

**SPATIAL AND TEMPORAL DISTRIBUTION OF DOMESTIC AND  
CIVIL ARCHITECTURE IN CHRISTIAN NUBIA**

by

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**A thesis submitted in conformity with the requirements  
for the degree of Doctorate  
Graduate Department of Near Eastern Studies  
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**ABSTRACT - Spatial and Temporal Distribution of Domestic and Civil Architecture  
in Christian Nubia**

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The aim of this thesis was to document the development of the Christian Nubian house and its variations in form between different geographic and political regions, within the kingdoms of Nobatia, Makuria and Alwa. Chronologies describing the evolution of Nubian church architecture have been produced, but no such detailed work exists concerning domestic or civil architecture. To further this end, a gazetteer was compiled of all known archaeological sites in Nubia containing Christian period domestic architecture. It follows the five chapters of discussion. Chapters 1 to 3 trace the house plan from simple, one and two-room dwellings in the transitional X-Group - Early Christian period, through to the complicated multi-chamber, fortified buildings that are produced at the end of the Terminal Christian phase. Possible origins and some reasons for the modification of their design are suggested. It is proposed that the early two-room houses form the basic construction module used in later domestic structures. Walled settlements, enclosures, palaces, public buildings are also discussed. Chapter 4 addresses the assumptions and problems associated with the identification of Nubian monasteries and endeavours to identify the characteristic features associated with them. It is suggested that some Nubian monasteries may have been *laura* rather than *coenobia*. Evidence for the tentative identification of some sites as monasteries is examined. The final chapter explores the environmental, socio-political and cultural factors that affected house construction and design. An attempt is made to explain room usage via artefact distribution and ethnographic analogies. A model for land use in Lower and Upper Nubia is also proposed.

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## INTRODUCTION

The first major archaeological surveys and excavations within Nubia were conducted during the early years of the twentieth century. These were instigated by the construction of the Aswan Dam (A.D. 1898-1902) and its subsequent expansions in A.D. 1907-11 and A.D. 1929-34. Little archaeological work was done when the dam was initially constructed. However, the following two dam enlargements sparked two archaeological salvage campaigns, the First Archaeological Survey of Nubia and the Second Archaeological Survey. Other pioneering expeditions also entered the Sudan at this time, working in areas not directly affected by the rising water levels. These included: the University of Pennsylvania E. B. Coxe Expedition to Amada, Aniba, Buhen and the Faras area, Oxford University Excavations in the Faras region and Sanam, Liverpool University at Meroe, the Wellcome Expedition to Jebel Moya, the Harvard Boston Expedition to Kerma, Gemai, Napata, Meroe and the Batn el Hajar, to list a few.

In the years that followed the completion of the Second Archaeological Survey of Nubia (post A.D. 1934) little archaeological investigation was undertaken. U. Monneret de Villard used the information the early expeditions yielded, supplemented it with his own literary research and survey work, and produced La Nubia Medioevale, vol. I-IV (1935-1952) and Storia della Nubia Cristiana (1938). These continue to be used as major historical sources concerning Christian Nubia.

He [Monneret de Villard] was able from documentary sources to put together a reasonably connected history of the Christian period, but his promised synthesis of the archaeological material was never achieved ... La Nubia Medioevale nevertheless remains the basic corpus for any study of medieval Nubian archaeology (Adams 1977:77).

At their greatest limits, the Christian Nubian kingdoms of Nobatia, Makuria and Alwa included an area that incorporated Lower Nubia, Upper Nubia and the Northern Sudan, extending along the Nile from north of Aswan, Egypt, to south of Khartoum, Sudan (maps 1, 2). The exact geographic parameters of these kingdoms have not yet been conclusively established and varied through time. Christian rule was established in Nubia during the 7th c A.D. It lasted until the beginning of the 14th c A.D. in the north, while the southern kingdom of Alwa is reputed to have endured until its capital at Soba East was sacked by the Funj just prior to A.D. 1504. The debate surrounding the dating of the end of Alwa is discussed in detail in chapter 3.

Salvage excavations conducted in Nubia by UNESCO during the 1960's, before the construction of the Aswan High Dam, provided rich new sources of archaeological material and much of these data have now been published. This new evidence provides the means through which the present skeletal description of the period, as developed by earlier investigations, may be further culturally, economically, and ecologically fleshed out. W. Adams began this process in Nubia Corridor to Africa (1977); however, his archaeological analysis of Christian period settlements and housing was limited as he focused primarily on the sites of Meinarti and Kulubnarti, and drew few comparisons with other sites and geographic regions (Adams 1977:489-94, 515-8, 580-3).

The objective of this thesis was to document the development of the house and settlement within the Nubian Christian kingdoms of Nobatia, Makuria and Alwa and to determine the environmental, socio-political and cultural factors that influenced their forms. Vernacular architecture was chosen as the focus of this study because it "show(s) most clearly the link between form and life patterns ... houses also provide the best way of relating the whole system of house, settlement, (and) landscape ... to the way of life" (Rapoport 1969:10). In short, this is an examination of the way common people modified and adjusted to their surroundings, at both a community and regional level, throughout this period.

Past studies have frequently centred on monumental church architecture or artistic forms of expression, such as wall paintings, with little attention being given to domestic dwellings. W. Adams (1965b), P. Gartkiewicz (1975, 1982a, 1982b, 1990), P. Grossman (1985) and B. Kjølby-Biddle (1994) have produced chronologies documenting the development of Nubian church architecture, but no such detailed work exists concerning domestic or civil architecture. Within this thesis, house patterns are traced chronologically from the transitional X-Group - Early Christian phase through to the end of the Terminal Christian period. It is my belief that the corpus of material now available is sufficient to establish a hypothetical developmental framework and to determine the essential functional characteristics of a Christian Nubian house, at least in Lower Nubia, through an analysis of the archaeological evidence and available historical documentation. One objective of this thesis was the compilation of a catalogue of Nubian sites containing Christian domestic architecture. "Archaeology and textual history obviously can and should complement each other. Together they can furnish a more complete picture of life at any time in history than can either source by itself" (Adams 1977:97). The results of this study should broaden the current understanding of Christian Nubia by illustrating how its communities,

on both a regional and local scale, changed in structure and developed through time.

Due to the nature and origin of much of the archaeological information presently available, current research is biased towards Lower Nubia (between the First and Dal Cataracts). The concentrated study of sites in Lower Nubia, which occurred during the UNESCO salvage campaign of the 1960's, supplied archaeologists with a plethora of information from this area and created a bias in the available data towards Lower Nubia. This problem is not limited to an individual time period and is evident during all phases. "Today the disparity in our knowledge of Medieval Nubia mirrors the thrust of archaeological research hence the heavy weighting towards the very north of Nubia" (Welsby 1993:135). This places more emphasis on information from Lower Nubia than it deserves. As a border region, this area may not typify the customs, traditions or conventions employed in the heartland of the Christian kingdoms or alternatively, it may over accentuate them. Nevertheless, as the majority of data originates from Lower Nubia, much of the analysis must be based upon this material.



## CHAPTER 1

### Housing from the Transitional X-Group-Early Christian Phase through the Early Christian Period<sup>1</sup>

Few sites, outside of those in Lower Nubia, have been dated to the Early Christian period. This is due to a lack of detailed investigations of Christian settlements in Upper Nubia and the Northern Sudan, rather than a deficiency of sites in these regions. For example, the Dongola Reach Survey tentatively classified several sites in the Letti Basin as Early Christian, but as none have been excavated, these identifications have not been verified. Early Christian remains have been tentatively identified at the following locations:

#### Lower Nubia and the Batn el Hajar

Occupation Sites	Abu Sir Argin V Faras West III Serrarti Island I (Abu Sir) Ukma I
Settlement Sites	Abd el Qadir II Abdallah Nirqi Ad Donga ? Ambikol III Argin VI Argin VII Arminna West Attiri I Attiri II Attiri III Buhen Debeira West III Debeira West IV Duweishat III Duweishat IV Faras West II Gemai East II Ger Belat Ikhmindi I Karanòg Melik el Nasr I Melik el Nasr II Meinarti Island Mirgissa III Saras IV Semna East IV Shirgondinarti Songi I Uronarti I

	Wadi el Arab
Walled Settlements	Abdallah Nirqi Dibger Faras West I Gezeira Dabarosa I Ikhmindi II Kulb III - Monastery ? Kalabsha Naga el Sheima Philae Qasr Ibrim Sabagura (Qirsch) Semna West Sheikh Daud
Enclosures	Ali Bek I Ali Bek II Dorsinkid Farki I Farki II
Building	Abd el Qadir III - "Tavern" Region of Ali Bek I (Abka) Region of Ali Bek II (Abka) Arukonarti (Abka) Ashkeit I Debeira West II Gebel Adda Gemai West II Gemai West III Kashkush (Ashkeit) Mirgissa I Mohsen el Din
Monastic Buildings	Debeira West V - Monastery/Ecclesiastical complex ? Debeira West VI - Monastery ? Er-Rammal - Monastery Hambukol, North Korn - Monastery ? Qasr Ibrim - House EC1-10 ? Wadi el Allaqi - Anchorite's dwelling ? Faras West IV - Anchorite dwelling
<u>Abri-Delgo Reach</u> Occupation Sites	Absire (Dal) Debba II Kakangu Kisseenfarki III
Settlement Sites	Araseer II Dakka Saab I

	Dawki Dawi II
	Dawki Dawi III
	Dawki Dawi V
	Debba III
	Gaaba I
	Gergetti Island II
	Jawgul
	Khor Kurubin
	Kofaree/Gebel Abdou Mellis
	Kossikool - saqia
	Meeme
	Shagamnirki
	Siyanneere
	Sudaga II
	Tiil
Walled Settlement	Ardimiri
	Ferkinarti ?
	Kassi-Markol ?
Building	Gerboonirki II
	Sulin
	Toona
Other Sites	Araseer I - Silos
	Dakka Saab II - saqia
<u>Dongola Reach Sites</u>	
Settlement Sites	Agab Wad Addul
	El Ghaddar Southeast
	Jogob Sheikh Mohammed
	Kankalab South
	Letti West V
	Sheikh en Naama
	Nugdumbush
	Urukutti
	Old Dongola - Walled Settlement, Settlement
<u>Abu Hamed Sites</u>	
Settlement Site	Wadi Dam et Tor
Walled Settlement	El Kab
	Kuweib
<u>Shendi Reach - Atbara - Khartoum Sites</u>	
Occupation Site	Gadu
Building	Nagazu
<u>Bayuda and Sites West</u>	
Enclosure	Umm Ruweim
<u>Gezeira Sites</u>	
Settlement Sites	Burri

El Eleina  
Soba East  
Wad el Haddad

Relative chronological distinctions made within the Early Christian period (i.e., transitional, beginning and end) are largely based upon the ceramic typology created by Adams (1962c:249-76; 1986).<sup>2</sup> As the construction of this typology was primarily derived from Lower Nubian material, its application outside that region is somewhat limited and its usefulness decreases as the distance from that area increases. Excavations at Soba East date 'Soba ware' to the Early Christian period (Welsby 1991:278). Its presence at other sites in the Gezeira, Abu Hamed Reach and southward was taken as an indicator of a possible Early Christian date.

### Settlements

Settlements of the Early Christian era have frequently been described as small at the beginning of the period then gradually growing larger towards its end. Houses start as small, single or double room dwellings that develop into larger, more complicated multi-room structures towards the beginning of the Classic Christian period (Adams 1964:243-44; Gardberg 1970:15; Jakobielski 1981:37-8). This is generally correct. During the X-Group and transitional X-Group - Early Christian phases, unfortified settlements appear linear, orientated parallel to the Nile, with houses scattered and spread out. "The typical village, especially on the more protected west bank, seems to have been a sprawling and unfortified collection of houses that were strung out just back from the cultivation" (Trigger 1965:155). This pattern seems to continue into the Early Christian period, as discussed below. Towards the end of the Early Christian period there is evidence of individuals congregating in larger settlements, such as Abdallah Nirqi, Debeira West and Arminna West. These settlements become more concentrated through time and houses were constructed closer together.

Within Lower Nubia, site distribution seems tied to cultivable land as suggested by Trigger. He noted that many sites were located along the Nile between "Koshtemna and Qurta, Derr and Arminna, and between Abu Simbel and the Second Cataract" (Trigger 1965:152). This corresponds to the location of several Nile plains and basins, including the Dibeira, Tushka, Allaqi, and Dakka plains, where the average elevation was under 100 metres a.s.l. (pl. 1).<sup>3</sup> For example, Ger Belat was situated at the opening of the Kalabsha basin and Arminna West was located just to the south of the Tushka plain. Soils in this area consisted of riverine alluvial soils

along the river, rocky areas without soil, and areas of sand, sandy earth and clay (Edwards 1989:17). As the entire region receives little rainfall, under 25 mm of rain annually (Mahdi 1975:fig.19), agriculture was largely dependent on river water or groundwater sources. The presence of concentrations of fertile river alluvium and a comparatively large flood plain could account for the proliferation of settlements on the plains and basins.

Cultivable land and availability of water also seem to have been the major factors in determining Upper Nubian settlement location, as the number of sites found on the arable land of the Letti Basin of the Dongola Reach, along wadis in the Abri-Delgo Reach, and up the Blue Nile clearly shows. Edwards notes that "despite limited fieldwork, a ribbon of riverine settlement with particular concentrations around the basins is now discernible [during the Christian period]. When compared with the resources available in Lower Nubia, it is likely that the region was markedly more productive and more densely settled" (Edwards 1989:216).<sup>4</sup>

In Lower Nubia, some variation was noted between settlements newly created or reoccupied at the beginning of the Early Christian period and those continuously occupied from the X-Group period. As the gradual transition between the X-Group and Early Christian periods occurred (ca. A.D. 550-600) in Lower Nubia, the Early Christians continued to inhabit many major X-Group sites without any apparent break in occupation. Sites with transitional remains included Meinarti, Qasr Ibrim, Buhen, Karanòg, Wadi el Arab, Faras West I and II, Mirgissa III and possibly Gemai West III, Uronarti I, Kakangu and Argin VII.<sup>5</sup>

At Qasr Ibrim, evidence of continuous occupation from the X-Group period into the Early Christian phase was noted particularly in houses X-6, X-7 and X-8 (pl. 2). Early Christian occupation of X-8, prior to its destruction, was probably brief as the occupational buildup was quite shallow. The settlement itself remained surrounded by the Meroitic enclosure wall and appeared to have maintained the tightly nucleated appearance of the X-Group settlement. Houses such as X-7 and X-8 shared walls, while houses EC1-20, EC1-26, EC1-28, and EC1-29 were separated by less than a metre (pl. 3). The area covered by the Early Christian phase is uncertain; however, Christian material has been found over a region measuring approximately 105 x 140 metres (Adams et al. 1983:44, fig.1).

X-Group houses at Ibrim were usually square in plan, contained two large, rectangular rooms that were often subdivided and were constructed of stone and mud-mortar. Walls averaged 60 cm thick. Internal walls were sometimes built of mudbrick and the floors were of mud frequently with storage magazines constructed below (Adams 1972:EC1.1, 7; 1982:29; Plumley

1975:8).<sup>6</sup> In other places "such Early Christian building as can be attested now stood directly over the X-Group structures which in their turn overlay earlier buildings" (Plumley 1975:14). X-Group houses, including X-5, X-8, X-9, X-10, X-11, X-12 and X-15, (pl. 2) were partially disassembled and the material used to fill their lower levels to create a large platform or plaza around the Temple-Church during the Early Christian period. X-Group sherds and debris were found on top of the earliest floor of this church (Adams 1972:EC1.1; Plumley 1975:6; Plumley et al. 1977:35-6), thus again displaying continuity of occupation.

Houses constructed at Qasr Ibrim at the beginning of the Christian period differed slightly from the earlier X-Group houses. They were smaller and usually consisted of one or two rectangular rooms, when the number of rooms could be reliably determined. They were also not necessarily square in shape. Both types were of stone and mudmortar construction, although the stones of the Early Christian structures were noted to be smaller on average than those included in X-Group buildings. Many doorways were similar to those of the X-Group period. An entrance in house EC1-24 had "the same kind of raised stone threshold and flanking door buttress as is [was] found in X-Group houses, but it lacks the cut stone jambs found in X-Group houses" (Adams 1972:EC1-24:2). Concerning the Early Christian I constructions, the "general character of the stone masonry is [was] closely similar to that in the later X-Group houses along Tavern Street" (Adams 1972:EC1-24:2). Houses of this date included EC1-13, EC1-24 and on the western slope EC1-20, EC1-28, EC1-29 and EC1-30 (pls. 2, 3, 4).<sup>7</sup>

EC1-28, for example, consisted of two small, rectangular rooms arranged parallel to each other, the southern being approximately twice as large as the north room. The building measured roughly three metres north-south. Much of the western section of the house had been destroyed and only about one and a half metres east-west remained. Walls were of stone and mudmortar and part of the southern wall had been laid in 'herringbone' fashion. The floors were of mud and a stone step was found at the entrance. Houses on the western slope (south of the Podium) were built directly upon the detritus and fill of earlier structures (Adams 1972:EC1.West Slope:3-4).

Several X-Group structures, including X-6, X-9 and X-17 were used well into the latter half of the Early Christian era as were some buildings constructed at the beginning of the Christian period (i.e., EC1-22 later designated EC2-12).<sup>8</sup> Throughout the Early Christian phase X-17 was steadily buried and by the end was used as a subterranean storage magazine (Adams 1972:EC2.1). Buildings EC2-1 and EC2-2 were constructed midway through the Early Christian period (pl. 5).<sup>9</sup> EC2-2 was situated directly on top of the Early Christian occupation phase

(designated EC1-4) found inside rooms 4 and 5 of house X-7. The walls were of stone and mudmortar construction. Unfortunately, little of the structure remained and its overall plan remains uncertain.

EC2-1 was a more complex structure. It incorporated stone and mudbrick walls of Meroitic, X-Group and Early Christian date. EC2-1, though recorded as one structure, may in fact be two separate buildings that share a wall. While portions of the centre of the structure were destroyed by later rubbish pits, it appears unlikely that rooms 1 and 5 were ever connected by a door due to the placement of the bins and surviving walls within these rooms. It is doubtful that a door would have opened into a bin or other structure.

The western portion of EC2-1, comprising spaces 1, 2, 3, and 4, consisted of two long rectangular rooms placed parallel to each other with the southern room (1) being longer than the northern one (3, 4). The southern room measured roughly 5 x 2.5 metres while the northern room was approximately 3.5 x 1.5 metres. The mudplaster floor of the northern room (spaces 3, 4) was slightly higher than that in the southern room. The western portion of this room was filled by an oven roughly one metre in diameter. Two bins were situated along the eastern wall of room 1. The northernmost bin was paved with sandstone flagstones, while the southern bin was of mudbrick and had sides that curved inward toward the bin's centre. Adams hypothesized that the southern bin may have been used for containing a liquid (Adams 1972:EC2-1.1-4). Erosional damage to the walls, possibly caused by liquids, was noted. This led Adams to conclude that the structure functioned as a bakery or brewery probably connected with Church 3 in the south. As another large oven was later constructed over rooms 5 and 6 (Adams 1972:EC2-1.5) his assertion may be correct.

The other half of EC2-1 was orientated perpendicular to rooms 1, 3 and 4 and was comprised of spaces 5 and 6. Again it consisted of two long, rectangular rooms placed parallel to each other with the eastern room (6) being shorter than the western room (5). Room 5 measured approximately 4.5 x 2.5 metres. Room 6 measured about 2 x 3 metres. A low, stone-paved mastaba, 15 cm high and 95 cm wide, spanned the southern half of room 5 (Adams 1972:EC2-1.4-5). The size of rooms 1, 5 and 6 are comparable to those found in the second settlement at Abdallah Nirqi and in House X at Arminna West discussed below.

Besides their affinities with the earlier X-Group structures, Ibrim houses constructed during the Early Christian period seem similar in plan to the 'double houses' found at Abdallah Nirqi and elsewhere. This is certainly appears true of the general building design and room size

of EC2-1. The 'double house' plan is discussed below. It may be seen as the basic design model for the Early Christian house, at least in Lower Nubia. It was previously believed that "in the Early Christian period it is difficult to recognize any distinctive Nubian house plan, either at Meinarti or in other settlements" (Adams 1977:489). Unfortunately, as much of the Early Christian levels at Ibrim were greatly destroyed or denuded, the fragmentary nature of the remains makes it impossible to determine house form with any certainty. It is clear, however, that building techniques and materials of the X-Group period continued to be used, though in a simpler manner as evidenced by similarities in courses of masonry and in doorways.

Like Qasr Ibrim, Meinarti was continuously occupied from the X-Group period into the Early Christian period, but was an unwalled settlement. The transitional phase between the X-Group and Early Christian periods was marked by levels 15b and 14. Finds included both X-Group ceramics and Christian artefacts, such as votive lamps. These levels were characterized by the excavator as "marked by continuing architectural deterioration" (Adams 1965a:156). The area covered by level 15b (pl. 6) measured approximately 40 x 64 metres (Adams 1968:fig.2) and the settlement was orientated north-south, following the shape of the island and the direction of the Nile. Earlier X-Group and Meroitic structures continued to be occupied with the inhabitants repairing them as required. As these buildings were abandoned or filled with sand flimsier mudbrick structures were built over them. The average thickness of these later walls was 20 cm as compared with an earlier average thickness of 35 cm. These later X-Group and transitional period houses were irregular in shape, contained three to four thin-walled rooms, usually one entrance and were built close together. They were separated by narrow streets that measured approximately one to two metres wide (pl. 6) (Adams 1968:184). Most structures shared walls with neighbouring buildings. By the end of this period, none of the earlier, thicker-walled structures were in use. "The general plan of the houses probably does not differ markedly from that of the earlier farmhouses [of Early X-Group and Meroitic date], save that they are now much more closely crowded together, apparently as a result of the shortage of protected building sites" [due to flooding] (Adams 1968:185).

While most of the X-Group/transitional buildings at Meinarti were destroyed by a massive flood, some situated on the highest parts of the island remained intact and continued to be used into the Early Christian period (Meinarti level 13) (pl. 7, area c). The area covered by level 13 was approximately 30 x 50 metres (Adams 1968:202). Buildings constructed at the beginning of the Early Christian phase exhibit differences from those of the preceding period, despite the



apparent continuity of occupation. House plans become more regular, usually consisting of one to three long, rectangular or square rooms with a single entrance. The buildings are also slightly larger.

House D, for example, appears to consist of one long rectangular room, measuring roughly 7.5 x 3.5 metres, and a smaller rectangular room (2 x 4.5 metres) placed perpendicular to it along the west end. The larger room was subdivided into two smaller, square spaces and was orientated roughly north-south. Another house, again consisting of two, rectangular rooms placed parallel to one another, was located to the north of House D and orientated perpendicular to it. House XXXII (labelled B on pl. 7) was very large, measuring roughly 8 x 15 metres. Its plan seems to consist of two, long rectangular rooms placed parallel to each other and possibly subdivided into smaller square units.

The most marked difference between these buildings and those of the earlier period is the thickness of the walls. Early Christian walls measured 40 cm thick on average, double the width of the earlier transitional period walls. These were later reinforced possibly to defend against repeated flooding.<sup>10</sup> By the middle of the Early Christian period, some walls were between 70-90 cm in width (Adams 1963-64:129). The thicker walls also allowed the buildings to be vaulted. The "excessively thin, irregular walls [of the X-Group period] ... could have supported only very light roofs of poles and thatch" (Adams 1968:185). The added wall thickness made the Early Christian structures more solid and sturdy than their predecessors.

At sites such as Meinarti and Qasr Ibrim, where there is continuous occupation from the X-Group through to the Early Christian period, "the Early Christian house plan seem[s] to evolve on the basis of the absorption and adoption of already existing X-Group (or post-Meroitic) domestic architecture, since there was no interruption in the habitation. ... the well planned Meroitic system of streets was still maintained in the Early Christian period" (Jakobielski 1981:37-8). Based on the above evidence, Jakobielski appears largely correct in his assertion; however, it should be noted that the Meroitic street system seems to have been maintained only at Qasr Ibrim and not at Meinarti. The city plan of Meroitic Meinarti (levels 18 and 17, pl. 8) differs substantially from that of Early Christian level 13 (pl. 7). Neither streets nor structures are in the same locations or of the same or similar plan. The Meroitic magazines in area B, the basins in area C, and the saqia site in area D are all absent from Early Christian level 13, having been first largely destroyed by a flood, then overbuilt during the X-Group period. These two sites also remained relatively large during the Early Christian period, with houses closely clustered

together like their X-Group precursors.

Small Early Christian settlements were found at Karanòg, Buhen and Wadi el Arab and again, occupation at these sites appears to have continued from the X-Group period. At these sites, the Early Christian habitation was seemingly poor in nature being little more than a scattered squatter occupation, with the inhabitants taking advantage of the extant structures from earlier periods. Houses that were constructed were flimsy, irregular and contained one or two rooms. Buildings were spaced apart. Occupation at Karanòg and Wadi el Arab was linear and stretched along the edge of the seasonally inundated land parallel to the Nile. "It would appear that the smaller towns were far from prosperous and that conditions were as yet little changed from those of the Ballana phase" (Trigger 1965:146). Trigger's assertion appears correct.

At Wadi el Arab, Early Christian pottery was recovered from houses 6, 7, 18, 21 and portions of house 1 (pl. 9). "It seems that in the Christian period the town was occupied by only a scanty and impoverished Coptic population" (Emery 1935:110). Houses 6 and 7 were continuously occupied from the X-Group through to the Early Christian period. Rooms 1, 2, and 6 to 10 of house 1 were likely constructed during the Early Christian period, as were buildings 18 and 21. These single room structures shared a wall, had mudplaster floors and were rectangular in shape (Emery 1935:110-114, 117-118). Emery particularly notes the very sturdy construction used within the X-Group structures as opposed to the more poorly constructed, thin, flimsy walls built at the beginning of the Christian period (1935:113).

Construction of the walls changed throughout the X-Group period and into the Christian period at Wadi el Arab. At the beginning of the X-Group occupation, sandstone blocks placed directly on the sand were used for the foundations, while the upper walls were of mudbrick laid in courses of stretchers or in alternating courses of headers and stretchers. This formed very sturdy thick walls between 40-60 cm thick (as found in parts of house 1, 9 and 14). Bricks measured 33x15x8 cm in size (Emery 1935:112-114). Later X-Group walls were thinner, reaching only 30 cm thick (as in houses 11 and 12) and bricks were found laid in alternating courses of stretchers and headers laid on their ends (Emery 1935:114).<sup>11</sup> The Christian period walls at Wadi el Arab were usually one brick thick. These later bricks were smaller than the earlier X-Group bricks, being only 30-31cm long (Emery 1935:112). This differs substantially from brick sizes found at Naga el Sheima as discussed below. During the X-Group period,

the increasing impoverishment of many formerly prosperous communities is reflected in their architecture. Mud-brick

buildings continued to be constructed, although the walls were often thinner than before, and barrel-vaulted roofs were becoming less common. Increasingly throughout this period, mud-brick wall construction was supplemented or replaced by irregular walls formed of rough stone slabs set into generous quantities of mud mortar. These walls, which were unable to bear much weight, continued to be built well into the following Christian period (Trigger 1978:109).

Similar observations were made at Karanòg and Buhen. Most of the settlement at Karanòg dates to the Meroitic and post-Meroitic periods; however, portions of the castle and houses 8 and 9 were in use at the beginning of the Early Christian period (pls. 10, 11). Evidence suggests "no more than a partial occupation by scattered poor families who squatted in the ruins of the deserted town and tried to make habitable a few of its less dilapidated chambers" (Woolley 1911:3). The Meroitic and X-Group settlement at Buhen contained rectangular houses constructed of irregular sandstone slabs, laid in 'herringbone' fashion, and mudbricks. A church was found in the vicinity and the Pharaonic temple within the fortress appears to have been reused as a church. A few small, Early Christian mudbrick houses were found within the fortress along the Middle Kingdom fortification wall near the Pharaonic temple (Randall-MacIver and Woolley 1911:100-101).

In newly established or re-occupied sites such as, Gezeira Dabarosa I, Abd el Qadir II, Ikhmindi I, Ger Belat, Araseer II and Dibger, initially the houses were very simple one or two room structures that often had rounded corners or were somewhat irregularly-shaped. They were constructed of stone slabs or with stone slab foundations and upper walls of mudbrick. Foundations were frequently laid in 'herringbone' fashion. The use of these construction materials may be restricted to Lower Nubia, but more evidence is needed to confirm this supposition.<sup>12</sup> Within these settlements, structures occasionally utilized natural features such as cliffs or rocky outcrops. Commonly, buildings were only loosely grouped together, although there are examples, such as Gezeira Dabarosa I, of strings of rooms sharing walls. At Abd el Qadir II, four to five houses were spread across an area of about 50 square metres. The site was located on a rocky hillside overlooking the river, again suggesting a linear form of settlement running parallel to the river (Adams 1961b:16-19; Adams and Nordström 1963:39-40). The settlements themselves are small in size. The aforementioned characteristics appear to define transitional X-Group - Early Christian dwellings, but whether these characteristics are true for Upper Nubia is unknown due to the lack of data pertaining to sites in this region. There is some indication that this settlement

pattern also existed in the Abri-Delgo Reach. The sites of Gaaba I, Kofaree/Gebel Abdou Mellis, Khor Kurubin, Shagamnirki, Sudaga II, Dawki Dawi II, III and V exhibit the aforementioned features (pls.12, 13).

Most of the structures within the enclosure at Dibger were destroyed, but some were preserved outside it (pl. 14). These dwellings were constructed of rough stone and were irregular in shape. Most contained one or two rooms, many had rounded corners and were built incorporating indigenous rocky outcrops. The majority of structures were small, measuring around five metres at their greatest point. One rectangular, mudbrick and stone building containing at least four rooms was noted (Monneret De Villard 1935:56-61). Similarly, in an area measuring 150 x 40 metres, several small, irregular-shaped, stone houses were scattered across a rocky outcrop at Araseer II (Vila 1975:80).

The transitional X-Group - Early Christian settlement at Faras West II [24-E-30] provides another good example. It contained four or five small, irregularly-shaped, two or three room houses loosely grouped together along a former Nile channel. Construction was of mudplaster and sandstone slabs. Many slabs were laid on their edges at a slant (so named 'herringbone' fashion) and sometimes portions of the cliff face were incorporated into the structures (Michalowski 1962a:12; Verwers 1961c:28-29).

At Ger Belat, a small village was located near the opening of the Kalabsha basin. Houses were of drystone construction and small in size, consisting of two or three irregularly-shaped rooms (pl. 15) (Monneret De Villard 1935:29-30). It is notable that many newly constructed transitional settlements, including Faras West II, Dibger, Ger Belat, Mirgissa III and the first settlement at Abdallah Nirqi, were located in defensible positions, (i.e., high rocky outcrops or on steep-sided embankments), and near arable land. Some cultivation was undoubtedly occurring as suggested by the twelve silos (designated Araseer I) located near the small village of Araseer II (Vila 1975:80). The defensive location and transient nature of these settlements was likely the result of the incursions of the Blemmyes in the eastern desert and the threat of Arab invaders from Egypt who conducted two invasions (A.D. 642 and A.D. 651-2) that reached as far as Old Dongola. The war with the Arabs culminated in their signing the Baqt treaty with the Nubians. These invasions were documented by the Arab historians Ibn Abd Al-Hakam (d. A.D. 871) and Al-Mas'udi (d. A.D. 956) (Vantini 1975:56-8, 132-3). The Blemmyes and the Baqt treaty are discussed further below.

Gezeira Dabarosa I included mudbrick houses of Early Christian date and X-Group houses

made of mud, mudbrick and stone (pls. 16, 17). A period of abandonment, designated by a sterile sand layer, separated the two occupation phases and an enclosure wall surrounded the settlement during the Early Christian period. Many X-Group houses were constructed of courses of stones laid in 'herringbone' fashion (Hewes 1962:30). Similar structures were found at Mirgissa III [5-S-24]. There two, roughly rectangular, stone and mudbrick houses, with walls 30 cm thick, were located on a slope near the river. The roofs of these structures were believed to be organic in nature (Adams and Nordström 1963:30; Hajnóczy 1974:349, fn. 34). The 'herringbone' construction technique was not evident in the Early Christian houses at the Gezeira Dabarosa I. These were described as having slightly thicker walls, mudbrick vaulting, stairways, and niches in the walls (Hewes 1962:30). 'Herringbone' masonry was used for some courses in a few walls at Abd el Qadir II but was not employed exclusively. It was alternated with "mudbrick or with more conventional stone masonry" (Adams and Nordström 1963:39).

Evidence suggests that the 'herringbone' construction technique is a defining characteristic of dwellings of the transitional X-Group - Early Christian period; however, its usage declined and did not continue much past the beginning of the Early Christian period. Length of use probably varied between sites as well and may have depended on the individuals constructing the structure. It is not clear whether this technique was used south of the Batn el Hajar. Stone slabs laid on their edges were utilized in the foundations of two rectangular houses at site of Awanirki/Gerboonirki III, south of the Dal Cataract (pl. 18) (Vila 1977b:58). Unfortunately, while the site is of Christian date, it is not certain when it was occupied.

Two settlements, separated by a period of abandonment (represented by a sterile sand layer) were excavated at Abdallah Nirqi.<sup>13</sup> They differed dramatically in their pattern of settlement, type of structures and the construction techniques used. Buildings from the first settlement, though fragmentary, were similar to those found in the Early Christian occupation at Gezeira Dabarosa I and reminiscent of the buildings at Wadi el Arab. Many were connected in long rows with individual dwelling units sharing walls. They were constructed of mudbrick and stone, had thin walls (20-25 cm thick), and were irregular in shape. Rounded corners were common as were mudplastered floors (Barkóczy and Salamon 1974:291). The extent of the area occupied by the first settlement is uncertain but it appears to have been orientated parallel to the river.

The date of the first settlement at Abdallah Nirqi is uncertain (Barkóczy and Salamon 1974:333); however, analogies with other dated sites and the presence of Late Ballana style

ceramics appear to place the occupation between the transitional X-Group - Early Christian period and the Early Christian phase. Török dates the first settlement to about the middle of the 6th century A.D. and the beginning of the second to the end of the 7th c A.D. (Török 1975c:361). Hajnóczi would date the second settlement to the latter half of the Early Christian period around the middle of the 8th c A.D. (Hajnóczi 1974:351). Both suggested dates of the second settlement place its occupation after the Baqt treaty. The second settlement contained three stratigraphically distinguished phases of occupation with the first and possibly part of the second occupation periods being Early Christian in date. The second occupation phase was largely of Classic Christian date and ended with the destruction of the town between the late 11th and the early 12th centuries. This was followed by a very brief period of abandonment then a third phase of occupation (Barkóczi and Salamon 1974:291, 334-6).

The second settlement was larger than the first. The core of the settlement was a 60 x 90 metres kom flanked by eastern and western suburbs, that measured about 120 metres and 70 metres from the centre of the village respectively (Hajnóczi 1974:340) (pl. 19). Early Christian buildings of the second settlement were characterised as "solid vaulted houses built with a much more advanced technique" (Barkóczi and Salamon 1974:296) than those of the first settlement. They were constructed of mudbricks measuring 9-10 x 16.5 x 30.5 cm that were "carefully fitted to one another and the cementing medium was thoroughly finished in all cases" (Barkóczi and Salamon 1974:298).

The first phase of the second settlement consisted of many small two room houses referred to as 'double houses' by the excavators (Hajnóczi 1974:349) (pl. 20). This term has been adopted here. These buildings have a standardized ground plan that was used with little variation. They were mudbrick structures containing two long, barrel vaulted, rectangular rooms placed either parallel or perpendicular to each other. The average size of one of these rooms was 5 x 2.5 metres with walls 50 cm thick (i.e., Abdallah Nirqi, room 5 on pl. 20), although usually one room was longer than the other and occasionally one room was divided into two by a thin mudbrick wall. Niches were constructed in the interior of some rooms. Entrances were situated towards the end of one room along the side wall. Both doors and vaults were low with the doors being between 1.1 and 1.2 metres in height and the roofs between 2.5 and 3 metres high. Low mudbrick walls were associated with some houses, possibly providing a farmyard or courtyard. The chosen shape of the courtyard may have dictated the positioning of the two rooms in relation to one another, as no chronological distinction was noted (Hajnóczi 1974:349-51).

It is the idealized architectural model of two rectangular rooms, orientated perpendicular or parallel to one another, that formed the underlying principle upon which Lower Nubian Early Christian houses were constructed (pl. 129). Its widespread usage coincides with the appearance of larger, more concentrated settlements. Both may be the result of the increasing political stability and unity and a gradually declining threat from the Blemmyes in the eastern desert and from Egypt that probably followed the signing of the Baqt treaty. Notably, the majority of the earlier X-Group sites in Lower Nubia were found on the west bank, perhaps to protect the inhabitants from the Blemmyes in the eastern desert (Trigger 1965:140, 143). This was also true of the majority of Early Christian walled settlements. This situation is discussed further below.

Similar buildings were found at several sites besides Abdallah Nirqi, including Debeira West IV, Gezeira Dabarosa I, Arminna West and possibly Qasr Ibrim and Gindinarti. At Gezeira Dabarosa I (pl. 17) rooms 19 and 21 form a 'double house' with a possible courtyard in room 20. Rooms 13 and 17 form another 'double house' (Hewes 1964:181). The Early Christian Western Building at Arminna West (Trigger 1967:26) (pl. 21) may also have been of this general type with several additional courtyards as perhaps were rooms A-M-1, 2 and 3 in the structures underlying the Classic townsite (pl. 22). This style of construction may have originated during the X-Group period. House X at Arminna West (pl. 23) has a similar layout and based on the associated ceramics was dated between 450 and 550 A.D. (Trigger 1967:34). There rooms 53 and 36 would form the actual house, while 39 and 37 were associated courtyards. The materials used in the construction of these buildings and the size of the rooms is also comparable to those at Abdallah Nirqi. For example room 53 of House X measured 5.1 x 2.7 metres in size and the walls are believed to have stood at least 2.5 metres high. For further details concerning comparative room size see fig. II.3. It is interesting to note that the ratio of length to width of a 'double house' room is approximately 2:1 and that this ratio is more variable among the earliest 'double houses', such as those at Arminna West. Unfortunately, a more specific ratio cannot be given as many of the room dimensions are themselves rough estimates.

Examples of the 'double house' may also be found Debeira West IV (R-8) (pl. 24a). Rooms 43 and 84 form the two rooms of the dwelling while 47, 77, 76, 83 and 38 are partitioned areas of a courtyard. A stairway was present in space 38 suggesting probable roof usage or perhaps an upper floor. Room 43 is described as "substantial" with "a number of small, lightly built, and later additions. ... Room 43 was a large, well-built room, originally roofed with a brick vault" (Shinnie and Shinnie 1978:11). This structure was part of the period II settlement, dated by

the excavators to the late Early Christian - Classic Christian period (Shinnie and Shinnie 1978:3), thus the usage of the basic 'double house' appears long-lived.

Buildings A and B at Debeira West II (R-3) were also constructed around the 'double house' plan (pl. 24b).<sup>14</sup> Rooms B4 and B6 form one house, with B5 as an attached courtyard and rooms B2 and B1 a second unit. In house A, rooms A1 and A2 form the larger room and A3, placed perpendicular to it, the smaller room. The larger room was later subdivided. A stairwell (A4) was incorporated into the structure giving it a more square appearance. Dating of this site was uncertain. Excavators speculated that, either Classic structures had been constructed in an area containing concentrations Early Christian sherds, or Early Christian buildings were also occupied during the Classic phase (Shinnie and Shinnie 1978:44).

"There was a continuity between the first and the second period of the [second] settlement; [at Abdallah Nirqi] the houses were used with minor alterations besides the new-type houses of the second period" (Barkóczy and Salamon 1974:334). Continuity of occupation from the Early Christian to Classic Christian periods at sites such as Meinarti, Debeira West, Arminna West and Abdallah Nirqi suggests that the pattern of the Classic Christian 'unit house' may have developed from the earlier 'double house' model. This is discussed further in chapter 2 along with house forms typical of the Classic Christian period.

Houses dating from the second half of the Early Christian period at Meinarti were quite different from their predecessors and the structures found at other sites mentioned above. Remains from this period (Meinarti levels 12, 11b and 11a) were greatly denuded by flooding and many earlier structures were damaged. Buildings constructed at this time resemble the earlier X-Group houses. Once again the structures were of flimsy, irregular construction and the walls were thin, occasionally curved, and unable to support vaulted roofing. Rooms were small and irregular in shape. The excavator suggests that many walls may have been footings for wooden structures (Adams 1965a:158). The mudbrick walls averaged 20 cm thick and some had stone foundations. Buildings often contained a mixture of earlier wall remnants and later flimsy wall additions. Earlier walls were invariably straighter and thicker than the later ones (Adams 1963-64:113-5).

This pattern continued into the Classic Christian period and was also found in the early Classic Christian levels of Kasanarti, another Second Cataract site (Adams 1965a:158-9; 1968:188-9). Flood levels are reported as abnormally high during the first part of the Classic Christian period (Gardberg 1970:15). Adams suggests that the "villagers of Meinarti, having unsuccessfully attempted to withstand the high Niles for several generations, had finally



recognized the futility of building ever more massive houses, and had resigned themselves to periodic destruction. Their houses were thus designed for economy rather than for endurance" (1965a:158). Notably the affected sites are both islands and the best preserved portions of their settlements are located on the highest points. Between A.D. 800 - 1000, areas among the dunes at Aksha were cultivated. "The basic similarities between the evidence from Aksha and Meinarti suggest that the location of the latter site, within a very constricted part of the valley, made it unusually susceptible -- and sensitive -- to Nile variation" (Butzer 1976:30, fn .3). If repeated high inundations were a major factor influencing house and settlement plan, then similar changes should be noticeable in other low lying settlements. Future studies should address this question, when more information becomes available through excavation or publication.

Other sites, continuously occupied from the Early Christian to the Classic Christian periods, were probably not affected by inundation as dramatically as the islands. For example, a large portion of the Classic Christian town at Arminna West was constructed three to four metres above the level of the Nile and the river bank was steep (Weeks 1967:fig.1) (pl. 25a, 25b). Debeira West IV was built at least one hundred metres from the river (Shinnie 1964:209). The location of these sites would serve to mitigate the negative effects of a high flood and perhaps leave the inhabitants with additional cultivable land requiring little or no irrigation. Large towns flourished and prospered at both sites at the beginning of the Classic phase with no apparent interruption.

Based upon modern ethnographic examples, Adams adds that "Nubians do not consider their houses to be of much value. Even today one buys a substantially built house in Nubia for the price of the woodwork and metal fittings; the mud is 'thrown in'" (Adams 1968:188). This attitude is put forth as yet another factor that influenced the inhabitants of Meinarti to remain during the high floods and affected the nature of houses constructed on the island. However, this analogy is flawed as the modern Nubians do place value upon their homes. While the mud might be "thrown in" for free, its excavation, transport and transformation into bricks are not, nor is the labour involved in constructing the building. In a place where the average wage of a farm labourer is under two US dollars a day and the cost of constructing a solidly built room can be as much as 2500 US dollars, the destruction of a house can be a disaster.<sup>15</sup> The destruction caused by the 1988 high Nile flood and its aftermath amply illustrates this point. This deals with the simple physical reality of a house and involved monetary costs, but to modern Nubians their houses and villages are much more than that. They symbolically define or contextualize their

social interactions be it consciously or unconsciously.

Social space is organized concentrically. At the hub is the *hosh* or *bayt* (house): an extended family and the place where life begins. Surrounding this in the village are kinsmen and neighbors, considered the same by local people: they are referred to as *nas garib*, "those who are close" or *garibna*, "our kin." In nearby villages are more distant relations and affines and, farther still, nonkin Arab Sudanese. Soon thereafter one arrives at the periphery of the known, and readily negotiable, social world. (Boddy 1989:71).<sup>16</sup>

At a very basic level this was also probably true for the Christian Nubians. It seems more likely that the inhabitants of Meinarti simplified their house plans to save the time and expense involved in repeated construction not because they placed little value upon their homes. That they remained at Meinarti despite the repeated flooding, suggests that Adams is correct in his analysis of the effect of inundation on the alluvium and that fields and arable land in this region were rare commodities worthy of protection (Adams 1968:188-89).

Continuity of occupation of some post-Meroitic sites into the Early Christian period does not seem restricted to Lower Nubia alone. In Upper Nubia, sherd scatters at Agab Wad Addul and El Ghaddar Southeast suggested a post-Meroitic to Early Christian date (Grzymiski 1987:28-29). Within the Gezeira, post-Meroitic and Early Christian sherds and artefacts have been found at the sites of Burri, El Eleila, Fiki Mahmoud, Soba East and possibly Wad el Haddad (Addison 1930:285-288; Balfour Paul 1952:211, 213; Welsby 1991:278-80; Welsby and Sjöström 1994:178). Interestingly, whereas sites in Lower Nubia were constructed primarily of stone and mudbrick, red brick fragments are reported littering the surface of many Gezeira and Abu Hamed mounds. El Eleila, Wad el Haddad, Soba East, and Wadi Dam et Tor all had red brick detritus scattered across them. Abu Ushar North, Abu Ushar South, Abu Furu', Baqeir, Hassaheissa I and Karagi, all of unspecified Christian period and situated in the Gezeira, are similarly disposed (Balfour Paul 1952:210-1, map 1). Red brick debris was also reported at El Ghaddar Southeast in the Dongola Reach. Except for Soba East, none of these sites has been excavated and their dates are tentative. It is possible that the red brick fragments may have originated in some instances from Meroitic structures, particularly in the area south of Atbara.

Excavation at the site of Soba, the capital of Alwa, revealed that mounds covered with red brick fragments invariably concealed churches while gravel mounds generally contained other structures (Welsby and Daniels 1991). This hypothesis was further tested during the excavation

season 1989-1990 and thus far appears correct. "No secure dating evidence was obtained for any of the red brick mounds, but as they occurred equally in areas of high Soba ware density [Early Christian in date] and areas with late mudbrick buildings and no Soba ware, it seems that they were not restricted to a single phase of Soba's life, but continued throughout it" (Welsby and Daniels 1991:29). The red brick mound at Alti was also described as a church (Clarke 1912:38; Macmichael 1967, I:48). Reasons for usage of red bricks or mudbricks in construction are discussed in chapter 5.

Based on this admittedly small sample, it is possible that many red brick remains referred to as settlements or habitation sites within the Gezeira and along the Blue Nile, are actually ruins of churches, be they of early or late date. Balfour Paul also noted that the presence of "clusters of low mounds strewn with these big red bricks (known locally as "Dineigeela"), and associated with recognisable pottery types are to be found wherever early travellers record a church and in many other places in what was once the area of the Soba Kingdom (1952:211). He further states that "sometimes - particularly in the case of the inland (Gezeira) sites - the restricted extent of the 'Dineigeela' indicates a settlement where only the church was built of red brick. Elsewhere, in such large settlements as El Eleila or Soba itself, many buildings as well as the church itself were evidently of this material" (Balfour Paul 1952:211). The excavations of Welsby and Daniels at Soba East (1991) seem to cast some doubt on whether secular structures were constructed of red bricks within the kingdom of Alwa. Possibly, the numerous red brick rubble mounds at Soba suggested to Balfour Paul that structures other than churches must have also been constructed in this medium.

Early Christian houses were excavated in the northern suburb (Kom P) of Old Dongola, Upper Nubia. This suburb extended northward from Kom A, the earliest inhabited area. It ran parallel to the Nile, but was set back from the cultivated area along the desert edge. This was not unlike the pattern of settlement found in Lower Nubia. Houses in Kom P were markedly different from their poorer relations in Lower Nubia. The earliest house excavated was house PCH-1 (pl . 26). Its initial construction was roughly dated to the latter half of the 8th c A.D. The entire suburb is believed to date between the 7th and 9th c A.D. (Godlewski 1991a:79, 87).

Dwelling PCH-1 was rectangular, free-standing, two-stories high and had the appearance of a villa. It measured 14.6 x 9.2 metres. External walls were 54 cm thick while interior walls were 34 cm wide. On the ground floor, the core of the structure was roughly square and consisted of three small rectangular rooms arranged parallel to one another with a long

rectangular room positioned perpendicular across the ends of the three smaller rooms. A stairwell and two additional rooms were added to the north of the structure's core. Dimensions are given in figure I.2 (p. 25). Two courtyards were attached to the dwelling, one in the north and the other in the west. Room "a" was equipped with a slot chimney and probably used as a kitchen. Traces of fire and soot were discovered within the chimney. An ash pit enclosed by some sort of installation was also found in this room. It is not known if the stairs were to an upper floor or the roof, as little remained. The roof was probably originally flat. Small slit windows (12-16 x 60 cm) were used to light the ground floor and as fragments of large ceramic window grills were recovered, the existence of a second floor is probable and likely was the main living area (Godlewski 1990a:14-6; 1991a:82-5).

Excavators discovered a similar building nearby. Construction of House A was somewhat later than PCH-1, occurring during the 9th c A.D. (Godlewski 1991a:87). The core of its structure was a duplicate of that found in House PCH-1 (pl. 27). It consisted of three small rectangular rooms, (1-3) arranged perpendicular to a long transverse chamber (6). A long chamber (A4/5) ran along the south side of the building and contained stairs leading to an upper floor or the roof. Room A1 contained a chimney like that in PCH-1 room a, while room A3 contained a bathing room. Hot water could be delivered to this room via a furnace found in chamber A12. All of the rooms on the ground floor had been covered with wall paintings (Jakobielski 1982c:116-8; Godlewski 1982c:92-5).

Godlewski has suggested that these structures housed important members of the elite based upon their spaciousness, sturdiness of construction, lack of animal enclosures and grain storage, the presence of stele fragments containing the names of the eparch Petros and one Zacharias in PCH-1, and the extensive wall paintings and a hot water furnace in House A (Godlewski 1991a:84-5). When compared with the poorer structures of the same date from Lower Nubia, I would be inclined to agree with him, however additional material from Upper Nubia would aid in verifying this hypothesis. It can be expected that many members of the Makurian court and the government bureaucracy would have resided in the vicinity of Old Dongola, the capital city. However, with a sample size of two it is not possible to reliably gauge the exact socio-economic niche which these structures occupied. While the houses obviously belonged to persons of some wealth, being situated in the rich agricultural area of the Letti basin may have made much of the populace disproportionately wealthy in comparison to the inhabitants of many of the poorer regions in Lower Nubia.

There are few analogous buildings to these structures and there is no direct evidence from which to determine their origin. In Lower Nubia, chimneys similar to those in the Old Dongola houses were discovered at Meroitic Karanòg in house 1 and in the Eparchs' palace north of the Faras West I cathedral (Godlewski 1991a:84; Michalowski 1967:95, 1974:73; Woolley 1911:27, pl. 24). Both the Palace and House 2 at Karanòg, although much larger (624.5 and 650.3 sq. metres) were two to three storeys high and the settlement was divided into elite and non-elite suburbs, just as Dongola is believed to have been (O'Connor 1993:99-101). With rooms arranged around open courts, the internal layout of these structures shown on pl. 10, differs vastly from the Old Dongola houses. Karanòg house 9 displays exactly the same plan as the core module of the Old Dongola houses (pl. 11), as does Meroitic House 19 at Faras West (pl. 28) and EC1-1 at Qasr Ibrim, also originally of Meroitic date (pl. 2). Analogies with these structures are further discussed in chapter 2. Unfortunately, all of these sites are located in Lower Nubia and no X-Group, transitional X-Group - Early Christian or Meroitic dwellings have yet been unearthed in the region of Old Dongola which could provide a comparison. Within Christian Nubia,

There are no analogies to House PCH.1 outside the capital. This is the case for all houses known from Nubia regardless of whether they were found in closed, walled-off settlements, for example Qasr Ibrim, Ihmindi or Sabagura, or in open ones such as Abdallah Nirqi or Debeira West. The so-called palaces and public buildings uncovered in Faras (Michalowski 1967:95), Arminna West (Weeks 1967:17-21 and 28-290, Tamit (Monneret de Villard 1935:164) and in Hambukol near Dongola are also different in their layout (Godlewski 1991a:84).

This is not entirely correct. Classic Christian type 1 'unit houses', discussed in chapter 2, were similar in plan to the Old Dongola villas, though simpler, smaller in size and lacking an upper storey. They were roughly square and contained three small rectangular chambers orientated perpendicular to a long transverse chamber just like the central part of both PCH-1 and House A. As mentioned above, it is possible that this is a simple version of a traditional building form passed on from the Meroitic period or alternatively, that the Early Christian house model from Old Dongola was later adopted during the Classic period in villages outside the capital. The simpler pattern of two, small rectangular rooms placed perpendicular to a longer rectangular chamber, found in some Early Christian fortresses, such as Naga el Sheima and Sheikh Daud, may be an early rendition of this plan. Two staircases were also discovered at Naga el Sheima (Bietak and Schwarz 1987:48, 52). Walled settlements are discussed further below.

Approximately 17 houses, many of which were two-storeys high, were discovered at Jawgul, in the Mahas region of the Abri-Delgo Reach (Edwards and Osman 1994a:43). The site was tentatively dated based on Early and Classic Christian wares found on the surface. If these two-storey buildings do date to the Early Christian phase, then they are a further indication of the differences between Upper and Lower Nubia and the relative impoverishment of Lower Nubia compared to Upper Nubia. The lower storey of these buildings was of drystone construction while the upper walls were of mudbrick. Access to chambers on the ground floor was via the upper floor through openings in the vaulting. The main entrance appeared to be on the upper floor in most cases. Other architectural details are shown in figure III.2 (p. 106); unfortunately, no plans are available to enable direct comparison with the Old Dongola houses (Edwards and Osman 1994a:43). Another two-storey building of similar construction and date was discovered at Toona (Edwards and Osman 1994a:33). Many of the features displayed by these buildings, including hidden crypt magazines with roof access and second floor entrances, are found in the Late Christian period 'castle houses' discussed in chapter 3. Similar structures in Mahas, as found at Haleeba, have been associated with Late period material. Since the Mahas buildings have not been excavated and their dates are tentative, being based solely upon a few identifiable surface sherds, it is possible that these buildings were constructed during the Late period upon earlier sites. This hypothesis must be confirmed through future work at these sites but at present seems the most probable explanation.

Houses A and possibly B at Debeira West II (R-3) also contained stairwells that led up to the roof or an upper storey, although their plans differed substantially from that of the Dongola houses (pl. 24b). House A was constructed around a modified Early Christian 'double house' plan, as discussed above. These dwellings may be some of the first examples of Christian two-storey houses in Lower Nubia. Building C remains more problematic. It was irregularly constructed of thin mud walls and consisted of several small rooms. The location of Debeira West II near the wadi or farki, away from the main town, might suggest that the inhabitants were involved in farming. Apart from the ubiquitous goat dung within the buildings, storage vessels and coarse utility wares discovered in building C, little other evidence was found to indicate the function of these buildings. Based upon the associated workshops, kitchen and storage facilities, the excavators hypothesized that Debeira West II "may have been the residence of an important personage" (Shinnie and Shinnie 1978:44). This could further support Godlewski's theory regarding the elite or higher socio-economic status of inhabitants two-storey dwellings.

Figure I.2

## FEATURES OF EARLY CHRISTIAN UPPER NUBIAN HOUSES

Site	House /Room Dimensions (m)	No. of Rooms on lower floor	Wall Thickness	Roof	Entrances
OLD DONGOLA					
House A	16 x 14	6 + stairway	c. 55 cm	vaulted	1
Room A1	3.9 x 2.8				
Room A2	4.5 x 2.8				
Room A3	4.5 x 2.4				
Room A4/5	8 x 3.5				
Room A6	8.8 x 3.3				
Room A12	9.9 x 3.3				
OLD DONGOLA					
House PCH-1	14.6 x 9.2	6 + stairway	54 cm	flat	2
vestibule	8.6 x 2.9				
Room a	4.3 x 2.2				
Room b	4.6 x 2.6				
Room c	4.5 x 2.4				
NE room	4.6 x 2.4				
NW room	4.6 x 2				
stairway	4.4 x 2.9				
JAWGUL (Mahas)					
c. 17 houses					
Average house	5.5x7	6	?	vaulted	?
Average room	2.6x2.3				
TOONA (Mahas)					
Building	c. 10x5	6	?	vaulted	?
room size	c. 3x2.5				

At Soba East, most Early Christian artefacts and habitations were found around the edges of the concession.<sup>17</sup> Welsby suggests that structures and material of later date cover the earlier remains elsewhere on the site (1991:278). Archaeological evidence recovered here suggests that the majority of Early Christian domestic structures were vastly different from those in Upper and Lower Nubia. Many were wooden post constructions. Material was recovered primarily from two units, MN3 and near MN8 where over 400 post holes were discovered within an area of 291.5 sq. metres (Sjöström and Welsby 1991:197) (pl. 29). These were associated with numerous pits and floor surfaces and several hearths including one of mudbricks. "The number of the floors found, together with the quantity of domestic refuse, indicates either a long or intensive period of occupation" (Welsby 1991:279). The placement and number of individual structures were difficult to discern due to the great quantity of holes in a relatively small area; however, the partial remains of two roughly circular dwellings could be delineated. The first was approximately five metres in diameter, contained the remains of a hearth and consisted of a semi-circle of eight postholes. A raised mud floor surface was all that remained of the second structure. Some mudbrick walls were associated with the postholes and floor surfaces in MN3. Stake and post holes, early pottery and pits containing domestic rubbish were also found in the area of mound B beneath several later churches, and beneath building F under mound Z2 (Welsby 1991:279; 1994:190).

Although the type of roofing and walls of these dwellings is unknown it seems probable that they were of organic construction.<sup>18</sup> The circulation of air would be facilitated by the permeable walls of a wooden, thatched structure and the roofing would aid water run-off during the rainy season. The 100 mm isohyet runs just to the south of Soba East whereas the Northern province of the Sudan receives only about 25 mm of rainfall per year (Van Noordwijk 1984:30). The amount of rain received may have been a factor in the selection of materials used and the type of buildings constructed in Alwa. Mudbrick would be damaged by the seasonal rains.

### Walled Settlements

The walled settlements of the Early Christian period exhibit many similar architectural characteristics. Commonly, a quadrilateral-shaped area was delineated on three sides by a stone enclosure wall and on the fourth side by a steep cliff that descended to the Nile. These walls were largely of drystone construction, although mud was also used at Gezeira Dabarosa I. They were extremely thick measuring between 1.5 and 3 metres wide. Orientation of these sites was



parallel to the Nile, where the area enclosed was not square. The spaces enclosed were fairly large. For example, Gezeira Dabarosa I measured 500x200 metres (Verwers 1962:30).

Sabagura proved an exception. There a stone, trapezoidal, enclosure wall surrounded the entire settlement and it was situated on a steep, rocky slope orientated perpendicular to the Nile (Monneret De Villard 1935:46-52; Stenico 1960:31-76). Comparison of the topographic differences between Naga el Sheima and Sabagura (pls. 30, 31) suggest that the cliff face at Sabagura was less steep by the river than it was at Naga el Sheima and thus the fourth wall was required. By the Nile, the slope rises two metres over a distance of ten metres at Sabagura while at Naga el Sheima the slope rises four metres over the same distance. Plans of Sheikh Daud and Ikhmindi II (pls. 32, 33) appear to indicate that access to these villages was difficult from the river side. The builders of Sabagura made full use of the local topography. The settlement is situated on the highest part of the rocky incline, to the north and south the land slopes away from the fort while the river wall afforded additional protection on the west side.

Bastions and one or two fortified gates further strengthened the enclosures and were situated in places where there was easiest access to the settlements. They could also be interpreted as locations from which a perceived threat might originate. The enclosure wall of Sheikh Daud had a fortified gate in the centre of the north wall (desert side) as well as corner towers and bastions (Velo 1964). Similarly, two round bastions were found on the northeast and southeast corners, again on the desert side at Sabagura. Naga el Sheima, Ikhmindi and Kalabsha all appear strongly fortified on the desert side of their enclosure walls. Construction of the bastions and gates differs slightly from site to site, but many similarities can be noted. For example, the fortified, indirect "L-shaped" entrance is found at Sabagura, Ikhmindi II and Sheikh Daud; bastions at Ikhmindi II and Sheikh Daud are similar both in shape and distribution, as are the corner towers of Naga el Sheima and Sabagura.

Adams noted that "the orderly and uniform arrangement of the buildings [within the forts] is clearly indicative of central planning, and contrasts sharply with the helter-skelter plan of the typical Nubian village" (Adams 1977:494). A church was centrally located within the enclosures and the dwellings were organized around it in a regular fashion.<sup>19</sup> At Sheikh Daud, the streets ran parallel to the enclosure walls. The houses were modular in shape, usually consisting of two long, rectangular rooms arranged parallel to each other, e.g., houses I-III. Sometimes they were subdivided into smaller square units such as those found in houses IV-VI. A similar ordered arrangement was found at Ikhmindi, Sabagura and Naga el Sheima. As mentioned above, this

plan appears to be a simplified version of the construction module used in the Early Christian houses at Old Dongola and the later Classic Christian type 1 'unit house' discussed in chapter 2.

Within all of the forts, where extant structures were noted, a long, rectangular barrel-vaulted room was the core unit of building construction and exterior walls were frequently shared by separate houses. Many dwellings were founded directly on the rock face and steps were cut into the rock in steep areas. At Naga el Sheima long, rectangular rooms were arranged perpendicular to the enclosure walls and traces of an east-west road were uncovered in the northern sector of the enclosure. Structures were deliberately arranged with reference to the road and were built at regular intervals to the north and south of it (Kromer 1979:134). Although the interior of the fort at Sabagura was greatly destroyed, a church was located in the centre of the enclosed village and a road ran from the north to the south gates past it.

Drystone construction was used for much of the lower foundation courses of the houses while the upper walls and vaults were of mudbrick at all of the sites. Wooden roof beams recovered at Naga el Sheima suggested that some roofs were flat rather than brick vaulted (Kromer 1979:134). Staircases were evident in several buildings at Ikhmindi II, Naga el Sheima (rooms H/IIe, h) and Sabagura suggesting a possible upper storey or at least usage of the roof by the occupants. Mudbrick size was found to have changed through time at Naga el Sheima. Between the 7th and the 8th centuries A.D. bricks were 37x20x8 cm in size. Later during the 9th century A.D. a more square brick measuring 32x16x8 cm was used (Schwarz 1986:386). This could aid in more precisely dating sites within the Early Christian period if this shift in size was more widely spread. At present the data available is inadequate to test this hypothesis.

Additional dwellings were frequently found outside the enclosure walls. Two churches, one to the north and the other to the south and an extensive settlement containing many small houses were found outside the Sabagura fort. Houses were situated along a road that ran parallel to the Nile and through the centre of the Sabagura fort indicating that a relationship of some sort existed between the settlements inside and outside the enclosure wall (Monneret De Villard 1935:46-52, figs.35-43). Outside the forts of Naga el Sheima and Ikhmindi, a church and small settlement were similarly arranged on the south (upstream) side (Bietak and Schwarz 1987:plan 1; Stenico 1960:fig. 1). At Dibger, small houses were found both to the north and south of the enclosure (Monneret De Villard 1935:56-61, figs.48, 50-53) and at Kalabsha buildings were scattered across the hills around the fort (Curto et al. 1965:87-88) (pls. 34, 35). Reports suggest that little difference existed between the houses outside the forts and those inside. Units still

appear tightly grouped together although the usage of space was not restricted by a fortification wall. The exterior settlement at Sabagura provides a particularly good example (pl. 31). Many houses were regular in plan usually with a long, rectangular room arranged perpendicular to several smaller square to rectangular rooms. Some buildings contained staircases suggesting usage of the roof or an upper storey. These houses are discussed further in chapter 3 as their date remains uncertain. Exterior walls were shared between some units. Most structures were built directly on the rock like many houses within the enclosures.

It has been suggested that the idea for the walled settlements of the Early Christian period originated either in Syria or Palestine and arrived in Nubia at roughly the same time as the conversion to Christianity (Adams 1977:495; Donadoni 1969:30; Stenico 1960:67-76). Adams (1977:495) further asserts that "no similar installations have been found in other parts of Nubia." Thus far this seems true; however, future surveys and excavations may prove this incorrect. Work in other border/frontier areas, particularly that of Alwa, has been conducted only in a very limited way if at all.

This theory neglects the long history of fortress construction in Lower Nubia, from the Middle Kingdom onwards, and the Roman presence and contacts during the Meroitic period. By the beginning of the Early Christian period, fortresses or enclosed villages were not foreign to Lower Nubia, consequently the idea need not have been introduced from elsewhere. The rectangular shape and the forms of the bastions and towers and their positioning within Early Christian enclosures such as Ikhindi II, though simpler,<sup>20</sup> is reminiscent of that found in the earlier forts at Buhen, Aniba, and Kubban.<sup>21</sup> In a general way irregular shapes like that of Shelfak are similar to that of Sheikh Daud. Remains of these earlier structures were still extant during the Early Christian period and were occasionally reoccupied. A few small mudbrick houses, probably of Early Christian date, were found within the fortress along the Middle Kingdom fortification wall near the Pharaonic temple at Buhen and a large Blemmye village was found outside the fort (Randall-MacIver and Woolley 1911: vol I., 125; vol II., 6-7, 100, pl. 68b, plan f; Trigger 1965:197). It is therefore possible that the origin of the Early Christian walled settlements may have been indigenous rather than imported.

The purpose of the walled settlements is uncertain. They exhibit similar features and internal organization, suggesting construction by a centralized and presumably governing authority. Further, their architectural similarities and contents (i.e., ceramics) suggest they were constructed within a relatively short time period of one another. Their thick walls, gates and

bastions have a clearly defensive character yet "le fait que la ville-forteresse n'est pas régulièrement employée est justifié par le caractère étranger de la conception" (Donadoni 1969:31). Nor are they apparently restricted to Lower Nubia. The walled settlement at Ardimiri, south of the Dal Cataract, was of Early Christian date, as was the fort at Kassi-Markol in the Mahas district (pl. 114) (Edwards and Osman 1994a:40-2).

The fortress at Kassi-Markol was similar in appearance to the Lower Nubian walled settlements, although little remained of the settlement in the interior. The outer wall was a trapezoidal shape. It had two "L-shaped" gates and round corner bastions and was constructed on a rocky slope overlooking the Nile as was Sabagura. Surveyors noted that the fort controlled traffic along the river road which ran to the north of the site (Edwards and Osman 1994a:41) as well as on the Nile. Architectural and locational similarities suggest that Kassi-Markol was contemporary with the Lower Nubian forts and constructed via the same agency, probably for similar purposes.

Pottery finds at Kuweib and El Kab in the Abu Hamed Reach, suggest Early Christian dates for these sites (pl. 108). At Kuweib, a stone and mudbrick fort was situated on a small mountain overlooking the Nile. These fortifications and enclosed structures used natural environmental features in their construction (Crawford 1953b:7-10). A similarly constructed walled settlement was found at Usheir, although datable finds were lacking (Crawford 1953b:19-24). Walled settlements found within the Abu Hamed Reach are less well documented and dated than those in Lower Nubia. I suspect that most are of Early or Late Christian date as the majority of securely dated walled settlements originated in one of these periods.

Donadoni suggested that the Early Christian forts in Nubia were made necessary by the presence of the Blemmyes in the desert and the people of Makuria to the south. As Nubia became more unified and stable under the Christian kings, these safe havens were made gradually obsolete (Donadoni 1969:31). Many forts were located near large towns. Trigger noted that most X-Group sites in Lower Nubia were situated on the west bank possibly to protect them from the Blemmyes who controlled much of the eastern desert (Trigger 1965:140, 143). Evidence for hostilities between the Nobatae and the Blemmyes may be found in the Silko inscription (ca. 536 A.D.) from the temple of Kalabsha. Therein, King Silko mentions numerous skirmishes with the Blemmyes and the destruction of their towns.<sup>22</sup> Further evidence may be found at Philae, where Greek inscriptions of the 5th and 6th centuries A.D. record work being conducted upon the enclosure wall (Bernard 1969:233, 282-85). This wall may have been constructed much earlier to

protect the site after the withdrawal of the Roman troops under the Roman emperor Diocletian. Of the Early Christian walled settlements only Sabagura, Qasr Ibrim and Dabger were located on the east bank of the Nile. The rest were located on islands (i.e., Firkinarti) or on the west bank. This appears to support Donadoni's hypothesis, as a site on the west bank or an island would afford additional protection from the Blemmyes. It does not account for the presence of unwalled settlements in Lower Nubia, several of which were situated on the east bank, far from a protected enclosure. Ambikol, Attiri I, II, III, Gemai East II, Melik el Nasr I, II, Saras IV and Songi I are a few such examples. While a strong defensive capability was one purpose of the forts, it evidently was not their only function.

Individuals settled outside the enclosure walls could withdraw into the nearby fort if the situation demanded it. Many of these external settlements and particularly the churches are situated to the south of the enclosures suggesting that another direction from which conflict might arise was to the north, downstream. This is supported by the records of Arab chroniclers such as Maqrizi and Baladhuri.<sup>23</sup> After the conquest of Egypt by the Arabs in 641 A.D., strife occurred between the Nubians and the Arabs. Arab historians record two military campaigns into Nubian territory, the first by Amru in 641 A.D. and the second by Abdalla b. Saad in 652 A.D. Yet another expedition may have occurred in 646 A.D. (Vantini 1981:63). The result of these conflicts was the creation of the Baqt treaty, essentially a peace agreement designed to facilitate trade between the Nubians and the Arabs.<sup>24</sup> It is probable that the greater political stability and safety for travellers and goods, as created by the treaty, eventually made the protection provided by the walled settlements obsolete as suggested by Donadoni. This environment of safety and stability would also have encouraged the growth of villages and the development of more permanent dwellings.

However, it may also be that the walled settlements were constructed by the Christian government to fulfil the requirements of the Baqt treaty and ensure that merchants, goods and travellers were adequately protected. Either way, their construction would have established a more secure atmosphere within Lower Nubia. The reason for traders entering Nubia is made abundantly clear by the Arab historian Ibn Khaldun, although his work is of later date (1332-1406 A.D.). He stated "one finds that the merchants who ardently wish to enter the country of the Sudan become the wealthiest of all men and richest of all in money. Because of the distance of the journey and its hardships, and the crossing of the desert which is full of dangers and thirst...the goods of the country of the Sudan in our country are very few" (Vantini 1975:549).

No mention of Nobatia has been preserved in the records of the Arab military campaigns (Vantini 1981:63). One would expect that if Lower Nubia was filled with strong fortifications, such as those at Ikhmindi II and Sheikh Daud, some mention would be made of them by the Arab chroniclers, although admittedly this is an argument from silence and such documentation may yet appear. An inscription found within the settlement at Ikhmindi II describes it as founded for "the protection of men and beasts" (Donadoni 1959:458-69; 1969:29-30) suggesting that these enclosures could have functioned as caravanserais (Trigger 1965:146). Ikhmindi is situated just downstream from the entrance to the Khor al Moharraqa (Stenico 1960:fig.1). Both it and Sheikh Daud "may have been the terminal points for an overland shortcut that eliminated the need to detour through the Korosko bend" (Trigger 1965:146). Sabagura and Kalabsha are just north of the Wadi Allaqi, a major desert road, while Kassi-Markol was situated to control traffic along the river road. Kalabsha is also situated at the mouth of Khor Kalabsha, another potential desert route. The introduction of camels to Nubia during the 3rd c A.D. (Trigger 1965:140) would have enabled a wider usage of overland trade routes.

By positioning forts along and at the end of major routes of travel, the Nubians could protect and regulate trade along these desert roads and assure their own sovereignty over the region. "Né è pensabile che Ikhmindi sia stata costruita in quel punto in funzione di protezione degli accessi a Wadi Allaqi o meglio alle miniere d'oro che si trovano in fondo a questa frattura, che dalla valle del Nilo va verso sud-est in direzione del Mar Rosso" (Stenico 1960:33). The existence of customs posts, at the north and south ends of the Batn el Hajar at the sites of Takoaa and Upper Maqs (possibly Akasha), as mentioned by Ibn Selim (Vantini 1975:603-4) and Abu Salih seems to further confirm this hypothesis. With reference to the customs posts Abu Salih states "No one is allowed to pass by the inhabitants of this place without being searched, even if he be a king, and if anyone pushes on and refuses to be searched, he is put to death" (Evetts and Butler 1895:262-3).

Construction of the forts around the same time by the power governing Nobatia would account for the structural similarities and planned arrangement of the interiors, but it does not explain the presence, though fewer, of Early Christian walled settlements in Makuria.<sup>25</sup> Unfortunately, most walled settlements in this region are poorly documented. As mentioned above, Kassi-Markol, Kuweib and El Kab are the only walled settlements for which some evidence of an Early Christian date exists (Crawford 1951:50, pl. 18; 1953b:7-14, pl. I, II, IIIa; Edwards and Osman 1994a:40-2). The characteristics of Kassi-Markol are discussed above. Both

El Kab and Kuweib are situated upstream from the Fourth Cataract on the right bank, where one would travel overland to avoid the cataract.<sup>26</sup> Natural features, such as riverine cliff faces and rocky outcrops were incorporated into the structures and apparently used for defence. Kuweib is situated atop a mountain. As with the Lower Nubian forts, their thick walls, bastions and defensible locations show that defense was one priority in their construction. These two sites differ from the Lower Nubian walled settlements in that they are less organized in the interior, are completely enclosed and irregular in shape. This lack of uniformity may suggest less involvement by a centralized authority in their construction than seems present in the Lower Nubian walled settlements. They also may have been constructed over a longer period.

The variations between the forts of Lower Nubia and those in the Abu Hamed Reach may be accounted for by the differences in the nature of trade and administration between the two kingdoms as related by Ibn Selim (Vantini 1975:603-4). Essentially,

Nobatia was a free-trade zone in which Egyptian merchants were allowed to travel freely and to settle, Egyptian coinage was in circulation, and day-to-day affairs were overseen by a kind of viceroy, the Eparch of Nobatia. Makouria, on the other hand, remained closed to foreigners except by special royal permit, no money was in circulation, and foreign commerce was a royal monopoly (Adams 1993:32).

A greater proportion of trade in Makuria would have been conducted by local Nubian inhabitants due to the strict regulations regarding foreigners conducting business there. Kassi-Markol may have regulated traffic moving overland to Old Dongola. With the stringent government rules in effect, it is doubtful if many traders would have travelled upriver from Old Dongola. Consequently, there may have been a lesser need for customs posts or caravaserai within the kingdom, particularly in the Abu Hamed Reach, as opposed to the border regions and major traffic routes, therefore these areas may have been less of a government priority.

### **Buildings**

Isolated or seemingly isolated structures were located at Arukonarti, Ashkeit I, Gemai West II, Gemai West III, Kashkush, Mohsen el Din, Gerboonirki II, Sulin, Dawki Dawi II, III and the Region of Ali Bek I and II (pls. 24b, 111, 112, 113). Their size, location and the associated remains and artefacts found at these sites suggest that many were probably small farms. Traces of previously cultivated land and the possible remains of a saqia were found at the Region of Ali

Bek I and II, and Arukonarti (Gardberg 1970:49-50). Gerboonirki II was situated on the alluvial plain beside the mouth of wadi Aranirki. Implacements for storage vessels were noted outside the structure (Vila 1977b:52). A small oval storage magazine was discovered at Gemai West III (Adams and Nordström 1963:30) and another rectangular magazine or water storage installation at Mohsen el Din (M.D.Villard 1935:42). Qadus fragments found scattered across Dakka Saab II and surface indications of saqia canals on the alluvial plain (Vila 1975:60) suggest that this may have been another farm site. Little was preserved above the foundation of these buildings and few house plans or artefacts were reported by the discoverers.

Among these structures three types of foundations were noted: those of drystone construction; stone and mudmortar; and stone, mudmortar and mudbrick construction. Structures of X-Group - Early Christian date appear restricted to the first two categories. This group includes buildings at Gemai West II and III, Kashkush, and Mohsen el Din. Houses of Early to Classic Christian date incorporated mudbricks into their foundations. The Region of Ali Bek I and II and Arukonarti fall into this category. However, the limited size of this sample and lack of absolute dates for the buildings prevents any definitive conclusions from being drawn.

Dawki Dawi II and III differed slightly from the aforementioned structures in that they were situated alongside a large wadi (Khor Kalal) and contained little that might suggest farming activity. The small size and irregular shape of these dwellings combined with their location and limited amount of occupational debris might suggest a seasonal or temporary residence. No tombs or churches were found associated with these structures (Vila 1979:49). They may have been used by pastoralists or during cultivation of the wadi when favourable seasonal rains made this practice possible.<sup>27</sup> Unfortunately there is little archaeological evidence from these sites to support this suggestion.

Buildings found at the sites of Abd el Qadir III, Mirgissa I, Abu Sir, Debeira West IV and Faras West I were unlike the 'double houses' in plan and size and their associated contents differed from those expected on a small farm. Mirgissa I is described as a large, rectangular building measuring 18.4 x 15 metres (Vercoutter 1964:60). Numerous amphorae and cup sherds were recovered from the building and several seal impressions were stamped in one wall. Mirgissa I was situated roughly 60 metres from the river on the west bank at the south end of the Second Cataract. It was also close to one end of the portage around the cataract (Vercoutter 1970b:fig.4). The X-Group - Early Christian settlement Mirgissa III was found nearby (Adams and Nordström 1963:30).



Abd el Qadir III (5-O-16) (pl. 36) was also situated on a rocky outcrop overlooking the Nile at the north end of the Second Cataract. It was a large, stone structure, roughly rectangular in shape, with eight rooms and a courtyard. The walls were approximately 50-60 cm thick and the building, measuring about 14 x 23 metres, was considerably bigger than structures in the neighbouring settlement of Abd el Qadir II. Large quantities of amphorae and drinking vessel fragments were recovered from the building and the village (Adams 1962b:17).

At both sites the structures and associated settlements were occupied only during the transitional X-Group - Early Christian phase and the Early Christian period. Additionally they were at opposite ends of the navigable portions of the Second Cataract. Both have been described as "caravansarai" or "taverns" (Adams 1963:39; Vercoutter 1970b:35). Their locations would have been optimal for servicing voyagers travelling along the Nile. They were large enough to accommodate several individuals and sturdy enough to tolerate such usage, but their exact function remains uncertain. Facilities to house and protect animals were lacking at Mirgissa I. A small enclosure was found in the settlement near Abd el Qadir III. If trade was largely conducted via riverine traffic then an enclosure to protect a caravan or herd would not have been required and these buildings may well have been rest stops for weary travellers, however, the protection provided by them would have been minimal. Finds of large quantities of amphorae sherds and fragments of drinking vessels were made in both places. While this could suggest a tavern, alternatively it may suggest a religious establishment where libations were offered.<sup>28</sup> Although the latter suggestion seems somewhat unlikely, little is known about the religious practices of the X-Group people. Libations to the gods were offered during the Meroitic period as is evidenced by the many offering tables of this date. It is possible that libations were also made during the X-Group period. Religious beliefs and rituals of the earlier period would continue to be practiced into the Early Christian phase by those who had not embraced the new faith.

Vercoutter suggests that Mirgissa I and III were abandoned at the beginning of the Classic Christian period as the desert track between Korosko and Abu Hamed became the preferred route for travellers and traders (Vercoutter 1970a:156-7). The unusually high floods that occurred toward the end of the Early Christian period and beginning of the Classic Christian period (Gardberg 1970:15; Trigger 1965:162) may have made the Nile more difficult to traverse in this region, thus motivating traders to choose an alternate route. Certainly the damage noted at Meinarti and Kasanarti (Adams 1965a:158-9; 1968:188-9) demonstrates the destructiveness of the inundations at a local level, during this period. In the mid 8th c A.D., the Abbasid Caliphate

complains of Nubian failure to pay portions of the Baqt and of Blemmye raids (Adam 1977:454). These factors could have affected the volume of trade moving between Egypt and the Nubian kingdoms. The need for whatever function the buildings at Abd el Qadir III and Mirgissa I served may have ceased with the reduction in trade. The decrease in travellers through this area may also explain why the majority of forts in this region contain little Classic Christian material. Sheikh Daud, Sabagura and Ikhmindii II are all largely Early Christian in date as are the enclosures at Farki II and Dorsinkid discussed below.

A two-storey high, round tower was found at Abu Sir (pl. 36). The upper storey was likely constructed of mudbrick while the lower storey and foundations were of stone and mudmortar. It was sturdily-built with the walls of the lower storey measuring roughly ten metres in diameter and being one metre thick. It was located on an island but not primarily defensive in nature as "the rocky outcrop on which it stands is by no means the highest one ... Moreover, it does not command any important arm of the river" (Adams and Nordström 1963:38-9). Its use is uncertain as is its date. Many Early Christian amphorae sherds were associated with the building (Adams 1961b:38). Perhaps its function was similar to that of Mirgissa I and Abd el Qadir II.

In 1963, the Polish mission at Faras West uncovered two large, roughly square, two-storey mudbrick structures later referred to as the Eparchs' palace (no. 2 on pl. 37) (Jakobielski 1981:40; Michalowski 1964:169). Staircases were centrally located in both and rectangular vaulted rooms were arranged around them. Some of the walls reached a metre in thickness. Domestic occupation debris was recovered from the interiors. These structures were vaguely reminiscent of the two-storey edifice at Debeira West IV of the same date. At a later date the structures were joined. Together the buildings measured roughly 20 x 30 metres. Unfortunately, little information is available concerning these structures. It was suggested very reasonably, based upon the structures' proximity to the Cathedral, that the buildings were the residences of the Bishop or the local ruler (Jakobielski 1981:40).

At Debeira West IV (R-8), the Classic Christian village was constructed around a two-storey, roughly square, mudbrick edifice of Early Christian date. It was comprised of rooms 33-39, an entrance corridor (68 and 72) and two towers (72 and 73) which flanked the entrance on either side (Shinnie and Shinnie 1978:3-7) (pl. 24a). The core of the structure was square and consisted of three long, rectangular rooms that were subdivided into two much like the 'double houses'. The structure measured roughly 11 x 16 metres and had walls about 80 cm thick. The central location of this building particularly with regard to the later settlement seems indicative of

its import but its function remains uncertain. Domestic debris, bins and storage vessels were found within and a small storage cellar was found in room 36. "This suggests that, whatever the public or religious purpose for which the building had originally been intended, it was not long before it was changed to more mundane ones (Shinnie and Shinnie 1978:6). However, there was nothing to indicate that it ever served a religious purpose and no analogous structures of religious function can be identified. It seems more probable that the structure was used as a storage magazine. Similar subfloor crypts were found in Ballana period structures at Qasr Ibrim. Adams suggests that these may indicate that the "massive Qasr Ibrim houses may have been designed more as magazines for the safeguarding of grain stores and goods than for everyday living" (Adams 1977:401). The large, Early Christian edifice at Debeira West IV may have served a similar purpose.

Within the Northern Sudan at Soba East, there is ceramic evidence which suggests that the use of Building F (mound Z2) continued into the beginning of the Medieval period (pl. 38). The structure measured 40.5 x 27 metres, and was roughly rectangular. The primary building consisted of a series of small square rooms, three across the north end, two adjoining rooms on both the east and west sides and possibly three or four across the south end, arranged around a larger square courtyard. Rooms were later added on to the west side. Floors were sand and seven hearths were discovered. The superstructure was constructed of red bricks measuring 41-36 x 19-17 x 6 cm although little of it remained and the foundations were of stone. Occupation of the building seems to have ceased around the 7th c A.D. and the edifice was destroyed. Large post-hole enclosures were then constructed on the site (Welsby and Sjöström 1994:178-80; Welsby 1994:188-90). Little was discovered which would indicate the function of the building and no analogous structures have yet been discovered. Based upon its size and the discovery of Eastern Mediterranean amphorae sherds, and some gold wire, the excavators suggested that it was an official building of some kind possibly used for "the housing of small semi-independent groups of people although what exactly it may have been is uncertain" (Welsby and Sjöström 1994:180). Due to the imported nature of some of the finds and the relatively high value of the gold wire combined with its portability for ease of trade, I suggest that Building F may have functioned as a caravanseri. The original structure of the building was accessible by a single entrance and had a series of small rooms around a larger courtyard containing a hearth. It could have accommodated merchants and their goods easily. Similar structures, known as *wekalehs*, were found in Egypt during the early Islamic period. These functioned as inns, storage units and shops for travelling

merchants (Castel 1978).

### Enclosures

The enclosures appeared to fall into two separate categories, those in Lower Nubia along the Nile and those in deserts such as the Bayuda. In Lower Nubia, the Scandinavian Joint expedition discovered several areas on the edge of the Nile enclosed on three sides by drystone walls and on the fourth by the river. These sites included Ali Bek I, II, Dorsinkid and Farki I. Farki II was similarly constructed but enclosed by a stone wall on all four sides (pl. 39). Traces of a mudbrick building were found inside the enclosure at Farki I and some traces were identified outside the wall at Dorsinkid, but generally these enclosures contained little structural remains or artefacts. The walls were of casemate construction with a rubble core faced on either side by larger roughly cut stones. No mortar was used in construction. Walls were up to three metres in height and the areas enclosed were sizeable and roughly rectangular in shape. For example, Farki I measured 260 x 170 metres (Gardberg 1970:47). No evidence of mudbrick construction was found at any of these sites. Several openings that could be interpreted as gates were found on the desert side of the enclosures, but bastions, towers and fortified gates were absent unlike those found in the walled settlements. The dating of these sites is tentative at best. Architectural affinities and the similarity of site locations suggest that these sites may be of roughly the same date. Ceramic evidence from Farki II and Dorsinkid indicated an X-Group to Early Christian date (Gardberg 1970:47).

Despite the lack of towers and fortified gates, defensibility and protection seem to have been significant factors influencing their construction. Farki I, Dorsinkid, Ali Bek I and II were all constructed beside a steep and rocky slope on high outcrops overlooking the surrounding area. Ali Bek II is described as "enclosed by stone walls on three sides and the ground outside these walls slopes steeply into wadis. The fourth side, facing the Nile, consists of a labyrinth of rocks which are rather difficult to climb" (Gardberg 1970:49). All were located on the east bank of the Second Cataract between Khor Musa Pasha and Abka, an area with noticeably more settlement on the west bank. No similarly enclosed sites were located on the west bank during the West Bank Survey conducted by the Sudanese Antiquities Service.

It is suggested by Gardberg that these structures may have been temporary retreats used by the local inhabitants during brief enemy attacks or raids. "The walls would be adequate to resist a cavalry attack and might well have served this purpose" (Gardberg 1970:47). The rocky

nature of the area and steep sloped wadi sides and Nile banks would have made the use of cavalry difficult at best therefore a cavalry attack in this area seems unlikely. As most settlement sites were on the west bank (possibly for reasons of defence from nomadic groups such as the Blemmye as aforementioned) the need for five large, protective enclosures on the less occupied east bank within a 7.6 km distance of one another is puzzling. (Assuming that they in fact do date to the same period.) Habitation debris was distinctly lacking at these sites so it is unlikely that they were occupied for extended periods of time and may have been "a more permanent form of *zariba*, here constructed of stone and not of thorny bushes" (Gardberg 1970:47). Were these used as animal enclosures some organic debris might be expected; unfortunately, its absence or presence was not reported for any of the enclosure sites. However, this seems the most plausible explanation of site function.

These sites seem to provide permanent protection of a minimal nature for a large area. The permanent nature of the sites seems to imply that they were frequently reused and their size suggests at least occasional use by large numbers of animals and/or people. Commencement or termination of an overland route along the east bank, around the Second Cataract and portions of the *Batn el Hajar*, would account for the number and size of these enclosures. Protection provided by the natural microenvironment of the cataract around the enclosures may have made stronger defensive structures unnecessary. The high volume of trade moving through Nobatia at this time could account for the size and number of the enclosures. The Baqt treaty alone mentions the exchange of 360 slaves, 1300 ardeb of wheat, 1300 ardeb of barley, 1300 jugs of *agnin* as well as many bolts of cloth, horses and lentils (Vantini 1975:642).

Desert enclosures tentatively dated to the Early Christian period included Umm Ruweim and Eilai in the Bayuda. Both were situated near water sources and were considerably smaller than those found beside the Nile. At Umm Ruweim, two roughly square stone enclosures were located approximately eleven kilometres from Ghazali in the Wadi Abu Dom. They were of drystone construction and one measured 69 x 69 metres in size. A Christian stele fragment, similar to those at Ghazali, and some Early Christian and possibly Meroitic sherds were found near the site (Chittick 1955a:88-90) potentially indicating usage over a long period. This is also suggested by the finds at Eilai. There, a round stone enclosure roughly 25 metres across was located to the west of the wells in association with Christian pilgrim flask fragments. Some post-Meroitic tumuli were also located nearby (Edmonds 1940a:299).

One structure at Umm Ruweim (pl. 40) was elaborately constructed with a building being

surrounded by two enclosure walls, an inner and an outer one. Rooms were incorporated into these walls and the northwest corner may have been a tower. Four entrances opened into the outer courtyard while there was only one entrance through the inner enclosure wall to the inner courtyard (Chittick 1955a:88). Umm Kuweib, located nearby, has a similar structure of unknown date (Chittick 1955a:90) (pl. 41).

These may be the ancient equivalent of the modern day desert rest houses known as *gahwas*, providing water, shelter and protection from the elements and predators. The geographer and traveller Al Bakri mentions the presence of "eighteen stations" along the desert road of the Wadi Allaqi in 1067 A.D. (Vantini 1975:244) showing that such rest stops did exist. As the aforementioned sites are situated on the desert route from Shendi (Metemma) to Gebel Barkal (Napata) it is probable that they were rest stops or caravanserais for travellers taking the overland route that cuts off the Nile loop between the Fourth Cataract and Atbara rivers. Chittick noted that the "resemblance of the enclosures provided with rooms to the Roman watering station (*Hydreuma*) named Qasr al Banāt on the Wadi el Hammamat route from the Nile to the Red Sea is striking" (Chittick 1955a:90). Several wells, including Beida, Hannik Kalas, Fura, Bir Jebel Fura, and Abu Tulein were located along the route and the greatest distance between water sources was roughly seventy kilometres (Chittick 1955a:86-7, fig.1). It is interesting to note that several pilgrim flask sherds were discovered at Eilai (Edmonds 1940a:299). Their purpose is unknown but perhaps they had been used to carry water or possibly grain for seasonal plantings in the wadis.

These structures may also have been used by pastoral nomads shepherding and grazing flocks and perhaps growing seasonal crops in the Wadi Abu Dom and other wadis. The presence of modern day pastoral nomads grazing herds and planting and harvesting seasonal crops such as cucumber (*ajjuur*) and melons (*shammaam*, *battiikh*) in the wadis of the Bayuda has been observed by the author. "Considerable" rain cultivation has been observed south of Gilif Hills (near Bir Jebel Fiki and Abu Halfa) in the Bayuda desert (Chittick 1955a:86). Al Bakri mentions the presence of nomadic peoples in the Sudanese desert in 1067 A.D. though this post-dates the Early Christian period (Vantini 1975:242-43). During their travels through the Bayuda Chittick and Shinnie noted many tumuli graves, probably of post-Meroitic date, and several Christian graves similar to those at Ghazali.<sup>29</sup> This suggests that the desert route between Shendi and Gebel Barkal and the associated wadis was extensively used during these periods, "the number [of graves] being such as to suggest that the population in the Bayuda region was once much greater

than it is now" (Chittick 1955a:88). "Most [nomadic] pastoralists exploit several sets of food resources; and furthermore, they can be understood as almost always being linked with other populations who have different but complementary modes of production" (Frantz 1979:189) thus their presence along a desert road and usage of the wadis would not be surprising.

Nomadic pastoralists do not seem to have been restricted to the aforementioned region. Many other stone enclosures of unknown date were located in Dar Hawawir between the Wadi Muqaddam and the Wadi El Milk. Several of these were associated with earthen enclosures (hafirs) used for holding rainwater (Edmonds 1940:294, and map 1, 299). The remains of a large reservoir with drainage canals, enclosed by a sandstone wall, were found on the north side of the hill at Jebel el Raqta. Walls of the enclosures were rubble filled and faced with sandstone and mudstone slabs. Although the date of this structure is uncertain, rectangular graves, identified by Arkell as Christian (Edmonds 1940a:303, fn), were located nearby suggesting that this area was in use during the Christian period. The reservoir did not occupy the entire 91 square metres enclosure and had an entrance situated on the northwest side (Edmonds 1940a:296, 301,303). Herds could be sheltered, protected and watered simultaneously. Edmonds noted "good grazing ground in the valley to the north-west and north and also cultivation in the soil flats near Jebel el Humr not far away" (1940a:301).

Hafirs of similar construction were found at Mitnet el Gawwala and Wadi Milh. Two circular stone enclosures were found closely associated with the remains of the walled reservoir at Mitnet el Gawwala. The largest was approximately 65 metres in diameter. The walls of the smaller enclosure stood 1.2 metres high and were about 75 cm thick. Those at Eilai were estimated as originally 1.8 metres high (Edmonds 1940a:296-99, pl.1). This would be sufficient to protect a herd from local predators.

It has been suggested that the hafirs of the Meroitic period were constructed by the government for "the benefit of people and animals during the sowing and harvesting of the areas of rain-fed fields and pasturelands in the wadis [and they] also permitted an effective control of the nomadic population group living nearby" (Hinkel 1994:174). This may also have been true during the Christian period. Control of desert water resources would effectively control a nomadic or semi-nomadic desert population as well as the movement of traders through the area. The placement of customs posts in the Batn el Hajar as related by Ibn Selim (Vantini 1975:603-4) and Abu Salih (Evetts and Butler 1895:262-3) shows that the Christian governments of Nubatia and Makuria were serious about regulating the movements of peoples within the kingdoms.

Similar building techniques used in the hafirs and in the desert enclosures might point to the involvement of a centralized authority in their construction.

Alternatively, marks on stones at the entrance to the Jebel el Raqta enclosure were interpreted by Edmonds as reproductions of animal brands (1940a:301) which if true would further suggest usage of this area by pastoralists. They could also be interpreted as identifying marks of a particular cultural group possibly indicating ownership or territoriality. For example, the Ahamda, a modern nomadic pastoral group found in Khartoum province raising primarily sheep and goats, dig wells or artificial reservoirs near their campsites. Usually only the individuals within the camp use these but "the tribe as a whole assert their rights to water, and nobody can refuse it to a member of the tribe" (Ariotti 1994:90).<sup>30</sup>

As this group apparently occupies the same environmental niche in some of the same locations as a nomadic pastoralists of the Christian period, limited and careful analogies may be drawn.<sup>31</sup> Small groups of Ahamda live in five to seven portable tents constructed of acacia and goat skin and hair mats. "Sometimes, the enclosure for sheep and goats is annexed to the hut, but more often the animals have their own separate enclosures" (Ariotti 1994:90). During years of plenty the entire group with all their tents and belongings moves in an east to west direction and back based on their accessibility to water and pasture. A small amount of millet is also cultivated. In lean years, few adult males move with the herds (Ariotti 1994:90). The settlement pattern presented would be sparse and scattered, restricted to areas of pasture and water plus, as virtually all possessions including shelter travel with the group, few artefactual remains would be left for the archaeologist. Consumption of meat is rare. The diet consists primarily of milk and milk products and dura breads such as *kisra*. "Animals have a social value and are rarely killed for meat; this only happens on particular occasions, like marriages and entertainment of guests" (Ariotti 1994:90). Campsites would therefore have little animal bone or skin waste as few animals are killed and of those that are virtually everything is used or consumed. Their leavings are similar to those found at the post-Meroitic and Early Christian desert enclosures.

Several wells and temporary camp sites of unknown date were located in the south Libyan desert (Hinkel 1979:1-9). Indications of some sort of Christian presence were found at Bir El 'Ein and Laqiya Arba'in (Hinkel 1979:103, 155). It is not unlikely that many of these wells and desert routes were in use throughout the entire Christian period and there are indications in some places of both earlier and later occupation and/or usage. Laqiya Arba'in is on a direct route from Selima to Wara along a south-southwest branch of the Darb el Arba'in (Hinkel



1979:10).<sup>32</sup>

1. The following chronological divisions of the Nubian Christian period have been suggested:

Figure I.1

Gardberg 1970:17-21		Trigger 1965:145-9	
Early Christian I	A.D. 600-750	Early Christian	A.D. 600-850
Early Christian II	A.D. 750-850		
Classic Christian I	A.D. 836/850-950	Classic Christian	A.D. 850-1100
Classic Christian II	A.D. 950-1050		
Late Christian I	A.D. 1050-1150	Late Christian	A.D. 1100-1300
Late Christian II	A.D. 1150-1350		
Terminal Christian	A.D. 1350-1500?	Terminal Christian	post A.D. 1300

Adams 1964:243-7	
Early Christian I	A.D. 600-750
Early Christian II	A.D. 750-850
Classic Christian I	A.D. 850-950
Classic Christian II	A.D. 950-1050
Late Christian I	A.D. 1050-1150
Late Christian II	A.D. 1150-1250
Terminal Christian	post A.D. 1250

These chronologies differ little from one another. The general framework proposed by Trigger is followed here as the usage of structural forms tends to follow a battleship curve and is not necessarily tied to ceramic chronologies or political events. Many buildings are also not securely dated.

2. For example, wares such as R2, U2 and U3 are found during the transitional period between X-Group and Early Christian. Pseudo-Samian fine wares (R4, W3) are found at the beginning of the Early Christian period but are absent towards the end of it and the percentage of locally made amphorae increases (Adams 1962c:249-76).

3. For more information on the geomorphology of the landforms in Egyptian Nubia see K. Butzer and C. Hansen (1968) Desert and River in Nubia. Madison, Milwaukee, and London. pp. 210-21.

4. Many sites in Upper Nubia and the Northern Sudan, while tentatively identified as Christian, have not been specifically dated to a particular Christian phase. In his examination of Upper Nubian settlements of the 1st Millennium A.D., Edwards thoroughly documents the geographical, geological, climatological, and pedological, characteristics of these regions and their potential effect upon settlement so it need not be repeated here (Edwards 1989:13-28, 29-35, 40-2, 50-2, 60-2, 79-81, 93-6, 112-4). Further he reviews the known Christian settlement sites in Makuria and Alwa (Edwards 1989:199-202), but in the absence of chronological information few conclusions may be drawn. Based upon the information currently available, I concur with his analysis. As more excavation is conducted in this region doubtless a more detailed picture will emerge.

5. Please refer to these site names in the site gazetteer for references.

6. For a more detailed description of the X-Group houses at Qasr Ibrim see Plumley et al. 1977:31-7.

7. The original designations given to the houses at Qasr Ibrim as listed in Adams' 1972 field notes are used within the body of this paper. Future publications may refer to these houses as follows: EC1-24 = EC-235-H; EC1-30 = EC-240-U; EC1-28 = EC-238-U; EC1-29 = EC-239-U; EC1-20 = EC-231H; EC1-13 = EC-225-R.
8. In future publications houses X-6, X-17, X2-9 and EC2-12 may be designated EC2-208-H; EC2-217-H; EC2-214-H; and EC2-233-H respectively.
9. The exact dating of structures built later in the Early Christian period at Ibrim is uncertain. Those constructed on top of Early Christian artefacts or buildings and beneath the Classic Christian stratum were given an "EC 2" designation and were presumably built later in the period. The "EC 2" layer did not cover the site uniformly nor was it dramatically distinguishable from the underlying Early Christian material. In other publications buildings EC2-1 and EC2-2 may be designated EC2-209-H and EC2-212-H respectively (Adams 1972:FN:EC2.1).
10. Repeated flooding is thought to have plagued the settlement at Meinarti. "During the next 200 years (following the Early Christian period) the village was attacked repeatedly by floods, and at each rebuilding the walls were, in general, reinforced and made thicker than before" (Adams 1965a:156). This seems to have been a problem that specifically affected Meinarti as there is less evidence for flooding at other Second Cataract sites and the Early Christian period does not appear to have experienced inundations particularly higher than was normal (Gardberg 1970:15; Trigger 1965:162).
11. Walls of similar construction were used in one of the early churches at Faras (Emery 1935:114).
12. Cf. The discussion regarding early settlement at Soba East towards the end of this chapter.
13. There is a difference of opinion among the site excavators L. Barkóczi and Á. Salamon and the ceramic analyst L. Török regarding the length of time separating the first and second settlements and whether there in fact was a period of abandonment at all. Török's arguments are persuasive, particularly when the topography of the site and ceramic finds are considered. It is quite possible that as the settlement became more urban the later dwellings were constructed in different, "free" areas of the site and some were perhaps occupied at the same time as the earlier structures. It should be noted that little of the early settlement was actually excavated. For further elaboration on the ceramic dating and distribution see L. Török (1975c) "Abdallah Nirqi 1964 The Pottery Finds of the Settlement." AAASH 27:361-62.
14. For the full publication of Debeira West II (24-R-3) see P. Shinnie and M. Shinnie (1978) Debeira West. Warminster. pp. 42-44.
15. These figures are based upon prices noted by the author while in the field.
16. For a more detailed interpretation of the symbolism of a modern hosh see J. Boddy (1989) Wombs and Alien Spirits. Madison. pp. 66-75.
17. Evidence for Meroitic and post-Meroitic occupation at Soba is somewhat sparse. A Meroitic ram, now in the Khartoum museum, was discovered at Soba (Shinnie 1961:17) and Weisby has

recovered some late Meroitic and post-Meroitic sherds in area MN11 (1991:279). The earliest phase of building G, situated at the southern end of the site, predates an associated Christian cemetery and "resembles in both plan and section the structure of a number of Meroitic pyramids ... The phase two plan of building G with a rectangular room fronted by a possible pylon and set within a rectangular enclosure bounded by a mud brick wall is reminiscent of the Sun Temple at Meroe" (Sjöström 1993:15). This building represents the earliest structure excavated on the site at present and appears to predate the Christian era.

18. In this region, some modern dwellings of similar form use stalks of dura for the roof and walls.

19. The temple at Kalabsha was actually reused as a church (Curto et al. 1965:77-120).

20. It must be noted that the ditches, glacis, additional enclosure walls and arrow slits found in the earlier period fortresses are missing from the Early Christian ones.

21. For information concerning these Second Cataract forts see D. Dunham (1967) Second Cataract Forts II - Uronarti, Shelfak, Mirgissa. Boston., W. Emery et al. (1979) The Fortress of Buhen: The Archaeological Report. London., B. Kemp (1986) "Large Middle Kingdom Granary Buildings." ZÄS 113:120-36., A. Lawrence (1965) "Ancient Egyptian Fortifications." JEA 51:69-94., G. Reisner (1960) "The Egyptian Forts from Halfa to Semna." KUSH 8:11-24., G. Reisner et al. (1960) Second Cataract Forts. I - Semna, Kumma. Boston., H. Smith (1976) The Fortress of Buhen: The Inscriptions. London., G. Steindorff (1937) Aniba. bd. II, Text. Gluckstadt., B. Trigger (1982) "The Reasons for the Construction of the Second Cataract Forts." JSSEA 12 (1):1-6., J. Vercoutter (1970b) Mirgissa I. Paris.

22. For the text of this inscription see G. Vantini (1981) Christianity in the Sudan. Bologna. pp. 30-1.

23. For a record of these accounts see G. Vantini (1975) Oriental Sources Concerning Nubia. Heidelberg and Warsaw. pp. 58-59, 80-81, 95, 639.

24. For the text of the Baqt treaty see G. Vantini (1975) Oriental Sources Concerning Nubia. Heidelberg and Warsaw. pp. 638-42.

25. It is generally believed that Nobatia "had ceased to exist as an independent political entity by the middle of the seventh century" and was governed by Makuria (Adams 1977:453). Cf. W. Adams (1977) Nubia Corridor to Africa. Princeton. pp. 453-4.

26. The two forts of Jebel Kelidob were located at the downstream end of the Fourth Cataract in a position where they could regulate travel through the area. Titherington suggested that it may have functioned as a caravanserai due to the numerous gates and strong fortifications. Although the date of this fort is uncertain it may have been constructed during the Early Christian period as Titherington found both "painted Christian and fine imported ware of the Roman period" (Titherington 1939:269). Were these structures of Early Christian date then both ends of the Fourth Cataract would have been controlled by fortresses.

27. This is practiced in modern Sudan. I have observed the cultivation of wadis after heavy seasonal rains.
28. The suggestion that the "tavern" at Meinarti (5-O-16) might actually have been used for offering libations was provided by P. Lenoble (Lenoble 1991:personal communication).
29. Occupation at Ghazali is of Early and Classic Christian date (Shinnie and Chittick 1961:24-5).
30. The social structure of the Ahamda is based upon agnatic kinship; relationships are defined by a common male ancestor and groups are subdivided based upon genealogical distance. The tribe as a whole is referred to as a qabila. Tribal branches are called fari', and the smallest units are called sons (awlad). For further information concerning how a tribe and genealogical relationships are defined among the Ahamda see M. Arioti (1994) "Ethnological Contribution to the Study of Prehistoric pastoralism in the Khartoum Province: Report on the Field-Work (1987-1990)." in Études Nubiennes. v.II. Ch. Bonnet (ed.) Genève. pp. 90-91.
31. It is recognized that kin relationships used to form an Ahamda group (agnatic kinship) versus those at work within a Christian group (possibly matrilineality and matrilocal residence (Boddy 1995:22)) were likely different.
32. The first written reference to the "40 days road" dates to A.D. 1698 but Egyptian court documents dating between A.D. 1562-9 indicate that Egyptian merchants were likely trading with Arabs in north Kordofan and Dar Fur (Hasan 1979:209). Intra- and inter-regional trade may have used portions of this road in earlier periods particularly after the introduction of the camel.

## CHAPTER 2

### Classic Christian Period Dwellings

As with the Early and Late Christian periods, when compared to the rest of Sudan, a disproportionate number of excavated Classic Christian sites have been documented in Lower Nubia as a result of the salvage operations of the UNESCO campaign. Outside Lower Nubia, classification of most Classic Christian settlement has been based on analysis of surface remains and few excavations have been conducted. For example, all of the sites in the Dongola Reach have been identified in this manner. Excavations of Christian sites in Upper Nubia and the Northern Sudan have seldom focused on domestic structures of Classic Christian date, thus this discussion is even more regional in nature than are the chapters concerning Early and Late Christian structures. Remains dated to the Classic Christian period have been discovered in the following places:

#### Lower Nubia and the Batn el Hajar

Occupation Site	Serrarti Island I
Settlements	Abdallah Nirqi Ad Donga Arminna West Debeira West II (24-R-3) Debeira West IV (24-R-8) Debeira West VII (24-R-44) Gendal Irki Gindinari Kasanarti Island Kasr Iko Kulubnarti V ? Kulubnarti VII Meinarti Island Qurta ? Shamanarti Island Tamit
Walled Settlements	Abkanarti Island Akasha ? Faras West I Gebel Adda Gezeira Dabarosa I Kalabsha Naga el Scheima Philae Qasr Ibrim Sabagura

	Sheikh Daud Sunnarti ?
Monasteries	Argin IV ? Ar-Rammal Debeira West I (24-R-1)? Gendal Irki ? Kulb III ? Kulubnarti III (21-S-10)? Qasr el Wizz
Buildings	Adnenarti Region of Ali Bek I Region of Ali Bek II Arukonarti (Abka)
<u>Abri-Delgo Reach</u> Occupation Sites	Absire Aliinarti Ardimiri Dakka Saab III Debba I Sai Satai ?
Settlement	Fagirinfenti II Fogo North Jawgul ? Kajbar Toshkei
Walled Settlements	Kisseenfarki II ? Jebel Nauri W Jebel Sesi ?
Buildings	Ademdulli II Toona
<u>Dongola Reach</u> Settlements	Sheikh Batran El Ghaddar Southeast Jogob Sheikh Mohammed ? Haj Magid Hambukol ? Letti West II Letti West III Letti West V Nugdumbush Urukutti
Walled Settlement Monastery	Old Dongola Hambukol (North Kom) ?

Bayuda Sites and Sites West

Monastery	Ghazali Ain Farah ?
Enclosure	Umm Ruweim

Abu Hamed Reach

Walled Settlement	El Koro ?
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Shendi Reach

Occupation	Jebel Abayud
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Gezeira

Settlement	Soba East
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Settlements

The Classic Christian period witnessed the flowering of Nubian Christian culture and increased urbanism. Communities became larger, more centralized and settlement within them denser. Several innovations occurred, including the widespread introduction of latrines into houses, perhaps heralding an increase in functional differentiation between rooms within houses of common folk, and the incorporation of a plaza or square into the town centre. Large structures, possibly palaces or public buildings were also incorporated into some settlements, probably reflecting increased wealth and stability within the population.

"It would seem that these changes were connected with the political and economic power of the Kingdom when there was no need to bother about a defensive system" (Jakobielski 1981:38). Jakobielski's analysis seems correct. Internal stability and the absence of hostilities from external sources seem to have played an important role in the formation of Classic Christian communities. Successful dealings with the Caliph al-Mutasim in Baghdad must have led to the recognition of Christian Nubia as a powerful kingdom. The beginning of the Classic Christian period coincides with the visit of King George I of Dongola to the Caliph in Baghdad (c. A.D. 835). Negotiations concerning the Baqt treaty were conducted resulting in

a bilateral treaty of non-aggression and non-intervention, guaranteeing security of the Moslem frontiers (Upper Egypt) and the reduction of the Baqt. ... Specific concessions ... were the release of certain Nubian prisoners, the resumption of an Egyptian payment of commodities in exchange for the Nubian slaves, and a stipulation that the exchange should be made every three years instead of every year (Adams 1977:455).<sup>1</sup>

In the following years, Egypt appears to have posed little threat to the Nubian kingdoms. Only one brief period of hostilities is recorded. A group of Arabs led by Omari, clashed with the



Nubians over a period that lasted roughly seven years. Omari was eventually murdered by some of his men and his head presented to Ibn Tulun probably in A.D. 868.<sup>2</sup>

Under the Tulunid and Ikhshid rulers Egypt, despite some political turmoil within the country, became increasingly independent from Baghdad. "The Ikhshid ruled Egypt as Ibn Tulun had done, with a strong army, competent officials and sound finances" (Watterson 1988:155). This statement may not be entirely correct. Nubians are documented within the troops of Ibn Tulun<sup>3</sup> and there is little textual evidence to indicate any hostilities or difficulties with the Nubian kingdoms. Following Ibn Tulun, the Egyptian government was concerned with its own internal problems and appears to have undergone a period of instability with at least thirteen different rulers in thirty years. At this time raids of the oases and Upper Egypt by Beja and Nubians were recorded by Arab historians. The capture of Ibrim by Nubians in A.D. 956 and a raid into Upper Egypt as far as Akhmim in A.D. 962 were reported (Vantini 1975:386, Ibid. 1981:116). Evidently government control of Upper Egypt was relatively weak and both Beja and Nubians were the aggressors, taking advantage of this situation.

Relations with the Fatimid Caliphate (A.D. 969-1169) that followed seem to have been peaceful. In A.D. 969, the Fatimid ruler Jawar as-Siqulli sent Selim al-Aswani to George II of Dongola with a request to resume payment of the Baqt and an invitation to become a Moslem.<sup>4</sup> While there is no record of the response by King George II "it is however, beyond any doubt that the outcome of the mission of Aswani was the establishment of a durable alliance between the Fatimids and Nubia" (Vantini 1981:123). It is in this atmosphere of relative peace and power that Nubia was able to develop and flourish until the middle of the Late Christian phase.

This is likely the reason for the lack of enclosure walls around Classic Christian villages founded during the period. Arminna West, Tamit and Debeira West IV were primarily of Classic Christian date and were not surrounded by girdle walls. Gindinarti and Murshid West were also apparently constructed without enclosure walls, however information concerning these sites is sparse and Murshid West was very denuded (Mills 1966:14-5; Monneret De Villard 1935:166-8). It has not yet been determined if settlements within the Dongola Reach were contained within perimeter walls and not enough information concerning Mahas sites is available to learn if girdle walls noted there were constructed during the Classic Christian period. Enclosure walls that surrounded Classic Christian villages, as opposed to monasteries, were as a rule constructed either before or after this era. There is little to suggest that girdle walls from earlier phases were maintained or repaired during this interval.

Ceramic materials associated with the fortifications at Old Dongola were dated mainly to the Early Christian and post-Christian phases. Most structures found were dated between the 6th and 7th c A.D. with an additional tower added during the 7th c A.D. (Godlewski 1991:103-9, 111). Although conclusive statements concerning the development and dating of the Dongola walls cannot be made at present due to the limited scope of excavations there, the information available suggests that work conducted on the walls during the Classic Christian period was minimal. Walls at Gezeira Dabarosa I and Naga el Scheima date from the Early Christian phase, while those at Abkanarti were Late Christian (Almagro et al. 1965:92; Bietak and Schwarz 1987:18-9; Verwers 1962:33). Construction of Sunnarti was tentatively dated between the 11th and 12th c A.D., either at the very end of the Classic period or during the Late Christian phase (Dinkler 1985:5).

No repairs or renovations were made to the Meroitic enclosure wall at Qasr Ibrim. "It is also apparent that in the Classic Christian period the fortification walls, which had received no attention since late Meroitic times, were in a very ruined condition" (Adams 1982:29).<sup>5</sup> Like Qasr Ibrim, the fortification walls surrounding Gebel Adda were originally constructed in late Meroitic times and only renovated during the Late Christian and Turkish periods (Millet 1967:62). Work conducted on the enclosure wall at Philae is reported in Greek inscriptions dating to the 5th and 6th c A.D. (Bernand 1969:233, 282-85). No similar record of repairs to the fortifications has been discovered for the Classic Christian period. While this is suggestive, it cannot be taken as proof that such work did not occur then.

Of the walled sites actually constructed during the Classic period, many were monasteries. These include Qasr el Wizz, Ghazali and perhaps Kulubnarti III and Kulb III. Enclosure walls surrounding these Classic establishments had few defensive qualities and likely functioned as a barrier between the sacred and profane worlds. Monasteries and their girdle walls are discussed in detail in chapter 4.

Settlements of the Classic Christian phase were characterized by a proliferation of individual living units tightly grouped together in blocks with many units sharing common walls. They also become more centralized and nucleated than in previous periods with structures arranged around an important feature such as a church, square, or perhaps a public building. The growth of the Classic Christian villages appears largely organic and unplanned. It may have been accompanied by an increase in population as many Early Christian villages at the same sites were smaller, contained fewer structures and were more spread out. Town configuration seems more

strongly influenced by topographic and environmental features than by any other factors. Most of the larger Classic sites were situated on small mounds which rose above the surrounding alluvial plain and were orientated parallel to the Nile. These characteristics were evident at Abdallah Nirqi, Arminna West, Debeira West IV, Tamit, Toshkei and the later Classic settlement at Meinarti and largely confirm analyses of Classic Christian towns made by earlier scholars (Adams 1977:489-92; Jakobielski 1981:38; Trigger 1965:148).

At Abdallah Nirqi, the first transitional X-Group - Early Christian settlement was constructed on the top of a terraced hill overlooking the Nile, and to the east of it. A church, known as the central church, constructed on the top of the hill was the focus around which the village grew and it was incorporated into the late period fortified enclosure wall. It was founded in the mid 8th c A.D. or perhaps slightly earlier (Török 1975c:362). The first period of the second settlement, characterized by the presence of Early Christian 'double houses', occupied the same area as the earlier structures and spread across more of the terraces on the hill. Suburbs to the east and west of the central hill were formed and the settlement was dispersed (pl. 19).

During the Classic Christian period, Abdallah Nirqi witnessed increased urbanisation as the settlement became more centralized and concentrated. Houses filled the gaps between the earlier dwellings and the village became denser. The Classic houses were constructed as individual units or in small, close blocks. "Thus the settlement structure of Abdallah Nirqi can be regarded as a tripartite unit: a linear settlement with a centre in the middle, a formation that came into being spontaneously, as a result of natural conditions" (Hajóczki 1974:340).<sup>6</sup> It was thought by the excavators that the intensive building that accompanied the Classic Christian phase showed the population of the town had increased substantially and perhaps its relative importance had also expanded (Barkóczy and Salamon 1974:316).

The tight clustering of living units can also be seen at Debeira West IV (R-8) and at apparently at Toshkei (pls. 24a, 116). Toshkei remains unexcavated at this time and thus far only a sketch plan of the surficial ruins is available (Vila 1978b:52-5). At Debeira West IV, rooms to the east and west of 33-39 form groups of dwelling units (pl. 24a). Some were separated by narrow streets, while others were contiguous with each other. Individual house units are listed in the tables below. The Early Christian edifice, comprising rooms 33-39 and towers (72,73), seemed to form the nucleus of the village and the later Classic Christian buildings spread outward from this point. Growth was primarily in a southward and westward direction, restricted by the Nile to the east and a wadi in the north. Domestic occupation debris was recovered from the

Classic Christian levels of rooms 33-39. The building's function during this period is uncertain although part of the structure seems to have served as a midden (Shinnie and Shinnie 1978:7-8). An open plaza (c. 12.5 x 28 m) was situated in the southern part of the site between housing blocks 138, 139, 140, 137 and rooms 128, 130, 131. The Early Christian settlement, denoted on plate 24a in black, was substantially smaller than the later Classic Christian village, marked by outlined walls. Based upon plans given by the excavators, the Early Christian village covered a minimum estimated area of 50 x 55 metres while the Classic settlement was substantially larger measuring roughly 140 x 80 metres in size. Following a brief hiatus after the Early Christian phase "the site was reoccupied after about A.D. 800 and the town was greatly enlarged" (Shinnie and Shinnie 1978:7).

Excavation at Arminna West concentrated on three areas, designated A, C and N, and much of the work seems to have focused on the public building in area A (Weeks 1967:10-21, 30-4) (pl. 25a). Structures dated to the late Meroitic, X-Group and Early Christian periods were found beneath area A (Weeks 1967:30, 34). X-Group and Early Christian structures were also found to the north of the Classic village and the church in that area was rebuilt during the Classic Christian phase (Trigger 1967). While the density of settlement during the Early Christian period cannot be determined with any reliability, it does seem to have been widely spread, with structures in the northern, western and central sectors. Occupation of the Classic phase seems restricted to the central area. Although the north church was rebuilt during the Classic Christian period few structures were associated with it and the excavator thought that it might have been maintained as an "adjunct to the cemetery" (Trigger 1967:24).

Again the Classic town pattern seems to have been somewhat influenced by the topography of the region. It was located on the highest natural mound in the area overlooking the Nile. The approximate centre of the village was 125 m. a.s.l.. The settlement spilled down the slope around this height, parallel with and towards the river from this point (Trigger 1967:fig.1). Remains of the Early Christian period were also situated on the higher reaches of the mound around 124 m. a.s.l.. Essentially the nucleus of the settlement was arranged around this geographic feature. The dwellings themselves were grouped in blocks separated by thin roads; however, as much of the town plan was drawn from exposed surface features, it is difficult to differentiate individual units and often rooms, and buildings appear to lack entrances. As much of the central portion of the site remained unexcavated it was not possible to determine if special focus or importance was paid to a specific structure in this area. The position and relative

isolation of the public building in area A on the southwestern edge of the village may be indicative of its importance. Contact with the village was maintained only on its eastern side. Public buildings and palaces are discussed further below. Three plazas were noted, the forecourt in area N, area C-U-7 and possibly area A-U-14.

Tamit was founded directly upon bedrock and was largely Classic Christian in date. Sherds dating to the Early Christian period were located but corresponding occupation levels from which they could have originated were not discovered despite extensive work in the area by two Italian missions (Donadoni 1967:83-4; Monneret De Villard 1935:144-66). This may suggest that settlement in the earlier and later periods was much less concentrated and sparser than during the Classic phase. Tamit was orientated parallel to the Nile and situated on a small mound that rose above the surrounding alluvial plain (pl. 42, 43). Most of the settlement was constructed between 121 and 123 m. a.s.l. (Donadoni 1967:17). It is the shape of this mound that seemed to dictate the general form of the settlement. Where the upper terrace was wider from east to west, so too was the settlement and the converse also appears true. In particular, the west side of the townsite was curved following the contour of the hill. Dwellings appear to have been built around a large open square in the centre of the site, while numerous churches dot the lower elevations of the hill around the fringe of the settlement. Like Debeira West, individual housing blocks were readily identifiable. For example, houses 3, 2, and 6 form separate units although they abut the walls of their neighbours.

At the beginning of the Classic Christian period, at Meinarti both house form and settlement distribution was similar to that of the earlier phases on the site. The island was greatly denuded by repeated flooding and buildings constructed at this time resembled the earlier X-Group houses there, possibly due to the need for constant repair and construction. Early Classic Christian levels at Kasanarti, another Second Cataract site, also displayed these characteristics (Adams 1965a:158-9; 1968:188-9; 1977:489). It is possible some portions of Kulubnarti were also affected. As discussed in chapter 1, the inundation levels seem to have been abnormally high at the beginning of the Classic Christian period, perhaps until the 10th c A.D. (Adams 1964:221; Gardberg 1970:15). Sites situated on higher heights were probably not as greatly affected by the flooding as were the islands. The best preserved archaeological features were found on the islands' highest elevations.

Towards the end of the first half of the Classic Christian phase, inundation levels probably declined to around normal (Gardberg 1970:15). Likely coinciding with this decrease,

at the end of the tenth century, there was a major 'urban renewal' at Meinarti which witnessed the rebuilding of the entire village within a matter of a few years. The new houses were not substantially built, and were tightly clustered together as before, but individually they were more spacious than any earlier Nubian dwellings except the 'de luxe' houses of the Meroitic élite. The village church was also rebuilt once again (Adams 1977:489).

The arrangement of the later Classic village (stratigraphic level 8, phase 5) at Meinarti was similar to that found at the sites mentioned above (pl. 44). Blocks of houses separated by small streets were constructed around a large plaza (marked A), the church and cemetery, and positioned relative to the contours of the island with settlement concentrated on the upper terraces. The town was orientated north-south, naturally limited by the size and shape of the island and parallel to its shores. Although the Classic site seems to occupy a larger area and contain a greater number of dwellings than the earlier villages at Meinarti, this may be misleading as the earlier levels were substantially damaged by flooding. Consequently, the population and site size relative to earlier phases cannot be reliably estimated.

That many other Classic Christian sites were situated upon small hills, like Tamit, Adenarti, Abkanarti, Toshkei and Arminna West may not be a coincidence. Settlement at Toshkei is described as "elles sont situées, soit sur de petites buttes" (Vila 1978b:52). Flood devastation may be one factor that led to the eventual abandonment of some early Classic Christian villages around the 10th c A.D. (Adams 1964:240; Gardberg 1970:180). Elevated locations would serve to minimize the destructive aspects of a high flood, yet benefit from newly created cultivatable land. Weeks found little evidence to suggest that high floods, between the 9th and 10th c A.D., affected the village at Arminna West as it had Meinarti (Weeks 1967:6). High inundation levels could have been particularly important at a site such as Arminna West where there was little cultivatable land in the immediate vicinity. It was the opinion of the excavators that the population of Arminna West was the "maximum which its own lands could have supported" (Weeks 1967:6). The amount of seluka land did increase to the north of the site towards Toshka as the valley opened in to the Tushka plain (pl. 1).<sup>7</sup> A high flood might expand the amount of cultivatable land (seluka land) available and consequently increase the quantity of food procurable.

In all probability, a long-term trend to higher floods would entail ... a higher-lying, broader, and sandier channel; higher and more massive banks, ... and lateral erosion of valley margin dunes or flooding of intradunal swales, so as to expand the alluvial plain.

Once a new steady state was established, the agricultural resource base would be considerably greater than before, as well as increasingly stable (Butzer 1976:52).

Classic sites appear urban and more densely populated than the earlier ones based on building distribution and relative number. Trigger has also postulated an increase in population at this time (Trigger 1965:162). The population of villages such as Tamit, Arminna West, and Debeira West IV has been estimated between 200 and 400 persons (Adams 1977:488). Several factors may have influenced population levels, with peace and political stability as discussed above, being foremost among them. The possibilities of food surpluses, initially created by high floods of the late Early Christian and the beginning of the Classic Christian phases, had the potential to offset starvation and reduce malnutrition, thus increasing resistance to disease within the population. The return of flood levels to normal around the 11th c A.D. would add further stability (Gardberg 1970:18). It is also possible that occupation of areas where agricultural land was elevated above the Nile, led to increased utilization of saqia irrigation. This would have increased the carrying capacity of the land and enabled a larger population to be supported in these regions.

During the Classic phase, the population may also have experienced a drop in mortality rates, particularly those of infants, due to an improved food supply and especially to the widespread use of latrines. Cesspits, such as those found at Meinarti and Debeira West IV, were often deliberately constructed near one another, as discussed below. This would restrict the contaminated areas within the village and lead to more sanitary living conditions. Again this would lead to an increased resistance to disease among the population.<sup>8</sup> Nutrition levels may also have affected the fertility rate as "women need to maintain a certain critical body weight in order to have the fat reserves necessary for regular ovation" (Yaukey 1985:170). At many of these sites increased access to a larger resource base and more secure food source might encourage an increase in the local population as individuals migrated to take advantage of these benefits besides those offered by a larger town. In Lower Nubia, the area in which the most detailed studies have occurred, the number of Classic Christian settlements (or occupations) is roughly half that noted during the Early Christian period. Migration might be one factor accounting for this phenomenon.

In addition to the local topography, settlement shape was also determined to some degree by centralized urban planning. Plazas appear for the first time during this period. Dwellings

were arranged around plazas or important edifices such as churches, public buildings or palaces. That houses were tightly clustered around plazas, such as at Tamit, suggests that inhabitants purposefully chose not to build in these spaces or were forbidden to do so. Some measure of a central controlling element is clearly indicated at Qasr Ibrim where virtually all the X-Group and Early Christian structures were levelled to create a large elevated plaza that ran between the Cathedral and the Temple church. Staircases led up to the plaza. It was not until the Late Christian period that structures again occupied this space (Adams 1978:29; Plumley 1975:6-8). As discussed below, with some variations, houses themselves also follow a standardized plan perhaps suggesting groups of local builders. Latrines of neighbouring houses, as found at Meinarti and Debeira West, were constructed close to one another. "A degree of central planning is implicit in the fact that groups of contiguous houses were always so oriented that their latrines were located adjacent to their common corner - thus limiting the number of 'contaminated' areas" (Adams 1968:190). Interestingly this apparent centralization also coincides with a more widespread appearance of large public buildings or palaces within settlements.

Within Upper Nubia and the Northern Sudan, little can be said regarding the shape or factors controlling the growth of Classic Christian settlements because work in this region has been sparse. Settlement at Old Dongola seems to have "grown gradually, but in accordance with a already existing street grid. The block of houses was delimited on the north and south by streets. Entries to the particular dwellings built side by side led from the south" (Medeksza 1986:78). As the capital developed during the Early Christian period, the settlement expanded northward from the citadel and Kom B along the desert edge, for a distance well over 500 metres. Basically, available space parallel with the cultivated region, but not in it, was utilized. Initially Early Christian House PCH-1 was constructed in a relatively open area with no neighbouring buildings. This open space was gradually filled with structures of Early to Classic date (Godlewski 1991:79-80).

Within the Abri-Delgo Reach, a similar pattern seems to have been followed. Occupation at Adendulli II, Dakka Saab III, Debba I (Sarkamatto), Fagirinfenti II, Satai, and Toshkei was located outside the area available for cultivation, either on the desert edge or on rocky terraces overlooking the Nile. These settlements were also orientated parallel to the river, as was Old Dongola. This alinement is clearly visible in the distribution of buildings at Toshkei as shown in plate 115. Many of the 70 houses found at Debba I (Sarkamatto) were laid out in an organized fashion along a road that ran parallel to the river (Vila 1975:29-31). As with Old Dongola, this



might be indicative of some form of regulated urban planning within these settlements.

Figure II.1

LOWER NUBIAN CLASSIC CHRISTIAN TOWNSITES  
ARRANGEMENT AND SIZE

Site	Size (m)*	Topographic Location	No. of Plazas	Other Features
Abdallah Nirqi (central area only)	c. 80 x 70	On hill overlooking the Nile, with east and west suburbs parallel to river.	? poss. CI-27?	1 central church, 2 other churches
Abkanarti	c. 100x 60	Highest points on island. Follows contours of island.	1 central (30)	1 church in town centre
Arminna West (Classic settlement only)	c. 90 x 80	Highest natural mound in vicinity, parallel to Nile, overlooking Nile	3 ?	Public building in sw corner of town
Debeira West IV	c. 140 x 80	"L"-shaped. parallel to Nile and running west along wadi, c. 100 m from Nile	1 small	Large edifice in town centre (rm. 33-9, 72,73)
Meinarti (level 8, phase 5)	c. 75 x 70	Highest points on island. Follows contours of island. Parallel to Nile.	1 central (A), poss. 3 small squares	1 church and cemetery
Tamit	c. 220 x 80	parallel to Nile, atop a small hill	1 central, poss. 3 small squares	7 churches

\* Estimates of site size are based upon scale plans published by the excavator.

It has been said that "In the early Christian period it is difficult to recognize any distinctive Nubian house plan ... In the newly rebuilt Meinarti village of the Classic period, however, we can discern a more or less uniform house plan which is reproduced all over the community as well as in other sites of the same era" (Adams 1977:489-91). Adams' was generally correct in his description of the Classic Christian houses but there was more variety found in the type of house present on Classic Christian sites than previously stated. There appear to be two variations of the Classic Christian house, referred to below as type 1 and 2 respectively. These patterns are used throughout the period although there are some structural variations caused by environmental determinants. The 'double house' form of the Early Christian period continued to be used with the newer 'unit houses' at Meinarti, Abdallah Nirqi, Debeira West IV and Kasanarti. Some 'double houses', such as those at Meinarti and Kasanarti, were actually constructed during the Classic Christian period (fig. II.6). Ceramic evidence from Abdallah Nirqi suggests that some 'double houses' (i.e., CIV/4, 5, 20) may have been occupied until A.D. 1000 or perhaps even slightly later (Török 1975c:374). At Qasr Ibrim, "all of the CC 1 [Classic Christian 1] houses except possibly CC1-5 were actually built in pre-Classic times" (Adams 1974:CC1.1). Usage of some of the X-Group houses, such as X-6, continued through the Early Christian period and into the Classic phase.

Evidence from Lower Nubian sites continuously occupied from the Early Christian period through the Classic phase, suggests that Classic Christian house plans did not spontaneously appear but may find their origins in the Early Christian 'double house' plan, the Early Christian Upper Nubian villa as found at Old Dongola and perhaps also in structures that date from even earlier periods.<sup>9</sup> One of the difficulties with this analysis is the lack of direct connection between the Early and Classic Christian remains at many sites. Material from both phases has been excavated at several sites but in not in stratigraphically related locations or in some places separated by a brief period of abandonment.

Several Early Christian 'double houses' at Abdallah Nirqi remained in use during the Classic Christian phase (Török 1975c:365-74). Construction of these houses began late in the Early Christian period during the first phase of the second settlement (II/1). The second phase of the second settlement (II/2) coincided with the Classic Christian period. The site was continuously occupied between phases one and two. At the beginning of this period a new house plan appears, replacing some earlier 'double houses' and co-existing with others.<sup>10</sup> On the site, these buildings were characteristic of the Classic Christian phase and were described by the

excavators as 'unit houses' (here designated type 1 'unit house') based upon Adams' description of dwellings at Kasantari.<sup>11</sup> Hajnóczy states that this form of 'unit house' (type 1) could date earlier than the Classic Christian phase because many examples at Abdallah Nirqi were constructed directly on X-Group/Early Christian settlement one remains and not on top of Early Christian buildings (Hajnóczy 1974:353). Although most sherds were of Classic Christian date, the earliest sherds associated with these 'unit houses' were from the latter half of the Early Christian period, the earliest being roughly dated to the mid 8th c A.D. (Török 1975c:362).

'Unit houses' at Abdallah Nirqi displayed an early and a late form. The latter were probably of Late Christian date (Hajnóczy 1974:354) and are discussed in chapter 3. The early 'unit houses' (hereafter designated type 1) were roughly square, constructed of mudbrick and contained three small rectangular rooms arranged parallel to each other (pl. 129). A larger, rectangular room was placed perpendicular to the three smaller rooms. Entry into the building was gained via this room. Both of the small corner rooms opened onto the larger, perpendicular chamber. The small central room was reached through a corner room. The other corner room also contained an exit to the lane running beside the house. Roofs were covered with low barrel vaults. Houses C1 (rooms 9, 14,15,16) and C1 (rooms 19, 20, 29) are examples of this type of structure (pl. 19). The first measured approximately 6.9 x 5.5 metres and the second 6.2 x 5.5 metres. The size of mudbricks used in these structures was 5-7x16x33-38 cm (Barkóczy and Salamon 1974:316). This differed from the earlier 'double houses' that used bricks of 9-10x16.5x30.5 cm (Barkóczy and Salamon 1974:296).

Three room house 6, 7, 8 at Gezeira Dabarosa I may be another form of the type 1 'unit house' (pl. 17). It was square, constructed of mudbrick and consisted of two small, rectangular rooms placed parallel to each other connected to a larger, rectangular, transverse chamber. Access was gained via the large chamber or the southernmost smaller room and the roofs were vaulted. The structure measured approximately 8.5 x 8.1 metres and the walls were roughly 70 cm thick (Hewes 1964:180-1). Several houses at Tamit also appear to follow this model but as little of the central village was excavated it is difficult to determine this for certain (pl. 43).

Two approximately square, stone-built 'unit houses', designated 1 and 2 were found in the Classic Christian settlement at Kasantari (pl. 45). Roofs of these structures were believed to be flat and constructed of beams and thatch (Adams 1964:221). Interior divisions within the structures seem to approximate those found in other type 1 'unit houses' and while they abutted walls with neighbouring buildings they did not appear to share them. A 'double house',

designated 3 on plan 45, also dated to this period.

Another type 1 'unit house' was found at Faras West I (pl. 28). House 3 was constructed of mudbrick, roughly square and contained four rooms. One long room was placed perpendicular across the ends of three smaller rectangular chambers. The internal dimensions of each were approximately 2 x 4.2 metres and the walls were between 55 and 60 cm thick. One entrance was located (Michalowski 1962:238). This structure was believed to date to the Late Christian period but at present there is little evidence to document this claim. If it does date to the Late Christian phase, it demonstrates the longevity of this plan and usage contemporary with the later form of 'unit house', discussed in the following chapter.

Michalowski noted similarities in plan between house 3 and Meroitic house 19 (Michalowski 1962:238) (pl. 28). However, while the arrangement of rooms (three small rooms placed perpendicular to one larger rectangular room) was similar, the walls of house 19 were slightly thicker at c. 90 cm, stone slabs were used in the lower courses and the building was larger (9 x 9.5 m) than house 3 (Michalowski 1962:225). Two Meroitic (level 15b) 'de lux' houses at Meinarti, designated A and B on plate 6, house 9 at Karanòg, and house EC1-1 at Qasr Ibrim provide further parallels (pls. 2, 10). Each of these structures display the same arrangement of chambers, have a single entrance and are roughly the same size. Excavators at Karanòg noted the resemblances between house 9 and a Coptic church, but were able to verify that it was largely of Blemmye date and the structure had been altered little by Christians (Woolley 1911:40).

House EC1-1 originally constructed at Qasr Ibrim during the Late Meroitic - Early X-Group period, was renovated during the Early Christian phase, and continued to be used through the Classic Christian period (Adams 1974:EC1.2). It bears a strong resemblance to the type 1 'unit houses'. It apparently consisted of at least three small rooms orientated perpendicular to a long rectangular chamber. It was square and slightly larger than the average type 1 'unit house', measuring approximately 10 x 10 metres with one entrance. Some additional interior partitions may have been present. The resemblance between the plans of these four houses with that of the type 1 'unit house' is quite striking and brings into question the ultimate origins of this structure.

The core module of the Early Christian villas of Old Dongola (Houses A, P, pls. 26, 27), discussed in chapter 1, consisted of three smaller, rectangular rooms placed parallel to one another and arranged perpendicular to a larger room. It is possible that housing fashionable among the inhabitants of the capital of Makuria, was eventually adopted in the provincial areas of Lower Nubia because this pattern is repeated in the Lower Nubian Classic type 1 'unit house'.

The Dongola houses were larger, as shown in fig. I.2, and contained an upper floor and two additional rooms. House A measured 10 x 9.4 metres, while House P was 9.4 x 9.1 metres. As the previous examples might suggest, this house configuration may have originated during the Meroitic period. Certainly, the floor plan and size are similar to Meroitic house 19 at Faras, Karanòg house 9 and EC1-1 at Qasr Ibrim, although an upper storey is lacking in the Meroitic examples.

Use of this plan continued at Old Dongola during the Classic period, suggesting that it had remained popular. House B (pl. 46) was constructed around the 10th c A.D. It abutted House A and was a reversed copy of its central area, with a long vestibule orientated perpendicular to three smaller rectangular chambers. Just as in house A, room A1, the south chamber (B3) contained a chimney and evidence of use as a kitchen. Two additional chambers (A7 and 8) were added to the west side of House A and these were similarly copied on the east side of House B (Jakobielski 1986:299-300; Medeksza 1986:79). Another room may have existed on the south side of House B again parallel to that in House A.

This pattern can be seen in house A, at the Classic settlement at Toshkei in the Abri-Delgo Reach (pl. 116). Unfortunately, little excavation has been conducted at this site and only the visible ruins were drawn (Vila 1978b:52-6). Few sites within the Abri-Delgo Reach have been securely dated to the Classic phase or excavated, so the extent and period for which this pattern was used remains uncertain.

Modifications made to Dongola House PCH-1 around the end of the Early Christian or beginning of the Classic Christian period divided the villa into three units, essentially a type 1 'unit house' in the south and two 'double houses' (one possibly with access to a roof or upper floor) to the north of it (pl. 47). As shown in figure II.6 (p. 75), the dimensions, room arrangement and shape of this new type 1 house were comparable to those found in Lower Nubia. The new 'double houses' were somewhat more irregular. I agree with Godlewski who suggests that this division was perhaps made to accommodate descendants of the original owner and may also reflect "a pauperization of the inhabitants of this particular district of the city" (Godlewski 1991a:89). This might suggest that the usual form of dwelling for common folk was either a simple two or three room structure as found in Lower Nubia, here represented by 'double houses' and Classic Christian 'unit houses'.

Figure II.2

## FEATURES OF CLASSIC 'UNIT HOUSES' - TYPE 1

Site	House Dimensions (m)	No. of Rooms	Wall Thickness	Roof	Entrances
Abdallah Nirqi C1(9,14,15,16)	6.9 x 5.5	3 small 1 large	c. 60 cm	brick vaulted (low)	1
C1(19,20,29)	6.2 x 5.5	3 small 1 large	c. 60 cm	brick vaulted (low)	1
Faras West I (pl. 28) House 3	c. 8 x 7.7	3 small 1 large	c.50 cm	?	1
Gezeira Dabarosa I House 6, 7, 8	c. 8.5 x 8.1	2 small 1 large	c. 70 cm	brick vaulted	2
Gindinari House 1	c. 7-7.7 x 7	4 small 1 large (sub- divided)	c. 60 cm	?	1
Kasanarti House 1	c. 11.1 x 10.6	3 small? 1 large?	c. 60 cm	flat - wood and brush	1?
House 2	c. 8 x 6.3 ?	3 small 1 large?	c. 60 cm	as above	1?
<b>UPPER NUBIA</b>					
Old Dongola House B	15 x 11	6, (4 small 2 large)	c. 55 cm	brick vaulted	2/3
House PCH-1 south house	c. 6.6 x 5.4	2 small 1 larger	54 cm	brick vaulted	1

Hajnóczy noted the lengthy tradition of the placement of a long chamber perpendicular to three smaller rooms within Nubian history. Examples he cites included Pharaonic sanctuaries, some Meroitic houses and early Nubian churches (Hajnóczy 1974:353). If the form of the type 1 'unit house' was derived from the plan of Pharaonic sanctuaries then it was a superficial adaptation only because the Christian structures do not use the Egyptian cubit (52.3 cm) in their measurements. For example, Abdallah Nirqi house C1 (rooms 9,14,15,16) measured 6.9 x 5.5 metres or 13.19 x 10.52 cubits. Dimensions of the average room at Abdallah Nirqi were 5 x 2.5 metres or 9.56 x 4.78 cubits.<sup>12</sup> The ratio of length to width was 2:1 as shown in fig. II.3 rather than 8:5 (1.6:1) as found in Pharaonic structures (Hinkel 1991:221).

Neither do the houses seem to incorporate modular units of measure nor use the Greek-Hellenistic planning system found in Meroitic monuments.<sup>13</sup> Application of a modular unit of measure derived from wall thickness to 'unit house' and 'double house' dimensions does not result in an even number.<sup>14</sup> This does not preclude origins based upon Meroitic houses as they also do not seem to have used the aforementioned planning system.

Meroitic houses at Gaminarti contained two rooms, a long rectangular one and a smaller, more square one (pl. 48). Each had a single entrance and some appeared to share a courtyard. 'De lux' Meroitic houses consisted of two roughly equal, rectangular, vaulted chambers, placed parallel to one another giving the structure a square shape. They contained one entrance and some of the chambers were subdivided into smaller units. Examples of these structures were found at Wadi el Arab, Arminna West and Meinarti (Adams 1977:357-8). This pairing of rooms is reminiscent of the Early Christian 'double houses' and might demonstrate a continuity of house form through time. More research on Meroitic and X-Group houses is required to ascertain their attributes and developmental evolution. For example, remains of the Meroitic village at Kasanarti were noted as "markedly different from Meroitic houses previously excavated at Gaminarti and Meili Island" (Adams 1964:220). That the Meroitic period was separated from the Christian phase by a little documented span of at least three hundred years of migrations, invasions, tribalism and cultural discontinuity that affected the different parts of Nubia to varying degrees, is surely another factor to be considered. Although some features, such as house plan may date to this phase and be indigenous to Nubia, it seems highly unlikely that the Christian house plan was directly descended from that of the Meroitic house due to the many influences and ideas that appeared between the two periods. Some likenesses between the two may also be due to availability of building materials and similar responses and solutions to environmental stimuli as

discussed in chapter 5.

It is the Early Christian 'double house' structure, discussed in chapter 1, which seems to form the basic building block of the type 1 'unit house'. It consisted of two long, barrel vaulted, rectangular rooms positioned either parallel or perpendicular to each other. Notably, when Early Christian House PCH-1 at Old Dongola was subdivided around the beginning of the Classic Christian period, two 'double houses' were created along with a type 1 'unit house' and the roof was barrel vaulted at this time (pl. 47). The type 1 'unit house' resembles a 'double house' with one of its rooms subdivided into two or three smaller chambers.

The average sizes of Lower Nubian 'double houses' and their rooms are given in figure II.3. The average ratio of length to width of these rooms was 1.94:1, or approximately 2:1. Usage of this proportion may be one of the underlying architectural principles governing the construction of Lower Nubian Christian houses. While this model may have been regarded as an ideal, structural irregularities noted within the houses suggest that it was not rigidly adhered to. This ratio was similarly used in the larger transverse chambers of the type 1 'unit houses' as shown in figure II.3. The average ratio was 2:1. This differs from the 8:5 (1.6:1) ratio of proportions found in Meroitic temples (Hinkel 1991:221). However, in both cases the sample size was small and more examples are required to confirm this hypothesis. Average sizes of the larger rooms of Lower Nubian 'double houses' and 'unit houses' were also similar being 6.2 x 2.9 metres and 6.22 x 2.94 metres respectively. The smaller rooms were more variable than the larger when considered by themselves, but when reconstituted as a larger rectangular chamber were of comparable dimensions and proportions. Examples include, rooms 20 and 29 at Abdallah Nirqi and Rooms 6 and 8 at Gezeira Dabarosa I, shown in figure II.3. This would further support the hypothesis that the origins of the Classic Christian type 1 'unit house' lie partially in a subdivided Early Christian 'double house'. Widespread usage of mudbrick barrel-vaulted roofing may have led to the adoption of these room proportions. Adams has noted that longer, narrow rectangular rooms are more conducive to vaulted roofing than are square shaped chambers (Adams 1964:221). In his study of Nubian vaulting Medeksza discovered that the average span covered was between 2.3 - 2.7 metres (Medeksza 1990:91).<sup>15</sup>



Figure II.3 COMPARISON OF ROOM SIZE  
BETWEEN EARLY CHRISTIAN 'DOUBLE HOUSES' AND CLASSIC 'UNIT HOUSES' - Type 1

'DOUBLE HOUSES' as listed in chapter 1					
Site	Room*	Dimensions (m)	Ratio of Room length to width	Wall Thickness	Brick Size (cm)
Abdallah Nirqi (average)		c. 5 x 2.5 m	2:1	c. 50 cm	9-10x16.5x30.5
Arminna West					
House X (transitional X-Group-Early Christian)					
	Room 53	5.1 x 2.7 m	1.9:1	50 cm	c. 34-35x20x10-12
	Room 36	3.4 x 2.35 m	1.4:1		
Western Building (Early Christian)					
	Room 49	4.9 x 3.2 m	1.4:1	35 cm	35x17x10
	Room 50	4.25 x 3.3 m	1.3:1	40 cm	40 cm thick stone slabs
Debeira West II (R-3)					
Building A					
	Rooms A1& A2	c. 6.6 x 2.8 m	2.4:1	c. 50 cm	?
	Room A3	c. 4 x 2.5 m	1.6:1		
Building B					
	Room B4	c. 7.4 x 2.9 m	2.6:1	c. 40 cm	?
	Room B6	c. 3.2 x 2.4 m	1.3:1		
Gezeira Dabarosa I					
1.	Room 19	c. 6.3 x 2.8 m	2.3:1	c. 55 - 70 cm	?
	Room 21	c. 6.5 x 2.8 m	2.3:1		
2.	Room 13	c. 6.6 x 2.8 m	2.4:1	c. 55 cm	?
	Room 17	c. 4.8 x 2.6 m	1.8:1		
Meinarti					
	House XXXI	7.5 x 3.5 m	2.1:1	c. 40 cm	?
		4.5 x 2 m	2.3:1	(later 70-90 cm)	

Average Ratio of room length to width = 1.94:1

Average size of large room = 6.2 x 2.9 m

\*These are the internal room dimensions where possible. Approximate values are given based upon scale drawings when not published by the excavator.

Figure II.3 continued on next page.

Figure II.3 continued.

## CLASSIC CHRISTIAN UNIT HOUSES - TYPE 1

Site	Room* Dimensions (m)	Ratio of Room length to width	Wall Thickness	Brick Size (cm)
Abdallah Nirqi				
Room 19	c. 6.6 x 3.5 m	1.7:1	?	33-38x16x5-7
Rooms 20, 29	c. 6.6 x 3.3 m	2:1	?	as above
Room 9	c. 7.7 x 3.3 m	2.3:1	?	as above
Rooms 14-16	c. 7.8 x 4.4 m	1.8:1	?	as above
Faras West I				
House 3	4.2 x 2 m	2.1:1	55-60 cm	?
Gezeira Dabarosa				
House 6, 7, 8				
Room 6	c. 4.1 x 2.7 m	1.5:1	c. 70 cm	?
Room 7	c. 6.7 x 3 m	2.2:1	as above	?
Room 8	c.3.7 x 2.96 m	1.25:1	as above	?
Rooms 6,8	c. 6.7 x 3.3 m	2:1	as above	?
Gindinarti				
House 1				
Large room	c. 5.9 x 2.9 m	2:1	c. 60cm	?

Average ratio of large room length to width - 2:1

Average size of larger room = 6.2 x 2.94 m

\*These are the internal room dimensions where possible. Approximate values are given based upon scale drawings when not published by the excavator.

Hajnóczy noted some resemblance between the type 1 'unit house' and the early Lower Nubian churches (Hajnóczy 1974:353). The ratio of proportions found in the Basilican and Early Nubian churches (types 1 and 2) is somewhat similar to that found in both the 'double houses' and type 1 'unit houses' shown in figure II.3 above, but the sample size is small and the range of proportion shown is great. Proportions of church type 1a (A.D. 550-750) ranged between 1:1 and 2:1, of type 1b between 1.5:1 and 1.7:1, of type 2a (A.D. 650-800) from 1.42:1 and 2:1 and type 2b from 1.54:1 to 1.64:1 (Adams 1965b:101-9, fig.5). Roughly the same range of ratios are used in sacred as in domestic structures of the Christian period.

Adams' type 70, the church prototype (A.D. 500-650), was similar in plan to the type 1 'unit house'. The church was believed to be constructed by the earliest Nubian Christians yet bore "little resemblance to the earliest true churches" (Adams 1965b:101). Some planning and proportion techniques used in the Basilican and Early Nubian churches may have later been used in construction of houses while the ground plans themselves remained more true to their earlier and likely indigenous origins. Type 1 Basilican churches have been located only in Lower Nubia and their design is thought to show strong Egyptian influence (Adams 1965b:101; Kjølbye-Biddle 1994:39-42). Unfortunately this discussion is largely applicable to Lower Nubia as the majority of excavated houses datable to the Classic period originate there and those from the Northern Sudan are entirely lacking. This is an area where future research should be considered.

Dobrowolski's analysis of church DC at Old Dongola suggested that a modular unit equal to half the wall width was employed in construction and that this unit was perhaps based upon the Roman *gradus* and Greek *berma* (73.5 - 74 cm) (Dobrowolski 1987:2). This module was also used in the plan of Church B at Soba although not in the neighbouring churches (Welsby and Daniels 1991:319-20). Application of modules half the extant wall width, half a *berma*, or of a *berma* to Lower Nubian 'double house', and type 1 'unit house' measurements did not result in a whole number. No standard construction module was discernible. Unfortunately there were no examples of houses from the Northern Sudan with which to test this modular application. Just as Egyptian influences were noted in the early churches in Lower Nubia, Byzantine influences were evident in the Alwan churches (Welsby and Daniels 1991:320-1). It is conceivable that Alwan and perhaps Makurian houses could have been constructed on a modular plan derived from a Byzantine metrological system whereas those in Lower Nubia were not. When the aforementioned modular unit variations were applied to the Early and Classic Upper Nubian houses at Old Dongola, modules based on half the wall width were clearly unsuccessful, but those

derived from the *gradus* and *berna* showed more interesting results. These are displayed in figure II.4 below. The even number of modules that result when *gradus* and *berna* measurements are applied to the building dimensions might suggest that they were used as units for some early houses in Upper Nubia, but as the sample size is minuscule no conclusions may be drawn at this time. Future excavation of Upper Nubian houses will hopefully provide more data with which to verify this hypothesis. The irregularity of the walls and measurements of many Christian houses suggests that the majority of vernacular architecture was not designed by professional architects, although a general building plan was followed in most cases. It is likely therefore, that were such a system followed it would not be stringently adhered to in domestic structures.

Figure II.4 Application of construction modules to the dimensions of Upper Nubian houses

Site	Building Dimensions	Wall Width	Module derived from 0.5 wall width	Module derived from <i>gradus</i> / <i>berna</i> (73.5cm)
Old Dongola House PCH-1 (phase I - Early Christian)	14.6 x 9.2 m	54 cm	54.1 x 34 (54 x 34)	19.9 x 12.5 (20 x 12.5)
House A (phase I - Early Christian)	16 x 14 m	c. 55 cm	58.2 x 51 (58 x 51)	21.8 x 19 (22 x 19)
House B (phase I - Classic Christian)	15 x 11 m	c. 55 cm	54.5 x 40	20.4 x 15 (20 x 15)

A second variety of 'unit house' (type 2) appears at Meinarti towards the end of the 10th c A.D. (Adams 1977:489), although it is found at other sites such as Debeira West IV earlier. It also seems to trace its roots to the 'double house' structure of the Early Christian period (pls. 24a, 44, 49). At Meinarti "each house included, at a minimum, a large 'parlor' (usually the first room entered) and a smaller room beyond it ... every house also included, beyond the smaller room, a narrow, right-angle passage ending in a latrine" (Adams 1968:190) (pl. 129). The form is essentially an Early Christian 'double house' of two parallel, rectangular chambers (one larger, one smaller), with a corridor and latrine added. Notably the first latrine appeared at Meinarti during the Early Christian period in stratigraphic level 13 in house D (Adams 1968:187-8) (pl. 7). House D, discussed in chapter 1, appeared to be a 'double house' with latrine added. It consisted of two chambers, a long rectangular room and a smaller room placed perpendicular to it along the west end. The smaller room contained the latrine. This structure lacked a corridor leading to the

latrine as found in the Classic type 2 'unit house'.

The major differences between the type 2 model of 'unit house' and type 1 found at Abdallah Nirqi, Faras I etc., are presence or absence of a latrine and the subdivision of rooms within the house. One chamber of the type 1 model was subdivided into two or more usually three smaller rooms while type 2 remained undivided and had a latrine added. This does not mean that settlements containing type 1 houses lacked latrines, merely that they were not incorporated into this house model. For example, rooms C1-21, and C1-1 at Abdallah Nirqi might be latrines, although this identification remains uncertain. Another possibility is the location of a latrine on an upper floor of a type 1 dwelling. As yet, nothing has been discovered that would indicate the presence of a second floor in the majority of these structures and cesspits on the ground floor have not been reported. Both type 1 and 2 'unit houses' were roughly square, approximately the same size, occasionally shared walls with neighbouring structures and had their origins in the Early Christian 'double house', perhaps the Early Christian villas of Old Dongola and possibly even earlier structures (figs. II.2, II.5, pp. 65, 73).

Type 2 'unit houses' at Meinarti were constructed together in blocks usually consisting of at least two dwellings. This gave an appearance of a cluster consisting of between four and eight rooms. All walls were one brick thick, about 20 cm wide, and flat roofing of beams and thatch was used. Buildings were generally either square or rectangular, measured roughly 5 x 5 metres (16 x 16 ft) on average and shared walls with neighbouring structures (Adams 1977:491). The average room size was 4.3 x 2.9 metres. Houses 134-6, 138-140 and 129 to 133 are two unit houses that share a central wall. Building 108, 110, 112, 114-6 and 152-6 are two other examples of 'unit house' (fig. II.5, pl. 49).

Figure II.5

## FEATURES OF CLASSIC 'UNIT HOUSES' - TYPE 2

Site	House Dimensions (m)	No. of Rooms	Wall Thickness	Roof	Entrances
ABKANARTI House 68?	c. 6.5 x 6.9	2 rooms, 1 latrine?	c. 40-50 cm	brick vaulted?	?
ARMINNA WEST House A-U-3-5	c. 9.75 x 6.4	2 rooms, 1 latrine?	c. 70 cm	brick vaulted	1
DEBEIRA WEST IV (R-8) House 79, 80, 82	c. 9.5 x 9	2 rooms, 1 latrine	c. 50-60 cm	brick vaulted	1
House 46, 53, 66	c. 10.6 x 8.4	2 rooms, 1 cesspit/latrine?	as above	as above	1
House 74, 81, 88, 89	c. 10.6 x 10	2 rooms, 1 cesspit/latrine?	as above	as above	?
House 48-49, 52, 57	c. 9.5 x 9 (maximum)	2 rooms, 1 sub-divided, 1 cesspit/latrine?	as above	as above	1
FARAS WEST I (pl. 37) House A	c. 7.9 x 7.1	2 rooms, 1 latrine	c. 60 cm	brick vaulted?	1
House B	c. 8.3 x 6.7	2 rooms, 1 latrine	as above	as above	1
KASR IKO House A	7 x 4.25	2 rooms, Remains of a corridor.	c. 40cm	?	?
House B	7.45 x 4.45	2 rooms, 1 latrine?	c. 40 cm	?	1
MEINARTI *Average** (Adams 1968:189-90)	c. 5 x 5	2 rooms, (1 large, 1 small) latrine	c. 20 cm	flat - beams and brush	1
House 134-6, 138-40	c. 7.6 x 5.6	2 rooms, 1 sub-divided, 1 latrine	as above	as above	1
House 129-33	c. 6 x 5.8	2 rooms, 1 latrine	as above	as above	2
House 108, 110, 112, 114-116	c. 6.7 x 6	3 rooms, 1 latrine	as above	as above	1
House 152-6	c. 5.9 x 5.2	2 rooms, 1 latrine	as above	as above	1

Not every Classic house at Meinarti seems to have been equipped with latrine facilities, although they were numerous. Rooms 82 and 83 constituted one roughly square, two-room house that lacked a latrine. The building formed by chambers 79, 103 and 104 is another example. Structures 76, 77, 78 and 84, 89 are two further illustrations. These were variations of the 'double house' plan described in chapter 1 with two roughly, rectangular rooms placed parallel to each other and perhaps sharing or abutting walls with neighbouring buildings. These differ from the earlier 'double houses' by having thinner walls and flat roofing, like the other dwellings on site. Three characteristics, thin walls, small rooms and flimsy construction were shared by houses of all forms across Meinarti during the latter half of the Classic Christian period.

The average size of the large chamber in an Early Christian 'double house' was 6.2 x 2.9 metres as shown in fig. II.3 (p. 68). That of the Classic Christian 'double house' at Meinarti was 4.5 x 2.7 metres, more comparable to the average chamber size (4.3 x 2.9 m) of the type 2 'unit houses' there.<sup>16</sup> The average ratio of chamber length to width was also similar to the type 2 'unit house' and less than that of the Early Christian 'double house' as shown in figures II.3, II.10. The thinness of the walls and flimsy construction possibly necessitated the construction of smaller rooms. Notably the houses at Kasr Iko had small rooms and thin walls comparable to those at Meinarti. It is likely that the roofs at Kasr Iko were also flat. House 3 at Kasanarti, house A-U-10/11 at Arminna West and possibly 22-23 and 66-67 at Abkanarti were also 'double houses' of Classic Christian date. Their wall thicknesses were comparable to those of other buildings on their respective sites and wider than those at Meinarti. This also appears to be true for the Classic 'double houses' found at Old Dongola where the wall thicknesses were greater than those at Meinarti yet comparable to other structures on their own site. This is shown in figure II.6 below.

Figure II.6

## FEATURES OF CLASSIC CHRISTIAN 'DOUBLE HOUSES'

Site	House Dimensions (m)	No. of Rooms	Wall Thickness	Roof	Entrances
Arminna West A-U-10/11	c. 11 x 5.7	2 rooms	c. 70 cm	brick vaulted?	1
Kasanarti House 3	c. 6.6 x 4.2	2 rooms	c. 60 cm	as above	1
Meinarti House 82-3	c. 3.7-4.5 x 5.0-5.5	2 rooms	c. 20 cm	flat - beams and brush	1
House 79, 103-4	c. 5.3-5.8 x 4.6	2 rooms, 1 sub- divided	as above	as above	2
House 76-8	c. 3.7-4.5 x 3.6-4	2 rooms, 1 sub- divided	as above	as above	1
House 84, 89	c. 3.0 x 5.5-6.2	2 rooms	as above	as above	1
UPPER NUBIA					
Old Dongola House PCH-1 North house	c. 7 x 4.4	2 rooms + staircase	54 cm	brick vaulted	1
Central house	c. 7 x 2.5	2 rooms	c. 55 cm	brick vaulted	1



Other 'unit houses' of the type 2 pattern were found at Debeira West IV (R-8), Kasr Iko (houses A, B, and perhaps E), Faras West I and possibly at Ad Donga and Toshkei (Almagro et al. 1965:92-4; Michalowski 1974:73; Shinnie and Shinnie 1978; Velo 1963:29-33; Vila 1978b:52-7) (pls. 24a, 37, 50, 51). Classic Christian ceramics were associated with these buildings. Those from Debeira West IV dated between A.D. 800 - 1000 (Shinnie and Shinnie 1978:11), while one of those at Faras West I (house A) was partially covered by the North Monastery which was constructed around the 12th c A.D. Like the structures at Meinarti, houses at Debeira West IV were roughly square, and consisted of two long, roughly rectangular rooms placed parallel to one another with a latrine reached via a long right-angled corridor that ran beside one of the chambers. As at Meinarti, a degree of urban planning was evident in the location of the latrines and associated drainage systems. Examples of houses following this plan included (79, 80, 82) with 79 being the latrine and 80 and 82 two rectangular chambers, house (48, 49, 57, 52), house (66, 53, 46), and building (74, 88, 81, 89).

Unlike Meinarti, these houses were brick vaulted and had walls around 50-60 cm thick, although they followed the basic type 2 design as shown in figure II.7. Rooms in these buildings were larger than those at Meinarti, averaging 7.5 x 3.4 metres. Similar type 2 'unit houses', such as A-U- 3-5, were found at Arminna West (pl. 25a). Wall thickness, the ratio of wall length to width, and room size were comparable to the large chambers of the type 1 'unit houses' and Early Christian 'double houses' noted in figures II.2, II.3. Wall thickness and roof type are obviously interrelated as thinner walls could not support vaulting, but the reason for the different usage of construction materials is less evident. The mechanics of vaulted roofing were known to the inhabitants of Meinarti because the church, a vaulted structure, was restored at the beginning of the phase 5 Classic Christian occupation (Adams 1968:190).

Application of a construction module based upon wall width (20 cm) resulted in an even number for most structures and chambers at Meinarti.<sup>17</sup> Employment of similar modules derived from wall thickness, to the dimensions of the Debeira West IV structures was unsuccessful. The Meinarti numbers probably reflect the size of brick used in construction rather than a planning module. Based upon the irregularity in room shape, corner angles, and flimsy construction it seems unlikely that a standard module or grid was stringently used, although evidently a general blueprint, that of either the 'double house' or 'double house' plus latrine, was followed. Many buildings were quadrilateral rather than exactly square or rectangular. No two houses at any site were identical despite similarities in overall plan.

Figure II.7

Size and Proportions of  
Classic 'Unit Houses' - Type 2

Site	Room* Dimensions (m)	Ratio of Room length to width	Wall Thickness	Brick Size (cm)
<b>Debeira West IV (R-8)</b>				
House 79, 80, 82				
Room 80	c. 7.8 x 3.4	2.3:1	c. 50-60 cm	?
Room 82	c. 7.8 x 3.4	2.3:1	as above	?
House 46, 53, 66				
Room 53	c. 6.7 x 3.4	2:1	as above	?
Room 66	c. 7.3 x 3.1	2.4:1	as above	?
House 74, 81, 88, 89				
Room 74, 81	c. 9.2 x 3.9	2.4:1	as above	?
Room 88	c. 7.8 x 3.9	2:1	as above	?
House 48-49, 52, 57				
Room 48-49	c. 5 x 2.8	1.8:1	as above	?
Room 57	c. 8.4 x 3.4	2.5:1	as above	?
<b>Kasr Iko</b>				
House A, large room	c. 5.0 x 2.4	2.1:1	c. 40 cm	40x18x9
House A, small room	c. 3.8 x 2.2	1.7:1	as above	as above
House B, large room	c. 4.65 x 2.25	2.1:1	as above	as above
House B, small room	c. 3.3 x 1.87	1.8:1	as above	as above
<b>Meinarti</b>				
House 134-6, 138-40				
Room 138	c. 2.4 x 4.3	1.8:1	c. 20 cm	?x20x?
Room 139-40	c. 3.4 x 5.6	1.65:1	as above	as above
House 129-33				
Room 129-30	c. 2.9 x 5.9	2:1	as above	as above
Room 132	c. 2.8 x 2.9	1:1	as above	as above
House 108, 110, 112, 114-116				
Room 112	c. 3.6 x 4.7	1.3:1	as above	as above
Room 115	c. 2.6 x 4.2	1.6:1	as above	as above
Room 116	c. 2.5 x 4.7	1.9:1	as above	as above
House 152-6				
Room 152-3	c. 3.9 x 3.8	1:1	as above	as above
Room 156	c. 1.7 x 2.3	1.4:1	as above	as above

Average ratio of room length to width at Meinarti - 1.5:1

Average ratio of room length to width at Debeira West and Kasr Iko - 2:1

Average room size at Debeira West IV - 7.5 x 3.4m; at Kasr Iko = 4.2 x 2.2m; at Meinarti = 4.3 x 2.9m

\*Internal room dimensions. Approximate values based upon scale drawings.

At the end of the Early Christian period and beginning of the Classic phase (Meinarti levels 12, 11a, 11b, 10), "there is evidence that the recurring floods carried away a good deal of alluvial soil - evidence, in fact, that much of the Nile floodplain was in effect redistributed at this time" (Adams 1968:188). However, damage caused by high floods at this time seems a more localised phenomenon than previously believed, perhaps restricted to lower lying areas such as islands, and it does not appear to have greatly affected the usage of one house design over another. High water marks found within Classic Christian structures at Debeira West IV were attributed to flooding of the 9th and 10th c A.D. although heavy rains were also postulated (Shinnie and Shinnie 1978:9). This site was not abandoned until sometime around A.D. 1100 (Shinnie and Shinnie 1978:3). No evidence of flooding was reported at Arminna West and the site was occupied into the Late Christian period (Weeks 1967:6). Nor was there any evidence from Abdallah Nirqi, similarly occupied to the beginning of the Late phase. Type 2 'unit houses' were found at Debeira West and Arminna West while type 1 plans were followed at Abdallah Nirqi. Occupation at these sites dates at least from the beginning of the period if not earlier. In the later post flood settlements of Meinarti and Kasanarti, type 2 house forms were found at Meinarti while type 1 appeared at Kasanarti. Employment of the 'double house' model was also noted at both sites. Both type 1 and type 2 'unit houses' were found at Faras West I (pls. 28, 37) and it is not beyond the realm of possibility that this occurred at other sites, unfortunately the data available was insufficient to make this determination.<sup>18</sup>

Materials used in construction were governed by availability and environmental determinants, particularly inundation, and the materials in turn determined how the general house model was applied. This conclusion was similarly reached by the Spanish Mission at Kasr Iko where "la ausencia de la madera en la construcción se debe a una razón puramente geográfica" (Velo 1963:32). Soil may have been a scarce resource in the Second Cataract region around Meinarti and Kasanarti due to the high flood levels. The amount of mud required to make bricks for vaults and to construct thicker walls may have been judged too great or was reserved for cultivation, thus thinner walls and wooden roofs were used at Meinarti and perhaps at Kasr Iko. Thinner walls might also account for the smaller size of the Meinarti houses and for the lack of vaults as aforementioned. As sand accumulated at Meinarti towards the end of the Classic phase, buttresses and retaining walls were added (Adams 1977:491) but most building walls themselves were not made thicker. At Kasanarti and Gendal Irki stone was used instead of brick but usage of the type 1 'unit house' plan was maintained. Flat wooden roofing was also used at Kasanarti.

The settlement at Kasanarti was situated on the highest elevations of the island and few traces of Early Christian occupation could be discovered. Choice of this location was believed to result from high Nile levels at the beginning of the Classic phase (Adams 1964:221, 239-40). Houses that dated from the second half of the Classic Christian period and into the Late phase at Gendal Irki were described as having low mudbrick vaults and poorly constructed, rough stone walls. Sherds were incorporated into the walls to fill spaces (Adams and Nordström 1963:40).

### Individual Buildings and Palaces

Several small farms, inaugurated during the Early Christian period, were continuously occupied into the Classic phase. Little of these installations remained beyond house foundations, some traces of saqias and few artefacts. These sites included Adnenarti, Arukonarti, Debeira West II and the Region of Ali Bek I and II and are discussed in chapter 1. Another farm, of Classic to Late Christian date, was found at Dakka Saab III. Traces of a round stone circle, perhaps a saqia emplacement were discovered in association with a small rectangular building near the Nile (Vila 1975:61). Ademdulli II, also just south of the Dal Cataract, may be a similar type of site but information concerning it is sparse (Vila 1978a:136). While most farm sites were located in Lower Nubia, small farms were certainly also situated elsewhere in Sudan, along the Nile and in the wadis as the site of Dakka Saab III suggests. Intensive archaeological survey will doubtless confirm this hypothesis.

Large buildings found at the sites of Soba East, Old Dongola, Arminna West, Faras West I, Argin IV, Ar-Rammal, Debeira West I (24-R-1), Gendal Irki, Kulb III, Kulubnarti III (21-S-10), Qasr el Wizz, Ghazali and Tamit, did not conform to the Early Christian 'double house' plan, villa, or to the Classic Christian 'unit house' configuration. Their great size and associated contents also differed from those expected in a domestic or sacred structure or a small farm. Only the first three sites, Soba East, Old Dongola and Arminna West, will be dealt with here as the others have been discussed in the sections dealing with monasticism, chapter 4. Unfortunately, due to the uniqueness of these buildings and lack of comparative materials, few conclusions may be drawn concerning them.

The earliest levels from building D at Soba East were dated between A.D. 800 and 1100. Occupation of the edifice apparently continued into the 13th century and a severe fire damaged the building's western end around A.D. 1000 (Welsby and Daniels 1991:34). The structure was approximately rectangular measuring at least 18.6 x 46.1 metres and had been a minimum of two

storeys high with the upper floor supported by palm timbers. It was constructed of mudbricks of varying sizes and the walls averaged 1.15 metres thick. Rooms were arranged symmetrically around a rectangular hall (c. 12.3 x 16.8 m) containing six columns. These columns were replaced by two walls prior to A.D. 1000. Three, long rectangular chambers, orientated parallel to one another, were situated to the west of the hall. Similarly, three long rooms were found to the east of it (pl. 52, top). Some of these rooms were subdivided into smaller square chambers. Except for the westernmost room which measured c. 4.5 x 8.1 metres, the chambers flanking the columned hall measured c. 3.6 x 16.5 metres internally. Small pairs of slit openings allowed light into the ground floor. Entry was gained via two axes, one east-west and the other running perpendicular to it through the centre of the columned hall. A staircase at the end of room m22 led to the upper floor (Welsby and Daniels 1991:92-6).<sup>19</sup> Several rooms were later added against the north and south sides of the building, but it is uncertain as to their exact date (pl. 52, bottom). Access from these chambers to the central portion of the ground floor was limited. Substantial finds of sherds, ash, bone and storage bins within these rooms suggests that they likely served as kitchen and storage areas (Welsby and Daniels 1991:103, 318).

This structure bears some similarity to the Meroitic palace at Wad ben Naga, where a series of parallel, rectangular vaulted chambers supported an upper storey.<sup>20</sup> It is also vaguely reminiscent of the Early Christian edifice (rooms 33-38) at Debeira West IV, which contained three parallel chambers. Deposits found within the ground floor rooms suggest one of their functions was as storage magazines. Again this might be similar to the Debeira West IV structure. "Presumably the primary function of those rooms [at ground level] was to elevate the rooms at first floor level" (Welsby and Daniels 1991:317). Welsby and Daniels reasonably suggest that the more important business was conducted on the upper floor (Welsby and Daniels 1991:317). Although the structures differ somewhat in layout, analogies for upper floor importance can be with the "throne hall" in the mosque building at Old Dongola and to the upper level of the North Monastery at Faras West I. Welsby and Daniels speculated that this structure had an official or palatial function (perhaps housing the king or bishop of Soba) and one concurs with their analysis. Their judgment is based upon its large size, position at the town centre, and proximity to a minimum of three large churches (buildings A, B and C) (Welsby and Daniels 1991:318). The construction of this building required organization and a great deal of both capital and labour.

Remains of two large mudbrick buildings were located to the east of Building D. Little is

known about the underlying structure but the upper one contained a large, rectangular, columned hall orientated east-west (Shinnie 1961). Welsby and Daniels noted that this pattern bears architectural resemblance to a church (Welsby and Daniels 1991:318) but as it was constructed of mudbrick rather than fired bricks this seems unlikely and it may be another official or palatial edifice. Continued excavation at the site of Soba has revealed that redbrick covered mounds invariably covered churches while gravel mounds generally concealed other structures.

The date of the 'Mosque building' at Old Dongola is somewhat uncertain. Based upon sherds incorporated into the mortar, it is thought to have been constructed around A.D. 850, early in the Classic Christian period (Godlewski 1982a:26). It measured 28 x 18 metres, stood about 10 metres high and was situated on a high terrace overlooking the city of Dongola (pl. 53). Like Building D at Soba East, it was two storeys high, roughly rectangular, and contained a series of long, thin parallel chambers on the ground floor the walls of which presumably supported the ceiling beams and upper floor. These rooms ranged between 1.6 and 3 metres in width. The ground floor was divided into two separate sections each with its own entrance in the north wall. Access to this floor was separate from that of the upper level. A chimney was found in each half (rooms 9, 13) leading the excavators to the assumption that the associated rooms may have served as kitchens (Godlewski 1982a:23-4). Similar chimneys were found in Old Dongola houses PCH-1, A, and B showing continuity of building techniques from the Early through Classic Christian periods. The function of the other rooms on the ground floor is uncertain but they may have been storage rooms.

Chambers of import were situated on the upper floor. A monumental entrance located in the west wall led directly to the stairs to the second level. Traces of wall paintings, one of a warrior saint, remained within the staircase and three layers of wall paintings covered the walls of the upper floor. One of these has been identified as a Nubian ruler or eparch based upon the horned headgear worn by the individual. On the second floor a corridor ran around the exterior of a centrally placed square room. Three entrances, in the centre of the west, north and south sides opened in to the central chamber. Large windows were situated in the north and south walls and on either side of the staircase (Godlewski 1982a:25-6).

Godlewski suggests plausibly that the 'Mosque Building' was constructed as a royal audience hall in imitation of those of the Byzantine emperors at Constantinople. Partial copies of the Byzantine throne room found in Bulgaria of 9th c A.D. date, bear resemblance to the ground floor of the Dongola building (Godlewski 1982a:27-8). This structure certainly served a palatial

or official function and its closest parallels are Building D at Soba East and the earlier Meroitic palace at Wad ben Naga. Unfortunately it is the only one of the three in which the upper floor is preserved so comparisons can only be made of the first floor layout. As with these other edifices, construction of this structure would have required both organization and capital. The large size of the building, its prominence and physical elevation are indicative of its importance and that of the individual or individuals residing there.

The 'Public Building' at Arminna West was substantially different from Building D at Soba East, and from the Dongola 'Mosque' (pl. 25a, 71). On the ground floor, a series of long rectangular chambers were arranged to form a square around a central pillared court. The primary structure measured c. 13.3 x 13.4-15.8 metres. Niches were found in several walls, the floors were paved and the interior plastered. The upper storey was reached via a staircase in room 35 but was not preserved.<sup>21</sup> Room 1, attached to the building in the south, was possibly a toilet and shares structural similarities, including a screen wall, a short staircase, a latrine drop pit and soakage channel, with the latrine located in room 2 of Building A-1 at Hambukol, although the latter was of Late Christian date.

The excavators noted that the structure shared some affinities with ecclesiastical architecture but did not overall resemble a church (Weeks 1967:17). An apse was lacking and sacred structures would not have been profaned by the presence of latrines. However the structure was roughly tripartite and constructed along an east-west axis that divided the building into two roughly symmetrical halves. This suggests that the building was constructed by professional ecclesiastical architects, individuals familiar with church architecture. The closest parallel to this edifice is Late Christian Building A, at Hambukol, discussed in chapter 3 and their functions may have been similar. No evidence of a kitchen or cooking facilities was discovered and there were few features within the building which could be deemed residential possibly suggesting a "public" rather than palatial function. Strata consisting of occupation debris were rather thin, being only 25 cm thick in the central court (Weeks 1967:19). Few artefacts and ceramic sherds were found. This might imply that the interior was swept regularly. The presence of an associated latrine (room 1) might indicate that many individuals were using the building or that usage was frequent. An inscribed stone object, possibly a stamp, was found in A-U-34 (Weeks 1967:68) but few objects were recovered from the building that would give some indication as to its function.

1. Concerning the visit of King George I to Baghdad see G. Vantini (1975) Oriental Sources Concerning Nubia. Heidelberg and Warsaw. pp. 316-20.
2. For details concerning the life and hostilities conducted by Omari see *ibid.* pp.706-20.
3. For documentation concerning Nubians within the army of ibn Tulun see *op cit.* (n.1), pp. 668-70.
4. For a description of Aswani's visit to Dongola see *op.cit.* (n.1) pp.721-22.
5. Cf. J. Plumley et al. (1977) "Qasr Ibrim, 1976." JEA 63:37-8.
6. For a detailed discussion of the growth of Abdallah Nirqi see Gy. Hajnóczy (1974) "Abdallah Nirqi 1964 Architectural Characteristics of the Settlement and Buildings." AAASH 26:339-43, and L. Barkóczy and Á. Salamon (1974) "Abdallah Nirqi 1964 Archaeological Investigations of the Settlement Town 'A'." AAASH 26:289-328.
7. Seluka land is located closest to the Nile and is cultivated with minimum of effort once the inundation subsides. Saqia land consists of fertile silt deposits cultivated through irrigation. Both are Arabic terms.
8. Studies concerning the reduction of mortality rates in industrialized and developing nations reveal that a combination of factors are responsible. Key elements affecting a decline in mortality rates include improved diet and availability of food surpluses and storage, improved personal hygiene, better housing and ventilation, construction of sewers, purification of drinking water, garbage removal, improved working conditions and better medicines. For a more detailed analysis see D. Yaukey (1985) Demography: The Study of Human Population. New York. pp. 110-44.
9. 'Double houses' are discussed and defined in chapter 1.
10. "The beginning of the 2nd period of the II<sup>nd</sup> settlement [at Abdallah Nirqi] should be dated about the middle of the 8th century. ... and the time limit denoting the end of period II/2 - should be dated to the 11th century" (Török 1975:363). Much of the settlement was destroyed around 11th c A.D. and the site may have been abandoned for a short period prior to reoccupation by a small number of individuals until the end of the Christian period (Barkóczy and Salamon 1974:335-6; Hajnóczy 1974:349-51).
11. Cf. W. Adams (1964) "Sudan Antiquities Service Excavations in Nubia: Fourth Season, 1962-3." KUSH 12: 221 and *Ibid.*, (1977) Nubia Corridor to Africa. Princeton. pp. 491-2.
12. The following figure demonstrates that neither the measurements of a 'unit house' nor 'double house' incorporate multiples of an Egyptian cubit (52.3 cm).

Figure II.8

## CLASSIC 'UNIT HOUSE' MEASUREMENTS

Site	House Dimensions		Room	Dimensions	
	Metres	Cubits		Metres	Cubits



Abdallah Nirqi C1(9,14,15,16)	6.9 x 5.5 m	13.19 x 10.52	R. 19 R. 9	c. 6.6 x 3.5 c. 7.7 x 3.3	c. 12.6 x 6.69 c. 14.7 x 6.31
C1(19,20,29)	6.2 x 5.5 m	11.85 x 10.52			
Faras West I House 3	c. 8 x 7.7 m	c. 15.3 x 52.3		4.2 x 2 m	8.03 x 3.82
Gezeira Dabarosa I House 6, 7, 8	c. 8.5 x 8.1 m	c. 16.25 x 15.5	R. 6 R. 7 R. 8	c. 4.1 x 2.7 c. 6.7 x 3 c. 3.7 x 2.96	7.84 x 5.16 12.81 x 5.74 7.07 x 5.66

EARLY 'DOUBLE HOUSE' MEASUREMENTS\*

Site	Room Dimensions	
	Metres	Cubits
Abdallah Nirqi	c. 5 x 2.5	c. 9.56 x 4.78
Meinarti House XXXI	7.5 x 3.5 4.5 x 2	14.34 x 6.69 8.6 x 3.82
Gezeira Dabarosa I		
1. Room 19	c. 6.3 x 2.8	c. 12.05 x 5.35
Room 21	c. 6.5 x 2.8	c. 12.43 x 5.35
2. Room 13	c. 6.6 x 2.8	c. 12.62 x 5.35
Room 17	c. 4.8 x 2.6	c. 9.18 x 4.97
Arminna West Western Building		
Room 49	4.9 x 3.2	9.37 x 6.12
Room 50	4.25 x 3.3	8.13 x 6.31
Debeira West II (R-3) Building A		
Rooms A1& A2	c. 6.6 x 2.8	c. 12.6 x 5.35
Room A3	c. 4 x 2.5	c. 7.65 x 4.78

\* As discussed in Chapter 1

13. F. Hinkel has postulated that Meroitic monuments were constructed following the use of Greek architectural theory and the "perfect" numbers of 10, 6 and 16. Each structure used a standard unit of measurement or module based on its own column diameter or wall thicknesses, thus the module was slightly different from building to building, yet consistent within a single structure. Multiples of these units or modules derived from Greek perfect measures were used in the construction of Meroitic temples. The ratio of 8:5 (1.6:1) was used to determine the length of the sides of a rectangular space (Hinkel 1991:221-2). With the permission of their excavator, Peter Shinnie, I examined the plans of Meroitic temples KC100, KC101, M720, M282 and KC104, excavated in Meroe city. Within these temples, several small irregularities in column and

wall widths, lengths and materials were noted. This suggests that, while an 8:5 modular system of proportion may have been the underlying architectural planning principle, it was not rigidly adhered to in all instances.

14. Although the sample size is small, the following chart demonstrates that the system used in planning Meroitic edifices was not utilized in Classic 'unit houses' or in 'double houses'. The module used in each case was derived from the average wall thickness of the structure.

Figure II.9

## CLASSIC 'UNIT HOUSE' MEASUREMENTS

Site	House Dimensions (m)	Module (cm)	Factor Length	Width
Abdallah Nirqi				
C1(9,14,15,16)	6.9 x 5.5 m	60 cm	11.5	9.17
C1(19,20,29)	6.2 x 5.5 m	60 cm	10.3	9.17
Faras West I				
House 3	c. 8 x 7.7 m	50 cm	16	15.4
Gezeira Dabarosa I				
House 6, 7, 8	c. 8.5 x 8.1 m	70 cm	12.1	11.57
			Average = 12.47	11.33

## EARLY 'DOUBLE HOUSE' MEASUREMENTS\*

Site	Room Dimensions (m)	Module (cm)	Factor Length	Width
Abdallah Nirqi	c. 5 x 2.5	50 cm	10	5
Meinarti				
House XXXI	7.5 x 3.5	40 cm	18.75	8.75
	4.5 x 2	40 cm	11.25	5
Gezeira Dabarosa I				
Room 13	c. 6.6 x 2.8	55 cm	12	5.09
Room 17	c. 4.8 x 2.6	55 cm	8.72	4.72
Arminna West				
Western Building				
Room 49	4.9 x 3.2	35 cm	14	9.14
Room 50	4.25 x 3.3	40 cm	10.62	8.25
Debeira West II (R-3)				
Building A				
Rooms A1& A2	c. 6.6 x 2.8	50 cm	13.2	5.6
Room A3	c. 4 x 2.5	50 cm	8	5
			Average = 11.84	6.28

\* As discussed in Chapter 1

15. For a detailed analysis of the Nubian barrel vault see S. Medeksza (1990) "Remarks on Structural Engineering in Nubia." *Nubica* I/II:85-91.

16. The measurements of rooms within Classic Christian 'double houses' at Meinarti are as follows:

Figure II.10

Site	Room Dimensions (m)	Ratio of Room length to width	Wall Thickness
<b>Meinarti</b>			
House 82-3			
Room 82	4.5 x 2.3	2:1	c. 20 cm
Room 83	4.5 x 3	1.5:1	as above
<b>House 79, 103-4</b>			
Room 79	4.6 x 2.9	1.6:1	as above
Room 103-4	4.2 x 2.3	1.8:1	as above
<b>House 84, 89</b>			
Room 84	4.6 x 2.9	1.6:1	as above

Average Room dimensions = 4.5 x 2.7 m

17. Application of a construction module based upon average wall thickness resulted in an even number in most cases as the following chart demonstrates.

Figure II.11

TYPE 2 'UNIT HOUSE' MEASUREMENTS

Site	House Dimensions (m)	Module (cm)	Factor Length	Width
<b>Meinarti</b>				
House 134-6, 138-40	c. 7.6 x 5.6	20	38	28
House 129-33	c. 6 x 5.8	20	30	29
House 108, 110, 112, 114-116	c. 6.7 x 6	20	33.5	30
House 152-6	c. 5.9 x 5.2	20	29.5	26

18. House A and house 3 (pls. 28, 37) at Faras West I are clearly different structures as house A was partially beneath the Northern Monastery and church whereas house 3 was situated to the north east of them.

19. For a much more detailed description of Building D see D. Welsby and C. Daniels (1991) Soba Archaeological Research at a Medieval Capital on the Blue Nile. London. pp. 92-120.
20. Cf. J. Vercoutter (1962b) "Un Palais des 'Candaces' contemporain d' Auguste." Syria 39:277-84.
21. For a detailed discussion of the architectural features of the 'Public Building' at Arminna West see K. Weeks (1967) The Classic Christian Townsite at Arminna West. New Haven and Philadelphia. pp. 17-21.

## CHAPTER 3

### Housing from the Late through Terminal Christian Phases

#### Beginning of the Late Christian Period (11th - 12th c A.D.)

Textual evidence from the first part of the Late Christian phase is slim and, as discussed in chapter 2, there is little to suggest major external or internal strife. Most information concerning the period is derived from the earlier mid 10th c A.D. accounts of Arab writers such as Ibn Hawqal and Selim al-Aswani. For example, although he did not view Alwa himself, based upon information he gathered, Selim al-Aswani described it as having

fine buildings (*abniya husān*) and large monasteries (*dhīr*), churches rich with gold and gardens; there is also a great suburb (*rabād*) where many Moslems live. The king (*mutamallik*) of 'Alwa is more powerful than the king (*mutamallik*) of Muqurra, has a larger army and more horses than the Muqurran (*al-muqurrī*): his country is more fertile and larger (Vantini 1975:613).<sup>1</sup>

Al-Idrisi, who is dated before 1170 A.D., wrote about the abundance of food and prosperity of the Nubians (*Nubah*) of Dongola (*Dunqulah*) and the inhabitants of Alwa (Vantini 1975:273-4). Concerning the border town of Philae he wrote "The inhabitants of this town have permanent houses and good resources; wheat is usually imported to them, but barley and millet are plentiful in their country. It is in this town of *Bīlaq* that the merchants from the *Nubah* and the *Habashah* gather; those from Egypt also come here, when there is peace between them" (Vantini 1975:274-5). Ibn Qalanisi (A.D. 1073-1160) documented the extradition of Abu Rakwa from Nubia to the Egyptian ruler Al-Hakim (A.D. 996-1021) (Vantini 1975:285-6). This is indicative of good political relations between the Nubians and the Egyptians at the beginning of the 11th c A.D. Abu Salih the Armenian, who wrote prior to A.D. 1200, further recorded a well-governed Nubia full of monasteries and rich, well-populated cities (Vantini 1975:323-7).

The following sites have been tentatively dated to the Late Christian period:

#### Lower Nubia and the Batn el Hajar

Occupation Sites	Genissab Serrati Island I
Settlement Sites	Abumulgum Island Abu Dom Amada Amashkeit Island Argin IX

Arminna West  
 Attiri IV  
 Debeira West VII  
 Deir Island II  
 Diffinarti II  
 Dukule Island  
 Erbenarti  
 Gendal Irki (Figir Antawu)  
 Kasanarti Island  
 Kasr Iko  
 Kulubnarti I  
 Meili Island  
 Meinarti Island  
 Miskenarti ?  
 Murshid West ?  
 Serrarti Island II  
 Shagir Island  
 Shamanarti  
 Shargeit Island  
 Tangur V  
 Turmuki III ?  
 Ushinarti

#### Walled Settlements

Abkanarti Island (Abka)  
 Abdallah Nirqi  
 Adindan I ?  
 Akasha VI ?  
 Askut  
 Faras West I  
 Gebel Adda  
 Gebel Sahaba  
 Kisinarti  
 Kulubnarti IV  
 Mowrada  
 Mugufil I  
 Nabash I  
 Nabash II  
 Philae  
 Qasr Ibrim  
 Sabagura ?  
 Serra East  
 Sunnarti  
 Tangur I  
 Ukma IV ?  
 Ukma VI ?

#### Building

Abu Sir  
 Duweishat VI ?  
 Matuge Island I  
 Matuge Island II  
 Turmuki III

Monasteries            Debeira West I ?  
 Meinarti Island  
 Qasr el Wizz

Abri-Delgo Reach - Sites South of the Dal Cataract

Occupation Sites    Aliinarti  
 Sagiet el 'Abd II

Settlement Sites    Abusaida II ?

Debba III (Sarkamatto)  
 Egmayin, Jogoyin, Saadin, Nobrayin ?  
 Kissebasha  
 Kofaree/Gebel Abdou Mellis  
 Kossikool  
 Meeme  
 Siyanneere

Walled Settlements

Debba I (Sarkamatto)  
 Diffi (Dal)  
 Ferkinarti  
 Kulme  
 Sai  
 Sheeragi  
 Sumbut  
 Tiine Island

Building

Abassiyankissee  
 Dakka Saab III  
 Debba IV (Sarkamatto)  
 Sudaga II

Ovens

Khor Kagnandi

Abri-Delgo Reach - Mahas

Settlement Sites    Awai Fagiriki

Fagirinfenti II  
 Fogo North  
 Serreig  
 Teanirki ?

Walled Settlements

Barja Aliiki  
 Diffi (Gezira Tombos district)  
 Gezira Dabaki  
 Kisseenfarki I  
 Kisseenfarki II  
 Komer  
 Mugur  
 Jebel Nauri W  
 Shofein II  
 Jebel Wahaba

Building

Haleeba

Dongola Reach Sites

Settlement Sites	Amentego East ? Jogob Sheikh Mohammed Haj Magid Northeast Hambukol Kajebi Letti West II Letti West III Letti West VI Letti West VII Megauda North Megauda South Nawa II Nugdumbush Umm Karabig ? Urukutti ?
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Walled Settlement Monastery	Old Dongola Old Dongola Kom H
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Abu Hamed Sites

Occupation Sites	Hubeil Khuzeina Jebel Khor Tafla
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Walled Settlement Building	Ras el Gezira Abbar Island
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Shendi Reach - Atbara - Khartoum Sites

Settlement Site	Jebel Abayud Gabatti I Gabatti II
Walled Settlement	Qarri

Southern Atbai Sites

Settlement Site	Hadaliya
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Gezeira Sites

Settlement Site	Soba East
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This apparent prosperity and absence of conflict appear further illustrated by the archaeological evidence. It appears that trends initiated during the Classic Christian phase, though disrupted at some low lying sites by flooding around the 10th c A.D., persisted into the beginning of the Late Christian period. In Lower Nubia, villages characteristic of the beginning of the Late Christian period (pre-A.D. 1150), differed little from those of the preceding Classic phase. Many Classic settlements including Abdallah Nirqi, Debeira West IV, Arminna West, and Tamit continued to be occupied at least until 12th c A.D. These sites remained highly



concentrated and urbanized, but unlike the preceding period, in areas where it was topographically possible, buildings were not constructed adjoining their neighbours. For example, blocks 138, 139, 140, and 132-3 in the southern sector of Debeira West IV were separated from each other by small passages, 2 to 5 metres in width (pl. 24a). This district was dated between the 11th and 12th c A.D. and is markedly different from the earlier habitation zone surrounding rooms 33-9, primarily because the later structures seldom shared walls with their neighbours (Shinnie and Shinnie 1978:9). This trend seems further accentuated in some post-12th c A.D. sites. Structures at Serra East usually stood apart from one another (Knudstad 1966:166). It was also noted at Meinarti where "there was ample building space available" (Adams 1964:192-3). Conversely at Kasanarti, an island with limited area, intervals between houses were filled by later dwellings, and then the settlement spread down the lower terraces possibly accompanying a drop in Nile level (Adams 1964:221-2) (pl. 54).

#### Late Christian 'Unit Houses'

Although the exact date of appearance is uncertain, around the beginning of the Late Christian period, the Classic 'unit house' forms were slightly modified and a single-storey Late period version appears together with these earlier building models. As mentioned above, the southern sector of Debeira West IV, containing house blocks 138, 139, 140 and 132-3, was dated between the 11th and 12th c A.D. It was believed to be the latest suburb constructed on the site. Much of the rest of the town was thought still occupied at this time, but the excavators were not able to "make exact chronological co-relations of buildings throughout the site because there is [was] little stratification within the rooms" (Shinnie and Shinnie 1978:9). The Late 'unit house' appears at Abdallah Nirqi prior to the 3rd period of the second settlement, and followed the construction of the Classic type 1 'unit houses'. Unfortunately the exact date of this settlement phase is not certain. It has been placed in the 11th century by Török and between A.D. 1172 and A.D. 1175 by Barkóczi and Salamon (Barkóczi and Salamon 1974:335; Török 1975:363). This is further discussed below.

The single-storey Late Christian 'unit house' has been described as similar to the Classic Christian type 2 'unit house'. Late 'unit house' walls were thicker and each unit was discrete with no common walls shared between structures. "Unit houses are so-called because they are always freestanding. Under crowded conditions they might stand virtually wall-to-wall with each other, but they never share a party wall" (Adams 1994b:37). As with the Classic Christian type 2 'unit

house' the essential elements were "a large room at the front, entered by a single door from the outside, one or more smaller rooms behind the front room, and a narrow, L-shaped passage leading behind the smaller rooms to a latrine at the back of the house" (Adams 1977:514).

More variety is displayed in house form than the above description would suggest, particularly later in the period. Just as toilets were not common to all Classic 'unit houses', figure III.1 shows that not all Late Christian 'unit houses' contained latrines or were restricted to two chambers. Some, primarily those dating from the second half of the era (A.D. 1150-1350), were quite complex containing several rooms and magazines. Storage cellars were noted in many houses, again particularly those of later date. Some examples include, Askut north C, west center A and southeast SE (Badawy n.d.:79, 81) and Kulubnarti I A5, B2, D4, and F1 (Adams 1994b:41-8) (pls. 55-59). Several of these storage rooms had no apparent entrance and were probably entered from above. It is believed that these safe rooms were used to store items not in daily use, including valuables and perhaps grain (Adams 1977:515).

While it is possible that grain was stored in these rooms in Lower Nubia and the *Batn el Hajar*, this was not a universal practice. Silos and magazines dating to the Early, Classic and Late Christian periods have been found south of the Dal Cataract at Araseer I, Toshkei and Dawki Dawi VIII. Except Kossikool, all were associated with cemeteries. Several reasons could account for this distribution. Cemeteries were primarily situated on the desert edge where stored grain would remain dry. In some places, empty tombs from earlier periods would provide ready-made magazines. The grain would also be located in a place easily remembered and whose ownership was known. In present day Nubia, one of the distinguishing features of the Jogob/Hambukol hamlet of El Ghaddar, Upper Nubia, is that its members usually are buried in a cemetery between Megauda and Jogob. Individuals from the main suburb of El Ghaddar tend to be buried in the desert just north of Old Dongola. It is possible that such practices were followed in earlier periods. Grain may also have played a role in the mortuary ceremonies. Among modern Nubians rounded, white stones are put on top of the grave, palm fronds placed at either end and occasionally on top, a bowl is set at one end (usually the south) and grains of dura may be put on the surface or planted at the end beside the bowl. The pebbles are laid by men and represent prayers beseeching forgiveness for the deceased. Children's graves are not covered in stones because they are thought to lack sin (Cavendish 1966:153). The bowl is filled with water that is poured over the pebbles and the dura. The Mahas water the dura for forty days (Kennedy 1978:228). In Mugaffi in Lower Nubia, the dura was watered daily for five days while the

pebbles were watered for fifteen days after burial. At Eip, also in Lower Nubia, the dura was popped and fed to children (Cavendish 1966:153). The use of grain in the mortuary ceremony may be a Nubian tradition predating Islam.<sup>2</sup>

This elaboration of the basic floor plan, through the eventual creation of an upper storey and the addition of cellars and store rooms accessible only from above, differentiates the houses of the Late period from those earlier. There may actually have been two or more varieties of the Late 'unit house' but the information available was not sufficient to make this distinction. For example, the poorly preserved ground floor of a two-storey 'unit house' (discussed below) could potentially be confused with a single storey structure containing sealed store rooms.

Late 'unit houses' were not necessarily constructed independently of one another. Houses CIV/33-4 and CIV/37-8 at Abdallah Nirqi shared a common wall as did houses 177 and 185 at Qasr Ibrim (pls. 19, 103). Nevertheless, these exceptions are rare and the majority of Late 'unit houses' were separate modules. It is largely this characteristic that distinguishes Classic type 2 houses from Late 'unit houses' in their most basic forms. Except for the architectural detachment from their neighbours, the simplest configuration of the Late 'unit house', as found in house XI at Meinarti (pl. 60) or SK at Serra East, differs little from those of the preceding period again possibly suggesting an origin in the Early Christian two-room 'double house' plan.

A dramatic increase in wall thickness was noted at Meinarti where Classic 'unit' houses had a wall thickness of 20 cm while those constructed during the Late period measured upwards from 40 cm. Similar increases were noted at Abdallah Nirqi, (from about 60 cm to roughly 70 cm) and in two instances at Debeira West IV (from approximately 50-60 cm to 55-80 cm). An increase in wall thickness and sturdier construction were believed to accompany the Late 'unit house' form as mentioned above. However, wall thicknesses from other sites were comparable to those noted earlier in Classic 'unit houses' and 'double houses' as shown in figures II.2, II.3, II.7, the majority falling between 40 and 60 cm. This would suggest that the increase in wall thickness noted at Meinarti was specific to the site and not characteristic of Late period 'unit houses' in general.

At Meinarti, Adams noted that the thin walled houses were "deliberately dismantled" and replaced by those with thicker walls (Adams 1968:192). Houses X, XV, and XVI were the earliest Late Christian 'unit houses' constructed there. They were built directly on the destruction and abandonment layer that divided the Classic levels (phase 5, level 7) from the Late period strata (phase 6, levels 6-4; A.D. 1150-1300). Buildings XI, XII, and XIII were constructed

sometime later during the Late Christian period (Adams 1963-4:26; 1968:191). Wilful destruction of Classic 'unit houses' and their subsequent replacement with thicker walled Late 'unit houses' was not reported at any other site. It is possible that the availability of mud increased with a redistribution of the flood plain and consequently the denizens of Meinarti were then able to construct walls comparable in thickness to that found at other sites. Replacement of flat brush roofing with barrel vaults later in the Late Christian period (Adams 1968:193) could suggest an increased supply of mudbrick construction materials. Around A.D. 1100 at Kasanarti, another low lying island site in the same region, mudbrick construction also replaces the earlier stone structures (Adams 1964:221) further suggesting an increased access to brick-making materials.

There is a broader range of house dimensions than in previous periods, as shown in figure III.1, however, a roughly square or rectangular shape was maintained. For example, House XV at Meinarti measured 11.1 x 11.2 metres, Building 2 at Kissebasha was 14.3 x 10.5 metres while D2 at Kulubnarti was only 4 x 2.4 metres in size. The mean size of a Classic Christian type 2 'unit house' was 7.9 x 6.6 metres while that of the Late 'unit house' was 8.7 x 6.7 metres showing that the later dwellings were slightly larger on average. Unfortunately, as many house dimensions were estimated and the sample sizes were small, this statistic cannot be regarded as significant. Excavators at Abdallah Nirqi, a site containing both Classic and Late 'unit houses' noted that structures of later date, although not excavated, were significantly larger than the earlier ones (Hajnácz 1974:353).

Attempts to find a common room dimension or ratio of room length to width were largely unsuccessful. Rooms, though usually quadrilateral, were not constructed according a rigidly fixed set of proportions and varied widely size.<sup>3</sup> This may suggest that local builders were extremely familiar with the limitations of their materials and with the 'unit house' plan and were thus able to vary it more. Similarities between the plans of simple Late and Classic 'unit houses', as drawn above, indicate that by the 12th c A.D., Nubians had been constructing structures of this nature for about 300 to 400 years. "The quality of their [house] construction and the regularity of their plans suggest that they were the work of itinerant professional builders" (Adams 1994b:37). I agree with Adams' hypothesis. Nubians were not strangers to the specialized work of architects. Professional builders, bricklayers, brick makers, stone masons and their apprentices are documented in Egypt in Roman papyri (Lewis 1983:135-8). The use of a system of fixed proportions in Meroitic temples<sup>4</sup> suggests that they were constructed by professionals, though it is unknown if they were Nubians. The uniformity, complexity, ornateness, and adherence to the 4th

c A.D. Apostolic Constitutions regarding church structure, as found in Nubian Christian churches indicate they were likely constructed by professional ecclesiastical builders. Similarity between Egyptian and early Lower Nubian churches suggests both were constructed by Egyptian builders. Distinctive Nubian features were incorporated by the 8th c A.D. (Adams 1977:474). This probably indicates that some ecclesiastical architects were Nubians. It is not much of a stretch to suggest that some trained individuals were engaged in house construction, particularly in the late period, when the churches were demonstrably smaller and large ecclesiastical projects few. Across Lower Nubia, the consistency exhibited in house form and the widespread adoption of structural modifications, such as the latrine, seems to indicate construction by professionals. The large number of houses and isolated location of some sites, particularly those in the Batn el Hajar and Dal Cataract areas, would suggest construction by indigenous builders rather than immigrants.

Figure III.1

## CHARACTERISTICS OF LOWER NUBIAN LATE CHRISTIAN 'UNIT HOUSES'

Site	House Dimensions (m)	Wall Thickness (cm)	No. of Rooms	Entrance	Roof
<b>Abdallah Nirqi</b>					
CIV/37-8	11.3 x 6.8	c. 70	4	?	vaulted
CIV/33-44	11.3 x 7.5	c. 70	4	?	vaulted
(prob. 2-storeys)					
CI/37-9	11.3 x 6.8	c. 70	5?	1 east side	vaulted
CIII/36-8	12.8 x 8.3	c. 70	6	1 south side	vaulted
<b>Askut</b>					
North A	c. 8 x 6.3	c. 40	3	1 south side	vaulted
North B	c. 8 x 7.4	c. 50	4 + latrine ?	2?	vaulted
(poss. upper storey)					
North C	c. 6.5 x 6.3?	c. 40	3?/2+ latrine?	?	vaulted
West Center A	9 x 6.7	c. 50	4	?	vaulted
West Center B	>5.3 x 5.8	c. 20	?	1, poss. more	?
West Center C	7 x 7	?	?	?	?
West Center D	8 x 7	c. 40	6?	?	vaulted
South A	?	?	?	?	?
South B	6 x 4.5	c. 50	5?	?	vaulted
(poss. 'castle house')					
Southeast NW	4.75 x 3	?	?	?	vaulted
Southeast SE	4.25 x 3.2	?	4	?	vaulted
Southeast 52-6	c. 9.5 x 7	c. 50	2 + latrine?	1 south side	vaulted?
<b>Debeira West IV (R-8)</b>					
Block 139	11.5 x 10	c. 55-80	3 (1 divided)	1 east side	vaulted
Block 132-3	10.5 x 10.5	as above	3 (1 divided)	1 east side	vaulted
Block 138	11 x 7.8	c. 50-75	2	1 north side	vaulted
<b>Kasanarti</b>					
76-81	c. 6.6 x 6	c. 50	2/3 + latrine?	2	?
90-94	c. 6.5 x 5.5	c. 50	3/4 + latrine	1	?
11-15	c. 10.5 x 7	c. 50	4 + latrine?	2	?
<b>Kissebasha *</b>					
Building 1	16.5 x 11.3	?	6	none noted	vaulted
(prob. 'castle house')					
Building 2	14.3 x 10.5	?	?	?	vaulted
Building 3	8.5 x 5.7	?	?	?	vaulted

\*This site is located in the Abri-Delgo Reach but was included here for the purposes of comparison.  
Figure III.1 continued on following page.

Figure III.1 continued

## CHARACTERISTICS OF LOWER NUBIAN LATE CHRISTIAN 'UNIT HOUSES'

Site	House Dimensions (m)	Wall Thickness (cm)	No. of Rooms	Entrance	Roof
<b>Kulubnarti I - (possible 1-storey 'unit houses')</b>					
A5	9 x 7.5	c. 45-55	9	2	vaulted
B2	8.5 x 7.5	c. 50-55	8 - 9	2	vaulted
D4	7 x 6.5	c. 45-55	7 - 9	1	?
D6	10.5 x 8	c. 40-60	7?	?	vaulted?
F1	7.5 x 6	c. 50-55	8	2	vaulted?
F2	9 x 6	c. 40	5 + latrine	1	flat brush
G3	10 x 9	c. 40-60	9?	1/2?	vaulted & flat
<b>Kulubnarti IV</b>					
B1	6.3 x 4.3	40	3?	?	vaulted
C1	5.3 x 4.7	40	5	1	vaulted
D1	7.2 x 4.2	40	? + latrine	?	flat brush?
D2	4 x 2.4	40 - 60	6?	1?	vaulted
<b>Meinarti</b>					
House X	5.8 x 5.5	c. 40	2	2? south side	flat
House XI	7.7 x 5.3	c. 40	2 + latrine	1 ne side	flat
House XII	8.0 x 6.6	c. 40	2 + latrine	1 ne side	flat
House XV	11.2 x 11.1	c. 40	7?	4, s, n, e sides	flat
House XVI	6.3 x 5	c. 40	2?	1, south side	flat
Note: later in the period (prior to A.D. 1300) the houses were vaulted (Adams 1968:193)					
<b>Gasr Ibrim</b>					
LC1-6 (177)	c. 12.7 x 6.5	c. 40	5 + latrine	1	?
<b>Serra East</b>					
SH	c. 9.5 x 7.5	c. 50	3? + latrine	?	vaulted
SK	c. 7.2 x 5.4	c. 40	3 + latrine	1	vaulted
SN	c. 7.5 x 6.2	c. 40-50	3 + latrine	1	vaulted
SP	c. 9.4 x 7	c. 40-50	4? + latrine	?	vaulted
SQ	c. 10.5 x 8.2	c. 50-60	4? + latrine	1?	vaulted

Average building dimensions = 8.7 x 6.7 metres

Second Half of the Late Christian Period (12th - 14th c A.D.)

Accompanying the fall of the Fatimid Caliphs in Egypt (A.D. 1169), Nubia was again thrown into conflict with its neighbours. However, it appears that tensions began increasing earlier. Usama Ibn Munqidh (A.D. 1095-1188) documented a mutiny of Nubians within the Egyptian army in A.D. 1144. "During that revolt a great number of Egyptians and Sudan were slain" (Vantini 1975:304). Ibn Muyassar reported numerous quarrels and petty conflicts involving Nubian troops in Egypt beginning in A.D. 1062 and subsequently in A.D. 1066, A.D. 1067, A.D. 1076, A.D. 1094, A.D. 1146, A.D. 1149 and A.D. 1154 (Vantini 1975:389-95).

The Caliph of Baghdad sent a Kurdish army unit to aid the Fatimids in their battle against the Crusaders in A.D. 1163. Salah ad-Din, became the leader of this contingent in A.D. 1169 and was named vizier. Resenting the power held by Salah ad-Din, several Fatimid officials plotted against him. This led to conflicts between Nubian and Kurdish soldiers. As a result, Salah ad-Din ordered the Nubian soldiers to leave Cairo and remain in Upper Egypt (Vantini 1981:157-9; Watterson 1988:157).

In A.D. 1171, Salah ad-Din succeeded Al-Adid, the last Fatimid Caliph. Intrigues against Salah ad-Din, led by highly placed Nubians including the Commissioner of the Palace, continued and resulted in a major confrontation in Cairo.<sup>5</sup> Qadi 'Imad Ad-Din Al-Isfahani (A.D. 1196) wrote "the rout (*kasrah*) of the Blacks (*sudan*) took place (in this year): many of them were slain, the remainder were driven out of Cairo. Al-Malik an-Nasir Salahaddin wrote to the military governors to kill every Black (*aswad*) they found in all the district. They actually killed all those they came across" (Vantini 1975:306-7). This battle was swiftly followed by a military expedition into Upper Egypt and Nubia led by Shams Ad-Dawla partially to punish the Nubians and because

Saladin and his brothers were aware that Nureddin [Caliph of Baghdad] was preparing to invade Egypt; so they all agreed on conquering either Nubia or Yemen, so that if Nureddin advanced against them, they might oppose him and block his advance into the country; but if they could not make a stand against him, they would retreat into either country (Vantini 1975:358).

Presumably, defeat of the Nubians might also have prevented Salah ad-Din from fighting a war on two fronts. Shams Ad-Dawla's destruction of Qasr Ibrim was documented by Abu Shama, Ibn al Athir, Qadi al-Fadil and Abu Salih (Vantini 1975:308; 328; 357-8; 367-8; 1981:159-61). Subsequent raids were carried out into Lower Nubia under the leadership of Ibrahim al-Kurdi. As



reported by Abu Shama, he and his troops "arrived at the citadel [of Ibrim], they divided themselves into smaller groups and began raiding the Nuba country around. They troubled them [the Nubians] with extortion and amassed a large amount of wealth" (Vantini 1975:369). Ibrahim drowned near Adindan. Abu Shama noted that further rebellions of both Nubians, Egyptians and Beni Kanz in the area of Aswan were suppressed by the Ayyubids (Adams 1977:524-5; Vantini 1975:370-1; 1981:160-1). When an Ayyubid appointee was made Governor (wali) of Aswan, he was killed by the Beni Kanz. Their sheikh, the Kanz ed-Dawla, was the traditional occupant of that office. Saladin sent a punitive expedition, led by his brother Sayf ad-din, to suppress their uprising and the Beni Kanz were defeated in A.D. 1174. Some fled to Lower Nubia while others went to the area of the Red Sea hills (Adams 1977:524, Vantini 1975:370-2).

Renewed conflict with Egypt and the unsettled political conditions accompanying it seems the primary cause behind the dramatic changes seen in Lower Nubian settlement patterns at this time. Many Lower Nubian Classic period townsites were deserted. "Of the widely scattered settlements of the Classic Christian period, only a handful show signs of occupation after the twelfth century" (Adams 1977:511). Debeira West IV was one site so abandoned. It was not occupied much after A.D. 1100 (Shinnie and Shinnie 1978:3). Settlement at Tamit, and Abdallah Nirqi was also much reduced (Donadoni 1967:83-4). At Abdallah Nirqi, the second phase of the IInd settlement, dated to the Classic and early Late Christian periods, ended with the destruction of the village and the abandonment of the site. Regarding this destruction,

there is no doubt that in this time we must reckon with the attack of hostile forces, i.e., the increasing danger of the Arab conquest. The temporary abandonment of the settlement must have been connected with one of the captures of Kasr Ibrim (1172-73) and with the events of war following it (Adindan 1175) (Barkóczi and Salamon 1974:335).<sup>6</sup>

Late Christian occupation was concentrated in the Batn el Hajar, where many new villages appeared and Lower Nubia became a buffer zone between Makuria and Egypt. Sites such as Kulubnarti I, II and VI, Amashkeit, Deir II, Diffinarti II, Gaminarti, Gebel Sahaba, Kisinarti, and Nabash I and II showed no signs of having been inhabited before this period. Sherds from these locations were of Late Christian date. Of the sites listed in figures III.3, III.4 only nine were in Lower Nubia while the rest were in the Batn el Hajar or further south in the Abri-Delgo Reach. 65 percent of all sites discovered by the Gemai to Dal survey in the Batn el Hajar were of Late Christian date (Adams 1977:513). This is a huge proportion considering that

the survey covered all periods from prehistoric through to Islamic. Adams is surely correct when he states "there can be little doubt that this poor and isolated region, by-passed by the main caravan routes of the Middle Ages, served as a major refuge for population fleeing from the political disturbances in the north" (Adams 1977:513). It seems unlikely that population pressure or scarce availability of cultivatable land forced individuals to move in such numbers from the basin regions to this less hospitable area. Use of the saqia would have allowed a large population to be supported in the basins and in areas where the arable land was elevated and not regularly irrigated by the inundation.<sup>7</sup>

At this time Nubian dwellings and settlements take on a more defensive character. Enclosure walls were constructed around some extant settlements, older city walls were renovated and some Pharaonic fortresses were reoccupied. Around the 12th c A. D. the upper central portion of Abdallah Nirqi was enclosed by a girdle wall with an eastern and western gate. The construction of blind storage cellars and a possible watchtower were noted (Hajnóczy 1974:344-7) and the entrances to several dwellings were sealed (Barkóczy and Salamon 1974:335). This suggests either the inhabitants had fled but intended to return or entry was via the roof by means of a ladder. Occupation dwindled and ceramic evidence indicated that habitation of the site was greatly reduced by the beginning of the 14th c A.D. (Török 1975c:364).<sup>8</sup> Adams has suggested that the enclosure at Sunnarti was also constructed around an existing settlement based upon the irregularity of the walls and topography on which they were constructed (Adams 1977:513-4). His suggestion has merit. Construction of the Sunnarti enclosure walls was dated between the 11th and 12th c A.D. No excavation was conducted inside the fortress. However, a church located approximately 300-400 metres away from the enclosure was of 9th c A.D. date and contained fragments of an 11th c A.D. Greek inscription (Dinkler 1985:4-7). This might indicate the presence of a settlement predating the fortification.

Meroitic fortification walls surrounding Gebel Adda, neglected during the Classic Christian period, were renovated during the Late Christian and Turkish periods (Millet 1967:62). The Meroitic girdle wall at Qasr Ibrim was also largely rebuilt during the 12th c A.D. and "there is a compelling temptation to associate them [Late Christian renovations] with the historically attested raid and partial destruction of the site by the Ayyubid Shams ed-Dawla in 1172/73 A.D." (Adams 1982:29). The Pharaonic fortress of Serra East was reoccupied. Sherds from Serra East showed Christian occupation began around the 12th c A.D. (Knudstad 1966:171). Gebel Sahaba was another fortress so occupied (Gardberg 1970:45-6) as was Askut, although occupation there

may have begun slightly earlier during the Classic period (Badawy n.d.:78).

Fortified settlements were not confined to Lower Nubia and the *Batn el Hajar*. Within the Mahas district, sherds discovered at Barja Aliiki, Diffi, Gezeira Dabaki, Jebel Nauri W, and Jebel Wahaba date these enclosures to the Late Christian phase (Edwards and Osman 1992:22, 28, 60, 64, 77). As these sites remain unexcavated, this hypothesis must await confirmation.

There is little historical documentation of events in Nubia following the defeat and scattering of the Beni Kanz in A.D. 1174 and Ibrahim al-Kurdi's raid on Adindan (A.D. 1175) until the latter half of the 13th c A.D. At this time, an abundance of information appears documenting hostilities and intrigues between the Mamelukes, the Nubian rulers of Makuria and the Beni Kanz. These events led up to the fall of the Christian kingdom of Makuria in A.D. 1323 with the accession of the Moslem Kanz ed-Dawla to the throne of Makuria. Primary sources of information concerning this historical episode are the Arab historians and geographers, an-Nuwairi (d. A.D.1332), al-Mufaddal (d. A.D.1358), Ibn Khaldun (A.D.1332-1406), and Maqrizi (A.D.1364-1442) (Vantini 1975: 469-92, 494-502, 558-63, 648-50, 676-97). As historical summaries have been related in detail elsewhere, the events of the period will be only briefly touched upon here and will primarily focus upon incidents that potentially affected the living conditions of the Nubian population.<sup>9</sup>

According to Abulfida (A.D. 1273-1331) an Arab geographer and historian, around A.D. 1220, a people known as the Damadim entered Nubia from southern Sudan. They "waged war against them (Nuba and other Blacks), and killed many, as it happened between the Tartars and Muslims" (Vantini 1975:465). Tensions begin to rise in A.D. 1265 when according to Maqrizi, the governor [wali] of Qos led an army into Nubia, "arrived near Dongola, killed many people, took prisoners and then returned" (Vantini 1975:679). It is unknown why the Mameluke governor undertook this action, but it may have been connected with his punitive expedition to Sawakin earlier in the year.

In A.D. 1275, the Upper Egyptian governor again led an army against Makuria in reprisal for attacks, conducted by a Nubian king named Dawud, on Aidhab (A.D. 1272) and Aswan (A.D. 1275). Among the prisoners captured and later executed by the Mamelukes was the Lord of the Mountain (Eparch of Lower Nubia) (Vantini 1981:172-3). Shekenda, a member of the Nubian royal house, approached and received support from the Mameluke Sultan Baybars to overthrow King Dawud. He led an army into Nubia in A.D. 1276, fighting battles at Daw (probably Gebel Adda), Meinarti and finally Dongola. King Dawud fled. Shekenda assumed the throne and made

a pledge of loyalty to the Mameluke Sultan (Vantini 1975:497-9). Apart from vassaldom, among the obligations entailed within this vow was the transfer of Maris (Nobatia) to Mameluke control and taxation of all non-Moslem, adult Nubians of one dinar per person annually.<sup>10</sup> Shekenda was soon assassinated by the Mamelukes for failure to uphold the particulars of their agreement, as was his successor Barak in A.D. 1279.

Shemamun became king of Makuria in A.D. 1279 under a similar oath of fealty to the Mamelukes. Hostilities between the Mamelukes and Shemamun began in A.D. 1286 with mistreatment of the Mameluke ambassador and the ambassador of the King of Abwab. In A.D. 1287 and again in A.D. 1289, Qalawun sent punitive expeditions against Shemamun. In both instances Shemamun retreated and reassumed the throne when the Muslim troops had left. Shemamun sent a gift to Qalawun in A.D. 1290. He apologized, asked the Sultan for pardon, and pledged to deliver the Baqt. This apology was apparently accepted and no further military action was taken against Dongola (Vantini 1975:478-84).

A successor to Shemamun, named Amay (Ammy, Ayay?) delivered the Baqt to the Mameluke Sultan and requested his assistance in defeating an enemy in A.D. 1304. Maqrizi recorded that soldiers and calvary were dispatched and spent nineteen months on a campaign in Nubia (Vantini 1975:690-1). Amay's throne was secured but he was murdered in A.D. 1311. Kerenbes (Kudanbes), his successor declared allegiance to the Sultan, but began withholding payment of the Baqt shortly after his installation as ruler. The Mameluke Sultan Qalawun sent a military expedition (A.D. 1315) to overthrow Kerenbes and replace him with a Moslem Nubian prince named Barshambo. Kerenbes requested that the Kanz ed-Dawla be made ruler instead. An-Nuwayri recorded his request as: "If our Lord the Sultan intends to give the kingdom to a Muslim, then he is a Muslim. Moreover, he is my sister's son and the Nubian kingdom will pass to him after me" (Vantini 1975:484). This petition was refused and the Kanz ed-Dawla imprisoned. Although Kerenbes fled as the army approached, he was later captured and Barshambo was made king.

Upon his release, the Kanz ed-Dawla travelled to Daw and was declared king. From there he travelled with an army to Dongola. These soldiers probably were mainly Beni Kanz, as he was their sheikh. Barshambo was assassinated by his own forces and the Kanz ed-Dawla assumed the kingship on behalf of Kerenbes. The Mameluke Sultan released Abraam, the brother of Kerenbes, and sent him with an army to replace the Kanz ed-Dawla. Shortly after his arrival, Abraam died and the Kanz ed-Dawla resumed the throne (Vantini 1975:484-6). Kerenbes was

then sent in A.D. 1323, with a Mameluke army to take the throne. The Kanz ed-Dawla retreated upriver, waited until the Mamelukes had left and retook Dongola. Kerenbes withdrew to Aswan and no attempts were made to regain the kingship. These events signified the end of Christian rule over the Makuria but not the end of Christian belief in Nubia.<sup>11</sup>

#### 'Castle-houses' and Two-Storey 'Unit Houses'

Between A.D. 1265 and 1323, Mameluke troops passed through Lower Nubia on at least ten different occasions. They reached Dongola and beyond in several instances. The appearance of large two-storey, fortified dwellings, referred to as 'castle houses', coincided with this increase in military activity (Adams 1994b:11). Essentially, with some modifications, an upper storey was added to the 'unit house' plan and by the 14th c A.D. fortified, two-storey 'unit houses' were widespread. The proliferation of fortified 'castle houses', as compared to the small size and sparse number of Late and Terminal Christian churches has been thought to herald the rise of secular feudalism in Nubia. It has been regarded, probably correctly, as an indication of decentralization of authority and a weak central government, unable to adequately protect its citizens (Adams 1977:520). Numerous Mameluke incursions into Nubia and disputes over dynastic succession must have sufficiently displayed these government failings to the populace. The proliferation of hidden storage rooms, fortified dwellings, walled and isolated settlements suggests that individuals and communities thought it necessary to provide their own security. After the fall of the Christian kingdoms, the appearance of strongholds known as *kourfas*, such as the "castle" at Kulubnarti I (Building D1-3a), also suggests that there is merit in the hypothesis of increasing feudalism.<sup>12</sup>

It appears that modifications were made to single storey constructions in response to the external stimuli that resulted from the unstable political situation. The origin and the date of the initial appearance of 'castle houses' is uncertain. Many are insecurely dated. Based upon ceramic chronologies, house 169 at Qasr Ibrim was dated between A.D. 1100 and A.D. 1300 (Adams 1994b:21; Frensd 1974:55-6) while the buildings at Serra East were of 12th c A.D. date (Knudstad 1966:171). The 'castle house' at Meinarti was constructed later around A.D. 1400 (Adams 1994b:21; 1968:194-5). Several sites incorporated both an enclosure wall and 'castle houses' as shown in fig. III.4. For example, the walled settlement of Abkanarti was further fortified by the construction of two 'castle houses' (Almagro et al. 1963:192). Adams' recent analysis of 'castle houses' need not be repeated here (Adams 1994b). My own research largely corroborates his

information. I generally agree with his conclusions; however, a few additional comments may be made.

Usage of 'castle houses' does not seem restricted to the region along the Nile between Qasr Ibrim and Ferka, as previously believed (Adams 1994b:15). This distribution may have been artificially created by the abundance of information concerning Lower Nubia versus the relative poverty of material available from Upper Nubia and the Northern Sudan. Variations of the 'castle house' plan also seem to have existed in the Abri-Delgo Reach and the Dongola Reach. Building A-1 at Hambukol, discussed below, may be an example of a Dongola 'castle house'. To Adams' list of potential 'castle houses', the rectangular stone building (3.4 x 3 metres) found south of the Dal Cataract at Sudaga II, should perhaps be added despite its size. It was thought to be "rappelant les maisons trouvées dans les sites fortifiés, doit se rattacher à un Chrétien tardif" (Vila 1977d:109). This structure may be a smaller variation of the 'castle house' but more information is required.

In the Mahas district, several stone "blockhouses" were reported on the seasonal island of Awai Fagiriki. Another "blockhouse" with stone foundations and upper walls of mudbrick was found within the walled settlement of Barja Aliiki. Two rooms remained on the ground floor. Yet a third "blockhouse" was found at Serreig, but this identification remains very uncertain (Edwards and Osman 1992:44, 45, 60, pl. XVIII-XIX). These structures, tentatively dated to the Late Christian period, may be 'castle houses'. More information is required to ascertain the truth of this hypothesis.

The Mahas sites of Haleeba, Teanirki, possibly Fagirinfenti III, Shyinirki, Jawgul and Toona, should also be included. The characteristics of these sites are shown in figure. III.2 and plate 117. All appeared to contain one or more, two-storey, rectangular or square structures. Access to these buildings was usually via the upper floor. Chambers on the ground floor were reached from the second floor via openings in their vaulting. Walls of the first floor were of drystone construction, while those of the upper floor were mudbrick when present. All buildings were freestanding and their size was variable (Edwards and Osman 1994a:33, 39, 43, 53-5, 58). The presence of hidden crypts with roof access on the ground floor, sturdy construction and entry via the upper floor are characteristic traits shared by the 'castle houses'. None of these sites has been excavated, so their dating remains uncertain. Jawgul and Toona may be constructed upon earlier Christian settlements, as discussed in chapter 1. Haleeba and Teanirki are tentatively dated to the Late Christian period through ceramic associations (Edwards and Osman 1994a:33,

55). The other sites have been identified as Christian only. It can not be ascertained whether these sites preceded or followed the construction of the Lower Nubian 'castle houses'. Based upon the movement of the Mameluke threat from Aswan southwards, I suspect the Lower Nubian structures were built before those in the Abri-Delgo Reach.

Figure III.2 CHARACTERISTICS OF TWO-STOREY BUILDINGS  
IN THE ABRI-DELGO REACH

Site	No. of Buildings	Dimensions (m)	Construction Materials	No. of Rooms	Entrance	Room Dimensions
Fagirinfenti III	1	c. 18x16.4	Stone - Lower Brick - Upper	? ?	1 - Lower	?
Haleeba	1	c. 10.6x9.7	Stone - Lower Brick - Upper	6-7 ?	1? - Upper	?
Jawgul	c. 17?	Avg. 7x5.5	Stone - Lower Brick - Upper	6 6	1? - Upper	2.6x2.3
Serreig	2	c. 20 m. sq. (largest one)	Stone - Lower	?	?	?
Shyinirki	3	?	Stone - Lower Brick - Upper	6 ?	1? - Upper	3.2x1.5
Sudaga II	1	3.4x3	Stone - Lower	?	?	?
Teanirki	7?	?	Stone - Lower Brick - Upper	? ?	? ?	? ?
Toona	1	c. 10x5	Stone - Lower Brick? - Upper	6 ?	1? - Upper	3x2.5

Lower Nubian 'castle houses' seem to originate with the addition of an upper storey to the single storey Late 'unit house' plan, although two-storey structures dating to the Early Christian period have been discovered in Upper Nubia and at Debeira West II, as discussed below. At Kulubnarti I, building D1-3 ("the castle") "began in late Christian times as an ordinary 'unit house', but was subsequently enlarged ... to form an enormous *kourfa*" (Adams 1994a:21). Simple, roughly rectangular, two-storey 'unit houses' were found at Tamit.<sup>13</sup> Unlike the 'castle houses', none of these dwellings displays any evidence of fortification, difficulty of access, or excessive complexity on the ground floor. They appear rather like two single-storey 'unit houses' stacked one atop the other. Casa 4 was smaller than most 'castle houses', measuring 5 x 4 metres. Although little of the upper floor remained, it seemed to consist of a single, large, front room (or perhaps two small rooms), and a corridor that led to a latrine at the back of the house. The lower floor mirrored the upper one with a cess pit located beneath the latrine. An external staircase led to the second floor and the entrance opened directly into the main room on both floors (pl. 61).

Casa 2 measured 6.45 x 3.6 metres. Both it and Casa 4 were smaller than 'castle houses' but well within the range of 'unit house' sizes shown in figures II.2 and II.7. In Casa 2, the upper and lower floors were laid out in the same fashion with a large, rectangular front room and a smaller, rectangular chamber behind, much like the basic 'unit house' plan. Again entry on both floors was directly into the main room and an external stairway led up to the second floor (pl. 61). Casa 3 had a more complex plan with a long rectangular chamber on the ground floor that led into two, smaller, square rooms. Access to the upper floor was via openings in the vaulting. The upper floor consisted of a large "L"- shaped, main room and traces of two concealed storage magazines (pl. 61) (Donadoni 1967:22-3, fig. 8, 9, 10).

Casa 1 was more typical of the traditional 'castle house' plan (pl. 62). The upper floor was similar in plan to that of the 'unit house' with a large rectangular, main room, a smaller, secondary room and a latrine reached by a corridor at the back of the house. Unlike the basic 'unit house' and the 'castle house', entry was up a set of stairs into a long vestibule that opened into the main room. The ground floor was accessible through a narrow doorway that led into a series of five linked chambers. No hidden magazines were associated with this building and the ground floor was lit by a series of slot windows (Donadoni 1967:22-3, fig.7). All four dwellings were constructed as individual units and did not share any walls with neighbouring structures although they did abut them in some places. Unfortunately, while they likely date from the Late Christian period, the exact date of these buildings is uncertain.



Additional examples of unfortified two-storey houses might be found at Sabagura and Naga Abdallah although the date of these structures is uncertain. Like those buildings at Tamit, they lacked the defensive and concealed storage features usually associated with 'castle houses'. At Sabagura, the two-storey houses were rectangular, contained a large main room and a smaller secondary chamber on the ground floor, again reminiscent of the basic 'unit house' pattern. The entrance on the ground floor led to a staircase to the upper floor or into the main chamber (pl. 63a). These houses measured around 7 x 9-10 metres, which was slightly larger than similar buildings at Tamit (Stenico et al. 1962:87-92; Monneret De Villard 1935:48). Although this site appears to largely be of Early Christian date based on analogies with material from Ikhmindī, it may have been reoccupied during part of the Late Christian period. Excavators were not able to learn the date of these structures and associated artefacts. "Quanto alla cronologia, non è possibile stabilire né quella relativa né quella assoluta: ... la confusissima e particolare situazione del terreno archeologico infine non permette uno studio stratigrafico dei materiali in esso contenuti, i quali sono peraltro ancora malamente conosciuti" (Stenico et al. 1962:91). Little remained of the structure at Naga Abdallah. It was roughly square, measuring about 8 x 8.5 metres, constructed of brick and contained three interconnected rooms and a stairwell on the ground floor. An entrance on the ground floor provided direct access into the building. Unfortunately the date of this building is uncertain (Monneret De Villard 1935:89-90).

Based upon the simplicity of floorplan, ease of access and lack of fortification, I suspect these structures date from early in the Late Christian period, perhaps pre-12th c A.D. Houses such as A and B at Debeira West II, may be forerunners of these buildings as they share some of the aforementioned traits, as well as exhibiting some characteristics of an Early Christian 'double house' as discussed in chapter 1. However, as Sabagura and Naga Abdallah were in Lower Nubia, north of Qasr Ibrim, their layout may be a function of location rather than time. Perhaps, the construction of fortified buildings by local inhabitants was discouraged by the Mamelukes after their assumption of control over Maris. The same excuse cannot be used for Tamit, situated well within the zone occupied by 'castle houses' between Qasr Ibrim and Ferka. Possibly, the unfortified two-storey buildings coexisted with the 'castle houses', but in view of the imprecise dates of many 'castle houses' and unfortified two-storey dwellings it is not possible to determine this at present.

Like the unfortified two-storey houses, the plans of the upper floors of the 'castle houses' appear similar to the designs employed in one-storey, Late Christian 'unit houses'. Unfortunately

few second floor plans have been preserved. At a basic level, the upper floor consisted of a large, main room, behind which was a smaller, rectangular chamber and a corridor that led to a latrine at the back of the dwelling. It was also constructed of mudbricks. This plan can be clearly seen in house 2a at Kulme, house D1 and house A1 at Kulubnarti I, and at Murshid West, although some rooms were subdivided in house D1 (pls. 63b, 64, 65, 119) (Adams 1994b:19, 26, 30, 32). This mirrors the simplest plan of the 'unit house' as found in houses XI and XII at Meinarti (pl. 60).

However, like the 'unit house', the upper floor could be more complex with a main room attached to series of smaller chambers. In 'castle house' C-1 at Kulubnarti I, room 6 was the main room while chambers 1 to 5 were ancillary (pl. 66). Similarly, in the single storey 'unit house' B2 at Kulubnarti I, room 5 was the main room while 1, 2, 4, 7, and 8 were smaller secondary chambers and 3 and 3a were concealed store rooms (pl. 58). The smaller chambers were variable in size and number and no two buildings were exactly alike. Dimensions of the main rooms seemed fairly consistent averaging 5 x 3.7 metres, but due to the small sample size this cannot be regarded as statistically significant.<sup>14</sup> Evidence from Serra East suggests that the upper floors of some 'castle houses' may have been connected. Excavators noted traces of vaults covering some narrow alleys that separated discrete buildings. This may have allowed access between the upper floors and roofs of these structures (Knudstad 1966:169-70). The ground floors of these 'castle houses' remained freestanding, seldom sharing a common wall, just like the single storey 'unit houses'.

At Hambukol, a portion of the upper floor of Building B, or later additions to it, have been excavated (pl. 68). Late Christian artefacts were associated with the structure (Grzymski and Anderson 1994:102). The exposed portion of the building is not similar to any other known building in Nubia. Perhaps, as at Serra East, some upper floors of individual structures were joined together. This may become clearer as more of Building B is excavated and the ground level is reached.

The lower floors of the 'castle houses' differed dramatically from the simplicity found in the unfortified two-storey 'unit houses'. They contained complicated networks of passages that connected upwards of four small, vaulted rooms, and were usually constructed of stone. No two structures were designed exactly alike. Storage rooms, accessible from the upper floor, were concealed within the walls. Other magazines were entered through hidden entrances on the ground floor (Adams 1994b:20). This may also be seen in the more complicated single-storey

'unit houses'. For example, houses A5, B2, and F1 at Kulubnarti I all contained hidden magazines. Storage chambers in B2 had a labyrinthine appearance, being a series of interconnected long thin rooms and dead ends (pls. 57-59).

Entry into the 'castle houses' was similarly made difficult. Exterior doorways were elevated and reachable only by ladder. Where there was an entrance on the lower floor, such as at Serra East, a long circuitous passage twisted around the ground floor ultimately leading to an opening in the vaulting through which a ladder could be extended or retracted (Adams 1994b:18, Knudstad 1966:169).<sup>15</sup> "The design of the castle buildings, with their numerous hidden crypts, clearly bespeaks a need for the protection both of persons and of property" (Adams 1994b:35).

Ibn Abd Az-Zahir (A.D. 1223-92), secretary to the Mameluke Sultans, documented some of the booty and prisoners carried off from Nubia after the Mamelukes' second expedition against Shemamun. Evidently the armies were looting Nubian villages.

The emir Ezzeddin asked for 300 camels to carry the prisoners of war ... A number of Nubian nobles (*akabir*), mounted on dromedaries (*hujin*) and holding spears in their hands marched on parade, an elephant and a large number of elephant tusks followed (them), the army of the emir carried loads of goods from the country as the emir Hisamaddin had instructed them to carry away (Vantini 1975:429-30).

Further, besides the punitive raids of the Mameluke army, the Damadim migrated into Nubia around A.D. 1220 probably from the southern Sudan. Apart from their engaging in hostilities with the Nubians, as documented by Abulfida, little is known about this people (Vantini 1975:465). It is possible that they raided Nubian villages. This may partially explain the 'castle houses' that were orientated to facilitate a southern view. Remnants of the Beni Kanz also fled into Lower Nubia in A.D. 1174 after their defeat by the Mamelukes. Some may have engaged in assaulting Nubian villages. Repeated, unpredictable onslaughts by the Mamelukes and raiders would have necessitated the protection of property. This likely provided the catalyst behind the creation of the storage crypts and concealed store rooms found on the lower floors of the 'castle houses' and in some single storey 'unit houses'. Taxation imposed on non-Moslem Nubians, because of the oath of fealty sworn to the Mameluke Sultans by the Nubian rulers, may have given people further impetus to hide their possessions.

'Castle houses' have been regarded as "a significant departure in Nubian domestic architecture, contrasting sharply with the rather flimsily built and tightly clustered dwellings of the Classic Christian period" (Adams 1994b:35). As demonstrated in chapter 2, except for lowlying

island sites like Meinarti, Classic Christian dwellings were not as flimsy as previously believed. Wall thicknesses in the latter half of the Early Christian period were comparable with those found at most Classic and Late sites (figs. II.2, II.3, II.7, III.1).

If 'castle houses' were used as common houses, then the degree to which they were fortified and contained hidden storage areas differentiates them from earlier Christian dwellings. If they chiefly functioned as a refuge and for storage of goods, then there are a few Nubian precedents that incorporate some characteristics found in the later 'castle houses'; however, 'castle houses' were certainly more numerous than their predecessors.<sup>16</sup> Unlike most domestic dwellings, Adams noted no hearths or mastabas, little internal stratigraphy and scant habitation debris within the 'castle houses', although they all contained latrines with large cesspits, implying that much usage was expected. The absence of stratified occupation debris was also noted in the houses at Serra East (Knudstad 1966:170). Detritus present was often due to secondary or squatter occupations. This suggests that 'castle houses' did not function primarily as habitations (Adams 1994b:36). As previously mentioned, access to the upper floors was difficult. This would be a nuisance if used on a daily basis, although it is possible. Consequently, I must agree with Adams' conclusion that 'castle houses' were used for storage and "regarded primarily as places of refuge in times of attack, while the owners lived ordinarily in more modest but more convenient dwellings nearby" (Adams 1994b:36).

Many architectural characteristics present in 'castle houses' are found earlier. Subfloor magazines and concealed storage rooms were also incorporated into some single storey Late period 'unit houses' as mentioned above. 'Castle houses' were a conglomeration of technology previously known to the Nubians and, by the Late Christian period, the Nubians were not strangers to two-storey structures. Consequently, it is not improbable that Nubians, perhaps professional architects, constructed these buildings themselves. The construction of Christian, two-storey domestic structures has been documented as early as the 8th c A.D. in Upper Nubia. Houses A and P at Old Dongola are two examples (pls. 26, 27). In Lower Nubia, houses A and possibly B from Debeira West II also contained stairwells. These structures dated to either the Early or Classic phase (Shinnie and Shinnie 1978:44).<sup>17</sup>

From earlier periods, staircases found in some Meroitic 'de luxe' houses suggested an upper floor (Adams 1977:357) and the 'Palace' and House 2 at Karanòg were two or perhaps even three storeys high (O'Conner 1993:101), as was the Meroitic palace at Wad ben Naga.<sup>18</sup> At the beginning of the Early Christian period squatters occupied the 'Castle' at Karanòg (Woolley

1911:3). From the Early Christian period, two-storey structures include the tower at Abu Sir, the North Monastery at Faras West I, and the Early Christian edifice (rooms 33-39, 72-3) at Debeira West IV. Structures originally of Classic Christian date include, Building D at Soba East, the 'Mosque' building at Old Dongola, and the 'Public Building' at Arminna West. Several sites tentatively identified as monasteries including Ar-Rammal, the Palace at Tamit and Qasr el Wizz, also had upper floors covering some of their buildings.<sup>19</sup>

Besides being two or more storeys high, these buildings possessed some features found in the later 'castle houses'. All were of sturdy construction and had walls comparable in thickness to those found in 'castle houses'. For example, walls of the tower at Abu Sir were roughly one metre thick, while those in the Debeira West IV edifice were about 80 cm wide (Adams and Nordström 1963:38-9; Shinnie and Shinnie 1978:6). Within the Debeira West IV building, a small, subfloor storage crypt was found in room 36, and two storage pits complete with stone lids were cut in the floor of room 34 (Shinnie and Shinnie 1978:6). Although the Classic Christian structures share little in common with the later 'castle houses', there is some indication that the ground floors of Soba East, Building D and the Dongola 'Mosque' were also used for storage, as discussed in chapter 2.

From earlier periods, most X-Group houses at Qasr Ibrim also contained subfloor magazines sealed with wooden covers and were two storeys high. These storage compartments appeared to be for the protection of goods and staples from both man and the environment (Adams 1977:401; 1982:27). Considering the strategic location of Ibrim fortress, the appearance of this type of storage unit is hardly surprising. The Meroitic 'Castle' at Karanòg also contained storage magazines and was notably better constructed than the neighbouring buildings (Woolley 1911:6).

The structure and possible function of the Early Christian tower at Abu Sir bears some resemblance to that of the 'castle houses' (pl. 36). Like the 'castle houses', its upper storey was mudbrick while the lower storey and foundations were stone and mudmortar. The tower was also sturdily constructed and was comparable in size, being roughly 9 metres in diameter, though not in shape to the later 'castle houses' (Adams and Nordström 1963:38). Unlike the 'castle houses' the ground floor was entered via an opening on the southeast side and there were no traces of secret storage crypts. The means of access to the upper floor is unknown; however, as no staircase was located it was likely via ladder. Entry to the ground floor and the opening into one chamber on the lower floor were later sealed, perhaps creating three blind storage rooms. Early Christian

amphorae sherds were associated with the structure that led the surveyors to tentatively date it to this phase (Adams 1961b:38). The presence of the amphorae sherds might imply that something was regularly stored in the tower.

Adams and Nordström did not believe that the structure, although fortified in appearance, was primarily defensive in nature. While it was situated on a rocky outcrop on an island, it did not overlook an important section of river, was close to the west bank and was not constructed on the highest elevation available (Adams and Nordström 1963:38-9). Examination of the field plan shows traces of an enclosure wall running along the edge of the rocky outcrop on the south and west sides (SAS Nov 21-6, 1961). Combined with the fortified appearance of the structure, this would imply that the tower did have a defensive function despite some of its locational failings. It is possible that its purpose was not to watch the river, but to view a part of the east bank instead. As discussed in Chapter 1, the Blemmyes formed a threat to the Nubians during the X-Group period and perhaps into the Early Christian phase as related by the Silko inscription. Most X-Group sites and Early Christian forts in Lower Nubia were located on the west bank, probably in an effort to afford them additional protection from the Blemmyes who controlled much of the Eastern Desert (Trigger 1965:140, 143). It is possible that the Abu Sir tower had a defensive function, limited storage capacities and served as a lookout.

Similarly, at Debeira West IV (R-8), the Classic Christian village was constructed around a two-storey, roughly square, mudbrick edifice of Early Christian date (rooms 33-9, 68, 72-3) (Shinnie and Shinnie 1978:3-7). It measured roughly 11 x 16 metres, placing it within the range of sizes shown by the later 'castle houses' (pl. 24a).<sup>20</sup> The core of the structure was square and consisted of three long, rectangular rooms, subdivided in two. As discussed above, finds of crypts, utility storage vessels, and depressions to hold standing pots in the ground floor rooms suggest that they may have primarily served as storage. The building may have also served a defensive function. Entry into the ground floor was indirect and the excavators suggest that room 68 may have served as a gatehouse guarding the entrance. This entrance was later reduced in size to further control access (Shinnie and Shinnie 1978:7). Compared to the other Early Christian structures on site, the walls are thicker. The site itself afforded good visibility as it was situated on a terrace beside a wadi, overlooking the Nile. It appears then, that during the X-Group and Early Christian periods, there were buildings that shared some structural characteristics and performed some functions ascribed to the later 'castle houses'.

### Settlement Types in Lower Nubia and the Batn el Hajar

During the latter half of the Late Christian period, Lower Nubian settlement is characterised by two different types of sites; those containing primarily small, one or two-room stone dwellings (here designated type A) and those that incorporated a variety of house models including 'unit houses', two-storey 'unit houses', 'castle houses' and small stone huts (type B) (figs. III.3, III.4). Safety and protection of the inhabitants could be maintained at either site type via enclosure walls or fortified houses.

Within the Batn el Hajar, there is a proliferation of type A settlements on the rocky slopes and summits of Nile islands, such as Meili, Serrarti, Shagir, Deir, Shargeit and Shamanarti. Of the type A sites listed in figure III.3, approximately 85 percent of those found in Lower Nubia and the Batn el Hajar were built on islands and they were largely single period sites.<sup>21</sup> This type of site is also found in the Abri-Delgo Reach, south of the Dal Cataract. Settlements at Meeme, Sheeragi, Tiine, and Debba I and III are examples. Apart from location, these sites share several distinctive characteristics. As shown in fig. III.3, they ranged widely in size, from very small with few dwellings to extremely large with upwards of 50 habitations. Houses were small, measuring between 2 x 2m to 3 x 5m on average and were constructed primarily of stone sometimes with mud or sand mortar. They usually contained only one or two rooms and were up to a single storey in height. Some structures were free-standing, but many incorporated sections of girdle walls, large boulders, ledges or bluff faces. Occasionally the upper walls were constructed of mudbrick (pls. 100, 106, 107, 110).

The choice of stone as construction material is not surprising because it was a strong, readily available material; however its use may reflect an inadequate supply of mud for brick making. This may be further confirmed by the increased emphasis on fishing, which apparently accompanied the move to the islands, and may not have been restricted only to the Batn el Hajar district. Numerous fishbones were recovered from Shamanarti and several semi-circular, stone fish traps located in narrow river straits were also identified there (Adams 1962b:14). A fishnet fragment currently on display in the Khartoum National Museum, was recovered from Attiri IV, an island settlement in the Halfa District tentatively dated to the Late Christian period.<sup>22</sup> Lack of cultivatable land in the vicinity might be the major reason behind the adoption of this pursuit; however, this apparent trend might also be the result of differential preservation of fishbones or variable reporting between sites. Arabic sources appear to confirm both this consumption of fish and the usage of the Batn el Hajar as a refuge. Based upon al-Aswani's description of the

Second Cataract area, Maqrizi (A.D. 1364-1442) recorded

This is the worst part I ever saw in this district, for it is narrow, extremely difficult to navigate and full of cataracts and intervening rocks ... The land on either side is cut by narrow passages (*majawib*), steep heights and mountainous passes so narrow that neither a rider nor any ill-equipped traveller on foot can cross them. ... These mountains provide the inhabitants with a (natural) fortress (*hisn*), where the inhabitants of the district bordering the land of Islam seek shelter. In some islands there are palm-trees and some plantations of negligible value. Their staple food is fish. They also use fish oil (*shahm*) to anoint themselves (Vantini 1975:603).

Enclosure walls surrounded some type A sites, but it was largely geographic isolation that was relied upon to provide security. Those that lacked girdle walls were sometimes equipped with fortified buildings in which to seek refuge. Of the Lower Nubian type A sites listed in figure III.3 (p. 116), a defensive construction was absent in more than 60 percent of them. Every site located on the East Bank was furnished with an enclosure wall or fortified house or both, except Ashkeit II and Tangur V; Tangur V was greatly denuded, so the extent of the site and its contents remains uncertain (pl. 101). Only one small dwelling was found at Ashkeit II. Perhaps it was occupied only seasonally or temporary. Alternatively, it is possible there were too few inhabitants at either site to make the construction of a defense system worthwhile.

It is possible that some of the smaller, simple, one-room, stone circles found at type A sites were tent rings, rather than actual stone dwellings. Rocks may have been used to weight down tent sides, thus forming the roughly circular shape recorded by archaeologists. No post or stake holes were reported associated with the stones, but as many sites were surveyed quickly this can not be taken as an indication of their absence. It seems more probable that tent rings might be found in type A sites lacking an enclosure wall or fortified dwelling, due to the investment of time and resources required for their construction. Usage of tents suggests settlement of a more impermanent or transitory nature.



Figure III.3

LOWER NUBIAN AND ABRI-DELGO REACH SETTLEMENT CHARACTERISTICS - TYPE A  
LATTER HALF OF THE LATE CHRISTIAN PERIOD

Site	Location	No. of Houses	House Dimensions (m)	No. of Rooms per house	Fortification
Abumulgum	island	c. 20	?	?	some 'castle houses'?
Abusaida II	E. Bank	50-100	?	1 - 2	no
Amashkeit	island	c. 25	c. 2 x 2	1 - 2	no
Ashkeit II	E. Bank	1	3.0 x 1.5	1	no
Debba I (Dal S.)	E. Bank	70	?	1 - 3	enclosure wall
Debba III (Dal S.)	E. Bank	c. 8 - 9	?	?	no
Deir II	island	>15	2x2 - 3x5	1 - 2	no
Duk	island	c. 24	c. 3.5 x 5	1	enclosure wall
Sai	island	?	?	1 - 2?	enclosure wall
Serrarti II	island	15	2.5 x 3 to 3 x 4	1	no
Shagir	island	2	3 x 2.5	1	no
Shamanarti	island	?many	2x2 - 3x3	1 - 2	no
Shargeit	island	c. 30	c. 2x2 - 3x3	1 - 2	no
Sheeragi	island	c. 50	?	1 - 2?	2 'fortified houses'?
Tangur V	E. Bank	9	c. 5 x 2-3	1 - 2	no?
Tiine	island	c. 15	?	1	enclosure wall, fortified house
Turmuki III	island	2	8.5 x 6 and 7x6.5	5 rooms on each floor	2 'castle houses'

Type B sites contained a combination of dwelling types, including 'unit houses', irregular stone huts, and 'castle houses'. Most were fortified villages, incorporating an enclosure wall or 'castle house', with the possible exception of Meinarti, Gendal Irki and Tamit (fig. III.4, pls. 43, 55, 56, 65, 88, 102-105).<sup>23</sup> Unlike the type A sites, inhabitants of these villages could not rely primarily on an isolated location to maintain their security. Roughly 70 percent of these sites were situated on islands, with the others evenly distributed between the east and west banks. The vast majority were located in the Batn el Hajar. Eight major type B sites have been documented, either textually or archaeologically, between the First and Second Cataracts. These include, Meinarti, Adindan I, Amada, Faras West I, Gebel Adda, Qasr Ibrim and Serra West, and Tamit.

The reason for the differentiation of house types within the type B sites is uncertain. It may be due to a misdating of structures or differential reporting between sites by the excavators. However, the large number of type B sites, all sharing these characteristics, makes this hypothesis improbable. Alternatively, it may be a reflection of chronological differences between the buildings or be indicative of status or socio-economic inequalities among the inhabitants.

At Kulubnarti I and IV, though exact dating of structures was difficult, the earliest artefactual material was associated with the stone huts or "flimsy houses" (Adams 1994a:11, fig. 1.1). Irregular stone huts E7, E8 and F4 at Kulubnarti I were connected to a 12th c A.D. accumulation of debris and ash, the earliest deposit on the site (pl. 67). Other irregular stone dwellings were associated with an overlying stratum consisting mainly of animal dung. They were also dated to the 12th c A.D. based on sherd content. 'Unit houses' and 'castle houses' were constructed on top of some stone huts and above the strata associated with them. Ceramic chronology dated many of these buildings to the 13th c A.D. This led the excavator to conclude that most 'unit houses' and 'castle houses' were constructed later than the irregular stone huts (Adams 1994a:11, fig. 1.1,26). I concur with his conclusions. Similarly, the seven stone huts at Kulubnarti IV were occupied during the 12th and 13th c A.D., while the 'unit houses' and 'castle house' (A1) were built later in the Late Christian period (Adams 1994a:11, fig.1.1, 238).

The building of irregular stone dwellings apparently preceded the construction of 'unit houses' and 'castle houses' and appears to coincide with the founding of these settlements during the second part of Late Christian phase. These early stone dwellings were not unlike those found at type A sites, although some were larger. Many incorporated natural rock outcrops. Based upon their irregular shapes and lack of building debris, Adams suggested that several may have

had upper walls of wood and thatch (Adams 1994a:26). This may indicate that Kulubnarti I and IV were initially of a temporary or transient nature, or possibly quickly constructed refuges. As with the type A sites, some of these structures, identified as stone houses, may actually have been tent rings. This would be a further indication of the temporary nature of the initial habitation. Perhaps, as the inhabitants of Kulubnarti I and IV decided to make their settlements more permanent, they invested greater time and effort in the construction of their houses and defense of their village. As a consequence, 'unit houses' and 'castle houses' were built. This may also be true for the site of Abkanarti, though it dates somewhat earlier.

This chronological model does not appear correct for all type B sites. At Serra East, roughly thirty buildings were uncovered, the majority of which were 'unit houses'. No small, rough stone houses were noted. The length of site occupation was thought to be relatively short, as most buildings were plastered once and few structures were modified or constructed on top of one another. Associated ceramics were of Late Christian date, the earliest being around the 12th c A.D. (Knudstad 1966:166, 170-1). As 'unit houses' and 'castle houses' were erected there either simultaneously or within a short time of one another, other considerations must have influenced their construction. Usage of both also appears to have been simultaneous.

Some type B sites, such as Serra East and Kulubnarti I, contained several two-storey houses, others like Meinarti, Kulubnarti IV and Abkanarti had only one or two. It is difficult to find an adequate explanation for this disparity of number. As mentioned above, scant occupation debris was found in many 'castle houses' and it is unlikely that most functioned as regular houses on a daily basis. It has been suggested that besides being protective refuges, they served as symbols of status, wealth and power, but the relationship between the 'castle house' proprietors and their neighbours is unclear. Apart from the imposing visage of a 'castle house', there is little direct artefactual or textual material to indicate their role or status. Adams has suggested that the Old Nubian word *tot*, a title that occurs with great regularity in the Qasr Ibrim documents, may refer to a local official and possible resident or administrator of many 'castle houses' (Adams 1994b:37). This remains unconfirmed and as Adams points out, does not account for the variation in number of buildings between sites. Few artefacts contemporary with the primary occupation phase of the 'castle houses' were recovered and nothing specifically labels them as the residences or property of feudal lords. Essentially, "the houses seem to give clear evidence of a social differentiation between the owners and their neighbours, without indicating what was the basis of such differentiation" (Adams 1994b:37).

Figure III.4 Lower Nubian and Abri-Deigo Reach Settlement Characteristics - Type B  
Latter Half of the Late Christian Period

Site	Location	No. of Houses	House Types Present	Fortification
Abkanarti	island	>85 rooms	'double houses' 1 room huts poss. Classic 'unit house'	enclosure wall 2 'castle houses'
Askut	island	c. 13?	2 storey 'unit houses?', 'castle houses', 'unit houses'	enclosure wall, 2 'castle houses'?
Diffi (Dal)	island	>15	'unit houses'	enclosure wall, 1 'castle house'?
Egrmayin etc.	island	?	?	7 fortified houses
Faras West I	W. Bank	?	'unit houses'?/ 'castle houses'?	enclosure wall, 1/2 'castle houses'?
Ferkinarti	island	?	'unit houses'	enclosure wall, 1 'castle house'?
Gamanarti	island	36-48	?	enclosure wall
Gebel Adda	E. Bank	?	'unit houses'?	enclosure wall, 2/3 'castle houses'
Gendal Irki	W. Bank	>100 rooms	poss. 'unit houses' poss. monastery?	no?
Gergetti Island I	island	11	'unit houses'?	enclosure wall
Kasanarti	island	>100 rooms	'unit houses' 'double houses'	1 'castle house'
Kissebasha	W. Bank	3	'unit houses'	1 'castle house'?
Kulme	island	4	'castle houses'?	4 'castle houses'?
Kulubnarti I	island	c. 65	'castle houses', 'unit houses', irregular 'flimsy' constructions, irregular 1 - 3 room stone houses	4 'castle houses'
Kulubnarti IV	island	13	5 'unit houses', 7 one/two-room huts, 1 'castle house'	enclosure walls
Meinarti	island	c. 12 (late 'unit houses')	'unit houses' poss. Classic 'unit houses' poss. 'double houses'	1 'castle house'
Murshid West	W. Bank	?	several 'castle houses'?	'castle houses'
Qasr Ibrim	E. Bank	>25	earlier houses reoccupied, 'unit houses'? 2-storey 'unit houses'	enclosure wall, 3 'castle houses'
Serra East	E. Bank	>30	'castle houses' 'unit houses'	enclosure wall, 1 'castle houses'?
Sumbut	E. Bank	?	'unit houses'?	enclosure wall
Sunnarti	Island	>12	'unit houses'	enclosure wall
Tarnit	W. Bank	?	2 storey 'unit houses', 'unit houses'?	?
Tangur I	Island	?	?	enclosure wall
Turmuki III	Island	?	2 'castle houses'	2 'castle houses'
Ushinarti	island	>10?	'castle houses'?, 'double houses'?, 'unit houses'?	fortified tower or castle house?

Four Late Christian churches were discovered at Serra East, while six or seven churches were identified at Gebel Adda (Knudstad 1966:167-9; Millet 1965:59-61; Monneret De Villard 1935:200-5).<sup>24</sup> A great deal of variation in the placement and number of churches was found within both settlement types (Adams 1977:519, 543). There is no satisfactory explanation to account for this distribution. Some settlements, like those mentioned above, contained several churches while others like Abkanarti had only one. Neither Nabash I nor II seemed associated with any church (pl. 100). Churches at Meinarti, Kulubnarti I, and Kasanarti were separated from their villages, whereas the church at Diffinarti II was central to its settlement. "It would appear that some of the Late Christians wished to gather as closely as possible around their church, while others tried to dissociate themselves from it" (Adams 1977:519). The most probable reason for this was "a population divided between devoted adherents of the old faith [Christianity] and zealous adherents of the new [Islam], with the largest element of all perhaps holding back from a strong commitment on either side to await developments" (Adams 1977:543).

In an attempt to account for these numerous small churches, it has been suggested that persons from several different places came to these sites to take advantage of the protection that the enclosure walls provided. These groups then maintained separate congregations and constructed their own churches (Adams 1977:511). This is a good suggestion, but unfortunately there is little to substantiate it. Hirschfeld noted that some monasteries were associated with memorial churches (Hirschfeld 1992:55-8) and commemorative chapels were found within Kom H, Old Dongola (Jakobielski 1994:personal communication). Perhaps a number of churches were present in some communities because they performed different functions such as memorial versus congregational, or possibly some churches were commissioned by families, as occurred in Byzantine Europe. Certainly a group or individual with the resources to construct a 'castle house' might also be able to fund a church. Following this line of reasoning, it is possible that at sites with many 'castle houses', the preference was for each congregation, tribal or kin group to possess or construct their own refuges and secure magazines. Part of this theory fails at sites like Kulubnarti I, where four 'castle houses' were discovered but only one small church, somewhat removed from the site. There does not seem to be a correspondence between the number of fortified houses per site and the number of churches.

The relationship between kinship and property is unknown. Christian legal documents from Qasr Ibrim, including several wills and deeds, seldom refer to kinship or family obligations and parentage is infrequently listed on funerary stele (Adams 1993:33-4).<sup>25</sup> This might be taken

to suggest that kinship was a minor factor where concerns of property, possessions or inheritance were an issue. However, the importance accorded matrilineality in matters of succession to the throne would indicate otherwise. A text from Faras West I, dating to A.D. 930, documents the succession and lineage of Zaccharia. It shows he was the rightful heir because he was the son of the previous king's sister's daughter, as well as his son. An 11th c A.D. wall painting in the Faras cathedral depicted the Queen Mother Martha wearing a crown and with an identifying text that included her title and familial relationship to the king, that of Queen Mother. This would suggest she was of some importance (Jakobielski 1972:112-4). Archaeologically, the divisions made to House P at Old Dongola during the Classic Christian period, as discussed in chapter 2, and the joined upper storeys of some two-storey houses at Serra East might suggest occupancy by a unit larger than a nuclear family. Therefore, it does not seem impossible that some 'castle houses' were constructed to provide security for an extended family and their belongings.

Personal safety and security seem to be the foremost factors influencing the construction of both type A and B sites. The sudden occupation of remote islands and the appearance of enclosure walls suggests that defensibility was an important criterion in choosing these sites. The proliferation of secret magazines and fortified dwellings indicates that individuals or communities thought provision for their own protection necessary. Additional personal protective measures may have been invoked via the application of graffiti. In Lower Nubia, Upper Nubia and the Northern Sudan, figures were inscribed on pot sherds, mud stoppers and vessels. These included personal monograms, crosses, palm fronds, stars, fish, alpha-omega monograms and sacred names. Many evoke basic Christian symbolism, although what they actually meant to the ancient Nubians remains uncertain. Some may have served as mnemonic devices, reminding people of biblical stories or hagiographies, while others may have been interpreted metaphorically or invoked abstract concepts such as innocence, purity or saintliness.

Painted, inscriptional makers' marks and complex owners' monograms were more common during the Late period and, prior to this phase, graffiti was seldom applied to imported vessels (Adams 1986:232, 257). At Meinarti, the proportion of vessels displaying graffiti "from Classic Christian times onward, ... fluctuated between 9 and 15 percent" (Adams 1986:257). Adams (1986:256) and Jakobielski (1991:281) suggest that the majority of the Christian Nubian monograms were apotropaic in function. "The designs may in some cases be the owners' names or monograms, but the frequency with which a few sacred names or symbols recur suggests that many inscriptions were intended to invoke divine blessing on the vessel or its contents rather than

to proclaim ownership" (Adams 1986:256). MIXAHA (Michael) frequently appears written as a monogram. This suggests an invocation to a Saint or Archangel rather than a population full of individuals named Michael.<sup>26</sup> At Soba East, it constituted 40 percent of the total number of monograms and 12 percent of the total number of graffiti discovered between 1989 and 1992. Roughly 750 graffiti were recovered during this period.<sup>27</sup> Michael is also commonly written in cryptographic form which further suggests a religious or mystical purpose.

In Nubia, it seems probable that the Archangel Michael was most often invoked in his role as protector and this role was defined by a combination of Christian scripture mixed with local tradition. Wall painting 74 from Faras shows the Bishop Petros II as Eparch under the protection of the Archangel Michael. Both are identified by accompanying texts [e.g., APXAIΓTEΛOC MIXAHA] (Jakobielski 1972:152-3). The Archangel Michael is one of two archangels mentioned in the Bible,<sup>28</sup> the other being Gabriel. The book of Daniel (xii, 1) describes Michael as the guardian of peoples and a prince of Israel. He is usually portrayed as a soldier carrying a sword and clothed in armour. He is also depicted holding the scales of justice and standing over the dragon of Revelation (xii, 7) (West 1989:35; Whittick 1960:146). Application of a graffito, particularly that invoking a strong defender or protector, was possibly believed to be an additional way in which persons could further safeguard their property and perhaps themselves.

In the domestic setting,<sup>29</sup> inscriptions were not just restricted to ceramic vessels, but also appear on the walls of some dwellings. For example, traces of 4 inscriptions including the names of the Archangels, Michael, Gabriel and Raphael and the abbreviation for Jesus Christ [ IC O XC] were written inside 'castle house' C1 at Kulubnarti I. Eleven inscriptions including Michael and "Mother of Christ" were discovered in house H1 at Kulubnarti I. Several of these texts were impressed into the wet plaster during the construction of the building (Adams 1994b:303-4).

Occasionally, there were paintings on house walls, although this was not restricted to the Late period.<sup>30</sup> Dating to the Late Christian period, from Building B, in Hambukol, Upper Nubia, a painting showed the upper portion of a naked man surrounded by flames praying. His head and arms were raised in appeal towards heaven. In early Christian iconography, if a Christian is portrayed without clothes, his nakedness shows his innocence. One term included in the sentences of Christian martyrs in the Roman empire was deprivation of their clothes (Török 1975d:123). An Old Nubian inscription NI NEU H was inscribed under the sinner. This was believed to be a biblical reference to the destruction of Nineveh recorded in Jonah cpt 3-4. "We

sent Jonas the prophet to Nineveh, the great city, and he preached a repentance for it, but his preaching was not sufficient to save them after they had repented, and they were destroyed again" (Grzymski and Anderson 1994:97).

Foundation deposits placed beneath the corners of domestic buildings may also be indicative of the search for personal and communal safety. Caches such as these have not been documented in Christian Nubia earlier than the 11th C A.D. A total of ten foundation deposits were discovered at Serra East (Knudstad 1966:167, fn. 4). Footed bowls had been placed upside down beneath the corners of building ST. Each covered an ostrakon inscribed in Greek and with magical symbols. Four unfired cups and jars were placed beneath the four corners of Building SR. All vessels had been placed upside down. Two vessels were found beneath the northwest and northeast corners of SS. The northwest one contained a small fish and some organic material while the northeast one contained organic debris (Hughes 1963:126).<sup>31</sup> Similarly, a small ceramic dish and a painted wooden container were found beneath the floor of House E5, room 1 at Kulubnarti (Adams 1994b:31) and may be foundation deposits.

"House amulets," ostrakon buried beneath thresholds, might also be included within this category. These usually were inscribed with a magical religious text invoking the Virgin Mary or saints and archangels. At Gebel Adda, Church 7 was reused by squatters perhaps as late as the 15th c A.D. Within the church, "new sills had to be set in the north and south doors, and under these were placed Christian amulets in the form of inscribed sherds which attest to the squatters' loyalty to the old faith" (Millet 1967:61).

Although no other examples have been documented in Lower Nubia, three inscribed magic bowls, also of Late Christian date, were recovered from beneath three corners of Building A-1 and another, though uninscribed from a doorway in House C-1 at Hambukol, Upper Nubia.<sup>32</sup> Each bowl was inscribed in Greek with the names of the 72 disciples of Christ who were given the power to trample serpents and scorpions in Luke 10:17-20 (Grzymski 1990a:139-63). These were likely placed beneath the corners of the building to ward off evil spirits. Żurawski has suggested that the placement of these foundation deposits acted to protect and purify the area enclosed by the bowls (Żurawski:in press; 1994:216).

### Settlement in Upper Nubia and the Northern Sudan

There is some evidence to suggest that the inhabitants of Upper Nubia reacted to political turmoil, persecution and armed threats much in the same way as the people of Lower Nubia.



Upon hearing of military force dispatched against him by the Mamaluke Sultan Qalawun, Shemamun ordered the evacuation of the population in the army's path. An-Nuwayri reported that "the king ordered him [Lord of the Mountain, Eparch of Lower Nubia] to evacuate the country under his jurisdiction before the advancing army and they withdrew, centre after centre, until they joined the king of Nubia at Dongola" (Vantini 1975:479).

Apart from the region just south of the Dal Cataract (included in figs. III.3, III.4), settlements analogous to the type A and B sites found in the Batn el Hajar, have been discovered in the Mahas district and Abu Hamed Reach. Within the Mahas region, Late Christian walled settlements were located at Kisseenfarki I and II, Komer, Mugur, and Shofein II (pl. 118). Fortified buildings, perhaps a southern version of the 'castle house', have also been discovered, as discussed above. With the exception of Mugur Island, all of these sites are situated on the west bank and most were found on steep slopes overlooking the Nile. Mudbrick ruins found within Kisseenfarki II, and Komer (Edwards and Osman 1994a:28, 58) suggest they may have been similar to type B sites. No information is available concerning the interior of Kisseenfarki I, Komer or Shofein II, but the remains of small stone huts outside Shofein II (Edwards and Osman 1994a:49) might indicate a similarity with type A sites. The quadrilateral shape, "L-shaped" gate and rounded, corner bastions of Shofein II are like those found in Early Christian forts, such as Sabagura and Kassi-Markol (pls. 31, 114, 118). They bear little resemblance to Late Christian forts, such as Abkanarti (pl. 88). It is possible that Shofein II was constructed during the Early Christian period and reoccupied during the Late phase, as were several other sites noted above. Future excavations at these sites will clarify the situation.

In the Abu Hamed Reach, several small round stone houses, similar to those found in Lower Nubian type A sites, were surrounded by an enclosure wall on the island of Fillikol II (Abbas 1971:12, 14; Crawford 1953a:18-9). The fortress at Ras el Gezeira was also tentatively dated to the Late Christian period (pl. 109) (Ahmed 1993:16; Abbas 1971:5-7). It was roughly triangular with rounded bastions on the corners. Excavation has not yet been conducted there so information concerning the site is lacking. It appears unlikely that people were forced to move from the rich basin areas of Upper Nubia into the Abu Hamed Reach in search of cultivatable land. It is believed that "with the use of the saqia, the Makurian heartland could closely match the productive potential and population of the same region in recent times" (Edwards 1989:216). This would suggest that another factor was the primary influence behind the formation of the Abu Hamed sites.

Unfortunately, most Fourth Cataract sites have not been dated to a particular phase within the Christian period or excavated. Of the 47 Christian sites identified thus far in the Abu Hamed Reach, 45 percent were walled settlements or fortified buildings and 51 percent were situated on islands. Based upon analogies with the Batn el Hajar and Dal Cataract, this might suggest that the majority of sites in the Abu Hamed Reach are of Early or Late Christian date.

Within the Letti basin, several Late Christian sites were situated within sight of one another on mounds parallel to the river (map 5). For example, sites to the north of Hambukol, including Jogob Sheik Mohammed and Megauda South, and towns to the south such as Old Dongola Kom A, were visible from the mound upon which Hambukol fortified Building A-1 was constructed. This structure is discussed in more detail below. Żurawski has suggested that the location of Building A-1 was chosen specifically for its strategic value in response to the hostilities that accompanied the 12th and 13th c A.D. in Upper Nubia (Żurawski: in press). Two to three metres deep sondages, dug within both Hambukol House A-1 and Building A-1, revealed little more than windlaid sand and single-use campfires. This suggests that much of the Late period Hambukol settlement was essentially built on an extant sandy hill (Grzymiski 1993: personal communication).<sup>33</sup> This would support Żurawski's assertion concerning choice of site. Further, it could be implied that at least some neighbouring Late period settlement mounds lining the Letti Basin, such as Jogob Sheik Mohammed and Megauda South, were originally chosen specifically for their elevations and view of the surrounding area. These Late period settlements might have been constructed upon mounds largely composed of sand rather than earlier occupation. Sherds recovered from these sites are also primarily of Late Christian date. It is also possible that a fortified building, like Hambukol Building A-1, was erected on them. Future excavation at these sites will determine if this hypothesis is correct.

In addition to watching for the enemy, I suggest that in troubled times, such as during the Early and Late Christian periods, the population retreated to the relative safety provided by the geographic isolation and difficult rocky terrain of the Fourth Cataract region.<sup>34</sup> Based upon the orders given by Shemamun mentioned above, retreat of this nature may even have been official government strategic policy. During the second Mameluke expedition against Shemamun, king of Dongola, the army upon arriving in Dongola, is informed that he had fled fifteen days upriver. An army unit attempting to capture him was unable to use boats because of the "many rocks in the river" (Vantini 1975:481-2). This must refer to the region of the Fourth Cataract. To avoid the incoming Mameluke army in A.D. 1323, the Kanz ad-Dawla also fled upriver, as did

Kerenbes in A.D. 1316 (Vantini 1981:187-8). It seems probable that most Late Christian occupation in the Abu Hamed Reach occurred towards the end of the 13th c A.D., coinciding with the repeated attacks and sacking of Old Dongola. The abandonment of Building A-1 at Hambukol, dated to  $1295 \pm 45$  A.D. by radiocarbon analysis (Grzymski 1990a:163, tab. 1), further supports this notion.<sup>35</sup> This may place Late Christian habitation of the Fourth Cataract roughly 100 years later than the aforementioned occupation in the Batn el Hajar. Future work in the region, probably accompanying the construction of the Merowe High Dam, may serve to verify this hypothesis.

Until recently little information has been available concerning the nature of Late Christian structures in Upper Nubia and the Northern Sudan. Current excavations at the sites of Hambukol and Old Dongola may shed some light on this problem. House C-1 at Hambukol and the latter occupation phases of Houses A, B and P on Kom P at Old Dongola have been dated to the Late Christian phase.

A radiocarbon sample taken from the earliest occupation of House C-1 at Hambukol gave a date of A.D.  $1150 \pm 90$ , placing the building firmly within the Late Christian period (Anderson 1994:225; Grzymski 1990a:163, table 1). This was further verified by associated ceramics. The rectangular structure measured roughly 10 x 20 metres, was barrel vaulted and constructed of mudbricks (pl. 69). The core of the building, contemporary with the earliest occupation level, measured roughly 9 x 7.5 metres and consisted of three rectangular rooms, numbered 1, 3 and 4. These chambers formed a clearly defined architectural unit, with rooms 3 and 4 orientated perpendicular to room 1. Chambers 3 and 4 were later subdivided creating rooms 2 and 9. This central unit is reminiscent of a type 1 Classic Christian 'unit house' being basically square with a large transverse chamber (1) arranged perpendicular to two or three smaller, parallel rectangular chambers. Walls within the core structure were two bricks wide and ranged from 60 to 70 cm in thickness. Most were mud-plastered (Anderson 1994:225; Grzymski 1990a:139-63).

Occupational buildup consisted of loose lenses and layers of ash, organic material, sherds and sand. Sand was used to level a room and to create a clean floor surface. "People walking upon such floors create with time a surface which, upon becoming dirty with animal excrements and refuse, is once again covered with a layer of sand and the process is repeated" (Medeksza 1990:94).

Secondary wall additions averaged 40 cm in width and were flimsier than the core of the building. Remains of a wooden animal pen were discovered along with organic debris on the

south side of room 5. Five major alterations were made to the floor-plan and at least four different occupation levels were noted. Rooms 1a, 2a, 7 and 7a were added, although their order of construction is not clear, and the wall between 2a and 2 was cut down to provide another entrance. Presumably the door from room 2 to room 4 was blocked at this time thus requiring another entry. All entrances, except the northern door to room 7, were located on the south side of the building, away from the north wind. Room 7's entry had been partially blocked by a series of brick courses probably to prevent windblown sand from accumulating.

Evidence for the existence of foundation trenches was lacking and the building was constructed on an irregular, sloping surface. This implies that "the buildings were not designed to be high, for the ground surface could not withstand too great a load" (Medeksza 1990:81). No evidence was found to suggest an upper storey or much use of the roof by the inhabitants. Examination of the vault springers visible in rooms 1, 2a, 2b, 3 and 4 suggested that the roof had been low. Vaulting spanned a distance of 2.27 metres in room 1, 2.05 metres in room 3 and 1.57 metres in room 4.

At Old Dongola, usage of houses A, B, and PCH-1 continued into the 11th and 12th centuries A.D. and possibly later. At this time these structures were in a ruined condition. The excavators suggested that the remains of the earlier buildings were modified and reused as service areas by those inhabiting newer houses in the vicinity (Godlewski 1991:89-90; Jakobielski 1982:118). Within House PCH-1, occupational debris suggested that the two long rectangular rooms to the east of the stairwell continued to function as a domicile (pl. 46, 47). As the fortunes of this suburb declined usage of a two-room dwelling, consisting of two long, parallel chambers and associated courtyards, was maintained. The arrangement of these chambers is reminiscent of the Early Christian 'double house'. The stairwell also remained serviceable. Animals were stabled in rooms b and c. Modifications, including the addition of an installation with two storage vessels set in it, were made to room a to facilitate storage. Ovens were added to the former vestibule area and to the north courtyard.

Godlewski notes that the suburb in which A, B and PCH-1 were located "had deteriorated before the Mameluke invasion of Dongola ... In all probability, this is evidence for the shrinking of the area of the city containing habitations of an urban type" (Godlewski 1991:91). While this must be confirmed by further excavation of the Dongola suburbs, this might be taken as further evidence supporting the withdrawal of the population from the urban centres during the troubled times of the 12th and 13th c A.D. Certainly the inhabitants do not appear to have invested much

time or resources in the construction of dwellings but rather used the materials and remains of structures readily available. This may be due to the impoverishment of the inhabitants of this suburb or of Dongola as a whole as suggested by Godlewski (Godlewski 1991:91). Alternatively, faced with threats of Mameluke incursions, raids, and taxation the population may not have wished to invest in their houses. Possible raids by the Damadim about A.D. 1220 (Vantini 1975:465) may have been an additional concern. As it is believed that they came from the southern Sudan, they may have entered Nubia at the bend in the Nile between the Third and Fourth Cataracts, coming up through the Wadi el Milk, Wadi el Muqaddam, or perhaps the Wadi Howar.

As with every other period, there were large structures that did not appear domestic in nature. Situated upon one of the highest elevations on the site of Hambukol was a large monumental building, designated Building A-1. An addition to the west side of the structure was labelled House A-1 (pl. 70). It consisted of chambers 3a, b, c, 7 and 8. The remaining rooms were considered part of Building A-1. Building A-1 was rectangular, measured roughly 18.5 x 17.5 metres, and was constructed of mudbrick, red brick and stone. Two radiocarbon samples, one pre-construction and the other post-occupation provided a *terminus ant quem* and *terminus post quem* for the structure. The first gave a date of A.D. 995  $\pm$  215 and the second A.D. 1295  $\pm$  45 after calibration (Grzymiski 1990a:163, table 1).

The building's core was almost square, with most of the interior occupied by a large, pillared central hall (rooms 4a, 4b, 10, 11, 14, and 19). The central axis ran between the north and south doorways and divided the structure into symmetrical halves. Five aisles were orientated north-south and four were aligned east-west. Inscribed bowls were placed as foundation deposits beneath three of the building's four corners as discussed above. As no means of access to an upper floor was discovered, the excavator believed the original structure was one-storey only (Żurawski: in press; Żurawski 1988:personal communication).

Several modifications were made to the original building. A staircase or tower (room 18) and latrine (2) were added to the southwest corner. House A-1 was attached to Building A-1 sometime after this alteration occurred. A staircase (3c) within House A-1 also enabled access to an upper floor or roof. At the time of excavation no second storey remained. The main entrance (6a) was monumental in appearance. It was situated on the south side of the structure and had large mudbrick buttresses on either side of it. The staircase was further altered by the addition of a massive mudbrick buttress to the southwest corner and it was founded on reused sandstone

blocks roughly two metres thick. This brace may have reinforced and provided additional support for the staircase (18) as it had been founded on the edge of a slope (Grzymski 1989:72-5; 1990a; Żurawski: in press).

While there is no building analogous to Building A-1, some general resemblance with the plan of the 'Public Building' at Arminna West can be noted (pls. 25a, 71). The public nature of the building A-1 is suggested by the two latrines (2, 17). Many persons seem to have regularly used the structure requiring the concurrent usage of two latrines (Żurawski: in press).

Alternatively it was anticipated at the time of construction that usage would be great either by a few people over a long period or many persons over a shorter span. Another possibility is the two latrines reflect a gender or status division. Notably the latrine in room 2 was of higher quality construction than that in room 17.

Occupation debris was thinly scattered and few artefacts or sherds were uncovered. As with the 'Public Building' at Arminna West, the floors may have been swept frequently. No cooking facilities were discovered in Building A-1 but, the relationship between an oven, situated north of House A-1, a thick occupation deposit to the west of House A-1 and the edifice remains uncertain. Many mud stoppers and jarstands were recovered from House A-1 suggesting that it might have been an attached service area or storage facility, perhaps a community magazine.

Żurawski has suggested that the edifice might be an inn, storage area and market space [wekaleh/wakala] for merchants (Żurawski: in press). Unfortunately there is little evidence to support this assertion. The building lacked an open courtyard common to these structures and as nothing remained of the second floor, it cannot be learned if it served as an inn or residence.

Building A-1 resembled a three-aisled Nubian church or the hall church in Grossman's typology (Grossman 1980:104-111). "The plan of the building may suggest a three aisled church, oriented east-west, with a narthex at the west end and the main entrance in the south wall" (Grzymski 1989:73). The subsequent discovery of two latrines and lack of an apse made this hypothesis untenable (Grzymski 1990a). Religious artefacts were absent. Affinities with ecclesiastical architecture could indicate that the building was constructed by professional architects familiar with church architecture. Żurawski has proposed that trained ecclesiastical architects engaged in the construction of secular structures towards the end of the Christian period because large churches were seldom constructed at this time. This could support Adams' supposition that, by the end of the Christian period secular architecture "had entirely supplanted the church as the medium in which Nubia's builders and rulers sought to express their creative

ingenuity" (Adams 1977:520). Conversely, Building A-1 may merely display the construction practices and standards used specifically for larger structures, whether profane or sacred (Żurawski: in press). While it is probably a combination of these two factors, some similarities between ecclesiastical architecture and the Classic Christian 'Public Building' at Arminna West, as discussed in chapter 2, suggests that the latter may be the primary reason.

Later modifications to Building A-1, particularly the tower and its subsequent reinforcements, gave the structure a defensive character and its elevated location enabled a good view of the Letti Basin and the river. During its later stages of occupation, it may have served as an Upper Nubian variation of the Lower Nubian 'castle house' (Żurawski: in press). However, some differences were noted. Where "the only external access to any of the two-storey [castle] houses at Kulubnarti and Dal was through a doorway at the level of the upper floor, which presumably was reached via a retractable ladder" (Adams 1977:515), the upper level of Building A-1 was reached by a stairway and there was an entry into the building at ground level. The lower floor of Building A-1 was very open and not labyrinthine in character. However, this reflects the unknown purpose for which the original building was constructed, not the subsequent modifications that made it more fortified in appearance. This large, open building may have been chosen for conversion because of its solid construction, thick walls and perhaps public nature within the community. There is some indication that part of the first floor of House A-1 was used for storage as discussed above, but no actual crypts as found in a 'castle house', were located. Examination of the fallen north wall of rooms 7 and 3b did not suggest a door. The only access to this area may have been via the upper floor or the subsequently blocked doorway in room 1. Restricted admission into a ground floor storage area is analogous to the situation found within a Lower Nubian 'castle house'.

The 'Mosque Building' at Old Dongola underwent some dramatic renovations around the beginning of the 14th c A.D., before its conversion into a mosque (pl. 53). A large mud buttress, enclosing the entire ground floor up the windows of the second floor, was added. The earlier ground floor doors were sealed. Entry into the ground floor was possible through room 12a, although the excavators suggest that this entrance may also have been made in modern times. Much of the ground floor was filled with two metres of debris and a flat roof was added to the upper floor. The excavators suggest that these alterations were made to repair damage that resulted from an earthquake early in the 14th c A.D. Some damage to the Cruciform Church and the Church of the Granite Columns is similarly attributed. However, they also state "it is possible

that the [sic] both Dongolese churches were partly ruined during Mameluke invasions of Old Dongola at the end of the XIIIth Century" (Godlewski 1982a:22).

I suggest that in addition to the destruction caused by the earthquake, some damage to the 'Mosque Building' may have resulted from incursions of the Mameluke army late in the 13th century. Besides the structural consolidation of the building, another factor considered in the rebuilding of the 'Mosque' must have been defence, due to the tense political environment of the period. These changes coincide with two Mameluke expeditions into Nubia directed towards Dongola, one in A.D.1304 to assist Amay against an aggressive enemy and the other in A.D. 1315 to overthrow Kerenbes (Vantini 1975:484; 690-1). Alterations made to the 'Mosque Building' appear largely defensive in nature. The building was situated on a high elevation that provided good visibility of the river and surrounding terrain. This position was certainly considered when repairs were enacted. Access to the lower floor from ground level was restricted if present at all. If there was no entrance from ground level, then the closure of the lower level served to create a series of crypts accessible only from the upper floor. The defensive character of the stout, steep-sided buttress is obvious, plus the north and east sides were further protected by sheer cliff faces. These features were shared by Building A-1 at Hambukol, Building D at Soba, and by the Lower Nubian 'castle houses', although this structure is most closely analogous to Building D at Soba as discussed below.

Between the 12th and 13th centuries A.D., substantial modifications were made to Building D at Soba East (pls. 52, 72). Following the 11th c A.D. fire, room 12c was filled with refuse and sealed. Several rooms on the ground floor, including all of those in the central section except m1, m19, m20, m22, were purposefully filled around the beginning of the 12th c A.D. The excavators noted tip lines in the fill. Storage bins were found in m22. The division between rooms m2a and b was eliminated forming a larger, square room (Welsby and Daniels 1991:34, 114-6, 318). Prior to this some of the southern rooms were filled with refuse.

Presumably much of the upper floor was damaged by the fire and subsequently demolished during the filling of the lower level. The excavators suggest that many ground floor rooms were filled to provide a firm foundation for a new building. The layout of this new structure was not preserved. As the upper walls were supported on the lower ones, just as in the earlier building, it may have borne some resemblance to the earlier structure. It would have definitely been greatly elevated above its surroundings. The means of entry to the upper floor is uncertain. It is possible that the staircase in m22 was still used. Rooms m1, m9, m10, m20, m29



and m37 were accessible only from the upper floor (Welsby and Daniels 1991:318).

One reason for the modifications made to the ground floor may have been to create hidden storage crypts like those in Lower Nubian 'castle houses'. Artefacts recovered from the lower levels of room m10 included pilgrim flask fragments and sherds from an aquamanile (Welsby and Daniels 1991:117), essentially storage vessels and part of a prestige item. The function of the structure remains uncertain, but many of its characteristics appear defensive in nature. Although Building D was much larger, the strong, solid, lower storey complete with hidden crypts, limited access to the upper floor and dramatic elevation above the surrounding environs are reminiscent of the features associated with Lower Nubian 'castle houses'. This edifice may have been converted into an Alwan version of the Lower Nubian 'castle house', just as the modified Old Dongola 'Mosque' appears to have been the Makurian version. Its central location in the city of Soba and large size suggests that it was of greater importance than the average 'castle house' and like the Old Dongola 'Mosque Building' probably still served an official or palatial function as discussed in chapter 2.

The question arises as to whether fortified edifices were required in the kingdom of Alwa, and unfortunately there is a paucity of information concerning the Alwa in the Late and Terminal Christian phases. The data available suggests that fortifications were a necessity. Ibn Abd Az-Zahir (A.D.1223-1292) recorded a letter, written by Ador of al-Abwab to Cairo, which stated he was at war against an individual named Ani and that control of the kingdom of the Anag had been taken by an unnamed king and he was doing his best to overthrow him. (Vantini 1975:429; 1981:180-1). Al-Abwab was situated on the northern border of Alwa but the location of the Anag (Anak) is unknown. A local tradition describes the inhabitants of Soba as Anag (Penn 1934:60-1).<sup>36</sup> As there were two or three dissenting parties recorded in Ador's letter, this suggests that there may have been several small feudal kinglets within Alwa during the mid 12th-13th c A.D. Certainly there were military disturbances and perhaps dispute over the Alwan throne. Further, Ador says that all the inhabitants of Nubia (*bilad as-sudan*) were afraid of the military might of the Mamelukes. In his letter he relates "the hearts of the natives had been impressed with great fear by the army of our lord the Sultan, as they had reached such places (inside Nubia) that no other army had reached before" (Vantini 1975:429). Fearmongering, a warring neighbour and possibly internal political upheaval would have given the population of Alwa reason to construct fortified buildings and walled settlements.

Fortresses did exist within the kingdom of Alwa, though few have been identified and

securely dated.<sup>37</sup> Qarri is recorded by the Funj chronicle as the last Alwan Christian fort left after the fall of Soba.<sup>38</sup> No excavation has been conducted at Qarri, but several rectangular, stone dwellings and some smaller, one-room stone circles were noted on the top of Jebel Irau enclosed by a stone girdle wall. Irregular-shaped enclosure walls were associated with some of the houses. The few objects and sherds found were thought to date to around A.D. 1500 (Chittick 1963:264-73). Some of these stone circles may have been tent emplacements, though this is uncertain.

Another fortified dwelling was found at Gabati II in the Shendi Reach. There, a 10 x 15 metres area was surrounded by a drystone wall. Two stone chambers were later constructed within the compound on the east side. One room seems to have been a kitchen. The other contained two storage pits. Throughout the entire occupation, the enclosure was covered by a flat roof supported on wooden posts. Post holes were found within the courtyard (Mallinson 1994:18, 20). This site was strategically situated. The inhabitants could regulate traffic on the desert road running through the Khor Shangarite and farm the wadi during the rainy season (Mallinson 1994:20).

It is possible these upheavals and potential threats to the Alwan power structure may have undermined the ability of the throne to adequately protect its citizens. Local artefacts of Terminal Christian date, post-13th c A.D. Islamic ceramics and 14th-15th c A.D. imported wares have not yet been identified at Soba East. The creation of the kingdom of Al Abwab in the northern part of Alwa around the 12th c A.D. and the apparent lack of Terminal Christian sherds, probably indicates that Soba and the kingdom of Alwa were in decline in the latter 13th c A.D. (Welsby and Daniels 1991:9, 34). Welsby and Daniels' analysis appears correct but may just apply to Soba East. As little archaeological research has been conducted in Alwa, no conclusions can be drawn at this time.

1. G. Vantini (1975) Oriental Sources Concerning Nubia. Heidelberg and Warsaw. This volume is a catalogue of translations of Arabic writings about Nubia as collected by the author.

2. Among the modern Nubians, men traditionally bury the dead and are responsible for death ceremonies, although women may follow behind the bier at a distance (Kennedy 1978:227-8). In death people traverse from the earthly, physical, secular realm into the metaphysical, spiritual domain. "Females are associated with enclosure, with the maintenance of life within the village; males are associated with the precarious outside world" (Boddy 1988:5). For a more detailed discussion of the modern Nubian house as a microcosm of the body and the symbolism and gender associations connected to the house see J. Boddy (1988) Wombs and Alien Spirits. Madison. pp.47-88.

Further to Boddy's discussion, regarding the symbolism associated with a modern Nubian house and village; the graveyard may be viewed as masculine and is in many ways as the antithesis of the protective enclosure surrounding a Nubian home [hosh] identified by Boddy as feminine (Boddy 1988:5). Although the body is sealed in a shroud, the graveyard population is not surrounded by a protective enclosure, nor is it the source of earthly fertility. It is open to the elements with no primary entrance or internal arrangement based upon gender and is not swept clean as is the hosh. Grain planted in the desert in the course of a mortuary ceremony dies. Fertility, as represented by popped dura and children at Eip, is taken back to the protective nurturing hosh, the entity from which humans are born and fed. The desert contains all the male elements and none of the female. It is hot, dry and a large portion of the Nubian desert is covered with black rocks, so it could be said to be black. "The color black is conspicuously linked with impurity and attributed to things which have lost their generative potency" (Boddy 1988:104).

This concept is made clearer by the Mahas' practice of watering the dura for forty days (Kennedy 1978:228). This is the same length of time women were traditionally kept in confinement after childbirth (Boddy 1982:684) and the time period for which the spirit is believed to linger around the grave prior to judgement (Kennedy 1978:228). The deceased is essentially provided with moisture, a female nurturing substance, to sustain him on the earthly plane until he is reborn into the male dominated metaphysical plane, where he has no bodily requirements. For the length of forty days the grave is treated like a womb. After this period is finished and the deceased has crossed over, he does not need the earthly, female accoutrements.

3. For example:

Figure III.5

Site	Application of Room Length to Width Ratios to the Dimensions of Late 'Unit Houses'		
	Room* Dimensions (m)	Ratio of Room length to width	
Abdallah Nirqi			
House CI/37	5 x 2.5	2:1	
	CI/38	5 x 2.7	1.9:1
	CI/39	2.5 x 2.5	1:1
House CIII/36	4.6 x 2.1	2.2:1	
	CIII/37	4.3 x 2.1	2:1
	CIII/39	2 x 2	1:1
House CIV/37	2.9 x 2.1	1.4:1	
	CIV/38	5.7 x 2.9	2:1
	CIV/ north of 38	5 x 2.1	2.4:1
House CIV/34	5.7 x 3.2	1.8:1	

CIV/ north of 34	5.7 x 2.1	2.7:1
<b>Kasanarti</b>		
House 76-81 - room 76	4.5 x 1.3	3.5:1
room 79	2.4 x 1.6	1.5:1
room 80	3.2 x 2	1.6:1
room 81	2.5 x 1	2.5:1
House 90- 4 - room 91	3.1 x 1.1	2.8:1
room 94	4.7 x 1.3	3.6:1
House 11-5 - room 11	4.5 x 2.2	2.1:1
room 12	4.2 x 2.5	1.7:1
room 14	4 x 2.5	1.6:1
<b>Kulubnarti I</b>		
House A5 - room 8	4.5 x 4	1.1:1
House B2 - room 5	4.6 x 1.9	2.4:1
House F1 - room 1a	2.4 x 2	1.2:1
room 1b	3.4 x 1	3.4:1
room 2	3.2 x 2.1	1.5
room 3	2 x 1	2:1
House F2 - room 3	3.5 x 2.5	1.4:1
room 5	5 x 2.1	2.4:1
House G3 - room 1	4.8 x 2.1	2.3:1
room 2	4.8 x 4.3	1.1:1
room 3	1.4 x 1	1.4:1
room 4	3.2 x 1	3.2:1
<b>Meinarti</b>		
House XI - large room	4.7 x 1.8	2.6:1
small room	2.8 x 2.2	1.3:1
House XII - large room	4.2 x 2	2.1:1
small room	2.7 x 2.1	1.3:1

\* These are internal room dimensions. Note: storage magazines or cellars are excluded.

4. Cf. F. Hinkel (1991) "Proportion and Harmony the Process of Planning in Meroitic Architecture." *Egypt and Africa*. W. Davis (ed.) London. pp. 220-5.

5. This story is related by Abu Shama (A.D. 1202-1267), Abu-L-Fida (A.D. 1273-1331), An-Nuwayri (d. A.D. 1332) and Ibn Al-Athir (A.D. 1160-1234) (Vantini 1975:355-7; 364-7; 465-6; 477).

6. L. Török disagrees with this interpretation and would place the end of the second period of the IInd settlement during the 11th c A.D. This is partially based upon his interpretation of the ceramics and "data known at present about the events of the end of the 12th century do not seem to confirm the assumption in the sense of which the towns of Lower Nubia would have been exposed to any violent destruction at that time" (Török 1975:364). Shams Ad-Dawla's destruction of Qasr Ibrim, the subsequent raids conducted in Lower Nubia by Ibrahim al-Kurdi and the suppression of Nubian and Egyptian rebellions in the region of Aswan surely seem to suggest otherwise. Cf. Vantini 1975:308; 328; 357-8; 367-71; 1981:159-61.

7. Regarding subsistence technology and the use of the saqia and the shaduf, Cf. B. Trigger (1965) History and Settlement in Lower Nubia. Boston. p. 162, and D. Edwards (1989) Archaeology and Settlement in Upper Nubia in the 1st Millennium A.D. Oxford. pp.21-5, 207-8.

8. Schneider would place the abandonment of the site around A.D. 1500 based upon his analysis of the usage of the churches on site (Schneider 1970:98). Cf. H.Schneider (1970) "Abdallah Nirqi, Description and Chronology of the Central Church." Kunst und Geschichte Nubiens in Christlicher Zeit. E. Dinkler (ed.). Recklinghausen. pp. 87-102.

9. For a more detailed historical analysis concerning the end of the Christian kingdom of Makuria and the Christian successor kingdom of Dotawo (or Daw) and Al-Abwab see W. Adams (1977) Nubia Corridor to Africa. Princeton. pp. 525-36; S. Munro-Hay (1982-3) "Kings and Kingdoms of Ancient Nubia." Rassegna di Studi Etiopic 29:117-32; Mustafa M. Musad (1959) "The Downfall of the Christian Nubian Kingdoms." SNR 40:124-6; G. Vantini (1981) Christianity in the Sudan. Bologna. pp. 171-98; D. Welsby and C. Daniels (1991) Soba Archaeological Research at a Medieval Capital on the Blue Nile. London. p. 9.

10. For further details regarding the vow taken by Shekanda see Vantini, *ibid.*, pp. 42-74, 499-501.

11. The conversion of the Nubians to Islam was a long and complicated process and a detailed discussion of this event is well beyond the scope of this thesis. However, a few brief comments are in order. Several scholars (Hasan 1967:124-5; Hillelson 1930:140-2; Mustafa Musad 1959:125) have propagated the grossly oversimplified theory of Ibn Khaldun, that the adaption of Islam was facilitated by the marriage of Moslem immigrants (Arabs) to local Christian or Pagan women. The Moslem children produced subsequently rose to influential positions in society which encouraged the adoption of Islam by the populace. This theory is in part based on the marriage of a Moslem into the Nubian royal family of Makuria and the accession to the throne by one of his offspring (Sayf Al-Din `Abdallah Barshambu) with the aid of the Mamlukes, as related in the main body of this thesis. This seemingly suggests that Islamization occurred quickly, was cleanly adopted by all, and completely ignores the processes of cultural change.

There were (and still are) two separate phenomena occurring simultaneously, that of Islamization and of Arabization (Haycock 1972:18). They are distinct and occur at varying rates, but each sustains and encourages the other. In effect, it was more a social incorporation of these changes, than the adoption of a new faith, which led the local population to embrace Islam and to the ultimate merging and acceptance of Arab pastoralists and nomads with the indigenous inhabitants. Several important factors, each of which is a paper in itself and thus beyond detailed discussion here, contributed to the relative ease with which the processes of Islamization and Arabization occurred. These include the decline of the Christian church and the co-existence of Islam and Christianity, the nature and adaptability of Islam, the infiltration of Moslem merchants into the Medieval kingdoms, use of Arabic as lingua franca, Arab migrations, flexibility of the local kinship systems, the means of access to land and control of wealth and resources, and the active propagation of Islam through the encouragement of Arab scholars. Pre-existing lines of social organization within Medieval Nubia, primarily matrilineality, appear to have aided many of these incoming changes.

Before the actual fall of the Christian kingdoms of Makuria and Alwa, traditionally regarded as A.D. 1323 and A.D. 1504 respectively, there is archaeological evidence that suggests a decline in the power and influence of the church. Ecclesiastical construction reached its peak

between the 8th and 12th c A.D., with the largest cathedrals being constructed prior to 800 A.D. Following this period, the magnitude and complexity of these structures gradually declined until the 14th century (Adams 1965:103-8; Gartkiewicz 1975, 1982a, 1982b; Grossman 1985). The church at Diffinarti is one example of a small Late-Terminal period church. It lacks a pulpit, has narrow aisles and the sanctuary and sacristy were combined. The small size of the church in the later Christian periods seems to preclude the participation of any sort of congregation within the church building. This may reflect lack of interest by the population or an increase in the alienation and separation of the people from the clergy.

Most high quality wall paintings and Christian documents date between the 8th-12th c A.D. An apparent decline in both quantity and quality follows this period (Adams 1975:11), although it may just reflect the situation in Lower Nubia as most of the data originates there, or differential reporting by the excavators. As the Old Dongola Kom H monastery continued to grow and thrive well into the Late Christian period (Żurawski 1994:339), the situation may be different in Makuria and Alwa. This apparent decline might suggest that in many places, the church had lost much of its official authority with the population, before official recognition and general practice of Islam. As the infrastructure of Christian religious authority began to break down during the decay of the Christian kingdoms, its adherents would have been left in a leaderless vacuum without official guidance. Christian beliefs and faith likely continued among the population, but without the authoritative, canonical guidance provided by the church institution and its representatives, it may have become a folk religion rather than a liturgical one.

Adams points out that fewer than 6 of over 150 known churches in Nubia were converted into mosques and ultimately concludes that "in the face of such evidence it seems clear that Christianity succumbed not to the external pressure of Islam but as a result of its own organizational and spiritual weakness" (Adams 1977:540). Evidence suggests that Christian belief and some organization persisted after the fall of the Christian kingdoms, despite the loss of contact with the See of St. Mark in Alexandria after A.D. 1235 (Hasan 1967:126). For example, a Bishop was buried at Qasr Ibrim with a document indicating he had been consecrated in 1372 A.D. (Shinnie 1971:44) and documents concerning the kingdom of Dotawo include the names of religious officials (Adams 1977:541). The Kom H monastery at Old Dongola was not abandoned until the 15th c A.D. and expansion of the facilities, even beyond the enclosure wall, continued through the 13th c A.D. (Jakobielski 1995:86; Żurawski 1994:339). Excavations at Atiri suggest that a church and mosque were in use simultaneously, although the church had been constructed before the mosque (Haycock 1972:20).

Consequently, it cannot be concluded that Islam eliminated Christianity, but co-existed with it in some areas and gradually replaced it in others. Possibly it filled a void left by the lack of structured political-religious authority in many areas and a growing ignorance of the faith. There seems a time in most areas where "the old religion [Christianity] was dying away and the new one [Islam] had not yet taken root" (Hasan 1967:178). For example, Ibn Batuta (A.D. 1304-1377) described Dongola as a country of Christians with a Moslem ruler (Vantini 1975:523). Following the disintegration of Christian political and religious authority, certain Christian practices may have become recognized not as Christian but as local traditions. This would account for their continuing propagation once Islam was adopted. These include the rite of "Mariya" and marking the sign of the cross on infants during birth ceremonies in the Northern Province, Sukkot District etc., as collected by Vantini (1982:25-42) and noted by the Kronenbergs (1963:304-5; 1964:285-6). If the adoption of Islam were directly connected with the displacement of Christianity one doubts whether these traditions would have been maintained or established as "local," their origins forgotten.

12. Little investigation of the *kourfas* has been undertaken and the date of most is uncertain. The "castle" at Kulubnarti I was originally a Christian period 'castle house' that was later restored and modified. Several of the modifications date prior to the introduction of firearms to Nubia in the 16th c A.D. (Adams 1994a:100-1).

13. Based upon ceramic finds, portions of Tamit may have been occupied as late as the 14th or 15th c A.D. (Donadoni 1967:83-4).

14. For example:

Figure III.6

'Castle houses' - Upper Storey

Site	Main room	Dimensions of Main Room (m)
<b>Kulubnarti I</b>		
A1	R2-2	c. 4.2 x 2.5
C1	R2-6	c. 5.6 x 4.6
D1	R2-2	c. 5.8 x 4.1
<b>Kulubnarti IV</b>		
A1	R2-2	c. 4.1 x 4.1
<b>Kulme [3-B-23]</b>		
House 2a	-	c. 5.5 x 3.4
Average room size = 5 x 3.7 metres		

15. A more detailed description and examples of these features are given in W. Adams (1994b) "Castle-Houses of Late Medieval Nubia." *Archeologie du Nil Moyen*. 6:18-20.

16. For a list of tentatively identified 'castle houses' see *Ibid.*, pp. 15, 17.

17. The dating of these structures is discussed in chapter 1.

18. Two-storey structures that date from earlier periods include the Meroitic palace at Wad ben Naga and the two Ballana castles at Karanög. Possible relationships between some Christian structures, such as the 'Mosque' at Old Dongola and Building D at Soba East, and these buildings are discussed in chapter 2.

19. Cf. chapter 4.

20. For example, the 'castle house' reported at Ferka measured 16.5 x 11.5 metres. For a list of 'castle house' dimensions see *op.cit.* (n. 15), p. 15.

21. This is a high percentage, though it is likely that not all sites in this region were located despite the detailed surveys conducted.

22. The Khartoum Museum object number is 20737.

23. Kayendi, in the Dal Cataract region, may also be of this date based upon similarities with Gergetti Island I. Cf. A. Vila (1978b) *La Prospection Archéologique de la vallée du Nil au Sud de la Cataracte de Dal*. fasc.10. Paris. pp. 81-5.

24. After reconsideration of the structures at Gebel Adda identified as churches, the excavator suspects that one may be a mosque of more recent date (Millet 1994:personal communication).

25. While kin relations are extremely important in present day Nubia, parentage is seldom directly recorded on grave stele as the name of the father is incorporated as the second name of the child. The absence of lineage on a grave stele can not be taken by itself as indicative of the unimportance of kin and other evidence must be considered.

26. For further discussion concerning the interpretation of the name Michael see S. Jakobielski (1991) "the Inscriptions, Ostraca and Graffiti." Soba Archaeological Research at a Medieval Capital on the Blue Nile. London. p. 281.

27. See J. Anderson (in press) "Christian Graffiti from the Excavations at Soba East, 1989-1992." Excavations at Soba East, v. II. (D. Welsby, et. al.) 28 pp. London.

28. Michael is in Daniel xii, 1; x, 13; Jude ix; Revelations xii, 7.

29. This does not include inscriptions in churches, monasteries, graves or tombs.

30. Virtually the whole lower floor of House A at Old Dongola was decorated with wall paintings. Paintings within the structure were dated to the 9th c A.D. and depicted Christ with a snake/dragon and lion underfoot, Saint Mercurius killing Julian the Apostate, Saint George or Saint Theodore Stratelatos killing the dragon, crosses, angels or Archangels and part of the gospel of John (Godlewski 1982c:95; Jakobielski 1982c:118). Godlewski draws some analogies between this representation, and that of Horus on the crocodiles during the Late Egyptian period and suggests that the latter may have influenced the former in some respects. He also notes that a strong victorious Christ is accompanied by angels or Archangels and soldier saints. For a detailed interpretation of the iconography present in some of these paintings see W. Godlewski (1982c) "Some Comments on the Wall Painting of Christ from Old Dongola." Nubian Studies. J. Plumley (ed.) Warminster-Wilts. pp. 95-7. Additionally, this painting would have served to reinforce the image of Christ and the angels and saints as powerful protectors and defenders and perhaps also have some magical efficacy. This vernacular belief may have been a very real presence in the lives of the inhabitants. The recent discovery of a crypt, at Kom H Old Dongola, which was inscribed on all four walls with magical texts invoking protection from demons would seem to substantiate this theory (Jakobielski 1994: personal communication).

31. I viewed these vessels during a visit to the Museum of the Oriental Institute of Chicago. The reference numbers for the ostraca are 19781-4, for the unfired vessels 24788, 24789, 24809, for the footed bowls 19788, 19547, 19548, 19582 and the fish pieces 19787.

32. In Mesopotamia and Iran, magic bowls inscribed in Aramaic, Syrian and Mandanean were used as foundation deposits under houses between the 4th and 7th c A.D., but other analogous examples closer in time and space have not yet been identified (Grzymiski 1990a:148). Cf. K. Grzymiski (1990a) "Excavations at Hambukol (Upper Nubia): 1987 and 1988 Seasons." JARCE 27:139-163; J. Naveh and S. Shaked (1985) Amulets and Magic Bowls. Aramaic Incantations of Late Antiquity. Jerusalem-Leiden; B. Żurawski (1994) "Some Christian Foundation Deposits from the Region of Old Dongola." Études Nubiennes. v. II. Ch. Bonnet (ed.) Genève. pp. 211-218.



33. This does not negate the possibility that occupations of earlier periods are present within the mound, it merely indicates that at least part of the mound was not occupied and a great deal of sand had accumulated by the time of Late period construction.

34. The fortress of Kuweib was tentatively dated to the Early Christian period (Abbas 1971:18; Crawford 1953b:7-10).

35. Hambukol is located in the Letti Basin in close proximity to Old Dongola.

36. Local traditions describe many archaeological sites in the Gezeira, Kordofan and Darfur as "the work of the Anak or Abu Um Genaan (giants)" (Penn 1931:179). Consequently, this identification is tenuous and may indicate that the current population is uncertain of a site's history or that it is part of a local mythology.

37. The paucity of clearly identified sites is due to the scant amount of field work conducted in the region.

38. According to the Funj Chronicle, the Funj attacked and overthrew the rulers of Soba and Qarri at an unknown date, prior to the foundation of Sennar in A.D. 1504 (Vantini 1975:786-8). As the final redaction of the Funj Chronicle occurred around A.D. 1870, long after these events were to have occurred, some "doubts have been cast on its historical accuracy" (Adams 1975:15).

## CHAPTER 4

### Monasteries

Nubian monasticism had been a topic little explored within contemporary Nubian studies until recently. The article entitled "Monasteries in Nubia - An Open Issue" by P. Jeuté (1994) largely addressed many concerns and problems associated with this subject, particularly the fragmentary nature of both the archaeological and literary sources.<sup>1</sup> There are few documented archaeological remains of monasteries in Nubia and fewer still which have been adequately excavated and published. The following discussion seeks to build upon Jeuté's analysis and perhaps fill a few more lacunae in this area of research.

Two types of monastic remains have been noted in Nubia: those of solitary hermits (Anchorites) and the ruins of monastic communities. The first type has been easier to identify than the second. A major difficulty encountered has been the tendency of excavators, surveyors and travellers to label any "nucleated village site" (Adams 1977:478) as a Christian monastery. Arkell's investigation of Ain Farah is one such example (Arkell 1959:115-9). He speculated that a building on the site was a church based solely on the discovery of two Christian sherds. Since there were affiliated buildings clustered near the supposed "church" he assumed that the group comprised a monastery. These sherds may date between the 8th and 11th c A.D., but their provenance is questionable and their number few. As none of the structures at Ain Farah were surveyed or cleared Arkell's analysis is suspect and remains unproven. Later work at the site on the supposed "church" was inconclusive (Neufville and Houghton 1965:200). The predisposition towards the assumption that many mounds are monasteries has been further propagated by the failure thus far to identify the actual remains of more than one, or possibly two (Ghazali and Meinarti), of the six Nubian monasteries named by Abu Salih (Evetts and Butler 1895:260-74).<sup>2</sup> Monasteries, though most remain unconfirmed, have been reported in the following locations:

Ain Farah  
Akasha II  
Argin IV (Dêr el Bohl/Bollor)  
Ar-Rammal  
Attab  
Biga  
Buhen  
Debeira West I  
Debeira West V  
Debeira West VI

El Ugal?  
 Faras West I (Western Palace? Christian potteries? North Monastery? South Monastery?)  
 Fantau  
 Gamanarti  
 Gemai West VIII (Qasr 'Antawu/ Deyr Solleh/ Deir Solleh)  
 Gendal Irki  
 Gergetti Island  
 Ghazali  
 Hambukol (North Kom)  
 Karmel  
 Kashasha  
 Koka  
 Kulb III  
 Kulubnarti III (21-S-10)  
 el Laqiya  
 Marcos Island  
 Matuge Island II (Geziret Thêt Matuga)  
 Mediq III  
 Meinarti Island  
 Old Dongola (Kom H, Kom D site DM, Kom K?)  
 Philae  
 Qasr Ibrim  
 Qasr El-Wizz  
 Sagiet el 'Abd I  
 Selima Oasis  
 Semna West  
 Sinada  
 Soba East  
 Tafa  
 Tamit  
 Tangassi  
 Ukma IV  
 Ukma VI  
 Hillet el-Bib  
 Faras West IV - Anchorite dwelling  
 Naga el Scheima - four Anchorite cells  
 Toshka East - Anchorite dwelling  
 Ez Zuma - Anchorite dwelling  
 Wadi el Allaqi - Anchorite's dwelling?

The presence of monasteries within the Nubian kingdoms was recorded by Abu Salih the Armenian and Ibn Selim al Aswani (as related by Maqrizi) (Vantini 1975:324-7; 336; 613). The *Hudud al-'alam* recorded 12,000 monks in the district of Tari. This number is thought to be exaggerated and Tari has not yet been located (Vantini 1975:174; 1981:54).<sup>3</sup> Few sites in Nubia have been positively identified as monasteries thus the characteristics of a specifically Nubian monastery (i.e., generalized architectural plans and developmental sequence) remain a mystery and the range of monastic variations practiced there is uncertain.

Among Egyptian, Syrian and Judean monasteries of the Byzantine period, two types could be distinguished, the coenobium and the laura. In the Judean desert, coenobia were further divided into those constructed near memorial churches and those built upon the ruins of fortresses (Hirschfeld 1992:18). Architectural elements present differed depending on the type of monastery.

a laura is a community of monks who live in separate cells, spend most of the week in solitude, and assemble on Saturdays and Sundays for communal prayer and to receive provisions for the following week. It consists of two elements: a core, which includes a church and service buildings, and the monks' cells. ... At least two buildings could be found in the centre of each laura: a church and a bakery (Hirschfeld 1992:18-9).

Typically lauras occupied large areas (ranging between 30,000 and 1,200,000 square metres) and could be surrounded by an enclosure wall or were geographically separated from the profane world by topographic features. Monks' cells were dispersed around the enclosure separated from both the church and bakery areas (Hirschfeld 1992:31-3).

A coenobium is "a monastery in which monks live a communal life, with a daily routine of communal prayer, work, and meals" (Hirschfeld 1992:33). They were smaller, more compact than the lauras and, within Egypt and the Judean desert, portions of these monasteries were two storeys high. Some covered an area of only 225 square metres. Contained within an enclosure wall were a church, a refectory, kitchen, work area, and monks' cells. The internal structures were interconnected but the cells were separate from the common areas. Entry into the enclosure was via a gate that often opened into a courtyard. The habitation area was located away from the entrance. Tombs of monks, the most important being that of the founder, were associated with both lauras and coenobia (Hirschfeld 1992:46-9).

Within Nubia, only four monasteries can be securely identified.<sup>4</sup> These include Qasr el-Wizz, Old Dongola monastery DM, Old Dongola Kom H and Ghazali, although Ar-Rammal, Meinarti, and the North Kom at Hambukol were probably also monasteries (pls. 60a, 73-78). Of these, Qasr el-Wizz is the most thoroughly investigated and published, consequently analyses of Nubian monasteries tend to rely heavily upon information derived from this site.<sup>5</sup> Ghazali was also published but unfortunately excavations there could not be completed.<sup>6</sup> The earliest date from Ghazali is A.D. 999 and most ceramics placed occupation of the site firmly between the 10th and 11th c A.D. (Shinnie and Chittick 1961:25). The church at Ghazali is also of Classic Christian date, being of type 3b or 3c according to Adams' typology (Adams 1965:136-7). Qasr

El-Wizz was similarly occupied during the Classic Christian phase. Based upon material from these sites "Nubian monasticism, such as it was, seems to have reached its fullest flowering in the Classic Christian period and to have declined rapidly thereafter" (Adams 1977:480). In light of new evidence from Old Dongola, this may not be entirely correct. Monasteries were apparently founded earlier and prospered much longer than previously suspected.

Both monasteries identified at Old Dongola were constructed during the Early Christian period. This may indicate that several monasteries were established in the Early Christian phase and played a larger role in Early Christian society than previously suspected. Ceramics from Old Dongola Kom H and monastery DM show that both were in existence during the 7th century A.D. and that monastery DM was particularly flourishing.<sup>7</sup> Żurawski suggests that "the early monks' communities could have played an important role in Nubia's conversion to Christianity. The official hagiographical story of the conversion of the Maccuritae ... is not adequately reflected in archaeological data hitherto collected. It seems much more plausible that the first Christians in Nubia were monks not official emissaries" (Żurawski 1994:322). The early dates of these monasteries add support to Żurawski's statements. The "full flower" of monasticism seen during the Classic Christian period may be a reflection of the stability and material wealth accumulated by an already well-established monastic institution. Archaeologists have traditionally focused upon the presence of physical goods and this may bias their interpretations.

Qasr el-Wizz was also founded during the Early Christian period although later than the monasteries at Old Dongola. Its construction coincided with the remodelling of the church. The newly modified church and associated monastery are dated architecturally and ceramically between 850-950 A.D. The church associated with the monastery is of the Classic Christian form, type 3 according to Adam's typology (1965b:110-2). It has a "passage behind the sanctuary, the haikal has been enlarged to include a tribute, and it is segregated by a brick higab" (Adams 1965b:51). The monastery itself underwent two building periods before it was abandoned in the Late Christian period around 1200 A.D. (Scanlon 1972:10).

The Kom H monastery expanded between the 8th and 10th c A.D. after monastery DM had been damaged by flooding (Żurawski 1994:336). It was not abandoned until the 15th c A.D. and expansion of the facilities, even beyond the enclosure wall, continued through the 13th c A.D. (Jakobielski 1995:86; Żurawski 1994:339). As the Kom H monastery continued to grow and thrive well into the Late Christian period, the perceived decline of Nubian monasticism after the Classic Christian period may not be as absolute as previously believed. The identification of

more Nubian monasteries should shed greater light on this issue as well as increase the sample size.

Despite the small sample size, some architectural features were common to all of the identified monasteries<sup>8</sup> and they appear to be of the coenobitic type perhaps associated with memorial churches. Tombs were directly associated with all of the monasteries, and with the possible exception of Ghazali, located near the church. Each had "a central church ... enclosed within a compact cluster of adjoining buildings and the whole is surrounded by a girdle wall" (Adams 1977:479). Clarke echoes this sentiment by describing monasteries as "self contained and enclosed by a wall" (Clarke 1912:105). External dimensions of the first monastery at Qasr el-Wizz were 30.5 x 28.5 metres. It was later enlarged to 54.5 x 28.5 metres. Ghazali encompassed approximately 60 x 70 metres. Old Dongola Kom H measured about 80 x 90 metres (c.150 x 200 metres if the associated cemeteries are included) and monastery DM covered an area of roughly 50 x 50 metres. These dimensions are well within the range exhibited by the larger Judean and Egyptian coenobia.<sup>9</sup> For example, Deir Anba Hadra (St. Simeon's) in Aswan measures 90 x 100 metres (Bowman 1989:194).

#### Enclosure Walls and Entrances

It has frequently been stated that the walls surrounding a Nubian monastery had no defensive capability and were built to maintain the separation between the secular world and the sacred world of the monks (Adams 1977:479; Jeuté 1994:93-4). There is some evidence to the contrary suggesting that enclosure walls of the earlier monasteries may not have been constructed merely to create an atmosphere of religious isolation. During its earliest and latest phases, the outer wall of the Dongola Kom H monastery had a fortified appearance. The earliest enclosure walls measured 1.5 metres thick, were constructed of mudbricks and had rounded external corners (pl. 77). In some areas they were reinforced and the thickness doubled. Actual round bastion compartments were added during phase IV (12th - 13th c A.D.). Preservation of the structure was sufficient to show that rooms along the enclosure wall lacked exterior windows (Żurawski 1994:333-5). Enclosure walls surrounding late period (9th c A.D.) monasteries in Egypt were constructed for defensive purposes. They ranged between one and three metres thick and were two metres wide on average (Walters 1974:79-80).<sup>10</sup> Thus far no entrance or entry gate into the Early Christian Kom H monastery has been located and three of the four sides of the structure have been surveyed (pl. 77). This suggests that access was more restricted than in the later

Classic Christian monasteries of Ghazali and Qasr el-Wizz. Characteristics of Nubian monastic enclosure walls are shown in figure IV.1 below.

During the Early Christian period the presence of the Blemmyes in the eastern desert may have made fortification walls a necessity as Old Dongola was located on the east bank. Notably most fortified Early Christian settlements were situated on the west bank, possibly to afford them greater protection, although their proximity to trade routes was another mitigating factor as discussed in chapter 1. The Silko inscription (c.536 A.D.) mentions hostilities between the Nobatae and the Blemmyes. It is possible that the Blemmyes also conducted raids into Makuria.

Alternatively the Nobatae themselves may have been a threat as Silko also says "I harried the land of the peoples who live to the South of the Nobadae, because they had picked a quarrel with me" (Vantini 1981:31). The biography of Isaac, the Coptic Patriarch of Alexandria (686-689/692 A.D.) documents strife between the kingdoms of Makuria and Nobatia during the 7th c A.D. prior to their unification.

the king of Makuria sent some delegates to the archbishop with letters to inform him how the bishops had decreased in number ... since they were not allowed, according to the order of the king of Maurotonia [Nobatia<sup>11</sup>], to make the journey as long as peace was not made with him. In fact, there were two kings reigning over that land, both Christians, but there was no peace between them (Vantini 1975:36).

As the monasteries at Dongola functioned during the 7th c A.D. while this conflict was occurring, it would not be surprising if their walls also served an additional defensive function. A girdle wall with a thickness that ranged between 1.5 and 3 metres seems somewhat excessive for the singular purpose of ensuring religious seclusion.

Perimeter walls around Classic Christian monasteries seem to function as a device to separate the profane from the sacred and to isolate the monks. Neither Ghazali nor Qasr el-Wizz display any evidence of having ever been fortified and access to these monasteries, though in some cases indirect, was easily achieved. Their enclosure walls were thinner than those around the earlier constructed monasteries at Dongola. Although modifications were made to the Kom H monastery during the Classic Christian period none seem to have augmented its defensive nature. Two entrances into the northeast service sector (rooms 1 and 2) were constructed at the beginning of the Classic Christian period, clearly breaching the defense and allowing easy access into the structure (pl. 77). Construction of the monasteries at Ghazali and Qasr el-Wizz post-date those at

Old Dongola, thus their enclosure walls and entrances probably reflect the more peaceful era of their initial construction, the late Early Christian and Classic Christian phases (pls. 73, 74). Classic Christian settlements were also unwalled and at this time Early Christian enclosure walls surrounding settlements were not refurbished and were allowed to decay, as discussed in chapter 2.

One primary entrance and four secondary openings were found at Ghazali enabling access to the interior from most directions. None appeared fortified. The enclosure wall was of drystone construction and measured about one metre thick and at least four metres high (Shinnie and Chittick 1961:22). Fortified late period monasteries in Egypt had enclosure walls that ranged between six and fourteen metres high (Walters 1974:79-80). No bastions were evident and suspected latrine facilities were located outside the walls showing the ease the inhabitants must have felt at entering and leaving the monastery. Shinnie and Chittick suggest that rooms X, V and AA may have been monks' cells (Shinnie and Chittick 1961:20). If this is true then they were situated away from direct view of the main entrance and shielded only by a thin wall from entrance iv.<sup>12</sup> Entrances into the church are similarly out of direct sight of any opening to the profane world located outside the monastery.

The perimeter wall at Qasr el-Wizz varied in thickness between approximately 50 and 75 cm. There were at least three entrances into the monastery, one main gate, another to the service area and possibly a third from the river side. The western entry block underwent several modifications which ultimately complicated and hindered entry into the monastery. Through time room III-O was filled, the entrance from I-T (in the church vestibule) to III-H was blocked and the entrance from III-F to II-G and the attached cells and refectory obstructed (Scanlon 1972:16). Modifications to the entrance may have been made to increase the privacy of the residents. This entrance is architecturally dissimilar from those found in the later (9th c A.D.) fortified Egyptian monasteries. A tower keep, gatehouse and other entrance fortifications are lacking, as is an entry "via a windlass from lower to upper levels" as was found at St. Anthony in Egypt (Walters 1974:82). Inhabitants of Qasr el-Wizz may not have felt the need to construct a fortified entrance. The altered entryway created an indirect access into the monastery rather than enhancing its defensive capabilities.

There is little information upon which to base an analysis of monastic perimeter walls during the Late Christian period. From the evidence available, it appears that some monasteries may have been fortified or perhaps a place of refuge such as a 'castle house' constructed, just as is



found in Late Christian settlements. Bastions were added to the enclosure wall around the Dongola Kom H monastery between the 12th and 13th c A.D. (during its phase IV) and some rooms were filled with debris and sealed. Żurawski suggests that the later defenses were added to protect the inhabitants from Bedouin raiders whose presence may be inferred from the history written by Leo Africanus (Żurawski 1994:338). Similarly Late Christian settlements, such as Serra East, show evidence of fortification and fortified "castle houses" as found at Kulubnarti I were constructed (pls. 63b, 64).<sup>13</sup> Occupation of Qasr el-Wizz ceased at the beginning of the 13th c A.D. It is possible that the effort required to make the thin walls surrounding Qasr el-Wizz and possibly Ghazali a defensible thickness and to strengthen or seal their numerous entrances may have been judged too great or perhaps the inhabitants too few to justify the labour, thus the sites were abandoned.

Figure IV.1

Comparison of Enclosure Walls around  
Nubian Monasteries

Monastery	Date (Christian)	Enclosure wall thickness	Bastions	No. of Entrances
Dongola DM	Early (7th c A.D.)	c. 80 cm stone and mudbrick construction	no?	Unknown
Dongola Kom H	Early (7th c A.D.)	1.5 m, up to 3 m in some places, kurba bricks used	Round corners	Unknown
	Classic	Storerooms against exterior of enclosure wall	as above	Two open into rooms 1, 2 NE corner
	Late (abandoned 15th c A.D.)	Perimeter walls strengthened. Rooms filled with debris and sealed. An additional skin of redbrick added to enclosure wall.	yes	Unknown, previous entrances sealed
Ghazali	Classic (c. 10th - 11th c A.D.)	c. 1 m thick, stone construction	no	5 entrances
Qasr el-Wizz	Early - Late (A.D. 850-950 A.D. 1200)	50 - 75 cm thick, stone construction	no	At least three entrances

### Refectories and Kitchens

Besides being surrounded by an enclosure wall and having a compact arrangement of inner structures, a refectory area could be distinguished at Qasr el-Wizz (II-A and possibly M-P), Ghazali (rooms K and L), and Old Dongola DM (room 1) (pls. 73, 74, 76). A kitchen and service area was found at Old Dongola Kom H (northeast unit), Ghazali (room J) and Qasr el-Wizz (II-T and II-R). Characteristics of these areas are shown in figure IV.2 below. One architectural characteristic differentiating a coenobium from a laura is the presence of a refectory. "Written sources mention refectories only in coenobia, and the archaeological finds do not indicate their existence in lauras. Indeed, one of the expressions of the communal life of coenobites was the common meal in which most of the residents of the monastery would partake at least once a day" (Hirschfeld 1992:190). Characteristics common to Nubian refectories seem to include several circular benches, roughly two metres in diameter possibly with a pot or food stand in the centre, a large room, usually with a domed or vaulted roof and sometimes a central pillar to support this roof, a closely associated kitchen, and a church located nearby.

The refectory (II-A) at Qasr el-Wizz was initially cleared and reconstructed by Monneret De Villard (1935:167-9). Scanlon's later findings further supported his work (pl. 73). The refectory at Qasr el-Wizz was a niched rectangular room with a central pillar that provided support for four domes, each covering a quarter of the room. Beneath each dome lay a round mudbrick bench roughly two metres in diameter that was presumably used for communal dining. There were two entrances into the room, one from the cell block (II-C, D, E, F, I, J, K) and one from the kitchen area II-T. The kitchen was identified based on the remains of two mudbrick ovens and its location next to the refectory (Scanlon 1972:21).

Room III-M/IIp was "structurally (and functionally?) related to the bakery (II-R)" (Scanlon 1972:39) but its exact purpose is unknown. It may have been another refectory or communal hall required for the enlarged monastery. No benches remained within but eight circular benches, each two metres in diameter, could have been accommodated in the space. Room II-R was identified as a bakery or kitchen based upon the remains of two ovens, five storage vessels sunk in the floor, and two "mixing bowls" set into raised platforms (Scanlon 1972:34). Room M-P was then tentatively identified as a refectory due to its large size, central pillar and proximity to room II-R.

Traces of three benches (inner diameter c. 1.8 metres) were found in Room 1 at Old Dongola DM. Remains of a small podium or stand, possibly to hold a communal bowl or platter,

was found in the centre of two of these benches (Jeuté 1994:72). The room itself was roughly square and lacked a central pillar. No indication of roof type was found and the kitchen was not identified.

Six circular brick benches were set in the floor of room K and an unspecified number were found in room L at Ghazali. Room K was roughly square with a central pillar and a pier in the centre of each wall. This presumably supported a vaulted or domed roof that divided the room into four parts, although the excavators only noted that the five piers had been spanned by stone arches (Shinnie and Chittick 1961:21). No traces of vaulting were found. Like Qasr el-Wizz, structural similarities were noted between this room and the refectory in St. Simeon's (Shinnie and Chittick 1961:21) (pls. 74, 79). Room J was presumed to be the kitchen since it was connected to the refectory and contained burned debris. Room L, though smaller than K, was also postulated to be a refectory because tiles on the floor were laid in the same circular pattern as the brick benches in room K.

The relationship between the location of the refectory and the church was important because "in the coenobia, in which communal prayer and communal meals constituted the heart of the life, the refectory generally stood near the church building" (Hirschfeld 1992:191). Prayer, instruction and religious offices frequently preceded or followed a communal meal. "This second [meal] sitting surely followed an office in the Synaxis, after which the brethren might be going either to their cells or to the refectory" (Chitty 1966:42, n.79). All of the Nubian refectories were located within short walking distance to the church and, except for room II-A at Qasr el-Wizz, the route to the church was apparently direct either along a corridor or across a courtyard. Due to the poor preservation of Dongola DM the path between the church and refectory remains uncertain. The most direct approach to the Qasr el-Wizz refectory (II-A) from the church ran through the cell-block. This may suggest that the early monastery at Wizz was more ascetic in outlook than the later remodelled monastery. "Any who wished might after prayers return to his cell and feed on bread and water" (Chitty 1966:25) rather than join the communal meal in the refectory. The positioning of the cells between the church and refectory would encourage this action. The later supposed refectory (M-P) was constructed closer to the church and was directly accessible along a short corridor from there.

Figure IV.2 Dimensions of Refectories and Kitchens in Nubian Monasteries

Monastery	Refectory Dimensions	Entrance Location	No. of Benches and diameter	Refectory to Church distance	Relation of Kitchen to Refectory
Dongola DM	c. 7 x 6 m (42 m sq.)	?	3 benches, c. 1.8 m dia.	c. 24 - 27 m	?
Dongola Kam H	unknown	unknown	unknown	unknown	Kitchen in NE corner, possibly room 3?
Ghazali (rooms K & L)	K = 9 x 8 m (72 m sq.)	2 entrances - north to L, south to exterior	6 benches c. 2 m dia.	c. 17 m	room J - adjacent
	L = 4 x 5 m (20 m sq.)	south to K	max. of 2 c. 2 m dia.	c. 34 m through K	room J - adjacent
Qasr el-Wizz (II-A & M-P)	II-A = 6 x 7 m (42 m sq.)	2 entrances - sse to II-T, sw to II-B cell- bloc corridor	4 benches 1.5 to 1.8 m	c. 25 m	II - T - 10 metres away down hall L
	M-P = 13 x 6 m (78 m sq.)	2 entrances - ne to II-R, se to church corridor	none identified, max. of 8 benches possible	c. 10 m	II - R - adjacent (identified as a bakery)

Scanlon estimated that five or six monks could fit "comfortably" around the dining benches in Qasr el-Wizz room II-A, and consequently estimated that this monastic community may have numbered between twenty and twenty-four individuals (Scanlon 1972:21). If M-P served as a refectory with eight benches, then the monastic occupancy could have been greater, possibly reaching forty-eight persons. If the same criteria are applied to Ghazali and Dongola DM, the first may have had a community of thirty-six to forty-eight persons and the second eighteen. Scanlon's population estimate may be low. Experiments conducted by the author, using a circle with a diameter of 1.8 metres and a circumference of 5.7 metres, demonstrated that up to eight adults could sit closely around the perimeter. When the circle was enlarged to a diameter of 2 metres and a corresponding circumference of 6.3 metres, there was sufficient space for nine

adults to be seated within it abet somewhat cosily. Analysis of monastic literature of the Early Coptic Church reveals the ascetic nature of their beliefs and the desire to achieve spirituality through the mortification of the flesh, thus the pursuit of comfort cannot be regarded as a high priority.<sup>14</sup>

Population estimates have assumed that all inhabitants partook of the daily meal simultaneously; however, according to early Greek sources from Egypt this may not necessarily be the case. "At the end of the century (4th c A.D.) according to Palladius, the daily meal began at midday, but there were later sittings for the more ascetic ... a closer study of the evidence suggests this rather than a single meal for the whole community" (Chitty 1966:25). Examination of the rule of Pachomius and the early Greek sources from Egypt show that there were two formal meal times, one at midday and the other "after an office in the Synaxis at or about the ninth hour" (Chitty 1966:42, n.79). Clearly, not all monks chose to partake of both meals. "Origenist monks, having stayed with Pachomius until the ninth hour, refuse the offer of a meal, ... Pachomius is described as entering with the brethren for the prayers, then, when they are completed, ... remaining himself in the Synaxis and extending his prayers" (Chitty 1966:42, n.79). Again, this might suggest that the Nubian monastic communities were larger than previously imagined since it was not necessary that all members be seated at every meal. They could be even double the size previously estimated.<sup>15</sup>

There is little likelihood that the Nubian communities supported monastic populations as large as those found in the Judean desert or in much of Egypt. For example, the refectory in the monastery of Martyrius covered an area of 318 m<sup>2</sup>, that in the monastery of Khirbet ed-Deir 173 m<sup>2</sup>, and in the monastery of Khirbet Makhrum 143 m<sup>2</sup> (Hirschfeld 1992:191). Within the refectory of Martyrius an upper floor provided an additional 200 m<sup>2</sup> of space and Hirschfeld states that while it is difficult to learn the exact number of monks, "it is probable that ... hundreds could be served" (Hirschfeld 1992:193). The number of inhabitants living in the larger Judean monasteries is estimated between 100 and 400 persons with an average of 150 persons, that of the mid-sized ones around 50 individuals and the smallest monasteries 20 monks (Hirschfeld 1992:78-9). Egyptian refectories were similarly large, usually rectangular and like the Judean monasteries, meals were often taken at long, rectangular tables rather than on round benches. For example, two refectories were identified at Sakkara. One had an area of 231 m<sup>2</sup> and the other of 200 m<sup>2</sup> (Walters 1974:100). Round benches have been found at St. Simeon's, in one room at Sakkara and in the modified Pharaonic temple at Athribis (Wannina) in middle Egypt.<sup>16</sup> In monasteries of the

Wadi Natrun and the Red Sea area, rectangular tables were used (Walters 1974:99-100). The use of round benches for communal meals may have been cultural preference specific to Nubia and portions of Egypt, particularly southern Egypt.

### Monastic Cell Blocks

An examination of the available material concerning Nubian monastic cells reveals a lack of hard data. Current data are summarized in figure IV.3 below. Cells have not yet been found at Dongola Kom H and those discovered at Dongola DM and Ghazali were only tentatively identified by the excavators. Therefore, current information may not be truly representative of most Nubian monasteries and certainly is not statistically significant. The data reveals no consistent cell size or shape. Materials used in their construction have mirrored those used in their associated monasteries, e.g., rough stone, mudbrick, mudplaster. It is probable that characteristics of a cell included niches in the walls for storage of goods, benches (*mastabas*) lining the walls for sleeping and sitting, and possibly prayer niches. These traits are common to cells in several Egyptian monasteries including St. Simeon's (pl. 79) and in fact cells at Qasr el-Wizz and Dongola DM also displayed most of these elements.

The cell block found at Qasr el-Wizz is the most thoroughly documented to date (pl. 73). There the lower storey of the cell block (II-C, D, E, F, I, J, K) consisted of seven, quadrilateral rooms with several niches in the walls and a bench running around the room perimeter presumably for sitting and sleeping. Most of the cells were vaulted. Based upon finds of painted plaster fragments, cells may have been decorated with wall paintings although none were found in situ (Scanlon 1972:31). This is not improbable as many wall paintings were discovered in Dongola Kom H<sup>17</sup> and decorated cells are known from Cellia and Esna in Egypt (Walters 1974:105-7).

Additional cells at Qasr el Wizz appear to have been located on an upper floor reached via the stairway in II-H, although architectural remains there were scant. Eight cells, equal in size to those on the ground floor, could have occupied the second storey (Scanlon 1972:16-7). Scanlon suggested that the upper floor of the "North Monastery" at Faras was used as the model for the second storey at Qasr el-Wizz (Scanlon 1972:13, n.1) (pl. 80). This is not possible as the Faras structure was constructed between the 12th and 13th c A.D. (Jeut  1994:66, 82), much later than Qasr el-Wizz. There is also some doubt regarding the function of the "North Monastery" at Faras as its name "reflects a working hypothesis, with relevant supportive arguments still to be

awaited" (Jeuté 1994:66). This building has also been described as an episcopal palace (Adams 1977:473). Additional information concerning this structure is required to make an adequate evaluation.

Figure IV.3 Characteristics of Monastic Cells in Nubian Monasteries

Monastery	Cell Dimensions	Bench	Wall Niche	Door
Dongola DM				
Room 3	5.5 x 3.5 m (19.3 m sq.)	yes	unknown	possibly
Room 9	7.5 x 3.3 m (25 m sq.)	yes	unknown	possibly
Dongola Kam H	Cells or dormitories have not yet been identified.			
Ghazali				
Room X	c. 6 x 3 m (c. 18 m sq.)	unknown	unknown	unknown
Room V	c. 6 x 3.5 m (c. 21 m sq.)	unknown	unknown	unknown
Room AA	c. 12 x 4 m (c. 48 m sq.)	unknown	unknown	unknown
Qasr el-Wizz II-C, D, E, F, I, J, K, and 2nd storey through II-H	c. 3-4 x 2-3 metres (II-F = c. 8 m sq.) (II-D = c. 11 m sq.)	All - yes	All - yes	no? no door sockets located

It has been debated whether there were enough cells to accommodate the number of inhabitants estimated based upon refectory seating arrangements. Assuming that the Qasr el-Wizz cells each were occupied by one monk, and that the second floor closely mirrors the first, Scanlon



calculated that fifteen monks could be housed, seven on the ground floor and eight on the upper story (Scanlon 1972:16-7). He concluded that cells for the remaining monks were not detected due to the poor condition of much of the monastery's remains. Jeuté noted that the arrangement of one monk per cell would only have to apply to cell II-F which was small and contained only one bench. Benches within other cells could have held two or three monks per room and therefore the twenty to twenty-four persons estimate could easily be met. Additional support for two to three individuals in a cell is found in Aswan where "St. Simeon's monastery probably provided accommodation for three in a cell, in accordance with the rule of Pachomius" (Jeuté 1994:92). If all of the cells, excluding II-F, were double occupancy then up to twenty-nine individuals could be housed, a number larger than previously estimated, and they all could be accommodated in the refectory as discussed above.

The amount of space allotted to the inhabitant(s) of the Qasr el-Wizz cells ranged between roughly eight square metres per person in the smallest cell II-F to eleven square metres per person in the larger cells. Cells in Deir Anba Hadra (St. Simeon's) covered on average eighteen square metres and as mentioned above were probably occupied by three persons (Walters 1974:fig.xxiv). This would give an individual six square metres of space under full occupancy. It is then not beyond possibility that two individuals could occupy eleven square metres of space as at Qasr el-Wizz. Some smaller cells in the Judean desert monasteries (i.e., Khirbet et-Tina) allotted a monk an area of about seven square meters (Hirschfeld 1992:177).

Discussions of cell occupancy have assumed that all monks were housed in cells but in coenobitic Judean monasteries of the Byzantine period this was not so. "The two arrangements [monks residing in separate cells and in common dormitories] seem to have coexisted, at least in the coenobia of the Judean Desert. ... Ordinary monks of the community at Khirbet ed-Deir lived in dormitories in the upper part of the monastery" (Hirschfeld 1992:177). This living arrangement was dictated by the Justinian Codex, a code pertaining to monastic life created by the Emperor Justinian (6th c A.D.) (Hirschfeld 1992:94, 177). Perhaps the search for monastic living quarters should be expanded beyond small cells and cell blocks in future. Notably none of the cells at Qasr el-Wizz seemed equipped with a door and low benches lined the cell block corridor (II-B). Perhaps ordinary monks or initiates slept on these *mastabas* while older more experienced monks occupied cells. If this is the case then six or seven more persons could be accommodated. Room AA at Ghazali may also fall into this category as it is much larger than a cell yet occupation debris was found there.

There is much unresolved debate concerning the nature and affiliations of the early church in Nobatia and Makuria. It is possible that a Byzantine model for monasticism rather than an Egyptian one may be more applicable in some parts of Nubia. "The earliest hierarchical organization in Nubia, the names used by the Nubians, the names of the Saints to whom there was great devotion in Nubia, all these show a much closer connection with the Byzantine church than with the Coptic church in Egypt" (Monneret De Villard 1938:61-2). However, the difficulty with this argument is that "whatever its early character may have been, the Nubian church was essentially Monophysite and Coptic after the seventh century" (Adams 1977:446). Both Byzantine and Coptic influences may be seen in various architectural elements and artefacts, sometimes at the same site. The question then follows, who were the inhabitants of the Nubian monasteries? No portrayals of monks have been found although twenty-seven Bishops were mentioned in inscriptions at Faras and fourteen were depicted in wall paintings there.<sup>18</sup> It is not known if they were Nubians or Egyptians.

At Ghazali, a rectangular epiphany tank or baptistry located to the north of the Church just outside its north entrance shares some affinities with Byzantine counterparts. The tank was lined with lime and situated under a domed roof. At the time of excavation the roof's supporting pillars remained in situ (Shinnie and Chittick 1961:18). Baptismal basins excavated at Old Dongola lacked separate roofing and were keyhole shaped.<sup>19</sup> No parallels for this structure have been found in Sudan but Shinnie and Chittick noted that the monastery of St. Laura in the Levant had a baptistry in a similar location (Shinnie and Chittick 1961:18). This may further suggest some direct or indirect contact with Christian communities in the Levant and may also reflect a large size congregation served by the church and monastery.

Jeuté noted structural similarities between Qasr el-Wizz room II-A and the refectory at Deir Anba Hadra (St. Simeon's) in Aswan (Jeuté 1994:89). While the current plan of St. Simeon's is of 10th century date and Qasr el-Wizz dates to the 9th c A.D., he suggests that many primary monastic architectural components (e.g., refectory, cells) of St. Simeon's retained their original design after its renovation in the 10th c A.D. and consequently many ideas used in Nubian monastic architecture could have originated here.<sup>20</sup> This hypothesis seems plausible but remains untested pending further excavation of pre-10th c A.D. strata at St. Simeon's. Shinnie and Chittick also noted some architectural and artefactual similarities between Ghazali and St. Simeon's (Shinnie and Chittick 1961:24).

Early Christian pottery uses simple geometric patterns whereas vessels of the Classic

period are more elaborately decorated (Adams 1981:10). Wall painting and pottery designs show inspiration from "Coptic and Byzantine miniature paintings and manuscript illumination" (Adams 1977:496; 1981:10). Logically the manufacturers and painters would be monks or individuals trained by monasteries, essentially persons with the opportunity learn or be exposed to these skills and art forms. Michalowski noted that violet was the dominant colour used in several Faras wall paintings. Many elements of the "violet style" appear derived from Coptic art (Michalowski 1964:200).

Several Coptic uprisings were suppressed by the Abbasids in Egypt during the 9th and 10th c A.D. and legislation unfavourable to Christians was enacted. Many Christians, including members of holy orders, sought refuge in Nubia (Plumley 1982a:107). This exodus may have begun as much as a century earlier. Adams (1981:10) and Wenig (1978:109) have suggested very plausibly that Egyptian refugee monks were the originators of the Classic Christian design styles because their immigration and the appearance of this distinctive decorative style coincide. Wall paintings from the church at Meinarti are painted in the Classic Christian style and are dated just slightly later than the exodus of refugees from Egypt. They also coincide with the founding of a possible monastery on the site (Adams 1965:167-8).

Archaeological evidence points to the presence of Egyptian Copts within the religious community of Nubia. Tombstones found at Ghazali were inscribed in Coptic and Greek (Shinnie and Chittick 1961:23). Some may "mark the graves of Coptic monks since there is some evidence that at moments of religious intolerance in Muslim Egypt Copts moved south to escape persecution" (Shinnie 1971:46). The extensive use of Coptic on the Ghazali tombstones rather than Old Nubian or Greek definitely hints at the presence of Coptic monks in Nubia. However, this in no way implies that the only language in use in the monasteries was Coptic. A Coptic book of prayers and a letter written in Old Nubian, which included a line of Greek, were found in cell II-E at Qasr el-Wizz (Scanlon 1972:18).<sup>21</sup> Conversely not all monks in Nubia were Coptic refugees. Trigger noted Nubian names written in Coptic on tombstones thus suggesting ethnic diversity within the population (Trigger 1965:147). Tombstones dating between the 8th and 10th c A.D. at Faras were mainly inscribed in Coptic while those that dated to the Late Christian period were written primarily in Greek. Griffith attributed this to a decline in the influence of the Coptic church in Egypt (Griffith 1926:56). It may also reflect a decline in the number of Copts emigrating from Egypt.

### Service Areas

The function of many rooms within these monasteries remains unknown and, as Jeuté points out, inferred by room contents when reported and location in relation to other structures (Jeuté 1994:93). The complex contained within the enclosure wall at Ghazali consisted of a church, some unexcavated, largely denuded mudbrick buildings and some stone buildings (Shinnie and Chittick 1961:22) (pl. 74). Other mudbrick structures were located throughout the enclosure but were neither mapped nor excavated. Four separate units of monastic buildings were noted: one unit west of the church, the second group north, the third north-east of the church and the fourth group comprised two stone rooms (A and C) located on either side of the east enclosure entrance. The second and third clusters were separated by a narrow corridor and considered, probably correctly, as a single unit by the excavators (Shinnie and Chittick 1961:19).

Very few rooms were excavated to the point that their function could be determined; however, as discussed above, some chambers north of the church may have been dormitories and rooms K, L, and J part of a refectory and kitchen complex. Room Y contained three water jar stands (zirs) and there was a small grain silo within W. A chimney shaft located on the south side of room Y directed a cooling air flow around the water vessels. Room Y was conveniently located near the presumed dormitory area (AA, V, X), the church and the refectory (K). J was identified as the kitchen based upon its proximity to the refectory rooms and extensive burning on its walls. The apparent lack of an oven within this room does not pose a problem for the identification of this room as a kitchen. Many modern Nubian kitchens lack an oven and cooking is conducted over small fires. The production of the staple unleaven bread (kisra) does not require an oven as it is cooked on a flat plate supported over a fire. The presence of two small slit windows within room J (Shinnie and Chittick 1961:21) could have allowed the smoke from a cooking fire to exit the room. Unlike other rooms within a modern Nubian house, a space is usually left between the roof and the top of the wall in the kitchen to allow the smoke to escape. Within the Ghazali report, the presence of windows in other monastic buildings is not mentioned although this does not necessarily mean that they were absent.

Outside the enclosure wall, about 500 metres east of the monastery, "extensive mounds of iron slag" and "the mouths of a number of what were evidently furnaces" were located (Shinnie and Chittick 1961:24). A row of buildings situated to the west of the monastery were thought to be latrines. Since neither of these sites was excavated, again no definitive statements can be made. The "furnaces" may actually be kilns, as without close examination some kiln wasters

have the appearance of slag. This may be the kiln site that produced the distinctive Ghazali pottery of the Classic Christian period.

At Qasr el-Wizz, areas tentatively identified included a latrine, wine cellar, two porters' rooms, and a possible workshop (pl. 73). Two kitchens (or bakeries) were also discovered and have been discussed above. Although nothing was found in II-N, II-Q, and II-O this area was identified as a potential workshop based upon the ease of accessibility and the openness of these vaulted rooms (Scanlon 1972:30). Unfortunately there is very little evidence to give this interpretation substance. II-LL, II-NN and II-U were identified as possible storage rooms largely because of their proximity to kitchen II-T and the affiliated storage and preparatory rooms II-S and II-W. This explanation seems plausible and is internally consistent as one would expect to find magazines near a kitchen; however, supporting evidence from within these rooms is lacking. The function of chambers II-T, S and W was determined by the presence of ovens in II-T, a flat washing basin (tisht?) in II-S and another in II-W as well as a large store jar (Scanlon 1972:23, 25). All were located near the refectory as expected of a kitchen and associated service area. Additionally, the southern half of room II-W may have contained a wine cellar. The presence of several imported amphorae sherds (dated to 850 A.D. and later) and the subterranean architecture of the structure led to this interpretation. A long vaulted room had been cut into the rock and a 35 cm hole in the roof provided ventilation. The entrance opened into the service area of II-W and II-T (Scanlon 1972:26, 30).

Room II-UU was a latrine. Access to this location from the cell block, work area (?) II-N, Q, O, and refectory II-A was relatively easy and direct plus it was at the far end of the monastery away from the church. It was situated so that waste could flow down the escarpment away from the monastery. Many Classic Christian sherds, used to provide soakage, were found in this room (Scanlon 1972:23-4). Many of these sherds were thought to have come from the Faras kilns because they exhibited distinctive Faras stamps and decoration (Scanlon 1970:52-3). Ashes from the ovens in the neighbouring room may also have been used for soakage and smoke from the ovens would deter an accumulation of flies. Traces of vaulting were not found in either the latrine or oven area (II-T) suggesting to the excavator that they may have been unroofed, however a flat roof of organic material such as palm fronds is just as possible. A gap left between the roof and the top of the wall would provide ventilation.

Two rooms (III-N and I-DD) situated beside major entrances were designated as porters' lodgings similar to chambers A and C found at Ghazali. Associated rooms (III-O, III-K and

possibly I-J) were identified as reception areas based solely on their physical location. The purpose of such a gatekeeper would be to regulate entrance into the sacred area of the enclosure, to receive visitors and possibly pilgrims. Pilgrimage to Nubian monasteries is discussed below.

The northeast unit of Old Dongola Kom H (pl. 77) was identified as a service area and in many ways the functional elements found there are similar to those at Qasr el-Wizz. Storage rooms were identified near an oven and ash from the oven was deposited in room that seems to have served as a cesspool (room 7) at some point in time. Rooms 1, 2, 4 and 11 were identified as vaulted magazines, constructed during an expansion of the monastery between the 8th and 10th c A.D. The floor and walls of these rooms were made of redbricks and plastered white (djir). Storage bins were found in chambers 1 and 4 while a storage jar was found in room 11. The excavator suggests that they were largely for the storage of grains (Żurawski 1994:336) although it seems that dried dates could be kept just as easily. An oven or furnace was constructed in room 8 probably during the 11th c A.D. A lack of kiln wasters and ceramic debitage suggested to the excavator that it may have heated water and was used for cooking. Ceramic pipe fragments were found running from the installation towards the interior of the monastery providing tentative support for its function as a water heater. Use of this installation for the production of ceramic religious artefacts such as sepulchral crosses, was another suggestion offered by the excavator (Żurawski 1994:337). The lack of ceramic sherds and particularly terracotta fragments from this area renders this theory as improbable.

#### An Analysis of Sites Tentatively Identified as Monasteries

Of the sites listed above no physical evidence whatsoever has been found at Buhen, Fantau, Gergetti Island, Karmel, Koka, Tafa, and Tangassi that would suggest a monastery was ever present at these sites. The function of the buildings at Argin IV, Biga, Gemai West VIII, Kashasha, Matuge Island II, and Mediq III remains uncertain as details concerning these structures are lacking (pls. 81-83). This may change with future research as more information is discovered or published. It has been suggested that Kashasha was a monastery based upon finds of Classic Christian ceramics, an enclosure wall and the presence of a large Christian cemetery in the vicinity (Vila 1977a:112). Sagiet el 'Abd I was similarly identified as a monastery because of the enclosure wall and finds of Greek graffiti (Vila 1978a:36-8). Similarly, the SARS Northern Dongola Reach Survey registered the site of El Ugal as a probable monastery based upon the presence of vaulted cell-like rooms, stone architectural fragments, and a possible red brick church

(Welsby 1994a:4-5; D. Welsby and I. Sjöström 1996:personal communication). Unfortunately, these sites have yet to be excavated and their identification remains uncertain. Sepulchral crosses have been found in the area of el Laqiya. This may suggest the presence of a monastery in the region (Żurawski 1994:321); however, no other evidence has been documented. The North-West church on Kom K at Old Dongola was built on top of a "large edifice" of Classic Christian date that may be a monastery, however it has not yet been excavated (Jakobielski and Medeksza 1990:165; Jeuté 1994:74).

Jeuté (1994:69) suggests that the settlement at Semna West might be a monastery; however, there seems little to support this idea. At the site a church dated between the 7th and 8th c A.D. and several mudbrick buildings were enclosed by a sturdy wall. The structures generally contained three rectangular rooms and were roofed with barrel vaults. Most of the artefacts recovered were domestic in nature and suggested a habitation site to the surveyors (Mills 1965:6; 1967-8:208-10). The location of this site at one end of the Second Cataract was convenient for monitoring trade along the river and around the cataract. The limited description of the site is not unlike that of other Early Christian walled settlements such as Sheikh Daud and Ikhmindi II; thus it seems probable that Semna West served a function similar to that of other Early Christian forts as discussed in chapter 1.

Ibn Selim al-Aswani records the presence of monasteries near Soba East (Vantini 1975:613). As Soba was the capital of Alwa this seems reasonable; however, as of yet they have not been located (Jeuté 1994:78). In several instances impressions by early travellers or local legends have been disproved by more detailed research or excavations at the sites. Naga el Scheima, for example, was initially believed to be a monastery prior to detailed excavations conducted there during the UNESCO campaign.<sup>22</sup> At Soba East, the recently excavated building D on mound B is a candidate for identification as a monastery (pls. 52, 72) because of its large size (c. 46 x 46 m), restricted entry and contact with identifiable religious structures. It was a multi-roomed, two-storey, mudbrick building adjoining cathedrals A and B. The first phase of the structure was dated from c A.D. 800 to c. A.D. 1100. Rooms on the ground floor were filled in during the 12th c A.D. and artefacts recovered from this level indicated that many rooms were magazines. (Welsby 1991:34, 317). Expected monastic features including a refectory, cells, kitchen area and enclosure wall were not discovered although some of these elements might have been situated on an upper floor as "the ground floor rooms served to elevate the important part of the building" (Welsby 1991:317). Additionally its location near the centre of the city as opposed

to the edge might make the religious isolation of monks difficult. The apparent lack of monastic elements and its location lead one to agree with Welsby's analysis, that the site functioned as either a palace or an ecclesiastical residence. "Its position towards the centre of the site and its close connection with the churches suggests that it was used by a high secular or religious person, perhaps the king or bishop of Soba" (Welsby 1991:318).

### **Tamit and Ar-Rammal**

The large building at Tamit (pl. 84), described as a "Palace" by Monneret De Villard (1935:161-2) was more thoroughly investigated during the UNESCO campaign by the Italian mission (Donadoni 1967). They concluded that it was just a large "farmhouse" similar to buildings at Biga and parts of Ar-Rammal (Donadoni 1967:24). Elsewhere it has been described as a monastery. "At Tamit, too, there seems to have been a small monastic or at least religious colony clinging to the edge of an ordinary farming village" (Adams 1977:480). The plan of the "Palace" at Tamit is reminiscent of the southern section of the structure at Ar-Rammal (pl. 75). An enclosure wall surrounded the "Palace" and contained an area of approximately 52 x 44 metres. Much of this area remained unexcavated; consequently, the extent to which other structures occupied the enclosure is unknown. Entry into the compound was through a monumental gate in the south wall. Exposed portions of the building revealed a south entrance and two corridors, one running north-south and the other, connected to it, orientated east-west. The building's entrance was offset from that of the main gate restricting the line of sight into the structure. A latrine was attached to the end of the east-west hallway and a total of nine small, rectangular rooms were placed along both halls on either side. Graves were found outside the enclosure wall (M. D. Villard 1935:161-2). Neither a church nor refectory were located. It is largely the presence of the enclosure wall, associated graves and cemeteries, structural similarities with Ar-Rammal and a presumed Classic Christian date which led to its identification as a monastic establishment.

Ar-Rammal was larger than Tamit, measuring at least 125 x 60 metres. There a church and several rooms were surrounded by an enclosure wall and five cemeteries were located in the vicinity (Monneret De Villard 1935:131-42). There are some difficulties with the identification of Ar-Rammal as a monastery. The site appears to lack a refectory and monks' cells (Jeuté 1994:60). As the entire complex was never fully planned or excavated these features may remain buried. Monneret De Villard does not date the structure nor describe any artefacts to which a specific date may be ascribed (Monneret De Villard 1935:161-2). Based upon Adams' typology



of churches the church at Ar-Rammal is dated to the Classic Christian period and is Adams type 3c (Adams 1965b:138). It is similar both architecturally and chronologically to the church at Qasr el-Wizz. However, scholarly opinion regarding the dating and typology of Nubian churches is not uniform and at least four different typologies have been proposed.<sup>23</sup> Not all of these typologies consider multi-period usage and alterations made to churches, consequently this Classic Christian date is not as secure as one would like.

If Ar-Rammal actually dates to late in the Early Christian period, a settlement and church surrounded by an enclosure wall would not be unusual as discussed in chapter 1. Early Christian walled settlements at both Gezeira Dabarosa I and Ikhmindi II contained churches. Ar-Rammal was also situated on the west bank of the Nile, as were the majority of Early Christian forts. Unlike walled settlements of the Early Christian phase, the enclosure wall at Ar-Rammal was missing substantial bastions and the internal rooms seem to lack the orderly arrangement so prevalent in these structures.

Adams lists twelve examples of church type 3c and many were dated to the Classic Christian period through other means (i.e., ceramic chronology) (Adams 1965b:115). It seems probable then, that the church and associated structures at Ar-Rammal are of Classic Christian date. The presence of an enclosure wall around a Classic Christian settlement is unusual, as discussed in chapter 2. The defensive capability of the Ar-Rammal wall seems limited, but for a monastery it would serve to separate the secular world from the sacred world of monks. If Ar-Rammal is a monastery, then based upon architectural similarities the "Palace" at Tamit may also be a monastery. Alternatively these resemblances could be accounted for by the nearness of the sites to each other. Both are on the west bank of the Nile and are separated by less than twenty km thus, positive identification of the function of these sites remains a problem.

Monneret De Villard's suggestion that Ar-Rammal was a monastery has been accepted by many Nubiologists. Identification was based upon the girdle wall, Christian cemeteries in the vicinity, a cluster of unidentified buildings around the church and the presumption that the site was largely of Classic Christian date. Adams states "Only three monastic establishments can be recognized with virtual certainty: at er-Ramal and Qasr el-Wizz in Lower Nubia, and at Wadi Ghazali near the Fourth Cataract" (Adams 1977:478-9). As discussed above, recent evidence, primarily from Dongola Kom H, shows that Nubian monasteries were not necessarily of the Classic Christian period.

A second assumption is also at work. "Churches in Nubia, so far as is currently known,

are never directly adjoined by wholly secular structures; contiguous structures are either satellite chapels, sacristies, or monastic establishments" (Adams 1972:EC2-1.6). While on the surface this assumption seems logical, evidence has not been presented which would either prove or disprove it. Examination of structures contiguous with Nubian churches has been limited as the investigation has frequently focused on the church itself. At Buhen, the Eighteenth dynasty Pharaonic temple was reused as a church and Christian houses were found "adjoining the temple on the north" (Maciver and Woolley 1911:18). There is nothing to imply that these houses were inhabited by priests or monks or had a religious function but admittedly information about these buildings is scant. It has been similarly assumed that structures north of the Church on the Point at Qasr Ibrim were monastic in nature (pl. 85). Investigation of these poorly preserved buildings revealed middens, firepits and some ceramics but no definitive monastic characteristics (Kjølbye-Biddle 1994:29-30). In another area of the site "church 3 [at Qasr Ibrim] also has adjoining structures on the south side (thus far uninvestigated), it seems reasonable to suppose that this was a monastery church" (Adams 1972:EC2-1.6). Excavation of EC1-10, a two-room structure adjoining Church 3 to the southwest did not reveal any evidence of monastic occupation. Unfortunately this area was destroyed in 1966 by later excavations (Adams 1972:EC1-10.1-8).<sup>24</sup>

At many sites domestic buildings are found in the vicinity of the church. Houses at Tamit are found around both the central and western churches (pl. 43). As previously mentioned building D on mound D at Soba East does not appear to be monastic in function yet has direct contact with a church building. This suggests that the aforementioned assumption may not be entirely correct. It assumes that secular structures were not allowed contact with sacred ones and that the definition of sacred space included the outer wall of the church. In places where a cemetery is directly associated with a church or monastery, this seems true. Great care was taken at Dongola Kom H to avoid contaminating the surrounding cemetery with debris and ash from the service area in the northeast corner (Żurawski 1994:337). It may be that for churches located in towns where space was at a premium the sacred area was thought to be that enclosed by the church wall but not necessarily the outer wall itself. Excavations that focus on settlements and domestic structures rather than churches alone may aid in answering this question.

#### Faras West

Monasteries have been reported in many historical texts from the region of Faras and further confirmed by inscriptional material found during the UNESCO excavations at Faras West.<sup>25</sup> Four buildings were tentatively identified as monasteries at Faras, the Western Palace, the

North Monastery, the South Monastery and the potteries which are discussed below. The Western Palace dates from the Meroitic period and was modified during the Christian period (Michalowski 1962:9) (pl. 37). The site measured about 36 x 38 metres and consisted of a series of small rooms arranged around a courtyard. A large central building about 11 x 11 metres stood within the courtyard. Artefacts found within included several lamps inscribed in Greek (Monneret De Villard 1935:192). No room has been identified as a refectory or kitchen in the traditional sense; however, the numerous small rooms arranged around the courtyard may have served as cells. The complex does appear separated from the profane world because it is both physically enclosed and roughly two km away from the citadel. The area covered by the complex (c. 1368 m<sup>2</sup>) is comparable to that of the first monastery at Qasr el-Wizz (c. 869 m<sup>2</sup>). Excavations conducted on the site were incomplete. An inscription found at the site referred to a monk named Makarios and analyses of written material from Faras by Jakobielski led him to suggest that the Western Palace might be a monastery dedicated to St. Menas (Jakobielski 1972:97-99). This seems to largely concur with much of the physical evidence; unfortunately the published documentation on this site is as yet incomplete so no definitive conclusions can be drawn at this point.

The North Monastery at Faras was not built before the end of the 12th c A.D. and it was constructed on top of earlier buildings (pl. 80). It contained a church on the upper floor and was enclosed by a large wall (Michalowski 1962b:241). Some chambers on the ground floor may have functioned as cells or dormitories. As previously mentioned, parallels between the upper floor of the cell block at Qasr el-Wizz and parts of the second floor of the North Monastery (excluding the church) have been proposed. The refectory could not be located but there was a long rectangular room abutting the south side of the church that could have been an assembly room or "devoted to ritual purposes" (Michalowski 1962b:242) or even a refectory. However, as with the Western Palace, documentation concerning this site is still awaited so all conclusions must remain speculative.

To the south of the Cathedral were the remains of another building described as the South Monastery. Only the fragments of some walls dating to the 8th c A.D. were preserved (Jakobielski 1981:42). As the site has not been published it is not possible to ascertain if it was a monastery. Were it a monastery, it would be yet another founded during the Early Christian period. Jakobielski has tentatively identified this building as the Monastery of Mary in Pachoras based upon his reading of an inscription found in the Cathedral (Jakobielski 1972:117).<sup>26</sup>

## Meinarti

It has been postulated that part of the level 6 to level 4 settlement on the island of Meinarti was a monastery. Physical evidence to support this claim seems slim. The structure in question dates from about 1150 to 1250/1300 A.D., encompassing the Classic and Late Christian periods. The community may have originated as early as 1000-1050 A.D. in level 8 (Adams 1968:190-1) (pl. 60a). Identification of the structure as a monastery was based upon spatial distribution of buildings over the site, the presence of a chamber with the appearance of a refectory or common room and the historical record written by Abu Salih describing a Nubian monastery dedicated to St. Michael and Cosmas.<sup>27</sup> Meinarti was divided between houses in the north and small rooms clustered around a courtyard and chapel or refectory in the south. "Because of its apparently communal character, and the presence of a good deal of religious decoration, it seems natural to identify the south building at Meinarti with the historically documented monastery of SS. Michael and Kosma" (Adams 1964:226). Mileham also makes this identification (Mileham 1910:5).

Unlike the monastery at Qasr el-Wizz, at the earliest levels (level 8, 1000-1100 A.D.) the area designated as the Meinarti monastery appears to lack internal organization and its outer boundary is not discernable. It is difficult to separate the profane from the sacred. It was not included on Monneret De Villard's list of Nubian monasteries (Monneret De Villard 1957:61-2). The only identifiable room that might allude to a monastic function is the "refectory," designated A on plate 86. It was a large, "L-shaped" room with a mudbrick bench at one end of it and a central post. Connected to it was another room that might have served as a kitchen as ovens were located there. This room was later modified (designated B on pl. 60). It was plastered a peach colour then covered again in white with Greek inscriptions at the beginning of the Late Christian period. By 1250 A.D. it had been painted with religious wall paintings. Most of the adjoining chambers and buildings were initially covered with plain mudplaster then later with light pink plaster (Adams 1965a:161). Features such as cells, an entrance, an associated church, an enclosure wall and service areas were not discovered.

As with the monastery at Qasr el-Wizz, the complex at Meinarti expanded in size through time and it is this Late Christian structure that the excavator describes as a monastery (Adams 1968:191). Building B, added during the Late Christian period, was unique with respect to the rest of the supposed monastery because it had vaulted roofing and wall paintings primarily red, green and violet in colour. These frescos were stylistically similar to those found at Faras

(Adams 1964:229, 235). This may have been a chapel or part of a church. A fortified tower (designated C) was also added during the Late Christian period (pl. 86). The presence of fortified towers or 'castle houses' was common in Late Christian settlements. As discussed in chapter 3, they seem to have provided a place of refuge and protection instead of or in addition to fortified enclosure walls, thus the construction of such a tower at Meinarti during the Late Christian phase would not have been unusual. Most monastic features cannot be clearly distinguished within this structure. Cells, an entrance and an enclosure wall are lacking, but a refectory, and chapel or church may be present. It is possible that the isolation of the island itself may have largely separated the monks from the outside world using geographic features like a *laura* rather than a physical wall as found in *coenobia*.

Within the associated cemetery, two cruciform superstructures were identified (Adams 1965b:170). These were similar to one found by Griffith at Faras West (1927:pl. LIV3, LVII9) and by Monneret De Villard at Ar-Rammal (1935:136-7) both sites of potential monasteries. Similar structures and sepulchral cross fragments were recovered from the cemeteries associated with Dongola Kom H.<sup>28</sup> Adams excavated a total of 323 burials between stratigraphic levels nine and three (from 1000 A.D. to 1300 A.D.) and determined that the ratio of males to females and of adults to subadults indicated a "normally balanced population, with the high infant mortality rate that is universal in this part of the world" (Adams 1965b:171). Were the monastery to have had a large population or occupied much of the island, one would expect a much higher proportion of adult males or if it were a nunnery a greater number of females.

The question remains whether this complex was a monastery and the answer remains uncertain. One would have assumed that the composite parts of a Nubian monastery had been standardized by the Late Christian period and the product a fully developed monastery with a majority of identifiable structures, but this does not appear to have been the case. Part of the difficulty lies with the lack of Late period monasteries and comparative Nubian material. Monasticism in Nubia had been thought to peak during the Classic Christian period and decline afterward; however, the Dongola Kom H monastery was clearly flourishing at this time as discussed above. Many walled monastic communities may not have been inhabited after the twelfth century possibly due either to a declining monastic population or indefensibility of their sites against Fatimid, Demdem and Zagawa incursions.<sup>29</sup> Towards the end of the Late Christian period smaller religious communities, which were not as sharply "separated from the surrounding world" (Adams 1977:480) as the earlier enclosed bodies, may have been the norm. For example,

the later community at Dongola Kom H extended beyond the enclosure wall yet had a place of retreat if required (Żurawski 1994:339), just as the inhabitants of Meinarti could have sought refuge in the Late period tower if necessary. However, if this is true, reasons for this evolution and the blurring of the separation between the sacred and profane remain unknown.

#### Debeira West

Monastic functions have been attributed to three sites in the area of Debeira West, here designated I, VI and V. Debeira West I (R-1) is somewhat enigmatic (pl. 87). Originally reported as a church, a large mudbrick building containing many rooms arranged around a tower was unearthed. Excavators placed the occupation of the site between c. A.D 900 and A.D 1100 (Shinnie and Shinnie 1978:42). It is doubtful if this building was monastic in nature as it seemingly lacks an enclosure wall, associated church, refectory, and cells although it appears incompletely excavated. Its structure resembles Late Christian 'castle houses' such as Serra East house SJ and Abkanarti building 1 (pl. 88), as discussed in chapter 3, and as such it may be a forerunner of these structures. Although it is larger than the two examples given, measuring roughly 12 x 14 metres compared with 9 x 9 metres and 9 x 11 metres respectively, it is well within the range of dimensions for 'castle houses' listed by Adams and far from the largest noted (Adams 1994:15). Geographically, it is located along the same region of the Nile, between Qasr Ibrim and Ferka, as the other identified 'castle houses'.

Debeira West VI (R-60) may have been monastic in nature (pl. 89). The earliest buildings consisted of a tower (rooms XXX, XXVI, XXV, XXIX) and associated chambers that formed the core of the enclosure around which other rooms were later built. Traces of an inscription were found within the tower. Walls of this structure were thicker and sturdier than those constructed later and only one entrance was located. X-Group sherds were found at the lowest levels of the building and much of the pottery associated with the structure itself was Early Christian in date. This led the excavators to conclude that it had been constructed between the late 6th and early 7th c A.D. Occupation of some sections of the entire complex continued until around A.D. 1100 (Shinnie and Shinnie 1978:35). If the early buildings served a monastic function, then this may lend further credence to the hypothesis that monastic enclosures of the Early Christian period were fortified in some way. Beyond the sturdy construction there is; however, little to suggest the function of the early building. At this point it can only be inferred from analysis of the later complex.

Several rooms, apparently contained within a thin perimeter wall, were added to the site.

While the function of many of these chambers remains obscure, two latrines (XIIId, XVIa), a kitchen and associated service areas (XIV, XIIIa, XIIa-e, Xa), storage (XXV), an open court (XXII, XVIIa) and a building possibly of religious or public function (II, III, IV, V) were identified. The interior of this structure was smoke-blackened and its appearance was similar to that of a church with the apse situated at the wrong end (Shinnie and Shinnie 1978:36-41). Church R-2 was located nearby. The site has most of the elements present in a coenobitic monastery except a refectory and cells but as it was not completely excavated they may exist elsewhere. Rooms XV, XXIV, XXIa and XXI vaguely resemble cells both in shape and size. Many inhabitants may have resided in dormitories. Several larger rooms could have easily served this purpose (i.e., X, XI, etc.). R-60 was located along the river bank several hundred metres to the north of the largest settlement in the area (R-8, Debeira West IV) and physically separated from it by a small wadi. This actual physical separation from the local profane community may further suggest purposeful religious isolation. R-60 was evidently an enclosed community complete with the facilities to support it. This does not necessarily indicate that it was monastic in nature although this does seem the most probable option.

Debeira West V (R-59) (pl. 90) could have been a monastery during its period one, Early Christian occupation. A complex of at least twelve chambers was apparently surrounded by an enclosure wall. This unit abutted and had two entrances into church R-2, contained a kitchen (room II), storage rooms (X, XII, XXXII) and a latrine (XVI) (Shinnie and Shinnie 1978:19-20). Like R-60 it was situated to the north of settlement R-8 and was separated from it by a small wadi and as with R-60 there is no indication of cells or a refectory. As previously discussed, Adams has stated that the "church was never in actual contact with secular buildings. It might however be adjoined by satellite chapels, a clerical residence, or a monastic establishment" (Adams 1977:478). The presence of a storejar containing a foetus buried beneath the floor of room LXII (Shinnie and Shinnie 1978:20) suggests that this complex was neither a group of satellite chapels nor had a monastic function.<sup>30</sup> It may have been a clerical domicile or a series of secular residences sharing walls although the "double house" form of Early Christian houses, discussed in chapter 1, does not appear in evidence. That the excavator noted the complex was "planned as a single unit [including church R-2] and only minor alterations were made during a long period of occupation" and that "It was certainly used as a dwelling house until it was abandoned" (Shinnie and Shinnie 1978:20) suggests that identification as an ecclesiastical residence is the more reasonable option.

Abu Salih reports that Nubian bishops were consecrated by the see of St. Mark the Evangelist (Vantini 1975:333). "There was, therefore, no such thing as a Nubian church in an organic sense; the Nubians were simply members of the Jacobite (Coptic) church of Egypt, not formally distinguished from their co-religionists in the northern country" (Adams 1977:472). If this is true, then Nubians probably also followed the rules set forth by the Coptic church pertaining to clergy eligibility. According to the requirements of the modern Coptic church, a deacon may be married if he has married only once and to a virgin. A priest may also be married if the marriage occurred before the individual's elevation to priesthood (Watterson 1988:165). If similar rules applied to Christian Nubian clergy, then the presence of a foetus buried within a storejar in the confines of an ecclesiastical residence is not impossible because a priest or deacon could have a family. Further evidence of this may be found in an Old Nubian letter discovered at Qasr Ibrim. It is from Iesou, Bishop of Phrim to Israel, domesticus of Pachoras and it mentions Iesou's daughter and wife (Browne 1989:46). Concerning the burial itself, an ethnographically comparable practice occurs in present day Sudan where miscarriages that required a midwife's assistance are wrapped in white cloth, placed in a globular cooking vessel (*gulla*) and buried within the house enclosure (*hosh*) (Boddy 1989:68).

#### Batn el Hajar

It has been surmised that several walled communities in the Batn el Hajar, including Akasha II, Kulb III, Kulubnarti III, Ukma IV, Ukma VI, were monasteries (Adams 1977:479) (pl. 91).<sup>31</sup> Typically buildings enclosed within the aforementioned compounds were irregular in shape, utilized rocky outcrops in their construction and were made of mudbrick and stone. Structures could incorporate the enclosure wall or share their walls with a neighbouring building. Individual buildings had between one and four chambers and were usually quadrilateral in shape. Ceramic finds date most of these sites to the Classic Christian period. Kulb III for example, appears to have been occupied from 800 to 1000 A.D. (Monneret De Villard 1935:234-5). Adams suggests that the presence of an enclosure wall of Classic Christian date, geographic location and the internal site arrangements preclude these settlements from either military or agricultural functions thus leaving the only option as monastic (Adams 1977:479).

Although little data are available concerning these sites, they all appear to lack some basic elements found in a coenobitic monastery. No identifiable refectories have been located. Churches were found near Kulb III, Gamanarti and Akasha but apparently not located in the vicinity of the other sites although they may have been overlooked by surveyors. Manuscript



fragments and Greek graffiti were recovered from Kulb III (Monneret De Villard 1935:234-5). One might expect a higher level of literacy in a monastic community as compared to the general population. It is possible that these settlements were *lauras*. The girdle walls, scattered dispersion of rooms within the enclosures, absence of refectories, and isolated location in the *Batn el Hajar* region is fully in keeping with the characteristics of a *laura* as described above. While the apparent lack of a church at some settlements is troubling, within a *laura* monks were required to meet for communal prayer one or two days per week, much less than those in coenobitic monasteries, thus a nearby church or communal prayer room may have been sufficient. In searching for Nubian monasteries, archaeologists have looked for characteristics typical of a coenobitic monastery.<sup>32</sup> If many Nubian monasteries were in fact *lauras*, then some coenobitic characteristics would be absent. This may have led to the misidentification of some sites and the actual number of Nubian monasteries is greater than previously believed.

Kulubnarti III (21-S-10) might be a Nubian *laura* (pls. 121, 122), and unlike the settlements in the *Batn el Hajar*, is well documented. A small settlement was situated on a terraced, rocky outcrop overlooking the river. The outcrop was situated on the east side of the island away from the closest riverbank. In times of high Nile this peak became an island thus geographically isolating it even further from the main body of the island. Over seventeen structures were spread across the upper and middle terraces, most of which were on a level designated terrace D. A drystone retaining wall, one metre thick, reinforced and enclosed this terrace. Access to the community was through a gate in the middle of the terrace and part of a door post and socket were found *in situ* (Adams 1994:206). Towards the end of the Classic Christian period, beginning of the Late Christian phase, the thickness of many walls was doubled and the gate was modified. A winding path led up from base of the hill granting indirect access to the community. This is shown on plate 121 as a line of arrows. Irregularly-shaped brick rooms lined the length of the terrace and most were single rooms that opened on to a long corridor. The walls of these structures were thin. Rooms grouped together were labelled as houses by the excavator although none were interconnected (Adams 1994:197-211).

Rooms arranged closely together, such as houses X (4 rooms), VII (3 rooms) and VIII (2 rooms) on plate 122, may indicate a cell with an associated prayer chapel or perhaps accommodation for a novice monk or disciple. Within the *laura* at Cellia, Egypt "each self-contained dwelling contained a magazine, sleeping quarters, kitchen, and sometimes a reception chamber and prayer-room" (Walters 1974:104). Examination of other Egyptian *lauras* including

Saqqara and Dêr al Dik, shows that the number of rooms per monk varied although most had two or three rooms just as at Kulubnarti III. Within these rooms was a prayer area (oratory), a magazine and an area for sitting or sleeping. The distribution and number of rooms appeared to depend on the space available (Walters 1974:108).

These functional requirements are easily met within the Kulubnarti III community. Many vessels, some buried within the floors, were recovered from the rooms at Kulubnarti III (Adams 1994:209). These likely served as storage containers. Ovens were discovered in houses XIII, XII, and VIII, and mastabas were found in houses X, XI, and VII (Adams 1994:209) (pl. 122). This seems a large number of ovens for such a small community. The presence and function of ovens within monastic communities versus secular settlements are discussed below. Artefacts recovered from the site included two censers, a lamp, textile fragments, two necklaces and one leather circlet and ceramic bowls, vases and lids (Adams 1994:331). No room identifiable as a refectory was discovered and no church was directly associated with the settlement; however, a Classic Christian church was found on the west bank opposite the island and a Christian cemetery (21-R-2) was associated with it (pl. 92). No settlement of Classic Christian date was found near the church. Taken together, the stone enclosure wall, isolated geographic location, indirect access, distribution of rooms within the community and comparisons with known Egyptian lauras, suggests that Kulubnarti III has all the characteristics of a laura.

### Anchorites

The Anchorite's grotto (Faras West IV) discovered near Faras West was a New Kingdom Pharaonic tomb that had been converted into a single monk's cell or chapel. It was covered with painted Coptic texts, including among them the beginning of the four gospels, a prayer, the names of the forty martyrs of Sebaste and the seven sleepers of Ephesus. These texts identify the former inhabitant as Theophilus. Within them he describes himself as "this least of monks who wrote these writings on my dwelling" and dates the inscriptions to 731 A.D. (Adams 1977:487; Griffith 1927:81-91). New Kingdom tomb II at Toshka East had been similarly reused by a monk (pl. 93). A cross had been cut into a pillar and two had been inscribed in the ceiling. The entrance facade had been arched and benches cut along the walls (Simpson 1963:19-20; M.D.Villard 1935:121-122).

Many anchorites in the Judean desert and in Egypt maintained some sort of connection with a parent monastic institution and received visitors.<sup>33</sup> The proximity of the Anchorite's grotto

to Faras West I may indicate a similar relationship. If such relationships did exist then monasteries may be found in the vicinity of some of these hermit dwellings. This is a subject for future research. As another cave carved with Christian motifs was found at ez-Zuma (pl. 94) (M.D.Villard 1935:251), an intensive survey in this area might reveal a monastery. One possibility is the site of Bakheit, just downstream from ez-Zuma, where an enclosure surrounding a church has been located.

References to monks residing near Wadi el Allaqi are found in the Arabo-Jacobitic Synaxary (Jeuté 1994:59). There Firth discovered a small, sandstone enclosure with its entrance facing the Nile. The bottom portion of the wall was decorated with "chevron and hatched patterns roughly cut into the stone" (Firth 1927:111). Two stone column fragments, apparently reused as furniture, were found within as were two lamps and a cup. Some oxidized Late Roman coins were found in a niche in the floor. Associated pot sherds were of Early Christian date. Firth describes the structure as resembling a "single-roomed cell of about the fifth or sixth century, which was occupied by a hermit" (Firth 1927:111).

Four anchorite cells, which possibly belonged to enclosed monks, were also reported to the south of Naga el-Scheima just across the river from Wadi el Allaqi (Jeuté 1994:60). The large number of hermit dwellings in this area may indicate that a laura was present. The walled-in nature of the Naga el-Scheima cells strongly suggests that someone was providing water and food for their inhabitants, possibly suggesting a link with a parent monastery. In other areas hermits may have engaged in subsistence farming or gathering, received donations from visitors, or were provided for by an associated monastery or some permutation and combination of the three. In Egypt and the Judean desert, anchorites acquired necessities via these methods.<sup>34</sup>

It is difficult to define the characteristics of a typical anchorite's dwelling due to their sparse number and the few details available concerning them. The basic arrangement seems to have been a single room with one entrance. There appears a marked preference for reusing earlier tombs or caves, perhaps because unlike a mudbrick building they were not labour intensive and little actual construction was required by the monk. The interiors were clearly modified to accommodate the residence of an individual and to provide a more pious Christian environment. Ledges for sleeping or sitting were cut at ez-Zuma and Toshka while in the Wadi el Allaqi columns were likely converted into benches. Religious decoration was added at Toshka and Faras West IV as described previously. In the Judean desert, one characteristic believed necessary for an anchorite's abode was a niche or separate room for prayer or at least a special corner possibly

decorated with religious symbols (Hirschfeld 1992:144-5). Crosses inscribed in the ceiling at Toshka could have demarcated a special prayer area or ledges found in the tomb corners might have indicated a prayer corner. The separate chambers at the back of the ez-Zuma grotto could also have served such a purpose. Unfortunately as there is very little evidence to substantiate or disprove these claims it remains speculation. Just as Judean monasteries had gates, Hirschfeld also noted that "a closed, though unlocked, door was also the rule for hermits living in caves" (Hirschfeld 1992:163). Evidence for this practice by Nubian hermits is lacking but cannot be ruled out partially due to the small sample size. No doors or door sockets have been reported; however, insects might easily consume a wooden door.

### Sources of Livelihood and Support

It has been said that monasteries did not play as large a role in the Nubian economy as they did in the Egyptian economy because there were fewer of them and they were smaller. "There is nothing to suggest that the Nubian monasteries were centres of manufacturing and commercial enterprise in any way comparable to some of the Egyptian and European monasteries" (Adams 1977:503). In 1977 no identified Nubian monastery was comparable in size to those in Egypt and very few had been found. With the discovery of Dongola Kom H this analysis must be reconsidered and revised. Deir Anba Hadra (St. Simeon's) in Aswan measures 90 x 100 metres (Bowman 1989:194) while Dongola Kom H measures roughly 80 x 90 metres. As aforementioned, Nubian monasteries were comparable in physical size to those of similar date in the Judean Desert. The monastic population in Nubia was likely smaller than that of Egypt (as previously discussed), but then the general population of Nubia was also less.<sup>35</sup> The Egyptian monastic community also varied in size and in its contribution to the economy depending upon regulations placed upon it by the governing Moslems.<sup>36</sup> Fewer monasteries have been discovered in Nubia than in Egypt but this is perhaps partially due to the shortage of archaeological work in Upper Nubia and the Northern Sudan rather than a lack of monasteries in these areas. The difficulty in identifying the characteristics of a Nubian monastery, as discussed previously, is probably also a factor.

Nubian monasteries must have had a means of supporting themselves. When addressing the question of monastic livelihood, the purpose for which the monastery was founded must be considered. Such objectives might include functioning as a base for missionary activity, a retreat for study and contemplation, or praying for praise and intercession. For example, clunial houses

in medieval Britain were "founded to serve God through praise and prayers for the souls of the dead" (Butler 1993:81). Examination of the geographic locations of the various monasteries offers some clues as to their functions and method of support. Both Dongola monasteries (Kom H and DM) and those tentatively identified near Tamit, Debeira West and Faras West were all in the vicinity of towns and were essentially urban in nature. If a monastery was engaged in providing a practical service or bulky goods then an urban location would be preferable. An "urban site [would] ... enable monks to enter a market economy and yet did not undermine their seclusion within the convent" (Butler 1993:81). The towns and their markets would stimulate sales of a commodity being produced by a monastery and additionally could serve the practical needs of pilgrims visiting holy resting places of saints.

Little evidence for Christian pilgrims has been documented in Nubia; however, the 13th c A.D. Arabo-Jacobiticum Synaxarium records that Qafra, a monk and nephew of a Nubian king, took a pilgrimage to visit the monastery of Abu Shenute in Egypt (Vantini 1975:439).<sup>37</sup> The names of some individuals inscribed within the Anchorites grotto may be those of persons visiting the site and the monk there (Adams 1977:486). Finds of tombs and memorial chapels complete with lamps and wall paintings at Kom H, Dongola indicate that this site may have been a pilgrimage site. A graffito found in room 9 of Kom H appears to commemorate the visit of Chael (II) the Bishop of Faras to the monastery (Jakobielski 1995:90). It has also been obliquely suggested that the male skeleton, aged approximately sixty at the time of death, found buried in a 6th c A.D. crypt beneath the cruciform church at Dongola, was that of Longinus, one of the key evangelizers of Nubia (Godlewski 1990b:518, n.16; 1990c:35-6). Visitation to this holy tomb could be one reason for pilgrimage to Dongola. Ghazali, an isolated desert monastery, might also have been a pilgrimage site and served travellers due to its location on the desert route in the Wadi Abu Dom. This wadi "has been of importance for many centuries as a route from the Dongola reach of the Nile to the area of ancient Meroë" (Shinnie and Chittick 1961:7).<sup>38</sup>

Monasteries located in large urban settlements such as Dongola and Faras would benefit the local rulers at both concrete and spiritual levels. By supporting religious institutions the ruler would be portrayed as a good Christian and assured himself of salvation. During the 9th c A.D. King George of Dongola visited Baghdad with at least three bishops and was described as "faithful orthodox, zealous for his faith, who detested communicating with the heretics" (Vantini 1975:320). In the 8th c A.D., Zacharias chose not to succeed his father King Merkurios and instead appointed a successor and devoted his life to "the word of God and the salvation of his

soul" (Vantini 1975:40). His successor received guidance and instruction from the Bishop of the city (Vantini 1975:41). These examples clearly show that Christian beliefs and spirituality were of concern to the Nubian rulers. The close physical association between a monastery and the ruling house would further reinforce for the common person the piety and spiritual strength of the ruler and perhaps give divine justification to his reign. As the tenets of Christian belief and particularly vernacular Christianity appear to have been strongly held and very real for the average individual such a link could be made at the subconscious level and would be important.<sup>39</sup>

Although literacy appears more wide spread during the Christian period than in earlier times, it was likely greater in the monasteries and priestly orders than in the general population. Documents found thus far have been primarily of a religious nature, and were written in Greek, Coptic and Old Nubian although those from Qasr Ibrim included letters, commercial and legal documents, many in Arabic (Adams 1993:36). Finds from Kom H, Dongola indicate that some monks were highly literate and had developed a great deal of artistic skill.<sup>40</sup> Sculptured window grills, wall paintings and stencil application of decorative friezes have been discovered (Jakobielski 1995:92). At a practical level the ruler and community could also benefit from this resource, perhaps gaining access to individuals with legal or medical knowledge, secretarial abilities and accountancy. Maintaining some sort of industry that served the community could also have been a means of distributing and utilising donations and wealth.

Adams does not believe that the monks directly cultivated the land. "The extent that the state and the church benefitted from agriculture,...must have been chiefly through the levying of taxes on land and also perhaps on animals and irrigation devices" (Adams 1977:502). This hypothesis has little Nubian evidence to either support or disprove it. Egyptian churches of the 6th c A.D. could own land and collect a portion of taxes paid (Bowman 1986:197). A similar situation may have existed in Nubia as the Church certainly advised and had close ties with the rulers but little is known about the structure of the taxation system. Compared with the average mudbrick house of any phase of the Christian period, the well-constructed monasteries with finished stone architectural elements and thick plaster, were repositories of some wealth.

Presumably the Nubian monasteries were endowed with agricultural land or produce from such land sufficient to provide for their needs. A survey of the literary and archaeological evidence concerning the Egyptian monastic diet determined that the fare and nutritional intake of monks residing in monasteries were similar to that of their non-monastic contemporaries (Husson 1979:191-207). This was probably also the case with Nubian monks; however, more research is

required in this area. That the majority of sites, identified either tentatively or in actuality as monasteries, were located close to cultivatable land seems to support this suggestion. Debeira West V and VI, Tamit and Faras were situated along the river bank near land regularly inundated. Both Dongola monasteries were located in the fertile Letti Basin region, DM near the river and Kom H closer to the Basin proper. Ground near Ghazali, isolated away from the river in the Wadi Abu Dom, could be cultivated. "At this point water is very near the surface and it is this which allows the inhabitants ... to raise crops and to cultivate the date palms which are found here exceptionally far from the river" (Shinnie and Chittick 1961:7). Even potential laura sites in the Batn el Hajar may have been near arable land. The West Bank Survey of the UNESCO campaign noted that the Batn el Hajar was crisscrossed by many soil retaining walls that were apparently of Christian date, implying that land was been brought under cultivation during this period (Adams and Nordström 1963:43-4). The presence of cultivatable land near seemingly isolated monasteries such as Ghazali and those in the Batn el Hajar strongly suggests that at least some monks engaged in agrarian pursuits.

Pottery, wine or beer, bread and textiles were probably produced by monks for their own needs and as saleable commodities. Evidence for ceramic manufacture comes from Faras West I (site 24-E-21), Ghazali and perhaps Dongola. The Potteries building at Faras West (24-E-21) was located northeast of the walled settlement and its identification as a monastery remains uncertain. It was rectangular, measured 25 x 25 metres, was constructed of mudbrick and contained about thirty rooms (Griffith 1926:31-33) (pl. 95). Excavation revealed six occupation phases. Two small kilns were added in the third occupation phase (Adams 1961c:31-3). Pottery production was initiated on a small scale and probably met local needs. The switch from small scale manufacturing to large scale production occurred after a great deal of water damage, possibly a flood or rainstorm (Adams 1986:19). At this point the little kilns were replaced by four large kilns and several smaller ones (pl. 95). There is no direct evidence to date this building but a misspelled Coptic inscription was found within the chapel (room 10). A similar misspelling was found in the Anchorite's Grotto dated to 739 A.D. "The occurrence of this rather unusual palindrome, in the same mis-spelled form, in two neighbouring sites causes a strong suggestion of contemporaneity between the two" (Adams 1961c:42). Based upon this epigraphic similarity Faras 24-E-21 was occupied between the 8th and 10th c A.D.

Both Adams (1986:17) and Griffith (1926:64) suggested that the Faras kiln building (24-E-21) was not originally a manufacturing centre but was converted from a monastery. However,

there is little indication that this structure ever functioned as a monastery. It does appear to have a chapel (room 10) with an apse facing the correct direction and is an enclosed block of rooms. It is not possible to identify cells, a refectory or kitchen area. "It is not easy to conceive of any other function for a densely clustered, integrated complex of rooms with very restricted access from [the] outside" (Adams 1986:17). Adams cites some similarities in ground plan between this building and the early floor plan at Qasr el-Wizz, and notes that the monastery at Qasr el-Wizz was founded around the same time as the water destruction of the small third phase pottery workshop (Adams 1986:17, 394 n.23). At this point any semblance of a monastery disappears from Faras 24-E-21 and the site is geared solely to ceramic production. This ceases for unknown reasons around the end of the Classic Christian period. Adams assumed that the monks' residence moved to Qasr el-Wizz and "the Potteries remained one of its dependencies, always staffed by monks and their assistants" (Adams 1986:394 n.23). Both Adams and Griffith may have fallen into the trap of assuming that any concentration of rooms is automatically a monastery if no other explanation is readily available, but it was not unusual for monasteries to be involved in the manufacture of ceramics. St. Simeon's in Aswan (Clarke 1912:pl XXIX) and St. Epiphanius at Thebes (Winlock and Crum 1926:80-1) show evidence of having been production centres for large amounts of pottery.

Much Classic Christian pottery, as well as some dating both earlier and later, has been located at the Ghazali monastery and it is assumed to originate there although the production site has never been located. "Given the fact that Ghazali was a monastery, as we assume was also the case at Faras, it is tempting to speculate that this was itself the place of manufacture of Upper Nubian wares" (Adams 1986:23). Adams further postulates a "historical connection" between Ghazali and Faras due to some similarities in Classic Christian pottery designs, although he notes differences as well (Adams 1986:23, 245).<sup>41</sup> This is a tenuous suggestion at best because the kiln site at Faras may not be a monastery and the monastic site of Ghazali may not have kilns. If both sites are monasteries and do produce pottery a "historic connection" between the two locations is not necessary either. If some inspiration for Classic Christian pottery designs came from a Coptic influence, such as refugee monks (as suggested earlier), it did not have to go through Faras before reaching Ghazali although this is probable geographically.

The only examples of known monasteries situated near kilns occurs at Old Dongola. As a large settlement site was also in the vicinity, it cannot be ascertained whether monks were operating the kilns. Finds of three terracotta stelae within the northeast unit of Kom H, Dongola



(pl. 77) and the presence of a furnace in this section led the excavator to suggest that the monks were producing inscribed terracotta and sepulchral crosses. "The location in a monastery, of such an 'industry' which requires the knowledge of writing is quite reasonable" (Żurawski 1994:337). This would suggest that some monasteries were engaged in ceramic production, perhaps of specialized items.

The specialized mass production of amphorae in the Faras kilns (24-E-21) has been taken as indirect evidence for a monastic wine making industry (Adams 1977:503). Growing of grapes and the production of wine requires "a considerable amount of communal effort, and for that reason has been regularly associated with monasteries both in Egypt and in Europe" (Adams 1986:503). Evidence of wine production was found in the monastery of St. Epiphanius at Thebes (Winlock and Crum 1926:161-2), and "according to Arab sources grapes were grown in Lower Nubia, especially in the southern part" (Trigger 1965:147). Further, the commercial production of amphorae at Faras, in the 8th c A.D., started at approximately the same time as much of the Nubian supply of imported wine was cut off by revisions to the Baqt exchange (Vantini 1981:88).

It is not without some reservation that one accepts Adams' hypothesis. Some amphorae at Faras may have been used for beer instead of wine. Abu Salih documented the use of *mizr*, a grain beer, in Nubia (Evetts and Butler 1895:265; Vantini 1981:134). Beer made from dates or sorghum mash has been produced in modern times as has distilled date liquor. Efforts to produce wine, a valued commodity, would probably have been made were its supply terminated. Based upon the climatic extremes in the region, particularly dryness and high temperatures, one wonders the degree to which this venture would have been successful. Wine making was attempted at Meinarti and Wadi el-Arab towards the end of the Meroitic period with apparently little success (Adams 1977:362). The climate may have become slightly more favourable after A.D. 350 or perhaps the monasteries could provide the communal effort and agrarian knowledge required to produce wine that may have been previously lacking. Monks coming from Egypt may have been more familiar with wine making than the indigenous Nubian monks. The entry of Coptic refugees into Nubia during the 9th and 10th c A.D. seems to have had an impact on Nubian monastic art and motifs as reflected in Classic Christian pottery and wall paintings as aforementioned. Grape and olive seeds were identified in botanical samples recovered from beneath building A, a Late Christian structure, at Hambukol, Upper Nubia.<sup>42</sup> This also suggests that the production of wine was possible during the Christian period although one suspects that the vintage was poor.

No direct evidence for bread or beer production has been recovered from a monastery, but the discovery of three notched bone tablets believed to be weaving tools, from Debeira West VI (R-60) (Shinnie and Shinnie 1978:80), suggests that weaving might have been an activity pursued by monks. A large oven (c. 1.5 metres in diameter) and a great deal of kitchen related debris were recovered from Debeira West VI (R-60) yet no ovens were identified at the primary settlement site of Debeira West I (R-8) (Shinnie and Shinnie 1978:3-11, 39). Two large ovens were found at Qasr el Wizz (room T), measuring 1.2 metres and 1.5 metres in diameter respectively (Scanlon 1972:23). Large ovens, such as those at Qasr el Wizz, as opposed to small cooking areas or fireplaces, were infrequently associated with Christian houses of any phase.<sup>43</sup> Not all houses in modern day Sudan are equipped with ovens and most cooking is conducted over small fires and on griddle surfaces. Bread is frequently purchased at a community oven, usually operated by men, or from women with ovens in their homes. It is possible that the large ovens associated with some monasteries serviced a nearby community in a similar fashion and were operated by monks. Silos were located near the eastern church at Tamit (Donadoni 1967:fig.2). This may suggest storage of grain by ecclesiastical persons.

1. Cf. P. Jeuté (1994) "Monasteries in Nubia - An Open Issue." Nubica III/I:59-97.
2. The monastery of Abu Jaras (Vantini 1981:232-34) is believed to be in the vicinity of Faras based on a comparison between historical sources and inscriptions from Faras (Griffith 1925:264-65; Jeuté 1994:62-3). Monasteries were reported by Ibn Selim al Aswani in the area of Safad Baqal. This region is identified as south of the Third Cataract (Jeuté 1994:71; Vantini 1975:606). Recent discoveries of possible monasteries at Hambukol and Old Dongola may be among those referred to by Ibn Selim.
3. It has been suggested that the Tari area refers to Ghazali, based on its geographic position between Upper Nubia and the Sudan, and because it is situated in the Wadi Abu Dom, a well traversed desert road (Jeuté 1994:78; Shinnie and Chittick 1961:7-8).
4. The author would add Kulubnarti III to this list as a Nubian laura. The reasons for this identification are discussed below.
5. Cf. G. Scanlon (1970) "Excavations at Kasr El-Wizz: A Preliminary Report." JEA 56:29-57, and Ibid. (1972) "Excavations at Kasr El-Wizz: A Preliminary Report II." JEA 58:7-41.
6. Cf. P. Shinnie and H. Chittick (1961) Ghazali - A Monastery in the Northern Sudan. SASOP 5. Khartoum.
7. For information concerning the development and dating of the church at Dongola DM see J. Dobrowolski (1991) "The First Church at Site "D" in Old Dongola (Sudan)." Archeologie du Nil Moyen 5:29-40.
8. For a detailed analysis of the architectural elements of Nubian monasteries and their internal layout, Cf. Jeuté, op.cit. (n.1), p.78-94.
9. Dimensions of twelve Judean desert coenobia of the Byzantine period may be found in Y. Hirschfeld (1992) The Judean Desert Monasteries in the Byzantine Period. New Haven and London. p. 49.
10. These monasteries include St. Anthony, St. Paul, Abu Makar, Anaba Bishoi, Deir es Suryani, Deir el Baramus and Anba Hadra (Walters 1974:79-80).
11. For a discussion of the reading of Maurotonia as Nobatia see G. Vantini (1981) Christianity in the Sudan. Bologna. p.71, n.1 and Ibid. (1975) Oriental Sources Concerning Nubia. Warsaw. p. 36, n.2.
12. Based upon S. Clarke's description of Ghazali (Clarke 1912:38-42), Jeuté suggests that monks' cells may have been located on both sides of a corridor that ran from the main gate to the church (Jeuté 1994:83). This remains to be determined pending future excavations in this area. If the areas labelled "ruins of Mudbrick Buildings" (Shinnie and Chittick 1961:fig.2) contain the remains of monks' cells, then segregation was assured by the perimeter wall and additional privacy derived from indirect access may not have been a requirement.

13. Late Christian period settlements are discussed in chapter 3. For a detailed discussion of Late Christian 'castle houses' see W. Adams (1994) "Castle-Houses of Late Medieval Nubia." Archeologie du Nil Moyen 6:11-46.

14. The ascetic approach to life, that monks were encouraged to follow, may be summed up by one of the sayings of John the Dwarf, a 4th-5th c A.D. Egyptian monk and priest:

Abba John said, 'I think it best that a man should have a little bit of all the virtues. Therefore, get up early every day and acquire the beginning of every virtue and every commandment of God. Use great patience, with fear and long-suffering, in the love of God, with all the fervour of your soul and body. Exercise great humility, bear with interior distress ... Renounce everything material and that which is of the flesh. Live by the cross, in warfare, in poverty of spirit, in voluntary spiritual asceticism, in fasting, penitence and tears, in discernment, in purity of soul ... Persevere in keeping vigil, in hunger and thirst, in cold and nakedness, and in sufferings. Shut yourself in a tomb as though you were already dead, so that at all times you will think death is near (Ward 1984:92).

15. Present day field labourers in the Northern Sudan often consume only one major meal per day so it is not unreasonable to assume that Christian monks living under similar environmental conditions would have been able to do likewise.

16. The benches at Athribis were observed by the author in 1990.

17. These paintings were reported at the 1994 International Conference of Nubian Studies in Lille, France by S. Jakobielski and viewed by the author in autumn of 1994.

18. For a detailed discussion of the Bishopric of Faras see S. Jakobielski (1972) A History of the Bishopric of Pachoras. Warsaw.

19. For greater detail concerning Nubian baptistries see P. Gartkiewicz (1990) The Cathedral in Old Dongola and Its Antecedents. Varsovie. pp. 64-9 and W. Godlewski (1979) Les baptistères Nubiens. Varsovie.

20. For the full text of Jeuté's argument see Jeuté, op.cit. (n.1), p. 96.

21. For a more detailed discussion on the use of Greek, Old Nubian, Coptic and Arabic in Nubia see A. Zaborski (1986) "Marginal Notes on Medieval Nubia." in Nubische Studien. M. Krause (ed.) Mainz am Rhein. pp.406-10.

22. Monneret De Villard refers to Naga el Scheima as a monastery (Monneret De Villard 1935:76-8). For the site report of the UNESCO excavations at Naga el Scheima see M. Bietak and M. Schwarz (1987) Nag' El-Scheima. Wein.

23. Nubian church typologies have been proposed by W. Adams (1965b), P. Gartkiewicz (1975; 1982a; 1982b; 1987; 1990), P. Grossman (1985), and B. Kjølbbye-Biddle (1994).
24. In future publications house EC1-10 may be designated EC-223-H.
25. For example, monasteries in the Faras region were reported by Abu Salih (Vantini 1975:215, 331-2).
26. The text of this inscription is as follows:  
 + ANOK MARIANE ΔΙΑ<sup>K</sup>ς [ΑΔ]ΕΛΦΟΥC ΑΥΤΟΥ ΙΗCΟΥ Α<sup>X</sup>P<sup>M</sup> ΜΑΡΙΑ ΠΑ<sup>X</sup>  
 "I, Mariane, deacon, the brother of Iesu himself, Archimandrite (of the Monastery of) Mary (in) Pachoras" (Jakobielski 1972:117).
27. Cf. Vantini (1975) op.cit. (n.10), p. 324 for the record made by Abu Salih.
28. S. Jakobielski and B. Żurawski 1994:personal communication. One tomb was viewed by the author in autumn 1994.
29. For details concerning the political instability of the Late Christian period and raids conducted into Christian Nubia see W. Adams (1966) "Post-Pharaonic Nubian in the Light of Archaeology." *JEA* 52:147-62.
30. Monks were supposed to remain celibate and resist temptation. This is clearly illustrated in the following sayings of the Egyptian Desert Fathers:
- A brother was attacked by lust, and he fought and intensified his ascesis, guarding his thoughts so as not to consent to those desires. later he came to the church and revealed the matter to everyone. And the commandment was given to all to do penance for that week for his sake, and to pray to God - and the warfare ceased (Ward 1975:8).
- Two brothers who were attacked by lust went away to get married. Later on they said to one another, 'What have we gained by leaving the angelic order and coming to this impurity? In the end we shall suffer fire and punishment. Let us then return to the desert and repent' (Ward 1975:17).
31. The Late Christian site of Gamanarti might also be added to this list, as structures within are described as "a single connected pueblo" (Adams 1962a:95-6). However, information concerning this site is slim, so conclusions may not be drawn at this time.
32. For example, with regard to Kulubnarti III, Adams states "the possibility of a small, fortified monastery cannot be ruled out, although there is certainly no room that can be identified as a refectory, kitchen, or chapel" (Adams 1994:207). This statement clearly indicates a search for a monastery with coenobitic characteristics rather than a laura.

33. This is illustrated in several sayings of the Egyptian Desert Fathers. For example, "a brother from Abba Poemen's neighbourhood left to go to another country one day. There he met an anchorite. The latter was very charitable and many came to see him" (Ward 1975:167).
34. Cf. Hirschfeld *op. cit.* (no. 9), pp. 214-6.
35. Trigger estimated that the population of Christian Nubia numbered around 50,000 persons (Trigger 1965:162, 166). In comparison, 3rd-4th c A.D. the population of the Egyptian city of Hermopolis is estimated between 25,000 and 50,000 individuals (Bagnall 1993:53).
36. Cf. B. Watterson (1988) Coptic Egypt. Edinburgh. pp.142-59.
37. There is a history of pilgrimages within Nubian culture that predates Christianity. Meroites travelled to Philae temple at Aswan and to other locations of religious significance. Frequently they inscribed footprints and texts to commemorate their presence at these sites. Cf. F. Griffith (1912) Meroitic Inscriptions pt. II. Napata to Philae and Miscellaneous. London. pp.33-52.
38. See also the discussion concerning enclosures within the Wadi Abu Dom in chapter 1.
39. Vernacular beliefs can be demonstrated by the Christian symbolism found in graffiti of the period. Cf. J. Anderson (in press) "Christian Graffiti from the Excavations at Soba East, 1989-1992." in Excavations at Soba East, v. II. (D. Welsby, et. al.) 28 pp. London.
40. This was particularly evident in the inscriptions and wall paintings discovered in the memorial chapels, viewed by the author in 1994 and in the crypt of archbishop Georgios associated with Kom H. Walls of this tomb were whitewashed and completely covered with Greek and Coptic inscriptions of a religious and magical nature (S. Jakobielski 1995:87).
41. The ceramic output of the Faras kilns was "somewhat specialized" (Adams 1961c:40). There were four primary pottery groups: 'Dongola' fine ware, described as a light slipped fine ware, primarily used in making saucers and bowls and similar to class I ware at Ghazali; 'Dongola' heavy ware, comparable to class II at Ghazali, consisting mainly of yellow or orange slipped large thick-walled vessels; Red slipped ware, like class III at Ghazali, consisting of small polished pots with a red slip; and Utility wares not unlike class IX of Ghazali and comprised mainly of coarse red ware, and the form usually being an amphora (Adams 1961c:40).
42. These botanical samples were collected in 1990 by D. Edwards and identified by the botany laboratory of Dr. McAndrews of the Royal Ontario Museum.
43. For example, two small ovens were found outside the Early Christian house at Kashkush. These ovens slightly over-lapped one another indicating that they were not used simultaneously and measured 75 cm and 70 cm in diameter respectively (Gardberg 1970:43). Ovens were not reported from any of the other Christian period SJE settlement sites (Gardberg 1970). One oven, also of Early Christian date was found at Naga el Scheima in room h/II/f (Bietak and Schwarz 1987:49). No ovens were reported from the site of Tamit (Donadoni 1967), or from Abdallah Nirqi, yet the summary of building contents and occupation levels is quite detailed (Hajnácz 1974:348-54). Kitchen sites were identified (Barkóczi and Salamon 1974:306, 313) as were numerous storage vessels and grindstones (Barkóczi and Salamon 1974:300-1, 303-4, 329). No

ovens were reported from the excavated portions of the Classic Christian settlement at Arminna West although ovens dating to earlier periods were located (i.e., Room A-M-9, Meroitic-X-Group) (Weeks 1967). At least three ovens and perhaps two kilns are documented from the level III, house B area of Arminna West, dated to the late Ballana - Early Christian period (Trigger 1967:fig.23). Three small ovens, all with diameters 70-80 cm across, were found in the latest phase (c. 12th c A.D.) of house PCH-1 at Old Dongola. This area is described as a service area for the surrounding houses (Godlewski 1991:89-90). Function areas within houses are discussed in more detail in chapter 5.

## CHAPTER 5

### CONCLUSIONS AND COMMENTS - FORM AND FUNCTION, USAGE OF MATERIALS AND SPACE

As noted in the previous chapters, settlement appeared to be largely of riverine orientation and tied to cultivable land, found primarily within the basins, despite some apparent population movement into the inhospitable cataract areas during the Early and Late phases. Concerning Lower Nubia, Maqrizi (A.D. 1364-1442) recorded "this district is narrow and uneven, very mountainous and situated exclusively on the Nile, its villages being arranged in lines along its banks, with palm" (Vantini 1975:601). Virtually every settlement located along the river was orientated parallel to it, regardless of the Christian phase. Several examples are given in figure V.2. This characteristic is particularly evident at Tamit (pl. 42). In the Letti Basin, Upper Nubia, settlements were situated along the Nile and the extinct river channel (map 5).

The following model helps to explain the utilization of land along the river. Settlement ran in a linear fashion along the Nile. Land usage was arranged in successive bands, distinguished by function, which spread outward from the river. Closest to the Nile was the fertile flood plain, cultivated with a minimum of effort, once the flood waters subsided (*seluka* land). Next were *saqia* lands, fertile silt deposits cultivated by irrigation. I agree with Edwards' conclusion that during the Christian period "There seems little doubt, ... the combination of *seluka* and *saqia* agriculture combined with some animal husbandry was at its most productive and extensive, not matched until modern times" (Edwards 1989:203). Notably, the introduction of the *saqia* to Egypt during the Ptolemaic period produced similar results, revolutionizing the agricultural industry and dramatically increasing production (Butzer 1976:91). It is possible that problems relating to land ownership may have arisen with the redistribution of *seluka* land by the Nile following inundation. The scarcity of arable land surely made it a valuable commodity and there may have been a local mechanism or governing authority for managing irrigation and land and resolving difficulties involving it; however, documentation of such has yet to be discovered.<sup>1</sup> This was the situation in Egypt during the Mameluke period.<sup>2</sup> Butzer has suggested that, within Egypt, irrigation was locally controlled because "whatever was done in any one natural flood basin, it did not deprive the next basins downstream of their direct access to the Nile. ... cooperation was essential only within natural flood basins" (Butzer 1976:109). This principle is also applicable to the floodplains within Lower and Upper Nubia. Some Lower Nubian basins are



shown in plate 1. Except for dam construction, changes or alterations made to a floodplain would affect the local micro-environment, but have little effect on those up or down river.

Sites where archaeological evidence has been found suggesting the use of saqia cultivation are shown in figure V.1. Indications of saqias were not found at all sites and this type of cultivation may not have been practiced in every village or suitable for every area. A disproportionate amount of evidence originates from regions where detailed surveys have been conducted. This suggests that the number and distribution of saqias found thus far are a product of the intensity of the surveys, rather than an indicator of absence of saqia usage in other regions. Several Arab geographers and historians recorded some crops grown and types of cultivation practiced in the Nubian kingdoms. Based upon al-Aswani's description of Lower Nubia, Maqrizi (A.D. 1364-1442) wrote

The upper part of this district is broader than its lower part and has vine plantations (*kurūm*); the Nile does not water its fields because of the upward slope of the land (from the river). The cultivated area is one or two or three acres (*faddān*) and is watered by water-wheels (*dawālib*) drawn by oxen. They (the inhabitants) plant little wheat (*qamh*), but more barley and rye (*sult*). Because the cultivated land is narrow, they plant continuously never allowing the land to go fallow. In summer, after fertilising it with manure and (new) earth, they sow it with *dukhn* (pennisetum millet), *dhurra* (sorghum millet), ... (*al-jāwrus*), sesame and beans (*lubiyah*) (Vantini 1975:602).

Concerning the Dongola Reach he wrote of, "an uninterrupted string of villages and fine buildings with pigeon towers, cattle and camels. The bulk [of] food supplies to their capital come from this district" (Vantini 1975:606). In the vicinity of Old Dongola were "about thirty villages with beautiful buildings, churches and monasteries, many palm-trees, vines, gardens, cultivated fields and broad pastures on which one can see camels" (Vantini 1975:606). Within Alwa were "big and small villages (*al-qura wa-d-diyya*'), islands, cattle, palm-trees, *muql*, cultivated fields and vines, many times as much as is seen on the side bordering the land of the Muslims" [e.g. Lower Nubia] (Vantini 1975:607). Ibn Hawqal (d. A.D. 988) stated that "the most prosperous part of the country is the territory of 'Alwa, which has an uninterrupted chain of villages and a continuous strip of cultivated lands, so that a traveller may in one day pass through many villages one joining the next, supplied with waters drawn from the Nile by means of saqiyas" (Vantini 1975:162-3). The limited amount of arable land in Lower Nubia led to its constant year-round cultivation and the lack of fallow fields, as documented by al-Aswani. This explains the

reluctance of the Nubians to construct their villages on potentially productive areas. Within the basins of the Dongola Reach, the necessity of producing surplus food for the capital of Makuria, as mentioned by al-Aswani, could partially account for the location of settlements along the edge of the cultivable area. That such surpluses may have been required is suggested by the large size of the Old Dongola settlement, the apparent specialization of certain industries such as ceramic production, the presence of artisans, architects, and perhaps a bureaucratic elite, and by the necessity of producing commodities to trade and for payment of the Baqt. It further suggests that some Nubians were engaged in agrarian pursuits at a level beyond mere subsistence farming.<sup>3</sup>

Figure V.1

Saqia Sites in the Archaeological Record<sup>4</sup>

Site	Geographic Region	Reference
Adenarti	Lower Nubia	Gardberg 1970:49
Region of Ali Bek I	Lower Nubia	Gardberg 1970:50
Region of Ali Bek II	Lower Nubia	Gardberg 1970:50
Arukonarti	Lower Nubia	Gardberg 1970:49-50
Gemai West I	Lower Nubia	Nordström 1962a:42
Shirgondinarti	Lower Nubia	Gardberg 1970:51
Abidinirki North II	Abri-Delgo Reach (Dal)	Vila 1978a:33
Ademdulli I	Abri-Delgo Reach (Dal)	Vila 1978a:123
Ardimiri or Ibn Ahmir	Abri-Delgo Reach (Dal)	Vila 1978a:94
Arkidukere	Abri-Delgo Reach (Dal)	Vila 1976:66,69
Daoud Aga East	Abri-Delgo Reach (Dal)	Vila 1978a:43-5
Dakka Saab II	Abri-Delgo Reach (Dal)	Vila 1975:60
Dakka Saab III	Abri-Delgo Reach (Dal)	Vila 1975:61
Diffi	Abri-Delgo Reach (Dal)	Vila 1976:24-8
Gaaba IV/Kittogga	Abri-Delgo Reach (Dal)	Vila 1976:59-62
Khor Kalal	Abri-Delgo Reach (Dal)	Vila 1977a:79
Kissebasha	Abri-Delgo Reach (Dal)	Vila 1976:48
Kossikool	Abri-Delgo Reach (Dal)	Vila 1975:71-2
Shagun Dukki II	Abri-Delgo Reach (Dal)	Vila 1977a:45
Sudaga I	Abri-Delgo Reach (Dal)	Vila 1977d:97-8
Fagirinfenti I	Abri-Delgo Reach (Mahas)	Edwards and Osman 1994a:36
Hambukol*	Dongola Reach	Grzymski 1996:personal communication
El Khandaq East*	Dongola Reach	Grzymski 1987:30
Letti West II*	Dongola Reach	Grzymski 1987:21
Letti West III*	Dongola Reach	Grzymski 1987:21
Letti West VII*	Dongola Reach	Grzymski 1987:22; 1990b:211
Mushu*	Dongola Reach	Waddington and Hanbury 1822:43, 256-7
Nawa II*	Dongola Reach	Grzymski 1987:20
Nuri*	Dongola Reach	Dunham 1955:fig.149
Old Dongola	Dongola Reach	personal observation
Sheikh Batran*	Dongola Reach	Grzymski 1987:33
Soba East*	Gezeira	Welsby 1987:284

\* No traces of saqia installations have been identified at these sites, but qadus fragments have been found.

Villages formed the third band out from the river. They were generally situated on the edge of the arable land, either in a rocky region or possibly in an area deemed less suitable for cultivation. For example, early Christian occupation at Karanòg and Wadi el Arab was linear and stretched along the edge of the seasonally inundated land parallel to the Nile (pl. 9). Some modern villages, such as Hambukol in Upper Nubia, are constructed on sandier soil with less capacity for water storage than the fields proper. Settlement orientation and the arrangement of houses within a village seems to have been dictated in part by the environment with wind, sand, river level and temperature exerting the greatest influences.

Most settlements in Nubia can be classified as either villages or hamlets. A village is defined as numbering between 100 and 1500 persons (Parsons 1972:127-150). Occupation of the Classic Christian settlements of Meinarti (6-K-3), Debeira West IV [24-R-8] and Kasanarti [5-X-32] has been estimated as between 200 and 400 persons (Adams 1977:488). Determining a site hierarchy, while desirable, was not possible due to the nature of the information available, particularly from Upper Nubia and the Northern Sudan. Most excavation has concentrated in Lower Nubia. Little is known about some sites and often their dating is insecure. Many archaeological reports lack detailed information and frequently site descriptions are confined to brief discussions of domestic sherd scatters described as "Christian." To address this situation, excavations following a multi-disciplinary approach must be conducted in Upper Nubia and the Northern Sudan.

Within settlements, the north to south direction of the prevailing wind and sand movement appeared to influence the positioning of house entrances (pl. 120). Few doors opened to the north, although some narrow slot windows, such as those in the stairwell of Old Dongola PCH-1, faced that direction (pls. 26, 47). These windows would have allowed light and the cooling effect of the north wind into the building, while their narrow dimension would serve to ameliorate its deleterious effects and those of the sun.<sup>5</sup> A room with its entrance "opening to leeward, with only small openings to windward, will have a steady airflow through it because the airflow over and round it creates low pressure within it so air is pulled in a steady stream through the small openings" (Fathy 1973:47). Most doors opened to the south, away from the north wind or towards the Nile, either east or west, depending on which bank the site was situated (fig. V.2). Northern entrances usually were sheltered by another structure or allowed indirect access into a building.

For example, at Debeira West IV blocks 138, 133 and 38 opened north, but 133 was

sheltered by 134. Wind and sand were blocked from 38 by building 80-82 (pl. 24a). The door to room 7 of House C-1 at Hambukol was the only entrance in that building facing north (pl. 69). This entry was screened by a wall constructed about 1.5 metres to the north of it. It is significant that this entrance was later blocked by several courses of brick, likely to prevent windlaid sand from accumulating within the room. Houses at Tamit were entered from the east or west. A row of connected dwellings ran across the north side of the site, effectively sheltering it from the depredations of the north wind. Similarly, the Kofaree/Gebel Abdou Mellis stone huts were protected from the wind by the neighbouring terrace face (pl. 13).

A similar practice is followed in modern Upper Nubia. Houses are usually constructed in the north half of a courtyard. By positioning the house in this area, it is protected from the sand-laden north wind by the enclosure wall and in turn shelters part of the courtyard. The main entrance to the courtyard is either in the south wall or in the wall facing the Nile. For example, in the village of el Ghaddar, located on the east bank in the Letti Basin, the primary door into the courtyard is found in the south or west wall.

Cemeteries, located on the unfertile desert fringe, comprised the outermost band of occupation. However, they could also be associated with churches and monasteries. When a church was located along the edge of a settlement, a cemetery could also be associated with it. The cemetery at Meinarti and the Mosaic Church (Kom E) at Old Dongola are two examples (pl. 44) (Żurawski 1994:98). Notably, at Meinarti the cemetery was not incorporated into the settlement, but was clearly separated from it. Its proximity to the village may reflect the limited amount of space available on the island. This settlement model has also been followed in recent times. Plate 126 shows the modern villages of Wadi Halfa and Halfa Degheim. Both ran along the edge of the cultivation, and were set back from the river.

On plate 123, church 73 was located on a gravel plain bordering the cultivable land. Settlements L11, L16, LR22, L336, and L337 were located outside the area of cultivation but close to it. This was likewise true for church 40 and settlements L350 and L67 on plate 124, settlements L339, L53, L51, and church 100 on plate 125.<sup>6</sup> Cemeteries L333, L195, L19, L297, and LN280 on plate 123 were located on the desert fringe and away from arable land. On plate 124, cemeteries L178, L180 and L220 were situated on a gravel plain outside the cultivation and L200 was found on the desert edge, as were L84, AL90, L63, L343, L331, ACL332, L351 and ACL401 on plate 125. Modern cultivation is represented on these plates. It is likely these regions were more intensely farmed in recent times than during the Christian period, partially due

to the introduction of mechanized irrigation. It does, however, give an idea of the land available for cultivation and its relationship to the Christian occupations.

Figure V.2 Settlement Alignment in Lower and Upper Nubia

Site	Date*	Orientation to Nile	Door position in Houses	Plate No.
Meinarti	EC	parallel	few open north	6, 7
Wadi el Arab	X-Group-EC	parallel	south side	9
Gezeira Dabarosa I	X-Group-EC	parallel	east or south side	17, 19
Debeira West	EC - CC	parallel	most south or east side	24a
Arminna West	CC	parallel	east or south side	25b, 71
Qasr el Wizz	CC	parallel	east, south, west sides	73
Kasr Iko	CC - LC	parallel	east or south side	50, 51
Meinarti	LC	parallel	few open north	60
Kulubnarti I	LC	parallel	all directions	86
Kulme	LC	parallel	south or west side	65
Hambukol	LC	parallel	most on south side	69, 70
Old Dongola	EC - LC	parallel	south or west side	26, 46

\* EC - Early Christian, CC - Classic Christian, LC - Late Christian

### The Development of House Form

The development of the Christian Nubian house should be seen as a progression of overlapping battleship curves with house forms gradually becoming more or less fashionable. Doubtless the speed with which a new house plan was adopted varied not only between towns, but within them as well and was subject to many different influences. Usage of particular house forms is shown in figure V.3 (p. 198). The nature and location of the vernacular architecture were determined by a combination of technology, construction methods and materials, and by the physical environment. It was also subjected to socio-political and probably cultural forces that affected its ultimate form. For example, repeated incursions by armies through Lower Nubia was a direct causal factor for increased settlement in the Batn el Hajar and the Abu Hamed Reach and for the creation of 'castle houses' during the Late Christian period. "House form is not simply the result of physical forces or any single causal factor, but is the consequence of a whole range of socio-cultural factors seen in their broadest terms" (Rapoport 1969:47).

Affinities between X-Group and Early Christian dwellings have been noted in Lower Nubia at some larger sites continuously occupied from the X-Group period through to the Christian phase. This suggests a continuation in traditional building practices and forms;

however, examples are few and largely derived from Qasr Ibrim and Meinarti. It also appears to confirm Jakobielski's hypothesis that, in part, the Early Christian house plan developed from the earlier X-Group dwellings (Jakobielski 1981:37-8).

Early Christian houses were generally smaller than those of the X-Group phase and usually contained only one or two rooms. Some building techniques, such as the use of 'herringbone' construction in foundation courses and stone masonry used around doorways, were common to both periods. 'Herringbone' construction was used in many transitional X-Group/Early Christian buildings, but its usage does not appear to continue very far into the Christian period. In other Lower Nubian sites, habitation at the beginning of the Early Christian phase appears to consist of either a scattered squatter occupation of earlier buildings or small, irregularly-shaped, one or two-room houses often with rounded corners and frequently utilizing natural features in their construction. Most of these sites were situated on rocky outcrops or steep slopes, probably in an attempt to provide security against Blemmye raids and perhaps attacks from Egypt. Examples may be found at Gezeira Dabarosa I, Abd el Qadir II, Ger Belat, Araseer II, Karanòg, Buhen and Dibger.

By the middle of the Early Christian period, settlements had grown larger and the 'double house' form was widely adopted, being found at sites such as Abdallah Nirqi, Debeira West IV, Gezeira Dabarosa I, and Arminna West (pl. 129). This challenges the traditionally held view that "in the early Christian period it is difficult to recognize any distinctive Nubian house plan, either at Meinarti or in other settlements" (Adams 1977:489). The appearance of the 'double house' seems to have coincided with increasing centralization of government authority and stability that followed the Baqt treaty, aspects that may be more clearly seen in the construction of the fortresses in Lower Nubia as discussed in chapter one. The 'double house' consisted of two rectangular rooms orientated parallel or perpendicular to one another. The two room arrangement of the 'double house' appears to be the key to Nubian house design. An idealized architectural model consisting of two rectangular rooms, orientated perpendicular or parallel to one another, appears to form the underlying principle upon which Lower Nubian Early Christian houses were constructed. It is this module that was used in the construction of the later, more complicated houses. Use of the 'double house' form persisted even when other styles of houses were being built. Continued use of this plan suggests that the two rooms of the 'double house' were sufficient to fulfil the needs of the average Nubian family at a basic level.

Towards the end of the Early Christian period and beginning of the Classic phase, two

new house plans appeared (designated types 1 and 2) and settlements within Lower Nubia became increasingly urbanized, denser, and more centralized (pl. 129). Early Christian city walls were allowed to decay. Internal stability, strong government, reduction of the Baqt payment, and an agreement of mutual non-aggression with Egypt seem to have contributed to the flourishing of Classic Christian communities. Relations with the Fatimid Caliphate (A.D. 969-1169) were apparently peaceful and under the previous Tulunid and Ikhshid rulers, Egypt seemed largely concerned with its own problems. Evidence of a centralized authority or governing power is suggested by the appearance of urban planning within some communities, including the placement of toilet cesspits close together, construction of buildings around plazas and the appearance of several large public buildings.

Type 1 'unit houses' were roughly square and generally contained three small, rectangular rooms arranged parallel to each other and a larger, rectangular room orientated perpendicular to these three smaller rooms. Examples may be found at Abdallah Nirqi, Gezeira Dabarosa I, Kasantari and Faras West I. This 'unit house' form resembles the earlier 'double house' with one of its chambers subdivided into two or three smaller rooms. As shown in figure II.3, the larger chambers of the 'double houses' and the type 1 'unit houses' were approximately the same size.

The second Classic 'unit house', herein designated type 2, was essentially an Early Christian 'double house' of two parallel rectangular rooms with a corridor and latrine added (pl. 129). Examples may be found at Meinarti and Debeira West IV. Again this plan appears to have originated from the Early Christian 'double house'. A latrine can also be documented at Meinarti during the Early Christian period (Adams 1968:187-8). Type 2 and type 1 'unit houses' were roughly the same size, square and usually shared walls with neighbouring houses. They differed in the presence or absence of a latrine and the subdivision of rooms within the house.

There is little evidence, textual or otherwise, to suggest that the atmosphere of peace and prosperity in Lower Nubia did not continue into the beginning of the Late Christian period. In its simplest configuration, there is little to distinguish the Late Christian 'unit house' from its Classic type 2 predecessor except that most Late houses were freestanding whereas most Classic houses shared common walls with their neighbours. Like the Classic houses, the Late period dwellings are very uniform in plan, possibly suggesting the work of professional builders.

Towards the latter half of the Late Christian period, Makuria was again in conflict with Egypt and coinciding with these events both settlement and house form were altered. These changes appear to have been made as a response to the unstable political situation, and



particularly punitive assaults conducted by the Mamelukes and possibly raids by the Beni Kanz, and Damadim peoples. Many Classic Christian villages, such as Debeira West IV, were abandoned or much reduced in size and Lower Nubia became a buffer zone between Makuria and Egypt with few settlements. Numerous small villages (herein described as type A) proliferated in the inhospitable region of the Batn el Hajar containing small, irregularly-shaped, stone houses of one or two rooms. Often natural features were incorporated into these buildings. A second type of settlement (designated type B) was also noted. It was found both in Lower Nubia and the Batn el Hajar and contained a mixture of dwelling types possibly indicating chronological differences between structures or status or socio-economic inequalities among the inhabitants, although this remains unclear. In both instances people appear to have moved to or congregated in places deemed to be more secure or have defensive capabilities.

Large two-storey fortified 'castle houses' or fortified enclosure walls were found at many sites in Lower Nubia, the Batn el Hajar, and the Abri-Delgo Reach. These structures seem derived from the addition of an upper floor to a single-storey Late Christian 'unit house'. Upper floors were similar in layout to Late 'unit houses' while the lower floors contained many magazines and the cesspit. Entry into these buildings was via ladder and sometimes through labyrinth-like passages winding through the ground floor. Magazines and cellars, accessible only from the upper floor, were hidden in the lower level. The simple, unfortified two-storey houses found at Tamit, Sabagura and Naga Abdallah may have been Lower Nubian precursors to the 'castle house'. The plan followed was similar to that of two Late 'unit houses' placed one on top of the other. They lacked hidden storage rooms, were not fortified, and had relatively uncomplicated direct entryways, characteristics not normally associated with a 'castle house'.

The few examples of dwellings available from Upper Nubia strongly suggest that Lower Nubia and the Batn el Hajar were extremely provincial by comparison. Well-constructed two-storey houses may be found in some quantity at Old Dongola, and possibly Jawgul, from the Early Christian period onward, but the same cannot be said for Lower Nubia until the Late Christian period. Similarities between the plans of Early and Classic period houses PCH-1, A and B from Old Dongola and the Classic Christian type 1 'unit house' found in Lower Nubia suggest that a sophisticated house form found in the Makurian capital may gradually have been adopted in outlying areas. The origin of the Dongola two-storey house plan is uncertain due to a lack of comparable data of post-Meroitic domestic structures. Some architectural similarities with the 'Castle' at Karanòg have been noted, possibly suggesting the persistence of a Nubian building

tradition.

There is every indication that the people of Upper Nubia retreated into inhospitable regions and fortified settlements in the face of invasions and hostilities, just as did the inhabitants of Lower Nubia. Apart from textual evidence, sites, similar to the type A and B sites of Lower Nubia and the Batn el Hajar, have been discovered in the Abu Hamed Reach and in the Mahas area. These sites are consistently associated with Early or Late period sherds. Unfortunately, none has been excavated.<sup>7</sup> Several Late period sites within the Letti Basin were strategically located along the river on large mounds within viewing or signalling distance of one another. Fortified buildings, such as Building A-1 at Hambukol, have been found and may be the Upper Nubian version of the 'castle house'.

Only four monasteries have been positively identified in Nubia and all are of the coenobitic type. The only monastery completely excavated and well illustrated thus far is Qasr el-Wizz. Due to the small sample size it is difficult to determine the characteristics of a Nubian coenobitic monastery; however, it may be conjectured that they comprised monks' cells or more probably dormitories, a refectory, a kitchen, a church or chapel, an entrance that prohibited direct access, and an enclosure wall. It is evident from the recent discoveries at Old Dongola of monasteries at Korrs H and D that monasticism began in Upper Nubia during the Early Christian period and continued through the Terminal Christian phase. Previous dating of monasteries placed them largely within the Classic Christian period, but this hypothesis was based on a limited amount of data.

The number of monks believed to have occupied these monasteries may have been dramatically underestimated. Previous estimates have been based upon the quantity of cells present and the number of individuals able to sit comfortably around a dining bench. They neglected to account for two meal sittings, the possibility that not all would attend each meal, and the occupation of dormitories, rather than cells, by junior monks. Scanlon estimated between 20 and 24 monks would have occupied Qasr el-Wizz (Scanlon 1972:21). If the aforementioned factors are accounted for then, there could have been between 32 and 36 monks.

It is not inconceivable that monasteries played a large role in the economy just as they did in Egypt. The small number of monasteries discovered thus far may be due to the lack of archaeological work conducted within Upper Nubia and the Northern Sudan and to the difficulties in identifying monastic characteristics. When seeking monasteries, archaeologists have traditionally sought those of the coenobitic type. However, it is possible that several monasteries,

such as Kulubnarti III and other sites in the *Batn el Hajar*, were *lauras*. They therefore would not have contained some characteristics traditionally associated with *coenobia*, including refectories, churches and actual enclosure walls and consequently not been identified as monasteries.

Figure V.3 THE DEVELOPMENT OF HOUSE FORM DURING THE CHRISTIAN PERIOD

	Transitional X-Group-Xtian	TIME PERIOD <sup>a</sup>						Terminal Xtian
		ECI	ECII	CCI	CCII	LCI	LCII	
<b>LOWER NUBIA</b>								
'Double house'	X?	X	X	X	X	X	?	?
Classic 'unit house' (type 1)	-	-	-	X	X	X	-	-
Classic 'unit house' (type 2)	-	-	-	X	X	X	-	-
Late 'unit house'	-	-	-	-	X?	X	X	?
Two-storey 'unit house'	-	-	-	-	-	X	X	?
'Castle house'	-	-	-	-	-	-	X	X
Irregular 1/2 room stone huts	X	X	-	-	-	-	X	X
Palace/Public Building	-	-	X	X	X	X	X?	X? <sup>9</sup>
<b>UPPER NUBIA &amp; NORTHERN SUDAN<sup>10</sup></b>								
Wooden Post houses <sup>11</sup>	X	X	?	?	?	X	X	X?
Irregular 1/2 room stone huts	X?	X	X?	X? <sup>12</sup>	X?	X?	X	?
Single storey houses	X?	X?	X?	X?	X?	X	X	X?
Two-storey houses	?	X?	X	X	X	X	X?	?
Fortified house	?	?	?	?	?	X?	X	X
Late 'unit house'	-	-	-	-	-	X	X	?
Palace/Public Building	?	?	?	X	X	X	X	X

KEY - X= feature present, ? = no information available, X? = dating of the evidence is uncertain/the site in question has not been excavated, - = all available evidence suggests the feature is absent.

### Factors Affecting House Construction and Design

Variations in construction materials and building shape were noted through time and in different geographic locations. Evidently the materials available and the environment, particularly the heat, wind, sun and sand, played an important role in determining the layout of the Christian house. To form a habitat suitable for human physiology, houses were designed to take advantage of the physical properties of their construction materials and the environment to alter the microclimate within and around the house.

Within Lower Nubia, several combinations of construction materials and techniques were used. These included drystone construction, stone and mudmortar, and stone, mudmortar and mudbricks. Choice of material seems to have been governed in part by local availability. The geomorphology of this region is varied and consisted of riverine alluvial soils along the river, rocky areas without soil, and areas of sand, sandy earth and clay (Edwards 1989:17) (pl. 97). Trigger noted site distribution in Lower Nubia was apparently tied to cultivable land (Trigger 1965:152). Many Lower Nubian settlements, such as those at Arminna West and Debeira West, were located near a Nile plain or basin. Examples include the Dibeira, Tushka, Allaqi, and Dakka plains (pl. 1). Concentrations of fertile river alluvium, easy access to water and a comparatively large flood plain accounts for the proliferation of settlements on the plains and basins and the usage of mudbricks in their construction.

Cultivable land was an important resource. In locations where it was sparse, construction in brick would have been necessarily restricted and usage of a medium such as stone likely preferable. Walled settlements of the Early Christian period were largely of drystone construction, although mudmortar was used at Gezeira Dabarosa I. Most of these sites were constructed beside steep, rocky slopes described at Ali Bek II as a "labyrinth of rocks which are rather difficult to climb" (Gardberg 1970:49), where there was little soil for bricks. Fired bricks were used infrequently, possibly because stone was more accessible and shared many of the durable properties of red brick. Wooden roof beams recovered at Naga el-Sheima suggested that some roofs were flat rather than brick vaulted. This might further indicate a shortage of brick-making materials, as might the change in brick size from 37x20x8 cm in the 7th-8th c A.D. to 32x16x8 cm during the 9th c A.D. (Kromer 1979:134). Frequently, drystone construction was used in lower foundation courses, while upper walls and vaults if present, were of mudbricks.

Settlement on the island of Meinarti was greatly affected by variations in inundation levels through time. Transitional X-Group - Early Christian buildings were largely destroyed by

flooding, while Early Christian walls were reinforced, again probably in an effort to minimize flood damage (Adams 1963-64:129). Remains from the end of the Early Christian period and the beginning of the Classic phase (levels 12, 11b, 11a) were also denuded by flooding (Adams 1965a:158). High inundation levels at the beginning of the Classic Christian period are thought to have greatly affected the floodplain and amount of soil available (Adams 1964:221; Gardberg 1970:15). "There is evidence that the recurring floods carried away a good deal of alluvial soil - evidence, in fact, that much of the Nile floodplain was in effect redistributed at this time" (Adams 1968:188). During this period, flat wooden roofs rather than brick vaults were used at Meinarti and Kasanarti as discussed in chapter 2. Walls at Kasanarti and Gendal Irki were of stone, while those at Meinarti, though of mudbrick, were exceptionally thin and flimsy (Adams 1964:221, 239-40). Soil required to make bricks may have been scarce or required for cultivation. This phenomenon appears to have varied from region to region as several other contemporary sites, including Arminna West and Debeira West IV, appear to have been only minimally affected by the flooding and little or no effect was noted on their mudbrick buildings (Weeks 1967:6).

Pressures on the available arable land were great within the *Batn el Hajar* ('belly of rocks') and in the Dal Cataract at its southern end. This region has been described as the "most barren and forbidding of all Nubian environments. ... The tortured landscape of bare granite ridges and gullies which characterizes this part of Nubia begins at the bank of the river itself; alluvium exists not as a continuous floodplain, but only in protected pockets and coves" (Adams 1977:26). Significantly, most sites there were drystone or stone and mudmortar construction. Many of these sites are listed and described in figures III.3, III.4. Exceptions were made for 'castle houses', whose upper floors were of mudbrick construction; however, not every site incorporated this building type, as discussed in chapter 3. Those that did frequently were restricted to one or two 'castle houses' as shown in figures III.3, III.4. This may be contrasted with sites such as Serra East, located at the north end of the Dibeira plain in Lower Nubia, which clearly had access to soil and contained many two-storey, mudbrick structures during the Late Christian phase.<sup>13</sup>

A similar situation seems to have occurred in the inhospitable regions of the Abu Hamed Reach. Buildings there were largely of drystone construction or of stone and mudmortar, just as they were in the *Batn el Hajar*. Examples include Kuweib, El Kab and perhaps Usheir. Both regions are extremely rocky and contained little arable land. Villages, such as the Late Christian type "a" settlements discussed in chapter 3, frequently incorporated natural features into their buildings.

Availability of cultivable land and access to water also appear to have largely determined the location of Upper Nubian sites. As mentioned in chapter 1, Edwards found settlements concentrated in the basin and floodplain areas just as Trigger did (Edwards 1989:216). Map 5, showing the distribution of sites within the Letti Basin, clearly supports Edwards' assertion. Within the Dongola Reach, mudbrick was used extensively in both secular and sacred structures, and many of the latter also incorporated large numbers of fired bricks. Though few examples have been excavated (notably House C-1 at Hambukol and Houses A, B and P at Old Dongola), it appears that unlike Lower Nubia, with the exception of thresholds and door sockets, little stone was used in domestic structures. Stone or red brick was used in high traffic areas and for door sockets probably because it is more durable and wears more slowly than mudbrick. Examination of the sundried mudbricks revealed a composition of Nile mud, chaff and animal dung. Mortar was of Nile mud or mud mixed with local lime (Medeksza 1990:79). Finds of vault springers indicate that many roofs were vaulted, although flat, wooden roofs have been suggested for some larger two-storey structures, such as Building A at Hambukol (Żurawski 1988:personal communication; in press).

The Dongola Reach is an extremely prosperous area in comparison to Lower Nubia. It contains both large cultivable basins, such as the Letti and Kerma basin, and the "alluvium [is] more extensive and uninterrupted here than anywhere else, but this is also the only part of Nubia which can count on an annual overflow of the Nile" (Adams 1977:30). Clearly in the Dongola Reach, manufacture of bricks was not hampered by a lack of soil or water and did not infringe on land required for crops. Mud, water, straw, animal dung, palm fronds, and dom were readily available in the region and for this reason likely inexpensive. This was probably an important factor in their continued usage. Another distinct advantage in the use of mudbrick is that unwanted rooms can be left to collapse and additions are easily made. This was probably true to a lesser extent in the Mahas area of the Abri-Delgo Reach where some stone construction was used. There the floodplains are not as extensive as further south.

Mudbrick construction is well adapted to the climate extremes found in Lower and Upper Nubia. The mean annual range in temperature is between 12 and 16 degrees celsius. The mean daily maximum in July is between 38 and 40 degrees celsius, while in January it drops to between 26 and 32 degrees celsius (Mahdi Amin 1975:figs.11, 16).<sup>14</sup> Mudbricks are poor conductors but retain heat; consequently, the thick mudbrick house walls served as insulators, absorbing heat during the day and radiating it in the cooler evening (Fathy 1973:45-6; 1986:7).<sup>15</sup>

Essentially the walls are slow to heat and to cool. They therefore maintain a more constant temperature than the surrounding air when subjected to the daily and seasonal temperature variations of the Nubian desert. The walls themselves create areas of shade around the building further altering the microclimate. In this respect, an east-west building orientation, as found for example at Tamit, Hambukol and Old Dongola, would also be advantageous as a larger shadow would be cast than were the structures arranged north-south.

Mudplaster and whitewash (djir) were applied to the interior and exterior wall faces of some buildings. The walls of House B at Old Dongola "were plastered on both the inside and outside of the building. ... the walls were simply smeared with a mud mortar and then repeatedly whitewashed. With time quite a thick layer of whitewash, resembling at first sight plaster, formed on the walls" (Medeksza 1990:85). Additional examples may be found at Arminna West (such as room A-M-1) and at Meinarti (levels 6-4, "monastery" rooms (Adams 1968:191-2; Weeks 1967:30). The whitewashed plaster was an architectural feature geared to coping with the climate. It served to reflect heat from the buildings and therefore keep their interiors cool. A local informant in the Dongola Reach confirmed that whitewash still fulfils this function in modern Nubia.

Usage of mudbrick domes and vaults could enable hot air from inside the structures to rise and, were there small high windows, escape. Unfortunately, there is little evidence to suggest that many single storey structures were very high. Few were constructed with foundation trenches and many were built on soft ground surfaces. "This may mean that the buildings were not designed to be high, for the ground surface could not withstand too great a load" (Medeksza 1990:81). In House C-1 at Hambukol and in House B at Old Dongola, where vault springers have been preserved, the roofs were estimated at between 2.2 and 2.4 metres high. This suggests that these rooms were very hot during the summer months, but warm during the winter. People probably slept outdoors and spent little time within their houses during the summer.<sup>16</sup> Some staircases, such as that in Building A at Hambukol, may have led to the roof rather than an upper floor. The roof could also be reached by ladder. It is possible that people also slept on their roofs although there is no direct evidence to substantiate this hypothesis.<sup>17</sup>

The porous nature of the matting used in flat, wooden roofs would allow hot air to escape while simultaneously absorbing moisture.<sup>18</sup> This would cause a reduction in the humidity of the room interior (Fathy 1986:8). The constant convection of warm air through the roof would also create ventilation and circulation within the rooms as air was drawn in through doors and

windows. Further, the layers of matting in the roof would serve as insulation (Kidd 1982:138).

Within the Bayuda, enclosures tentatively dated to the Christian period were of drystone construction and built near wells. Umm Ruweim and Eilai are two examples (Chittick 1955a:88-90; Edmonds 1940a:299). As these are both desert sites, usage of valuable water to construct bricks was likely impractical. There may also have been a shortage of suitable soil for brickmaking or bonding materials such as chaff or animal dung, but this seems a less significant factor.

Archaeological evidence recovered from Soba East suggests that many domestic structures in Alwa were wooden post constructions, vastly different from the largely rectilinear, mudbrick and stone houses found in Upper and Lower Nubia. Numerous post and stake holes, associated floors and domestic debris were discovered under mounds B and Z2 and in units MN3 and MN8. Traces of two circular huts were discovered. Within MN3, a hearth associated with a semi-circle of eight postholes suggested a round, hut structure (pl. 29). Roofing and walls of these buildings were probably of thatch (Sjöström and Welsby 1991:197; Welsby 1991:279; 1994:190). Except for building D on mound B, comparatively few mudbrick structures were discovered (Welsby and Daniels 1991:34). Wooden post structures, enclosed within a drystone wall, were also discovered at Gabati II, south of Atbara (Mallinson 1994:18). As discussed in chapter 1, evidence of red brick structures has been reported at many Gezeira sites including Alti, Baqeir, Bashaqra East, Branco, Abu Ushar North, Abu Ushar South, Abu Furu', and El Eleila. Red bricks were used in the construction of churches at Soba East (Welsby and Daniels 1991).

The annual amount of rain received in this area was probably a key factor in the selection of construction materials and the shape of domestic structures. The rainy season begins in July and ends in September with an average monthly intensity between 50 and 100 mm in the Gezeira (Mahdi Amin 1975:figs. 44, 48). The 100 mm isohyet runs just to the south of Soba East (Van Noordwijk 1984:30) (pl. 98). Mudbrick would be damaged by the seasonal rains whereas a red brick structure would be more permanent. There is nothing to indicate a shortage of brickmaking materials in this area and, in fact, large red brick manufacturing centres are found in modern day Soba East and West. The pervious nature of the walls of a wooden, thatched structure would facilitate ventilation and the roofing might facilitate water run-off. Rains would not have been as great a factor in Lower or Upper Nubia because the mean annual rainfall there is under 50 mm as is the monthly intensity of rain during the rainy season (Mahdi Amin 1975:figs.19, 48).

In modern Sudan, Lee noted the usage of two house types that differed in shape and



construction materials (Lee 1969b). Their geographic distribution, shown on plate 127, roughly corresponded to the climatic zones of the country, particularly the temperature and precipitation belts. The first house type was rectilinear and constructed of mud and mudbricks, while the second was round and constructed of thatch. The rectangular buildings were found in the northern part of the country. They were found particularly suited to the climate there because the thick, mud walls mediated the daily temperature extremes. Climatic zones of the Sudan are shown on plate 128.<sup>19</sup> Permeable walls of the second house type, the thatched hut, allowed for a freer circulation of air, a necessity in the more humid southern climate. Its conical roof was structured to allow maximum water runoff during the rainy season. Both house forms have a "maximum of durability for the climatic zone of their locale" (Lee 1969b:395).

There was a zone of overlap between the two house types, stretching from Shendi through the Gezeira, which the aforementioned environmental stresses failed to explain. The number of round, thatched houses was declining in the northern part of the overlap at the time of Lee's study but there were several rectangular, mud houses in the climatically unsuitable Gezeira region.<sup>20</sup> In the Gezeira, choice of house shape was apparently determined not by environment, but by the higher status and prestige conveyed through the ownership of a rectilinear mudbrick house, thought of as a symbol of urban society (Lee 1969b:395). Economics also played an important role. In the north, the thatched hut is often the "abode of migrant workers and semisedentarized nomads ... it is thus a visible symbol of poverty, backwardness and impermanence" (Lee 1969b:396). Evidently in this instance, environmental demands were subordinated to socio-cultural requirements.

As aforementioned, many dwellings at Soba East appear to have been constructed of wooden posts and thatch, however, Building D was constructed of mudbricks (pl. 52). The excavators speculated that Building D probably performed an official or palatial function (Welsby and Daniels 1991:318). Similarities in construction were noted between Building D, the Meroitic palace at Wad ban Naga, and the 'Mosque' at Old Dongola, as discussed in chapter 2. This may be a situation where construction materials and building shape were dictated not by environmental constraints, but by the need to project an appropriate image, be it power, prestige, or importance. A two-storey, mudbrick edifice was thought to convey the correct information and impression to the populace despite the drawbacks suffered due to the environment. The model for this building was perhaps originally adopted from the north where it was more suited to the climate.

The structural form of the Christian house, though partially determined by environmental,

political and climatic constraints, as discussed above, may also have been modified by cultural demands, though it is often difficult to learn what these might be from an archaeological context. Studies of modern peoples reveal that houses, constructed by different cultures under identical environmental conditions, do not appear alike. Arensen (1983) conducted a survey of indigenous vernacular architecture in the southern Sudan and northern Kenya. He found that under similar environmental conditions, seventeen distinct cultural groups constructed different dwellings. House form was subjected to socio-cultural modifications including, religion, subsistence, economy, socialization mechanisms, etc..

Though constructed of similar materials, differences noted between modern Sudanese houses and Christian Nubian dwellings further suggest that available resources and the environment are not the only factors that determine the form of vernacular architecture.<sup>21</sup> Evidently, some features of modern Sudanese houses do not originate with the vernacular architecture of the Christian period. While some Christian houses, such as PCH-1 at Old Dongola (pls. 26, 47), had courtyards attached, they were not an intrinsic feature present in every dwelling in either Upper or Lower Nubia. To list just a few examples that range over space and time, house C-1 at Hambukol and many buildings at Abdallah Nirqi, Gezeira Dabarosa I, Tamit and Debeira West IV lacked courtyards (pls. 7, 16, 17, 19, 24a, 43, 69). The courtyard seems to have been introduced to Nubia around the 13th c A.D. as conversion to Islam occurred (Lee 1969a:37), although it does not appear to have been uniformly utilized initially. For example, the structure typical of the early Arab occupation on Komms A and B at Old Dongola was roughly square and contained two rooms, a larger, living space and a smaller store room (Jakobielski 1986:302). Small courtyards were attached but did not surround the entire house.

Modern Sudanese vernacular architecture is designed with considerable attention being given to accommodating privacy and the Islamic practice of secluding women kinfolk from strangers.<sup>22</sup> Individual courtyards are widely spaced if possible, separated by winding, unplanned roads and alleys and no courtyard entrance faces another. Though individuals may be closely related, share a water source (among other things), and their main entrances face into the area between their respective courtyards, their entrances do not directly face each other. The distance between courtyards ensures that conversations will not be overheard. In the prefabricated Nubian settlements, created by the government in response to the flooding of Lake Nasser, one of the most common complaints was lack of privacy. The closeness of the buildings enabled neighbours to overhear conversations and caused tensions within the community (Fahim 1983:60). Within

the courtyard, the thick walls of the rooms help to ensure privacy of individual family members (Fahim 1983:58). Privacy is also required between adult children and their parents as well as between neighbours.

Following Islamic practice women are not expected to socialize or interact with strangers. This is not taken to include relatives sharing the household (Fawzi 1954:98, 102). It is therefore desirable to seclude guest areas from the family areas<sup>23</sup>. In planning a house this factor must be considered. The material culture, as represented by the house, attempts to embody and represent the societal ideals.<sup>24</sup> Seclusion of women is less rigidly kept within villages. Young women milk animals in enclosures located outside their courtyards (hosh) and some less-established households lack courtyard walls or large segments of them. This could suggest that the demarcation of public/exterior space versus private/interior areas does not require an actual physical barrier to create and maintain it. The solid boundary merely serves to reinforce its existence. Absence of an actual wall does make it harder to physically hide the women, although they are considered concealed within their cloth wraps (tob). In a way an entire village full of related persons can be seen as "an extended domestic space" (J. Boddy 1989:personal communication).

The absence of a courtyard enclosing a Christian Nubian house suggests that the Christian Nubian concept of private and public space differed from that of modern Nubians or that it did not require a physical barrier in all instances. Certainly, the dense and compact nature of housing within the villages would have allowed for frequent contact between neighbours, particularly during the Classic and Late periods. Within the Christian houses, women could not be secluded in the same manner and were likely not restricted to the interior of these buildings as many rooms were extremely small with low ceilings.<sup>25</sup> During the summer months, the heat inside these rooms would be unbearable. Consequently, based on architecture alone, the role of women within Christian Nubia can be hypothesized as differing from that of modern Nubian women. Ethnographic analogies may be useful for identifying and negating theories concerning not only the straightforward identification of materials, but also the associated behaviour and societal system that have governed the presence or absence of a given physical artefact.

#### Usage of Space with the House

The 'double house' seems to have been the basic, minimal form for the Christian house, at least in Lower Nubia. Therefore, this simple unit must have accommodated the necessary functional elements required and fulfilled the essential, primary needs of a Christian Nubian

domestic group. Buildings are "physical expressions of schemata and cognitive domains: environments are thought before they are built" (Rapoport 1980:284).

Based upon the small size and detached nature of both the 'double house' and 'unit house' forms, I largely agree with Adams' suggestion that the house, in its most basic form, was occupied by a nuclear family. "Domestic arrangements seem to show clearly that the basic residential unit in medieval Nubia was the nuclear family of husband, wife and children, rather than some larger kin group" (Adams 1993:33), but as discussed in chapter 3, this may not have been true in all instances. House P at Old Dongola was subdivided into three residences during the Classic Christian period. This might suggest occupation by three related families, possibly offspring of the initial inhabitants (Godlewski 1991:88-9). That some upper storeys of the Late Christian Serra East houses were apparently connected is also suggestive of residence by an extended family (Knudstad 1966:169-70). Occupancy of houses was probably not as rigidly restricted to the nuclear family as Adams would suggest, because some family members might be engaged in trade or work elsewhere and persons might visit.

The nuclear family was not necessarily a small unit. In Millet's study of Meroitic Nubia and his subsequent reconstruction of Meroitic family relationships from textual evidence, between three to five children survived long enough to be mentioned by name and associated with their parents on texts (Millet 1968).<sup>26</sup> This does not account for differential textual preservation or discovery, and offspring not recorded for one reason or another. In modern Sudan, it is not uncommon for a rural family (with one wife) to have between seven and eight children (Ismail 1986:56).<sup>27</sup> While, there is little to indicate the number of individuals in a Christian Nubian nuclear family, there is no reason to believe that Christian Nubians had drastically fewer children than did the Meroites. It can therefore be hypothesized that the average established household was inhabited by at least five to seven people.

It was hard to determine the function of rooms within the 'double houses' and 'unit houses'. There are several reasons for this difficulty, in part because of the belief that "attempts to explain the use and nature of Nubian rooms in sites like these [Debeira West II] is often profitless" (Shinnie and Shinnie 1978:44). As many publications are limited to survey reports or interim accounts of fieldwork, house contents are described merely as domestic in nature and artefacts and their findspots are not necessarily distinguished. When they are identified, it is often only by room or structure and not to a level or feature contained within; consequently, the relative date and place of deposition frequently remain unknown. For example, stratified occupation

debris was not found by the excavators in the houses at Serra East (Knudstad 1966:170). Similarly, little artefactual material or habitation debris was discovered within the 'castle houses' that would be indicative of their original function, although some squatter detritus was discovered (Adams 1994b:36).

The sandy, loose nature of the fill in the rooms at many sites also makes the definition of stratigraphic layers more difficult. Floors often consisted of thin layers and lenses of a compact mixture of ash, organic material, sherds and sand. Sand was used both to level a room and to create a clean floor surface. "People walking upon such floors create with time a surface which, upon becoming dirty with animal excrements and refuse, is once again covered with a layer of sand and the process is repeated" (Medeksza 1990:94).

When building contents of the 'double houses' or 'unit houses' are known, although there were variations from house to house, most were found to contain a mixture of several artefacts geared to providing for the basic needs of the inhabitants. Finds suggest that rooms were multi-functional. For example, the floor surfaces of 'double house' H/IIk and I at Naga el Sheima (pl. 30) contained the following: in room IIk, level 4 were pot sherds, juglet 76465, lamp 76466, bowl stamped centerpiece 76468, lid 76470, brass corner piece 76471, copper disc 76472, a small wooden truncated cone 76473, globular cooking pot 76475, 2 game pieces 76478, a small glass perfume bottle 76479, glass fragments, copper rod 76481, sandstone seal/stamp 76482, beads and leather fragments; in room III were glass fragments, cup 76492, bowl/dish 76493, amphora fragments 76497, jar fragments, game piece 76503, beads, a ladle 76507 and 3 Coptic papyrus fragments (Bietak and Schwarz 1987:62-74). Room H/III, the eastern room, also had three bins situated against the west wall and the floor of room H/IIk was plastered (Bietak and Schwarz 1987:64, pl. III).

The contents of room H/III, including the bins, jars and amphorae fragments, suggest it was used for the storage of food and everyday items, such as tableware. The less accessible room H/IIk, contained a higher proportion of valuable goods and items of adornment. This type of division may also be seen in Meinarti, level 8, where bins and silos presumably used for the storage of foodstuffs and grain, were situated near entrances in easily accessible locations (pl. 49). It is particularly noticeable in rooms 76, 81, 84, 129, and 130. Further, the construction of hidden magazines in Late Christian 'unit houses' and 'castle houses' suggests that the Nubians did desire to protect their more valuable goods by limiting or restricting access to them. Both rooms at Naga el Sheima included beads, gaming pieces, glass fragments and pot sherds, items easily lost

or broken and scattered. The presence of these items might suggest activities of adornment or recreation, thus attesting to the multipurpose nature of the rooms.

The contents of Classic Christian type 2 'unit house' 79, 80, 82 at Debeira West IV (pl. 24a) included the following: in room 79c were an unbaked spindle whorl and a stone bowl that had possibly served as a mortar; in room 80 were a utility ware bowl and a store jar and in room 82 were a saucer, vase, handmade bowl, cooking pot, gaming piece and a bead (Shinnie and Shinnie 1978:62, 63, 69, 70, 77-82). Though the contents were more scant than those found in house H/IIIk and I at Nag el Sheima, the impression given by them is similar. Room 80, the front room, contained storage vessels and utility wares, while more variety was found in the back room no. 82. Again the artefacts suggest the food preparation and storage. Room 79 was identified as a latrine. Toilets and cesspits were readily identifiable due to attached drainage channels, and the excessive numbers of sherds and ash used for soakage found in the holding tanks (Shinnie and Shinnie 1978:10).

Not every Christian period house contained an oven or hearth. Several, including House C-1 at Hambukol, Matuge Island II, and Arminna West A-U-12a, A-U-12f, displayed signs of burning on their walls or had ash mixed with the layers of occupation debris, but lacked an identifiable cooking installation (Adams 1962a:88; Adams and Nordström 1963:42-44; Anderson 1994:225-8; Weeks 1967:13, 15). In many modern Nubian kitchens, cooking is performed on small fires indoors and a centralized community oven is used if required. Therefore, it is quite possible that some cooking was conducted inside over small fires during the Christian phase, as the smoke blackened walls and ash lenses mentioned above might attest.

The area to the south and east of the central building (rooms 33-39, 72, 73) at Debeira West IV is reported as containing a great deal of ash and several ovens (pl. 24a) (Shinnie and Shinnie 1978:9). This might have been a community cooking area or that of an extended family. Hearths were seldom reported in houses at Debeira West IV (Shinnie and Shinnie 1978). During the X-Group period at Meinarti, few ovens were found and the excavator speculated that "a good deal of the cooking was done out of doors" (Adams 1968:185). This practice may have continued into the Christian period. Room A-U-6 at Arminna West may be another jointly used kitchen area (pl. 25a). An oven and a "thick and extremely well-compacted layer of almost pure ash" were associated with the second occupation floor in this room (Weeks 1967:12). Room A-U-6 opened into a courtyard (A-U-14) and was not directly connected to any identifiable domestic dwelling. Two other ovens were discovered in area A in rooms A-U-11 and A-U-12c. No ovens

were reported in either area C-U or N-U, however, a large ash deposit and a small platform were found in room N-U-4. The excavators suggested that this may have been used for cooking in a fashion similar to that found in modern Nubian homes, as discussed above (Weeks 1967:25).

Four ovens, two in room II-T and two in room II-R, were discovered at Qasr el-Wizz (pl. 73) (Scanlon 1972:21, 34).<sup>28</sup> If the population numbered between 20 and 24 individuals as Scanlon estimated (Scanlon 1972:21), the use of four large ovens to provide strictly for the monastic community appears excessive. It is possible that the monks operated an oven or bakery for the surrounding non-monastic population. Some monks were so employed in Egyptian monasteries (Walters 1974:219).<sup>29</sup>

Handmade, globular cooking pots, sunk into floor surfaces, are among the most frequently reported finds from Christian period houses.<sup>30</sup> Nine of these vessels were discovered set in the floor in the corners of rooms 2, 3, and 4 of house C-1 at Hambukol (pl. 69). Sand filled the pots and charring was noted on the exterior. Their bases were mat impressed or incised in a cross-hatched pattern. These vessels are similar to Ghazali type Q, ware class VIII. Form type Q is "globular cooking pots ... made of a very soft thick ware (normally Class VIII) with deep mat impression on the base" (Shinnie and Chittick 1961:35). Ware class VIII was "coarse micaceous black ware with straw levigation. Only employed for handmade pots, chiefly cooking vessels" (Shinnie and Chittick 1961:32).

The widespread distribution of these pots suggests they were extremely useful and probably performed several different functions. They may have served as incense pots, cooking vessels or, as suggested by Jakobielski, *murhaka* pots with grindstones (Jakobielski 1986:300). They may also have played a role in some sort of ritual function, since they tend to always be found along walls, in corners and around doorways. One Hambukol pot was incorporated into a wall rather than removed. Alternatively, they may have been of too little value to be deemed worthy of moving or keeping, when it was easier to cover them over. The apparent lack of contents suggests they were biodegradable. In present day Sudan, miscarriages that needed a midwife's assistance are enshrouded in white cloth, put in a globular, cooking pot (*gulla*) and interred within the house enclosure (Boddy 1989:68). It is possible that this was also the custom during the Christian period as it appears to be neither a Christian nor Islamic practice.<sup>31</sup>

The simple, two-room dwelling must have provided the basic essentials required by the Christian Nubians that is why its usage endured. From the evidence available, it may be hypothesized that in a two-room house, one room largely functioned as a storage room for staples,

while the other served as a cooking and living area. Most artefacts associated the houses are largely domestic in nature and connected with activities traditionally thought to be performed by women, such as cooking and food preparation. There is no indication that these household tasks were executed by men. Certainly, the majority of protagonists mentioned in texts as traders, travellers, warriors and clergy were men (Browne 1989; Vantini 1975). It may be that the house was primarily the domain of women, while the outside world was that of men. Ideally then, the majority of artefacts found outside domestic structures should be associated with men. However, as there is a lack of detailed information concerning artefact distribution across sites and within rooms, it is not possible to draw any conclusions at this time.

The usage of two rooms could reflect a division between male and female household members for activities such as sleeping or entertaining. Male and female congregation members and penitents were separated from each other and the clergy within the Nubian churches (Adams 1965, 1977:475, fig. 72).<sup>32</sup> Overhead galleries found in several Egyptian churches (i.e., Hermopolis, St. Barbara, Abu Sarga) and in the type 2a Nubian churches of Adams' typology "were normally intended for the female members of the congregation. This custom seems to have been a characteristic of the eastern church" (Walters 1974:36). Unfortunately, there is little evidence at present to document such a division at the household level, so this also must remain speculation. Ethnographic analogies are of little value in this instance, because the current population is Islamic and its tenets prescribe the separation of women and men.

The correlation between artefact distribution, room usage, gender and behaviour is not necessarily a simple one, due to cultural mediation. An object may have social significance and power because of its position within an abstract set of cultural symbols, whether or not this characteristic is consciously recognized. For example, the Christian symbols of a cross or fish would mean little to someone unfamiliar with Christianity.<sup>33</sup> Theoretically, this symbolic framework should be visible in every expression of the material culture. Each space and artefact should be significant in terms of its apparent function and place within the house or community as a whole because the governing symbolic principles permeate each relationship. If isolated out of context, it is possible that the overall patterning can be missed. For example, a random survey would not necessarily provide a sufficient sample to determine the full range of activity areas or the means by which they are linked. Appropriate ethnographic analogies can provide a source from which hypotheses may be created and aid in the design of problem-orientated fieldwork and sampling schemes. From an archaeological perspective, however, it is often difficult to reach



beyond the material culture and identify underlying symbolic constructs.

1. According to modern practices in Sudan, the floodplain is theoretically divided in half. If seluka land disappears from one side of the river, any additional seluka land that surfaces on the opposite bank is used to compensate the loss. Cf. J. Boddy (1989) Wombs and Alien Spirits. Madison. pp. 35, n. 28, 36.
2. Cf. G. Baer (1969) Studies in the Social History of Modern Egypt. Chicago.
3. A more detailed discussion of the economics of Medieval Nubian society is beyond the scope of this thesis. For analyses of the evidence for Nubian trade, farming technique, and crop type see D. Edwards (1989) Archaeology and Settlement in Upper Nubia in the 1st Millennium A.D. Oxford. pp. 202-10; B. Trigger (1970) "The Cultural Ecology of Christian Nubia." Kunst und Geschichte Nubiens in Christlicher Zeit. E. Dinkler (ed.). Recklinghausen. pp. 347-86; and Y. Kobischtschanow (1984) "Agriculture and Economic-cultural Types in Medieval Nubia." Meroitica 7:472-82. Kobischtschanow noted that the names of several towns between the Third and Fourth Cataracts included the Nubian word kole and equated this with the meaning "saqia" based on a suggestion proposed by Monneret De Villard (Kobischtschanow 1984:473). This appears incorrect. The word actually seems to be kol, meaning "place", as found in the toponym Hambukol, "place of the dom palm". This meaning was given by modern local Nubian informants (Grzymski 1990:141).
4. This list is largely restricted to information reported in publication.
5. Christian Nubians may have regarded windows as a possible entrance for evil influences and thus openings were kept small. In modern Lower Nubian houses it has been suggested that the small size or absence of windows serves to "keep the family out of the range of neighbours, and especially the bad influences of the evil eye" (Jaritz 1973:49). I have not noted this to be a strong consideration in Upper Nubia, although protective charms are placed on infants and young children (i.e., cowrie shells and Koranic writings). On one occasion, two windows built into the north wall of a chamber reserved for the nuptials of the bride and groom, were opened by the bride and her sister during my visit to let in the cooling breeze. If fear from the evil eye was a truly strong factor, I doubt that these windows would have been situated in a bridal chamber. On another occasion, in a guest house, a building used exclusively for housing and entertaining visitors, there was a northern window situated specifically to allow cooling breezes to refresh the host and guest. It would seem to be a breach of hospitality to expose one's guest to the possibility of getting the evil eye. The placement of plates on courtyard walls noted in Lower Nubia, and said to represent generosity and to draw the evil eye away from the houses (Lee 1969:37), is also not a particularly common practice in Upper Nubia.
6. Following the designation given by the surveyors for the Scandinavian Joint Expedition, "L" indicates a late period site of Meroitic, X-Group or Christian date. All examples given here are of Christian date.
7. Fillikol II and Ras el Gezeira in the Abu Hamed Reach and Kisseenfarki I, Komer and Shofein II in the Mahas district are some examples.
8. These time periods correspond to those listed in figure I.1 in Chapter 1, endnote 1.

9. Textual evidence indicates that there was a king Joel at Dotawo (Gebel Adda) as late as A.D. 1460 (Gardberg 1970:21) although no archaeological evidence to suggest a residence has been reported.
10. These regions have been grouped together due to the sparsity of information available.
11. These structures have been found at the sites of Soba East and Gabati II only.
12. Classic and Late sherds were associated with the settlement at Debba I (Sarkamatto) but the site was not excavated (Vila 1975:29-31).
13. For information concerning excavations at Serra East see G. Hughes (1963) "Serra East: The University of Chicago Excavations, 1961-62: A Preliminary Report on the First Season's Work." KUSH 11:121-30 and J. Knudstad (1966) "Serra East and Dorginarti." KUSH 14:165-86.
14. Cf. W. Adams (1977) Nubia Corridor to Africa. Princeton. pp. 33-4 and Mahdi Amin El-Tom (1975) The Rains of Sudan. Khartoum. figs. 12-16.
15. For the thickness of walls within Christian period houses see figures II.2, II.3, II.4, III.1. For the relative conductivity levels of mudbrick and red brick see H. Fathy (1973) Architecture for the Poor. Chicago and London. pp. 45-6. Note that red bricks are more conductive than mudbricks.
16. Within modern Sudanese villages, people often sleep outdoors within their courtyards during the summer months.
17. I have observed this practice in modern Egypt but not in the Sudan.
18. For example, several of the 'castle houses' at Kulubnarti were sufficiently preserved to indicate flat, wooden roofs on their upper floors (Adams 1994b:56). Construction of these roofs was probably similar to modern roofing. Modern Nubian roofs are constructed of tied palm fronds (jereed) or split bamboo (ganna). Reed matting is placed on top of the palm fronds followed by dry grass or straw. The outer surface is plastered over with mud and animal dung. The roof is traditionally supported on palm logs or poor local timber.
19. For annual temperature fluctuation see W. Adams (1977) Nubia Corridor to Africa. Princeton. p. 31, fig. 7.
20. Since 1987 the number of thatched huts is increasing in the north as persons move to escape the war, banditry or famine.
21. Ethnoarchaeology is a useful means of examining the relationships between behaviour, function, culture, and artefacts, and may suggest rules and concepts governing their organization (Kent 1987:541). Ethnographic analogies are useful because they provide information on how living people actually use space and thus aid in the generation of hypotheses. The primary assumption is that "behavioral elements of sociocultural systems have material correlates; if they are incorporated in the archaeological record, such residues may be used to develop inferences about the behaviours with which they were associated" (Kramer 1979:1). Through the observation of modern cultures, insights into past conduct may be gained "particularly when strong similarities can be shown to exist between [the] environments and technologies of the past

and contemporary sociocultural system being compared" (Kramer 1979:1).

Several such parallels may be drawn between the environment and technology of the Nubian Christian period and that of modern Nubia. Based upon the distribution of archaeological remains in Lower Nubia, the areas of arable land (based upon deposition of Nile alluvium) appear to have changed little during the past 5,000 years. In fact, the "larger and richer a locality is, the more evidence is there of continuous or repeated habitation throughout Nubian history" (Trigger 1970:351). The macroclimate, including humidity, temperature, rainfall etc., has also been relatively consistent for the past 4,500 years (Trigger 1983:9). The effects of flood and sand movement vary from region to region and consequently overall trends may not be reflected in local microenvironments. For example, I observed great variations in the amount of damage done to different villages by the 1988 Nile flood.

Historical sources indicate that the type of farming and irrigation practiced by the modern Nubians in the northern Sudan has altered little since the late Meroitic period (excluding the recent introduction of mechanization). Waterwheels (saqia) are recorded between Meinarti and Old Dongola during the second Mameluke campaign against Shemamun in A.D. 1289. Maqrizi (A.D. 1364-1442) recorded "the army plundered the country, killed those whom they found, let their animals graze in the cultivated fields and destroyed the waterwheels "saqiyas" as far as the town of Dongola" (Vantini 1975:688). In the 10th c A.D. saqias are mentioned in Alwa by Ibn Hawyal (Kobischtschanow 1980:472-3). More recently, British Intelligence described the right bank of the Nile around Old Dongola as a region containing 422 waterwheels (Gleichen 1905:30). It is only within the past twenty years, that the majority of saqias ceased to be used.

The primary agricultural products have also changed little through time. Nubians in Dongola are described as cultivating dates and dura by Mas'ud, the Egyptian government representative in A.D. 1172, as recorded by Abu Shama (A.D. 1202-1267) (Vantini 1975:370). This is further reinforced by finds of date pits and grinding stones in House C-1 at Hambukol. These crops are still among the most important harvested today.

It can be demonstrated that several technological and environmental correlations exist between the Christian period and the contemporary culture. Such analogies should, however, be taken with care because the nature of a culture is not determined solely by its technology and responses to environmental stresses. Interpretation of archaeological material cannot be undertaken without due consideration being given to the belief structure and the effect this may have on activities and practices. In theory the greater the number of affinities which can be drawn between the modern and past societies being compared, the more accurate and persuasive the analogy and the hypotheses generated therefrom.

Where continuity between the past and present can be assured it is easier to acknowledge many formal similarities between the information being compared ... one way in which the number of formal similarities between a past and present situation can be increased is by comparing a recent archaeological site with modern sites in the same area" (Hodder 1982:18).

Continuity of population is suggested by the persistence of several practices which seem to be cultural remnants of the Christian tradition. Early travellers to the northern Sudan noted several customs among the Nubians which appeared to be Christian in origin. For example, in some villages south of the Second Cataract, at the turn of the century, the rite of "Mariya" was performed following the birth of a child. A day or two after the delivery the midwife and infant, accompanied by children and village women, travelled to the Nile. Sweepings from the house,

the afterbirth, midwife razor, oil lamp and a flour cake were placed on a straw raft and set adrift in the river. Water was collected at the river and kept to wash the mother's breasts prior to the infant's first nursing upon its return from the river. On the way to the Nile the midwife also carried dates, dura, kohl and a kohl pot. The dura was dispersed by the midwife during the journey as she chanted "this is the portion of the Mariya. O Angels." The response from the women accompanying her is "By the Mariya! By the angels and by this new face, grant us, Oh God our desires" (Vantini 1982:25-6; Crowfoot 1919:183-93). The Mariya here also means angels, river folk and holy ones but the origin of the word, as interpreted by Vantini, seems to be Mary, the mother of Christ. He was able to confirm his hypothesis with a Moslem Sheikh familiar with the custom (Vantini 1982:30).

Other practices, seemingly of Christian origin and also performed in Nubia south of the Second Cataract, are the drawing of a cross on a newborn's forehead just after birth, and the painting of crosses on the house of the newborn with sheep blood. Such crosses are also drawn on newly constructed dwellings. This practice may be derived from Passover traditions (Vantini 1982:27). Further examples can be drawn from among the Midob, the Dago of Darfur and from the area of Ain Serra (Vantini 1982:32-40). Survivals of Christian traditions were also noted in the area of Serra where an invocation could be made to the Virgin Mary during the settlement of disputes surrounding date palm rights and obligations (Kronenberg and Kronenberg 1964:285).

Some continuity of population, from the Christian period to the present, must have existed in order to facilitate the transmission of the aforementioned relics of Christian belief. There seems sufficient continuity between the past and present in Nubia, as demonstrated by technology, environment and remnants of Christian tradition, to warrant further investigation and comparison between them. However, due to the introduction of Islam in the area, I seriously doubt that all of the ethnographic corpus is directly applicable to the archaeological material.

Unfortunately, the archaeological use of ethnography tends to operate under the assumption that cultures do not change through time and that for most past material cultural patternings there is a modern behavioral equivalent. It also neglects to account for chance likenesses (Hodder 1982:12). Similarities found in some instances are not necessarily indicative of further similarities, and perceived analogy may often be very subjective so caution should be used. No simple correlation can exist between artefact distribution and behaviour because of cultural mediation by an abstract symbolic code which may not be consciously acknowledged. Archaeologically it is often difficult to distinguish boundaries beyond those delineated by the purely physical.

22. Modern houses formerly located within Lower Nubia have been described as cubiform, constructed of mudbrick and flat roofed. Rooms were arranged around a courtyard (Jaritz 1973:50-1). I have also observed houses of this type in Mahas. In Upper Nubia, houses are constructed of mudbricks, and have fewer rooms. These are seldom arranged all the way around the perimeter of the courtyard (hosh) and are often enclosed within it. The courtyard is quite large and rooms are usually grouped together in an "L"-shape. Occasionally, the courtyard is divided by thin mud walls. While modelled, mud decoration is sometimes found over the main entrance and occasionally on the corners (Lee 1969a:37), the lack of exterior, plastered decoration on Upper Nubian houses further differentiates them from those previously found in Lower Nubia. For a discussion of house decoration present in Lower Nubia, prior to the construction of the Aswan High Dam, see M. Wenzel (1972) House Decoration in Nubia. London.

23. "Gender expectations are that the male protects the female by secluding her, but that the female is also dangerous to the male; he is vulnerable to her misconduct, especially sexual misconduct, and because of his vulnerability, his impulses to seclude her are intensified" (Gulick 1976:210).

24. For example, a kitchen must be positioned so as not to expose women to strangers passing on the street. If a male visitor stays overnight, difficulties sometimes arise in smaller houses because the seclusion of female household members can not be maintained. This is particularly a problem in large cities. Fawzi noted that one solution was to have the guest sleep just outside the courtyard entrance in the street (Fawzi 1954:99). This temporarily expands the private innerspace of the courtyard to include the exterior area around the gate. Mastabas located outside the front gates among the Kenuzi were often used as reception areas (Jaritz 1973:58) and acted to place private household space outside the confines of the courtyard. This may be viewed as an externalized private space.

25. For examples of room size see figure II.3.

26. For example, five children of Payeši and ?Qêresamaye are documented, Harentyotf and Šipešiye had at least five children as did Wayekiye I and Tayeši. Four of Šaweyibar and Yilaḥmali's children were recorded textually and Yilaḥmali also appears to have had a second husband named Qêqêli (Millet 1968:91, 128).

27. Observations I have made certainly confirm Ismail's statement.

28. A large oven was also discovered in the service area of the Kom H at Old Dongola (Żurawski 1994:336-7).

29. Other labours performed by Egyptian monks included basket weaving, tanning hides, performing labour in the fields, carpentry, smithing and making shoes (Walters 1974:219).

30. Some reported examples are from Hambukol, houses C-1 and B, Old Dongola, house B, Abdallah Nirqi , rooms CI/26, CI/19, CIV/2, 3, 4, Debeira West VI, room XII, Debeira West IV, rooms 37 and 43, to list just a few (Anderson 1994:225-8; Barkóczi and Salamon 1974:295, 303, fig. 29; Jakobielski 1986:300; Shinnie and Shinnie 1978:40, pls. IIb, XIVb).

31. For possible uses and symbolism of the globular, cooking pot among different ethnic groups in modern Sudan see J. Boddy (1989) *Wombs and Alien Spirits*. London. pp. 68-70 and L. Holy (1988) "Gender and Ritual in an Islamic Society: The Berti of Darfur." *MAN* 23(3):471-2. These two interpretations differ slightly and neither are provable in an archaeological context. This further illustrates the care which should be taken with the application of ethnographic analogies.

32. This practice continues in the modern Coptic Orthodox Church.

33. In the early church the fish was used as a symbol for Christianity and to facilitate communication between Christians. The Greek word for fish, *ichthus*, was used as an abbreviation for, Ιησους Χριστος, Θεον Υιου Σωτηρ, "Jesus Christ, Son of God, Saviour" and a fish was easily drawn (West 1989:20-1).

## SITE TYPOLOGY AND GAZETTEER

### Site Typology

The initial purpose in categorizing the sites was to enable similarities to be discerned and distinctions drawn between them. Differentiation was based on size, possible function, date and distinguishing features (i.e., site location, construction materials). Ideally, these characteristics would be known for every site, but in reality this was not possible and a much more inclusive, generalized typology was used. Site classifications were created based upon what the documentation currently available could support. A variation of the typologies used by Flannery (1976) or the French-Sudanese Survey conducted south of the Dal Cataract (Vila 1975) would have been more desirable. Unfortunately, as Edwards (1989:29) discovered, the archaeological reports from many sites are frequently "generalized and often inadequate" with more detailed information being required in order to create precise site typologies. The quantity of dependable, recent information is limited. Little is known about some sites and the co-ordinates of a few are not exact. Some may have been mistakenly identified by their discoverers. "While it has been possible to differentiate many small and discrete sites, large spreads of ill-defined remains, often of several periods have been treated as single units" (Edwards 1989:29), just as they were reported.

Documentation of many sites is limited to a brief mention of domestic sherd scatters described as "Christian". Without excavation or detailed survey, a more precise chronology or site description is impossible to achieve. Anything from a small building to a large village could be hidden beneath the surface in many of these places and artefact and sherd identification may be incorrect or uncertain in some instances. The word "structure" is frequently used within the text. This is taken to mean an organized, purposefully constructed feature. With the aforementioned limitations in mind the following site classifications were used:

**Occupation.** No visible buildings were located however, artefact scatters on the surface (usually potsherds) suggested human activity and/or residence in the vicinity. In most instances excavation has not been conducted at the site. Occupation sites were often noted by travellers or individuals conducting surveys.

**Building/Fortified Building.** This category encompassed single, isolated residences sometimes associated with sparse surface remains.

**Settlement.** Owing to the limitations of the archaeological data available this is a rather broad

category. A site is included in this category if traces or remains of structures were reported. It includes everything from temporary camp sites to large permanent villages. It includes both nucleated and dispersed villages. Where possible the size and type of settlement is distinguished in the gazetteer when there is sufficient documentation.

Types of settlements found included camps, hamlets, villages and towns. Loosely defined; a camp is a temporary and possibly seasonal settlement consisting of a few structures. It may have accommodated anywhere from two to twenty persons. A hamlet is a small community, probably a permanent settlement numbering under one-hundred persons, without any large public structures and possibly though not necessarily lacking a church. A village and town are both permanent settlements, with a village being smaller than a town. Both could contain public and religious architecture. This general rule of size was followed by the Archaeological Survey of the Nile south of the Dal Cataract (Vila 1975:23).

The separation between village and town was difficult to delineate as there is no clear cut distinction between them. One person's large village is another's small town and as such these terms tend to be used interchangeably with appropriate qualifying adjectives. Caution must be exercised because the construction of a hierarchy and division of sites into classifications is complicated by the fact that sites differ in degree rather than absolutes (Flannery 1972:38-9). Following Parsons' definition of villages, a village may be occupied by 100 to 1500 individuals (Parsons 1972:127-150). Is this a valid definition for Nubia? Population estimates for the substantial Classic Christian settlements of Meinarti (6-K-3), Debeira West IV [24-R-8] and Kasanarti [5-X-32] vary between 200 and 400 inhabitants (Adams 1977:488). This would suggest that most settlements in Nubia could be classified either as villages or hamlets. This does not conflict with Trigger's population estimates for Lower Nubia. He calculated that the population of Lower Nubia during the Christian period was around 50,000 persons. His analysis was based upon the average size of cemetery sites while considering continuity of settlement in a region and factors which might influence the population size (Trigger 1965:156-166).

One difficulty to be considered is that quantification of site size in many cases is based upon estimates largely derived from detritus visible on the surface; then further assumptions are made regarding the number of inhabitants. Any errors are compounded. It also does not necessarily allow for differences between compact, nucleated settlements, as might be found on an island, versus a more dispersed one as could be found on an alluvial plain. Nor does it account for the shifting of occupied areas through time within a settlement.



**Walled Settlement.** Simply this is a village surrounded by an enclosure wall or constructed within an extant enclosure. Often the purpose of these walls was to provide protection for the inhabitants however, this should not be automatically assumed in every case. If the site appeared to clearly be fortified this is mentioned in the description.

**Settlement with fortified buildings.** (as opposed to walled settlement) These sites contain individual fortified dwellings such as "Castle houses" rather than being surrounded by a wall and are frequently of the Late Christian period.

**Monastery.** There are few proven monasteries in Nubia due to the fragmentary nature of the archaeological data.<sup>1</sup> Sites believed to be monastic in nature by those documenting them are listed as such. Unfortunately there was a tendency among early travellers to describe settlement remains associated with obvious churches as monasteries. For example, Lepsius (1913:82) and later Monneret de Villard (1935:76-78) mention a monastery at the site of Nag el Sheima. Excavation of the site during the Unesco campaign exposed a walled settlement and several churches but no monastery (Bietak and Schwarz 1987). Consequently unexcavated sites reported as monasteries must be regarded as suspect until further information is available. Based upon the model provided by Ghazali and Qasr el-Wizz and comparative Egyptian material, Nubian monasteries consisted of several distinctive elements. A church, refectory, monks cells and work area were contained within an enclosure wall.

**Anchorite dwelling.** An isolated or clearly separated locale that displayed evidence of occupation by a single person or series of individuals for religious purposes. The individual is assumed to be a monk and in several instances is clearly identified as such through artefactual or textual means (e.g., Faras West IV, [24-E-22]). Potential sites include natural grottos, reused tombs, and small buildings of one or two rooms.

**Enclosure.** Either a few isolated buildings or no structural remains associated with an enclosed area defined by a wall or walls connected to natural features.

The following features were also noted:

**SAQIA** Traces of canals, qadus fragments and circular depressions or stone emplacements situated on an alluvial plain.

**Magazine/ Storage Pit, Silo.** A natural or manmade hollow or a circular mud structure was located and a storage function was presumed by the excavator or surveyor based upon associated sherds or samples.

**Kiln/Oven.** Traces of burning, kiln wasters, sherds and usually structural remains of a small

chamber led to the identification of these installations.

**Basin.** A man-made depression with a finished interior and possibly a spout but lacking associated finds that would suggest a storage function. It also may be connected to a gutter.

**Quarry.** A location from which there were indications that stone had been extracted.

As the focus of this thesis was to explore sites with civil and/or domestic structures, or more specifically sites from which there was evidence of individuals having resided, cemeteries were not included in the site gazetteer. Churches and free-standing, isolated churches were also not individually included as they were beyond the scope of this project, not being civil or domestic in nature. If a cemetery or church was located within or near a settlement its presence is noted in the gazetteer under the settlement reference.

The question arises as to whether or not seemingly isolated churches and cemeteries may be taken as indicators of nearby settlement. Nubian churches have been found within settlements, on the edge of settlements, on associated burial grounds and in seemingly isolated locations.<sup>2</sup> Based upon results gathered from modern surveys,<sup>3</sup> there does not appear to be an obvious connection between the number of churches or cemeteries, their locations and the surrounding population. For example, the French-Sudanese survey conducted south of the Dal Cataract found several habitation sites and the remains of a church on the island of Arnyatta [2-R-50, 51, 53; 2-Q-1] but no cemetery was discovered (Vila 1979:42, 46). Similarly four cemeteries were located at Kosha West but only one was in the vicinity of the fortified settlement [3-P-10]. At Kosha East a similar situation occurs with two settlements [3-P-25, 3-P-2] being located in the area of six Christian and three X-Group/Early Christian cemeteries (Vila 1979:42, 46, 50). This does not even consider if the Christian settlements and cemeteries were contemporary or if a cemetery may belong to a semi-nomadic pastoral segment of society rather than a nearby settlement. It is also conceivable that sites may have been missed during the course of modern explorations. Quite probably the factors regulating settlement differ from those governing cemetery and church locations.

The differences in the location of the sacral edifices may evolve ... from the particular function which the individual church buildings fulfilled. Some could have been parish churches, others (those far from the town with large cemeteries) kinds of funerary chapels, used first of all for the funeral service. Still others are monastic churches etc. ... However, it should be said at this point that the interior of the church is always designed to serve for the

celebration of the service, and there are no remarkably differing features in the interiors which would clearly suggest the prevailing function to be expected (Jakobielski 1981:43).

In addition, "nearly every settlement in Nubia possessed a church, and some - several churches. It is interesting that the number of sacral buildings in settlements does not correlate with the size of the population " (Jakobielski 1981:43). "The number and distribution of churches remains something of a mystery, for it bears little relation to the distribution of population. Some fairly important settlements had only a single church, while others, no larger, had as many as five or six" (Adams 1993:33). Adams suggests that family, cultural or ethnic divisions may be the reason behind the placement of churches (Adams 1977:478). Admittedly, Adams' assertion has been made in the absence of numerous substantially excavated and well-documented sites, but with the information currently available no clear correspondence between cemeteries, churches and settlements may be drawn and more questions are evoked than answers found.

## Site Gazetteer

Within the gazetteer, a general description and dating of Christian period sites is given along with a geographic location and provisional classification based upon the information currently available. The site names used are those given by the Sudan Survey Department and site co-ordinates are given in latitude and longitude to within 1 degree when possible. Variations on the site name are included in brackets after the Sudan Survey Department designation. The following exceptions have been included to maintain continuity with the excavator or surveyor and the associated publications for ease of reference and to increase the accuracy of site identification:

1. Following the system which they established, the Scandinavian Joint Expedition (SJE) sites are also documented by grid references found on the 1:250,000 map [NF-35-1] printed by the Sudan Survey Department in 1960. Their concession area was enclosed within the co-ordinates x 934000 to 936000 and y 656000 to 658000 (Save-Soderbergh 1962:79). Plate 96 shows a plan of the Sudan displaying the numbering system of the 1:250,000 maps.
2. Sites from the West Bank Survey of Lower Nubia and the Gemai to Dal Survey are also identified by a three element designation, e.g., 24-E-7 following the system devised for the Campaign to Save the Monuments of Nubia. All of the Lower Nubian sites are found on the Wadi Halfa map (sheet NF-35-I).

Sheet [NF] 35-I (Wadi Halfa) of the 1:250,000 series maps of the Sudan is [was] divided into a 15-minute grid, the squares of which are numbered consecutively from east to west beginning at the top of the map. ... These squares are [were] further divided into a 3-minute grid with squares lettered consecutively in a similar fashion. The actual sites are [were] numbered within this system in the order of their discovery. Thus, the ancient Egyptian fort at Semna West is numbered 16-E-1, i.e. 15-minute square 16 - 3-minute square E - first site (Mills 1965:2).<sup>4</sup>

3. Sites from the Archaeological Survey of the Nile Valley South of the Dal Cataract follow the same system as described in 2. The 1:250,000 series map used in this survey is NF 36-M (heading: Kosha) (Vila 1975:23).<sup>5</sup>
4. Sites discovered between el Khandaq and Farinkotti in the Dongola Reach, by the Dongola Reach Project, are also identified by a field identification number. These numbers have a ROM prefix (Grzymski 1987:1-8).

5. SARS survey sites between Bagrawiya and Atbara, in the Shendi reach have a designation beginning with BM. BM refers to a bench mark, numbered in 2 kilometre intervals from the modern town of Shendi (Mallinson 1993:16-8).

The following geographic terms are used in the gazetteer: Lower Nubia and the Batn el Hajar, Abri-Delgo Reach, Dongola Reach, Abu Hamed Reach, Shendi Reach, Bayuda, Butana and Gezeira. These regions and their respective climatic and ecological zones, average rainfall, vegetation and major landforms are shown on plates 97-99.<sup>6</sup>

## **SITES IN LOWER NUBIA AND THE BATN EL HAJAR (Maps 1, 13-19)<sup>7</sup>**

**Abd el Qadir I - See Meinarti Island**

**Abd el Qadir II (Abd el Kader)**

**Settlement, Early Christian**

**21.52.N./31.14.E., [5-O-15], West Bank**

Scattered houses made of stone, mudbrick and mortar were found. The site included four to five houses that covered an area of about 50 square metres. It was situated on a rocky hillside overlooking the Nile. The houses contained three to six rooms founded directly on the bedrock and the courses of some walls were laid in 'herringbone' fashion. Walls were thin, measuring 25 cm on average and reached an estimated height of little over one metre. An oval, stone-walled enclosure measuring approximately 17.4 x 14.4 metres was also found. It was estimated that the surrounding wall stood under 0.5 metres in height. The village appeared to be associated with church 5-O-14 and "tavern" 5-O-16. A small, decorated chapel was located on a small hill 2 kilometres away from the settlement.

Adams 1962a:FN.V:16-19; Adams and Nordström 1963:39-40; Clarke 1912:54

**Abd el Qadir III**

**Building - "Tavern", Early Christian**

**21.52.N./31.14.E., [5-O-16], West Bank**

A large rectangular stone building, measuring 10x20 metres, was found. It was associated with settlement 5-O-15. Within the building some stones were laid in "herringbone" fashion. Large quantities of amphorae and drinking vessels were found in and around the structure.

Adams and Nordström 1963:39-40

**Abdallah Nirqi**

**Settlement, Walled Settlement, Early - Late Christian**

**22.22.N./31.40.E., West Bank**

Two settlements were found at Abdallah Nirqi. The first was transitional X-Group - Early Christian in date and contained long, stone and mudbrick houses some with rounded corners. It was orientated parallel to the Nile and the dwellings were quite dispersed. Structures within the settlement were similar to those found at Gezeira Dabarosa I. The second settlement had three phases of occupation. The first dated to the second half of the Early Christian period and consisted of a series of "double houses". These were mudbrick structures containing two long, barrel vaulted, rectangular rooms placed either parallel or perpendicular to

each other. In some cases one room was divided into two by a thin mudbrick wall. Distribution of the houses within the first period of the second settlement was much like that of the first settlement; scattered and parallel to the river. Phase two of the second settlement dated to the Classic Christian period. Continuity in occupation was observed between phases one and two. "Unit houses" were characteristic of phase two and had an early and later form. They were barrel-vaulted and of mudbrick construction. The early houses were roughly square in shape and they contained three, small parallel, rectangular rooms orientated perpendicular to a larger rectangular room. The later "unit houses" were much larger in size than the earlier ones and usually contained two large, rectangular rooms placed beside one another with two smaller, rectangular rooms positioned perpendicular to the larger rooms at one end. The later "unit houses" were of Late Christian date. Houses are constructed closer together and the settlement becomes increasingly more concentrated from the Classic Christian period onwards. An enclosure wall surrounded the central portion of the settlement from roughly the latter 10 c A.D.. Three churches were associated with different phases of the settlement beginning with the construction of the Central Church around the beginning of the 8th c A.D.. A cemetery and quarry were also located nearby.

Barkóczi and Salamon 1974:289-338; Castiglione 1967:14-9; Castiglione and Török 1974:277-87; Hajnóczy 1974:339-68; Kákósy 1975:103-117; Klasens 1963:57-66; 1964:147-56; 1967:79-86; Monneret De Villard 1935:170; Pósa 1975:154-56; Smith 1962:42; Török 1974:367-403; 1975a:119-33; 1975b:135-55; 1975c:353-494; Van Moorsel 1967:387-92; 1970:103-8; 1971:22-27; Van Moorsel et al. 1975; Weigall 1907:124

#### Abkanarti (Abka)

Walled Settlement, Classic - Late Christian

21.48.N./31.12., [5-X-5], Island

A large settlement, constructed of mudbrick, was surrounded by a stone enclosure wall. It was situated on the highest terraces of the island overlooking the Nile. The settlement contained houses, a church, kilns, public square and a citadel. The citadel was constructed of mudbrick on the highest elevation overlooking both the river and the village. Approximately 10 houses were excavated and all were roofed with brick vaults. Adams has identified 2 potential 'castle houses' located outside the enclosure wall. Three kilns were found in the centre of the village. Ceramics, primarily utilitarian wares, fired in these kilns were found throughout the site. The site measured approximately 100x60 metres and Classic and Late period ceramics were recovered. A cemetery was located on the lower terraces of the island.

Adams 1994a:13, 15, 17; Almagro et al. 1963:192-5, pls. XLIV, XLV; 1965:89-95

#### Abu Dom

**Settlement, Late Christian?**

21.45.N./31.12.E., [11-D-2], Island

A late period tower was built on top of a denuded settlement.

Mills 1965:4

**Abu Sir****Building, Fortified Tower, Early and Late Christian?**

21.50.N./31.13.E., [5-T-29], West Bank

A large round tower, two storeys high, constructed of stone and mud mortar was found. It measured roughly ten metres in diameter. The second storey seems to have been constructed of mudbrick. It was located on top of a rocky outcrop on an island. Early Christian ceramics were spread across much of the surface adjoining the tower.

Adams 1961b:FN.V:37-8; Adams and Nordström 1963:38-9; Nordström 1961b:FN.III:23-7

**Abumulgum Island****Settlement, Late Christian?**

21.06.N./30.42.E., [21-N-19], Island

Approximately twenty mudbrick structures were preserved in this settlement. Adams has suggested that some of the structures might be 'castle houses'.

Adams 1994b:15, 17; Mills 1965:11, pl.1b

**Ad Donga (North Argin)****Settlement, Early? - Classic Christian**

21.59.N./31.20.E., [24-V-7], West Bank

Classic Christian pottery covered the surface of this small kom. Test excavations revealed a series of vaulted mudbrick rooms separated by a corridor or street. Bricks within the foundations were laid upright on their ends. An ash filled destruction layer marked the end of Christian occupation at the site suggesting much of the settlement was destroyed by fire. A grave stele inscribed in Greek and dated to A.D. 1093 (809 of the Era of the Martyrs) was discovered just outside the Classic Christian mound in association with the ruins of some mudbrick buildings. These may have been the remains of a later settlement constructed following the destruction of the first one.

Almagro et al. 1965:92-5

**Adindan I**



**Settlement, Christian, Late Christian**

22.13.N./31.29.E. [Map Ref. 947.15/664.65], West Bank

The site measured approximately 60 x 50 metres and Christian sherds were scattered around the area. Part of one house was dug revealing mudbrick walls and stone thresholds. Smith describes the site as a "suburb of Faras" (Smith 1962:20). The site was located close to the river and a cemetery was found in the vicinity. A 13th c A.D. Arabic manuscript listed Adindan as one of the major settlements in Lower Nubia during the Late Christian period. Following Shams Ad-Dawla's destruction of Qasr Ibrim in A.D. 1172-3, subsequent raids were carried out into Lower Nubia under the leadership of Ibrahim al-Kurdi. Adindan was raided in A.D. 1175 and Ibrahim al-Kurdi drowned in its vicinity.

Griffith 1927:102-3; Smith 1962:20; Trigger 1965:195; Vantini 1975:369

**Adindan II****Buildings, Christian**

22.13.N./31.29.E., West Bank

Two small, single houses were found. Both were of stone rubble and mud mortar construction. House A had three building phases. In its earliest form it consisted a rectangular room with a plastered mastaba inside and a door opening to the north. In later phases additional rooms were added, totalling six in all and the entry was from the south. An oven was found in one room while two ceramic hearths were found in the floor of another. An exterior staircase and mastaba were also present. House B consisted of a single rectangular room with a hearth in the south corner. Both buildings were located near a Christian cemetery and the monastery of Qasr el-Wizz. Sherds found suggested that these structures were of the same date as the monastery.

Smith 1962:23-25; Trigger 1965:195

**Adnenarti****Building, Saqia Site, Classic Christian**

21.50.N./31.14.E, [905.900/639.850, SJE 439], Island

A large stone and brick building was found associated with a saqia site and previously cultivated land. The building was irregular in shape and consisted of roughly fourteen rooms arranged around a courtyard. The entire area measured 200x40 metres. A stone wall with an irrigation conduit ran along the north border of the site.

Gardberg 1970:49, pls.2, 23, 32, 78

Jebel Agurjai Island - See Kulubnarti IV

**Akasha I****Settlement, Christian****21.06.N./30.41.E., [21-N-10], West Bank****About twenty poorly preserved stone buildings occupied the site.****Mills 1965:10****Akasha II****Walled Settlement/ Fortress, Christian****21.06.N./30.42.E., [21-N-11], West Bank****A stone enclosure wall was found surrounding fallen detritus. This site is described as similar to 21-N-7 and 21-N-9, Ukma IV and VI respectively.****Mills 1965:10****Akasha III****Settlement, Christian****21.06.N./30.41.E., [21-S-4], West Bank****A highly denuded settlement which contained the remains of several stone buildings.****Mills 1965:10****Akasha IV****Settlement, Christian****21.05.N./30.41.E., [21-S-7], West Bank****A scattering of six poorly preserved small stone dwellings was found.****Mills 1965:10****Akasha V****Settlement, Christian****21.05.N./30.41.E., [21-S-8], West Bank****Approximately twenty mudbrick and stone structures remained at this site.****Mills 1965:10****Akasha VI (Ukma East)****Walled Settlement, Christian****21.07.N./30.42.E., [21-N-1], East Bank**

A mudbrick church was enclosed within a stone wall. Several small stone rooms were noted in the enclosure. It has been speculated that the Makurian customs post of Upper Maqs was located in this region. Chittick 1957:42-4; Mills 1965:10; Vantini 1975:603-4

#### Ali Bek I

Enclosure, Early Christian?

21.48.N./31.12.E., [901.700/636.400 SJE 278], East Bank

A roughly rectangular area was enclosed by stone walls on 3 sides and by the Nile on the fourth. Entrances seem to have been located on the desert side. No evidence of occupation was found in the interior.

Gardberg 1970:48-9, pls.2,22,33:2

#### Ali Bek II - Abka School

Enclosure, Early Christian?

21.48.N./31.12.E., [901.200/636.000 SJE 279], East Bank

An area was enclosed on 3 sides by stone walls and on the fourth by the Nile. An entrance was located on the desert side. The Nile side was very rocky while the other 3 sides were located on steep wadi slopes.

Gardberg 1970:49, pls.2, 22, 33:2

#### Region of Ali Bek I (Abka)

Building, Early - Classic Christian?

21.48.N./31.12.E., [902.100/636.100 SJE 273], Island

The site was similar to SJE 256. House foundations, made of mudbrick and stone, were found associated with a probable saqia site and land which had been previously under cultivation.

Gardberg 1970:50, pls.2, 33:2; Säve-Söderbergh 1962:68

#### Region of Ali Bek II (Abka)

Building, Early - Classic Christian

21.49.N./31.12.E., [902.250/635.800 SJE 274], Island

The site was similar to SJE 256. House foundations of mudbrick and stone were found associated with a probable saqia site and previously cultivated land.

Gardberg 1970:50, pls.2, 33:2; Säve-Söderbergh 1962:68

#### Amada

Settlement, Christian, Late Christian?

**22.43.N./32.15.E., West Bank**

The Pharaonic temple was reused as a church and it was believed to be a monastery by early travellers. An X-Group cemetery was discovered in the vicinity. A 13th c A.D. Arabic manuscript listed Amada as one of the major settlements in Lower Nubia during the Late Christian period. Excavations at Amada during the UNESCO campaign focused largely on C-Group and Pharaonic remains.

Cailliaud 1826:265; Emery and Kirwan 1935:200-8; Griffith 1927:102-3; Monneret De Villard 1935:94-9; Trigger 1965:192; Weigall 1907:106

**Amashkeit Island**

Settlement, Late Christian

21.45.N./31.11.E., [5-X-12], Island

Approximately twenty-five small, rectangular, one-room, buildings with low vaults were found. They were both free-standing and constructed against rock outcrops. The site was similar to Gendal Irki. The lower courses were made of stone and the upper courses of mudbrick.

Adams 1962b:FN.VI:50; Adams and Nordström 1963:14; Vercoutter 1955-6:4

**Ambikol I**

Settlement, Christian

21.20.N./30.51.E., [16-S-3], East Bank

The remains of a settlement were found.

Mills 1965:8

**Ambikol II**

Settlement, Christian

21.19.N./30.51.E., [16-R-2], East Bank

The remains of a settlement were found.

Mills 1965:8

**Ambikol III**

Settlement, X-Group/Early Christian

21.18.N./30.51.E., [16-W-2], East Bank

Remains of a settlement were found.

Mills 1965:8

**Ambikol Island I****Settlement, Christian****21.19.N./30.52.E., [16-R-9], Island****The remains of a few, scattered, stone buildings were discovered.****Mills 1965:8****Ambikol Island II****Settlement, Christian****21.19.N./30.51.E., [16-R-10], Island****The denuded remains of a settlement were found.****Mills 1965:8****Argin I****Occupation (debris), Christian****c. 22.01.N./31.21.E., [24-V-15], West Bank****No visible structures were noted however, a concentration of sherds and occupation debris covered roughly thirty square metres in this area.****Nordström 1961a:FN.II****Argin II****Occupation (debris), Christian****c. 22.01.N./31.21.E., [24-V-16], West Bank****No structures were visible however a collection of sherds and occupation debris were found covering about thirty square metres.****Nordström 1961a:FN.II****Argin III****Occupation (debris), Christian****c. 22.03.N./31.21.E., [24-W-20], West Bank****No structures were visible but a concentration of sherds and occupation debris were found covering approximately twenty square metres.****Nordström 1961a:FN.II****Argin IV (Dêr el Bohl/Bollor)**

**Building - Monastery?, Classic Christian?**

c. 22.03.N./31.21.E., [24-W-3], West Bank

A church (Adams type 3, Adams 1977:475) and possibly a small monastery was found. A large building with long barrel-vaulted chambers was associated with the church. Few doorways into these rooms were noted suggesting access was gained through the vaulted ceilings and the possible existence of an upper floor. Unfortunately it was denuded in 1899 and no remains were noted in 1959. The building was made of mudbricks that measured 35x6x17 cm.

Clarke 1912:57-9, fig. 1, pl. 10; Monneret De Villard 1935:209-210

**Argin V**

Occupation (debris), Early Christian

22.01.N./31.21.E., [24-V-12], West Bank

The site measured approximately 5x15 metres. Debris was scattered across the surface. It included loose mudbricks, door pivots, Christian sherds and pillar fragments. Possibly it forms part of Argin 24-V-13.

Nordström 1961a:FN.II:23-25; 1962b:44

**Argin VI**

Settlement, late X-Group - Early Christian

22.00.N./31.21.E., [24-V-13], West Bank

The site covered an area of roughly thirty square metres. Remains of mudbrick walls and several layers of stratification were found.

Nordström 1961a:FN.II:25-26; 1962b:44

**Argin VII**

Settlement? Occupation (debris), Meroitic, X-Group, Christian

21.58.N./31.21.E., [6-B-8], West Bank

The remains of a large Meroitic settlement containing a pottery kiln were reported here. Sherds of Meroitic, X-Group and Christian date were also found suggesting later occupation on the site.

Adams 1962d:64, pl.XVIa; Nordström 1962b:44

**Argin VIII**

Settlement? Occupation (debris), Christian

21.58.N./31.21.E., [6-B-20], West Bank

No complete structures were found. The site contained the denuded remains of a mud floor covered by sand

and occupation debris, including a stone column and potsherds. It covered an area of roughly thirty square metres.

Nordström 1961a:FN.II:19-20; 1962b:44; Trigger 1965:197

#### Argin IX

Settlement, Late Christian

c. 21.58.N./31.21.E., [6-B-21], West Bank

A large unexcavated mound measuring 50 metres in diameter and with a height of five metres was found. Traces of mudbrick walls were discovered and the site surface was covered with Late Christian sherds.

Adams 1961a:FN.IV:71

#### Arminna West (Ambinira)

Settlement, Early - Late Christian

22.25.N./31.47.E., West Bank

An Early Christian church and two buildings were excavated at the north end of the site while a large Classic Christian village was found at the south end of the floodplain. Squatters occupied the aforementioned church at the beginning of the Late Christian period and the population appears to have declined. The two early buildings consisted of a series of irregularly shaped rooms constructed of mudmortar, stone and infrequently mudbricks. Pottery was found associated with the structures. The Classic Christian village consisted of mudbrick houses, densely packed together, and situated along narrow roads. Individual rooms were generally quadrilateral in shape. Floors were generally of compressed mud and /or earth and some evidence of vaulted roofing was discovered. In many cases it is difficult to separate one house from another as dwellings share walls and many building modifications were made. No central village plan or organization is evident although a large public building was located in the southwest part of the townsite. The excavators noted that little Early Christian material was recovered from the townsite or the southern half of the plain whereas artefacts from the north half dated primarily to this period (Weeks 1967:28).

Monneret De Villard 1935:129; Oates 1963:161-171; Simpson 1962a:28-39; 1962b:36-46; 1963a:41-43; 1964:15-23; Trigger 1965:193; 1967; Weeks 1967; Weigall 1907:124

#### Ar-Rammal (Ar-Ramal/Er-Rammal)

Monastery, Classic? Christian

22.24.N./31.46.E., West Bank

No excavations or clearances were conducted at Ar-Rammal however, the visible walls were recorded by

Monneret De Villard. The site measured at least 125 x 60 metres in size. Stone and red brick buildings were constructed parallel to the Nile on the alluvial plain. They were apparently surrounded by an enclosure wall that incorporated the walls of several rooms within the monastery. Stairs were found in several of the rooms indicating usage of an upper floor or roof. A church [Adams type 3c (Adams 1965:138)] was seemingly centrally located with long, barrel-vaulted east-west orientated rooms to the north of it and other more square rooms (possibly a group of monks' cells) to the south. A water cistern was located to the west of the church. Another church had been constructed to the north of the monastery on the terraces and was associated with cemetery a. A total of five Christian cemeteries (designated a-e) were situated in the vicinity.

Monneret De Villard 1935:131-42; Trigger 1965:194

#### Arukonarti (Abka)

Building, Early - Classic Christian

21.50.N./31.14.E., [5-T-55, 905.600/639.850, SJE 256], Island

A house, constructed of stone and brick, and a saqia site were surrounded by previously cultivated land. The house was located at the top of a bluff. The walls were 60-70 cm thick. The structure measured approximately 20x25 metres.

Gardberg 1970:49-50, pl. 24; Säve-Söderbergh 1967-8:247; 1962:68

#### Ashkeit I

Building, Early Christian

22.01.N./31.22.E., [924.975/652.275, SJE 102], East Bank

Two walls, presumably part of a rectangular structure at one time, were found. They were made of mudbrick and stone. The mudbricks measured 30x16x10cm.

Gardberg 1970:44

#### Ashkeit II

Building, Christian - Islamic

22.00.N./31.22.E., [924.375/652.450, SJE 53], East Bank

A small single room, with 2 entrances, was constructed against a rock terrace. It measured about 3.0x1.5 metres and was made of flat sandstone pieces mortared together. During the Islamic period the structure was enlarged.

Gardberg 1970:44-45, pls.1,20,31,70,71



**Askut****Walled Settlement, Classic? - Late Christian****21.38.N./31.06.E., [11-L-1], Island**

Mudbrick unit houses were constructed along the girdle walls of the Pharaonic fortress. Most were quadrilateral in shape, subdivided into long rectangular rooms and vaulted. On average they measured 6.0-8.5 metres x 6.0-8.5 metres. Storage cellars were located beneath some of the floors. Some of the buildings may have had two-storeys.

Badawy 1963; 1964a; 1964b; 1965; 1966; n.d.

**Attiri I****Settlement, X-Group/Early Christian****21.26.N./31.00.E., [16-J-15], East Bank**

The ruins of a settlement were located.

Mills 1965:6

**Attiri II****Settlement, X-Group/Early Christian****21.24.N./31.00.E., [16-J-13], East Bank**

The denuded remains of a settlement were found.

Mills 1965:6

**Attiri III****Settlement, X-Group/Early Christian****21.24.N./30.58.E., [16-J-11], West Bank**

The denuded remnants of a settlement were found.

Mills 1965:7

**Attiri IV****Settlement, Late Christian?****21.26.N./31.00.E., [16-J-16], Island**

A large settlement which contained many preserved structures and a small church.

Arkell 1950:31; 1961:pl. 21b; Chittick 1957:48; Mills 1965:7

**Biga (Bige)**

**Monastery? Christian**

24.01.N./32.53.E., Island

The presence of a church and two associated Christian cemeteries may suggest a settlement somewhere in the vicinity. Weigall (1907:35) noted a small mudbrick structure, possibly of domestic nature, on the northeastern part of the island and suggested that it might be a monastery. Although it was highly denuded, stairs to an upper floor or roof were noted as were a couple of rectangular, vaulted rooms. The remains measured roughly 12.5 x 16 metres.

Blackman 1915; Monneret De Villard 1935:11-15; Reisner 1910:104-111; Trigger 1965:186; Weigall 1907:35

**Bugga (El-Mashad)**

Occupation/Settlement? Christian - Islamic

24.01.N./32.53.E., East Bank

A church, identified as that of St. Michael and overlooking the river, was said to be located near a Fatimid mosque. A fragment of a Christian inscription was found near the base of the minaret.

Evetts and Butler 1895:274; Monneret De Villard 1935:17-18; Trigger 1965:187

**Buhen**

Settlement, Early Christian?

21.55.N./31.17.E., [6-F-1], West Bank

A settlement, of Meroitic and possibly Blemmyan date, was located roughly 300 metres south of the Buhen fortress. Houses were constructed of sandstone slabs laid in "herringbone" fashion and bricks and were rectangular in shape. This settlement was originally reported as a monastery however, there is little evidence to support this assumption. A church was also found in this location and the Pharaonic temple within the fortress appears to have been reused as a church as well indicating some Christian occupation. A few, small, Christian mudbrick houses were found within the fortress along the Middle Kingdom fortification wall near the Pharaonic temple.

Mileham 1910:48-56; Monneret De Villard 1935:212; Randall-MacIver and Woolley 1911: vol I., 125; vol II., 6-7, 100, pl. 68b, plan f; Trigger 1965:197

**Dal I**

Settlement, Christian

21.01.N./30.36.E., [21-V-5], East Bank

A settlement site was located.

Mills 1965:11

Dal II

Building, Christian

21.03.N./30.37.E., [21-W-2], West Bank

A mudbrick dwelling comprised of three rooms was found.

Mills 1965:12

Dal III

Settlement, Christian

21.01.N./30.34.E., [21-V-1], West Bank

A small settlement was found.

Mills 1965:12

Debeira West I (Dibeira West)

Building - Monastery? Classic - Late Christian

22.06.N./31.22.E., [24-R-1], West Bank

A large mudbrick building was found. It contained many rooms grouped about a tower with a staircase. Shinnie and Shinnie (1978:42) date the site between A.D. 900-1100. Originally it was reported as a church however excavation did not confirm this hypothesis.

Shinnie 1965:190-94; Shinnie and Shinnie 1978:41-44; Trigger 1965:196; Verwers 1962:29; Vercoutter 1957:111-112

Debeira West II (Dibeira West, Hammâm el Farki, Hammâm Kissé)

Buildings, Early - Classic Christian

22.06.N./31.22.E., [24-R-3], West Bank

Three mudbrick structures were found. Buildings A and B were well constructed, two storeys high and vaulted. Building A had a tower. Building C was irregular in shape with very thin walls. It contained a kitchen and a workshop area. Pottery from C primarily consisted of large, handmade store jars. All structures were founded directly on sand. Some surface remains indicated that R-3 may have been connected to R-1 in some way. This site was originally reported as being a church. Additionally the name Hammâm el Farki was used to describe church 24-R-2.

Clarke 1912:59-62, pl. XI; Mileham 1910:14; Vercoutter 1955-56:9; Vercoutter 1957:112; Shinnie 1965:190-94; Shinnie and Shinnie 1978:41-44; Trigger 1965:196

**Debeira West III (Dibeira West)****Settlement, Early Christian****22.05.N./31.22.E., [24-R-6], West Bank**

A thirty metre section of "gutter" ran northwest across the site. It was blocked at one end with sandstone. Associated, but not connected with it, were denuded remains of small, scattered mudbrick houses.

**Verwers 1961b:FN.IV:27-29****Debeira West IV (Dibeira West)****Settlement, Early - Classic Christian****22.05.N./31.22.E., [24-R-8], West Bank**

A large town of mudbrick and stone structures with two clear phases of occupation and several levels within each was discovered. The first phase of occupation is dated to the Early Christian period while the second phase is of Classic Christian date. The Early Christian occupation was represented by one building, wall fragments to the west of it and several rooms to the north. The main building consisted of three rectangular rooms, each subdivided in two, arranged parallel to each other and two towers at the north end of the building flanking the entrance. A stone arch roofed the entry. Access to the structure was indirect through a passage running east to west with an opening in the west. Stone and mudbrick were used in construction. The original function of this structure is uncertain. Shinnie and Shinnie (1978:6-7) speculate that it may have served a religious or public function. The latest periods of occupation in it are domestic in nature. Other Early Christian buildings were of less sturdy construction being primarily constructed of walls one mudbrick thick. Rooms were quadrilateral in shape. Individual walls may have been shared between units and it is difficult to discern separate units. Floors were of mud and domestic artefacts were recovered. These buildings were constructed directly upon the rock surface. A period of non-occupation separated the Early from the Classic Christian settlements whereupon the large Early Christian building was reoccupied and several modifications made to it. The settlement became much larger. Houses were constructed of mudbricks and some were two storeys high. Rooms were quadrilateral in shape and their number and distribution within each house varied. Three latrines (rooms 80, 121a, 136a) were noted. One unusual house was found in the southern part of the excavation. It consisted of four quadrilateral rooms (134 - 136), a courtyard and a staircase and was built of mudbricks and stone slabs. Mudbricks formed the bottoms of the walls while stone and mortar the upper portions. An isolated building (117) was found to the north of the village. It was constructed of stone with some mudbrick additions and contained two ovens. It may date to the Late Christian period.

**Clarke 1910:62; Mileham 1910:14; M.D.Villard 1935:209; Shinnie 1963:258-63; 1964:208-12;****1975:116-120; Shinnie and Shinnie 1978:3-17; Trigger 1965:196; Vercoutter 1957:112; Verwers 1962:29**

**Debeira West V (Dibeira West)****Building, Early Christian****22.05.N./31.22.E., [24-R-59], West Bank**

Two mudbrick structures, containing many rooms, were built on top of each other and separated by a period of abandonment. The first structure was founded on the bedrock and contained about twelve irregular shaped rooms with walls of varying thicknesses and stability. The thickest walls were constructed of stone and mud mortar while others less sturdy were built of mudbricks set on stone foundations. Some very thin walls (5 cm thick) were built of mudbricks. The second structure had approximately ten rooms and was built upon the levelled remains of the first one. Mudbricks were used for construction. Domestic materials were associated with both dwellings. These buildings were probably part of an ecclesiastical complex which included church 24-R-2.

Shinnie 1964:24; Shinnie and Shinnie 1978:19-29

**Debeira West VI (Dibeira West)****Building - Monastery? Early Christian****22.05.N./31.22.E., [24-R-60], West Bank**

A large complex of mudbrick rooms, including a tower, was found. Originally it may have been surrounded by an enclosure wall and may be a monastic complex. Several distinct groups of rooms were noted within. The first consists of a rectangular unit of three, thick walled rooms (XXV, XXVI, XXX) associated with the tower. Shinnie and Shinnie (1978:35) suggest it may have had a defensive function and probably was the first area to be constructed. Rooms were later added to this unit (e.g., XI, X). Another unit consisted of rooms II, III, IV, IVa, and V. It was well built along an east-west axis and had the overall appearance of a church with the apse situated at the wrong end. Its function is uncertain. A kitchen area was noted in rooms XIV and XIIIa. Several smaller rooms were noted to the north of this unit. Vaulted roofing was found in some of the rooms while others appear to have had flat roofs of mud, matting and wood.

Shinnie 1964:214-5; 1975:116-120; Shinnie and Shinnie 1978:33-41

**Debeira West VII (Dibeira West)****Settlement, Classic - Late Christian****22.05.N./31.22.E., [24-R-44], West Bank**

Mudbrick structures were found immediately to the south of the church (24-R-2) and had been constructed after its abandonment. Finds suggested that the Church was occupied by squatters prior to the construction of these houses. Within one house two barrel-vaults oriented perpendicular to each other were preserved as was a stairway and an oven.

Shinnie and Shinnie 1978:33

Debeira West VIII (Dibeira West)

Enclosure, Christian

22.06.N./31.22.E., [24-R-7], West Bank

A circular mudbrick enclosure entered by a narrow doorway was located. A mud column stood at centre of the enclosure. The structure may originally have been roofed and measured 5.6 metres in diameter.

Verwers 1961b:FN.IV:29-31

Deir Island I (Abu Sir)

Settlement, Early/Late Christian ?

21.50.N./31.13.E., [5-T-41], Island

The scattered remains of several stone and mudbrick houses were constructed on the rocky outcrops of the island. Some stone walls measured as much as 50-70 cm thick. Associated ceramics dated from all Christian periods and were primarily utility wares.

Adams and Nordström 1963:42-44; Nordström 1962a:FN.IV:6-7

Deir Island II (Abu Sir)

Settlement, Late Christian

21.50.N./31.14.E., [5-T-42], Island

Two groups of rectangular or square, stone houses, measuring between 2x2 metres and 3x5 metres were found at the site. The first was a collection of approximately 15 dwellings, while the second group were scattered across two rocky promontories. The structures were constructed of granite slabs and sand and some houses had mud floors. A rectangular, storage pit, measuring 2.5 x 3.0 metres and with a depth over 1 metre, was located near an rocky outcrop. Stone slabs (20-50 cm) covered the pit and its interior was mudplastered. An oval pit, measuring 2.6 x 3 metres and similarly constructed, was also found. Late Christian sherds were scattered across the site.

Adams and Nordström 1963:42-44; Nordström 1962a:FN.IV:7-8

Dibger (Dibgir)

Walled Settlement, Early Christian?

23.15.N./32.54.E., East Bank

A stone wall enclosed a quadrilateral area of the village on three sides with the Nile forming the fourth side. The village was situated on a rocky outcrop overlooking the Nile. Virtually all of the structures within

the enclosure were destroyed by the time of Monneret De Villard, however some were preserved to the north and south of it. The dwellings were constructed of rough stone and were irregular in shape. Most contained one or two rooms, many of which were somewhat rounded and were built to incorporate indigenous rocky outcrops. The majority of structures were small in size measuring around five metres at their greatest point. One rectangular mudbrick and stone building containing at least four rooms was noted. A Coptic inscription fragment was found and a Christian cemetery was located nearby.

Donadoni 1969:30; Monneret De Villard 1935:56-61, figs.48, 50-53; Trigger 1965:189; Weigall 1907:85

#### Diffinarti I (Gemai East)

Occupation (debris), Christian

c.21.48.N./31.11.E., [5-X-3], Island

Mudbrick rubble and scattered debris were found on the surface.

Vercoutter 1955-6:4

#### Diffinarti II

Settlement, Late-Terminal Christian?

21.33.N./31.03.E., [11-P-1], Island

This was a large settlement that contained about 50 mudbrick rooms. Some walls were preserved three metres high. A small, Late-Terminal period church was found associated with the village.

Crowfoot 1927a:150; Mills 1965:5; M.D.Villard 1935:230-1, fig.220

#### Dorsinkid

Enclosure, Early Christian?

21.49.N./31.14.E., [902.825/638.625, SJE 168], East Bank

The site is comprised of a rectangular enclosure which was constructed of stone casemate walls on 3 sides and which used the bordering Nile as the fourth side. The walls were roughly 2 metres high and 2 metres thick.

Gardberg 1970:48, pls.2,22,33:1,77

#### Dukule Island (Abu Sir)

Settlement, Late Christian

21.49.N./31.13.E., [5-T-45], Island

Many small, widely scattered, stone houses were found in the midst of several rocky outcrops. This settlement was also associated with a kiln (5-T-46) and a Christian cemetery and might be considered an

extension of Deir II. Late Christian ceramics were associated with the site.

Adams 1962a:FN.V:92; Adams and Nordström 1963:42-44

#### Duweishat I

Settlement, Christian

21.23.N./30.57.E., [16-O-5], East Bank

A denuded settlement was found.

Mills 1965:7

#### Duweishat II

House, Christian

21.20.N./30.55.E., [16-S-1], East Bank

A single, small, denuded structure was discovered.

Mills 1965:7

#### Duweishat III

Settlement, X-Group/Early Christian

21.24.N./30.58.E., [16-O-7], West Bank

The remains of a settlement were found.

Mills 1965:7

#### Duweishat IV

Settlement, X-Group/Early Christian

21.24.N./30.58.E., [16-O-10], West Bank

The ruins of a settlement were discovered.

Mills 1965:7

#### Duweishat V

Settlement, Christian

21.23.N./30.56.E., [16-N-6], West Bank

Approximately twenty-five stone dwellings and a mudbrick church were found. Most houses were one to two rooms in size.

Mills 1965:7



**Duweishat VI****Fortified Building - Tower, Christian?****21.21.N./30.56.E., [16-N-7], West Bank****The remains of a fortified tower were found.****Mills 1965:7****Erbenarti - See Kulubnarti IV****Fantau****Monastery? Christian****c. 20.40.N./28.08.E., West Bank?****This site has never been located. Cailliaud reported a well preserved monastery in this location.****Caillaud 1826:363; Jeuté 1994:71; Monneret De Villard 1935:240; Żurawski 1994:321****Faras West I****Walled Settlement, Monastery & kilns, Early - Late Christian****22.13.N./31.29.E., [24-E-15,16, 24-E-21, 24-E-23, 24, 26, 24-J-1], West Bank**

**Enclosed within an extensive, quadrilateral fortification wall was a large settlement. A tower was constructed at each corner of the enclosure and four bastions and a gate were situated on the west wall facing the desert. Another gate was set in the south wall. From north to south the length of the enclosed area was approximately 281 metres. The interior length of the north wall was roughly 102 metres and that of the south wall about 183 metres. The korn was approximately 16 metres high and stone, red brick and mudbrick fragments and sherds covered its surface. It included at least four churches (Rivergate, Citadel, The Cathedral, and Church of the South Slope) some of which underwent several rebuilding phases. Prior to functioning as a church, the Rivergate church appears to have been a royal residence. Mudbrick ruins were noted on the north and east sections of the mound. Six Christian period mudbrick houses were cleared in this area. Their exterior walls measured roughly 55 cm thick while the interior walls were 60 cm thick. Some X-Group houses were discovered in the southwest corner of the enclosure. Pharaonic and Meroitic stone blocks were found reused in later structures. Remains of X-Group, Meroitic and Islamic structures were also discovered and several Christian cemeteries were noted in the vicinity. A large, mudbrick building (24-E-21), possibly originally a monastery but later remodelled to function as a ceramic factory was also found. It contained around thirty rooms and was constructed of mudbricks. Six stratified levels were excavated. Some rooms were barrel-vaulted. The structure measured roughly 25x25 metres. Excavation of the western half was conducted by the Oxford University Expedition between 1911-1912.**

The remainder of the structure was excavated by the SAS-UNESCO survey in 1960.

Adams 1960:FN.III:3-49; 1961c:30-43; 1961d:10; Clarke 1912:66, pl. XIV; Godlewski 1979; Griffith 1926:63-65, pl. XLI-XLV; 1927:57-115; Jakobielski 1972; 1982; Karkowski 1986; Kolodziejczyk 1975; 1982; Martens-Czarnecka 1982a; 1982b; Michalowski 1962a:9-11; 1962b; 1964; 1965a; 1965b; 1967; 1970; 1974; 1979; Mileham 1910:23-39; Monneret De Villard 1935:135-140, 188-193, fig. 175; Nordström 1962; Ratynski 1982; Trigger 1965:195; Vantini 1970

#### Faras West II

Settlement, Early Christian

22.13.N./31.28.E., [24-E-30], West Bank

Three to five small houses were discovered. Each contained two to three rooms and were built of mudplaster and sandstone, frequently laid in 'herringbone' fashion. They were constructed along a former Nile channel and some were built against a sandstone escarpment. Two houses were fully excavated during the SAS-UNESCO survey.

Adams 1961d:10; Trigger 1965:195; Michalowski 1962a:12; Verwers 1960:FN.I:11-15; 1961a:FN.III:29; 1961c:28-29

#### Faras West III

Settlement? Occupation (debris), Early Christian ?

22.11.N./31.27.E., [24-I-18], West Bank

Christian sherds were scattered across the surface of the site. Traces of small mudbrick structures, just beneath the surface were found. Although not actually excavated, these buildings were thought to be small in size and highly denuded.

Verwers 1961a:FN.III:9; 1962:21

#### Faras West IV

Anchorite dwelling, Early Christian

22.13.N./31.28.E., [24-E-22], West Bank

A New Kingdom tomb was converted into a single monk's cell or chapel. The walls were covered with painted Coptic texts identifying a former inhabitant as Theophilus. Within the texts he describes himself as "this least of monks who wrote these writings" and dates the inscriptions to 731 A.D. (Adams 1977:487).

Adams 1961a:10; 1977:487; Griffith 1927:81-91; Michalowski 1962a:10; Mileham 1910:23

Farkeit

**Settlement, Christian**

21.37.N./31.06.E., [11-L-16], Island

A small settlement was found.

Mills 1965:5

**Farki I**

Enclosure, Early Christian?

21.51.N./31.15.E., [906.300/641.300 SJE 244], East Bank

A large enclosure constructed of stone casemate walls, which measured 260x170 metres, was found located on a rise overlooking the Nile and a steeply sloped wadi. The remains of a mudbrick house were found in the interior but it could not be dated.

Gardberg 1970:47, pls. 2, 22, 32

**Farki II**

Enclosure, X-Group - Early Christian?

21.50.N./31.15.E., [904.900/640.400 SJE 142], East Bank

A stone casemate wall which enclosed an area roughly 200x250 metres was found. The wall was 220-230cm high and 220cm thick. Two possibly three gates were located on the east side. The west and south walls bordered on a steep slope.

Gardberg 1970:47-48, pls. 2, 22, 32, 75, 76

**Gaminarti Island (Abu Sir)**

Walled Settlement, Late Christian

21.49.N./ 31.13.E., [5-T-47], Island

Between 36 to 48 small, stone rooms covered an area 60 metres square. Many of the rooms appear to have been interconnected rather than discrete as found at other Late Christian sites in the Batn el Hajar but as the site was greatly disturbed this could not be determined for certain. Test excavations were inconclusive. The settlement sat on an outcrop and was enclosed by a thick, stone girdle wall. A pottery kiln was associated with the settlement. A church (5-T-4) located nearby was also constructed on a rocky peak. A Christian cemetery (5-T-49) was found just outside the settlement.

Adams 1962a:FN.V:95-96; Adams and Nordström 1963:32-4, 42-44

**Gebel Adda (Medinet Adda)**

Walled Settlement, Settlement, Fortified buildings, Early - Terminal Christian

### 22.18.N./31.37.E., East Bank

The site consisted of a fortified town located on a slight hill and a series of cemeteries found on the lower plain around the village (primarily to the east and southeast) and a quarry to the south of the village.

Artefactual material from the site ranged in date from the Meroitic to Islamic periods. At least seven churches (from all Christian periods and clearly not in use simultaneously), were noted. A small, two room mudbrick structure was found near the Early Christian cemetery and may be of this date. The mudbrick enclosure wall surrounding the settlement was of Meroitic date and continued to be used throughout the Christian period. Little remained of the Classic Christian period within the fortification due to extensive clearances conducted during the Late Christian period however, some Classic Christian houses were found outside the enclosure, though nearby, to the west and south. Several Coptic and Greek text fragments were found associated with these houses. Arabic tombstones dating to this period were also recovered giving "clear proof that at this time the population of Adda consisted of both Christian and Muslim communities living side by side" (Millet 1976:59). The enclosure wall was rebuilt and renovated during the Late Christian period. Two large Late Christian houses, designated 100 and 101, were excavated and seem to be of the fortified "castle-house" type as identified by Adams (1994:15, 17). Another large structure, initially constructed in the 13th century A.D. and designated the "palace" by excavators, also appears to have been somewhat fortified. It was two to three storeys high, U-shaped and constructed of stone, red brick, plaster and mudbrick. Additional rooms were added through time. A large "monumental" entrance was found on the building's east side facing a contemporary church. Access to the first floor was gained via the upper floor. Unfortunately little remained of the upper floor or floors. Adams (1994:13) noted some architectural similarities between the Late Christian buildings at Gebel Adda and Qasr Ibrim.

Adams 1994b:13, 15, 17; Clarke 1912: 73-74; Millet 1961-1962; 1963:147-65; 1964:7-14; 1967:53-63; Monneret De Villard 1935:176-81; Trigger 1965:194; Weigall 1907:141

### Gebel Sahaba

Walled Settlement, Late Christian

22.00.N./31.22.E., [923.800/652.300 SJE 51], East Bank

Stone casemate walls formed rectangles which measured 3x3-5 metres or circles with diameters of approximately 3.5 to 4 metres. They were located both inside and outside the Pharaonic fortress walls and were identified as either hut foundations or tent pitches.

Gardberg 1970:45-46, pls.1,2,21,31,45,61,72-4; Säve-Söderbergh 1967-8:245

### Gemai East I

Settlement, Christian

21.44.N./31.11.E., [11-D-6], East Bank

A small denuded village was noted.

Mills 1965:3

Gemai East II

Settlement, X-Group - Early Christian

21.41.N./31.11.E., [11-I-3], East Bank

A very large, denuded settlement was noted.

Mills 1965:3

Gemai East III

Settlement, Christian

21.40.N./31.11.E., [11-I-6], East Bank

A small, denuded settlement was found.

Mills 1965:3

Gemai West I

Settlement, Christian

21.46.N./31.11.E., [5-X-37], West Bank

Mudplastered magazine pits, two saqia with drainage ditches and the remains of several stone houses were found. The site was very denuded.

Adams and Nordström 1963:fig.1; Nordström 1962a:FN.IV:42

Gemai West II

Building, Early Christian

21.45.N./31.11.E., [5-X-41], West Bank

The house was rectangular in shape and constructed of stone and mud mortar. Four rooms were preserved. Foundations were laid in "herring bone" fashion. The structure measured approximately 5 metres square.

Nordström 1962c:FN.V:1-2

Gemai West III

Building, X-Group-Early Christian

21.47.N./31.09.E., [5-X-29], West Bank

An oval storage room, made of small stones and mud, was associated with a building constructed of stone

with mud mortar. The structure contained 6 or 7 rooms and measured roughly 7 metres square.

Adams and Nordström 1963:30; Nordström 1961c:FN.IV:39-41

#### Gemai West IV

Basin, Christian

21.47.N./31.09.E., [5-X-30], West Bank

An oval basin measuring 380x200-215 cm, was constructed of stones 10 - 20 cm in size. The interior was lined with sand and mud plaster. The original depth could not be determined. The remains of a stone gutter running towards the Nile was found.

Adams and Nordström 1963:14, fig.1; Nordström 1962a:FN.IV:35

#### Gemai West V

Settlement, Christian

21.42.N./31.10.E., [11-D-12], West Bank

The survey located a denuded settlement.

Mills 1965:3

#### Gemai West VI

Settlement, Christian

21.42.N./31.10.E., [11-D-13], West Bank

Some mudbrick and stone walls were located on this small settlement site. There were also a few associated graves.

Mills 1965:3

#### Gemai West VII

Settlement, Christian

21.42.N./31.10.E., [11-I-9], West Bank

A small settlement with a few walls remaining was found.

Mills 1965:4

#### Gemai West VIII (Qasr 'Antawu/ Deyr Solleh/ Deir Solleh)

Settlement, Monastery? Christian

21.45.N./31.11.E., [11-D-1], West Bank

A mudbrick church and associated cemetery were found here. Foundations of the church were constructed

of stone and the ceilings were vaulted. The suggestion that trace remains of structures located near the church form part of a monastery remains unconfirmed.

Clarke 1912:50, pl. VI, fig. 3; Jeuté 1994:69; Mills 1965:3; Monneret De Villard 1935:227, fig.218

#### Gendal Irki (Gemai West) (Figir Antawu)

Settlement, Monastery? Classic? - Late Christian

21.46.N./ 31.10.E., [5-X-1], West Bank

A large settlement containing multi-roomed buildings, some over one-half kilometre in size, was discovered and excavated by the SAS. Over 100 rooms were found. The buildings were constructed of stone with mudbrick vaults and some shared common walls. Unfortunately the structures were highly denuded. The most recent buildings incorporated Classic and Late Christian sherds into the walls. Two large mudbrick churches were located within the settlement although by the time of the UNESCO Nubian Campaign the eastern church, noted by Monneret De Villard and Clarke, had disappeared. The remaining central church was of Classic Christian date (Adams type 4; Adams 1977:475). The buildings were grouped around a "small but substantial mud brick building, perhaps part of a monastery, which may, like the church, date from the classic period" (Adams and Nordström 1963:40).

Adams 1962:FN.VI:24-33; 1964:218; Adams and Nordström 1963:35-36, 40; Clarke 1912:50-52, pl. VII, figs. 1, 2; Mileham 1910:12-13; M.D.Villard 1935:223

#### Genissab

Occupation, Late Christian

21.51.N./31.15.E., [907.150/640.600 SJE 257:II], Island

Large concentrations of sherds and many house foundations were noted but not investigated by the Scandinavian Joint Expedition.

Gardberg 1970:49; Säve-Söderbergh et al. 1981:154, pl. 69

#### Ger Belat

Settlement, X-Group - Early Christian?

23.34.N./32.52.E., West Bank

A small village was located near the opening of Khor Kalabsha. The houses were made of drystone construction. Most were small in size consisting of two or three irregularly-shaped rooms. A Greek graffito was found near the site and sherds were scattered around the area.

Monneret De Villard 1935:29-31, figs.18-20; Trigger 1965:188

**Gezeira Dabarosa I****Walled Settlement, X-Group - Classic Christian**

21.57.N./31.20.E., [6-G-6], West Bank

A large settlement site, measuring approximately 500x200 metres, was located overlooking the Nile and running parallel to it. The site included Early and Classic Christian mudbrick houses and some X-Group houses made of mud and stone. Many of the X-Group houses were constructed of courses of stones laid in "herringbone" fashion while this technique was not evident in the Early Christian houses. Christian houses were noted to have thicker walls, mudbrick vaulting, stairways, and niches in the walls. Remains of a circular cistern and terracotta pipe were located within the village and thought to provide irrigation for trees. Pot sherds and animal bones were found scattered throughout the site. Most bones were found exterior to the dwellings. Pig remains were found only associated with Christian contexts. A thick, stone and mud wall ran along the western edge of the village and probably enclosed it on at least three sides. A church was constructed roughly at the centre of this wall within the village. A cemetery was located nearby.

Adams 1962d:65; Hewes 1964:180-83, fig.3; Trigger 1965:197; Verwers 1961b:FN.IV:69-83; 1962:30-33, 48, fig.4

**Gezeira Dabarosa II****Quarry, Christian?**

21.56.N./31.20.E., [6-G-10], West Bank

Chisel marks on a sandstone rock face covered an area roughly 3x10 metres. Some Christian sherds and a cup were found on site.

Nordström 1961a:FN.II:27; 1962b:50

**Gindinari (Gindinarri)****Settlement, Classic Christian**

22.22.N./31.41.E., [964.90 x 685.80], West Bank

A church, Adams' type 3c with a small chapel attached to the north, was found at this settlement site. Remains of many poorly preserved houses were found around it. A wide variety of house forms were noted. One-room, irregular-shaped structures, rectangular dwellings, containing two rooms and square buildings consisting of one long rectangular room orientated perpendicular to three smaller rectangular rooms were noted.

Adams 1965:128; Monneret De Villard 1935:166-8, fig.157, 158; Smith 1962:45; Trigger 1967:194



**Gushum (Ambikol)****Settlement, Christian****21.19.N./30.53.E., [16-R-8], Island****A small settlement was found containing the remains of stone structures.****Mills 1965:8****Ikhmindi I****Settlement, Early Christian****23.02.N./32.41.E., West Bank****Scattered, rough stone buildings were found north of the walled settlement of Ikhmindi. These structures were constructed against a rocky outcrop. Christian sherds were spread throughout the area.****Smith 1962:102; Trigger 1965:190****Ikhmindi II****Walled Settlement, Settlement, Early Christian****23.02.N./32.41.E., West Bank****Three sides of a roughly square area containing a village, was enclosed by a bastioned stone wall while the fourth side was protected by a steep cliff bordering the Nile. Two fortified gates were present, one in the north wall and the other in the south wall. Like Sabagura, the desert wall was reinforced by two corner towers. A church was located in the centre of the enclosed village and a road ran from the north to the south gates past it. Adams noted that "the orderly and uniform arrangement of the buildings [within the enclosure] is clearly indicative of central planning, and contrasts sharply with the helter-skelter plan of the typical Nubian village" (Adams 1977:494). Drystone construction was used for much of the lower storeys while vaults and upper levels were of mudbrick. Staircases were evident in several of the buildings and exterior walls were frequently shared by separate houses. A long, rectangular barrel-vaulted room was the core unit of building construction. Early Christian pottery was scattered across the site and several cemeteries were located nearby. An inscription found within the settlement describes it as founded for "the protection of men and beasts" (Donadoni 1959:458-65; 1969:29-30). A church was located outside the enclosure to the south.****Donadoni 1959:458-465; 1969:29-30; Monneret De Villard 1935:66-76, figs.54-64; Stenico 1960; Trigger 1965:190****Kagnarti****Settlement, Christian**

**21.37.N./31.05.E., [11-L-8], Island**

A group of approximately twenty small stone and mud buildings were found on a rocky outcrop on the island. The houses usually contained 2-3 rooms, storage bins and occasionally an oven. A church was located in this settlement.

Mills 1965:5; 1966:15

**Kajinjera (Semna)**

Settlement, Christian

**21.31.N./30.58.E., [10-Y-7], Island**

The ruins of a settlement were found.

Mills 1965:6

**Kalabsha**

Walled Settlement, Early - Classic? Christian

**23.33.N./32.52.E., West Bank**

A partially preserved sandstone wall enclosed a village situated on a cliff, overlooking the Nile (northwest of the Kalabsha temple). Structures within the village were built of sandstone blocks and bricks and pot sherds were scattered on the surface. Remains of other structures, possibly houses, were noted on the surrounding hills. The Kalabsha temple itself was reused as a church. Another church was found southwest of the temple and a cemetery and quarry were located in the vicinity. The layout of the enclosure, village and churches is similar to that at Ikhmindi, Sabagura and Sheikh Daud (Adams 1977:494).

Curto et al. 1965:77-120; Donadoni 1969:31; Firth 1909:36; Monneret De Villard 1935:36-42; Trigger 1965:188; Weigall 1907:75; Wright 1972:12-13

**Karanòg**

Settlement, Meroitic - X-Group, Early Christian

**22.44.N./32.04.E., West Bank**

Although the majority of the settlement at Karanòg dates to the Meroitic and post-Meroitic or X-Group periods, portions of the castle and houses 8 and 9 were in use during the Christian period. Evidence suggests "no more than a partial occupation by scattered poor families who squatted in the ruins of the deserted town and tried to make habitable a few of its less dilapidated chambers" (Woolley 1911:3). Fragments of two Coptic manuscripts were recovered from the castle as well as some Christian pottery, seals and lamps. Structural modifications were made to room 22, an open court in the castle, with two bins of broken mudbrick and plaster being added. Rooms 6 and 7 of house 8 were of drystone construction and

were probably added during the Christian period. Much of the earlier walls are of mudbrick. House 9 was largely of sandstone and mudplaster construction and was similar in plan to that of a church.

Monneret De Villard 1935:105-106, fig.88; O'Conner 1993:86-107; Trigger 1965:193; Woolley 1911

#### Kasanarti Island (Gemai West)

Settlement, Classic - Late Christian

21.47.N./31.11.E., [5-X-32], Island

This large settlement contained over one-hundred rooms and had two distinct periods of occupation. Phase I consisted of a series of large, stone built rooms in the centre of the site while during phase 2 narrow, vaulted mudbrick rooms were added. This settlement was built on top of an earlier one of Meroitic and X-Group date [5-X-60]. Some Early Christian pottery was found however, no structures were identified. Adams hypothesized that the Early Christian settlement had either been restricted to the highest parts of the island or all traces of it had been removed by inundation (Adams 1964:221).

Adams 1962-3:FN.VII; 1964:218-222; Adams and Nordström 1963:40

#### Kashkush (Ashkeit)

Building, Early Christian

22.01.N./31.22.E., [24-W-43, 925.180/625.600, SJE 339], East Bank

A three room house constructed of stone and mudplaster was discovered. The dwelling measured approximately 5x8 metres. Two small ovens were located outside the structure against one of the walls.

Gardberg 1970:43-4, pls.1, 19, 31, 69

#### Kasr Iko (Abka)

Settlement, Classic - Late Christian

21.51.N./31.15.E., [5-T-5], Island

Two, well preserved, churches (Adams type 4; Adams 1977:475) situated close together, were discovered. The surrounding settlement was scattered and consisted of houses constructed of mudbrick and stone found in varying states of preservation. No cemetery was located. The remains of six houses were excavated. They were square and contained two rectangular rooms. Bricks used in construction measured either 34x17x8 cm or 35x18x10 cm.

Almagro et al. 1963:189-91; Velo 1963

#### Kisinarti (Abu Sir)

Walled Settlement, Late Christian

21.49.N./ 31.12.E., [5-T-51], Island

The site was located on top of a rocky outcrop overlooking the Nile. A thick, stone wall surrounded a church and two houses made of stone and mudplaster. The church measured approximately 9x9 metres and had three aisles and an apse. It appears similar to the church found at Gaminarti (5-T-4). The houses were small in size (ca. 5x6-7 metres) and simple in plan. Each consisted of two rooms with mudplastered floors. The site covered an area of 60x70 metres and was fully excavated by the SAS in 1962. Christian period graves were located nearby.

Adams and Nordström 1963:32-34, 38, pl. Va; Nordström 1962a:FN.IV:16-20

Kulb I

Settlement, Christian

21.03.N./30.39.E., [21-X-1], East Bank

A small settlement was located.

Mills 1965:11

Kulb II

Settlement, Christian

21.04.N./30.39.E., [21-S-12], West Bank

A small settlement was found containing a few houses. A stone and brick church was reported nearby.

Clarke 1912:45-9, pl. V, fig. 2; Mills 1965:11

Kulb III

Fortress/Walled Settlement/ Monastery?, Classic Christian

21.03.N./30.39.E., [21-R-3], West Bank

A very large fort with an enclosure wall that stood roughly three metres high was situated on a rocky outcrop. The remains of several mudbrick and stone buildings were noted within the interior. Buildings within the interior were irregular in shape, utilized rocky outcrops in their construction and neighbouring structures shared walls. Structures were built along the enclosure wall and incorporated it. Individual dwellings contained between one and four rooms, usually quadrilateral in shape. Greek graffiti was found on sherds and manuscript fragments. Ceramic finds from the fort suggest it was occupied from 800 to 1000 A.D.. A domed church (21-R-1) was located nearby on a lower terrace and no traces of an associated cemetery have been located.

Clarke 1912:45-9, pl. V; Dinkler 1970:267-72; 1971:456-91; Dinkler and Grossman 1971:143-46; Mills 1965:11; Monneret De Villard 1935:234-5

**Kulubnarti I****Settlement, Late - Terminal Christian****21.03.N./30.39.E., [21-S-2], Island**

This site was comprised of a very large, well preserved, mudbrick settlement. At least 65 dwellings were found and several were two storeys in height. No settlement plan was readily apparent and buildings were scattered across the site often incorporating natural rock outcrops. The earliest structures were of two differing varieties. The first were irregularly shaped and appear to have been made of brush with thin stone and brick foundations. Post-holes were associated with these structures. The number of rooms within seems to have been between two and six however this remains uncertain due to their fragmentary preservation. The second type was an irregularly shaped building constructed of either rough stone or thin stone slabs. Several of the rough stone houses were believed to have functioned as outdoor kitchens and animal pens. Construction of mudbrick and stone unit houses and two storey castle houses followed. A castle house (D1-3) with a tower and fortified enclosure was also found on site. This settlement included a small church with painted plaster. The site is thought to have been continuously occupied from A.D. 1100 to A.D. 1500/1600. It has also been occasionally occupied in recent times. Two Christian and post-Christian cemeteries, were located near the Kulubnarti settlements. One was located on the island and the other on the west bank.

Adams 1970:143; 1994a; 1994b:14-24, 26-31, 33-37; Burckhardt 1822, repr.1968:78; Clarke 1912:49-50, pl.VI, fig.2; Mills 1965:11; M.D.Villard 1935:233-234; Shinnie 1955:96-97, pl. XV

**Kulubnarti II - omitted**

**Kulubnarti III****Settlement, Walled Settlement, Monastery? Classic Christian****21.04.N./30.40.E., [21-S-10], Island**

A small settlement was situated on a rocky outcrop overlooking the river. In times of high Nile this peak became an island. Three distinct phases of occupation were noted, two dating to the Classic Christian phase and the third to the post Christian period. The end of the second Classic Christian occupation probably extended into early in the Late Christian phase. Settlement was scattered across a series of rocky terraces and around the base of the outcrop. Five Classic Christian houses were found on the summit from both periods of occupation. They were irregular-shaped and of flimsy construction similar to the early houses at Kulubnarti I. Natural rock features were incorporated into their construction. At least seventeen structures were spread across the upper and middle terraces, most of which were on a level designated terrace D. The majority of these buildings were occupied during both Classic Christian phases. A drystone retaining wall,

one metre thick, reinforced and enclosed terrace D. Irregularly-shaped brick built rooms lined the length of the terrace. Most were single rooms that opened on to a long corridor. Single rooms grouped together, were labelled as houses by the excavator although none of the rooms were interconnected. An entrance gate was situated in the middle of the terrace and reached from the base of the outcrop. During the second Classic Christian occupation many of the walls were doubled in thickness and the gate was modified. A Classic Christian church was also located with the west bank cemetery (21-R-2).

Adams 1970:142, 147-8; 1994b:197-232

#### Kulubnarti IV

Walled Settlement, Meroitic - X-Group?, Late - Terminal Christian

21.04.N./30.10.E., [21-S-9], Island

A small scattered settlement was located on a small island (Erbenarti) to the north of Kulubnarti. Several different types of houses were discovered including seven round stone huts, five single-storey mudbrick and stone 'unit' houses and one two-storey mudbrick 'unit' house. Five mud (jalus) and stone dwellings probably dating to the 18th c A.D. were also found. None of the round, stone huts were enclosed within a girdle wall. Portions of three adjoining enclosure walls were found surrounding some of the unit houses. The stone huts usually contained only one room. The 'unit' houses were approximately rectangular and were subdivided into at least three long rectangular rooms. This site was referred to by Mills as Jebel Agurjai island and confused with 21-S-10.

Adams 1970:142, 148; 1994b:233-54; Mills 1965:11

#### Kulubnarti V

Settlement, Classic? Late Christian

21.04.N./30.10.E., [21-S-41], Island

Approximately 12 irregular stone huts were spread across a small ridge. Natural rock formations were incorporated into the structures. Most contained one or two rooms and measured about 2x2 metres. The site was greatly denuded and not excavated. No objects were recovered.

Adams 1994b:267

#### Kulubnarti VI

Settlement, Late Christian

21.04.N./30.09.E., [21-S-43], Island

Three mudbrick 'unit' houses were located on the top of a ridge. Traces of Greek or Old Nubian inscriptions were painted on the wall of one dwelling.

Adams 1994b:266-7

**Kulubnarti VII**

Settlement, Classic - Late Christian

21.03.N./30.09.E., [21-S-45], Island

Approximately 40 irregular stone houses were scattered across the highest elevations on the west part of the island. The settlement covered an area of roughly 1000x 200 metres. These buildings contained one or two rooms and were generally round or square.

Adams 1994b:267

**Kumuki**

Settlement, Christian

21.21.N./30.55., [16-S-5], Island

A small settlement constructed of stone and mudbrick was discovered.

Mills 1965:7

**Marcos Island (Morgos)**

Monastery? Christian

23.49.N./32.56.E., Island

Weigall noted structures, sherd scatters and brick fragments and suggested the site might be that of a monastery. He noted one primary structure and several separate, smaller buildings on the south end of the rocky island. None of the construction remained when visited by Monneret De Villard roughly twenty years later.

M.D.Villard 1935:23; Trigger 1965:187; Weigall 1907:60

**Masmas**

Building, Christian

22.35.N./31.54.E. [Map ref. 987.35/707.30], West Bank

A rectangular, wind-eroded structure was noted by Smith. It stood 1.5 metres high and contained both A-Group and Christian sherds. The A-Group sherds were believed to have originated from a nearby cemetery. The building was constructed of stone and mud mortar and the occasional mudbrick.

Smith 1962:52; Trigger 1965:193; Weigall 1907:123

**Matuge Island I (Abu Sir)**

**Building, Late Christian**

21.50.N./31.13.E., [5-T-39], Island

A small, two-room, stone house was located on a slope at the north end of the island. Two rectangular rooms formed a square measuring approximately 6x7 metres. The stone walls were roughly 70cm thick and were made of rough "ashlar" masonry.

Adams 1962a:FN.V:89; Adams and Nordström 1963:42-44

**Matuge Island II (Abu Sir) (Geziret Thêt Matuga)****Building, Late Christian**

21.49.N./31.12.E., [5-T-40], Island

Small, rectangular, mudbrick structure which measured 230x330 cm was found on site. The walls were one course thick (ca. 20cm). The floor was made of clay. It and the interior wall faces exhibited evidence of repeated burning, probably from cooking fires. Two cemeteries were also reported on the island by the SAS survey. Clarke (1912:52) recorded the presence of a basilica church and some associated structures which he suggested may have been a monastery surrounded by an enclosure wall. This remains unconfirmed.

Adams 1962a:FN.V:88; Adams and Nordström 1963:14, 42-44; Clarke 1912:52, pl. VIII; Jeuté 1994:68-9

**Mediq I (Madeyq)****Settlement, Christian**

22.48.N./32.35.E., West Bank

A series of small, stone houses were reported from the above location.

Smith 1962:96; Trigger 1965:191

**Mediq II (Madeyq)****Settlement, Christian**

22.47.N./32.35.E., West Bank

A series of small, stone-built shelters, similar to those at Mediq I were reported.

Smith 1962:96; Trigger 1965:191

**Mediq III (Madeyq)****Settlement, Christian**

22.54.N./32.35.E., West Bank

A large Christian settlement covering an area over 100 metres in size was found. A church was situated in



the southern half of the site and excavated by Firth. The site itself was highly denuded. Clarke and Monneret De Villard suggested that an unexcavated stone building found about 30 metres south of the church was a monastery. This remains unconfirmed.

Clarke 1912:81-2; Firth 1915:233-34; Jeuté 1994:60; Smith 1962:98; Monneret De Villard 1935:54-6; Weigall 1907:96

#### Mediq IV (Madeyq)

Building, Christian

22.52.N/32.35.E., West Bank

The remains of a single Christian house situated on the top of a cliff were noted.

Smith 1962:98

#### Meili Island (Gemai West)

Settlement, Late Christian

21.45.N/31.11.E., [5-X-43], Island

This site was similar to Gendal Irki. It consisted of about fifteen small stone and mudbrick houses scattered across the island. Some were freestanding but most were built against rock outcrops and bluffs.

Adams 1962b:FN.VI:49; Adams and Nordström 1963:40

#### Meinarti Island (Abd el Qadir I)

Settlement, Late Meroitic - Terminal Christian

21.51.N/31.15.E., [6-K-3], Island

The site measured roughly 90x220 metres and was twelve metres high. The excavator found eighteen stratigraphic levels. The settlement was very large and comprised of mudbrick houses, a church and cemetery. Numerous rebuildings and structural modifications were noted. Sherds were scattered across the site and upon excavation it was discovered that the site was occupied from the Late Meroitic through to the Terminal Christian period. Environmental changes, particularly in the Nile level were observed in the excavations and excessive flooding forced the temporary abandonment of the site at the beginning of the Classic Christian period. A monastery possibly founded during the late Classic Christian period, appears to have flourished during the Late Christian phase.

Adams 1963:FN.I; 1963-4:FN.II-IV; 1964:222-240; 1965a:148-176; 1968:174-207; 1977:488-93; Crowfoot 1927b:230-231; M.D.Villard 1935:217-221; Sherif 1964:249-250; Vercoutter 1957:pl. 10;

#### Melik el Nasr I

**Settlement, X-Group/Early Christian**

21.18.N./30.53.E., [16-V-4], East Bank

The denuded remains of a settlement were found.

Mills 1965:8

**Melik el Nasr II**

Settlement, X-Group/Early Christian

21.17.N./30.47.E., [16-U-2], East Bank

Remains of a settlement were discovered.

Mills 1965:8

**Mirgissa I**

Building, Early Christian

21.49.N./31.11.E., [5-S-10, Mirgissa site ref. VI], West Bank

A large, rectangular mudbrick building, measuring 15x18 metres, was found overlooking the Nile downstream from the Mirgissa fort. Due to wind erosion only the lowest courses of the walls were preserved. The structure contained numerous amphorae and drinking vessel fragments and an arabic ostrakon. One wall was found stamped with seal impressions. Possibly it functioned as a "tavern" or a caravanserai. Adams and Nordström tentatively identified it as a church or chapel but subsequent examination by Vercoutter did not confirm this identification (Adams and Nordström 1963:fig.1).

Adams and Nordström 1963:14, fig 1; Vercoutter 1964:60; 1970b:35, fig.4

**Mirgissa II**

Building - House, Late Christian

21.49.N./31.11.E., [5-S-16, Mirgissa site ref. V], West Bank

The foundations of a small, single dwelling were constructed of granite. The upper courses of the walls were probably constructed of mudbrick but only decayed bricks with silt, stones and sherds were found at the time of excavation. One room contained a mud floor beneath which a skeleton, oriented east-west, was discovered. This burial lacked grave goods but a slave's iron was discovered five metres away from it. This site was initially believed to be Pharaonic in date (Adams and Nordström 1963:fig.1).

Adams and Nordström 1963:fig.1; Nordström 1961b:FN.III:35-36; Vercoutter 1964:60; 1970b:35, fig.4

**Mirgissa III**

Settlement, X-Group - Early Christian

21.48.N./31.10.E., [5-S-24], West Bank

Two rectangular, stone and mudbrick houses were located on a slope running towards the river. Remains consisted of mud floors, foundations (referred to as "basements") and sherds. Four cooking pots were found in the floors of one of the buildings.

Adams and Nordström 1963:30; Nordström 1961b:FN.III:40-42

Miskenarti

Settlement, Late Christian?

21.27.N./30.58.E., [16-E-13], Island

A Turkish fort was found constructed on the ruins of a Christian settlement.

Mills 1965:6

Mohsen el Din (Mohsen ed-Din)

Building, X-Group - Early Christian?

ca. 23.32.N./32.53.E., West Bank

A single, drystone building consisting of two rooms, one square and the other oval in shape was found. Construction of this building is similar to that at Ger Belat. A rectangular hole measuring 1.6x2 metres was located approximately two metres from the building. Its function is uncertain however, it may be an installation for holding water (Monneret De Villard 1935:42).

Monneret De Villard 1935:42, fig. 21; Trigger 1965:188

Mowrada (Gamai East)

Fortified Building, Late - Terminal Christian?

21.47.N./31.11.E., [5-X-2, 899.025/633.975, SJE 162], East Bank

A rectangular structure was located on a rocky outcrop overlooking the Nile. It exhibited three building phases, the last of which could Turkish in date. It contained a tower, measuring roughly 9x10 metres, with a staircase in the north-east corner and was constructed of mudbrick of varying sizes, each size corresponding to a different building period. Large mudbricks 37-38x18-20x8-9 cm in size were associated with the earliest building phase. This structure has been tentatively identified as a 'castle house' by Adams. A small mudbrick building was situated to the south of the larger one and was described by Gardberg (1970:52) as an "outpost".

Adams 1994b:15; Gardberg 1970:51-2, pls.2, 27, 28, 82-5; Vercoutter 1955-6:4

Mugufil I

**Walled Settlement, Late Christian?**

21.37.N./31.06.E., [11-L-2], Island

Approximately 30 small, mudbrick and stone houses were enclosed by a thick, stone wall roughly one metre wide. The settlement covered an area roughly 60x22 metres and was located on a cliff overlooking the river on the south-east part of the island.

Mills 1965:5; 1966:15

**Mugufil II**

Settlement, Christian

21.37.N./31.06.E., [11-L-3], Island

Most of the island was covered in small stone and mud houses consisting of 2 to 3 rooms each. They usually included storage bins and occasionally ovens and were found in groups of 2 to 4.

Mills 1965:5; 1966:15

**Murshid West**

Settlement, Late Christian?

21.40.N./31.07.E., [11-I-1], West Bank

This large settlement contained several two-storey mudbrick houses. On average, they measured 5x5 metres. The ground floor of these structures consisted of a series of vaulted chambers that were entered from the upper storey. Adams has tentatively identified these structures as 'castle houses'.

Adams 1994b:15; Mills 1965:4; 1966:13-4, pl. IIb; M.D.Villard 1935:228; Wheeler 1932:256

**Nabash I (Mirgissa)**

Walled Settlement, Late Christian

21.48.N./31.11.E., [5-S-31], Island

The site covered roughly 150x250 metres. It comprised approximately 100 small, roundish, one-room, stone houses enclosed within a stone wall, 2 to 3 metres thick. The girdle wall followed the contours and rocky promontories of the island so that it was situated on the highest elevations. Entry into the settlement was through a gate although no bastions or towers were found. The settlement also included a stone building with six, rectangular rooms. In addition to those of Late Christian date, Pharaonic and Meroitic sherds were also recovered from the site and the original fortification was believed by the excavators to be Pharaonic in origin.

Adams 1962b:FN.VI:19-22; Adams and Nordström 1963:36, 38

**Nabash II (Mirgissa)****Walled Settlement, Late Christian****21.48.N./31.11.E., [5-S-32], Island**

The site measured about 50x100 metres and was surrounded by a massive stone wall. Approximately twenty-four semicircular stone huts were found in the interior. Most were built against the enclosure wall. This site is thought to have replaced Nabash I [5-S-31].

Adams 1962b:FN.VI:17-18; Adams and Nordström 1963:36, 38

**Naga Abdallah****Settlement, Christian****22.46./32.33.E., West Bank**

A small settlement was located just to the north of Wadi el-Arab. One brick dwelling was cleared. It was a square, two-storey structure with three interconnected chambers and a stairwell on the ground floor. It measured roughly 8x8.5 metres. Bricks used in construction measured 32x16x7 cm. Remains of a church were found to the north of the settlement. An X-Group cemetery was reported in the vicinity.

Emery 1930:121; Monneret De Villard 1935:89-93

**Naga el Gama (Naga' Eg-Gama')****Building, Anchorite's dwelling? Christian****c. 23.24.N./32.55.E., West Bank**

A small two-room, roughly rectangular building was constructed against the cliff face. It measured approximately 4.8x4.4 metres and seems to have been made of a combination of rough-hewn rectangular blocks and irregular shaped ones. The cliff face it self was used as one side of the structure. Remnants of a rectangular bin were found in the corner of the smaller room. M.D.Villard (1935:44) suggests that the structure may have been occupied by an anchorite. A Coptic inscription containing the name Theodore or possibly Theodoros was found on the rock face nearby and may refer to an/the inhabitant of the building.

Monneret De Villard 1935:44, fig. 33; Trigger 1965:189

**Naga el Sheima (Nag` el-Scheima)****Walled Settlement, Early - Classic Christian****22.57.N./32.37.E., West Bank**

A bastioned, stone wall enclosed a quadrilateral area on three sides. The fourth side was protected by the Nile and a steep, rocky embankment. Within the enclosure long rectangular rooms were arranged perpendicular to the enclosure walls and a church was located near the centre. Like Ikhmindi, buildings in

the interior appear to have an ordered and uniform arrangement. Lower walls were constructed of drystone construction while upper storeys were made of mudbrick. Mudbrick sizes changed through time from 37x20x8 cm around the 7-8th centuries A.D. to a more square brick measuring 32x16x8 cm in the 9th century A.D.. The majority of rooms were rectangular in shape and roofed with mudbrick vaults, although some wooden roof beams were recovered. In the northern section of the enclosure the remains of a road running east-west were found. The excavators noted that structures were deliberately arranged with reference to the road and were built at regular intervals to the north and south of it (Kromer 1979:134). Another church and remains of some buildings were found outside the enclosure in the south and a cemetery was found nearby. Monneret De Villard reported a monastery in the region however, this remains unconfirmed. Four anchorite cells were discovered to the south of the site.

Bietak and Schwarz 1987; Bietak 1981:54; Firth 1927:45, 212-213, pl. 16; Jeut  1994:60; Kromer 1964:38ff; 1967; 1979:131-36; M.D.Villard 1935:77-78; Schwarz 1986:385ff; Trigger 1965:191; Weigall 1907:95

Nag' Umm Haqabat

Building, Christian

22.53.N./32.35.E., West Bank

The remains of a single house, located overlooking the Nile on the top of a cliff, were reported.

Smith 1962:98

Philae

Walled Settlement, Monastery? Early - Late Christian?

24.01.N./32.53.E., Island

Five of the Pharaonic temples present were used as churches (e.g. Temples of Hathor and Imhotep etc.) and two churches were built. An associated fortified settlement was reported here and Greek inscriptions of the 5th and 6th centuries A.D. record work being conducted upon the enclosure wall (Bernand 1969:233, 282-85). The wall may have been constructed much earlier to protect the site after the withdrawal of the Roman troops under the Roman emperor Diocletianus. Lyons (1897:27) describes the site as "covered with the debris of mud brick houses" and noted that stone blocks from the temples had been reused within the houses and churches. The rise of the water level in 1902, caused by the Aswan dam, removed all traces of the mudbrick buildings. It has been suggested by Coquin (1991:1955) that a 10th century A.D. manuscript (British Library Or. 7029) may suggest the presence of a monastery on the island, headed by a Bishop however, little physical evidence supports this proposal. Concerning the length of Christian occupation on the site; the cult of Isis was suppressed on Philae by the Byzantine emperor Justinian during the 6th

century A.D. thus making Christianity the official religion there. Abu Salih (Evetts and Butler 1895:274-75) noted two churches on the island during the 12th century A.D..

Adams 1977:336-38, 417; 1991: 1954-55; Bernard 1969; Clarke 1912:89-94, pl.XXIV; Coquin 1991: 1955-58; Evetts and Butler 1895 :274-75; Grossman 1970:29-41; Haeny 1985:232-33; Leclercq 1939:692-93; Lyons 1897; 1908b; Maqrizi 1900:549; Monneret De Villard 1935:2-11, figs. 1-7; Trigger 1965:186, 146

### Qasr Ibrim

Walled Settlement, Settlement, Monastery, Early - Late Christian

22.39.N./32.00.E., East Bank

Qasr Ibrim was a large concentrated urban site occupied continuously from about 1000 B.C. to A.D. 1812. Early Christians continued to occupy X-Group houses. These were generally square in plan, contained two rectangular rooms and were constructed of stone and mudmortar. Internal walls could also be constructed of mudbrick and the floors were of mud. The Taharqa temple was converted into a church and a cathedral was constructed using blocks from the earlier Meroitic temple. A monastery seems to have been adjacent to the church. The city was enclosed within a wall of Meroitic date. Many of the X-Group and Early Christian structures were levelled to create a plaza between the church and cathedral during the Classic Christian period. Much of the enclosure wall was in poor condition at this time. Adams suggests that "throughout the Classic Christian period it seems evident that Qasr Ibrim was primarily a religious and pilgrimage centre, the large open plaza having been intended perhaps to accommodate the large numbers of religious visitors. ... there is no evidence of important commercial or administrative activities at this time" (Adams 1978:29). The enclosure wall was rebuilt during the Late Christian period and settlement became more concentrated within the site. It appears probable that the site became the primary residence of the Eparch at this time and many manuscripts of both administrative and commercial nature were discovered. Approximately 25 Late Christian houses were found including the residence of the Eparch. Houses were generally of stone and mudmortar construction with beaten earth floors. Several pits were scattered across the site. As they were not associated with any structures the excavators suggest that "large areas within the walls were left uninhabited" (Adams et al 1983:55) during the Late Christian period. The latest Christian dwelling on the site may be the "watchtower" built on the east end of the podium. It was originally at least two storeys high, constructed of mudbricks and measured approximately 8 x 8 metres in size. The ground floor consisted of two rectangular rooms, one of which displayed evidence of barrel vaulting. The walls were 50 cm thick. Bosnian occupation overlay this building.

Adams 1982:25-33; 1994b:11-46; Adams et al. 1983: 43-60; Browne 1989; Clarke 1912:75-81; Frend 1972:224-29; 1974:33-41; 1985:51-53; Horton 1991a; 1991b; Monneret De Villard 1935:108-120; Plumley 1964: 3-5; 1966:9-12; 1967: 3-5; 1970a:12-18; 1970b:129-34; 1971:8-24; 1975a:6-16; 1975b:5-27;

1975c:101-107; 1975d; 1982a:99-110; 1982b:129-40; 1982c:15-24; 1983:158-70; Plumley and Adams 1974:212-38; Plumley and Browne 1988; Plumley et al. 1977:29-47; Trigger 1965:193; Weigall 1907:12

#### Qasr el Wizz

Monastery, Classic - Late Christian

22.13.N./31.29.E., West Bank

An enclosure wall surrounded a dense, ordered cluster of contiguous buildings arranged around a church (Adams type 3, Adams 1977:475). The site was located just to the north of Faras West. Monastic cells, a refectory, a latrine, kitchen, bakery and possible pottery workshop were identified. Walls were constructed of sandstone and plastered in some areas. Bricks were used for vaulted roofing, niches and doorways. Some buildings (i.e., monks' cells) may have been two storeys high. Two distinct building phases were noted, the first being the initial construction of the monastery and the second involved an addition in the southeast corner and modifications of the western entrance. Changes made to the entrance appear to protect and increase the privacy of the inhabitants through indirect access and do not seem to have a defense function. The monastery was situated above a steep slope overlooking the Nile. Based upon the ceramic typology and architecture of the site, the monastery appears to have been founded between A.D. 850 - 950 and was at its peak during the Classic Christian period. Based upon the number of dining benches Scanlon (1972:21) estimated that the monastic community may have numbered between twenty and twenty-four individuals. A cemetery was found in the vicinity as were several Coptic tombstones.

Clarke 1912:73; Monneret De Villard 1935:183-85; Scanlon 1970; 1972; Smith 1962:21-22; Trigger 1965:195

#### Qertassi (Kertassi/Qirtas)

Walled Settlement, Christian

23.39.N./32.53.E., West Bank

A Roman period fort was reoccupied during the Christian period. The nearby Ptolemaic temple possibly was reused as a church. Several Greek inscriptions were noted in the area and quarries, certainly in use during the Ptolemaic period and perhaps later, were found in the vicinity. The fort enclosure was rectangular in shape and constructed of stone. A tower seems to have stood against the north wall and another solid, fortified structure was found in the centre of the enclosure. Remains of modern houses, ancient houses as well as stone detritus were scattered across the fort's interior.

Monneret De Villard 1935:24-25; Trigger 1965:188; Weigall 1907:62-63

#### Qurta



**Settlement, Classic? Christian****23.10.N./32.45.E., West Bank**

A pharaonic temple was converted into a church and an X-Group cemetery was located in the vicinity. This site has been identified as a bishopric during the Classic Christian period as several Christian mortuary texts refer to the Bishop of Qurta.

Adams 1977:487; Firth 1927:157; Trigger 1965:190

**Sabagura (Qirsch)****Walled Settlement, Settlement, Early - Classic Christian****23.17.N./32.56.E., East Bank**

A stone, trapezoidal, bastioned enclosure wall, with fortified gates on the north and south sides, surrounded a large settlement at Sabagura. The fort was situated on a steep rocky slope, perpendicular to the Nile. Two round bastions were found on the northeast and southeast corners. The enclosure wall and much of the lower storeys of the houses were of drystone construction while the upper storeys and vaults were of mudbrick. Two churches and an extensive settlement containing many small houses were found outside the enclosure wall along a road that ran parallel to the Nile through the centre of the fort. Three rough stone and mudbrick houses were found in the vicinity of the south church. Two were located near the north church. Many were regular in plan usually with a long rectangular room arranged perpendicular to several smaller square to rectangular rooms. Some of the buildings contained staircases indicating usage of the roof and/or an upper storey. Exterior walls were shared between some units. The structures were built directly on the rock and steps had been cut in the rock surface of some of the steep roads. The arrangement of this site and its buildings is similar to that at Ikhmind and Sheikh Daud.

Clarke 1910:86-87, fig.19, pl.XXIII; Donadoni 1969:30-31; Firth 1912:41-42, pl.XVI, pls.10-11; Monneret De Villard 1935:46-52, figs.35-43; Stenico 1960:31-76; Trigger 1965:189

**Saras I****Settlement, Christian****21.38.N./31.06.E., [11-M-3], East Bank**

A small settlement which was constructed of mudbrick.

Mills 1965:4

**Saras II****Settlement, Christian****21.36.N./31.05.E., [11-L-13], East Bank**

A large, denuded settlement was noted.

Mills 1965:4

**Saras III**

Settlement, Christian

21.35.N./31.05.E., [11-Q-7], East Bank

A denuded settlement was found.

Mills 1965:4

**Saras IV**

Settlement, X-Group - Early Christian

21.33.N./31.04.E., [11-Q-13], East Bank

A denuded settlement site was found.

Mills 1965:4

**Saras West I**

Settlement, X-Group - Early Christian?

21.39.N./31.06.E., [11-H-2], West Bank

The survey located a denuded settlement site.

Mills 1965:4

**Saras West II**

Settlement, Christian

21.33.N./31.03.E., [11-Q-15], West Bank

A small settlement, constructed of mudbrick and stone, was found. Some walls stood 6-7 courses high.

Mills 1965:5

**Semna East I**

Settlement, Christian

21.28.N./30.58.E., [16-E-11], East Bank

Ruins of a settlement were discovered.

Mills 1965:6

**Semna East II**

**Settlement, Christian**

21.28.N./30.58.E., [16-E-12], East Bank

A few Christian graves were found associated with a denuded settlement.

Mills 1965:6

**Semna East III****Settlement, Christian**

21.27.N./31.00.E., [16-J-2], East Bank

A denuded settlement was found.

Mills 1965:6

**Semna East IV****Settlement, X-Group/Early Christian**

21.29.N./30.58.E., [16-E-5], East Bank

A large, denuded settlement was located.

Mills 1965:6

**Semna West****Walled Settlement, Monastery? Early Christian**

21.28.N./30.57.E., [16-E-19], West Bank

Roughly thirty mudbrick rooms and an early period church were found surrounded by an enclosure wall.

The style of church was dated between the 7th and 8th centuries A.D.. The buildings consisted of two to three rectangular rooms and frequently were roofed with barrel vaulting. Objects found on site were domestic in nature. Jeuté (1994:69) suggests that this structure might be a monastery however, there seems little to support this idea as the site appears similar to other Early Christian walled settlements and its location at one end of the second cataract would be conducive to regulating riverine trade.

Jeuté 1994:69; Mills 1965:6; 1967-8:208-10.

**Serra East****Walled Settlement, Late Christian**

22.07.N./31.24.E., [24-N-1], East Bank

A large settlement was enclosed within the walls of a Pharaonic Middle Kingdom fortress. Thick mudbrick walls surrounded the settlement on three sides while a steep slope and the river protected the fourth side.

Stone fragments found running parallel to the river on the west side of the enclosure suggest that there may

have been a thick stone wall protecting the settlement during the Christian period. Most of the Christian houses were situated in the upper part of the enclosure away from the river. The site contained four churches of Adams type 4 (Adams 1977:475) and at least thirty other separate buildings, primarily all 'unit houses'. Their plan generally consisted of two storeys with four or five vaulted, quadrilateral rooms on the lower floor. The skew vault was commonly used and doorways were frequently vaulted. Houses were constructed of large mudbricks, reused Pharaonic bricks, stone, and mud mortar in many cases directly upon the rock surface. Foundation deposits, including bowls, ostraca and fish, were found beneath the corners of some of the houses. Entrances and household debris were found on the ground floor of several of the structures. Two churches were also located outside the enclosure, one to the north and the other to the south. A cemetery surrounded the southern church.

Adams 1994b:13,15, 17, fig.3; Clarke 1912:62-66, pls. XII, XIII; Griffith 1927:57-115; Hughes 1963:121-30; Knudstad 1966:165-86; Mileham 1910:40-47; Monneret De Villard 1935:200-205; Trigger 1965:196

#### Serra West

Building, Christian?

22.07.N./31.23.E., [24-M-14], West Bank

A mudbrick construction founded on sand was located. Bricks were placed on their sides in the foundation layers. It was associated with pottery, ash and slag but the date remains uncertain. The excavators described it as highly denuded and unstratified. A couple of Christian cemeteries and a church were discovered in the vicinity (i.e., 24-M-13, 24-M-11).

Trigger 1965:196; Verwers 1961b:FN.IV:27

#### Serrarti Island I (Abu Sir)

Occupation (debris), All Christian periods

21.49.N./31.12.E., [5-T-51], Island

No structural remains were found however, extremely dense occupational detritus was discovered covering an area measuring 100x200 metres.

Adams and Nordström 1963:fig. 1; Nordström 1961c:FN.IV:21

#### Serrarti Island II (Abu Sir)

Settlement, Late Christian

21.49.N./31.13.E., [5-T-52], Island

The remains of fifteen small stone houses were found scattered amongst the rocky outcrops along the river.

The buildings ranged in size from 2.5x3 metres to 3x4 metres. Some were mudplastered in the interior. Most structures were only one room.

Adams and Nordström 1963:42-44; Nordström 1962a:FN.IV:21-22

#### Shagir Island (Abu Sir)

Settlement, Late Christian

21.49.N./31.12.E., [5-T-53], Island

Two one-room stone buildings and one two-room structure were found amidst the rocky outcrops of the island. They were partially mudplastered on the exterior and contained mud floors. The single rooms measured 3x2.5 metres in size.

Adams and Nordström 1963:42-44; Nordström 1962a:FN.IV:22

#### Shamnarti Island (Mirgissa)

Settlement, Classic - Late Christian

21.49.N./31.12.E., [5-S-30], Island

The site covered 500x1000 metres and consisted of widely scattered, small, stone houses. Most houses tended to be rectangular to semi-circular in shape and were built against vertical rock cliffs. Generally they contained only 1 or 2 rooms that measured between 2x2 and 3x3 metres. Walls were a minimum of 75 cm wide and contained large numbers of sherds. Some houses were constructed against one another. Sherds covered the surface of the site.

Adams 1962b:FN.VI:14-16; Adams and Nordström 1963:14, 27, 42

#### Shargeit Island (Mirgissa)

Settlement, Late Christian

21.48.N./31.11.E., [5-S-33], Island

Approximately thirty scattered, small stone huts were found. They were exactly the same as those found on Nabash I and Shamanarti. Some were freestanding while others were built against cliff faces. Late Christian sherds and some of earlier date were scattered across the site.

Adams 1962b:FN.VI:19; Adams and Nordström 1963:42-44

#### Shatturma

Settlement, Christian

22.41.N./32.26.E., East Bank

Smith noted the robbed and denuded ruins of a small village. A Christian cemetery was found in the

vicinity.

Emery 1935:148; Smith 1962:93; Trigger 1965:192

#### Sheikh Daud

Walled Settlement, Early - Classic Christian

22.44.N./32.11.E., West Bank

The village of Sheikh Daud covered a quadrilateral shaped area defined on three sides by a sandstone enclosure wall and on the fourth side by the Nile and a steep cliff. The fortification wall contained a fortified gate in the centre of the north wall (desert side) as well as corner towers and bastions. A church was located roughly in the centre of the village and dwellings were organized around it in a regular fashion. Streets ran parallel to the enclosure walls. Houses were modular in shape, usually consisting of two long rectangular rooms arranged parallel to each other, e.g. houses I-III. On occasion these were subdivided into smaller square units as in houses IV-VI. The arrangement of this site is similar to Ikhmindi, Sabagura and possibly Kalabsha.

Mileham 1910:4, pl.2; Monneret De Villard 1935:102-104; Trigger 1965:192; Velo 1964; Weigall 1907:108, pl.LIX

#### Shellal

Settlement? Christian

24.02.N./32.54.E., East Bank

A church, (initially of mudbrick, then later constructed of stone on the denuded foundations of the earlier building) associated with several cemeteries in the surrounding area may suggest the presence of a settlement in the vicinity.

Reisner 1910:111-112; Trigger 1965:186

#### Shirgondinarti

Settlement, Early Christian

21.48.N./31.11.E., [901.000/634.200 SJE 396], Island

An area of formerly cultivated land with a probable saqia installation was enclosed by a series of stone walls. Two round, stone house foundations were found.

Gardberg 1970:51, pls.2, 25, 26, 80, 81

#### Songi I

Settlement, X-Group/Early Christian

21.14.N./30.42.E., [21-D-1], East Bank

A denuded settlement was located.

Mills 1965:9

Songi II

Settlement, Christian

21.13.N./30.41.E., [21-D-3], East Bank

The denuded remains of a settlement were discovered. A single mudbrick structure was found still standing.

Mills 1965:9

Songi III

Settlement, Christian

21.12.N./30.41.E., [21-D-4], East Bank

The remains of a small settlement were found.

Mills 1965:9

Songi IV

Settlement, Christian

21.12.N./30.41.E., [21-D-6], West Bank

The remains of a small settlement constructed of stone and mudbrick were discovered.

Mills 1965:9

Songi V

Settlement, Christian

21.12.N./30.40.E., [21-I-1], West Bank

Five small dwellings were found.

Mills 1965:9

Soros Island (Sorosnarti)

Settlement and Fort, Christian

23.36.N./32.54.E., Island

Mudbrick ruins, including the remains of a small fort, and scattered sculpture fragments were found on the island.

Monneret De Villard 1935:27-29; Trigger 1965:188

**Sunnarti (Susinarti)**

Walled Settlement, late Classic? - Late Christian

21.18.N./30.51.E., [16-W-1], Island

On an isolated rocky island, over 12 stone and mudbrick houses were enclosed within a stone fortification wall that stood at least three metres in height and was roughly 2 metres thick. The enclosure wall was roughly triangular, had bastions at the corners, a fortified gate and a secondary entrance. Excavators noted that local terrain was taken into consideration in the construction of the fort and most approaches to the edifice were highly visible. Most of the houses appeared roughly rectangular, contained two rooms and were constructed of mudbrick and stone, however, excavation was not conducted within the fort.

Occupation was thought to have lasted until the 14th or 15th c A.D.. A church was located roughly 300–400 metres south-west of the enclosure. Ceramics from the church largely dated between the 8th and 14th c A.D.. Those from the fort were later dating roughly between the 10th and 14th c A.D..

Chittick 1957:45-7, pl. X; Dinkler 1970:259-72; 1985:2-14; Dinkler and Grossman 1971:122-46; Dinkler, Grossman and Diebner 1968:717-38; Dinkler, Scharabi and Zanker 1971:456-91; Mills 1965:8; Rodziewicz 1988:56-95

**Tafa**

Monastery?, Christian

23.38.N./32.53.E., West Bank

A monastery was recorded in this vicinity by Abu Salih, but no archaeological remains have been found. Jeuté 1993:59; Vantini 1975:336

**Tarnit**

Settlement, Building (monastery?), Classic Christian

22.23.N./31.43.E., [966.400/688.800], West Bank

The settlement was orientated parallel to the river on the alluvial plain and measured at least 220 x 80 metres in size. Most of the ceramics associated with the settlement were domestic in nature. Houses were irregular in shape usually consisting of two to five vaulted, quadrilateral rooms, often with several small, rectangular rooms positioned perpendicular to a longer rectangular room. Remains of a tiled floor were found in one house. Some structures were two storeys high; the upper storey supported upon the vaults of the lower. Although most houses were discrete units, some dwellings shared walls. Construction was primarily of mudbricks measuring 35x18x8 cm in size and the buildings were founded directly upon the



bedrock. Mixed stone and brick construction noted elsewhere in Lower Nubia (i.e. Ikhmindi, Sheikh Dawd, Er-Rammal) was absent here. A small plaza was found roughly in the centre of the settlement and houses were constructed around it. Seven churches were located within the settlement. One appeared to be dedicated to St. Paul, another to St. Raphael and a third (cruciform in shape) possibly to the angels. Silos were noted near three of the churches. A large building, described by Monneret De Villard as a "palace", was found to the west of the settlement near a cemetery on the terraces. It was surrounded by an enclosure wall. The exposed part of the structure revealed a south entrance joining a corridor orientated approximately north-south. This corridor met a second hallway orientated perpendicular to it. Small, rectangular, vaulted rooms were situated on either side of both halls. The east-west corridor ended at a latrine. A staircase to the roof or second floor was found off the north-south corridor to the west. Bricks used in construction measured 40x20x8 cm. Examination by the 1964 Italian mission led them to believe that it was just a large "farmhouse", similar to structures found at Biga and portions of Er-Rammal (Donadoni 1967:24). The presence of graves around the exterior, the enclosure wall and structural similarities to Er-Rammal suggest that it might have been a monastery. Another church was situated neighbouring a cemetery on the terraces to the north of the "palace". Evidence of occupation during the Islamic period was also discovered on the site as were a few sherds of Early and Late Christian date.

Donadoni 1967; M.D.Villard 1935:144-66; 1957:110; Trigger 1965:194

#### Tangur I

Walled Settlement, Late Christian

21.15.N/30.44.E., [15-Y-1], Island

A large oval, stone enclosure wall was found standing approximately 1.5 metres high. The gate was located on the southeast side. Local topography of the island influenced the shape of the enclosure. Dwellings within the fort were small and constructed of stone. A partially preserved mudbrick church, 13-14 c A.D. in date, was located roughly 150 metres to the southeast of the fort.

Breasted 1908:104-105; Chittick 1957:45; Dinkler 1970:262-5; 1985:10-13; Dinkler and Grossman 1971:135-9; Mills 1965:9

#### Tangur II

Settlement, Christian

21.15.N/30.44.E., [15-Y-5], Island

The remains of a small settlement were found.

Mills 1965:9

**Tangur III****Settlement, Christian****21.15.N./30.44.E., [15-Y-6], Island****The denuded remnants of a settlement were discovered.****Mills 1965:9****Tangur IV****Building - House, Christian****21.15.N./30.44.E., [15-Y-7], Island****The remains of a single dwelling, containing seven or eight rooms, was discovered.****Mills 1965:9****Tangur V****Settlement, Late Christian****21.15.N./30.44.E., [15-Y-3], East Bank****Traces of 9 small, round or oval stone dwellings were found. Most contained one or two rooms and were 5 x 2-3 metres in size. The village was largely constructed on the top of a terrace.****Cailliaud 1826:255; Dinkler 1985:10; Dinkler and Grossman 1971:137-9; Mills 1965:map1****Tila****Settlement, Christian****21.26.N./30.59.E., [16-J-5], Island****A large settlement with standing walls was located.****Mills 1965:6****Toshka East (Tushka East)****Anchorite Grotto, Christian****22.30.N./31.53.E., East Bank****Pharaonic tomb II at Toska East was reused during the Christian period by a monk. Two crosses were inscribed in the ceiling and one on a pillar. The entrance was altered to create an arch and to incorporate two mastaba benches along the walls. It was similar to the anchorite cave discovered at Ez Zuma.****Monneret De Villard 1935:121-2; Simpson 1963b:19-20****Turmuki I**

**Settlement, Christian**

21.18.N./30.50.E., [16-V-6], Island

The denuded remains of a small settlement were found.

Mills 1965:8

**Turmuki II****Settlement, Christian**

21.18.N./30.48.E., [16-V-8], Island

Several small, scattered, stone houses were found.

Mills 1965:8

**Turmuki III (Turmukki)****Settlement, Late Christian**

21.17.N./30.47.E., [16-U-1], Island

Two rectangular, two-storey structures were discovered on a rocky outcrop overlooking the Nile. Lower wall courses were constructed of stone while the upper were of mudbrick. Tower A measured approximately 8.25 x 6 metres while tower B was 6 x 5 metres. Tower A was well-preserved, with 5 vaulted rooms on the ground floor. Access had originally been from the upper floor as a secondary entrance had been cut into the ground floor. Five roughly rectangular rooms were found on both floors. The walls on the lower floor were about one metre thick. Thin slot windows allowed light into the upper floor. Little was preserved of Tower B. It also appeared to have 5 rooms on the ground floor and its plan was similar to that of Tower A. Adams has identified these structures as 'castle houses'.

Adams 1994b:17; Dinkler 1985:8-10; Dinkler and Grossman:1971:140-2

**Ukma I****Occupation, X-Group/Early Christian**

21.08.N./30.42.E., [21-N-14], East Bank

Remains of mudbrick walls, standing up to one metre in height were found.

Mills 1965:9

**Ukma II****Settlement, Christian**

21.09.N./30.40.E., [21-H-2], West Bank

The remains of approximately fifteen stone houses were found.

Mills 1965:10

**Ukma III**

Settlement, Christian

21.09.N./30.39.E., [21-I-3], West Bank

The ruins of a settlement were discovered.

Mills 1965:10

**Ukma IV**

Fortress/Walled Settlement, Christian

21.08.N./30.41.E., [21-N-7], West Bank

A stone wall, measuring up to two metres in height, enclosed a small area filled with detritus.

Mills 1965:10

**Ukma V**

Settlement, Christian

21.08.N./30.41.E., [21-N-8], West Bank

A settlement, consisting of about twenty stone rooms, was located.

Mills 1965:10

**Ukma VI**

Fortress/Walled Settlement, Christian

21.09.N./30.40.E., [21-N-9], West Bank

A stone wall enclosed an area filled with debris. This site is similar to 21-N-7 (Ukma IV) although larger in size.

Mills 1965:10

**Ukma VII**

Settlement, Christian

21.09.N./30.39.E., [21-I-4], West Bank

Remains of a large settlement were located.

Mills 1965:10

**Ukma VIII**

**Settlement, Christian**

21.11.N./ 30.39.E., [21-I-2], Island

Remnants of a small settlement, constructed of stone, were found.

Mills 1965:10

**Ushinarti**

**Settlement, Late Christian**

21.41.N./31.11.E., [11-I-8], Island

This was a small well-preserved settlement, constructed primarily of mudbrick. It included a large multi-roomed structure which was possibly a fortified tower.

Donner 1967-8:74, 76-8; 1990:1-4; 1994:3-4; Mills 1965:4

**Uronarti I**

**Settlement, X-Group/Early Christian**

21.32.N./30.58.E., [10-Y-4], Island

A denuded settlement was found.

Mills 1965:5

**Uronarti II**

**Settlement, Christian**

21.32.N./30.58.E., [10-Y-5], Island

A small settlement constructed of stone was found.

Mills 1965:5

**Umm Simbel**

**Settlement, Christian**

22.55.N./32.36.E., West Bank

Smith reports the presence of a large Christian settlement and cemetery just north of a Christian church.

The village measured at least one hundred square metres and was greatly denuded by seabkhim.

Firth 1927:234-235; Smith 1962:98; Trigger 1965:191

**Wadi el Allaqi**

**Building, Anchorite's Dwelling? Early Christian**

23.07.N./32.47.E., East Bank

A small, sandstone enclosure, with its entrance facing the Nile was found by Firth at Wadi el Allaqi. The lower portion of the wall was decorated with "chevron and hatched patterns roughly cut into the stone" (Firth 1927:111). Two stone column fragments were found inside, apparently reused as furniture. Two lamps and a cup were recovered. Some oxidized Late Roman coins were found in a niche in the floor. Sherds scattered around dated to the Early Christian period. A Christian cemetery was located nearby. Firth (1927:111) describes the structure as resembling a "single-roomed cell of about the fifth or sixth century, which was occupied by a hermit." References to monks residing near Allaqi are found in the Arabo-Jacobitic Synaxary.

Firth 1927:111; Jeut  1994:59; Monneret De Villard 1935:64; Trigger 1965:190; Vantini 1975:442

#### Wadi el Arab

Settlement, Meroitic - Early Christian

22.45.N./32.30.E., West Bank

While much of the site, including the wine press appears to date to the Meroitic and X-Group periods, Christian pottery was recovered from houses 6, 7, 18, 21 and portions of house 1. "... it seems that in the Christian period the town was occupied by only a scanty and impoverished Coptic population" (Emery 1935:110). Christian graves were also located in the vicinity. Houses 6 and 7 appear to have been almost continuously occupied and were in use or reused during the Christian period. Rooms 1, 2, and 6 to 10 of house 1 appear to have originated during the Christian period. They are located near two kilns which also contained Christian pottery and were similar in form to some found at Faras. Buildings 18 and 21 are poorly built, single rooms that may have been constructed during the Christian period. Most buildings were made of sandstone blocks founded on sand.

Emery 1935:104-105, 108-148, pl.17; Trigger 1965:191

#### Wadi Qamar

Walled Settlement, Christian

23.52.N./32.54.E., West Bank

A walled settlement was located on a rocky, granite outcrop overlooking the river. Bricks used in construction measured 33x18x10 cm. Two Christian cemeteries, were located nearby.

Monneret De Villard 1935:21; Reisner 1910:199-203, pl. 42a; Trigger 1965:187

#### **ABRI-DELGO REACH - Sites South of the Dal Cataract (Map 2)**

Note: The site name/names are followed in brackets by the name of the administrative district and the longitude and latitude is followed by the site number given by the French-Sudanese survey team.

**Abassiyankissee (Sarkamatto)****Fortified Building, Late Christian****20.56.N./30.35.E., [3-G-12], Dal South, East Bank**

A large, irregularly-shaped, stone building was situated atop a seasonal island. An artificially created slope of large granite blocks enclosed the site. Walls of the structure were constructed of granite slabs measuring 30x20x20cm and mortar. About nine rooms could be differentiated. One was rectangular in shape while the others were ovals or irregular-shaped. The west end of the structure may have contained a platform however this area was greatly denuded.

**Vila 1975:(fasc.2):112-113****Abbakinirki (Koyekka)****Occupation, Christian****20.42.N./30.22.E., [8-H-2C], Dal South, East Bank**

Sherd scatters were discovered on the edge of a khor roughly 775 metres from the Nile.

**Vila 1978b:(fasc.10):40****Abidinirki (Arnyatta)****Occupation, Christian****20.49.N./30.21.E., [2-R-51], Dal South, Island**

Sherds and traces of quadrilateral mudbrick structures covered an area 30x15 metres.

**Vila 1978a:(fasc.9):32****Abidinirki North I (Arnyatta)****Settlement, Christian****20.49.N./30.21.E., [2-R-50], Dal South, Island**

Remains of approximately 30 rectangular, mudbrick houses occupied an area that measured 70x50 metres. A single rectangular, mudbrick building stood slightly apart from the others. It was 7x6 metres in size and constructed of bricks measuring 44x22x11cm. The surveyors suggested that it was a church.

**Cailliaud 1826:364; Monneret De Villard 1935:237; Vila 1978a:(fasc.9):31****Abidinirki North II (Arnyatta)****Saqia, Christian****20.49.N./30.21.E., [2-R-53], Dal South, Island**

Traces of a stone installation, approximately 50 metres of canal, and the remains of an old well were noted.

The well measured 6 metres in diameter. Its superstructure was constructed of red bricks. Christian sherds were discovered in the vicinity.

Vila 1978a:(fasc.9):33

Absire (Dal)

Occupation, Early - Classic Christian

21.00.N./30.34.E., [3-B-5], Dal South, West Bank

Potsherds were found scattered across an area 100x25-50 metres in size within a small sandy depression.

Traces of an irrigation canal were also found however no structural remains were discovered.

Vila 1975:(fasc.2):33

Abu Gebiran (Hamid)

Settlement, Christian

20.39.N./30.18.E., [8-G-37], Dal South, West Bank

The remains of roughly 30 small, circular stone houses were distributed over a 70x50 metre area, about 300 metres from the river. The average diameter of the structures was 2.5 metres. Sebakhim had greatly damaged the site.

Vila 1978b:(fasc.10):102

Abusaida I (Ferka E)

Settlement, Christian

20.53.N./30.35.E., [3-L-8], Dal South, East Bank

Traces of six, one-room, circular stone dwellings were located on a rocky slope roughly 300 metres from the river. The area of the site was 50x20 metres.

Vila 1976:(fasc.3):75

Abusaida II (Ferka E)

Settlement, Late Christian?

20.52.N./30.35.E., [3-L-9], Dal South, East Bank

Between 50 and 100 small, circular stone dwellings were scattered across 4 terraces. The area was rocky and located about 600 metres from the Nile. The site covered an area of 500x100 metres and few sherds were found.

Vila 1976:(fasc.3):76



**Ademdulli I (Tabaj E)****Occupation, Saqia, Christian****20.44.N./30.21.E., [8-B-38], Dal South, East Bank**

Sherds were dispersed across a large area that measured in excess of 1400x100 metres. Traces of a saqia installation were also noted.

**Vila 1978a:(fasc.9):123****Ademdulli II (Tabaj E)****Building, Classic - post Classic Christian****20.44.N./30.21.E., [8-C-9], Dal South, East Bank**

The surface of the site was covered with sherds and brick fragments. Occupation debris was spread over a roughly circular area measuring 30x40 metres and the denuded remains of a single building were noted.

**Vila 1978a:(fasc.9):136****Adjej (Amara E)****Ovens, Late Christian****20.48.N./30.24.E., [2-R-27], Dal South, East Bank**

Five ovens, constructed of fire-reddened bricks, were situated on the alluvial plain approximately 30 metres from the river. Earth associated with the ovens was also fire-reddened. The base of one oven was 3 metres in diameter.

**Vila 1977d:(fasc.8):54****Aliinarti (Aleinarti) (Dal)****Occupation, Classic-Late Christian****20.59.N./30.34.E., [3-B-20], Dal South, Island**

Traces of approximately twenty walls were found on the island. Habitation debris was scattered across an area 50 metres in length from north-south and 20 metres east-west. Most of the occupation appeared to be concentrated on the southern end of the island.

**Vila 1975:(fasc.2):59****Amannag (sud) (Ginis W)****Settlement, Christian****20.50.N./30.28.E., [2-T-63], Dal South, West Bank**

Occupation debris was spread parallel to the Nile across an area measuring 800x75 metres. Traces of 12

mud houses were noted and the remains of 5 beehive-shaped ovens were found. The ovens measured about 80 cm in diameter and were probably originally around 50 cm high.

Vila 1977a:(fasc.5):127-31

Amendenfarki (Amendenferki) (Sarkamatto)

Settlement, Christian

20.57.N./30.35.E., [3-G-8], Dal South, East Bank

Twenty-five houses of drystone construction occupied an area 70x25 metres on a granite outcrop. Houses were round, single rooms with an average diameter of two metres or rectangular, two room structures averaging 3x2.5 metres in size. Local rock outcrops were incorporated into some of the buildings. The site was orientated north-south.

Vila 1975:(fasc.2):109-110

Ammarin (Koyekka)

Occupation, X-Group? - Christian

20.40.N./30.20.E., [8-G-44], Dal South, East Bank

Concentrations of sherds were discovered on a terrace 175 metres from the Nile. Occupation debris covered an area of 200x30 metres.

Vila 1978b:(fasc.10):39

Angureeb (Dal)

Building, Christian

20.58.N./30.34.E., [3-B-27], Dal South, West Bank

A lone mudbrick building was constructed on the plain near the river. It was roughly rectangular in shape measuring 10.5x7 metres and contained eight quadrilateral rooms. Bricks used measured 40x20x10 cm. The remains of an earthen platform (A), millstone (C), a round ceramic plate (dokka) (E) and possibly an oven (B) were discovered.

Vila 1975:(fasc.2):76-77

Arafarre (Ginis E)

Settlement, Christian

20.48.N./30.31.E., [3-P-39], Dal South, East Bank

Along the east side of the Khor Tewfig, about 1.2 km from the river, were 4 one-room, stone buildings. They measured around 1x2 metres and were constructed along the sides of a ridge.

Vila 1977a:(fasc.5):104

**Araseer I (Arasee) (Sarkamatto)**

Silos, Early Christian

20.58.N./30.34.E., [3-B-29], Dal South, East Bank

Twelve circular silos were found at the top of a small hill. Their average diameter was 150cm. A cemetery was located nearby.

Vila 1975:(fasc.2):79

**Araseer II (Arasee) (Sarkamatto)**

Settlement, Early Christian

20.58.N./30.34.E., [3-B-30], Dal South, East Bank

Several small, irregular-shaped, stone houses were situated on a rocky outcrop, covering an area 150x40 metres in size. Sherds were strewn across the area and a pot was found in the floor of one structure.

Vila 1975:(fasc.2):80

**Ardimiri (Amara E)**

Occupation, Early-Classic Christian

20.48.N./30.23.E., [2-R-1"A], Dal South, East Bank

Christian sherds and artefacts were scattered within the Meroitic girdle wall. A Christian tomb and church were associated with the occupation.

Cailliaud 1822:251-3; Hoskins 1835:261-2; Kirwan 1939:28; Linant 1958:11-13; Vila 1977d:(fasc.8):28-49;

Waddington and Hanbury 1922:17-8

**Ardimiri or Ibn Ahmir (Ardimiri / Ibn Ahmir) (Tabaj E)**

Saqia, Christian

20.47.N./30.20.E., [2-V-19], Dal South, East Bank

Remains of 3 saqias, possibly of Meroitic date, were located on the alluvial plain 700 metres from the river. Traces of wells and circular impressions 10 metres in diameter were found.

Vila 1978a:(fasc.9):94

**Arkidukere (Ferka E)**

Settlement, Christian

20.52.N./30.35.E., [3-L-4], Dal South, East Bank

A cemetery and 20 silos were situated on a terrace roughly 250 metres from the Nile. An occupation site containing the remains of 3 saqia canals, some large silos, and a small, rectangular stone and mudbrick structure, was located closer to the river. The building measured 2.7 x 1.6 metres and was constructed partially below ground surface. It consisted of two rectangular rooms, a small, subdivided room and a larger one.

Vila 1976:(fasc.3):66, 69

Aru I (Aro) (Dal)

Magazine? Christian

20.57.N./30.33.E., [3-B-40], Dal South, West Bank

Excavation revealed an oval hollow that may have functioned as a magazine. Sherds were found associated with this feature. A cemetery was located nearby as was a previously cultivated Nile terrace.

Vila 1975:(fasc.2):96

Aru II (Aro) (Dal)

Settlement, Christian

20.57.N./30.33.E., [3-G-17], Dal South, West Bank

Fifteen, single room, rectangular structures of drystone construction were found on a rocky outcrop. Several incorporated natural rock features in their walls. Another area of habitation was located to the north. Here several round houses made of stone and mortar were discovered. A cemetery was located to the north of these habitation zones.

Vila 1975:(fasc.2):114-115

Awanirki /Gerboonirki III (Attab E)

Settlement, Christian

20.49.N./30.27.E., [2-T-50], Dal South, East Bank

Seven rectangular, stone houses were built on the alluvial plain to the east of the wadi Awanirki. The foundations of two buildings were constructed of stone slabs placed on their ends. One of these structures measured 7x3 metres. Irregular-shaped rocks were used in the walls of the other houses. One of these buildings measured 5.2x4.8 metres. The site occupied an area of 40x40 metres.

Vila 1977b:(fasc.6):58

Bagagin Farki (Ginis E)

Settlement, Christian

20.48.N./30.28.E., [2-T-7], Dal South, East Bank

Approximately 65 small, one-room, stone dwellings were found scattered across a distance of 800 metres to the west of the Khor Bagagin. 29 houses were found on rocky outcrops, 22 were situated in small wadis and 14 were constructed on the plain. Structures on the rocky outcrops incorporated the natural features in to their constructions and were somewhat irregular in shape. Those in the wadis and on the plain were roughly circular and measured 1 - 2 metres and 1.2 - 2 metres in diameter respectively.

Vila 1977a:(fasc.5):37-8, fig.10

Dakka Saab I (Dakasab Island) (Dal)

Settlement, X-Group - Christian

21.00.N./30.34.E., [3-B-17], Dal South, Island

Debris was scattered across an area measuring 100x35 metres. Six houses were visible in the southeast area of the site. They were of drystone construction and had foundations of vertical stone blocks embedded in the ground. The houses had between four to six rectangular rooms. An alluvial plain was located nearby as was a seasonally flooded Nile channel.

Vila 1975:(fasc.2):54-55

Dakka Saab II (Dal)

Saqia site, X-Group - Christian

21.00.N./30.34.E., [3-B-21], Dal South, West Bank

Qadus fragments were spread across the site. Five groups of stones gave the surveyors indications of where the saqia canals were originally located. Debris covered an area of 200x30 metres. The site was located in a sandy depression on the alluvial plain.

Vila 1975:(fasc.2):60

Dakka Saab III (Dal)

Saqia site, Building, Classic - Late Christian

21.00.N./30.34.E., [3-B-22], Dal South, West Bank

Occupation debris was found across an area measuring 1000 square metres. Two structures were found. The first a round stone circle, may have functioned as a saqia emplacement. The second was a rectangular building. Burnt remains to the west of the rectangular building may indicate the presence of an oven. The site was situated near the river.

Vila 1975:(fasc.2):61

**Dambo (Attab E)****Settlement, Christian****20.49.N./30.26.E., [2-S-3], Dal South, East Bank**

Five stone huts were dispersed over a 1000 metre area, 225 metres from the river. Two incorporated natural rock outcrops into their walls and were irregularly-shaped while the remaining three were circular.

**Vila 1977b:(fasc.6):28****Damnei North (nord) (Tabaj W)****Silos, Christian?****20.45.N./30.19.E., [8-B-20], Dal South, West Bank**

Approximately 20 circular pits were dug in the rocky surface 500 metres from the Nile. One was explored and it was found to have a diameter of 80 cm. Five graves were found nearby.

**Vila 1978a:(fasc.9):109****Daoud Aga Est (Aga David East) (Abri E)****Occupation, Christian****20.48.N./30.21.E., [2-V-8], Dal South, East Bank**

Occupation debris orientated parallel to the river, covered an area of 650x50 metres. The site was roughly 150 metres from the river. Remains included sherds and traces of a saqia installation.

**Vila 1978a:(fasc.9):43-5****Dawki Dawi I (Ginis E)****Settlement, Christian****20.49.N./30.28.E., [2-T-23], Dal South, East Bank**

Several rectangular, stone and lime mortar houses were noted along with the remains of 4 saqia canals. One house (A/1) measured 4.4 x 2.0 metres. The settlement ran parallel to the Nile for a distance of roughly 1500 metres. A cemetery was located nearby.

**Vila 1977a:(fasc.5):63-5****Dawki Dawi II (Ginis E)****Settlement, Early Christian****20.49.N./30.28.E., [2-T-25], Dal South, East Bank**

Just to the west of the Khor Kalal were three small, oval dwellings. They contained one chamber and were constructed of stone. Their diameters measured between 1 and 2 metres. Sherds were associated with

the structures.

Vila 1977a:(fasc.5):67

**Dawki Dawi III (Ginis E)**

Settlement, Early Christian

20.49.N./30.28.E., [2-T-26], Dal South, East Bank

In an area measuring 100x30 metres, approximately 10 rectangular, stone houses were found. They varied in size from 1x2 metres to 2x4 metres and contained only one chamber. They were located approximately 400 metres from the Nile along the Khor Kalal.

Vila 1977a:(fasc.5):68

**Dawki Dawi IV (Ginis E)**

Settlement, Christian

20.49.N./30.28.E., [2-T-27], Dal South, East Bank

Roughly 20 small, stone houses were scattered over a 250x150 metre area to the west of the Khor Kalal, about 1000 metres from the river. They were rounded structures measuring between 2x1 and 3x5 metres.

Vila 1977a:(fasc.5):69

**Dawki Dawi V (Ginis E)**

Settlement, Early Christian

20.48.N./30.28.E., [2-T-28"], Dal South, East Bank

About 15 semi-circular, stone buildings were constructed against a ridge. They averaged 3 meters in diameter and contained a single chamber. Three tombs were located nearby.

Vila 1977a:(fasc.5):70

**Dawki Dawi VI (Ginis E)**

Settlement, Christian

20.48.N./30.28.E., [2-T-30], Dal South, East Bank

Along the west side of the Khor Kalal, 1300 metres from the river, sat about 15 small, circular or semi-circular houses. They averaged 1x3 metres in size, contained a single room and were constructed of dressed stone. The site covered an area measuring 150x30 metres.

Vila 1977a:(fasc.5):73

**Dawki Dawi VII (Ginis E)**

**Buildings, Christian**

20.49.N./30.27.E., [2-T-43], Dal South, East Bank

Sherds were spread across the surface of the site and three mounds of stones were noted. Remains of a stone, lime mortar and mudbrick house were found beneath one of the stone piles. The structure measured 10x4 metres and was founded on bedrock. Possibly two further dwellings lay beneath the other mounds.

Vila 1977a:(fasc.5):81

**Dawki Dawi VIII (Ginis E)**

Silos and Ovens?, Late Christian / Islamic?

20.49.N./30.28.E., [2-T-22], Dal South, East Bank

Two pits, two depressions and some silos were found on a limestone slope. Evidence of burning was found in the pits suggesting that they might have served as ovens or kilns. Some of these features had been reused as tombs.

Vila 1977a:(fasc.5):61-2

**Debba I (Sarkamatto)**

Walled Settlement, Classic - Late Christian

21.00.N./30.35.E., [3-B-3], Dal South, East Bank

Seventy, small, stone houses were located on a steep-sided rocky terrace. The settlement was orientated north-south parallel to the river and covered an area roughly 200x100 metres in size. Remains of an enclosure wall were visible across the eastern portion of the site. The houses were laid out in an organized fashion along a road. Stones used in construction varied in shape and size. Houses were simple in plan consisting of one to three rooms and being either rectangular or round in overall shape.

Vila 1975:(fasc.2):29-31

**Debba II (Sarkamatto)**

Occupation, Early Christian

21.00.N./30.35.E., [3-B-4], Dal South, East Bank

Scattered potsherds and stone fragments were spread across part of an alluvial plain. The distribution measured roughly 300x80 metres in size and was orientated north-south. Vila suggests this site might be an unwalled village.

Vila 1975:(fasc.2):32

**Debba III (Sarkamatto)**



Settlement, Early Christian and possibly Late Christian?

20.59.N./30.35.E., [3-B-9], Dal South, East Bank

Four, irregular-shaped, stone houses were discovered on a rocky terrace overlooking the Nile. Traces of an additional four to five structures were noted. Some of the buildings were constructed against the cliff face. The area of the site measured roughly 30x10 metres. Broken rock fragments were scattered across the site. Vila 1975:(fasc.2):39

Debba IV (Sarkamatto)

Buildings, Late Christian

20.59.N./30.35.E., [3-B-14], Dal South, East Bank

Three, greatly denuded, drystone buildings were noted in this area. The first was located on an alluvial plain while the other two were situated a short distance away at the foot of a rocky outcrop. The structures were associated with a stone wall that ran east-west for a distance of fifty metres. Evidence of occupation covered an area of 85x25 metres.

Vila 1975:(fasc.2):48

Diffi (Dal)

Fortified Settlement, Late Christian

20.59.N./30.34.E., [3-B-1], Dal South, Island

The settlement was situated on a high, steep granite outcrop overlooking the Nile and was orientated parallel to the river. During times of low Nile, the island may be connected to the west bank. Three distinct areas within the site were noted: the north section, central and south precincts. These were separated from one another by rocky valleys. Settlement in the north district covered an area roughly 75x40 metres and consisted of approximately fifteen structures. One well-preserved, rectangular, single-storey structure (3-B-1/1) measuring 9.4x7.8 metres and standing approximately six metres high was investigated. Its foundations were of stone while the upper walls were of mudbrick. The roof may also have had stone supports. The rooms were quadrilateral in shape. Three rectangular windows were located in the north wall and a triangular one in the east wall. Occupation in the central area covered roughly 100x40 metres and the majority of the buildings were denuded. One partially preserved house (3-B-1/4) was constructed of mudbrick, contained six rectangular to quadrilateral rooms and measured about 9x7 metres. Traces of mudbrick vaulting were found. Painted figures, including a cross or monogram were discovered in a natural rock shelter near this building. The southern precinct measured 125x50 metres and was separated from the rest of the site by a wall with a tower at its eastern end in addition to the natural barriers. Most of the structures were built on the eastern slope (away from the west bank). As with the other buildings on site,

dwelling in this area had mudbrick walls and stone foundations and were generally, rectangular and one storey high.

Adams 1994a:14-17; Vila 1975:(fasc.2):22-25

Diffi (Kosha W)

Walled Settlement, Christian

20.51.N./30.33.E., [3-P-10], Dal South, West Bank

The fort was rectangular in shape, orientated north-south and measured 80x40 metres. It was constructed close to the Nile. Contained within the enclosure wall were approximately fifteen, rectangular, stone rooms built against its interior face. A large mudbrick building with vaulted chambers (7x2.5 metres) was situated in the south-west corner. The enclosure wall had stone foundations while the upper portions of the walls were of mudbrick. Entry to the fort was gained through entrances in the east and possibly the north walls. A mudbrick building and a stone structure were built against the exterior of the fort. A cemetery was located nearby.

Vila 1976:(fasc.4):101-102

Diffi (Mograkka)

Settlement, Christian

20.51.N./30.33.E., [3-K-1], Dal South, Island

Traces of many stone houses were found on several rocky hills on the island. Generally these were circular with an average diameter of two to three metres. No overall settlement plan was noted. At the foot of one hill (3-K-1A/1) some rectangular stone buildings were present. Their average size was 6x4 metres and grinding stone and millstone fragments were found associated with them. The remains of a rectangular, mudbrick structure(s) and possibly silos were found on the plain between the hills. A cemetery was found in the vicinity and a saqia site was also located. Meroitic, X-Group and Christian sherds were scattered around the site of the saqia.

Vila 1976:(fasc.4):24-28

Eider (Mograkka)

Settlement, Christian

20.51.N./30.33.E., [3-P-2], Dal South, Island

Between twenty and thirty small, circular, stone houses were built on top of a rocky outcrop overlooking the river. The area of the village was approximately 5000 square metres and it was orientated north to south parallel with the river. Remnants of an irrigation canal and about twenty silos were also discovered. A

Christian cemetery was located nearby and X-Group sherds were also found in the vicinity.

Vila 1976:(fasc.4):60, 80

Egmayin, Jogoyin, Saadin, Nobrayin (Nilwatti)

Settlement, Classic and/or Terminal? Christian

20.38.N./30.18.E., [8-L-2], Dal South, Island

Isolated concentrations of sherds and occupation debris were scattered around the island but were particularly located around the rocky outcrops. Sherds were discovered on the tops of 12 small hills. Several structures were visible including the remains of seven fortified houses. These buildings were rectangular. Side length ranged between 7.6 and 12.9 metres. Foundation courses were constructed of stone while the upper walls were of mudbricks 40x20x9 cm in size. Interior chambers were vaulted. A similar building was discovered at Hamid [8-G-18]. One church and two structures identified as possible churches were also found on the island.

Cailliaud 1826:368; Vila 1978b:(fasc.10):24, 104-7

Fariya (Ferka E)

Settlement, Christian

20.56.N./30.35.E., [3-G-10], Dal South, East Bank

Occupation debris was spread across a small rocky outcrop covering an area 200 x 150 metres. The remains of 4 stone dwellings and 2 silos were noted. A church [3-G-9] was located nearby.

Vila 1976:(fasc.3):28

Farkenkoon (Ferka E)

Silos, Christian

20.52.N./30.35.E., [3-L-13], Dal South, East Bank

Several silos were located on a terrace in the vicinity of a Christian cemetery.

Vila 1976:(fasc.3):80

Fentiera / Bertenbash (Ginis E)

Settlement, Christian

20.49.N./30.30.E., [3-P-35], Dal South, East Bank

Traces of mudbrick buildings were visible and sherds were spread across the surface of the site. Occupation debris covered an area of 500x300 metres on the alluvial plain. The site was orientated parallel to the river and roughly 300 metres from it. A tomb was found nearby.

Vila 1977a:(fasc.5):95

**Ferkinarti (Firkinarti, Diffinarti) (Ferka)**

**Walled Settlement, Early/Late Christian?**

**20.54.N./30.34.E., [3-L-25], Dal South, Island**

Kirwan reported the presence of a rectangular, drystone enclosure on Ferkinarti. The occupation area measured 260x130 metres and was orientated north-south along the Nile. Square bastions were constructed along the enclosure wall and semi-circular towers formed the corners. Stone and mudbrick houses were enclosed within and sherds were scattered across the site. One structure, a rectangular, mudbrick house designated house 2, was planned. It measured roughly 8.5x7.5 metres and contained 8 rooms. No ground floor entrance was evident. Adams has tentatively identified house 2 as a 'castle house' based on the plan. Some sherds found dated to the Early Christian period suggesting that a portion of the island may have been occupied at that time. Two churches and a quarry were located on the west bank of the river and a Christian cemetery was also found in the vicinity.

Adams 1994b:14-5, 17; Kirwan 1935b:192, 197; 1939:21-23, pl. VI, 7; Vila 1976:(fasc.3):90-4

**Filin I (Mograkka E)**

**Magazines, Christian**

**20.52.N./30.34.E., [3-L-21], Dal South, East Bank**

Six silos were constructed on a low terrace in association with a Christian cemetery.

Vila 1976:(fasc.4):51

**Filin II (Filin and Maylon) (Mograkka E)**

**Settlement, Christian**

**20.51.N./30.34.E., [3-L-23], Dal South, East Bank**

Roughly twenty, circular, stone houses were protected by a granite cliff. Several of the blocks appeared to be reused. A church [3-L-2] and a cemetery were located nearby.

Kirwan 1939:24, pl.VI, 5; Linant 1958:11; Monneret De Villard 1935:236; Vila 1976:(fasc.4):56

**Gaaba I (Mograkka W)**

**Settlement, Early Christian**

**20.52.N./30.33.E., [3-K-3], Dal South, West Bank**

The remains of at least twenty, stone dwellings dotted the surface of the hilltop. About eight houses consisted of a single room and were circular in shape. Eight others contained internal partitions and were

irregularly shaped. The area covered measured 150x50 metres and was orientated north-south parallel to the Nile.

Vila 1976:(fasc.4):36

**Gaaba II (Mograkka W)**

Settlement, Christian?

20.52.N./30.33.E., [3-K-4], Dal South, West Bank

Twenty-one, stone buildings of round or irregular shape were scattered down a rocky slope. Natural stone outcrops were included in some of the structures. The site's area was about 60x35 metres. Few sherds were recovered from the site.

Vila 1976:(fasc.4):37-38

**Gaaba III (Ferka W)**

Settlement, Christian

20.53.N./30.33.E., [3-L-27], Dal South, West Bank

Fourteen circular or oval, stone dwellings were spread over an area of 100x50 metres, 900 metres from the river. They were situated 15 metres above the alluvial plain on a hill. The average diameter of the houses was 4 metres.

Vila 1976:(fasc.3):100

**Gaaba IV / Kitfogga (Ferka W)**

Settlement, Christian

20.53.N./30.34.E., [3-L-1], Dal South, West Bank

Two mudbrick churches and the traces of several buildings were visible at the site. Traces of the supports for a saqia canal were associated with the settlement. Some Meroitic sherds and numerous Christian sherds were scattered across the surface.

Vila 1976:(fasc.3):59-62

**Gamaa (Koyekka)**

Occupation, Oven, Christian

20.41.N./30.21.E., [8-G-39], Dal South, East Bank

Occupation debris were scattered across a 360x140 metres area roughly 240 metres from the river. A small mound (dia: 3 m) concealed an oven.

Vila 1978b:(fasc.10):36

**Gebel Amaden (Kosha E)****Building, Christian****20.49.N./30.32.E., [3-P-25], Dal South, East Bank**

A highly eroded mudbrick building sat on a rocky peninsula. The structure measured 8.5x7 metres and used bricks that measured 35x17x11 cm. Vestiges of other greatly denuded buildings were noted nearby. Sherds were scattered across the site.

Vila 1976:(fasc.4):117

**Gerboonirki I (Attab E)****Settlement, Christian****20.49.N./30.27.E., [2-T-41B], Dal South, East Bank**

Several small rock shelters, similar to those at Shagamnirki were noted.

Vila 1977b:(fasc.6):47

**Gerboonirki II (Attab E)****Building, Early Christian****20.49.N./30.27.E., [2-T-45], Dal South, East Bank**

A single, rectangular stone building stood at the mouth of the wadi Awanirki. The structure measured 3.1 x 2.6 metres. Depressions created by storage vessel were noted outside the house and a grindstone was found inside.

Vila 1977b:(fasc.6):52

**Gergetti Island I (Attab)****Walled Settlement, Late Christian****20.49.N./30.26.E., [2-S-21], Dal South, Island**

An irregular-shaped, bastioned, stone enclosure wall occupied a rocky outcrop at the west end of the island. Within it eleven mudbrick buildings were identified. These were rectangular in shape and measured 5.5 to 6.5 x 5 to 5.5 metres in size on average. Bricks used in construction measured 50x30x6 cm. Of the eleven buildings, ten of them contained two rooms. The main room was large and square. The second room was rectangular, ran the length of one side and was considerably smaller and narrower. A low mastaba (measuring 2.5 x 1.5 metres) was found in the main room of Building 1. Building 4 differed from the other ones in having a semi-circular niche in the east wall and having only one room. Rocky outcrops separate the structures. Inhabitants of the region refer to this structure as a monastery. This site was similar to Sumbut [8-G-12].

Budge 1907:(I):468-9; Cailliaud 1826:363; Jeuté 1994:71; Monneret De Villard 1935:236; Vila 1977b:(fasc.6):32-4

**Gergetti Island II (Attab)**

Settlement, Early Christian

20.49.N./30.26.E., [2-S-22], Dal South, Island

Occupation debris and structural remnants covered an area measuring 300x50 metres. A larger structure, measuring 8.3x4 metres, was constructed on a rock platform at the west end of the site. A Christian cemetery containing 15 tombs was in the vicinity.

Vila 1977b:(fasc.6):38

**Gessein or Gettei (Gessein / Gettei) (Hamid)**

Settlement, Christian

20.40.N./30.18.E., [8-G-27], Dal South, West Bank

Traces of some small, denuded, circular, stone dwellings were found at the foot of a rocky terrace. One shelter was 2 metres in diameter.

Vila 1978b:(fasc.10):92

**Haakmali (Dal)**

Settlement, Christian

20.59.N./30.34.E., [3-B-39], Dal South, West Bank

Several small, stone structures were noted on the rocky outcrops here. The site covered approximately 500 square metres. Sherds were associated with the dwellings and some round pots were found in situ.

Vila 1975:(fasc.2):95

**Hemmet (Attab E)**

Occupation, Christian

20.49.N./30.26.E., [2-S-59], Dal South, East Bank

Christian sherds were scattered along a small granite outcrop overlooking the Nile. The site was reused during the Islamic period and appears strategically located with respect to controlling river traffic.

Vila 1977b:(fasc.6):40

**Jebel Meeme (Amara E)**

Settlement, Christian

20.48.N./30.24.E., [2-S-20"], Dal South, East Bank

Three small stone shelters and one rectangular house were situated roughly 400 metres from the Nile on a small mountain at the edge of a khor.

Vila 1977d:(fasc.8):113

Kada I / Saadée (Amara E)

Settlement, Christian

20.48.N.30.24.E., [2-S-18], Dal South, East Bank

Over 30 stone houses were scattered amongst the rocks on a terrace situated between two khors. The area covered measured roughly 700x550 metres. Several of the structures incorporated natural stone outcrops in their construction and were built on the slope. Shape and form varied with irregular, semi-circular, circular and rectangular houses being found.

Vila 1977d:(fasc.8):111

Kada II (Amara E)

Occupation?, Christian

20.48.N./30.24.E., [2-S-19"], Dal South, East Bank

Isolated sherds were found scattered on the edge of a khor near Kada I/Saadée.

Vila 1977d:(fasc.8):112

Kada III (Amara E)

Silos, Christian

20.48.N./30.25.E., [2-S-25"], Dal South, East Bank

Several silos were noted on the edge of the alluvial plain, near the mouth of a khor. A cemetery was associated with the pits.

Vila 1977d:(fasc.8):118

Kadanulu (Amara W)

Settlement, Christian

20.50.N./30.24.E., [2-S-40], Dal South, East Bank

The remains of two buildings and a few sherds were discovered roughly 80 metres from the river, spread over an area 80x40 metres.

Vila 1977c:(fasc.7):120



**Kadnarti (Ferka W)****Occupation, Christian****20.55.N./30.34.E., [3-G-29], Dal South, Island****Christian sherds covered an area, 50x15 metres, located on the alluvial plain.****Vila 1976:(fasc.3):56****Kakangu (Dal)****Occupation, X-Group - Early Christian****20.59.N./30.34.E., [3-B-28], Dal South, West Bank****Pot sherds were scattered across the site and two walls were visible on the surface.****Vila 1975:(fasc.2):78****Kashasha I (Ginis W)****Walled Settlement?, Monastery? Classic Christian****20.49.N./30.30.E., [2-T-52], Dal South, West Bank****A mudbrick and stone enclosure wall surrounded an area 170x100 metres. Bricks used in the wall measured 30x15x7 cm. Traces of structures were noted in the interior. A large Christian cemetery was found to the north of the site.****Vila 1977a:(fasc.5):112****Kashasha II (Ginis E)****Settlement, Christian****20.50.N./30.30.E., [3-P-51], Dal South, East Bank****Undecorated Christian sherds were found on the site as were four stone dwellings. These were single room structures measuring around 1x2 metres in size. Occupation debris covered an area, measuring 100x20 metres, orientated parallel to the wadi Mérémeré.****Vila 1977a:(fasc.5):161****Kashay (Ferka W)****Walled Settlement, Christian****20.56.N./30.34.E., [3-G-25], Dal South, West Bank****A stone enclosure wall surrounded a small village. The site covered an area of 75x50 metres and was built on a rocky outcrop. The majority of dwellings were irregular in shape, constructed of stone and consisted of one or two rooms. A group of stone-built rectangular rooms, stood in the centre of the village near a**

small mudbrick and stone church (Adams type 3c) (Adams 1965:114-6).

Vila 1976:(fasc.3):50

**Kassanta (Arnyatta)**

Occupation, Christian

20.49.N./30.21.E., [2-Q-1], Dal South, Island

Christian sherds were strewn across the tops of four terraces. The area occupied measured at least 100x25 metres.

Vila 1978a:(fasc.9):30

**Kayendi (Hamid)**

Settlement, Christian

20.41.N./30.18.E., [8-G-18], Dal South, West Bank

Similarities were noted between this site, Gergetti Island I [2-S-21] and Sumbut [8-G-12]. Approximately 40 stone and mudbrick houses were noted. A fortified, rectangular tower measuring 7x5.5 metres was found at the southwest end of the site. Foundations were of stone while the upper walls were constructed of mudbricks. The bricks were 30x20x6 cm in size.

Vila 1978b:(fasc.10):81-5

**Khor Kagnandi (Amara E)**

Ovens, Late Christian

20.48.N./30.24.E., [2-S-28], Dal South, East Bank

Two ovens were situated at the mouth of the Khor Kagnandi roughly 170 metres from the river. Late Christian sherds were found on the surface.

Vila 1977d:(fasc.8):122

**Khor Kalal / Bagagin Farki**

Occupation and Saqias, Christian

20.49.N./30.28.E., [2-T-37], Dal South, East Bank

Christian sherds were spread across 600x200 metres of the alluvial plain, parallel to the Nile. Traces of two saqias were also noted.

Vila 1977a:(fasc.5):79

**Khor Kurubin (Attab E)**

**Settlement, Early Christian**

20.49.N./30.27.E., [2-S-58], Dal South, East Bank

About 20 small, one-room stone dwellings were spread along the edge of the Khor. Some utilized natural rocky outcrops in their construction and were somewhat irregular in shape, while others were circular.

Vila 1977b:(fasc.6):39

**Kissebasha (Ferka W)**

**Settlement, Late Christian?**

20.56.N./30.34.E., [3-G-24], Dal South, West Bank

Portions of three, rectangular mudbrick structures were discovered associated with the remains of a saqia canal. The site was located on an elevated terrace and covered an area 55x40 metres. Building 1 was tentatively identified by Adams as a 'castle house'. It measured 16.5x11.3 metres, contained 4 long rectangular rooms constructed parallel to one another and orientated perpendicular to two larger rectangular chambers. The rooms were vaulted and no evidence of an entrance was noted. Use of this structure had continued until modern times. Building 2 measured 14.3x10.5 metres and Building 3, 8.5x5.7 metres.

Adams 1994b:14-15, 17; Vila 1976:(fasc.3):48, fig. 25, 27

**Kissee (Mograkka E)**

**Occupation, Christian**

20.50.N./30.33.E., [3-Q-6], Dal South, East Bank

Surface remains of sherds and stones suggested the presence of a Christian occupation. An Islamic fort was also constructed here. A Christian cemetery was located nearby.

Vila 1976:(fasc.4):71

**Kitfogga I (Ferka W)**

**Settlement, Christian**

20.54.N./30.34.E., [3-G-30], Dal South, West Bank

Ruins of 12 stone dwellings were found on a terrace approximately 250 metres from the Nile. The site occupied 50x30 metres. The houses were roughly circular though somewhat irregular in shape, measuring about 4x2 metres. Building foundations were of large blocks 90x45x35 cm. Few sherds were found.

Vila 1976:(fasc.3):57

**Kitfogga II (Ferka W)**

**Quarry, Christian**

20.54.N./30.34.E., [3-L-6], Dal South, West Bank

Two areas, from which pink and grey granite had been extracted, were noted in a granite outcrop. The rock was roughly 250 metres from the Nile. The first area measured 100x60 metres and the second 25x25 metres. Remains of columns and places from which blocks had been removed were noted at the second site.

Kirwan 1939:23-24; Vila 1976:(fasc.3):72-3; Waddington and Hanbury 1822:map 1

Kitfogga III (Ferka W)

Settlement, Christian

20.54.N./30.34.E., [3-L-11], Dal South, West Bank

Sherds were scattered across the surface. Three rectangular, mudbrick houses and eight rectangular, stone structures were noted. The site was orientated north-south (400x100 metres) along the Nile and was 100 metres away from it on the alluvial plain.

Vila 1976:(fasc.3):78

Kitfogga IV (Ferka W)

Settlement, Christian

20.54.N./30.33.E., [3-L-19], Dal South, West Bank

Occupation debris covered an area of 100 metres square. One stone, building was noted. It contained three rooms and incorporated natural rock outcrops in its construction.

Vila 1976:(fasc.3):88

Kitfogga V (Ferka W)

Settlement, Christian

20.54.N./30.33.E., [3-L-20], Dal South, West Bank

A small settlement was situated 500 metres from the Nile. It contained two groups of houses, the first numbering 6 stone buildings and the second 3 circular, stone structures. Large, natural rock outcrops were incorporated into the structures. The area of occupation measured 50x50 metres.

Vila 1976:(fasc.3):89

Kofaree/Gebel Abdou Mellis (Sarkamatto)

Settlement, Early Christian and Late Christian

20.58.N./30.34.E., [3-B-31], Dal South, East Bank

Roughly thirty-three single room, stone houses occupied the top of the mountain while an additional forty-

two were spread down the slope. Some utilized natural rock outcrops in their construction. The site was located beside a wadi and a cemetery was nearby at the foot of the mountain. Several round silos (average diameter 50cm) were also found at the base of the hill.

Vila 1975:(fasc.2):81-84

**Kossikool (Kosikol) (Sarkamatto)**

Settlement, Saqia, Early Christian and Late Christian

20.59.N./30.34.E., [3-B-25], Dal South, East Bank

Denuded remains of several circular, drystone dwellings were noted. Pot sherds were scattered across the site. Nineteen silos were associated with the structures. They were arranged in two rows and measured approximately 90cm in diameter. A small basin linked by a canal to a larger basin was found near the silos. A saqia canal was discovered at the south end of the site.

Vila 1975:(fasc.2):71-72

**Krumbus (Hamid)**

Occupation, Christian

20.41.N./30.18.E., [8-G-26"], Dal South, Island

Sherds were scattered across the alluvial plain covering an area measuring 300x175 metres.

Vila 1978b:(fasc.10):91

**Kulme (Kulma) (Dal)**

Settlement with fortified buildings, Late Christian

20.59.N./30.34.E., [3-B-23], Dal South, Island

Four fortified, mudbrick "castle" houses were constructed upon the summits of three small rocky islands; one on the north island (1), two on the central island (2a, 2b) and one on the south island (3). They were built directly upon the rock and were two storeys high. The rooms were rectangular in shape and vaulted. Building 2a measured roughly 7x6 metres and building 2b was about 8.5x5.5 metres in size. Inscriptions were found on the mud plaster of the north, east, south and west walls of house 2a. Lintel fragments, sherds, latrine and door fragments were recovered.

Adams 1994b:14-17, 20, 32; Vila 1975:(fasc.2):62-68

**Marka (Koyekka)**

Occupation, Christian

20.41.N./ 30.21.E., [8-G-43"], Dal South, East Bank

Christian sherds were dispersed over a 100x70 metre area, 400 metres from the river.

Vila 1978b:(fasc.10):38

**Meeme (Sarkamatto)**

Settlement, Early-Late Christian

20.56.N./30.35.E., [3-G-6], Dal South, East Bank

About ten dwellings were found on the south slope of Gebel Meeme and on a rocky terrace. They were of drystone construction and usually single rooms. Six were oval or quadrilateral in shape, measuring between four to six square metres while the other four utilized natural rocky outcrops in their construction. An Early Christian cemetery was located nearby at Deshna.

Vila 1975:(fasc.2):107

**Missiminia (Abri E)**

Ovens, Christian

20.47.N./30.21.E., [2-V-15], Dal South, East Bank

Two highly denuded, circular brick ovens were situated at the base of a terrace. One oven was 2.8 metres in diameter and constructed of bricks measuring 33x15x7cm. The diameter of the second oven was 2.7 metres. Sherds, brick and stone fragments found suggest occupation in the vicinity.

Vila 1978a:(fasc.9):43-5

**Olleg I (Amara E)**

Settlement, Christian

20.49.N./30.25.E., [2-S-9], Dal South, East Bank

Three different areas of occupation were noted on the rocky terraces roughly 500 metres from the river. The first contained the remains of about 8 oval, stone dwellings, between 2 and 2.5 metres in diameter. The second was a sherd scatter measuring 30x 15 metres. Sherds and stone circles, found on an isolated terrace, marked the third occupation area.

Vila 1977d:(fasc.8):102

**Olleg II (Amara E)**

Settlement, Christian

20.48.N./30.25.E., [2-S-17], Dal South, East Bank

On the rocky terraces overlooking the river, were 7 irregular-shaped, stone shelters and 2 circular, stone dwellings. The site was situated roughly 325 metres from the Nile.

Vila 1977d:(fasc.8):110

Oued Ossée (Koyekka)

Settlement, Christian

20.43.N./30.22.E., [8-C-10], Dal South, East Bank

A small settlement, consisting of about 12 small, stone houses was found on a gravel bank beside the Nile. It covered an area of 50x25 metres. Dwellings within the hamlet were circular with diameters of 2-3 metres and contained one or two rooms.

Vila 1978b:(fasc.10):26-7

Saadlin I (Attab E)

Settlement, Christian

20.49.N./30.27.E., [2-S-1], Dal South, East Bank

Roughly 30 circular, one-room, stone dwellings were situated along the east side of the Khor Saadlin. Diameter of the houses varied between 125x125 cm and 250x200 cm. Sherds were spread across the surface. The remains of four additional structures were noted about 100 metres northeast of the site. They were slightly larger being 3.5x3, 2x1.5, 2x2 and 4.5x2 metres in size respectively.

Vila 1977b:(fasc.6):23

Saadlin II (Attab E)

Settlement, Christian

20.49.N./30.36.E., [2-S-15], Dal South, East Bank

To the west of the Khor Saadlin were 6 drystone huts. 5 incorporated natural rock outcrops into their construction while the 6th was circular.

Vila 1977b:(fasc.6):31

Sagdi (Sakdi) (Dal)

Settlement, Christian

20.59.N./30.35.E., [3-B-18], Dal South, Island

Potsherds and stones were scattered across a 300x150 metre area. Traces of 75 irregular-shaped, stone structures were found. The surveyors noted that in several places walls, originally of stone were repaired using mudbricks. This village may have been constructed upon an earlier Meroitic settlement.

Vila 1975:(fasc.2):56

**Sagiet el 'Abd I (Abri W)****Walled Settlement, Monastery? Christian****20.48.N./30.20.E., [2-V-1], Dal South, West Bank****Located 400 metres from the Nile on the alluvial plain, was a enclosure measuring 45x33 metres.****Occupation debris, including sherds, mudbrick and stone fragments, was distributed across the surface. The girdle wall appeared largely constructed of stone. Plaster fragments inscribed with Greek letters and part of a stele were discovered in the vicinity. Vila suggested that the site might be a monastery.****Cailliaud 1826:364; Monneret De Villard 1935:237; Vila 1978a:(fasc.9):36-8; Waddington and Hanbury 1822:map 1****Sagiet el 'Abd II (Abri W)****Occupation, Late Christian****20.48.N./30.20.E., [2-V-2], Dal South, West Bank****Remains of a large settlement containing mudbrick structures and a canal were found. Sherds and bricks covered the surface roughly 150x150 metres. Most of the site was buried by windlaid sand.****Vila 1978a:(fasc.9):40****Sagiet el 'Abd South (sud) (Tabaj W)****Settlement, Christian****20.47.N./30.20.E., [2-V-12], Dal South, West Bank****The highly denuded remains of about 5 mud dwellings were found occupying an area of 50x30 metres. Most rooms were rectangular or quadrilateral in shape although some were more irregular. Two structures were planned. The first was roughly "L"-shaped and contained four rooms, three rectangular and one slightly rounded. It measured 10.5x7 metres at its greatest points and most rooms were accessed from the exterior. The second house measured 7x6 metres, was square and contained three rooms, two smaller rooms orientated perpendicular to a larger rectangular room. No doors were evident.****Vila 1978a:(fasc.9):91-2****Sai****Settlement, Walled Settlement, Christian****20.42.N./30.20.E., Dal South , Island****Evidence suggests that Sai was occupied throughout the Christian period from the 6th to 14th centuries A.D.. A total of 5 churches and a cathedral have been recorded on the island and a bishop's chair, Coptic and Greek inscriptions and numerous sherds have been recovered. This was the seat of one of the Nubian**



bishoprics. Christian period dwellings were noted to the northeast of the Pharaonic fortress and several decorated stone blocks were recovered from its interior, primarily from the Classic Christian levels. Small shelters were constructed within the fort during the Late Christian phase and the surveyors suggested that it had been used as a place of refuge at this time. Christian tombs were discovered to the west of the fort. Azim 1975:95-6; Budge 1907:I:463-4; Cailliaud 1826:366; Clarke 1910:45; Crawford 1951:141; Gratien 1985:15; Kirwan 1935:58-9; Linant 1958:192; Monneret De Villard 1935:238-9; Vercoutter 1970a:158-9; 1975:133-4; 1986:199-200

#### **Sarget (Mograkka)**

**Settlement, Christian**

20.51.N./30.34.E., [3-Q-2], Dal South, Island

Small, circular, stone structures were scattered across the tops of two rocky hills. The settlement may have comprised about fifteen houses in total. It was largely destroyed by the time of the survey.

Vila 1976:(fasc.4):65-66

#### **Shagamnirki (Attab E)**

**Settlement, X-Group - Early Christian**

20.49.N./30.27.E., [2-T-33], Dal South, East Bank

Fourteen semi-circular, stone huts were constructed against rock outcrops along sections of wadi Awanirki. Although some sherds were recovered, little occupation build-up was noted.

Vila 1977b:(fasc.6):41

#### **Shagun Dukki I (Ginis E)**

**Occupation, Christian**

20.49.N./30.29.E., [2-T-4], Dal South, East Bank

Occupation debris covered two mounds situated on the alluvial plain. Traces of an irrigation canal were found in the vicinity. The site measured 600x100 metres and was roughly 200 metres from the Nile.

Vila 1977a:(fasc.5):29

#### **Shagun Dukki II (Ginis E)**

**Saqia Installation, Christian**

20.49.N./30.29.E., [2-T-11], Dal South, East Bank

Remains of a saqia canal were found associated with two mounds covered with occupation debris. The site was located on the alluvial plain.

Vila 1977a:(fasc.5):45

Shawa (Ginis E)

Settlement, Christian

20.48.N/30.31.E., [3-P-31], Dal South, East Bank

The site was located along the west side of the Khor Tewfig over 1 km from the river. Sherds were scattered across the surface and traces of three, circular stone buildings were found.

Vila 1977a:(fasc.5):90

Sheeragi (Dal)

Walled Settlement, Late Christian

21.00.N/30.35.E., [3-B-19], Dal South, Island

Approximately fifty stone structures were built on a high rocky promontory. Remains of a stone enclosure wall were found to the north and south of the village. In the western part of the site was a large, stone building with paved floors. It comprised roughly ten rooms. Another massive structure measuring 20x10 metres, was situated in the north area of the site. It contained about four or five chambers. Pot sherds were scattered across the site. The area occupied measured about 80x20 metres and it was orientated north-south.

Vila 1975:(fasc.2):57-58

Siyanneere (Sianeri) (Sarkamatto)

Settlement, Early Christian and Late Christian

20.57.N/30.34.E., [3-B-37], Dal South, East Bank

Remains of four structures, of drystone construction, were found on a rocky outcrop. This small settlement covered an area 200x150 metres. A cemetery was located on the alluvial plain below.

Vila 1975:(fasc.2):91

Sudaga I/Olleg (Amara E)

Occupation and Saqia, Christian

20.49.N/30.26.E., [2-S-6"], Dal South, East Bank

The boundaries of the site were denoted by a scatter of sherds and pebbles and small mounds of stones. It was orientated parallel to the Nile and measured 500x50/150 metres. The remains of a canal and saqia installation were also found on the site. Christian and possibly X-Group tombs were discovered in the vicinity.

Vila 1977d:(fasc.8):97-8

**Sudaga II (Amara E)****Settlement, Early and Late Christian****20.49.N./30.26.E., [2-S-16], Dal South, East Bank**

Approximately 6 to 7 small, irregular-shaped, stone dwellings were found among the rocky outcrops. These were believed to date to the Early Christian period. A rectangular stone house, measuring 3.4x3 metres, was also discovered in the vicinity and thought to date to the Late Christian phase. The surveyors thought it reminiscent of the fortified 'castle houses' of the Late period. Sherds were associated with these structures.

Vila 1977d:(fasc.8):109

**Sulin (Amara E)****Building, Early Christian****20.48.N./30.24.E., [2-R-30], Dal South, East Bank**

Remains of a denuded stone building sat upon the alluvial plain roughly 200 metres from the Nile. Sherds were associated with the structure.

Vila 1977d:(fasc.8):57

**Sumbut (Soumbout) (Koyekka)****Walled Settlement, Late Christian****20.40.N./30.20.E., [8-G-12], Dal South, East Bank**

Remains of a rectangular, stone enclosure wall were discovered surrounding several houses. The wall was constructed of schist blocks and mortar and the area enclosed measured roughly 100x75 metres. Entry was gained via a large entrance, over 5 metres wide, on the south side. Enclosed within the wall were several rectangular, stone houses measuring roughly 5-6x5-6 metres. Dwellings usually contained two rooms. The main room was large and square. The second room was rectangular, ran the length of one side and was considerably smaller and narrower. A low mastaba was found in the main room. Structural similarities were noted between this site, Gergetti Island I [2-S-21] and Kayendi [8-G-18].

Vila 1978b:(fasc.10):23, 29-30

**Tiil (Til) (Sarkamatto)****Settlement, Early Christian****20.57.N./30.35.E., [3-G-5], Dal South, East Bank**

Approximately twenty-two small, greatly denuded, structures of drystone construction occupied an area of 100x50 metres on a rocky slope. The settlement was orientated north-south. Sherds were scattered on the

surface. An Early Christian cemetery was located nearby at Deshna.

Vila 1975:(fasc.2):106

Tiine Island (Tina Island) (Dal)

Walled Settlement, Settlement, Late Christian

21.00.N./30.35.E., [3-B-15], Dal South, Island

A small village, covering an area roughly 60x30 metres, was constructed on top of a steep-sided rocky island. Approximately fifteen houses were constructed on the terraces leading from the river to the highest part of the island. A winding path led to the pinnacle where about thirteen or fourteen structures stood. A drystone wall enclosed this upper terrace and many houses utilised it and the natural stone outcrops in their construction. The houses were of drystone construction, irregular in shape and usually only a single room. A single, quadrilateral building was situated halfway up the slope on the path and may have acted as a fortified gatehouse. Its upper walls were made of bricks measuring 35x25x8 cm in size while the foundations were of stone. It stood approximately 3.5 metres high and appeared to be a single storey.

Vila 1975:(fasc.2):49-51

Toshkei (Morka)

Settlement, Classic Christian

20.43.N./30.18.E., [8-B-23], Dal South, West Bank

Several mudbrick structures were constructed on small mounds over a distance of roughly 4000 metres along the Nile. The largest group [8-B-23/3] was reminiscent of Debeira West IV [R-8] and consisted of many mudbrick rooms tightly clustered together. Remains visible on the surface of 8-B-23/3 covered an area of 50x40 metres. Two churches were identified. Approximately 20 silos (avg. dia:1 m), an oven, and two cemeteries were located in the vicinity.

Shinnie 1950:297-9; Vila 1978b:(fasc.10):23, 52-7

Warda (Mograkka W)

Settlement, Christian

20.52.N./30.33.E., [3-K-7], Dal South, West Bank

Trace remains of six circular, stone buildings were situated on the slopes and bottoms of two ravines. The average diameter of a dwelling was three metres and the site occupied 100x30 metres.

Vila 1976:(fasc.4):42

Yaren (Amara E)

Occupation, Christian

20.48.N./30.25.E., [2-S-13], Dal South, East Bank

Sherds were spread over an area 200x75 metres. Some building traces were also noted. The site ran parallel to the Nile.

Vila 1977d:(fasc.8):107

#### **ABRI-DELGO REACH - Mahas Sites (Map 3)**

Abu Fatima (Tombos district)

Walled Settlement? Christian - Islamic

19.41.N./30.24.E., [NE-36-A/8-I-], South Mahas, East Bank

A mudbrick and stone structure was located on a rock outcrop beneath a qubba. Traces of large mudbrick walls were found north of the building. Foundations of a stone wall enclosing the outcrop were discovered.

Edwards and Osman 1992:13; 1994b:280

Awai Fagiriki (Habarab district)

Settlement, Late Christian?

19.53.N./30.19.E., Mahas, Seasonal Island

Several stone "blockhouse" structures were located here.

Edwards and Osman 1992:45

Barja Aliiki (Barja district)

Walled Settlement, Late - Terminal Christian

19.53.N./30.23.E. [NE-36-A/2-M-], Mahas, East Bank

The site was located on an outcrop overlooking the Nile. Little remained within the fortified enclosure walls of the settlement with the exception of a "blockhouse". It was reported as measuring roughly seven square metres but examination of the photograph indicates that it was clearly larger. Two rooms were noted within and it was constructed of mudbrick walls set on a stone foundation. The enclosed area measured approximately 50x30 metres. Several rooms with remnants of barrel vaulting were preserved in the northeast corner.

Edwards and Osman 1992:60, pl. XVIII-XIX; 1994b:280, 291; Waddington and Hanbury 1822:35

Deweriki (Jawgul)

Occupation, Kilns? Christian

19.57.N./30.23.E., Mahas, West Bank

Sherds of various dates, including Islamic (?) and Early Christian were spread across a 500 x 200 metre area. Most sherds were undiagnostic. Kiln wasters were located suggesting the presence of kilns in the vicinity.

Edwards and Osman 1994a:45

Diffi (Gezeira Tombos district)

Walled Settlement, Late Christian?

19.42.N./30.23.E., South Mahas, Island

A large, mudbrick enclosure, measuring 125x45 metres, was found at the southwest end of the island. It had been subsequently modified and greatly enlarged during the Islamic period. The measurements given above are of its final size. The surveyors noted a number of construction phases and suggest that the core of the structure was a much smaller enclosed area in the northwest corner. This area is thought to be of Christian date.

Edwards and Osman 1992:22; Waddington and Hanbury 1822:38

Fad East (Fad East district)

Occupation, Christian

19.54.N./30.25.E., Mahas, East Bank

No structures were found however sherds were scattered near two outcrops.

Edwards and Osman 1992:63

Fad Island

Occupation, Christian

19.56.N./30.26.E., Mahas, Island

Christian sherds were noted on the northwest side of the island near the river.

Edwards and Osman 1994a:60

Fad West (Arduan Island)

Occupation, Christian

19.56.N./30.26.E., Mahas, Island

Christian sherds were noted near the Nile at the northeast end of the island.

Edwards and Osman 1994a:60

**Fagirinfenti I (Tajab West)****Saqla, Christian?****19.56.N./30.17.E., Mahas, West Bank****A saqla pit was located. As it was located near Fagirinfenti II, this site was thought to be of similar date.****Edwards and Osman 1994a:36****Fagirinfenti II (Tajab West)****Settlement, Classic - Late Christian****19.56.N./30.17.E., Mahas, West Bank****A small settlement containing stone and mudbrick buildings was found near the Nile. One structure was thought to be a mudbrick church. Classic through Late sherds were spread over the surface.****Edwards and Osman 1994a:38****Fagirinfenti III (Tajab West)****Building, Christian****19.56.N./30.17.E., Mahas, West Bank****A large, rectangular structure, roughly 18 x 16.4 metres, was situated on a rocky outcrop, overlooking the desert route to Soleb. Foundations and the lower storey were of stone while the upper was of mudbricks. Rooms on the lower floor were barrel-vaulted. The main entrance was on the lower floor and a stone ramp led up to it.****Edwards and Osman 1994a:39; Linant 1958:183****Fogo North (Tajab West)****Settlement, Classic - Late Christian****19.52.N./30.18.E., Mahas, West Bank****Classic to Late period sherds were spread over roughly an area of 1 hectare. Structures had been constructed among the rocky outcrops and some ruins were noted.****Edwards and Osman 1994a:32****Gezeira Dabaki (Gezeira Tombos district)****Fortress, Late - Terminal Christian?****19.42.N./30.23.E., South Mahas, Island****A well-preserved, mudbrick church, measuring 16.5x10.3 metres in size, was found within the eroded, thick mudbrick and stone walls of a Pharaonic? fortification. The enclosure walls measured roughly 75x35**

metres. Surface finds from within the enclosure date predominantly to the Christian and Islamic periods.

Edwards and Osman 1992:28, pl. X-XI

**Gezeira Masida (Masida district)**

Occupation, Christian

19.53.N./30.23.E., Mahas, Island

Sherd scatters suggest the presence of a settlement.

Edwards and Osman 1992:51

**Gezeira Tombos (Gezeira Tombos district)**

Occupation (debris), Christian

19.42.N./30.23.E., South Mahas, Island

No structural remains were found, however, occupation debris and sherds were scattered across the central and rocky eastern areas of the island.

Edwards and Osman 1992:26

**Habarab Madrasa (Habarab district)**

Occupation (debris), Christian

19.52.N./30.19.E., Mahas, East Bank

No structural remains were found however, sherds were strewn across the surface.

Edwards and Osman 1992:45

**Haleeba (Defoi)**

Building, Late - Terminal Christian

19.56.N./30.31.E., Mahas, West Bank

Remains of a two-storey building, measuring approximately 9.7 x 10.6 metres, were preserved on a rocky area along the edge of the cultivation. The lower storey was of drystone construction while the upper of mudbrick. No entrance was located on the ground floor and the chambers on this floor appeared to be entered from above through openings in the vaults. Six or seven rooms were preserved on the ground floor. Traces of other drystone structures, possibly animal enclosures, remained around the building.

Edwards and Osman 1994a:55

**Hillat al Arab (Kabodi district)**

Walled Settlement? Christian?



**19.45.N./30.22.E., Mahas, East Bank**

Traces of a stone wall (50m long on its east side), a gateway and corner towers, along with a vast amount of debris suggested the presence of a large unexcavated, fortified settlement. Unfortunately no datable remains were found during the survey.

Edwards and Osman 1992:33

**Hillat al Arab S (Kabodi district)**

Occupation (debris), Christian

**19.45.N./30.22.E., South Mahas, East Bank**

Large scatters of Christian sherds were found, however, no structural remains were located.

Edwards and Osman 1992:33

**Iraw W (Habarab district)**

Occupation (debris), Christian

**19.51.N./30.19.E., Mahas, East Bank**

Ceramic debris strewn in this region suggests the presence of a Christian habitation site.

Edwards and Osman 1992:43

**Jawgul (Jawgul)**

Settlement, Early - Classic Christian?

**19.57.N./30.22.E., Mahas, Island**

Seventeen houses, many of which were two-storeys high and well-preserved, were constructed on the rocky area of the island. The houses were similar in plan, measuring 5.5 x 7 metres on average, with 6 barrel-vaulted rooms on the lower floor and a similar number on the second storey. Rooms measured 2.3 x 2.6 metres in size. The lower storey was constructed of irregular stones while the upper floor was of mudbrick. Access to the buildings was via an entrance in the upper storey. Openings in the first floor vaulting allowed entry into the chambers of the lower floor. Early and Classic Christian wares were discovered on site.

Edwards and Osman 1994a:43

**Kajbar (Kajbar)**

Settlement, Classic Christian - Islamic ?

**19.57.N./30.32.E., Mahas, West Bank**

Traces of several denuded buildings were noted on a hill and sherds were scattered over the area.

Edwards and Osman 1994a:57

**Kassi-Markol (Jawgul)**

**Walled Settlement, Early? Christian**

**19.57.N./30.20.E., Mahas, West Bank**

A large, quadrilateral, drystone enclosure was situated on a slope overlooking the Nile. The surveyors estimated that 3000 sq. metres were enclosed by the wall. No remains were noted in the interior but sherds were scattered across the surface and some were of Early Christian date. Round bastions were constructed at the corners of the enclosure. Two "L"-shaped gates, one in the centre of the north wall the other centred in the west wall, allowed access to the interior. This site appeared similar to Shofein II.

Edwards and Osman 1994a:40-2

**Kedurma N (Kedurma district)**

**Occupation - Kiln? Christian**

**20.02.N./30.36.E. [NF-36-M/21-W-], Mahas, East Bank**

No structural remains were found however extensive scatters of sherds and vitrified debris suggest the presence of a settlement and possible kiln site.

Edwards and Osman 1992:84; 1994b:281

**Kisseenfarki I (Tajab West)**

**Walled Settlement, Late Christian - Islamic**

**19.50.N./30.18.E., Mahas, West Bank**

Located on the north side of the Khor Kisseenfarki, was a large, rectangular mudbrick enclosure. Round towers were situated at each corner. Late period Christian sherds were found on the surface. The site had been rebuilt and modified by the addition of an enclosure and stone and jalus reinforcements during the Islamic period.

Edwards and Osman 1994a:26; Linant 1958:182

**Kisseenfarki II (Tajab West)**

**Walled? Settlement, Classic - Late Christian**

**19.50.N./30.18E., Mahas, West Bank**

Classic Christian and later period sherds were spread across the site surface. Mudbrick ruins, red brick detritus and the remains of an enclosure wall were noted. Several mudbrick structures seemed well preserved with intact vaults.

Edwards and Osman 1994a:28

**Kisseenfarki III (Tajab West)**

Occupation, Early and Classic Christian?

19.51.N./30.18.E., Mahas, West Bank

Early and Classic Christian sherds were scattered across the site surface. The exact nature and extent of the site remains uncertain.

Edwards and Osman 1994a:28

**Koka**

Monastery? Christian

c. 20.01.N./30.35.E., Mahas, West Bank

A mound, reputed to be a monastery, was reported to the south of Koka but this remains unconfirmed.

Edwards and Osman 1994a:64

**Komer**

Walled Settlement, Late Christian? - Islamic

c. 20.16.N./30.35.E., Mahas, West Bank

A large fort overlooking the Nile was noted. It had drystone foundations and a superstructure of mudbrick. The date of this structure remains uncertain.

Edwards and Osman 1994a:62

**Mugur**

Walled Settlement, Late Christian? - Islamic

19.57.N./30.21.E., Mahas, Island

A stone enclosure wall (2.5 metres thick) surrounded a fortified building, a tower and the remains of several other structures. Mudbricks used in construction measured about 43x20x10 cm.

Edwards and Osman 1994a:58

**Jebel Nauri (Nauri district)**

Occupation? Christian - Islamic

19.55.N./30.26.E., Mahas, East Bank

The presence of a small Christian settlement is suggested by sherd scatters.

Edwards and Osman 1992:66

Jebel Nauri W (Nauri district)

Walled Settlement, Settlement, Classic - Terminal Christian

19.55.N./30.25.E. [NE-36-A/2-I-], Mahas, East Bank

Sections of a rectangular, stone enclosure wall remain standing however the majority of the structures within the settlement lie in ruins. The wall was approximately one metre thick, had a gate in the east wall and a tower in the northeast corner. Christian sherds are scattered across the site and part of an Old Nubian text was found in this vicinity. Several small, stone dwellings were constructed on a rock shelf on the mountain and not enclosed within the town. These structures showed evidence of barrel vaulting, although most side walls preserved had been constructed of stone, and traces of plaster were found. Sherds from the associated settlement primarily date to the Late Christian period.

Edwards and Osman 1992:64, pl. XXI; 1994b:280, 291, 293, fig.12; Griffith 1928a:117-46; Linant 1958:18

Sadeik Madrasa (Sadeik district)

Occupation (debris), Christian

19.49.N./30.19.E., Mahas, East Bank

Sherds strewn in this area suggested to the surveyors that a habitation was likely present.

Edwards and Osman 1992:41

Satai (Tajab West)

Occupation, Classic? Christian

19.55.N./30.18.E., Mahas, West Bank

Sherds, some of Classic date, were spread over a distance of 300 metres along the river bank. The surveyors suggest that kilns might be present here.

Edwards and Osman 1994a:35

Serreig (Habarab district)

Settlement, Late Christian?

19.52.N./30.19.E., Mahas, East Bank

Two dwellings were found. The larger measures twenty metres square and was constructed of mud and stone. The second structure had mudbrick walls which were set on stone foundations.

Edwards and Osman 1992:44

Jebel Sesi (Sesi district)

Walled Settlement, X-Group-Christian-Islamic

20.07.N./30.33.E. [NF-36-M/21-L-], Mahas, West Bank

A heavy stone enclosure wall surrounds Jebel Sesi. Some large structures are preserved within the enclosure. Many stone houses were built on the eastern slope of the mountain outside the enclosure wall. Cailliaud 1826, vol. I:386; Edwards and Osman 1992:91; 1994b:281

Shofein I (Defoi)

Occupation, Christian

19.57.N./30.26.E., Mahas, West Bank

A sherd scatter, measuring roughly 90x45 metres, was noted along the Nile bank.

Edwards and Osman 1994a:49

Shofein II (Defoi)

Walled Settlement, Late Christian

19.57.N./30.27.E., Mahas, West Bank

Situated upon a steep slope, overlooking the river, was a large, quadrilateral, stone enclosure. Walls measured between 2.4 and 3.3 metres wide. Entry was via an "L"-shaped gate and round bastions were constructed at the corners. Little was found in the interior but some stone huts, of unspecified date, were noted outside. The fort was positioned so as to control traffic along the river road which ran through a narrow pass at this point. Sherds were largely of Late date. A church was found to the east of the fort.

Edwards and Osman 1994a:49-50

Shoona (Tajab West)

Granary, Christian? - Islamic

19.49.N./30.18.N., Mahas, West Bank

A roughly, square, jalus building, measuring 16x15 metres was located within the cultivation. A tower was constructed on the northwest corner. Some form of this structure is thought to have originated in the Christian period although most construction was recent.

Edwards and Osman 1994a:25

Shyinirki

Settlement, Christian

c. 19.57.N./30.23.E., Mahas, Island

Three buildings were constructed on the rocky outcrops of the island. Two were surrounded by small enclosure walls, that measured about 4 x 5 metres. The buildings were roughly square. Their lower stories

were of drystone construction while their upper levels were mudbrick. The ground floor was divided into 6 chambers, measuring roughly 3.2 x 1.5 metres. These rooms were entered from the second floor through openings in their vaulting.

Edwards and Osman 1994a:58

**Teanirki (Defoi)**

Settlement, Late Christian?

19.57.N./30.31.E., Mahas, West Bank

Located on a rocky mound overlooking the Nile was a small village. Seven, rectangular, stone and mudbrick buildings were found, some of which were apparently two-storeys high. Some barrel-vaulting was noted.

Edwards and Osman 1994a:53-4

**Toona (Tajab West)**

Building, Early - Classic Christian?

19.52.N./30.19.E., Mahas, West Bank

A building, with lower courses of stone and upper walls of mudbrick, was discovered among the rocky outcrops along the Nile bank. The lower walls appeared to be laid without mortar and the stone used was irregular in shape. The building measured roughly 10 x 5 metres, and had 6 small, vaulted rooms on the lower floor. Each room was approximately 2.5 x 3 metres in size. Nothing remained of an upper floor. Early and Classic sherds were associated with the structure.

Edwards and Osman 1994a:33

**Jebel Wahaba (Fareig district)**

Walled Settlement, Late Christian - Islamic

19.57.N./30.34.E. [NE-36-A/3-B-], Mahas, East Bank

The enclosure measured approximately 50x35 metres. The ruins of two types of structures were present. The first were constructed of stone, while the second were made of large mudbricks measuring 44x28x6 cm. Late Christian sherds were found as inclusions in the east wall of the enclosure. This site is situated on the top a rocky outcrop and overlooks the 3rd Cataract. Edwards and Osman (1994:293) note that this location provides a good view of the cataract and an ideal position from which to control traffic through it. Edwards and Osman 1992:77, pl. XXVI; 1994b:281; Waddington and Hanbury 1822:33

**DONGOLA REACH SITES (Map 5)**

**Sheik Abdallah Manasyr (District El Bakri)****Settlement, Christian****18.24.N/30.42.E., [ROM 99] (15-N-), Dongola Reach, West Bank**

Situated close to the river is a small mound, approximately 50 metres in diameter. Christian ceramics are scattered across its surface. Grzymski suggests that it was an agricultural settlement.

Edwards 1989:99; Grzymski 1987:33; 1990b:212

**Abker (Estabel)****Occupation, Christian****18.03.N/31.05.E., Dongola Reach, East Bank**

Christian period sherds were noted near a large Christian cemetery.

Arkell 1940:12; Edwards 1989:99; Linant 1958:36

**Agab Wad Addul****Settlement, Early Christian****18.30.N/30.42.E., [ROM 70] (9-X-), Dongola Reach, East Bank**

The site is located atop a steep bank overlooking the Nile. Sherd scatters suggest a Post-Meroitic to Early Christian date.

Edwards 1989:99; Grzymski 1987:28-29; 1990b:211

**Amentago East (District Amentego)****Settlement, Meroitic, Late Christian? - Islamic?****18.25.N/30.44.E., [ROM 102] (15-J-), Dongola Reach, East Bank**

Some sherds and bricks found on the west side of the site suggested to the surveyor a possible Late Christian or Islamic date. The site is a large low mound. Finds indicate is primarily of Meroitic date.

Grzymski 1987:27; 1990b:211

**Arab Haj North (District Arab Haj)****Settlement, Christian****18.23.N/30.44.E., [ROM 56] (15-O-), Dongola Reach, East Bank**

Hand-made and wheel-made Christian pottery was discovered scattered across the surface of a small mound. The remains of a small, possibly modern, structure were found on the southeast section of the site.

Edwards 1989:99; Grzymski 1987:26;1990b:211

**Baganarti****Settlement? Christian****18.09.N./30.49.E., [ROM 66] (22-G-), Dongola Reach, East Bank**

The remains of a small rectangular structure, possibly an Islamic gubba, were situated on top of a mound, fifteen metres in diameter. Red brick and plaster fragments were scattered across the surface suggesting the presence of an earlier Christian settlement site.

Edwards 1989:100; Grzymski 1987:10-11; 1990b:210

**Bakheit (Bakhit/Bachit)****Walled Settlement, Christian****18.17.N./31.41.E., Dongola Reach, East Bank**

A mudbrick and stone enclosure wall with eighteen bastions or towers surrounded the remains of a church and other unidentified structures some large in size. The fort is quadrilateral in shape measuring approximately 150x220 metres. The church is described as being small in size (ca. sixteen metres long) and with three aisles and an apse, apparently similar to one at Gebel Deqa. Based upon its description it may be between Classic and Late Christian in date.

Breasted 1908:39; Budge 1907:ii:301; Edwards 1989:100; Lepsius 1853:231; 1913:V:252-253; Monneret De Villard 1935:251, fig.229

**Jebel Barkal****Occupation, Christian****18.32.N./31.50.E., Dongola Reach, East Bank**

Sherds and Coptic and Greek inscriptions found scattered in the area of Jebel Barkal, suggests the presence of a Christian period settlement. Several Christian graves were also noted in the area of the Napatan temples and some mudbrick walls were constructed within the temples during the Christian period.

Dunham 1970:79, 81, 85; Donadoni 1986:9-13; Edwards 1989:100; T. Kendal 1996:personal communication

**Sheikh Batran (District El Bakri)****Settlement, Classic Christian****18.23.N./30.42.E., [ROM 91] (15-N-), Dongola Reach, West Bank**

Numerous saqia knobs and Classic Christian sherds were spread across a small mound. A gubba was later build on top of the site. A cemetery (designated ROM 92), probably of Christian date, is located nearby.

Edwards 1989:100; Grzymski 1987:33; 1990b:212



**Jebel Deiga (El-Deiga/Gebel Deka/Deqa)****Walled Settlement/Fortification, Christian****18.11.N./31.36.E., Dongola Reach, East Bank**

Massive walls surrounded the remains of several structures including a small three-aisled church and ruins of some other red brick buildings. The fort is situated on a sandstone promontory overlooking the Nile. The enclosed church is reported as similar to that at Bakheit (Lepsius 1853:231).

Budge 1907:ii:301; Edwards 1989:101; Lepsius 1853:231; 1913:V:251; Monneret De Villard 1935:250

**Diffar (Tifar/Ed-Dafar) (El Hau?)****Settlement, Christian - Islamic?****18.03.N./31.18.E., Dongola Reach, East Bank**

A fortress containing a church is mentioned at this location. Edwards suggests that the fort may be Islamic in date and situated on top of an earlier Christian settlement. He further suggests that Diffar may be El-Hau mentioned by Monneret De Villard.

Breasted 1908:39; Cailliaud 1826:II:29; Edwards 1989:101; Lepsius 1853:231-2; 1913:V:250; Linant 1958:38; Monneret De Villard 1935:250

**Fergi (District Fergi)****Occupation, Christian?****18.28.N./30.41.E., [ROM 94] (15-D-), Dongola Reach, West Bank**

Red bricks, possibly of Christian date were found reused in a modern cemetery by Grzymiski. A church and Christian sherds were noted by Monneret de Villard. Red brick ruins were recorded by Gleichen but recently no trace of these remains have been found.

Edwards 1989:101; Gleichen 1905:313; Grzymiski 1987:34; 1990b:212; Monneret De Villard 1935:244

**Gabriya****Occupation, Christian****18.07.N./30.52.E., Dongola Reach, West Bank**

The remains of a church and settlement site were noted here. Unfortunately, during the 1930's, they were greatly destroyed.

Arkell 1940:13; Edwards 1989:101; Linant 1958:35

**Ganetti (Genetti/Ginetti)****Walled Settlement/Fortress, Christian**

**18.00.N./31.17.E., Dongola Reach, West Bank**

A church and the remains of a settlement were enclosed within a large fortification wall. Granite columns and capitals have been noted on the site.

Breasted 1908:39; Clarke 1910:226; 1912:42-43, pl. IV; Crowfoot 1927a:145; Edwards 1989:101; Linant 1958:173

**El Ghaddar**

**Settlement Meroitic, Christian, Islamic**

**18.15.N./30.45.E., [ROM 6] (15-Y-), Dongola Reach, East Bank**

Brick detritus, sherds, sandstone fragments and shells were scattered across the surface of a large mound. The mound reached up to three meters high and was situated at the entrance to a big wadi. An Islamic cemetery was located nearby.

Edwards 1989:102; Grzymski 1987:15; 1990b:210

**El Ghaddar South (District El Ghaddar, Sheik Joda)**

**Settlement, Early - Classic Christian**

**18.15.N./30.45.E., [ROM 1] (15-Y-), Dongola Reach, East Bank**

Near the entrance to a small khor lies a mound covered with red brick detritus and Early and Classic Christian sherds. The mound is approximately three metres high. A cemetery probably of Christian date is located nearby.

Edwards 1989:102; Grzymski 1987:14-15; 1990b:210

**Jebel Ghaddar**

**Building, Christian - Islamic**

**18.15.N./30.45.E., [ROM 14] (15-Y-), Dongola Reach, East Bank**

The remains of a structure built of stone, red brick, mudbrick and mud mortar sits on top of the mountain. Numerous Arabic graffiti are inscribed in the sandstone around it. Grzymski (1987:16) suggests usage during the Christian and post-Christian periods.

Edwards 1989:102; Grzymski 1987:16; 1990b:210

**Jogob Sheikh Mohammed (District El Ghaddar)**

**Settlement, Meroitic? - Late Christian**

**18.16.N./30.44.E., [ROM 34] (15-Y-), Dongola Reach, East Bank**

A large, settlement mound was located near the Nile. It was roughly "C"-shaped and the surface was

covered with sherds, primarily of a Late Christian date. Artefact material found on the surface is similar to that found at Hambukol [ROM 33]. The mound was oriented approximately north-south along the Nile. A Christian period cemetery was located nearby. The site has also been referred to as Nurin Jabal and Jebel Nuuri. Edwards (1989:102) calls the site Gojub Sheikh Mohammed.

Edwards 1989:102; Grzymski 1987:24; 1990b:211

#### Haj Magid

Settlement, Classic Christian?

18.21.N./30.46.E., [ROM 49] (16-K-), Dongola Reach, East Bank

Several large mounds were found covered with sherds and settlement detritus, including granite columns and capitals and plastered red brick fragments. The remains of several structures were noted. Orientation of the site appears to be north-south and it is situated on the edge of the Letti Basin. Pot sherds dating to the Classic Christian period were noted on the surface. The site is thought to cover an area roughly 400x200 metres in size.

Edwards 1987:103; Grzymski 1987:19-20, pl. 3a; 1990b:211; Jakobielski and Krzyzaniak 1973:154, n.19

#### Haj Magid Northeast

Settlement, Terminal Christian - Islamic

18.22.N./30.46.E., [ROM 83] (16-K-), Dongola Reach, East Bank

Coarse, handmade sherds, possibly of Terminal Christian or Islamic date, were found scattered across the site along with brick detritus.

Edwards 1989:103; Grzymski 1987:20; 1990b:211

#### Hambukol (District El Ghaddar, Jogob)

Settlement, Monastery? Early - Late Christian

18.15.N./30.44.E., [ROM 33] (15-Y-), Dongola Reach, East Bank

A large "Y"-shaped mound, oriented north-south, was located near the Nile. It measured approximately 400x300 metres and was approximately fourteen metres high. The surface of the mound was covered with habitation debris including sherds, brick detritus and bones. Excavation has been conducted in three areas uncovering a small mudbrick house, a large, mudbrick, red brick and stone public building, a mudbrick and red brick house attached to the public building, and a large mudbrick structure. Structures on the main mound are largely of Late Christian date. A second, smaller mound was located to the north of the main mound. Excavations there have revealed a large red brick and mudbrick structure that may have been a monastery of Early to Classic Christian date. Two post-Meroitic sherds have also been recovered from this

mound. The site is also referred to as Jogob El Madrasa.

Anderson 1994:225-228; Edwards 1989:103; Grzymiski 1987:23-24; 1988; 1989:72-75, pls. IIa, IV-XIII; 1990a:139-163; 1990b:211; Grzymiski and Anderson 1994:93-105; Jakobielski and Krzyzaniak 1973:154, n.19; Phillips 1991:24-33; 1994:229-236; Żurawski 1994:215-217

Ishashi (Ischischi)

Settlement, Christian

18.34.N./31.57.E., Dongola Reach, Island

Lepsius noted the remains of several stone and brick structures on the island. Edwards suggests one building might be a church containing an apse.

Edwards 1989:104; Lepsius 1853:225; 1913:V:286

Sheikh Joda

Settlement, Christian

18.17.N./30.45.E., [ROM 26] (15-Y-), Dongola Reach, East Bank

At the base of Jebel Sheikh Joda, lay the remains of a small settlement. A cemetery was located nearby.

Edwards 1989:104; Grzymiski 1987:18; 1990b:210

Kadacol-Teraza (District Kadacol)

Settlement, Christian

18.20.N./30.43.E., [ROM 54] (15-O-), Dongola Reach, East Bank

A large mound, measuring roughly 500 metres long and oriented north-south, was discovered covered with sherds, brick detritus, sandstone fragments, plaster and part of a stone pillar. Edwards suggests that "this is probably the site of a church recorded by Breasted" (Edwards 1989:104) but there is little evidence to substantiate this claim.

Breasted 1908:40; Edwards 1989:104; Grzymiski 1987:25-26; 1990b:211

Kait

Settlement/Occupation, Christian

Location unknown, Dongola Reach ?

Waddington and Hanbury recorded the presence of a couple churches and some archaeological ruins between Wad Nimeiri and Dongola. This site or sites have not been located.

Edwards 1989:104; Waddington and Hanbury 1822:222

**Kajebi (Kejebi)****Settlement, Late Christian - Islamic****18.28.N./31.47.E., Dongola Reach, East Bank****Red brick detritus and Christian sherds were found mixed with later Islamic ruins. A Christian cemetery was located nearby.****Abbas Sid Ahmed 1971:20; Edwards 1989:104****Kankalab North (District Kankalab)****Settlement, Christian - Islamic****18.17.N./30.42.E., [ROM 87] (15-Y-), Dongola Reach, West Bank****The remains of an Islamic fortress overlook the Nile. A large mound covered with Christian sherds was located to the west of it.****Edwards 1989:105; Grzymski 1987:32; 1990b:211****Kankalab South (District Kankalab)****Settlement, Meroitic, Early Christian, Islamic****18.17.N./30.32.E., [ROM 86] (15-Y-), Dongola Reach, West Bank****A low mound ran parallel to the Nile for a distance of approximately 500 metres. Sherds from the Meroitic, Early Christian and Islamic periods were found and mudbrick walls were visible on the mound surface.****Grzymski 1987:31-2; 1990b:211****Kerma****Occupation, Christian****19.36.N./30.25.E., Dongola Reach, East Bank****Sherds have been found in the area possibly suggesting a Christian period occupation in the vicinity, and a Medieval burial of several individuals was discovered.****Edwards 1989:105; Shinnie 1950:297; Simon 1986:31****El Khandaq****Settlement, Fortress, Christian****18.36.N./30.34.E., Dongola Reach, West Bank****A stone fortress with buttressed walls, similar to those at Bakhit, was situated overlooking the Nile. It appears to have been rebuilt with mudbrick and used during the Islamic period. The fort was located at the**

end of the caravan route to Kordofan. Some sherds associated with the fort date to the Early Christian period. Other finds include Christian gravestones, and graves additionally, a number of churches have been noted in this location.

Crawford 1951:36-38; Edwards 1989:105; Gleichen 1905:28; Linant 1958:30; Monneret De Villard 1935:242-245

#### El Khandaq East

Settlement, Christian

18.36.N./30.35.E., [ROM MM 5] (9-Q-), Dongola Reach, East Bank

The site is oriented north-south along the Nile. Sherds were scattered across the surface and included wheel-made qadus fragments. Sherds of other periods were also noted including those of possible Early Nubian and Islamic date.

Edwards 1989:105; Grzymiski 1987:30; 1990b:211

#### El Laqiya

Monastery?, Christian

19.28.N./30.16.E., Dongola Reach, West Bank

Gleichen reported a structure, possibly a monastery, in this location. This may be the same as the monastery at Allaqi referred to in the Arabo-Jacobitic Synaxary. Sepulchral crosses have been reported in this area.

Bonnet 1991:19; Edwards 1989:106; Gleichen 1905:204; Jeuté 1994:59; Vantini 1975:442; Żurawski 1994:321

#### Khor Letti East

Settlement, Christian

18.19.N./30.45.E., [ROM 48] (16-P-), Dongola Reach, East Bank

The mound measured approximately 50x30 metres and was covered with red brick fragments and Christian sherds. It was oriented north-south.

Edwards 1989:106; Grzymiski 1987:19; 1990b:210

#### Letti West I

Settlement, Christian

18.16.N./30.45.E., [ROM 39] (15-Y-), Dongola Reach, East Bank

Sherds, red and mudbrick detritus were found covering the surface of a small mound. The site was oriented north-south along the west side of the Letti and measured roughly 80x40 metres.

Edwards 1989:106-107; Grzymski 1987:21; 1990b:211

#### Letti West II

Settlement, Classic - Late Christian

18.17.N./30.45.E., [ROM 40] (15-Y-), Dongola Reach, East Bank

A number of small mounds ran from north to south over a distance of approximately 300 metres. Sherds covered the site and several stamped bowl centres and qadus knobs were noted.

Edwards 1989:107; Grzymski 1987:21; 1990b:211

#### Letti West III

Settlement, Classic - Late Christian

18.18.N./30.45.E., [ROM 41] (15-T-), Dongola Reach, East Bank

Two mounds, spaced 300 metres apart, stood on the west side of the Letti Basin. Both were covered with Classic and Late Christian sherds including qadus knobs and store jars, as well as red brick fragments.

Edwards 1989:107; Grzymski 1987:21; 1990b:211

#### Letti West IV

Settlement, Christian

18.18.N./30.45.E., [ROM 42] (15-T-), Dongola Reach East Bank

This site consisted of five mounds. It was located near Letti West III and artefacts similar to those from Letti West III were noted here. A section cut through one mound revealed a two-metre deep deposit of Christian sherds.

Edwards 1989:107; Grzymski 1987:21; 1990b:211

#### Letti West V

Settlement, Early - Classic Christian

18.18.N./30.45.E., [ROM 37] (15-T-), Dongola Reach, East Bank

Red brick debris and Early to Classic Christian sherds littered the surface of this large mound. It had a diameter of approximately 180 metres. Letti West IV was located to the southeast of this site.

Edwards 1989:107; Grzymski 1987:22; 1990b:211

#### Letti West VI

Settlement, Late Christian

18.17.N./30.45.E. [ROM 36] (15-T-), Dongola Reach, East Bank

Red brick detritus, sandstone and granite fragments were spread across a series of small mounds. Few sherds were noted.

Edwards 1989:107; Grzymski 1987:22; 1990b:211

#### Letti West VII

Settlement, Late Christian

18.19.N./30.45.E., [ROM 43] (15-T-), Dongola Reach, East Bank

Red brick detritus, qadus knobs and sherds were scattered across the surface of a series of low mounds.

Grzymski 1987:22; 1990b:211

#### Letti West VIII

Settlement, Christian?

19.19.N./30.45.E., [ROM 35] (15-T-), Dongola Reach, East Bank

Red brick detritus and sherds covered a low mound. A rectangular, mudbrick structure stands at the north end of the mound. A granite statue base with a Meroitic inscription was located to the west of the mound.

Anderson and Grzymski 1994:in press; Grzymski 1987:22; 1990:211

#### Mawwad (District Kankalab)

Settlement, Christian

18.18.N./30.42.E., [ROM 88] (15-X-), Dongola Reach, West Bank

Brick detritus and pot sherds were found spread across two mounds. The mounds were orientated north-south.

Edwards 1989:107; Grzymski 1987:32; 1990b:212

#### Megauda North (District Megauda)

Settlement, Late Christian

18.19.N./30.43.E., [ROM 45] (15-T-), Dongola Reach, East Bank

The site consisted of a circular mound, 40 metres in diameter, and a long mound, oriented north-south, along the Nile. Both were covered with Christian sherds and red brick detritus. A post-Meroitic, Christian and modern period cemetery, located in the desert of the Letti Basin, may have been associated with this site and with Megauda South.

Edwards 1989:107-108; Grzymski 1987:25; 1990b:211

#### Megauda South (District Megauda)



**Settlement, Late Christian**

18.18.N./30.43.E., [ROM 38] (15-T-), Dongola Reach, East Bank

The mound was located near the river and oriented along it in a north-south direction. Sherds, bones and brick fragments were scattered across its surface. Grzymski noted that the Letti Basin, Letti desert and Nubian desert were visible from the top of the kom.

Edwards 1989:108; Grzymski 1987:25; 1990b:211

**Merowe East****Occupation, Christian**

18.29.N./31.48.E., Dongola Reach, East Bank

Christian pot sherds have been reported from the area of the Islamic castle. Hoskins reported a church in the area. Budge attributed some Coptic inscriptions to this location.

Budge 1907:I:129; Edwards 1989:108; Hoskins 1835:132; Linant 1958:43, 167-168; Lepsius 1913:V:282-283; Monneret De Villard 1935:253

**Merowe (Abu Dom)****Settlement? Christian**

ca. 18.28.N./31.49.E., Dongola Reach, West Bank

Buildings and stelae of Christian date have been reported from this area, however no specific site has been located.

Edwards 1989:108; Griffith 1923:74-75; Lepsius 1913:V:282-285

**Mushu (Mosch)****Settlement, Christian**

19.23.N./30.23.E., Dongola Reach, West Bank

A small church and settlement were noted here. Lepsius found them similar to undated remains at Koya (Koi). Qadus knobs have been reported from this site.

Clarke 1910:224; Edwards 1989:108; Lepsius 1853:235; Waddington and Hanbury 1822:43, 256-7

**Sheikh en Naaman****Settlement, Early? Christian**

18.32.N./30.40.E., [ROM 73] (9-X-), Dongola Reach, East Bank

Christian sherds, including numerous pilgrim flask fragments, grindstone and sandstone fragments, were found scattered across and around a low gravel mound. Kerma material was also discovered here.

Edwards 1989:108; Grzymiski 1987:29; 1990b:211

Nawa I, saqia 27 & 28 (Nawi, District Nawa)

Settlement, Christian

18.27.N./30.44.E., [ROM 74] (15-E-), Dongola Reach, East Bank

Sherds, red brick and mudbrick detritus, sandstone and granite fragments were found spread throughout the village of Nawa. Extensive robbing and destruction of the site had occurred. A Greek inscription published by Crowfoot may have originated here.

Breasted 1908:40; Crowfoot 1927b:226-228; Edwards 1989:108; Grzymiski 1987:28; 1990b:211

Nawa II (Nawa)

Settlement, Late Christian - Islamic

18.27.N./30.45.E., [ROM 75] (16-A-), Dongola Reach, East Bank

Saqia knobs, lithics, bone fragments, Late Christian and Islamic sherds, utility wares and grindstones were found on the surface of this site.

Grzymiski 1987:20; 1990b:211

Nugdumbush (Bugdumbush)

Settlement, Early - Terminal Christian

18.32.N./30.40.E., [ROM 72] (9-X-), Dongola Reach, East Bank

A large settlement site situated on the cultivation edge, was covered by pot sherds of all Christian periods. No architectural remains were visible on the surface. The local Omda reported the presence of columns at this site to Crawford (1951:38).

Breasted 1908:41; Crawford 1951:38; Edwards 1989:100-101; Gratien 1978:21; Grzymiski 1987:29; 1990b:211

Nuri

Settlement, Christian

18.33.N./31.55.E., Dongola Reach, West Bank

A settlement containing a church (NU 100) was noted amidst the Nuri pyramid field. A Christian cemetery was located nearby. Sherds, including qadus knobs, and Coptic and Greek gravestone fragments were recovered from the site.

Dunham 1955:3-4, 197, 271-272, fig. 149; Edwards 1989:108; Monneret De Villard 1935:258

### Old Dongola

#### Walled Settlement, All Christian periods

18.14.N./30.45.E., Dongola Reach, East Bank

An extensive settlement was found at Old Dongola and identified as the capital city of Makuria. It contained many churches (at least ten have been positively identified), kilns, habitation sites, a possible throne hall and monasteries. Several cemeteries are associated with the site. A sturdy fortification wall surrounded kom A, the highest part of the settlement. Three Christian period houses, designated A, B, and P have been excavated. Monastic settlements have been found on kom D (DM) and H. It is further suspected that portions of kom E and K may also house monasteries.

Clarke 1912:43-44; Dobrowolski 1987; 1988; 1991; Edwards 1989:108; Gartkiewicz 1990; Godlewski 1978a, 1978b, 1982a; 1982b; 1982c; 1990a; 1990b; 1991a; 1991b; 1995; Jakobielski 1970; 1975a; 1975b; 1978a; 1979; 1982a; 1982b; 1982c; 1986; 1991; 1993; 1995; Jakobielski and Godlewski 1990; Jakobielski and Krzyzaniak 1967; Jakobielski and Ostrasz 1967; Jakobielski and Rudniewski 1971; Jeut  1994:71-4; Kolodziejczyk 1971; Medeksza 1990; Michalowski 1966, 1969, 1970; Pluskota 1994; Zagrodzki 1975; Żurawski 1994; 1995

#### Mohamed Amentod (District Rumi Qubli)

##### Settlement, Christian

18.25.N./30.42.E., [ROM 97] (15-I), Dongola Reach, West Bank

An Islamic gubba was constructed on top of a Christian settlement site. The site forms a low mound 2.5 metres high and 50x20 metres in size. Sherds and debris were scattered across the surface and like many other mounds in the region, it was orientated north-south. Grzymski notes that it is similar in "character" to Sheik Abdallah Manasyr (Grzymski 1987:33).

Edwards 1989:108-109; Grzymski 1987:33; 1990b:212

#### Saleb (Nasrani, District Saleb)

##### Enclosure, Settlement? Monastery? Christian

18.08.N./30.52.E., [ROM 100] (22-M-), Dongola Reach, East Bank

A low wall measuring 120x80 metres enclosed a round kom. The wall was constructed of sandstone blocks and bricks. The diameter of the mound was between 18 to 20 metres and it stood four to five metres high. Scattered across the surface were red brick and plaster debris. Few sherds were noted. Sides of the mound were rather steep. The exact nature of the site is uncertain. Grzymski suggests that it may be a church or monastery. Saleb South [ROM 101] was located nearby and it certainly was a settlement site.

Edwards 1989:109; Grzymski 1987:9-10; 1990b:210

**Saleb South (District Saleb)****Settlement, Christian****18.08.N./30.52.E., [ROM 101] (22-M-), Dongola Reach, East Bank****Red brick fragments and sherds covered the surface of this mound. Stone blocks have also been reported from the site. The kom had a diameter of roughly 100 metres and reached a height of about five metres.****Edwards 1989:109; Grzymski 1987:9; 1990b:210****Sheikh Wahab South****Settlement, Christian****18.14.N./30.45.E., [ROM 2] (21-E-), Dongola Reach, East Bank****Red brick detritus, sherds and plaster fragments were scattered across a small mound. Approximately thirty Moslem graves were found on the north side of the mound.****Edwards 1989:110-111; Grzymski 1987:14; 1990b:210****Sinada (District Baganarti)****Walled Settlement/Monastery? Christian****18.10.N./30.47.E., [ROM 53] (22-F-), Dongola Reach, East Bank****An enclosure wall roughly 200x200 metres in size surrounded the mound. Remnants of structures were visible on the surface and secondary inhumations were present on the sides of the mound. The kom was about six metres high. Kenisa (church) is the local site name.****Edwards 1989:109; Grzymski 1987:11; 1990b:210; Żurawski 1994:322****Tabo (Tabu)****Occupation, Christian****19.23.N./30.28.E., Dongola Reach, Island****A church was constructed amidst the remains of a Pharaonic temple and a Christian cemetery was located nearby. Ashes were scattered around the interior of the church. Remnants of structures, red bricks, plaster and sandstone fragments and terra cotta window grill pieces were also found on site. A stone seal with ΠΙΕΤΡΟΥ inscribed on it was recovered.****Bonnet (ed.) 1990:260-261; Lepsius 1913:V:247-248; Edwards 1989:109; Maystre 1973:198-199****At Tammariya (District El Golid Qubli, Tammariya)****Occupation, Christian****18.29.N./30.41.E., [ROM 93] (15-D-), Dongola Reach, West Bank**

The presence of a Christian settlement was suggested by scatters of Christian pot sherds.

Edwards 1989:103; Grzymiski 1987:34:1990b:212

#### Tangassi (Tangassi el Hella/Hilla)

Settlement, Christian

18.09.N./30.48.E., [ROM 78] (22-L-), Dongola Reach, Island

A rectangular structure containing sandstone column fragments was located on a mound covered with Christian sherds. Grzymiski equates this site with Kandamir identified by M.D.Villard (1935:248). A story related to Franciscan monks in Cairo identified a monastery on the island of Tangassi (Vantini (1981:205) however, there is little evidence thus far to support this assertion.

Arkeel 1940:13; Edwards 1989:109-110; Grzymiski 1987:11; 1990b:210; Jeuté 1994:74-5; Linant 1958:34; Monneret De Villard 1935:248; Vantini 1981:205-6

#### Tanqasi

Occupation, Christian

18.23.N./31.48.E., Dongola Reach, West Bank

Christian sherds have been reported in the area of the post-Meroitic tumuli field suggesting a Christian occupation somewhere in the area.

Edwards 1989:110; Lepsius 1913:V:255-256

#### Teiti (Teyt)

Settlement? Christian

18.50.N./30.29.E., Dongola Reach, West Bank

The remains of a church and settlement have been reported in this location along with much red brick detritus.

Cailliaud 1826:II:14; Edwards 1989:110; Linant 1958:29; Monneret De Villard 1935:242

#### Tombos

Quarry, Christian?

19.42.N./30.24.E., Dongola Reach, East Bank

This area was extensively quarried for granite during the Napatan and Meroitic periods. Edwards (1989:110) suggests this may be one source of Christian period granite columns. This supposition remains unconfirmed.

Edwards 1989:110; Linant 1958:18-19; 22-23

**El Ugal****Monastery? Settlement, Christian****18.46.N./30.02.E., Dongola Reach, East Bank**

Remains of red brick and mudbrick walls were visible on the surface of a large sherd covered mound to the south of Kawa. One structure had small vaulted rooms constructed on either side of a long passage and traces of vaulting were preserved. Several stone architectural fragments were discovered. The surveyors have suggested that this site is a monastery.

Welsby 1994a:4-5; D. Welsby and I. Sjöström 1996:personal communication

**Umm Karabig (?)****Settlement, Late Christian ? - Islamic ?****18.34.N./30.38.E., [MM 7], (9-R-), Dongola Reach, East Bank**

Sherds were scattered on the surface of a small site that measured approximately 50x30 metres. The site was greatly denuded.

Grzymski 1987:30; 1990b:211

**Urbi****Occupation, Christian****18.44.N./30.32.E., Dongola Reach, East Bank**

Sherds have been found in this area.

Edwards 1989:110; Monneret De Villard 1935:242

**Urukutti (District Amentago, Sheikh Ismail)****Settlement, Early, Classic and Terminal Christian****18.25.N./30.44.E., [ROM 21] (15-J-), Dongola Reach, East Bank**

This is a large settlement site with artefactual material of Meroitic and Christian date originating here.

Sherds cover the site and sandstone blocks have been reported. Grzymski suggests that Urukutti is Dongolawi for "the Royal Mound" or "the mound above the water".

Arkell 1940:12; Edwards 1989:110; Grzymski 1987:27-28; 1990b:211

**Qasr Wad Nimeiri****Settlement, Christian - Islamic****19.00.N./30.27.E., Dongola Reach, West Bank**

Christian sherds have been noted in the area of the Islamic fort and to the south of the fort are the ruins of

a large village. A Greek stele has been recovered from the area. Several reports also mention churches in the area.

Arkell 1940:12; Cailliaud 1826:II:12; Crawford 1951:32-33, pl. 5b; Edwards 1989:110; Linant 1958:29; Sayce 1910:267; Monneret De Villard 1935:242; Waddington and Hanbury 1822:222

Wadi Sheikh Wahab

Building, Christian?

18.14.N./30.45.E., [ROM 5], Dongola Reach, East Bank

A two-room, sandstone house was constructed on a small hill in the middle of the wadi. The house measured 8x6 metres. A single Christian sherd was found in the vicinity.

Edwards 1989:110, Grzymiski 1987:13; 1990:210

Ez Zuma

Anchorite grottos? Christian

18.21.N./31.44.E., Dongola Reach, East Bank

Cave tombs of probable Meroitic date appear to have been reused during the Christian period. Edwards (1989:111) suggests that "hermits" may have used the caves. This supposition may be expanded to include anchorites. One cave, discovered by travellers during the 19th century, was found decorated with Christian graffiti and part of an inscription containing the name MOYCHC.

Budge 1907:I:129; Edwards 1989:111; Monneret De Villard 1935:251

**ABU HAMED REACH SITES (Maps 6, 7)**

Abbar Island (Korta)

Fortified building, Late Christian? - Islamic

19.32.N./33.12.E., Abu Hamed Reach, Island

Christian sherds are scattered across the site. Some of the earlier mudbrick remains show traces of "djir" plaster. A fortified mudbrick building, quadrilateral in shape, is also located here. Bastions were evident at the corners of the structure. An iron, Christian key was recovered from a room in the fortress interior. Remains of a large mud building were discovered in the northeast part of the fortification. The ruins of a settlement, cemetery and possible church were located nearby.

Abbas Sid Ahmed 1971:7-9; Edwards 1989:83; Jackson 1926:28

Abu Raheel (Bonni Island)

Fortress, Christian?

19.01.N/32.26.E. [SAS # 68: NE-36-B/22-X-4], Abu Hamed Reach, Island

A fortress of unknown date is reported here. A Christian cemetery is located nearby [SAS #67]. Ahmed M.A. Al Hakem 1993:18, 23

Abu Sideir (Hager Hilal?)

Building, Christian

19.29.N/33.14.E. [SAS # 49?: NE-36-C/13-D-6], Abu Hamed Reach, West Bank

This is a red brick building with Christian sherds covering the surrounding surface. Locally it is referred to as "Kenisa". Two Christian cemeteries are associated with the ruins. It is probably a church.

Abbas Sid Ahmed 1971:13; Ahmed M.A. Al Hakim 1993:17, 21; Crawford 1953b:19; Edwards 1989:83

Amri

Occupation, Christian

18.47.N/32.02.E., Abu Hamed Reach, West Bank

A site, reputed to be a church, has been reported in this region.

Edwards 1989:83; Titherington 1939:269

Arjat

Walled Settlement, Christian

19.27.N/33.20.E., Abu Hamed Reach, Island

A settlement constructed of stone and surrounded by a wall was recorded by Jackson. Christian period ceramics and a grave were noted by Abbas.

Abbas Sid Ahmed 1971:12-3; Edwards 1989:83; Jackson 1926:31

Artul

Occupation, Christian - Islamic

18.53.N/33.32.E., Abu Hamed Reach, Island

Christian sherd scatters, now disrupted by cultivation and greatly weathered, occur on the island in the area of a mosque. This mosque is rectangular with a tower and two entrances. It is thought to be a converted church based on the presence of granite columns and carved stone elements. Decorations on these elements included a cross and a bird.

Crawford 1953b:14-15, pl. viiia; Edwards 1989:84; Jackson 1926:26-7; Mohi 1991:60

`Atmur I



**Walled Settlement, Christian**

19.07.N./33.34.E., Abu Hamed Reach, West Bank

Numerous Christian sherds were found scattered amidst the red brick and mudbrick remains of a village. One brick appeared to have a cross marked on it. An earthen embankment enclosed the ruins and appeared to be contemporary with it. To the east of the settlement are the remains of a red brick structure referred to locally as a church.

Crawford 1953a:16-7; Edwards 1989:84; Jackson 1926:26; Mohi 1991:59

**`Atmur II****Settlement, Christian**

19.11.N./33.31.E., Abu Hamed Reach, West Bank

The remains of a small mudbrick village were noted by Crawford. Two mudbrick walls of a structure, possibly a church, were standing at the time of his visit. As no excavation was conducted the building plan could not be determined.

Crawford 1953a:17; Edwards 1989:84

**Baqeir II****Walled Settlement, kilns, Christian**

18.42.N./33.37.E., Abu Hamed Reach, West Bank

Crawford discovered the stone foundations of a small enclosure wall. Bastions were noted at two of the structure's corners. None of the superstructure remained extant but it was probably constructed of mudbrick or mud. Two kilns were located within the enclosure and two outside the walls. Christian sherds and kiln wasters covered the site.

Crawford 1953b:30-31, fig.9; Edwards 1989:84; Mohi 1991:61

**Berti ('Keniset Birti')****Occupation, Christian**

18.54.N./32.17.E., Abu Hamed Reach, Island

The local name of 'Keniset Birti' and scatters of Christian sherds suggest the presence of a Christian period occupation.

Edwards 1989:84; Jackson 1926:21-2, 26; Monneret De Villard 1935:259

**Hillet el-Bib****Walled Settlement - Monastery? Christian**

18.48.N./32.01.E. [SAS # 114: NE-36-F/3-P-1], Abu Hamed Reach, East Bank

Buildings within this settlement were constructed of mudbrick and stone. The central structure is a three-aisled church with an apse in the east end. The presence of structures connected to the church suggest that the site may have been a monastery.

Ahmed M.A. Al Hakem 1993: 19, 23; Caneva 1988:4; Edwards 1989:84-5; Lepsius 1853:226, 1913:IV:288; Monneret De Villard 1935:258, fig.233

Wadi Dam et Tor (Wadi Dam al-Tor)

Settlement, Early (?) Christian

18.44.N./33.33.E., Abu Hamed Reach, West Bank

Many buildings of mudbrick and red brick were noted. Damage to the site by robbers revealed a rectangular mudbrick house and many Christian sherds. Red brick fragments were concentrated in the northwest area of the site. Part of a stone wall ran along the east side of the site suggesting that it may have been enclosed at one time. A stone dyke ran from northeast to south west to the east of the stone wall. To the south of the site was cemetery with Post-Meroitic and Christian graves.

Crawford 1953b:24-26, pl. xviiia, xviiib, xviiiia, xviiiib; Edwards 1989:85; Mohi 1991:60

Esri (Isri)

Occupation, Christian

18.32.N./33.39.E., Abu Hamed Reach, West Bank

Pot sherds were found scattered in this area.

Edwards 1989:84; Jackson 1926:26

Esri Island (Isri)

Settlement, Christian

18.32.N./33.40.E., Abu Hamed Reach, Island

"An extensive Christian site was found on the eastern side of the island" (Kleppe 1982:147). Unfortunately no other information is available.

Edwards 1989:85; Kleppe 1982:147

Fillikol I

Occupation, Christian - Islamic

19.29.N./33.17.E., Abu Hamed Reach, Island

Sherd scatters suggested the presence of a settlement damaged or destroyed by modern cultivation. A

Christian cemetery, containing roughly fifty graves, was located near the site. Pottery similar to Funj coarse ware was also found here.

Abbas Sid Ahmed 1971:12-4; Edwards 1989:85

#### Fillikol II

Walled Settlement/Fortification, Christian

19.29.N./33.17.E., Abu Hamed Reach, Island

Jackson discovered the remains of a small village of round, stone structures. Associated sherds were undistinguished. Abbas compares this settlement to the stone village on Arjat. Similarities between the two villages might suggest a Christian date for Fillikol II. Several fortified walls were located near the village. As the house stones were not incorporated into the nearby Christian cemetery a date of Christian period or later is further suggested.

Abbas Sid Ahmed 1971:12, 14; Crawford 1953a:18-19; Edwards 1989:85; Jackson 1926:25

#### Gandeisi Island I

Settlement, Christian

18.42.N./33.38.E., Abu Hamed Reach, Island

Just to the north of site Gandeisi II at the east end of the island, lies a small red brick church. A settlement was probably located nearby as Christian sherds litter the region.

Crawford 1953b:26-28; Edwards 1989:85; Jackson 1926:26

#### Gandeisi Island II

Walled Settlement/Fortress, Settlement, Christian

18.42.N./33.38.E., Abu Hamed Reach, Island

The remains of stone and mud structures were found within a small fortified quadrilateral enclosure. Bastions were located at each corner of the structure and there were two gates. The northwest wall was thicker than the others (ca. 5 m). Finished sandstone was found reused within the structure. A large kom covered, with brick detritus and Christian pot sherds, was located outside the northeast fort wall. A cemetery was located to the east of the fort.

Crawford 1953b:29-30, pl. xxib; Edwards 1989:85; Jackson 1926:26; Mohi 1991:61

#### Gereif

Settlement, Christian

19.02.N./33.33E., Abu Hamed Reach, West Bank

Opposite the Islamic fort at Gereif lay the disturbed remains of a large settlement. Stone ruins and numerous sherds covered the site. Small stone enclosures and a cemetery were noted to the south, while two cemeteries were found north of the site. Red painted plaster and an inscribed tile were found. Crawford 1953a:14-16; Edwards 1989:86; Mohi 1991:59

#### El Goz (Shirri Island)

Settlement, Christian

19.08.N./32.34.E. [SAS #60: NE-36-B/23-L-1], Abu Hamed Reach, Island

The presence of a settlement is reported here.

Ahmed M.A. Al Hakem 1993:17, 22

#### Hajar

Settlement, Christian

19.30.N./33.20.E., Abu Hamed Reach, Island

Christian sherds, both "thin, [red] hard ware and painted sherds" (Abbas 1971:14) and fragments of wall plaster were scattered across the site. The houses appear to have been round and constructed of stone (probably foundations) and red brick (upper walls). No intact house plans were visible. This site is referred to as Megal by Crawford. A Christian cemetery was located nearby.

Abbas Sid Ahmed 1971:14; Crawford 1953a:5-6; Edwards 1989:86; Jackson 1926:25

#### Hajar el-Merwa (Hagar el Meroe)

Walled Settlement, Christian

19.14.N./33.30.E., Abu Hamed Reach, East Bank

A large mound, called "Kanisa Kurgus", was located within a Pharaonic mudbrick fortification. The site is covered with Christian period sherds, mudbrick and red brick fragments. This suggests the reoccupation of the fort during the Christian period and the construction of a village with a church there. A nearby cemetery may also date to the Christian period. The site has been damaged by "maroq" diggers.

Arkell 1950:39; Crawford 1953a:7; Edwards 1989:86

#### Hubeil

Occupation, Late Christian?

19.30.N./33.17.E., Abu Hamed Reach, Island

The presence of a settlement somewhere in the area is suggested by the presence of Late Christian sherds, the reuse of plastered red bricks in a local mosque and the name "Kenisa" for this locality. Christian graves

are also found in the area. Settlement here is possibly connected with that at Khuzeina, the neighbouring village, as the cemetery appears to run between the two villages.

Abbas Sid Ahmed 1971:11-12; Edwards 1989:87

#### El Kab

Walled Settlement/Fortress, Christian - Islamic

19.18.N./32.43.E., Abu Hamed Reach, East Bank

Crawford describes two, stone and mudbrick forts neighbouring each other along the bank of the Nile. The large fort was quadrilateral with thick walls and bastions. Remains of mud structures and round stone houses were found within. Traces of red plaster were found within the round buildings. The second fort was smaller with thinner walls. Traces of rectangular mud structures were found inside. Christian sherds were associated primarily with the large fort and Funj sherds with the small fort, although some early Christian pottery was also found near the small fort.

Crawford 1951:50, pl.18; 1953b:10-14, fig.1, 2; Edwards 1989:87; Jackson 1926:26, 31-32; Titherington 1939:271

#### Kadeitta

Occupation, Christian

19.29.N./33.17.E., Abu Hamed Reach, West Bank

During his trek in the Abu Hamed district Jackson noted pot sherds at Kadeitta.

Edwards 1989:87; Jackson 1926:26

#### Karmel (al-Karmel) (El Hilla)

Walled Settlement/Fortress, Christian - Islamic

19.28.N/33.19.E. [SAS #4: NE-36-C/14-B-1], Abu Hamed Reach, Island

This stone, red brick, mud and mudbrick fort is located on top of a granite prominence overlooking the Nile. The fort is irregular in shape and the main entrance was flanked by two large towers. Traces of stone walls were found inside the structure as were mudbrick walls of a recent date. Many rebuildings, using a wide variety of materials, were noted and it appears the fort was reused several times and occupied for a long period. Christian sherds are scattered across the surface. The presence of gun slits suggests use during the Funj period and later. This site appears to be Crawford's (1953b:35-36) site 32, Kelesaikal. Caillaud appears to have described this site as a "convent".

Abbas Sid Ahmed 1971:2-5, plan 1; Ahmed M.A. Al Hakim 1993:16, 21; Caillaud 1826:187-9; Crawford 1953a:18-19; 1953b:35-36; Edwards 1989:87; Jackson 1926:31

**Keer Saad (Bonni Island)****Settlement, Christian?****18.59.N./32.26.E. [SAS #77: NE-36-F/4-D-5], Abu Hamed Reach, Island****A settlement, thought to be of Christian date, was reported in this location.****Ahmed M.A. Al Hakem 1993:18, 23****Jebel Kelidob I (Kalidob) (Dar el Arab)****Walled Settlement/Fortress, Christian****18.49.N./32.04.E. [SAS #112: NE-36-F/3-Q-5], Abu Hamed Reach, East Bank****Two forts were located just downstream from the 4th Cataract. They are described as "carpeted with pot-sherds and both the painted Christian and fine imported ware of the Roman period was seen"****(Titherington 1939:269). This fort is quadrilateral in shape and constructed of mud and stone. Remains of red brick structures were noted in the interior. Several bastions were placed along the walls and ten gates were noted. The great number of gates and the fort's location suggest that it may have functioned as a caravanserai.****Ahmed M.A. Al Hakem 1993:19, 23; Edwards 1989:88; Titherington 1939:269-271****Jebel Kelidob II (Kalidob) (El Sweegi)****Walled Settlement/Fortress, Christian****18.49.N./32.04.E. [SAS #113: NE-36-F/3-Q-6], Abu Hamed Reach, West Bank****This fort is situated opposite Jebel Kelidob I. Like the other fort it was constructed of mud mortar and stone and many bastions lined its walls. It is irregular in shape with several gates. Little evidence of rebuilding was noted by Titherington. Christian pot sherds are scattered across the site. The walls of both forts are reported as approximately three metres thick and standing about 5.5 metres high. Some graves of unknown date were located to the west of this fort.****Ahmed M.A. Al. Hakem 1993:19, 23; Edwards 1989:88; Titherington 1939:269-271****Khuzeina****Occupation, Late Christian ?****19.31.N./33.18.E., Abu Hamed Reach, Island****The ruins of a small red brick structure were located here amidst many Late Christian sherds. Christian graves are present around the building and in the area between Khuzeina and Hubeil. This area of the village is referred to as "Kenisa" (church).****Abbas Sid Ahmed 1971:12; Edwards 1989:88**

**Kirbekan****Occupation, Christian****18.55.N./32.24.E., Abu Hamed Reach, West Bank****Christian pot sherds were noted suggesting a possible occupation in the vicinity.****Edwards 1989:88; Jackson 1926:26****El Koro (Al-Kurru)****Walled Settlement, Classic Christian ? - Islamic****19.22.N./33.22.E., Abu Hamed Reach, West Bank**

**A large, rectangular, stone, red brick and mud fort stands beside the bank of the river at El Koro. Stone towers are visible at some of the corners. The fort interior was subdivided in two. The smaller enclosure was more strongly fortified and contained the remains of rectangular mud buildings. Many contained part of a stone and mud column probably used to support the roof. The remains of several buildings with stone foundations surmounted by mud walls were found in the larger enclosure. Although the date of the fort is unknown, the nearby mosque of Wad Saleh appears to be a converted church and several Greek and Coptic grave stelae were recovered from an associated Christian cemetery. One of the stele dates to 917 A.D.**

**[note: Jackson refers to this site as Kuddik and suggests that it may be a monastery.]**

**Abbas Sid Ahmed 1971:20; Crawford 1953a:14, n.19; 1953b:31-35, 44-47, fig.10, pl. XXIII, XXIV;**

**Edwards 1989:88; Jackson 1926:26, 28, 31; Mohi 1991:58-9**

**Kuddik****Walled Settlement/Fortress, Christian****18.51.N./33.31.E., Abu Hamed Reach, West Bank**

**Christian sherds were found scattered across the site of a ruined stone fort or castle. The exterior walls and bastions were built of stone and mud. The remains of many large red brick structures were enclosed within the fort walls.**

**Crawford 1953a:14; Edwards 1989:89; Mohi 1991:60**

**Kurgus (Kenisa Kurgus)****Walled Settlement/Fortress, Christian****19.14.N./33.30.E., Abu Hamed Reach, East Bank**

**A large, rectangular mudbrick fort measuring approximately 78x69 metres was located opposite Hagar el-Merwa. Mudbricks used in construction measured 38x20x10 cm and the north wall was approximately 5.5 metres thick. Red brick fragments and Christian pot sherds were scattered across the surface within the**

fort. Arkell suggested that the fort was Pharaonic in date, possibly constructed by Thutmosis I, then later reused by Christians as the local name and finds imply.

Arkell 1950:39; Edwards 1989:89; Jackson 1926:25-6; Mohi 1991:59

#### Kuweib

Walled Settlement/Fortress, Early Christian ?

19.32.N./33.14.E., Abu Hamed Reach, East Bank

The stone and mudbrick fort is situated on a small mountain overlooking the Nile. The fortifications and enclosed buildings appear to have utilized the natural environmental features in their construction. "The main defensive wall ... consists in places of detached pieces cunningly built to strengthen the natural features" (Crawford 1953b:9). Remnants of mudbrick structures were enclosed within the defense wall. Traces of two walls, running between a neighbouring mountain and that of the fort, suggests that a courtyard may have been attached to the fort. Similar spaces were found at Usheir and Koro. Christian sherds, probably dating to the Early Christian period, were found within the fort. A small Christian cemetery was located nearby.

Abbas Sid Ahmed 1971:18; Cailliaud 1826:II:187, 189; Crawford 1953b:7-10, pl. I, II, IIIa; Edwards 1989:89

#### El Mazara (Bonni Island)

Settlement, Christian

c.19.02.N./32.26.E. [SAS #71: NE-36-B/22-X-6], Abu Hamed Reach, Island

A Christian settlement was reported at this location.

Ahmed M.A. Al Hakem 1993:18, 23

#### Ras el Dir

Settlement, Christian

18.47.N./32.02.E. [SAS #124? NE-36-F/3-U-8], Abu Hamed Reach, Island

A settlement of small, stone houses and numerous Christian period sherds were noted.

Ahmed 1993:20, 23; Caneva 1988:6; Edwards 1989:90

#### Ras el Gezeira

Walled Settlement/Fortress, Late Christian ?

19.32.N./33.06.E [SAS #39: NE-36-C/7-W-9], Abu Hamed Reach, Island

The stone and mudbrick fort is located at the west end of Mograt Island. Mudbricks used in construction



measured 36x18x6 cm. Bastions occur at the corners of the structure. A line of pointed stones runs from the middle of the south wall to the mid point of the east wall. Abbas suggests it functioned as a defense against horses. The remains of several fired brick structures were enclosed within the fort. Ruins of houses were noted outside the fort along the river. Late Christian sherds were spread across the site and a small Christian cemetery was located nearby.

Ahmed M.A. Al Hakim 1993:16, n.39, map 1; Abbas Sid Ahmed 1971:5-7; Edwards 1989:90; Jackson 1926:31

#### Salamat

Occupation, Christian

19.09.N./32.34.E., Abu Hamed Reach, West Bank

Jackson mentions finding Christian sherds in this area. No sites were reported by the Sudan Antiquities Service during their survey of the Fourth Cataract.

Ali M.A. Al Hakim 1993:map 2; Edwards 1989:90; Jackson 1926:26

#### Kaniset El Sur

Occupation, Christian

c.19.03.N./32.29.E., Abu Hamed Reach, Island

Jackson records the presence of Christian sherds. Locally the area is referred to as "Kenisa", church.

Edwards 1989:91; Jackson 1926:26

#### Jebel Khor Tafla

Occupation, Late Christian

18.46.N./32.03.E., Abu Hamed Reach, Island

Caneva noted some Late Christian sherds at this site.

Caneva 1988:4; Edwards 1989:91

#### Tarfaya

Walled Settlement/Fortification, Christian - Islamic ?

18.45.N./33.34.E., Abu Hamed Reach, East Bank

A 100x150 metres, rectangular stone wall enclosed a fortified settlement. Remains of several red brick and mudbrick structures and two round buildings were found outside the fortification. The walled settlement was roughly quadrilateral in shape with round towers built in the centre of each side and at every corner. The walls were 1.5 metres thick on average and made of stone. Traces of three round, red brick buildings

were found within the fortified settlement. Fragments of red wall plaster and a quern were discovered within these buildings. Christian sherds littered the surface and a Christian cemetery with red brick and white plaster was located nearby the site.

Crawford 1953b:15-17, fig.3; Edwards 1989:91; Jackson 1926:31; Mohi 1991:60

**Tokna (El Shellal)**

Occupation, Christian

19.26.N./33.20.E. [SAS #42, 43: NE-36-C/14-G-1,-2], Abu Hamed Reach, West Bank

Abbas and Ahmed report the presence of a large Christian cemetery. An inscribed red brick was found in modern fields near the site. Edwards suggests this may indicate the presence of a Christian settlement in the vicinity, however no indication of a settlement was found during the Merowe (Hamdab) Dam Survey. [The survey actually discovered two Christian cemeteries in this region.] Abbas Sid Ahmed 1971:13; Ahmed M.A. Al Hakim 1993:17, 21; Edwards 1989:91

**Umm Duras**

Settlement/Building?, Christian?

18.50.N./32.05.E., Abu Hamed Reach, Island

Titherington and Caillaiud noted red brick remains on this site which may date to the Christian period. The Merowe [Abu Hamed] Survey makes no mention of a site in this area.

Caillaiud 1826:197; Edwards 1989:91; Titherington 1939:269

**Wadi Umm Hadima**

Occupation, Christian

19.23.N./33.22.E., Abu Hamed Reach, West Bank

Christian sherds were found scattered across the surface.

Edwards 1989:91-91; Jackson 1926:26

**El Usheir**

Walled Settlement/Fortification, Christian

18.29.N./33.41.E., Abu Hamed Reach, Island

A large, irregularly-shaped, stone-built fort was situated on the north end of the island. It consisted of an outer enclosure and an inner enclosure, both containing the remains of numerous red brick structures, including round buildings with traces of plaster on the interior. Fragments of querns and Christian pottery were strewn across the surface. At least three gates opened into the outer enclosure. The inner enclosure

was accessible only from the courtyard of the outer one. Remains of twelve bastions or towers lined the walls. A third enclosure, of no apparent defensive value, abutted the other two. Several small round dwellings were located south of the fort near the ruins of a red brick church.

Crawford 1953b:19-24, fig.4, 5, pls. XIVa, XV; Edwards 1989:92; Mohi 1991:61

#### El Wadda (Shirri Island)

Settlement, Christian

19.08.N./32.35.E. [SAS #62: NE-36-B/23-L-3], Abu Hamed Reach, Island

The SAS reported a settlement in this location.

Ahmed M.A. Al Hakem 1993:17, 22

#### SHENDI REACH AND THE BUTANA (Map 8)

Jebel Abayud

Building, Late Christian, Occupation, Classic Christian

17.00.N./33.44.E., [Bench Mark 112.5], East Bank

A stone circle containing a hearth was excavated. Late Christian pottery was associated with the structure, but Classic Christian sherds littered the area indicating an earlier occupation.

Mallinson 1994:18

Defeia

Building, Christian

15.39.N./32.37.E., East Bank

Redbrick detritus covers two mounds and two structures have been found. One building contained a crypt.

Edwards 1989:68; Vercoutter 1959:5-7

Jebel Erebat (Qoz Reqeb, Goz Reqeb)

Settlement, Christian

16.05.N./35.33.E., Atbara River, East Bank

Stone and redbrick structures were reported at this site and it is covered with much brick detritus. Christian graffiti (i.e., fish, stars, crosses within/upon circles, Petros) were present on some of the bricks. The bricks measured 39x18x7cm. A Moslem cemetery and a Christian cemetery are located nearby.

Crawford 1951:94; 1953a:4; 1958:170; Chittick 1954:94; Edwards 1989:38; Fattovich 1984:399; Kirwan 1939; Mohi 1991:62; M.D.Villard 1935:275; Werne 1852:39

**Gabati I****Building, Late Christian****17.10.N./33.44.E., [Bench Mark 153.8], East Bank****A single Late Christian structure was reported here.****Mallinson 1994:18****Gabati II****Fortified Building, Late Christian****17.11.N./33.44.E., [Bench Mark 155.4], East Bank**

**A drystone wall enclosed an area measuring 10x15 metres, by the opening of the Khor Shangarite. During the first phase of construction this entire area was covered with a roof supported by posts. In the second phase, two stone rooms were built on the east side of the enclosure. One room contained two large, storage pits thought to be for grain, while the other room may have been a kitchen. Post holes found within the courtyard indicated that it had been roofed during the later phase. A hearth was located to the south of the structure. Several cemeteries were located nearby.**

**Mallinson 1994:18, 20****Gadu****Occupation, Early Christian****16.58.N./33.43.E., West Bank**

**Finds of "Soba" ware and other Christian sherds suggest the presence of an Early Christian occupation site in the vicinity. The main mounds visible at Gadu show extensive traces of a Meroitic settlement.**

**Edwards 1989:69; Hintze 1959:175; Mohi 1991:62; Shinnie 1961:36****Hadaliya****Settlement, Late Christian?****16.15.N./36.00.E., Southern Atbai**

**Redbrick detritus and pottery sherds are scattered over an area of about five square metres. Some of the bricks are decorated with Christian graffiti including fish, crosses and Greek letters.**

**Durante et al. 1980:64-71; Edwards 1989:38; Fattovich 1984:399-405****Mahmiya****Occupation, Christian?****17.09.N./33.43.E., East Bank**

Brick detritus and "tiles" are scattered over small mounds. Sayce suggested that this might be a Meroitic site. Edwards suggests that this the location named Gabati, where Jackson discovered Christian sherds. Edwards 1989:72; Lepsius 1853:157; Garstang, Sayce and Griffith 1911:6, n.1.

#### Mikeilab

Occupation? Christian

17.55.N./34.00.E., East Bank

Christian sherds and a site have been reported in the vicinity. The exact location of this site is unconfirmed.

Crowfoot 1911:8; Edwards 1989:73; Jackson 1926:27

#### Musawwarat es Sufra

Occupation, Christian

16.25.N./33.22.E., Western Butana

The presence of Christian graves and the possible reuse of Temple IIIa as a church suggests the possibility of a settlement at the site. Several Greek and Old Nubian inscriptions were also found on the site

Edwards 1989:57; Hintze 1962:193-4; 1963:224-5; Mohi 1991:63

#### Nagazu

Building, Christian or earlier

16.29.N./32.50.E., Atbara - Khartoum, East Bank

The ruins of a rectangular, red brick building were noted here by Geus. Many of the original building materials are currently being reused in a nearby modern cemetery.

Edwards 1989:73; Geus 1974:137

#### Jebel Nakharu

Fortress and Settlement, Christian - Islamic

18.09.N./33.56.E., West Bank

A square, stone fort measuring approximately 73x73 metres and a village comprised of round stone dwellings were located to the north of it on top of a sandstone ridge overlooking the Nile. The remains of stone bastions were found at three of the fort 's corners and in the centre of three sides of the enclosure wall. Remains of buildings were found within the fort and a rectangular, stone structure was located inside the northwest corner. Stone cross walls ran from the top of the ridge to the river. Dwellings and a great deal of pottery were found to the south of the fort and to the north. Those in the north were round in shape.

"The fort was obviously made to dominate and control traffic along the w. bank" (Crawford 1953b:18).  
Crawford 1953b:17-9; Edwards 1989:74

Qarri (Qerri, el Kerri, Gerri)

Walled Settlement, Terminal Christian?

16.13.N./32.38.E., East Bank

The Funj chronicle records this site as the last Christian fortress left after the fall of Soba. A stone enclosure wall encircled most of Jebel Irau. It was located just up the slope from the base of the mountain and followed the mountain's topography. Approaches to the hill were defended by ancillary stone walls. Several rectangular, stone dwellings and some smaller stone circles were found on the mountain top. Most consisted of one room. Irregular-shaped enclosure walls were associated with some of the houses. The few objects and sherds found were thought to date to around A.D. 1500. No excavation was conducted. Rock engravings were found on the east side of the mountain. One apparently depicted a pair of sandals possibly suggesting a Meroitic occupation or religious site somewhere in the region.<sup>8</sup> Tumuli of unknown date were also reported in the vicinity.

Chittick 1963:264-73; Edwards 1989:74; Geus 1974:145; Mohi 1991:62

Tuti Island

Occupation, Christian

15.38.N./32.30.E., Island

Ruins were noted by Cailliaud.

Cailliaud 1826:198; Edwards 1989:76

Gebel Umm Ali

Quarry, Monastery? Christian

17.03.N./33.43.E., East Bank

Christian sherds were discovered here as were several Old Nubian and Greek inscriptions and inscribed crosses and monograms. The largest cave is thought to have served as a church.

Arkell 1946:3; Edwards 1989:77; Hintze 1959:6-7; Jackson 1926:27, fn.; Mohi 1991:62

Wadi Dein

Settlement, Christian

17. 02.N./33.44.E., [Bench Mark 118], East Bank

A campsite and associated tumuli were found at the base of a mountain during the SARS survey. The

assemblage found thus far seems related to the Alwan cultural tradition rather than the Makourian/Nobatian tradition with some regional differences being noted. Three stone circles were excavated. A hearth, a series of floor surfaces and pot depressions were found. A Christian tumults burial was also excavated.

Mallinson 1993:17-21, fig. 3; 1994:18-20

#### Zeidab East

Occupation? Christian?

17.26.N./33.54.E., East Bank

Christian period occupation has been reported from this region based upon the index of sites in the Khartoum Museum, however no evidence of the site has been discovered thus far. Christian and Meroitic sherds are reported as being found on a hill near the south end of the railway station.

Edwards 1989:78; Hintze 1959:172-3; Mohi 1991:62

#### GEZEIRA SITES (Map 9)

Abu Furu'

Occupation, Christian

14.48.N./33.17.E., Gezeira

A scattering of redbrick detritus covers the surface at this site. The bricks were hand-made, contained fingermarks and measured approximately 14"x7"x2.5" (35x17.5x6.25 cm).

Balfour Paul 1952:210-1, map 1; Edwards 1989:45

Abu Ushar North

Occupation, Christian

14.55.N./33.13.E., Gezeira

Redbrick detritus covers the surface of this small mound.

Balfour Paul 1952:210-1, map 1; Edwards 1989:45

Abu Ushar South

Occupation, Christian

14.54.N./33.13.E., Gezeira

Redbrick detritus covers the surface of this small mound.

Balfour Paul 1952:210-1, map 1; Edwards 1989:45

Alti (Elti)

**Settlement, Christian?****15.15.N./32.49.E., Gezeira**

The remains of redbrick structures were noted as was the probable presence of a church.

Clarke 1912:38; Crowfoot and Griffith 1911:8; Edwards 1989:45; Macmichael 1967, I:48; Mohi 1991:68

**Baqeir****Occupation/Settlement? Christian****15.21.N./32.46.E., Gezeira**

Redbrick detritus is reported covering a small mound which is reputed to be a Christian settlement site.

Balfour Paul 1952:map 1; Edwards 1989:45

**Bashaqra East (Rodos)****Settlement? Christian?****15.14.N./33.05.E., Gezeira**

Redbrick detritus analogous to that found at Soba East was reported by Cailliaud and identified as "Rodess". This site has also been referred to as "Rodis" and remains of a church have been reported at this location.

Cailliaud 1826:II:210; Clarke 1912:38; Edwards 1989:46; Macmichael 1935:I:48; Mohi 1991:68

**Branko (Bronko)****Settlement, Christian****14.59.N./33.15.E., Gezeira**

The presence of redbrick detritus is reported. Crowfoot records "traces of ancient occupation" (Crowfoot and Griffith 1911:8).

Crowfoot and Griffith 1911:8; Edwards 1989:46; Mohi 1991:68

**Burri****Settlement, Late X-Group/Early Christian****15.36.N./32.34.E., Gezeira**

The remains several buildings were discovered along with numerous sherds and whole vessels. The remnants of one room were explored. The bricks measured 40x20x7 cm. Some of the sherds found have been identified as "soba ware".

Addison 1930:285-288; Edwards 1989:46; Mohi 1991:68



**El Eleila****Settlement, Early Christian?****14.33.N./33.29.E., Gezeira**

A large settlement, containing many structures built of redbrick, was located. Some sherds found on site may date to the X-Group period.

Balfour Paul 1952:211, 213; Edwards 1989:46; Mohi 1991:67

**El Geteina (Fiki Mahmoud)****Settlement, Christian****14.49.N./32.19.E. Gezeira**

Pot sherds and skeletal remains were found strewn across the surface and the remains of redbrick structures were sighted on the cliff face. Both Meroitic and Christian material was found.

Crawford 1953:26-7; Edwards 1989:46

**Hassaheissa I (Hassa Hissa)****Occupation, Christian****14.44.N./33.18.E., Gezeira**

Redbrick detritus and sherds were discovered covering a mound. Crowfoot records "traces of ancient occupation" (Crowfoot 1911:8).

Balfour Paul 1952:202, map 1; Clarke 1912:38; Crowfoot and Griffith 1911:8; Edwards 1989:46

**Hassaheissa II****Settlement, Christian****14.42.N./33.18.E., Gezeira**

A site containing redbrick detritus and Christian sherds was noted amidst a modern cotton field. The ceramics are described as "painted decoration in red on a white slip" (Balfour Paul 1952:213).

Balfour Paul 1952:213, map 1; Edwards 1989:47; Mohi 1991:68

**Kalakla****Settlement, Christian****15.31.N./32.30.E., Gezeira**

The site is described as "a large medieval site [which] is being transformed into cultivated fields" (Geus 1984:12).

Edwards 1989:47; Geus 1984:12

**Karabi (Kerebi, Kerembi)****Settlement, Christian****14.46.N./33.16.E., Gezeira****Scattered redbrick detritus marked this site.****Balfour Paul 1952:map 1; Edwards 1989:47****Kasembar (Kamlin)****Occupation, Christian?****15.07.N./33.10.E., Gezeira****It is uncertain whether there are one or two sites here. Crowfoot reports a mound covered in redbrick fragments while Sayce notes column drums. It has not been determined if they refer to the same location.****Crowfoot refers to Kasembar as "near Kamlin " (Crowfoot 1911:8).****Clarke 1912:38; Crowfoot 1911:8; Edwards 1989:47; Mohi 1991:68; Sayce 1909:192****Qoz Bakheit (Goz Bakheit)****Settlement, Christian****14.42.N./33.13.E., Gezeira****Redbrick detritus was found covering a mound.****Balfour Paul 1952:203, map 1; Crowfoot and Griffith 1911:8; Edwards 1989:47-8****Saqadi****Walled Settlement? Christian****13.34.N./33.09.E., Gezeira****Scattered Christian sherds were associated with a redbrick building thought to be a church, may suggest the presence of a settlement. The building was enclosed within a stone wall of earlier date.****Crawford and Addison 1951; Edwards 1989:48; Mohi 1991:66****Soba East****Settlement, Early-Terminal? Christian****15.31.N./32.40.E., Gezeira****Ceramics and occupational debris are scattered across the surfaces of low gravel and red brick mounds.****The site measured at least two square kilometres in size. Remains of mudbrick structures, post hole dwellings and red brick buildings (primarily represented by robber trenches) have been uncovered. The red brick mounds seem to be primarily churches while the gravel mounds contain domestic architecture.**

Christian cemeteries have also been uncovered on the site. Monasteries were reported here by Ibn Selim al-Aswani and Abu Salih but thus far no physical evidence has been discovered. See Welsby (1991) for a detailed discussion of the site and finds.

Budge 1907:i:324; Clarke 1912:34-8; Daniels 1982; Evetts and Butler 1895:263; Lepsius 1853:162; Monneret De Villard 1935:269-71; Shinnie 1961; Sjöström 1993:13-15; Sjöström and Welsby 1991; 1993; Vantini 1975:326, 613; Welsby 1983a; 1983b; 1984; 1987; 1985; 1991; 1993b; 1993c, 1994; Welsby and Daniels 1991; Welsby and Sjöström 1994

#### Et Tukeilat

Settlement, Christian

15.12.N./33.07.E., Gezeira

Redbrick detritus and Christian sherds covering a mound have been noted in this location

Balfour Paul 1952:map 1; Edwards 1989:49

#### Umm Dorn

Settlement, Christian

15.33.N./32.38.E., Gezeira

Ceramics, plaster and redbrick debris cover a mound at this site.

Edwards 1989:49; Leclant 1977:285

#### Wad el Haddad

Settlement, Early Christian?

13.50.N./33.32.E., Gezeira

Redbrick detritus is scattered across the site. Some associated graves were Christian, while others may be post-Meroitic based upon ceramic dating.

Balfour Paul 1952:211, map 1; Crowfoot 1927a:pl. XXXII.4; Edwards 1989:49; Mohi 1991:67

#### BAYUDA SITES (Map 10)

Wadi Abu Hashim (near Kernak wells)

Enclosure, Christian? Islamic?

16.47.N./31.17.E.

One large and five smaller, circular, stone enclosures were found along the west side of the wadi. The biggest one measured roughly 238 metres in diameter and had a north and south entrance. Its walls had a rubble interior, an outer casing of flat sandstone and mudstone blocks and were about 1.5 metres thick and

1.8 metres high. The smaller enclosures were generally about twenty-seven metres in diameter however, one was only roughly six metres across. Several wells were located nearby. The date of these structures is uncertain.

Colston 1875-76: 357; Edmonds 1940a:296-297, pl. 1; Edwards 1989:116

#### Ain Farah

Settlement, Monastery?, Christian

c. 14.31.N./24. 25.E.

The ruins of several circular animal pens, large brick structures and part of an enclosure wall were found in the vicinity of a perennial spring at Ain Farah. This site is located on an east-west desert route that runs by Jebel Marra between the Libyan desert and the Bahr el Ghazel. Stone and mudbrick buildings were located on the main portion of the mound and it is this section likely described as a monastery by Arkell (1940).

One structure, tentatively identified as a church was square, constructed on a stone platform roughly one metre high, and had stone and brick walls about 2.5 metres thick. Its internal arrangement is reminiscent of Adams' Late -Terminal Christian type 5 church as found at Diffinarti (Adams 1965:119) although stairs to an upper floor were lacking. This structure may have later been converted into a mosque and features tentatively identified as a mihrab and minbar were present. Over 200 small circular stone huts of unknown date were scattered across the ridges in the vicinity. Christian sherds were found at the site.

Arkell 1936:301-11; 1959:115-9; Mohi 1991:70; Neufville and Houghton 1965:195-204

#### Bayuda Wells (Baiyuda Wells)

Quarry, Christian

17.33.N./32.08.E.

An incomplete granite column was found in the quarry and Greek inscriptions have been reported in the vicinity.

Edwards 1989:116; Jackson 1926:30

#### Bir el Kai Wells

Occupation, Christian

16.25.N./30.04.E.

Arkell noted the presence of one Old Nubian inscription in the region of these wells. Several petroglyphs were also found in the area.

Arkell 1951:353-354; Edwards 1989:117

**Eilai****Enclosure, Christian****16.30.N./31.03.E.**

A round, stone enclosure roughly 25 metres across was located to the west of the wells at Eilai. Edmonds estimated the original height of these walls was over 1.8 metres. Sherds, identified as those from pilgrim flasks, were scattered in the area. Some post-Meroitic tumuli were also found nearby.

Edmonds 1940a:299; Edwards 1989:117

**Ghazali****Monastery, Classic Christian****18.26.N./31.56.E.**

The monastery of Ghazali was located on a rocky outcrop approximately ten miles (16.7 km) up the Wadi Abu Dom. It consisted of a three-aisled church and several adjoining structures, including a corridor of monks' cells and a refectory, all contained within an enclosure wall. Several graves were found outside the east wall of the church. Shinnie and Chittick attributed the location of the monastery to an adequate water source, good rock for structural foundations and construction and close proximity to the desert route between Shendi and the Dongola Reach.

Clarke 1912:38-42, pl. IV; Edwards 1989:117; Jeut  1994:75-78, fig.9; Lepsius 1853:218-220; Linant 1958:169-170; Monneret De Villard 1935:253-256; Shinnie and Chittick 1961; Tremaux 1862a: pl. 52-54; 1862b:331-333

**Jakdul****Settlement, Christian****17.39.N./32.52.E.**

Chittick identified the remains of two square, stone dwellings near nine Christian graves. Christian sherds were recovered from the site and a larger cemetery containing approximately 200 graves was located nearby. The site was located in the hills about one kilometre north of the wells at Jakdul.

Chittick 1955a:92; Edwards 1989:117-118

**Kufriyat el Atash (Wadi el Qasr)****Building, Christian?****17.41.N./31.03.E.**

Remains of three ancient wells and a roughly square, sandstone building, measuring about 45x47 metres, were found in the Wadi el Qasr. The structure was constructed of rubble-filled walls faced with sandstone

slabs and it appeared to have a buttress in the centre of one of the walls. Edmonds (1940b:162) noted that the building was not well situated to guard the wells or desert track. Christian ceramics, including a pilgrim flask sherd, were found on site. Edmonds noted some structural similarities between this building and the ones on Gandeisi Island and at el Kab (Edmonds 1940b:166).

Edmonds 1940b:160, 162-64, 166; Edwards 1989:118

#### Wadi Milh

Enclosure, Christian?

c.16.31.N./31.31.E.

Just to the northwest of the wells at Wadi Milh were the remains of at least five ferricrete and yellow sandstone enclosures, each surrounding an ancient reservoir. The walls consisted of rubble cores faced with sandstone slabs and no mortar was used in their construction. One was approximately 229 metres in diameter. Drainage channels had been included in the wall construction. The remains of another enclosure (ca. 91 metres in diameter) was located near the reservoirs. The date of these structures remains uncertain. Edwards (1989:118) notes that the accumulation of silt within the hafirs and the decomposition of the associated walls provides some evidence of antiquity.

Edmonds 1940a:296, 299-301, pl. III; Edwards 1989:118

#### Mitnet el Gawwala

Enclosure, Christian?

c.16.18.N./31.18.E.

Two, circular, stone enclosures were found closely associated with the remains of a walled reservoir. The structure of the enclosed hafir was similar to that at Wadi Milh and Jebel el Raqta. Walls of the round enclosures were rubble filled and faced with sandstone and mudstone slabs. The largest measured ca. 65 metres in diameter. Its walls originally stood roughly 1.8 metres high and were about one metre thick. The smaller enclosure was approximately 13 metres in diameter and had walls that stood 1.2 metres high and which were about 75 centimetres thick.

Edmonds 1940a:296-98, pl. I; Edwards 1989:118

#### Jebel el Raqta

Enclosure, Christian?

c.16.24.N./31.20.E.

The remains of a reservoir enclosed by a sandstone wall were found on the north side of the hill. Over 91 metres were enclosed however, Edmonds noted the actual reservoir did not appear to occupy the entire

enclosure. Drainage canals were found. An entrance was located on the northwest side of the enclosure and some undeciphered graffiti had been inscribed there. The date of this structure remains uncertain.

Rectangular graves, probably of Christian date, were located nearby.

Edmonds 1940a:296, 301, 303, pl. III; Edwards 1989:119

#### Wadi Segenait

Building, Christian?

16.32.N./32.47.E.

A square, red brick structure, possibly dating to the Christian period, was located here.

Chittick 1955b:5; Edwards 1989:119

#### Umm Khafur

Enclosure, Christian?

18.23.N./32.02.E.

A stone enclosure, constructed of granite slabs was found in the Wadi Abu Dom. It measured approximately fifty square metres. No structures were found within the interior. Twenty Christian graves were located nearby. Chittick (1955a:90-91) noted similarities between this structure and the remains at Kufriyat el Atash.

Chittick 1955a:90-91; Edwards 1989:119

#### Umm Ruweim

Enclosure, Early - Classic Christian?

18.25.N./32.01.E.

Two, roughly square, stone enclosures were located approximately eleven kilometres from Ghazali in the Wadi Abu Dom. (This is approximately 20 kilometres from Merowe.) One structure was fairly elaborate in construction, having a building surrounded by two enclosure walls, an inner and an outer one. Rooms were incorporated into these walls. Four entrances opened into the outer courtyard while there was only one entrance through the inner enclosure wall to the inner courtyard. A tower may have been located in the northwest corner. The second enclosure measured approximately 69x69 metres and had one entrance on the west side. No structures were found in its interior. A Christian stele fragment, similar to those at Ghazali, and some Early Christian or possibly Meroitic sherds were found near the site.

Chittick 1953:87; 1955a:88-90; Edwards 1989:120

**SOUTH LIBYAN DESERT SITES (Maps 11-12)**

Several wells and temporary camp sites of unknown date were located in the south Libyan desert. It is not unlikely that many of these wells and desert routes were in use during the Christian period. For a list of these sites see Hinkel 1979:1-9.

**Abu Sofyan (Abu Sofian, Abu Sufyan)**

Settlement? Christian?

15.37.N./27.53.E., South Libyan Desert

Remnants of pilgrim flasks were recovered from the site suggesting a Christian date. The remains of two round, redbrick structures were found. One was 12.5 metres in diameter while the other was roughly 10 metres in diameter. A large, red brick mound, 3-4 metres high, with a flat top was also associated with the site. The sides of this hill are reported to consist of red bricks laid in stepped courses. The exact nature and function of this site is unclear. Some graves were located in the vicinity.

Arkeel 1940:18; Edwards 1989:116; Mohi 1991:69; Monneret De Villard 1935:279; Newbold 1924:78-82; Shaw 1936:324-326

**Bir El 'Ein**

Occupation? Christian

ca. 16.36.N./29.19.E., [NE-35-P/10-L-4], South Libyan Desert

Just north of the Wadi el Milk, an iron cross was discovered in the area of several Moslem graves on the edge of a rocky outcrop. The exact location of this site is uncertain. The cross may have been a trade item or may suggest the presence of a temporary camp of the Christian period in the vicinity. A well was situated nearby.

Hinkel 1979:2, 155

**Laqiya Arba'in**

Occupation? Christian

ca. 20.03.N./28.02.E., [NF-35-O/23-P-2], South Libyan Desert

Several artefacts of "medieval" date were found in the vicinity. Objects include a Chinese pot sherd, beads possibly of Palestinian origin and an iron anklet. These items may have been trade goods and may suggest a temporary camp of the Christian period along an overland trade route. The exact location of this site is uncertain.

Hinkel 1979:4, 103



**Selima Oasis (Salima Oasis)****Monastery? Christian****21.22.N./29.19.E., South Libyan Desert**

Travellers have reported the presence of a stone monastery on a small hill overlooking the plain. It is reported as containing eight cells although the diagram given by Monneret De Villard (1935:fig.227) shows only six rooms and a roughly rectangular building measuring approximately 5.5 x 9 metres. There were two entrances, one in the north and the other in the south. The function of this structure remains unconfirmed.

**Budge 1907:300; Gleichen 1905:203; Hertzog 1957:123; Leach 1926:43-4; Monneret De Villard 1935:237-8, fig. 227; Newbold 1928:169; Żurawski 1994:319-21**

1. Some documented monastic sites include Ghazali, Ar-Ramal, Faras, Old Dongola, and Qasr el-Wizz.

2. Selected references to church sites and typologies in Nubia include: W. Adams (1965) "Architectural Evolution of the Nubian Church 500-1400 A.D." *JARCE* 4:87-139; B. Kjølbbye-Biddle (1994) "The Small Early Church in Nubia." *Churches Built in Ancient Times*. K. Painter (ed.), London. pp.17-47; F. Deichmann and P. Grossman (1988) "Nubische Forschungen." *AE* 17.; P. Gartkiewicz (1975) "The Central Plan in Nubian Church Architecture." *Nubia Recentes Recherches*. Varsovie. pp. 49-64.; Ibid. (1982a) "New Outline of the History of Nubian Church Architecture." *New Discoveries in Nubia*. P. Van Moorsel (ed.) Leiden. pp. 9-10.; Ibid. (1982b) "An Introduction to the History of Nubian Church Architecture." *Nubia Christiana* I:43-105.; Ibid. (1987) "Nubian Church Architecture: Unity or Distinctness." *Nubian Culture Past and Present*. T. Hagg (ed). Uppsala. pp. 237-246.; Ibid. (1990) *The Cathedral in Old Dongola and its Antecedents*. Warsaw.; P. Grossmann (1985) "Typological problems of the Nubian Four-pillar Churches." *Nubian Letters* 4:23-5.

3. Reports of these surveys include: W. Adams (1961d), "Archaeological Survey of Sudanese Nubia." *KUSH* 9:7-10.; W. Adams and H. Nordström (1963), "The Archaeological Survey on the West Bank on the Nile: Third Season, 1961-62." *KUSH* 11:10-46; Ahmed M.A. Al Hakem (1993), "Merowe (Hamadab) High Dam and its Impacts." *KUSH* 16:1-25.; I. Caneva (1988), "A Prospection of the Fourth Cataract." *Nubian Letters* 10:1-9.; D. Edwards and Ali Osman (1992) *The Mahas Survey 1991. An Interim Report and Site Inventory*. Cambridge.; Ibid. (1994a), *The Mahas Survey 1990. An Interim Report and Site Inventory*. No. 2. Cambridge.; Ibid. (1994b) "Survey of the Mahas Region, Sudanese Nubia, 1990. A Preliminary Report." *NUBICA III/I*:275-96.; W. Emery and L. Kirwan (1935), *The Excavations and Survey between Wadi es-Sebua and Adindan, 1929-1931*. Service des Antiquities de l'Egypte. Mission Arch. de Nubie 1929-1934. Cairo.; C. Firth (1912), *The Archaeological Survey of Nubia. Report for 1908-1909* (2 vols.) Cairo.; Ibid. (1915), *The Archaeological Survey of Nubia. Report for 1909-1910*. Cairo.; Ibid. (1927), *The Archaeological Survey of Nubia. Report for 1910-1911*. Cairo.; C. Gardberg (1970), *Late Nubian Sites*. Scandinavian Joint Expedition Volume 7. Stockholm.; K. Grzymiski (1987), *Archaeological Reconnaissance in Upper Nubia*. Toronto.; M. Mallinson (1993), "SARS Survey from Bagrawiya to Atbara 1993." *NSARS* 5:16-22.; A. Mills (1965), "The Reconnaissance Survey from Gemai to Dal: A Preliminary Report for 1963-64." *KUSH* 13:1-12.; Ibid (1967-8), "The Archaeological Survey from Gemai to Dal: Report on the 1965-6 Season." *KUSH* 15:200-10.; G. Reisner (1910), *The Archaeological Survey of Nubia. Report for 1907-1908* (2 vols.) Cairo.; T. Save-Soderbergh (1963), "Preliminary Report of the Scandinavian Joint Expedition: Archaeological Investigation Between Faras and Gemai, November 1961-March 1962." *KUSH* 11:47-69.; Ibid (1970) "Christian Nubia. The Excavations Carried out by the Scandinavian Joint Expedition to Sudanese Nubia." *Kunst und Geschichte Nubiens in Christlicher Zeit*. E. Dinkler (ed.). Recklinghausen. pp. 219-40.; G. Verwers (1961c), "Trial Excavations in the Faras Region." *KUSH* 9:15-29.; Ibid (1962), "The Survey from Faras to Gezeira Dabarosa." *KUSH* 10:19-33.; A. Vila (1979), *La Prospection Archéologique de la Vallée du Nil au Sud de la Cataracte de Dal*. vol. 11, Paris.

4. Cf. Adams 1961d:7-8.

5. For further information or clarification regarding the identification and numbering of sites used by the Archaeological survey of the Nile Valley south of the Dal Cataract see A. Vila (1975), La Prospection Archéologique de la Vallée du Nil au Sud de la Cataracte de Dal. v.1. Paris.
6. For a detailed discussion of the physical characteristics of these regions see W. Adams (1977) Nubia Corridor to Africa. Princeton. pp. 21-43 and D. Edwards (1989) Archaeology and Settlement in Upper Nubia in the 1st Millennium A.D.. Oxford. pp. 13-35, 40-3, 50-2, 60-2, 79-81, 93-6, 112-4.
7. See also J. Baines and J. Málek (1980) Atlas of Ancient Egypt. Oxford. pp. 178-9.
8. "The number or the Meroitic graffiti and the nature of the places where they are found are instructive, however, with regard to the assessment of personal religious feeling among the Meroites. Many of them must be regarded as *Pilgerinschriften*, written in honour of the local god by a person who has come a long way ... and wishes to commemorate his devotion to the powers of the place; ...These are scratched on the walls of temples, within fairly easy arm's reach, often accompanied (at least in Lower Nubia) by a picture of the two feet of the devotee or of an offering table, sketchily drawn" (Millet 1984:112). The graffito at Qarri suggests that this practice was not restricted to Lower Nubia.

## Abbreviations

The following abbreviations are employed within the bibliography and text:

**AA** - Archäologischer Anzeiger.

**AAASH** - Acta Archaeologica Academiae Scientiarum Hungaricae.

**AF** - Archäologische Forschungen.

**AJA** - American Journal of Archaeology.

**AMS** - The Archaeological Map of the Sudan.

**ASAE** - Annales du Service des Antiquités de l'Égypte.

**AJSL** - American Journal of Semitic Language and Literature.

**ASN** - Archaeological Survey of Nubia.

**BzS** - Beiträge zur Sudanforschung.

**BAR** - British Archaeological Reports.

**BIEA** - British Institute in Eastern Africa.

**BIFAO** - Bulletin de l'Institut Français d'Archéologie Orientale.

**C.M.I. Bulletin** - Canadian Mediterranean Institute Bulletin.

**ET** - Études et Travaux. Travaux du Centre d'Archéologie Méditerranéenne de l'Académie Polonaise des Sciences.

**FN** - Field notes of the West Bank Survey, unpublished. This designation is followed by a volume number and preceded by the name of the author of the notes.

**GJ** - Geographical Journal.

**JAC** - Jahrbuch für Antike und Christentum.

**JARCE** - Journal of the American Research Center in Egypt.

**JEA** - Journal of Egyptian Antiquities.

**JSSEA** - Journal of the Society for the Study of Egyptian Antiquities.

**LAAA** - Liverpool Annals of Archaeology and Anthropology.

**Linant** - M. Linant de Bellfonds.

**MIE** - Mémoires de l'Institut d'Égypte.

**NSARS** - Newsletter of the Sudan Archaeological Research Society.

**QA** - Oriens Antiquus.

**PSBA** - Proceedings of the Society for Biblical Archaeology.

**PRGS** - Proceedings of the Royal Geographic Society

**ROM** - Royal Ontario Museum.

**SJE** - Scandinavian Joint Expedition.

**SAS** - Sudan Antiquities Service.

**SASAE** - Supplément aux Annales du Service des Antiquités de l'Égypte.

**SASOP** - Sudan Antiquities Service Occasional Paper.

**SNR** - Sudan Notes and Records.

**ZÄS** - Zeitschrift für Ägyptische Sprache und Altertumskunde.

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Plate 1 Nile plains and basins in Egyptian Nubia (Butzer and Hansen: 1968:211, fig.5-4)

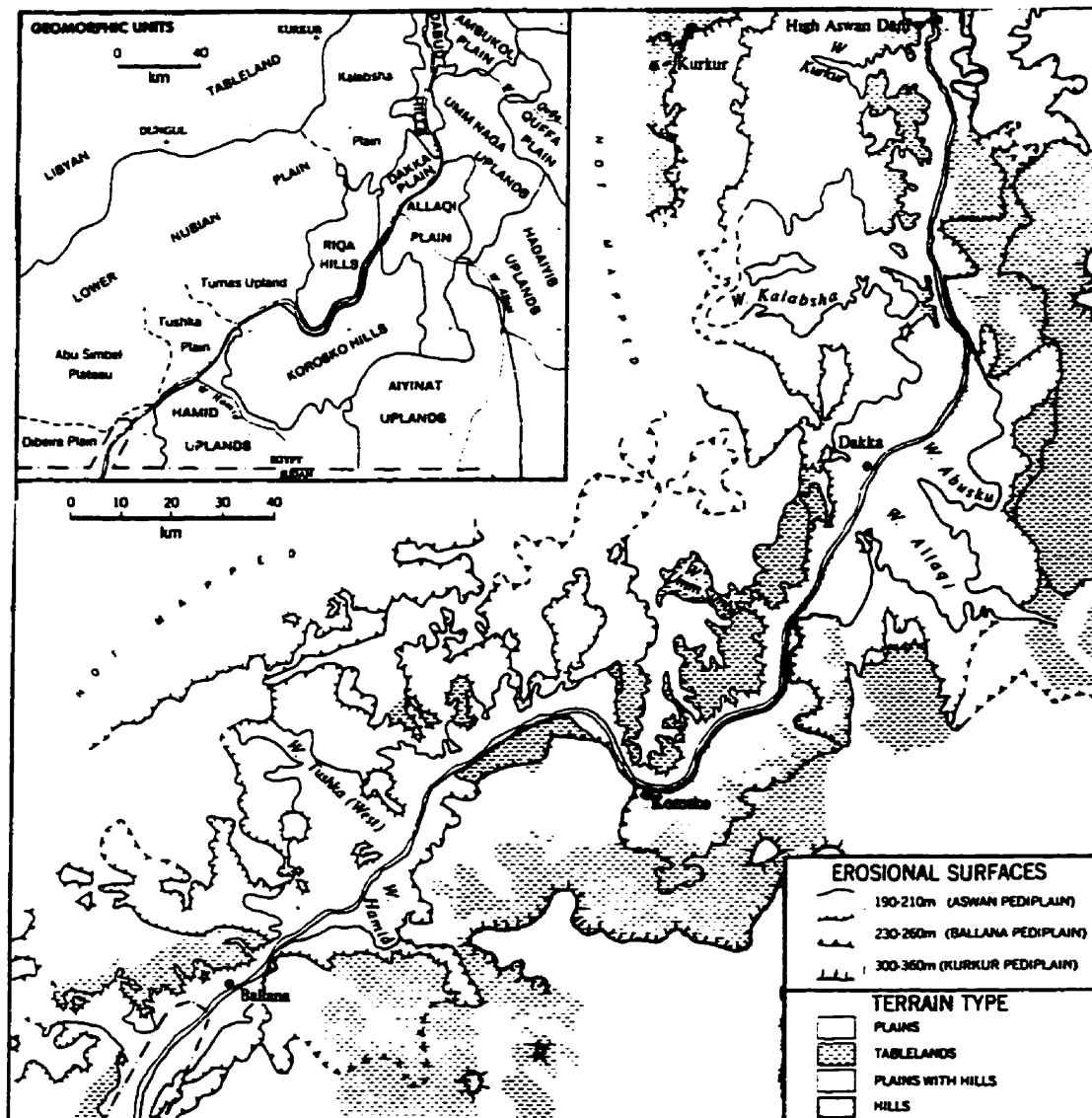


Plate 2 X-Group and Early Christian occupation at Qasr Ibrim (Plumley 1975:18, fig.2).

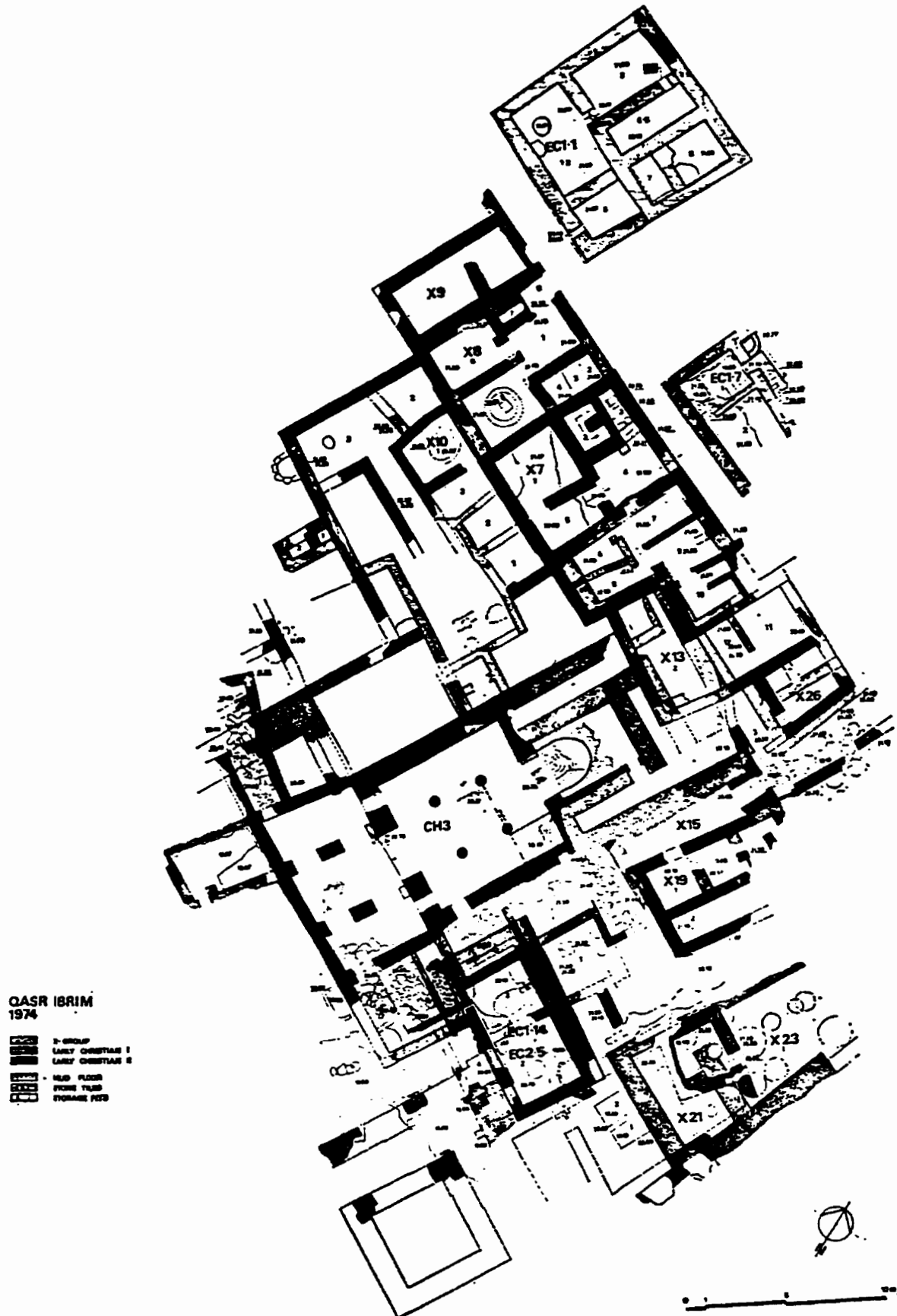


Plate 3 Field drawing of Early Christian buildings on the west slope at Qasr Ibrim (after Adams 1972:FN). Approximate scale: 1 sq. = 1 metre

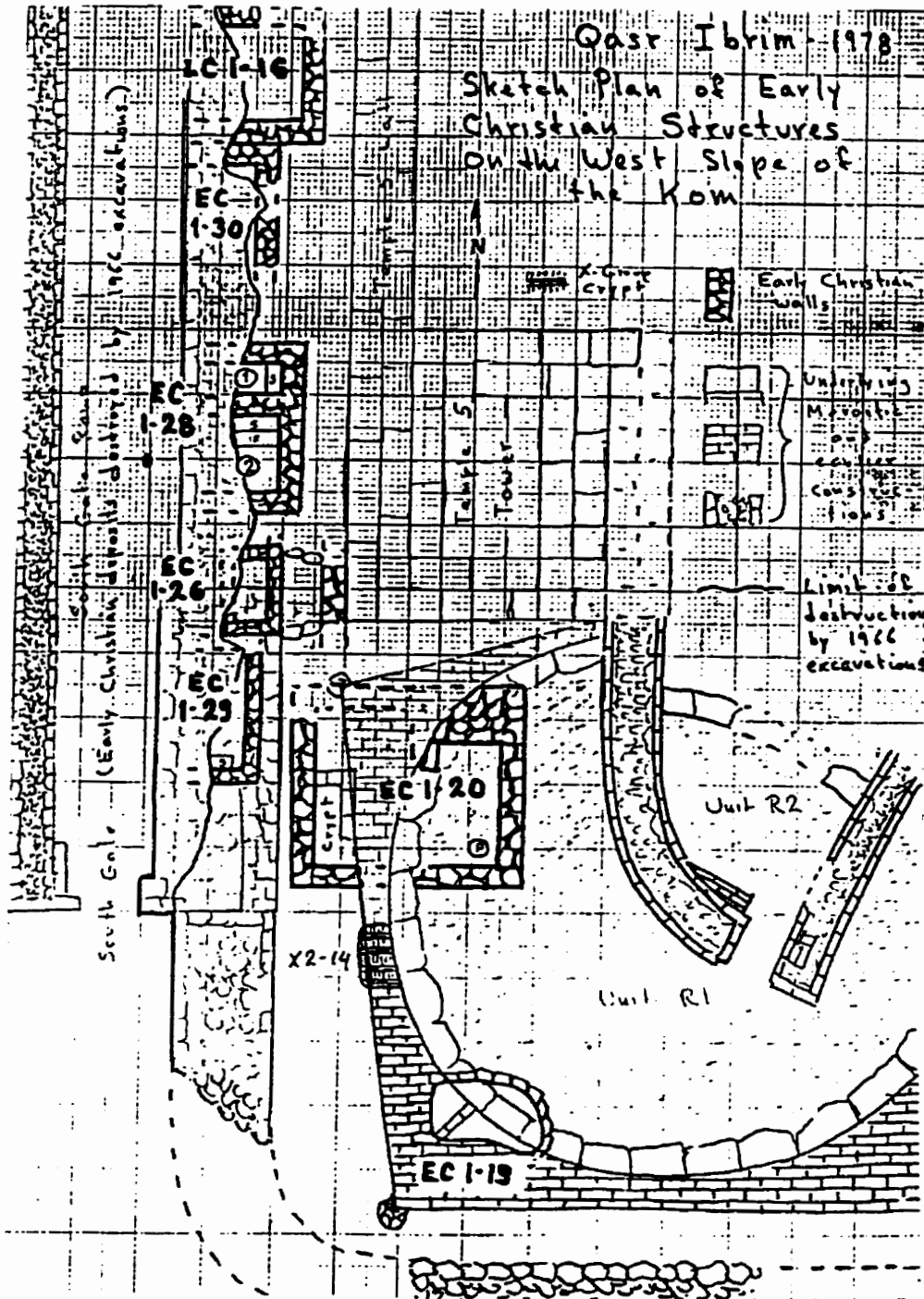


Plate 4 Field drawing of Early Christian house EC1-13 at Qasr Ibrim (after Adams 1972:FN:EC1.8).

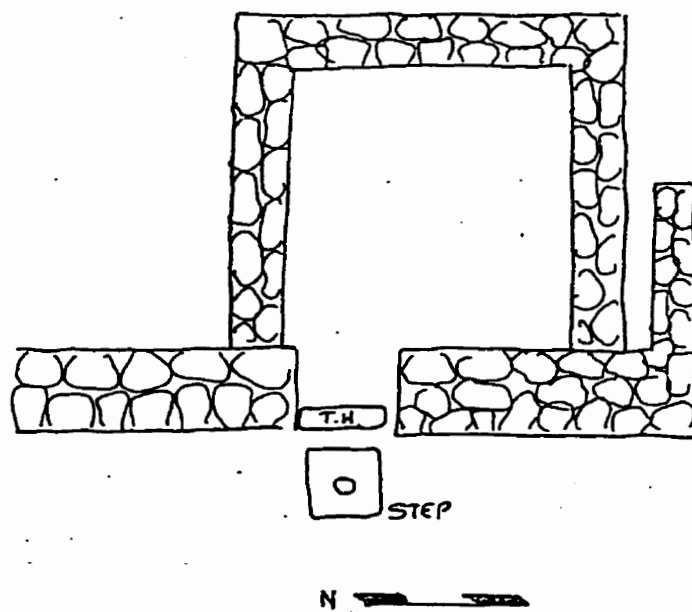
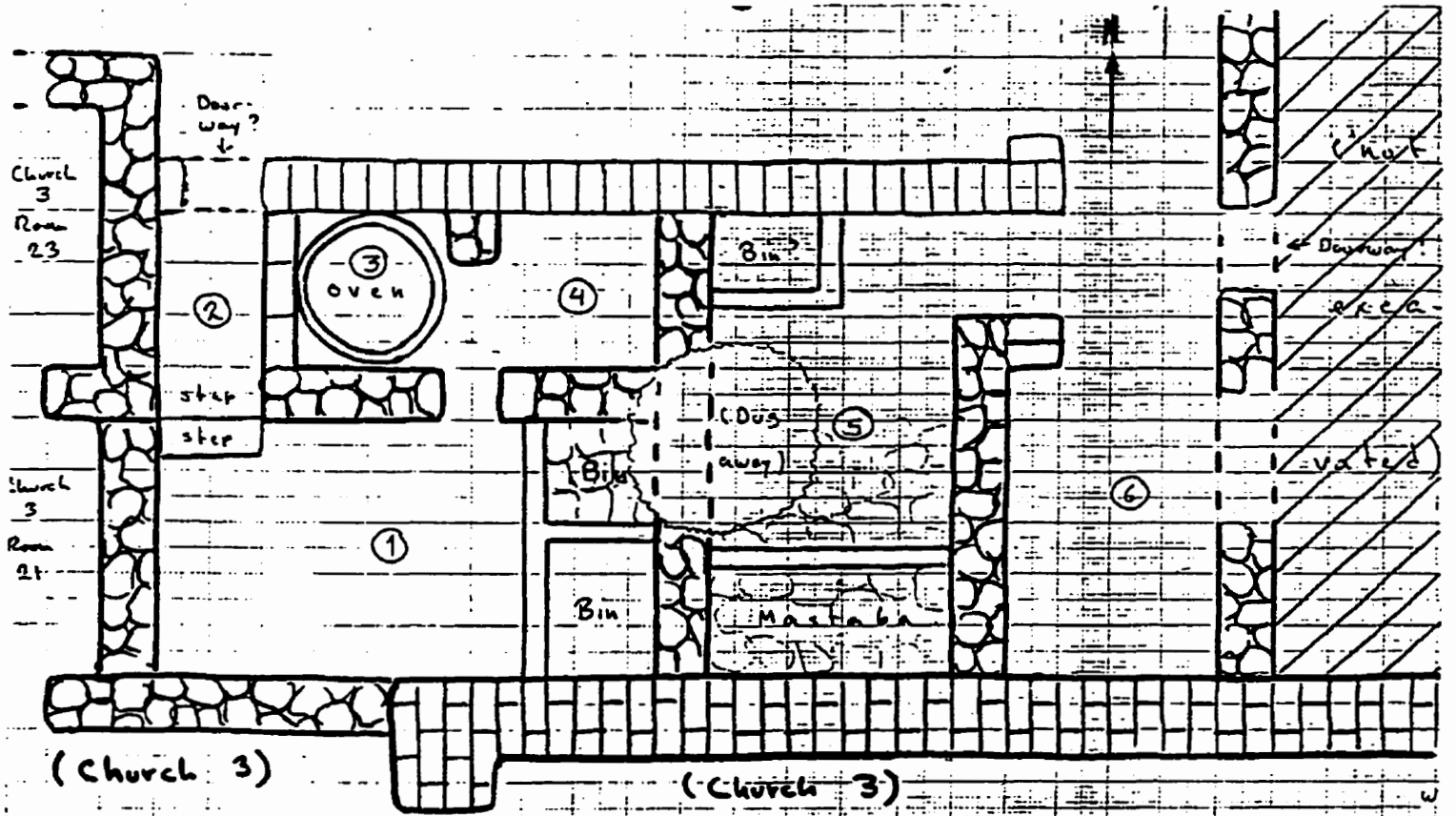




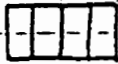
Plate 5 Field drawing of Early Christian house EC2-1 at Qasr Ibrim (after Adams 1972:FN).



Qasr Ibrim - Sketch Plan of House EC 2-1 - 1972 (209)



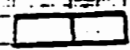
Meroitic brick  
Temple wall re-  
mains in use  
as church wall



X-group brick  
wall remains  
in use



Early Christian slab construction



Early Christian brick construction

Plate 6 Level 15b at Abd el Qadir I (Meinartı) (Adams 1968:201).

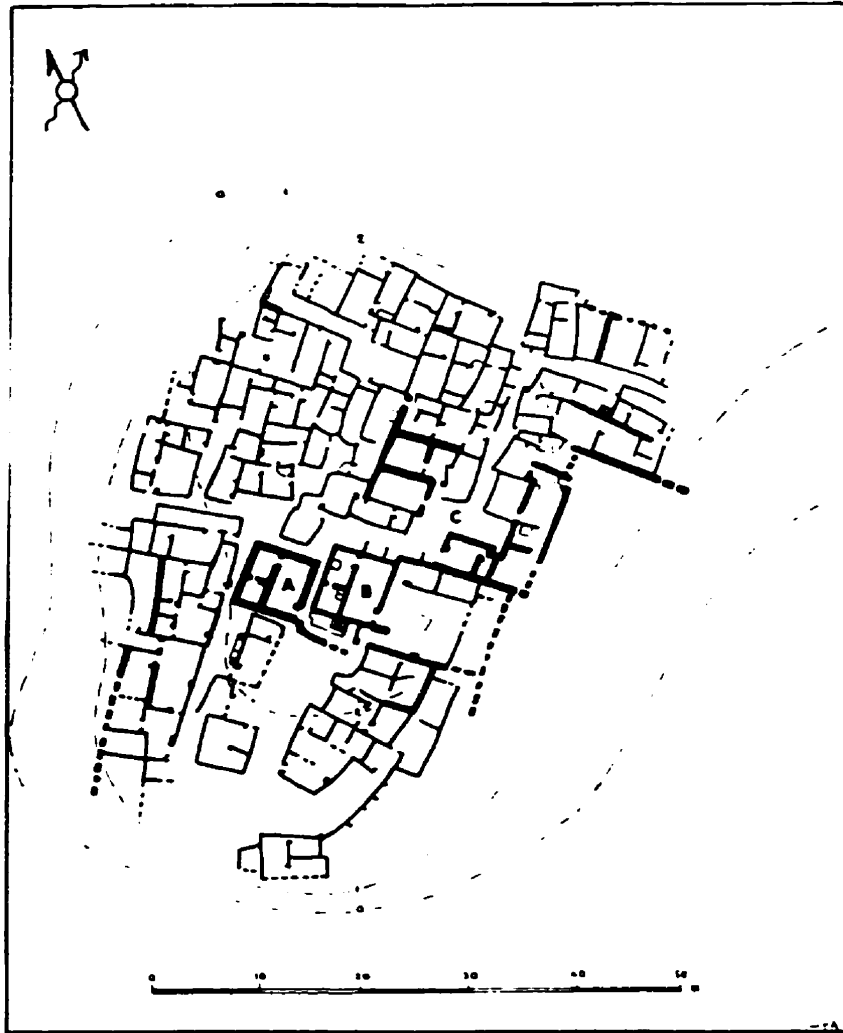


Plate 7 Level 13 at Abd el Qadir I (Meinarti) (Adams 1968:202).

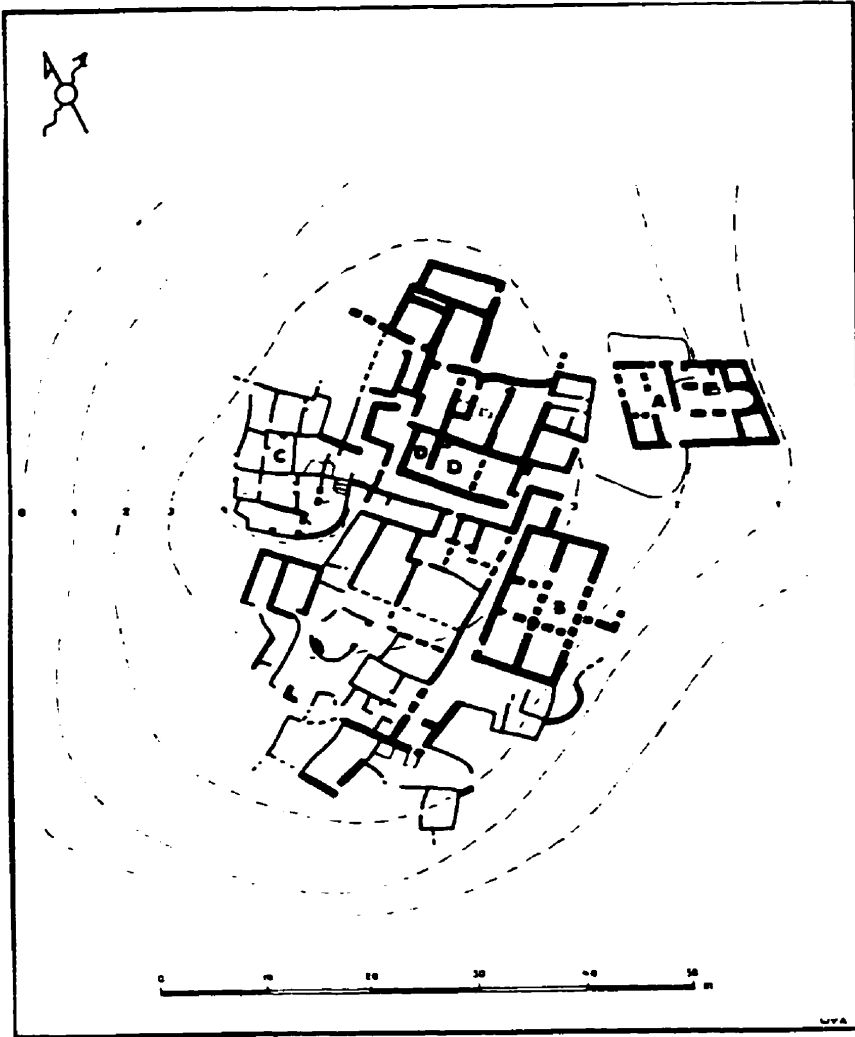


Plate 8 Level 18 at Abd el Qadir I (Meinarti) (Adams 1968:200).

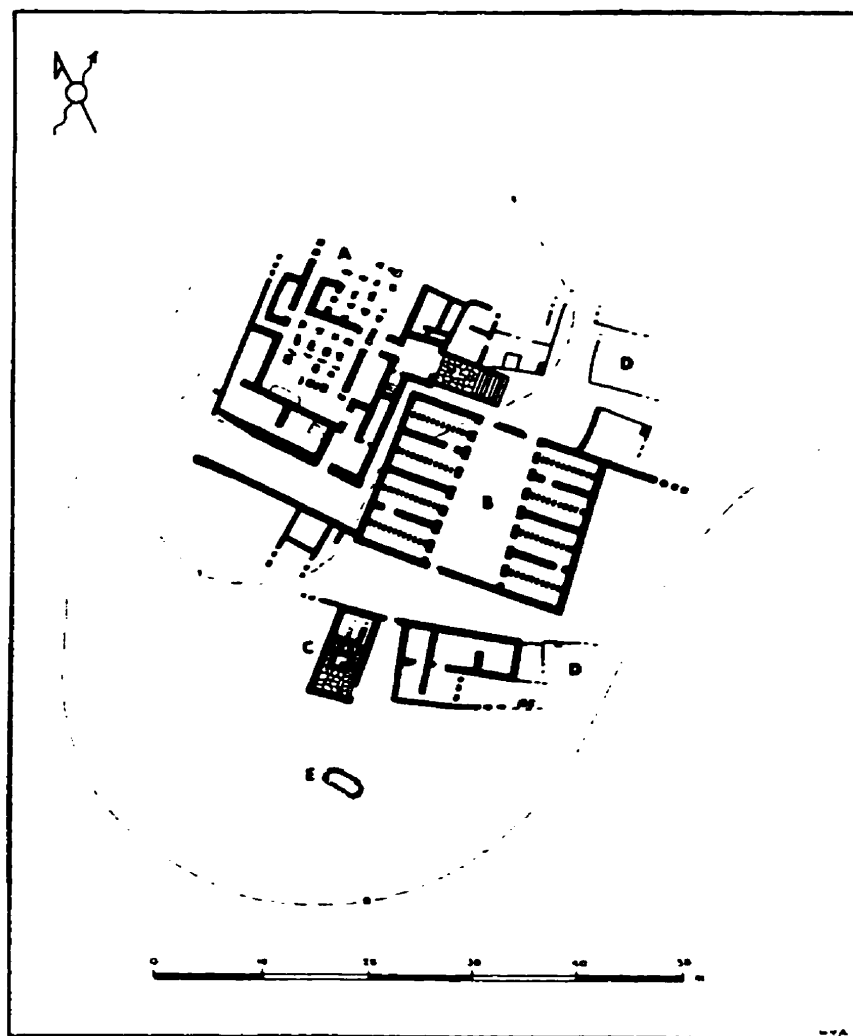


Plate 9 The settlement of Wadi el Arab  
(Emery and Kirwan 1935:pl.17).

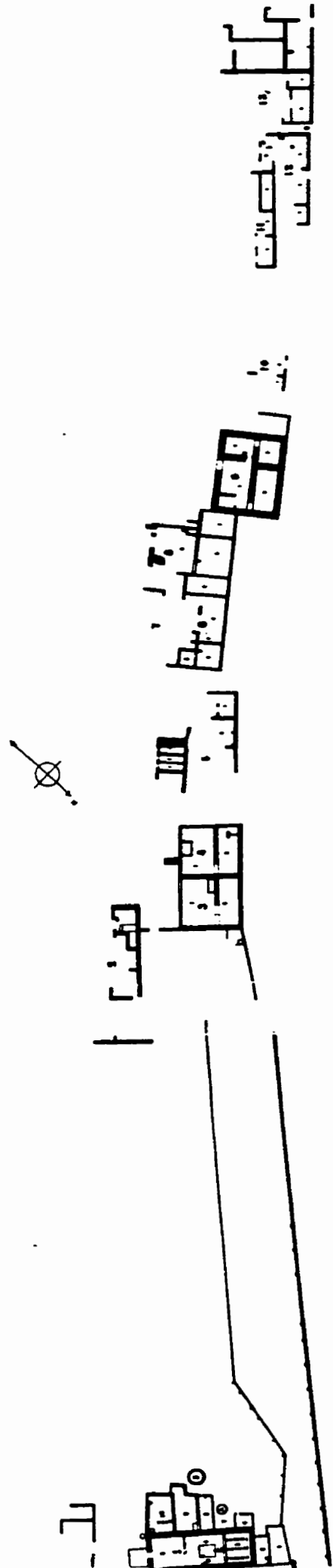
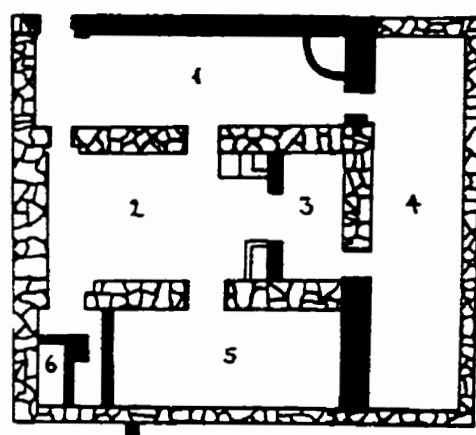
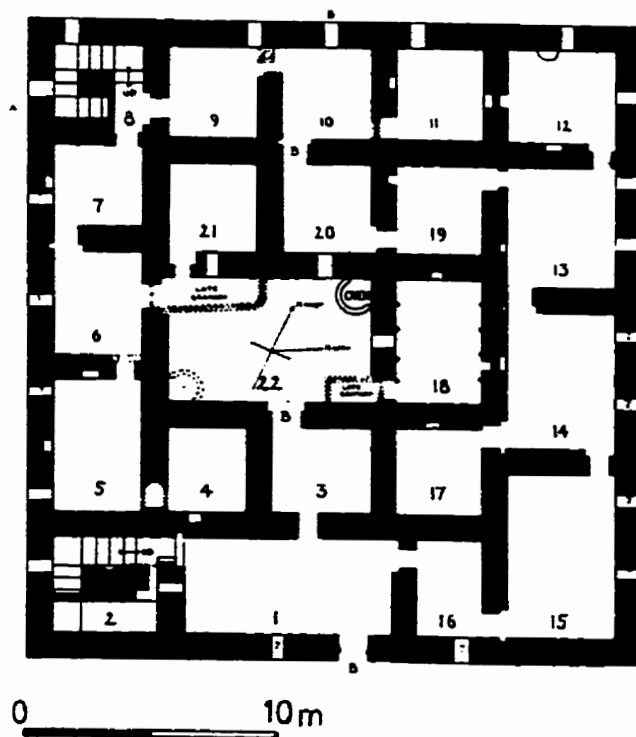


Plate 10 The 'castle' and house 9 at Karanög (after Woolley 1911:pl.21, 28).



HOUSE 9. GROUND PLAN.



Plate 11 House 8 at Karanòg (after Woolley 1911:pl.29).

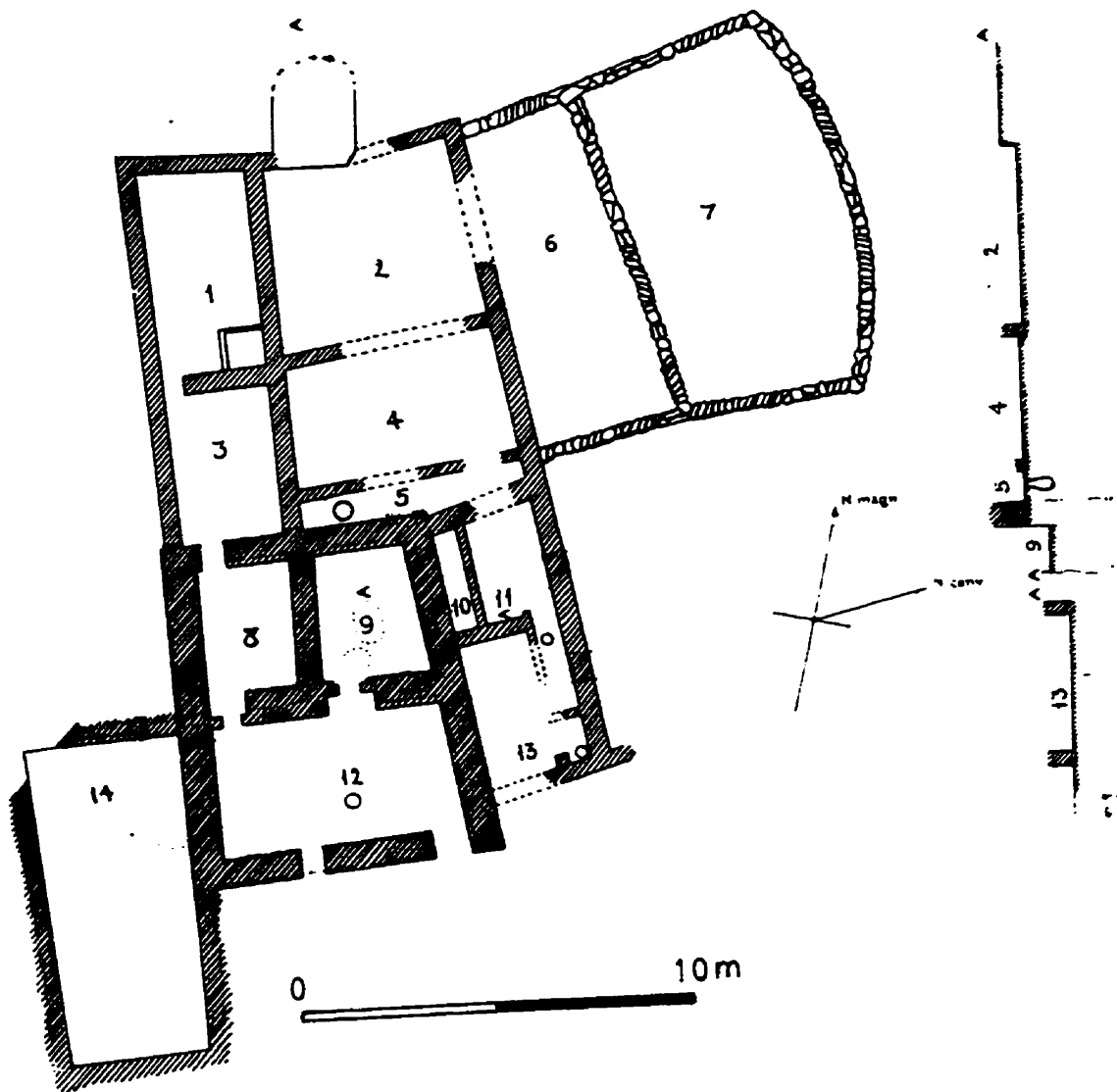


Plate 12 Settlement at Gaaba I (Vila 1976:38).

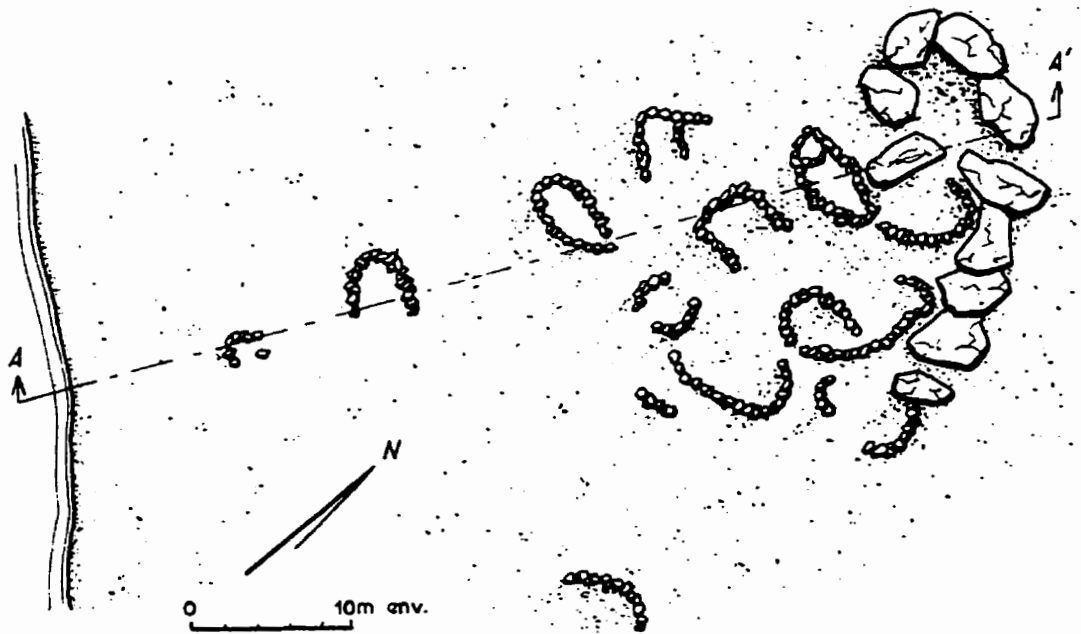




Plate 13 Settlement at Kofaree/Gebel Abdou Mellis (Vila 1975:82).

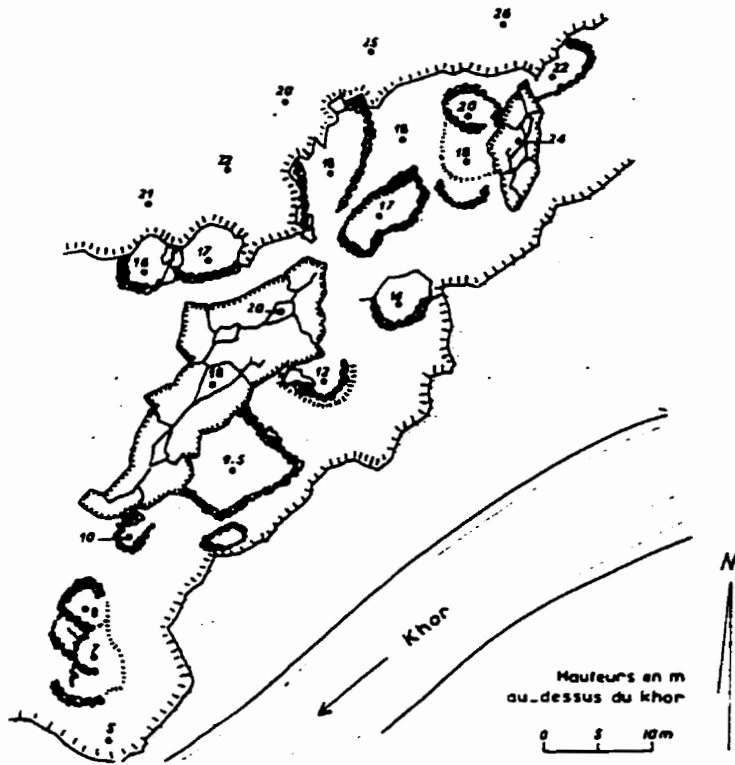


Plate 14 Examples of dwellings found outside the enclosure at Dibger (M.D. Villard 1935:59).

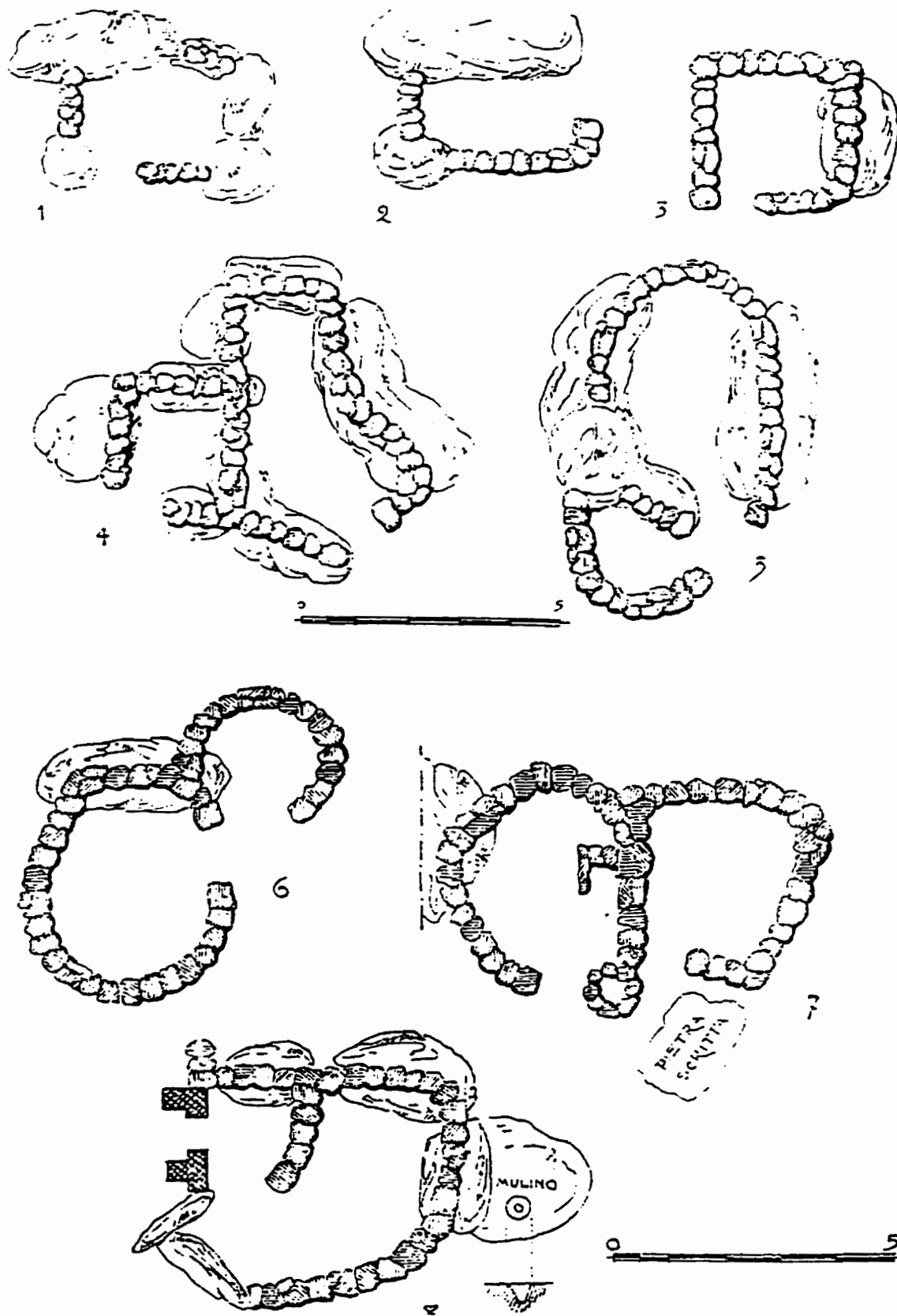


Plate 15 Examples of dwellings found at Ger Belat (after M.D. Villard 1935:31).

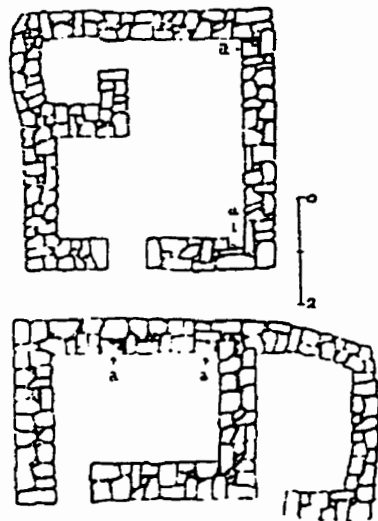
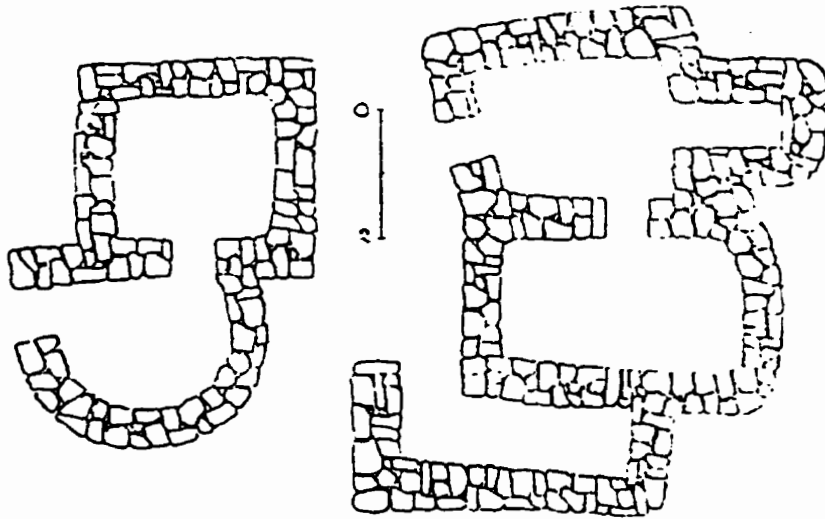


Plate 16 X-Group and Early Christian settlement at Gezeira Dabarosa I (after Verwers 1962:31).

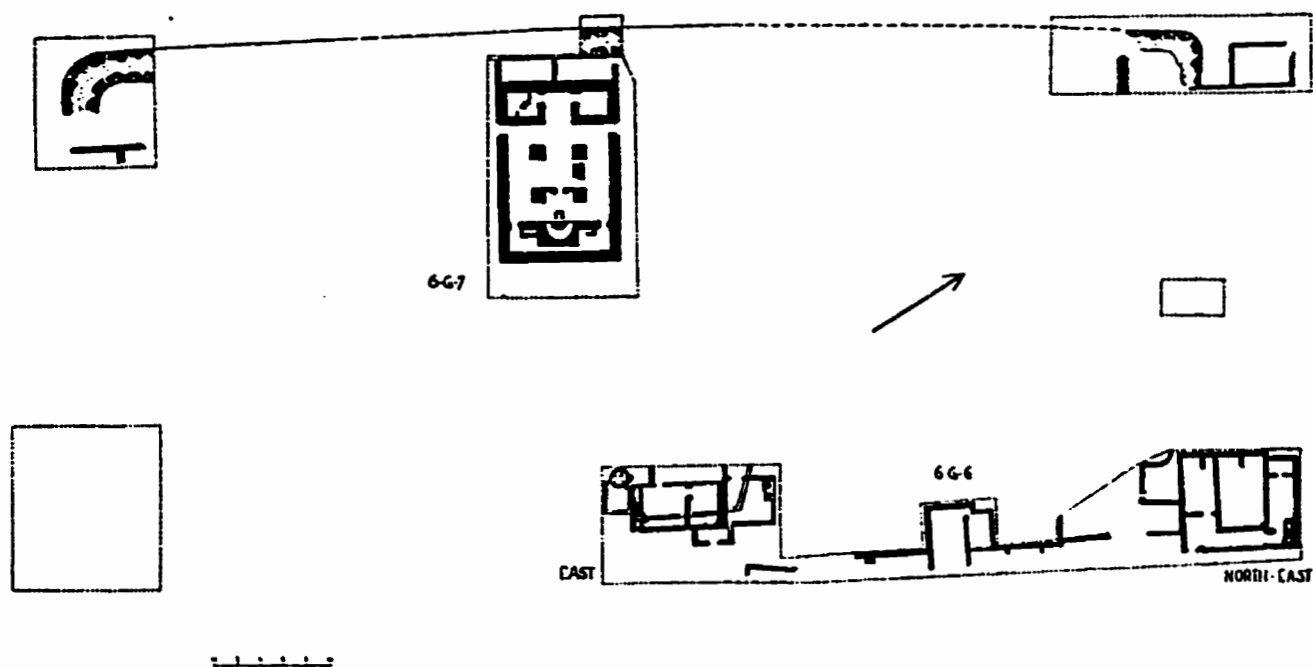


Plate 17 X-Group and Early Christian houses at Gezeira Dabarosa I (after Hewes 1964:181).

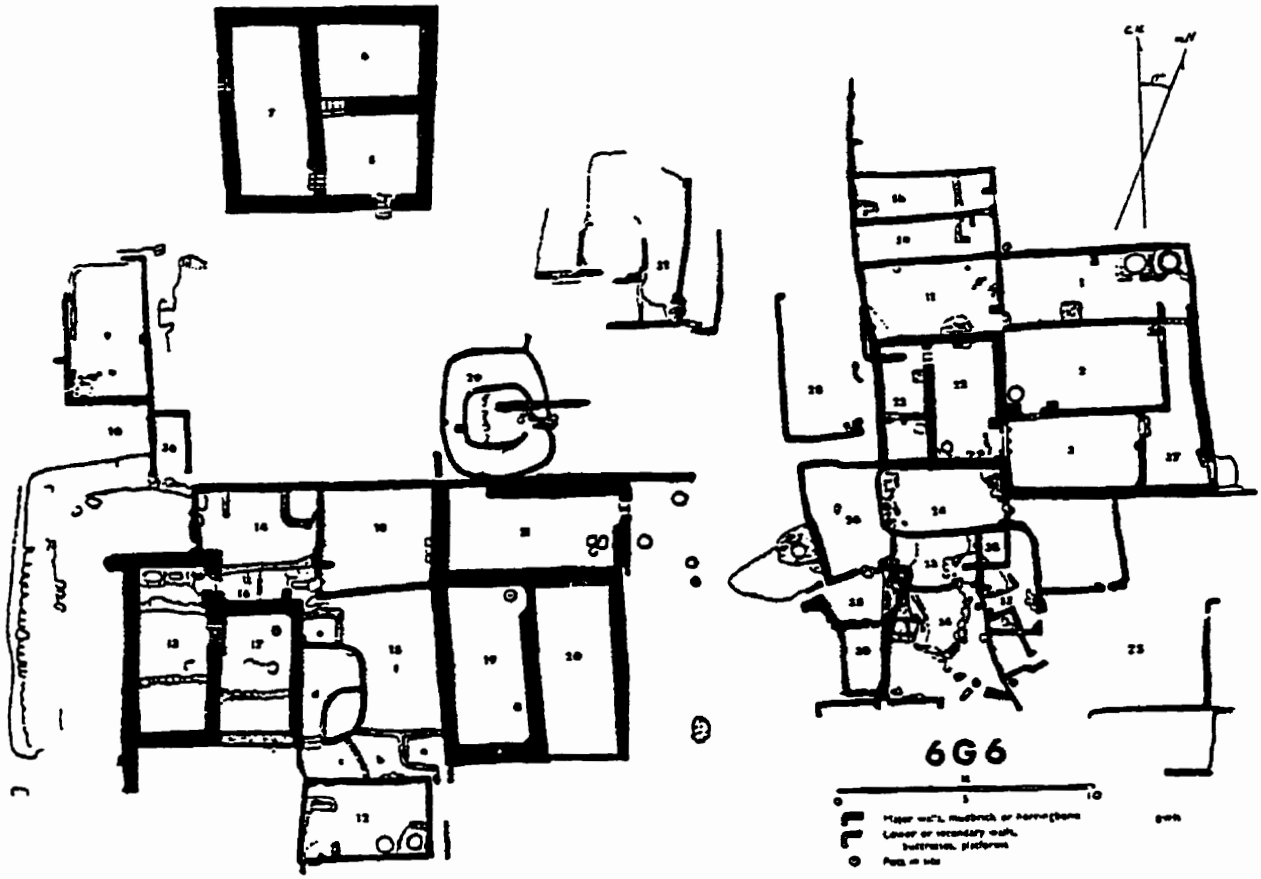


Plate 18 Plan of house foundations at Awanirki/Gerboonirki III (Vila 1977b:58).

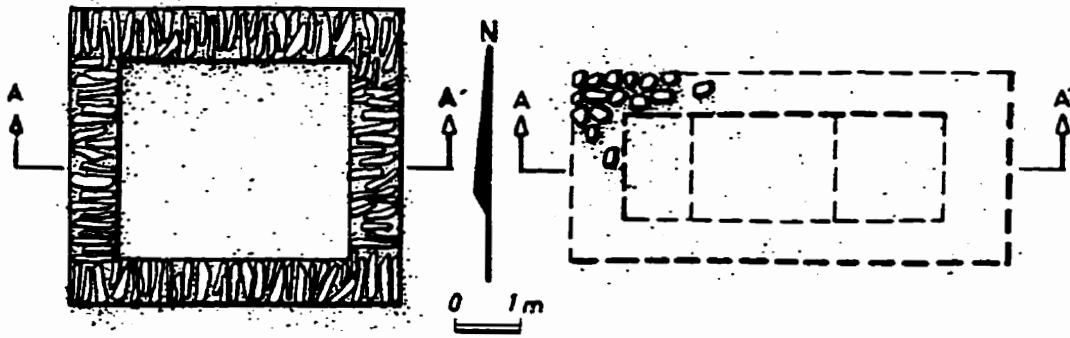


Plate 19 Site plan of Abdallah Nirqi (Barkóczi and Salamon 1974:343).

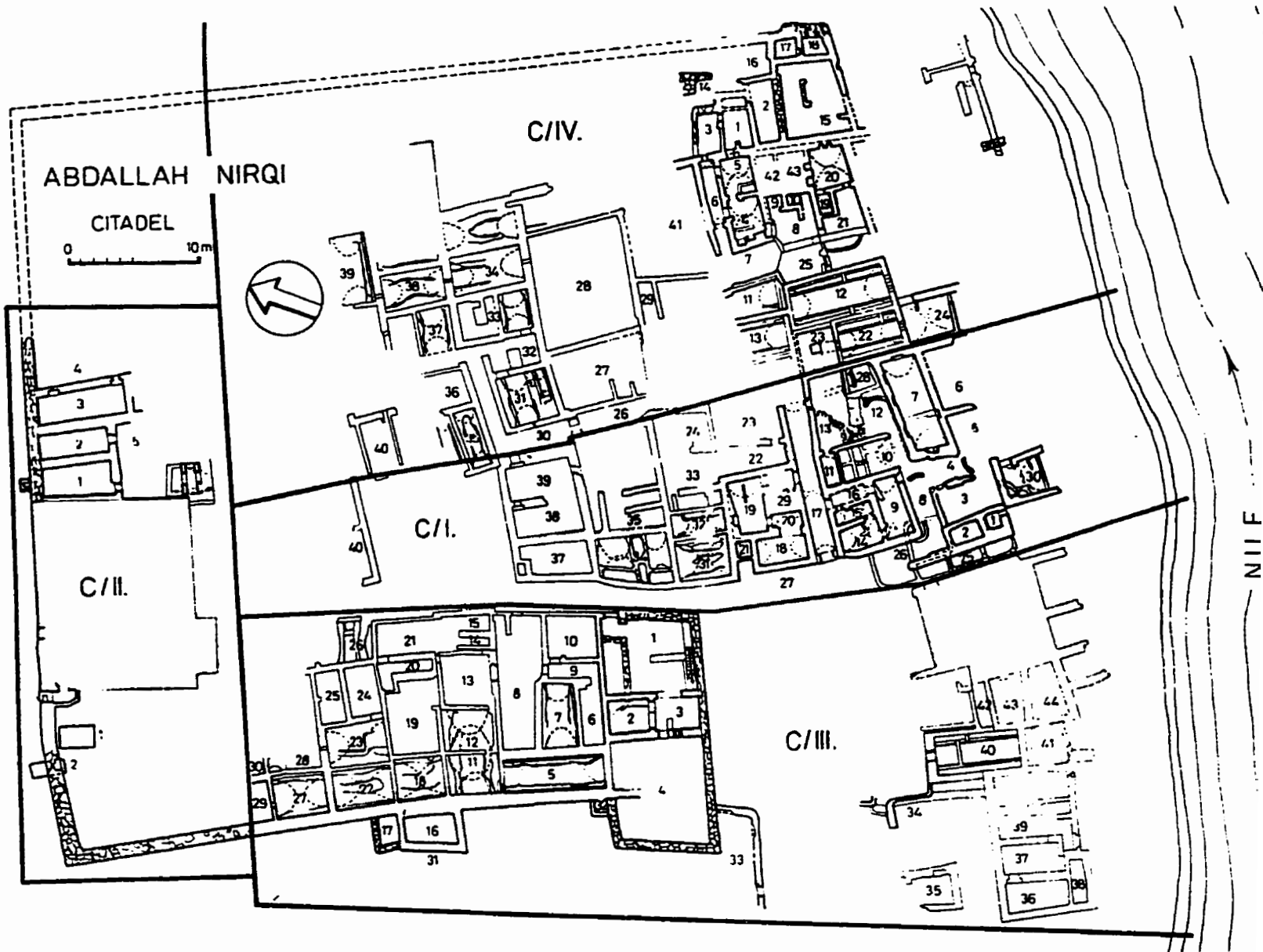


Plate 20 Plans of 'double houses' at Abdallah Nirqi (after Hajnóczi 1974:350).

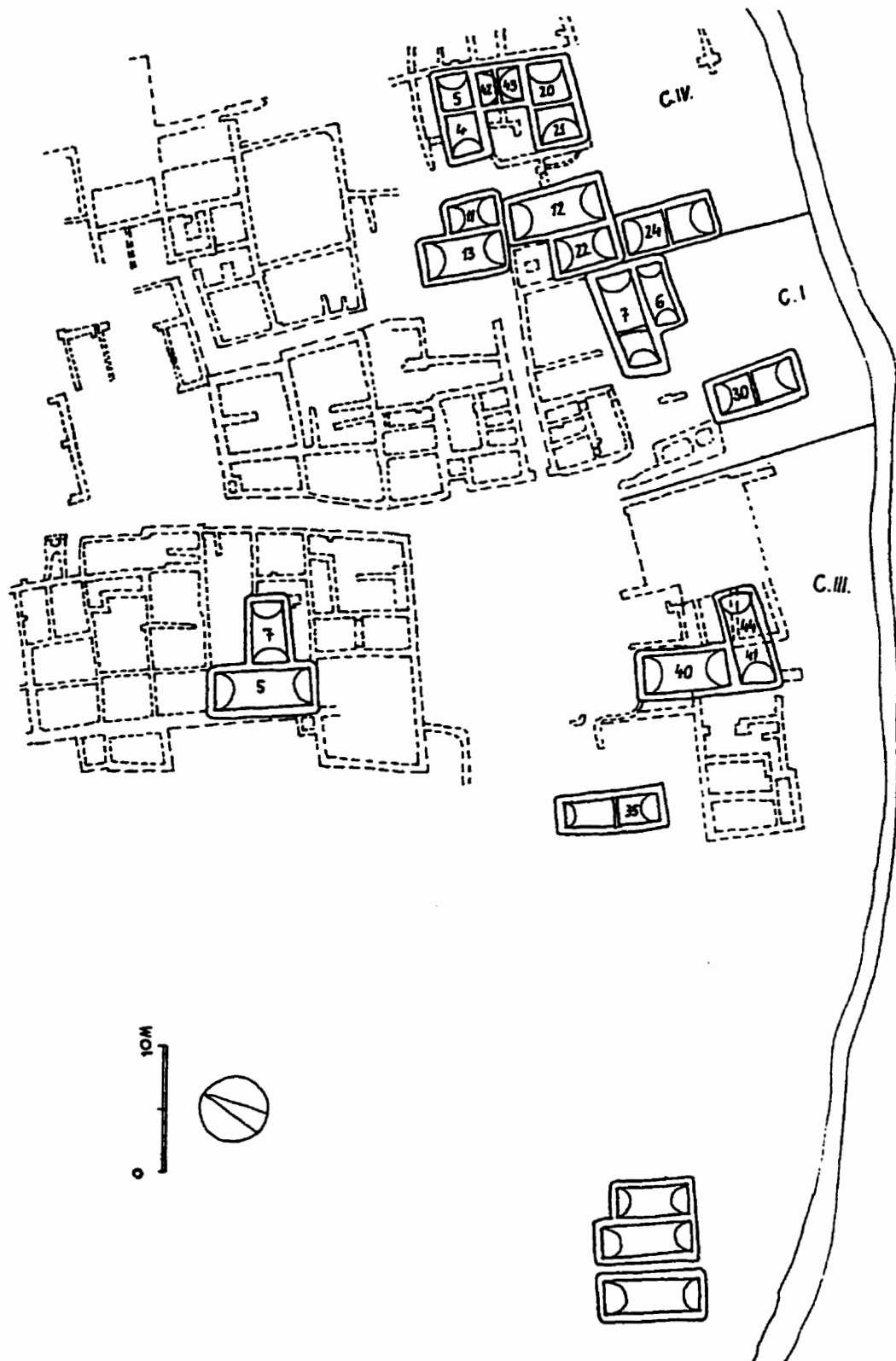




Plate 21 Western building at Arminna West (after Trigger 1967:fig.16).

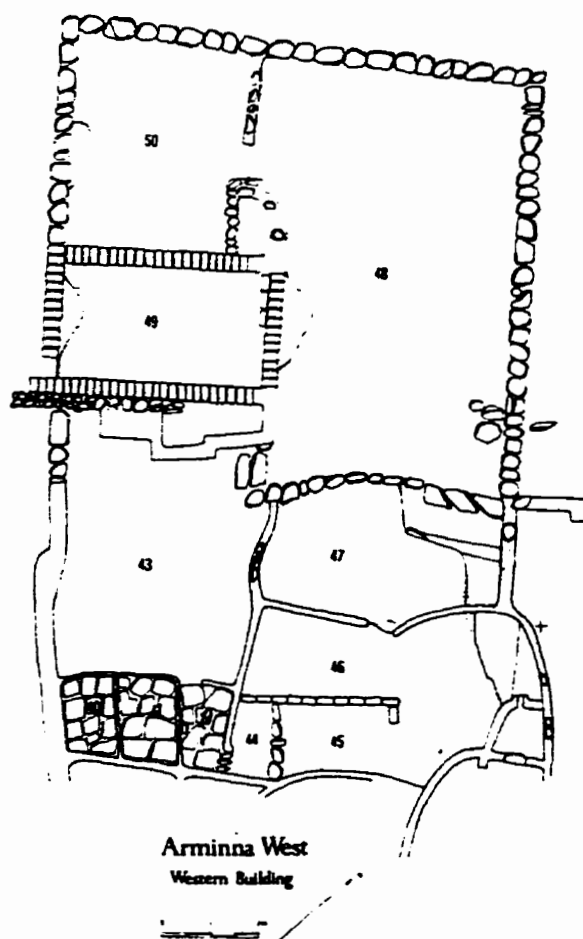


Plate 22 Middle buildings levels at Arminna West (Weeks 1967:30).

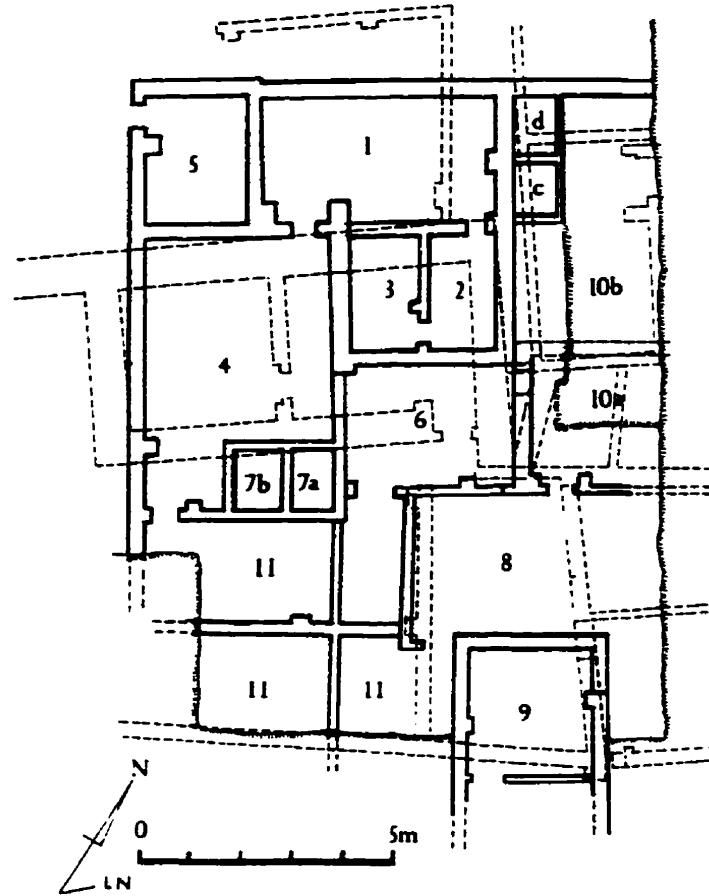


Plate 23 House X at Arminna West (Trigger 1967:30).

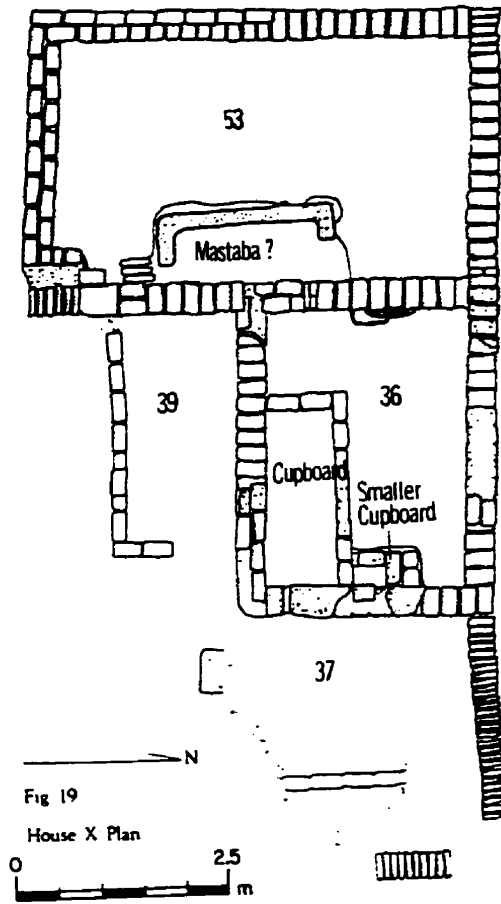


Fig 19  
House X Plan

Plate 24a Site plan of Debeira West IV  
(after Shinnie and Shinnie 1978:fig.3).



Plate 24b Site plan of Debeira West II (after Shinnie and Shinnie 1978:fig.33).

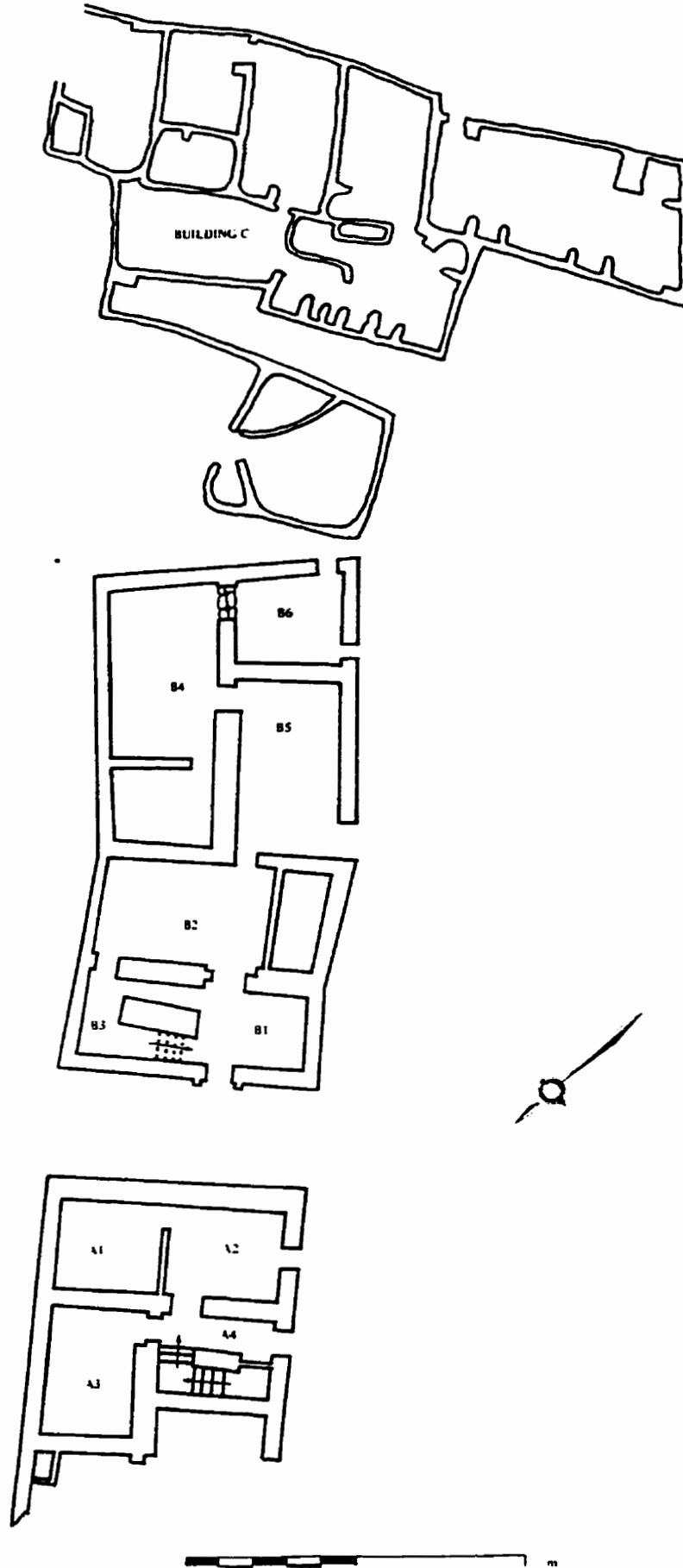


Plate 25a Site plan of Armirna West (after Weeks 1967:fig.1).

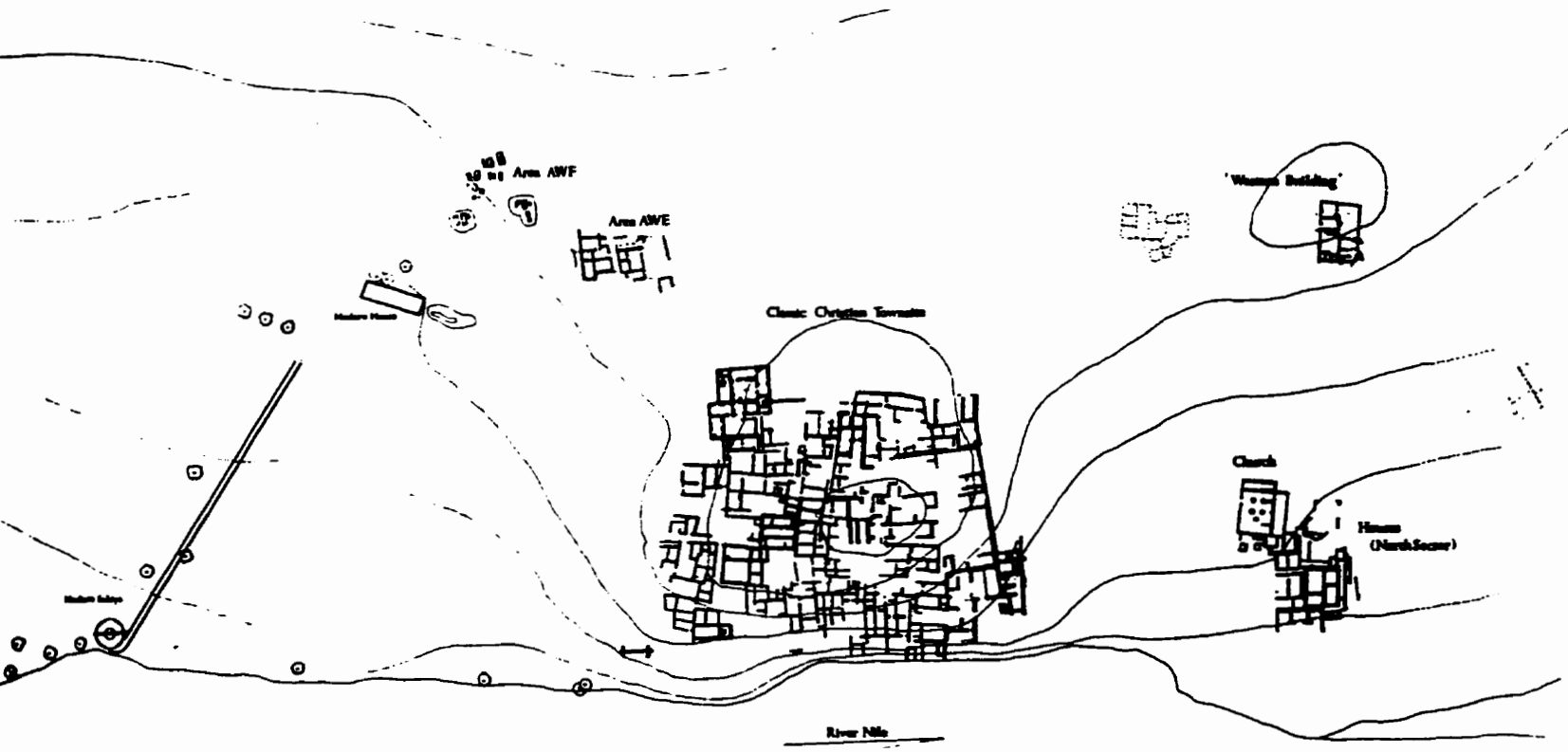


Plate 25b Classic Christian settlement at Arminna West (after Weeks 1967:fig.2).



Plate 26 House PCH-1 at Old Dongola. Top - general plan, Bottom - Early Christian phase (after Godlewski 1991:81-2).

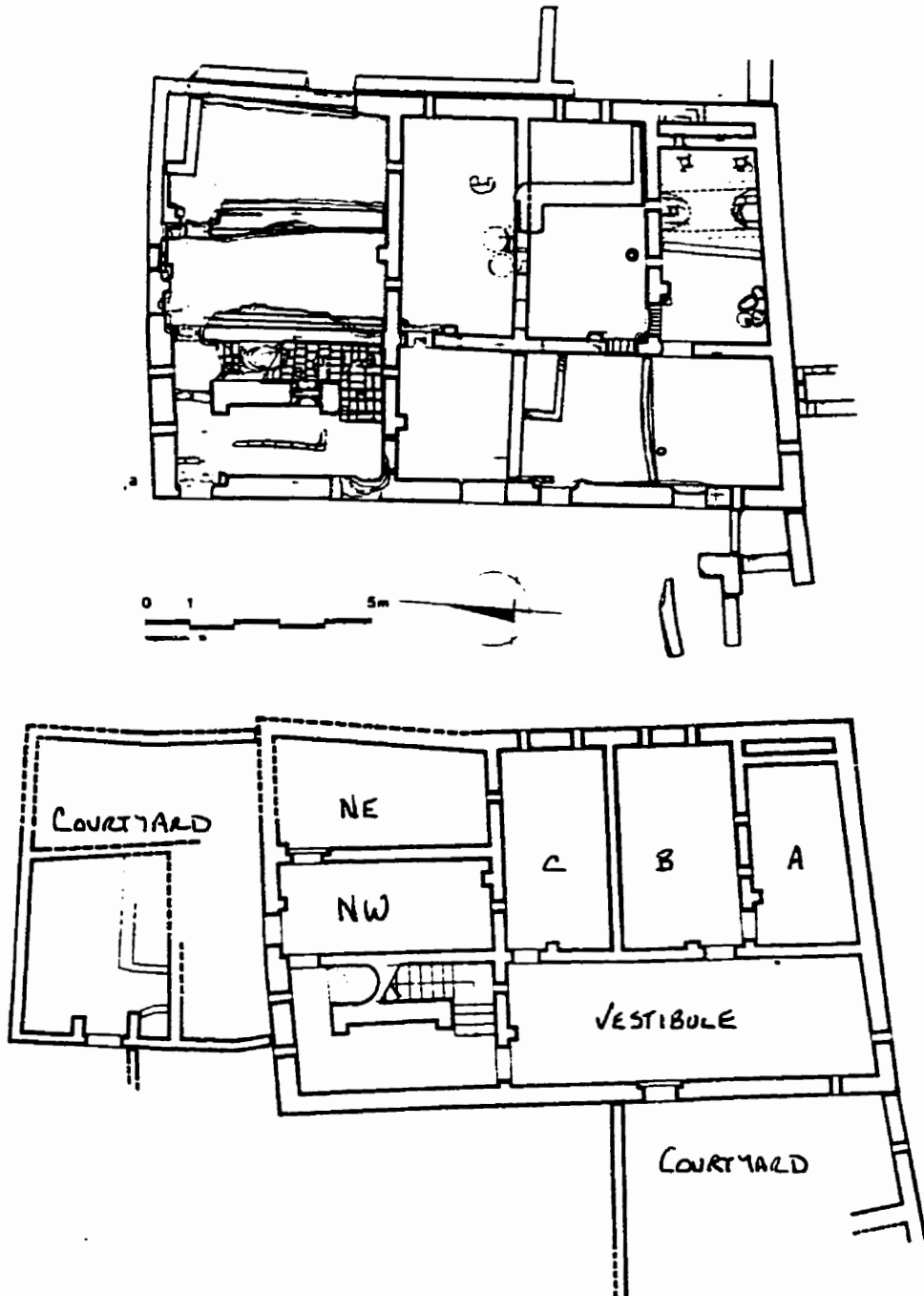




Plate 27 House A at Old Dongola, Early Christian phase (after Godlewski 1991:85).

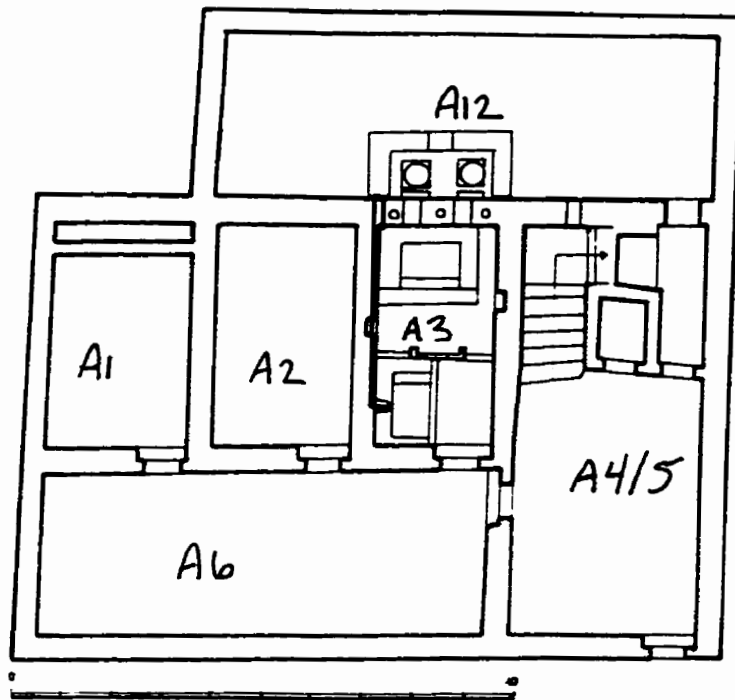


Plate 28 Site plan of the Citadel at Faras West I (after Michalowski 1962a:fig.1).

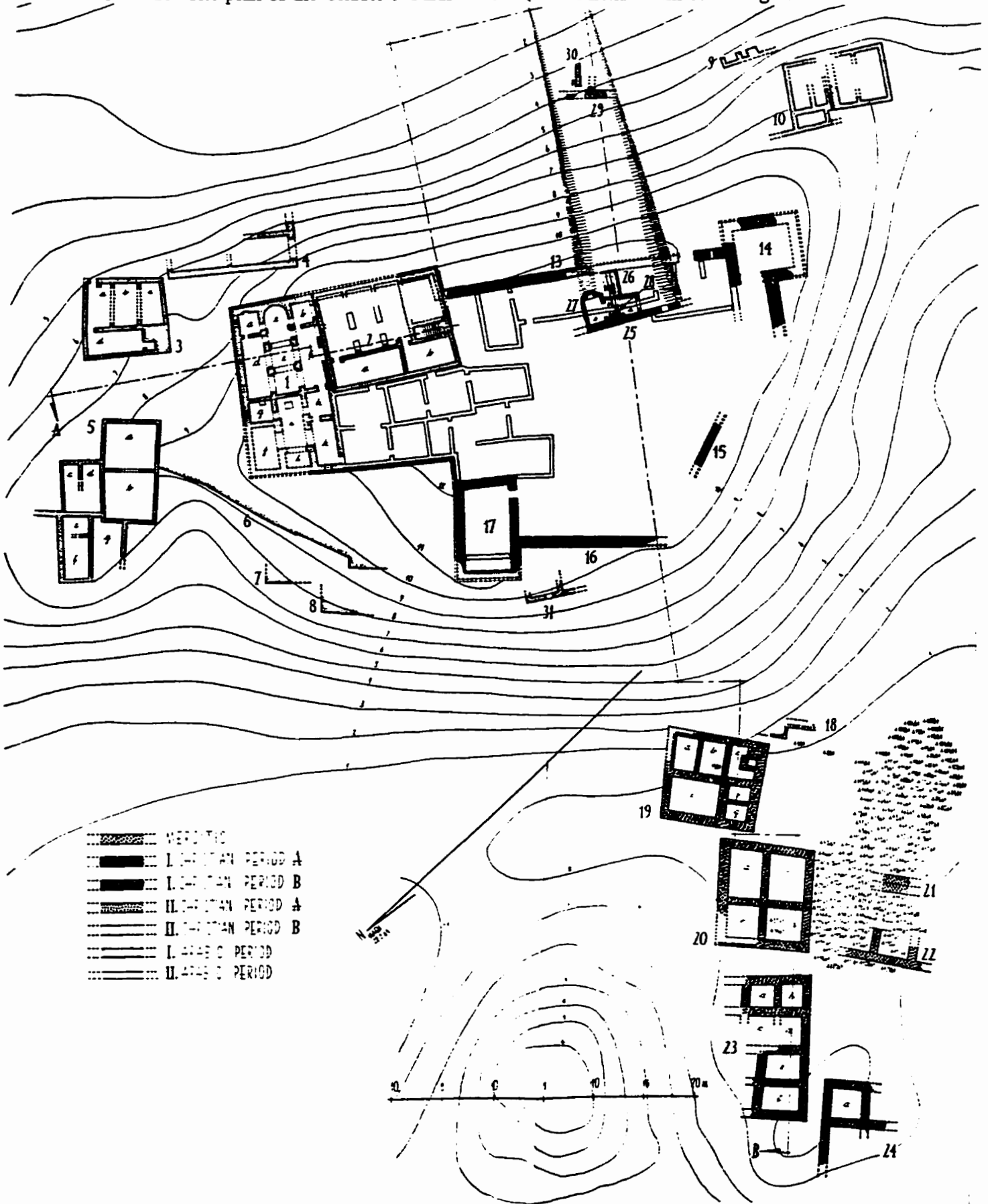


Plate 29 Post holes in MN3, trenches MN11 and MN12 at Soba East (after Sjöström and Welsby 1991:196).

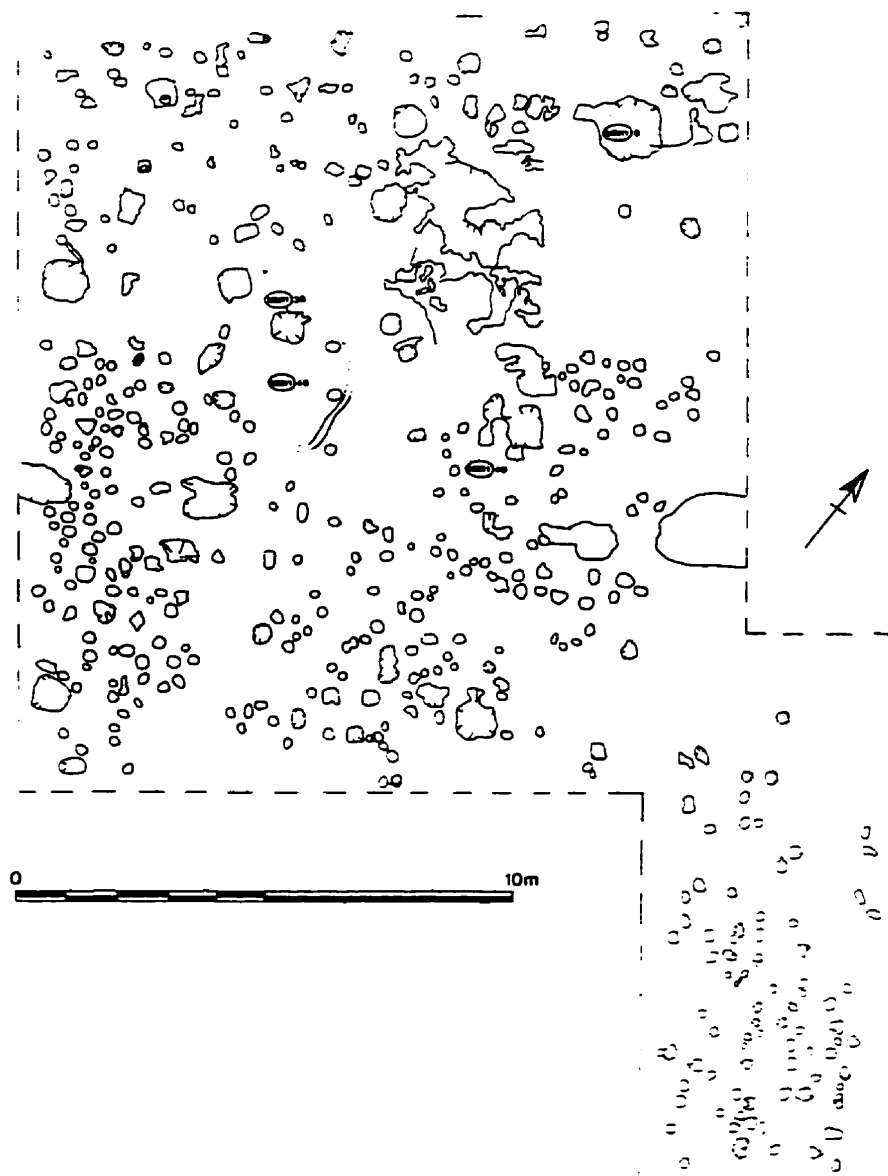


Plate 30 Site plan of Naga el Sheima (after Bietak and Schwarz 1987:fig.1).

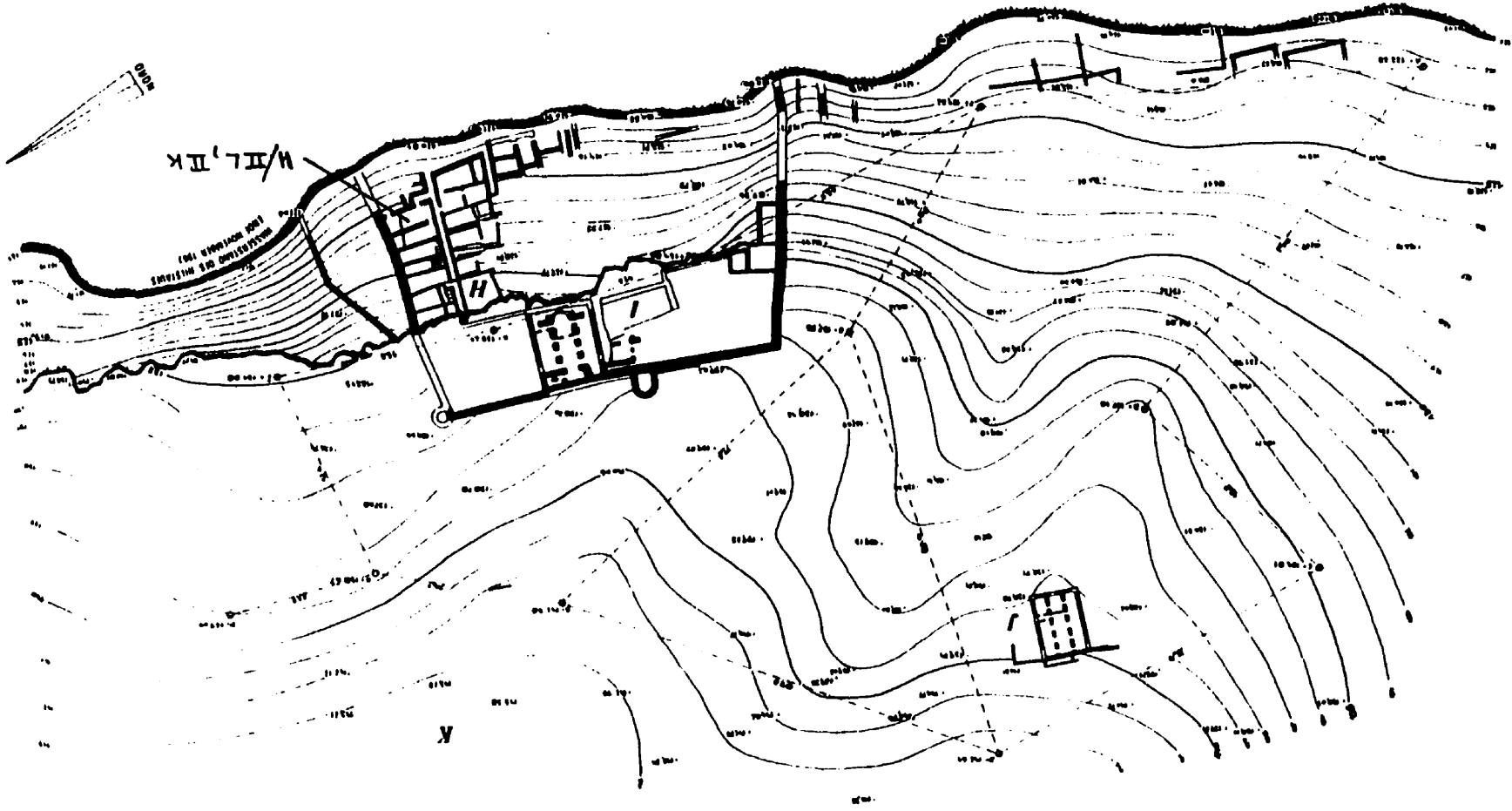
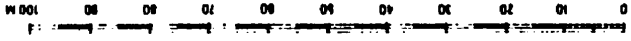


Plate 31 Site plan of Sabagura (after Firth 1912:pl.XVI).

SABAGURA FORT AND TOWN

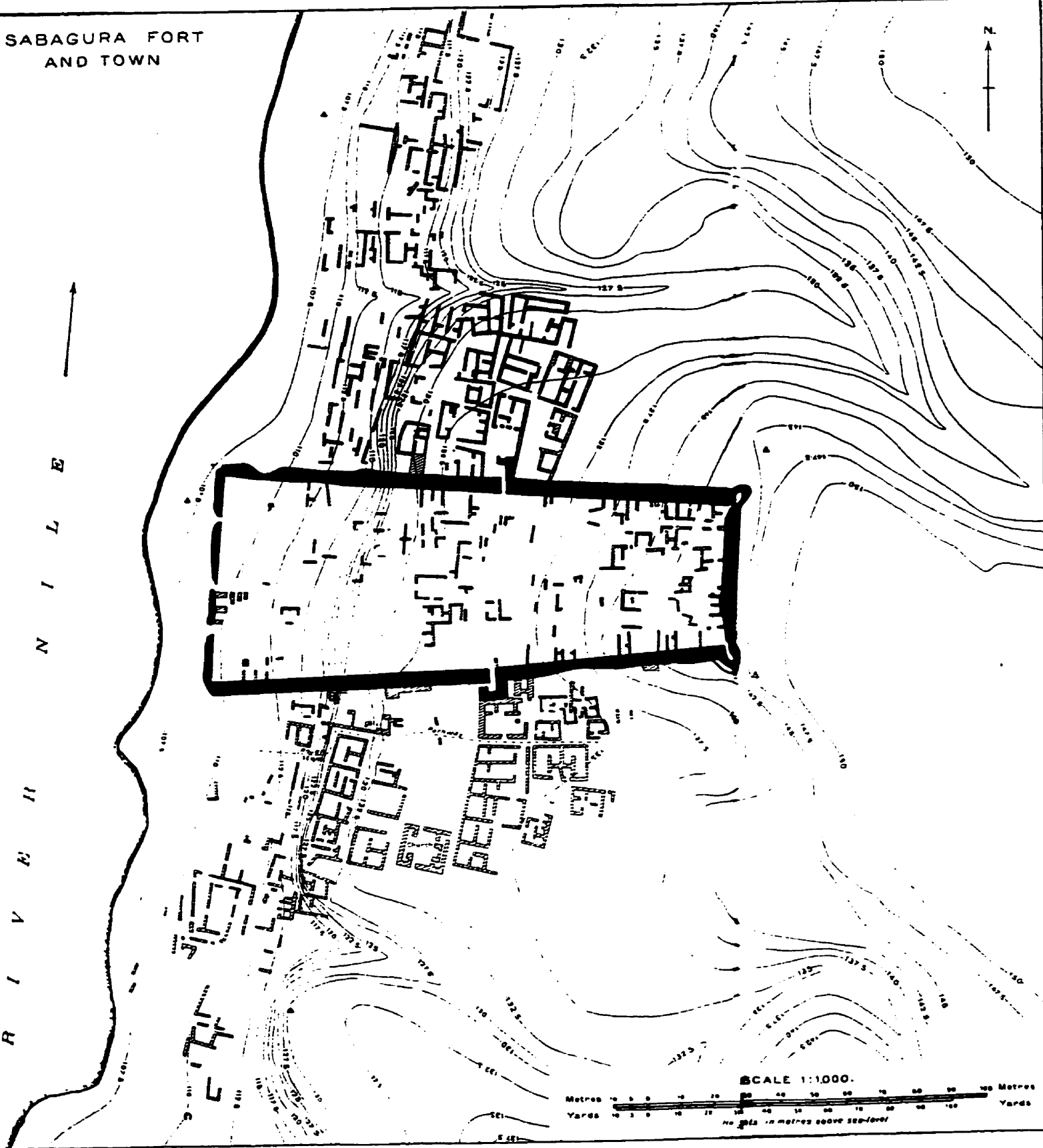


Plate 32 Site plan of Sheikh Daud (after Velo 1964:general plan).



Plate 33 Site plan of Ikhmindi II (after M.D. Villard 1935:67).

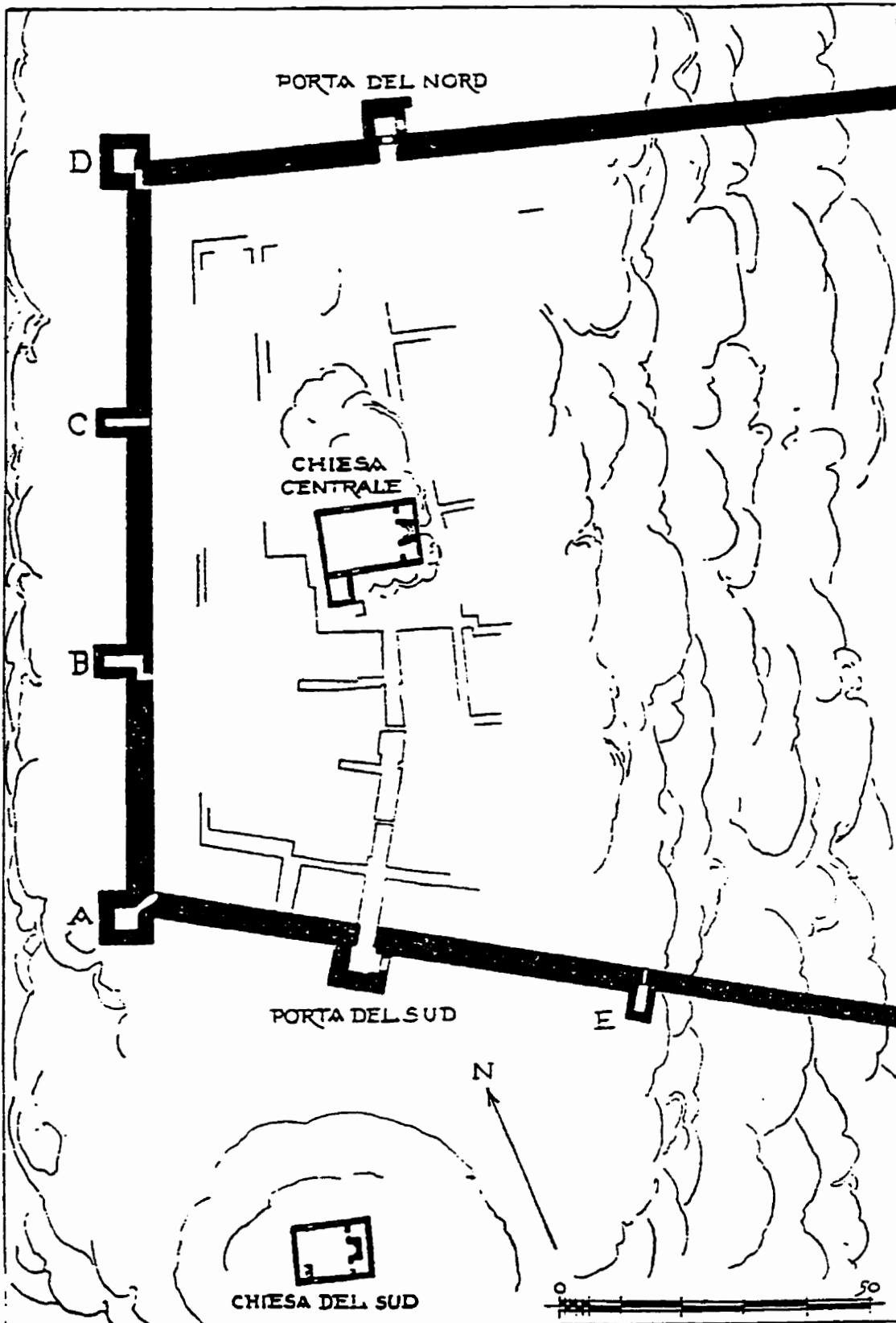


Plate 34 Topographic plan of Dibger (after M.D. Villard 1935:58).

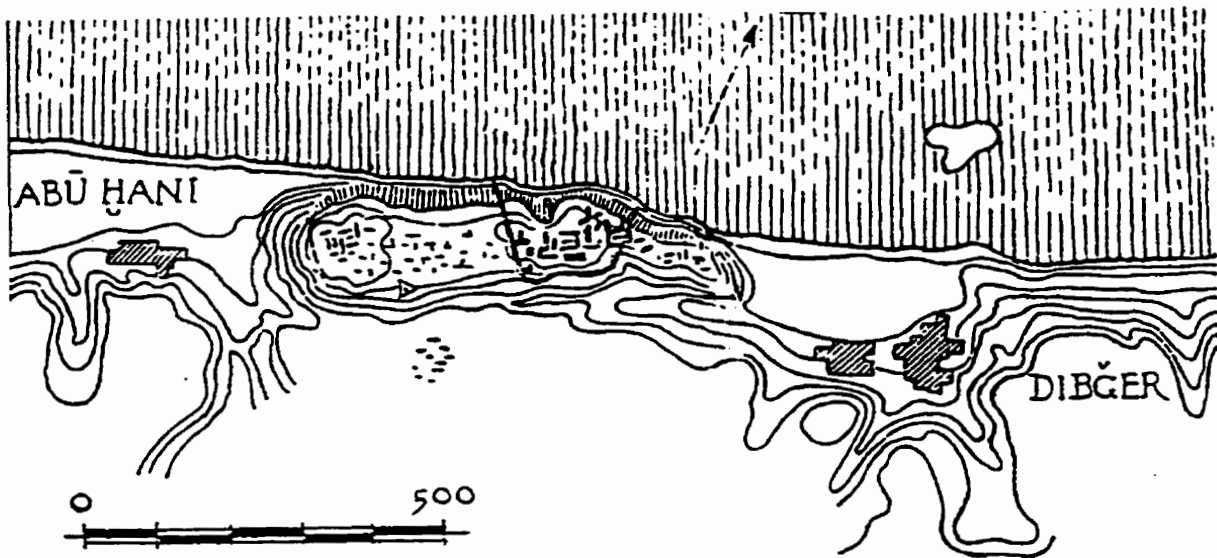




Plate 35 Site plan of Kalabsha (after Curto et al. 1965:101).

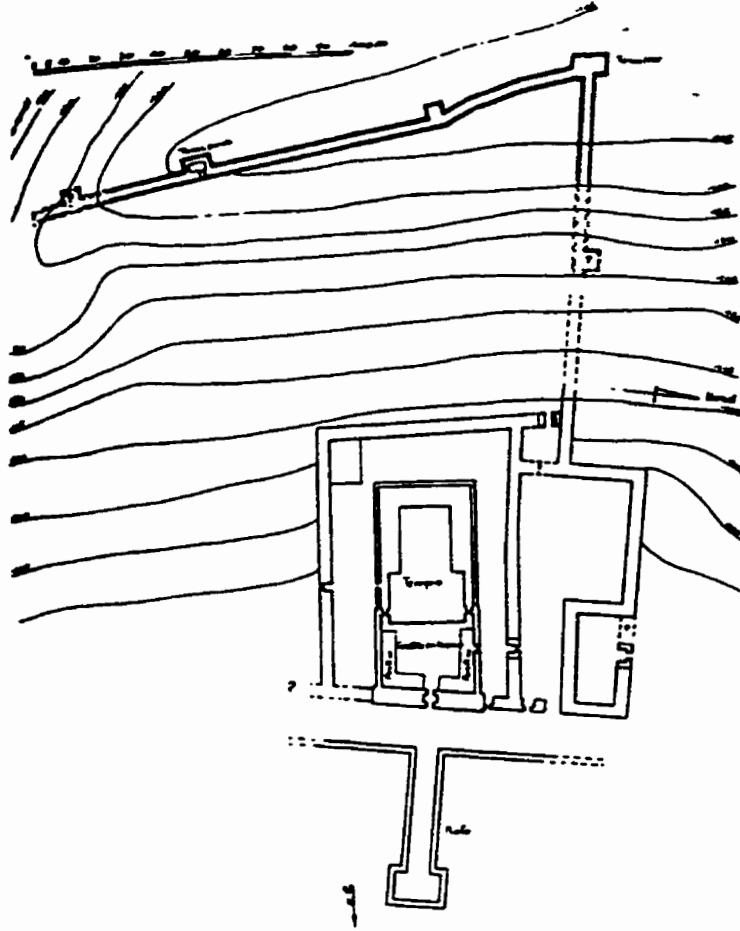


Plate 36 Site plan of Abd el Qadir III [5-O-16] and the building at Abu Sir [5-T-29] (after Adams and Nordström 1963:37).

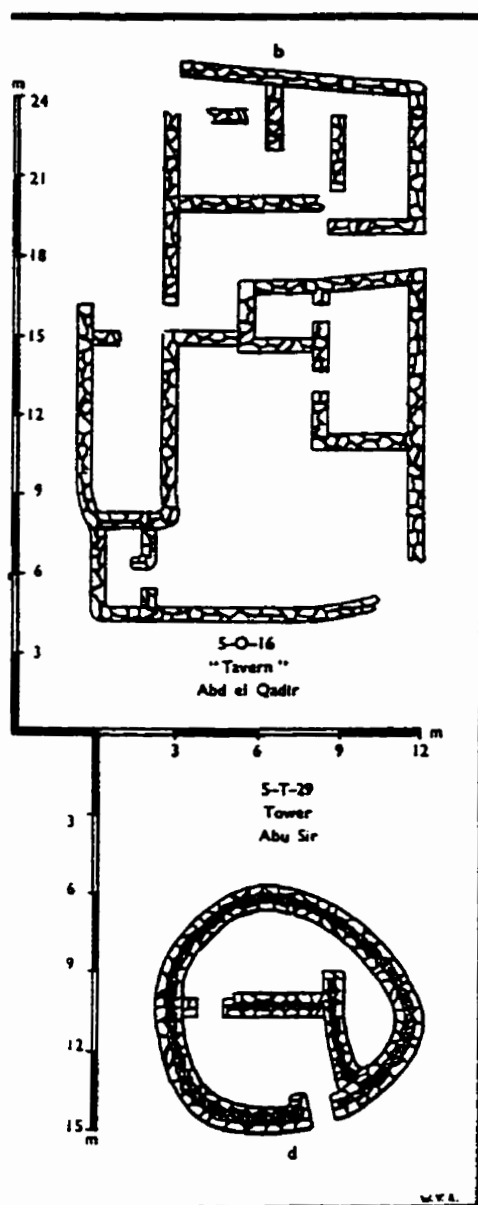


Plate 37 Site plan of Faras West I after excavation (after Michalowski 1974:73).

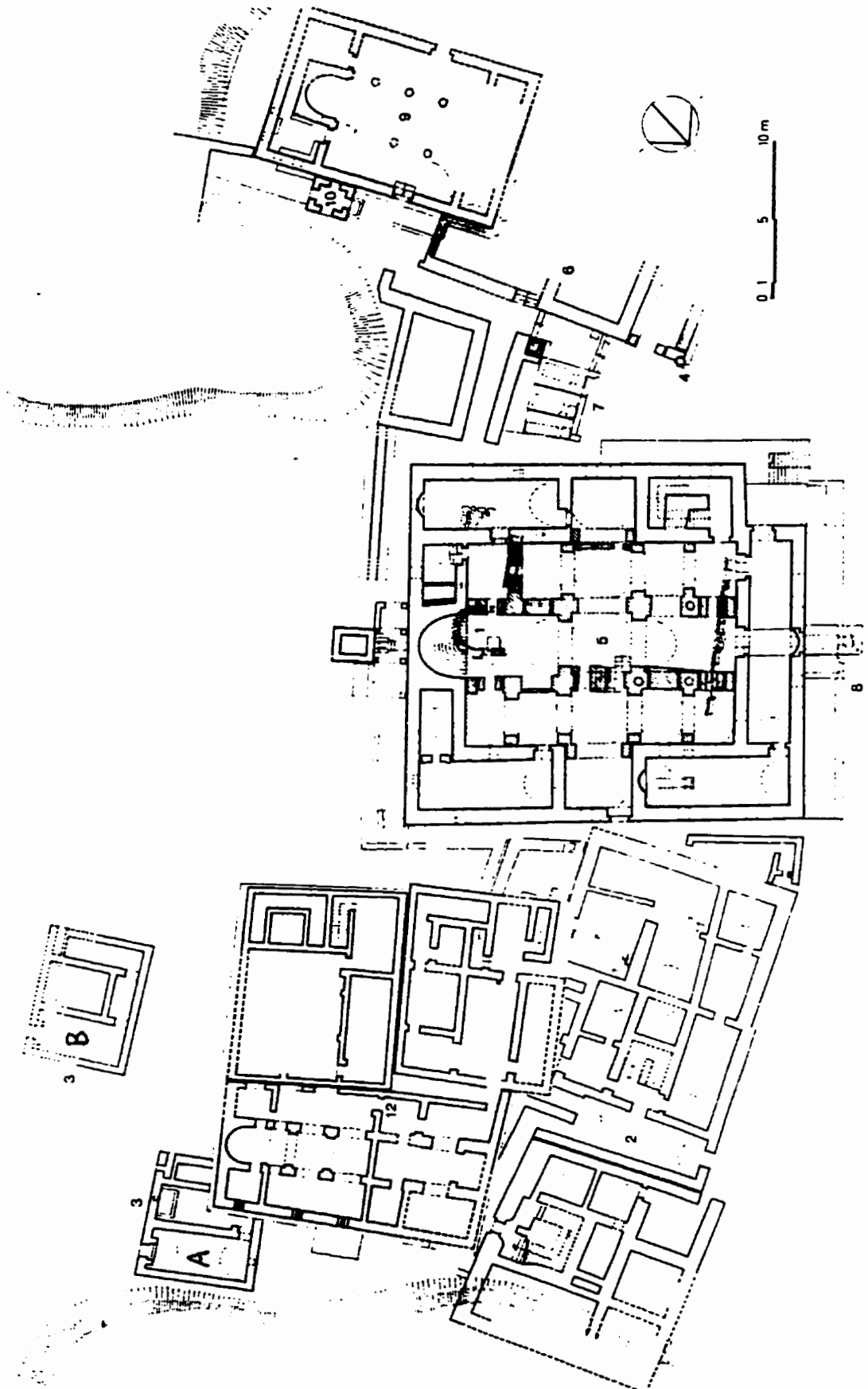


Plate 38 Plan of Building F on mound Z2 at Soba East (Welsby and Sjöström 1994:179, fig.1).

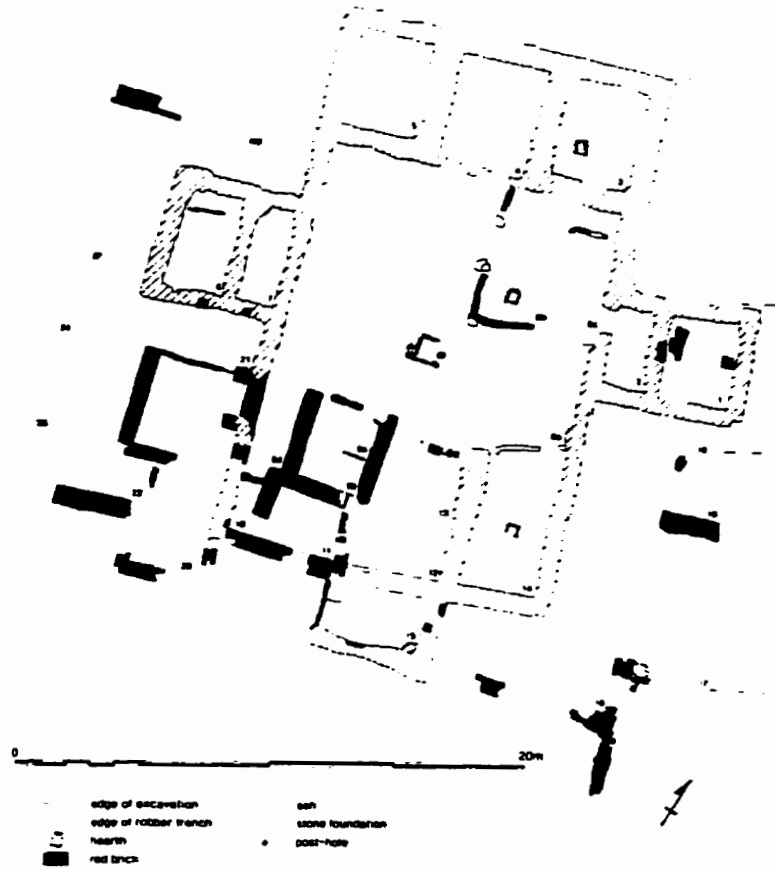


Plate 39 Plan of enclosures at Ali Bek I [278], Ali Bek II [279], Dorsinkid [168], Farki I [244] and Farki II [142] (Gardberg 1970:78).

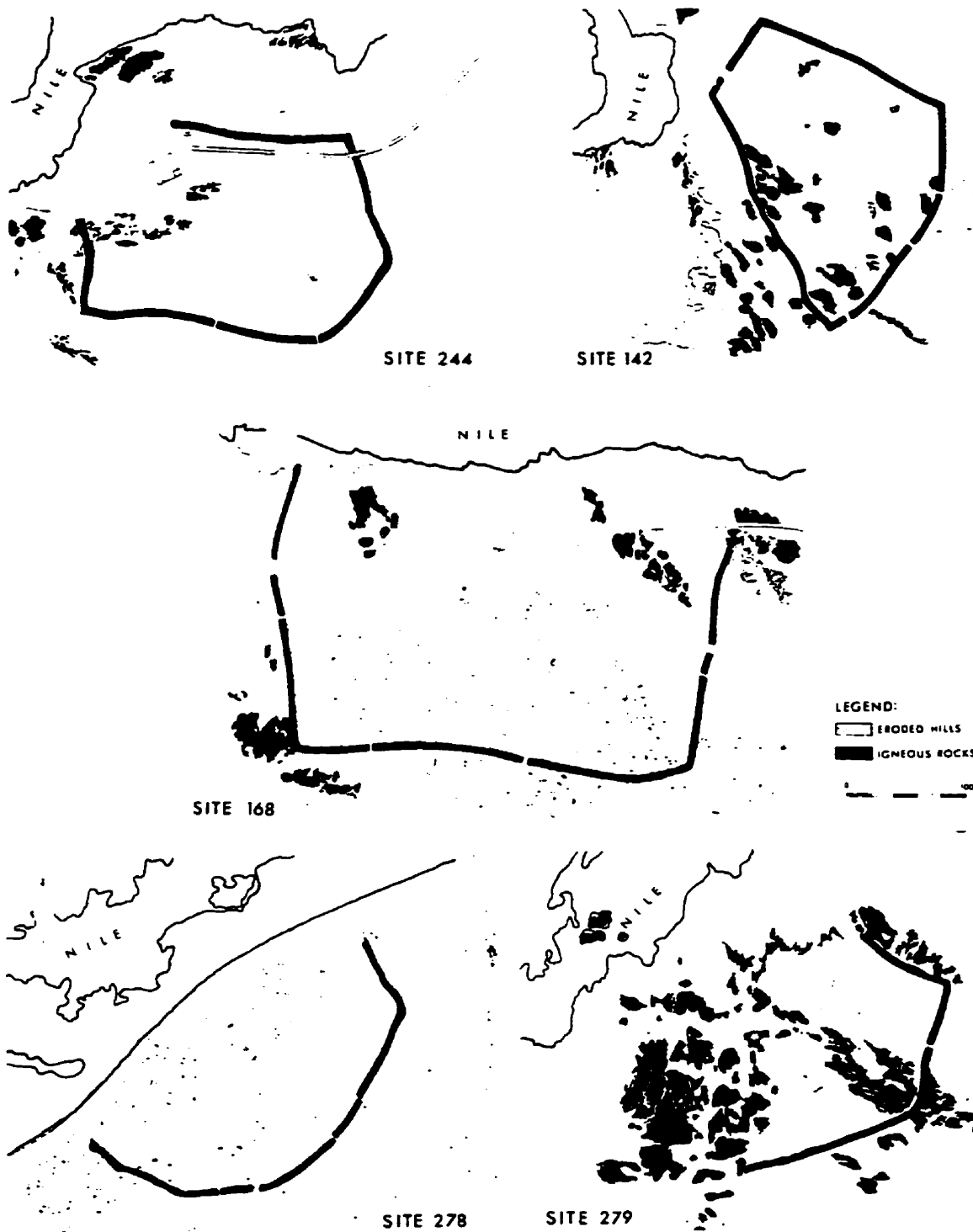


Plate 40 Plan of enclosure at Umm Ruweim (Chittick 1955:88, fig.2).

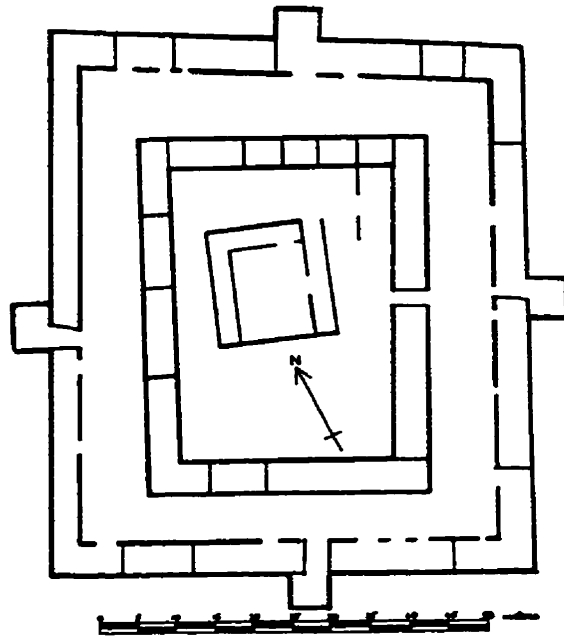


Plate 41 Plan of enclosure at Umm Kuweib (Chittick 1955:90, fig.4).

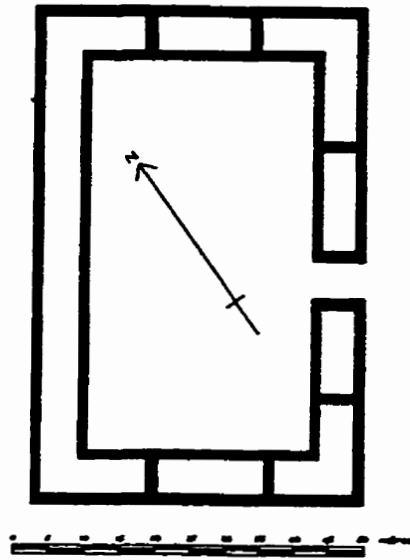


Plate 42 Topographic plan of area around Tamit (after Donadoni 1967:fig.1).

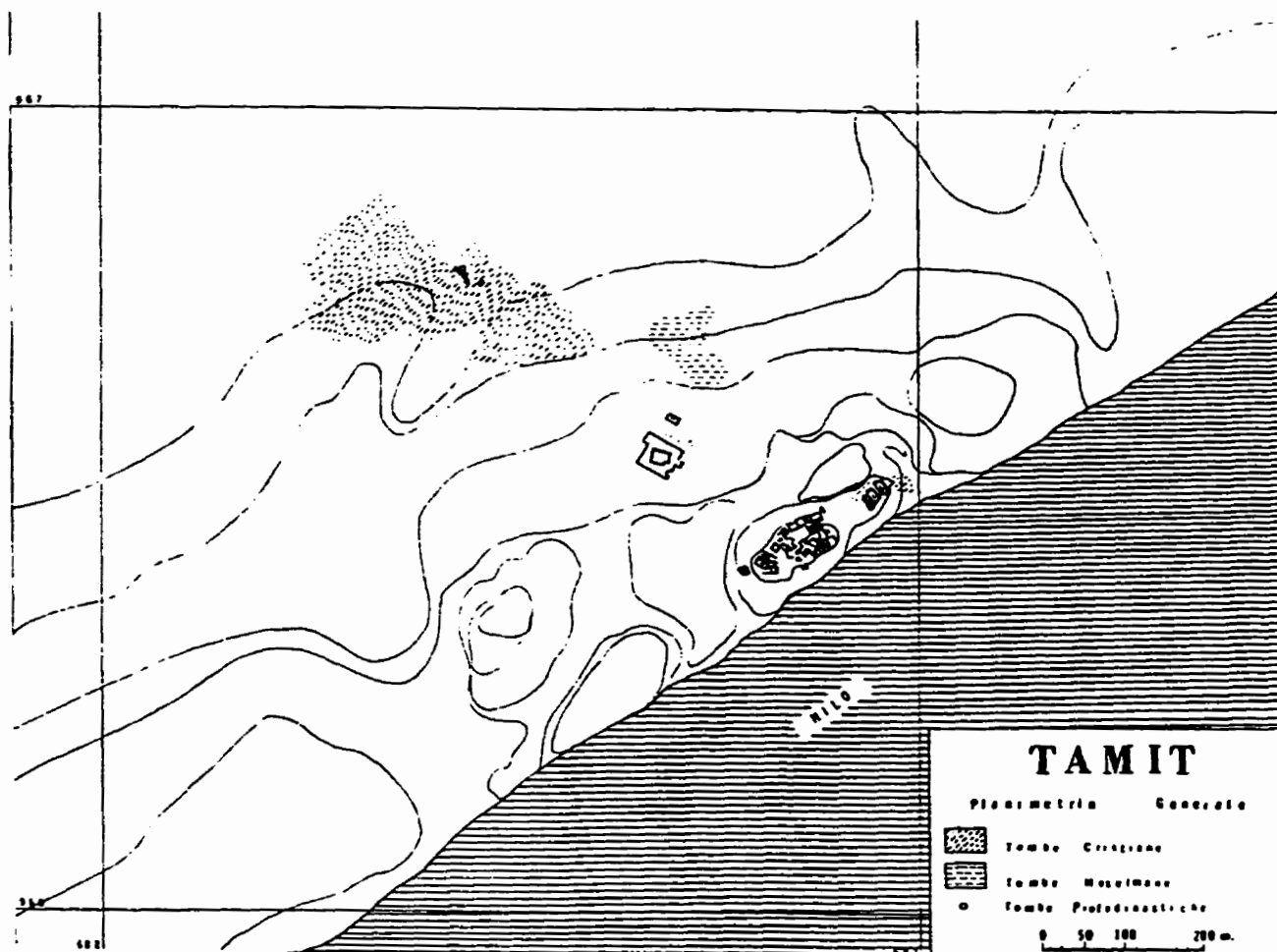




Plate 43 Site plan of Tamit  
(after Donadoni 1967:fig 2).

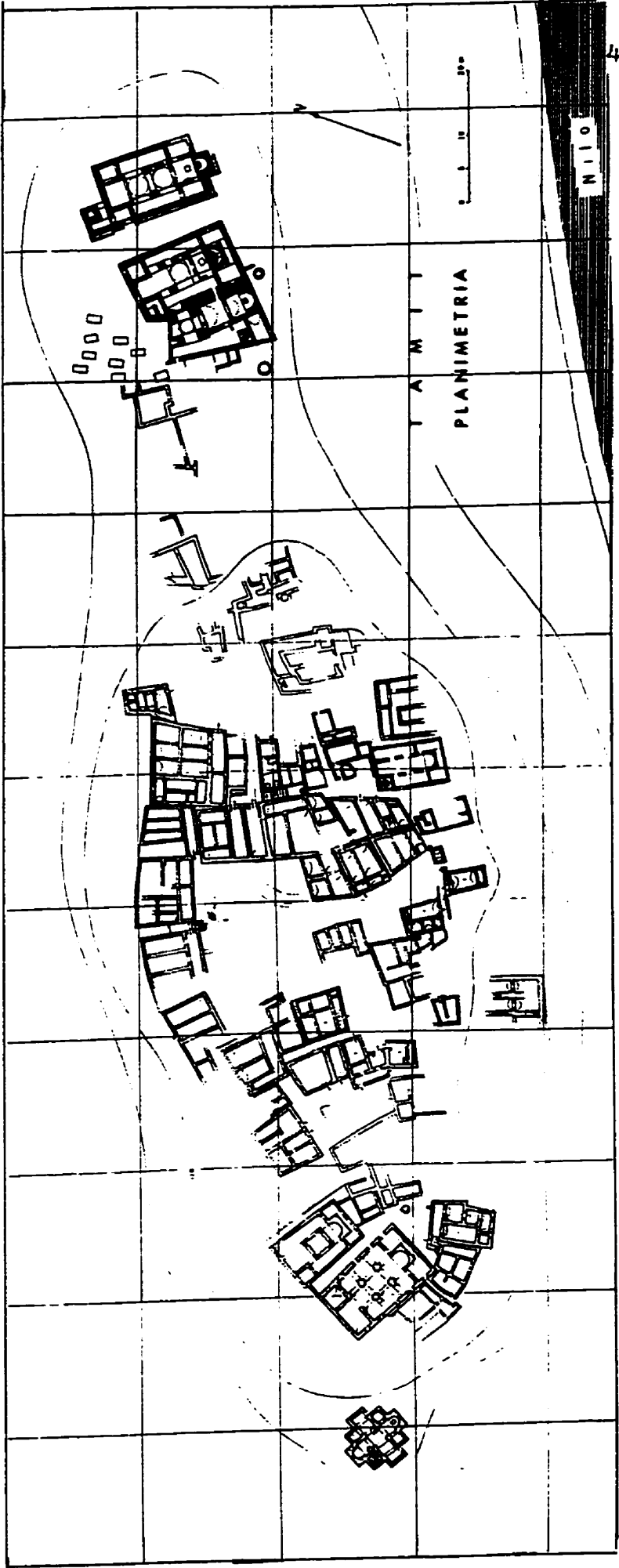


Plate 44 Plan of Abd el Qadir I (Meinarti), level 8 (Adams 1968:204).

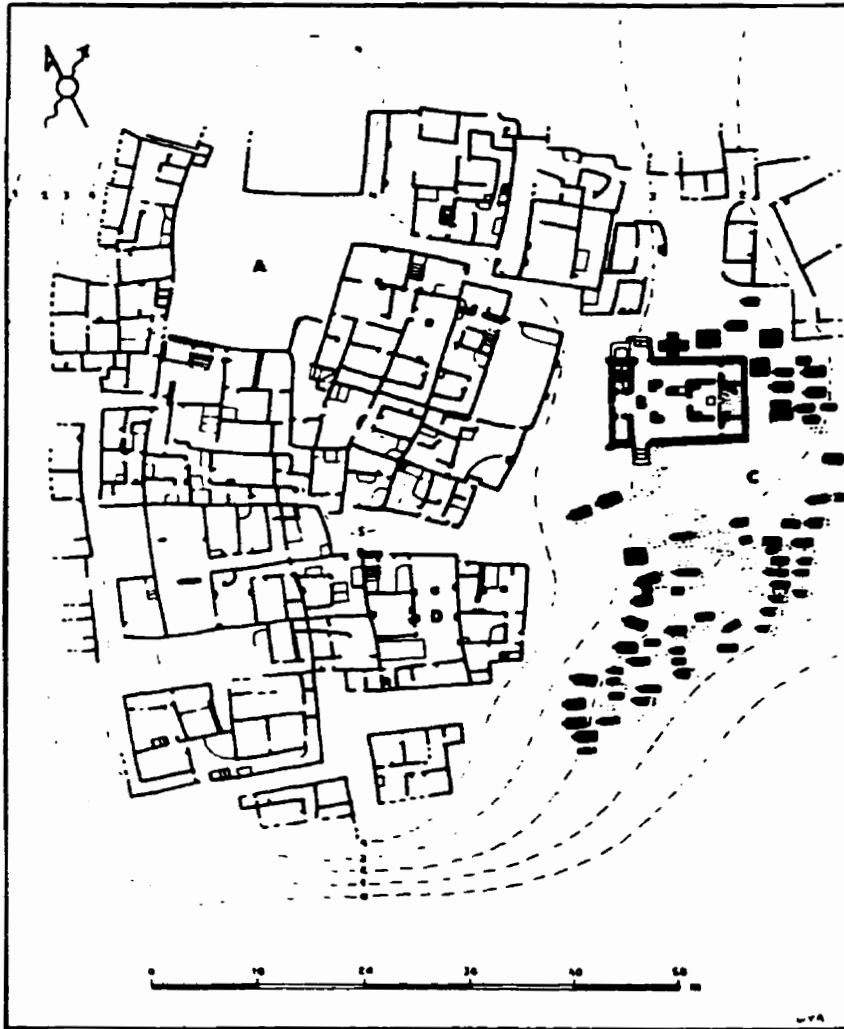
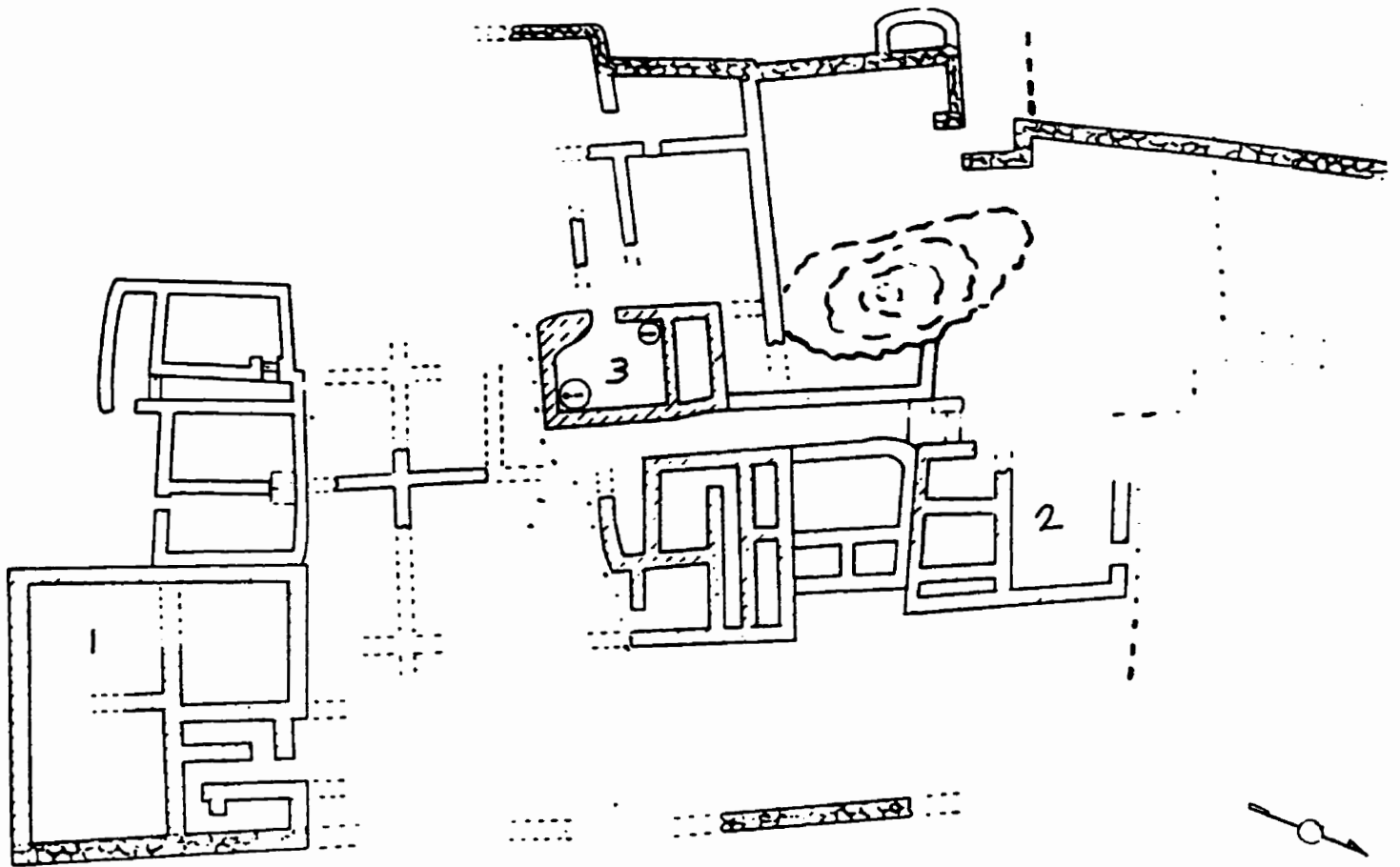


Plate 45 Field plan of Classic levels at Kasanarti (after Adams 1962-3:FN).



Stone Structures of the First (Classic) Christian Period

Plate 46 Houses A and B at Old Dongola. House A is on the left and B on the right (Medeksza 1990:78, fig.1).

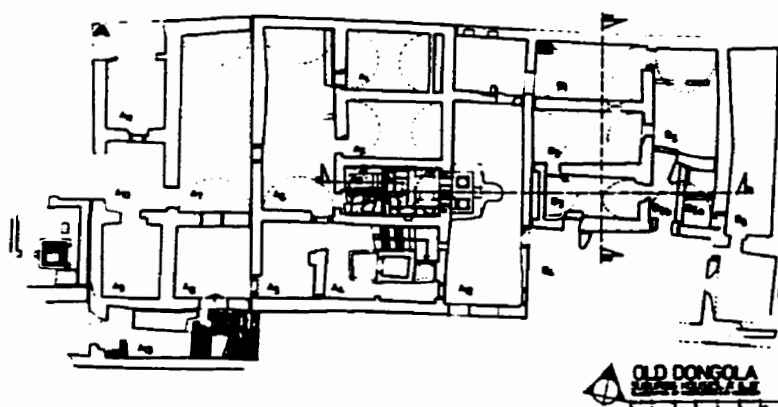


Plate 47 House PCH-1 at Old Dongola (after Godlewski 1991:88, 91). Classic phase on top and Late period on the bottom.

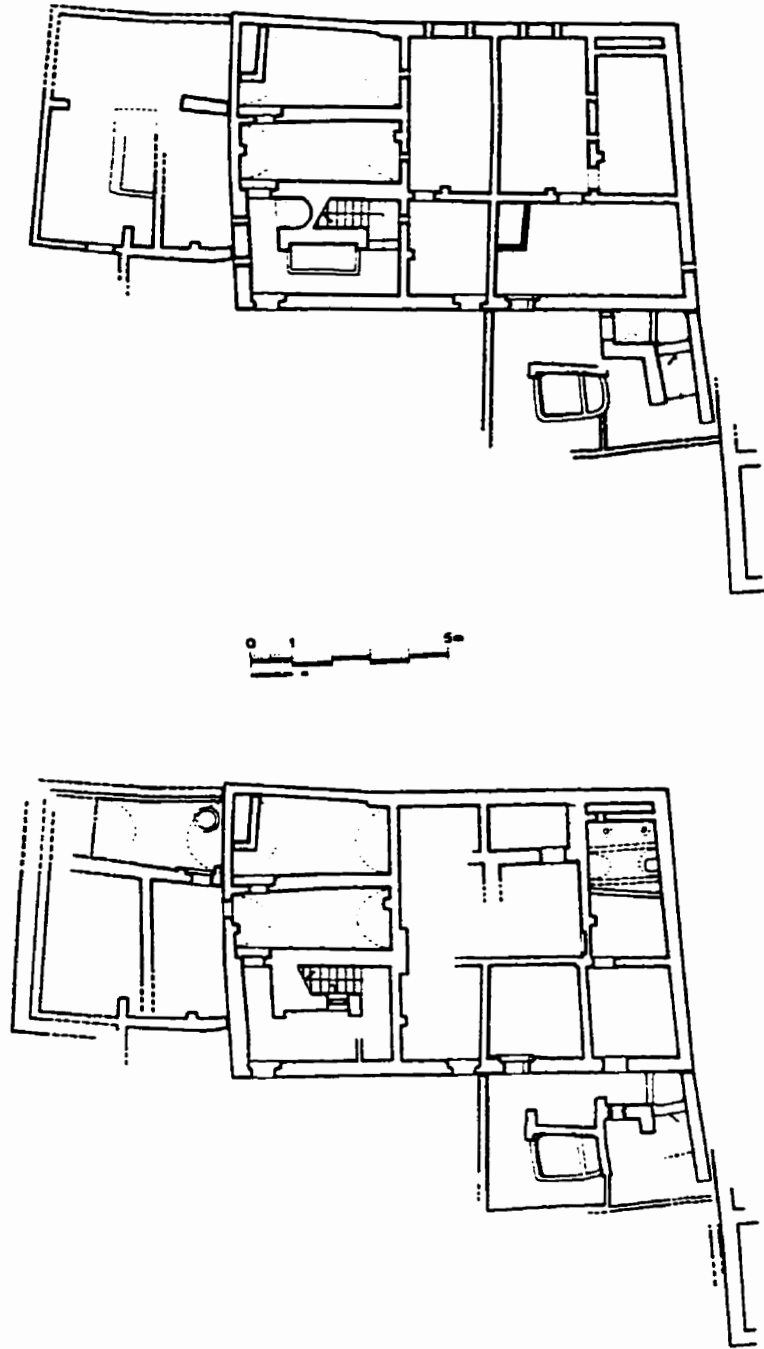


Plate 48 Meroitic houses at Gaminarti (Adams 1977:359).

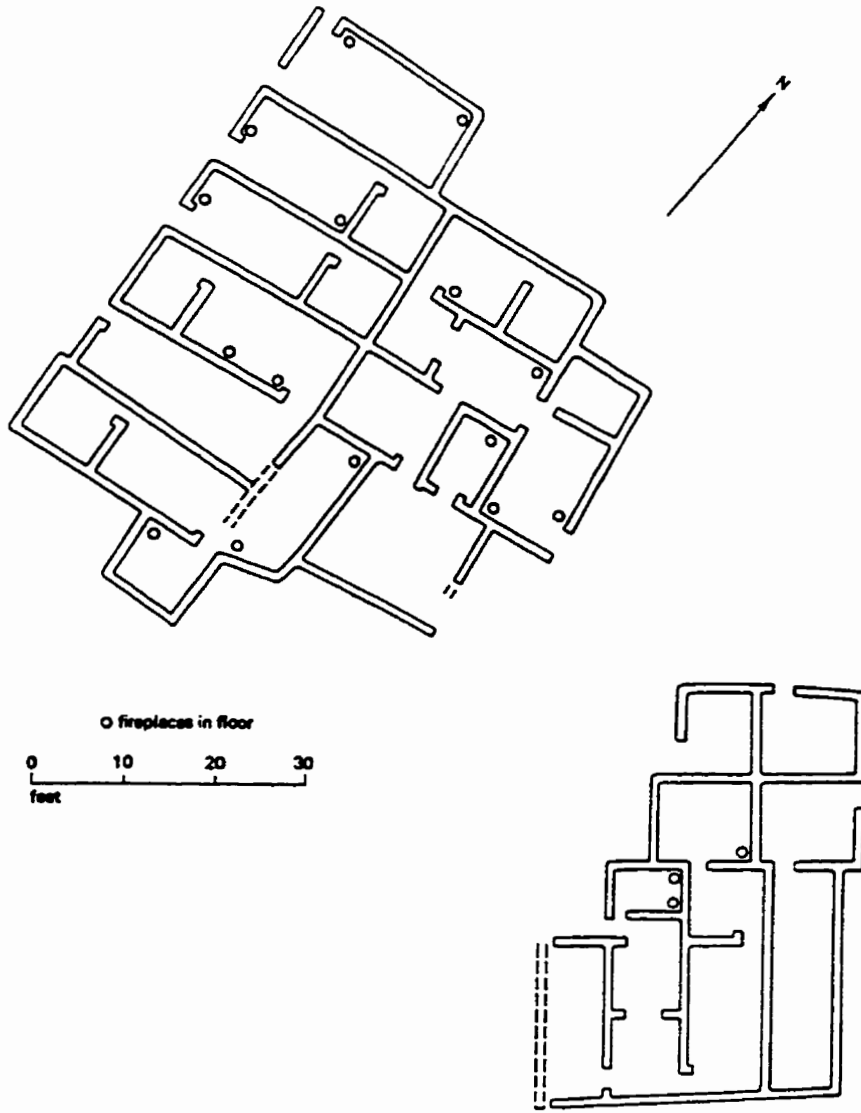
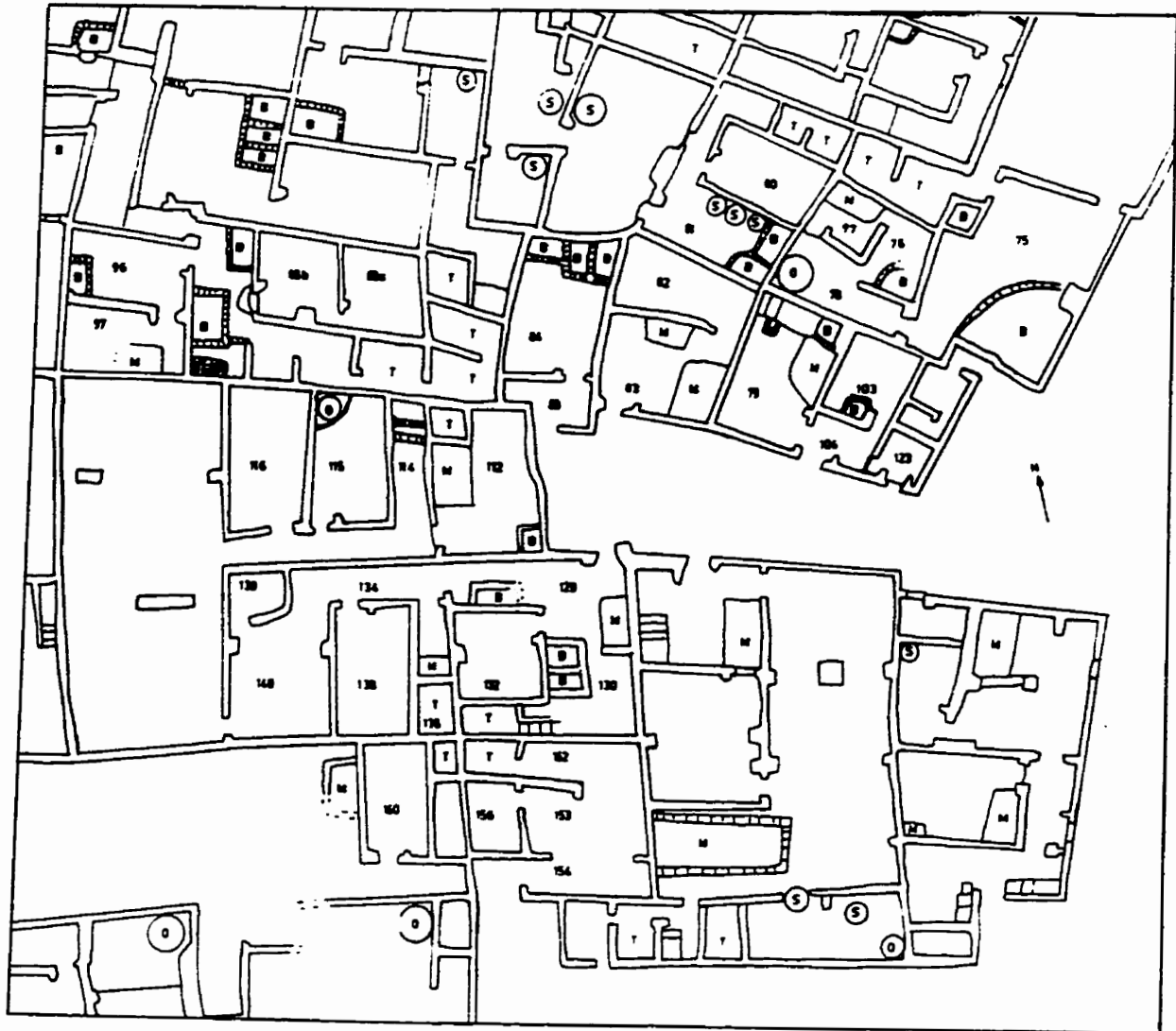


Plate 49 Southeast sector at Abd el Qadir I (Meinarti), Classic period, level 8 (after Adams 1963-4, field drawing).



0 ————— 5m

S - Silo  
O - Oven  
T - Toilet pt  
M - Mastaba  
B - Bin

MEINARTI (ABD EL QADIR I)  
LEVEL 8, SE SECTOR  
CLASSIC CHRISTIAN

Plate 50 Site plan of Kasr Iko (Velo 1963:fig.1).

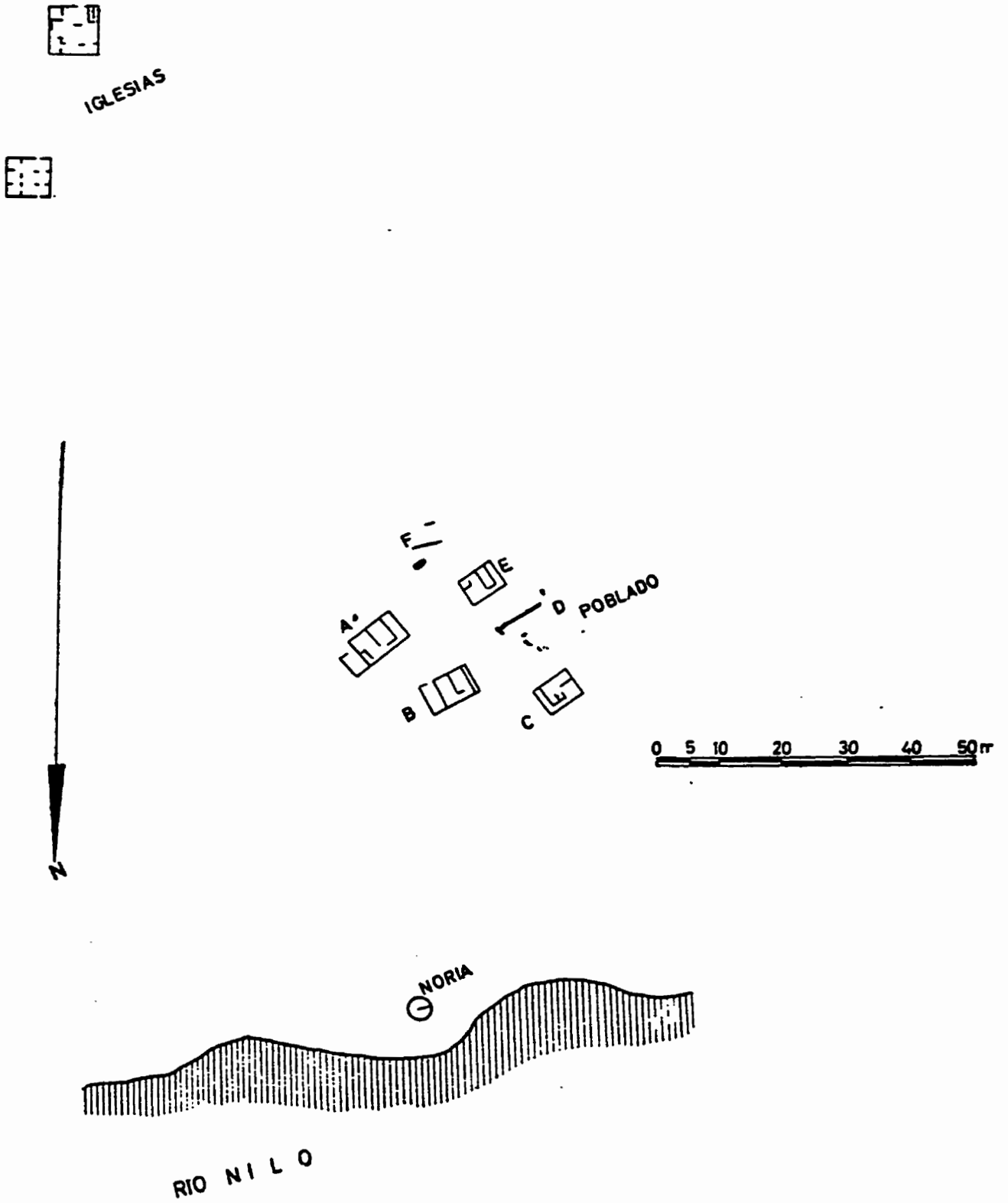




Plate 51 Houses found at Kasr Iko (Velo 1963:fig.7).

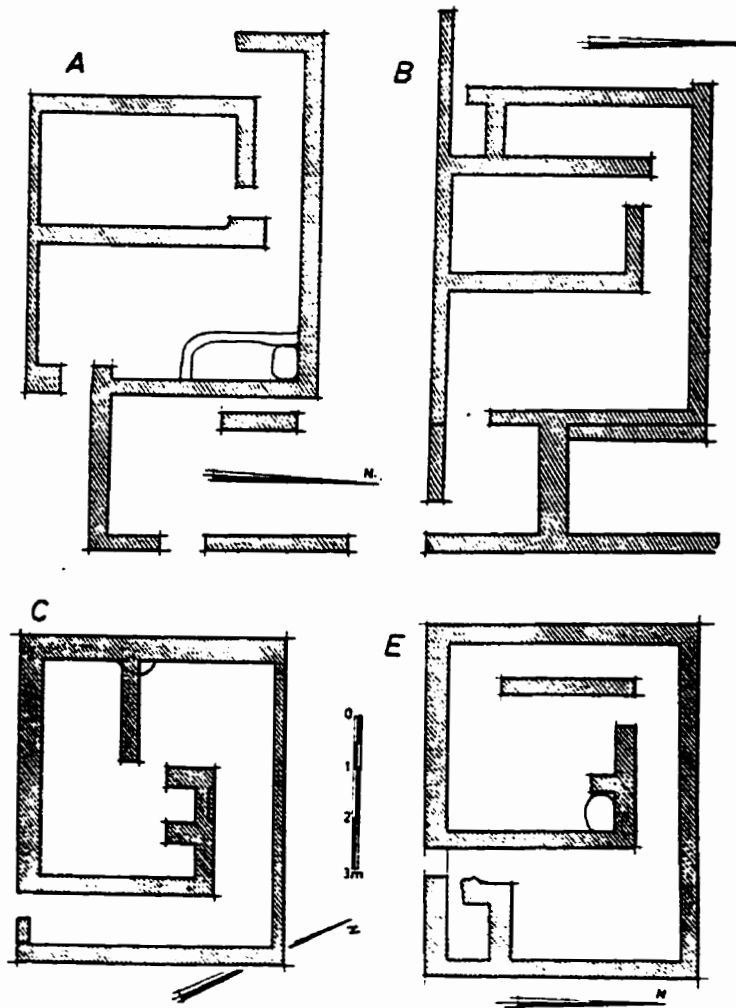


Plate 52 Top - Earliest form of Building D at Soba East. Bottom - Later additions to the south side of Building D (Welsby and Daniels 1991:94, 110).

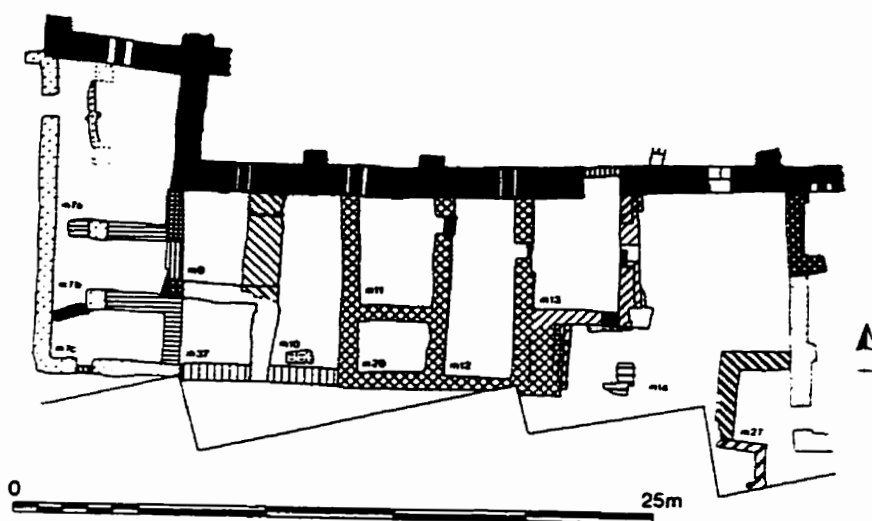
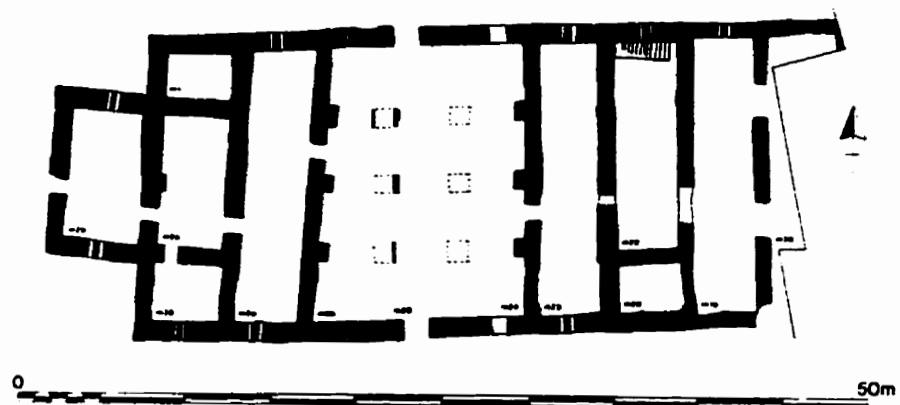


Plate 53 Reconstruction of original plan of the 'Mosque' building at Old Dongola (Godlewski 1982a:pl. II, III). Top - Lower floor. Bottom - Upper floor.

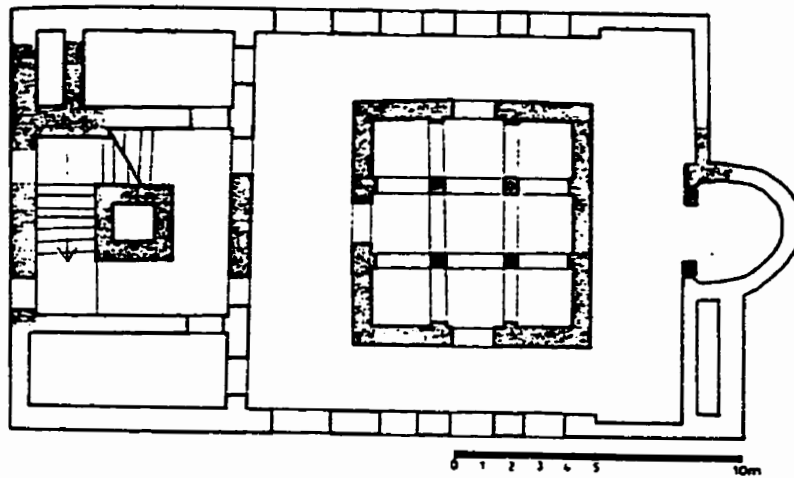
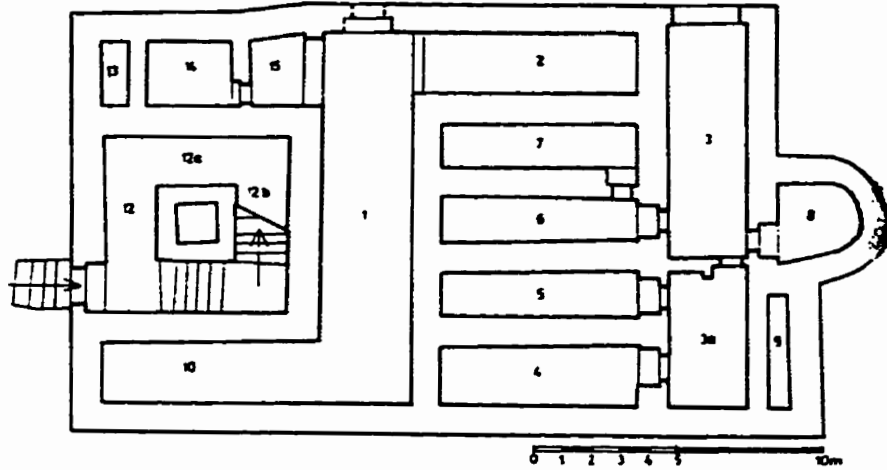


Plate 54 Late Christian phase at Kasanarti (after Adams 1964:219).

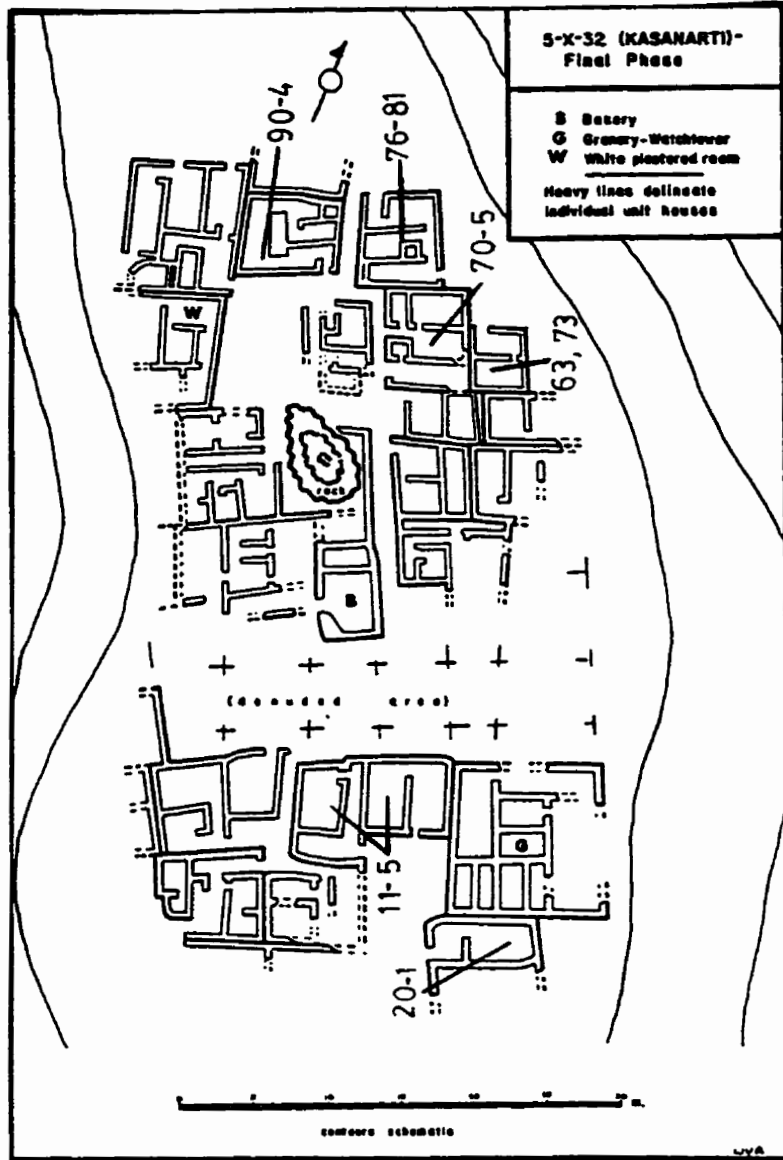


Plate 55 Site plan of Askut (after Badawy nd:fig. 7).

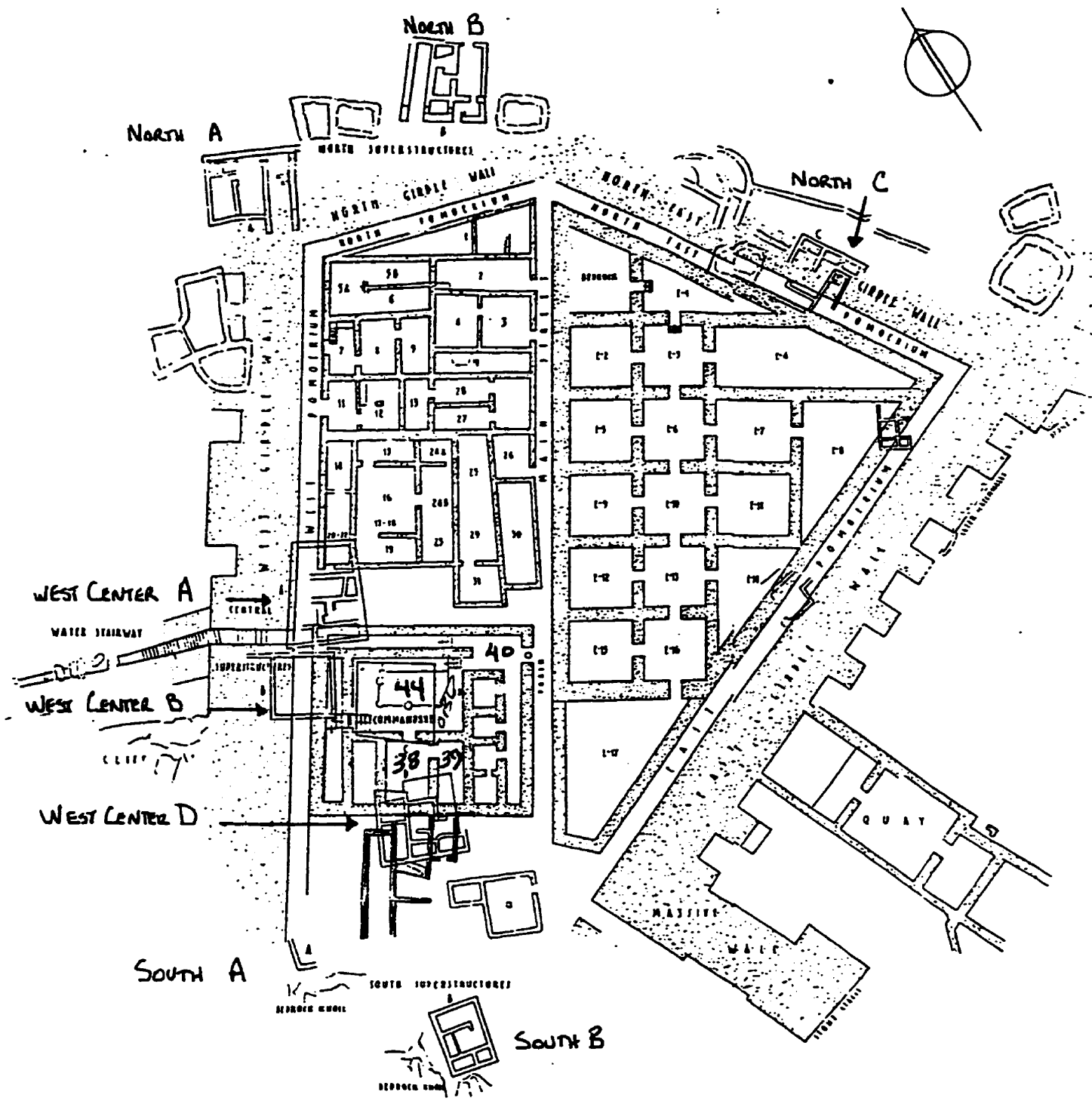


Plate 56 Site plan of Kulubnarti I (Adams 1994a:24-5).

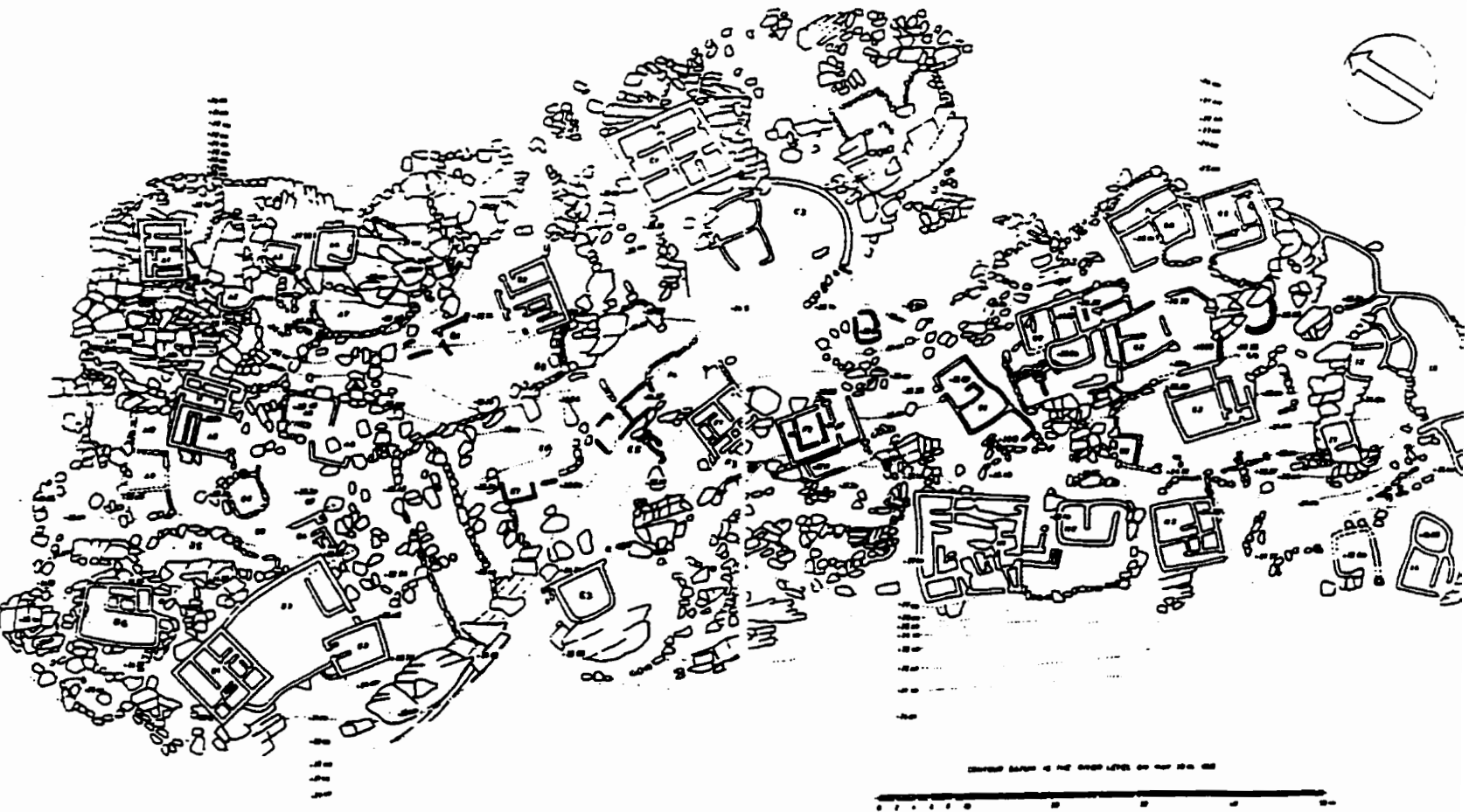


Plate 57 Plan of 'unit house' A5 from Kulubnarti I (Adams 1994a:42).

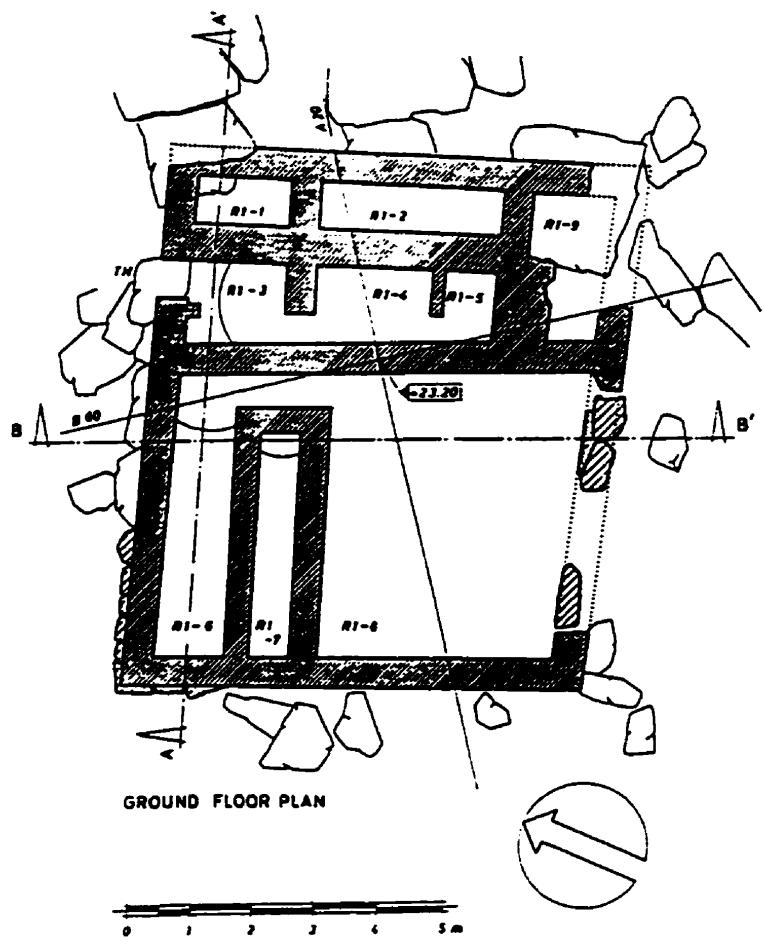


Plate 58 Plan of 'unit house' B2 from Kulubnarti I (Adams 1994a:45).

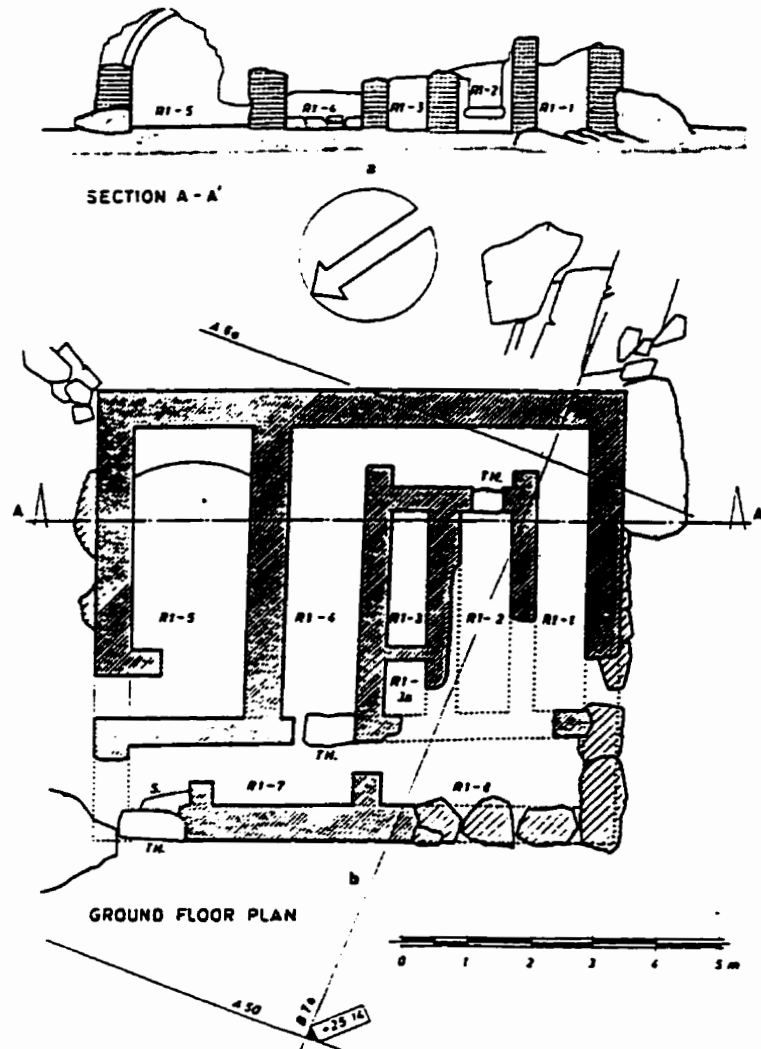




Plate 59 Plan of 'unit houses' D4 and F1 from Kulubnarti I (Adams 1994a:46, 49). Top - House D4. Bottom - House F1.

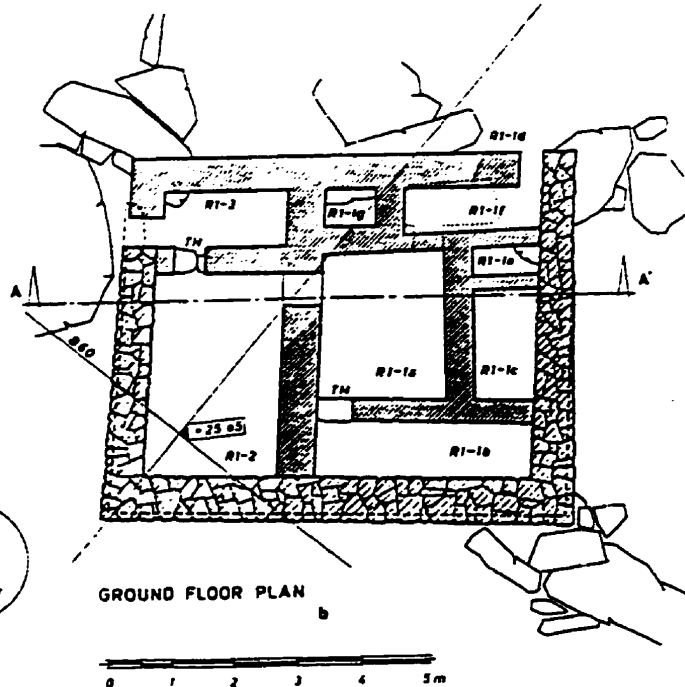
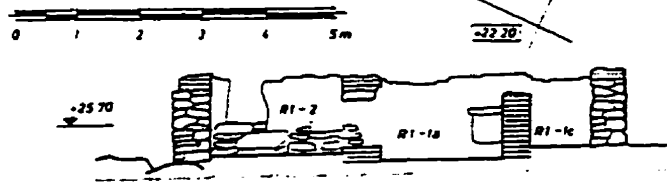
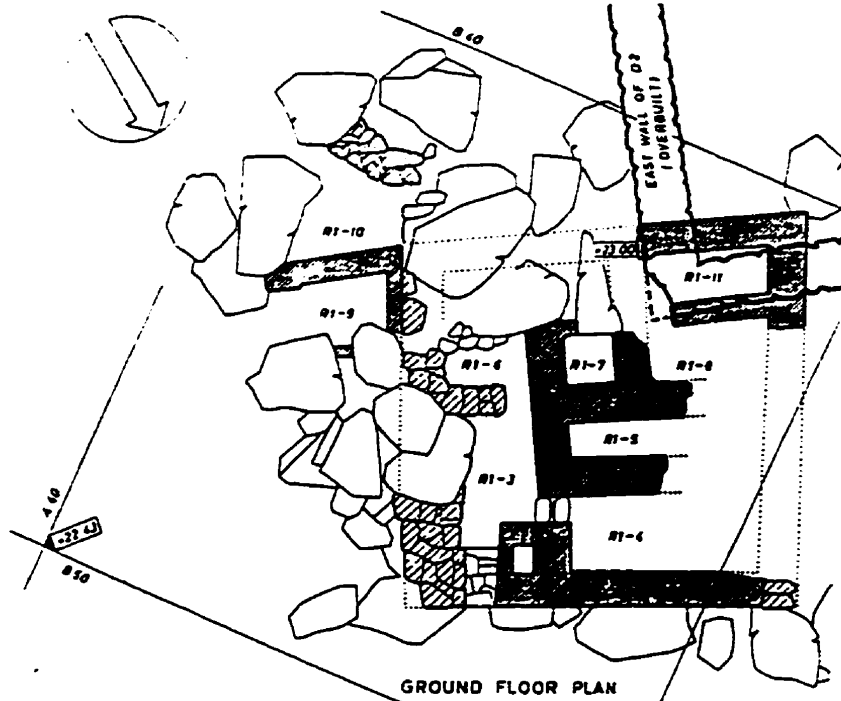


Plate 60 Site plan of Late Christian Abd el Qadir I (Meinarti) (after Adams 1964:227).

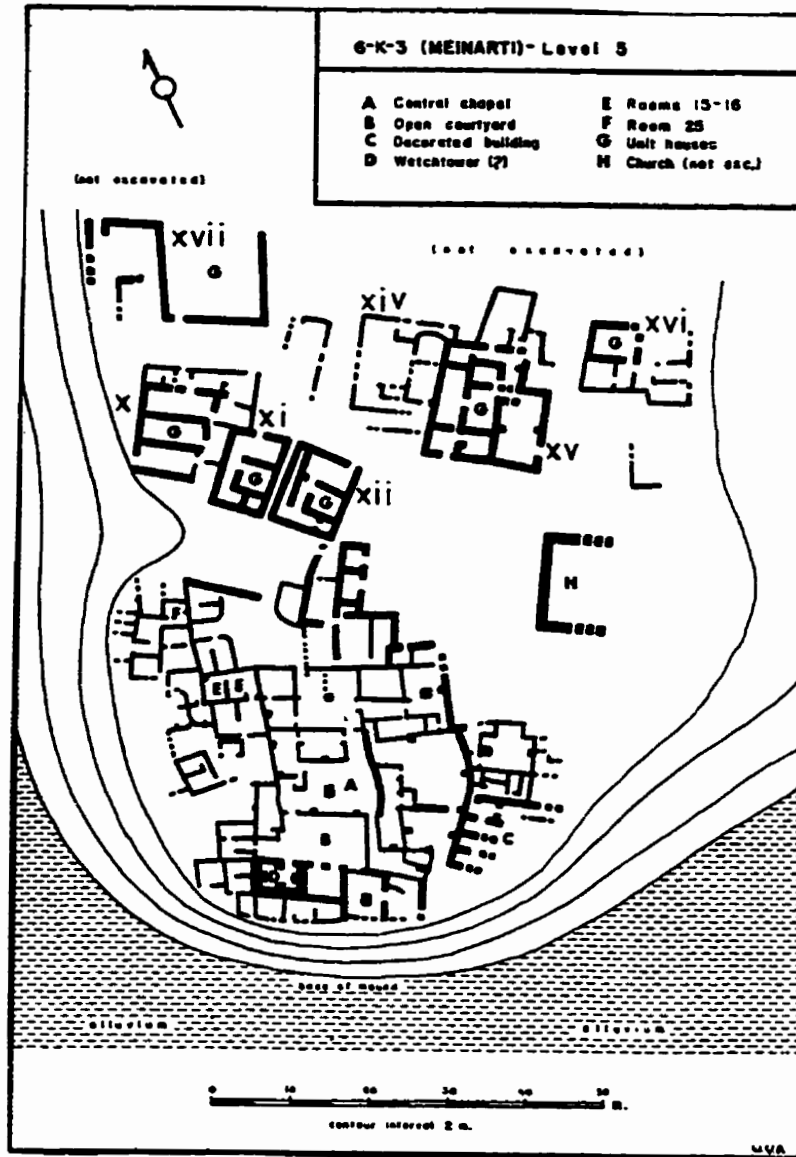


Plate 61 Plan of Casa 4 and Casa 2-3 at Tamit (after Donadoni 1967:figs. 8, 10). Top - Casa 4. Bottom - Casa 2-3. Left - ground floor, Right - upper floor.

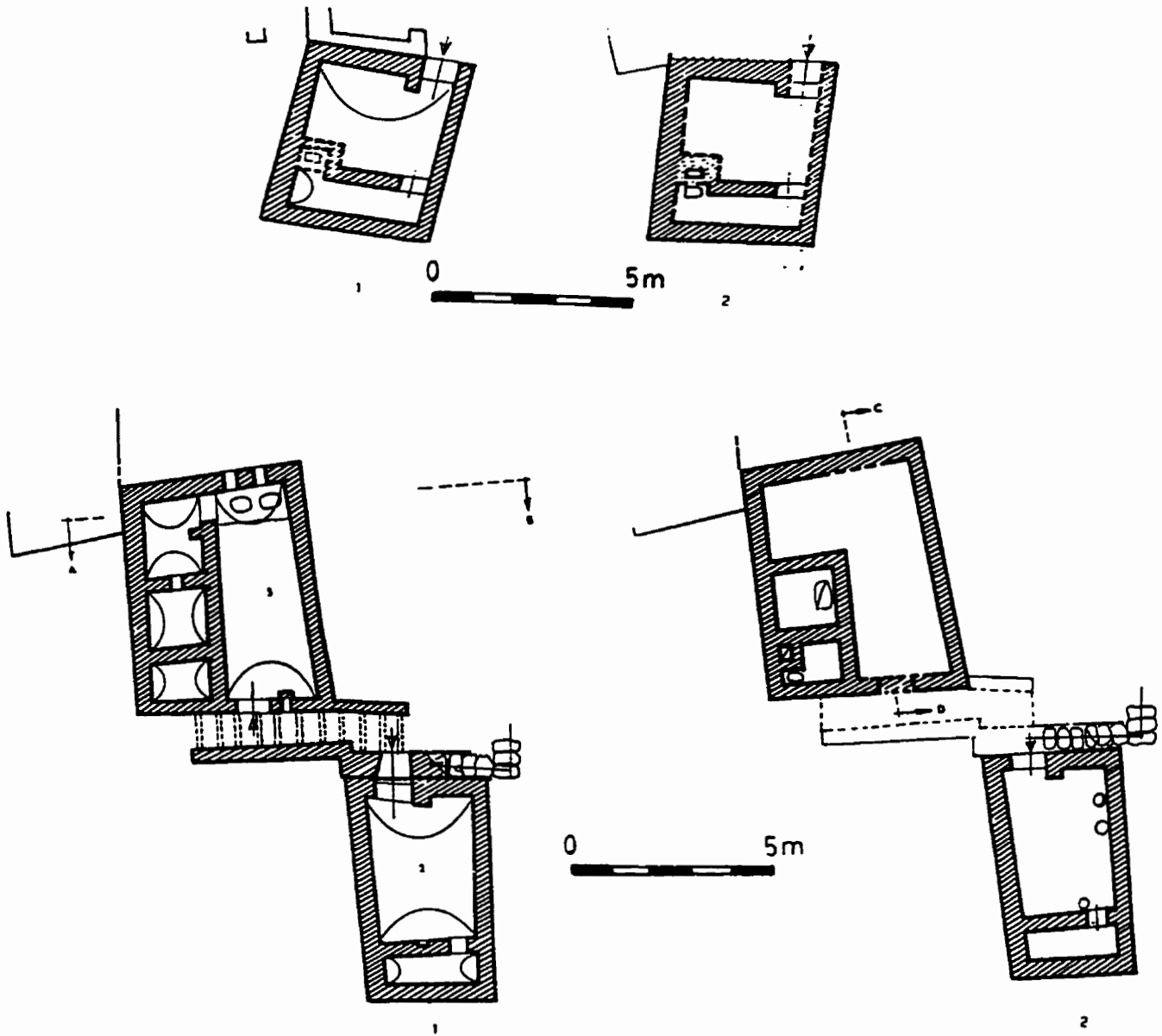


Plate 62 Plan of Casa 1 at Tamit (after Donadoni 1967:fig 7). Left - ground floor. Right - top floor.

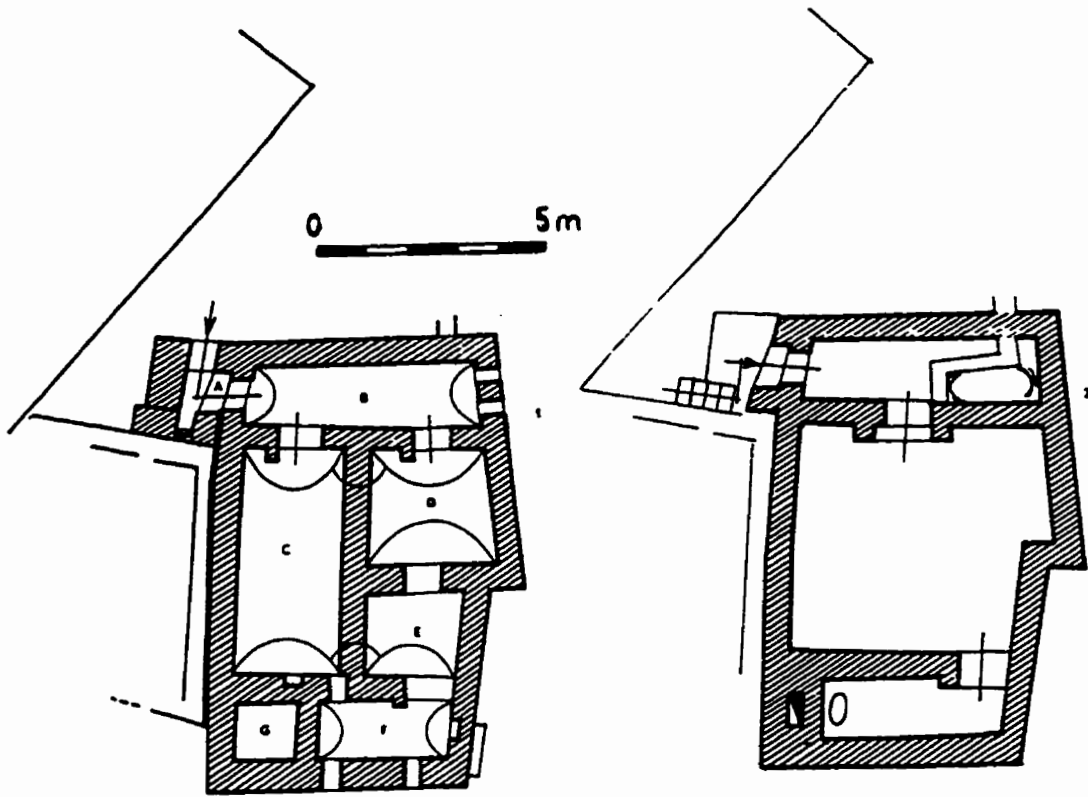


Plate 63A Top - Plan of house at Naga Abdallah (M.D. Villard 1935:90). Bottom - Plan of house at Sabagura (M.D. Villard 1935:48).

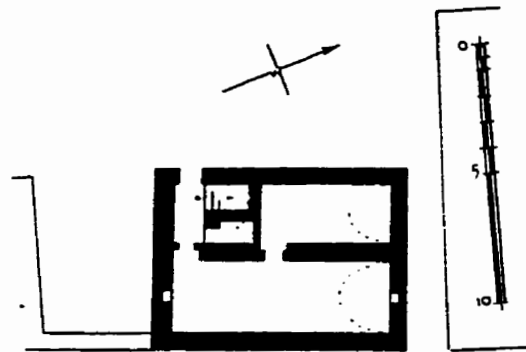
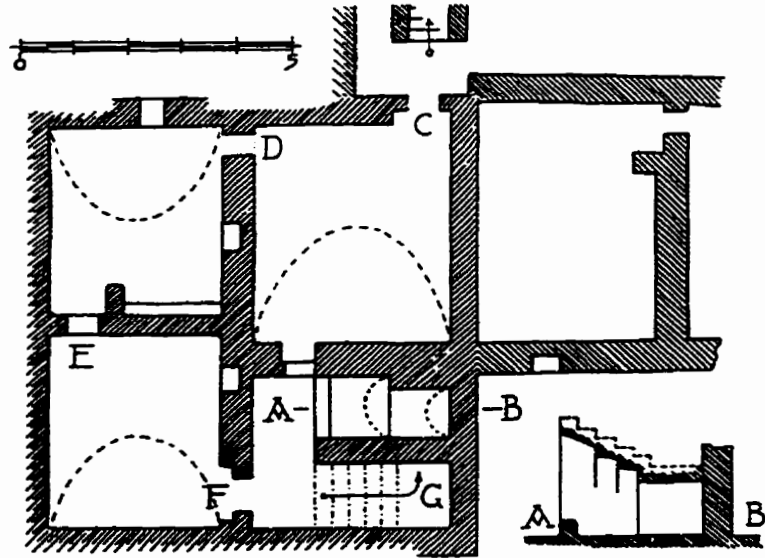


Plate 638 'Castle house' D1 at Kulubnarti I (Adams 1994a:68, 71). Top - ground floor. Bottom - upper floor.

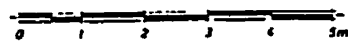
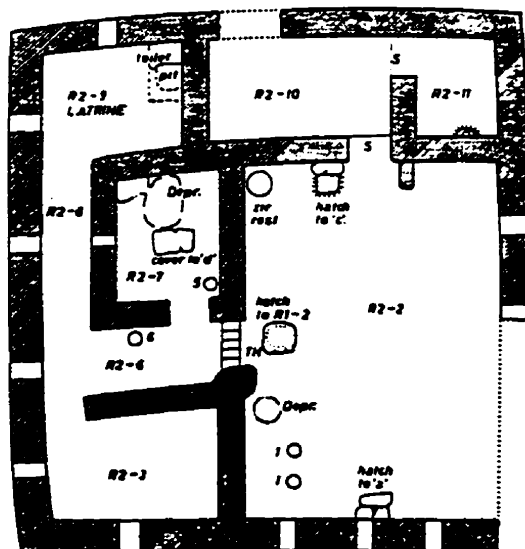
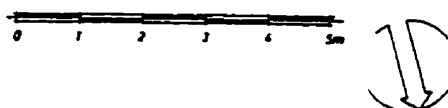
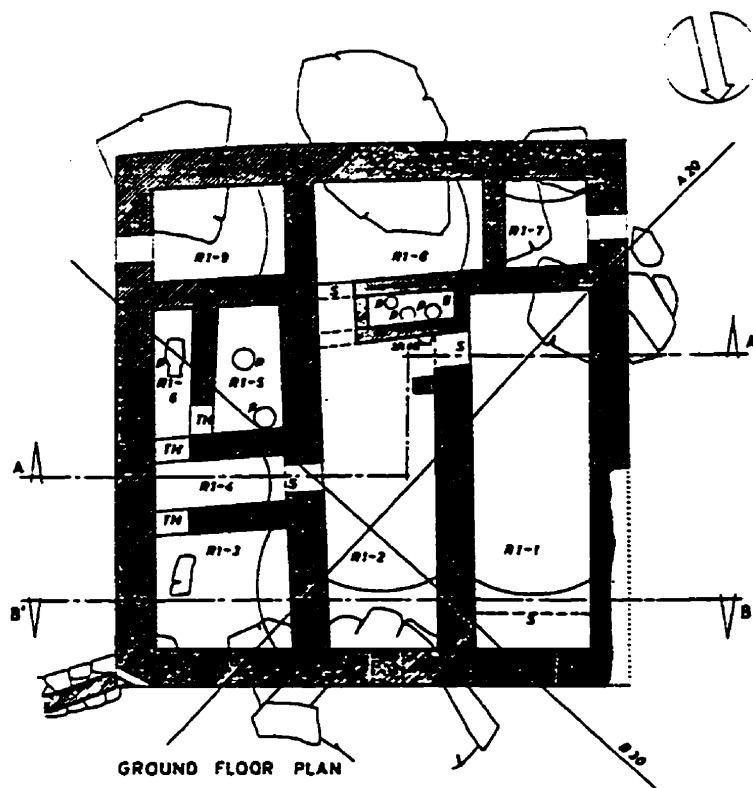


Plate 64 'Castle house' A1 at Kulubnarti I (Adams 1994a:58).

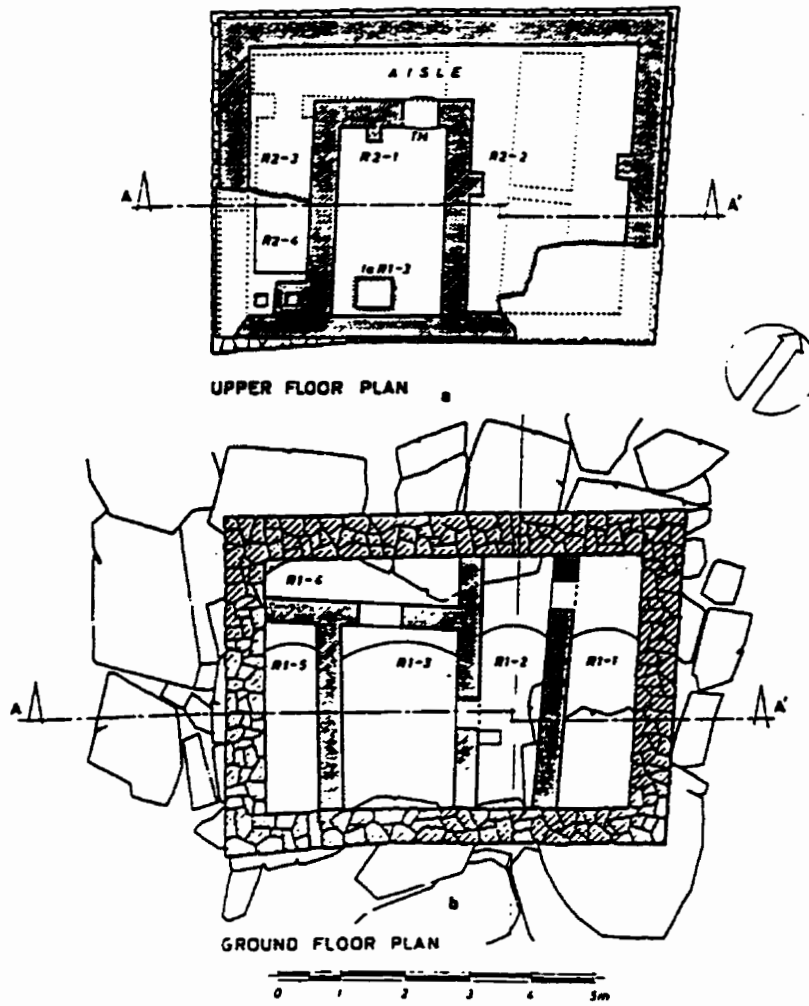


Plate 65 Top - Site plan of Kulme. Bottom - Plan of House 2a at Kulme (Vila 1975:62-3).

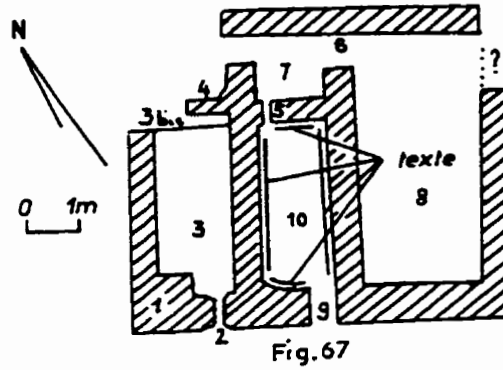
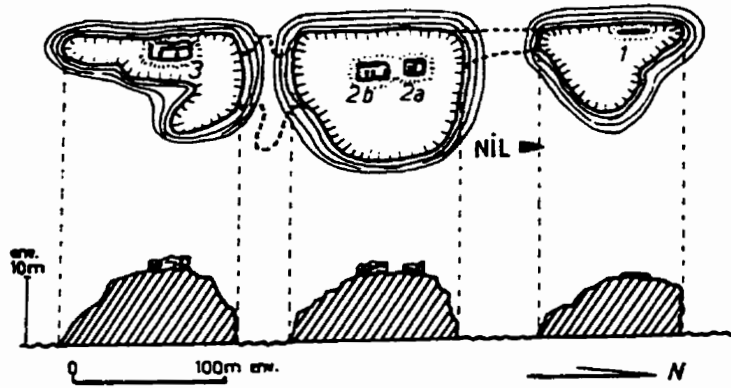




Plate 66 'Castle house' C1 at Kulubnarti I (Adams 1994a:62, 64). Top - ground floor. Bottom - upper floor.

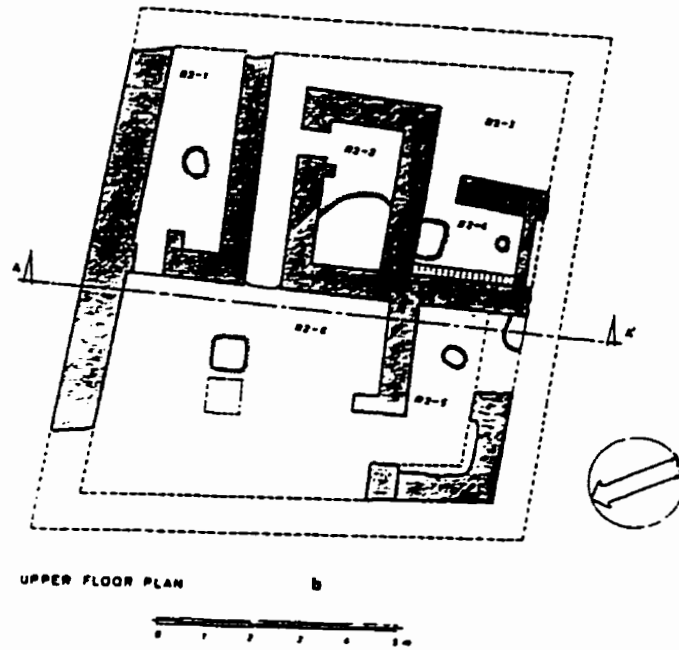
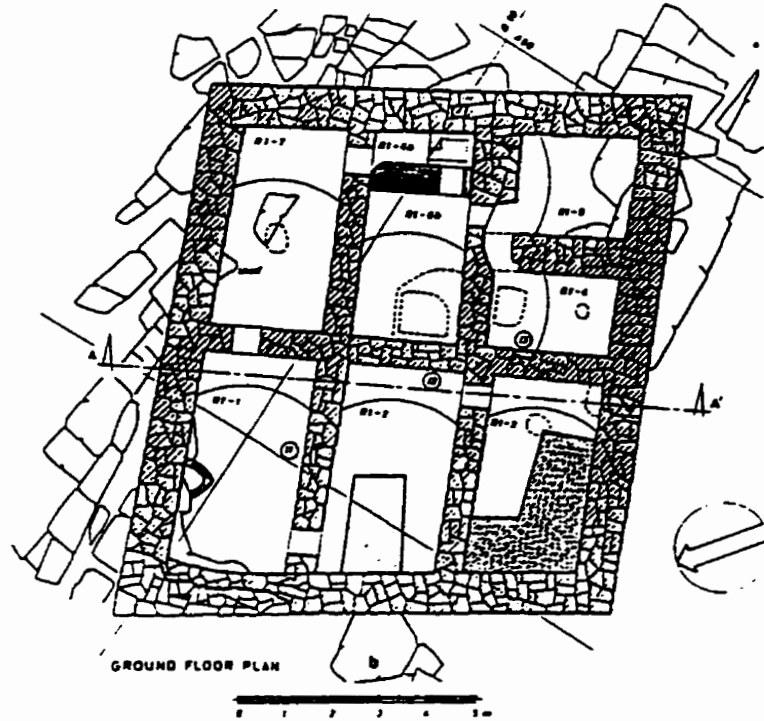


Plate 67 Top - Plan of irregular stone houses at Kulubnarti I (Adams 1994a:27).

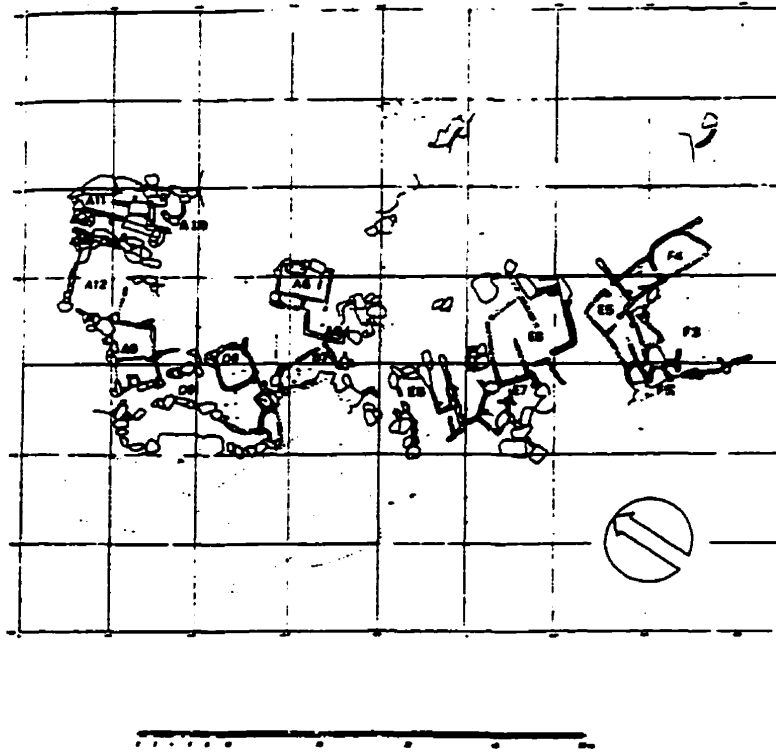


Plate 68 Plan of upper floor of Building B at Hambukol (Grzymski and Anderson 1994:95, fig. 1).

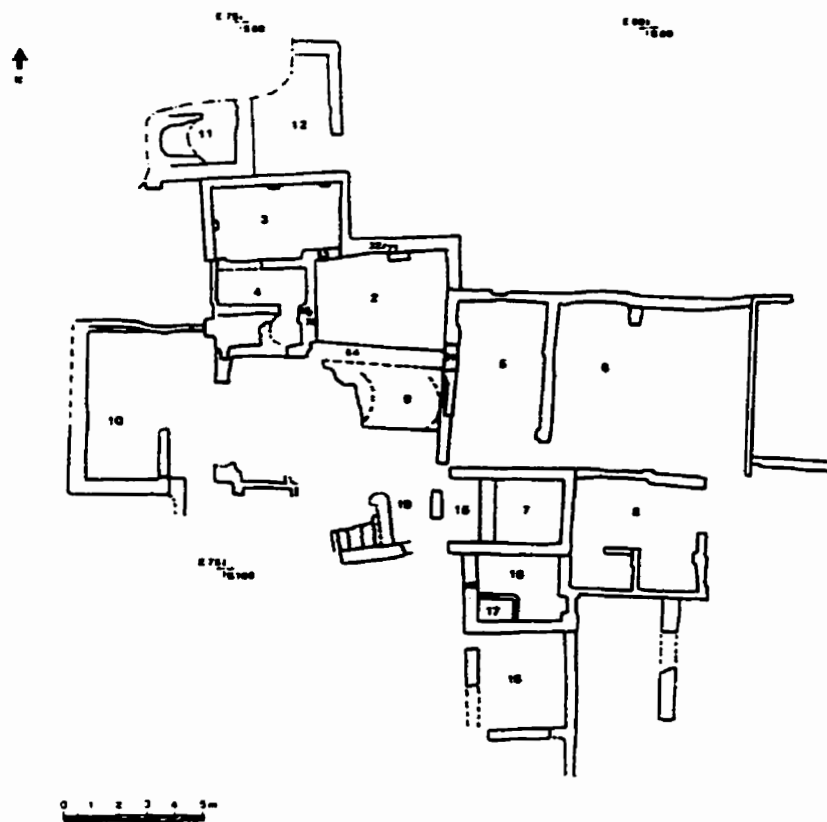


Plate 69 House C-1 at Hambukol (Anderson 1994:227, fig. 2).

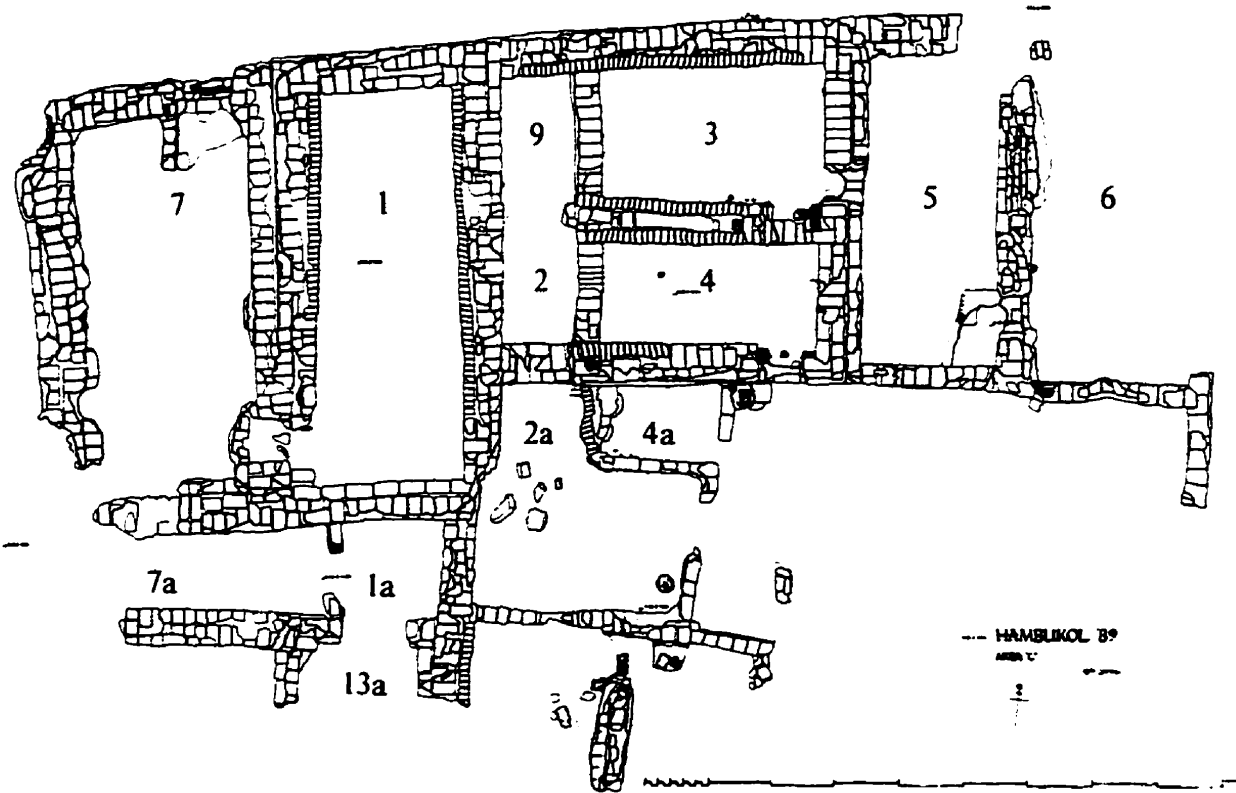


Plate 70 Plan of Building A-1 and House A-1 in area A at Hambukol (Grzymski 1990a:144).

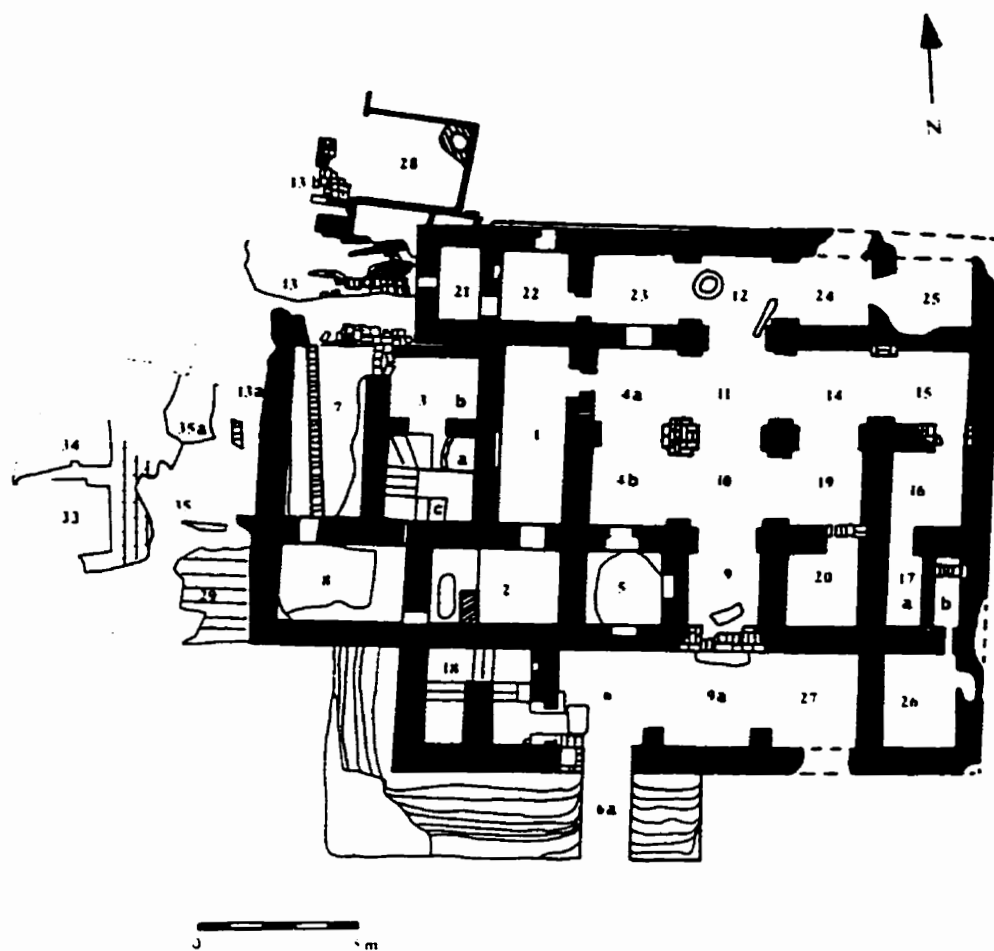


Plate 71 Plan of the 'Public Building' at Arminna West (Weeks 1967:fig. 10).

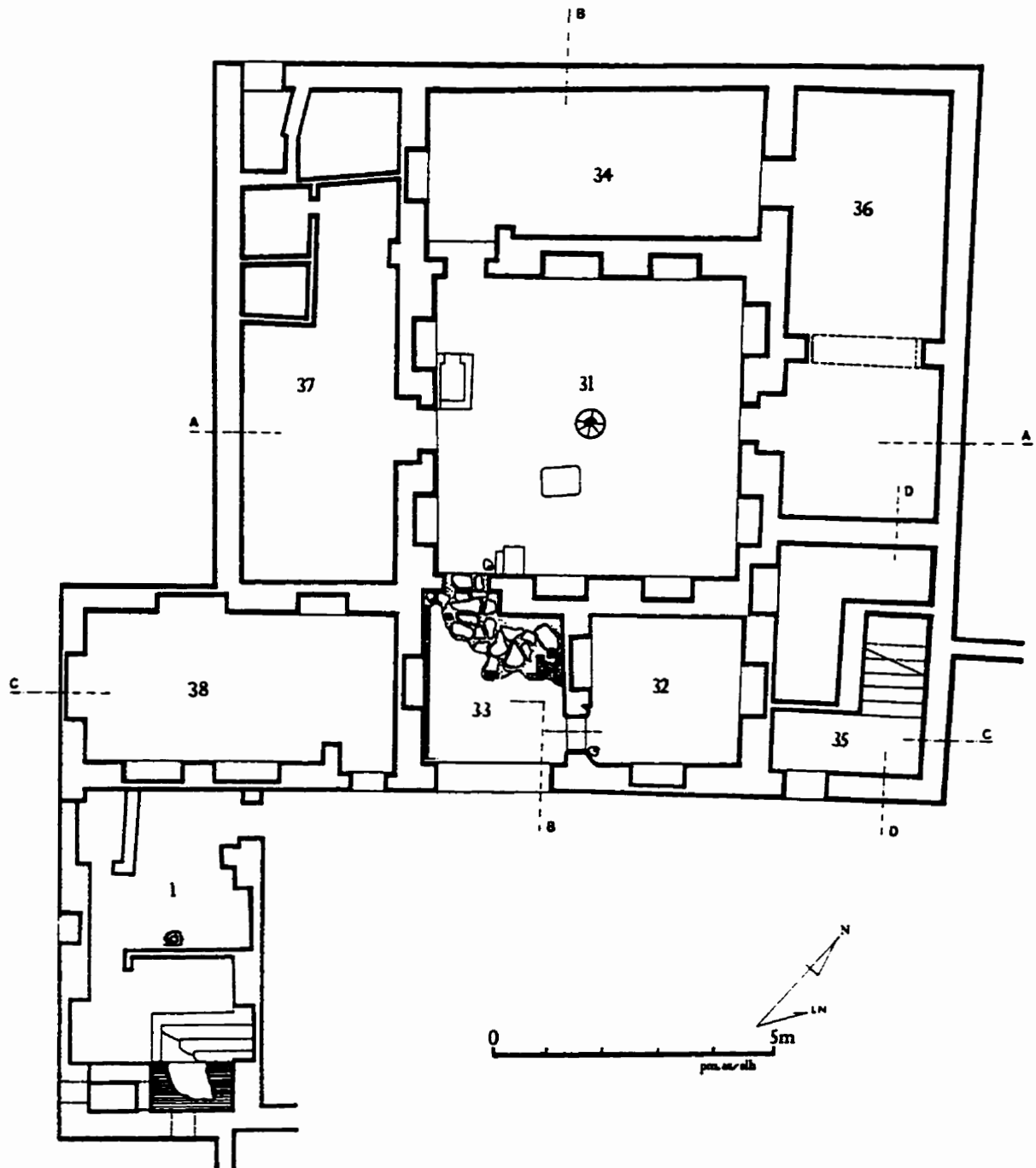


Plate 72 The final phase of Building D at Soba East and associated churches (Welsby and Daniels 1991:2, fig. 2).

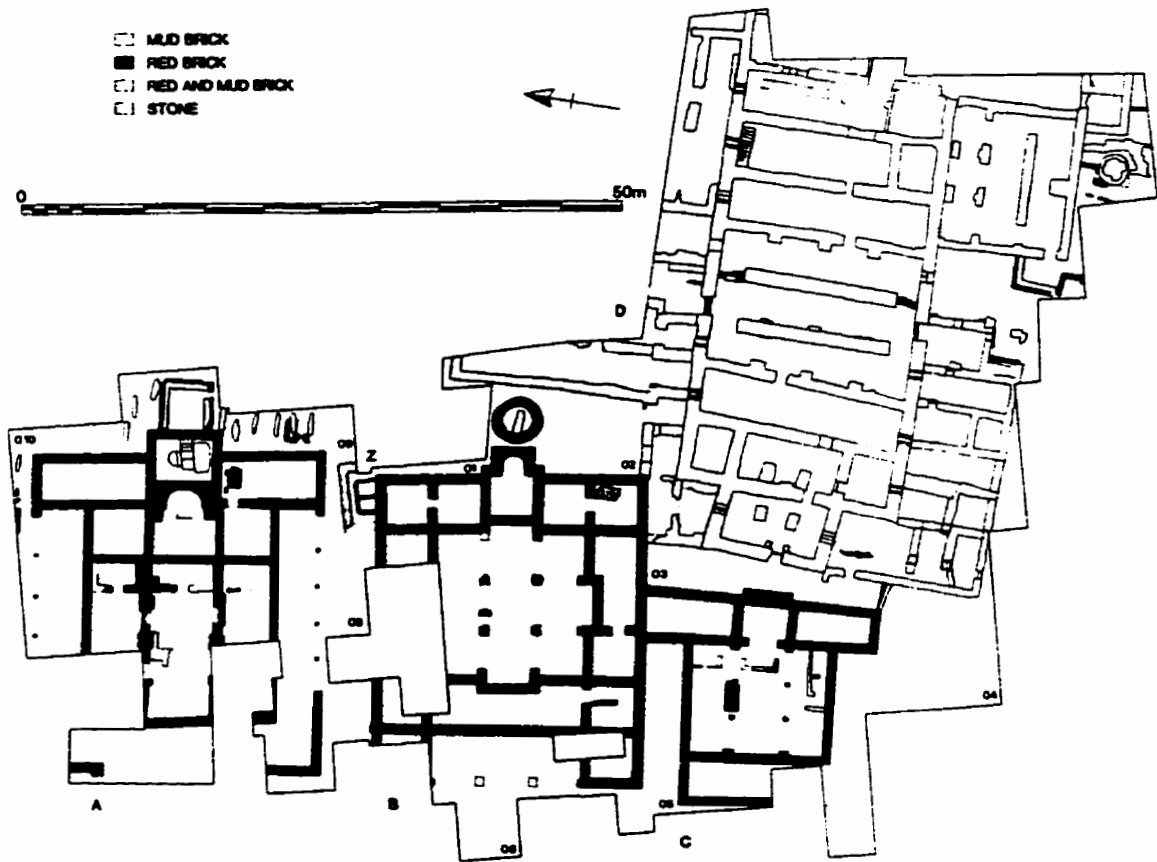


Plate 73 Plan of Qasr el Wizz monastery. Top - Early monastery (Scanlon 1972:fig. 1). Bottom - enlarged monastery (Scanlon 1970:28, fig. XXXI).

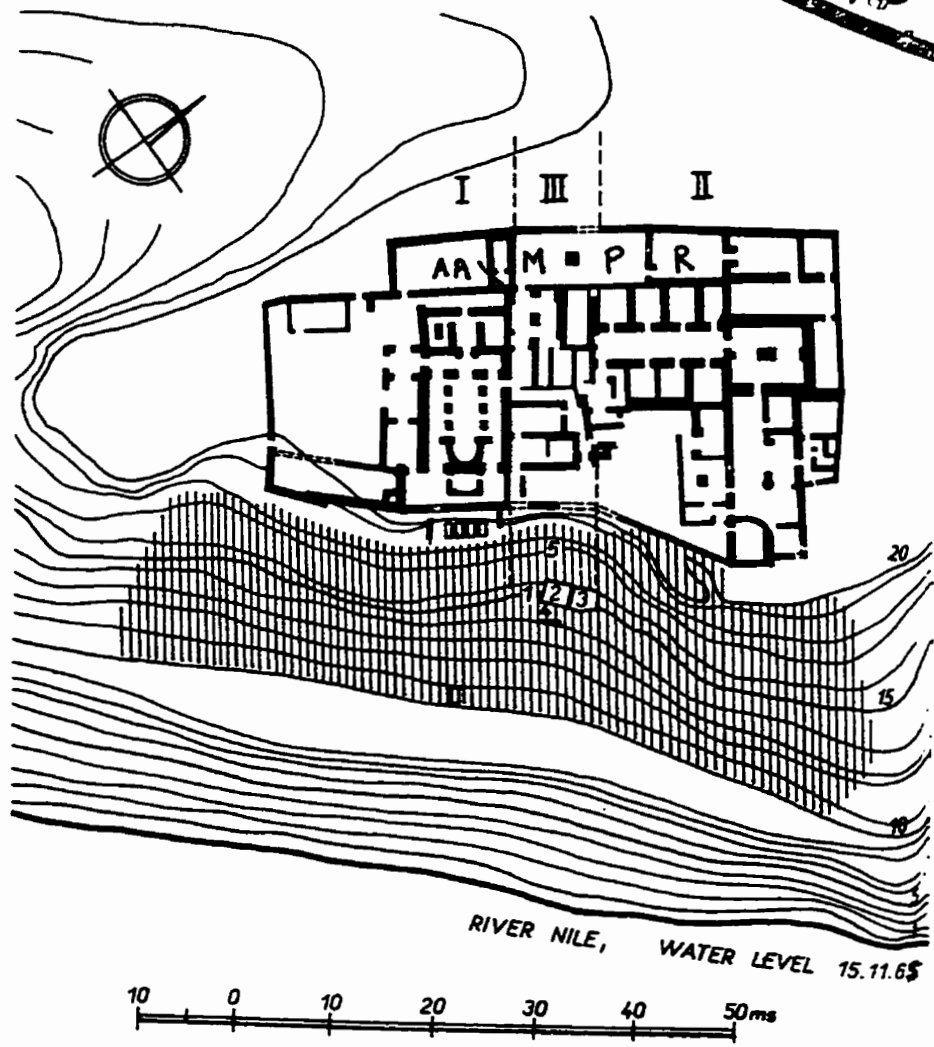
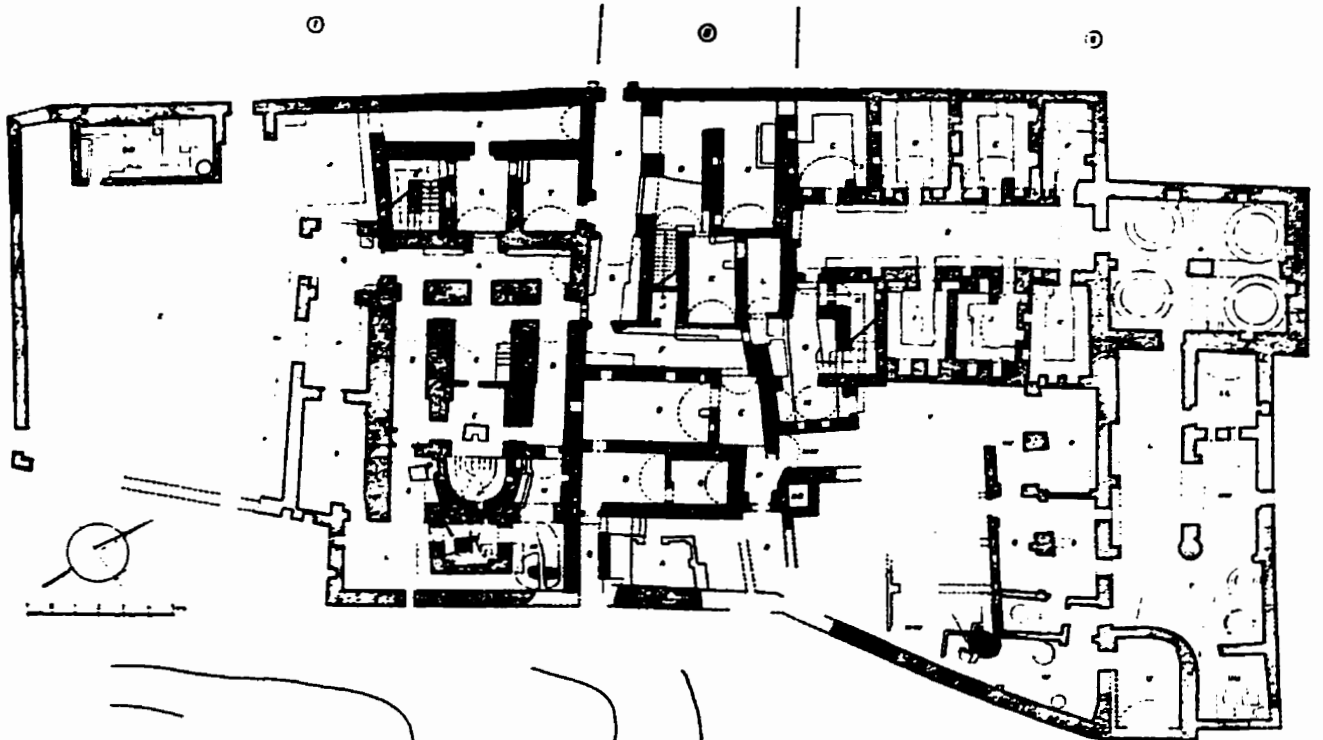




Plate 74 Plan of monastery at Ghazali (Shinnie and Chittick 1961:11, fig. 2).

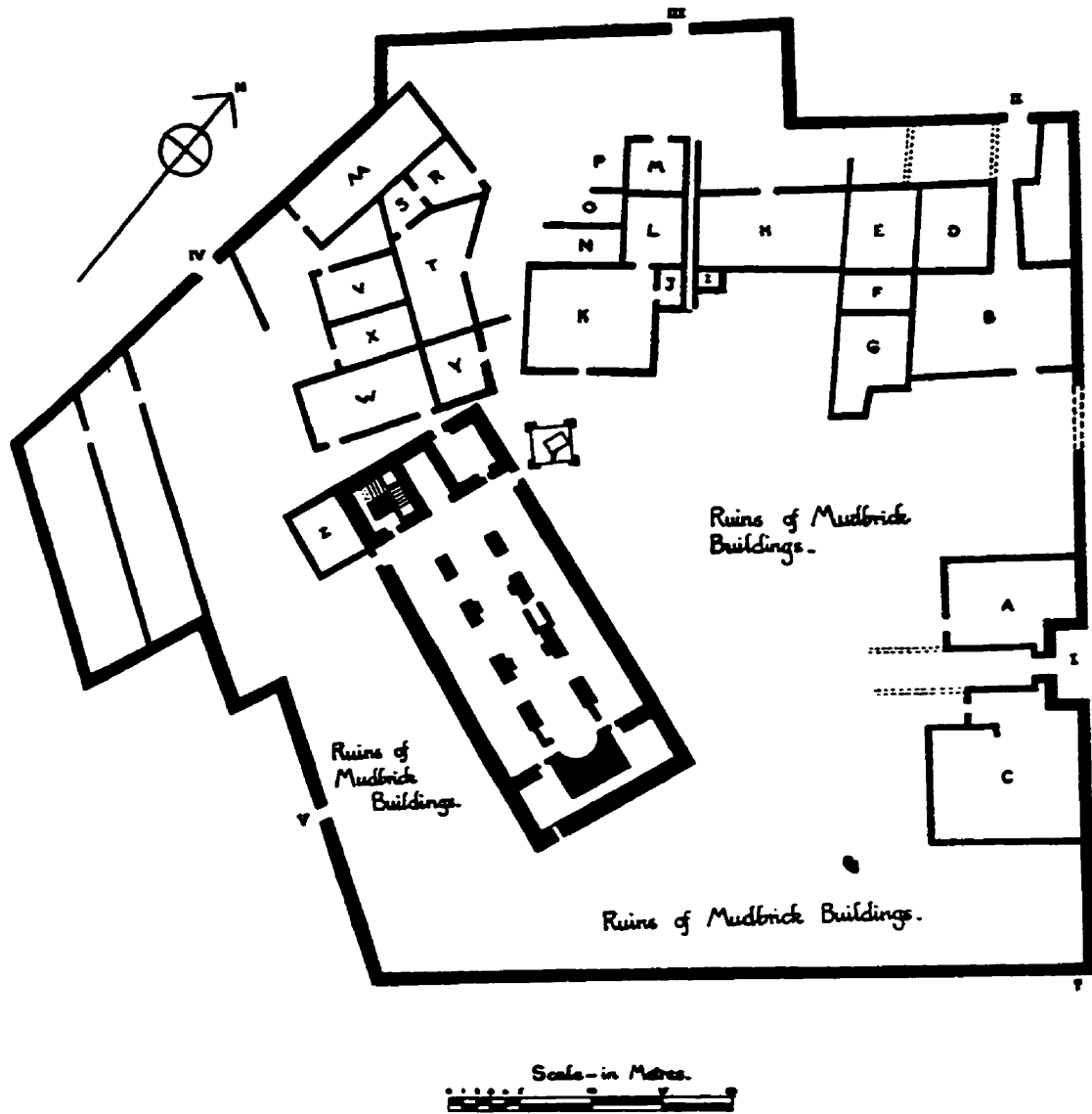


Plate 75 Plan of building at Ar-Rammal (M.D. Villard 1935:138).

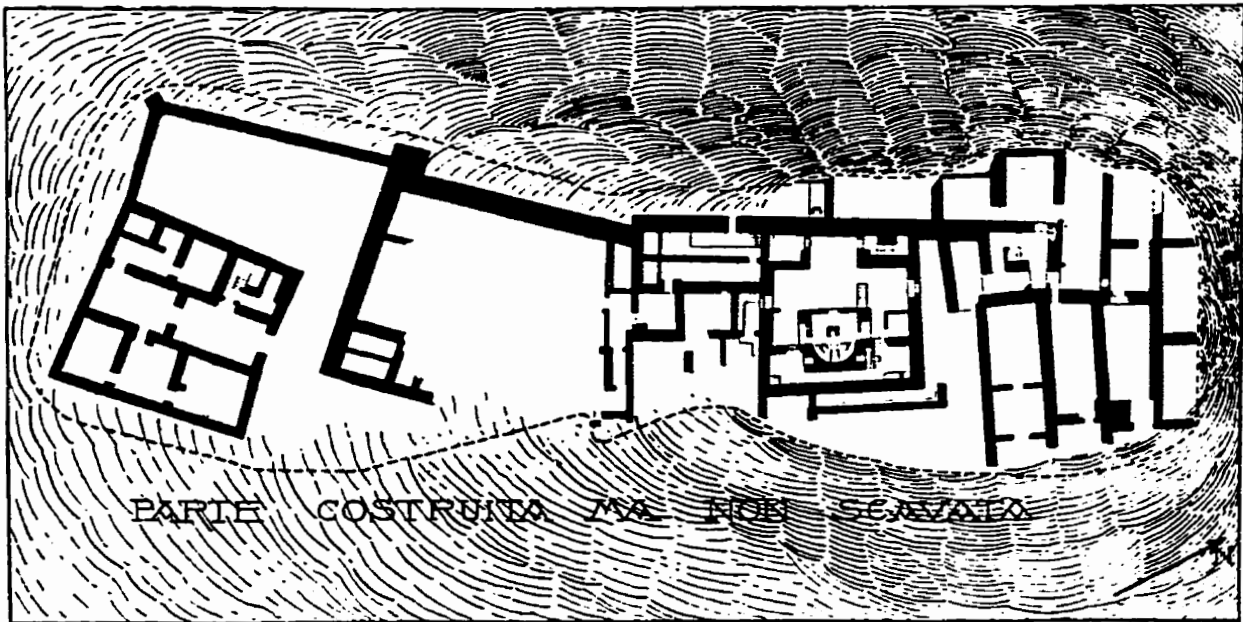


Plate 76 Plan of monastery DM at Old Dongola (Jeuté 1994:74, fig. 6).

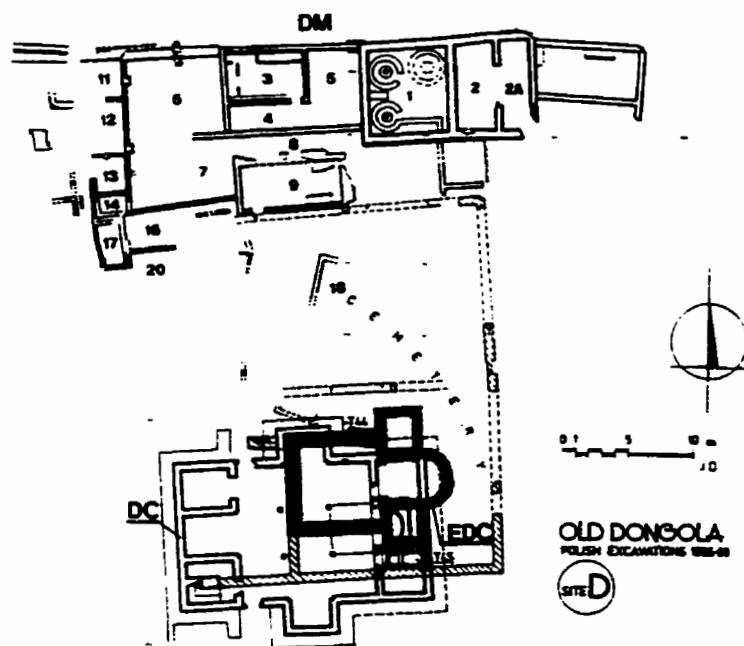


Plate 77 Top - Plan of *Kom H* monastery at Old Dongola (Żurawski 1994:340, fig. 16). Bottom - Plan of northeast corner of *Kom H* monastery at Old Dongola (Jakobielski 1993:99, fig. 1).

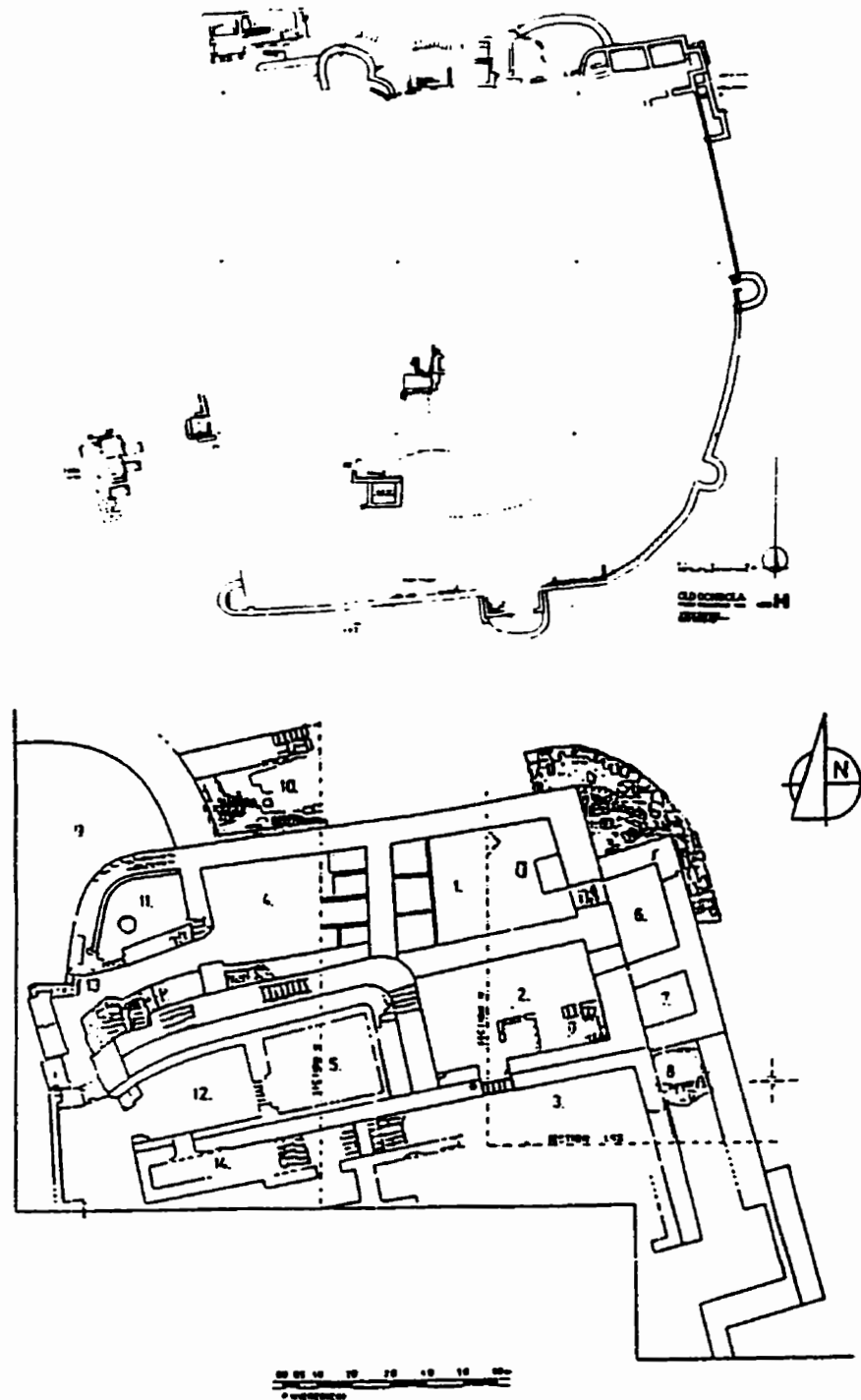


Plate 78 Top - Plan of northwest corner of *Kom H* monastery at Old Dongola (Jakobielski 1993:103, fig. 3). Bottom - Enlargement and detail of northwest corner (Jakobielski 1995:85, fig. 1).

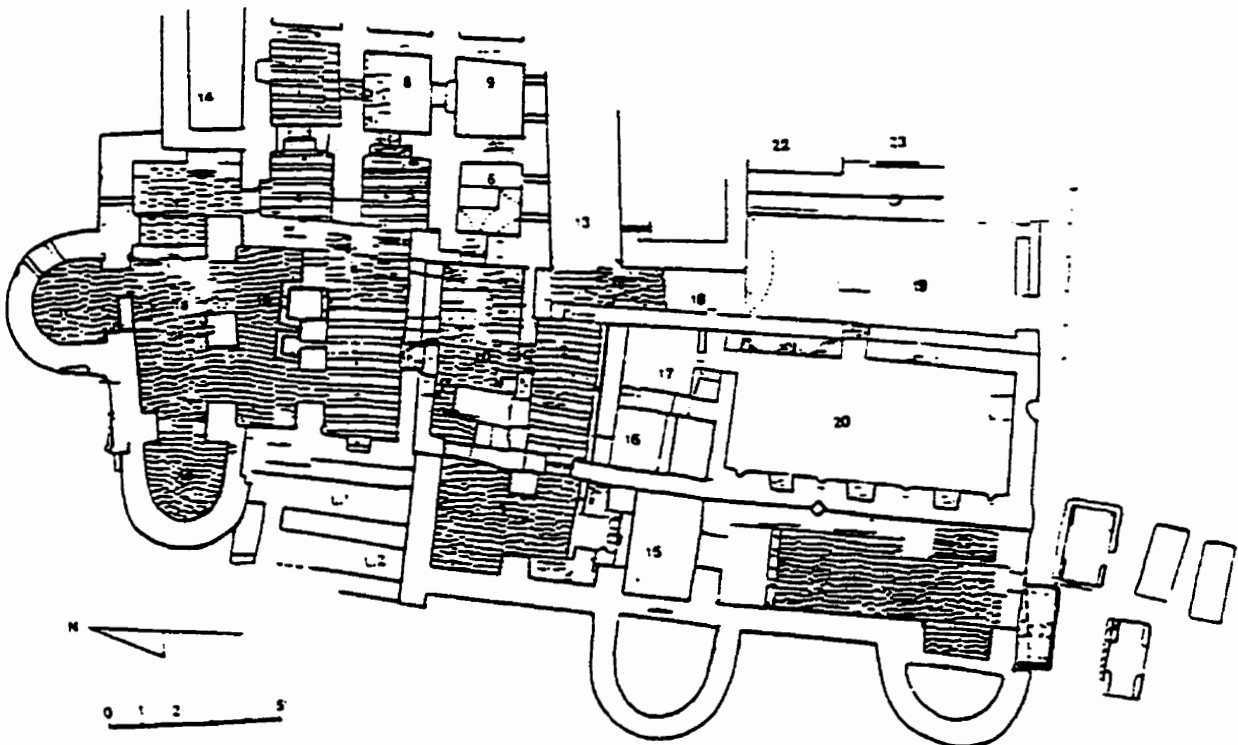
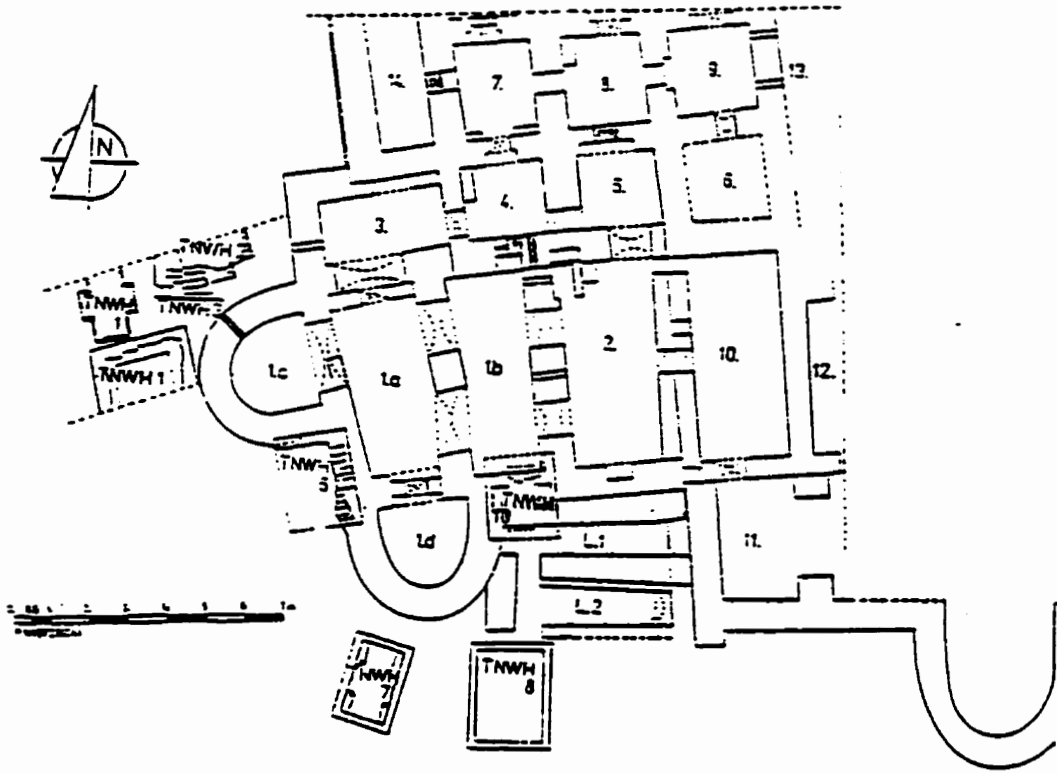


Plate 79 Plan of St. Simeon's (Deir Anba Hadra) in Aswan (Walters 1974:fig. XXIV).

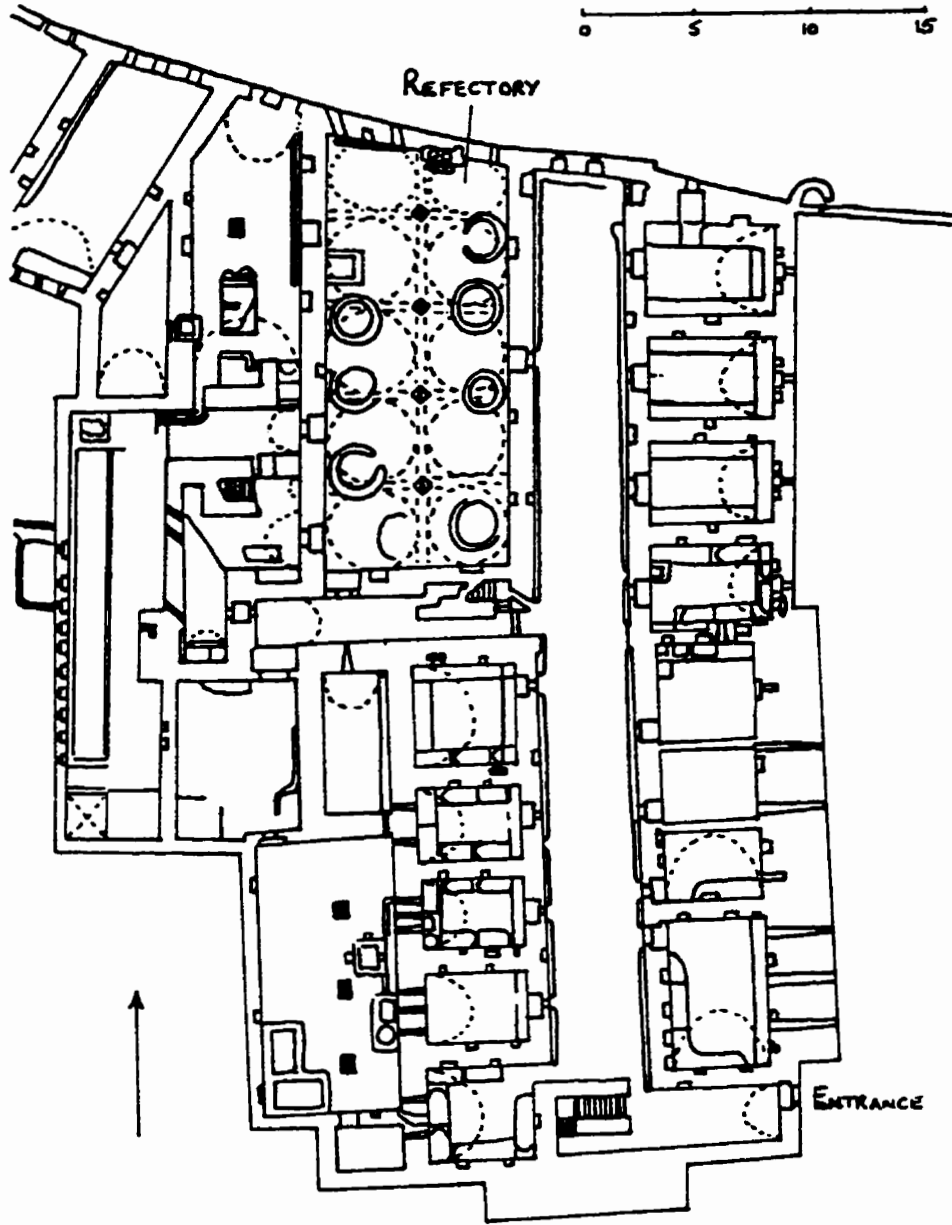


Plate 80 North monastery at Faras West I (Jakobielski 1981:41, fig. 9).

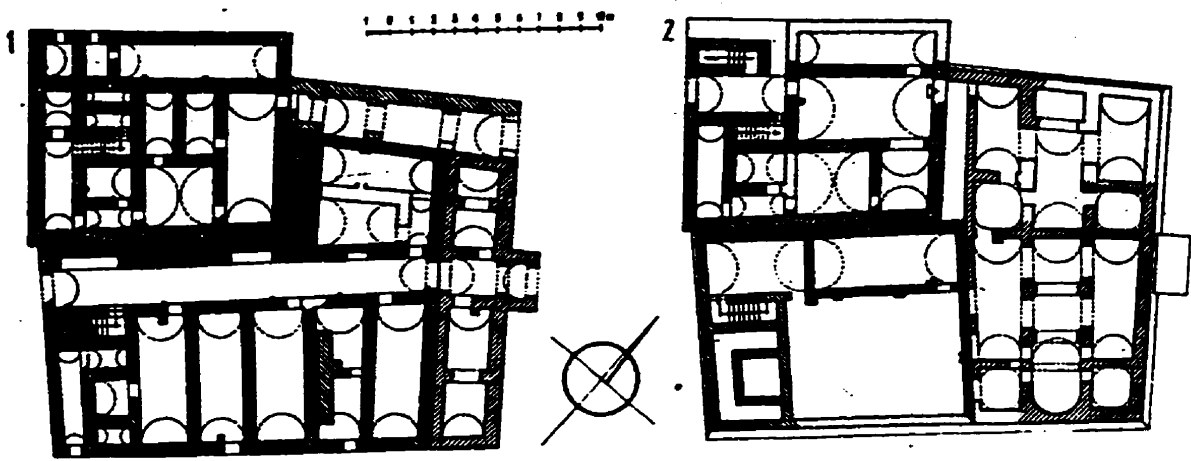
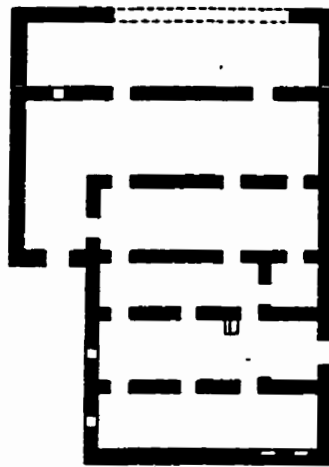
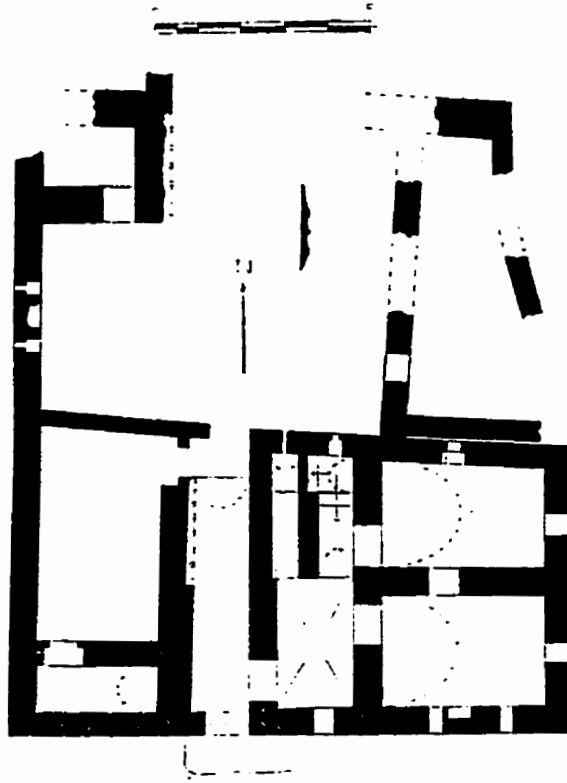


Plate 81 Top - Building at Biga (M.D. Villard 1935:15, fig. 10). Bottom - Building at Mediq III (Clarke 1912:pl. XXI).



SCALE  $\frac{1}{16}$



Plate 82 Plan of Argin IV (Deir el-Bollor) (M.D. Villard 1935:210, fig. 205).

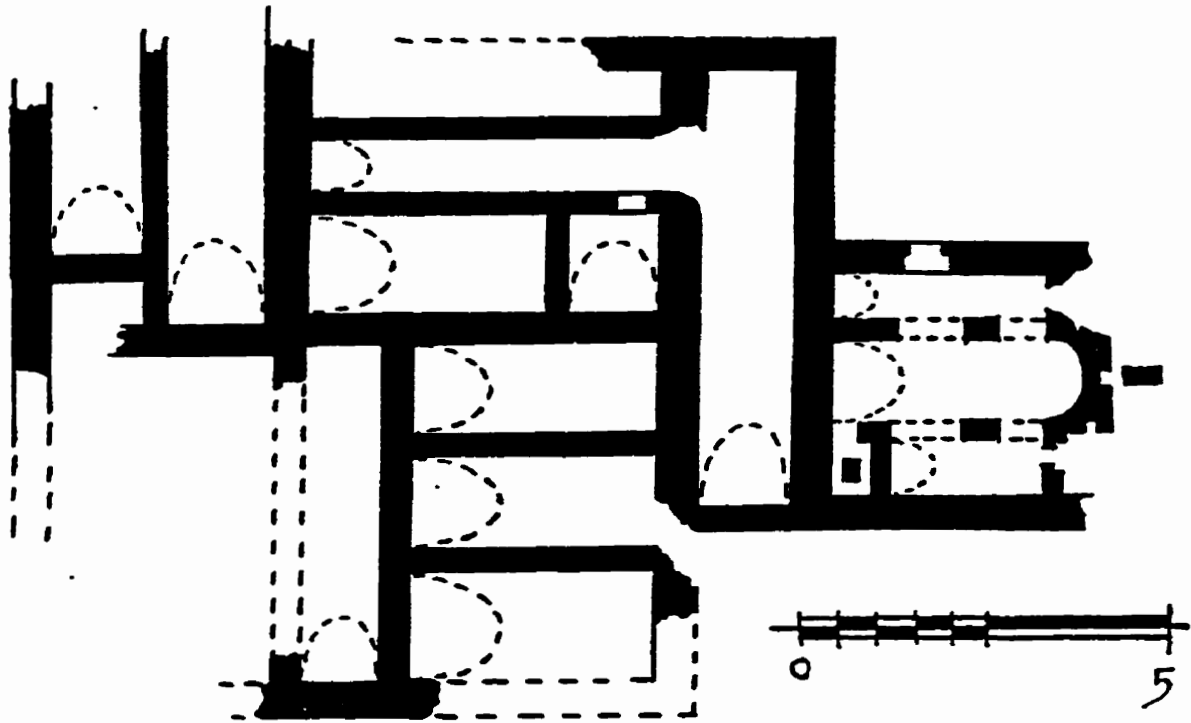


Plate 83 Plan of Matuge Island II (Geziret Thét Matuga) (Clarke 1912:pl. VIII).

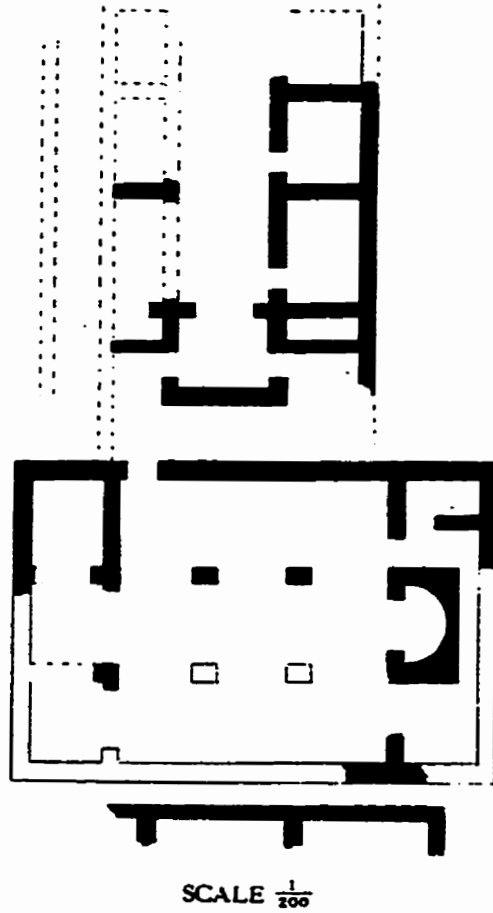


Plate 84 The "Palace" at Tamit (M.D. Villard 1935:fig. 143).

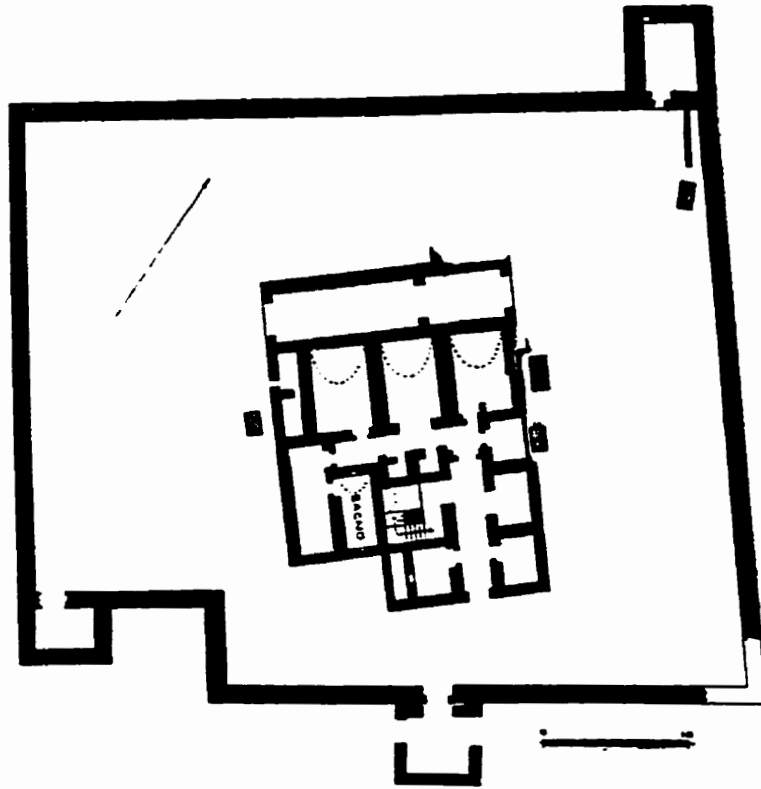
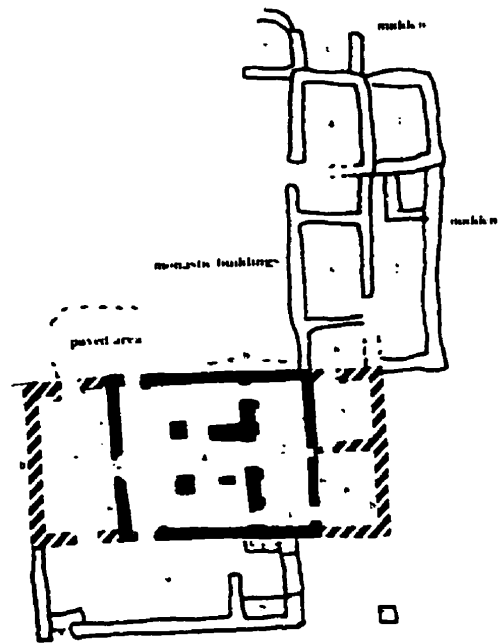


Plate 85 The Church on the Point at Qasr Ibrim (after Kjølbye-Biddle 1994:23, fig. 4).



86. Late period settlement at Abd el Qadir I (Meinarti) (Adams 1968:205). (Detail of plate 60).

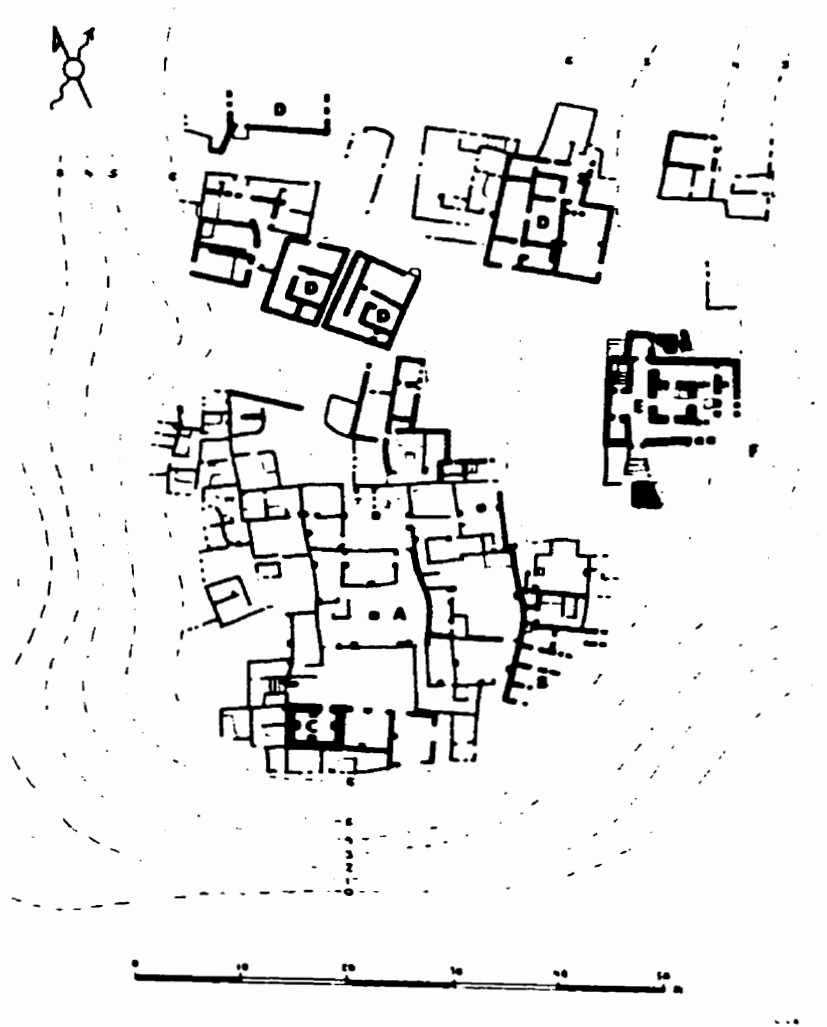


Plate 87 Plan of Debeira West I (R-1) (Shinnie and Shinnie 1978:41, fig. 32).

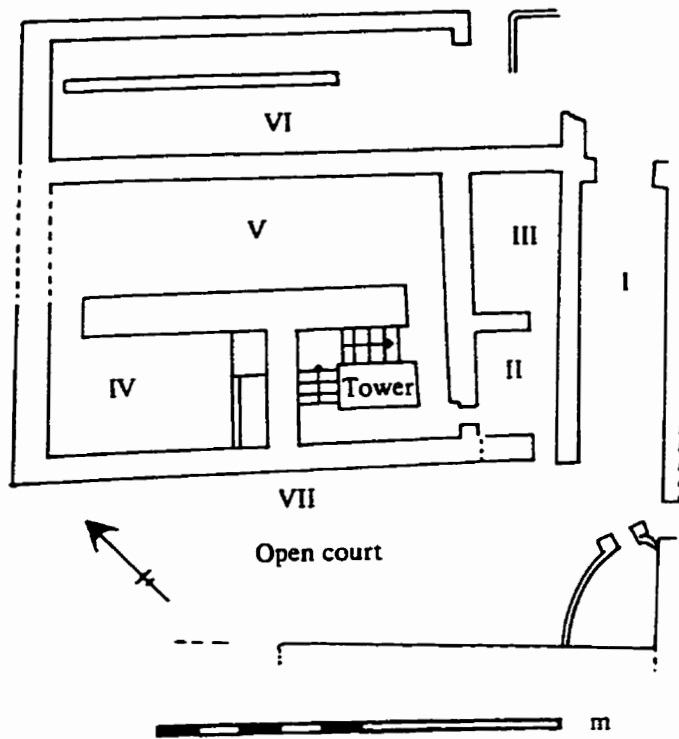


Plate 88 Site plan of Abkanarti (after Velo 1965:plan 1).

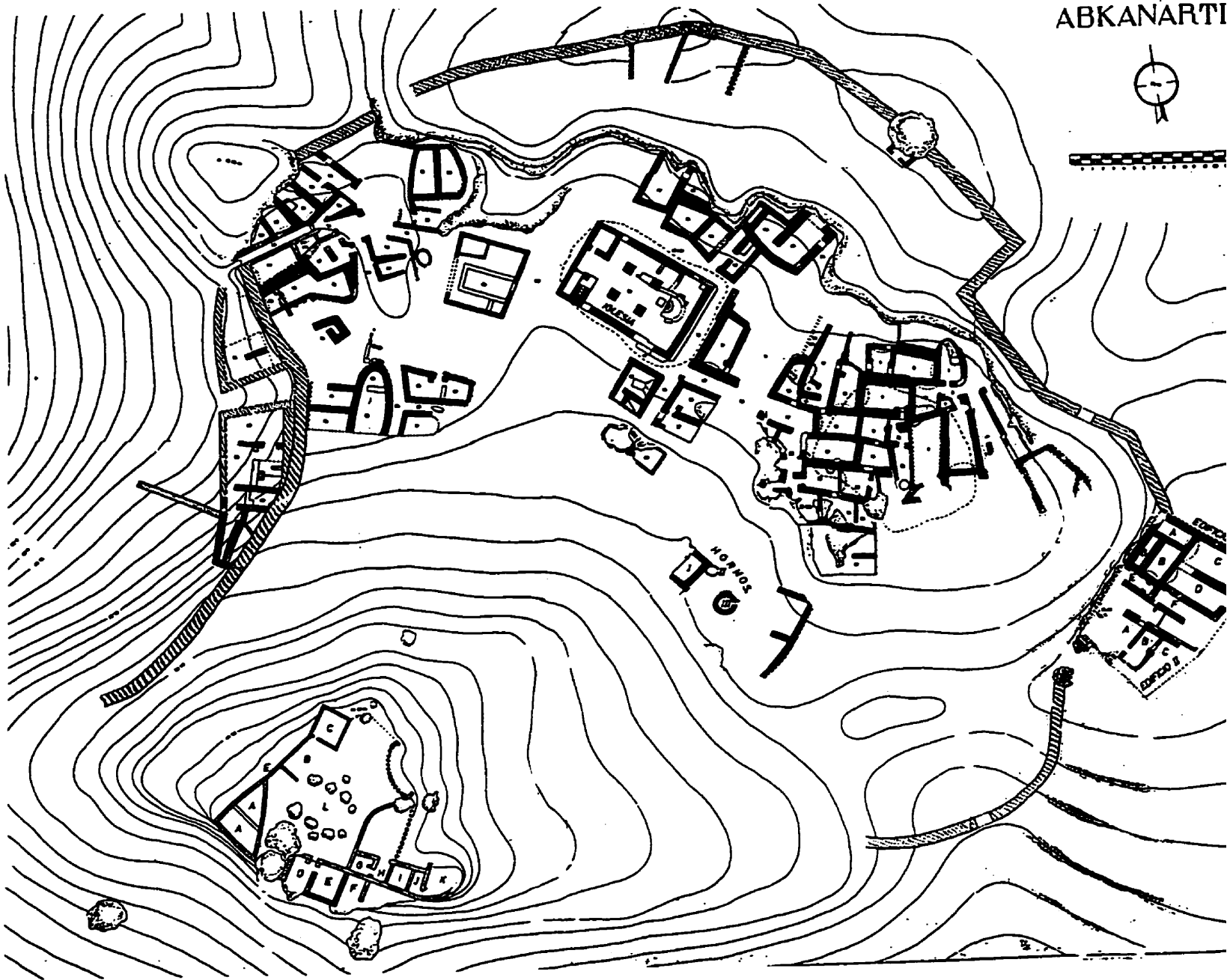


Plate 89 Plan of Debeira West VI (R-60) (Shinnie and Shinnie 1978:34, fig. 26)

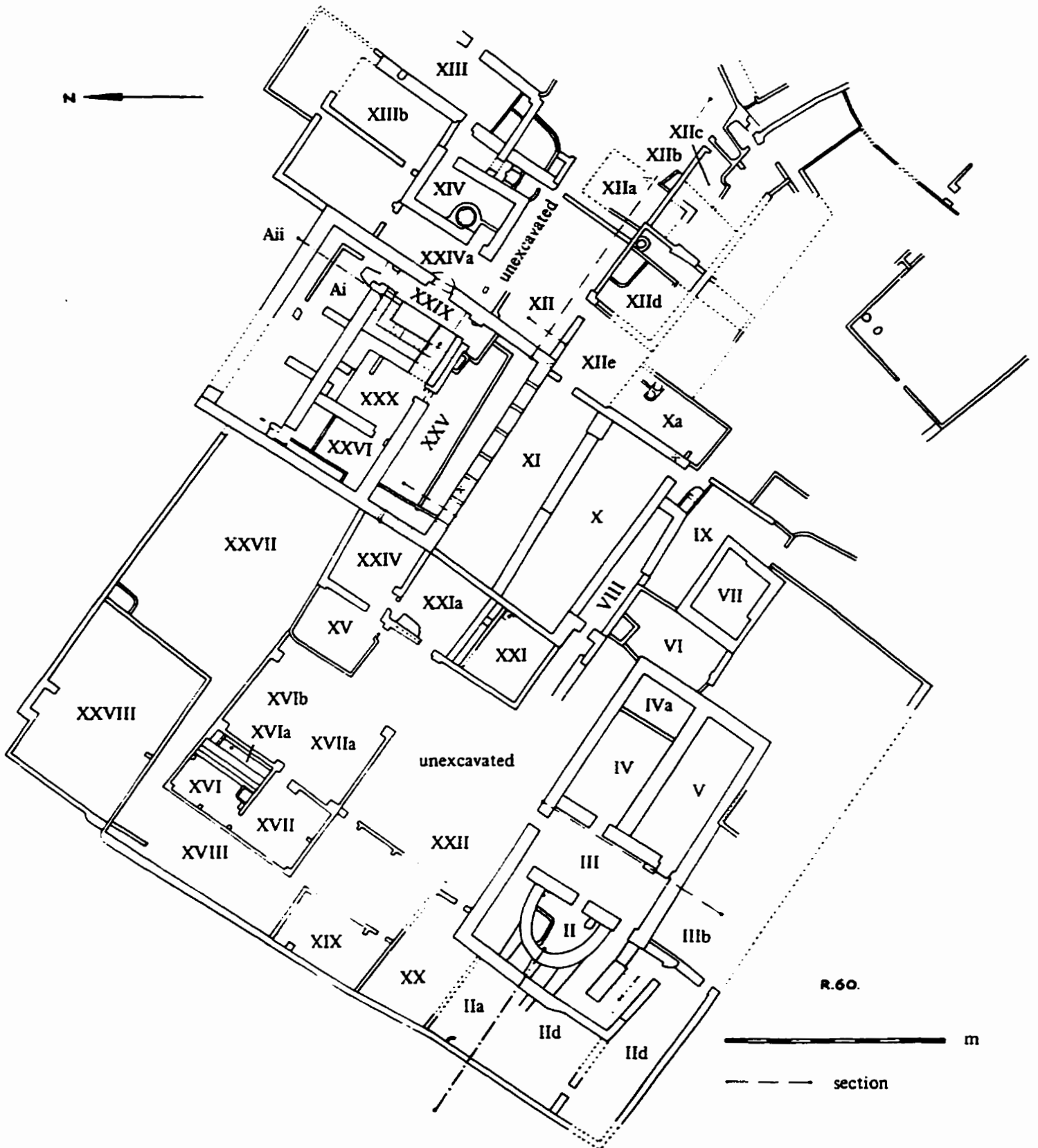




Plate 90 Plan of Debeira West V (R-59) (Shinnie and Shinnie 1978:18, fig. 18).

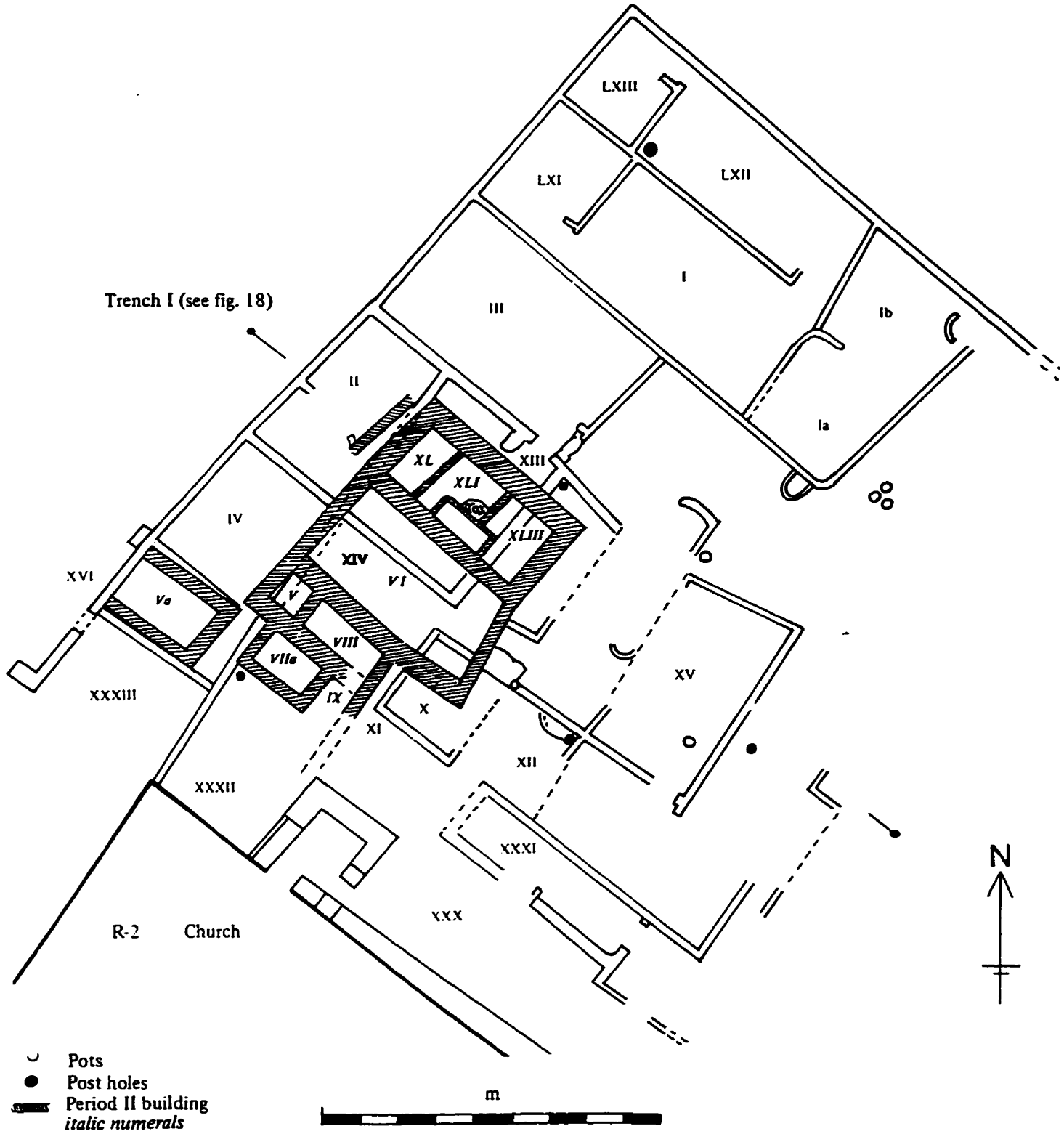


Plate 91 Plan of Kulb III (Dinkler 1970:268, fig. 37).

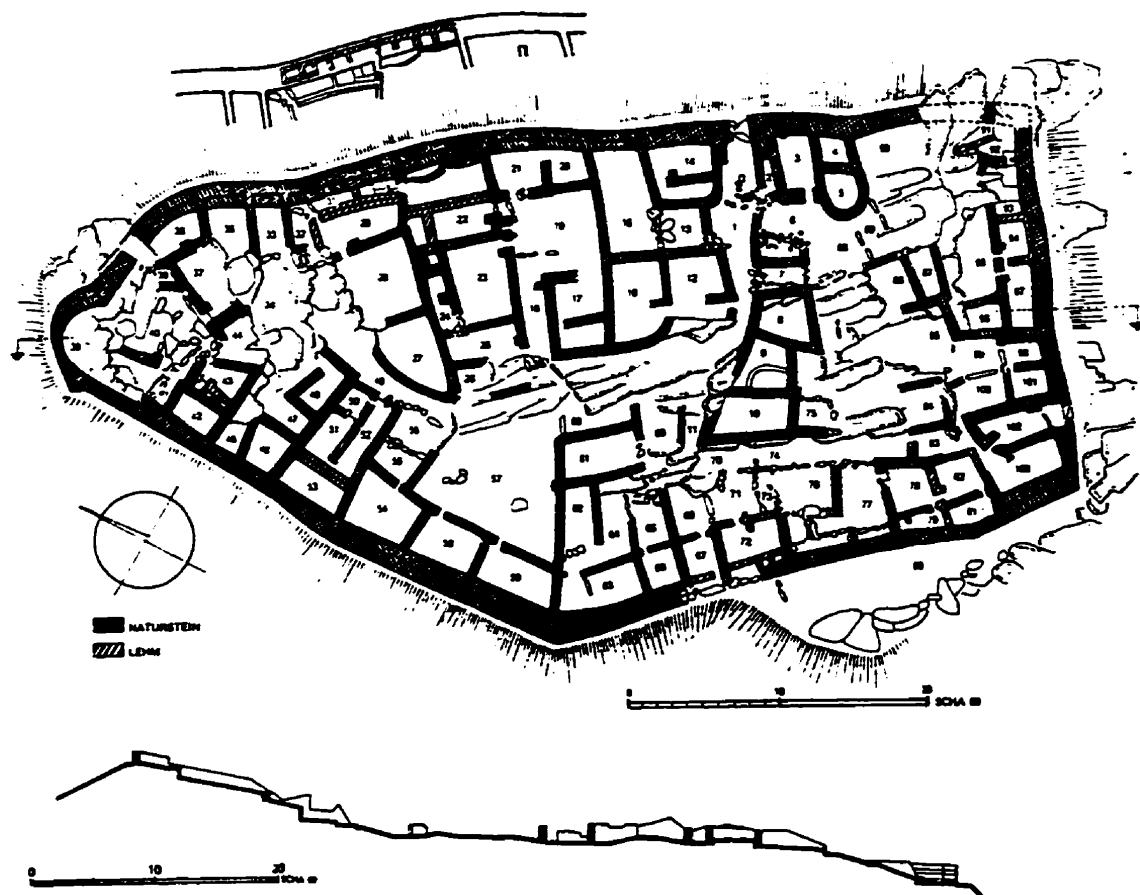


Plate 92 Map of all sites on the island of Kulubnarti (Adams 1994a:3, map 1.2).

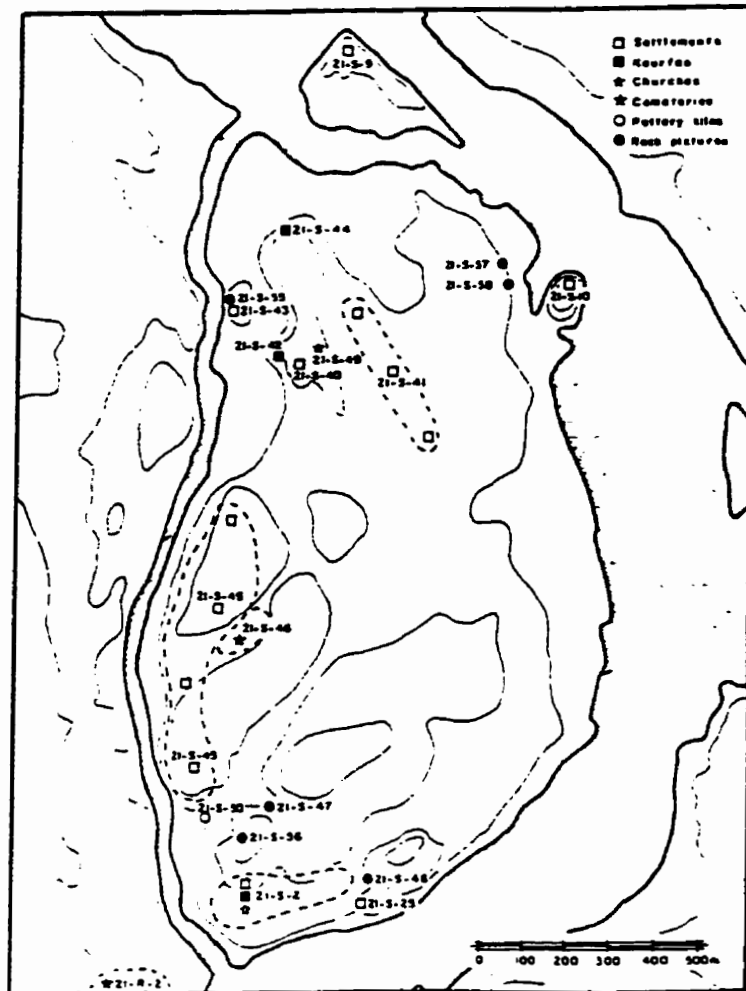


Plate 93 Tomb no. II at Toshka East (Simpson 1963:19, fig. 15).

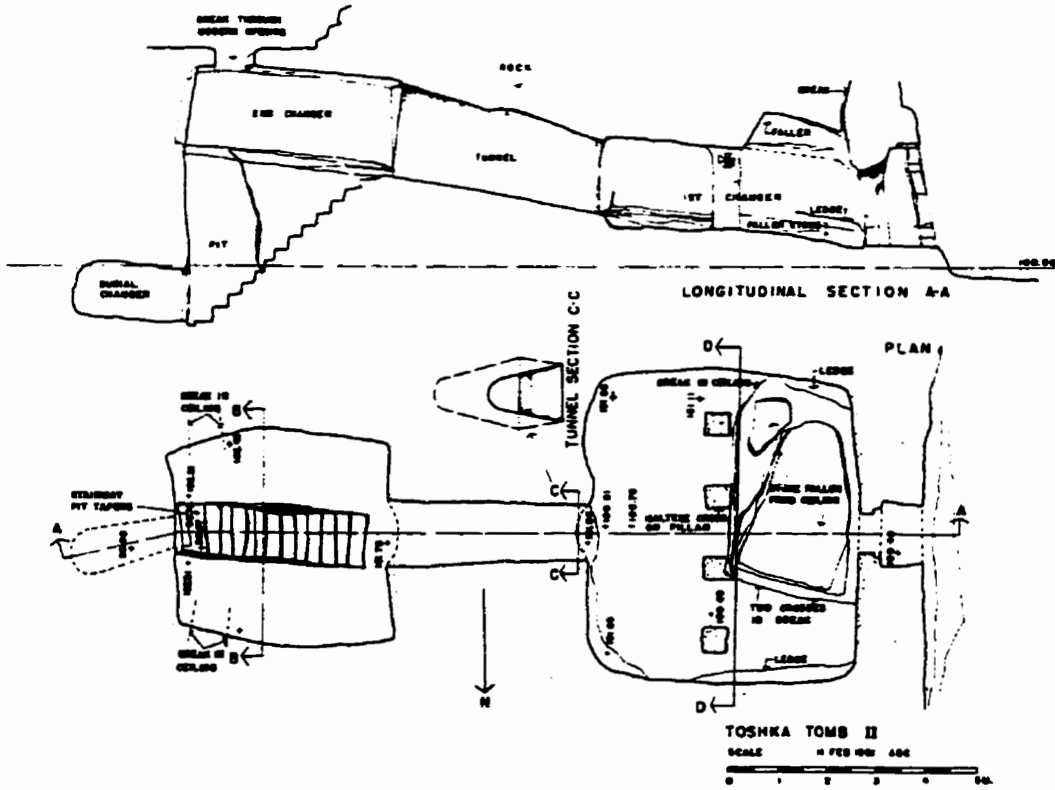


Plate 94 Tomb at ez-Zuma (M.D. Villard 1935:251).

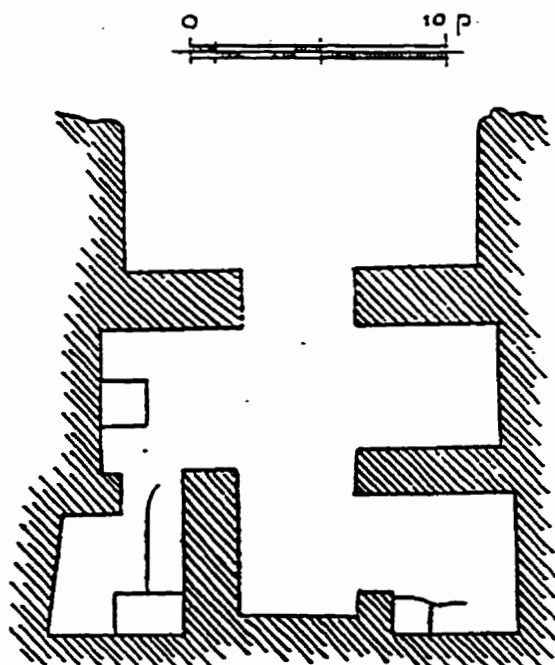


Plate 95 Top - The 'Potteries Building' at Faras West (24-E-21), early occupation levels (Griffith 1926:pl. XLII). Bottom - The 'Potteries Building', final phase of occupation (Adams 1961c:35).

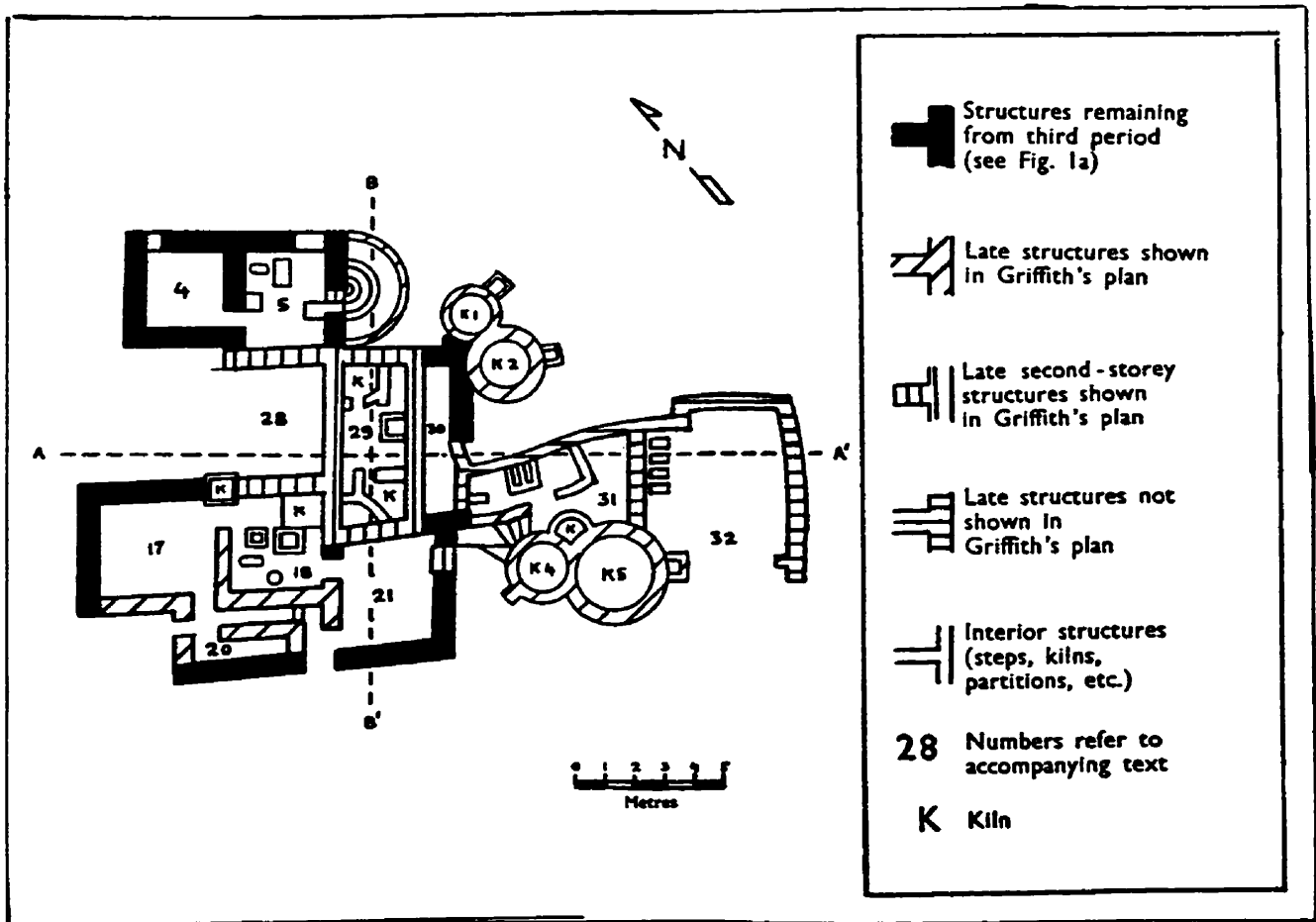
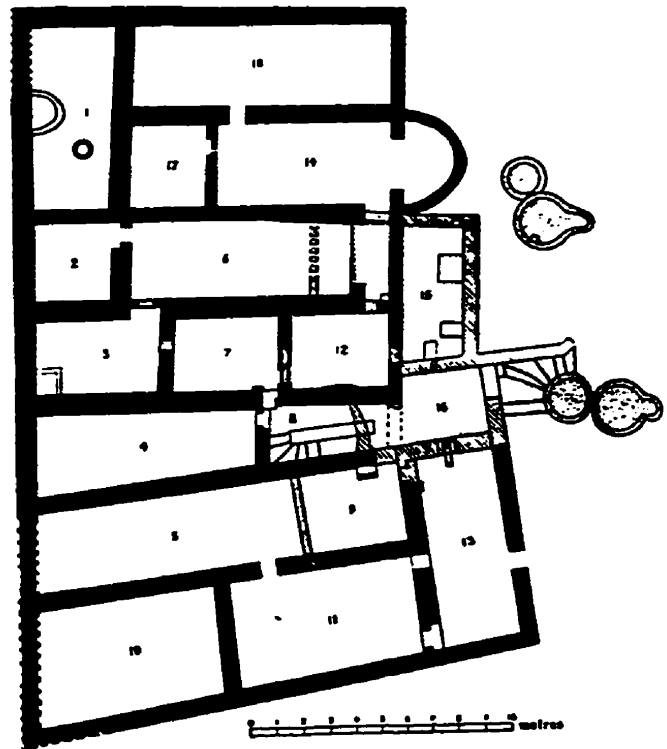


Plate 96 The numbering system for the 1:250,000 maps of the Sudan (Hinkle 1979:back cover).

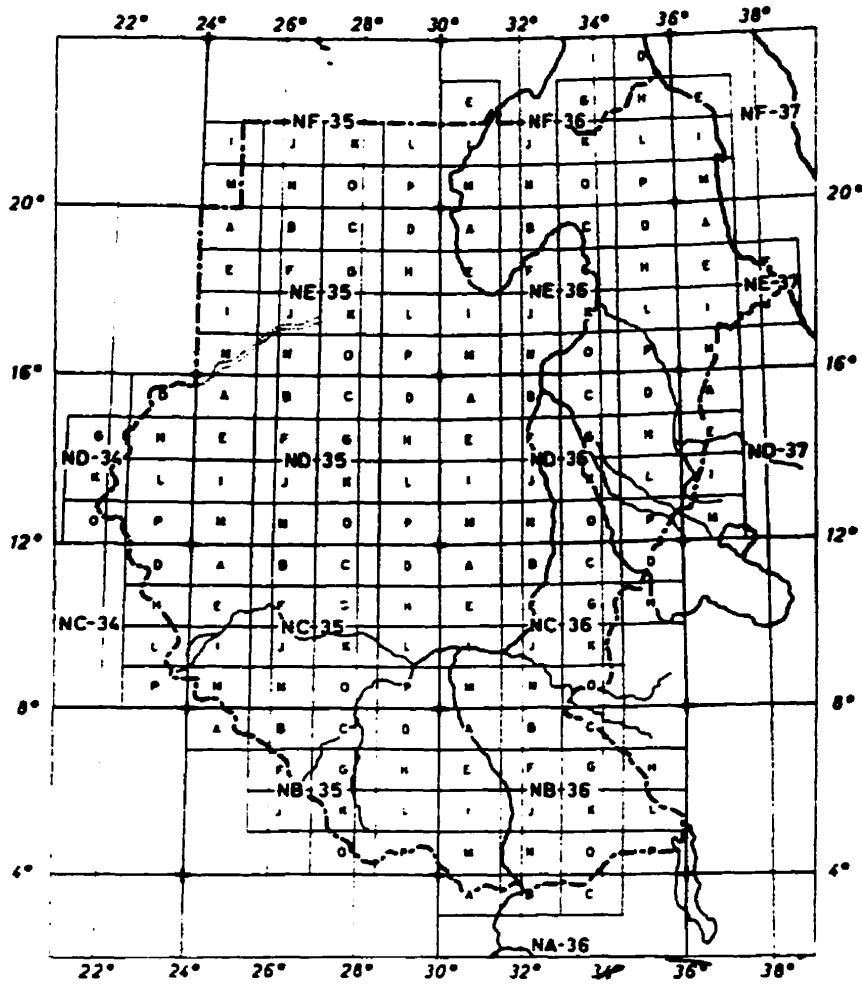
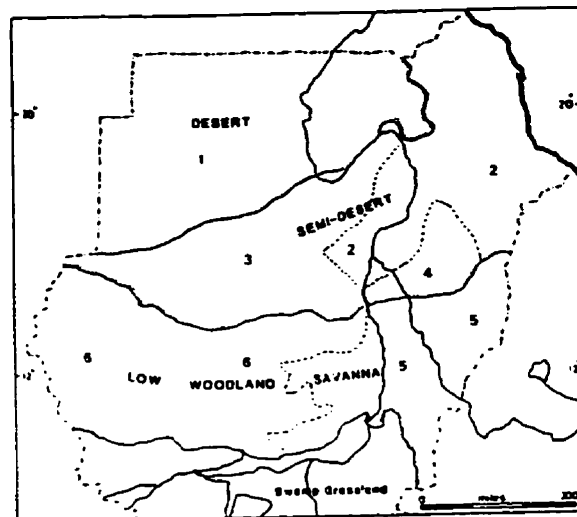
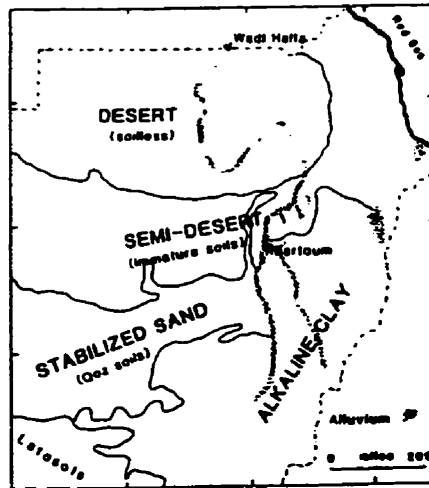


Plate 97 Top - Distribution of soils in Sudan. Bottom - Vegetation distribution in Sudan (Edwards 1989:18, figs. 4, 5).



- 1) Desert    2) Acacia scrub    3) Short grasslands & thorn scrub
- 4) Sudan short grassland    5) Clay Plains Savanna    6) Qoz Savanna



Plate 98 Amount of annual rainfall (in mm) in Sudan (Van Noordwijk 1984:30, fig. 1.15).

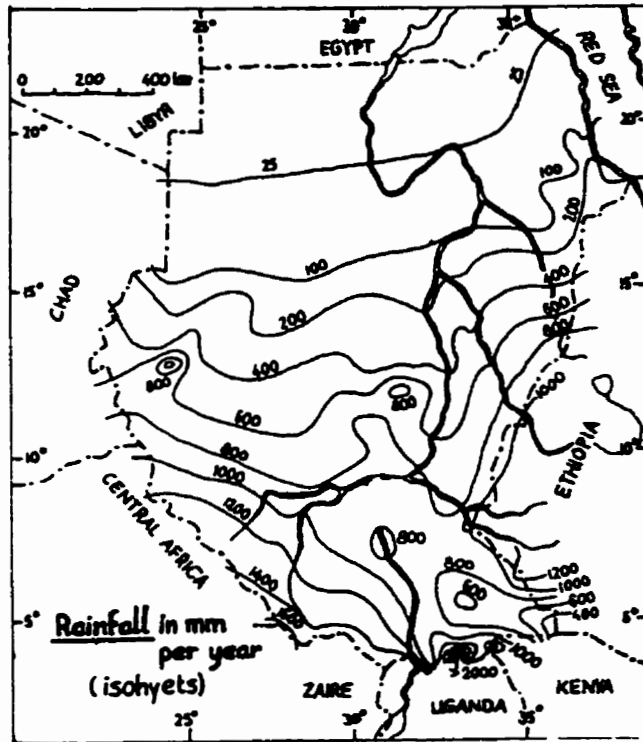
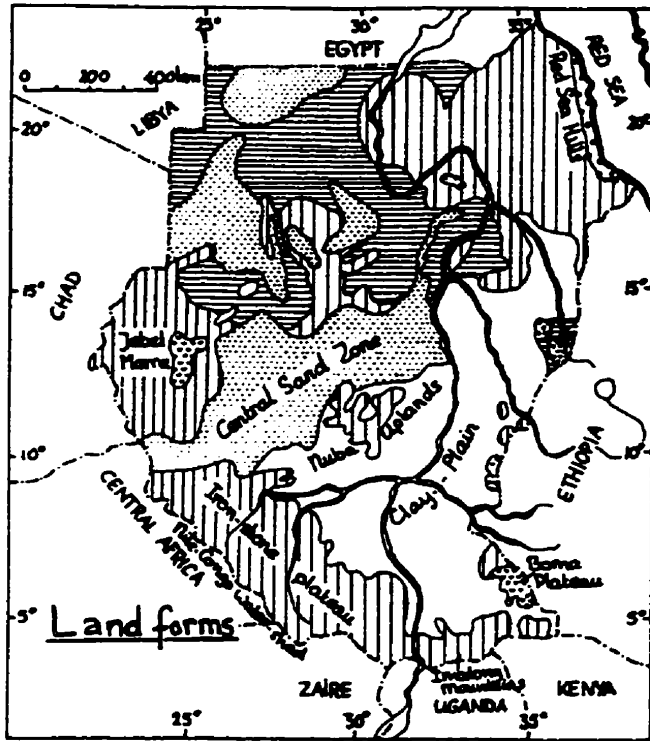
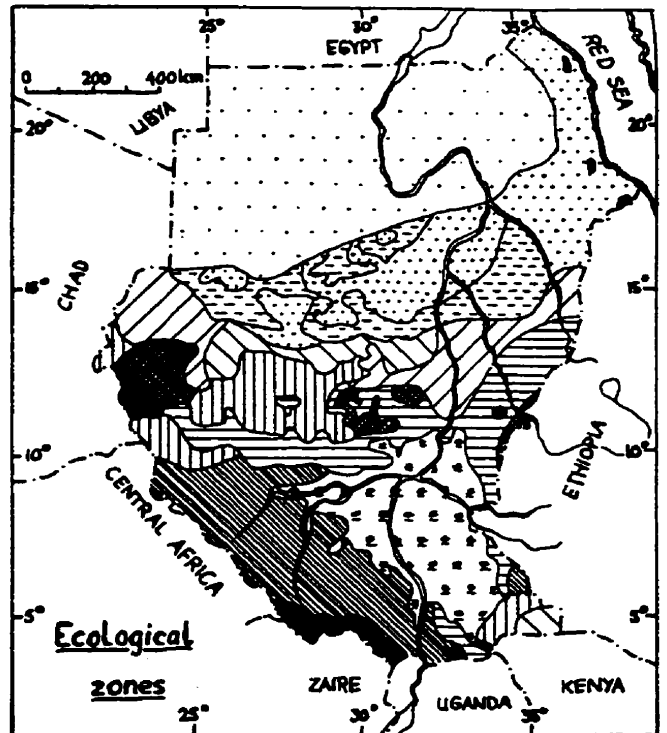


Plate 99 Top - Landforms in Sudan. Bottom - Ecological Zones in Sudan (after Van Noordwijk 1984:31).



- |   |                  |   |                                     |
|---|------------------|---|-------------------------------------|
|  | superficial clay |  | basement complex                    |
|  | wind-blown sand  |  | sediments of Red Sea coastal plain. |
|  | volcanic rocks   |   |                                     |
|  | nubian sandstone |   |                                     |















- |  |                         |   |   |
|--|-------------------------|---|---|
|  | desert                  |  | sudan savanna on sand                                 |
|  | semi-desert (shrub)     |  | hill areas  |
|  | semi-desert (grassland) |  | flood region  |
|  | sahel savanna on clay   |  | high rain woodland (guinea savanna)                   |
|  | sahel savanna on sand   |  | woodland recently derived from rainforest (greenbelt) |
|  | sudan savanna on clay   |  | montane vegetation                                    |

Plate 100 Late Christian fortified settlement on Nabash II (after Adams 1962: field plan of Sudan Antiquities Service excavations).

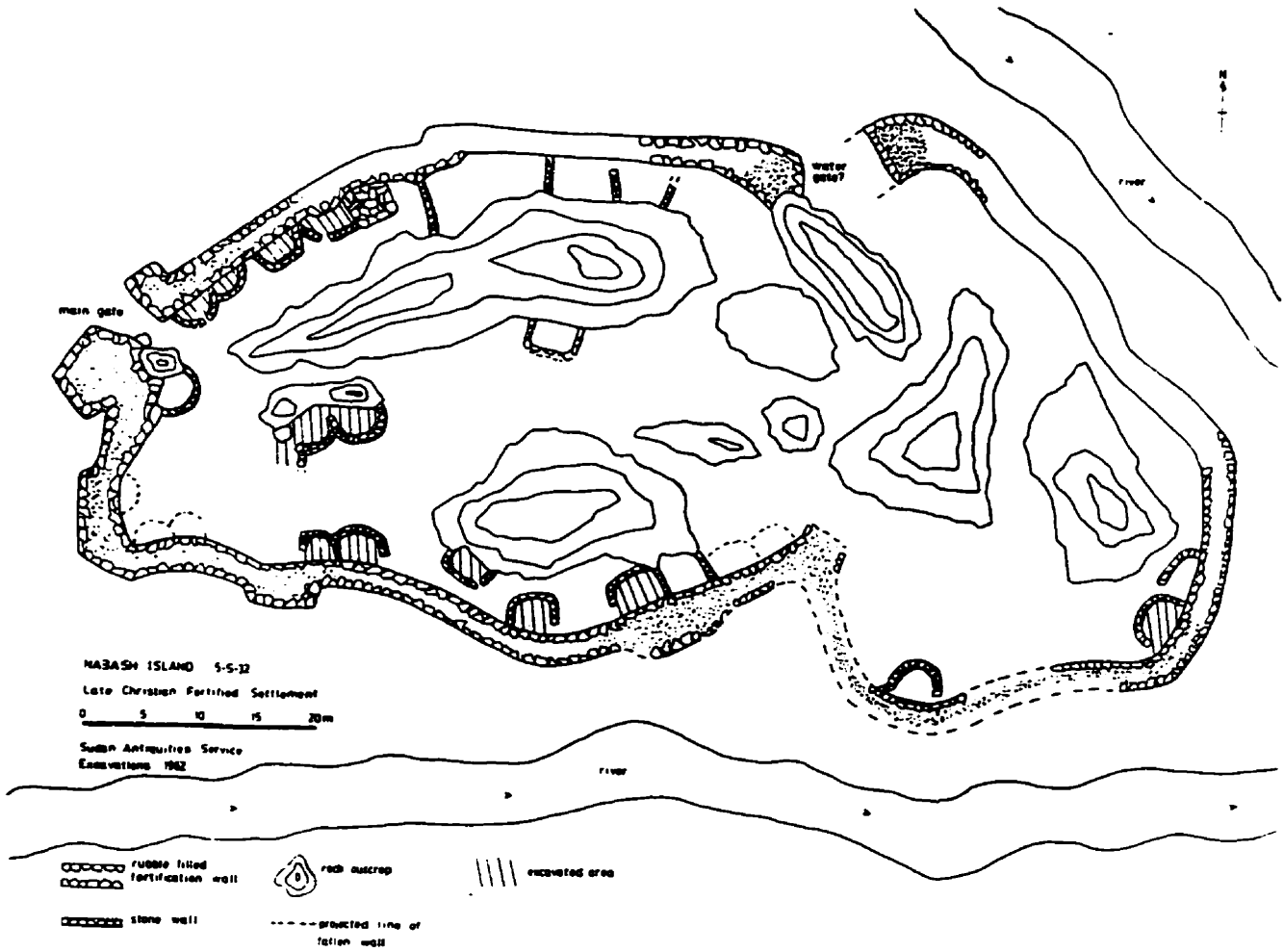


Plate 101 Site plan of Tangur V (Dinkler and Grossman 1971a:138).

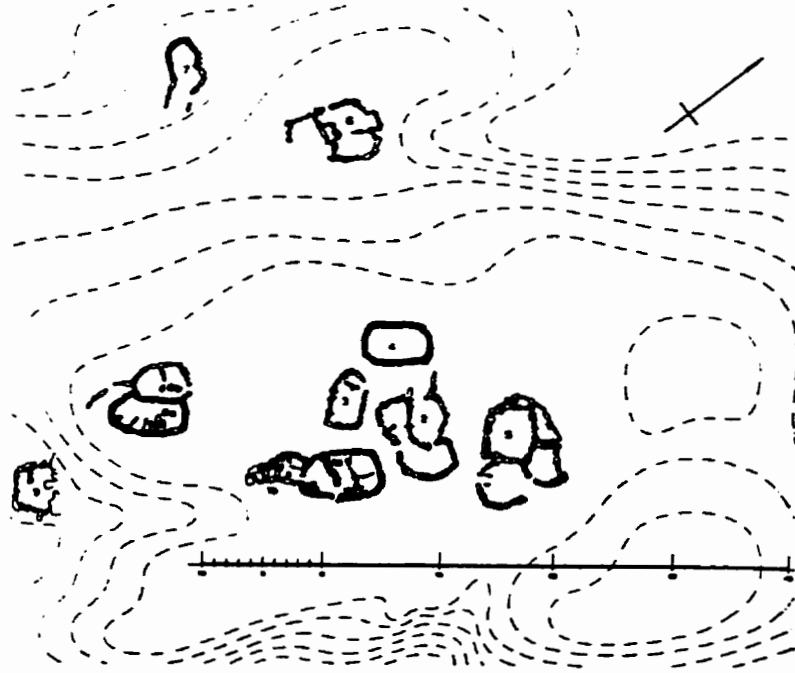


Plate 102 Site plan of Sumarti (Dinkler 1970:266).

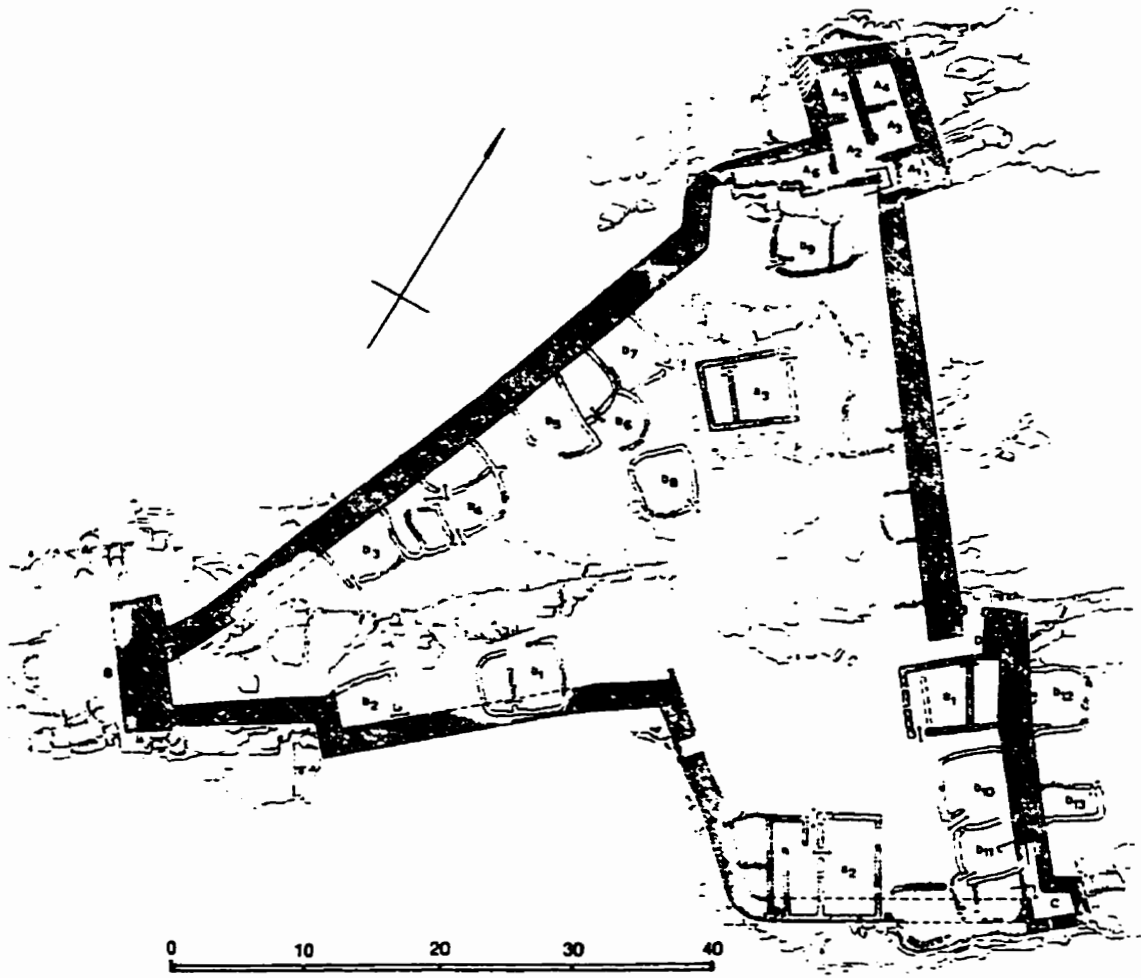


Plate 103 Late Christian remains at the east end of Qasr Ibrim (after Adams 1972: field plan).

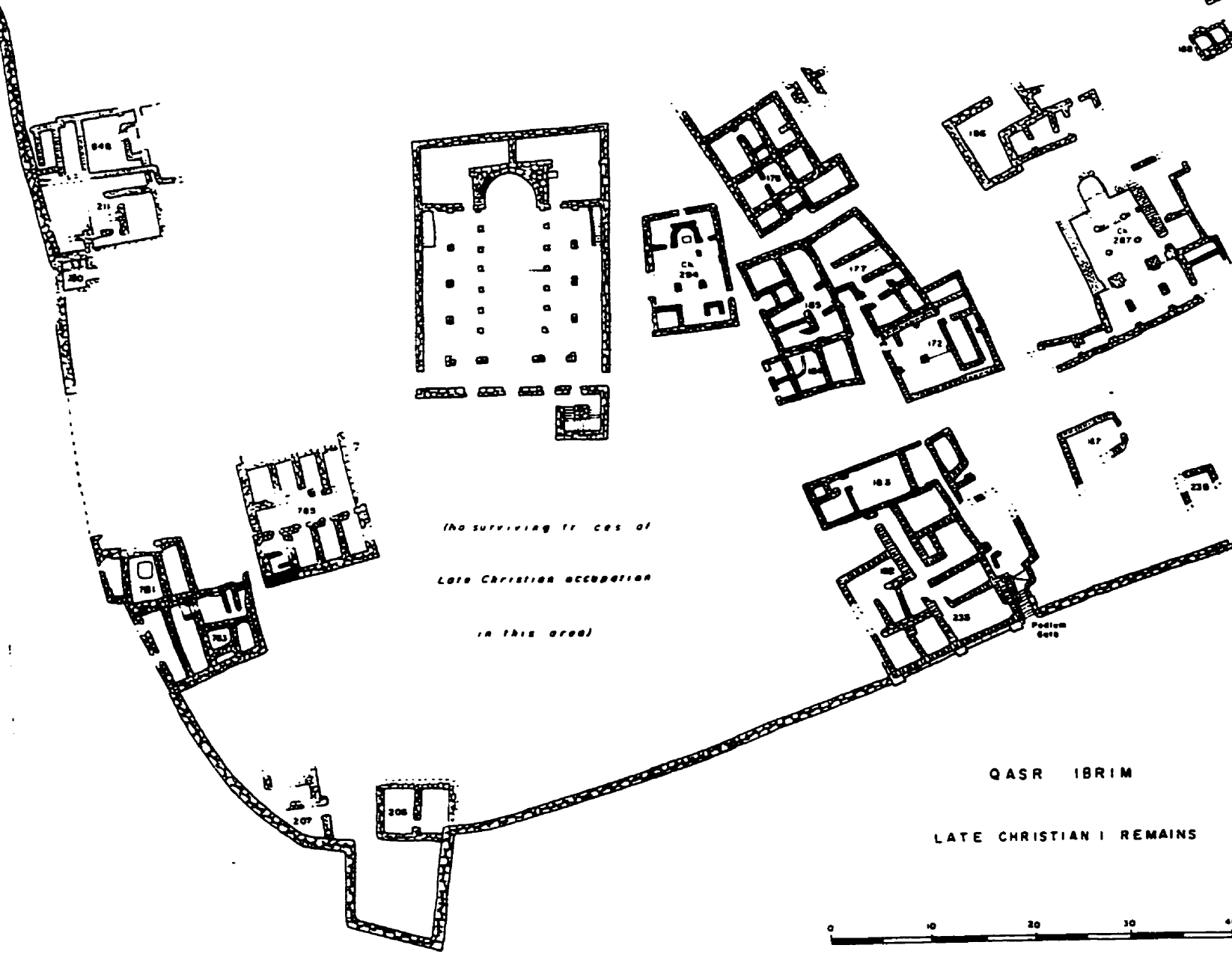


Plate 104 Plan of Ferkinarti (Vila 1976:92).

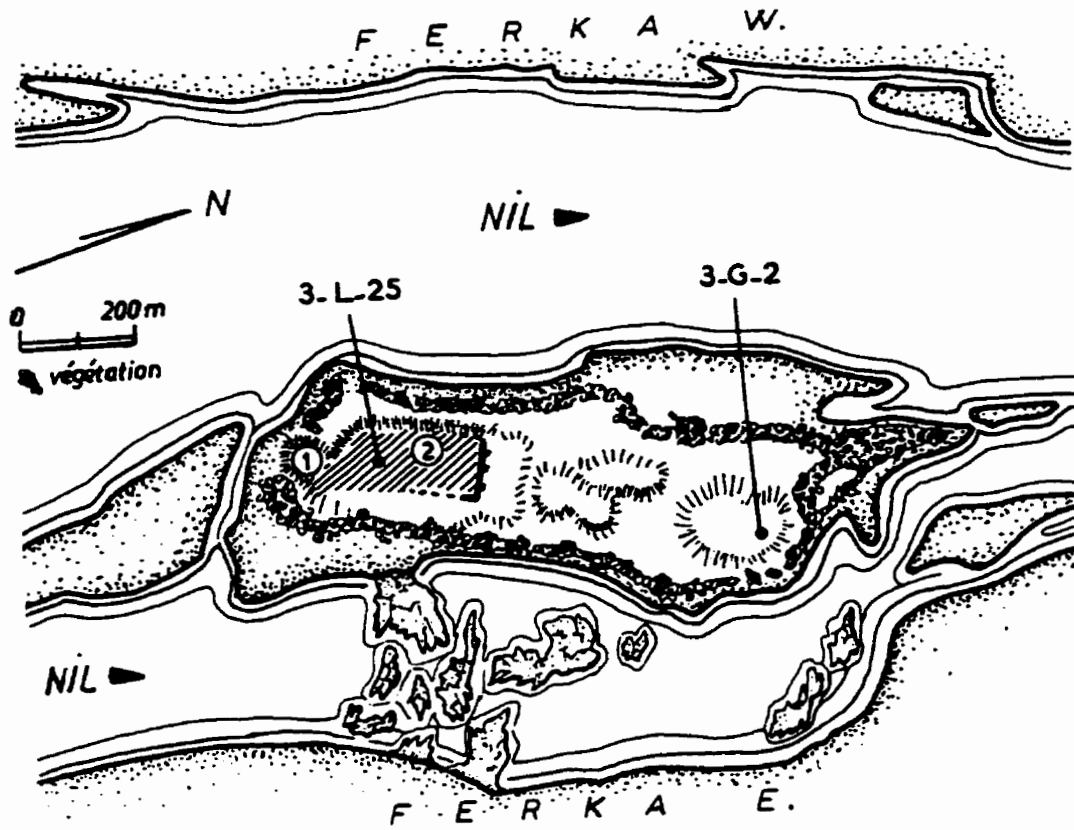


Plate 105 Plan of Gergetti Island I (Vila 1977b:33, fig. 9).

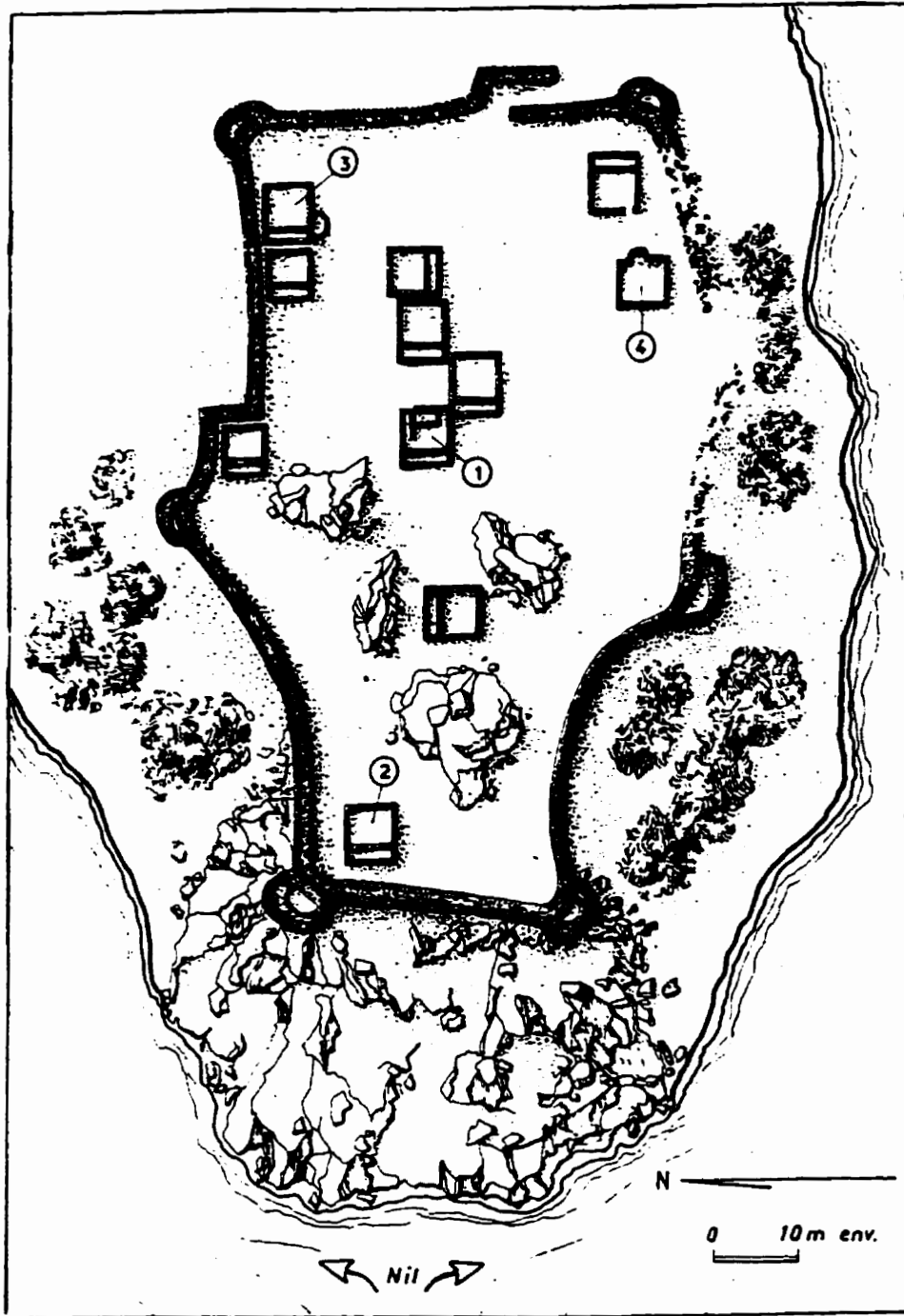




Plate 106 Sketch plan of Kisinarti (after Adams and Nordström 1962: field plan, Sudan Antiquities Service).

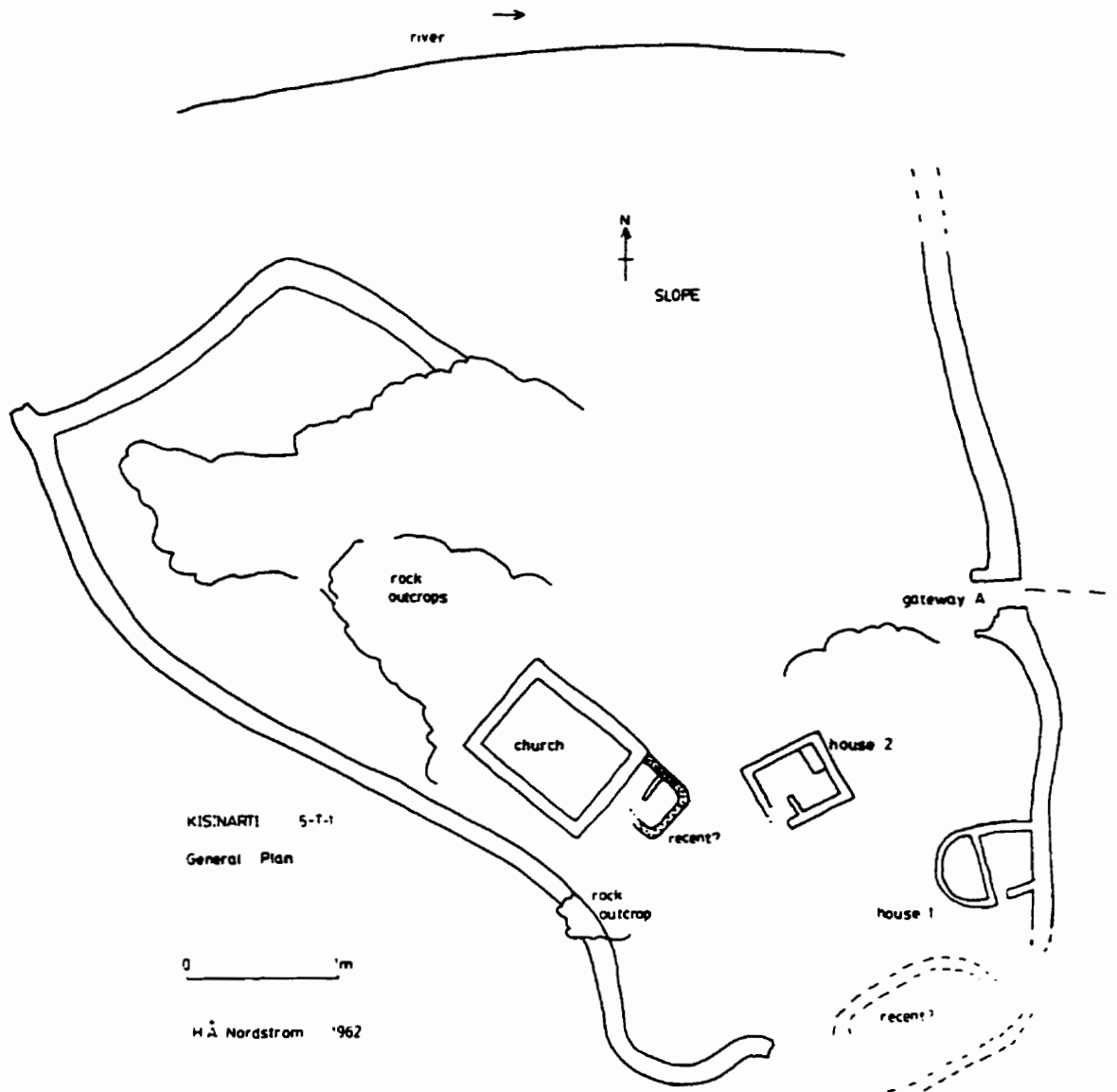


Plate 107 Plan of Tiine (Vila 1975:50, fig. 48).

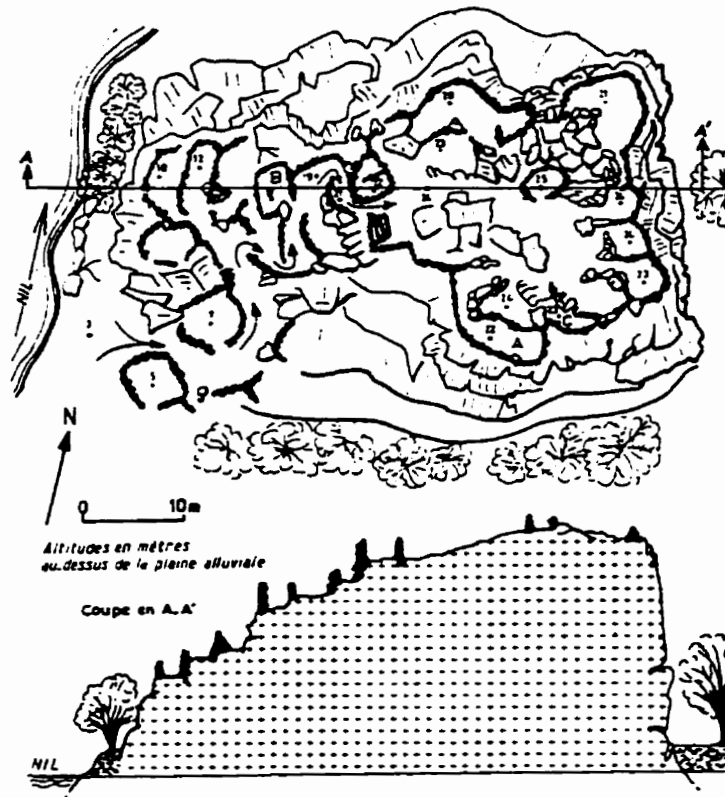


Plate 108 The forts at el Kab (Crawford 1953b:fig. 1).

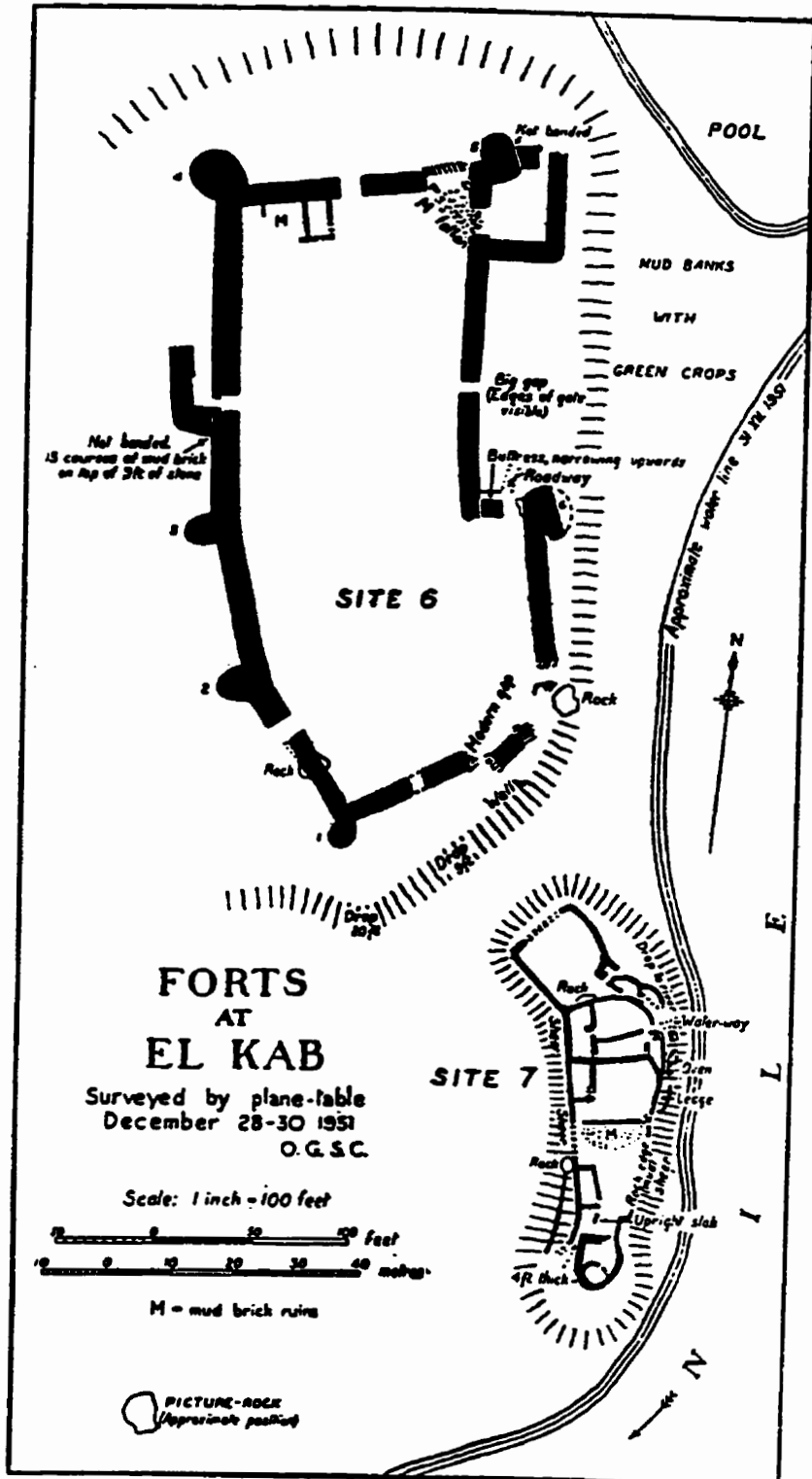
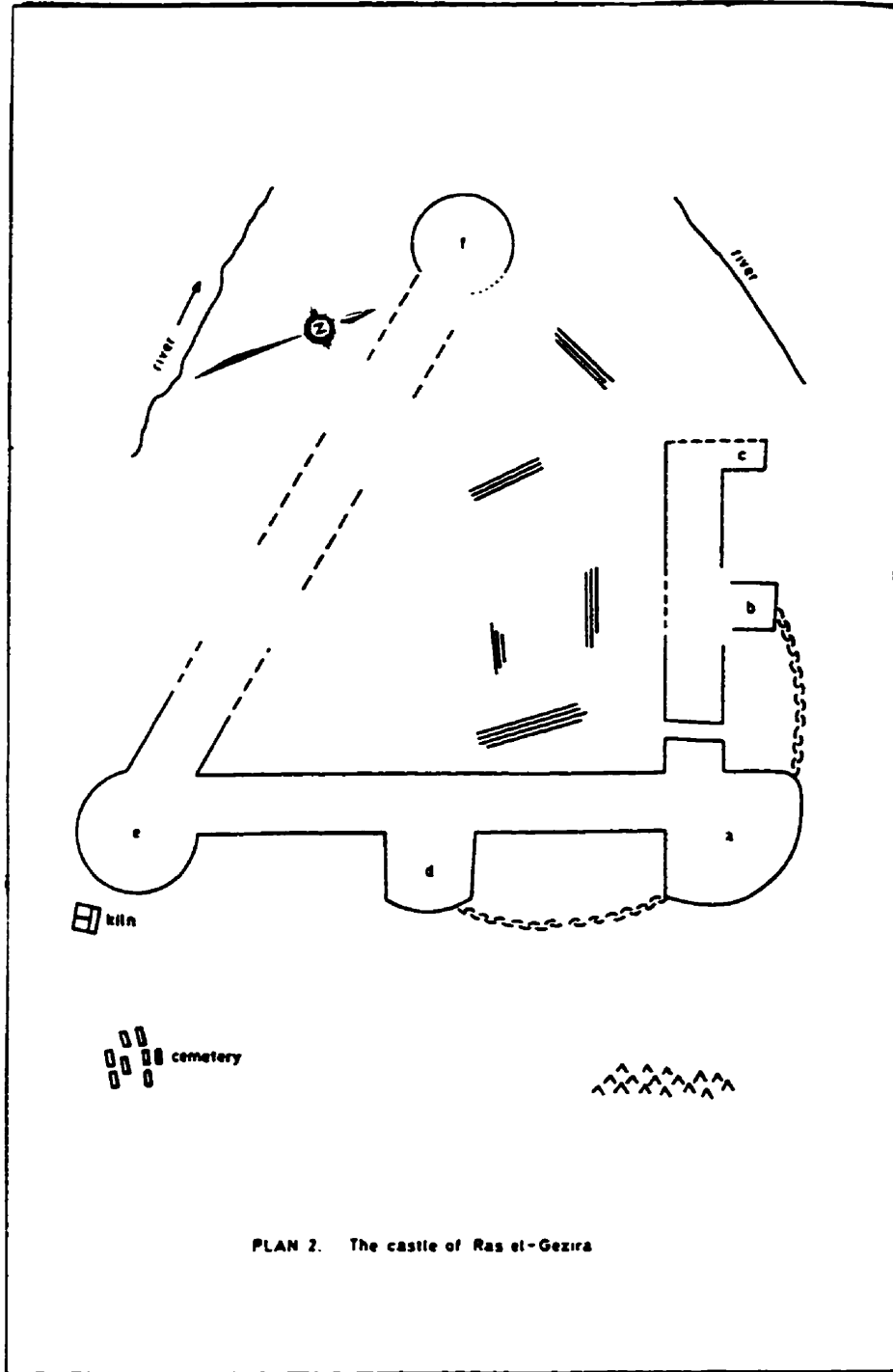


Plate 109 The fort of Ras el-Gezira (Abbas 1971:6).



PLAN 2. The castle of Ras el-Gezira

Plate 110 The fortress of Gebel Sahaba (Gardberg 1970:77).

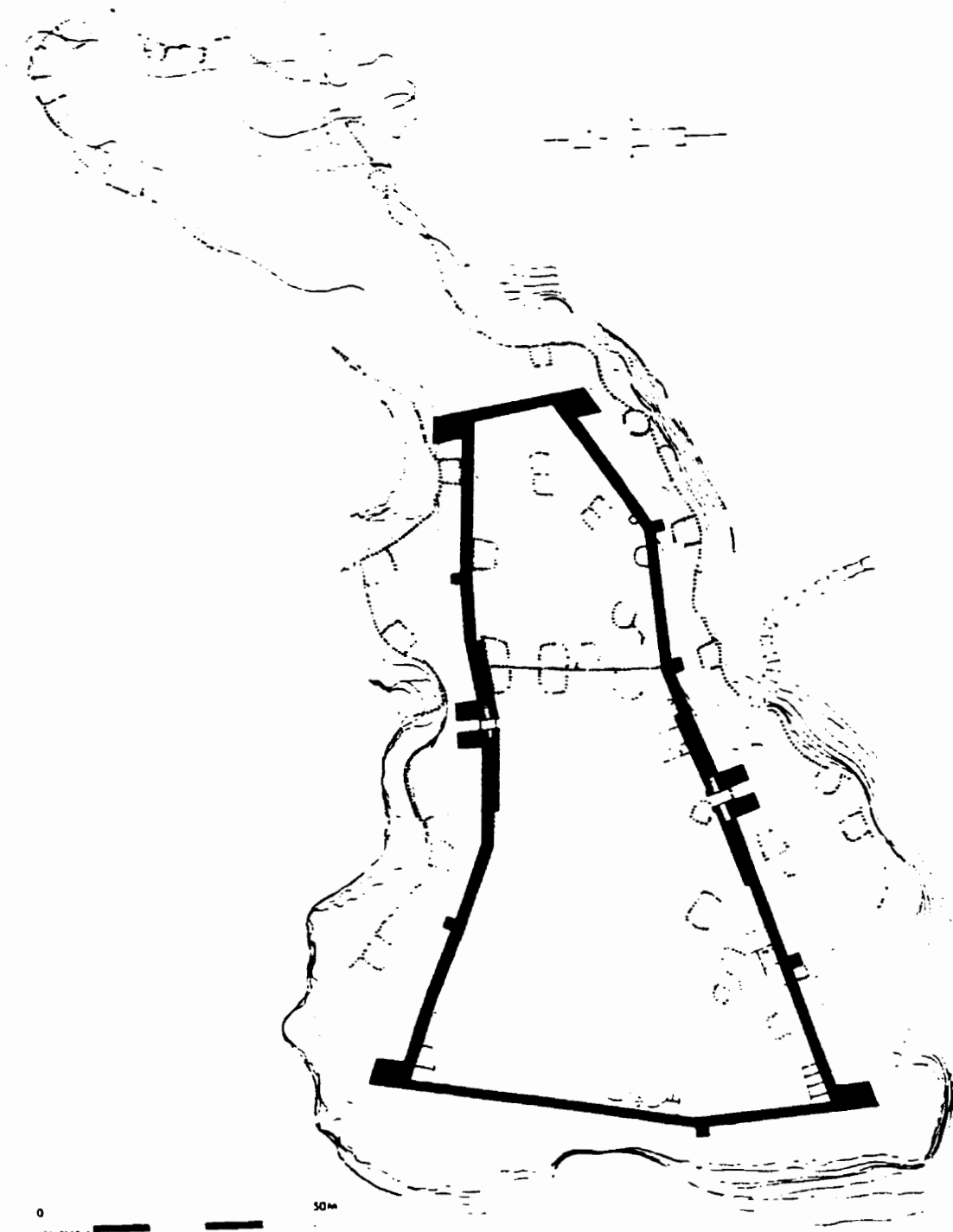
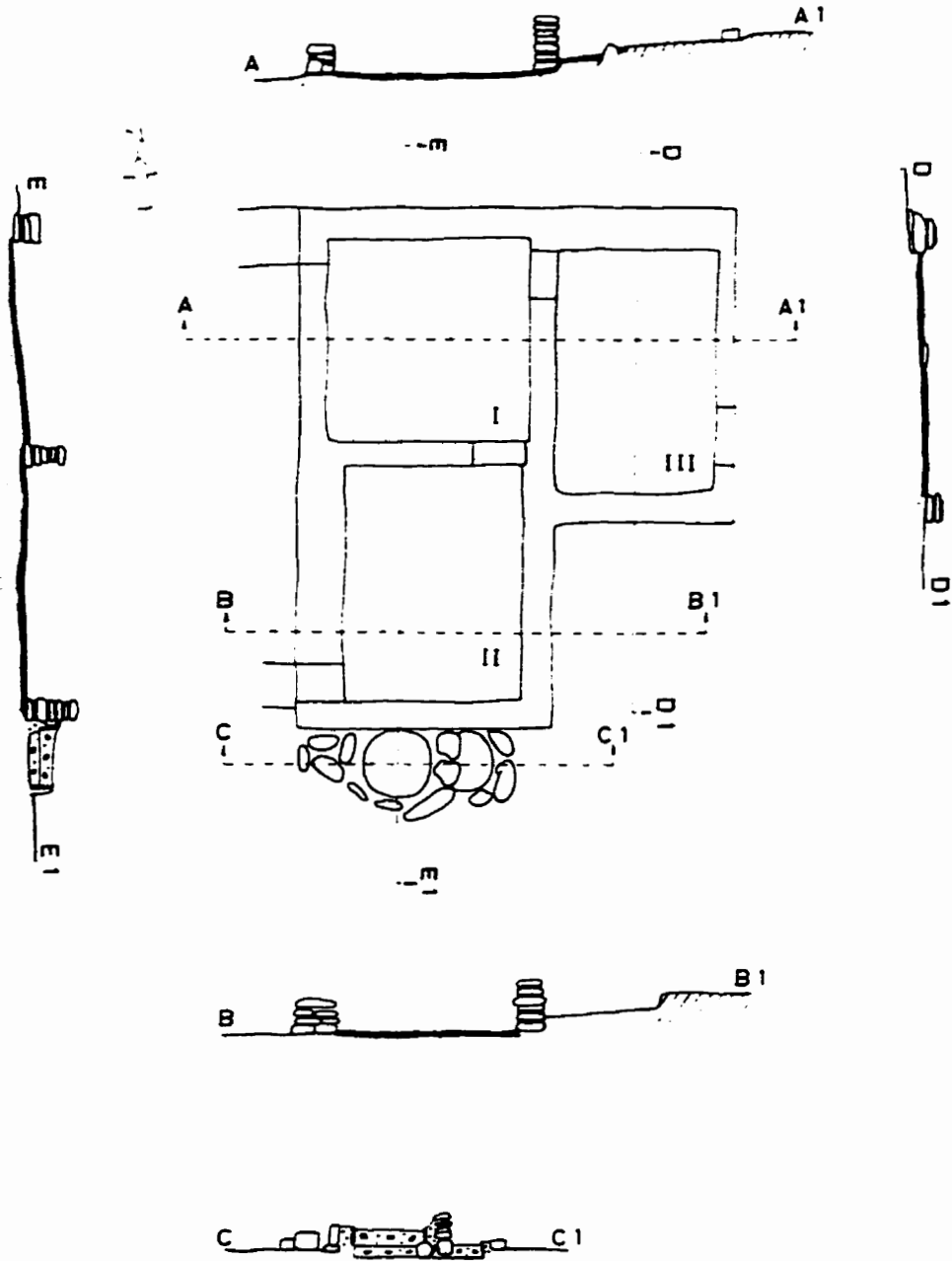


Plate 111 Building at Kashkush (after Gardberg 1970:75).



SITE 339.

0 4 M

⊘ SAND AND COAL  
// ROCK  
— SILT

Plate 112 Top - Settlement at Arukonarti and associated *saqia* remains. Bottom - Settlement at Arukonarti (after Gardberg 1970:80).

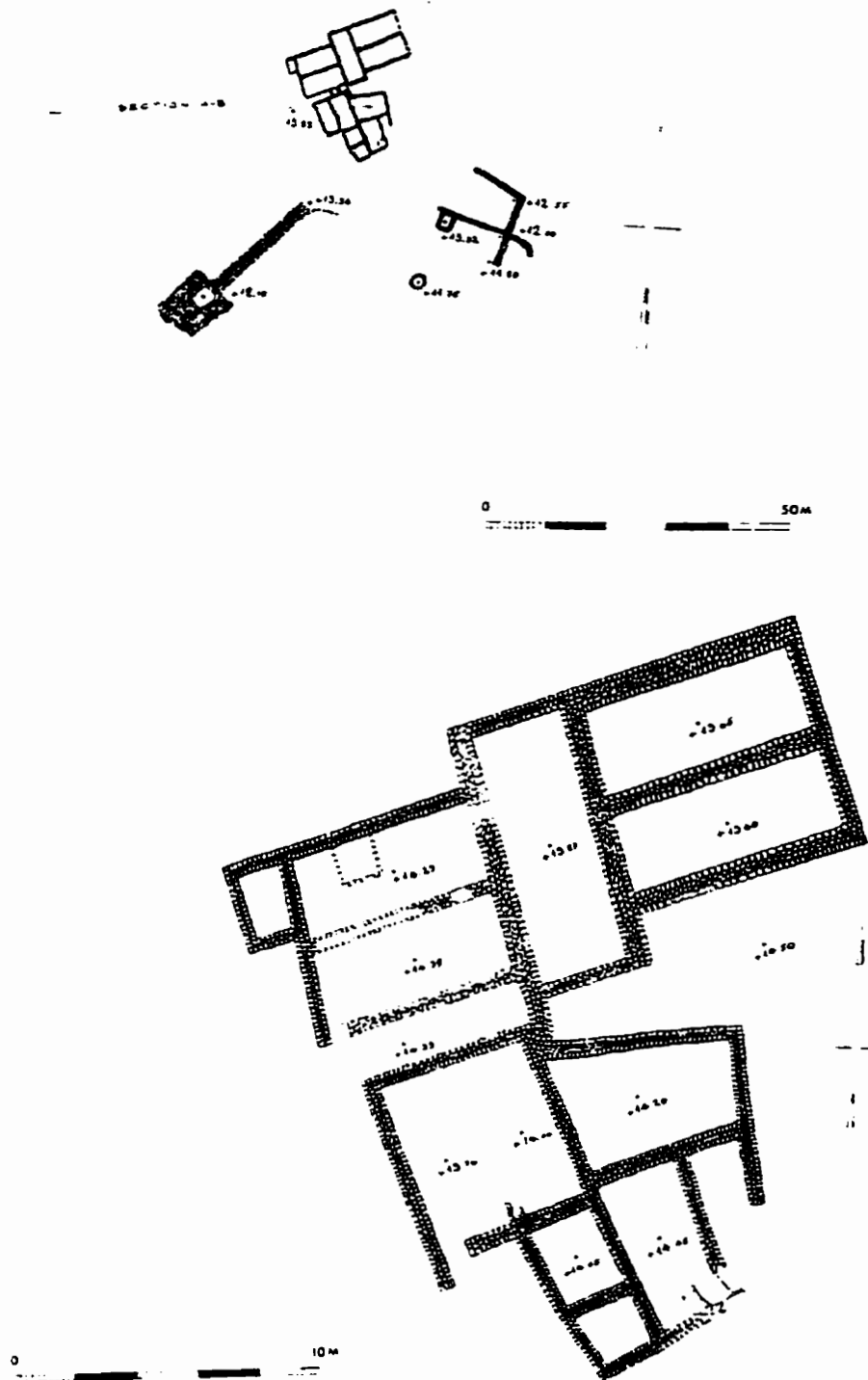
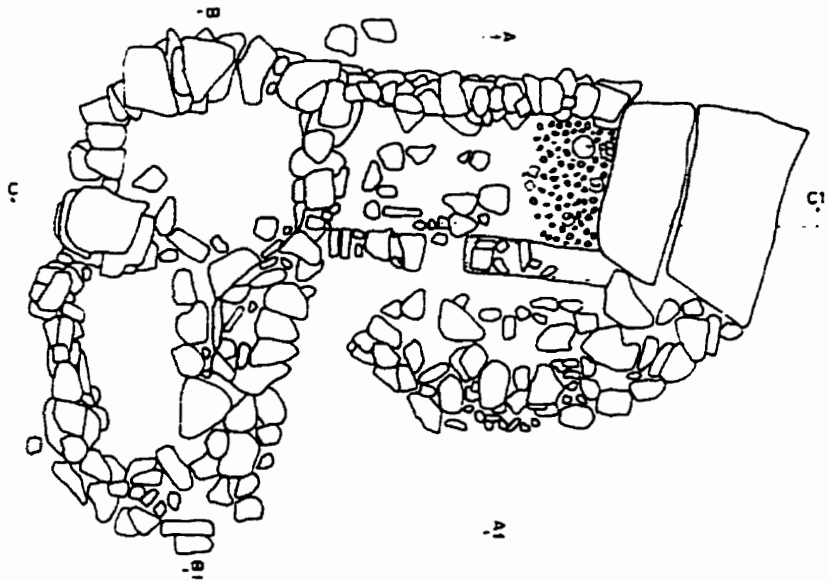


Plate 113 Foundations of an isolated house at Ashkeit I (Gardberg 1970:76).



CLAYPLASTER  
SAND  
SILT

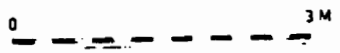




Plate 114 Sketch plan of the fortress at Kassi-Markol in the Abri-Delgo reach (Edwards and Osman 1994a:40).

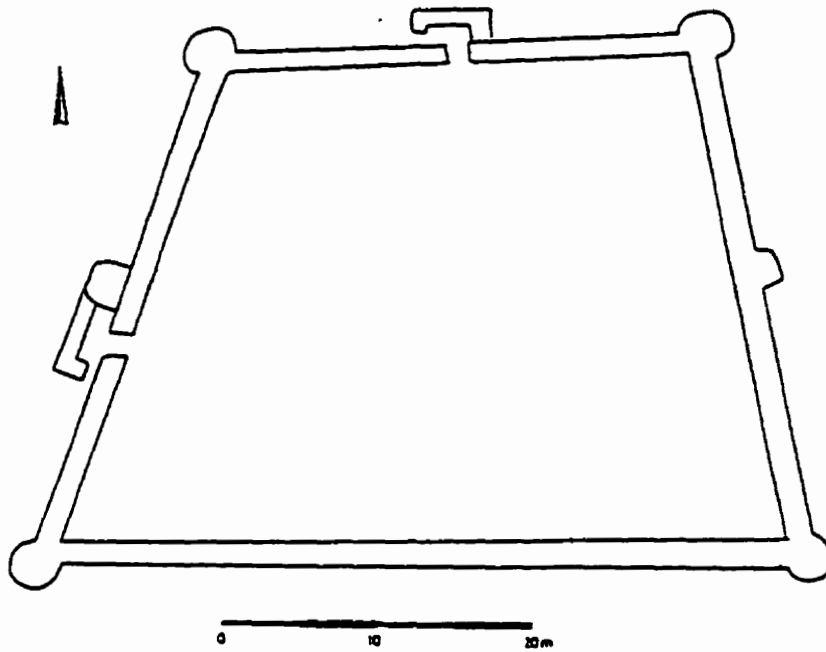


Plate 115 Distribution of Classic Christian structures, including buildings, churches, silos and cemeteries at Toshkei (Vila 1978b:53).

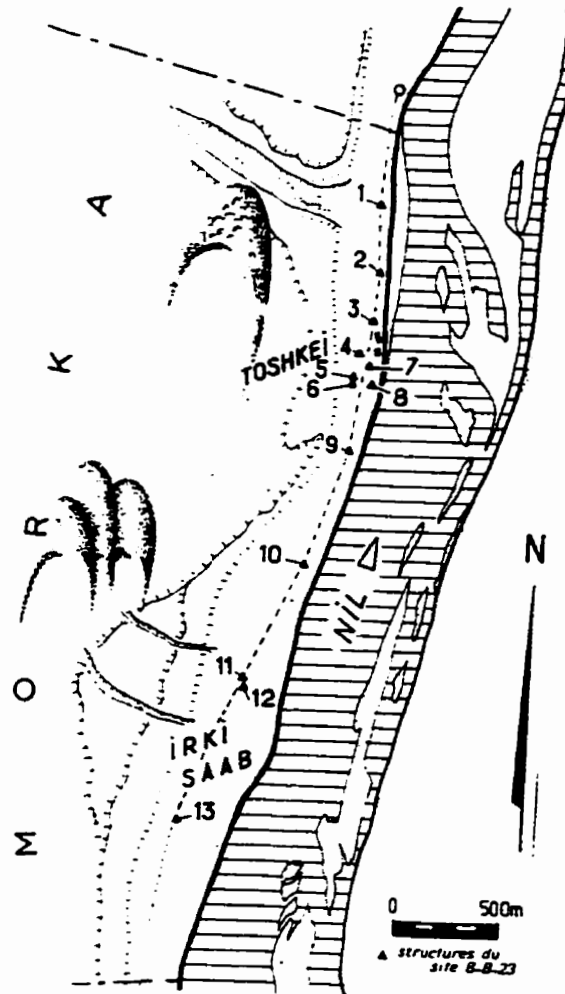


Plate 116 Sketch plan of the Classic Christian settlement at Toshkei (after Vila 1978b:55).

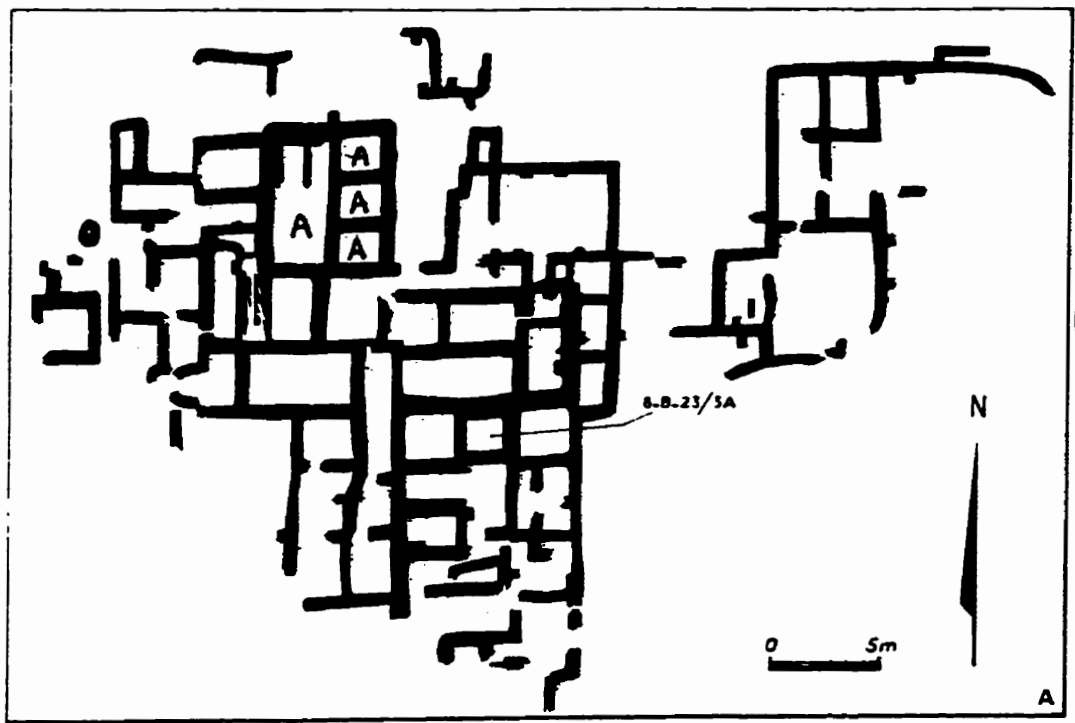


Plate 117 Sketch plan of the ground floor of the two-storey house at Haleeba (after Edwards and Osman 1994a: 55, fig. 9).

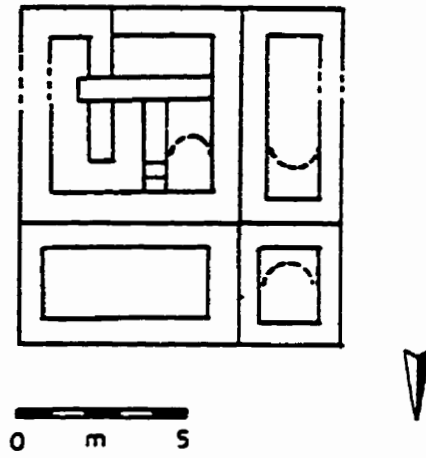


Plate 118 Sketch plan of the fortress at Shofein II (Edwards and Osman 1994a:50).

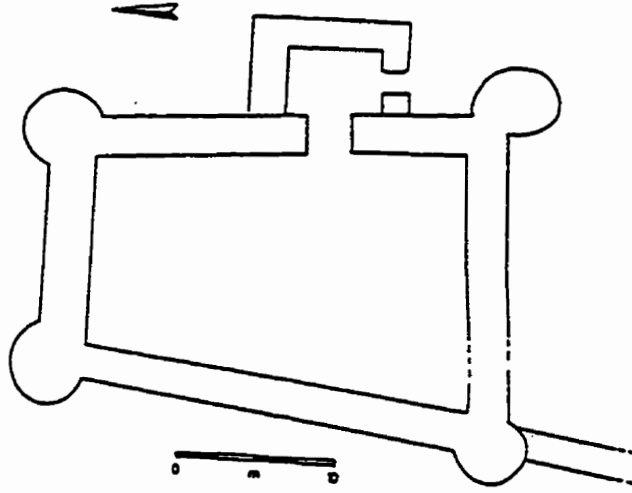


Plate 119 Partial reconstruction of a 'castle house' at Murshid West (Mills and Nordström 1966:13, fig. 5).

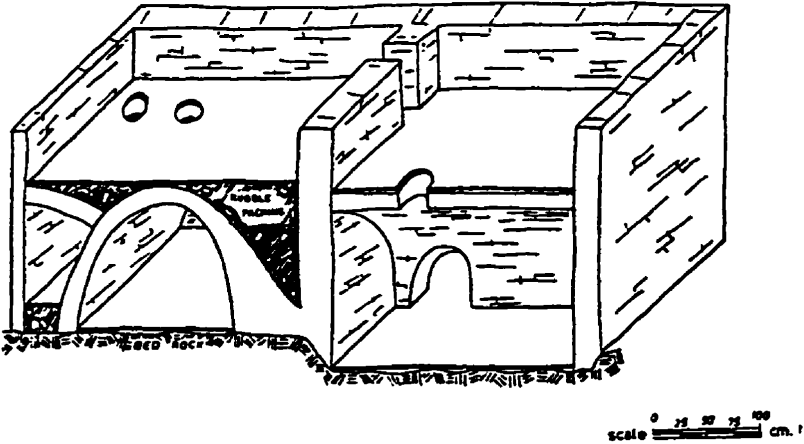


Plate 120 Direction of prevailing winds and the principle direction of sand dune movement across northeast Africa (Vail 1978:30, fig. 8).

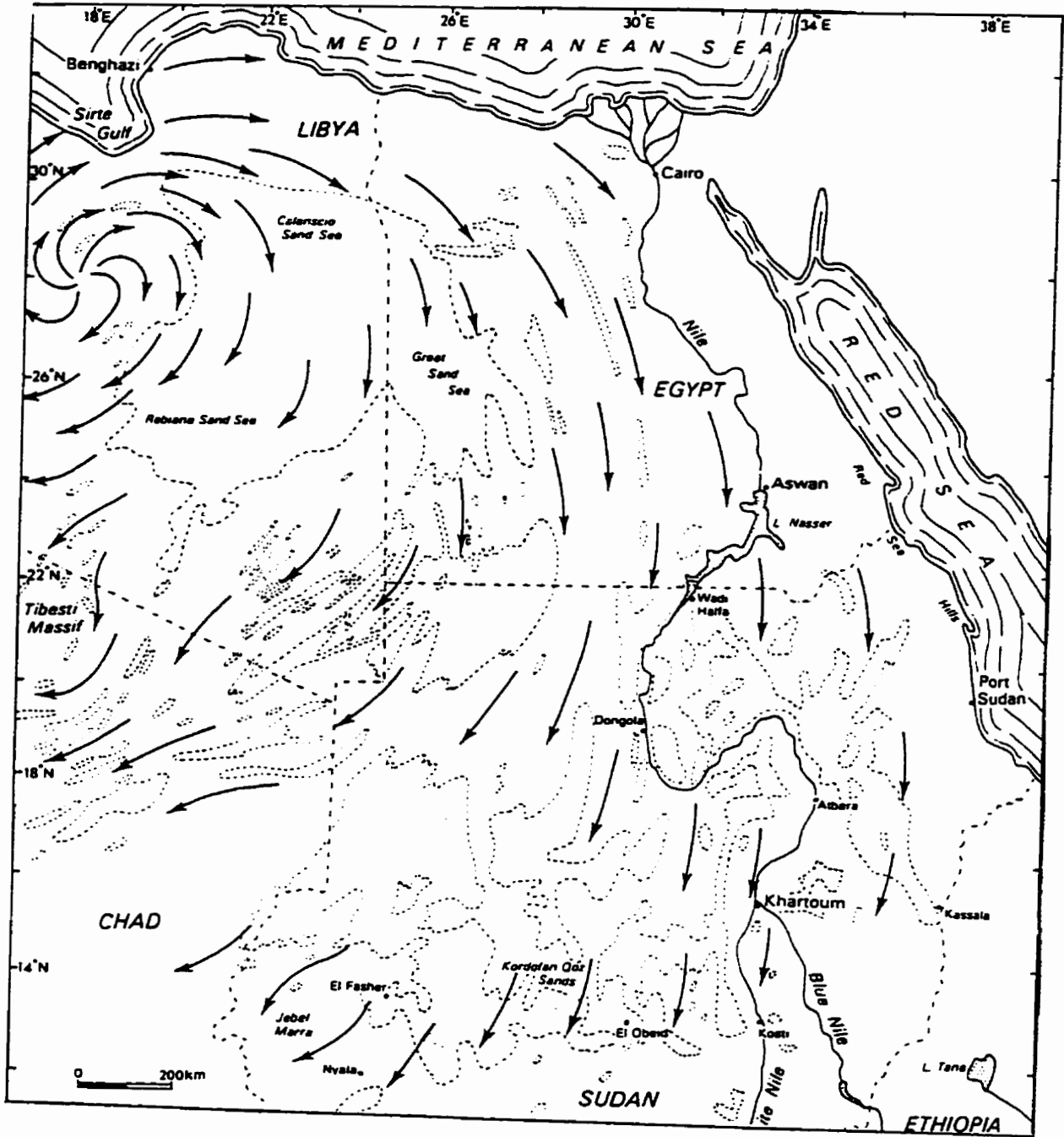


Plate 121 Kulubnarti III (21-S-10), general site plan of Classic and post-Classic buildings (after Adams 1994a:201, map 5.1).

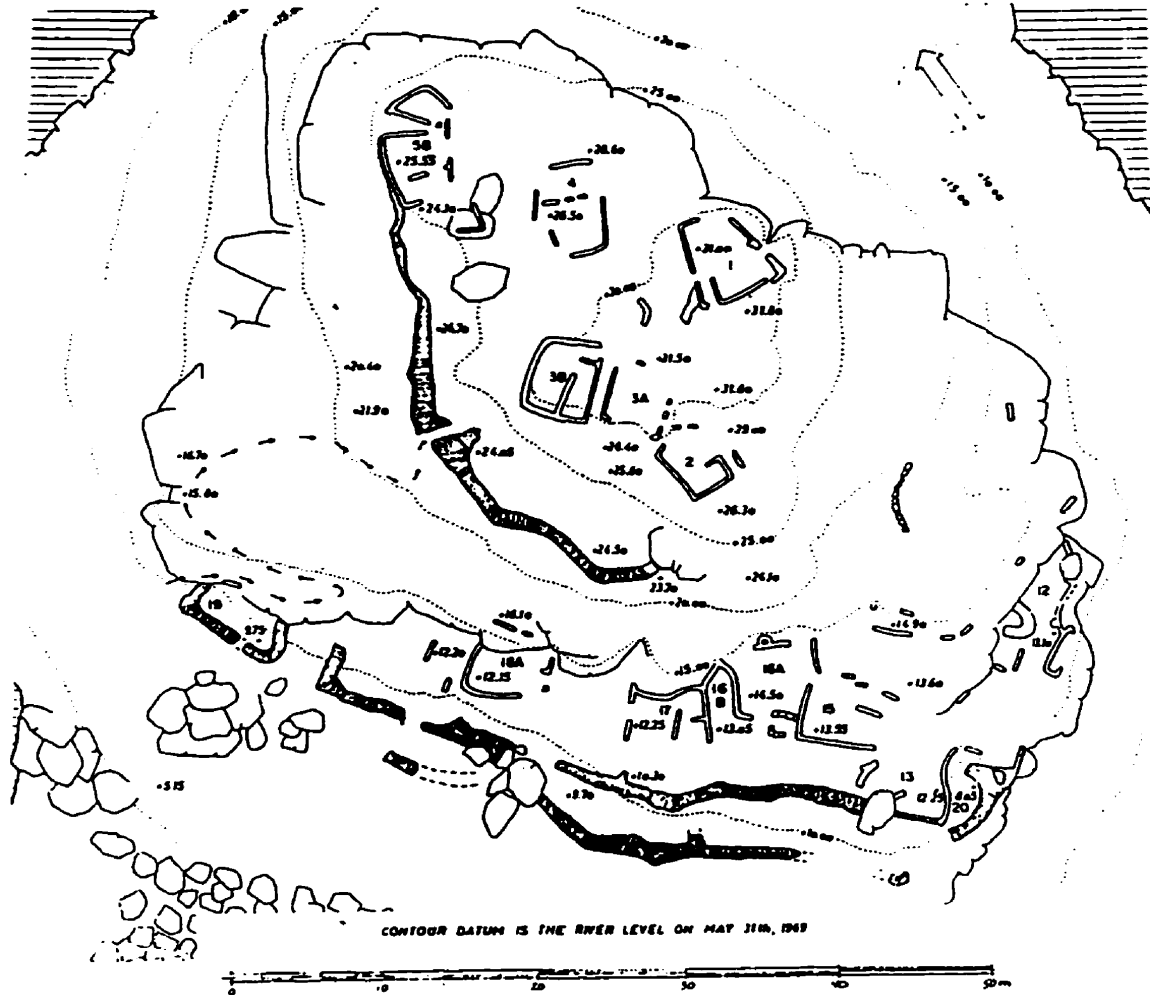




Plate 122 Kulubnarti III (21-S-10), post-Classic structures on terrace D (after Adams 1994a:202, map 5.2).

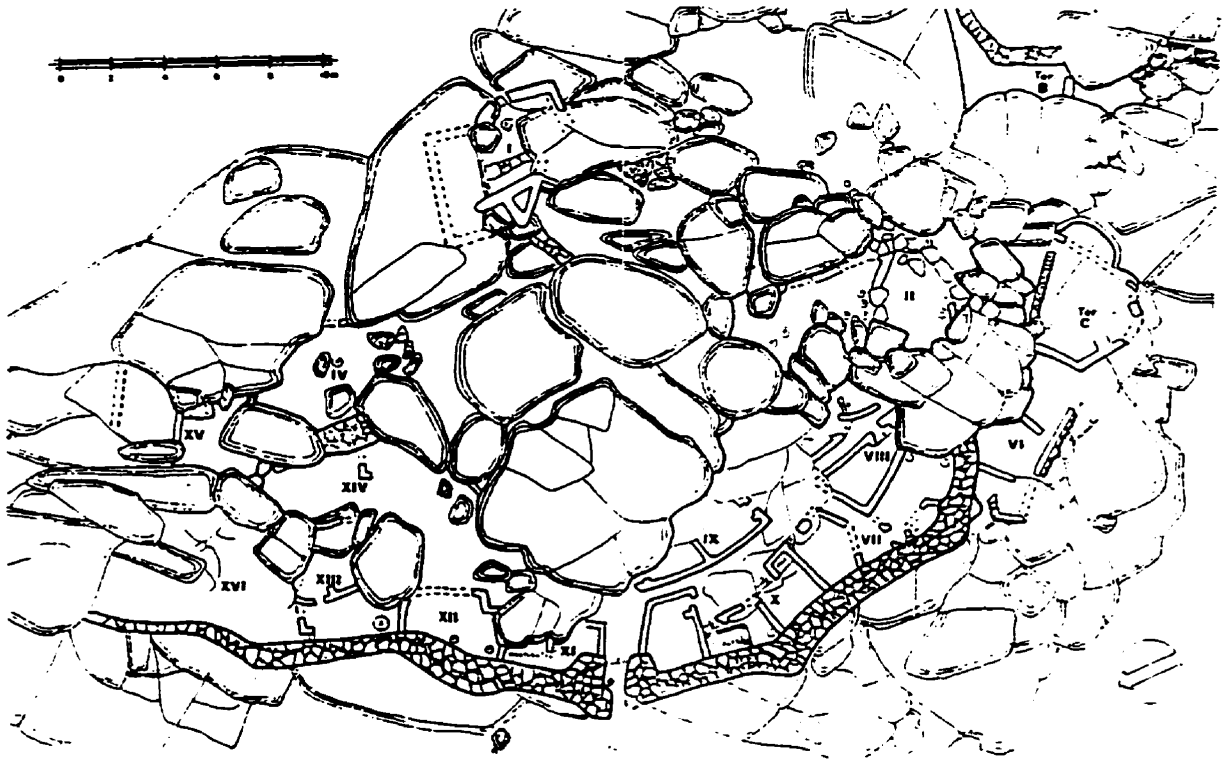


Plate 123 Distribution of cultivated land, Christian settlements and cemeteries in the Lower Nubian districts of Faras and Serra (after Hellström and Langballe 1970:map 1).

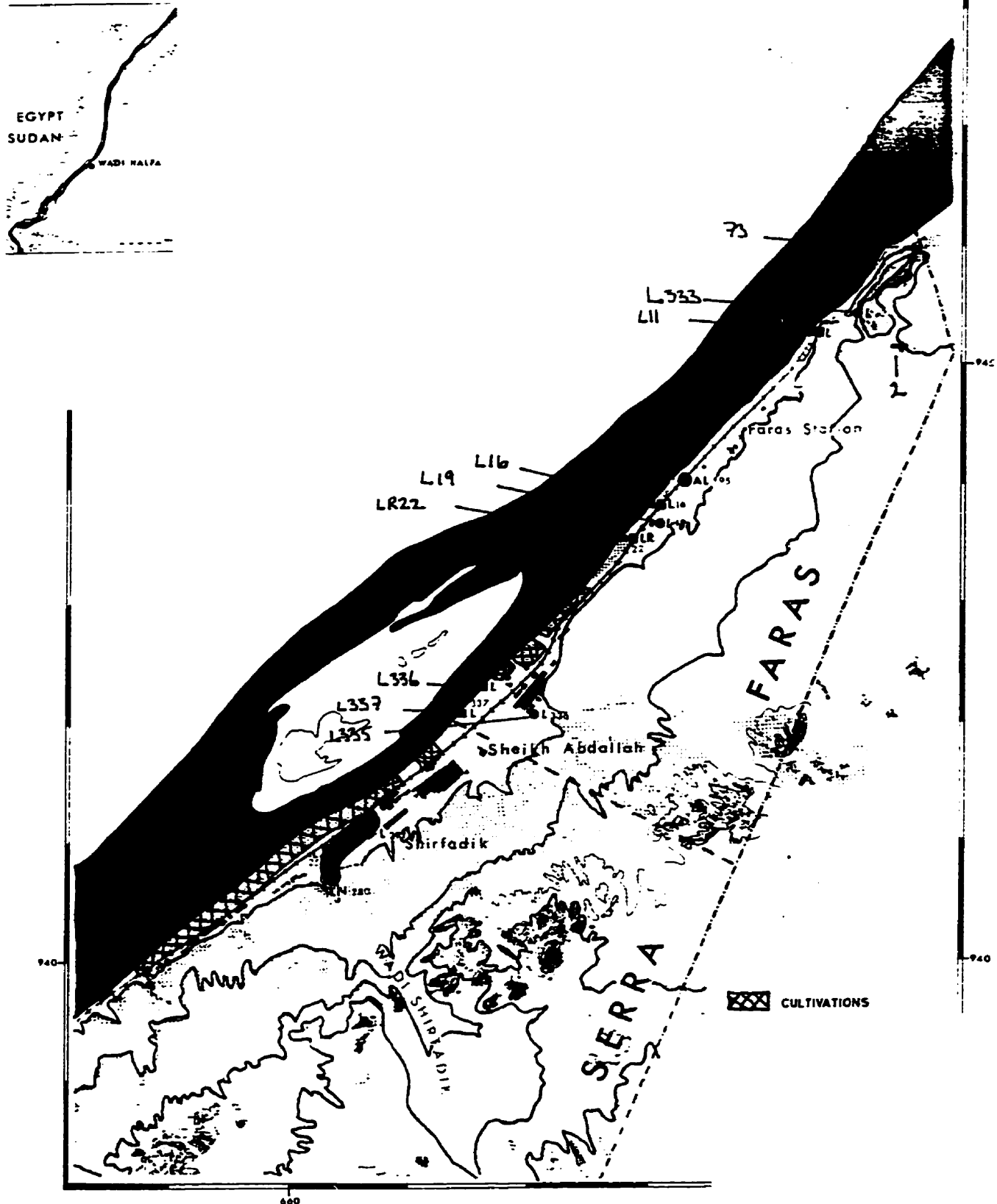


Plate 124 Distribution of cultivated land, Christian settlements and cemeteries in the Lower Nubian districts of Debeira and Ashkeit (after Hellström and Langballe 1970:map 2).

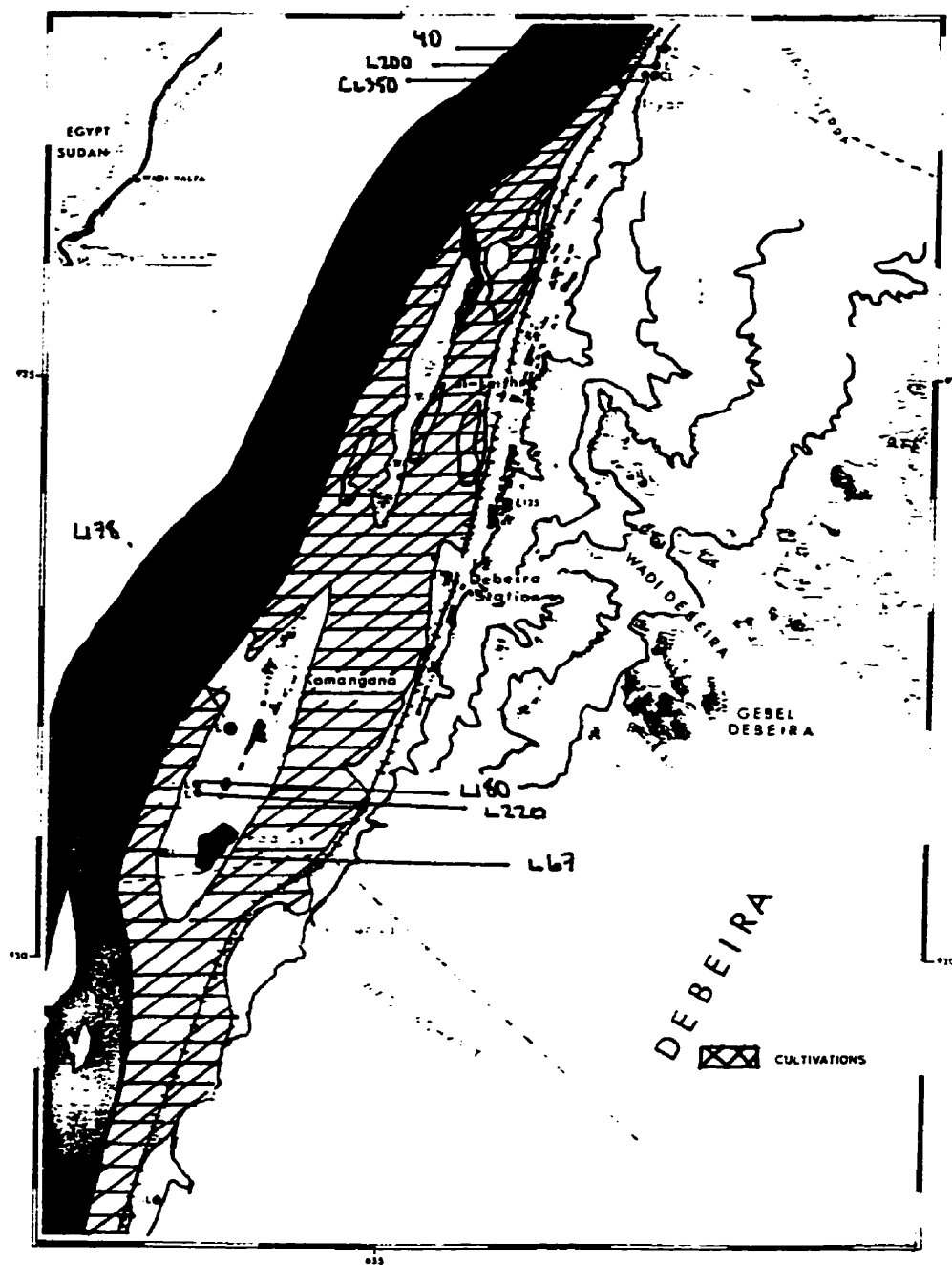


Plate 125 Distribution of cultivated land, Christian settlements and cemeteries in the Lower Nubian districts of Ashkeit and Sahaba (after Hellström and Langballe 1970:map 3).

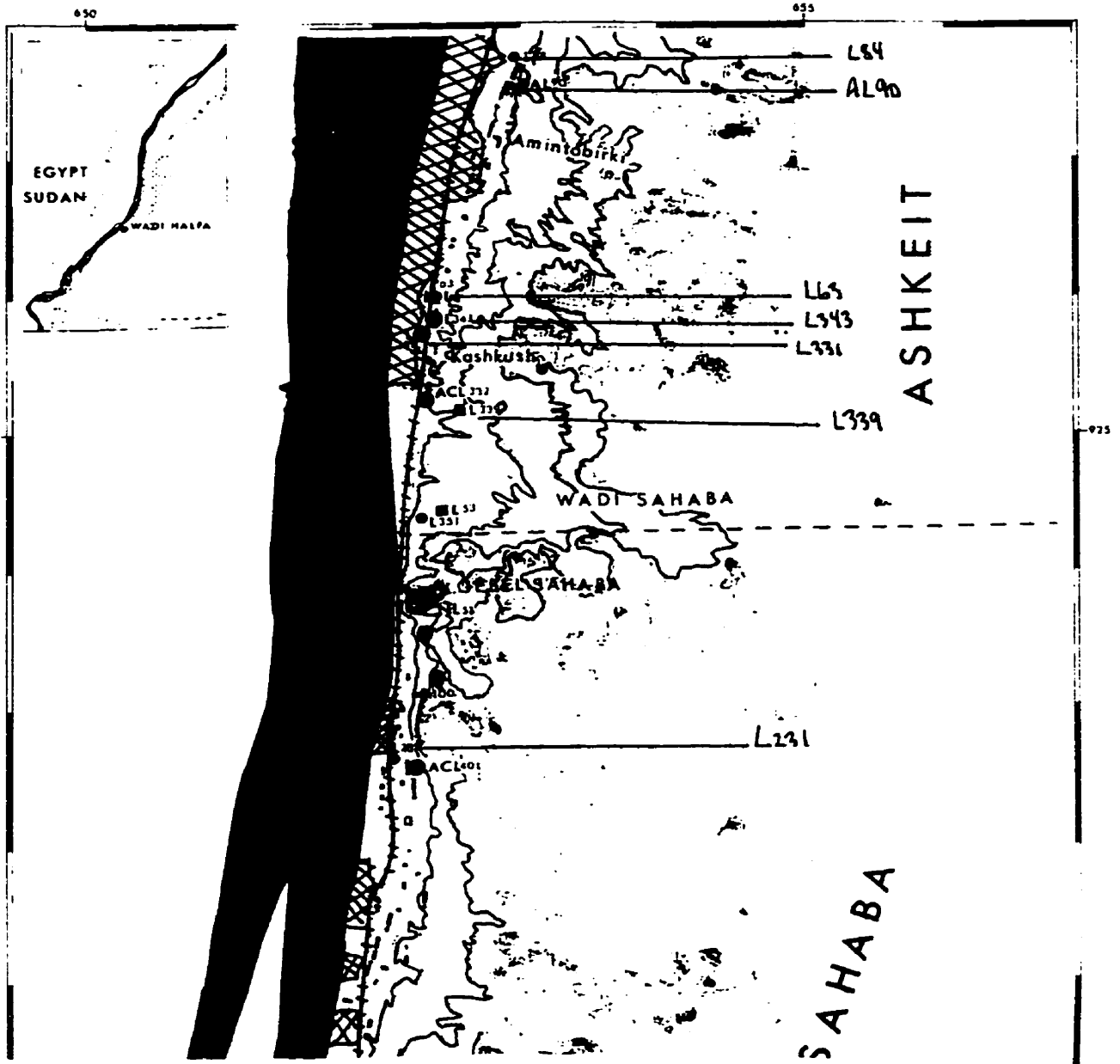


Plate 126 Distribution of cultivated land and the modern villages of Wadi Halfa and Halfa Degheim (after Hellström and Langballe 1970:map 4).

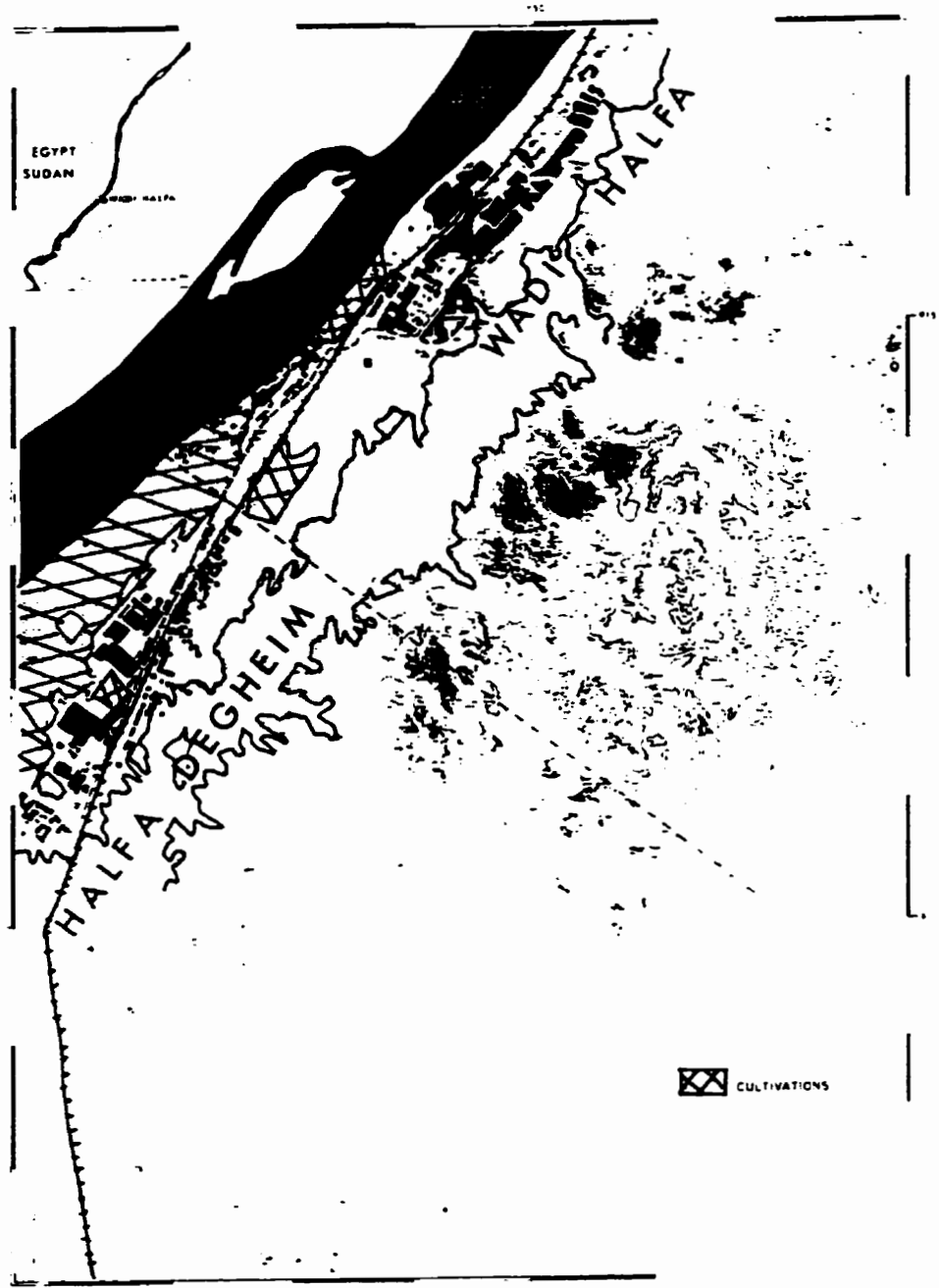


Plate 127 Distribution of modern house types in the Sudan. Rectilinear mud buildings were found in the north and round thatch structures in the south. Both types were found south of Shendi into the Gezeira (after Lee 1969b:394, fig.1).

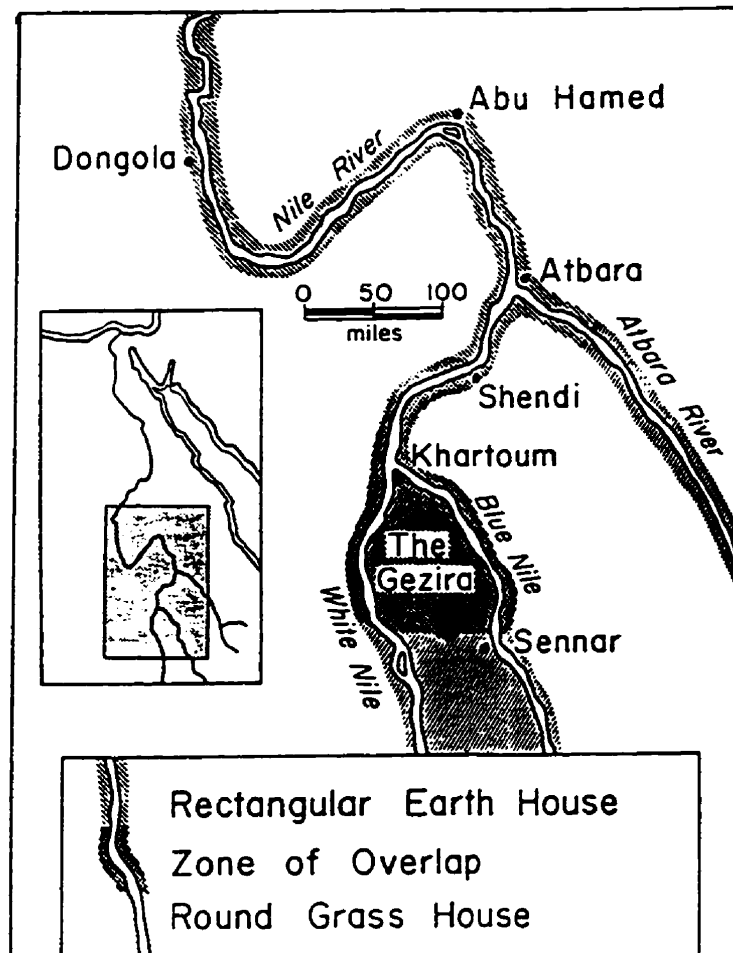


Plate 128 Climatic zones of the Sudan. D = desert, A = arid, S = semiarid, M = monsoon, H = highland (after Van Noordwijk 1984:30).

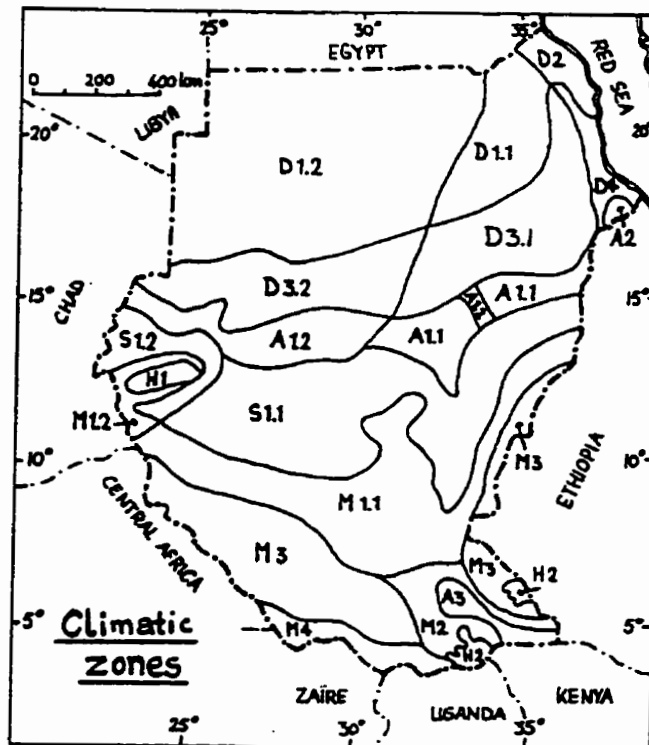
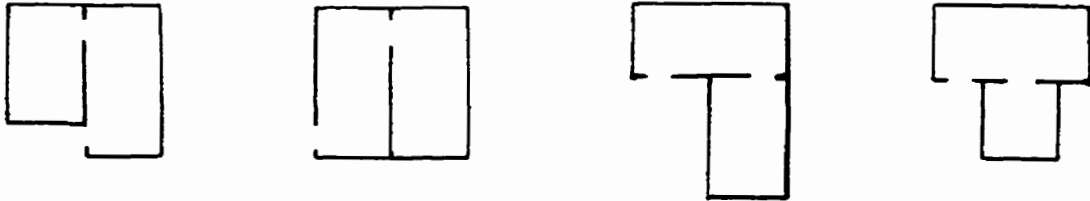


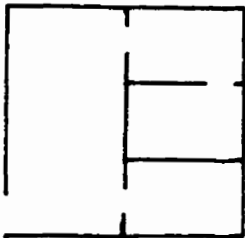
Plate 129 Idealized ground plans of Early Christian 'double houses' and Classic Christian 'unit houses' - (not drawn to scale).

Early Christian 'double houses' - variations in plan.

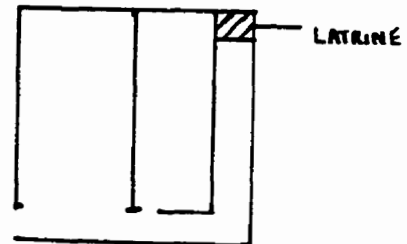


Classic Christian 'unit houses'.

TYPE 1

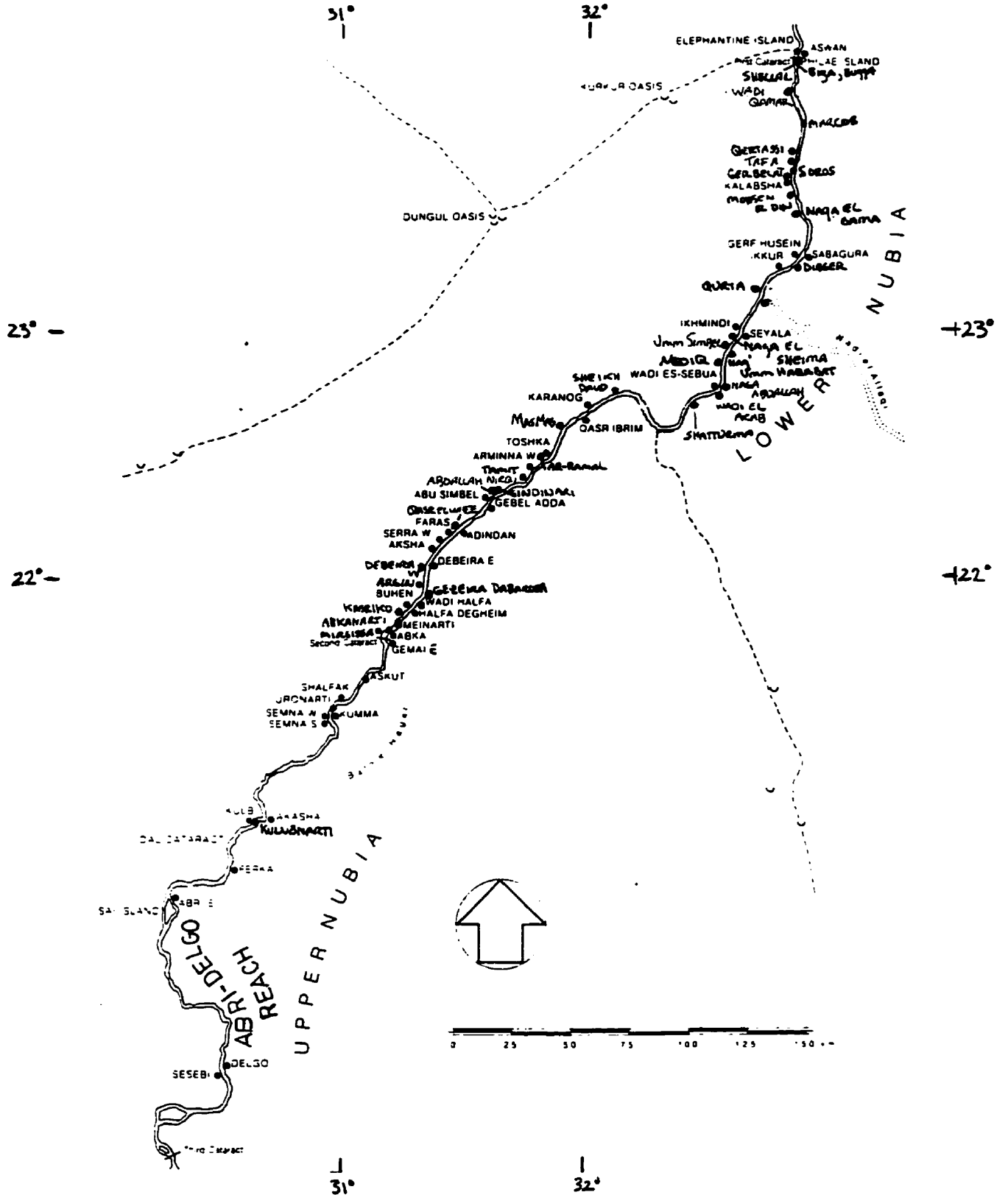


TYPE 2

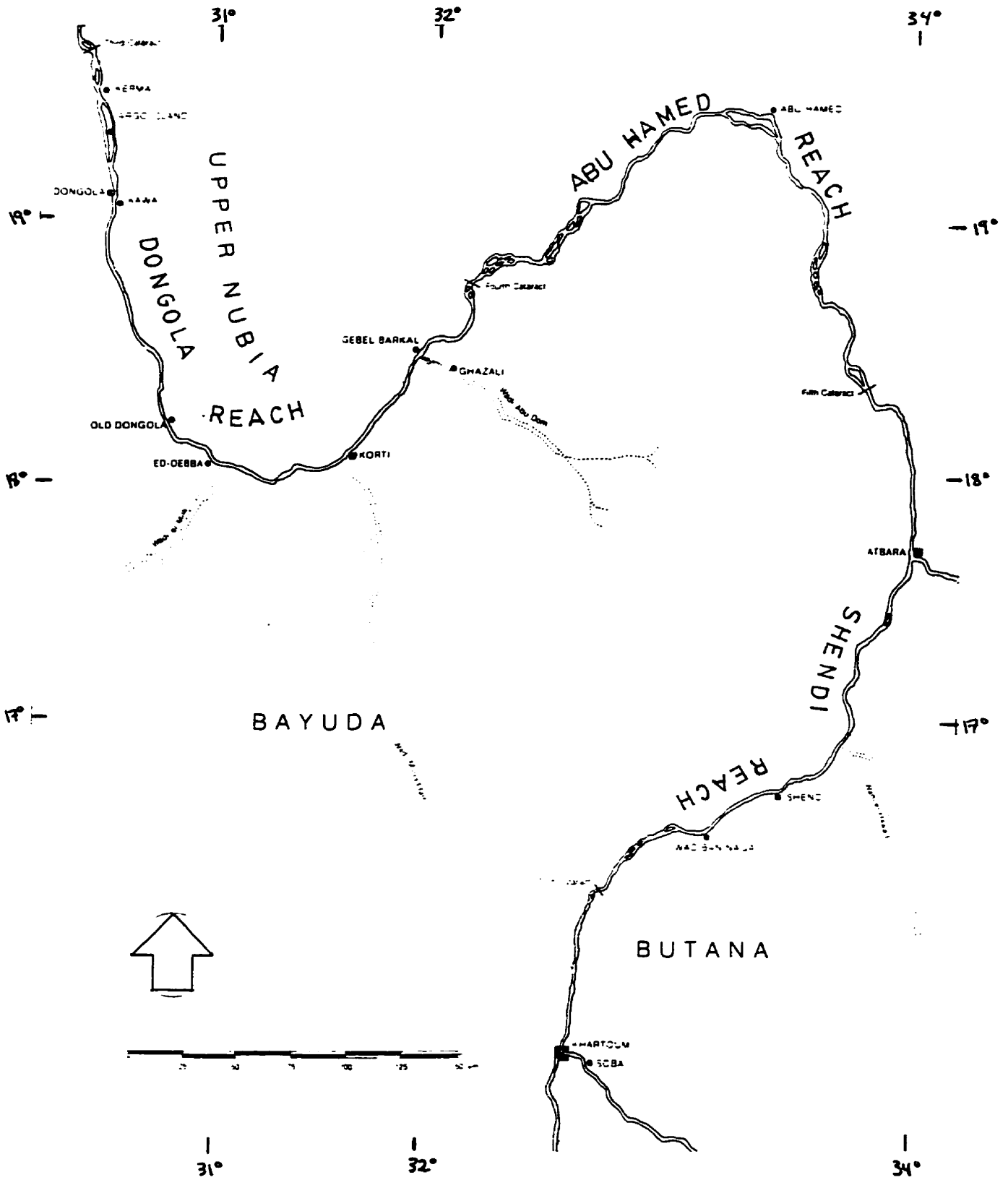




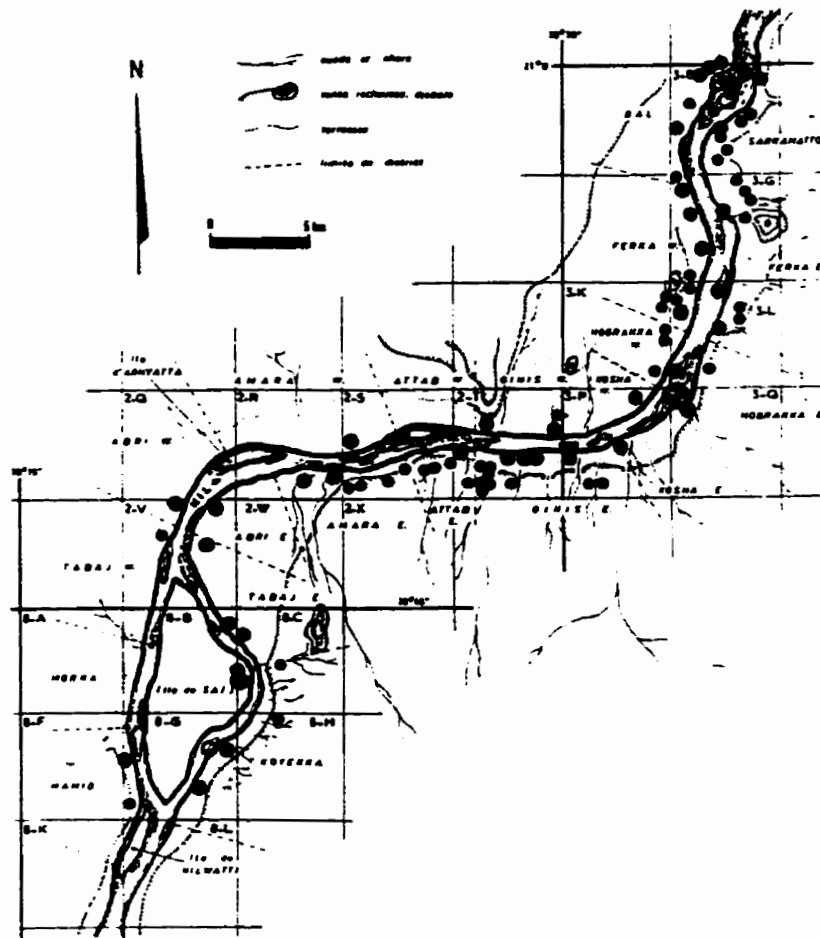
Map 1. Lower Nubia and the *Batn el Hajar* (after The Brooklyn Museum 1978:map 2).



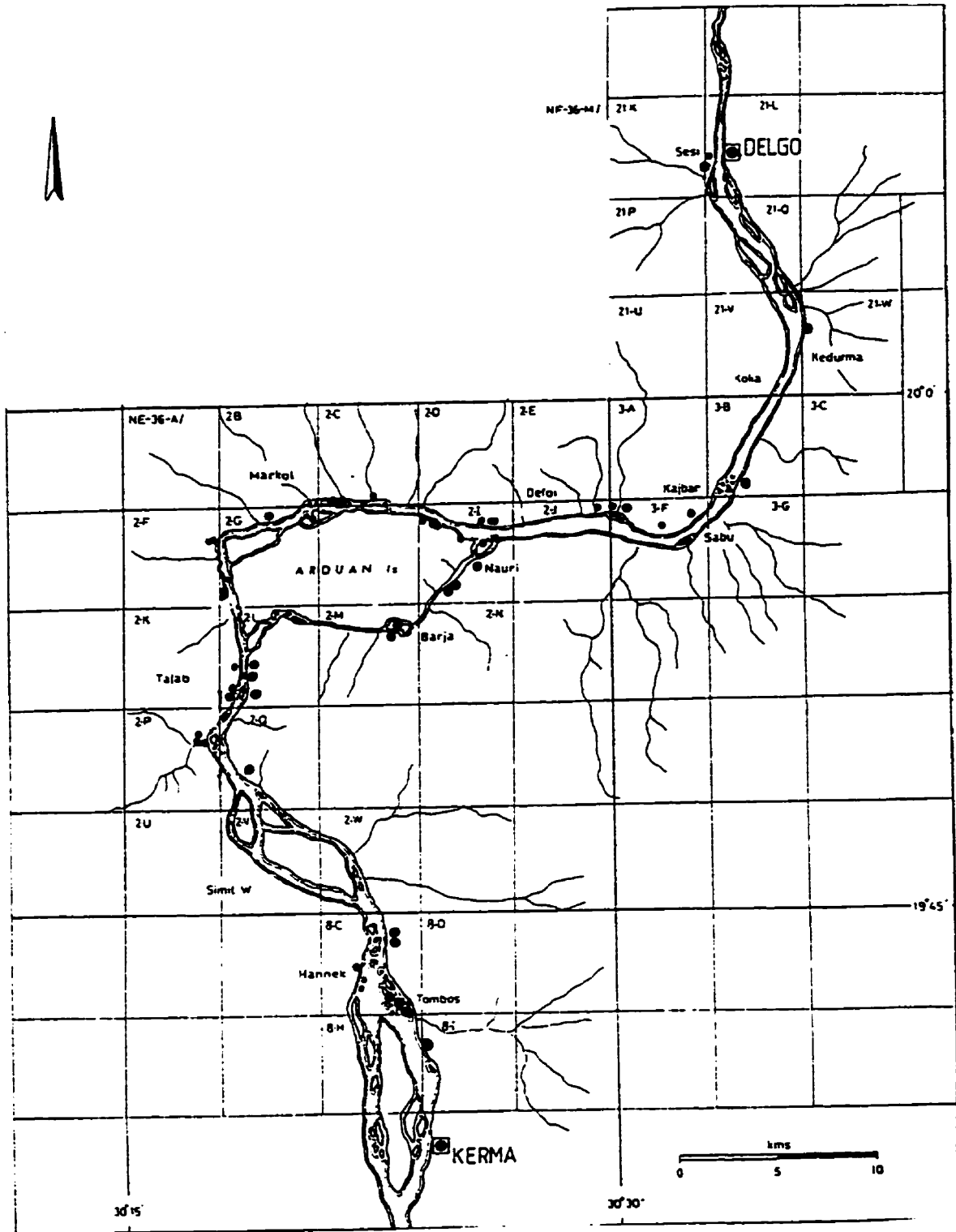
Map 2. Upper Nubia and the Northern Sudan (after The Brooklyn Museum 1978:map 3).



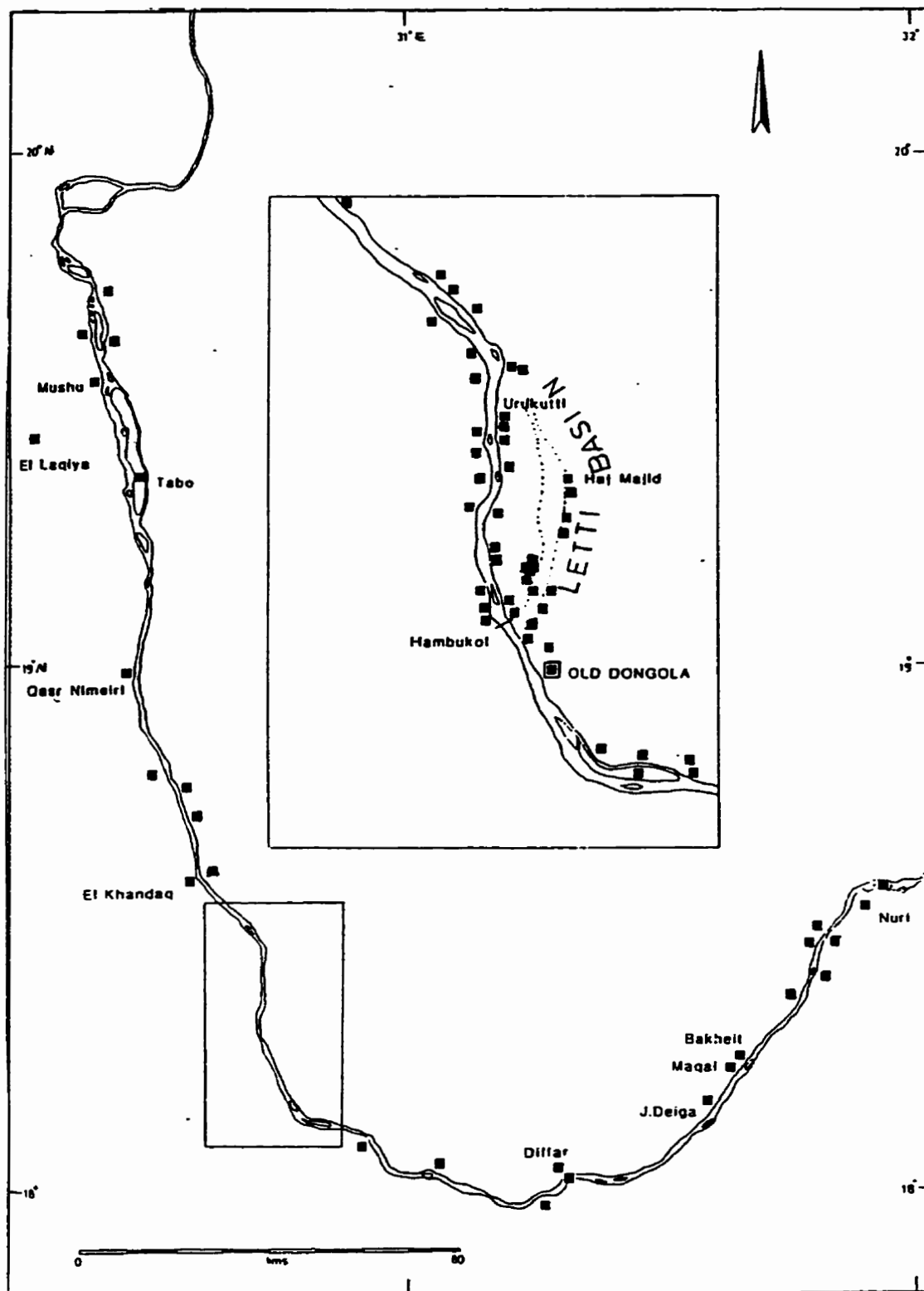
Map 3. Sites in the Abri-Delgo Reach, south of the Dal Cataract (after Vila 1979: figs. 16-18).



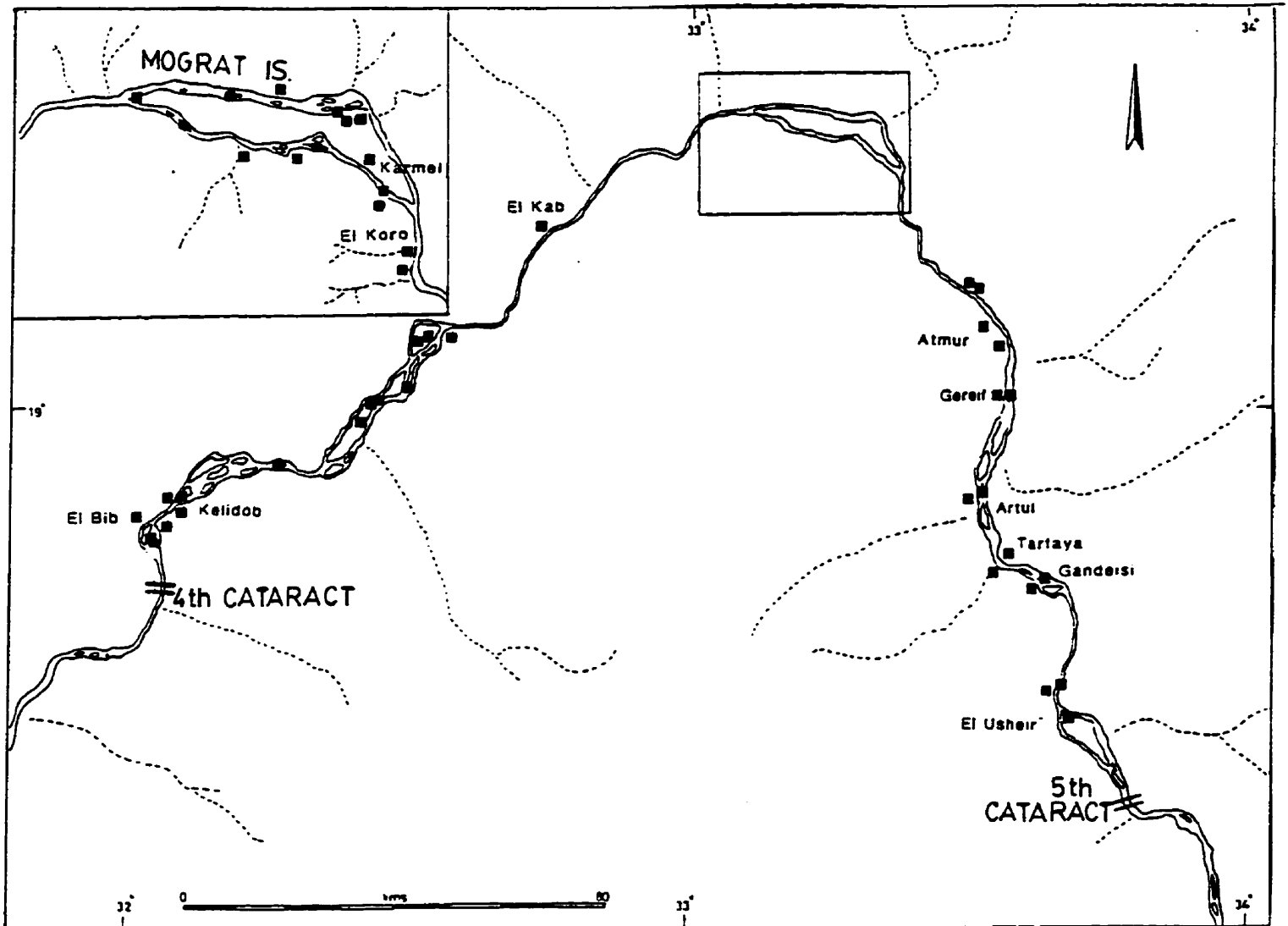
Map 4. Sites in the Abri-Delgo Reach. Mahas region (after Edwards and Osman 1992:fig. 1).



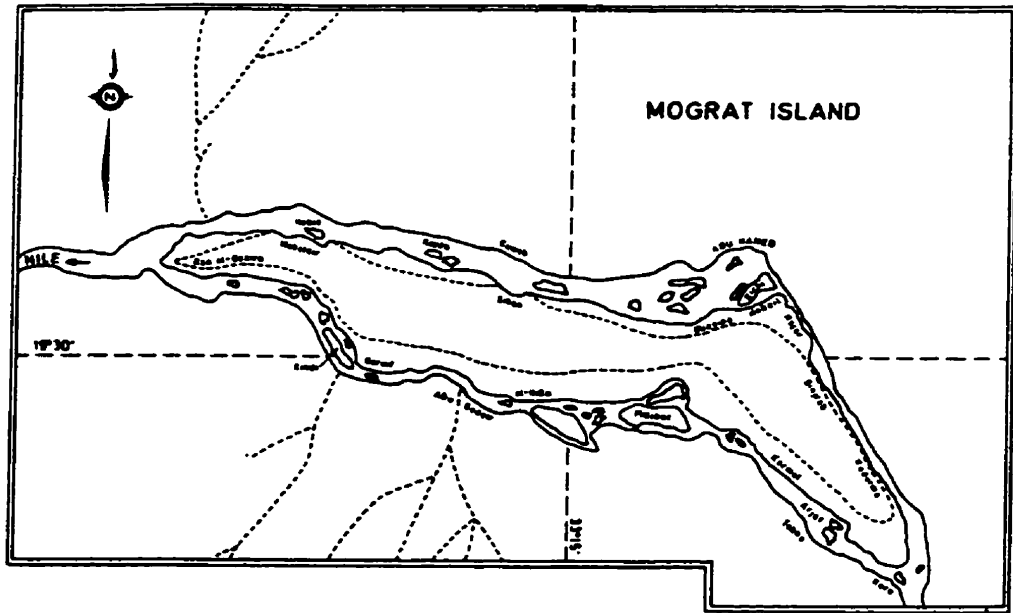
Map 5. Sites in the Dongola Reach (after Edwards 1989:fig. 25).



Map 6 Sites in the Abu Hamed Reach (after Edwards 1989: fig.26).

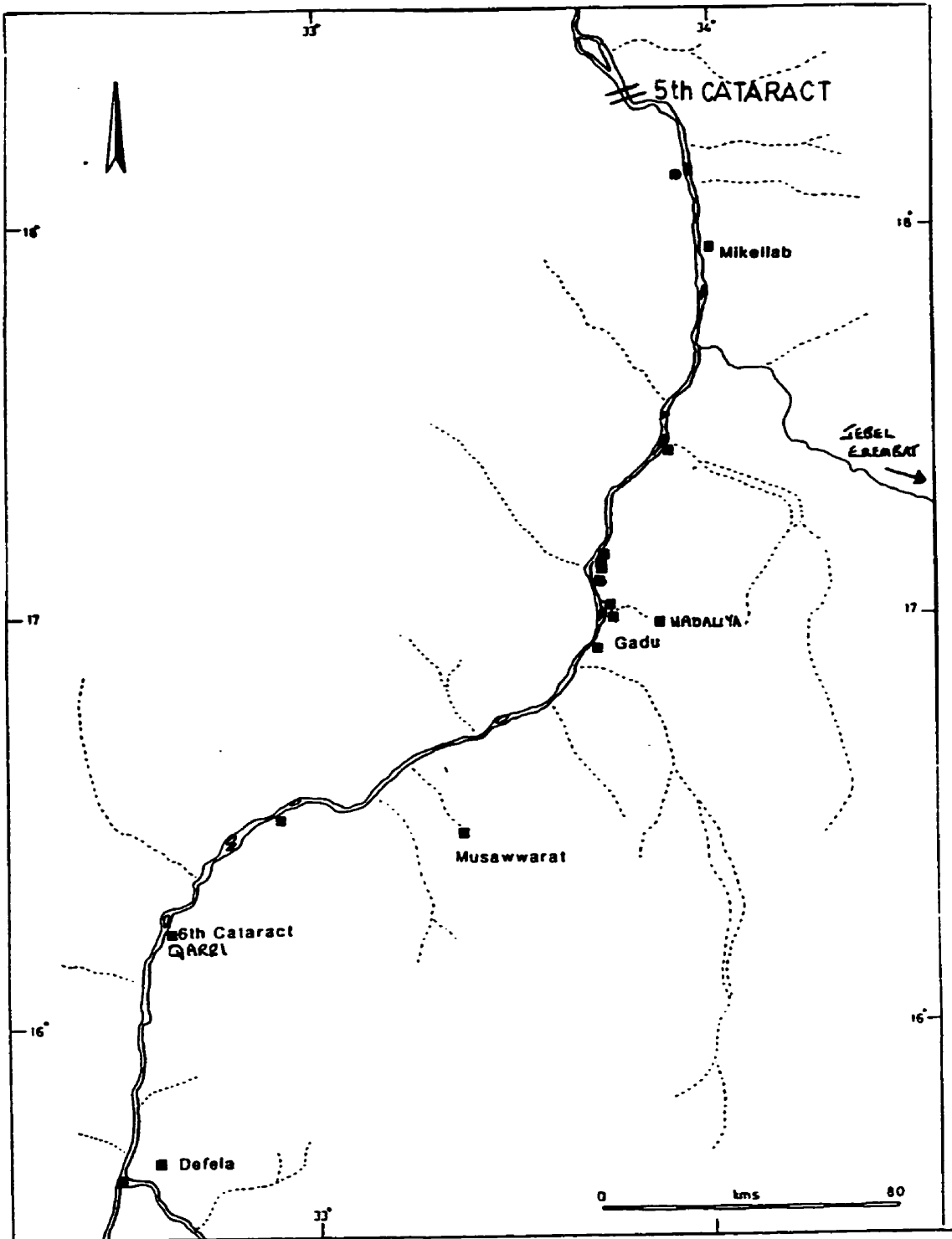


Map 7. Detail of the districts on Mograt Island, Abu Hamed Reach (Abbas Sid Ahmed 1971:map 1).



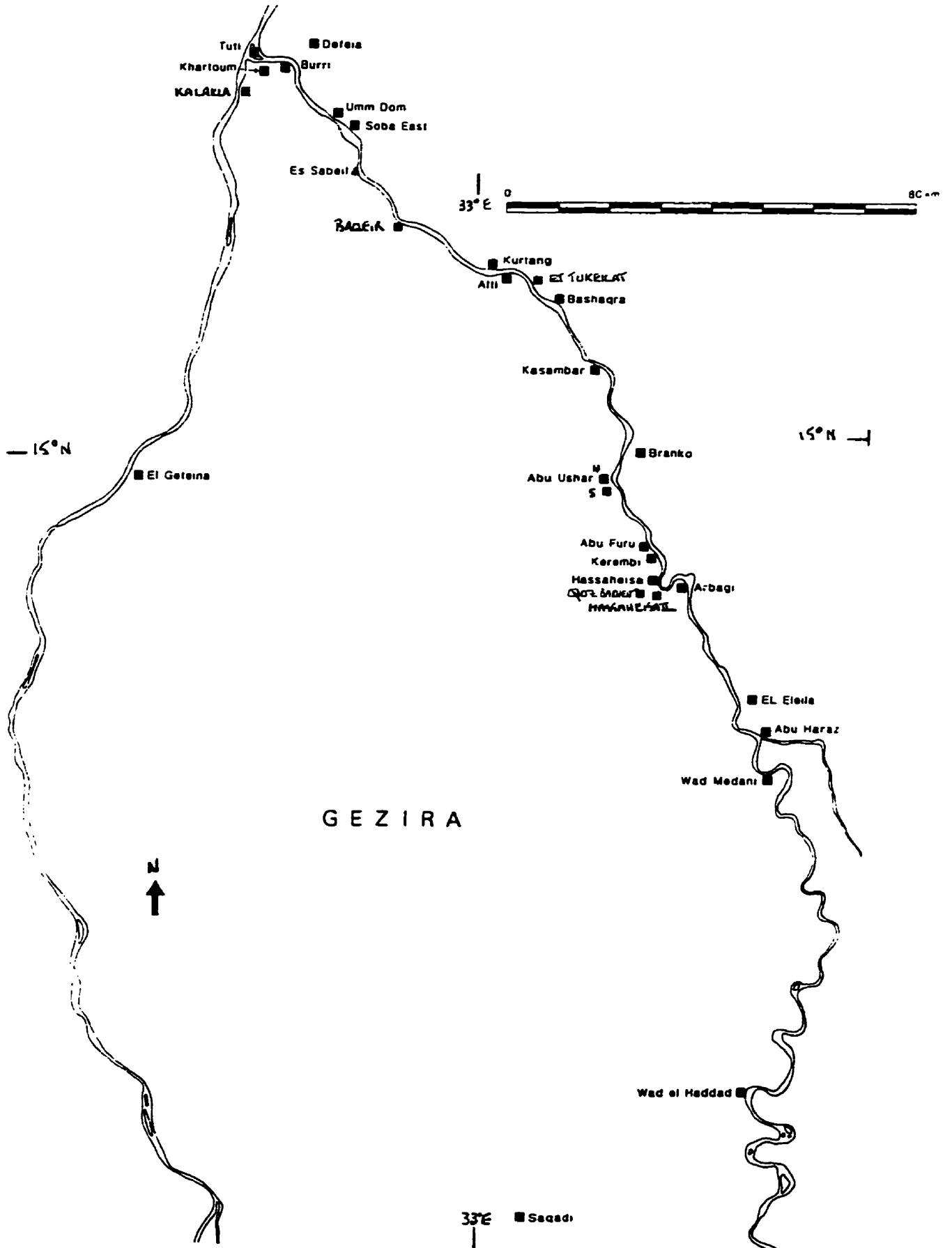
Scale app. 1:250,000

Map 8. Sites in the Shendi Reach and the Butana (after Edwards 1989: fig. 27).

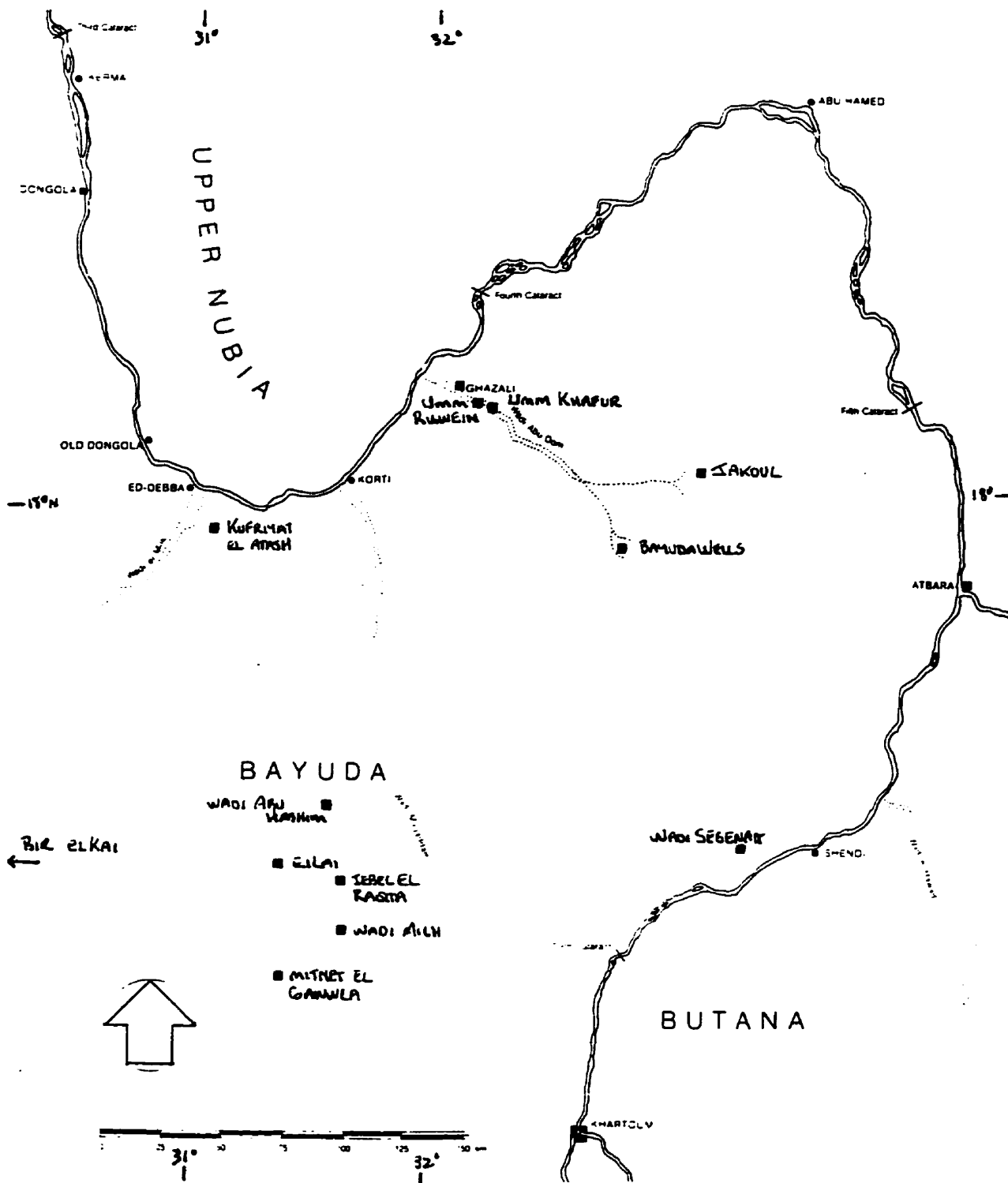




Map 9. Sites in the Gezira (after Welsby and Daniels 1991:fig. 3).

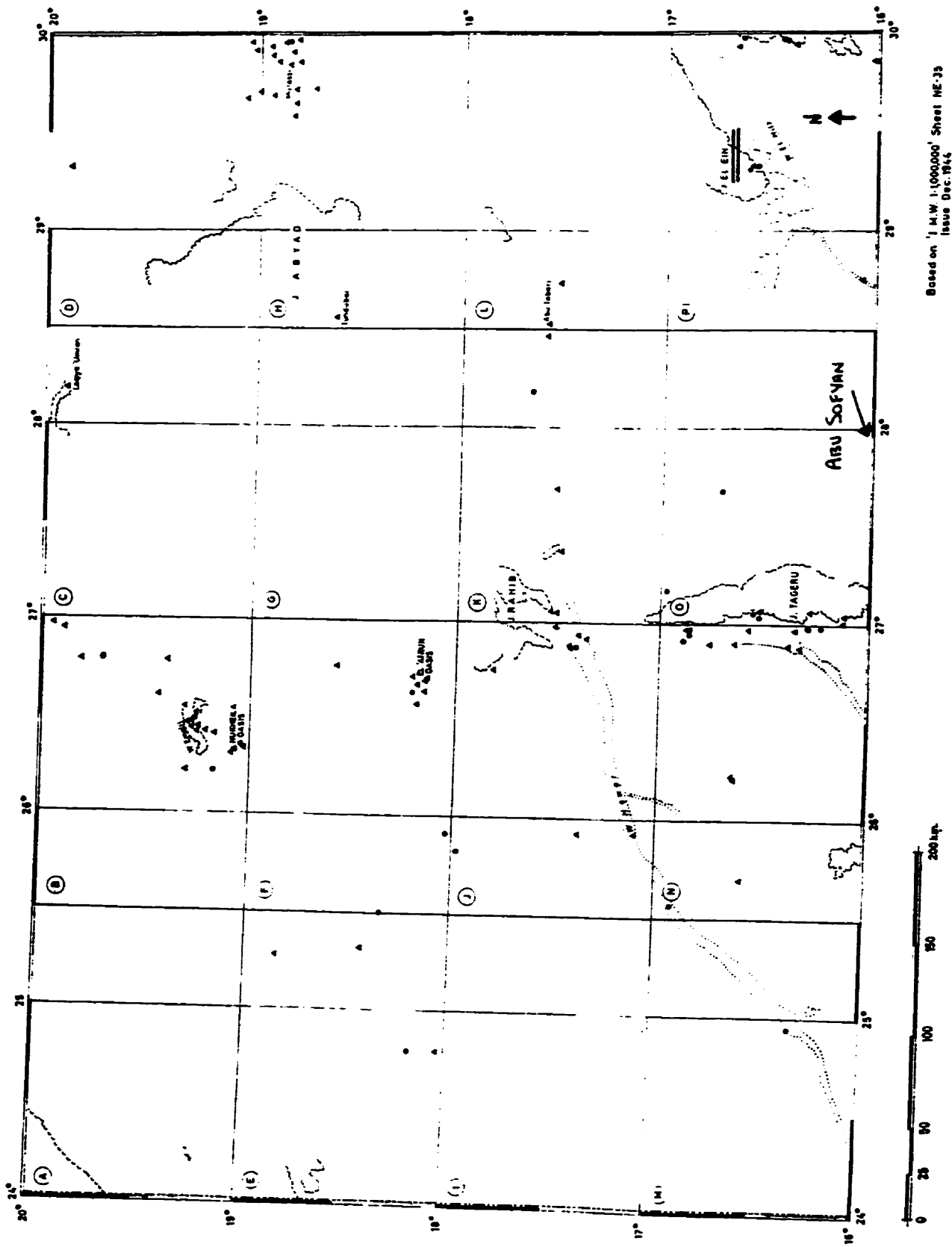


Map 10. Sites in the Bayuda (after The Brooklyn Museum 1978:map 3; Edwards 1989:fig. 16).



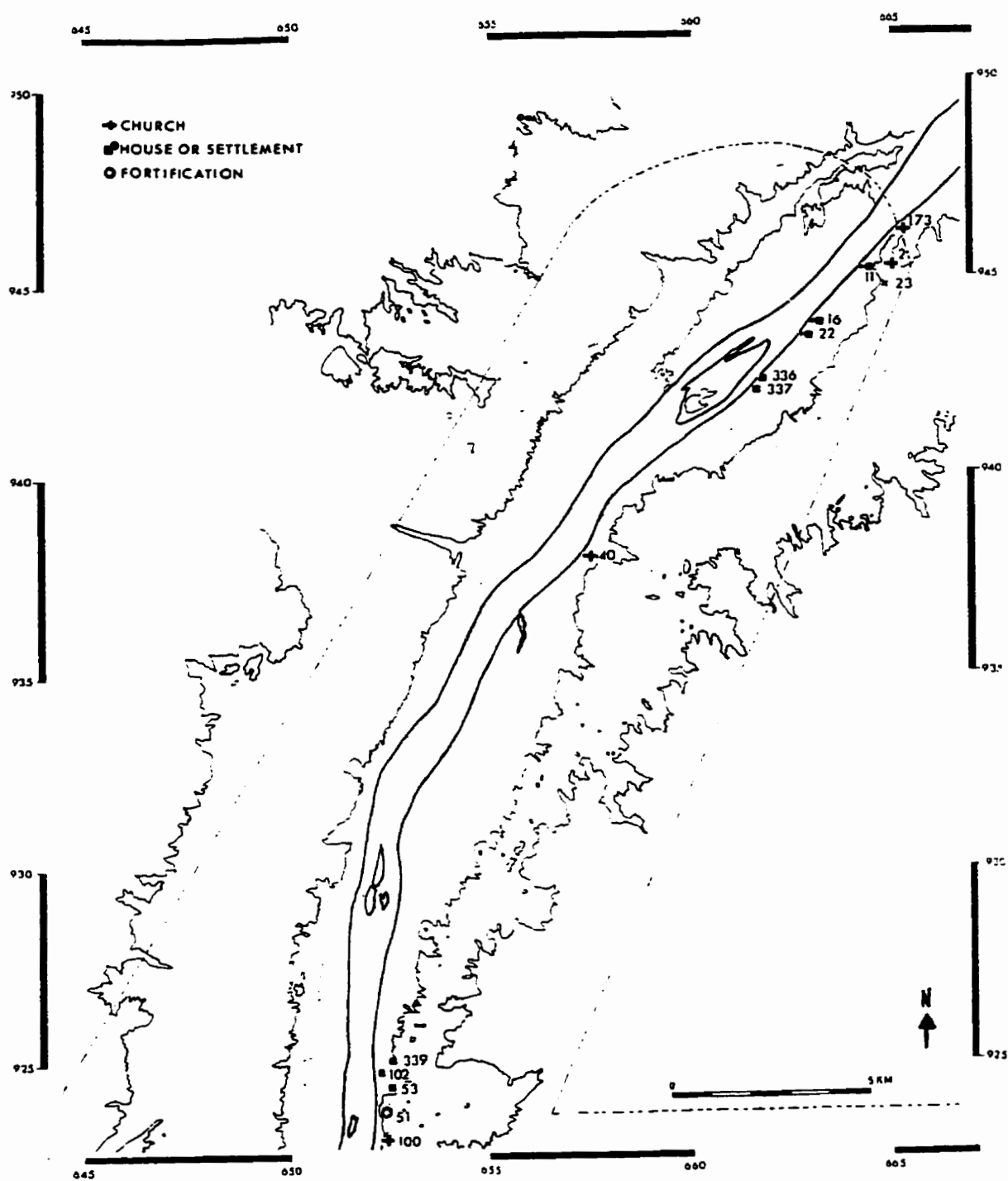


Map 12. Sites in the Libyan Desert (after Hinkel 1979:map NE-35).

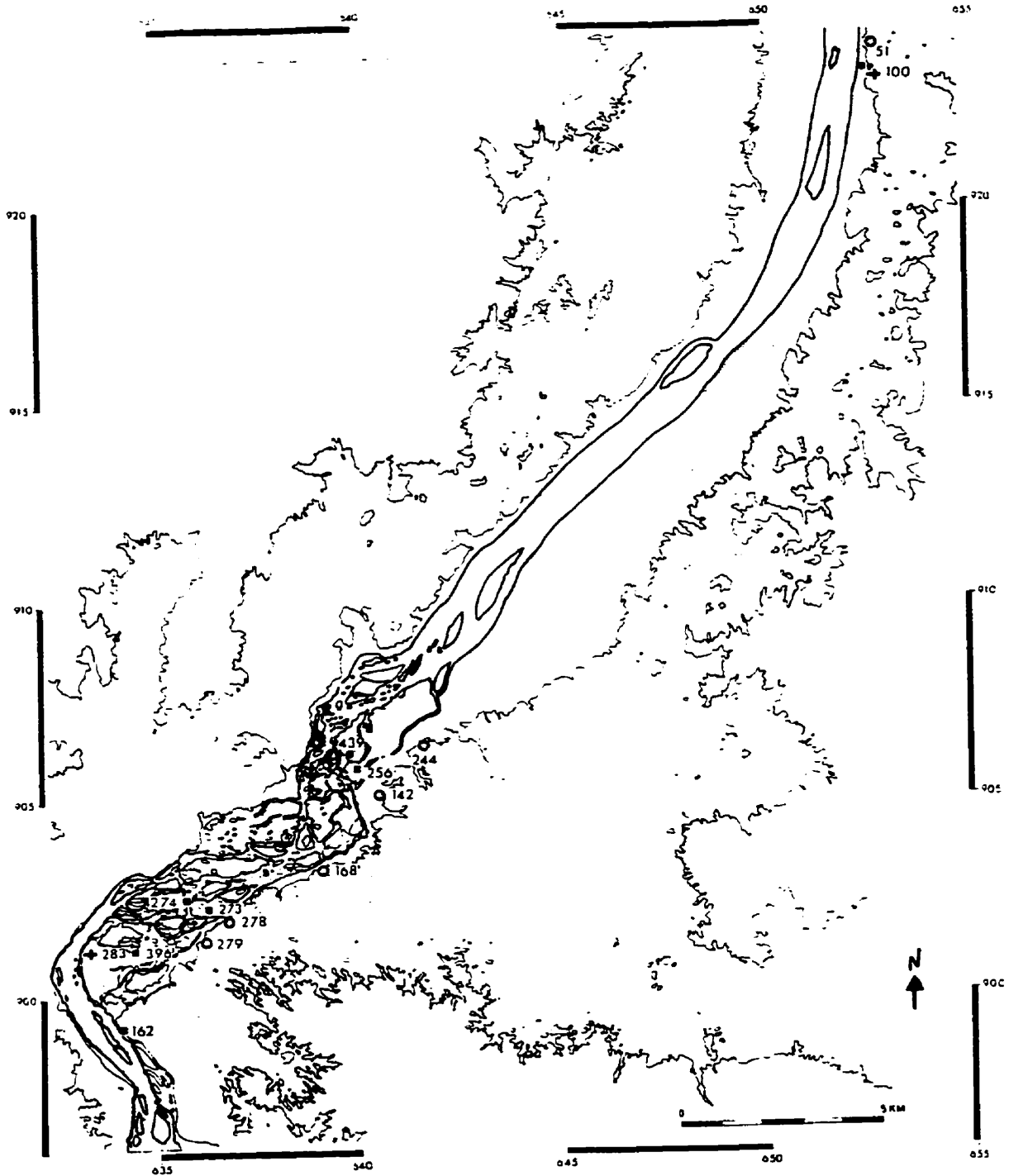


Based on J.M.W. 1:1,000,000 Sheet NE-35  
Issue Dec. 1966

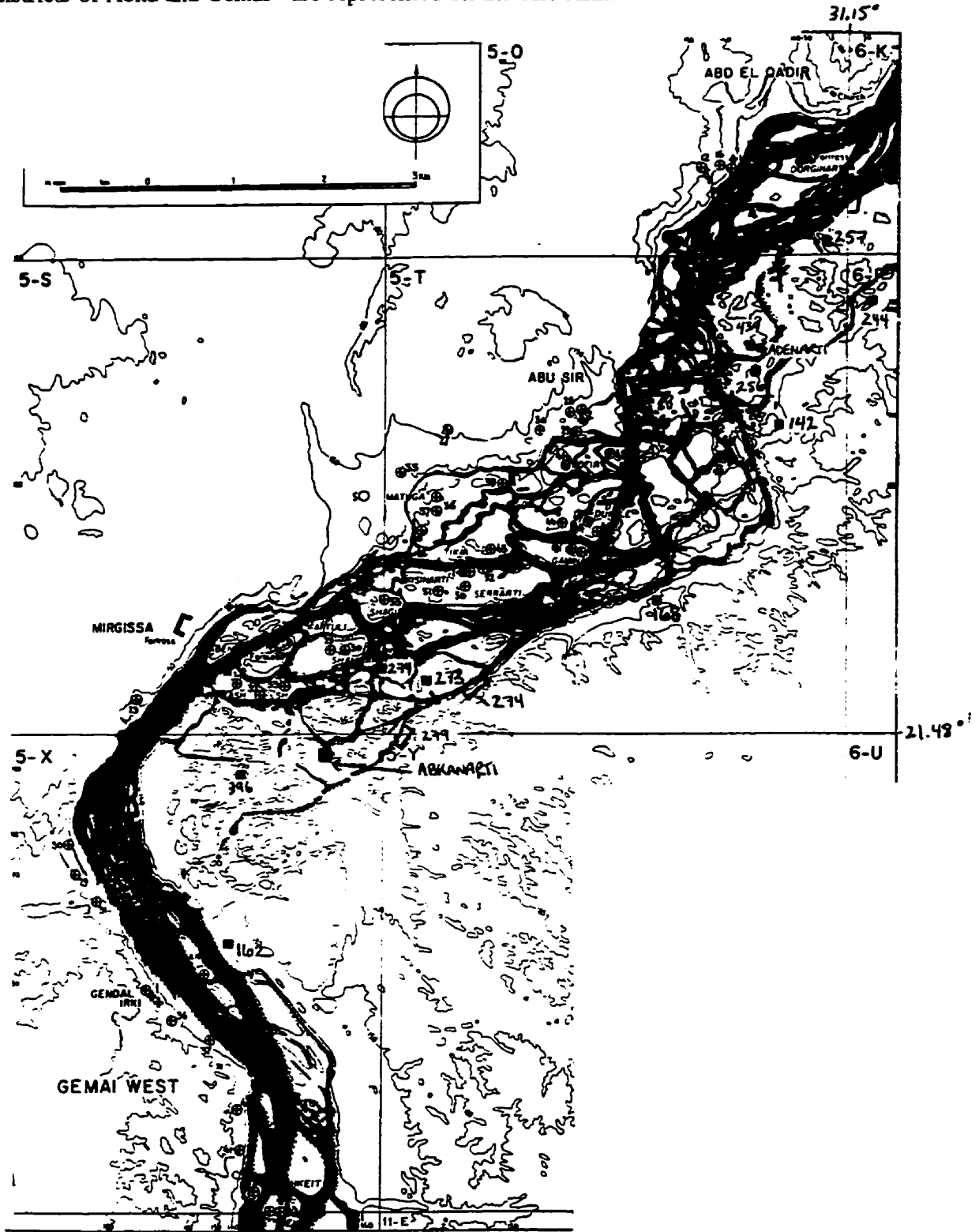
Map 13. Scandinavian Joint Expedition Sites - Districts of Faras, Serra, Debeira and Ashkeit (Gardberg 1970:57).



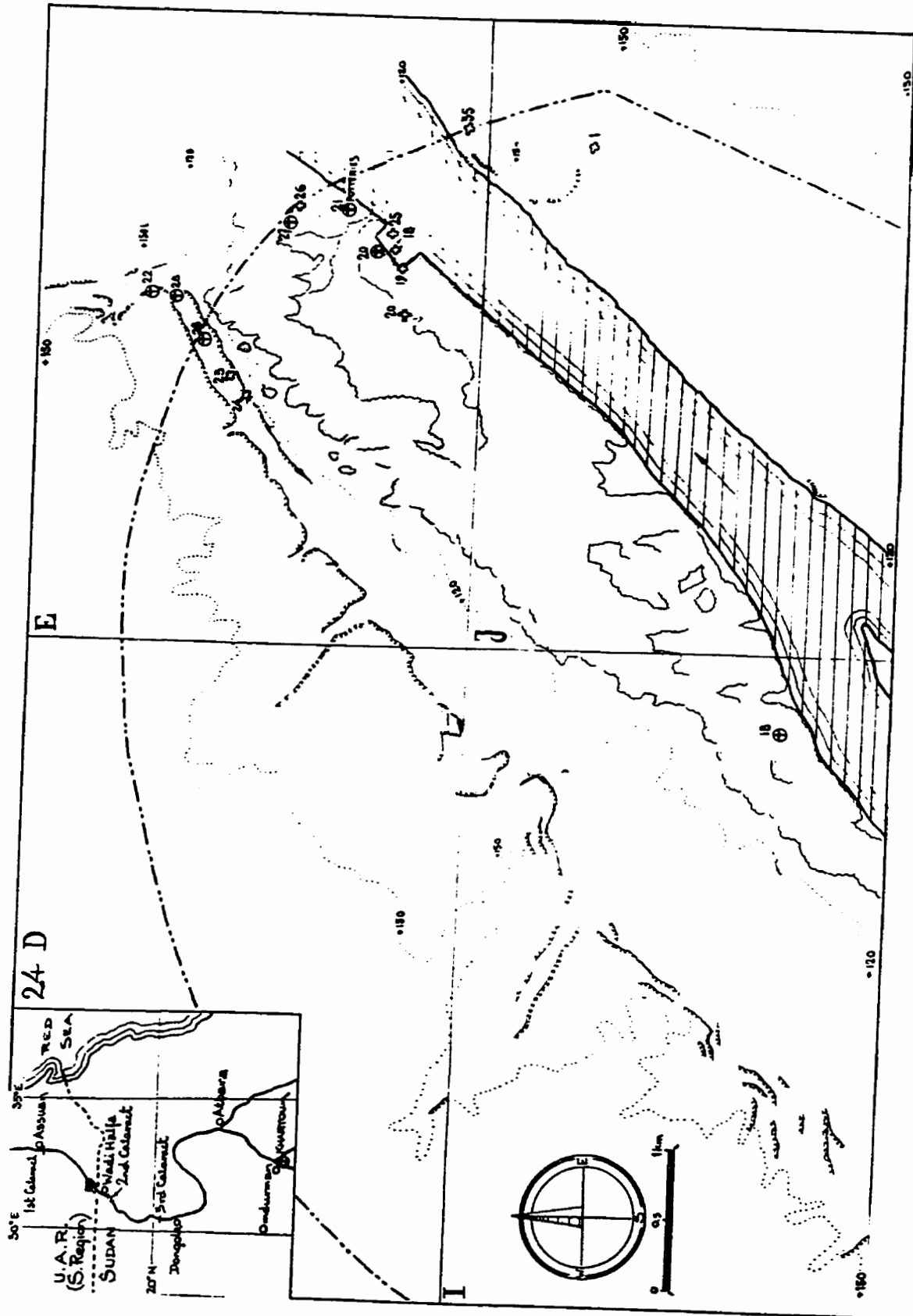
Map 14. Scandinavian Joint Expedition Sites - Districts of Sahaba, Wadi Halfa, Halfa Degheim, Abka and Gemai (Gardberg 1970:58).



Map 15. Sites surveyed by the West Bank Survey between Abd el Qadir I (Meinarti) and Gemai West (after Adams and Nordström 1963: fig. 1). Scandinavian Joint Expedition Sites in the districts of Abka and Gemai are represented on the east bank.

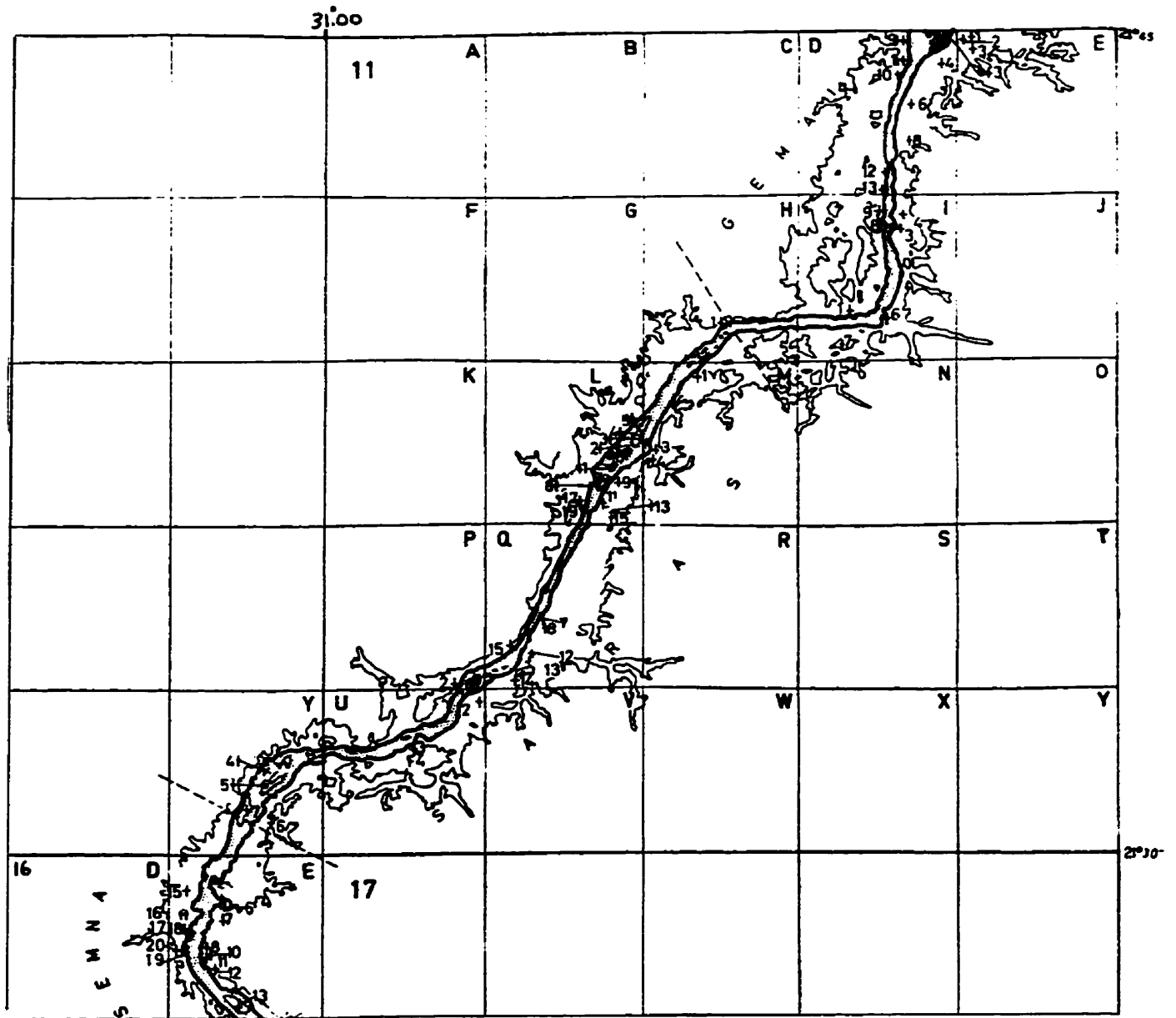


Map 16. Sites from the district of Faras West recorded by the West Bank Survey (after Adams 1961d:fig. 1).

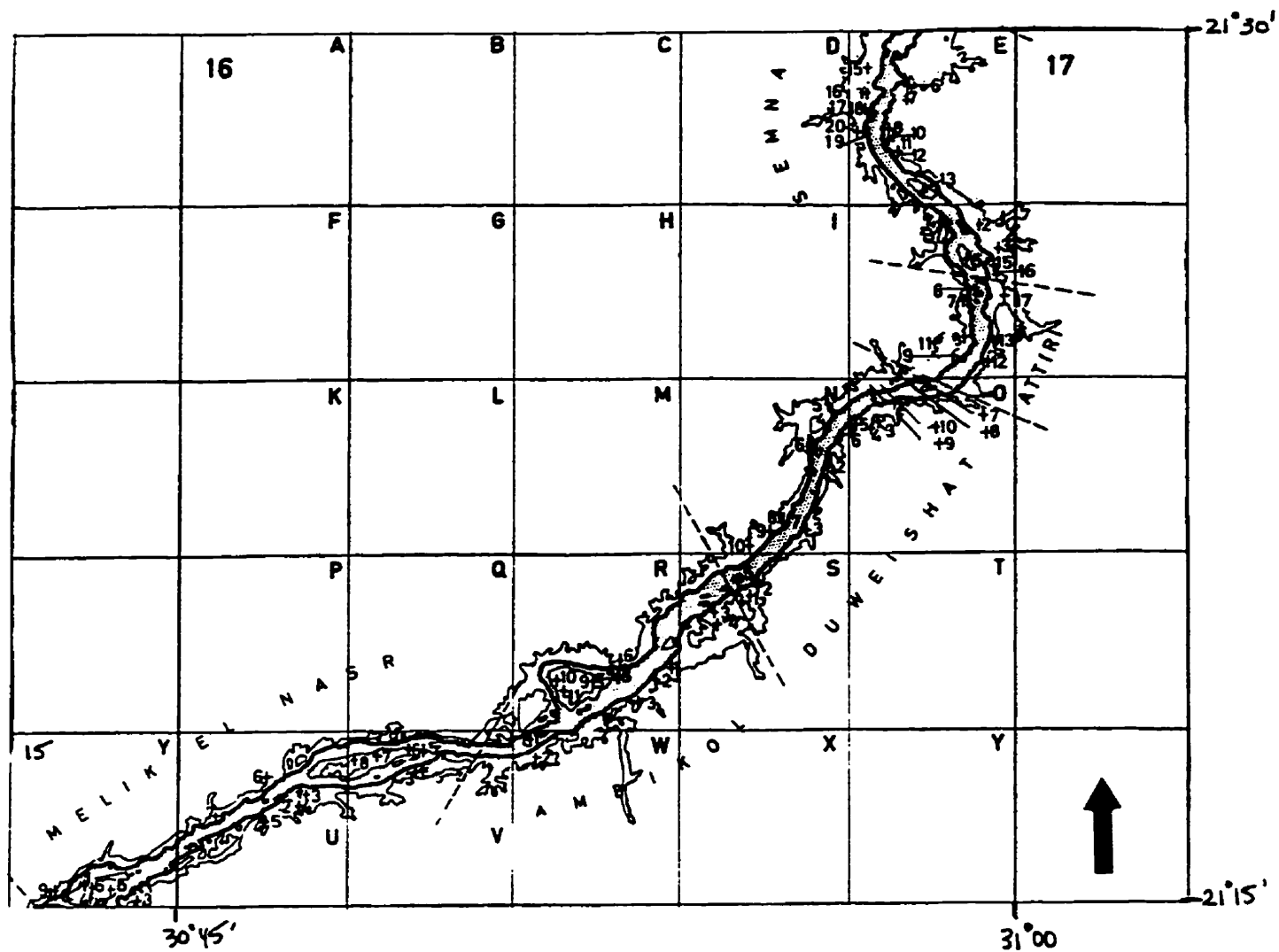




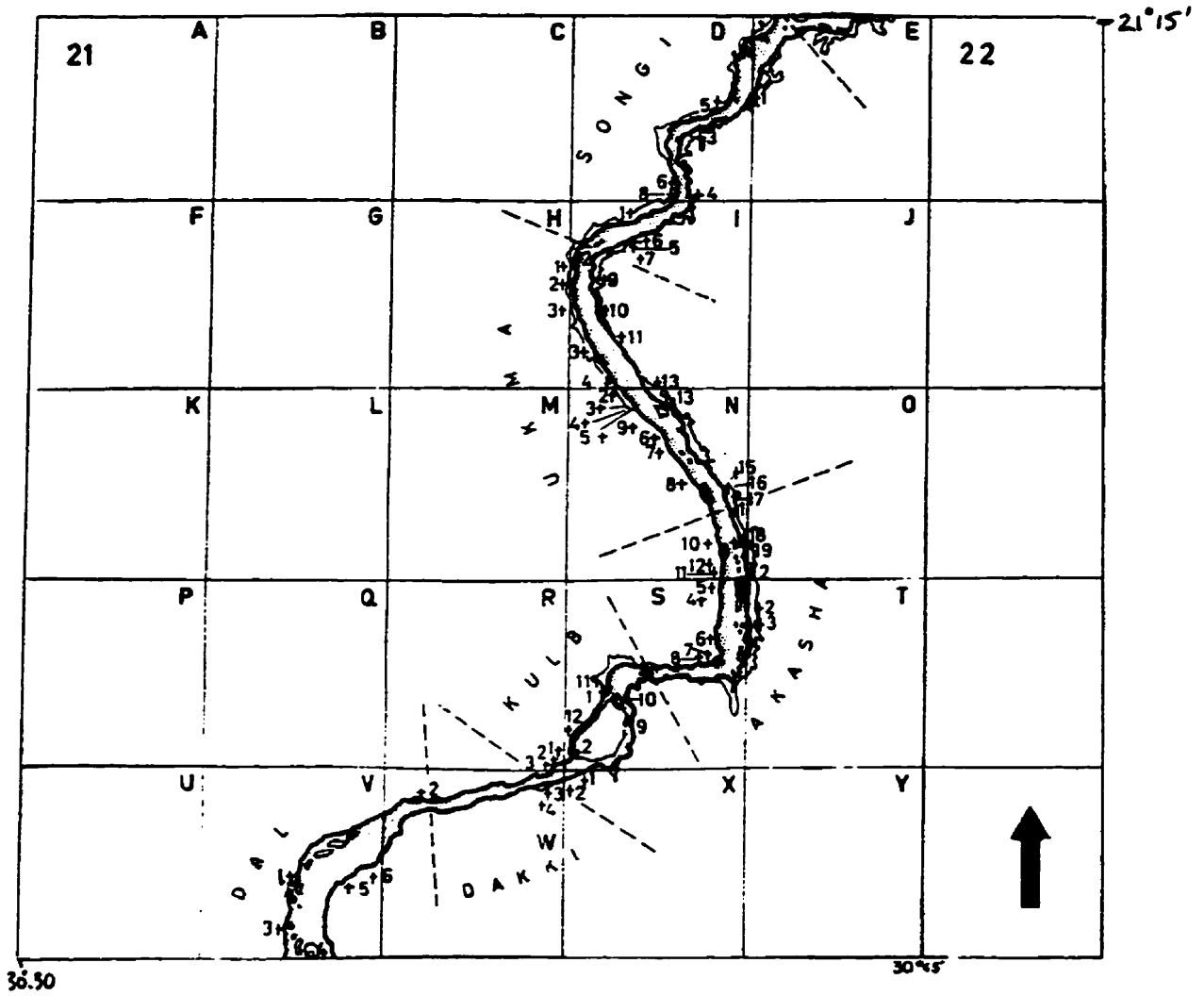
Map 17. Northern-most sites from the Gemai to Dal Survey - from Gemai to Semna (after Mills 1965:map 1, facing p. 2).



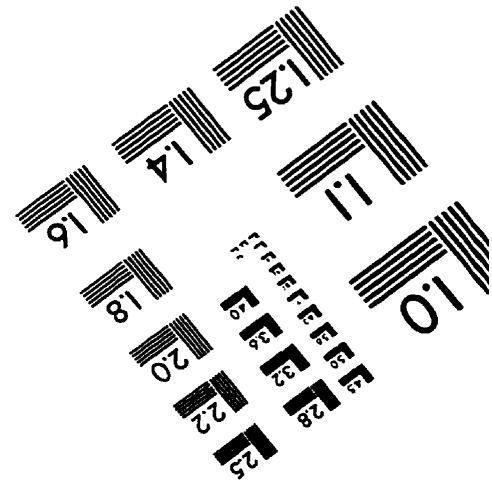
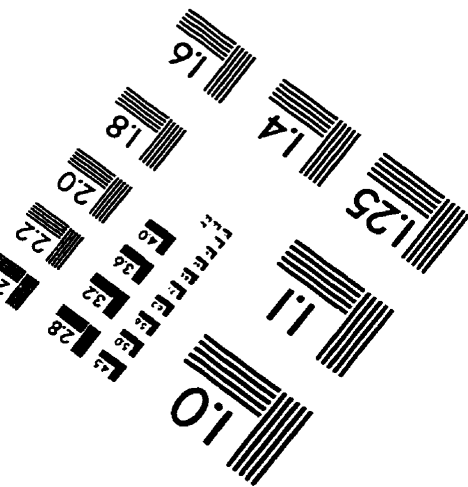
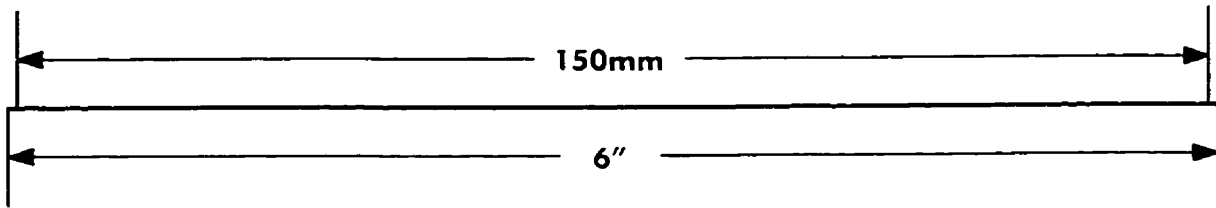
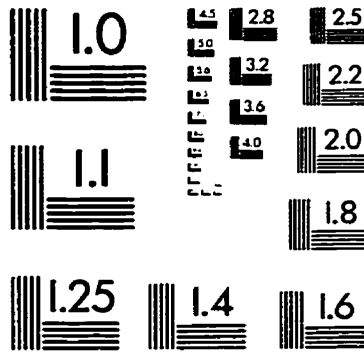
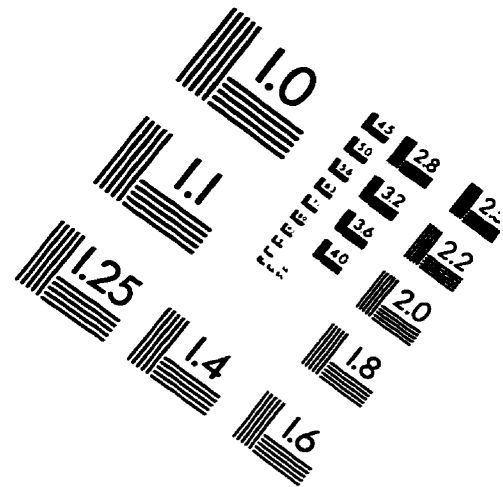
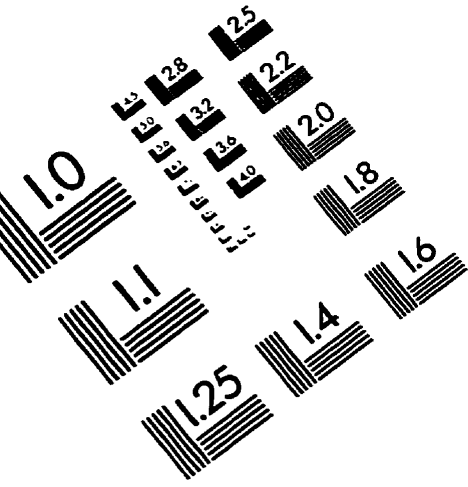
Map 18. Sites from the Gemai to Dal Survey - from Semna to Melik el Nasr (after Mills 1965:map 1, facing p. 2). For scale see map 17.



Map 19. Southern-most sites from the Gemai to Dal Survey - From Melik el Nasr to Dal (after Mills 1965:map 1, facing p.2). For scale see map 17.



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