows:

“An ivory label of King Aha on which a prisoner is apparently identified by the bow sign (*Stj*) traditionally used for Nubia, has been interpreted as evidence of military action in the south at the beginning of the First Dynasty. It is possible, however, that in this instance *Stj*-land refers to the region between Gebel es-Silsila and the First Cataract and that the label alludes to action designed to secure the southern frontier of Egypt at Aswan. A fortress marking this frontier

report see W. B. Emery, 1963, “Egypt Exploration Society: Preliminary Report on the Excavations at Buhen, 1962,” *Kush* 11: 116-120). By way of explanation Trigger has written: “Only the small amount of Nubian pottery [i.e., about 5 per cent] found in the Old Kingdom Egyptian settlement at Buhen (some of it associated with squatter-like huts) may indicate a limited survival of the A-Group during the Old Kingdom. Even that pottery may have been carried to the site by Nubian prisoners or traders whose homes were in Upper Nubia.” (B. G. Trigger, 1976, *op. cit.*, p. 44).

⁴⁵²C. M. Firth, 1927, *op. cit.*, p. 18.

⁴⁵³For a representation of it see B. G. Trigger, 1976, *op. cit.*, p. 40, Fig. 8.

appears to have existed on Elephantine Island at Aswan as early as the reign of King Huni (c. 2600 B.C.).”⁴⁵⁴

A second text is a relief carved into the cliffs of Gebel Sheikh Suleiman (Figure 2) near the Second Cataract. Although the attribution of the text to the reign of Djer has been questioned,⁴⁵⁵ Trigger writes that “...it certainly dates [to] about the beginning of the First Dynasty.”⁴⁵⁶ The text is now considered the strongest evidence of Egyptian intervention in the First Dynasty into this sector of Nubian territory, which resulted in the partial or complete conquest of the A-Group. Arkell, originally described the inscription as follows:

“The scene...has been in part obliterated by graffiti, some of which date from the Middle Kingdom, but there can still be seen to-day a boat with a high prow and vertical stern typical of the First Dynasty...below which float several corpses in the water, and from the prow of which a rope binds the larger figure of a captive chief. At the extreme left of the scene is the name of King Jer and a figure with hands bound behind its back holding the peculiar bow that is the hieroglyph for Zeti the earliest name of Nubia...”⁴⁵⁷

Emery and Kirwan, writing at the time of the Second Archaeological Survey, have attributed the A-Group decline to Egyptian military activity in Lower Nubia during the Second Dynasty reign of Khasekhem. Their conclusion is based on the interpretation of yet another text, this one from the Ptolemaic period, which is so far removed from A-Group times that its accuracy must certainly be questioned. However, the authors maintain that:

“A tradition of an even earlier raid on Nubia, which may well be based on actual fact, is recorded in a Ptolemaic inscription from the temple of Horus at Edfou. This inscription tells us how, in the year 363 of Horakhuti, the Horus-King returning

⁴⁵⁴*Ibid.*, p. 41.

⁴⁵⁵By W. Helck, 1970. “Zwei Einzelprobleme der thinitischen Chronologie,” *Mitteilungen des deutschen archäologischen Instituts Abteilung Kairo* 26: 83-85.

⁴⁵⁶B. G. Trigger, 1976, *op. cit.*

⁴⁵⁷A. J. Arkell, 1961, *A History of the Sudan from the Earliest Times to 1821*, pp. 39-40.

from a military expedition in Nubia discovers that a rebellion has broken out in Egypt. Having put down the rebels, called in the text the 'Companions of Set,' he drives them as far as Zaru on the eastern frontier of the Delta. The king then returns south and, entering Nubia, he suppresses the last vestiges of the insurrection at Shasheryt in 'Ta-Wawat.' Professor Newberry has interpreted this inscription as a reference to the Set rebellion of Perabsen in the second dynasty, and, pointing out that the year 363 is an era dating giving the number of years from the establishment of the monarchy under the Horus-King Menes to the time of the outbreak of the Set rebellion, he identifies Horakhuti with Khasekhem on the basis of Professor Meyer's restoration of the Palermo Stone. In light of this identification it is important to compare a fragment of a stela of this same Khasekhem from Hieraconpolis, which records his conquest of 'Bow-land.'⁴⁵⁸

This latter piece of evidence has been described more fully as a fragmentary victory stela of Khasekhem, "...on which the stricken foe is shown with the *Sti* hieroglyph on his head."⁴⁵⁹ There can be little doubt that the nature of this text is military, and it likely indicates an invasion of Nubia by Khasekhem. But is the text referring to Lower Nubia or Upper Nubia? Also, there is nothing in the text to indicate the reason for the possible attack or the effects it may have had on the A-Group population, if any, in Nubia at this time.

Finally, the Fourth Dynasty text of Snofru must be considered in terms of its implications for the A-Group demise. It is easy now to appreciate how exaggerated the text must be with regard to the number of Nubian prisoners taken, if one considers that this was the period of a hiatus in Lower Nubia. It is extremely unlikely that there existed this size of population in the Nile Valley at this time. It is more reasonable to assume, according to Adams, that "here we have nothing more than the record of a highly successful slave-raid,

⁴⁵⁸W. B. Emery and L. P. Kirwan, 1935, *The Excavations and Survey between Wadi es-Sebua and Adindan*, p. 2.

⁴⁵⁹H. S. Smith, 1966b, *op. cit.*, p. 119.

perhaps in the guise of a military reprisal...no purely military objective could have justified operations on such a scale."⁴⁶⁰ Thus, given the high probability of gross exaggeration in this text and the fact that Lower Nubia was already largely abandoned by the time of Snofru's reign, the text cannot be taken seriously as evidence relating to the A-Group demise. The only alternative explanation one can offer for the account given in this text is that it refers to an Egyptian encounter with pastoralists in the eastern and/or western deserts of Lower Nubia, and not with the settled A-Group population. This possibility has been touched upon in the literature. Smith writes that "Vercoutter has already pointed out that the proportion of beasts to humans carried off by *Snfrw* (nearly 30:1) strongly suggests that his opponents were pastoralists."⁴⁶¹ However, this possibility must, for now, remain unproven because of the overall lack of direct evidence for sizeable desert populations in A-Group times.

Turning now to alternative explanations for the A-Group disappearance, natural causes have been considered and ruled out. Nordström and Trigger are both in agreement on this point, and Trigger writes simply that "it is impossible to attribute the total disappearance of the A-Group in Lower Nubia entirely to natural causes."⁴⁶² Although the volume of the Nile flood is known to have decreased during the First Dynasty, this is not thought to have been significant enough to have caused, by itself, the disappearance of the A-Group.⁴⁶³ Natural events outside of Lower Nubia are also thought not to be related to the A-Group demise. Nordström has written:

⁴⁶⁰W. Y. Adams, 1977, *op. cit.*, p. 139.

⁴⁶¹H. S. Smith, 1966b, *op. cit.*, p. 120.

⁴⁶²B. G. Trigger, 1976, *op. cit.*, p. 44.

⁴⁶³*Ibid.*, p. 44-45.

“...there is as yet no evidence that suggests any substantial climatic alterations outside Nubia which would indirectly have brought about a sudden change of the A-Group structure, for example, in terms of migrations.”⁴⁶⁴

The theory that has gained the most appeal in recent years is that the unification of Egypt so severely affected Nubian-Egyptian trade relations that Nubia was unable to keep pace with the developments and changes in Egypt at this time. Thus, according to this theory the A-Group demise is completely dependent upon a very close trade relationship between Egypt and Nubia. Nordström, the original proponent of this theory has written:

“We may infer that the apparent wealth and stability of the Terminal A-Group structure was fragile and dependent on Egypt...This dependence was probably of a more complicated nature than is reflected in the material culture—it may have evolved into a system of reciprocity that dominated the socio-economic spheres of the A-Group...”

A close reciprocity between the Negadeh culture and the A-Group would mean that the Nubians were connected with the Egyptian production circles, receiving important surplus commodities—beer, wine, oil, perhaps also cereals, salt and other foodstuffs, as well as socially significant objects such as beads, palettes and copper tools...

A break-off of this reciprocity, and exclusion from the Egyptian ‘cash-crop circles,’ would have a rapidly deleterious effect on the whole socio-economic structure of the A-Group. The disappearance of the A-Group material culture during the course of the First Dynasty suggests that such a break actually did occur. We can only guess that this was in consequence of a development in Egypt, relative to the status of the king and his control over the power structure. This process may have been coupled with an economic change towards a more rigid redistribution system inside Egypt, and a shift to a more aggressive and negative attitude towards neighbouring tribal groups, including the Nubian A-Group.”⁴⁶⁵

⁴⁶⁴H.-Å. Nordström, 1972, vol. 3.1, *op.*, *cit.*

⁴⁶⁵*Ibid.*, pp. 31-32.

Trigger, who, on the one hand appears to support Nordström's views,⁴⁶⁶ adds a number of considerations that allow for a broader perception of both the A-Group demise and Nubian/Egyptian relationships at or around the time of the A-Group dissolution. These are: (1) that the unification of Egypt may have given the Egyptians the economic organisation necessary to bypass the Nubian middlemen and to conduct direct trade with those areas to the south of Lower Nubia,⁴⁶⁷ (2) that while a centralized control of trade in Egypt would have adversely affected A-Group prosperity, "...it is difficult to account for the disappearance of all sedentary life in Lower Nubia in terms of this economic breakdown,"⁴⁶⁸ (3) that some consideration should be given to the possibility of Egyptian military intervention in the protection of trade routes, and (4) the possibility that the Nubians were not trading with the Egyptians at all, but rather were receiving Egyptian products in exchange for military service.⁴⁶⁹ While Egyptian conscription of Nubians is known to have happened in later times, its occurrence during the A-Group period cannot yet be proven. However, Trigger indicates that if this was the case in A-Group times, then

"the impoverishment which is evident after the Second Dynasty would thus represent the time when the pharaoh turned from voluntary recruitment to the forcible enslavement of Nubian troops."⁴⁷⁰

Whatever the true cause or causes of the A-Group demise, it is generally accepted that after the disappearance of the culture, there occurred a hiatus in the occupation of Lower Nubia. This is supported by the fact that Trigger's

⁴⁶⁶B. G. Trigger, 1976, *op. cit.*, p. 45.

⁴⁶⁷*Ibid.*

⁴⁶⁸*Ibid.*, p. 46.

⁴⁶⁹See Adams, 1977, *op. cit.*, p. 137. This was a personal communication from Trigger to Adams.

⁴⁷⁰*Ibid.*

settlement analysis has failed to verify the existence of a substantial population in the A-Group territory at the time in question. However, the true nature of this hiatus, which lasted until the beginning of the C-Group period, is still imperfectly understood. Although 'hiatus' is the term used, it may now be more realistic to think that Nubia was not completely devoid of inhabitants at this time, but according to Nordström, "it is probable that the old A-Group habitat during this period had a sparse and scattered population that did not leave behind any significant material remains."⁴⁷¹ Adams is also willing to concede that the alleged hiatus between the A-Group and C-Group populations may be "partly imaginary."⁴⁷² The only indication that a sparse occupation may have existed in Lower Nubia after the demise of the A-Group is the discovery at Buhen (Figure 1) that about five per cent of the ceramic assemblage was of Nubian wares. This indicates, according to Smith, that there was not a substantial indigenous population in Lower Nubia at this time,⁴⁷³ but it does suggest that the area was not devoid of Nubians altogether. It is apparent, however, from the existence of the Egyptian fort of Buhen,⁴⁷⁴ that the Egyptians had already moved into the area in the early Old Kingdom.

Trigger writes:

"We now know, as a result of Emery's excavations at Buhen, that there was at least one Egyptian community in Nubia during the Old Kingdom. The large bricks which were used to construct the lowest levels of this site suggest that the town had been founded as early as the Second Dynasty."⁴⁷⁵

⁴⁷¹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 32.

⁴⁷²W. Y. Adams, 1977, *op. cit.*, p. 133.

⁴⁷³H. S. Smith, 1966b, *op. cit.*, p. 120.

⁴⁷⁴Originally excavated by W. B. Emery (1963, "Egypt Exploration Society: Preliminary Report on the Excavations at Buhen, 1962," *Kush* 11: 116-120).

⁴⁷⁵B. G. Trigger, 1965, *op. cit.*, p. 79.

Another significant factor is the question of what became of most of the A-Group population at this time. Nordström has done the most substantial assessment of this topic, having outlined three separate possibilities that may also be taken in combination: (1) a northward migration of A-Group people into Egypt, (2) a southward migration, presumably into Upper Nubia and perhaps beyond, (3) the adoption of a nomadic pastoral way of life by elements of the population not migrating from the region. He writes:

“...the disappearance of cemeteries and material culture during the course of the First Dynasty does not, in all probability, indicate a complete exodus from Lower Nubia of the indigenous A-Group population but rather a change of their ethnic roles, a change that may have been facilitated by the presence of closely related Nubian groups living in areas adjacent to the old A-Group habitat. Thus it is likely that, while some people migrated or were deported to Egypt, some stayed on as nomadic pastoralists...especially in the regions between Lower Nubia and the Red Sea hills, and some moved further south, away from the raiding Egyptians.”⁴⁷⁶

This combined evidence, if the textual interpretations are correct or close to correct, may suggest that the dissolution of the A-Group was the result of not one Egyptian invasion, but a series of such events, beginning with the reign of King Aha (as evidenced by the ivory label) and continuing into Djer's reign, followed somewhat later by the raids of Khasekhem. The result of this continued warfare may have been to drive most of the A-Group population into a nomadic pastoral type of existence into the deserts on the fringes on the Nile Valley. Sadr has written about the advent of warfare as one of the primary driving forces in the development of nomadism, indicating that warfare and other factors should be viewed as alternatives to ecological models, which have traditionally been used to “...universally explain nomadism.”⁴⁷⁷ Sadr seems

⁴⁷⁶H.-Å. Nordström, 1972, vol. 3.1, *op. cit.*

⁴⁷⁷K. Sadr, 1991, *op. cit.*, p. 1.

supportive of the theory that Egyptian conflict with Nubia could have led to the A-Group abandonment of Lower Nubia. The author writes:

“The magnitude of this conflict may be indicated by a hiatus in occupation of all archaeologically known stretches of the Nile Valley south of Egypt’s ancient border after 3000 BC and until about 2500 BC. Shortly after power in Egypt became centralized at the beginning of the Early Dynastic Period, the A-Group occupation of Lower Nubia abruptly ended...The only archaeological remains of Lower Nubia dating between 3000 and 2500 BC are Old Kingdom Egyptian fortified towns,...which lead to the speculation that conflict drove the A-Group population into the deserts bordering the Nile.”⁴⁷⁸

Sadr further suggests that the Egyptians may not have stopped at Nubia but continued their invasions up the Nile, thus securing their means of access to the Sudan through the Nubian Nile Valley. Sadr writes:

“Interestingly, the shock of Egypt’s campaigns may even have rippled as far south as the Middle Nile region. There are no known archaeological remains in the Middle Nile Valley which postdate the Late Neolithic occupation at Kadada (ca. 3000 BC at the latest...). Not until the Meroitic times (first millenium BC) did populations return to that stretch of the Nile in any numbers. Even in the hinterlands of the Middle Nile, Shaqadud seems to have been abandoned until ca. 2600–2700 BC, when a late Neolithic occupation was resumed...

Conflict of this magnitude clearly disrupted existing economic relations between Egypt and her hinterlands through the intermediary of the A-Group. Now, if the displaced Lower Nubian A-Group turned to nomadism in the hinterlands, the conflict model could be supported.”⁴⁷⁹

Taking the analysis another step further, we might postulate from the ‘evidence’ of Snofru’s Fourth Dynasty text, that the invasion of the presumably pastoral people of the text could represent the continued persecution of the A-Group population by the Egyptians after the A-Group peoples retreated from the Nile Valley into the desert regions. This continued conflict, combined with

⁴⁷⁸*Ibid.*, p. 93.

⁴⁷⁹*Ibid.*, p. 94.

the obvious result of the breakdown of Nubian/Egyptian trade relations as outlined by Nordström, seems to be the best combination of factors that explain the fate of the A-Group. One may further speculate that in time, some A-Group people returned to the Nile Valley, thus beginning the C-Group phase, and thereby explaining the origin of that culture. The possibility of this is supported by the fact that nomadism, as it is now understood, is not necessarily a fixed state. According to Sadr, a population could "...evolve and devolve rapidly to and from nomadism,"⁴⁸⁰ even in so short a space of time as a year or two. A temporary shift to nomadism by the A-Group population could also easily explain the lack of a substantial archaeological presence in the Lower Nubian Nile Valley during the period of the so-called hiatus.

⁴⁸⁰*Ibid.*, p. 10.

CHAPTER 4: – AN ASSESSMENT OF A-GROUP ORIGIN AND RELATIONSHIPS

4.1. A-GROUP ORIGIN AND NUBIAN RELATIONSHIPS

It is extremely difficult to define the origin and earliest relationships of the A-Group because so little is known of the first phase of the culture in comparison with the Classic and Terminal A-Group. Furthermore, in my opinion the primary problem with defining the Early A-Group is the inability to understand at present the correct relationship between the two distinct and very different sub-phases of the Early A-Group, which appear to have coexisted within their respective geographic limits in Lower Nubia. These are (1) the Khor Bahan culture in northern Lower Nubia, the Egyptian likeness of which is now well established, and (2) the more indigenous sub-cultures of the Kubbania, Dakka, and the Gezira Dabarosa regions.

Despite Reisner's assessment that the Khor Bahan 'culture' was an outgrowth of the Amratian in Upper Egypt, it is still difficult to prove whether or not the Khor Bahan population was Egyptian. The essential problem seems to be one of proving the act of migration from archaeological evidence. Reisner certainly assumed a southward Egyptian migration into Lower Nubia, without considering, alternatively, that the Khor Bahan population may have been Nubian with strongly Egyptianized qualities. Despite the lack of evidence for migration, the idea proposed by Trigger of a predominantly Egyptian Bahan culture coming into contact with an indigenous Dabarosa phase to form the Classic A-Group, has been widely accepted. According to Nordström, the indigenous group, once having come into contact with the Amratians, "...received cultural stimuli of such significance that their socio-economic

structure was transformed.”¹ As we have already seen (Chapter 2 above), Junker seems to have been the only scholar to have argued for an indigenous origin for the earliest phases of the A-Group, but Nordström has noted that this is problematic because the theory is based on cemetery remains only and excludes evidence from habitation sites.² However, one cannot ignore the evidence for continuity between the earlier Nubian cultures and that of the A-Group. The following discussion attempts to establish and define Early A-Group cultural links with other indigenous cultures of Nubia and the remainder of the Sudan. To accomplish this, emphasis is placed here on comparisons of ceramics, and less so on lithic comparison. The reason for this is that generally the ceramics of any given industry are better published than the lithic material, and ceramic evaluations are more consistent between cultures than for the lithics. Although most researchers make use of Tixier’s lithic typology³ for the Sudan, the reader should be aware that those of Bordes⁴ and Heinzelin⁵ are also sometimes used. Needless to say, this has created some inconsistencies in evaluations of finished tool types. Furthermore, as Marks has pointed out with regard to his work at Shaqadud, “traditionally ceramics are much more sensitive indicators of change than are chipped stone tools.”⁶ It is on this premise that much of the work of this chapter is undertaken.

¹H.-Å. Nordström, 1972, *Neolithic and A-Group Sites*, vol. 3.1, p. 28.

²*Ibid.*

³J. Tixier, 1963, *Typologie de l'épipaléolithique du Maghreb, Mémoires du Centre de recherches anthropologiques, préhistoriques et ethnographiques*.

⁴F. Bordes, 1950, “Principes d’une méthode d’étude des techniques de débitage et de la typologie du paléolithique ancien de moyen,” *L’Anthropologie* 54: (no.1-2): 19-34.

⁵J. de Heinzelin, 1962, *Manuel de typologies des industries lithiques*.

⁶A. E. Marks, 1991c, “The Stone Artifacts from Shaqadud Midden,” in *The Late Prehistory of the Eastern Sahel: The Mesolithic and Neolithic of Shaqadud, Sudan*, edited by A. E. Marks and A. Mohammed-Ali, p. 112.

The Qadan

The Qadan is discussed here only as a background to those Lower Nubian cultures that directly preceded or were contemporary with the A-Group. The Qadan fits into the sequence of aceramic cultures in Lower Nubia, and into the process of the so-called Nilotic adjustment, which is characterized by a predominantly microlithic stone tool industry based on the increasing utilization of local Nile pebble. According to Nordström, this Nilotic adjustment is "...primarily expressed in terms of changes of the technological and typological features of the lithic material...for example, a shift from ferrocrete sandstone to Nile pebble, an increase of microlithic tools, [and] a high frequency of burins."⁷ Nordström also writes that the Qadan "...is regarded as an indigenous evolution of the Gemaian which is centered at the Second Cataract."⁸ Thus the Qadan should in no way be considered the earliest of Nubian indigenous cultures.⁹ Marks has summarized its most important aspects as follows:

"Of all the Nubian Final Stone Age industries, the Qadan is the best represented in the northern Sudan with 16 sites of this industry either excavated or systematically collected...Stratigraphically, the Qadan industry occurs in the upper portion of the Sahaba formation. On the basis of this stratigraphy and radiocarbon dates, the Qadan should most probably be dated between 13,000 B.C. and 8,000 B.C., although the terminal date is still open to question. Qadan sites are located from Gemai, south of the Second Cataract, north to Ballana...The Qadan...has been typologically seriated into a number of 'stages,' but the clearest manifestation of

⁷H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 6.

⁸*Ibid.*, p. 7.

⁹The overall sequence of aceramic Nubian industries is: Early Stone Age, Middle Stone Age, Upper Stone Age (Khormusan Gemaian, and Sebilian industries), and the Final Stone Age (Halfan, Qadan, Arkinian, and Shamarkian industries). For an introductory discussion of these industries see A. E. Marks, 1970, *Pre-ceramic Sites*.

this industry, as a distinct entity, occurs in what has been called the Middle Qadan...”¹⁰

This does not mean, however, that the Early Qadan phase was devoid of important developments. It seems that lunates made their first appearance in Lower Nubia at this time, but it is believed they did not originate in Lower Nubia or with the Qadan. Shiner writes:

“There is good reason to believe that the lunate is borrowed from outside of Nubia. If it came to Nubia along with the concept of compound hafted tools, then this innovation is primarily responsible for the transition from Gemaian to Qadan.”¹¹

The Early Qadan examples bear the sickle sheen that is characteristic of tools used for harvesting plants. Combined with the discovery of grinding stones, this attests to the existence of a grain processing economy already at the time of the Early Qadan. Nordström writes:

“Wendorf has suggested that the Qadan lunates and other tools with similar lustrous silica deposit were used as sickles during an early part of an ‘intensive collecting’ stage, when suitable wild species of Gramineae may have been available in the Nile valley. This stage did not lead to a transformation of the economy in terms of agriculture.”¹²

Shiner also argues that lunates link the Qadan with eastern and northern Africa, in contrast to the Abkan, which appears to be more localized within the area of Lower Nubia. According to the author,

“The presence of lunates in Qadan assemblages tends to make them appear similar to industries both in North and East Africa. The Capsian of North Africa runs heavily to long, slender backed blades made on true blades, triangles, and trapezes...Ibero-Maurusian or Oranian assemblages are

¹⁰A. E. Marks, 1970, *ibid.*, p. 21

¹¹J. L. Shiner, 1968b, “The Cataract Tradition,” In *The Prehistory of Nubia*, vol. 2, edited by F. Wendorf, p. 629.

¹²H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 7.

very similar. Although blade tools became common in later Qadan assemblages, they are not of the same quality. For the most part, blades in Nubia are long flakes. Again, we seem to be confronted with somewhat parallel developments with North Africa oriented more toward blades and geometrics and Nubia toward lunates and flake tools."¹³

However, a look at the trends in Qadan lithic traits shows not only a development toward the Abkan industry but a continued evolution of the same characteristics into the A-Group. In the Early Qadan scrapers were more common than in the Gemaian, occurring at a frequency of 21.8 per cent, but decreased steadily in proportion through the Middle and Late Qadan (to 3.8 per cent), only to be revived again in the Final Qadan. The Final Qadan proportions closely approximate the frequency seen in the Early Abkan. We have already seen that scrapers were the most common tool type in the A-Group, comprising about 25 per cent of the lithic assemblages. Thus the frequency of scrapers in the Early Qadan closely approximates that of the A-Group. Initially the same trend was exhibited by Qadan lunates, which increased in frequency from 9.2 per cent in the Early Qadan to 38.2 per cent in the Late Qadan. However, by the time of the Final Qadan there was a sudden decrease in lunate production, again marking the transition to the Abkan. The frequency of burins fluctuated only in minor amounts from 5.8 per cent in the Early Qadan to 9.8 per cent in the Late Qadan, and dropped off slightly by the end of the Qadan. Borers and groovers however, had become increasingly more significant by the end of the Qadan industry, and would remain significant in numbers into the A-Group. The microlithic tool index rose constantly through the first three phases of the Qadan industry (64.1 to 87.6), but dropped off slightly by the time of the Final Qadan. This trend continued into the A-Group, where percentages, as we have already seen, are between

¹³*Ibid.*, pp. 628-629.

about 54 and 68 per cent. Precisely the same trend is observed in the blade tool index, although the reduction during the Final Qadan was considerably more severe than the drop in the microlithic index. Another noticeable change in the Late and Final Qadan is the appearance of Egyptian flint, albeit in very small amounts. None of this material was found in the Early and Middle Qadan sites, and its presence attests to the expansion of Lower Nubian contacts to the north. It seems most likely that the overall increase in Egyptian flint in the Abkan and A-Group sites attests to the continuous strengthening of Lower Nubian/Egyptian relations over time. In addition, Shiner notes that in the Final Qadan “other transitional changes in the technology are shown by the decrease in faceted platforms, and the increase in flakes struck directly from cortex. In the following Ceramic Age, careful preparation of cores becomes less and less important.”¹⁴

Shiner viewed the introduction of ceramics, which occurred at the transition stage from the Final Qadan to the Early Abkan,¹⁵ as a second importation into Lower Nubia, i.e., following the importation of lunates into the Qadan Industry. Although ceramics form the “...generic link...thought to exist between the generally aceramic Qadan and the ceramic Abkan,”¹⁶ little may be said about the earliest examples because of the paucity of specimens.

The Abkan

Cultural continuity between the Final Qadan and the Abkan industry has been well illustrated by Shiner through his investigation of the lithics

¹⁴J. L. Shiner, 1968b, *op. cit.*, p. 610.

¹⁵N.B. Shiner's consideration of the Qadan involved four stages, Early, Middle, Late, and Final Qadan.

¹⁶H.-Å. Nordström, 1972, *op. cit.*

from two Early Abkan sites, CPE 2002 and CPE 1029.¹⁷ The trends in lithic development and decline begun in the Final Qadan were continued in the Early Abkan. This is exhibited by (1) a continuing decline in the microlithic tool index and the blade tool index, with larger tools becoming more numerous, (2) an increase in the frequency of cortex platforms, (3) greater use of quartz, (4) an increase in the proportion of denticulated tools, (5) a decrease in the frequency of lunates and burins, and (6) a significant increase in groovers and borers.¹⁸ Shiner remarks that “the hallmark of the industry is the groover which together with the borer make up a high percentage of all tools.”¹⁹ In addition, Abkan lithic technology is regarded as having undergone a marked decline from the Qadan, as exhibited by inferior flaking and chipping and the fact that numerous tools were made on poorly shaped flakes. Shiner emphasizes that this new characteristic of the Abkan should not be taken as evidence of a decline of the Qadan industry in its final stages, and he implies that it may indicate instead a new aspect of the economy. He writes:

“There is no reason to think that the Qadan ‘culture’ was declining or falling apart. The Abkan industry is not a withered version of [the] Qadan, in spite of a decline in stone technology. If for no other reason, a strong continuation is inferred from the quality and size of Abkan sites. The answer to the changes must be sought in terms of new interests, needs and values.”²⁰

As for what these new interests were it is difficult to decide. Shiner postulates a decrease in hunting activities, which may explain the decline in lunates and burins, but changes in other tool frequencies such as groovers and borers

¹⁷Discussed in J. L. Shiner, 1968b, *op. cit.*, pp. 612-616.

¹⁸For actual percentages in the Late Qadan, Early Abkan, and Developed Abkan, see the summary table entitled “Typological and Technological Change” in *ibid.*, p. 626.

¹⁹*Ibid.*

²⁰*Ibid.*, p. 627.

cannot be so easily explained because of our lack of knowledge about the true function of these tools. If hunting activities did indeed decline, then one should expect an increase in some other type of economic or subsistence pursuit, but there is no evidence to show a marked preference for another type of economy. According to Shiner, "grinding stones occur, though they are not numerous,"²¹ and hence we cannot propose a hypothesis of greater agricultural activity. The importance of fishing is attested by varied fish remains, including Nile perch and catfish, but as Nordström points out, "there are no implements in the Abkan tool kit that can be connected conclusively with fishing, such as net sinkers, fish hooks or spearing equipment."²² It has been assumed by Shiner and Myers²³ that stone fish traps would have been the preferred method of catching fish in the cataract regions where Abkan sites are predominantly located, but no archaeological examples of such traps are known. Hence Shiner's statement that Abkan economy "...would have been heavily based on fishing"²⁴ remains unsupported.

Abkan ceramics serve to firmly link this culture with the A-Group with a far greater degree of certainty than the Abkan lithic material. By the Terminal Abkan phase²⁵ a varied number of forms and decorations had developed. These are summarized by Nordström as follows:

²¹*Ibid.*

²²H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 15.

²³Respectively, J. L. Shiner, 1968b, *op. cit.*, p. 625; O. H. Myers, 1958, "Abkan Re-excavated," *Kush* 6, Plate XXXIV, and 1960, "Abka Again," *Kush* 8: 175. Myers claims that the type of fish trap seen in the ancient drawings are still used in the Abka area today.

²⁴J. L. Shiner, 1968b, *op. cit.*, p. 627.

²⁵This phase was added to Shiner's already existing two phases (Early and Developed Abkan) by Nordström (1972, *op. cit.*, vol. 3.1, p. 13), through the discovery of late Abkan sites in the Scandinavian concession.

“Abkan pottery is made up of an extensive sherd collection characterized by relatively soft to moderately hard, sand-tempered wares with different combinations of surface colour and surface treatment (Ware Family M...). Wares with coarse, hand-smoothed or scraped exterior surfaces (Ware M1.01 and M1.02) are very common in the present [SJE] material. Another predominant ware is M2.01, which has thin or moderately thick vessel walls with a plain burnished exterior. This ware is the earliest in the great array of burnished or polished hand-made wares developed in Nubia. Rippled surfaces also occur in the Abkan pottery, being a diagnostic feature of Wares M2.02 and M4.12, the latter being dated in the Terminal Abkan. These are the forerunners of the rippled wares characteristic of the Nubian A-Group.

...The predominant patterns of the decorated coarse or burnished sherds of the Abkan consist of parallel rows of impressed triangular or rectangular dots and of various zigzag patterns executed by a rocker stamp with a serrated or plain edge...Herring-bone patterns of dotted lines are also represented. Some sherds of this family also have incised patterns made up of short parallel lines combined with impressed elements. Rim top decoration also occurs, especially on the thin, black-mouthed wares of Group M4, which are generally of Terminal Abkan date.”²⁶

To summarize further, the ceramic characteristics that are shared between the Abkan industry and the A-Group are:

- (1) Burnished surfaces leading later to rippling of exterior surfaces,
- (2) zigzag patterns made with a rocker stamp,
- (3) black-mouthed wares,
- (4) milled rims,
- (5) herring-bone patterns consisting of dotted lines,
- (6) parallel rows of impressed rectangular dots,
- (7) parallel rows of impressed dots,
- (8) the practice of scraping the exterior and interior surfaces of some vessels, usually with a tool of some kind, and
- (9) general colour schemes such as brown, black, grey, and red-and-black, which are common to both cultures.

Nordström has argued for a large degree of contemporaneity between the Terminal Abkan and the Early A-Group cultures, wherein each culture was

²⁶H.-Å. Nordström, 1972, *ibid.*, pp. 14-15.

influenced materially and ideologically by the other.²⁷ Geographically, however, both cultures were distinct. The author writes:

“The evidence at present points to the conclusion that the Terminal Abkan (and perhaps, a part of the Developed Abkan) in the Second Cataract area and Batn el-Hagar was contemporary with the Early A-Group in the northern part of Lower Nubia.”²⁸

As far as our present knowledge indicates, the Abkan seems not to have expanded further north than Wadi Halfa, and the industry is known “...at least as far south as Ambikol, Melik en-Nasr, and Ukma.”²⁹ Radiocarbon dates are not numerous for any phase of the Abkan culture, but Nordström lists two. One is from the single Káragan site (AS 11-I-16),³⁰ which Carlson initially judged to be immediately pre-A-Group in date, and which Nordström has labelled Terminal Abkan,³¹ and the other is from Ambikol East, Site 16-S-10. These dates are, respectively, 4935 ± 130 B.P. and 5330 ± 80 B.C. Nordström also views the Abkan as being related to “...a pre-agricultural technocomplex, which was spread over a large territory in the central parts of the Sudan and in northern Chad.”³² It should be noted, however, that further interpretations about the Abkan are problematic because of the complete lack of burial evidence for this culture. As with the Post-Shamarkian and Khartoum Variant (discussed below), no graves or cemeteries are known that can be dated to the Abkan culture. Furthermore, there is not a substantial amount of settlement data that may be used to generate a settlement pattern as has been

²⁷*Ibid.*, p. 28.

²⁸*Ibid.*

²⁹*Ibid.*, p. 16.

³⁰Discussed above in Chapter 2 under the sub-heading “The University of Colorado: Gamai West to Firka.”

³¹H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, pp. 13 and 17.

³²*Ibid.*, p. 16.

accomplished for the A-Group. The palaeoenvironment may be to blame for the paucity of settlement sites, as "...a rise of the Nile level at the time between 5200 and 4800 B.P. may have covered with alluvial silt, many habitation remains in Lower Nubia from the Terminal Abkan/Early A-Group phase."³³ A further complication is that in many instances it is difficult to distinguish between sites of Terminal Abkan and Early A-Group date. Many sites in the Scandinavian concession, for example, are thus given a combined designation.

The Post-Shamarkian Industry

The Post-Shamarkian industry, an outgrowth of the Shamarkian, is known from only two sites near Ashkeit and Debeira in the Second Cataract region, DIW-50 and DIW-4.³⁴ The sites exhibit an extensive lithic industry similar to, yet distinct from that of the Shamarkian, with little of any other type of material remains. Nordström views the industry as "...a local counterpart to the Khartoum Variant and the Abkan, which both display a much wider geographical distribution."³⁵ He also informs us of two radiocarbon dates, one from each site, 5600 ± 200 B.P. for DIW-50 and 5200 ± 50 B.P. for DIW-4.³⁶

³³*Ibid.*, p. 29.

³⁴Both published in R. Schild, M. Chmielewska, and H. Wiechowska, 1968, "The Arkinian and Shamarkian Industries," In *The Prehistory of Nubia*, vol. 2, edited by F. Wendorf, pp. 748-767. The designation of DIW-4 is somewhat confusing in the literature. Some authors consider it of Early A-Group date. See: A. E. Marks and C. R. Ferring, 1971, "The Karat Group: An Early Ceramic Bearing Occupation of the Dongola Reach, Sudan," in *The Prehistory and Geology of Northern Sudan*, edited by J. L. Shiner, pp. 187-275; F. Wendorf, R. D. Daughtery, and J. Waechter, 1964, "The Museum of New Mexico-Columbia University Nubian Expedition: The 1962-63 Field Programme," *Kush* 12: 12-18.

³⁵H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 8.

³⁶These dates were originally reported as 3650 ± 200 B.C. and 3270 ± 50 B.C. respectively, and were both obtained from charcoal samples. See R. Schild, M.

In terms of the main subsistence base for the Post-Shamarkian, it is not possible to say much, as no evidence of faunal exploitation, animal domestication, agriculture, hunting, fishing, or gathering exists. However, the excavators have assessed that some shift in the economy from Shamarkian times is indicated by the increase in site size, which is up to five times larger.³⁷ There was also a division of settlements into smaller units that likely represented the single family household, which is not seen in the Shamarkian. Little may be said about the ceramic material from the site, except that it is of the Neolithic tradition. Most of the two-hundred or so sherds were very small and undiagnostic, but a further problem is that they appear to be unstudied and unpublished.³⁸ Unfortunately, no burials belonging to this industry were found. However, in terms of the lithic industry, the Post-Shamarkian shows some surprising new developments from the Shamarkian. Most notable is the appearance of side-blow flakes and planes at both sites, which are likely diffused cultural elements from the Faiyum. In addition, there is a significant proportion of imported Egyptian flint in the finished tool assemblage, which is indicative of the borrowing or diffusion of materials from the north, or trade with Egypt. The presence of one amazonite bead and the likelihood of the importation of this material (if not the product itself) from northern Tibesti, testifies to western links for the Post-Shamarkian. In addition, Chmielewska notes that certain characteristics show Saharan links. The author writes:

“The high percentage of the retouched blades and multiple notches on blades and flakes occur in the Neolithic assemblages with Capsian tradition. They are redistributed

Chmielewska, and H. Wiechowska, 1968, *op. cit.*, pp. 757 and 766.

³⁷*Ibid.*, p. 766.

³⁸See A. Mohammed-Ali, 1982, *The Neolithic Period in the Sudan, c. 6000–2500 BC*, British Archaeological Reports, International Series, S139, p. 139.

on the wide territory of Northern Africa including the Sahara.”³⁹

These types of links at this early date in Lower Nubia, i.e., predating or contemporary with the Early A-Group, indicate that Nubia was already well within the sphere of Neolithic development in northeast Africa. This argues heavily for the A-Group culture as a product of this widespread Neolithic revolution.

More analogous to A-Group lithic characteristics are the manufacture of tools from Nile pebble, predominantly chert and agate. Mohammed-Ali writes that among the new materials, Nile pebble “...counts for 73.5 per cent in DIW-4 and 65.5 per cent in DIW-50, while in finished tools it forms 61.8 per cent at DIW-4 and 58.5 per cent at DIW-50.”⁴⁰ This certainly places the Post-Shamarkian within the context of the so-called Nilotic adjustment. Like the A-Group, the Post-Shamarkian is a microlithic industry, although as Mohammed-Ali informs us, “...its technological frequencies cannot yet be worked out.”⁴¹ It should be noted that the main difference between A-Group and Post-Shamarkian lithic industries is not so much in the tool types exhibited, but in their relative frequencies. While differences in frequencies have yet to be properly interpreted in terms of economic activities, ethnic identity, etc., they are generally held to be highly significant. For the two Post-Shamarkian sites Chmielewska writes:

“We see a high frequency of borers and notched pieces, and an increase in perforators and burins [from the Shamarkian], if we take into consideration burin spalls and specimens with retouched edges. End scrapers do not increase very much. Backed bladelets decrease, and two-thirds of the types which occur in the Shamarkian sites are missing. The quantity of

³⁹R. Schild, M. Chmielewska, and H. Wiechowska, 1968, *op. cit.*, p. 767.

⁴⁰A. Mohammed-Ali, 1982, *op. cit.*, p. 125.

⁴¹*Ibid.*, p. 129.

geometric tools show no major change, but trapezes are represented mainly by arrow points."⁴²

It must also be noted that quartz occurs in high frequencies in the debitage of DIW-50, as it does in A-Group habitation sites, and in the finished tools at DIW-4. The relative paucity of end scrapers (1.1 per cent for DIW-4, for example) in the Post-Shamarkian may suggest that hide preparation played a less significant economic role than in the A-Group culture. A comparative summary of the most significant Post-Shamarkian lithic traits are:

- (1) A higher index of borers and groovers than the Shamarkian (7.4),
- (2) a higher index of *micropoinçons* (double-backed borers) than the Shamarkian (20.4),
- (3) a lower proportion of backed tools and lunates than the Shamarkian (20.4),
- (4) a greater use of quartz than in the Shamarkian,
- (5) the presence of imported Egyptian flint, not seen in the Shamarkian,
- (6) the presence of tools made with the pressure-retouch technique, not seen in the Shamarkian,
- (7) an absence of C-C and J-shaped geometrics,
- (8) the presence of side-blow flakes and planes (protogouges), which suggests links with the Faiyum, and
- (9) a relatively high quartz debitage index (eg. 39.1).

The Khartoum Variant Industry

This complex is certainly of pre-A-Group age, but its exact chronological place in Lower Nubian prehistory is still debatable. Nordström considers the Khartoum Variant to be contemporary with the Early Abkan phase,⁴³ but Haaland argues that the Abkan is later than the Khartoum Variant.⁴⁴ Unfortunately, no secure radiocarbon dates are available for the Khartoum

⁴²R. Schild, M. Chmielewska, and H. Wiechowska, 1968, *op. cit.*, p. 766. For all lithic types and frequencies see Table 21, p. 756 for DIW-50 and Table 22, p. 762 for DIW-4.

⁴³H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 17.

⁴⁴For her argument see R. Haaland, 1972, "Lithic Artifacts," in *Neolithic and A-Group Sites*, by H.-Å. Nordström, vol. 3.1, p. 115 ff.

Variant, although Nordström estimates a range of c. 6500 to 5500 B.P.⁴⁵ This is based on radiocarbon chronology from Chad and the Faiyum. The Khartoum Variant has provided considerably more lithic material than the Post-Shamarkian, as well as ceramics from a total of thirteen known sites. All sites with the exception of the complex of newly discovered sites on Sai Island (not listed here),⁴⁶ are located in the Second Cataract area. They are:

- (1) SJE 428 or CPE⁴⁷ 1045 - near the Khor Musa Wadi
- (2) CPE 2006 - near Wadi Halfa
- (3) CPE 277 - near the Khor Musa Wadi
- (4) CPE 2016 - near Abka
- (5) CPE 1022 - near the Khor Musa Wadi
- (6) CPE 626 - near Wadi Halfa
- (7) CPE 628 - near Wadi Halfa
- (8) DIW-5 - at Debeira
- (9) CPE 1039 - at Jebel Sahaba
- (10) SJE 18A - at Faras East
- (11) Myer's Site V - Abka (partial Khartoum Variant remains only)
- (12) Myer's Site IX - Abka (partial Khartoum Variant remains only)
- (13) AS 6-F-3 - Gezira Dabarosa

⁴⁵H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 12. Nordström has reported three radiocarbon dates for the Khartoum Variant, but they are from "uncertain context" (*ibid.*, p. 251, Table 38). I have decided therefore, to disregard these dates.

⁴⁶These sites are not numbered or described here because they have not been investigated. They were discovered by the French Archaeological Unit in 1978, but were abandoned because of the cessation of their work at Sai in 1981, only resumed in 1993. (See F. Geus, 1997, "Two Seasons in Sai Island (1993-1995): A Preliminary Report," *Kush* 17: 98-99). Plans are now being formulated for their investigation, which should yield new and exciting results for the Khartoum Variant industry. Geus writes: "Three of them are particularly interesting...they are linear settlements apparently including habitation structures, a remarkable fact for this industry which, until now, has been mainly documented through denuded sites providing only rather poor surface series of lithics, ceramics and, more exceptionally, faunal remains" (*ibid.*, p. 98). It may be hoped that these as yet unrevealed number of sites will shed new light on A-Group relationships. It should be added that the island of Sai has not yet produced remains contemporary with the A-Group, but it seems fully expected that it will. One Neolithic site has so far been discovered and is soon to be investigated. See J. Vercoutter, 1986, "L'île de Sai (1969-1981)," in *Nubische Studien*, edited by M. Krause, p. 200.

⁴⁷Combined Prehistoric Expedition site.

As the name implies, the Khartoum Variant shares affinities with the Early Khartoum and Khartoum Neolithic traditions to the south, particularly in terms of ceramic attributes. For this reason the culture was originally considered to have been the result of a migration of new people, presumably from the Khartoum area, into Lower Nubia.⁴⁸ However, it must be noted that Shiner's migration theory was based on ceramic material that has not been studied in great detail. It seems equally likely that trait diffusion could explain the character of the Khartoum Variant industry in Lower Nubia. Furthermore, the lithic characteristics of this tradition, when taken into account, show that some features of the Khartoum Variant resemble those of the Post-Shamarkian. This circumstance may allow for a re-assessment of Khartoum Variant relationships. Haaland has found that "...there is a close relationship between the Post-Shamarkian and the Khartoum Variant in terms of the technological and typological indices of the stone artifacts."⁴⁹ Thus, it is probably best, as Nordström now suggests, to regard the Khartoum Variant as "...a Nubian industry with a specific combination of lithic artifacts and pottery. The cultural context is thus determined by this combination and not by lithic material or potsherds alone."⁵⁰ The following features typify the Khartoum Variant lithic assemblages:

⁴⁸J. L. Shiner, 1968c, "The Khartoum Variant Industry." In *The Prehistory of Nubia*, vol. 2, edited by F. Wendorf, p. 789.

⁴⁹R. Haaland, 1972, *op. cit.*, p. 106. The reader should note that Haaland has been extremely contradictory in her statements about these relationships. Elsewhere in the same publication she has written: "No correlation between the Post-Shamarkian on the one hand, and the Khartoum Variant-Abkan industries, on the other, has yet been established. Thus there are no explicit data about the technological and typological traits which may be diagnostic of the Post-Shamarkian in relation to these other groups" (*Ibid.*, p. 96). However, the data speak for themselves in support of very similar typological indices.

⁵⁰H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 9.

- (1) A low index of borers and groovers, but comparable with the Post-Shamarkian (2.2 to 7.1),
- (2) a high frequency of backed tools and geometric tools,
- (3) a high proportion of blade tools,
- (4) a limited use of quartz in the debitage,
- (5) the presence of exotic flint scrapers, suggesting links with Egypt,
- (6) the presence of *micropoinçons*,
- (7) the presence of side-blow flakes and leaf-shaped points,
- (8) the presence of bifacial points with pressure retouch, and
- (9) a generally high microlithic tool index, comparable with the A-Group (54.4 to 92.6).

The Khartoum Variant shares with the Post-Shamarkian the presence of exotic flint scrapers, *micropoinçons*, side-blow flakes, leaf-shaped points, and bifacial points. It must be noted that these characteristics are not found in either the Early Khartoum or the Khartoum Neolithic lithics, and thus suggests entirely northern links through these traits.

The ceramics of the Khartoum Variant are characterized by a sandy or micaceous fabric, which is virtually identical to the Early Khartoum and Khartoum Neolithic wares. Nordström describes the Khartoum Variant wares as follows:

“...characterized by hard, dense, well-fired wares with significant inclusions of fine-to medium-textured grains of quartz and feldspar (Ware Group K1). The two predominant wares are K1.01 and K1.02, the latter with conspicuous amounts of bladed mica...The surfaces of these wares are most often light red or pale grey, always uncoated and never burnished. The texture on the exterior surface is usually gritty like sandpaper, while the interior sometimes is fairly smooth. The exterior sides on a great majority of sherds are decorated with parallel or irregular rows of impressed dots, principally executed with a rocker stamp...Some sherds display a wavy-line or a zigzag pattern of dot lines. At the orifice there is often a border of single or double rows of dots or short strokes, sometimes arranged as a herring-bone or a criss-cross pattern, or a row of fingernail impressions. The

rim tops are sometimes decorated with dots or short transverse strokes.”⁵¹

All of these decorations except for the wavy line motif are shared by the A-Group, in addition to numerous others, including: (1) horizontal rows of rectangular dots on vessel bodies,⁵² (2) parallel horizontal lines on body sherds,⁵³ (3) parallel rows of shortened V's on body sherds,⁵⁴ (4) small leaf-shaped impressions on rim bands⁵⁵ (5) combination leaf-shaped arrangement on body sherds⁵⁶ (6) crescent shapes in a straight line on rim bands,⁵⁷ (7) rows of triple-dot triangles on body sherds,⁵⁸ (8) short parallel oblique strokes on body sherds,⁵⁹ and (9) a combination of oblique and horizontal strokes on rim bands.⁶⁰ In all other respects the Khartoum Variant ceramics are akin to those of the Khartoum area and, to a limited extent, the Abkan wares, especially in terms of their exterior (grey) colour.

Nordström adds that Shiner's original assessment of a fabric impression for most of the exterior decoration is likely not correct.⁶¹ It is also likely that most Khartoum Variant sherds came from large hemispherical bowls that were used for storing foods and transporting goods over short distances.

⁵¹*Ibid.*

⁵²H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 121: 9.

⁵³*Ibid.*, Plate 123: 11 and 17.

⁵⁴*Ibid.*, Plate 123: 6.

⁵⁵*Ibid.*, Plate 121: 5.

⁵⁶*Ibid.*, Plate 121: 8.

⁵⁷*Ibid.*, Plate 121: 9, 10, and 11.

⁵⁸*Ibid.*, Plate 212: 7.

⁵⁹*Ibid.*, Plate 122: 15.

⁶⁰*Ibid.*, Plate 121: 19 and 20.

⁶¹*Ibid.*, vol. 3.1, p. 9.

Nordström writes that “their shape and net weight could not have been very practicable for long transportations.”⁶²

As with the Post-Shamarkian, little may be said about the economic and subsistence patterns of the Khartoum Variant people, although fish and mollusc remains attest to the exploitation of riverine resources. There is no evidence whatsoever of plant or animal domestication, although the presence of grinding implements such as hammerstones and grinding stones suggests that food may have been prepared using these devices. However, there are no remains that link these implements directly with food preparation, and thus the alternative function of pigment grinding must also be considered.

The settlement pattern of the Khartoum Variant has been described as “homogeneous,”⁶³ consisting of small unsheltered campsites that “...could hardly have been occupied by more than small bands of a few nuclear families.”⁶⁴ At least one such site (CPE 2016), according to Shiner, may have been a fishing camp because of its close proximity to the Nile.⁶⁵ Site 2016 was the only Khartoum Variant location to yield evidence of a habitation structure, in the form of a compacted mud floor.⁶⁶ Unfortunately, not enough of the feature remained to provide information about the type or size of the structure represented.

The existence of Khartoum Variant relationships with cultures other than the A-Group are now fairly well accepted even though very little is known about the precise nature of these cultural links. According to Haaland,

⁶²*Ibid.*

⁶³*Ibid.*, p. 10.

⁶⁴*Ibid.*

⁶⁵J. L. Shiner, 1968c, *op. cit.*, p. 780.

⁶⁶*Ibid.*, p. 777.

“In the Khartoum Variant phase there are specific artifact types that point to contacts with areas located to the north of Nubia, such as Kharga (the Peasant Neolithic), Fayum (the Fayum A culture), and Siwa...These types are the exotic flint scrapers, side-blow flint flakes, and planes...All these types are made from Egyptian flint. Possible sources for this flint are ‘either the Sinn el Kaddab Plateau, or...the limestone outcrops to the south of it. This last area remains largely unexplored...’ The flint artifacts in question may have come from these areas or from locations further to the north, such as Kharga or Fayum.”⁶⁷

It is not known whether raw flint or the finished tools were imported from Egypt, or both.

Despite these similarities in the material cultures of these regions, Nordström has cautioned, particularly with regard to the Peasant Neolithic of Kharga, that “...this similarity does not warrant any hypothesis of diffusion or migration from Kharga to Nubia.”⁶⁸ It should further be noted that there is little evidence in the Khartoum Variant of any cultural contact or links with the areas west of the Nile, such as Tibesti, unless one considers the ultimate source of the gouge to be of western origin. The absence of the amazonite stone is most notable, especially as it appears in the Post-Shamarkian industry and in areas to the north and south of Lower Nubia (Faiyum, Shaheinab, etc.). This situation led Shiner to conclude that the Khartoum Variant appeared “...quite impoverished,”⁶⁹ particularly in comparison with Shaheinab. Indeed, the specific and seemingly selective links in the Khartoum Variant create great confusion in the question of its true origins. Haaland’s attempt to determine whether the culture represents a new ethnic group in Lower Nubia through her examination of the lithics, has proven inconclusive.⁷⁰ It may well be,

⁶⁷R. Haaland, 1972, *op. cit.*, p. 114.

⁶⁸H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 12.

⁶⁹J. L. Shiner, 1968c, *op. cit.*, p. 789.

⁷⁰R. Haaland, 1972, *op. cit.*, p. 106ff.

according to Haaland, that Nubia at this time (just prior to the rise of the A-Group) was characterized by a series of distinct ethnic groups, each of which remained culturally unique "...in spite of a lively contact across ethnic boundaries and despite the fact that different groups may share many cultural traits."⁷¹

Early Cultures of the Dongola Reach

The five cultures of this region that were roughly contemporary with the A-Group in Lower Nubia were (1) the Karmakol industry (also known as the 'Early Khartoum Related Group'), (2) the Tergis Group, (3) the Karat Group, (4) the El Melik Group, and (5) the Pre-Kerma culture.⁷² The strategic location of the Dongola Reach in between the areas occupied by the Early Khartoum and Khartoum Neolithic populations on the one hand and the A-Group on the other, might lead one to think that all the Dongola industries were susceptible to influences from both north and south. However this appears not to have been the case. In terms of lithics and ceramics, the Karmakol, Tergis and El Melik Groups appear to have had very little in common with the A-Group, whereas the Karat Group and the Pre-Kerma culture were certainly much more closely linked with Lower Nubia.

The Karmakol industry shows remarkable similarities with the Early Khartoum and the Khartoum Neolithic to the south, and with their variant, the Khartoum Variant in the Second Cataract region. In addition, it appears

⁷¹*Ibid.*, p. 106.

⁷²It must be added that Neolithic remains, including ceramics, have been identified in the Letti Basin at Hambukol, but this material has not yet been published in any detail. It is hoped that this material, when studied, will strengthen the evidence for A-Group connections with this area of the Dongola Reach. See the two reports of K. Grzymski, 1997a, "Canadian Excavations at Hambukol, October-December 1993," *Kush* 17: 231-235, and 1997b, "Canadian Expedition to Nubia: The 1994 Season at Hambukol and in the Letti Basin," *Kush* 17: 236-243.

also to have had its own unique diagnostic peculiarities. Four of the seven sites of the Karmakol industry have been detailed by Hays,⁷³ N13, N40, N41, and N79. They appear to have been habitation sites characterized by both a microlithic flake tool industry and ceramics. Hays's account of the lithic technology is detailed and excellent, but for the sake of brevity, the predominant traits are summarized below.⁷⁴ I have added my A-Group comparisons to Hays's analysis.

- (1) A considerably lower number of scrapers than in the A-Group (range 3.71 to 11.72),
- (2) a lower proportion of notched tools than in the A-Group (range 3.70 to 7.82),
- (3) a higher percentage of truncated tools than in the A-Group (range 4.32 to 11.21),
- (4) a very low proportion of groovers (Hays's gravers) compared with the A-Group (range 0.00 to 2.59),
- (5) a lower number of borers than in the A-Group (range 0.86 to 2.26),
- (6) a much lower burin index than in the A-Group (range 0.00 to 0.62),
- (7) the occasional presence of gouges, not seen at all in the A-Group,
- (8) a higher microlithic tool index than in the A-Group (range 74.6 to 85.0), and
- (9) a considerably higher lunate index than in the A-Group or any other industry in Upper and Lower Nubia (range 25.14 to 46.33).

This last trait clearly separates the Karmakol Industry from the cultures of Nubia and brings it closer to the Khartoum area cultures, where similarly high (or higher) frequencies are seen in lunates. Unfortunately Hays does not comment on the possible significance of such a high lunate index in the Dongola region, but one may speculate that a heavy fishing economy may be represented, assuming that the tools were used as barbs or spears. However, there is little collaborative evidence in Hays's report that supports this hypothesis. No mention was made of fish remains, for example. However, the

⁷³T. R. Hays, 1971a, "The Karmakol Industry: Part of the 'Khartoum Variant Style,'" in *The Prehistory and Geology of Northern Sudan*, edited by J. L. Shiner, pp. 84-153.

⁷⁴All numbers quoted are in percentages and taken from either Tables 3 and 12 in *ibid.*, pp. 108 and 150 respectively.

four sites were near the river, and were seasonal, suggesting perhaps a series of connected seasonal fishing camps. Hays writes:

“All sites were located east of Ed Debba near the villages of Karmakol, Girra and Abu Dom on the south bank of the Nile...They were situated on a flat portion of the Girra pediment which was covered in places by small dunes...All sites were rather small in size and apparently represented a single (perhaps seasonal) occupation or campsite. Nonetheless, the concentrations of artifacts were quite dense and compact.”⁷⁵

The ceramic traits of the Karmakol further substantiate the strong Khartoum Variant relationships of this culture, particularly in terms of decoration. The decorative motifs common in the A-Group are noticeably missing in the Karmakol pottery, such as the rocker-stamp zigzag design and what Hays designates as fish net patterns and chevrons, the latter of which one assumes to be the equivalent of Nordström's herring-bone designs.⁷⁶ Present instead are wavy-line and dotted wavy-line patterns, with a variant of a straight line motif, as well as the so-called linear mat and woven mat designs. The only characteristics that may very loosely link the Karmakol wares with those of the A-Group are (1) milled rims on the tops of some rims, (2) a rim band decoration of impressed lines, and (3) a wash of red ochre that was applied to the vessels before decorating. Milled rims were much rarer than the latter two features. In addition to Khartoum area links through the wavy-line and dotted wavy-line motifs, Hays has noted that the woven mat motif figures predominantly in the wares of the Khartoum Variant tradition and in the Saroba complex near Khashm el Girba.⁷⁷ It is significant to note

⁷⁵*Ibid.*, p. 87.

⁷⁶For this and the following information see Table 9, in *ibid.*, p. 136.

⁷⁷*Ibid.*, pp. 139 and 142.

that the woven mat motif together with the linear mat design, comprise, on average, over 50 per cent of decoration types between the four Karmakol sites.

The temper types exhibited by the Karmakol wares include, predominantly, a grass tempered ware (over 80 per cent of sherds), as well as a quartz and sand temper and a quartz and mica temper, the latter of which is analogous to the micaceous wares of both the Khartoum Variant and the Early Khartoum ceramics. The lack of proper study of the Karmakol wares makes it difficult to be more precise about the comparisons of the micaceous wares.

Briefly, it should be noted that the coil technique was employed in making vessel bodies but not the bases, which were molded. The vessel walls were then shaped and thinned with a paddle and anvil. The coil technique has also been observed in the Khartoum Variant pottery.

Surprisingly, Hays provides no discussion of Karmakol chronology or its place, if any, in the evolution of Lower Nubian cultures. In his brief summary of the work in the Dongola region Shiner merely writes:

“If our comparative studies have indicated the accurate alignments, the Karmakol Industry is probably the oldest of the lot. Karmakol is a typical member of the so-called ‘Neolithic of Sudanese tradition’ in that the only link among the different local groups is a similar set of pottery designs.”⁷⁸

As to the date of “the lot,” Shiner places them between 4000 and 2000 B.C., which would make the Karmakol no older than 4000 B.C. I agree with this age estimation, but it should be emphasized that this places the Karmakol almost exactly in the middle of the date range given for the Khartoum Variant by Nordström (6500 to 5500 B.P.), allowing for a rough conversion from B.P. to

⁷⁸J. L. Shiner, 1971a, “Ceramic Sites in the Dongola Reach: A Summary,” in *The Prehistory and Geology of Northern Sudan*, edited by J. L. Shiner, p. 291.

B.C. In this case it might be proposed that the Karmakol, on the basis of its similarities with both the Khartoum area cultures and the Khartoum Variant, in addition to being a direct variant of the Khartoum traditions, was a variant of the northern variant, i.e., the Khartoum Variant, but located further south. It is therefore logical to speculate that the Karmakol Industry like the Khartoum Variant, is foreign to the area of Lower Nubia. Perhaps similar components of the Early Khartoum culture diffused or otherwise spread northward at roughly the same time to form these two very similar yet geographically distinct cultures. The theory of the 'Horizon-style concept' as proposed by Hays to explain such widespread cultural resemblances is sound, and far better than Shiner's theory of the migration of Khartoum people northward. Hays writes:

"...the idea of a unified Khartoum Culture Area resulting from a movement of people must be reconsidered. It is apparent that the only common elements are some generalized traits (e.g. ground stone, microliths, and pottery) and the presence of a similar pattern of ceramic decoration...Because of this common design style, it is believed that the concept of a 'Horizon-style' expresses the occurrence of this pottery design better than that of population migration.

The Horizon-style concept was introduced into South American archaeology in the 1940's and has proven its utility in that area. In theory, a horizon-style occupies a great deal of space but very little time. Implicit is the idea that this archaeological evidence indicated a rapid spread of a new idea over a wide geographic area. For example, the presence of the Khartoum Horizon-Style elements in various far flung sites in northeastern Africa links those assemblages, in the very broad sense that they reflect some kind of contact, but the cultures so linked are quite different from one another."⁷⁹

Turning now to the Tergis Group (or Industry),⁸⁰ we see it represented by five sites (N3, N30, N55, N57, and N90) in the immediate vicinity of Goshabi

⁷⁹T. R. Hays, 1971a, *op. cit.*, pp. 151-153.

⁸⁰Reported by T. R. Hays, 1971b, "The Tergis Industry," in *The Prehistory and Geology*

village (Figure 6). All but site N90 were investigated and surface collected. Like the Karmakol, the Tergis was a ceramic industry having a lithic technology that is best defined as a microlithic flake industry, but with a low blade tool index. Hays's further comparison of the Tergis and Karmakol yielded the following observations:

"The great use of Nile pebble corresponds with the Karmakol Industry, but two differences in raw material usage can be seen. In the Tergis Industry there is a greater use of agate in all categories and a good deal less use of quartz. Tergis Industry sites do not have the large amounts of quartz debris typical of the Karmakol Industry.

This industry...cannot be characterized by a single tool type...Lunates, triangles and trapezoids are common, although they never exceed 12 per cent of any assemblage. Backed flakes and microblades are also present in considerable numbers. The microburin technique is present, but does not seem to have been very important in tool production. Scrapers occurred in varied amounts, from 8 to 21 per cent of the assemblages...Piercing tools were common, but occurred in widely divergent percentages, from 4 to 17 per cent...Other tools included denticulates, notched pieces, truncations, scaled flakes, burins, becs, picks and gouges..."⁸¹

Other aspects of the stone industry that are shared with the Karmakol include the presence of querns, so-called handstones (presumably pestles or grinding stones), sandstone rubbers, and one palette. Stone rings were quite common in the Tergis, but only one small fragment appeared in the Karmakol.

The ceramic material of the Tergis Industry is unfortunately very sparse, and very little has been written about it. It is clear from Hays's brief treatment that the pottery has not been properly studied. A broad description of the material is the following:

"All sherds were moderately thick (6 mm), and tempered with a fine quartz sand. None was as thick as the typical

of Northern Sudan, edited by J. L. Shiner, pp. 154-186.

⁸¹*Ibid.*, pp. 161-167.

sherds of the Karmakol Industry, however. Most sherds had a reddish outer slip and either no slip or a buff slip on the inner surface. Those with a red slip were usually lightly burnished on the outer surface, but never on the inner surface.

Decorative motifs were restricted to the upper portion of the vessel bodies and included a two line band of simple punctations or a thick cord impressed band close to, but not reaching the rim...One sherd showed a roughly milled rim; otherwise all rim sherds were undecorated."⁸²

From all of the material on hand Hays concludes that "...there was some general connection between it [the Tergis Industry] and the Karmakol Industry,"⁸³ but beyond this, very little has been or could be ventured. Hays's attempt to find a statistical index of agreement between the two cultures was largely inconclusive. It seems that any attempt to find a reasonable degree of cultural continuity between the two groups is prevented by certain widely divergent aspects, such as the general lack of Khartoum traits in the Tergis ceramics and the overall lack of stone rings in the Karmakol.

Despite the difficulty in proving cultural continuity, one's initial impression of the Tergis is that it may have been an undeveloped or impoverished version of the Karmakol Industry. This is based on the general lack of diversity in pottery types in the Tergis, especially in terms of decoration, and a similar restriction of types in the lithics. The Karmakol, for example, seems to show more variation in notched pieces and truncated tools than does the Tergis. This might in turn suggest that perhaps the Tergis was a culture in the early stages of development toward a Karmakol-like equivalent, with certain unique traits of its own, such as a high incidence of stone rings. This would imply that it was somewhat later than the Karmakol and perhaps imitated that culture.

⁸²*Ibid.*, p. 175.

⁸³*Ibid.*

Chronologically, Shiner has attempted to link the Tergis with the Khartoum Neolithic of Shaheinab, which would support a date for the Tergis that is later than the Karmakol. But in the absence of radiocarbon dates, the temporal range for the Tergis is far from certain. Shiner writes:

“The Tergis Industry may be temporally related to the so-called Khartoum Neolithic and to the material from Shakadud near Shendi...Traits that suggest similarities include burnished exteriors on the pottery (absent in early Khartoum and all of the so-called ‘Sudanese Neolithic sites’). Also found are stone rings, gouges and punctate decoration on pottery. Though these traits are nowhere nearly identical to those of Shaheinab...the Tergis material shows much more similarity to this last site than it does to Early Khartoum.”⁸⁴

Any attempt to link the Tergis Industry with the A-Group proves just as inconclusive as trying to establish Tergis/Karmakol links. However, there are some noteworthy similarities in certain tool frequencies between the Tergis and the A-Group. Most significantly, the microlithic tool index for the Tergis, which ranges from 54.9 to 78.1,⁸⁵ is fairly compatible with the A-Group index, but considerably lower than the Karmakol (see above). Similarly comparable tool proportions between the Tergis and the A-Group are seen in their denticulates, groovers, and burins. Notched pieces and lunates in the Tergis are slightly higher in proportion than in the A-Group, while borers are lower. Little similarity may be found between Tergis and A-Group ceramics, except for the single find of one sherd with a milled rim and the double row of punctate decorations already mentioned.

The third early industry in the Dongola Reach is the El Melik Group, represented by a total of thirteen sites, ten of which were investigated and only

⁸⁴J. L. Shiner, 1971a, *op. cit.*, p. 292.

⁸⁵T. R. Hays, 1971b, *op. cit.*, p. 167.

two of which have been published in detail (N50 and N89).⁸⁶ Shiner's publication of these sites is noticeably poorer in quality than the accounts of the other three Dongola industries. The ceramics, sadly, are not dealt with at all, except for the passing remark that from Site N89 "...the same form and color of ceramics were present"⁸⁷ throughout the site. From an earlier publication by Marks, Shiner and Hays, the El Melik pottery is described only as "...thin, hard, sand-tempered, with a red slip on both faces. Decoration is very rare, but when present tends toward simple incised lines."⁸⁸ Elsewhere, it was written of this same pottery that it is "...quite distinct from all others found in the concession area and seems to be relatively late in the prehistoric sequence."⁸⁹ Clearly this is not enough information on which to base a comparative analysis of the El Melik pottery, and for the purpose of comparison one must rely completely on the lithic material from the two published sites. Two unusual features are immediately noticeable from the lithic assemblages, i.e., a very high proportion of both denticulates and notches. Shiner writes that "denticulates and notches combined constitute from 42 per cent to 57 per cent of all tools at each site."⁹⁰ By comparison, A-Group proportions for these tools lie generally in the 8 to 12 per cent range. Scrapers, in comparison with A-Group numbers are very low (10 to 14 per cent for El Melik), as are borers, groovers and burins.⁹¹ The percentage of

⁸⁶See J. L. Shiner, 1971b, "El Melik Group," in *The Prehistory and Geology of Northern Sudan*, edited by J. L. Shiner, pp. 276-290.

⁸⁷*Ibid.*, p. 284.

⁸⁸A. E. Marks, J. L. Shiner, and T. R. Hays, 1968, "Survey and Excavations in the Dongola Reach, Sudan," *Current Anthropology* 9 (no. 4): 322.

⁸⁹A. E. Marks, T. R. Hays, and J. de Heinzelin, 1967-68, "Preliminary Report of the Southern Methodist University Expedition in the Dongola Reach." *Kush* 15: 185.

⁹⁰J. L. Shiner, 1971b, *op. cit.*, p. 285.

⁹¹For actual percentages consult the two tables on pp. 278 and 284 for sites N50 and

lunates is low for both sites, 3.8 per cent for Site N50 and 5.2 per cent for Site N89, but these figures are fairly compatible with the A-Group lunate indices. El Melik lunates, particularly at Site N89, are described as the best-made tools, "...made of better stone and...carefully chipped."⁹² This is in marked contrast to the quality of other tool types, characterized by poor or careless manufacture, which has been attributed to a decline in the lithic technology throughout the Dongola Reach. For this reason Shiner has cross-dated the El Melik Group with the Abkan tradition in which, it will be recalled, a similar pattern of decline has been reported. Shiner writes:

"In the vicinity of the Second Cataract, some kilometers downstream, late stone age and ceramic sites showed a general and progressive decline in the quality of stone tools. It is believed that the same trends occurred in the vicinity of Debba.

If the hypotheses are correct, the following trends were taking place:

1. Tools made on blades decreased in frequency.
2. Microlithic tools decreased in frequency.
3. Backed pieces, truncations, and geometrics decreased in frequency.
4. Denticulates, notches, scrapers, and graters all increased in frequency.
5. The use of Nile River pebble for raw material decreased from roughly 60 per cent to about 20 per cent.

All of these changes seem to reflect some form of economic change. The form of this change, however, cannot be specified since there were no perishables recovered from el Melik sites."⁹³

It must also be noted that the unifacial chipping on the El Melik groovers is very similar to that seen in the Abkan industry. This type of chipping produces a sharp point on the tool, but according to Shiner, it also "...places the tip of the point out of the rotational axis of the tool so that it is not suitable for

N89 respectively (*ibid.*).

⁹²*Ibid.*, p. 285.

⁹³*Ibid.*, pp. 286-287.

boring holes. Similar tools are very abundant in the Abkan Industry.”⁹⁴ Shiner’s use of the low Nile pebble index is not, I think, a reliable indicator of a decline in El Melik lithic technology because of the close proximity of the sites to the wadi (Wadi el Melik), which has resulted in a large proportion of wadi chert being selected for tools. One must therefore allow for the possibility that convenience rather than any regard for quality may have dictated the choice of some of the raw material in this industry.

This review of the El Melik Group is far from satisfactory because it has not been possible to determine with certainty the nature of any of the economic bases in the industry. In my opinion both hunting and (possibly) herding may be ruled out as main economic pursuits because of the low scraper index. It seems that the key to understanding the industry lies in explaining the significance of the very high frequencies of denticulates and notched tools, an issue that was not addressed by the excavators. As for A-Group links, none can be established, although it should perhaps be noted that the microlithic index for the El Melik Group, at 70.0, is somewhat compatible with that of certain A-Group sites (Table 3–1 above). Despite the lack of substantial Lower Nubian links, it appears that this culture had a more northern than southern orientation, as there seems to be no evidence of Khartoum-like traits in the industry. A detailed analysis of the pottery should help to resolve this issue. Until this is done the cross dating of the El Melik with the Abkan must be considered tentative. Shiner indicates that there are even doubts about “...the group qualifying as an industry,”⁹⁵ because of the small sample size of some assemblages. Unfortunately Shiner provides no summary treatment of the El Melik Group in relation to the other cultures of the Dongola Reach.

⁹⁴*Ibid.*, p. 281.

⁹⁵*Ibid.*, p. 289.

Of all of the five early Dongola Reach cultures, the Karat Group has received the most attention in the literature. This is fortunate because it is the only culture that shows the presence of A-Group connections in the Dongola region, and it is also quite different from the Karmakol and Tergis Groups because of its lack of a predominantly Early Khartoum adaptation. Relationships with the Khartoum Neolithic are, however, suggested by some aspects of the material culture.

The Karat Group sites occur primarily in the Girra pediments and silts⁹⁶ in the region between Girra and Ganetti. Of the twenty-five known sites, six were chosen for detailed study and publication, N16, N34, N35, N37, N60-2, and N86-5.⁹⁷ Based on comparisons of the Karat Group ceramic material with the A-Group and the Khartoum Neolithic pottery, Marks and Ferring were able to cross-date the Karat industry with the Early A-Group and Shaheinab. Their date range for the Shaheinab has been placed at 3400 B.C. to 3200 B.C.⁹⁸ I will add a comparison of the Karat and A-Group lithic components to their analysis in order to further validate A-Group links with the Karat industry. It should perhaps be emphasized that the authors probably did not have access to Nordström's A-Group lithic counts at the time of their own publication. Furthermore, DIW-4 was used by them as a representative site of the Early A-Group phase for the purposes of lithic comparisons with the Karat Group.⁹⁹

⁹⁶For a description of these see *ibid.*, p. 168.

⁹⁷See A. E. Marks and C. R. Ferring, 1971, *op. cit.*, pp. 187-275.

⁹⁸*Ibid.*, p. 188.

⁹⁹It will be recalled that DIW-4 has a dual designation as a Post-Shamarkian and Early A-Group site. See p. 285 above, note 34.

The six Karat Group sites investigated have been shown statistically to have been very homogeneous,¹⁰⁰ and therefore it is possible to describe the Karat Group as an industry based on a minimum of blade production, with a heavy occurrence of flakes (40 per cent for the latter). However, the three most striking aspects of the industry are (1) a very high scraper index, (2) an impoverished ground stone industry, and (3) the virtual absence of a microlithic industry, the latter feature of which separates the Karat Group from other Dongola industries and the cultures of Shiner's Cataract Tradition. The latter trait has been described as "...quite strange, considering the vast number and variety of such sites north of the Second Cataract."¹⁰¹ The implications of this are assessed as follows:

"...this negative evidence reinforces the belief that most of the Nubian Late Stone Age industries were either of local or northern origin. More than this, it indicates that the Halfan, Ballana, and Qadan peoples did not spread south along the Nile, possibly owing to the hostile environment of the Batn el Hajar which begins just south of the Second Cataract."¹⁰²

The paucity of ground stone tools in the Karat Group contrasts sharply with neighbouring Dongola cultures, especially the Karmakol. The authors write: "At most sites only a few fragments of querns and handstones were found, and complete examples were almost non-existent."¹⁰³ Although the authors seem cautious in their interpretation of this evidence, it certainly attests to a lack of emphasis in plant food preparation, such as the grinding and pounding of grain, whether wild or domestic. In short, the small numbers of ground stone implements does not allow for the reconstruction of

¹⁰⁰See A. E. Marks and C. R. Ferring, 1971, *op. cit.*, pp. 240-242 for the chi square value between 0.05 and 0.10.

¹⁰¹A. E. Marks, T. R. Hays, and J. de Heinzelin, 1967-68, *op. cit.*, 187.

¹⁰²*Ibid.*

¹⁰³A. E. Marks and C. R. Ferring, 1971, *op. cit.*, p. 248.

large scale agricultural activity or even a significant amount of plant gathering activity.

Concerning the high scraper index, its average value for the six sites is 44.7, with a range from 39.0 to 53.0.¹⁰⁴ This value is considerably higher than the 25 per cent seen for the A-Group, and also far exceeds Khartoum Neolithic (Shaheinab) values, which has been estimated at about 2.2 per cent.¹⁰⁵ It is also significant that of the scraper types present, the end scraper was by far the most common in the Karat Industry, constituting, on average, 86 per cent of the entire scraper count.¹⁰⁶ Convex side scrapers, concave side scrapers, and core scrapers made up the remaining contingent of the scraper category.¹⁰⁷ It is speculated that the end scraper, indicative as it is of skin-working activities, may point to a primarily herding economy, consisting of "...goat herders who lived in small temporary camps, often moving their herds short distances to take advantage of new areas for grazing."¹⁰⁸ Otherwise, the tool kits are not particularly suggestive of a hunting and gathering economy. Other lithic types include tool categories with frequencies that are very similar to some of those seen in the A-Group. Karat Group denticulates average 8.3 per cent for the six sites, notches, 8.1 per cent, burins, 1.6 per cent, truncated tools, 4.3 per cent, and piercing tools, which include borers, groovers, and perforators, average 8.1 per cent.

It must be added that a peculiar feature of the end scrapers is that most were made from ovoid flakes that were first heated before flaking. This

¹⁰⁴All values for the Karat Group are calculated from the data presented in Table 8, *ibid.*, p. 240.

¹⁰⁵*Ibid.*, Table 11, p. 264.

¹⁰⁶*Ibid.*, p. 227.

¹⁰⁷Exact numbers and percentages by sub-type are presented in *ibid.*, Table 7, p. 226.

¹⁰⁸A. E. Marks, T. R. Hays, and J. de Heinzelin, 1967-68, *op. cit.*, p. 191.

production process has not been noted elsewhere in the Sudan for any tool type, and the authors remark that "...it...appears to be a special trait of the Karat Group, at least in terms of Nilotic technology."¹⁰⁹ The reason for heating (primarily chert) pebbles in the Karat Group is not clear. In North American archaeological sites, where the technique has been observed, it has been determined that it "...results in a change of the crystalline structure [of the rock], making it easier to flake, particularly when pressure technique is employed."¹¹⁰ However, such an explanation cannot be applied to the Karat Group because pressure flaking was not employed on any of the lithic types, and furthermore, "...nor was the quality of flaking on these heated pebbles any better than was typical of industries where there is no evidence of heating."¹¹¹ Alternatively, the authors propose that the pebbles may have been used primarily for some other purpose before they were made into scrapers, such as for treating milk and cooking goat and sheep intestines. This is practiced amongst the Ahaggar and Ayr Tuareg today.¹¹² However this still does not explain the removal of a single flake from the Karat Group scrapers before heating was performed. In short, the purpose and origin of this trait in the Karat industry remains a mystery.

The ceramic assemblages from the Karat Group sites are small, as are the sherds themselves. Only 102 sherds were stylistically analyzed,¹¹³ but enough information has been obtained to show ceramic links with both the A-Group and the Shaheinab cultures. In terms of decoration, A-Group characteristics are more pronounced than Shaheinab traits, and the authors

¹⁰⁹A. E. Marks and C. R. Ferring, 1971, *op. cit.*, p. 207.

¹¹⁰*Ibid.*, p. 206.

¹¹¹*Ibid.*, p. 207.

¹¹²*Ibid.*, pp. 206-207.

¹¹³No quantitative analysis was possible due to the small sample available.

remark that "...all decorative motifs found in the Karat Group exist in the early A-Group."¹¹⁴ These include a number of variations of the zigzag pattern:¹¹⁵ (1) rows of shortened V's, (2) opposing rows of V's,¹¹⁶ (3) solid zigzag with two gaps,(4) straight packed, interrupted zigzag, (5) packed dotted zigzags, (6) solid herring-bone design, and (7) horizontal rows of short dashes. The authors maintain that the tool used for making some of these designs was not the catfish spine as was the case in the Khartoum area, but "...a high spired snail shell which had five or more whorls."¹¹⁷ In addition, some milled rims occurred in the Karat assemblage, consisting of lines of impressed dots and cross-hatched lines. It has also been noted that the tendency to cover the entire body of a vessel with decoration, particularly with the punctate design, was not as frequently manifest in Karat Group ceramics as they were in the Early Khartoum and Karmakol industries. The presence of burnishing prior to decorating on both sides of most sherds, links the Karat Group ceramics with both the Khartoum Neolithic and the A-Group. Compositionally the temper of Karat ceramics is of quartz sand, linking the industry again with that of Shaheinab. Technologically, attributes include: (1) a thinness of 3 to 5 mm. with evidence of thinning by paddling, (2) firing at a low temperature, giving a soft to moderate hardness to the wares, and (3) a general colour of light yellowish brown. All three of these attributes are comparable with Early A-Group ceramics. Forms of the Karat Group vessels were described as follows:

¹¹⁴A. E. Marks and C. R. Ferring, 1971, *op. cit.*, p. 265. Note that the authors use the term 'wolf tooth' to describe the zigzag motifs, which I have not adopted here.

¹¹⁵For most of the design representations see *ibid.*, Fig. 19, p. 254.

¹¹⁶For this design see Nordström, 1966, "A-Group and C-Group in Upper Nubia," *Kush* 14: 66, Fig. 1:2.

¹¹⁷A. E. Marks and C. R. Ferring, 1971, *op. cit.*, p. 255.

“All least two types of vessels were present: small globular bowls or cups (?) and small flaring bowls or jars (?). In the first case, the rims are somewhat incurvate and indicate possible vessel diameters of 6 cm and 8 cm. In the second case, the rims are flaring and indicate possible vessel diameters of 32 cm and 34 cm.”¹¹⁸

Characteristics that are notably absent in the Karat Group that occur in A-Group and Shaheinab ceramics are the black topped and black mouthed wares, and the wash of red ochre seen in some A-Group and Shaheinab types. The authors also remark that Shaheinab has a “...much wider range of impressed decorative motifs than is found in the Karat Group. There is little question that Shaheinab has a much richer ceramic inventory, as well as a much greater proportional occurrence of pottery than does any Karat Group site.”¹¹⁹

Further evidence of Karat Group relationships with both the A-Group and Shaheinab, with an preference for stronger A-Group links, is provided by the presence of one polished axe head and a limited number of gouges in the Karat assemblages. The comparative assessment of polished axes from all three cultures is given as follows:

“Polished axes...occur...in the Early A-Group, particularly within grave lots, and also in the possibly contemporaneous late Abkan...Thus the presence of polished axes near the Second Cataract during the late 4th mil. B.C. is well documented. In all cases, however, these axes are extremely small, suggesting a ritual rather than a utilitarian function. At Shaheinab, on the other hand, polished and unpolished stone axes (celts) are large and show evidence of use...The single example from the Karat Group is morphologically comparable to those from the Second Cataract, rather than to those at Shaheinab. The presence of this single example might point to contact with the north, but cannot be used to

¹¹⁸*Ibid.*, 253.

¹¹⁹*Ibid.*, p. 266.

document a 'polished axe technology' in the Dongola Reach."¹²⁰

Similarly, the gouges in the Karat Group more closely approximate those of the Second Cataract region than those of the Khartoum area. The authors write:

"While the gouge, or plane, is a recognized tool type from all along the Nile during the 4th mil. B.C., there is considerable morphological variation present. Those from Shaheinab may be considered 'classic' both in morphology and technique of manufacture...They are made on rhyolite, are first bifacially chipped and then partially polished...They are large and clearly fall outside the normal range of chipped stone artifacts present at Shaheinab.

The same cannot be said for those from the Karat Group and DIW-4. These are exclusively made on Nile pebble, are generally small, unifacially flaked, and never polished...Even smaller and more rudimentary examples occur in the Late Abkan..., suggesting a significant distribution of these gouges in the area of the Second Cataract. In short, the gouges from the Karat Group show close morphological and technological parallels with those from the Second Cataract, and only very generalized affinities with those from Shaheinab."¹²¹

On the basis of the combined evidence of the lithics and the ceramics, the beginning of the Karat Group appears to be marked by a large shift in the subsistence economy. The authors write:

"Gone are the numerous grinding stones, querns, and microliths which suggests a mixed hunting and gathering (perhaps even partly horticultural economy)? In its place are found indirect indications of herding...

At this point, during the occupation of the Karat Group, the pottery indicates more connexions to the North than to the South. This affinity, however, is relative and no strong connexions can be seen in either direction. As there appears to be no progenitor for the Karat lithic industry on the Nile, it

¹²⁰*Ibid.*, p. 261.

¹²¹*Ibid.*, p. 261-262.

is possible that its origins are to be found to the west of the Nile, where sheep and goat herders still live today.”¹²²

The assessment of a primarily pastoral (goat-herding) economy for the Karat Group seems reasonable and is fairly well supported by a number of features: (1) the high proportions of scrapers in the industry in contrast with the low incidence of geometrics, which suggests that the animals utilized by the Karat Group people were “...abundant and easily taken,”¹²³ (2) the very low incidence of grinding implements, suggesting a minimal emphasis on plant gathering activities, plant food preparation, and agriculture, (3) the spatial arrangement or distribution of Karat Group sites, which the authors describe as small, single occupation sites with low artifact densities,¹²⁴ all features of which are highly suggestive of a herding population seasonally on the move, and (4) the presence of small, light ceramics with a significant lack of large storage vessels. The excavators have also shown that the Karat Group sites were geographically restricted to the Girra/Ganetti stretch of the Nile that bore vegetation cover, a necessary source of food for herding animals, whether wild or domestic.¹²⁵

The Pre-Kerma complex, which holds so much promise for illuminating A-Group relationships, is still difficult to define because publication has been slow and frugal. It seems that Pre-Kerma remains were not excavated after 1989 and that excavations have only resumed since 1995 with the addition of Honegger to the Swiss team.¹²⁶ Honegger has added and hopefully will

¹²²A. E. Marks, T. R. Hays, and J. de Heinzelin, 1967-68, *op. cit.*, p. 191.

¹²³A. E. Marks and C. R. Ferring, 1971, *op. cit.*, p. 273.

¹²⁴*Ibid.*, p. 271.

¹²⁵For a lengthy discussion of the ecological zones of the Girra/Ganetti plains see *ibid.*, pp. 266-275.

¹²⁶See C. Bonnet, L. Chaix, M. Honegger, and C. Simon, 1995, “Les fouilles archéologiques de Kerma (Soudan),” *Genava* 43: 33 and 58.

continue to add new insights to the Pre-Kerma culture.¹²⁷ It should be noted that excavation and examination of all Pre-Kerma remains is still far from complete. Privati's report on the ceramics¹²⁸ is still the only one of its kind, while only a tentative analysis of Pre-Kerma fauna has been attempted. Concerning the latter, Chaix has noted:

“Nous n'avons pas étudié ce matériel en détail car de nouvelles fouilles doivent permettre d'augmenter un échantillon encore très pauvre et de trouver peut-être des éléments plus caractéristiques. Cependant, on peut d'ores et déjà noter la présence de restes post-crâniens de boeuf (vertèbres et côtes) ainsi qu'une dent attribuable à cet animal. Les autres vestiges déterminés appartiennent aux caprinés domestiques.”¹²⁹

Very little new information may be added to the description of Pre-Kerma ceramics already given above (Chapter 2). Specific decorative motifs that are shared between the A-Group and Pre-Kerma wares include the cross-hatched rim top design¹³⁰ and a similar but not identical rim band decoration.¹³¹ The presence of the painted egg shell ware and rippling in the Pre-Kerma collection has already been noted. Lithic material has been recovered in extremely meagre amounts, consisting of fragments of quartzite and flint. Nothing diagnostic or comparative may be said about these remains. Although I have suggested that the Pre-Kerma culture may represent a migration of A-Group peoples into the Kerma Basin during the hiatus in Lower Nubia, it should be noted that the excavators have maintained from the beginning that the Pre-Kerma complex is distinct from that of the A-Group

¹²⁷See his report in *ibid.*, pp. 58-59.

¹²⁸B. Privati, 1988, “La céramique de l'établissement pré-Kerma.” *Genava* 36: 21-24.

¹²⁹C. Bonnet, L. Chaix, M. Honegger, and C. Simon, 1995, *op. cit.*, p. 55.

¹³⁰B. Privati, 1988, *op. cit.*, p. 22, Fig. 1: 5.

¹³¹*Ibid.*, p. 22, Fig. 1: 6.

because of certain ceramic differences. Bonnet writes, "...la population pré-Kerma se distingue de celle du Groupe A et c'est vraisemblablement durant cette période que certaines traditions nubiennes vont être fixées."¹³² The Pre-Kerma/Kerma cultural continuity that was once postulated for the Kerma Basin can now no longer be doubted, and furthermore the totally indigenous nature of the Pre-Kerma complex is emphasized by the lack of any Egyptian ware types in its material assemblages.

4.2. BROADER A-GROUP RELATIONSHIPS

A. The Central Sudan: Early Khartoum and the Khartoum Neolithic

The widespread nature of certain Khartoum area traits has already been considered and the general archaeology of the Khartoum region dealt with. The task now is to determine if there is any evidence of A-Group connections with this region. Beginning with the Early Khartoum culture, one may not expect to find similarities between it and the A-Group because of the temporal and geographic barriers separating the two cultures. Generally I have found this to be the case, especially in terms of lithics, yet it seems that some common ground existed in the ceramic decorations and other aspects of the material cultures. Whether all of these similarities are archaeologically meaningful or not is more difficult to decide.

The Khartoum Hospital lithics have, unfortunately, not been quantified, and for this type of information one must rely on stylistic attributes and quantified data from other sites belonging to the Early Khartoum tradition,

¹³²C. Bonnet, 1992b, "Kerma: Les apports historiques de l'archéologie," in *Études Nubiennes*, vol. 1, ed. by C. Bonnet, pp. 102-103.

such as Saggai and Sarurab.¹³³ The Early Khartoum lithic industry was described by Arkell as a predominately microlithic industry,¹³⁴ like that of most cultures of the Neolithic Sudan, with the following tool types present: crescents, scrapers, backed blades, scalene points, scalene triangles, chisel-type arrow heads, borers or perforators, burins (rare), and utilized flakes. Khartoum Hospital tools were made predominately on quartz obtained locally, but rhyolite was also present in abundance. The indices for the raw materials have not been calculated. All tool types, with the exception of the chisel-type arrow heads¹³⁵ and crescents¹³⁶ are present in the A-Group. The crescents were the most common type of tool in the Early Khartoum industry, and despite their resemblance to the A-Group lunates, their primary purpose seems to have been for cutting and scraping. Arkell also has a category of crescent scrapers,¹³⁷ in which the crescent definitely evolved the dual purpose of a scraper. Stylistically, the other Khartoum Hospital tool types appear to have had little in common with the A-Group examples. Scrapers, for example, while represented in numerous varieties (end scrapers, side scrapers, hollow

¹³³For both locations see Figure 4. I have ignored the distinctions of Sarurab 1 and Sarurab 2 because there is no indication that they represent two phases of the same industry. It is likely that they do not. Khabir, who excavated the site of Sarurab later than Mohammed-Ali, indicates that he labeled his excavations Sarurab 2 in order to distinguish it from Mohammed-Ali's work. See A. M. Khabir, 1987b, "New Radiocarbon Dates for Sarurab 2 and the Age of the Early Khartoum Tradition," *Current Anthropology* 28 (no. 3): 378. The site of Sarurab is also known as Bauda, as it is near the village of that name. See A. M. A. Hakem and R. M. Khabir, 1989, "Sarourab 2: A New Contribution to the Early Khartoum Tradition from Bauda Site," in *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and M. Kobusiewicz, pp. 381-385.

¹³⁴A. J. Arkell, 1949a, *Early Khartoum*, p. 41ff.

¹³⁵See *ibid.*, Plates 10 and 13 for examples.

¹³⁶See *ibid.*, Plate 15 for examples.

¹³⁷Shown in *ibid.*, Plate 16.

scrapers, and core scrapers), are generally more crudely made and certainly larger than their A-Group counterparts.

The tool types seen at Khartoum Hospital were present at Saggai and Sarurab with the addition of denticulates and truncations for Saggai. The few proportions of finished tools at Saggai¹³⁸ represent the only quantified lithics of the Early Khartoum tradition, but the data are enough to confirm a clear dissimilarity with A-Group lithic proportions. It should be noted that the numbers of scrapers were much more numerous at Khartoum Hospital than at Saggai, while perforators were much higher in numbers at Saggai. Sarurab represents a few departures from the Early Khartoum type of assemblage, particularly in the high proportion of scrapers. Mohammed-Ali writes:

“Technologically the industry is a microlithic flake one. Microliths constitute ca. 78.6% of the lithic artefacts recovered...Blade production was minimal...End scrapers made of secondary flakes and core fragments are a common tool type. Straight-sided, convex, and thumbnail scrapers have been identified. Denticulates...are also frequent, and notched and truncated pieces are present. Lunates, a common Neolithic artefact in this region, are regular and well-backed...geometric artefacts and backed and retouched pieces were found. Borers and points, picks and proto-gouges are among the finds.”¹³⁹

A ground stone industry was exhibited at all of the Early Khartoum sites. Khartoum Hospital, for example, had pebble grinders, a variety of larger grinders, hammerstones, stone rings, sandstone rubbers, possible fishing line sinkers, grooved stones and lower grindstones. None of the ground stone

¹³⁸Not reproduced here. See I. Caneva and A. Zarattini, 1986, “The ‘Mesolithic’ of Central Sudan: Problems in Terminology and Typology,” in *Nubische Studien*, edited by M. Krause, p. 42-43.

¹³⁹A. S. Mohammed-Ali, 1984b, “Sorourab 1: A Neolithic Site in Khartoum Province, Sudan,” *Current Anthropology* 25 (no. 1): 118.

industry at any of the sites is definitely associated with agriculture or plant food preparation. Remains of ochre have, however, been found on some grinding implements at Khartoum Hospital. The sandstone grinders for ochre are certainly analagous to the A-Group examples, in terms of both appearance and function, the difference being that some A-Group examples were used for grinding grain. Hammerstones are common to both cultures, although the Early Khartoum examples are made from material other than quartzite, such as gneiss, rhyolite, chert, sandstone, and even fossil wood. Khartoum hammerstones are also related to Arkell's category of "pebble fabricators," likely used for striking flakes off backed blades and lunates, but a similar purpose has not been established for the A-Group examples. A-Group and Early Khartoum hammerstones are of roughly the same size (betwen five and ten centimetres in diameter) and are all spherical in shape. Nordström notes that A-Group examples are found in habitation sites, with no examples coming from undistrubed graves.¹⁴⁰

Ceramic comparisons are a little more rewarding in terms of possible A-Group/Early Khartoum links. The presence of milled rims, for example, while very rare in the Early Khartoum assemblage, does occur. Seven sherds from the Khartoum Hospital site were found with simple impressions made on their rim tops.¹⁴¹ It is difficult to determine from Arkell's publication what the exact form of the design is, but it appears to be diagonal slashes made in the clay. This same pattern has been found on A-Group rim tops.¹⁴² The identical pattern was also used as a rim band decoration at Khartoum

¹⁴⁰H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 121.

¹⁴¹See A. J. Arkell, 1949a, *op. cit.*, Plate 70: 2, which unfortunately shows the sherds from the sides only, not the top.

¹⁴²See H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 24/T: 14.

Hospital, that is, on the exterior of the vessel at the top.¹⁴³ Rim band decorations were common in greater variety in the A-Group, but not, it seems, in this particular pattern. One may observe an almost identical parallel between a heavy herring bone pattern from early Khartoum¹⁴⁴ and an A-Group rim band pattern.¹⁴⁵ The herring bone pattern was also used on body sherds in the A-Group and at the Khartoum Hospital site.¹⁴⁶ A variant of this design is the lighter herring bone pattern at the rim border in sherds from both cultures.¹⁴⁷ Extremely similar also are rim band decorations of lines of impressed dots or short dashes in both Early Khartoum wares and A-Group ceramics.¹⁴⁸ Dotted straight line impressions have also been reported (but not illustrated) for Sarurab, presumably on body sherds.¹⁴⁹ To my knowledge none of the Sarurab ceramics have yet been published in illustration form. To this list may be added the presence of the zigzag pattern from the Khartoum Hospital site and Sarurab.¹⁵⁰ The former site has yielded a dotted zigzag pattern and the packed version of the same dotted zigzag.¹⁵¹ Mention should be made of the presence of a brown coarse ware or a plain brown ware at Khartoum Hospital and in the A-Group, but Arkell's comment that rough

¹⁴³A. J. Arkell, 1949a, *op. cit.*, Plate 77: 1

¹⁴⁴*Ibid.*, Plate 87:1, lower right.

¹⁴⁵H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 24/T: 14.

¹⁴⁶Compare Arkell, 1949a, *op. cit.*, Plate 82, inset, and Nordström, 1972, *ibid.*, vol 3.2, Plate 25, Group 1: 14-15.

¹⁴⁷Compare Arkell, *ibid.*, Plate 80:1, right, Plate 87, top left, and Nordström, *ibid.*, Plate 24/RB: 13.

¹⁴⁸Compare Arkell, *ibid.*, Plate 84: 2 and 4, and Nordström, *ibid.*, Plate 24/RB: 2 and 5.

¹⁴⁹A. M. Khabir, 1987b, *op. cit.*, p. 378.

¹⁵⁰I am unable to determine the exact variant of the design for Sarurab because of the lack of published drawings or photographs.

¹⁵¹A. J. Arkell, 1949a, *op. cit.*, Plate 90: 2 and pp. 92-93 for the text. Although the sherds bearing these designs are described as atypical, they are not necessarily much later in date than the remaining Early Khartoum assemblage.

undecorated 'utility' pottery is "common to most ages,"¹⁵² precludes the use of this characteristic as a diagnostic tool for comparison. It is significant to note that the wavy line design, which is most typical of the Early Khartoum industry, does not appear at all in the A-Group, a fact that is most puzzling considering that areas to the north of Lower Nubia (Bir Kiseiba in Egypt's Western Desert, for example)¹⁵³ had ceramics bearing this design at about the time of the Early Khartoum industry to the south.

Moving temporally away from the Early Khartoum industry, one observes increasingly greater attributes of the A-Group in the Central Sudan. The closest parallels between the A-Group and the Khartoum area undoubtedly come from the site of Omdurman Bridge. Both Omdurman Bridge burials contained a rippled ware that is virtually identical to A-Group examples at Faras. Arkell writes:

"The rippled ware from these graves has its closest known counterpart in the rippled A-Group ware found by the late F. Ll. Griffith...Indeed one of the pots, of which an outline only is given by Griffith...is identical (except for size) in every particular, shape, rippling, red outside, black inside, and decorated rim, with one of the pots from Omdurman Bridge."¹⁵⁴

Decorated motifs from Omdurman Bridge identical to those in the A-Group are identifiable on rim bands only. They consist of the cross-hatched design and oblique parallel lines on rim bands,¹⁵⁵ which occur as a rim top and body decoration in the A-Group.

Because of the remarkable resemblances between the Omdurman Bridge ceramics and those of the A-Group, Vercoutter, writing ten years following

¹⁵²A. J. Arkell, *ibid.*, p. 87.

¹⁵³This area is discussed below, this Chapter.

¹⁵⁴A. J. Arkell, 1949a, *op. cit.*, p. 104.

¹⁵⁵Arkell, *ibid.*, Plates 93, 98, and 99.

Arkell's publication of *Early Khartoum*, suggested the fascinating possibility that "...the A-Group tribes might have occupied the whole Northern Sudan, at least as far south as Khartoum."¹⁵⁶ He further adds that

"...until this Omdurman Bridge culture has yielded human remains, we will not know if the people who created it belonged to the Hamitic race or if they came from another stock but had trade relations with the true A-Group people, and had more or less adopted their culture."¹⁵⁷

It remains to be added that the Omdurman Bridge culture could also represent a diffusion of A-Group ideas and/or cultural traits to the area of Khartoum, rather than an actual movement of A-Group people. One should not readily agree with Vercoutter that a racial assessment of the population at Omdurman Bridge (assuming that human remains are found) would make the issue significantly clearer, unless all of the previous A-Group racial typing is re-done. It is most regrettable that the scant amount of material from Omdurman prevents any solid connection from being made between the A-Group and the early cultures exhibited in the Khartoum area. Based on current evidence it may be accepted only tentatively that the Omdurman Bridge population was the same as the A-Group population to the north.

A number of new ceramic features separate the Khartoum Neolithic from the preceding Early Khartoum industry, and more firmly link the Khartoum area with Lower Nubia and even Egypt. These features include (1) the first appearance of burnishing in the Khartoum region, (2) the use of black-topped or black mouthed wares, and (3) a new and greater diversity in rim top decorations, a feature of ceramic art that became so popular in the A-Group. It was established long ago by Arkell that the custom of decorating rim

¹⁵⁶J. Vercoutter, 1959, "Ancient Egyptian Influence in the Sudan," *Sudan Notes and Records* 40: 9.

¹⁵⁷*Ibid.*

tops with the rocker stamp 'V' motif, had a wide geographic range, extending from Egypt to the Khartoum area. A Khartoum area origin for the motif has been sought,¹⁵⁸ as it seems likely that the so-called black incised wares of the Gerzean period are related to the earlier decorated types of the Khartoum Neolithic at Shaheinab. At Shaheinab one sees several varieties of the rocker stamp decoration on rim tops of black-topped or plain black wares.¹⁵⁹ Arkell writes that the decoration "...is an elaborate one requiring two separate operations, and it is unlikely to have been invented independently in two different places. It consists of an impressed narrow zigzag in thin line made by 'walking' a fragment of shell on the rim...On top of this as a second operation slanting strokes are incised to form a wide zigzag in rather thicker line."¹⁶⁰ Arkell's comparisons of six Gerzean pots with the Khartoum Neolithic ceramics led him to conclude the following:

"There can be no doubt that the rim decoration on these incised pots (five 'black' and one red) from the early Gerzean culture in Egypt is basically the same as the rim decoration found not infrequently on sherds of the Khartoum Neolithic period...This is sufficient to prove that the 'Black Incised' ware...is not foreign to the Nile Valley but came from the Nile Valley south of Egypt, i.e., somewhere in the Sudan."¹⁶¹

Now, a comparison of the A-Group decorated rim tops with the Gerzean and the Khartoum Neolithic specimens¹⁶² shows, surprisingly, that none of the A-Group examples have the slanting strokes over the zigzag motif, as do the Gerzean examples. This naturally leads one to conclude that the A-Group

¹⁵⁸See A. J. Arkell, 1953c, "The Sudan Origin of Predynastic 'Black Incised' Pottery," *Journal of Egyptian Archaeology* 39: 76-79.

¹⁵⁹For illustrations of the decoration see *ibid.*, Fig. 2, p. 77: 30-40.

¹⁶⁰*Ibid.*, p. 76.

¹⁶¹*Ibid.*, p. 79.

¹⁶²Compare Arkell's (*ibid.*) Figs 1 and 2, and Arkell, 1953a, *Shaheinab*, Plate 37, with Nordström, *ibid.*, vol. 3.2, Plate 24: T.

zigzag rim top decoration may have been derived from the Khartoum area rather than from the geographically closer Gerzean area. In support of this hypothesis is the presence of other design types (other than the zigzag pattern) in the A-Group that are virtually identical to Shaheinab rim top patterns. These include (1) simple vertical strokes across the top of the rim,¹⁶³ (2) the same pattern, but utilizing slanted strokes,¹⁶⁴ (3) a cross-hatched rim top pattern,¹⁶⁵ and (4) sets of slanted lines running in opposite or alternating directions.¹⁶⁶

As for the new characteristic of burnishing in the Khartoum Neolithic, Arkell defines it as “the provision of a more or less polished surface by rubbing the almost dry clay of the still unfired pot with a smooth hard object such as a water-worn pebble, a large smooth seed, or an animal’s tooth.”¹⁶⁷ Arkell also adds that “in the Khartoum Neolithic ware, highly polished sherds occur fairly rarely, but all the sherds show that the surface of the pot had been specially smoothed or slightly polished before firing.”¹⁶⁸ Furthermore, the author treats the new burnished ware as a transitional type to the rippled ware of the Badarian and the A-Group cultures. Concerning the ceramics from Shaheinab he writes:

“Some of the sherds were burnished after the decoration had been incised on them, and though no sherd has yet been noticed where intensification of the burnishing produced the rippling characteristic of the Badarian and of the Sudan

¹⁶³Nordström, 1962, *op. cit.*, vol. 3.2, Plate 24/T:13. Similar to A. J. Arkell, 1953a, *ibid.*, Plate 37: 1.

¹⁶⁴Nordström, *ibid.*, Plate 24/T: 14. Similar to Arkell, *ibid.*, Plate 37 :14.

¹⁶⁵Nordström, *ibid.*, Plate 24/T: 15. Identical to Arkell, *ibid.*, Plate 37: 20.

¹⁶⁶Nordström, *ibid.*, Plate 24/T: 4 and 5. Very similar to Arkell, *ibid.*, Plate 37: 23 and 24.

¹⁶⁷A. J. Arkell, *ibid.*, p. 69.

¹⁶⁸*Ibid.*

Protodynastic, it might have been produced at any moment."¹⁶⁹

If Arkell is correct then these earliest burnished wares from Shaheinab may well be the prototypes of the very fine rippled wares seen in the A-Group. However, it seems important to note that the trait of burnishing was first acquired by the Terminal Abkan in Lower Nubia before it was transmitted to the A-Group. It will be recalled (p. 283 above) that the Abkan is the earliest of the Nubian industries bearing this characteristic. Similarly, the occurrence of a "blackish grey ware with a red slip to within 10 mm. of the rim"¹⁷⁰ and a "red burnished ware with a blackened rim"¹⁷¹ may be transitional to the black-topped red ware of the Badarian and the Early Predynastic cultures. The origin of the black-top decoration seems to have had an interesting and involved sequence of evolution in the Khartoum Neolithic. It is quite probable that the feature of blackened rims may have served, initially, a largely utilitarian rather than a decorative function. Arkell writes:

"It was a surprise to find this ware, that is so characteristic of predynastic Nubia, starting in the Khartoum Neolithic and in a most unexpected form. There is little doubt that the origin of this decorative motif is derived...from the gourd cups so common in the Sudan which always have a black rim from being fired on the edge when the gourd is cut in half, probably to prevent the edge splintering or tasting...

In the Khartoum Neolithic the pattern seems at first to have been made by scraping a row of inverted triangles (each with a base 3 to 4 mm. long) in the heavy red slip along the outside of the rim...,and then burning some substance, which smoked heavily, possibly animal fat, which had been placed on the triangles and on the top of the rim (Pl. 34, Fig. 1). Traces of thickly carbonized matter can be seen on several sherds...

¹⁶⁹A. J. Arkell, 1949d, "The Excavations of a Neolithic Site at Esh Shaheinab," *Sudan Notes and Records* 30: 214.

¹⁷⁰*Ibid.*

¹⁷¹*Ibid.*

In the next stage all trace of the black triangles has vanished, and the black rim is somewhat wider and more pronounced, though not usually more than about 1 cm. deep and often of irregular depth, probably because it was found difficult to control the carbonization process which blackened the rim."¹⁷²

Other ceramic body decorations typical of the Khartoum Neolithic at Shaheinab, which are found in the A-Group, are straight-combed lines (as opposed to wavy lines),¹⁷³ dotted straight lines,¹⁷⁴ and variations of the zig-zag pattern such as the packed dotted zigzag and the solid zigzag.¹⁷⁵ A herring-bone motif having more of a scraped quality than in the A-Group has also been found at Shaheinab.¹⁷⁶ In addition, a combination pattern of horizontal incised lines at the rim band and oblique body lines is identical to the incised designs found in the A-Group.¹⁷⁷

As with the Early Khartoum industry, the lithics for the Khartoum Neolithic at Shaheinab have not been quantified by Arkell. Marks and Ferring have compiled a table of approximations of the main lithic types at Shaheinab, which is useful for limited comparison with the A-Group.¹⁷⁸ Arkell does, however, give a good stylistic analysis of the Shaheinab lithic industry, especially in relation to that of the Early Khartoum. He writes:

“As in the Khartoum Mesolithic, crescents are the most common implements in the assemblage. They do not run as large as the largest crescents from Early Khartoum. As there, rhyolite is the material used for the largest specimens,

¹⁷²A. J. Arkell, 1953a, *op. cit.*, p. 75.

¹⁷³*Ibid.*, Plate 33.

¹⁷⁴*Ibid.*, Plate 33: 4.

¹⁷⁵See Arkell, *ibid.*, Plate 32 for the Shaheinab examples.

¹⁷⁶*Ibid.*, Plate 33: 1.

¹⁷⁷*Ibid.*, Plate 33: 6. For the A-Group example see Nordström, 1972, *op. cit.*, vol. 3.2, Plate 25, Group 2: 4.

¹⁷⁸See Marks and Ferring, 1971, *op. cit.*, Table 11, p. 264.

but there is a much greater use of fossil wood for medium-sized specimens. There are a number of crescents smaller than any from the Khartoum Mesolithic. The geometric *triangles* and *points scalènes*, &c., which appear to give the Khartoum Mesolithic a Capsian flavour, are entirely absent.

After crescents, borers are much the commonest microlithics, much more numerous than in the Khartoum Mesolithic, presumably because the manufacture of beads had by then become more general. There are also a few large rhyolite borers.

A few scrapers (non-microlithic) are better made than any in the Khartoum Mesolithic, but as in that culture, they are not common or of any regular type.

There are no burins at all, nor do micro-burins occur. Microlithic blacked blades are too few and characterless to be regarded as typical...

The rhyolite gouge is the most characteristic tool of the culture...It is more numerous than the flaked and polished rhyolite celt, which has been almost always re-used after fracture, so that it seems probable that it was not made at Esh Shaheinab, and that there were only few craftsmen able to make it in the other settlements of the culture. The gouge is usually polished on the underside; and the technique of polishing (grinding) after flaking is a novelty introduced with many other features which distinguish the Khartoum Neolithic from the Khartoum Mesolithic."¹⁷⁹

Combining this description with the approximate proportions from Table 11 of Marks and Ferring, it is evident that the lithic proportions for Shaheinab are not at all comparable with the A-Group. Scrapers, for example, while they exist in some variety at Shaheinab,¹⁸⁰ only total about 2.1 per cent of the assemblage, compared with the 25 per cent seen in the A-Group. The percentage of Shaheinab piercing tools (8.1) is perhaps marginally comparable to that of the A-Group, but this is a difficult comparison to attempt because this category is only represented by borers at Shaheinab, but by borers, groovers and burins in the A-Group. Of the other Shaheinab tool types, Marks

¹⁷⁹A. J. Arkell, 1953a, *op. cit.*, p. 25.

¹⁸⁰*Ibid.*, pp. 27-29.

and Ferring estimate 71.3 per cent for geometrics (presumably the crescents of which Arkell writes), 13.1 per cent for gouges and planes, 4.2 per cent for axes, 0.8 per cent for backed tools, and 0.3 per cent for denticulates.

By the time of the later stages of the Khartoum Neolithic it is possible to observe some changes in the ceramics and lithics of Central Sudan that distinguish this period from the earlier culture at Shaheinab. The site of Kadero best exemplifies these changes, perhaps because it is by now one of the best studied sites in the Khartoum region. As already noted above (Chapter 2), the late radiocarbon dates from Kadero 2 (the second or northernmost mound) extends the Khartoum Neolithic forward to a time contemporaneous with the A-Group in Lower Nubia. It is generally agreed that, according to Chlodnicki, "...the Esh Shaheinab settlement may have come into existence earlier and it may have functioned long enough to be contemporary with [the] earlier phase of the Kadero settlement."¹⁸¹

The analysis of the pottery shows that the decorated types seen at Kadero are largely the same as those seen at Shaheinab, and are typical of the Khartoum Neolithic tradition, with the exception of the overall lack of wavy line and dotted wavy line impressions at Kadero. Apparently only a few sherds with these impressions have been found in the large ceramic assemblage of Kadero.¹⁸² A-Group parallels with the Kadero pottery have been loosely noted by Chlodnicki, particularly in the presence of the rocker stamp decoration forming zigzag patterns. However my examination of the Kadero decorative types shows that all of the variations of the zigzag pattern, including the dotted

¹⁸¹M. Chlodnicki, 1984, "Pottery from the Neolithic Settlement at Kadero (Central Sudan)," in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 342.

¹⁸²*Ibid.*, p. 340.

varieties present in the A-Group, appear in the Kadero ceramics as well.¹⁸³ In addition, many other decorative parallels may be found between the Kadero and A-Group pottery, although some variation occurs in the placement of the designs. For example, the dotted herring-bone pattern, which is “a rarity”¹⁸⁴ in all of the Khartoum Neolithic ceramic collection, is found as a rim top decoration at Kadero.¹⁸⁵ This design occurs as a panelled body decoration in the A-Group.¹⁸⁶ Regular or solid herring-bone designs are found as body decorations in both the A-Group and Kadero examples.¹⁸⁷ A V-shaped arrangement of small oval designs is also identical to both cultures, but it was used at Kadero as a rim-top decoration and in the A-Group as a rim band or border.¹⁸⁸ Cross-hatching is common as a body design in both cultures, but it is not used as a rim top decoration at Kadero as it was in the A-Group. Also the Kadero examples of cross-hatching occurred in combination with parallel horizontal lines placed above the hatching.¹⁸⁹ This combination is not seen in the A-Group. Identical patterns in terms of placement and designs are the use of shortened V's on the body of vessels, parallel rows of small dots, parallel rows of large dots, short vertical lines on rim tops, along with a slanting variation, and the use of straight horizontal lines as a rim band decoration in both the A-Group and Kadero ceramics. Straight horizontal lines on the body

¹⁸³Compare Nordström, 1972, *op. cit.*, vol 3.2, Plate 25, with Chlodnicki, *ibid.*, p. 341, “Pattern Elements on the Body.”

¹⁸⁴M. Chlodnicki, 1989, “The Petrographic Analyses of the Neolithic Pottery of Central Sudan,” In *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyzaniak and M. Kobusiewicz, p. 372.

¹⁸⁵See M. Chlodnicki, 1984, *op. cit.*, p. 341, design B-4-0.1.

¹⁸⁶Nordström, 1972, *op. cit.*, vol. 3.2, Plate 25, Group 1: 24 and Group 3: 3.

¹⁸⁷M. Chlodnicki, 1984, *op. cit.*, p. 341, design L; Nordström, 1972, *ibid.*, Plate 25, Group 1: 14..

¹⁸⁸Chlodnicki, *ibid.*, pattern C1h-0.8, and Nordström, *ibid.*, Plate 24/RB: 6.

¹⁸⁹Chlodnicki, *ibid.*, pattern D6.

of vessels were also common to both cultures.¹⁹⁰ Of great interest is the presence of the large inverted triangle design on Kadero body sherds, which are not identical to the A-Group patterns but which closely approximate them. The triangles filled with horizontal lines¹⁹¹ are particularly noteworthy for their identical arrangement to A-Group triangles,¹⁹² although the latter are filled with either solid paint or painted cross-hatching. Further parallels that may be drawn between the Kadero and A-Group wares are the presence of (1) black-topped pottery, (2) a red-ochre wash on the interior and exterior of about one-fourth of all Kadero potsherds, (3) a possible dung temper in a few of the Kadero sherds, although this has yet to be formally confirmed by petrographical analysis,¹⁹³ (4) burnishing on most surfaces of the Kadero pottery, and (5) very similar or identical vessel forms, with the exception of the gourd-shaped vessel, which does not exist in the A-Group.¹⁹⁴ It should be noted that these gourd-like vessels, otherwise known as ladle pots, occur only infrequently at Kadero, as do cups with flat bases. The Kadero vessel forms are described generally as "...simple...and consist of deep bowls or pots with restricted orifice, and with hemispheric or ovoid shape. Shallow or small pots are rare."¹⁹⁵

Chlodnicki has noted that "...there is a larger amount of pottery at Kadero than at Shaheinab with ornaments similar to the materials common to the Omdurman Bridge site, the burials of protodynastic date at Esh Shaheinab,

¹⁹⁰For one Kadero example see M. Chlodnicki, 1987, "Ceramics from the Neolithic Cemetery at Kadero, Central Sudan," *Archéologie du Nil Moyen* 2: 146, Plate 1: V.

¹⁹¹M. Chlodnicki, 1984, *op. cit.*, pattern 11.

¹⁹²Nordström *op. cit.*, vol. 3.2, Plate 25, Group 4: 9 and 10.

¹⁹³M. Chlodnicki, 1984, *op. cit.*, p. 337.

¹⁹⁴See *ibid.*, p. 339, Fig. 1 for the Kadero forms.

¹⁹⁵*Ibid.*, p. 338.

and El Kadada.”¹⁹⁶ This fact, coupled with other evidence of wide geographic connections of the Kadero culture with northern and northwestern Sudan, greatly increase the chances of Kadero/A-Group contact and/or cultural exchange. From the so-called elite graves at Kadero, specialty items have been found, including mace-heads, possibly obtained from Egypt, as well as malachite and amazonite, the latter certainly originating ultimately from the Tibesti area. As a result of these finds, Krzyżaniak postulates:

“That far flung trade was already developed by 6000 B.P. is well documented by the marine shells and malachite/amazonite objects found in the Kadero 1 graves and in the Shaheinab settlement and its direction was generally north-south, most probably along the Nile.”¹⁹⁷

It is therefore not unreasonable to surmise that the A-Group would have been involved directly in this riverine trade, and therefore had contact, whether direct or indirect with the Kadero population and those contemporary with it in the Khartoum region. However, this theory is not further strengthened by the character of the Kadero lithic assemblage. Nowakowski has conducted a good comparative analysis of the Kadero lithics that does not, unfortunately, include the A-Group.¹⁹⁸ Nowakowski notes that the Kadero lithic technology exhibits a few similarities with the Terminal Abkan and the Post-Shamarkian industries. These include, for Kadero and the Terminal Abkan, similar burin indices (0.16 at Kadero and 0.40 in the Abkan), similar scraper

¹⁹⁶M. Chlodnicki, 1981, “The Kadero Neolithic Pottery,” *Nyame Akuma* 18: 48.

¹⁹⁷L. Krzyżaniak, 1991, “Early Farming in the Middle Nile Basin: Recent Discoveries at Kadero (Central Sudan),” *Antiquity* 55: (no. 248): 531.

¹⁹⁸Comparisons with DIW-4 were noted, but the authors considered this to be a Post-Shamarkian site. Other comparisons involve Kadero with Early Khartoum, Shaheinab, and the Terminal Abkan. J. Nowakowski, 1984, “The Typology of Lithic Implements from the Neolithic Settlement at Kadero (Central Sudan),” in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 348.

indices (9.70 and 12.70 respectively), and similar denticulate indices (11.70 and 13.0 respectively). Similarities between the Kadero and the Post-Shamarkian lithics include compatible notch and denticulate indices, a high frequency of quartz in the debitage, use of the flake technique, a high index of retouched flakes, the presence of side blow flakes, and the presence of unpolished celts. Despite these parallels, there can be no doubt that the Kadero lithics display a predominantly local flavour. Nowakowski writes that "...the Kadero assemblage is clearly related to that originating from Shaheinab,"¹⁹⁹ and is characterized by

"...a high index of notches and denticulates, piercing tools, gouges, and partially retouched flakes and blades. The differences between these indices are not significant. Exceptionally low indices of backed bladelets, truncations and most of all, burins, is a characteristic feature at Kadero. The assemblage is also characterized by a low index of end scrapers, side scrapers, segments and celts."²⁰⁰

An attempt to find similarities between these features and the A-Group lithics is disappointing. The only compatible index between both cultures is the borer/perforator proportion, between 14 and 18 per cent in the Kadero industry and 14.7 per cent for borers at site SJE 408 of the A-Group (Table 3-1 above). The total end/side scraper index for Kadero (9.71)²⁰¹ is much lower than most of the A-Group scraper indices. This low scraper value for Kadero is most puzzling given that the culture has been assessed as a primarily pastoral economy, with cattle-keeping contributing in part to the surplus wealth of the so-called elite.²⁰² Admittedly the large amounts of bovid remains

¹⁹⁹*Ibid.*

²⁰⁰*Ibid.*, pp. 345-346.

²⁰¹See *ibid.*, Fig. 5, p. 347.

²⁰²See L. Krzyżaniak, 1991, *op. cit.*, p. 528.

at the site²⁰³ has contributed greatly to the formation of this theory, but it is clear that the theory is not supported by the lithic technology. None of the tool types present, or their proportions are particularly suggestive of the utilization of domesticates. The only possible explanations for the disparity are that (1) perhaps the Kaderans kept cattle solely for trade purposes, thereby acquiring the wealth documented in certain of their graves, or (2) cattle were kept for their products only, such as milk and blood. The latter is entirely possible, and it will be recalled that a similar use of cattle was suggested by Caneva for the El Kenger sites (see above, Chapter 2, p. 140). It is frustrating that none of the excavators of Kadero have addressed the issue of what appears to be a disparate lithic industry.

Returning to the A-Group/Kadero lithic comparison, we see further discontinuities in the burin index, which is lower at Kadero than in the A-Group. Kadero indices that are higher than the A-Group are the amount of quartz in the debitage, and the numbers of denticulates. The only possible lithic evidence of Kadero connections with the A-Group is the rather uncertain presence of Egyptian flint, which could have been acquired indirectly from Egypt through the A-Group. One flint find from Kadero is indicated and assessed as a possible import.²⁰⁴

Other Khartoum Neolithic sites in the Sixth Cataract region (El Geili, Zakiab, Nofalab, Islang, and Umm Direiwa)²⁰⁵ display lesser affinities with the Second Cataract area and with the A-Group than does Kadero. It is not

²⁰³For the Kadero faunal report see A. Gauthier, 1984b, "The Fauna of the Neolithic Site of Kadero (Central Sudan)," in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa*, edited by L. Krzyżaniak and M. Kobusiewicz, pp. 319-319.

²⁰⁴J. Nowakowski, 1984, *op. cit.*, p. 345.

²⁰⁵For the location of most of these sites see Figure 4 above.

possible to do a proper comparison of the Nofalab and Islang sites with the A-Group, as the former are only superficially known and largely unquantified in terms of lithics and ceramics. For Zakiab it is possible to list, from Haaland's published dissertation material,²⁰⁶ five ceramic designs shared with the A-Group. These are: (1) dotted horizontal lines,²⁰⁷ (2) the horizontal chain-link design,²⁰⁸ (3) a cross-hatched rim top motif,²⁰⁹ (4) the dotted zigzag, closely spaced,²¹⁰ and (5) solid zigzags.²¹¹

Through the more extensive publication of the Geili material, Caneva offers some brief regional comparisons between all of these Khartoum area sites. Concerning the ceramics from these sites, Caneva writes:

“The favorite decorative technique at Geili is still the rocker combing in all its versions. These account for more than 45% of the total...The sites of Shaheinab and Nofalab, on the opposite side of the river, offer the same panorama, with an even higher percentage of rocker stamping: 58-72% at Nofalab, 50% at Shaheinab. A comparable occurrence of decorative patterns and/or techniques is shown at the other Early Neolithic sites in the region, especially at Zakiab and Umm Direiwa. A slightly different situation, however, seems to characterize Kadero, where the rocker stamping motifs account for 36% of the total, while incised motifs account for more than 18% (against 6% at Geili), and lines of dots, i.e. ‘simple impression’ probably combined with ‘alternating pivoting stamp,’ represent more than 23% (16% at Geili). One of the most characteristic patterns at Kadero—semicircular panels of incised lines—is extremely rare at Geili, Nofalab, Zakiab and Umm Direiwa, and is absent from our study sample from Geili. Since it seems that in the Late Neolithic

²⁰⁶R. Haaland, 1982a, *Migratory Herdsmen and Cultivating Women: The Structure of Neolithic Seasonal Adaptation in the Khartoum Nile Environment*, Bergen: Universitetet i Bergen.

²⁰⁷*Ibid.*, p. 167, Fig. 27: e.

²⁰⁸*Ibid.*, p. 167, Fig. 27: f.

²⁰⁹*Ibid.*

²¹⁰*Ibid.*, p. 176, Plate 14: i.

²¹¹*Ibid.*, p. 178, Plate 15: d.

assemblages the rocker stamping is almost abandoned in favour of incised motifs and impressed dotted lines, Kadero seems to represent quite a late aspect, compared to Geili and other Early Neolithic sites of the region.

In conclusion the pottery characteristics at Geili seem to be associated with the aspects evidenced at Nofalab and Shaheinab and, to a lesser extent, with those of Zakiab and Umm Direiwa. All the features described are apparently a typical early expression of a well-defined local culture that developed from Mesolithic traditions, anticipating some traits of the more widespread Late Neolithic cultures of the Nile Valley.”²¹²

Despite the existence of earlier motifs at Geili in comparison with Kadero, and despite the regional variations amongst the Khartoum sites themselves, it is still possible to see parallels between the Geili and A-Group pottery decorations. Specifically, the rim top decoration of slanting incised lines is present at El Geili, as is the rim top design of hatched lines.²¹³ Similar body sherd characteristics between the two cultures are: (1) horizontal lines of impressed dots or punctates, called the ‘alternating pivoting stamp’ by Caneva,²¹⁴ solid herring-bone lines,²¹⁵ rippled surfaces,²¹⁶ and red-slipped wares with the blackened mouths.²¹⁷ Simple slanting incised lines also occur on body sherds of both cultures, but at El Geili these are contained within an incised linear border, unlike in the A-Group.²¹⁸ A-Group zigzag motifs seen

²¹²I. Caneva, ed., 1988, *El Geili: The History of a Middle Nile Environment 7000 B.C.–A.D. 1500*, pp. 112-113.

²¹³*Ibid.*, p. 85, Fig. 5: 1 and 2, respectively.

²¹⁴Compare *ibid.*, p. 99, Fig. 13: 1 and 2, with Nordström, 1972, *op. cit.*, vol. 3.2, Plate 25, Group 1: 2 and 3.

²¹⁵I. Caneva, 1988, *ibid.*, p. 17, Fig. 17: 4.

²¹⁶For some El Geili examples, see p. 107, *ibid.*

²¹⁷I. Caneva, *ibid.*, p. 110 for description.

²¹⁸Compare *ibid.*, p. 109, Fig. 19: 4 and Nordström, 1972, *op. cit.*, vol. 3.2, Plate 25, Group 2: 2.

at El Geili include the packed dotted zigzag,²¹⁹ the solid zigzag pattern,²²⁰ the regular dotted zigzag, not tightly packed,²²¹ and a straight packed, interrupted zigzag.²²²

The lithic tool industry at Geili is assessed as "...not as significantly different from those of other Neolithic sites in the region, as it is from every Mesolithic assemblage."²²³ Similarly, the decrease in the microlithic tool index (for which no value was given) is consistent with the Mesolithic/Neolithic transition in the area. Unfortunately, in terms of the lithic tool counts themselves, No similarities may be observed between Geili and the A-Group. The indices for Geili notches, perforators and denticulates are the highest, with respective values of 22.03, 14.78, and 13.04.²²⁴ In all three cases the values far exceed the A-Group counterparts. The combined end/side scraper value at Geili (12.39), as with Kadero, is significantly lower than that of most A-Group sites. Other tool types and their indices include truncations (5.65), crescents or segments (5.22), gouges (1.40), trapezes (one example only), backed pieces (1.09), and a large number of retouched pieces (23.70).

The ground stone industry of Geili displays no remarkable characteristics, except for the absence of stone rings, the significance of which has not been addressed. All ground tool types present at Shaheinab are also present at Geili. There is no evidence from El Geili tools or any material associated with them, of agricultural pursuits, and a pastoral way of life is generally assumed. Caneva writes:

²¹⁹I. Caneva, *ibid.*, p. 89, Fig. 7:2.

²²⁰*Ibid.*, p. 85, Fig. 5:13.

²²¹*Ibid.*, p. 85, Fig. 5:5.

²²²*Ibid.*, p. 89, Fig. 7:5.

²²³I. Caneva, *ibid.*, p. 134.

²²⁴*Ibid.*, Fig. 21, p. 119.

“...grinding involved other material, like clay and ochre, and all kinds of objects to be polished, such as stone beads, axes, gouges, palettes, mace heads, bone implements, etc., and...these were activities performed also in a pastoral economy, with less and smaller implements...”²²⁵

Turning now to the Shendi Reach, we come to the final important series of sites that shed light on possible A-Group Nilotic interconnections to the south. These sites include El Kadada and the host of other neolithic sites discovered in the region during the course of excavation at Kadada: Taragma, El Ghaba, El Atra, El Kudra, El Ushara, Shendi, Gereif West, Wad Ben Naga, Umm Heidan, Qerqur, Sara el Suqur, and Kadruka.²²⁶ Kadada is by far the most important because of the unique combination of cross-cultural features (see above, Chapter 2) that seem to reflect influences from the Khartoum Neolithic, the A-Group, and the C-Group. However, despite the great importance of this region it seems that not a single stylistic or quantitative analysis of either the ceramics or lithics has yet been produced. This is astonishing given the broad specialist interest in the site.²²⁷ In terms of ceramics, the concentration has been on petrographic and chemical analyses of the pottery, which utilizes small sherd samples only, not the larger samples required for a quantitative analysis. No mention has been made of a similar treatment of the lithics or the ground stone industry. However, my study of the numerous excavation reports has made it possible to be more specific about A-Group and Shendi area connections than what the excavators have so far supplied. The following stylistic similarities may be observed between A-Group and Shendi area ceramics:

²²⁵*Ibid.*, p. 144.

²²⁶For most site locations see Figure 8. See Figure 6 for Kadruka.

²²⁷See above, Chapter 2, for notes about this topic.

- (1) The presence of horizontal lines of punctate design on the body of vessels. One example of a complete pot bearing this decoration comes from KDD 85, Kadada.²²⁸
- (2) The presence of the rim band decoration of cross-hatched lines.²²⁹
- (3) Straight horizontal lines on body sherds, one example of which is known from El Ushara,²³⁰ and one from El Ghaba.²³¹
- (4) Horizontal lines of shortened V's, not the same as the more common rocker stamp designs. One body sherd with this design was published from El Ushara.²³²
- (5) An oblique line decoration was found on a rim band at Shendi.²³³ The same decoration, as already noted, is a common A-Group rim top and body design.
- (6) The rocker stamp zigzag decoration of solid lines has been found on an entire vessel from El Ghaba.²³⁴
- (7) The zigzag impression of dotted lines is known from El Ushara.²³⁵
- (8) Rippled wares, are especially common at Shendi. The site shows a "very high index of ripple pottery."²³⁶

B. Eastern Sudan: The Butana, the Atbai, the Gash Delta, and the Nubian Desert

Of the two main sites in the Butana, Shaqadud provides the most data for comparison with the A-Group. The ceramics have, by now, been very well

²²⁸F. Geus, 1981b, *Rapport annuel d'activité 1979-1980*, pp.14, fig. 12: b, and p. 31, Pl. IV: f. Compare with Nordström, 1972, *op. cit.*, vol. 3.2, Plate 25, Group 1: 2.

²²⁹For an example from Kadada see F. Geus, *ibid.*, p. 34, Pl. VII: 4.

²³⁰*Ibid.*, Pl. XI: 8. Compare with Nordström, 1972, *op. cit.*, Plate 25, Group 2: 1.

²³¹F. Geus, 1983b, *Rapport annuel d'activité 1980-1982*, p. 48, Pl. VII: e.

²³²F. Geus, 1981b, *op. cit.*, Pl. XI: 13. Compare with Nordström, 1972, *op. cit.*, Plate 25, Group 1: 7.

²³³F. Geus, 1983b, *op. cit.*, Pl. XV: 6.

²³⁴F. Geus, 1986b, "La section française de la direction des antiquités du Soudan, travaux de terrain et de laboratoire en 1982-1983." *Archéologie du Nil Moyen* 1, p. 48, Pl. VI: 1.

²³⁵F. Geus, 1981b, *op. cit.*, Plate 11: 6.

²³⁶F. Geus, 1981a, "Franco-Sudanese Excavations in the Shendi Area (1980)," *Nyame Akuma* 18: 41 (but not illustrated).

studied²³⁷ in contrast with those from Khashm el Girba. The importance of Shaqadud cannot be overemphasized because it is the only site in the Sudan to show unequivocally clear evidence of the Early Khartoum/Khartoum Neolithic transition. Marks and Mohammed-Ali summarize this important transition as follows:

“While Arkell showed at El Qoz that the Khartoum Neolithic was stratigraphically later than the Khartoum Mesolithic, he did not postulate a direct evolution between the two; rather, he posited that there was no ‘appreciable interval’ between them...still, most workers have assumed that the Khartoum Mesolithic and Neolithic formed a developmental continuum...From Arkell on, however, the Khartoum Mesolithic and Neolithic have each been defined by sets of generally non-overlapping attributes. Khartoum Mesolithic pottery is described as unburnished, while Neolithic pottery is burnished; the Khartoum Mesolithic has stone rings, while the Neolithic does not but does have chipped and polished gouges, etc. Only a very few items are considered shared; harpoons, lunates and the rockerstamp technique of pottery decoration are the most obvious...

It is a relief, therefore, that the Shaqadud midden provided clear evidence for an unbroken developmental evolution of ceramic typology, surface treatments, techniques of decoration, and motifs between the Mesolithic and Neolithic...

A major aspect of this transition is the gradual replacement of unburnished sherds with burnished sherds...

A second important aspect of the ceramic evolution at Shaqadud is the abrupt replacement during the Khartoum Mesolithic of a Hard Coarse Ware by a Friable Coarse Ware without any break in the type of surface treatment, technique of decoration or motifs produced...

A final important aspect of this long evolution is the clear stratigraphic sequencing of traditional ceramic type fossils.”²³⁸

²³⁷A. Mohammed-Ali, 1991, “The Mesolithic and Neolithic Ceramics from Shaqadud Midden,” in *The Late Prehistory of the Eastern Sahel: The Mesolithic and Neolithic of Shaqadud, Sudan*, edited by A. E. Marks and A. Mohammed-Ali, p. 65.

²³⁸A. E. Marks and A. Mohammed-Ali, 1991b, “The Place of Shaqadud in the Late Prehistory of the Central Nile Valley,” in *The Late Prehistory of the Eastern Sahel: The Mesolithic and Neolithic of Shaqadud, Sudan*, edited by A. E. Marks and A.

Despite the clear evidence of an Early Khartoum/Khartoum Neolithic transition, it does not imply that the entire stratigraphic sequence at Shaqadud is completely documented. The thirteen radiocarbon dates now collected for the site²³⁹ show a temporal gap between the Khartoum Neolithic and the so-called Post-Khartoum Neolithic Period, the period that is contemporary with part of the A-Group in Lower Nubia. However, given that some of the Shaheinab sequence is older than the A-Group and that pre-A-Group dates were obtained from levels containing pottery with A-Group-like designs, it is reasonable to assume a south to north direction of diffusion of ceramic traits if indeed such diffusion occurred. So far, little consideration has been given to the possibility of northern links for Shaqadud, but a simple comparison of ceramic decoration reveals that there are a considerable number of parallels between the A-Group and Shaqadud ceramics. Features of Shaqadud ceramic decoration shared by the A-Group include:

- (1) On body sherds: parallel horizontal lines,²⁴⁰ horizontal dotted lines,²⁴¹ slanting parallel lines,²⁴² the regularly spaced plain zigzag (not packed),²⁴³ the dotted zigzag,²⁴⁴ the tightly packed dotted zigzag,²⁴⁵ horizontal lines of large punctates (not the same as the finer dotted

Mohammed-Ali, p. 240.

²³⁹Not reproduced here. See A. E. Marks, 1991b, "Shaqadud and the 1981/83 Excavations," in *The Late Prehistory of the Eastern Sahel: The Mesolithic and Neolithic of Shaqadud, Sudan*, edited by A. E. Marks and A. Mohammed-Ali, p. 61, Table 4-1.

²⁴⁰A. Mohammed-Ali, 1991, *op. cit.*, p. 68, Fig. 5.1: e.

²⁴¹*Ibid.*, p. 68, Fig. 5.1: n.

²⁴²R. Robertson and A. E. Marks, 1988, "Shaqadud Cave: The Organization of the 3rd Mil. B.C. Ceramics," in *Meroitica 10*, edited by S. Donadoni and S. Wenig, p. 534, Fig. 5: b.

²⁴³A. Mohammed-Ali, 1991, *op. cit.*, p. 76, Fig. 5-7.

²⁴⁴*Ibid.*, p. 75, Fig. 5-6: l.

²⁴⁵*Ibid.*, p. 75, Fig. 5-6: o.

lines),²⁴⁶ the solid herring bone motif,²⁴⁷ and a pattern of alternating triangles filled with lines, very similar but not identical to A-Group designs.²⁴⁸

(2) On rim bands or borders: the herring bone design,²⁴⁹ and the cross-hatched design.²⁵⁰

(3) On rim tops, the cross-hatched pattern,²⁵¹ and parallel oblique lines.²⁵²

In addition, the pattern of short oblique lines used as a rim top decoration in the A-Group was frequently used as a rim band decoration at Shaqadud.²⁵³

The large body of Shaqadud lithics is less illustrative of A-Group or Lower Nubian connections, but it must be noted that the lithic industry of Shaqadud is of such poor quality that there is little basis for comparison. The choice of pebble quartz contributed largely to the character of the lithics because of the poor flaking properties of this material. Furthermore, Marks adds that "...the folk of the Khartoum Mesolithic and Neolithic periods who inhabited Shaqadud midden showed no evidence of ever having been moderately good flint knappers. In fact, it is unlikely that the production of finely chipped stone tools was considered very seriously, if at all."²⁵⁴ In short, the Shaqadud lithics may best be characterized by simple or crude functional types, quickly manufactured, and showing only "...very limited morphological

²⁴⁶*Ibid.*, p. 534, Fig. 5: c.

²⁴⁷R. Robertson, 1991, "The Late Neolithic Ceramics from Shaqadud Cave," in *The Late Prehistory of the Eastern Sahel: The Mesolithic and Neolithic of Shaqadud, Sudan*, edited by A. E. Marks and A. Mohammed-Ali, p. 146, Fig. 7-8: f.

²⁴⁸*Ibid.*, Fig. 7-12: j.

²⁴⁹R. Robertson and A. E. Marks, 1988, *op. cit.*, p. 534, Fig. 5: g, and R. Robertson, 1991, *ibid.*, p. 146, Fig. 7-8: i, l, f, g.

²⁵⁰R. Robertson, 1991, *ibid.*, p. 155, Fig. 7-12: e and Fig. 7-8: e.

²⁵¹R. Robertson and A. E. Marks, 1988, *op. cit.*, Fig. 5: g.

²⁵²*Ibid.*, Fig. 5: d.

²⁵³*Ibid.*, Fig. 5: a and h.

²⁵⁴A. E. Marks, 1991c, "The Stone Artifacts from Shaqadud Midden," in *The Late Prehistory of the Eastern Sahel: The Mesolithic and Neolithic of Shaqadud, Sudan*, edited by A. E. Marks and A. Mohammed-Ali, p. 95.

standardization"²⁵⁵ and virtually no stylistic variation. The predominance of quartz amongst the debitage material, the cores, and tools at Shaqadud²⁵⁶ is in sharp contrast to the preferred choice of Nile pebble in these same categories of raw material in the A-Group and other cultures of the Cataract tradition. There can be little doubt that the ease of availability of local material was the chief determinant in the choice of raw materials at Shaqadud as it was in Lower Nubia. Marks notes that quartz "...is immediately available as pebbles which are eroding out of the sandstones which cap the inselberg at the base of which lies the midden."²⁵⁷ Despite the differences in the raw material selection, the retouched tools that have been identified for Shaqadud are consistent with the types seen elsewhere in the Khartoum area and in Lower Nubia. It is important to emphasize, however, that the Shaqadud lithics do not show any developmental variation from the Early Khartoum industry to the Neolithic as do the ceramics. Marks writes "...there are no classes or types of retouched tools which clearly distinguish one of these periods from the other."²⁵⁸ Tool types present were lunates, geometrics, endscrapers, sidescrapers, burins, points, perforators, double backed perforators, notches, denticulates, backed microliths, scaled pieces, truncations, retouched pieces, triangles, trapezes, transverse arrowheads, backed pieces, and denticulate endscrapers. General comparative and contrasting features of the Shaqadud lithics in relation to the A-Group are:

²⁵⁵*Ibid.*

²⁵⁶For actual percentages and numbers for the midden see *ibid.*, Tables 6-1, 6-2 and 6-3, pp. 98, 99 and 100 respectively. Numbers and percentages are very similar for the cave lithics.

²⁵⁷*Ibid.*, p. 96.

²⁵⁸*Ibid.*, p. 103.

- (1) The predominance of microlithic tools,²⁵⁹ but usually made from small flakes not bladelets.
- (2) A much higher lunate index²⁶⁰ than that of the A-Group, 18.6 for the midden and 31.1 for the cave.
- (3) A considerably lower scraper index of end scrapers and side scrapers (combined) than for the A-Group.
- (4) A very low burin index, which Marks describes as almost non-existent for the midden (2.9), but which is very compatible with A-Group burin indices. The burin index for Shaqadud cave is even lower, at 1.6.
- (5) A similar compatibility is found between Shaqadud and A-Group denticulate indices (10.3 for the midden and 9.1 for the cave).
- (6) The notch index for Shaqadud is only slightly higher than in the A-Group, at 15.3 in the midden and 13.2 in the cave.
- (7) Points and transverse arrows, which occur in low proportions in the Shaqadud deposits are, of course, absent in the A-Group.

Marks implies that the triangles and trapezes at Shaqadud may have been accidentally produced in the process of making lunates and were therefore not "desired forms."²⁶¹ This idea is somewhat substantiated by their very low occurrence and by the fact that these tool types were found in the cave only and not in the midden.

Not to be forgotten is the ground stone industry, which although present at Shaqadud, is too undiagnostic for use as a comparative tool. Marks writes about the midden material:

"The ground stone recovered from the midden was mostly fragmentary and, therefore, difficult to classify in any detail. The obvious classes were present: hand stones, lower grinding stones, pitted stones, rings, etc. Both because of their condition and because of the fairly small samples involved, no

²⁵⁹No microlithic tool index given for either midden or cave lithics.

²⁶⁰Marks (1991c) does not use indices *per se*, but percentages. I have merely adapted the terminology for the sake of consistency in this thesis. Also all numbers here are averages, which are calculated from *ibid.*, Tables 6-6, p. 104, and A. E. Marks, 1991d, "The Stone Artifacts from Shaqadud Cave," in *The Late Prehistory of the Eastern Sahel: The Mesolithic and Neolithic of Shaqadud, Sudan*, p. 179, Table 8-5.

²⁶¹A. E. Marks, 1991c, *ibid.*, p. 106.

detailed typology was attempted and very little was done in terms of measurements.”²⁶²

Turning now to Khashm el Girba, the second of the areas of the Butana to yield comparable material, one must rely on Shiner’s original work for the raw data in the absence of publication of any revised versions of his work. Fortunately Shiner did quantify the lithics for each of his sites, and some brief descriptions of the pottery were also provided, with a few illustrations. The treatment given by Shiner to the ceramics of the Butana phase is clearly not as thorough as his treatment of the Butana phase lithics. As for the Saroba ceramics, Shiner did not deal with them at all, but apparently turned them over to Hays for inclusion in his discussion of the Karmakol industry of the Debba-Korti region. Hays attempted to apply the “Horizon Style” theory to the Saroba pottery,²⁶³ arguing that these ceramics, being so similar in style to the wares of the late Early Khartoum industry, indicated a rapid spread of Khartoum traits over a large area, which included not only the Dongola Reach (as exhibited by the Karmakol and Khartoum Variant), but the Eastern Butana and Atbai regions as well. This theory has since been challenged for the Eastern Sudan by Mohammed-Ali and Jaeger, who claim that

“...at the present state of knowledge, the wavy line motif, not to mention pottery making itself, may have been present on the Nile for *ca* 2,000 years before it spread across the Butana to the Atbara river basin. At this time...at least, Eastern Sudan cannot be linked to the Nile Valley by a ‘rapid’ spread of any ceramic tradition.”²⁶⁴

²⁶²*Ibid.*, p. 96.

²⁶³T. R. Hays, 1971c, *The Sudanese Neolithic: A Critical Analysis*, Ph.D. dissertation, Southern Methodist University, Dallas, Texas, and 1971a, “The Karmakol Industry: Part of the ‘Khartoum Horizon Style,’” in *The Prehistory and Geology of Northern Sudan*, edited by J. L. Shiner, p. 142 ff.

²⁶⁴A. Mohammed-Ali and S. E. Jaeger, 1989, “The Early Ceramics of the Eastern Butana (Sudan),” In *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyzaniak and M. Kobusiewicz, p. 478.

In spite of the apparent delay in ceramic development of the Eastern Butana, there do occur ceramic motifs at Khashm el Girba that resemble or are identical to some Khartoum area and A-Group patterns. Perhaps as evidence of the late development of the area, examples of such parallels come not only from Shiner's Saroba and Butana phases, but from the much later El Hagiz industry. Therefore, on the basis of the ceramic evidence, I think Mohammed-Ali and Jaeger's theory of a very slow spread of traits to the Eastern Sudan is very probable rather than merely possible. However, those decorations with A-Group equivalents in the Khashm el Girba area are:

- (1) The rocker stamp design of packed dotted zigzags from site N114 of the Saroba industry,²⁶⁵
- (2) a somewhat careless rendition of the cross-hatched technique on a body sherd from the same site,²⁶⁶ as well as from site N107 of the Butana industry,²⁶⁷
- (3) a true cross-hatched design used as a shoulder decoration from site N120 of the El Hagiz Group,²⁶⁸
- (4) the true cross-hatched design used as a rim band decoration, from the same site,²⁶⁹
- (5) oblique parallel incised lines used as body and rim band decoration on the same sherd, from site N123 of the Butana industry,²⁷⁰
- (6) a dotted herring bone design from site N129 of the Butana industry,²⁷¹
- (7) burnished and rippled wares,²⁷² and
- (8) parallel horizontal lines, although in many cases they are often incorporated with angled lines, unlike the A-Group designs (site N129 again).²⁷³

²⁶⁵J. L. Shiner, ed., 1971, *The Prehistory and Geology of Northern Sudan*, p. 322, Figure 5b.

²⁶⁶*Ibid.*

²⁶⁷*Ibid.*, p. 348, Figure 11b.

²⁶⁸*Ibid.*, p. 401, Figure 24.

²⁶⁹*Ibid.*, p. 405, Figure 25a.

²⁷⁰*Ibid.*, p. 367, Figure 15.

²⁷¹*Ibid.*, p. 386, Figure 22a.

²⁷²*Ibid.*, p. 369, Figure 16.

Although new sites of Pre-Saroba date (KG55 and KG14) and Saroba date (KG10, 13, 94, and 104) are known along the Atbara River, no ceramic illustrations have been produced for them.²⁷⁴ Presumably the material is being properly studied. The excavators have noted that the ceramics from the two new Pre-Saroba sites appear distinct, yet they share certain features of smoothed exterior surfaces (not as developed as burnishing) and a limitation of the decoration to the upper bodies of vessels. The ceramic decoration from KG55 and KG14 is consistent with the Khartoum area, the former having horizontal wavy lines, and dotted wavy line motifs. However, most of the wares from KG55 were characterized by impressed designs and rocker stamping, the exact variations of which have not been elucidated. Elsewhere it is noted that the KG14 pottery "...appears to be related to the general 'Khartoum Horizon Style.'"²⁷⁵ Furthermore, the authors mention a "knobbed decoration"²⁷⁶ in the Pre-Saroba wares, which they claim has "...no parallels on the Central Nile."²⁷⁷ Elsewhere this same ware type is described as a "...nobbed ware of a type found at early Kerma and in the Gash Delta."²⁷⁸ Yet another description gives the motif as "...zones of lined knobs, made by pushing the clay from the interior to make a small hollow and then adding a tiny rock to fill it. These decorations were placed either as bands around the vessels' tops or as rectangular zones, separated from each other by

²⁷³*Ibid.*, p. 386, Figure 22a.

²⁷⁴See the report by A. Mohammed-Ali and S. Jaeger, 1989, *op. cit.*, pp. 473-479.

²⁷⁵R. Fattovich, A. E. Marks, and M. Mohammed-Ali, 1984, "The Archaeology of the Eastern Sahel, Sudan: Preliminary Results," *The African Archaeological Review* 2: 178.

²⁷⁶A. Mohammed-Ali and S. Jaeger, 1989, *op. cit.*, p. 476.

²⁷⁷*Ibid.*

²⁷⁸A. E. Marks, A. Mohammed-Ali, T. R. Hays, and Y. Elamin, 1982b. "Butana Archaeological Project: Interim Note." *Nyame Akuma* 21: 40.

undecorated areas.”²⁷⁹ It seems that from the descriptions alone, the decoration sounds very like the button ornament design detailed for some of the Wadi Howar wares (see below), but it very difficult to be certain in the absence of illustrations. Marks’s statement that the decoration is not known anywhere else is somewhat puzzling,²⁸⁰ and not likely to be accurate. I think what one may be seeing is perhaps the same basic decorative motif, but with regionally specific variants. Obviously a proper publication of this decoration type would greatly clarify its true nature and distribution.

The four new Saroba sites occur to the east of the Atbara River, and are therefore located in the South Atbai steppe proper. Unfortunately only a short collective description was given of their ceramics, as follows:

“The ceramics from these sites are quite uniform. The fabrics consist of fine to coarse grained clays, moderately to heavily tempered with sand. The sand grains vary from fine through medium to coarse. The wares are friable, buff-coloured and unburnished. They are decorated with dotted straight lines and dotted zigzags.”²⁸¹

As is typical of lithic industries outside of Lower Nubia, the lithics of the Khashm el Girba area are not helpful in defining links to the north. Shiner in fact argues for a discontinuity within the region itself from preceramic to ceramic times, because he was not able to see any “...close connection between Saroba stone technology and that of the late preceramic groups.”²⁸² Under these circumstances Shiner favoured the migration theory for an explanation of the ceramic horizons in the Eastern Sudan, rather than a diffusion of traits.

²⁷⁹A. E. Marks, 1991a, “Relationships between the Central Nile Valley and the Eastern Sudan in Later Prehistory,” in *Egypt and Africa: Nubia from Prehistory to Islam*, edited by W. V. Davies, p. 35.

²⁸⁰*Ibid.*

²⁸¹A. Mohammed-Ali and S. Jaeger, 1989, *op. cit.*, p. 476.

²⁸²J. L. Shiner, ed., 1971, *op. cit.*, p. 417.

Migration, he claimed, is likely to have occurred from west to east, but not necessarily from the Khartoum region of the Nile.²⁸³

In the following Table (4-1) I have summarized the lithic counts for all four of Shiner's time periods (pre-ceramic, Saroba, Butana, and El Hagiz), with all numbers representing averages in percentages for the main tool types.

TABLE 4-1. SUMMARY OF KHASHM EL GIRBA LITHICS

	Pre-Ceramic	Saroba	Butana	El Hagiz
Total scrapers	13.5	15.6	9.1	10.8
Lunates	3.5	7.7	5.9	2.1
Truncations	8.0	6.0	3.4	6.9
Denticulates	7.9	16.2	8.7	23.0
Borers	9.2	1.5	2.7	—
Gravers	—	5.8	16.4	5.9
Burins	5.0	1.0	1.4	2.7

The only indices compatible with those of the A-Group are the denticulate and borer indices. The figures for the Saroba industry are especially important, of course, because of the contemporaneity of this sequence with the A-Group. The Khashm el Girba scraper index for all four periods is generally lower than in the A-Group, while the borer index is much lower for the ceramic bearing industries only. It should be noted that the Butana N129 site contained an abnormally high number of gravers (35.5%), for which Shiner was not able to offer an explanation.²⁸⁴ No other site of any period approaches

²⁸³*Ibid.*

²⁸⁴See Shiner, ed., 1971, *ibid.*, p. 384.

this figure, and the next highest is from N124, another Butana site, with 13% of its assemblage consisting of graters. The lack of certainty about the function of the tool type makes the single disparity difficult to assess.

Despite the lack of detailed lithic study, however, there can be little doubt that the ceramic cultures of the Khashm el Girba area, beginning with the Pre-Saroba were economically oriented toward a primarily hunting and gathering strategy that exploited both riverine environments and the margins of the steppe. There is no evidence yet that the Pre-Saroba populations ever ventured onto the Atbai steppe. There is also no reason to doubt Shiner's assessment of a discontinuity between the pre-ceramic industries and the Pre-Saroba culture. Marks writes:

“Unlike in the Nile Valley, there are late Pleistocene, pre-ceramic sites in Atbara River Valley...but these are not the progenitors of the peoples who later occupied the area.”²⁸⁵

Therefore a migration of new people from an unknown area or areas, possibly Khartoum, at about 5,000 B.C. is a likely origin for the Pre-Saroba industry. Since even the end of the Pre-Saroba (c. 4500 B.C.) predates the rise of the A-Group in Lower Nubia, nothing may be presumed about possible connections between these two cultures. There is also no evidence of any pre-A-Group Lower Nubian contacts with this area of the Eastern Sudan at this time, and the Pre-Saroba pottery is largely akin to that of the Early Khartoum sequence.

The Saroba, on the other hand, could show ceramic connections with the Nile regions north of Khartoum, particularly in its later stages. Whether these possible links were direct or indirect (via Khartoum) is impossible to decide. Links are suggested, I think, by the number of shared decorative motifs between the A-Group and Saroba cultures. These connections, whether direct

²⁸⁵A. E. Marks, 1991a, *op. cit.*, p. 35.

or indirect, likely developed as the Saroba culture itself evolved and acquired new ceramic attributes, particularly the knowledge of rippled wares. Marks writes:

“At about 4,000 BC Saroba Phase sites became larger (c. 20,000 sq m), and their material culture more varied, although their economy remained the same.

While Saroba pottery continued, two new kinds appeared; a rare, black-burnished ripple ware and an abundant thin-walled, sand-tempered, undecorated ware with both interior and exterior surfaces scraped with a wide-toothed comb. This technique of wall thinning continued into later periods, becoming both a form of decoration and a major attribute of ceramic production. Other materials include lip plugs, a rich inventory of flaked stone tools, and ostrich egg shell beads. There is no evidence for permanent structures and it is likely that settlements were still only seasonally occupied.”²⁸⁶

Moving eastward now to the culture area of the Gash Delta (including the Atbai steppe), we see a very similar economic adaptive strategy to that of the Butana, but quite a different series of pottery assemblages. These ceramic assemblages are the basis of a new and lengthy chronology (which may still grow) that incorporates and revises Shiner’s old sequence. Shiner’s Saroba Group, for example, has now been renamed the Saroba Phase, the earliest of the three main phases of the Atbai Ceramic Tradition.²⁸⁷ Therefore, the terminology of ‘group’ versus ‘phase’ has become more exact, wherein groups represent specific ceramic traditions within the larger categories of cultural phases. At present nine groups are known in the Gash Delta alone, not all of which extend into the Atbara steppe and the Atbara River regions.²⁸⁸ According to Fattovich, the nine are:

²⁸⁶*Ibid.*

²⁸⁷R. Fattovich, 1989, “The Late Prehistory of the Gash Delta (Eastern Sudan),” in *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 486.

²⁸⁸For relative relationships within the chronology see R. Fattovich, A. E. Marks, and

“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 B.C.); 4. Gash Group (*ca* 3,000-1000 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.).”²⁸⁹

In short,

“The archaeological research in the Gash Delta has led to the construction of a cultural sequence spanning from 6000/5000 BC–AD 1800. The sequence includes the development of an indigenous ceramic tradition—the Atbai Ceramic Tradition—from about the late fifth millennium BC to the early first millennium AD...The most characteristic feature of this ceramic tradition is the use of scraping and pinched rims as decorative techniques...”²⁹⁰

Despite the contemporaneity of some of the Gash Delta groups with the A-Group, (i.e., the Butana Group and earliest periods of the Gash Group), A-Group connections with the Gash Delta are more tenuous than for any other part of the Sudan. It seems that the eastern edge of the Butana may well have marked the boundary of A-Group relationships with the Eastern Sudan. Of the ceramic evidence published so far for the Gash Delta (no quantitative and petrographic analyses have yet been produced) it is possible to see only a few broad similarities with some of the ceramic patterns of the A-Group. These shared designs could perhaps have been more easily derived from the Khartoum area or may have been independently invented in the Gash region. They include blacked-topped pottery and a type of cross-hatch design with a few subtle variations that make them similar but not identical to the A-Group

A. Mohammed-Ali, 1984, *op. cit.*, p. 177, Fig. 2.

²⁸⁹R. Fattovich, 1989, *op. cit.*, p. 481.

²⁹⁰R. Fattovich, 1993a, “Excavation at Mahal Teglinos (Kassala), 1984-1988; A Preliminary Report,” *Kush* 16: 226.

examples.²⁹¹ Another difference occurs in the use of a double slanting set of lines over opposed single lines. The A-Group utilized only single lines to create its hatching. Where single lines alone are used in the Gash pottery to create hatching, the lines are slightly arched or curved, not straight,²⁹² a variant not seen in the A-Group. It should be noted that cross-hatching on Gash sherds occurs as a rim top, rim band, and as a body design, as in the A-Group. The only exact parallel between Gash Delta and A-Group ceramics is in the use of oblique parallel lines on the bodies of vessels,²⁹³ but this example post-dates the A-Group, being from the Jebel Mokram sherd collection. In addition, the presence of red-slipped wares have been noted in the Gash ceramic collections, but these too, post-date any A-Group phase.²⁹⁴ The same applies to vegetal tempered ware,²⁹⁵ which has not yet been fully analyzed to determine the exact type of organic matter involved. It is to be wondered whether, if there was any cultural exchange between this area and Lower Nubia, the process of 'sharing' was delayed as appears to be the case in the Butana. Perhaps the occurrence of the few A-Group-like traits after the A-Group period is evidence of this. Another factor suggestive of this is the fact that the lowest archaeological level at Mahal Teglinos (contemporary with the A-Group) contained largely undecorated sherds, with only very few examples of wiped and scraped sherds.²⁹⁶ It is quite clear that the amount and types of

²⁹¹For Gash examples see *ibid.*, p. 281, Fig. 15, and p. 282, Fig. 16.

²⁹²This design occurs from level 1 at Mahal Teglinos, which greatly post-dates the A-Group. See G. Capuano, A. Manzo, and C. Perlingieri, 1994, "Progress Report on the Pottery from the Gash Group Settlement at Mahal Teglinos (Kassala), 3rd-2nd Mill. BC," in *Études Nubiennes*, vol. 2, edited by C. Bonnet, p. 112, Fig. 3: 2, and p. 114.

²⁹³R. Fattovich, A. E. Marks, and A. Mohammed-Ali, 1984, *op. cit.*, p. 183, Fig. 6: 3.

²⁹⁴G. Capuano, A. Manzo, and C. Perlingieri, 1994, *op. cit.*, p. 114.

²⁹⁵*Ibid.*

²⁹⁶*Ibid.*, pp. 114-115.

decorated ceramics increased progressively beyond this earliest level at the site.

The lithic assemblages of the Gash region cannot be used to shed further light on possible relationships because very little lithic material has been published. Even illustrations of finished stone tools are generally lacking. Fattovich has remarked that “the preliminary analysis of the flaked stone industry from Mahal Teglinos indicated that it is basically microlithic, with a practically insignificant blade index.”²⁹⁷ The tool types are typical of Neolithic and Post-Neolithic assemblages, including the A-Group, but their numbers seem not to have been calculated. They include side scrapers, end scrapers, notches, denticulates, truncations, retouched flakes, perforators, backed pieces, crescents, and very few examples of burins, triangles, and trapezoids.²⁹⁸ Other aspects of the stone industry such as grinding stones, axes, lip-plugs, and studs, etc., appear to have been locally manufactured, with no evidence of imported types.

So what were the cultural connections of the Gash Delta, given the virtual lack of evidence for Lower Nubian links in A-Group times? Surprisingly, Nilotic links as far north as Kerma in Upper Nubia in post A-Group times have been noted, although the evidence is not overwhelming. It would appear that Gash Delta connections with Nubia did not begin until after the demise of the A-Group and even then did not extend as far north as Lower Nubia. Such connections are evidenced by the presence of the knobbed ware (already discussed above) at Kerma, which also links the Gash Delta with

²⁹⁷R. Fattovich, 1993b, “The Gash Group of the Eastern Sudan: An Outline,” in *Environmental Change and Human Culture in the Nile Basin and Northern Africa until the Second Millennium B.C.*, edited by L. Krzyżaniak, M. Kobusiewicz, and J. Alexander, p. 440.

²⁹⁸*Ibid.*

regions west of the Nile, such as the Wadi Shaw, and the Gilf Kebir Plateau of Egypt. It seems that a southeast to northwest rather than a northwest to southeast diffusion of the trait is generally assumed. The excavators write:

“The knobbed ware of the 6th millennium B.C. Pre-Saroba Phase sites apparently lasts for some time in the north, finally reaching the Nile Valley at Kerma during the 3rd millennium B.C.”²⁹⁹

The Gash area knobbed ware is known from the earliest ceramic occupation and beyond. In the Amm Adam Group, which is contemporary with the Khashm el Girba Pre-Saroba phase, the decoration is described as “...perpendicular holes in the wall closed with small clay balls forming...rim bands.”³⁰⁰ Equivalent designs are now known in the Malawiya and Agordat Groups of the Gash sequence. Other ceramic similarities noted with Upper Nubia are the zigzag rim bands in some Gash Group sherds, which “...are comparable to C-Group and Early Kerma specimens.”³⁰¹ Although these designs have not been illustrated, I have assumed that they are not comparable to any A-Group rim band designs. In addition, there are numerous examples of decoration from most of the Gash sequences that clearly link the area to the Khartoum Horizon style of the Central Sudan. These designs include, especially, the zigzag motif executed with a serrated rocker stamp, and the woven mat motif, the latter of which has been compared with the Middle and Classic Kerma wares.³⁰²

²⁹⁹A. E. Marks and R. Fattovich, 1989, “The Later Prehistory of the Eastern Sudan: A Preliminary View,” in *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 457.

³⁰⁰R. Fattovich, 1989, *op. cit.*, p. 484.

³⁰¹*Ibid.*, p. 493.

³⁰²*Ibid.*, p. 495.

It should not be surprising to find that the ceramic evidence most strongly links the Gash Delta with other areas of the eastern Sudan, especially Shaqadud, and with Ethiopia directly to the east. Members of the Gash Delta research team, most notably Fattovich, are currently expanding their research interests into Ethiopia to sites such as Agordat (Figure 7), noted so long ago by Arkell but never properly investigated.³⁰³ These new interests represent the latest outcome of work in the Eastern Sudan. It is important to emphasize that most of the Gash Delta extra-regional contacts, not only with Nubia, began fairly late in prehistory, i.e., after the demise of the A-Group in Lower Nubia. Earlier relations, when they did occur, appeared not to have been in the direction of Lower Nubia at all, but further to the east, as far as Yemen. These realizations have made it somewhat easier to understand why A-Group traits appeared not to have figured heavily in the material attributes of Gash Delta culture. Nevertheless, the importance of the Gash Delta

³⁰³In addition to Agordat, Arkell investigated the four sites of Kokan. Ntanei, Shabeit, and Dandaneit in the same vicinity. These occupation sites, were never actually excavated, but much material was recovered from their surfaces to show that they warranted some attention. The finds, collected in 1942, remained in the Khartoum Museum for eleven years before Arkell was requested by the Commissioner for Archaeology (Sudan) to publish an article concerning them. (See A. J. Arkell, 1954b, "Four Occupation Sites at Agordat," *Kush* 2: 33-62.). A descriptive examination of the finds showed that a number of periods were represented in the Agordat area, with most of the material coming from an occupation contemporary with Egypt's Second Intermediate Period and the early New Kingdom. Arkell was, however, reluctant to commit to any judgement concerning the date of the main occupation, and he warned that other periods not represented by the surface material are likely to be present below the surface. Indeed, this issue could not reasonably be settled without at least a minimum of excavation. Some evidence of an earlier occupation contemporary with the Egyptian predynastic period (and hence the A-Group in Nubia) was obtained, but none of it was overwhelmingly suggestive of Egyptian or Lower Nubian connections. Arkell noted only a few loose parallels in the presence of disk maceheads and knobbed spherical maceheads, which "...might have been derived from knobbed maceheads probably of Asiatic origin which occur in the Late Predynastic in Egypt" (*ibid.*, p. 62.). In addition, a few slate palettes and fragments of the same are "...not unlike those used in Predynastic and Protodynastic Egypt" (*ibid.*, p. 45), particularly the ones having decorated borders.

interconnections in post A-Group times cannot be underestimated. Fattovich provides the following summary of Gash relations:

“The available evidence suggests that the Gash people were included in a complex network of contacts and exchanges which linked Egypt and the Middle Nile Valley to the Upper Nile, the Horn and possibly Southern Arabia...Such contacts seem to have been particularly frequent in the first half of the 2nd millennium B.C.

The occurrence of Kerma elements along the whole stratigraphic sequence at Mahal Teglinos documents the continuity of contacts with this early stage during the whole period of development of the Gash Group...

Coiled and finger-nail impressed sherds, like specimens from Shaqadud Cave in the Northern Butana going back to the late 3rd-early 2nd millennium B.C., appear in levels I, II, and upper III (ca. 2,000-1,500 B.C.). Fragments of the Jebel Moya type occur in the level I...Fragments like the Terminal C-Group and Pan Grave ones occur in the Terminal Gash Group level overlapping the burial ground...A fragment of wavy punctate decoration along the rim, comparable to specimens from Northern Yemen going back to the 3rd-2nd millennium B.C., has been found in the level IV (ca. 2,500-2,300 B.C.).

On the whole, it seems that the radius of action of the Gash Group covered a very wide area stretching from the White Nile to the Red Sea coast and the cliffs of the Ethiopian plateau...Therefore, the present evidence suggests that in the late 3rd-early 2nd millennium B.C. Mahal Teglinos was a node in the commercial routes connecting the Middle Nile and the Gezira to the Red Sea Coast and the Ethiopian highlands.”³⁰⁴

The final area to be considered in the Eastern Sudan for possible A-Group links is the Nubian desert, immediately to the east of the A-Group territory. Sadly, very little may be ventured about A-Group interconnections with this area, but this seems to be a result of a general lack of attention given to the region rather than from any lack of existing evidence. Only a few preliminary reports have been produced by Sadr and the Castiglioni

³⁰⁴R. Fattovich, 1993b, *op. cit.*, pp. 443-444.

brothers³⁰⁵ from their investigations of the Neolithic phases of occupation in the Nubian Desert, although the great potential for finding such sites has been noted.³⁰⁶ It is to be wondered whether the material recovered to date, particularly the ceramics, will ever be more extensively published, as the Castiglioni brothers appear to have shifted the focus of their fieldwork eastward to the Islamic remains of Berenice.³⁰⁷ Furthermore, interest in the Neolithic occupation of the Nubian Desert was not represented at all at the latest Nubian conference, and interest in the early periods of the area seems to have waned.

However, as already noted (Chapter 2, above), the earliest ceramic occupation of the Nubian Desert seems related to the Khartoum cultures to the south. Khartoum Horizon Style pottery has been identified tentatively by I. Caneva, and a few sherds have been published in illustration form.³⁰⁸ Fewer sherds still have been published from the Neolithic tumulus D5, which may be related to the A-Group or Badarian civilization. One of these sherds³⁰⁹ shows the characteristic A-Group designs of straight horizontal lines over the body, and diagonal strokes along the rim top. As promising as these similarities are, they are too scanty to allow for the formulation of any reasonable hypotheses regarding interconnections. Lithic material, unfortunately, has not been reported at all, but it is difficult to imagine that no examples were

³⁰⁵See K. Sadr, A. Castiglioni, and A. Castiglioni, 1994, "Preliminary Results of CeDRO's Research in the Nubian Desert," *Nyame Akuma* 41: 66-68, and K. Sadr, A. Castiglioni, and A. Castiglioni, 1995, "Nubian Desert Archaeology: A Preliminary View." *Archéologie du Nil Moyen* 7: 203-235.

³⁰⁶*Ibid.*, 1995, p. 204.

³⁰⁷See the abstracts of the latest Nubian conference papers in T. Kendall and P. Der Manuelian, eds., 1998, *International Society for Nubian Studies Ninth International Conference August 21-26, 1998: Abstract of Papers*, pp. 49-50.

³⁰⁸K. Sadr, A. Castiglioni, and A. Castiglioni, 1995, *op. cit.*, p. 205, Fig. 3.

³⁰⁹*Ibid.*, p. 211, Fig. 10.

found in at least the Early Khartoum related and Neolithic sites. It can only be hoped that further data are forthcoming from the Nubian Desert.

C. Western Sudan: The Wadi Howar and Laqiya Regions

The B.O.S. expedition has now identified Early and Late Neolithic assemblages in the Wadi Howar region, in addition to an important 'Middle' Neolithic phase, not yet known in the Khartoum region or elsewhere in the Nile Valley.³¹⁰ Unfortunately none of the ceramic and lithic material from any of these periods has yet been quantified, but presumably these data are forthcoming. For the purpose of (limited) A-Group comparisons, the Middle Neolithic phase in this region is contemporary with the A-Group. The presence of the rocker stamp design at the Wadi Howar sites has already been mentioned, but more specifically, its variant is the plain (not dotted) design, with an estimated occurrence at about 20 per cent.³¹¹ An interesting evolution of the zigzag rocker stamp design took place in the Wadi Howar, and seems to have been limited to the western Sudan, with a similar evolution being noted at the Laqiya Oasis. This is the development of the so-called 'Leiterband' patterns, described as having "...decorated and undecorated bands alternating each other."³¹² Keding informs us that the basic type of implement used in making this design was known in the Khartoum area, but was never adapted

³¹⁰J. Richter, 1989, "Neolithic Sites in the Wadi Howar (Western Sudan)," in *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 434.

³¹¹There are many examples in the Wadi Howar excavation reports. See Richter, *ibid.*, p. 436, Fig. 4:4 and B. Keding, 1993, "Leiterband Sites in the Wadi Howar, North Sudan," in *Environmental Change and Human Culture in the Nile Basin and Northern Africa until the Second Millennium B.C.*, edited by L. Krzyżaniak, M. Kobusiewicz, and J. Alexander, p. 376, Fig. 4: 1.

³¹²B. Keding, 1993, *ibid.*, p. 372. For sherds bearing this design see *ibid.*, p. 375, Fig. 3: 2-5.

and used in precisely this manner in the Nile Valley. The only known direct parallels for the Leiterband designs are from Wanyanga (Figure 5), Delebo, and Erg Jmeya,³¹³ but generally the design seems only indirectly related to similar decorations in the Khartoum Neolithic. In Keding's own words:

“Implements with one or two gaps within the working edge were...common in Leiterband decoration producing one stroke and one or two dot-impressions which were set in rows overlapping each other; it is necessary to find the last row, which has not been overlapped, to recognize the shape and the length of the gap implement...So the Leiterband decorations have been produced by a modified implement which had been...known in the Khartoum Mesolithic and the Khartoum Neolithic, but is now used in a more complicated form of the traditional technique.”³¹⁴

I have noted that many examples of A-Group parallels at the time of the Wadi Howar Middle Neolithic involve the cross-hatched decorative form. These are: (1) a cross-hatched rim top decoration,³¹⁵ (2) a cross-hatched design on bodies of sherds,³¹⁶ and (3) the cross-hatched rim band decoration.³¹⁷ The most recent discoveries of A-Group decoration in the Wadi Howar have occurred in the so-called Lower Wadi Howar, that is, east of Gebel Rahib, from where it is now known that the Wadi Howar extended eastward in Neolithic times to connect with the Nile as a tributary. In this region, ceramics bearing the herring-bone design have been found with great frequency.³¹⁸ Keding writes, “...the herringbone decorated ware, which is red, well-burnished and...organic tempered has so far not been documented in the

³¹³*Ibid.*, p. 378.

³¹⁴*Ibid.*, p. 377.

³¹⁵J. Richter, 1989, *op. cit.*, p. 436, Fig. 4:1 (from site 84/13).

³¹⁶*Ibid.*, p. 433, Fig. 2:3 (from site 84/24).

³¹⁷*Ibid.*, Fig. 2:3.

³¹⁸A complete pot has been found with this design at the top portion of the vessel. B. Keding, 1997, “Prehistoric Investigations in the Wadi Howar Region: A Preliminary Report on the 1995-1996 Season.” *Kush* 17: 43, Photo 3.

Wadi Howar and is apparently restricted to regions east of the Djebel Rahib. They indicate a general resemblance with the pottery of the Nubian Pre-Kerma or A-Group.”³¹⁹ The overriding significance of these new finds is, according to the author, that

“the ceramics of the Lower Wadi Howar apparently reflect a strong influence from the Nile Valley, while the ceramics recovered from the Middle Wadi Howar [i.e. further west] seem to indicate local or more western oriented connections. Furthermore, these two regions are characterized by different settlement patterns.”³²⁰

It would therefore not be unreasonable to suggest that if further evidence of A-Group (and Pre-Kerma) connections were sought amongst the dunes of the Lower Wadi Howar, more would be found. Of the areas examined in this work thus far, this portion of the Wadi Howar seems one of the most promising for extending our knowledge of A-Group relationships.

Although connections between the Early Khartoum Industry and the Khartoum Neolithic are now well demonstrated by the abundant finds of wavy line and dotted wavy line wares, there are some departures from the Khartoum assemblages that suggest further links with the A-Group. For example, I find particularly interesting Richter’s statement that “...the range of band [rim band] ornament variations from 84/13 far exceeds the Shaheinab repertoire.”³²¹ This exactly parallels the difference between the A-Group and Shaheinab rim band decoration, with a greater variety being present in the A-Group than at Shaheinab. Similarly, the gouge type seen at Shaheinab is absent from the Wadi Howar assemblages, as it is from the A-Group. Instead,

³¹⁹*Ibid.*, p. 35.

³²⁰*Ibid.*, pp. 38-39.

³²¹J. Richter, 1989, *op. cit.*, p. 437.

a localized style of the gouge, now known as the Darfur type,³²² which was likely used for woodworking, is common in the Wadi Howar and throughout the Eastern Libyan Desert.³²³ The fact that neither the A-Group nor the Wadi Howar share the Khartoum Neolithic gouge may be significant in terms of interconnections.

Few comparative notes may be made of the Wadi Howar lithic industry in the absence of quantified data. Similarities with the A-Group and other Nilotic cultures occur in the predominant use of quartz, which was available locally, and the predominance of microlithic tools (no microlithic index is available). Otherwise the general features of the Wadi Howar lithic industry may be summarized by the presence of (1) microlithic segments or crescents, (2) the predominance of micro-tranchets and tanged micro-tranchets in at least one assemblage (Djabarona, site 84/13), (3) small numbers of denticulates, notched pieces, and borers (at Djabarona), (4) Darfur type axes of green stone, (5) pestles, (6) so-called disc-shaped stone clubs, which seem analogous to the stone rings from the Khartoum area, and (7) numerous grinding stones. The Djabarona lithic assemblage is the only one described in any detail to date. Keding writes:

“The stone industry does not match those from further east...or west...and the characteristic feature of the Leiterband-sites, the numerous types of micro-tranchets, are missing in neighboring areas. Nevertheless, the inventory has some features, such as segments and axes, in common with the Khartoum Neolithic...The differences in the typology may be explained by chronological differences and as a result of a different type of exploitation of the natural environment.”³²⁴

³²²These are the same type of polished axeheads observed by Newbold and Shaw in the 1920's and 1930's.

³²³J. Richter, 1989, *op. cit.*

³²⁴B. Keding, 1997, *op. cit.*, p. 372.

Turning now to the Laqiya, Wadi Sahal and Wadi Shaw areas, we see many characteristics in the ceramic and lithic industries identical to those of the Wadi Howar. As with the Wadi Howar material the pottery is most indicative of Nilotic links. Generally the forms suggest that vessels had pointed or rounded bases. The decorated types of Camp 49 included red polished or burnished black-mouthed wares, combed impressions, and rocker stamp decoration in conjunction with rows of knobs under the rim. Francke writes about this latter type:

“Technically these knobs remind [one] of the ‘bouton au repoussé’ of the French Neolithic and are pressed out of the vessel from the inside to the outside...In some cases this ‘button ornament’ presents the only element of decoration, forming small metopes under the rim.”³²⁵

The author also writes that

“Some of the elements here mentioned can be found within the decorative patterns of the Nubian A-Group as well as in the C-Group...The ‘button ornament’ on the other hand brings the whole complex near to the Kerma Culture cautioning us to await more detailed studies of the material before any far reaching conclusions [can be made].”³²⁶

The ceramic material recovered from site 82/38-1 in the Wadi Shaw is perhaps most consistent with that from A-Group sites in the Nile Valley. Cziesla notes that

“A first examination of the material shows some striking parallels in the pottery of the Nubian A-Group, but some of its elements can also be found among the material of the C-Group, the Abkan, and Kerma.”³²⁷

³²⁵U. Francke, 1986, “Camp 49 Re-examined,” in *Nubische Studien*, edited by M. Krause, p. 138.

³²⁶*Ibid.*

³²⁷E. Cziesla, 1986, “Excavations at the Wadi Sahal,” in *Nubische Studien*, edited by M. Krause, p. 144.

The ceramic characteristics here include the black-mouthed ware with a red polished or rippled surface, occasionally having a notched (milled) rim, as well as the rocker stamp zigzag decoration. A herring-bone punctate design has also been found in the Wadi Sahal ceramic assemblage, which is identical to the A-Group motif.³²⁸ In addition, site 82/31-2 in the Wadi Shaw yielded, most interestingly, a type of complex pattern seen in some A-Group ceramics, consisting of a checkered pattern of lozenges placed in horizontal rows one on top of the other.³²⁹ The lozenges are filled with impressed line decoration in both the Wadi Shaw and A-Group examples. The only difference between the design in the two cultures is that the A-Group lozenges are more elongated, but otherwise the design and the layout are identical.

Further ceramic links with the Nile Valley (but not with the A-Group) are attested by the presence of the dotted wavy line decoration on some sherds, particularly from the Wadi Shaw sites.³³⁰ These are the oldest ceramics of the area and are characterized by a predominance of quartz in the temper as well as by small amounts of organic material and fine sand. No petrographic analysis has yet been conducted. A rather unusual pattern that was first noticed in the Laqiya area is described as "...a cross-hatched herring bone ornament which might be termed 'Laqiya type.'"³³¹ Schuck claims that it is reminiscent of the Early Khartoum-related group ceramics, by which one

³²⁸This occurs at site 82/38-1. See R. Kuper, 1995, "Prehistoric Research in the Southern Libyan Desert: A Brief Account and Some Conclusions of the B.O.S. Project," in *Actes de la VIIIe conférence internationale des études nubiennes, Lille 11-17, septembre 1994: I. Communications principes. Cahier de recherches de l'Institut de papyrologie et d'égyptologie de Lille* 17: p. 134, Fig. 6: 10.

³²⁹E. Czesla, 1986, *op. cit.*, Fig. 2: 1, p. 142. Compare with Nordström, 1972, *op. cit.*, vol. 3.2, Plate 26, Group 5: 5.

³³⁰W. Schuck, 1989, "From Lake to Well: 5,000 Years of Settlement in Wadi Shaw (Northern Sudan)," in *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 424, Fig. 2: 7, 9, and 12.

³³¹*Ibid.*, p. 423, and Fig. 2, p. 424, 7, 10, and 11.

assumes he must mean the Karmakol and Khartoum Variant pottery of the Nile Valley. The design appears more complex than the author indicates, being perhaps a combination of the cross-hatched and herring-bone designs of the A-Group, as well as the wavy line decoration of the Khartoum area. The motif was thought initially to have been restricted to the Laqiya area, as perhaps a "...local tradition,"³³² but as Schuck now notes, "...the decoration apparently does not represent a local tradition, as has been suggested...but seems to have a distribution of more than 300 km from north to south (Wadi Shaw to Wadi Howar)."³³³

The lithic and ground stone industries of the Laqiya area have barely been published, with only brief site notes having been produced to date. However, from the low percentages of lithic tools present at most sites, it is generally held that stone tool production played a minimum economic role in the region. Lithics from the settlement site designated 82/38-6 in the Wadi Sahal have been described as follows:

"At this settlement the fabrication of stone implements obviously was not very important because no re-touched artifacts could be found. Nevertheless, judging from the existing cores, unretouched chips and flakes, stone implements must have been used. The raw material, [as] in Wadi Shaw, consisted mainly of local quartzite of different colour-varieties and of petrified wood. During the survey in the southern part of the wadi a number of quartzite outcrops were noticed with some flaking sites nearby."³³⁴

At another Wadi Sahal site (82/38-1), the only tools identified were backed bladelets, flakes, and one stemmed point, all made of petrified wood.³³⁵

³³²R. Kuper, 1986, "Wadi Howar and Laqiya: Recent Field Studies into the Early Settlement of Northern Sudan," in *Nubische Studien*, edited by M. Krause, p. 131.

³³³W. Schuck, 1989, *op. cit.*, p. 426.

³³⁴E. Cziesla, 1986, *op. cit.*, pp. 143-144.

³³⁵*Ibid.*, p. 144. See also p. 148, Fig. 2: 13-22.

Similarly, at 82/38-4, "...only a few retouched flakes and some bladelets...are to be recognized as tools."³³⁶ Somewhat greater lithic variation was provided by the sites at Camp 49, which Francke describes as follows:

"...the low percentage of tools among the lithic industries consists mainly of borers and scrapers of petrified wood, jasper and quartzite. Some well-worked thumbnail-scrapers...present the most striking form."³³⁷

As at Wadi Howar, grinding stones were common in the Laqiya area. Among the more interesting finds at Camp 49 was a grinding stone having the unusual feature of a handle that appeared to have been carefully worked.³³⁸ This new example is exactly analogous to ones found earlier in this century by Newbold at Wadi Howar and Nukheila.³³⁹ The only known parallels for this type of object are from the Gilf Kebir in Egypt's Western Desert, where the artifact is known as a characteristic feature of the culture there. Darfur axes were found at Camp 49 as well, suggesting cultural links directly to the south. Beyond these few observations, the combined lithic material from the Laqiya region is too ill defined to allow for further comparisons, especially with the A-Group. It may be that such an analysis may not be realistic if the Laqiya area continues to yield sparse lithic material as a characteristic feature of its culture.

A new area that must be added to the B.O.S. archaeological inventory is the Selima Sandsheet (Figure 6), which spans northwestern Sudan and southwestern Egypt. Although long known, the area has been "...until recently, believed to be free or, in relation to other regions nearly free of

³³⁶*Ibid.*, p. 144.

³³⁷U. Francke, 1986, *op. cit.*, p. 138. See also Fig. 1, p. 141 for the thumbnail scrapers.

³³⁸R. Kuper, 1986, *op. cit.*, Fig. 3, 1-2, p. 135 and p. 131 for the text.

³³⁹See D. Newbold, 1928b, "Rock-pictures and Archaeology in the Libyan Desert," *Antiquity* 2 (no. 5): 276, Fig. 5.

prehistoric remains. Now, that the exploration of the Western Desert has turned from geographical to geological and archaeological studies, this view must be revised.”³⁴⁰ The principal site investigated so far is near the rock of Burg et Tuyur (Figure 6), although about 285 sites are now known in the vicinity of the rock.³⁴¹ The Neolithic occupation of the region around Burg et Tuyur is characterized by very small sites with a rarity of ceramics in a poor state of preservation, but with somewhat greater amounts of better preserved lithics. Ground stone implements such as grinding stones were fairly frequent, while faunal remains were rare. The combined evidence is suggestive of cultural connections with the Gilf Kebir, Bir Kiseiba, and Nabta Playa area (discussed below), rather than with the Wadi Howar, Laqiya, and other areas of the western Sudan. Concerning the ceramic material, Schuck writes:

“Rim decorations are very uniform: short strokes perpendicular or angled to the outer edge...All these sherds are comparable to sherds from sites of the Nabta and Bir Kiseiba area where they would be placed within the Early or Middle Neolithic assemblages in the general Saharo-Sudanese-Tradition. This is also proposed for the lithic material.”³⁴²

It should also be noted that “further comparable pottery is found in the Nile Valley as well as in the Central Sahara on sites which in general fall within the ‘Neolithic of the Saharo-Sudanese-Tradition.’”³⁴³ The rim decoration

³⁴⁰W. Schuck, 1993, “An Archaeological Survey of the Selima Sandsheet, Sudan,” in *Environmental Change and Human Culture in the Nile Basin and Northern Africa until the Second Millennium B.C.*, edited by L. Krzyżaniak, M. Kobusiewicz, and J. Alexander, p. 237.

³⁴¹G. Idris, 1994, “Burg et Tuyur: A Neolithic Settlement in the Selima Sandsheet, Northern Sudan,” in *Études Nubiennes*, vol. 2, p. 101. The two principal sites are 85/78 and 85/79.

³⁴²W. Schuck, 1993, *op. cit.*, p. 246.

³⁴³G. Idris, 1994, *op. cit.*, p. 103.

described by Schuck is the same as the rim band and rim top patterns of incised lines seen in the A-Group, but significantly, these examples pre-date those of the A-Group. Rockerstamping was also performed on Burg et Tuyur ceramics, but no patterns have yet been found that are comparable to any A-Group design. The dotted zigzag motif, while present, occurs in a horizontal direction on the vessel, not vertical.³⁴⁴

Perhaps the most interesting feature of the lithic industry is the so-called micro-triangular point,³⁴⁵ which in addition to showing links with the North African and some Algerian sites, may also be traced to a very restricted region of Lower Nubia. Idris writes:

“In the Nile Valley they only appear around Wadi Halfa at the sites DIW 53, DIW 3 and DIW 6, which are dated between 7700 and 6200 b.p...Further to the south of Nubia they have not been found up to now. This tool type together with the great number of segments gave reason to assign the analyzed material to the Middle Neolithic period of the Eastern Sahara, as it is represented by several sites around Nabta Playa and Bir Kiseiba...It must be stressed that this micro triangular point does not occur in the Early or the Late Neolithic of the Eastern Sahara.”³⁴⁶

D. Egypt's Eastern and Western Deserts and Oases

A-Group relationships with the Nilotic civilizations of Egypt, especially the Naqada culture, have been dealt with extensively by scholars in the past and much of the evidence and arguments concerning A-Group/Egyptian connections has already been presented above. Largely untouched, however, is the topic of A-Group relations with the regions of the Eastern and Western

³⁴⁴*Ibid.*, p, 104, Fig. 2: 9.

³⁴⁵*Ibid.*, p. 103.

³⁴⁶*Ibid.*

Deserts of Egypt. With the focus of archaeological work having expanded outward from the Egyptian Nile in recent years, it is now somewhat easier to examine the Desert/Nile interconnections than ever before in the past. Undoubtedly the Western Desert is much better studied over a longer period of time than the Eastern Desert. Some of the investigative projects in the Eastern Desert were begun only in the 1990's,³⁴⁷ such as Sadr's work at Bir Abraq,³⁴⁸ and Alfano's work on the rock drawings between Qasr el Banat and Gebel Abu Queh.³⁴⁹ By contrast with the Western Desert, the body of publication on the Eastern Desert shows that much of the investigative work throughout the region has been concerned with rock art and inscriptions and less so with the archaeological remains. Yet as Majer points out, "we will never reach a full understanding of this rock art until excavation reveals habitation sites connected to it."³⁵⁰ The Eastern Desert connections with the Nile civilizations of Egypt (especially the Badarian and Naqada II cultures) have become better defined only in recent years, but until now, Eastern Desert links with the Sudan have not been properly investigated. Majer's suggestion for the Sudan of a "...parallel influence from both Eastern and Western Deserts,"³⁵¹ is, in fact, only now being realized. Preliminary reconnaissance at Bir Abraq

³⁴⁷However in 1923 Murray and Derry reported the discovery of a predynastic burial near Ras Samadai on the Red Sea coast, but this appears not to have stimulated serious archaeological interest in the Eastern Desert at that time. See G. W. Murray and D. E. Derry, 1923, "A Predynastic Burial on the Red Sea Coast of Egypt," *Man* 23: 129-131.

³⁴⁸K Sadr, 1994, "Preliminary Report on Archaeological Reconnaissance in the Eastern Desert, Southeast Egypt," in *Études Nubiennes*, vol. 2, edited by C. Bonnet, pp. 7-11.

³⁴⁹C. Alfano, 1994, "Rock Pictures of the Eastern Desert of Egypt (1989 Campaign)," in *Études Nubiennes*, vol. 2, edited by C. Bonnet, pp. 117-124.

³⁵⁰J. Majer, 1992, "The Eastern Desert and Egyptian Prehistory," in *The Followers of Horus*, edited by R. Friedman and B Adams, p. 231.

³⁵¹*Ibid.*, p. 227.

(Figure 6) has revealed, in addition to Ptolemaic remains, a third millennium B.C. occupation contemporary with the A-Group, and an earlier culture that utilized the Khartoum Horizon style of pottery. Sadr writes: "...the presence of these sherds confirms the extension of the Khartoum related industries into the areas east of the Nile in what is now southeastern Egypt."³⁵² The ceramic material of the third millennium B.C. occupation is somewhat different in that its connections are not so easy to define. Sadr indicates that "many pieces were decorated with designs which do not seem to be related to any of the Nile Valley traditions."³⁵³ However, I would argue that they certainly appear to have been executed with a type of rocker stamp, particularly the punctate designs. This decoration type, arranged in horizontal rows, has an A-Group parallel, as do the criss-cross patterns of hatched lines.³⁵⁴ Sadr did not note these A-Group parallels but instead remarked that "two of the sites contained some sherds decorated with fine cross-incisions: these may represent a precursor of the net-patterned cross-incised wares of the typical Pan-Grave industry."³⁵⁵ In addition many sherds were decorated with a red slip and burnishing, and some were "clearly blackmouthed."³⁵⁶ Although these features are all A-Group characteristics, these traits are too widely scattered to be ascribed to only one particular industry or, for that matter, to one temporal horizon. Associated with the third millennium B.C. ceramics are tumuli, but very little data have been published concerning these tombs. No lithics have yet been isolated for study, and no radiocarbon dates have yet been published for Bir Abraç.

³⁵²K. Sadr, 1994, *op. cit.*, p. 10.

³⁵³*Ibid.* See also p. 9, Fig. 3 of this same report for the decorations.

³⁵⁴*Ibid.*, Fig. 3 again.

³⁵⁵*Ibid.*, p. 10.

³⁵⁶*Ibid.*

A second area in the Eastern Desert that shows evidence of A-Group connections is Abu Queh. Alfano has reported there the presence of rock shelters of the A-Group type found by Bietak and Engelmayr at Sayala. Alfano writes:

“These natural shelters obtained from the friable sandstone have often been reinforced with simple little walls...Similar shelters have been found in Nubia, especially in the area of Sayala.”³⁵⁷

The author also claims that the pre-A-Group (Palaeolithic) lithics at the same site show “clear affinities”³⁵⁸ with those found by the Scandinavian Joint Expedition at Wadi Halfa. A possible source of the Palaeolithic flint in Nubia is suggested as the Wadi Hammamat. This adds an exciting new alternative to the flint source at the Sinn el-Kaddâb already proposed by Shiner.

Another important contribution made by Alfano is the identification of A-Group rock drawings at Abu Queh, attributed to the so-called temporal Horizon A at the site.³⁵⁹ Alfano writes:

“An extremely interesting group of drawings from [the] A-Group belong to this horizon. It is certain that some sereḥ of human shapes and boats which were found on site M.18 and on the cliff of Abu Queh can be attributed to a very ancient period (predynastic and protodynastic)...On the M.18 site there are some empty sereḥ and some with a falcon above them, and among these only a few have already been indicated in previous studies, a war scene with a kneeling prisoner and a male figure in the act of hitting him with a club.”³⁶⁰

The ancient pictures are very sketchily rendered but their subject matter is unmistakable nonetheless. It is not clear on what grounds Alfano has attributed the oldest drawings to the A-Group, as no comparative material

³⁵⁷C. Alfano, 1994, *op. cit.*, p. 117. See also Fig. 1, p. 118.

³⁵⁸*Ibid.*, p. 118.

³⁵⁹See *ibid.*, p. 120, Fig. 3, bottom register.

³⁶⁰*Ibid.*, p. 120.

(further drawings or artifactual evidence) was presented to help cross-date the pictures. Since lithics are present at the site, then ceramic material can surely be expected from the site at some future date. The design elements of any ceramics found will be very interesting to assess in light of A-Group interconnections with this area of the Eastern Desert.

Areas of the Western Desert,³⁶¹ both long-known and newly discovered, that will be considered here are: Bir Kiseiba, Nabta Playa, the Wadi Bakht, Wadi el Akhdar, the Gilf Kebir, Abu Ballas, Kharga Oasis, Dakhleh Oasis, the Faiyum, Dungul Oasis, Kunkur Oasis, Siwa Oasis, Farafra Oasis, and Bahariya Oasis.³⁶² The first three areas have been the archaeological domain of the Combined Prehistoric Expedition in recent years. The CPE undertook investigations at Bir Kiseiba from 1979 to 1980 in order to study human adaptation to hyper-aridity as this once-moist region gradually dried out to its present desert state. The archaeology of the region shows distinct association with the Early Holocene wet phases, which were punctuated by dry phases in which occupation ceased. Wendorf and Schild remark that "this sequence...is unusual, if not unique, for the Sahara, and inevitably, poses as many questions as it solves. The climatic sequence is similar, but not identical to the sequence proposed for the Lake Chad area in the Central Sudan."³⁶³ The earliest known occupations are of Late Acheulean age, followed by Mousterian and Aterian-like assemblages (c. 44,000 B.P.), but with the beginning of playa desposition in the area at about 8900 B.P., one sees a series of ceramic occupations with pottery resembling the Early Khartoum tradition. Such

³⁶¹Otherwise called the Eastern Sahara, the Libyan Desert, or the Darb el Arbain Desert.

³⁶²For all locations see Figure 6.

³⁶³F. Wendorf and R. Schild, 1984, *Cattle Keepers of the Eastern Sahara: The Neolithic of Bir Kiseiba*, edited by A. E. Close, p. 3.

ceramics occur in association with temporary living sites. In addition to the use of cattle, the domestication of six-row barley seems to have taken place shortly before the silts of the first playa covered these earliest settlements, at around 8100 B.P. Plant domestication thus marks the transition to the Neolithic occupation of Bir Kiseiba, which the excavators have divided into an Early, Middle, and Late sequence.³⁶⁴ The Late Neolithic, c. 6000 to 4600 B.P., is contemporary with most phases of the A-Group, however, it is the least studied of the Neolithic phases of the Bir Kiseiba region. This situation has resulted in part from a heavier concentration of work on the Early and Middle Neolithic sites and also from the highly eroded nature of the Late Neolithic sites, which rarely left any traces of pottery. In spite of the fact that poor ceramic preservation prevents many solid connections from being made with the A-Group culture, I think the area holds future promise for turning up evidence of A-Group interconnections, especially if a reasonably well-preserved site is located. The reason for such optimism is that there is already evidence of connections between some Late Neolithic sites at Bir Kiseiba and the Abkan industry. Wendorf and Schild write:

“After a minor arid event within Playa III, at about 6300 B.P., moist conditions and playa accumulation continued. The frequently large sites associated with this second phase of Playa III contain lithic assemblages generally similar to those of the first phase, but the pottery is dramatically different: it is much better made, and is often burnished or smudged and burnished. This represents a new tradition which most closely resembles the pottery in the Abkan Neolithic along the Nile near Wadi Halfa. The associated fauna is essentially the same as that in the preceding horizon, and includes cattle, sheep-goat, hare and gazelle. This new pottery and lithic complex appear before 5800 B.P.,

³⁶⁴For a complete breakdown of these phases into ‘types’ or groups see *ibid.*, pp. 7-8.

when much of the desert seems to have been abandoned because of increasing aridity.”³⁶⁵

The cattle and sheep/goat of the Late Neolithic have been noted as certain domesticates.³⁶⁶ It should be added that the Abkan-like pottery at Bir Kiseiba should not be taken as the earliest evidence of Nile or Nubian contact with this area. Gautier has shown that the shell and fish remains present in the faunal assemblages since the Early Neolithic indicate a lengthy association with the Nile Valley, although the exact nature of these relationships is not known. Concerning the so-called exotic faunal elements, at Bir Kiseiba Gautier notes that they

“...could not have derived from the catchment area of the sites. These elements provide evidence for direct or indirect contact with other areas. At Bir Kiseiba such elements are the Red Sea cowrie found in the Middle Neolithic, and the large freshwater bivalves (*Aspatharia rubens*) probably collected along the Nile and found throughout the sequence.”³⁶⁷

The presence of *Lates* sp. or Nile perch is less easily explained, as this species “...requires well oxygenated and fairly large bodies of water—very different from the ephemeral playas found at Nabta.”³⁶⁸ Presumably because of the problem of transporting fresh fish from the Nile, it has been suggested that the fish may have been dried or smoked first and then brought from the Nile or elsewhere.³⁶⁹

I would also add that of the meagre amounts of pottery that have been published from the Early Neolithic sites of the Bir Kiseiba (and Nabta Playa—

³⁶⁵*Ibid.*, p. 3.

³⁶⁶*Ibid.*, p. 7.

³⁶⁷A. Gautier, 1984a, “Archaeozoology of the Bir Kiseiba Region, Eastern Sahara,” in *Cattle Keepers of the Eastern Sahara: The Neolithic of Bir Kiseiba*, edited by A. E. Close, p. 67.

³⁶⁸*Ibid.*

³⁶⁹*Ibid.*

the source is not pinpointed in the publication),³⁷⁰ the cross-hatched design seen in the A-Group is present. This indicates that the design likely did not originate with the A-Group or in Lower Nubia and its appearance this early, about two millennia before the rise of the A-Group, points to the Western Desert as a possible source of origin for some A-Group ceramic designs. Furthermore, the earliest appearance of this decorative motif in the Khartoum area is in the Khartoum Neolithic occupations of Shaheinab, Kadero, and Geili, all of which are younger than the Bir Kiseiba Early Neolithic. It will be seen below that this cross-hatched motif is not the only A-Group-like ceramic pattern that has been found in the Western Desert that predates the A-Group.

Only three sites of Late Neolithic date have been found in the Bir Kiseiba region: E-79-9, Bir Murr I, and Bir Murr II (Figure 6). Site E-79-9 yielded a poor complement of pottery, i.e., only seven small sherds, which Connor notes have no direct parallels with sherds outside of the immediate area.³⁷¹ None of the material is suggestive of A-Group links or even Nile connections. The sherds were described as

“...thin, ranging from 4mm. to 5mm...tempered with grit and organic material...None of those with interior or exterior surfaces intact showed any incised or impressed designs of the type common in Early Neolithic sites and none showed evidence of having been wheel-made...Two thinner sherds...were completely covered with fine parallel striations, probably produced by wiping.”³⁷²

³⁷⁰K. M. Banks, 1984b, “Early Ceramic-bearing Occupations in the Egyptian Desert,” in *Origin and Early Development of Food-Producing Cultures in North-Eastern Africa* edited by L. Krzyżaniak and M. Kobusiewicz, p. 152, Fig. 2.

³⁷¹D. R. Connor, 1984, “The Kiseiba Plateau and Bir Murr Playa,” in *Cattle Keepers of the Eastern Sahara: The Neolithic of Bir Kiseiba*, edited by A. E. Close, p. 356.

³⁷²*Ibid.*

The trait of burnishing, which marks the transition from Middle to Late Neolithic is also present at this site. Perhaps more important is the lack of evidence for the Khartoum-like impressed designs, which, as Wendorf and Schild note, seem to disappear abruptly with the transition from Middle to Late Neolithic.³⁷³ The trait of burnishing and the lack of Khartoum-like designs are the only characteristics of the Bir Kiseiba pottery that are shared by the A-Group.

The lithic material of E-79-9 is equally dissimilar to that of the A-Group or any of the Cataract Tradition sequences, particularly in the diversity of its tool types, which is very low. Connor reports the presence of perforators (3 per cent), notched flakes (10 per cent), denticulates (34 per cent), and a category of *varia*, which includes a single side-scraper. Otherwise scrapers are not present in the assemblage.³⁷⁴ Chert was the dominant class of raw material present (83.5 per cent), and was supplemented by Egyptian flint, an apparently prized commodity (at 4.5 per cent), petrified wood (8.1 per cent), sandstone (3.4 per cent) and insignificant amounts of quartz and basalt. In short, there is little from the combined assemblage that separates it from the earlier Neolithic sites in the area, although Connor has drawn attention to the predominance of notches and denticulates, the lack of backed pieces, and the use of flakes rather than bladelets as the most common blank form. The site has yielded one radiocarbon date of 5070 ± 120 B.P.

Bir Murr I and II, located to the north of Bir Kiseiba in the Kiseiba Plateau yielded no ceramics, but they have been assessed as Late Neolithic. The lithics have been quantified,³⁷⁵ but are not readily comparable to those of

³⁷³F. Wendorf and R. Schild, 1984, *op. cit.*, p. 418.

³⁷⁴D. R. Connor, 1984, *op. cit.*, Table 16.2, p. 355 for all of the data.

³⁷⁵*Ibid.*, Tables 16.4 and 16.6, pp. 394 and 400 respectively.

the A-Group. Connor writes that “while the lithic technology at Bir Murr and elsewhere lacks bladelet production, its tools are, at their best, technical achievements comparable to the best of the Early Neolithic, particularly the bifacial pressure-flaking.”³⁷⁶ It should be emphasized that the area of Bir Murr has undergone only preliminary reconnaissance to date.

The region of Nabta Playa, somewhat further to the east and closer to the Nile Valley, may hold more promise for Nilotic interconnections. Site E-75-8 is, however, the only Late Neolithic occupation found so far, having been dated tentatively between 6500 and 6300 B.P. The less intensive Late Neolithic occupation at the site in comparison with the earlier Neolithic phases is attributed to the onset of a drying phase. The ceramic material shows two designs common to the A-Group, incised parallel horizontal lines on the body of the vessel,³⁷⁷ incised lines on rim tops, and two rows of punctates on the rim band. This evidence may be added to that of the cross-hatch design of the Early Neolithic in arguing for a possible Western Desert origin for some A-Group ceramic motifs. Once again the earliest occurrence of these designs in the Khartoum region is at the Khartoum Neolithic sites of Shaheinab, Kadero, and Geili, all of which are younger than the Late Neolithic occupation of Nabta Playa. Otherwise the pottery at site E-75-8 belongs predominantly to the Early Khartoum tradition.³⁷⁸ It should be added that the site also yielded some of the earliest known examples of burnished and smudged and burnished sherds, but that these types generally lacked incised decoration. Banks adds that “...colors now range from black to brown to buff and red.”³⁷⁹

³⁷⁶*Ibid.*, p. 403.

³⁷⁷K. M. Banks, 1984b, *op. cit.*, Fig. 6 and p. 157.

³⁷⁸See. F. Wendorf and R. Schild, eds., 1980, *Prehistory of the Eastern Sahara*, pp. 156-157.

³⁷⁹K. M. Banks, 1984b, *op. cit.*, p. 157.

The lithics from the site have been quantified (see Table 4-2 below), and show a clear lack of diversification in comparison with later Nilotic traditions such as the A-Group.

TABLE 4-2. SUMMARY OF LITHICS: SITE E-75-8³⁸⁰

TOOL TYPE	PERCENTAGE
Retouched Flakes	30.8
Notches/Denticulates	27.1
Truncations	17.0
Perforators	5.8
Geometrics	5.8
Bifacial Points	2.0
Scrapers and Bladelets	1.7
Microburins	1.3
Endscrapers on Flakes	1.3

Banks writes:

"The tool kit is reminiscent of the Middle Neolithic, as retouched pieces, denticulates and notches are the most common tool type and geometrics and backed elements are fairly rare. The assemblage is completed by bifacial arrowheads, sidecrappers, flaked and/or ground and polished celts and the occasional transverse arrowhead. Side-blow flakes are also present..."³⁸¹

Most importantly, Post-Shamarkian links have been noted for the Nabta area, based primarily upon the lithic evidence. Wendorf and Schild have noted that:

³⁸⁰Compiled from F. Wendorf and R. Schild, eds., 1980, *op. cit.*, pp. 151-154.

³⁸¹*Ibid.*

“the DIW-50 assemblages...include flaked stone adzes and ground celts, as well as a few bifacial points and scrapers on side-blow flakes, all of which were present at Nabta.”³⁸²

Further to the west in the region of the Gilf Kebir, the Wadi Bakht has shown evidence of occupation contemporary with that of the Bir Kiseiba and Nabta Playa areas. However, the Wadi Bakht tradition is viewed as somewhat isolated by both the CPE team³⁸³ and by McHugh, who has produced a detailed study of the lithics and, less so, the ceramics.³⁸⁴ Because of the poor preservation of diagnostic sherds it was difficult for McHugh to ‘fit’ the Wadi Bakht ceramics into any known tradition, and certainly no A-Group parallels are evident in his sherd sample. A few poorly preserved sherds³⁸⁵ show plant impressions that were likely the result of accidental contact with plant materials during firing. Otherwise decoration consists of single incised lines, dotted lines, parallel ridges or grooves, intersecting trailed lines, areas of dotted lines offset by a single incised line, and holes drilled into vessels after firing, likely for suspension. However, later material uncovered by the CPE from the Late Neolithic component³⁸⁶ at Wadi Bakht contains some new decorative types, most interesting of which are the dotted herring-bone designs, called dotted chevron motifs by the excavators.³⁸⁷ Here again we find an early counterpart of an A-Group ceramic design predating the rise of the A-Group, and thus adding to the argument already formulated above for a

³⁸²F. Wendorf and R. Schild, 1984, *op. cit.*, pp. 419-420.

³⁸³See K. M. Banks, 1984b, *op. cit.*, p. 160.

³⁸⁴W. P. McHugh, 1975, “Some Archaeological Results from the Bagnold-Mond Expedition to the Gilf Kebir and Gebel-^cUweinat, Southern Libyan Desert,” *Journal of Near Eastern Studies* 34 (no. 1): 31-62.

³⁸⁵*Ibid.*, p. 154, Fig. 5.

³⁸⁶One radiocarbon date of 6,930 ± 180 B.P. has been obtained for the Late Neolithic at Wadi Bakht. See K. M. Banks, 1984b, *op. cit.*, p. 158.

³⁸⁷*Ibid.*, p. 158, Fig. 7.

Western Desert origin for some A-Group pottery designs. The occurrence of the dotted herring-bone design in this area is especially significant, because as we have already seen, its occurrence elsewhere in the Sudan, including the Nile Valley, is extremely rare. A second 'new' motif, identified from the work of the CPE was a variant of the woven mat motif, "...executed by dragging the comb in one direction and then 90° in the other direction. This served to obliterate the design."³⁸⁸ This trait at last links the Wadi Bakht tradition to the Middle Nile, i.e., to the Khartoum area and some Khartoum related traditions away from the Nile. But for the most part, the ceramics still do not show possible relations with other areas of the Western Desert, such as Bir Kiseiba and Nabta Playa.

The overall distinctiveness of the Wadi Bakht ceramics is reinforced by the nature of its lithic assemblages. There is a high diversity of types in contrast to the lithic assemblages elsewhere in the Western Desert. The types include notches, denticulates, scrapers, burins, microburins, borers and borer-like tools, points, lunates, backed blades and bladelets, retouched flakes, possible pedunculate pieces, truncations, trapezoids, and scaled pieces. With regard to the A-Group, the tool frequencies are widely divergent, with scrapers representing only 8.7 per cent of the assemblage, for example. From the lithic sample studied, McHugh reconstructs an economy based on a woodworking industry, the harvesting and preparation of plants, animal hide preparation, and only a minimum of hunting. McHugh writes:

"Outright hunting implements are extremely scarce. A few crude stone points are not at all like the true arrowheads or dart points found across the Sahara from Aterian times on. The two [pedunculate] specimens are lacking the point and may simply be notched specimens. Eight lunates and one

³⁸⁸*Ibid.*, p. 159.

trapezoid may have been employed in composite tools such as arrowheads, knives, and sickles.”³⁸⁹

Based on his lithic analysis McHugh has postulated that the closest cultural connection for the Wadi Bakht is with the Bedouin Microlithic industry of the Kharga Oasis, as defined by Caton-Thompson.³⁹⁰ It should be noted that McHugh has also argued for close associations with the Gebel ‘Uweinat area based on the ceramic material.³⁹¹ So far these disparate views have not been reconciled and the relationships of the Wadi Bakht material are, for the most part, still obscure.

A second body of data from the Western Desert originates from the B.O.S. expedition, also engaged in archaeological work in selected regions. These areas include the Gilf Kebir, the Gebel Kamil, and Abu Ballas. The B.O.S. team has also been conducting its own investigations at the Wadi Bakht since 1980, and their results, including their radiocarbon date of 6600 B.P.,³⁹² generally confirm those found by the CPE. Of great importance here is the newly discovered region of Wadi el Akhdar (or Wadi Akhdar) near the Wadi Bakht. Many of the sites discovered so far³⁹³ are later than those in the Wadi Bakht, with radiocarbon dates between 5,500 and 5,000 B.P., making the Late Neolithic occupation of the area contemporary with the A-Group. Site 80/14, dated at c. 4300 B.P., and contemporary with the end of the Terminal A-Group, is the latest site in the area. Because only brief preliminary reports have been published so far, the ceramics have not yet been illustrated, but the

³⁸⁹W. P. McHugh, 1975, *op. cit.*, p. 50.

³⁹⁰See *ibid.*, p. 51.

³⁹¹*Ibid.*, p. 52.

³⁹²See W. Schön, 1989, “New Results from Two Playa-sites in the Gilf Kebir (Egypt),” in *Late Prehistory of the Nile Basin and the Sahara*, edited by L. Krzyżaniak and M. Kobusiewicz, p. 220.

³⁹³They are numerous. See *ibid.*, p. 216, Fig. 1 for the map of the area.

descriptions indicate the presence of A-Group-like patterns. Unfortunately one cannot determine the exact extent of the resemblance to A-Group sherds. Schön writes:

“The pottery from the playa surface is thin-walled and well-fired. The most common decoration is a running fish bone pattern, which is found exclusively on the upper part of the vessels. As far as can be told and judged by the shape, the vessels seem to have had pointed bases. The pottery preservation and quantity of sherds have been satisfactory enough in two cases only to allow reconstruction. A fine ripple-pattern on the outer surface could be found often, but it has not yet been possible to reconstruct a vessel showing this decoration, so that it is difficult to state whether this particular pattern covers the whole surface or not...”³⁹⁴

The herring-bone pattern (dotted or solid?), the pointed bases, and the rippling are certainly suggestive of A-Group ceramics, and argues for specific links with Lower Nubia. It should be added that, as at the Wadi Bakht, the “...conditions for the preservation of pottery are extremely poor.”³⁹⁵

The Wadi el Akhdar lithics have only been minimally assessed, both quantitatively and comparatively.³⁹⁶ Borers were counted in unusually high proportions, while scrapers occurred infrequently. The latter trait is obviously shared by Wadi Bakht lithics. The high utilization of quartzite (98 per cent) in the Wadi Akhdar material has a Khartoum area parallel. Otherwise this parallel is shared by the occurrence of Khartoum-like triangles and the presence of a few wavy line sherds in the ceramic assemblages. Schön also notes that “the main part of the retouched pieces comprises the group of denticulates.”³⁹⁷

³⁹⁴*Ibid.*, p. 220.

³⁹⁵*Ibid.*

³⁹⁶For illustrations see *ibid.*, p. 221, and pp. 218-219, Figs. 2 and 3 respectively.

³⁹⁷*Ibid.*, p. 220.

The Gebel Kamil region, located to the southeast of the Wadis Bakht and el Akhdar, is known but briefly.³⁹⁸ As Hahn writes, “the research conducted in the Kamil area is preliminary, [and] most of the material has not yet been analyzed.”³⁹⁹ However, in 1983 a number of Neolithic sites were identified from artifact surface scatters. It seems that deflation has only recently uncovered the sites of this time period, showing rather well preserved ceramics and lithics. These industries, none of which have been quantified, have been summarized as follows:

“The Neolithic in the Gebel Kamil area is characterized by rather hard-burned, fine-grained pottery, red to strong brown...with an impressed comb decoration. The motif is a herring bone design of vertical or oblique lines, delimited by horizontal lines...The fine tempered potsherds are dated in the Gifl Kebir area to the 4th to 3rd millennium B.C. and named ‘Gifl pottery’ by Kuper...”

The stone technology is based on flakes and large, long blades, made from quartzitic sandstone, and on a fine-grained creamy opalic flint. The latter has been used to produce triangular microliths, segments or small, narrow perforators made by abrupt retouch. The blades serve as blanks for end-scrapers and denticulated blades.”

The herring-bone motif just described⁴⁰⁰ is the dotted version, and is very analogous to the same design type in the A-Group. It would be reasonable to think of the decoration in both areas as variations of the same pattern. Some A-Group examples are also delimited by horizontal lines. Alternatively, the presence of this design in the Kamil area may only indicate connections as close as the Wadi el Akhdar, rather than direct links between the Gebel Kamil

³⁹⁸See J. Hahn, 1993, “Neolithic Settlement Patterns in the Gebel Kamil Area, Southwestern Egypt,” in *Environmental Change and Human Culture in the Nile Basin and Northern Africa until the Second Millennium B.C.*, edited by L. Krzyżaniak, M. Kobusiewicz, and J. Alexander, pp. 225-236.

³⁹⁹*Ibid.*, p. 227.

⁴⁰⁰*Ibid.*, pp. 229-230.

area and the Nile. Furthermore, Gilf Kebir links are more pronounced in the Gebel Kamil region through the presence of the special Gilf Kebir handstones. The excavators have proposed specific connections with the Gilf Middle to Late Neolithic rather than with the "...northern Sudanese Neolithic of the Wadi Shaw and Wadi Sahal."⁴⁰¹ There is an apparent lack of Early Neolithic sites paralleling those in the Gilf Kebir, but continued investigation may yet provide these data.

On the basis of lithic types and the faunal remains (gazelle, large bovid, and other mammals), Hahn indicates that "only a hunting economy is visible archaeologically."⁴⁰² The author adds that "the presence of grinding stones in the large sites may point to plant use, but ethnographic information indicates that these can also be used to grind dried meat."⁴⁰³ To my knowledge the latter use of grinding stones has not been proposed for any other industry in the Sudan, although the possibility is an intriguing one. Hahn, unfortunately, does not expound upon his ethnographic source.

The two radiocarbon dates obtained so far for the Kamil region predate and post-date the A-Group.⁴⁰⁴ The more recent date is presumed to indicate the latest occupation of the area. It is therefore likely that sites dating between the two extreme dates will eventually be found. Hahn writes that the earlier of the two dates "...indicates that the late prehistoric occupation may have spanned—with long interruptions—the time between 7,000 and 4,000 B.P."⁴⁰⁵ It

⁴⁰¹*Ibid.*, p. 230.

⁴⁰²*Ibid.*, p. 235.

⁴⁰³*Ibid.*

⁴⁰⁴These are: (1) from site 83/28-1, 4,310 ± 65 B.P., and (2) from site 85/58-2, 6520 ± 70 B.P. *Ibid.*, p. 228.

⁴⁰⁵*Ibid.*, p. 229.

will be interesting to see in future whether the Gebel Kamil area produces any secure evidence of Lower Nubian or Nile connections.

The Abu Ballas area,⁴⁰⁶ the latest B.O.S. interest in the Western Desert, is now known to have been occupied from the Epipalaeolithic (8,700 ± 190 B.P.)⁴⁰⁷ to about 5,700 B.P., the latter date of which corresponds to the beginning of the A-Group culture in Lower Nubia. Environmental conditions are to be blamed for a sudden cessation of human occupation in the Abu Ballas region. Kuper writes: "According to the vegetation map for the time around 5,700 b.p....wetter conditions did not return to this part of the Libyan Desert where the prehistoric settlement came to a definite end. Only in the Gilf Kebir was the deadline somewhat postponed, while in the Fayum and in the Nile Valley Neolithic life started to flourish."⁴⁰⁸ It must be wondered whether the movement of desert inhabitants eastward due to climatic pressures could explain, at least in part, the origin of the A-Group population. The only 'evidence' that supports this theory for the Abu Ballas region is, as mentioned, the termination date of the Abu Ballas culture sequence, which coincides with the start of the A-Group culture without any apparent overlap. Unfortunately there is no resemblance (to date) between the Abu Ballas and the A-Group material cultures that would indicate they were identical populations. For the most part, the Abu Ballas material culture shares specific traits with the Gilf Kebir, most notable of which are the special Gilf

⁴⁰⁶The area is also known as 'Mudpans' and now there is a 'Westpans' region, newly discovered. The name Mudpans was applied by Bagnold in the 1930's because the terrain resembled a 'chain of ancient lakes' that looked like one continuous site. See R. Kuper, 1993, "Sahel in Egypt: Environmental Change in the Abu Ballas Area, Libyan Desert," in *Environmental Change and Human Culture in the Nile Basin and Northern Africa until the Second Millennium B.C.*, edited by L. Krzyżaniak, M. Kobusiewicz, and J. Alexander, p. 214.

⁴⁰⁷*Ibid.*

⁴⁰⁸*Ibid.*, p. 222.

type of handstone. Very little information is available about the Abu Ballas ceramic industry, but the Khartoum related type of decoration is certainly present on some potsherds.⁴⁰⁹ So far this represents the northernmost occurrence of the Khartoum related designs. Concerning the lithic industry, which is sparsely represented in the Abu Ballas area, Kuper writes: "The material which has not yet been studied in detail, comprises triangles, segments and trapezes as well as *mèches de foret*,⁴¹⁰ lateral retouched blades and a large number of scaled pieces...The latter and also some scanty indications of surface retouch seem to correspond to Middle Neolithic sites further north in the Great Sand Sea."⁴¹¹ It should be added that stone houses were also discovered at one site (85/50), which were circular and ranged in size from 2.0 to 2.5 metres in diameter. I am unable to compare these with the A-Group house structures because of the lack of published plans or photographs for the Abu Ballas structures. They are reported to have been constructed of stone slabs. The author adds that "one of the stone circles was completely excavated and showed up to 60 centimetres of standing walls."⁴¹²

A look at the oases of the Western Desert shows, surprisingly, very different ceramic and lithic traditions from those in the surrounding desert regions. Cultural links with the Lower Nubian Nile Valley are virtually non-existent as far as present evidence allows us to believe. In the oases, the problem of lack of attention to the Neolithic, especially the Late Neolithic

⁴⁰⁹*Ibid.*, p. 217, Figs. 3 and 4.

⁴¹⁰Schön's very good definition of this lithic type gives: "The *mèche de foret* is a long, narrow special form of perforator with a D-formed cross-section. It is most often made from a blade that has been steeply retouched along both lateral edges, sometimes producing two borer ends." (See W. Schön, 1994, "The Late Neolithic of Wadi El Akhdar (Gilf Kebir) and the Eastern Sahara," *Archéologie du Nil Moyen* 6: 135.

⁴¹¹R. Kuper, 1993, *op. cit.*, p. 219.

⁴¹²*Ibid.*

occupation is even more pronounced than it is for the Western Desert. Caton-Thompson's early study of the Kharga Oasis, for example, was deliberately concentrated upon the Palaeolithic (aceramic) sequence at the expense of the Neolithic remains.⁴¹³ However Neolithic habitations contemporary with the A-Group most certainly existed in the Kharga Oasis.⁴¹⁴ The ceramics from the hearths of this period were badly damaged due to eolization, but Caton-Thompson did note the lack of decoration on all sherds, even the rims. This she remarked, was "...an important point in view of the 'Saharan' ware in the Gilf, and Nubian and Sudanese potteries in general."⁴¹⁵ Recent discoveries by the CPE of new sites in the Kharga region⁴¹⁶ have added only marginally to the knowledge of the Neolithic ceramic tradition, and the new work has generally confirmed Caton-Thompson's findings. Banks provides the following analysis of the new Kharga wares:

"The present collection includes 122 undecorated sherds, consisting of two distinct types based on temper and color differences. The redware has a pinkish color and fossil shell temper; the brownware is dark brown and has sand temper. Both types occurred at Site E-76-7, indicating their contemporaneity.

Vessel forms could not be determined but probably consisted of shallow bowls with inward sloping sides. Bases and rims are indistinguishable from the body except for a slight thickening toward the base...

⁴¹³See G. Caton-Thompson, 1952, *Kharga Oasis in Prehistory*, p. vi.

⁴¹⁴The ceramic bearing occupation was called the Peasant Neolithic by Caton-Thompson, and it immediately followed the so-called Bedouin Microlithic, which lacked pottery and showed a well developed microlithic stone industry. The Peasant Neolithic was loosely cross-dated with the Amratian. See Caton-Thompson, 1952, *ibid.*, p. vii and pp. 32-40.

⁴¹⁵*Ibid.*, p. 38.

⁴¹⁶For sites E-76-7, E-76-7a, and E-76-2 see F. Wendorf and R. Schild, eds., 1980, *op. cit.*, pp. 189-203.

Vessels were constructed by molding, as finger impressions are present...All sherds are undecorated.”⁴¹⁷

Elsewhere it was noted that this pottery “...in no way resembles the Early Khartoum pottery seen to the south at Nubia.”⁴¹⁸ It is perhaps significant to add that there have been no new discoveries of the “...mat-impressed, red-brown ware with black or grey fracture”⁴¹⁹ that Caton-Thompson found and considered (probably incorrectly) to be of possible Meroitic date from Nubia. If more of these sherd types were found in primary and datable Neolithic contexts at Kharga they could link the Kharga Neolithic with the Khartoum area. However this possibility is still a tentative one given the very meagre evidence available. The only certain connections that may be supported for the Kharga Neolithic are with the Faiyum and the site of Armant in the Nile Valley. The latter link is based on the ceramic similarities between the two areas.⁴²⁰ Although the ripple ware of the A-Group type has been found at Armant, none of it seemed to have been shared with the Kharga Neolithic.

The lithic evidence from Kharga, about which little need be said here, is consistent with the lack of A-Group and Nubian ceramic connections. Caton-Thompson did note that

“The virtual absence of ground and/or polished axes in both places [Kharga and Armant] is an interesting parallel on the negative side, and, apart from other considerations, would

⁴¹⁷K. M. Banks, 1980, “Ceramics of the Western Desert,” in *Prehistory of the Eastern Sahara*, edited by F. Wendorf and R. Schild, pp. 309-310.

⁴¹⁸F. Wendorf and R. Schild, eds., 1980, *op. cit.*, p. 203.

⁴¹⁹G. Caton-Thompson, 1952, *op. cit.*, p. 42 and Plate 123: 2.

⁴²⁰See Caton-Thompson, *ibid.*, p. 39 and R. Mond and O. H. Myers, 1937, *Cemeteries of Armant*, pp. 50-51, which describes a so-called Grit-ware that utilizes shell (or other materials) in place of chaff as temper. It is also quite sandy, thus further paralleling the Kharga wares.

seem conclusively to dispel any possibilities of synchronism with the Nubian B group.”⁴²¹

Caton-Thompson also remarked that the earlier Bedouin Microlithic industry shared no similarities with either the Sebilian or the Early Khartoum.⁴²² The Peasant Neolithic phase, which is characterized by the cessation of microlith manufacture has been described by the CPE from new quantified data as follows:

“It seems that all the Neolithic collections from Kharga represent a single taxonomic unit that is characterized by simple core technology, limited to unprepared flake cores, and by a stress on the working of tabular chert into bifacial tools, foliates, and large, oval, hoe-like pieces with an endscraper edge and unifacially or bifacially retouched sides. The quality of the tabular chert was mediocre and the collections therefore include many failed pieces abandoned at various stages of manufacture. The major elements in the tool kit are the denticulates followed by perforators, both of them occurring in a wide variety of forms. Sidescrapers are frequent and always well made. Endsrapers and notches are present, as are occasional burins and truncated flakes.”⁴²³

Turning now to the neighbouring Dakhleh Oasis, we see a somewhat conflicting set of interpretations concerning its relationships in Neolithic times. Based largely on the lithic material, McDonald has recently argued for the placement of Dakhleh Oasis within the Saharo-Sudanese Neolithic tradition,⁴²⁴ but according to Tangri, the ceramics support a more regional development within the Dakhleh Oasis.⁴²⁵ Whatever the eventual outcome of this debate, it is clear from my own examination of the Dakhleh ceramic

⁴²¹For which we may now read the Nubian A-Group. Caton-Thompson, *ibid.*, p. 39.

⁴²²*Ibid.*, p. 33.

⁴²³F. Wendorf and R. Schild, 1980, *op. cit.*, p. 203.

⁴²⁴See M. M. A. McDonald, 1991, “Origins of the Neolithic in the Nile Valley as Seen from Dakhleh Oasis in the Egyptian Western Desert,” *Sahara* 4: 41-52.

⁴²⁵See D. Tangri, 1991, “Neolithic Basket-Imprinted Pottery from Dakhleh Oasis, Egypt: New Evidence for Regionalism in the Eastern Sahara,” *Sahara* 4: 141-143.

decoration that very few A-Group designs are to be found. Black-topped ware is present,⁴²⁶ but it has been noted that “the Dakhleh black-topped vessels are very rarely red coated or burnished as are those from the Predynastic Period in Egypt and their exterior is generally rough or striated.”⁴²⁷ The same comparison of course, holds for the A-Group black-topped wares. Tangri has noted the presence of black-topped and burnished wares at Dakhleh,⁴²⁸ so while they are not abundant, they do occur. In addition, incised rims with vertical strokes (not oblique) have been found,⁴²⁹ as well as the horizontal punctate design and the cross-hatch motif.⁴³⁰ From these and other features of the ceramics it is generally agreed that links between Dakhleh and the Nile Valley existed in Neolithic times, but their exact nature and extent eludes us at present. Tangri cautions that overall, “there are a few parallels between Dakhleh and the oases and the Nile Valley, but none are strong enough to warrant an interpretation of close or even continuous contact.”⁴³¹ Furthermore, Tangri thinks that “parallels with the surrounding desert regions are also scarce.”⁴³² and this is confirmed by Edwards *et. al.*, who write: “It would appear that the indigenous ceramic assemblage from the Neolithic in Dakhleh stands apart from that of surrounding areas.”⁴³³ The only ware type indicative of Sudanese but not A-Group links is the woven mat design, which Tangri calls the basket-impressed ware. However, Tangri

⁴²⁶W. I. Edwards, C. A. Hope, and E. R. Segnit, 1987, *Ceramics from the Dakhleh Oasis: Preliminary Studies*, p. 9, Fig. 1: e, f, g.

⁴²⁷*Ibid.*, p. 3.

⁴²⁸D. Tangri, 1991, *op. cit.*, p. 142.

⁴²⁹W. I. Edwards, C. A. Hope, and E. R. Segnit, 1987, *op. cit.*, p. 9, Fig. 1: 2.

⁴³⁰None of these two designs have been illustrated for Dakhleh.

⁴³¹D. Tangri, 1991, *op. cit.*, p. 143.

⁴³²*Ibid.*, p. 142.

⁴³³W. I. Edwards, C. A. Hope, and E. R. Segnit, 1987, *op. cit.*, p. 3.

argues for a local development of the design, which is consistent with his theory of regionalism for the Dakhleh Oasis. His argument, I think, is not entirely convincing, although his point that the basket-impressed design can only be securely dated to the Dakhleh Neolithic and to no other Neolithic assemblage in the Western Desert and Egypt is well taken.

Even if McDonald is correct in her assumption of Saharan and Sudanese links for Dakhleh, there is too little evidence to suggest, at present, that this included any interaction with the Early A-Group, with which the latest sequence at Dakhleh may have overlapped.⁴³⁴ The greater implication of McDonald's theory, for which the author also argues, is that the Nile Valley Neolithic may have had a Western Desert origin rather than a southwest Asian origin as has been assumed. If this was the case it would strengthen my own theory of a Western Desert origin for some A-Group ceramic traits, though not necessarily from Dakhleh. McDonald lists the evidence for Egyptian Nile Valley and Western Desert connections as follows:

"Chipped stone industries are macrolithic and predominantly flake-based, while tabular raw material is also used. The bifacial technique is employed to produce a wide variety of tools. Tool types and classes shared by both areas include concave-or hollow-based arrowheads, bifacially-worked knives, planes, or tranchets, scrapers made on side blow flakes, and a variety of notches, denticulates and retouched pieces. In addition, sites in the Western Desert and the Nile share pottery, grinding stones, and ostrich eggshell fragments and beads.

To this list, on the evidence from Dakhleh, one can add small polished stone axes or celts..., shell bracelets..., amazonite beads, reported for Fayum A, the Post-Shamarkian in Nubia, and the Khartoum Neolithic, stone lip-plugs, shell pendants, chipped stone crescents, and the working of quartz...In addition, Dakhleh has produced clusters of stone circles which may be akin to the flimsy

⁴³⁴Date ranges given for the Dakhleh Neolithic by McDonald are from 7600 B.P. to 5500 B.P. (M. M. A. McDonald, 1991, *op. cit.*, pp. 43-45).

structures found at Merimde and on Predynastic sites in Upper Egypt..."⁴³⁵

The Faiyum, which will be considered here within the context of the Western Desert oases, has yielded no evidence of links with the A-Group, although a few connections with the Nubian Nile Valley are suggested by some of the material evidence. In contrast with the Western Desert oases, the Faiyum Neolithic has been well studied, originally by Caton-Thompson and Gardner⁴³⁶ and by the CPE in more recent times. New pottery samples obtained by the CPE have yielded radiocarbon dates of 3910 ± 115 B.C. and 3210 ± 110 B.C.,⁴³⁷ the latter of which is exactly contemporaneous with the Classic A-Group. The Faiyum pottery, however, is much simpler and more homogeneous than that of the A-Group. It is described as "...monotonous, consisting of handmade, chaff-tempered wares lacking any decorations beyond simple burnishing."⁴³⁸ Even the forms, which are characterized by rounded or flat bases, lack any resemblance to the pointed bases of A-Group vessels. Furthermore, none of the Faiyum ceramics have incised, combed or painted decoration. However, two sherds were found by Caton-Thompson that bore a decoration of raised studs just below the rim,⁴³⁹ which I maintain, without having seen the real examples, bear an uncanny resemblance to the 'button ornament' found in the Wadi Howar, Laqiya region, Kerma, and the Eastern Sudan. In the Faiyum examples the studs appear to have been pushed from the inside out, exactly as in the specimens from beyond the Faiyum. Otherwise these Faiyum sherds lack decoration such as incising. If

⁴³⁵*Ibid.*, p. 43.

⁴³⁶G. Caton-Thompson and E. W. Gardner, 1934, *The Desert Fayum*, 2 vols.

⁴³⁷K. M. Banks, 1980, *op. cit.*, p. 310.

⁴³⁸*Ibid.*

⁴³⁹For examples, see G. Caton-Thompson and E. W. Gardner, 1934, *op. cit.*, Plate XVII: 24 and 25.

these sherds represent imported vessels, which is likely given their rare occurrence, they could suggest Sudanese links for the Faiyum through this form of ceramic decoration. So far the only links established for the Faiyum through the ceramics are entirely Egyptian, with the site of Merimde representing the closest ceramic counterpart. However, we have already seen that the Faiyum lithic industry testifies to broader connections than has been indicated by the pottery, especially through the wide distribution of the side blow flake. I have already noted the presence of this lithic type in the Post-Shamarkian, Kharga Oasis, and Dakhleh Oasis, but to this list must also be added the Siwa Oasis in northwestern Egypt. The presence of the gouge, "a tool peculiar to the Fayum Neolithic,"⁴⁴⁰ in the Khartoum region has already been commented upon, but the differences in the tool type between the two regions makes it inappropriate to argue for Khartoum Neolithic links with the Faiyum through this lithic type. Otherwise, the main tool types represented in the Faiyum are: ground and polished axes, polished and flaked axes, flaked axes, adzes, planes, knife blades, daggers, spears or javelin heads, halberds, chisels, ground points, triangular or hollow-based arrowheads, leaf-shaped arrowheads, concave-based arrowheads, tanged arrowheads, sickle blades, leaf-shaped points, pebble-butted points and knives, pebble-backed knives and scrapers, celtiforms, scrapers, backed blades, and trihedral rods.⁴⁴¹

As for the remaining oases, very little or nothing may be ventured about A-Group links with these areas. Although Dungul and Kurkur Oases have been archaeologically investigated,⁴⁴² there is still no evidence of a cultural phase that was contemporary with the A-Group. This is most puzzling given

⁴⁴⁰*Ibid.*, p. 20.

⁴⁴¹For descriptions of each type see *ibid.*, pp. 19-22.

⁴⁴²See J. J. Hester and P. M. Hobler, 1970, *Prehistoric Settlement Patterns in the Libyan Desert*. University of Utah Papers in Anthropology, 92.

the fact that cultures predating and postdating the A-Group have been found, the latter of which is a C-Group equivalent. The authors have called this sequence the 'Oasis C-Group' in order to distinguish it from the Nile Valley C-Group. They define the Dungul C-Group as follows:

"The term Oasis C-Group is used to refer to three habitation sites of stoneworking, pottery-making peoples with a presumably Neolithic type of economy, existing later than the Libyan occupation of the Dungul region. Pottery at these sites resembles C-Group material from the Nile Valley. The evidence suggests that this was not a single occupation at one point in time, but rather a number of re-occupations of the Oasis area by people with essentially the same material culture...They represent the most recent permanent or semi-permanent habitation in the Dungul region, and indicate some of man's final attempts, in the face of increasing aridity, to occupy the region. These sites are marked by sandstone masonry houses."⁴⁴³

A radiocarbon date of $1,675 \pm 180$ B.C. has been obtained from a feature belonging to this culture.⁴⁴⁴ The so-called Libyan Culture series, on the other hand, which the excavators equate with Caton-Thompson's Bedouin Microlithic and Peasant Neolithic of the Faiyum, has been dated to about $5,910 \pm 150$ B.C.⁴⁴⁵ for the Dungul Oasis. And between these two dates lies the apparent hiatus, wherein one would expect a cultural assemblage temporally equivalent to the Nubian A-Group. Perhaps the discovery of this material lies to future investigators. It should be added that these and other (earlier) cultural complexes are now known to extend not only to Kurkur Oasis, but to the oases of Nakhlai, Taklis, and Sheb as well. All areas have been investigated briefly by Hester and Hobler.⁴⁴⁶

⁴⁴³*Ibid.*, p. 57.

⁴⁴⁴*Ibid.*, p. 58.

⁴⁴⁵*Ibid.*, p. 51.

⁴⁴⁶See *ibid.*, p. 133 ff.

Siwa Oasis, which has been investigated by Hassan,⁴⁴⁷ is similarly devoid of any material resembling that of the A-Group. Given its extreme northwest location in Egypt, it is not surprising that Siwa shows more links with the Western Desert rather than with the Nile Valley. However, unlike the Dungul and Kurkur Oases, Neolithic occupations dating between 4,000 and 3,000 B.P. are known. Nile Valley comparisons have been made with the Qadan, Shamarkian, and with El Kab, but few similarities have been found. Instead, the closest Siwa connections are with "...the earliest Neolithic and terminal Palaeolithic of Haua Fteah and the terminal Palaeolithic of the Fayoum."⁴⁴⁸ The comparisons for Siwa made by Hassan are as follows:

"The assemblages are...distinguishable from the Nilotic industries of that period, which include the Kabian...and the Shamarkian...The Kabian, dating back to ca. 8,000 B.P., is dominated by backed bladelets and microburins. The Siwan assemblages share with the Kabian the presence of backed bladelets and...microburins, but the Kabian is extremely rich in microburins and lacks burins, which are predominant in the Siwan assemblages. The Shamarkian, dating to about 7,700 B.P. is characterized by backed bladelets and microlithic segments, which are not present in the Siwan assemblages...The Qadan..., spanning a long interval from ca. 15,000 B.C. to 6,000 B.P., is distinguishable from the Siwan assemblages by its emphasis on scrapers, lunates, and truncated microlithic flakes. Leaf-shaped points, which are common in the latter stages of the Qadan, however, are represented at Siwa by a few specimens.

Similarities between Saharan assemblages and Siwan assemblages are vague, with the possible exception of the Adrar Bous and Greban assemblages...

⁴⁴⁷For two reports see F. A. Hassan, 1976, "Prehistoric Studies of the Siwa Oasis Region, Northwestern Egypt," *Nyame Akuma* 9: 18-34, and 1978, "Archaeological Explorations of the Siwa Oasis Region, Egypt," *Current Anthropology* 19 (no. 1): 146-148. The earlier work of Fakhry (1973, *The Oases of Egypt. Vol. 1. Siwa Oasis*) is not strictly archaeological.

⁴⁴⁸F. A. Hassan, 1976, *ibid.*, p. 30.

Comparison with material from the southern part of the Egyptian Sahara reveals a distinct similarity."⁴⁴⁹

It is worth noting that none of the archaeological reports for the Siwa Oasis contain any mention of ceramic material. The latest date given for the lithic assemblages is about 5,000 B.P.,⁴⁵⁰ and one should perhaps assume that all are aceramic.

The prehistoric occupation of Farafra Oasis has only begun to receive detailed archaeological attention,⁴⁵¹ and the Neolithic cultures there are still only broadly defined. Geologically the region is similar to the Bir Kiseiba area in that the human occupations are directly associated with playa sediments. The latest playa formation is estimated to date around 5,000 B.P.,⁴⁵² which indicates a possible contemporaneity with the Early A-Group. However, there is no published ceramic material from Farafra from which to draw for comparison. Ceramics, when noted in the later occupations, were described but briefly. A sherd decoration of "impressed punctation"⁴⁵³ has been found at the site of Ain e-Raml, but the exact form and layout of the design cannot be ascertained. It seems that the ceramics are very badly preserved. Barich and Hassan write:

"In several assemblages (Ain e-Raml...) the association of the lithic products with ceramics is certain. However, from the few fragments collected, which unfortunately were weathered, it has been impossible to obtain any indications as to the manufacturing or decorative techniques used."⁴⁵⁴

⁴⁴⁹F. A. Hassan, 1978, *op. cit.*, p. 147.

⁴⁵⁰*Ibid.*

⁴⁵¹The University of Rome began survey operations there in 1987. See B. E. Barich and F. A. Hassan, 1984-87, "The Farafra Oasis Archaeological Project (Western Desert, Egypt)," *Origini* 13: 117-191.

⁴⁵²*Ibid.*, p. 148.

⁴⁵³*Ibid.*, p. 152.

⁴⁵⁴*Ibid.*, p. 169.

Lithic material has been found in greater abundance than pottery at all sites. Of the quantified samples, none are comparable to those of the A-Group. Finished tools such as scrapers and denticulates, while present, are greatly limited in numbers. Flake debitage seems to dominate most of the lithic assemblages, while blade elements are generally low. So far, on the basis of lithic comparison, the investigators have noted links with the Kharga Neolithic, Wadi Bakht, the Middle Neolithic of Bir Kiseiba and Nabta Playa, and Dakhleh.⁴⁵⁵

In the Bahariya Oasis Neolithic remains have been discovered, but again they are only superficially known. Because so little has been published about the Neolithic period at Bahariya, it is still too early to attempt cross-regional comparisons with this oasis.⁴⁵⁶ Although lithic material has been uncovered in abundance, there is no mention of ceramics having been found. One radiocarbon date of 6705 ± 140 B.P.,⁴⁵⁷ obtained from ostrich egg shell, is very close to the Farafra Oasis dates, but it still pre-dates the A-Group in Lower Nubia. There is as yet no mention of material that is later than this date or contemporary with the A-Group culture.

E. Blue and White Niles: Neolithic Sites South of Khartoum

When I first approached the subject of A-Group interconnections I assumed that the Khartoum province would be a likely limit for the southward spread of A-Group traits. However, new and ongoing research in

⁴⁵⁵*Ibid.*, pp. 177-178.

⁴⁵⁶However, the lithic material uncovered and studied is noted to have parallels with the Isnán industry of Upper Egypt, which has been dated to c. 12,500–13,000 B.P. See F. A. Hassan, 1979, "Archaeological Explorations at Baharia Oasis and the West Delta, Egypt," *Current Anthropology* 19 (no. 4): 806.

⁴⁵⁷*Ibid.*

the Blue and White Nile regions has forced a reconsideration of these limited assumptions and at least a consideration of possible A-Group connections even further south along the Nile. It is now clear that the Early Khartoum tradition spread further southward along the Nile as did the Khartoum Neolithic. Some investigators have noted the presence of an impressed herring-bone design on a rim sherd at Guli, which "...occurs rarely also at Esh Shaheinab."⁴⁵⁸ The design was also compared to those of the same type at Khashm el Girba. It will be recalled that the motif was used as a rim band and body sherd decoration in the A-Group. Unfortunately no finer comparison can be made because the Guli sherd in question was not illustrated. Other ceramic decorations from Guli that have A-Group (and Shaheinab) parallels are horizontal rows of punctates on rim bands, as well as rocker stamping on rim bands. The exact version of the latter is impossible to glean from the description.⁴⁵⁹ These features and a radiocarbon date of $5,500 \pm 90$ B.P. (or 3530 ± 90 B.C.)⁴⁶⁰ place Guli firmly within the Khartoum Neolithic tradition.

Another known site with a Khartoum Neolithic occupation in this region is Rabak, also on the White Nile. The ceramics from the lowest levels of the site are very consistent with the Khartoum Neolithic, but as the excavators note, "...the lithic material is rather different from the Khartoum Neolithic tradition. Gouges are totally absent and the flaked lithic artifacts are very crude with very few of the standardized tools (lunates, groovers and scrapers) which are common features in the Khartoum Neolithic. Grinders are also rare, suggesting that utilization of plant resources was of minor

⁴⁵⁸See D. Adamson, J. D. Clark, M. A. J. Williams, 1974, "Barbed Bone Points from Central Sudan and the Age of the 'Early Khartoum' Tradition," *Nature* 249 (no. 5452): 123.

⁴⁵⁹*Ibid.*

⁴⁶⁰*Ibid.*, p. 122.

importance."⁴⁶¹ The site has also yielded evidence of domesticated cattle in this area as early as 6,000 B.P. Only one pottery design at Rabak is shared by the A-Group, the cross-hatched rim band pattern.⁴⁶² One other design is loosely similar to an A-Group motif, a series of vertical oval markings on the rim band of one sherd.⁴⁶³ This resembles a rim top decoration already seen in both the A-Group ceramics and in the Kadero assemblages.

The newest discoveries of Khartoum Neolithic complexes south of Khartoum have been made by the Spanish Archaeological Mission working on the Blue Nile.⁴⁶⁴ These consist of the three sites of Haj Yusif, Umm Dom, and a Neolithic occupation at Soba. The first site was discovered in 1942 by Arkell but not excavated. For the most part, descriptions only are available for the ceramics of all three sites, but most decoration types are consistent with the Shaheinab Neolithic. Because few published illustrations exist, I am unable to draw exact A-Group parallels, but A-Group traits from Haj Yusif include: (1) impressions of rocker stamp resulting in packed zigzags, with evenly serrated edge, (2) the same, but with an unevenly serrated edge, (3) rocker stamp in spaced zigzag, evenly serrated, (4) rocker stamp with a plain and curved edge, (5) paired lines of single dots, (6) single dotted lines, and (7)

⁴⁶¹A. T. El Mahi and R. Haaland, 1984, "Archaeological Research in the Area of Rabak and Atbara, Sudan, 1983-84," *Nyame Akuma* 24/25: 30.

⁴⁶²See R. Haaland, 1989, "The Late Neolithic Culture-historical Sequence in the Central Sudan," in *Late Prehistory of the Nile Basin and the Sahara*, p. 363, Fig. 2: 5.

⁴⁶³*Ibid.*, p. 363, Fig. 2: 13.

⁴⁶⁴See their two reports: (1) V. Fernández, A. Jimeno, and M. Menéndez, 1994, "The Archaeological Survey of the Blue Nile: Aims and First Result," in *Études Nubiennes*, ed. by C. Bonnet, 13-18, and (2) V. Fernández, A. Jimeno, and M. Menéndez, 1997, "The Spanish Archaeological Work at the Blue Nile (Khartoum Province), 1989-1996," *Kush* 17: 355-377.

red burnished black-topped ware.⁴⁶⁵ A strange feature of this site is that lithic material is very scarce, and little has been written about this aspect of the site.

It is difficult to determine from the publications if Umm Dom has yet been excavated. It is described simply as being "...beside a big and deep, recent quarry hole, and merely consisted of a few rocker impressed sherds scattered on the surface."⁴⁶⁶ It is also assessed as a temporary camp for fishing and herding.

The Neolithic occupation of Soba, very near the medieval site and modern town, has already yielded about fifty sherds, most of which show a rocker stamp decoration. Again, few illustrations are available, but the sherd decorations that have been drawn are not comparable to those of the A-Group.⁴⁶⁷ Some of the decoration has been compared with certain examples from Rabak.⁴⁶⁸

Lastly, mention must be made of the few sites of the Early Khartoum tradition on the Blue and White Niles. Shabona, the most important, has been long known, although the ceramic decoration has yet to be published in illustration form. Clark has, however, quantified the pottery according to temper type,⁴⁶⁹ and there are designs that by their descriptive names, appear synonymous with some A-Group motifs. These are the simple straight line decoration, dotted straight line, and herring-bone motifs. The linear and mat

⁴⁶⁵Impressively, all decorative types have been quantified, something that has not been done often enough in the past for Sudanese ceramic material. These numbers are also compared with those obtained by Caneva for El Geili. See V. Fernández, A. Jimeno, and M. Menéndez, 1997, *ibid.*, p. 357 ff.

⁴⁶⁶V. Fernández, A. Jimeno, and M. Menéndez, 1994, *op. cit.*, p. 15.

⁴⁶⁷*Ibid.*, Fig. 3, p. 17.

⁴⁶⁸*Ibid.*, p. 15.

⁴⁶⁹J. D. Clark, 1989, "Shabona: An Early Khartoum Settlement on the White Nile," in *Late Prehistory of the Nile Basin and the Sahara*, ed. by L. Krzyżaniak and M. Kobusiewicz, p. 404.

motifs are also represented in the assemblage as are the Early Khartoum wavy line and dotted wavy line designs. Clark writes, "most decoration appears to consist of one design form that would have covered the whole pot."⁴⁷⁰ The Shabona lithics, also quantified by Clark, depart from the Early Khartoum norms in terms of both the presence of lunates and their occurrence in quite high numbers (25.3 per cent).⁴⁷¹ Otherwise, there is nothing remarkable about the tool types, quantities, and raw materials, the latter of which consisted largely of quartz. A summary assessment of Shabona is the following:

"The prehistoric group occupying the Shabona site can never have been large and the satisfaction of their dietary needs was based on hunting, fishing and collecting. The shallow nature of the site and variable weathering patterns on the bone imply seasonal occupation...There is every reason to suppose that the pattern of occupation was similar to that seen today among ethnic groups such as the Nilotic peoples on the Upper Nile to the south."⁴⁷²

Two new sites of the Early Khartoum tradition that have been found by the Spanish team are Sheikh Mustafa-1 and Al Mahalab. Their most significant aspects are "...a constant decrease in the percentage of WL [wavy line] and a consistent increase of Rocker decoration,"⁴⁷³ as well as the gradual replacement of backed pieces by lunates, a trend also observed at the contemporary sites of Saggai and Kabbashi. The ceramic decoration, not illustrated, is suggestive of some A-Group designs by the presence of the packed zigzag motif and rocker impression. One assumes that more detailed

⁴⁷⁰*Ibid.*, p. 403.

⁴⁷¹*Ibid.*, p. 396, Fig. 6.

⁴⁷²*Ibid.*, p. 407.

⁴⁷³V. Fernández, A. Jimeno, and M. Menéndez, 1997, *op. cit.*, 367.

presentations will be made of the pottery in the near future, as the sites become better known.

F. Comparative Burial

Evolution of A-Group Burial

It is now known that the basic type of contracted burial with its subtle variations was in use in Nubia long before the emergence of the A-Group during the Qadan or the Nubian Final Stone Age. Only three burial sites from this period are known: Jebel Sahaba, Toshka (site 8905), and site 6-B-36 from the area of Gezira Dabarosa. The expedition of the Southern Methodist University (in 1965) found an entire cemetery of the Qadan Industry at Sahaba, dated tentatively between 12,000 and 8,000 B.C.⁴⁷⁴ The site, designated as 117, "represents the largest single find of associated skeletons of this age in Africa."⁴⁷⁵ The burials, which differ in only one aspect of their orientation from A-Group burials (heads to the east instead of to the south), show remarkable similarities with the A-Group. The authors write:

"All the skeletons had been buried in oval pits, most of which had large slabs of rock covering them. Burial position was, for the most part, uniform; the skeletons were on their left sides, heads to the east, facing south. Legs were semi-flexed with the heels at the pelvises and the arms were flexed with the hands at or on the face."⁴⁷⁶

⁴⁷⁴F. Wendorf, *et. al.*, 1966, "The 1965 Field Season of the Southern Methodist University," *Kush* 14: 22-24. A later publication of the site gives "...somewhere between 12,000 and 10,000 B.C." See F. Wendorf, 1968b, "Site 117: A Nubian Final Palaeolithic Graveyard near Jebel Sahaba, Sudan," *The Prehistory of Nubia 2*, edited by F. Wendorf, p. 954. No radiocarbon dates are available.

⁴⁷⁵*Ibid.*, p. 24.

⁴⁷⁶*Ibid.*, p. 22.

The graves also showed a combination of single and multiple burials, with two to four bodies being most common in the multiple graves. There were no grave inclusions in the burials, although most individuals had retouched points embedded into their bones (as many as twenty-seven in one case), which evidently had been the most frequent cause of death. The presence of these points allowed, in part, for the identification of the Qadan lithic industry.⁴⁷⁷

At the second site, designated as site 8905, at Toshka,⁴⁷⁸ Wendorf and his colleagues located nineteen burials of essentially the same character as the interments at Site 117. A consistent orientation was not rigidly adhered to as at Sahaba. The Toshka burials also showed little or no indication of death by violence. Bodies were found in varying degrees of contraction on right or left sides, with no grave goods included in the burials. A significant feature of these burials is that some had fossilized remains of horn cores of wild cattle (*Bos primigenius*) above the skeletons. Wendorf indicates that "this repeated occurrence over the burials suggests the possibility that the horn-cores may

⁴⁷⁷This evidence has raised some interesting but unanswerable questions about the nature of the cemetery and the political conditions at this time in Nubia. Wendorf writes: "Violence must have been a very common event in Nubia at this time, if we are to consider this graveyard as typical. There appears to be no significant distinction between males, females, and children in their exposure to violent death; evidently all members of the group were involved in conflict, not just the adult males...Such a high incidence of violence undoubtedly represents an abnormal situation which no group could long endure, unless, of course, the Jebel Sahaba graveyard was restricted to only those individuals who died in this manner...There is no direct evidence available on the factors which were responsible for the violence seen in Nubia at this time...One possibility...is that the population pressures may have become too great with the deterioration of the Late Pleistocene climate and the effects which this had on the herds of large savanna-type animals which were the primary source of food at this time. With this situation, the few localities which were particularly favorable for fishing would have been repeatedly fought over as other sources of food became increasingly scarce." (F. Wendorf, 1968b, *op. cit.*, 992-993).

⁴⁷⁸Reported in F. Wendorf, 1968a, "Late Paleolithic Sites in Egyptian Nubia," *The Prehistory of Nubia 2*, edited by F. Wendorf, pp. 791-953.

have served as grave markers.”⁴⁷⁹ The artifact assemblage at the site consisted mostly of lithics, with a small amount of worked eggshell.

The third burial group, now known as the Wadi Halfa Mesolithic population,⁴⁸⁰ consists of thirty-six individuals “...buried in a flexed position, lying on their left sides with their heads to the southeast.”⁴⁸¹ This quite clearly parallels the A-Group burial. The authors add that “the majority seem to be single or double interments; however, one area of the site can be interpreted either as a mass burial or, more likely, as single and double interments over time in a restricted area producing very close superposition of skeletons.”⁴⁸² Little attention has been given to the scant material offerings in these graves (compared with the human remains), but the culture was quite clearly preceramic and possessed a lithic industry. Faunal material was also found in association with some of the human remains.

Despite the existence of these three early sites, there are no known burials in Lower Nubia after the Qadan to show any development toward the A-Group style of burial with its notable innovations, such as the inclusion of burial goods. Essentially there is a total lack of human burial evidence from the Post Shamarkian, Khartoum Variant and Abkan cultures. The reason for this ‘hiatus’ is not known. Geus has written:

“These first and rather spectacular beginnings of mortuary traditions in Nubia seem not to have been continued. Despite extensive exploration, no Neolithic grave has been revealed in Lower Nubia. It is not known whether inadequate field research or site erosion or the absence of burial practices are

⁴⁷⁹*Ibid.*, p. 875.

⁴⁸⁰See D. L. Greene and G. J. Armelagos, 1972, *The Wadi Halfa Mesolithic Population*, Research Report No. 11, Department of Anthropology, University of Massachusetts, Amherst.

⁴⁸¹*Ibid.*, p. 3.

⁴⁸²*Ibid.*, pp. 3-4.

responsible for the lack of data. However, recent discoveries in Central Sudan have luckily rectified the situation and have provided evidence of an evolution in funerary customs during this period."⁴⁸³

Thus it has become customary to look to the areas outside of Lower Nubia for evidence of an evolution of the Qadan style of burial. Such evidence has not been lacking. Geus has in fact proposed an evolutionary scheme for the central Sudanese burial,⁴⁸⁴ which incorporates the earlier Qadan style of burial. Geus advocates that the Early Khartoum⁴⁸⁵ style of burial was somehow related to the Qadan burial style. The Khartoum Neolithic burial in turn evolved directly from the Early Khartoum type of interment. Immediately post-dating these cultures, the A-Group is quite rightly viewed by Geus as a culmination of all of these influences as well as a product of Egyptian influence. It is now apparent that, contrary to what Reisner led us to expect from his early assessment of the A-Group culture, the Egyptian resemblances in the A-Group burial are not necessarily outweighed by the central Sudanese resemblances. However, the A-Group development of a primarily southward orientation of the body with the individual facing west, has exact parallels with contemporary Egypt. M. A. Murray has shown that this orientation was a predynastic Egyptian custom since Badarian times.⁴⁸⁶ By contrast, in the Khartoum area contemporary burials show no preference for the direction in which the dead were lain. One may surmise that the absence of a preferential (southward) orientation and other Egyptian traits in the Khartoum area is a

⁴⁸³F. Geus, 1991, "Burial Customs in the Upper Main Nile: An Overview," In *Egypt and Africa: Nubia from Prehistory to Islam*, edited by W. V. Davies, p. 57.

⁴⁸⁴*Ibid.*, pp. 57-59.

⁴⁸⁵Geus uses the 'Khartoum Mesolithic' terminology.

⁴⁸⁶See M. A. Murray, 1956, "Burial Customs and Beliefs in the Hereafter in Predynastic Times," *Journal of Egyptian Archaeology* 42: 86-96.

direct result of the distance between Egypt and the Central Sudan. The A-Group culture and the A-Group territory may have acted as a buffer zone in preventing the transmission of Egyptian cultural traits to the Central Sudan. In support of this idea Firth has written:

“As the distance from the Egyptian frontier increases, the character and contents of the graves at all periods begin to show a want of homogeneity with contemporaneous Egypt, and bear the unmistakable traces of a local and more distinctly African culture...”⁴⁸⁷

However, such a theory seems simplistic if one considers that some of the burial traits described by Murray for the Badarian, Amratian and Gerzean periods are shared by *both* the A-Group and the Central Sudanese sites. One such feature includes the occurrence of the anthropomorphic pottery figurine in burials. Geus’s implication that the inclusion of pottery figurines in A-Group graves is primarily a southern influence,⁴⁸⁸ must be questioned because of the existence of the tradition in Egypt and the Aegean at the same time. Furthermore, no formal comparative study of these figurines has yet been undertaken that includes all three areas of Egypt, the Aegean, and the Sudan.⁴⁸⁹ Ucko’s study has demonstrated convincingly that there were Nubian/Egyptian connections in the figurine tradition. The two well known A-Group examples from Halfa Degheim⁴⁹⁰ are remarkably like some Egyptian

⁴⁸⁷C. M. Firth, 1927, *The Archaeological Survey of Nubia: Report for 1910-1911*, p. 37.

⁴⁸⁸F. Geus, 1991 *op. cit.*, p. 59.

⁴⁸⁹Ucko’s excellent interpretive work on anthropomorphic figurines, which focuses Egyptian and Cretan examples, does incorporate the Nubian A-Group figurines, but not the Central Sudanese figures. Also Ucko does not deal with the temporal relations of anthropomorphic figurines from the various areas. See P. J. Ucko, 1962, “The Interpretation of Prehistoric Anthropomorphic Figurines,” *Journal of the Royal Anthropological Institute* 92 (Part 1): 38-54, and 1968, *Anthropomorphic Figurines of Predynastic Egypt and Neolithic Crete with Comparative Material from the Prehistoric Near East and Mainland Greece*.

⁴⁹⁰H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 56: 1 and 2, and Plate 197.

figurines published by Ucko,⁴⁹¹ especially in terms of the incisions made to indicate eyes, the beaked nose, the semi-reclining position of the body, the stumped arms, and steatopygia. It is also suggested that the semi-reclining posture probably “moved from Nubia to Egypt.”⁴⁹² Ucko has confirmed the Nubian/Egyptian likeness in figurines beyond the time of the A-Group. He writes:

“It would seem...that predynastic Egyptian figures are closely related both to predynastic and A-Group Nubian figures as well as to C-Group (Middle Kingdom?) figures at which period Middle Kingdom figures were imported from Egypt. The result was that two completely distinct types of figures co-existed in the C-Group of Nubia.”⁴⁹³

A possible A-Group/C-Group link has been implied by Nordström through the discovery of a male figurine by the Scandinavian Joint Expedition, whose exact provenience is not certain.⁴⁹⁴ It may be from an Abkan, A-Group or even a C-Group context. However, Nordström writes that “the style resembles in a general way that of the two female figures [i.e., from Halfa Degheim] but is closer to the anthropomorphic figures common in the C-Group.”⁴⁹⁵ If this artifact does predate the C-Group, it is a good indication that the A-Group examples are forerunners of the figurine tradition of the C-Group culture.

Perhaps the best evidence in support of Geus’s theory of a primarily southern influence in the use of the A-Group figurine is that some figurines found in the Central Sudan predate the A-Group and Egyptian examples. Because of this one wonders whether the A-Group figurine tradition may not ultimately be of Sudanese origin, despite the close resemblance of A-Group

⁴⁹¹See especially P. J. Ucko, 1968, *op. cit.*, pp. 2-3, Fig. 3; p. 51, Fig. 53; pp. 60-61, Fig. 68.

⁴⁹²*Ibid.*, p. 405.

⁴⁹³*Ibid.*

⁴⁹⁴H.-Å. Nordström, 1972, *op. cit.*, vol. 3.2, Plate 56: 1.

⁴⁹⁵*Ibid.*, vol. 3.1, p. 128.

figurines to the Egyptian examples. The Sudanese evidence consists of the following items:

- (1) From the Khartoum Hospital site, eleven crude and very fragmentary examples of possible legs or arms, and eight fragments of possible heads, all of clay,⁴⁹⁶
- (2) from Shaheinab, one entire female clay figurine, associated with the protodynastic material at the site.⁴⁹⁷
- (3) from Kadada, two examples, one an almost complete steatopygous female clay figurine, the other made of sandstone,⁴⁹⁸
- (4) from Geili, two fragmentary female figurines, one head, one trunk, and six phalloi, all of clay.⁴⁹⁹ and
- (5) from the Kerma Basin, a base of an anthropomorphic figurine has been found in the Pre-Kerma levels.⁵⁰⁰

Of these, the Kadada examples are most like those of the A-Group, especially in terms of the steatopygia and the incised lines on the thighs that may indicate a type of garment. Although Caneva maintains that the Geili examples are quite unlike those of the A-Group,⁵⁰¹ the incised lines for eyes and the beak-like nose on the fragmentary head are very like the features already seen in A-Group and Egyptian figurines. The torso fragment from Geili, which has raised dots for breasts is also reminiscent of A-Group figurines. The Shaheinab figurine is less like A-Group figures, being more globulous in form, but Arkell believed it to be made by the same potters who made the vessels in the protodynastic burials at Shaheinab. This figurine also

⁴⁹⁶See A. J. Arkell, 1949a, *op. cit.*, Plate 56.

⁴⁹⁷A. J. Arkell, 1953a, *op. cit.*, p. 88, and Plate 41: 7 and 9.

⁴⁹⁸F. Geus, 1982c, "La section française de la direction des antiquités du Soudan: Quatre années d'activités (1975-1979)," in *New Discoveries in Nubia: Proceedings of the Colloquium on Nubian Studies, The Hague, 1979*, edited by P. van Moorsel, Planche 13.

⁴⁹⁹I. Caneva, ed., 1988, *op. cit.*, Figs. 17 and 18, pp. 184-185.

⁵⁰⁰See M. Honegger's report in C. Bonnet, L. Chaix, M. Honegger, and C. Simon, 1995, *op. cit.*, p. 58.

⁵⁰¹I. Caneva, ed., 1988 *op. cit.*, p. 172.

appears to be decorated with A-Group-like pottery designs. Arkell describes the figure as follows:

“The head is represented by a mere point, the shoulders by two prominences, and the buttocks by two more. The breasts are youthful and well modelled, and the navel is prominent, with short paralld dotted lines to either side and below it, probably representing a cicatrized pattern, as probably do also the line of herringbone dots and one vertical line of dots up the back. There are four slanting dotted lines on the left side below the navel, and a double horizontal line of dots round the back below the spiral decoration and above...the buttocks, probably represents a girdle. The base is the broadest part of the figurine and is cupped...”⁵⁰²

The earliest examples from Khartoum Hospital are, unfortunately, too fragmentary to assess comparatively, but their aspects seem generally much cruder than the other Sudanese examples. Nothing, unfortunately may be gleaned about the Pre-Kerma figurine from the published report, which is brief in its mention of the object.

Regarding the purpose of the anthropomorphic figurine, there seems to be little agreement amongst scholars. In the case of the pair of Halfa Degheim figurines Säve-Söderbergh has proposed a *shabti*-like function for them. He writes:

“they were connected with an earlier burial, consisting of a woman...and a girl, which had been disturbed when the tomb had been re-used. The woman had a ring of bone around her left wrist and an armlet...of cylinder beads of cornelian and fayence. Another ring of bone was placed under her upper arm. In addition to the clay figurines there were small lumps of clay which seem to imitate grains of corn.

This find is of interest, not only as pieces of art of high quality, but also for the interpretation of such figurines. In this case they seem rather to depict the dead individuals buried in the tomb to secure their eternal vitality, and can

⁵⁰²A. J. Arkell, 1953a, *op. cit.*, p. 88.

hardly be interpreted as sexual partners for a deceased man or as pictures of a fertility goddess.”⁵⁰³

This interpretation is not supported by an abundance of evidence, and it does not account for the occurrence of male figurines in the graves of females or vice-versa. Furthermore, Firth has noted a predominant occurrence of figurines in graves of young girls, and has suggested on this basis that they may simply have functioned as toys, i.e., dolls.⁵⁰⁴ Ucko is generally in favour of this idea, having preferred to adopt a functional approach to the interpretation of all figurines rather than the more traditional and perhaps overused ideological explanation for them as the ‘mother goddess.’⁵⁰⁵ The doll theory, according to Ucko, would explain certain peculiar features of the figurines. Ucko writes:

“As always, the archaeological context of the figurines is all-important; the association between the figurines and the childrens’ tombs in Nubia appears to bear out a doll interpretation, but this association is peculiar to Nubia...

It is interesting to here note that a feature of many of the figurines, which has up to now been treated simply in terms of typological classification—the arm-or shoulder stump—finds a significant parallel and possible explanation in dolls among such tribes as the Ashanti which have their arms formed into stumps to reduce the likelihood of breakage when carried around by children...”⁵⁰⁶

Ucko’s point about the unique association of Nubian figurines with childrens’ graves must be emphasized because it illustrates the limits imposed by the data when comparing figurines cross-culturally. Since there is no direct

⁵⁰³T. Säve-Söderbergh, 1967-68, “Preliminary Report of the Scandinavian Joint Expedition,” *Kush* 15: 228.

⁵⁰⁴As, for example, in Grave 3 at Sayala, already quoted in Chapter 3 above. See again C. M. Firth, 1927, *op. cit.*, pp. 200-201.

⁵⁰⁵Early scholars such as Baumgartel support this view. See E. J. Baumgartel, 1952, “Some Notes on the Origins of Egypt,” *Archiv Orientalní* 20: 278-279.

⁵⁰⁶P. J. Ucko, 1962, *op. cit.*, pp. 44-45.

evidence from other cultures to suggest the use of figurines as dolls we cannot assume a universal use for such objects. In other words, the existence of the objects cross-culturally does not necessarily imply identical uses over large distances. Furthermore, Ucko's discussion of the numerous and varied modern uses for anthropomorphic figurines suggests numerous other possibilities for their use in ancient times.⁵⁰⁷

A second shared aspect of A-Group burial is animal interment, especially of dogs. A survey of the data reveals that A-Group animal burials share features similar to animal burials in Egypt and in the Central Sudan. In terms of the variety of animals buried, A-Group animal burials more closely approximate those in Egypt, the latter of which include burials of dogs, goats, sheep, oxen, and gazelles, to name but a sample. The Central Sudanese burials tend to be more restricted to dogs and goats only. The sites in which animal burials are known to occur in the Central Sudan are also very restricted in numbers. Bonnet (*et. al.*) has shown, for example, that dog burials have occurred at Kadada,⁵⁰⁸ but the absence of this type of burial at El Ghaba, which is in the immediate vicinity of Kadada is not yet understood. From what is known about the Kadada burials, it appears that dogs may have been treated with a similar degree of sanctity as in the A-Group and Egyptian cultures. Bonnet (*et. al.*) is of the opinion that most of the dog remains from the Kadada graves testify to particular funerary rites,⁵⁰⁹ the nature of which eludes us at present. Furthermore, the presence of both the sacrificial dog burial and the independent dog burial, both of which I have already described

⁵⁰⁷For a short discussion of the topic see *ibid.*, pp. 46-47.

⁵⁰⁸See C. Bonnet, L. Chaix, P. Lenoble, J. Reinold, and D. Valbelle, 1989, "Sépultures à chiens sacrifiés dans la vallée du Nil," *Cahier de recherches de l'Institut de papyrologie et d'égyptologie de Lille* 11: 25-39.

⁵⁰⁹*Ibid.*, p. 26.

for the A-Group, are also present at Kadada.⁵¹⁰ As in the A-Group, there appears to have been no separate cemeteries devoted entirely to dogs, and their graves were scattered within human cemeteries. The work of Bonnet and his associates has also demonstrated the continuation of the practice of dog burial well into Meroitic times, including the C-Group and Kerma cultures. It may well be that a study of the practice in later Nubian times will shed light on the Neolithic practice. Beyond this, very little comparative assessment may be given of A-Group animal burial, as the subject of animal burial is, on the whole, under-represented in archaeological site interpretation. I emphasize again that A-Group animal burial has never been properly studied.

Comparative material for the A-Group infant pot burial is very sparse. The burial type is known nowhere else in Nubia and the Sudan except at the site of El Kadada, but it is also known in the Naqada II phase in Egypt. However, in predynastic Egypt the burial type is rare, suggesting a possible importation of the custom from the south, either from the A-Group or elsewhere in the Sudan. One infant burial was found inside a vase at El Amrah,⁵¹¹ without grave offerings of any kind. At Abydos at least one infant in a pot was found interred with grave goods consisting of a wavy-handled jar and two additional vessels.⁵¹² This material in no way approaches the variety of burial goods seen in infant pot burials at Kadada. Vandier has also noted that in undisturbed graves containing infant pot burials, there was a definite preference for a southward orientation of the vessel opening. This feature has not been noted in the A-Group or Kadada examples.

⁵¹⁰*Ibid.*, p. 25.

⁵¹¹See J. Vandier, 1952, *Manuel d'archéologie égyptienne*, vol. 1, pp. 237-238, and Fig. 151.

⁵¹²*Ibid.*, p. 238.

Reinold has done a preliminary study of the Kadada material, but it is difficult to draw comparisons between this material and the A-Group pot burials because so few examples are known in the latter case and these have not been as well reported as those at Kadada. At Kadada, seventeen vase burials were found sparsely distributed around the main mound of the site, essentially bordering the inhabited area. The burials did not appear to conform to a particular spatial organization, as some were isolated, while others occurred adjacent to another, and others were cut into slightly earlier pot burials. Reinold was not able to define either a consistent orientation of the bodies inside the vessels or a consistent orientation of the vases inside the graves. In this respect, i.e., the lack of any preferred orientation, it seems that the Kadada pot burials parallel those of the A-Group rather than Egypt. The graves themselves were simply hollowed-out pits near the habitation area, which has led Reinold to the conclusion that the vase burials “...ne semblent pas faire l’objet d’un rituel important.”⁵¹³ I would argue, however, that the discovery of objects inside the vases with the bodies indicates that some sort of funerary ritual was associated with the infant pot burials, whether we think of it as ‘important’ or not. The objects were deposited on or underneath the bodies or were placed against the walls of the vessels. They included mollusc shells, beads, items of amazonite, agate, carnelian, and quartz, elephant ivory bracelets, pottery, palettes, and fragments of palettes. It should be emphasized that the inclusion of objects inside A-Group pot-burials has not been noted. If this was not an oversight on the part of excavators, could it indicate that Kadada perhaps represents a more evolved form of the infant pot burial? I think Reinold’s most significant contribution in his study was to determine

⁵¹³J. Reinold, 1985, “La nécropole néolithique d’el Kadada au Soudan central: Les inhumations d’enfants en vase,” In *Mélanges offerts à Jean Vercoutter*, pp. 279-289.

the ages of the infants interred in pots, something that seemed not to have been attempted for the A-Group examples, except in obvious cases where the individuals were newly-born. Reinold writes:

“Malgré la très mauvaise conservation de ces squelettes, il est possible de déterminer que ce mode d’inhumation s’applique pour les nouveau-nés et les enfants jusque vers l’âge de cinq ou six ans...Le statut d’inhumation en pleine terre [i.e., the adult burials], à el Kadada, intervenant pour les sujets d’âge supérieur à six ans, correspond probablement à une étape dans la vie de l’adolescent (initiation...)”⁵¹⁴

The latter idea is, I think, a fascinating one, and although not developed any further by the author, could supply a logical reason for the infant vase burial in both A-Group and Kadada contexts. I will take the idea one step further to suggest that the enclosure of an infant in the vase could be symbolic of the enclosure of the individual in a womb, suggesting perhaps that the person was still considered in a child-like state or closer to childhood than, as Reinold implies, an individual who had already undergone an initiation procedure toward adolescence or adulthood. Such an ideology would adequately explain why older children and adults were not buried in vases.

Burial Customs and Ideology

Despite the large amounts of A-Group burial evidence it is not easy to ascertain the nature of the ideology surrounding the afterlife in A-Group times. This topic has received little attention from scholars, and as Geus has pointed out, “...publications of burial sites often include essentially monotonous, yet useful, inventories that discuss at length material remains, but seldom approach burial conceptions and beliefs in themselves.”⁵¹⁵ That

⁵¹⁴*Ibid.*, p. 281.

⁵¹⁵F. Geus, 1991, *op. cit.*, p. 58.

the ideas about the afterlife were significantly more developed from the period of the Final Stone Age is clear from the new feature of including burial goods in A-Group graves. Adams interprets this as evidence of "a growing concern for the afterlife."⁵¹⁶ Firth has written the following concerning the early ideologies of Egypt and Nubia:

"In the prehistoric period the conceptions as to what happened at death was extremely vague. Death was regarded merely as a change and not as the destruction of the individual. So long as man was alive, his actions were visible and under the bodily control of his neighbours, but after death his individuality was released and continued to exist with full and uncontrolled powers for good and evil. The cult of the dead must have arisen from a fear of their ghosts rather than from any wish to ensure a *renewal* of existence for those who had died...It has been suggested that a provision for the dead arose from leaving the necessities of existence with the sick whom a nomad people might be compelled to abandon on the march...

But, whatever the underlying motive, we find that the earliest graves in Egypt, those of the neolithic period, are furnished with an equipment more or less complete of those things which were in use by the dead when alive."⁵¹⁷

Firth's discussion shows an early tendency to look toward Egypt as the probable source of A-Group funerary ideology. This tendency is still adhered to today. Nordström writes:

"The occurrence of numerous graves grouped in cemeteries is one of the principal distinguishing features of the A-Group in comparison with both the Khartoum Variant and the Abkan. This significant shift in the attitude towards the after-life was probably a result of a cultural diffusion from Egypt at an early phase of the Negadeh period. In any case there is hardly any other way in which we can explain the similarities between Predynastic Egypt and the A-Group in

⁵¹⁶W. Y. Adams, 1977, *Nubia: Corridor to Africa*, p. 127.

⁵¹⁷C. M. Firth, 1927, *op. cit.*, p. 10.

respect of grave structures, burial positions, and the composition of grave goods placed in burial shafts..."⁵¹⁸

If we are to assume parallels between A-Group funerary ideology and that of Egypt it is also reasonable to assume parallels with the Central Sudan because of the existence of shared burial customs between these three areas. It is quite likely that all three areas (Nubia, Egypt, and the Central Sudan) shared similar beliefs in a continued existence in an afterlife. Murray is convinced that the inclusion of grave goods in predynastic Egyptian graves "all show a belief in some kind of material survival of the dead person after death."⁵¹⁹ More specifically, Geus suggests that in the Khartoum Neolithic, the attitude of rebirth may have been reflected in the contracted burial position, as this posture "evokes the embryonic stage and thus the act of birth."⁵²⁰ It should be noted that a more practical explanation has been proposed for the contracted burial that has nothing to do with ideological burial concepts. Smith and Wood Jones have written:

"Various theories have been propounded as the reason for this form of burial; but it may be said to any one whose mind is not determined on the discovery of ancient ceremonial, it is obvious that this is the position in which a dead body can be packed into the smallest hole. To a primitive people whose implements were quite inadequate for extensive digging operations, this fact is likely to have been a weighty consideration, and it may possibly have been the determining cause of a practice which became traditional..."⁵²¹

Returning to the ideological discussion, the often consistent placement of grave goods in relation to the body is suggestive of some unknown ritualistic

⁵¹⁸H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 27.

⁵¹⁹M. A. Murray, 1956, *op. cit.*, p. 89.

⁵²⁰F. Geus, 1991, *op. cit.*

⁵²¹G. E. Smith and F. Wood Jones, 1910a, *The Archaeological Survey of Nubia: Report for 1907-1908. Volume II. Report on the Human Remains*, p. 181.

notions. Murray writes: "The Gerzean burials show by the arrangement of the grave-goods that there must have been a definite ritual, for the various objects had each its own appointed place."⁵²² In the A-Group we see that even the poorest of A-Group graves contained at least pottery, with the exception of many of those graves designated as B-Group, which were often devoid of all material. In the typical A-Group burial, large pottery vessels, including the Egyptian imported wine jars, were usually placed at both ends of the grave pit, while other types of objects were placed around the body. Most of the latter category consisted of items of personal adornment and objects of everyday use, which, according to Nordström, "cannot be regarded exclusively as funeral objects, since they were evidently also found on the habitation sites."⁵²³ These included the various forms of Nubian indigenous wares such as the fine egg-shell red-painted vessels, storage jars, bowls, grinding implements (for cosmetics), beads, and leather clothing or wrapping.

That specific rituals were centered on the body itself is likely if one recalls the red ochre found on the A-Group skeletons. This feature appears in the Khartoum Neolithic burial as well, which Geus surmises are "remains of ochred clothes and spreads."⁵²⁴ If there was a burial rite or rites associated with this act, it has not left behind any archaeological traces. Geus also suggests that down-turned pottery vessels may be evidence of some ritual performance. Concerning the evidence from El Ghaba, he writes:

"The pottery vessels were not there to contain food, as one would think, since they are almost always inverted and occasionally on top of each other. They might have been used during a ritual banquet before the sealing of the tomb."⁵²⁵

⁵²²M. A. Murray, 1956, *op. cit.*, p. 94.

⁵²³H.-Å. Nordström, 1972, *op. cit.*, vol. 3.1, p. 27.

⁵²⁴F. Geus, 1991, *op. cit.*

⁵²⁵*Ibid.*

In A-Group contexts down-turned vessels were sometimes found in graves with objects underneath them, as in grave 6 at Cemetery 142 (Naga), where an ivory bowl was found turned over a very fine ivory comb carved with the figures of two giraffes.⁵²⁶ The ideological significance behind this sort of display can only be guessed.

⁵²⁶C. M. Firth, 1927, *op. cit.*, pp. 213-216. See Plate 20e for the comb.

CHAPTER 5 – CONCLUSIONS

5.1. DISCUSSION AND SYNTHESIS OF A-GROUP ORIGIN AND RELATIONSHIPS

The following Table (5-1) is a summary of the textual evidence for the ceramic comparisons given above. In addition to the specific pattern types indicated in the Table, the total number of features counted includes the more general traits of burnishing, red-slipped wares, a red ochre wash, and black-topped or black mouthed pottery. However, these have not been assigned pattern numbers. It should be understood that the numbers represent the occurrence of different A-Group traits, not the occurrence of the same trait x number of times. For example, '3' for Karmakol indicates the presence of three different A-Group motifs in the Karmakol Industry. As already indicated, these are milled rims, a rim band decoration of impressed lines, and a red ochre wash. If the decorative types were truly quantified or quantifiable for all sites (or industries) by counting individual sherds, the figures in most or all cases would undoubtedly be much higher.

The summary of the data has produced some surprising results. In terms of ceramic design, the A-Group appears not to be closely linked with the industries geographically nearest to it, i.e., those cultures in Lower Nubia and the Dongola Reach. Rather, connections further abroad are definitely suggested. Table 5-1 demonstrates clearly that the number of A-Group decorative motifs shared by certain Khartoum Neolithic sites of the Central Sudan far exceeds the number of shared A-Group motifs in any other area of the Sudan and Egypt. The sites of Kadero, Shaheinab, and Geili figure most

TABLE 5-1. COMPARATIVE DESIGNS IN A-GROUP POTTERY¹

CULTURE OR SITE	NUMBER & TYPES OF A-GROUP CERAMIC FEATURES
LOWER NUBIA	
Abkan	7 (Patterns 1, 2, 13, 19, 31)
Post-Shamarkian	0 (Pottery not studied)
Khartoum Variant	15 (Patterns 1, 2, 4, 5, 7, 8, 10, 11, 12, 13, 18, 20, 21, 22, 23)
DONGOLA REACH	
Karmakol	3 (Patterns 19, 24)
Tergis	5 (Patterns 19, 23; Decoration restricted to rims).
El Melik	1 (Pottery not well studied; Decoration rare).
Karat ²	10 (Patterns 1, 4, 12, 15, 18, 34, 26, 35, 37)
Pre-Kerma	5 (Pattern 18)
CENTRAL SUDAN	
Khartoum Hospital	6 (Patterns 12, 25, 26, 32, 35)
Sarurab	2 (Pattern 1, and an unspecified zigzag motif).
Omdurman Bridge	6 (Patterns 18, 25)
Shaheinab	14 (Patterns 1, 7, 12, 15, 18, 19, 25, 27, 33, 35)
Kadero	21 (Patterns 1, 3, 4, 7, 12, 13, 18, 19, 24, 25, 28, 31, 32, 35, 36, 37, 38)
El Geili	12 (Patterns 1, 7, 9, 18, 22, 25, 31, 32, 35)
Zakiab	5 (Patterns 1, 6, 18, 31, 35)
SHENDI REACH	
Kadada	2 (Patterns 1, 18)
El Ushara	4 (Patterns 4, 7, 31, 32)
El Ghaba	2 (Patterns 7, 31)
Shendi	2 (Pattern 9)
EASTERN SUDAN	
Shaqadud	12 (Patterns 1, 3, 7, 9, 12, 18, 31, 32, 35, 38)
Khashm el Girba	10 (Patterns 1, 7, 9, 12, 13, 18, 20)

¹For pattern key see Table A-3, Appendix, "Key to A-Group Ceramic Designs."

²The number of patterns here is likely to be much higher, but one is unable to obtain a full inventory because of the lack of published evidence. It will be recalled that Marks and Ferring remarked that all Early A-Group decorative types occurred in the Karat Group (p. 310, Chapter 4, above).

TABLE 5-1, con't.

CULTURE/SITE	NUMBER & TYPES OF A-GROUP CERAMIC FEATURES
Gash Delta	4 (Patterns 9, 18)
Nubian Desert	2 (Patterns 7, 25; Area not well studied)
WESTERN SUDAN	
Wadi Howar	5 (Patterns 12, 18, 31)
Laqiya/Wadi Sahal	7 (Patterns 14, 19, 30, 31?) ³
Selima Sandsheet	2 (Patterns 19, 25)
EASTERN DESERT	
Bir Abraç	5 (Patterns 1, 18)
NUBIAN DESERT	
	2 (Patterns 7, 25)
WESTERN DESERT & OASES	
Bir Kiseiba	2 (Pattern 18)
Nabta Playa	4 (Pattern 9, 19, 23)
Wadi Bakht	1 (Pattern 13)
Wadi el Akhdar	2 (Pattern 12 or possibly 13)
Gebel Kamil	1 (Pattern 13)
Abu Ballas	0 (Little information available on ceramics).
Kharga Oasis	1 (Ripple ware only).
Dakhleh Oasis	4 (Patterns 1, 18, 19)
Faiyum	1 (Burnishing only).
Dungul and Kurkur Oases	0 (No occupation contemporary with A-Group).
Siwa Oasis	0 (No ceramics reported).
BLUE AND WHITE NILES	
Guli	4 (Patterns 7, 12, 23)
Rabak	1 (Pattern 18)
Haj Yusif	9 (Pattern 17 or 18, 22?, 23, 29 31, 35)
Umm Dom	0 (Pottery not published, but rockerstamp noted)
Soba	0 (Pottery not well publ.; rocker stamp noted).
Shabona	3 (Patterns 1, 7, 12)
Sheikh Mustafa-1 & Mahalab	2 (Pattern 20 or 22; Exact version not published)

³A question mark here and elsewhere indicates that the exact variant of the pattern is not determinable from published reports.

heavily in this regard. As if to confirm the possibility of strong Khartoum Neolithic relationships for the A-Group, the next industry to yield comparatively substantial A-Group ceramic traits is the Khartoum Variant in the Second Cataract region. Furthermore, these ceramic relationships apparently outweigh those of Lower Nubia. The Abkan, the only other Lower Nubian industry whose pottery is well known, shows less than half the number of A-Group ceramic traits displayed at Kadero, for instance. The overriding significance of this is that many of the impressed and incised decorative elements in the A-Group ceramic industry did not develop indigenously in Lower Nubia, and that the likely place of origin for these motifs was the Central Sudan in Khartoum Neolithic times. It remains to be determined whether the Khartoum Neolithic traits in the A-Group were acquired indirectly through the Khartoum Variant and Dongola Reach industries or more directly from the Khartoum region itself. I think this question is answerable to a limited degree by the simple counts presented here.

A comparison of the shared A-Group traits between the Khartoum Variant and the three Khartoum Neolithic sites of Kadero, Shaheinab, and Geili, shows that there is only a marginal degree of overlap of A-Group traits between the Second Cataract and Khartoum areas. Only half of the A-Group traits in the Khartoum Variant are also found in the three Khartoum Neolithic sites in question. Furthermore, of the twenty-two traits listed for the combined sites of Kadero, Shaheinab, and Geili, most (68 per cent) do not appear in the Khartoum Variant. The implication of this is that the A-Group was likely not dependent solely upon the emergence of the Khartoum Variant industry in the Second Cataract for the acquisition of Khartoum Neolithic ceramic traits. Nor does it seem likely that these traits developed indigenously

in Lower Nubia at all, due to the scarcity of these motifs in the Abkan assemblages. Of the three patterns listed for the Abkan, only two may have derived from the south, while the other (pattern 2, rectangular impressed dots) does not appear at all in the Khartoum area. The question then arises of how the A-Group obtained many of its Khartoum Neolithic traits. If one assumes a more direct acquisition or diffusion of traits from the Khartoum region into the A-Group area, then one would also have to assume that Khartoum Neolithic designs survived at least as late as the time of emergence of the Early A-Group. Hence the A-Group should be envisioned as having absorbed Khartoum Neolithic traits if direct acquisition is assumed. However, as we have already seen, there is a problem of establishing even marginal contemporaneity between the end of the Khartoum Neolithic sequence and the beginning of the Early A-Group.

But perhaps there is another possibility for explaining the existence of so many Khartoum Neolithic ceramic motifs in the A-Group. The data from Table 5-1 show most surprisingly a heavy representation of A-Group ceramic traits at Shaqadud and Khashm el Girba in the Eastern Sudan (Butana). All, or one-hundred per cent of the A-Group traits at Shaqadud also appear in the Khartoum Neolithic Nile sites, but only forty per cent of the Shaqadud traits appear in the Khartoum Variant. One may perhaps surmise that the A-Group had either direct or indirect contact with Shaqadud, and thus absorbed certain Khartoum Neolithic traits from outside the Nile Valley. The proposed relationship would have been quite possible given the later duration of Khartoum-like assemblages in the Butana. The evidence from Khashm el Girba on the easternmost edge of the Butana does not, unfortunately, add to the argument for a predominantly Butana origin for the Khartoum Neolithic designs in A-Group ceramics, as opposed to a Khartoum Variant origin.

Although almost all of the Khashm el Girba traits (86 per cent) appear in the Khartoum Neolithic, all of these same traits also appear in the Khartoum Variant industry.

Whatever the precise origin and route of transmission for the Khartoum Neolithic ceramic traits in A-Group pottery, it may be certain that the direction of the movement of these traits was from south to north and from the southeast to the northwest, given the earlier occurrence of the shared traits in the south. I indicated above (Chapter 4), that if the A-Group did have cultural connections with the Eastern Sudan, these likely had their limit at Khashm el Girba because of the noticeable reduction of A-Group ceramic traits in the Gash Delta. The design of cross-hatching (pattern 9) in the Gash Delta is not identical to the A-Group cross-hatched motifs, and the only other shared features of oblique lines (pattern 18) is not exactly contemporaneous with the A-Group. However, I now suggest that perhaps a more realistic easterly limit for A-Group interconnections is at Shaqadud and not as far east as Khashm el Girba. This is based on the general lateness of many of the shared ceramic motifs in the Khashm el Girba region, which often post-date even the Terminal A-Group. Furthermore, the lack of archaeological assemblages from the vast area lying between Shaqadud and Khashm el Girba does not encourage one to favour the possibility of A-Group connections further east of Shaqadud.

The only other possible source of Khartoum Neolithic designs in the A-Group is through the Karat industry, where six shared motifs between the A-Group, the Khartoum Neolithic, and the Karat Group are noted (see Table 5-1 again). Strong Shaheinab influences in the Karat Group pottery have already been noted, and these influences are somewhat substantiated by similarities in their lithic industries. However, the rather limited amount of Khartoum

Neolithic motifs in the Karat Group suggests that only a few or several traits were transmitted to the A-Group through the Dongola Reach, and this again forces a consideration of more direct links for the A-Group with the Khartoum region. On the other hand, a more complete publication of the Karat Group pottery may well change this view if it were demonstrated, for instance, that a greater range of Khartoum Neolithic traits is in fact present in the Karat industry. One suspects that the Karat Group has the potential to produce such evidence, certainly more so than any other industry in the Dongola Reach. However, based on current evidence it appears that the Early A-Group was only loosely linked to the Dongola Reach through the Khartoum Neolithic ceramic traits of the Karat Group. The Pre-Kerma industry, as promising as it is for elucidating A-Group relationships with Upper Nubia in the future, is too scantily known to allow for definitive comparisons. The occurrence of the cross-hatched design and the variegated haematitic ware alone says little for A-Group relations in Upper Nubia. The same statement applies to the presence of only three A-Group ceramic motifs in the Karmkol, Tergis, and El Melik Groups combined. As already noted, the El Melik pottery is gravely in need of study.

The combined corpus of A-Group ceramic traits in the Shendi Reach is weakly suggestive of specific A-Group relationships with this area. All traits counted from the sites of Kadada, El Ushara, El Ghaba, and Shendi are also present in the Khartoum Neolithic. The same may be said about the decorative attributes listed for the Blue and White Nile regions. Taken as a whole, about 78 per cent of the Blue and White Nile designs correspond with Khartoum Neolithic motifs, thus attesting to the spread of Khartoum traits to these regions south of Khartoum.

Turning now to the evidence from the Western Sudan, there is sparse but very suggestive evidence of A-Group links with this area. These connections appear to have been quite independent of A-Group relations with the Khartoum area. Two designs attest to this, pattern 14, the herring-bone punctate, and pattern 30, the checkered arrangement of lozenges, both of which have appeared in the Laqiya region and in the A-Group. These designs, to my knowledge, are totally unknown in the Khartoum area or in the deserts and oases of Egypt. However, the former pattern is probably related to the solid and dotted-line versions of the herring-bone design seen all along the Sudanese Nile. As for the source of these two distinctive patterns, very little can be ventured at present. Did they originate in the Western Sudan and then spread to Lower Nubia or vice-versa? The B.O.S. expedition seems to have considered the problem of the direction of influence between the Nile and the Western Sudan, but they have conceded that the direction of A-Group interconnections with the west is a difficult issue to decide.⁴ But regardless of the direction of cultural flow, A-Group relations to the west appear not to have been as well developed or as extensive as its Nilotic connections to the south. The development between the Nile Valley and the western desert regions of the Sudan has been described as follows:

“Parallel to the different Khartoum-derived groups along the Nile, in the desert so far two offshoots can be described: the Rahib—and Laqiya group. Around 5000 BP the latter seems to have been the last representative of the Khartoum tradition in the Laqiya area.

Thereafter Wadi Howar and Laqiya area[s] have witnessed a different evolution: in Wadi Shaw and Wadi Sahal A-Group-

⁴See R. Kuper, 1995, “Prehistoric Research in the Southern Libyan Desert: A Brief Account and Some Conclusions of the B.O.S Project,” *Cahier de recherches de l’Institut de papyrologie et d’égyptologie de Lille* 7: 135.

related pottery became common, comprising elements which suggest at least some of its roots in the Gilf Kebir.”⁵

Finally we come to the Egyptian Western Desert and oasis regions⁶ where there is not much certain evidence of A-Group links through the ceramics. However, I propose that there are indications of a Western Desert origin for a few A-Group traits. It should be emphasized that the oases show a disappointing lack of evidence for interaction with the Nubian Nile Valley and with the A-Group. The only possible exception may be Dakhleh, but more research and analysis is certainly needed before a solid argument could be made for Lower Nubian connections. It seems, based on current evidence, that A-Group connections may have existed only with the desert regions of Western Egypt. The fact that a few ceramic traits of the Western Desert appeared as early as the Abkan in Lower Nubia attests to links between the Western Desert and the Nubian Nile Valley well before the emergence of the A-Group. That these connections continued to flourish during the time of the A-Group is now only becoming clear, and the evidence in support of this process is still scant. I list again those traits in the Western Desert that predated the arrival or the emergence of their counterparts in the Khartoum region: (1) the cross-hatched pattern (no. 18) from Bir Kiseiba, (2) pattern 9, oblique parallel lines from Nabta Playa, (3) pattern 23, a double row of dots on the rim band, also from Nabta Playa, and (4) pattern 13, the dotted herring-bone motif, specifically arranged in panel format, from Wadi Bakht and Gebel Kamil. Of these designs, pattern 23 does not appear in the Early Khartoum and Khartoum Neolithic assemblages at all, although strangely

⁵*Ibid.*, pp. 135-136.

⁶I have omitted the Eastern Desert of Egypt and the Nubian Desert from this comparative summary, as there is too little material evidence from which to draw for analysis.

enough, its presence has been noted all round the Khartoum region. This includes the sites of Guli and Haj Yusif south of Khartoum, as well as in the Khartoum Variant and Tergis industries. So while its lack of occurrence in the Khartoum province would tend to strengthen the possibility of a Western Desert origin for the trait, it is difficult to explain its occurrence in every other region of the Nile, especially south of Khartoum. However, the very early presence of these four motifs in the Western Desert suggests that not all ceramic innovation in the Sudan originated in the Khartoum province, but that there may have been some diffusion or transmission of traits, however, limited, from the Eastern Sahara in a southeast direction toward the Nile Valley. If this did indeed occur with selected ceramic traits then Lower Nubia would have been among the first areas to have assimilated these characteristics.

I draw attention now to the possibility of western connections for the A-Group that may have extended beyond Egypt and the Sudan. Pattern 2, rows of impressed rectangular dots, occurs in the Abkan industry as well as in the A-Group. Its only other occurrence is in the Khartoum Variant, where it is one of only two 'anomalous' ceramic traits, that is, traits that do not seem to have derived from the Khartoum ceramic traditions. In addition, Chlodnicki has published two variants of the pattern consisting of a single line of rectangular dots used as a rim top decoration at Kadero,⁷ however it does not seem to have been used as a body design at Kadero or in multiple rows as it was in the A-Group, Abkan, and in the Khartoum Variant. Also, the motif occurs in very low frequencies at Kadero, between 0.11 and 0.15 per cent. I have not noted the occurrence of the trait elsewhere in the Sudan, or for that matter in the

⁷M. Chlodnicki, 1982, "Studies on Pottery from a Neolithic Settlement at Kadero, Sudan," *Przegląd Archeologiczny* 30: 95, C6.

Western Desert regions of Egypt. However, the trait is known at Enneri Wour, in the Tibesti area of Chad, where the arrangement and alignments of the 'dots' (long sides oriented upward) is exactly the same as the A-Group design.⁸ The description of the motif from Enneri Wour reads as follows: "There is one neck and rim sherd of a fairly large vessel with a vertical neck...on which decoration in irregular horizontal lines has been applied with an instrument of rectangular cross section."⁹ Even the type of instrument used to make the motif seems quite different from the traditional sort of tool used in making the design types of the A-Group and Sudanese traditions, i.e., catfish spines, and bivalve shells. Given the occurrence of the trait in Chad, it is not unreasonable to expect the future discovery of the design in the western areas of the Sudan and Egypt, assuming the trait or the knowledge of it diffused from that direction into the Nubian Nile Valley. It must be remembered that the Late Neolithic of the Western Desert is but imperfectly known. If, on the other hand, the trait is not found in these desired regions, this would have greater implications for A-Group interconnections, as it would imply more direct links between the Nubian Nile Valley and Chad. This I consider to be entirely likely given the evidence we have already seen for Chadian connections with other areas near the Nile Valley, such as the Faiyum.

The final question to be answered now is: Do other types of evidence validate or negate the proposed relationships for the A-Group based on ceramic decoration? Fortunately a few arguments may be added to the ceramic comparisons to substantiate some of these relations, but there are

⁸See C. Vita-Finzi and R. A. Kennedy, 1965, "Seven Saharan Sites," *Journal of the Royal Anthropological Institute* 95: 209, Fig. 14.

⁹*Ibid.*, p. 200.

certainly no large bodies of data from which to draw. However, there is growing evidence to suggest that the A-Group may have received its pastoral impetus from the Libyan Desert,¹⁰ from where it is now being argued that African pastoralism developed independently from southwest Asia and subsequently spread from the desert regions into the Nile Valley.¹¹ Such a claim has received much support from the discovery of early domesticates in such regions as Bir Kiseiba and Nabta Playa. The latter stage of this pastoral development may well have involved a migration of nomads into Lower Nubia, thus adding to the indigenous Terminal Abkan/Early A-Group population. That such a process may also have contributed to the pastoral element of the Karat Group in the Dongola Reach is, I think, worthy of much consideration. So far it is very difficult to explain the economic shift to pastoralism that is evident in the Karat Group, and that industry stands alone in the Dongola Reach in displaying a strong pastoral element. If an eastward migration into the Nile Valley can ever be proven to have occurred then it is also possible that the Karat Group may have absorbed the pastoral mode first and then transmitted it northward to the A-Group. I emphasize again that the Karat Group and the Early A-Group are very likely to have been exactly contemporaneous. Furthermore, it is known that desiccation was occurring in the deserts at a time contemporaneous with the emergence of the A-Group in Lower Nubia, thus providing adequate impetus for a migration to a more favourable environment. However, I do not support a totally Western Desert

¹⁰Schön has suggested this directly. See W. Schön, 1994, "The Late Neolithic of Wadi el Akhdar (Gilf Kebir) and the Eastern Sahara," *Archéologie du Nil Moyen* 6:151.

¹¹This argument has actually been growing for a number of years, and many scholars now support it. See for example, W. P. McHugh, 1974, "Late Prehistoric Cultural Adaptations in Southwest Egypt and the Problem of the Nilotic Origins of Saharan Cattle Pastoralism," *Journal of the American Research Center in Egypt* 11: 9-22, and F. A. Hassan, 1986b, "Desert Environment and the Origins of Agriculture in Egypt," *Norwegian Archaeological Review* 19 (no. 2): 63-76.

origin for the A-Group population because this would ignore the development of the indigenous Lower Nubian cultures of the Qadan and the Abkan that are known to have been culturally continuous with the A-Group. The lithic evaluations of these cultures have demonstrated this continuity admirably. Rather, I support a theory of a mixing of an indigenous Nile Valley population with a desert pastoral population, both elements of which contributed to the growth and expansion of the A-Group through its Classic and Terminal phases. It must be emphasized that the A-Group pastoral element seems to have been quite separately acquired from its agricultural element. The traditional view is that the A-Group received its agricultural impetus from Egypt and that this is evidenced by the food producing sub-culture of the Khor Bahan Early A-Group. This culture, with its knowledge of agriculture was gradually absorbed southward into the more indigenous segments of the A-Group population. However, there is growing evidence to suggest that the Western Desert oases may have been the origin of Nile Valley agriculture, thus again challenging the the traditional theory of a southwest Asian origin for domesticated cereals in Egypt. As with animal domestication, the most important evidence of an indigenous African origin for cereal domestication comes from the Bir Kiseiba/Nabta Playa region from where it is argued that "...food production in the oases of Kharga, Baharia and Farafra, was introduced."¹² Barich and Hassan also indicate that the wheat and barley from the Nabta/Kiseiba region dates to the Middle Neolithic, c. 7,700-6,200 B.P.¹³ The proposed model is that

"the oases therefore may have served as areas where
sedentarization commenced before it did at Merimde and

¹²B. E. Barich, F. A. Hassan, 1984-87, "The Farafra Oasis Archaeological Project (Western Desert, Egypt)," *Origini* 13: 182.

¹³*Ibid.*

Badari in the Nile Valley. Incipient agriculture in the Nile Valley is also believed to have been initiated by a movement of people from the oases towards the Nile..."¹⁴

The implications of this theory for the A-Group is that the Lower Nubian Nile Valley also may have absorbed a west to east spread of agriculture if such a movement did indeed occur. It has always been assumed that the Khor Bahan agricultural element spread from Upper Egypt southward along the Nile, but clearly this view should now be questioned in light of the new evidence from the Western Desert. Therefore two alternatives should now be considered with regard to the question of the A-Group acquisition of agriculture: (1) the traditional theory of direct acquisition from Upper Egypt, with the provision that Egyptian agriculture may have derived from the Western Desert, and (2) direct acquisition from the Western Desert itself.

The possibility of strong links between the A-Group and Kadero, as suggested by the comparatively large number of shared ceramic motifs is further enhanced by the new discovery of 'elite' burials at Kadero. The material found in these graves (maceheads, malachite, etc.) is very suggestive of either direct or indirect trade or contact between Kadero and Egypt. If Kadero was involved in trade with Egypt the Nubian A-Group certainly would have been the middleman in that trade. The other possibility is that the A-Group dealt directly with Kadero in providing Kadero with Egyptian specialty items. I am particularly struck by the existence of the so-called elite group at Kadero, which closely parallels our understanding of A-Group social organization. No other Sudanese culture displays evidence for social stratification, not even Geili, whose funerary rite closely parallels that of Kadero, and whose graves also contained maceheads, albeit in very low

¹⁴*Ibid.*, p. 184.

numbers. Is it possible that Kadero society may have had a chiefdom class similar to that of the A-Group? If this was the case it would imply a much closer relation between the A-Group and Kadero cultures than even the ceramic analysis here has shown. Undoubtedly much more research is needed before such a question may be answered.

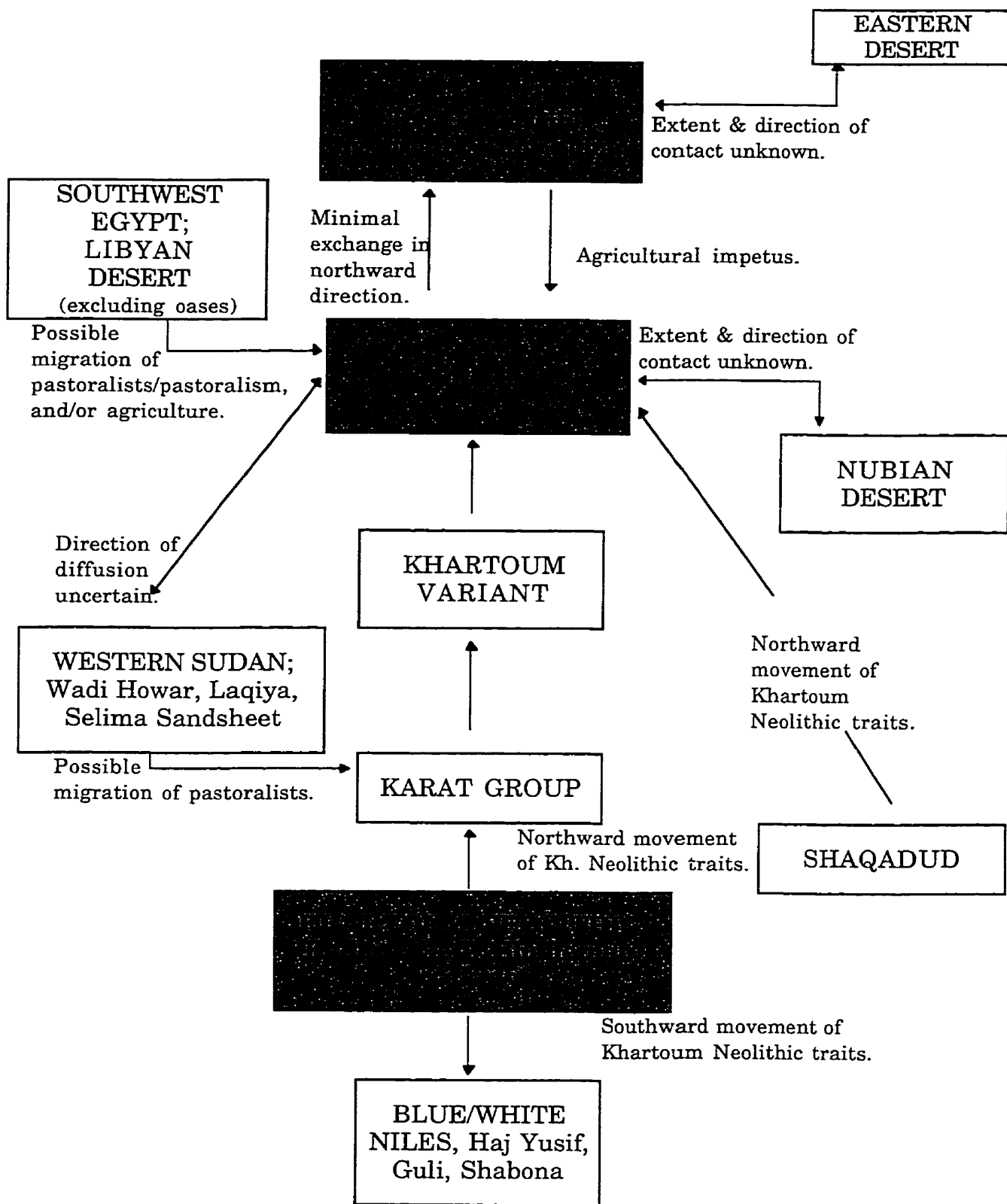
Despite the weak connections suggested by the few shared ceramic motifs between the A-Group and the Shendi area, other shared cultural aspects such as dog burial and the infant pot burial may strengthen the case for A-Group/Shendi Reach connections. Kadada is particularly illustrative of both customs, and in addition, I have noted that its single anthropomorphic figurine is very like the A-Group examples. In general, however, the analysis of the figurine tradition has not been decisive in pinpointing A-Group connections. The main problem is undoubtedly the lack of enough specimens for a good comparative analysis. In terms of A-Group relations it may be significant that both the dog burial and the infant pot burial are, so far, restricted to this region of the Sudanese Nile.

A comment on the lithic comparisons made throughout this work is in order here. Disappointingly, I have found the lithic material to be of limited comparative value for a number of reasons: (1) the lack of consistency in reporting the material between excavators, such as the use of various typologies, terminologies, and even definitions for certain lithic types, (2) the uncertainty that we have about the functions of most tool types, (3) the fact that not all sites had quantifiable lithic data from which to draw for comparison, and (4) the fact that lithic material seems truly to be much more variable than ceramic material. It has been seen, for example, that the choice of raw material was often a function of what was available from the environment, and not from any consideration of tool quality or design. I am not convinced

therefore that the same comparative approach with the lithic material was as suitable a method as it was for the ceramics. It is quite likely that a formal statistical approach is needed for this material. Perhaps, too, if more consideration was given to the techniques of manufacture cross culturally (if such an approach is possible), the results would have been more useful as comparative tools. The results obtained here have confirmed more than anything that lithic materials are often not good indicators of cultural interconnections.

In spite of this, the total analysis presented here has yielded some significant results. From the ceramic counts it would seem that both southward and southeastern interconnections around the Middle Nile region are most strongly suggested for the A-Group in terms of shared ceramic decoration. The model I propose for these relationships (see Table 5-2, below, "Model for A-Group Relationships") considers the Khartoum province as the central region of dispersal for ceramic traits, which is entirely consistent with Arkell's original ideas, and for which I think confirmation will only grow. The point I wish to emphasize through this work is that the A-Group seems to have been very much a part of this 'dispersal process' despite its strong Egyptian connections, and it should be regarded equally as a product of Sudanese as well as Egyptian influence. Indeed, what has emerged here is a very multidimensional picture of A-Group relationships. It can now be certain the Egyptian dimension formed only one aspect of A-Group relations. The importance of the Khartoum region for the development of Sudanese ceramics cannot be underestimated, especially given the present state of research. It is now understood that Sudanese pottery was likely invented in the region of Sarurab, and thereafter the knowledge of its technology and earliest designs spread rapidly from this core area. Khabir has written:

TABLE 5-2. MODEL FOR A-GROUP RELATIONSHIPS



“Sarurab 2 has provided the earliest reliable dates so far for the Early Khartoum complex in the Nile Valley and thereby increased the probability that, as has been postulated by Arkell...and Clark..., the wavy-line and other wares of the Early Khartoum were an early and independent development on the Upper Nile.”¹⁵

The lack of the earliest traits of wavy line and dotted wavy line motifs in the A-Group can no doubt be explained by the lack of contemporaneity between the A-Group and the Early Khartoum complexes. However, not only were numerous traits of the more contemporaneous Khartoum Neolithic absorbed by the A-Group but also those important characteristics such as burnishing and black mouthed and black-topped wares. The highly burnished wares of the Khartoum Neolithic are thought, probably correctly, to have been the progenitors of the fine rippled wares of the A-Group.

Returning now to the proposed model for A-Group relationships, it seems entirely likely that Khartoum Neolithic ceramic motifs were acquired through contact with or diffusion from the sites of Kadero (principally), as well as Geili, Shaheinab, and possibly Zakiab. From these regions a northward diffusion of traits is likely to have occurred through the Karat Group of the Dongola Reach and the Khartoum Variant of the Second Cataract. The possibility of diffusion does not, of course, preclude direct or indirect A-Group contact with these areas. However, cultural exchange along the Nile does not account for all of the Khartoum Neolithic motifs in A-Group ceramics, and this forces a consideration of possibly direct A-Group links with the site of Shaqadud in the Butana, which also shows an array of the same Khartoum Neolithic pottery designs present in the A-Group. The partial

¹⁵A. M. Khabir, 1987b, “New Radiocarbon Dates for Sarurab 2 and the Age of the Early Khartoum Tradition,” *Current Anthropology* 28 (no. 3): 380.

contemporaneity between the A-Group and Shaqadud cultures makes such relations far easier to envision.

The other regions with which the A-Group seems to have had substantial relationships are the Western Desert of Egypt and the western regions of the Sudan. It is difficult to ascertain at present whether the links with one region outweighed those of the other. However, growing evidence suggests the possibility of stronger links with the Wadi Howar through the branch of the Lower Wadi Howar that connected with the Nile in antiquity. It is also difficult to decide at present whether A-Group relations with the Wadi Howar operated primarily from east to west or from west to east. The likelihood of a Western Desert origin of some A-Group ceramic motifs greatly increases the chances of finding further evidence of A-Group relations with this area. There seems little doubt now that the inhabitants of the Western Desert and the western Sudan had contact with the Abkan peoples of Lower Nubia prior to the emergence of the A-Group. Given this circumstance I see little reason to doubt the possibility of a migration of pastoralists eastward into the Lower Nubian Nile Valley, thus contributing a strong pastoral element to some of the cultures there. Both the A-Group and the Karat Group are strongly suggested as recipients of such an influx. As for the oases of the Western Desert, nothing substantial may be ventured about the possibility of A-Group connections with these regions, except for the possible influx of agricultural knowledge. The little evidence that exists concerning the relationships of these regions is simply not suggestive of specific links with the A-Group, but rather, is more suggestive of links with the surrounding desert regions. Little may also be said in favour of A-Group links with the Eastern and Nubian Deserts, although in these cases one suspects that some evidence is there waiting to be uncovered. A-Group connections are suggested by the discovery of A-Group

rock drawings in the Eastern Desert and by some of the burial material from Bir Abraaq. That these regions were also seemingly affected by the wide dispersal of Khartoum-like traits is attested by the presence of a few such traits in their little known ceramic assemblages. Much work remains to be done in both these eastern desert regions separately before any assessment of their relationships may be attempted.

5.2. THE FUTURE OF A-GROUP STUDIES

Despite the closure of the High Dam Campaign thirty years ago and the end of excavation of A-Group sites, the study of the A-Group cannot be considered complete. Indeed, much remains to be done. Fuller publication of those data obtained thirty years ago is still needed for some sites and for numerous aspects of many sites. Most regrettable to me perhaps is the lack of full publication of the Tunqala West graves, whose preserved superstructures makes them a rare type of study. However, many more little known but important aspects of A-Group culture could be listed for future consideration:

- (1) The nature of dog burial and other types of animal burial is still obscure. If better known, they could now be compared with the Neolithic material emerging from the Middle Nile region.
- (2) Infant pot burial needs much further definition.
- (3) A quantification of most A-Group ceramic assemblages is still needed. Although the typology produced by Nordström is excellent, it could be further supplemented by quantified data from sites beyond the SJE concession, as has been done for Geili, and which is now being done for newer sites in the Blue and White Nile regions.
- (4) We are still lacking radiocarbon dates for the Early A-Group.
- (5) Faunal analyses and plant/grain analyses still need to be undertaken, particularly with regard to the problem of plant and animal domestication. The Afia grain material first comes to mind.

(6) I propose that a re-evaluation of the Qustul material is needed since no attempt has been made to incorporate the site into the mainstream of development of A-Group social organization. The problem is that no viable alternative has been proposed for Williams's Nubian kingship theory, and thus the entire site remains an anomaly. It is perhaps worth noting that Nordström's new work of ranking A-Group graves ignores the Qustul material, in much the same manner as researchers have tended to do consistently in the past.

Despite these unsolved problems, I do not see A-Group studies as progressing, realistically, into these arenas. Rather, it is easier to envision A-Group archaeology evolving into a more inter-regional study because of the emphasis of present research on the regional approach to Sudanese antiquity. Caneva's treatment of Geili and its surrounding environs is perhaps the epitome of this approach, although the present work of this thesis feeds into a regional model as well.

Lastly, I should perhaps provide some criticism of my own work. There are doubtless many ways in which it could have been improved, but perhaps the most serious shortcoming is that the analyses conducted here were produced from published results only, that is, not from an examination of complete site collections of ceramics and lithics. Complete collections are almost never published in their entirety. Ideally one would have liked to view such collections, if not for all sites and industries, then for some of the larger assemblages such as Kadero and Shaqadud. However restrictions of funds, time and other practical considerations have prevented such an ideal approach. I am therefore willing to concede that a more 'hands-on' approach to the same problem of A-Group origin and relationships may have produced more substantial results. It is therefore hoped and expected that the conclusions I have presented here will be subject to revision with further study of the many problematic aspects of A-Group culture.

Secondly, in a work of this kind there are many circumstances beyond one's control that ultimately affect the outcome. Most significant is the fact that the sites and cultural complexes used for comparison are so variously known, and in no way does there exist an even distribution of data of the same type(s) between sites. Caneva has commented on this situation for the Central Sudan, and on what I view as a general 'isolationist' tendency in Sudanese archaeology today. Caneva writes:

"...it is surprising to see that the data on [the] ancient Middle Nile basin are scanty and badly organized. On the one hand there is a real fragmentation of the data, ranging from marked regionalism (the 'Khartoum province,' the 'Shendi province,' the 'Gash delta,' the 'Dongola Reach,' etc.) to the extreme detail of classification, often sinking into the 'cul de sac' of the site = culture equivalence (cf. Early Khartoum, Shaheinab, Omdurman bridge, Kadada, the Arkinian, etc.). On the other hand, the scarcity of data seems to encourage free comparison over enormous space and time..."¹⁶

Taking Caneva's statement one step further, it may be said that the current state of knowledge and the current state of archaeology in the Sudan may well have dictated my own comparative approach. Perhaps if a level of standardization is ever reached in collecting and reporting information from the Sudan, the task of comparison such as the one undertaken here will become somewhat easier and more rewarding at some future date.

¹⁶T. Caneva, 1988, ed., *El Geili: The History of a Middle Nile Environment, 7000 B.C.–A.D. 1500*, p. 11.

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APPENDIX

TABLE A-1. A-GROUP INDIGENOUS CERAMICS

WARE GROUP	NAME	EXTERIOR	INTERIOR	FABRIC
H1.01	Coarse or smooth brown ware.	Brown or light to dusky; grey or black-spotted. Smooth texture, little polishing. Mat lustre.	Brown, brownish-grey, black. Same texture as exterior. Some polishing marks. Mat lustre.	IIA, IIB ¹
H1.02	Scraped brown ware.	Dusky brown or greyish brown. Texture abrasive, scraped in all directions. Some polishing marks, Mat lustre.	Black, dark brown or grey. Abrasive texture, scraped or smoothed. Some polishing marks. Mat lustre.	ID, ² IIB
H1.03	Combed brown ware.	Brown, seldom grey. Sometimes black-topped. Coarse texture. Combed horizontally or diagonally. Mat lustre.	Black or brown. Combed like exterior, some-times smooth. Mat lustre.	IIB
H1.11	Red-coated unpolished ware.	Pale brown & black-spotted. Always coated with red ochre, except sometimes near the base. Mat lustre.	Pale brown, uncoated. Texture smooth. Sometimes smoothing marks. Mat lustre.	IIB
H2.01	Plain, polished brown ware.	Brown or grey, never black. Smooth texture. Low to medium lustre.	Same color as exterior, never black. Smooth texture. Low to medium lustre.	ID, IIA, or IIB

¹N.B.: All page numbers for this Table's references refer to N.-Å. Nordström, 1972, vol. 3.1, *Neolithic and A-Group Sites*. IIA is a low to medium-grade fabric with ash-tempered paste. IIB is a low to medium-grade fabric with dung-tempered paste (Nordström, 1972, *ibid.*, p. 51).

²ID is a low to medium-grade fabric with a sandy paste (Nordström, 1972, *ibid.*, p. 50).

Table A-1, con't.

WARE GROUP	NAME	EXTERIOR	INTERIOR	FABRIC
H2.02	Rippled brown ware.	Shades of brown or grey. Never black. Texture smooth with vertical or diagonal rippling. Low to med. lustre.	Color same as exterior. Not rippled. Lustre low to medium or mat.	IIB
H2.03	Plain polished brown ware with un-compacted interior.	Brown or grey, never black. Texture smooth & compacted. Lustre low to medium.	Same color as exterior, sometimes of lower value. Never black. Texture smooth, never polished. Lustre mat.	IIB
H2.11	Plain red-polished ware.	Pale brown, often black-spotted. Always coated with red ochre. Texture smooth. Lustre medium to high.	Pale brown, seldom black-spotted. Sometimes coated with red ochre. Texture smooth. Lustre low to medium.	IIB
H2.12	Red, rippled ware.	Pale brown, often black-spotted. Always coated with red ochre and vertically rippled. Lustre medium, seldom high.	Pale brown, like exterior. Sometimes coated with red ochre. Texture smooth. Lustre low to medium.	IIA or IIB
H2.13	Plain red-polished ware with uncompact interior.	Pale brown, sometimes black-spotted. Always coated with red ochre. Texture smooth. Lustre low to medium.	Brown or greyish brown. Always uncoated. Texture uncompact, partially smooth. Lustre mat.	IIB
H3.01	Plain polished black ware.	Black, sometimes with dark brown areas. Smooth texture. Lustre medium to high.	Same in all aspects to exterior.	IIA or IIB.
H3.02	Rippled black ware.	Rippled version of above ware (H3.01). Ripples are vertical or diagonal.	Not rippled.	IIB

Table A-1, con't.

WARE GROUP	NAME	EXTERIOR	INTERIOR	FABRIC
H3.03	Polished black ware with un-compacted interior.	Black with areas of dark. brown. Smooth texture. Polished with decorative fields. Lustre of polished parts med. to high, otherwise mat.	Black. Texture always uncompact and usually combed horizontally then smoothed. Lustre mat.	IIB
H4.01	Plain polished brown and black ware.	Greyish brown, brown, or light to pale brown. Texture smooth, with polishing marks. Lustre low to high.	Black or greyish black. Texture like exterior. Lustre varies like exterior.	IIB
H4.02	Rippled brown and black ware.	Light or pale brown. Texture compacted, always rippled vertically or diagonally. Lustre usually medium.	Black with small areas of greyish-black. Texture smooth, not rippled. Lustre medium or high.	IIB
H4.03	Plain polished brown and black ware with uncompact-ed interior.	Light or pale brown, sometimes black-spotted. Smooth texture with polishing in decorated fields. Lustre medium to high.	Black with greyish black areas. Texture smooth or coarse, sometimes combed. Lustre mat.	IIB
H4.04	Brown or black ware with polished interior.	Medium to pale brown, partially black-spotted. Texture smooth, sometimes with scraping marks, impressed designs, or polishing marks.	Black with grey or brown areas beneath rim. Texture smooth. Lustre medium.	IIA or IIB

Table A-1, con't.

WARE GROUP	NAME	EXTERIOR	INTERIOR	FABRIC
H4.11	Plain polished red and black ware (many variants).	Light or moderate brown. Always with coating of red ochre. Texture smooth, sometimes with polishing marks. Lustre medium to high.	Always black. Texture smooth. Lustre from low to high.	IIA or IIB
H4.12	Rippled red and black ware.	Light to moderate brown, rarely black-spotted. Always with red ochre coating. Texture compacted, distinctly rippled vertically or diagonally. Lustre medium or high.	Black. Texture smooth, rarely rippled, sometimes with polishing marks.	IIA or IIB

APPENDIX

A-2. TABLE OF ALL A-GROUP HABITATION SITES

SITE TYPE	DESIGNATION	LOCATION	MAIN SOURCE(S)
I. No permanent structural features. ³	Archaic Camp	Meris Markos	Reisner, 1910a: 215-218.
	—	Qurta	Firth, 1927: 152.
	—	Faras	Griffith, 1921a: 4.
	A.2	Ballana West	Smith, 1962: 30-32.
	A.1	Ballana West	<i>Ibid.</i> , p. 27.
	A.3	Ballana West	<i>Ibid.</i> , p. 37-39.
	A.6	Abu Simbel West	<i>Ibid.</i> , p. 41-42.
	A.7	Toshka North	<i>Ibid.</i> , p. 50.
	SJE 89	Ashkeit	Nordström, 1972: 159-160.
	SJE ⁴ 316	Faras West	<i>Ibid.</i> , 134-136.
	SJE 303	Serra East	<i>Ibid.</i> , p. 140-144.
	SJE 332/V	Ashkeit	<i>Ibid.</i> , p. 173.
	SJE 366	Abka	<i>Ibid.</i> , p. 246-247.
	SJE 340	Debeira	<i>Ibid.</i> , p. 155-158.
	SJE 370	Abka	<i>Ibid.</i> , pp. 228-229.
	SJE 371	Abka	<i>Ibid.</i> , p. 225-228.
	SJE 408	Abka	<i>Ibid.</i> , pp. 222-223.
	SJE 414	Abka	<i>Ibid.</i> , pp. 230-233.
	SJE 421	Abka	<i>Ibid.</i> , p. 234-235.
	SJE 430	Abka	<i>Ibid.</i> , p. 235-239.
	AS ⁵ 11-M-7	Saras West	Mills & Nordström, 1966: 5-6.
AS 11-L-14	Saras East	<i>Ibid.</i> , pp. 6-7.	
AS 24-V-11	Argin West	Nordström 1962: 44.	
AS 6-F-3	Gezira Dabarosa	<i>Ibid.</i> , pp. 48-49.	

³This category includes refuse areas, as well as all camp-site types, such as fishing camps.

⁴Scandinavian Joint Expedition.

⁵Archaeological Survey site.

Table A-2, con't.

SITE TYPE	DESIGNATION	LOCATION	MAIN SOURCE(S)
Type I, <i>con't.</i>	AS 6-G-21	Gezira Dabarosa	<i>Ibid.</i>
	AS 6-G-19 ⁶	Gezira Dabarosa	<i>Ibid.</i> , p. 50.
	3 or 4 sites. ⁷	Between Gemai and Nag Sigaga	Donner, 1967-68: 72-73.
	AS 5-S-25	Shagir I	Adams and Norström, 1963: 12 and 16.
	AS 5-T-18 ⁸	Abu Sir	<i>Ibid.</i> , p. 12.
	AS 5-T-25 ⁹	Abu Sir	<i>Ibid.</i>
	AS 5-T-38	Matuga Island	<i>Ibid.</i> , p. 12 and 17-18.
	AS 11-L-10 ¹⁰	Saras East	Mills, 1965: 4.
	AS 11-M-15 ¹¹	Saras West	Mills & Nordström, 1966: 5.
	AS 11-Q-72 and 5 others.	Saras Plain	Mills, 1967-68: 202-202.
	AS 11-D-20	Murshid West	Hewes, 1966: 29.
	AS 11-I-16 ¹²	Murshid West	<i>Ibid.</i> , p. 32; Carlson, 1966.

⁶Described as a "refuse area, probably settlement." See source indicated in Table.

⁷These sites of the Finnish Nubian Expedition are not designated or detailed. Due to the discrepancy in the number of sites reported, I will use "4" as the possible maximum number.

⁸Site not described.

⁹This site is listed as having "refuse," therefore I have included it as a possible habitation site. No description was given.

¹⁰Site not described.

¹¹The date of the mud-brick structures at the site is uncertain, but they are likely of C-group or New Kingdom date. However, the area was occupied in A-Group times.

¹²This site is the temporal equivalent of the A-Group, but technically it is the basis of the Karagan Phase (see above, Chapter 2).

Table A-2, con't.

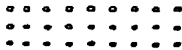
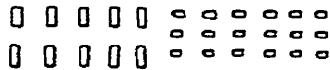
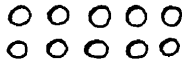


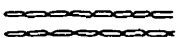
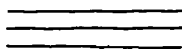
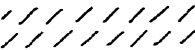
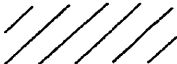
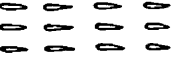
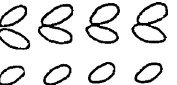



SITE TYPE	DESIGNATION	LOCATION	MAIN SOURCE(S)
Type I, <i>con't</i>	AS 11-I-17	Murshid West	Hewes, 1966: 32.
	AS 11-I-18	Murshid West	<i>Ibid.</i>
	AS 11-I-19 ¹³	Murshid West	<i>Ibid.</i>
	AS 11-L-20	Saras West	<i>Ibid.</i> , p. 39.
	AS 11-U-5	Saras West	<i>Ibid.</i>
	AS 16-J-18	Attiri	<i>Ibid.</i>
	S5	Saras	Solecki, ed., 1963: 84.
	S28	Saras	<i>Ibid.</i>
	S35	Saras	<i>Ibid.</i>
II. With structural features (stone).	—	Dakka	Firth, 1915: 9-10.
	A.5 or AFH-1	Afia	Smith, 1962: 59-61; Lal, 1967: 104-109.
	—	El-Riqa	Smith, 1962: 71.
	AS 6-B-6	Argin West	Nordström, 1962: 44.
	A.4 ¹⁴	Abu Simbel West	Smith, 1962: 45.
III. Rock Shelter	AS 24-H-4	Serra West	Verwers, 1962: 22
	"The Painted Shelter."	Korosko East	Smith 1962: 79-90.
	—	Sayala/Khor Nashryia	Bietak and Engelmayer, 1963, and Kromer and Ehgartner, 1963: 71-73.

¹³This site had a "small dry masonry structure, partly extended with mud walls, adjacent," but there is no mention of the date for the remains. It had been re-used until Christian times. The area was definitely occupied in A-Group times.

¹⁴I have classified this site as a type II settlement, but this is based on a very brief and unclear account of the remains. It appears to be like 6-B-6, with no order to the deposits. See the text of this report (Chapter 3).

APPENDIX

TABLE A-3. KEY TO A-GROUP CERAMIC DESIGNS

PATTERN NUMBER	APPEARANCE	DESCRIPTION	TYPE ¹⁵
1		Horizontal rows of dots or punctates.	B
2		Parallel rows of impressed rectangular dots.	B
3		Horizontal rows of large punctates.	B
4		Horizontal rows of shortened V's.	B
5		Rows of triple-dot triangles.	B
6		Horizontal chain-link design	B
7		Straight horizontal lines.	B
8		Short parallel oblique lines.	B
9		Oblique parallel lines.	B
10		Short horizontal strokes on body.	B
11		Combination of leaf-shape designs, large version.	B
12		Solid herring-bone.	B, RB
13		Dotted herring-bone panel.	B
14		Herring-bone punctate (dots, not lines).	B

¹⁵B' indicates body decoration, 'RT,' rim top decoration, and 'RB' is a rim band design.

TABLE A-3, con't.



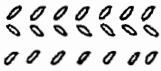

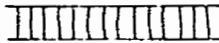


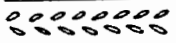

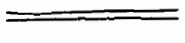


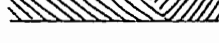


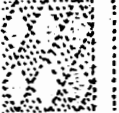

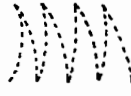





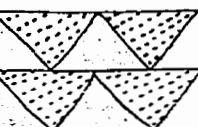
PATTERN NUMBER	APPEARANCE	DESCRIPTION	TYPE
15		Opposing rows of V's	B
16		Combination of parallel rim band lines and oblique body lines	B, RB
17		Combination leaf-shaped design, small version.	B
18		Cross hatched design.	B, RT, RB
19		Vertical parallel incisions.	RT
20		Single line of crescents (finger nail).	RB
21		Combination of oblique and horizontal strokes.	RB
22		Small leaf-shapes.	RB
23		Double row of dots.	RB
24		Horizontal lines at rim.	RB
25		Oblique parallel lines.	RT
26		Horizontal rows of short strokes.	RB
27		Two sets of slanting opposed lines.	RT
28		Leaf-like impression in a V-shape.	RB
29		Single dotted lines.	RB
30		Checkedered lozenges filled with short oblique strokes; complex pattern.	B

TABLE A-3, con't.

PATTERN NUMBER	APPEARANCE	DESCRIPTION	TYPE
31		Solid zigzag (curved lines).	B
32		Dotted zigzag (curved lines).	B
33		Solid zigzag with one gap (curved).	B
34		Solid zigzag with two gaps (curved).	B
35		Packed dotted zigzag.	B
36		Straight dotted zigzag.	B
37		Straight packed, interrupted zigzag.	B
38		Inverted triangles in alternating arrangement.	B