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Space, place and meaning in northern riverain Sudan

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Submitted in fulfilment of the requirements for the degree

Philosophiae Doctor (Architecture)

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The main problem is the construction of an interpretative framework, intended to be a foundation for future research on the architecture of the Sudanese northern riverain region and for architectural education in Sudan.

The research evolved out of issues pertinent to the area. Scant information exists on architecture of the area and there is no adequate theoretical base for research. The initial observations of the context led the author assume that there must be some reason for the frugality evident in the physical manifestations of the culture.

Phenomenological interpretative research is attempted within an ecosystemic epistemology. The study pertains to postmodernist approaches in the use of language and blurring of boundaries between disciplines.

An eco-systemic construct of the context is articulated to identify the milieu within which the artefact exists and how it developed within a framework of people's beliefs and social interaction systems. The term artefact is defined as any cultural agent and is not restricted to a physical object but includes ritual, social practice and linguistic agents. These are explored within their contextual settings.

Space and place making are better understood by broadening conventional definitions of architecture. People, activities and networks are the basic canons of architectural place making. As pieces of a puzzle, the tangible and the intangible all address the theme of models of habitation. Traditional building practice and space use has been elevated and studied with respect to the knowledge embodied in it. Interdisciplinary interpretation is used to address the issue of how people interact with the environment and how they shape their spaces at the micro and macro levels.

It has become evident that social structure, which greatly influences the configuration of built form, reflects the character of the natural environment to a large extent. Architectural expression takes on different forms through time, especially when comparing different eras with drastically different climates. Place making activities are guided by peoples' ability to come to terms with their environment. This dissertation also studies the setting of one African interaction with Islam.

Lived experience is prior to abstract reflection. Whenever we reflect intellectually on experience, we have to go back to the lived world of our experience prior to that reflection. On submitting that experience to reflection, we make it cognisant. It is acknowledged that on embarking with the study, it was not clear as to what would be achieved: An ecology as the one studied transcends a total understanding. Also, many aspects and relationships may remain concealed due to the limitations of any one analytical perspective or intellectual structuring device.

This dissertation has been an attempt to partially expose what is concealed and to put it in a usable format for future researchers.

Ruimte, plek en betekenis in die noordelike rivier-Soedan

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Voorgelê ter vervulling van die vereistes vir die graad

Philosophiae Doctor (Argitektuur)

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Die hoofprobleem is die konstruksie van 'n vertolkende raamwerk wat kan dien as basis vir toekomstige navorsing oor die argitektuur van rivier-Soedan en vir argitektuuropleiding in Soedan.

Die navorsing vloei uit vraagpunte wat pertinent is tot die gebied. Tans is kennis oor argitektuur van die gebied armoedig en ontbreek 'n toereikende teoretiese navorsingsbasis. Inisiële observasie van die konteks het die outeur tot die aanname gelei dat daar 'n onderliggende rede moet bestaan vir die ekspressie van matigheid in die fisiese manifestasies van kultuur.

Fenomenologies vertolkende interpretasie word toegepas binne 'n ekosistemiese epistemologie. Die studie slaan ag op postmoderne benaderings tot die gebruik van taal en die vervaging van grense tussen dissiplines.

'n Ekosistemies gefundeerde konstruk van die konteks word artikuleer om die milieu waarin die artefak bestaan te identifiseer en verder te toon hoe dit ontwikkel binne 'n geloofsraamwerk en sosiaal interaktiewe sisteme. Die term artefak word definieer as enige kultuuragent, wat nie slegs as fisiese objekte manifesteer nie maar ook ritueel, sosiale praktyk en taal insluit. Laasgenoemdes word binne konteks bestudeer.

Ruimte en plek word beter begryp indien konvensionele definisies van argitektuur verbreed word. Mense, aktiwiteit en netwerke is die kanon van argitektoniese plekvorming. Soos dele van 'n legkaart adresseer die tasbare en nie-tasbare saam die tema van bewoningsmodelle. Tradisionele boupraktyk en ruimtegebruik word in die studie erken en bestudeer met 'n respek vir die kennis wat daarin vervat is. Interdissiplinêre interpretasie word aangewend om die interaksie tussen mens en omgewing te peil en te begryp hoe ruimtes op die mikro- en makrovlak gevorm word.

Daar is bevind dat sosiale struktuur, in sigself 'n beduidende vormgewer van bouvorm en -konfigurasie, ook 'n refleksie is van die karakter van die natuurlike omgewing. Argitektoniese uitdrukking neem verskeie vorme aan oor tyd, veral waneer daar gekyk word na verskillende eras wat voorkom binne drasties uiteenlopede klimaatsomgewings. Plekvorming word gerig deur mense se vermoë om hul met hul omgewing te vereenselwig. Die verhandeling bestudeer ook die verloop van een Afrikagebonde interaksie met Islam.

Geleefde ervaring gaan abstrakte refleksie vooraf. Die onderbewuste kan as die sluimerende ervaring van ons interaksie met die wêreld beskou word. Deur oor ervaring te reflekteer word dit bekend gemaak. Daar word erken dat die uitkoms van die studie nie helder was ten tye van die aanvang daarvan nie: die wêreld transendeer die moontlikheid tot volkome begrip. Ter enige tyd sluit die wêreld nie net dit wat ontbloot is in nie, maar ook dit wat verborge is.

Hierdie verhandeling poog om dit wat verborge is gedeeltelik te ontbloot en binne 'n bruikbare raamwerk te plaas vir toekomstige navorsers.

Glossary

a. Artefacts mentioned in the text.

Amina – a forked timber post that props up a roof, usually located in the middle of a room.

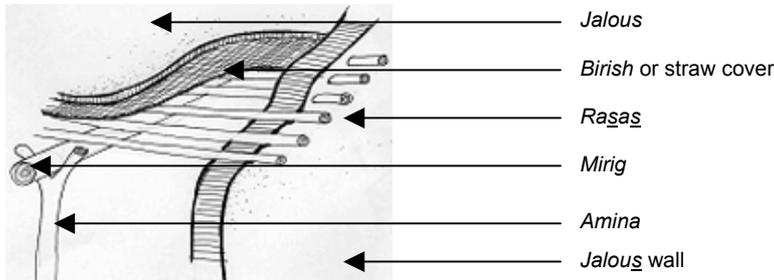


Fig. 1 A traditional building (drawing by author).

'Angarib – a wooden framed bed with leather or rope webbing. These are sometimes covered with a mattress and pillows (Lee, 1967: 57-58)ⁱ



Fig.2 Making an 'angarib in Omdurman, 1920 (Daly and Forbes, 1994: 198)ⁱⁱ

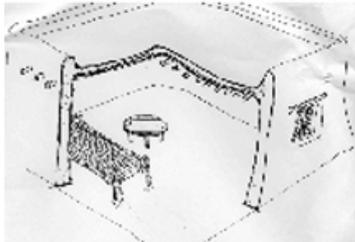


Fig.3 A typical room *qurfa*, room with the 'angarib as the main piece of furniture (drawing by author).

Bubkhar – a clay container for burning incense (*bakhoor*).

Dammur – a sheet (*faradah*) of special hand spun cotton.



Fig.4 A typical *faradah* of *dammur* cotton (photographs by author, 2004).

Firkah – a colourful silk cloth used for weddings.

i Lee, D. R. 1967. The Geography of Rural House Types in the Nile Valley of Northern Sudan, Ph.D. Dissertation, University of California, Los Angeles.

ii Daly, M.W. & Forbes, L.E. 1994 Caught in time: great Photographic Archives. The Sudan: Photographs from the Sudan Archives. Durham University Library: Garnet Publishing.



Fig.5 A *firkah* (photographs by author, 2004)

'Ima – turban, a length of usually white cloth that is wrapped around the head (Gasim, 1985: 793)ⁱⁱⁱ.

'Ibaya – a cloak open in front and worn over other clothes (*ibid*: 739).

Jabana – a round clay pot with a long neck used for coffee (*ibid*: 204).



Fig. 6 Typical *jabana* (photograph by author, 2004)

Jalabiya – long white dress worn by men.

Mirig – a wooden beam on which the *raṣaṣ* is supported (*ibid*: 1080). Refer to Fig. 1.

Rakuba – a veranda:

“...rafters are supported at one end by the wall of the house and at the other by a top plate resting on two or more posts stuck into the mud. Occasionally pillars of brick are used to support the veranda. The posts supporting the top plat are shorter than the height of the wall, so the veranda slopes noticeable down from the roof. Since the function of the veranda is mainly to provide shade and not shelter from the rain, the roofing material of the veranda quite often is not waterproofed.” (Lee, 1967: 56).

Raṣaṣ – wooden logs on which a roof is placed in a traditional building, equivalent of purlins.

'Arooq are *raṣaṣ* made of a particular type of wood referred to as *'arooq*, which literally means ‘roots’. Refer to Fig. 1.

Raya – flag, plural *rayat*.

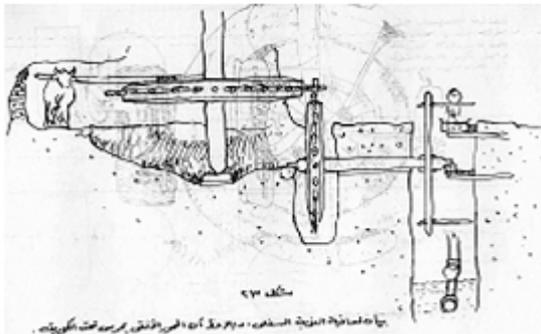
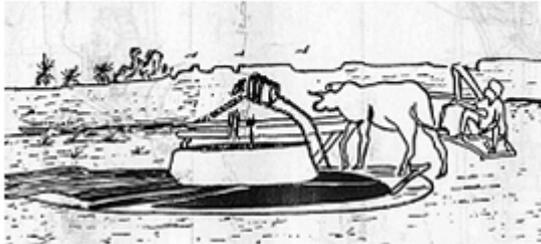
Sabeel – a water pot placed on the road and continuously cleaned and filled by a person/family as a *ṣadaqah*, a good deed done in the hope of Allah’s blessings. A drinking fountain or public fountain on the roadway that is made as charity: “*Makan lilshurb ‘ala qari’at al tareeq ju’il fi sabeel allah.*” (Gasim, 1985: 521).

ⁱⁱⁱ Gasim, A. 1985. *Qamoos al-lahja alamia fi al-Sudan*. Cairo: *Matabi al-Maktab al-Misry al-Hadeeth*.



Fig.7 Zir pots (Photograph by O. Osman in 2003)

Saqiyya – a water wheel used to elevate water from the river to irrigate small agricultural holdings.



Figs. 8 and 9 A 3-dimensional view and a section of typical *saqiyyas* in the northern regions (Abu Salim, 1980: Figs 17 and 23)^{iv}

Tob – a cloth worn by women and also used for a sheet to cover the body when reclining or sleeping (Gasim, 1985: 188).

Tukul – literally meaning dependence. This is a kitchen, referred to as such because it is usually an external room with a structure that leans on the main building (*ibid*: 173).

Waarid – long and continuous (*ibid*: 1221). In building it refers to *raṣaṣ* that is a continuous run and is not supported in the middle.

Qutiyya – a conical hut made of straw (*ibid*: 917)

^{iv} Abu Salim, M. I. 1980. *Al-Saqiyya* Khartoum: Institute of Afro-Asian Studies, Khartoum University Press.

b. Building types in the region.

The mosque – the place for prayer:

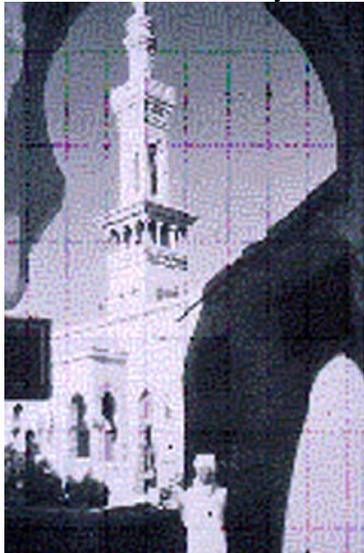
“It is not the habitation of a deity, sanctified by his Presence, but a place set aside for public prayer and for hearing the word of God in the Koran.” (Greenlaw, 1976: 62)^v.

The design of mosques is usually based on a domestic prototype – that is, the Prophet Muhammad’s house in Medina. When Islam was introduced and the mosque constructed in the middle of an African town pagan worship was still practised on the fringes of the town. The religious centre was transformed to a cultural centre with schools, library, hospital etc attached to the mosque (Adahl, 1993: 133)^{vi}. The mosque is identified by size and mass and its orientation towards the *qibla*, Mecca. It is also recognisable by its minaret. In many African contexts there is little dominance of the entrance and little decoration (*ibid*: 133)

Protruding beams characterising the Sudanese style in West and East Africa may have been used as permanent scaffolding initially and are now a part of the aesthetic expression of the building. The mud plaster is renewed every year before the rainy season and the floors are covered with earth no objects. Internally the mosques are unadorned except for the *mihrab* indicating the qibla and a movable stool as a *minbar* where the *imam* gives his talks to congregation. There is no articulation or decoration of beams or arches:

“The simplicity and serenity of the construction and the moulded, almost melted shapes, still permit monumentality; the total impression is overwhelmingly forceful.” (*ibid*: 134)

Some mosques were influenced by various external cultures such as the Turkish influence on the Farooq Mosque in Khartoum (Fig. 10). Some influences are mixed and difficult to identify as in Fig. 11.



Figs. 10 and 11 Farooq Mosque in Khartoum and Khalifa Mosque in Khartoum North (Photographs from the Sudanese Embassy, Pretoria, 2002).

v Greenlaw, J.P. 1976 *The Coral Buildings of Suakin* Oriel Press, Northumberland
vi Adahl, K. 1993 *The Islamic Architecture and Art in Sub-Saharan Africa: A Problem of Identity* in Granqvist, R. (editor) *Culture in Africa, An Appeal for Pluralism*. Uppsala: The Scandinavian Institute of African Studies.

Older mosques, some converted from churches have been documented by Crawford.^{vii}



Fig. 12 ElKoro Mosque/church, east elevation with apse and buttress and north elevation with door (Crawford, 1953: Plate xxvii)

Fig. 13 ElKoro, another mosque (ibid, plate xxvi).^{viii}

The *zawiyya* – a smaller gathering place for prayer (literarily meaning corner or angle). Attached to houses or shops very ‘urban’ in that sense. It can be an enclosed space open to the sky with a *mihrab*. It can also be temporary prayer space where people are camping.

The *khalwa* – a place for the teaching of the Koran can be part of the *masid* or the mosque.

The *masid* – a complex where there exists a mosque, *khalwa* as well as dwelling places for the *shaykh*, his assistants and followers. This is sometimes situated near the *shaykh*’s tomb. The *masid* is the only element that may be considered unique to the Sudanese context (regional). It can though be compared to what Al Faruqi calls the *zawiyah* (corner) which he defines as “...the home for a mystical (Sufi) brotherhood.” (192)^{ix}

vii Crawford, O.G.S.1951 The Fung Kingdom of Sennar, with a Geographical account of the Middle Nile Region. Gloucester: John Bellows Ltd.

viii Refer to the map at the end of this document for the location of these places.

ix Al-Faruqi, L. I. 1987. *Unity and Variety in the Islamic Architecture of the Maghrib* in *Africana Journal*, Vol. XIV, No. 2&3. New York: Holmes & Meier Publishers.

The dwelling – some information on residential buildings has been included in the main text of this dissertation. One of the interesting typologies is the ‘Fortified household’, developed in the later centuries of Christian Nubia:

“The ground floors were comprised of vaulted storage cellars, while the living chambers were on the floor above. There was no access at the ground floor level; entry was by means of doorways at the second floor level, which could only have been reached by means of ladders.” (Adams, 1987: 334)^x.

Crowfoot (1911: 40)^{xi} believes that a reason for this was to get the breeze and avoid the desert sand. This developed into the *kourfa*, a post-Christian fortified household origins traced to the western *sahel*:

“Essentially it comprises a residence, which may be either large or small, an open courtyard enclosed by high, blind walls adjoining the residence, and a tall tower (or very occasionally two or more towers) projecting from one corner of the compound.” (Adams, 1987: 338)^{xii}.

From then on flimsier structures were erected first from a mixture of brick and stone then dry-walled stoned huts (*ibid*: 335).

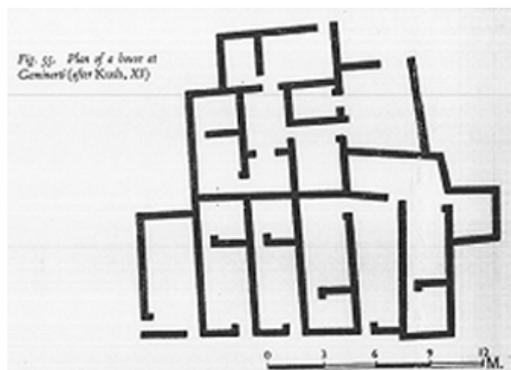


Fig.14 Plan of a house at Gaminarti in the north (Shinnie, 1967: 157)^{xii}.

On the palace at Wad-Ban-Naga, Hakim (p. 94) says:

“... its plan indicates that the ground floor was divided into a number of independent areas some of which could be entered from ground level and others apparently only from the floor above.”

This description is very similar to that of the later palaces, of which Crawford presents many photos, but little information as to how they are internally sub-divided or used due to lack of documentation. According to Adams (1986: 334), the ‘fortified households’ developed in the later centuries of Christian Nubia:

“The ground floors were comprised of vaulted storage cellars, while the living chambers were on the floor above. There was no access at the ground floor level; entry was by means of doorways at the second floor level, which could only have been reached by means of ladders.”

xi Crowfoot, J.W. and Griffith, M.A. 1911. The Island of Meroe and Meroitic Inscriptions Part 1 Soba to Dangêl Edited by Griffith, F. LL. The Offices Of the Egypt Exploration Fund, London.

xii Shinnie, P.L. 1955 Excavations at Soba Occasional Papers, No. 3, Sudan Antiquities Service

“The floors of most residences are made of beaten earth; only the eight or ten wealthiest inhabitants have tile floors. Roofs are constructed by laying palm fronds over a series of wooden beams and putting a combination of mud and manure over the fronds. The interior walls of the guest room are usually left as they were made, although the more wealthy or Europeanised villagers may white-wash them.” (Barclay 4)^{xvi}.

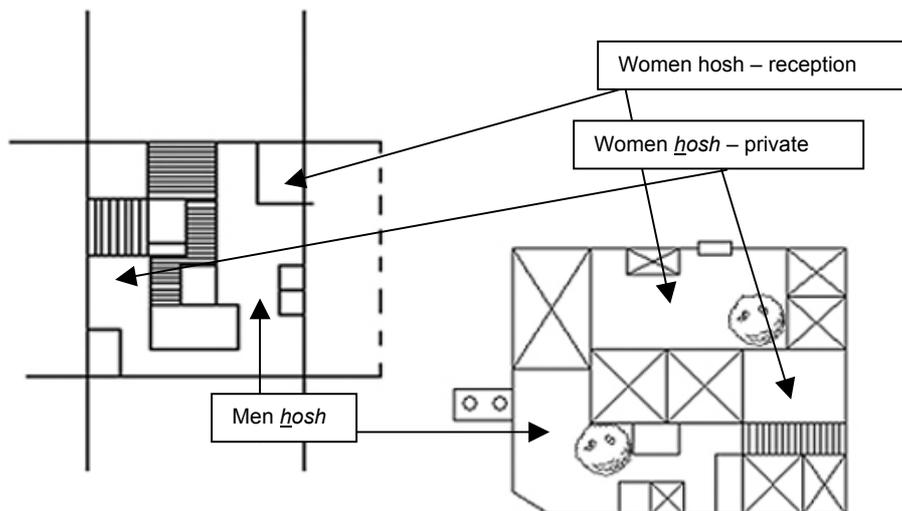
This is Cloudsey’s description of a *daywan* (p. 167)^{xvii}:

“The *divans* ran the whole length of the house from front to back as an integral part of their structure... windows both ends, a French window to receive visitors and another door conveniently placed in the small wall, but near the back of the room in a direct line with the kitchens. Two white plaster pillars had been erected on either side of the centre of Mahmoud’s *divan* to give an appearance of supporting the roof. Mahmoud took particular pleasure in them. Emulating the Turkish style, many brick-built houses in Khartoum and Omdurman have such pillars supporting veranda roofs.”

Shinnie (1967: 156-157) describes one Meroitic house in Gaminarti in the Second Cataract, which is of some size and complexity as it:

“It was solidly built of sun-dried brick, with walls that stood to a height of well over six feet. One of the features of this house, repeated in others, is its arrangement in groups of two rooms, of which the smaller one is entered from the larger. The cooking pots and the fireplace have always been found in the main room, which must have also been used for living and sleeping in, so far as these activities took place indoors; the smaller room seems to have been a store. The few other houses of the period which we know conform to this pattern and were presumably the dwelling places of a small community, or a large extended family, each set of two rooms forming a unit within the whole building.”

Typical house layouts as they are today, and how they developed, have been discussed in the study. The images below give additional information and provide a visual essay that may portray the feel and the colours of these house typologies.



Figs.15 and 16 Typical house layouts. The first one is in ElSahafa, Khartoum, built in the 1960's. Second one is in Shendi built in the 1950's. Note the shifted rooms that allow for

xvi Barclay, Harold B. 1964 Buurri Al Lamaab. A Suburban Village in the Sudan. Cornell University Press.

xvii Cloudsley, Anne 1984 [1981] Women of Omdurman. Life, Love and the Cult of Virginity 3rd Edition, London Ethnographica

visual privacy for the male and female sections of the houses (Drawings by D. Kirkman, 2004).



Fig. 17 A view of the Men *hosh* of house in Fig. 14. The grey colour is uncharacteristic. (Photograph O. Osman, 2003)



Figs 18-24 Photographs taken at random of street scenes in Omdurman (Photographs by O.Osman, 2003)



Fig. 25 Houses at el-Boayda, el-Gezira region. This is probably a government funded housing scheme yet it follows in the pattern of house typologies in the region (Photograph by author, 2000)

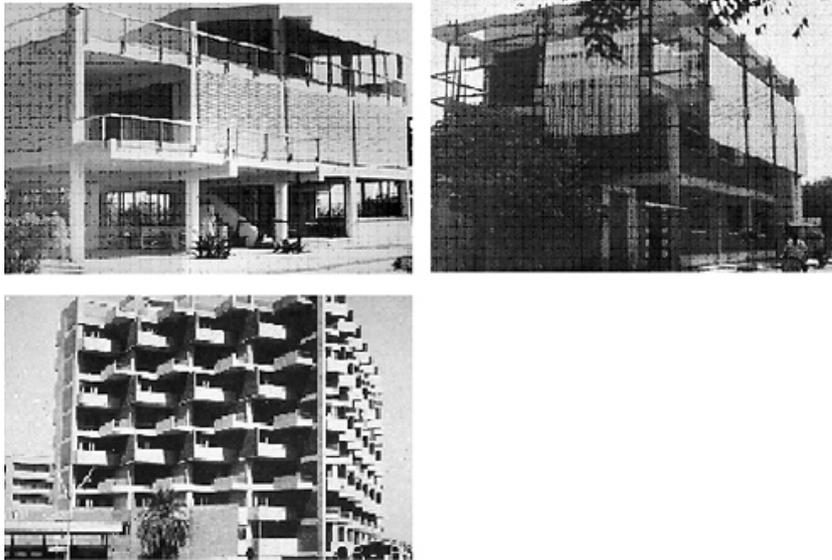
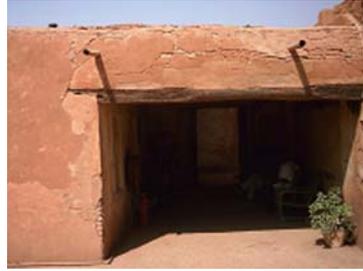


Fig.26-28 Residential buildings designed by Abd el-Munim Mustafa in the 1960's (Photographs obtained from O. Osman, 1999). These follow in the Khartoum Style – a regional interpretation of modernism that took the climate of the Sudan into consideration. It would be interesting to study plans of these and relate them to space use in the house types portrayed in Figs. 14-24 above.

Houses of local village shaykhs rarely differed from the other houses in the village. But some residences of political leader have a degree of prominence; the most well known is the Khalifa 'Abdullah house in Omdurman.



Figs. 29-30 Plan and external view of the Khalifa 'Abdullah house in Omdurman (Photographs by O. Osman, 2003).



Figs. 30-31 More images of the Khalifa house, now a museum.



Fig. 32-34 More images of the Khalifa house, now a museum.

The qubba

This is where the shaykh of a Sufi sect is buried and the object of visitations. It is sometimes attached to a mosque. It is interesting to see in Adams (1986: 358) a cemetery of *qubbas*.

“...the small, domed tomb superstructures that are a conspicuous feature of many post-Christian cemeteries. Basically they comprise four brick pilasters set close together, and surmounted by a tapered dome.... it is not certain that they date exclusively from the post-Christian period; the earliest examples may have made their appearance just before the final demise of Nubian Christianity. However, by far the largest numbers clearly date from the period between 1500 and 1820. Similar tumuli are found at least as far south as Old Dongola, without any significant variation in form. They appear to be the single most uniform architectural expression of the Islamic period in the northern Sudan.” (Adams, 1986: 333)

The *qubba* in its form, seems to be unique to the Sudan:

“...the familiar land of castles and *qubbas* which we associate so strongly with Sudanese Islam.” (Adams, 1986: 339)

Castles/ palaces

Sennar palace description quoted in Spaulding (1985: 7-8)^{xxii}

“[Sultan Bādī] built the government castle, and made it with five stories one above the other. He built a number of other [buildings] for the deposit of the necessities of government such as arms and the like, and also the houses of the harem and a divan for his sitting-in-state. He had two other divans, one of which was outside the great castle and the other within the castle wall. He put a great wall around the whole, and in it made nine gates. (the ninth gate being for the king alone) He assigned to each one of the great men of his kingdom a gate through which to enter and exit, and likewise to each of the great men of his kingdom a special divan in which to sit for the

xxii Spaulding, J. L. 1971 Kings of Sun and Shadow: A History of the ‘Abdallāb Provinces of the Northern Sinnār Sultanate, 1500-1800 A.D. Ph.D. Dissertation, Columbia University

consideration of his business... All these gates opened from a single wall in a straight line. In front of these gates was a roofed gallery with twin pillars, under which was a high bench known as *dikkat man nādāk*.”

“ [The] royal audience hall paved with colored tiles and equipped with a raised dais for the king, “an elevated platform two spans above the ground, covered with a red carpet.” And a stone that marked the limit beyond which one who approached the king must not advance. In front of the palace complex lay a wide square, the *fāshir*, in which public ceremonies of state took place and which served as the market.” (Spaulding 1985: 8)

The *mak* of the ‘*abdallab* province lived in fortified buildings called a *jama’a* or community, which can be translated to castle. Sites were on rocky outcroppings of the desert behind the cultivated strip. The castles of the Funj era differed from Christian Nubia: they were built of stone, or earth instead of red baked brick and they employed rectangular corner towers in place of round ones placed at intervals along the walls. Some had wells within the walls some overhung the river. Some times curtain walls were constructed from each river corner of the castle to the waterside to give a defensible corridor leading to water (Spaulding, 1971: 135-136)

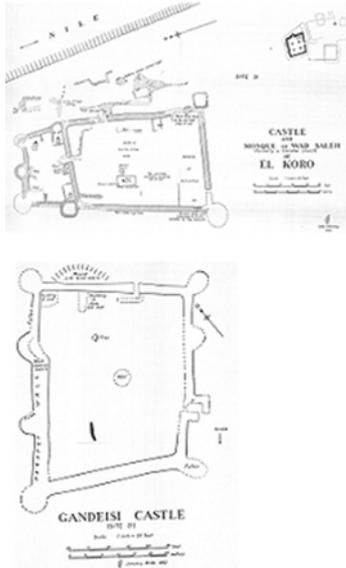


Fig. 35 Castle and mosque at ElKoro (Crawfords, 1953: 31).
Fig. 36 Gandeisi castle (Craford, 1953: 29).

c. Pottery, decoration stone reliefs on buildings.



Fig. 37 Painted patterns on Meroitic pottery (Shinnie, 1967: 121).

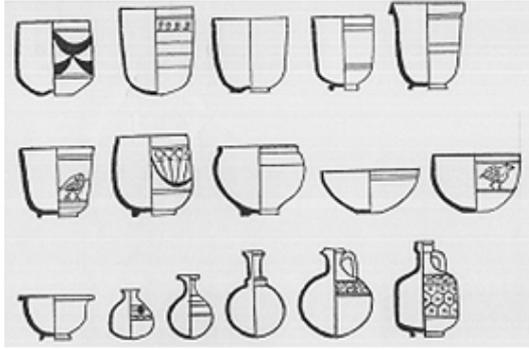


Fig. 38 Meroitic pottery (Shinnie, 1967: 114)



Fig. 39 Meroitic pottery (Shinnie, 1967: 115).

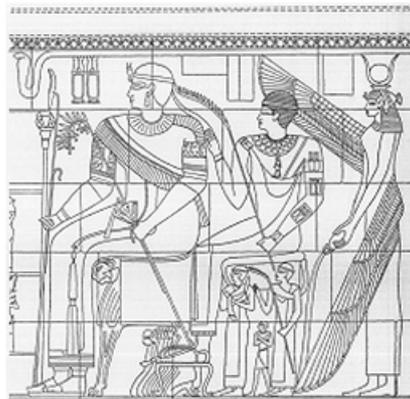


Fig. 40 Relief from the pyramid chapel of Nahirga (Shinnie, 1967: 109

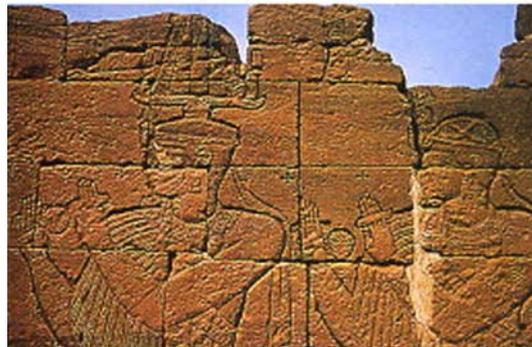


Fig. 41 Relief at Old Meroe (Photograph by author in 1996).



Fig. 42-43 Reliefs from Old Meroe (Photographs by the author in 1996).

d. A checklist of buildings components/elements in the region.

Arches

Arches have certain political connotations at the present time. They have a strong link to Nubia as well as Suakin. They have been extensively used in colonial architecture of the Sudan. Different arch forms need to be identified and documented. They also need to be compared to the rest of the Muslim regions. Which forms are associated with which eras and what the influences are are important aspects to research.



Fig. 44-45 The Presidential Palace, from the Turkish era, and Khartoum University, from the British era. Note the use of arches and arcades (Photographs obtained from the Sudanese Embassy in Pretoria, 2002).

Arcades

Arcades provide cover for the areas bordering a facade or courtyard. They are very visible in all kinds of buildings throughout the region. They were also used extensively in colonial buildings. The history and use of this architectural form needs to be investigated.



Fig. 46 Building in central Khartoum with arcades at the ground level (Photograph obtained from the Sudanese Embassy, Pretoria, 2002).

Domes

These are very visible in the northern riverain region, especially on numerous *qubbas* and mosques. They also have political connotations at the present time, but are strongly linked to Nubian architecture. The *qubba* (translated 'dome') is basically single dome on a square base however elaborate they may be. The dome shapes need to be identified.

Vaults

See the image of a vault in a Meroitic building. It means that the use of vaults dates back to the pre-Muslim eras. This needs to be investigated.



Fig. 47 Stone vault in the ruins of ancient Meroe (Photograph by author, 1996).

Minarets

This element does not seem to be as significant as in the rest of the Muslim countries. Its use may be more recent in history. According to a drawing of Sennar in 1837, the Mosque there does have a minaret even though another drawing in 182, just has square towers on the corners (both in Crawford). The latter resemble the towers on the corners of old *shaygiyya* castles rather than the minarets in mosques in the other Muslim countries.

Minarets are very evident in the old mosques of Suakin though – maybe they are a Turkish influence? The ruins of old churches also do not have steeples.

These aspects may be significant: the solidity of buildings in that region – as the heavy forms and the dependence on the whole rather than the parts, convey the architectural character particular to the region. This in contrast to what Al Faruqi mentions about the ‘modular organisation’ evident in buildings in other parts of the Muslim world. Even though that ‘modular organisation’ is evident in the plan forms in the region it is less evident in 3-dimensional forms. The art of ancient Nubia has been described as being almost ‘modern’ in form and colour, when compared to the rest of the ancient world. This may be related to the clean, solid, un-ornamented forms of some of the churches, castles or mosques.

(Watch)towers

These are evident in the old *shaygiyya* and Funj castles. Semi-circular or square. They are usually “...conspicuously battered... always projects beyond the regular line of the wall... comprises a single large and very high chamber, with an open parapet above... regularly loopholed.” (Adams, 1986: 338).^{xxx}

e. A checklist of building materials in the region.

Some materials are more available than others. Historically, some were more evident than now. Some have had a role to play in building form such as the limitations of mud may have been the reason for the distinctive conical shape of the *guba* or the solidity and heaviness of castles or churches in the Christian eras.

Mud

The *jalous* construction (layers of mud are built and the walls are raised as the mud dries) characteristic of the region was introduced around A.D. 1700 (Adams: 335)

“...and became increasingly common thereafter. The one thing that can be said consistently about all of the post-Christian constructions is that they are relatively light and insubstantial, and they apparently became more so with the passage of time. Rooms were mostly very small, and lacked altogether such interior features as *mastabas*, ovens and latrines. Another consistent feature was the extreme material poverty of these sites, which generally yielded only the crudest of tools and pottery vessels.”

This was also the time when roofs became lightweight constructions with poles and matting.

xxx Adams, W. T. *Islamic Archaeology in Nubia* in Hägg, T. (Editor) 1987 Nubian Culture Past and Present. Main Papers Presented at the Sixth International Conference for Nubian Studies in Uppsala, 11-16 August 1986, Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.

Bricks

The changes in brick shapes and sizes through history are interesting. Adams, referring to castles, mentions that “...nearly all involved combinations of rough stone a brick construction, including both red brick and mud brick.” (Adams, 1986: 340). About the bricks, Crawford says that they are the : “...large and flat kind.” 340



Fig. 48 Columns in Old Meroe (Photograph by author, 1996).

Gateways/ forifications/military buildings



Fig. 49 Forts at El Kab (Crawford, 1953: 11).

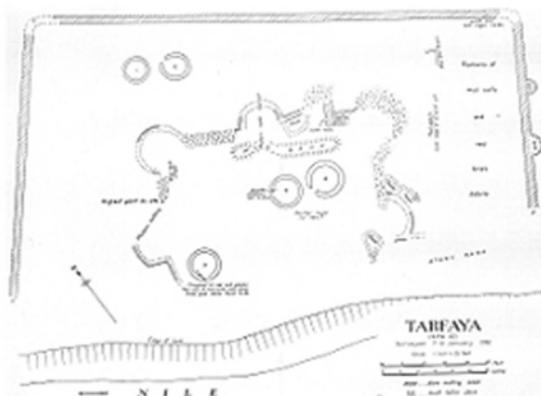


Fig. 50 Tarfaya, a fort (Crawford, 1953: 15).



Fig. 51 El Usheir castle and fort (Crawford, 1953: 21).

The church

Many old churches were converted castles. They were in the pattern of the fortified households mentioned above. Crowfoot has speculated Auxumite connections (1911: 40).

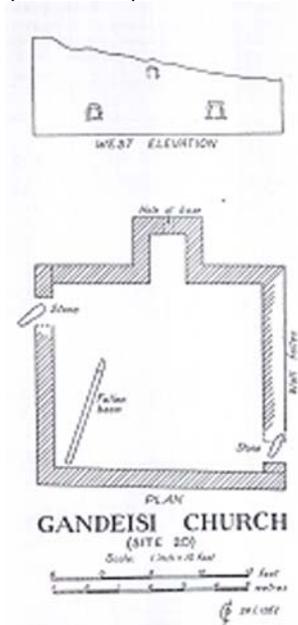


Fig. 52 Gandeisi church (Crawford, 1953: 27).

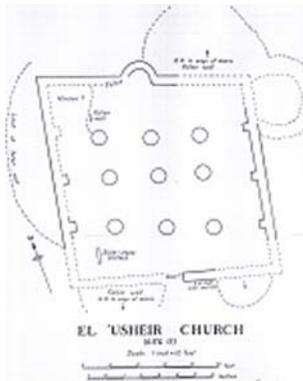


Fig. 53 ElUsheir church (Crawford, 1953: 21).



Fig. 54 ElKoro Mosque/church (Crawford, 1953: plate xxvi).

The pre-Christian temple



Fig. 55 A ruin in the region of Meroe. There is still speculation about what the function of the building may have been (Photograph by author, 1996).

f. Decorative elements in the region.

The extent to which certain decorative forms are Islamic or African is still to be seriously researched. Some graphic forms in '*hijabs*' (Muslim amulets) seem to be distinctly African. Also the 'zigzag' pattern used in buildings and artefacts. House painting in Halfa is relatively recent historically. Nubian house decoration was initiated by Ahmad Batul (1920-1960) in villages near *wadi* Halfa. The motifs used, colours, decorative plates, geometric patterns, all create good opportunities for research and documentation.



Fig. 56-58 The door decorations in various regions of the country have not been well documented (Photographs by author, 2000)



Fig. 59 Public buildings, such as this one in Baoida, Gezira, stand out in the landscape because of the use of bright colours. This contrasts strongly with the earth coloured houses (Photograph by author, 2000).

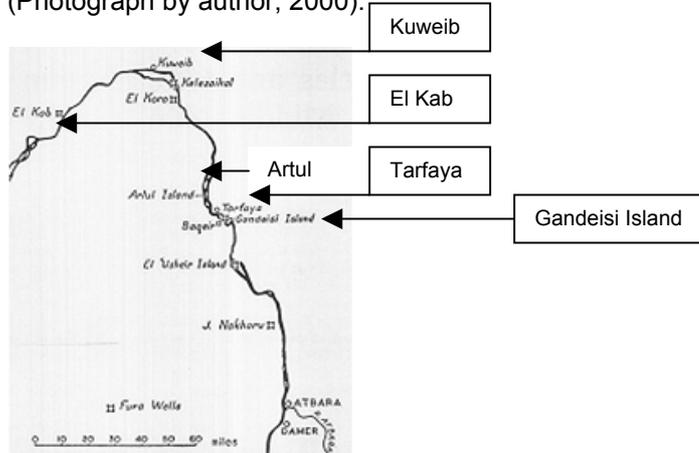


Fig. 60 Some sites mentioned above (Crawford, 1953: 8)