Architecture of the modern houses at the Fourth Cataract

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Introduction

In December 2004, I was in the Umm Muri area of the 4th Cataract attached to the SARS AKSC team, to make a photographic record of the houses and villages of the present inhabitants before these are destroyed by the rising waters of the new lake and the population relocated to new areas. In this work, I had the invaluable help of a young Sudanese lady, Moona Elhaj Bilal, who introduced me to the ladies of the houses and acted as interpreter.

In the limited time available, 11 villages were visited (Colour plate IV), using et-Tereif on the riverbank and Umm Kedissa on Mis Island as my home bases (and living with the team in the dig houses in each case). About 300 digital images of the architectural features and daily life activities of the area were taken.

Priority was given to recording pictorially the range of designs of the houses and their layout to show the artistic effect of the creative use of mud plaster construction. Some simple notes and rough sketch plans of houses were made. No formal ethnographic study was undertaken, but information about people and their families was gathered from informal conversations. Aspects of their way of life and activities such as irrigation and agriculture were noted and recorded photographically where possible.

Physical Setting

The houses and their architecture are a product of their physical setting on rocky islands in the midst of the River Nile, which changes every year from a swift flowing but dependable waterway into a raging torrent with unpredictable behaviour, except for the certainty that at some time it will flood its bed and overflow onto any low-lying ground on its banks.

The houses of island villages are built closely together on high ground and clustered around a mound of rocks. These islands are accessible only by river (Plate1). The mainland-riverbank villages are similar, but could spread out onto flatter areas around the mound of rocks which make a focal point. These are accessible by overland vehicle transport on desert tracks from Merowe or as far away as Khartoum.

All villages are surrounded by, or associated with, date palm groves and areas of cultivated plots beside the river on seloka land. The main activity and source of income is the cultivation of date palms together with subsistence farming involving ploughing with oxen, irrigation work and animal husbandry of sheep, goats and a few cattle. I saw no wheeled vehicles on the river islands but a few donkeys were used for the transportation of people and goods. The centre of each island is a desert landscape of sand and rocks with little in the way of defined roads or tracks between settlements.

Large villages usually have a communal open space, where there is access to the mosque built on the outskirts of the village. Where there are mosques, for example in et-Tereif and Umm Kedissa, these are simple buildings without minarets.

Riverbank Villages

From our base at et-Tereif on the south (left) bank, Ganob to the east and Hantilah to the west were visited along with the small village of Umm Aroshair on the island of Umm Ushur, opposite et-Tereif.

Et-Tereif is a large village with one road passing through. The houses cluster together and the site rises to a low mound of rocks. It extends across a wadi as there is almost unlimited flat land available.

From a distance, the village of Ganob to the east of et-Tereif looks like a fortified village with buttress towers, but these are normal house compounds with tall round pigeon houses.

The small village of Hantilah (west of et-Tereif) is a three generation family village. The houses have no arcades but a variety of construction methods are employed: dry-stone walling, mud-block walls (jalous), and solid looking cuboid rooms.

The houses in Umm Aroshair on Ishashi island are built on a rocky outcrop high above the river and the courtyards inside have floors as uneven as the slope up from the river. There are wonderful river views from the windows.

Island Villages

After two weeks, we left the river bank base of et-Tereif and moved by boat and on foot to the island of Mis which is in the heart of the 4th Cataract — a landscape of river,
rocks and date palm groves - paradise but without modern facilities.

In the flood season the islands become very small as the rising river fills the low areas which in December become perfect for farming (see Plate 1). Umm Kedissa village, where the team was based in a local house, is built on the rocky prominence whose highest point is called the ‘Hill of Iron’. From this vantage point, the isolation of this remote island can be appreciated. On the edge of the village two houses have a view of the wild and beautiful cataract region with the riverbank/mainland in the far distance (Plate 2).

Visits were made to Umm Gemesa, Umm Quwaib, Umm Angareeb and Muhallitib, which are all villages within walking distance of Umm Kedissa.

The village of Umm Gemesa lies within a short walk of Umm Kedissa in December, but it is clear that the annual flood would fill low-lying areas and cut apart the villages on islands for some time each year (Plate 1). Umm Gemesa is clustered around and built up on an outcrop of boulders to make a safe place for dwellings.

Umm Quawaib is further away and similarly placed so that it is shown on some maps as a permanently separated island although in December we walked across the fields to reach it. The beautiful houses (one with stepped rounded arches) are built on a rocky site surrounded by field plots and date palm groves (Plate 3).

The main access route into Umm Kedissa crosses the jedwell/ditch which is the source of most of the village’s drinking water, as the river is far away down steep slopes. It was part of the pumped irrigation network and was, therefore, running water. Water is also transported from the river by donkeys and women.

We were told that the abandoned village on the rocky heights overlooking our landing place on Mis island was the original settlement of Umm Kedissa, whose population later moved to the lower site of today’s village. Known as el-Hazama, it has the appearance of a piece of modern art. The rectangular houses are beautifully constructed from blocks and perched on top of large boulders sticking up from the ground (Plate 4).

At Umm Angareeb there were no imposing gateposts, but always beautifully made walls stretching away over the landscape.

Animal pens with castellated copings line the way up to houses and are usually placed on the outskirts of the village.

Plate 2. Looking northeast from Umm Kedissa over the Fourth Cataract. Two diwans, the further one having comfortable furniture.

Plate 3. House in Umm Quwaib with stepped arches.

Plate 4. El-Hazama village of deserted houses on a rocky height.

House Architecture

The designs of houses are dictated by the skill of the builders and their architectural aspirations. Houses in villages of the Fourth Cataract are usually constructed by their owners as a gift for their bride, and I was given the impression that professional help is rarely available for design or building.

Modern houses are of the same materials as the ancient ones and the environment, at least over the last 300 years has been broadly the same. Modern buildings can be used
by archaeologists to interpret the structures which once stood on the ancient foundations, especially the use of rooms, storage spaces, etc., some of which could be indicated by post-holes or slight remains of mud foundations.

The building materials available in the area affects the architecture, namely, Nile mud which can be varied in consistency by the addition of straw or stones or sand, and wood from a limited variety of trees, predominantly date palm with acacia and dom palm.

There seemed to be little attempt to clear away natural rocks etc. on the ground before laying out the plan of a house or even a road in the village. Rocky outcrops are incorporated into foundations for walls and used as a base for domestic activities within the house enclosure.

House compounds are surrounded by a high enclosure wall with a few ventilation openings. A pair of imposing gateposts flank lockable doors at a main entrance while side entrances often have no doors inserted. Colour plate IX shows one of the finest house compounds in et-Tereif with concrete posts painted in bright shades of yellow and green. Each house, although basically similar, varies in detail from its neighbours. Some have mastaba (benches) of various heights built on to the exterior of the enclosure wall and the gate posts have individual features made of variations of brickwork and/or coloured paintwork which was designed by the owner.

Within the courtyard are two or more separated rooms, some with arched arcades around them. Sometimes the arcades conceal two separate rooms (Plate 5); and some have painted decoration on the interior wall (Colour plate X).

Two fine looking houses in Umm Kedissa in well kept compounds are diwans or men’s quarters, each associated with a separate women’s house in the village (Plate 2). The most luxurious one contained comfortable sprung armchairs, thick piled carpets, and a TV set to be watched while the men recline on metal beds made comfortable with two mattresses each. A tall dresser is the only type of furniture normally seen in the houses, together with wooden angareeb beds and a few very small tables (Colour plate X).

Across the street this arrangement could be clearly seen: on the left is the doorway leading to the women’s quarters. The break in the party wall gives private access to the diwan which has an imposing gateway on the right and a well built house with unusual rectangular door openings (Colour plate XI).

This arrangement applies in most dwellings in all the villages that I visited. It ensures that the ladies and children are not encroached on by non-family male visitors and provides accommodation for hospitality to be given and enjoyed. This division of use and the relationship of the various houses to each other would not be obvious from archaeological investigation of house sites. The entrance to the women’s house shown in Colour plate XI has large rocks forming a clumsy doorstep.

A building in another compound was obviously a men’s diwan. A well-made stairway led to the solid raised house base, with an arcade of beautifully made rounded arches and even with shelters across them to keep out flies and the cold wind.

Our own dig house was an interesting example of the division of occupancy. Standing inside the yard of the men’s part, the inner face of the imposing gateway was visible through the gap in the party wall.

Across the rough ground of the women’s yard a stepped arch colonnade shaded two separate rooms (Plates 5 and Colour plate F.II). The inner area then led out to a rear court where the kitchen and water storage facilities were located and domestic work takes place.

The kitchen and other domestic rooms are usually in the women’s quarters. The typical kitchen building was set into the corner of the rear courtyard, roofed with loose palm branches to allow the cooking smoke to rise. I saw one kitchen shelf in all my visits – a real shelf on brackets fixed to the wall. Several kitchens had make-shift shelf-units of planks placed on brick supports. A shelter for water jars (zir) is built beside the kitchen or nearby.

Many houses have a square tower pigeon house. This is usual in Umm Kedissa.

A simple shaded loggia of palm leaves loosely laid across a frame of wooden posts would leave little evidence in the archaeological record. Many houses have open-ended rooms which act as a verandah.

Because we were women, Moona was able to ask if we could be shown intimate areas of the houses – so we were shown the dekkah (sauna or aromatherapy area) The lady of the house burns scented wood in this pot (Plate 6) set into the floor of a smoothed area, and then enjoys the scent and heat of the steam in private, among other activities.

**Building techniques**

The buildings are of mud-block construction which is then
mud-plastered and whitewashed. The buildings’ corners are reinforced by the addition of a buttress - the need for this is clear from the signs of wear and tear on the plaster. In one compound a fine building has an arcade of stepped rounded arches with a room inside (Plate 7). Another building has rounded arches (Colour plate IX). All have protruding water spouts for the occasional rainfall.

Ahmed Hassan Sidiq, the owner of a house of this type in et-Tereif, told me that he helped his father to build the original house and then added more when he himself married. He showed me an unplastered wall to explain the usual method of construction. These are not conventionally made mud bricks, made in a mould and then dried in the sun before being laid with mortar jointing. These ‘blocks’ are made on site by means of a mud mixture formed into large ‘bricks’ without mortar and laid down course by course, each course being left to dry in situ in the sun for about two days, then further courses are added.

The builder follows the natural contours, and if there is a rock in the way he just builds over it. This results in the typical wavy walls, like one at Gunob village (Plate 8).

Unfortunately no houses were being built because the people were soon to be relocated, but there was evidence of repair and refurbishment. One could see the dark patch on the ground where the mud was mixed, and the sections of mud plaster added to the walls on different days, the darker mud having been the most recently applied.

At Hantilah a curved wall had been built the day before my visit – the remnant of the mud/stone mixture had been left and one could clearly see the courses (Plate 9).

At the rear of et-Tereif, an unplastered building showed the construction of a stepped arch (Plate 10). The building had been well built of ‘blocks’ and the doorway half filled with mould made bricks to turn it into a safe pen for animals. The rounded arch was very well made of two rows of
bricks with a neat group of bricks to make a keystone. I was told that the shape was achieved by using a wooden shaped form supported on the two ‘steps’ of the ends of the side wall to hold it in place until hardened.

An unoccupied house at et-Tereif showed this type of construction and also the way that each section of the building’s walls and those of the surrounding enclosure is built separately and abuts against the next one with no bonding between them. This leads to houses literally falling apart at the seams if not repaired regularly.

Arches for houses are rounded or stepped-arch while some openings had flat lintels. Every house is individual: sometimes the stepped arches are outlined with white wash, and the usual wooden shuttered windows show the position of the inner room. Sometimes the arcades conceal two separate rooms (Colour plate X).

On the well maintained plastered exterior wall and doorway of a diwan, the mud plaster is treated in an artistic way at the corner and smoothed to a pointed coping at the top. Some building techniques were less successful than others. On the island of Ishashi a doorway lintel had been tied with string to the formwork plank which could not be removed as the mud lintel had cracked.

At the rear of et-Tereif, an animal pen showed the use of dry-stone walling topped with mud plaster coping. The circular animal pens were usually made of mud blocks – in one example, large chips of stone had been inserted into the mud blocks in the second row from the top, all being built on a foundation of random rocks.

Painted Decoration.

Decorations seem to be invariably painted by the lady of the house. For example, in the guest room of the et-Tereif dig house the artist, Mona Abeed Allah, proudly showed her work (Colour plate XII). It is a simple but decorative floral motif, similar to the henna designs painted on ladies’ hands.

Our house at Umm Kedissa had extensive decoration; a plant laden with fruits climbing around the door of one room (Colour plate X), there were geometrical line patterns, and even a painted sketch of a cat (Umm Kedissa means ‘mother of cats’). There is a rose painted above the door of the other room (Plate 5).

A house at Umm Quwaib has a decorated arcade with rectangular doorways, and a magnificent roof with huge beams. At Umm Angareeb a house unusually has painted decoration on its outer wall, including a car.

Roofs, Ceilings and Doors

Roofs are made of one or two huge logs, as beams, stretching from side to side, the visible ends on which protrude through the walls on the exterior. On these beams are laid crosswise, as rafters, smaller logs beneath a matting of palm ribs. Palm leaves and mud are laid on top to make a waterproof roof (Plate 11). The neat finish of roofs can be seen from above. The corners of rooms have often been patched where the two walls are coming apart.

Internal and external doors are set into a simple wooden frame. In one case the entrance door to the house is squeezed into a corner and approached by a steep uneven path. The lintels for doorways and windows use any handy plank or log that is available – these should not usually be visible, being covered with mud plaster (Plate 12).

The charming interior of a house in the deserted village of el-Hamaza is still in good condition. The rectangular
doorway showed a common feature in that the two jambs slope inwards towards the doorstep which is usually made separately so it can be replaced when worn away by use.

A house in Umm Quwaib has an interesting wooden door with pivots set into an impressive doorway. The owner has consolidated the rough stones in his yard into a working platform on which we saw a mass of mould made bricks. The bricks were clearly hand made – and large - one measured 280 x 180 x 80mm.

The rectangular doorway to an arcaded building had a rolled up mat of paper sacks above, which could be unrolled.

**Conclusion**

These beautiful houses with their individual designs cannot be replaced and one hopes that the skills to build them will not be completely lost.

My aims were achieved in that I obtained a representative selection of images of the villages and the individual houses which will form an archive of the heritage of these people. These may serve as source material for rebuilding within a museum context or as the basis and inspiration for a new vernacular architecture. The images also convey aspects of life among the natural surroundings of the Fourth Cataract in the Sudan.

Finally, my overall view of this area is expressed by a favourite image – a wooden door set into an unplastered wall, with an unnecessarily huge log as a lintel which is hardly able to perform its function due to the dilapidated state of the structure (Plate 13). The door has a lock to make it secure and yet the door frame could easily be pushed out by any strong man. This does not matter because in the islands everyone knows everyone else and everyone has to be honest. I hope that the future for these happy and trusting people will hold a satisfactory and comfortable outcome for them.

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Colour plate IX. Modern architecture. Et-Tereif – entrance gate into yard with two colonnaded rooms.

Colour plate XII. Modern architecture. Et-Tereif – Team dig house “Guest” room with painted decoration and the artist, Moona Abeed Allah.

Colour plate X. Modern architecture. Um Kedissa – the team’s dig house – two rooms within the arcade shown in Plate 5, with decorations painted on walls and simple dresser cupboard.

Colour plate XI. Modern architecture. Um Kedissa – diwan on the right with imposing doorway and well-kept house with internal access to the women’s quarters on the left.

Colour plate XII. Modern architecture. Et-Tereif – Team dig house “Guest” room with painted decoration and the artist, Moona Abeed Allah.