

Space, place and meaning in northern riverain Sudan

by

Amira Omer Siddig Osman

Submitted in partial fulfilment of the requirements for the degree

Philosophiae Doctor (Architecture)

Faculty of Engineering, the Built Environment and Information Technology

University of Pretoria

Supervisor: Prof. K. A. Bakker

May 2004

The sea [river]*

Tonight my family greet me
The spirit of my forefathers emerges from the dreams of the river
And from the night of the sky

The city

I will return Sennar.....
Open – guards of Sennar – for the one who is returning tonight – the gates of the city
Open – for the one who is returning tonight – the gates of the city
Open the gates of the city

Are you a Bedouin?
No.

Are you from the land of the Africans?
No.

I belong to you
A lost one returning
Singing in one tongue
Praying in another

I belong to you
Your pain is mine
My spear is yours
A pagan who worships the land
A blind Sufi who worships miracles and the fire of the God

The dream

A dream? An imaginary tale? Truth?
What am I without this sound – this symbol?
It creates me
I create it
On the surface of a city – under the sun of the night – and a deep love

This study is dedicated to the Sudan – a broken country – in the hope for unity and peace

*The Sudanese refer to the River Nile as the sea.

These are excerpts from the poem, The return to Sennar, by Mohammed Abd AlHay, *Al A'mal al Shi'riyya alkamila*, 1999, Cairo, *Markaz aldirasat al sudaniyya*.

ACKNOWLEDGEMENTS

Thank you to

Prof. Karel Bakker, my supervisor – I have learnt much from you through this process.

My father, Prof. O.S. Osman, for consistently reading my rough notes with the same sincerity as he would have a more articulate document – for continuously providing me with material that I requested – for never failing to encourage me through text messages, e-mails and phone calls to: 'Keep working on your Ph.D.!'

All the staff at the Department of Architecture, University of Pretoria, for their continued support.

Prof. Schalk Le Roux.

Prof. Roger Fisher.

Gus Gerneke for trying to make me a 'literate architect'.

The International Affairs Office, University of Pretoria for the bursary I obtained to travel to Bergen – the trip was essential to my study.

The Centre for Middle Eastern Studies, University of Bergen.

Prof. Anders Bjørkelo – for amazing support and assistance.

Prof. O'Fahey – for access to your private library and incredible conversations.

The Department of Geography, University of Bergen.

Dr. Vibeke Vågenes.

Prof. (*'ami*) Ahmed ElTayib Zain El'Abideen – though you are no longer with us, your ideas still motivate me.

Dr. Khidir Abd AlKarim– you acted as guide on my trips to the archaeological sites in the north – you were able to spark vivid images of life in ancient Meroe that persisted in my thoughts.

My family and friends, who not only provided moral support, but also unwittingly gave me ideas for this study through our conversations.

Sarah – for being there.

Deborah Kirkman for your valuable assistance.

Hamid 'AbdAllah for help with language and translation.

My mother, *mama* Asia and *umi* Fatima, my grandmother, whose house in Shendi, *hosh elshajara*, inspired me!

BASHIR – FOR EVERYTHING!

TABLE OF CONTENTS	Page No.
CHAPTER 1: THE STUDY PROPOSAL – THE PROBLEM AND ITS SETTING	1
1.1 THE STATEMENT OF THE PROBLEM	1
1.2 THE MAIN HYPOTHESIS	1
1.3 THE DELIMITATIONS	1
1.4 THE DEFINITION OF TERMS	2
1.5 THE SOURCES, THEIR TREATMENT AND INTERPRETATION	3
1.6 THE RESEARCH METHODOLOGY	5
1.7 THE SPECIFIC BASIS OF EACH SUB-PROBLEM	6
1.8 IMPORTANCE OF THE STUDY	8
1.9 THE QUALIFICATIONS OF THE RESEARCHER	10
CHAPTER 2: PHILOSOPHICAL APPROACH AND RESEARCH METHODOLOGY FOR THE CONTEXTUAL STUDY OF ARCHITECTURE	 11
2.1 SUB-PROBLEM 1	11
2.2 HYPOTHESIS 1	11
2.3 OUTLINE OF CHAPTER 2	11
2.4 METHODS, SOURCES AND SCHOOLS OF THOUGHT	12
2.4.1 Eco-systems of paradigms	12
2.4.2 Dialectic processes, absolutism and relativism	13
2.4.3 Phenomenology of the body	15
2.4.4 Recapitulation	17
2.5 SOURCES, LANGUAGE, CLASSIFICATION AND INTERPRETATION	18
2.5.1 Information sources	18
2.5.2 Language	18
2.5.3 Artefacts and their classifications	19
2.5.4 The origins of artefacts	20
2.5.5 More on classification – the concept of multiple characteristics	21
2.5.6 Interpretation	23
2.5.7 Signs, symbols and interpreters	24
2.5.8 Recapitulation	26
2.6 INTERDISCIPLINARY INVESTIGATION: THE VALIDITY AND DIFFICULTIES OF USING A VARIETY OF SOURCES TO UNDERSTAND ARCHITECTURE	 26
2.6.1 The Architecture/Culture/Environment dialectic	27
2.6.2 Perception of climate	29
2.6.3 Perception of landscape	31
2.7 ARCHITECTURE DEBATED	32
2.7.1 Vernacular architecture	32
2.7.2 What is beauty?	34
2.7.3 African architecture	36
2.7.4 African spirituality	39
2.7.5 A Sudanese idiom	40
2.8 A RE-DEFINITION OF ARCHITECTURE	42
2.9 SUMMARY AND CONCLUSIONS	45
CHAPTER 3: AN ECO-SYSTEMIC CONSTRUCT OF NORTHERN RIVERAIN SUDAN	 47
3.1 SUB PROBLEM 2	47
3.2 HYPOTHESIS 2	47
3.3 OUTLINE OF CHAPTER 3	47
3.4 THE CONTEXT: ITS HISTORY AND ITS VALIDITY AS AN AREA OF STUDY	 47
3.5 RECURRING THEMES IN THE LITERATURE ON THE REGION	57
3.5.1 Social conscience, religion and ethics	58
3.5.2 Elaborate social interaction systems	60

3.5.3	Complex and intricate kinship system	61
3.5.4	The slave trade, racism and political power	62
3.5.5	Trade routes	63
3.5.6	The harshness of the environment, the desiccated landscape and the poor economy	66
3.5.7	Sudanese Sufism	68
3.5.8	The <i>shaykh's</i> cult	69
3.6	IDENTITY OF A PEOPLE: WHO THEN ARE THE NORTHERN SUDANESE?	70
3.7	SUMMARY AND CONCLUSIONS	73
CHAPTER 4: PEOPLE AND PLACE: THE IDENTITY OF THE REGION THROUGH SELECTED ARTEFACTS		75
4.1	SUB PROBLEM 3	75
4.2	HYPOTHESIS 3	75
4.3	OUTLINE OF CHAPTER 4	75
4.4	GENDER ROLES AND BODY IMAGES	76
4.5	DRESS FORM AND MEANING	80
4.5.1	Conformity, identity and group affiliation	80
4.5.1 i)	Conformity – <i>albas al bi'jib al nas</i>	80
4.5.1 ii)	Identity – <i>al shilookh</i>	81
4.5.1 iii)	Group affiliation	82
4.5.2	Clothing as environmental control	82
4.5.3	<i>Sutraa</i> and <i>hijab</i> : the <i>tob</i>	83
4.5.4	Wrapping containers, wrapping bodies	85
4.5.5	Dress forms: history and origins	85
4.5.6	Attitudes to mechanization and material as economic currency	87
4.5.7	Clothing and associated meanings	87
4.5.8	Clothing and national identity	88
4.6	CLOTHES, BUILDINGS AND SPACE USE	89
4.7	DETERMINANTS OF HOUSE FORM AND LAYOUT	90
4.7.1	Social structure and spatial articulation: hierarchical differentiation in the physical environment – changes through time	91
4.7.2	Social themes concerning gender roles and their impact on house layout	94
4.7.3	Connotations of the word <i>bayt</i>	95
4.7.4	Privacy and the individual's use of space	96
4.7.5	Time as a structuring element in place making – nomadic cycles	97
4.7.6	The cardinal directions and spatial perception	101
4.7.7	Symbolic relationship between burial and dwelling	102
4.7.8	The courtyards, the streets and the public spaces	104
4.8	SHAYKHS, VILLAGES, TOWNS AND TOMBS	106
4.8.1	Islam and Sufism	107
4.8.2	Bearers of the new religion, Nile dwellers and teachers of Islam	108
4.8.3	The Nuclei of Urban Centres: the Religious Centres	111
4.8.3 i)	al-Dammar	113
4.8.3 ii)	Hillat Khojali	115
4.8.3 iii)	Wad Hassuna	115
4.8.3 iv)	al-Fijayja	116
4.8.3 v)	al-Fara'/al-Qubba	117
4.8.3 vi)	Kadbas	117
4.8.3 vii)	Um Dubban	118
4.8.3 viii)	al-Sanniyya	118
4.8.4	Descriptions of religious centres	118
4.9	OMDURMAN	122
4.9.1	The morphology of Omdurman compared to the Medina typology	126

4.10	SUMMARY AND CONCLUSIONS	129
CHAPTER 5: MAKING VISIBLE THE INVISIBLE: THE INTANGIBLE CONSTRUCT		134
5.1	SUB PROBLEM 4	134
5.2	HYPOTHESIS 4	134
5.3	OUTLINE OF CHAPTER 5	134
5.4	THE CONSTRUCTION OF THE MEANING OF A PHENOMENON	135
5.5	SOCIAL SYSTEMS	136
	5.5.1 The <i>Fareeq</i> community network	136
	5.5.2 The nuclear family	137
	5.5.3 Segregation of the sexes	138
	5.5.4 Personal appearance as a form of gender differentiation	139
	5.5.5 Milestones and activities	139
	5.5.6 Social sanction – maintaining social order	140
5.6	ECONOMIC SYSTEMS	140
5.7	STATUS AND POWER SYSTEMS	142
	5.7.1 Kushite and Meroitic eras	143
	5.7.2 Christian era	144
	5.7.3 Arab penetration	144
	5.7.4 Funj era	145
5.8	RELIGIOUS SYSTEMS	147
	5.8.1 Protection from the spirits	147
	5.8.1 i) The Quran	147
	5.8.1 ii) White and shiny things	147
	5.8.1 iii) <i>Bakhour</i> incense/substances of strong smell or taste	147
	5.8.1 iv) Loud sounds	148
	5.8.1 v) Sacrifices and food types	148
	5.8.1 vi) Protection in numbers and words	148
	5.8.2 Rituals	149
	5.8.2 i) Visits to burial places	149
	5.8.2 ii) Flags and colours	149
	5.8.2 iii) More on colour	151
	5.8.2 iv) Rituals at the river bank	151
5.9	APPROPRIATION OF SPACES FOR RITUALS	152
	5.9.1 Death	153
	5.9.2 Marriage	153
	5.9.3 Religious ritual and corresponding space: the <i>halaqa</i>	154
	5.9.4 <i>Zar</i>	155
5.10	KNOWLEDGE AND CREATIVE SYSTEMS	155
	5.10.1 Attitudes to knowledge and creativity	155
	5.10.2 Literature	156
	5.10.3 Language and words	158
5.11	THEMES AND PATTERNS THAT DETERMINE PLACE-MAKING ACTIVITIES	160
	5.11.1 Cultural space/natural space	160
	5.11.2 Levels of control/Agents of control	162
5.12	INTANGIBLE VALUES AND PHYSICAL/SPATIAL IMPLICATIONS	164
	5.12.1 Origins of built artefacts in the northern riverain region	164
	5.12.2 Intangible/abstract imitation of original forms	165
5.13	SUMMARY AND CONCLUSIONS	167
CHAPTER 6: A THEORETICAL, INTERPRETATIVE FRAMEWORK FOR THE STUDY OF SUDANESE ARCHITECTURE		169
6.1	SUB PROBLEM 5	169
6.2	HYPOTHESIS 5	169
6.3	OUTLINE OF CHAPTER 6	169
6.4	TOWARDS AN INTERPRETATIVE FRAMEWORK	169

6.5	A COMPARISON BETWEEN CULTURES OF VARIOUS HISTORICAL ERAS	170
6.6	AN ALTERNATIVE INTERPRETATION OF SUDANESE HISTORY	181
6.7	NORTHERN SUDAN IN THE CONTEXT OF SUDAN AND AFRICA	183
6.8	SUDANESE ARCHITECTURE	184
6.9	AN ECO-SYSTEMIC FRAMEWORK FOR THE STUDY OF SUDANESE ARCHITECTURE	185
6.10	CONCLUSIONS	186
CHAPTER 7: RECAPITULATION, ACHIEVEMENTS, DELIMITATIONS AND COUNTER-ARGUMENTS, CONCLUSION AND OPPORTUNITIES FOR FURTHER RESEARCH		187
7.1	RECAPITULATION	187
7.2	ACHIEVEMENTS	189
7.3	DELIMITATIONS AND COUNTER-ARGUMENTS	191
7.4	CONCLUSIONS: INTERFACE: ISLAM MEETS AFRICA	192
7.5	OPPORTUNITIES FOR FURTHER INVESTIGATIONS	195
LIST OF REFERENCES		198
SUMMARY English		207
Afrikaans		208
Arabic		209
GLOSSARY		210

LIST OF FIGURES

		Page No.
Fig. 2.1	Diagram generated by the author from writing of Klinck	17
Figs.2.2 and 2.3	Rudimentary structures in the Gezira region, the Sudan	41
Fig. 3.1	Nubia and Kush	48
Fig. 3.2	Historical episodes	49
Fig. 3.3	The three Christian kingdoms	50
Fig. 3.4	Rough boundaries of the Sudan	54
Fig. 3.5	Map from Daly and Forbes	55
Fig. 3.6	A diagrammatic representation of the region under study and its surroundings	57
Fig. 3.7	Goods being traded to and from Shendi	64
Fig. 3.8	Trade routes between the major towns of the northern Sudan	65
Fig. 3.9	Routes of Muslim penetration into the Sudan	68
Fig. 4.1 and 4.2	Unidentified Sudanese man and woman in 1920	80
Fig. 4.3	Man and woman in traditional attire	83
Fig. 4.4	A typical pattern in house design: <i>qurfatayn makhloofat</i> .	95
Fig. 4.5	A modern interpretation of the <i>qurfatayn makhloofat</i>	95
Fig. 4.6	Old Shendi house	99
Fig. 4.7	Indoor rooms/Outdoor rooms in a Shendi House	100
Fig. 4.8	Sun directions and shadow pattern on a summer morning	100
Fig. 4.9	The cardinal directions and associated symbolism	102
Fig. 4.10	A typical northern Sudanese grave	104
Fig. 4.11	Comparison between the morphology of Sudanese towns and villages and that of other Muslim cities	105
Fig. 4.12	The same outside space becomes a series of different settings	106
Fig. 4.13	Places mentioned in the text: map of North East Sudan	109
Figs.4.14 & 4.15	Villages on the Khartoum-Shendi route	111
Fig. 4.16	Khalwa boy dipping a reed pen into ink for writing sections of the Quran on a <i>loh</i> (wooden board)	119
Fig. 4.17	Dervishes in a procession in Khartoum	119
Fig. 4.18	"The domed gubba and minaret of Sheikh Gharieb Allah"	120
Fig. 4.19	Qubba of Shaykh Idris wad Arbab	121
Fig. 4.20	Mahdi's Tomb, Omdurman	124

Fig. 4.21	The Khalifa House	125
Fig. 4.22	The <i>Qubba</i> viewed from the roof of the Khalifa House	125
Fig. 4.23	Morphology of the city of Omdurman during the Mahdiyya	128
Fig. 4.24	Aerial photograph of Omdurman taken around 1930	128
Fig. 4.25	Aerial photograph of al Fashir taken in 1916	129
Fig 5.1	The <i>Fareeq</i> within a village setting	137
Fig. 5.2	The movement patterns of women in a neighbourhood.	139
Fig. 5.3	Overlaps between the different age groups	140
Fig. 5.4	The two dimensions of status during the Funj era.	146
Fig. 5.5	Flags at a graveyard	149
Fig. 5.6	Flags at a celebration of <i>Moolid</i>	150
Fig. 5.7	Painting by Ahmed Shibrain	159
Figs.6.1 & 6.2	The topography of Meroe and the layout of the town	174
Fig. 6.3	Castle at Meroe from the later Funj era	174
Fig. 6.4	Church in Old Dongola	180

LIST OF TABLES

	Page No.	
Table 2.1	Constituents of the tangible culture of a people.	20
Table 2.2	Codes that make up a cultural context.	25
Table 2.3	Determinants of form, organisation and space use.	28
Table 2.4	The two forms of social structure and their characteristics.	30
Table 2.5	The three domains of dwelling and agents of control.	41
Table 3.1	Historical timeline.	53
Table 4.1	Gender differences (Vagenes, 1998: 92).	78
Table 4.2	Gender perceptions, roles and social/cultural domains present in the northern riverain area.	79
Table 4.3	Comparison between Omdurman and other African cities influenced by Islam.	127
Table 5.1	Tangible and intangible culture: Construct of aspects of culture relevant to the context, explored through various themes and patterns.	135
Table 5.2	<i>Schema</i> of the relationship between this world and the other world: based on Levi-Strauss in Leach (1974: 76).	160
Table 5.3	<i>Schema</i> representing the relationship between this world and the other world for the Northern riverain Sudanese people. .	161
Table 5.4	Levels and control in the northern Sudanese environmental setting.	162
Table 5.5	Origins of built form according to Quatremère de Quincy.	164
Table 6.1	A comparison between cultures of the different eras in Northern riverain Sudan.	171
Table 6.2	Space and place in northern riverain Sudan: a framework for teaching and research.	185
Table 7.1	Sub-problems, hypothesis and outcomes.	188
Table 7.2	Themes particular to the northern riverain context and aspects for special consideration.	189-90

CHAPTER 1: THE STUDY PROPOSAL – THE PROBLEM AND ITS SETTING

1.1 THE STATEMENT OF THE PROBLEM

The main problem to be addressed is the formulation of a suitable theory base and the subsequent construction of an eco-systemically based interpretative framework, intended to be a relevant foundation for future analysis of the architecture of the Sudanese northern riverain region and for architectural education in the Sudan. This provisional framework requires the identification and articulation of an appropriate philosophical approach, and an eco-systemically based, interdisciplinary description and analysis of tangible and intangible culture prevalent in paradigmatically bound epochs in the identified region – the case study.

1.2 THE MAIN HYPOTHESIS

A more probable and relevant interpretation of the architecture of the Sudanese northern riverain region will be achieved through the construction of an eco-systemically based interpretative framework that incorporates essential and relevant dimensions of the tangible and intangible culture of the region, that includes interdisciplinary knowledge fields, that acknowledges the complexities of interpreting a vernacular architecture, and that addresses inadequacies of, and fills *lacunae* in existing architectural historical research and architectural approaches to the interpretations of place.

1.3 THE DELIMITATIONS

The area under investigation extends along the Sudanese Nile valley from the northern border with Egypt to the town of Sennar on the Blue Nile and Kosti on the White Nile, south. This is inclusive of the Gezira area between the two Niles. This falls within the regions of the current political sub-divisions of Northern Province as well as El Nil, Khartoum, White Nile and Blue Nile Provinces.

There is no specific time limit to the study and no chronological order in the design of the thesis. Ideas are freely borrowed from different eras to examine the set hypothesis. This is seen as an appropriate approach, as the intention is to use existing documentation on different eras to achieve an understanding of the context as it is today. In fact, the thesis aims to reformulate the approach to the study of the

history of the region, as conventional approaches are seen to focus too much on specific historic incidents and not so much on periods of transition.

The artefacts to be examined will be selected in terms of their relevance, at the discretion of the author and are not intended to be exhaustive. The attempt is to use artefacts that are representative of various characteristics of and recurring themes pertaining to the context. Sudanese sources will be used as much as is feasible.

The built environment is looked at in its totality rather than as individual buildings as is the approach in studying institutionalised architecture.

1.4 THE DEFINITION OF TERMS

An eco-systemic approach:

An approach that permits placing an artefact within a constructed hierarchy of a perceived total realm. This approach is accepted as prevalent and valid. It pertains to eco-philosophy as a way of thinking. It acknowledges the interconnectedness of things and ideas. The significance of the artefact is abstracted into an association with meaning and the subjectivity of the interpreter is acknowledged.

Artefact:

This refers to any cultural agent within the socio-cultural realm. For the purpose of this study the term is not restricted to mean a physical objectⁱ but has been expanded to include values, ideas, emotions, rituals, social practices and linguistic agents that are explored, eco-systemically, within their contextual settings. An artefact acquires meaning, that is, it is interpreted as standing for something other than itself. Signsⁱⁱ indicate a perceived quality, thus, any artefact can act as a sign depending on the context and social interpretation.

Space:

Where things exist and move. The undomesticated natural environment, geographic and natural features which may have a sense of 'place' or not. Space is associated

ⁱ The author is aware that this terminology is controversial, but it is an approach to intangible heritage accepted by various researchers, which the author is partial to. The relevance of this working definition to the specific case study becomes apparent through this document.

ⁱⁱ Signs can be realised in symbols, which tell about their objects (Vagenes, 1998: 151). Symbols have learned meanings within a particular cultural context (Broadbent, 1980, 3).

with a lack of intimacy. The perception of time and space are strongly related, as well as elements of natural landscape.ⁱⁱⁱ

Place:

Where the natural setting is distinct through environmental features or human intervention. Where people have inhabited space. Where a space has acquired social, spiritual, functional significance to a people. Where a space is marked by some quality or identity that distinguishes it from other spaces. A location that encourages dwelling, in a broad sense of the word. Place can be determined by how people interact with landscape and geography. It is the relationship between man and nature. It also relates to the degree of control and territorial behaviour of people towards space or a particular landscape (physically or socially).

Meaning:

This comprises two facets: The first is the shared repertoire of significance, importance or quality attributed to an artefact. The common understanding of the symbolism of artefacts creates the cultural identity of a community. In semiotic terms this is an interpretative community, sharing the same codes. Secondly, it is important to acknowledge the meanings read by the interpreter or researcher, as these may not necessarily coincide with those of the community under study. Some attributes of the context are seen as essential and others as incidental. Meanings read by the author no doubt reflect the author's cultural framework and experience. Meaning is a matter of social definition. Interpretation or 'meaning-making' includes subjective processes as a part of the academic enquiry.

1.5 THE SOURCES, THEIR TREATMENT AND INTERPRETATION

The data will comprise historical, archaeological, anthropological, folkloric and sociological studies carried out in Sudan, as far as possible by Sudanese, but not restricted to that. The data will be collected from reputable sources. Artefacts will be studied from images and descriptions in reliable documentation.

ⁱⁱⁱ Expressed by Motloch as 'wilderness'. The same author also writes: "The perception of time and space are inextricably bound, as both time and space are experienced sequentially and concurrently. In fact, time can be seen as the sequential ordering of space as one moves through the landscape." (Motloch, 1991: 117)

The literature search also tries to benefit from Western and African sources from other parts of the continent where similar approaches have been attempted, that is a study of contexts with similar characteristics that have a bearing on the current study. This material has been sourced from the African Institute, Pretoria; the Academic Information Centre, University of Pretoria; UNISA Library, Pretoria. Its interpretation involves an analytical literature review.

Social, political, cultural and religious descriptions of the context were found in a variety of sources. In addition to the above, the material was mostly from private collections; National Records Office, Khartoum; WITS library, Johannesburg; Centre for Middle Eastern studies, Bergen. Anthropological, religious, social and historical studies were sourced. Interpretation relied on analysing and assessing the validity and relevance of the information.

Though the focus of some sections of the dissertation was on physical artefacts, including buildings, few of the sources are architectural, simply because of their non-existence/unavailability. Material was sourced again from private collections including that of Professor Sean O’Fahey, Bergen and travel documents and others from the Centre for Middle Eastern studies, University of Bergen. Interpretations were achieved through an analytical literature review.

In order to be able to address the peculiarities of the case study, it is attempted to place more focus on Sudanese sources in the final sections of the study, while the first part of the study locates the problem of the dissertation within the broader framework of thinking in the field. An analytical literature review is carried out culminating in an interpretation relevant to the topic of the thesis.

Empirical reasoning guides the research. This is a substantiated personal interpretation accomplished through identifying patterns in observations. At the same time a phenomenological standpoint is taken where the act of observation is not separated from that which is observed and the subjectivity of data obtained through individual thought processes is acknowledged.

Writings in Arabic are translated into English and revised by an official translator. Transliteration follows a consistent system. Where quotes are used from other sources the transliteration of the original source is adhered to.

The artefacts selected cover a progression of scales, from the level of the village/urban centre, houses and the body and clothing forms. This was not decided on from the outset but rather developed as links emerged through the research between these different forms of expression. From these broad guidelines more linguistic terms became apparent, social practices and sayings that elaborated on the preliminary concepts. Thus, the study evolved out of the issues pertinent to the area rather than out of an abstract theoretical assignment that may be irrelevant to the region.

1.6 THE RESEARCH METHODOLOGY

An eco-systemic approach is used as a basis for defining the structure of the interpretative framework and establishing the linkages between the main components of the framework stated in 1.1. It will be an exercise in interpretative research, which exists in the phenomenological realm of inquiry.

Scant information exists on the issue of architecture in the area under consideration. There is no adequate theory base on which to support such a study and thus the formulation of such a base is seen to be a contribution to this field of study. A classification system for the built artefacts of the region is established as well as the identification of main themes in the area under study. From this it is possible to identify what has been neglected and still needs to be researched. An analytical, non-interactive document research method, whereby there was no direct contact with people or authors of the documents, was used due to logistical limitations.

The interrelated nature of artefact, context and interpreter is acknowledged. In the framework, Intuitive Gestalt Perception is used as a method rather than the phenomenological method of interpretation per se (This does not exclude future such interpretation within the framework). An 'ecology' is constructed of the context where artefacts emerged and developed, thus achieving a certain complexity in the description of an architectural environment that consists of linked sub-systems or layers identified through an inter-disciplinary investigation.

The study pertains to postmodernist approaches in the use of language, blurring of the boundaries between disciplines, the focus on processes and in including popular culture.

The research approach is in line with the eco-systemic school of thought of the Department of Architecture, University of Pretoria. The study has been conceived within this particular approach to environmental investigation which furthers the meta-level of understanding emphasising the heuristic, phenomenological and contextual teaching of architecture, through overt articulation (Fisher, 1992 and 1993).

The boundaries between the disciplines dissolve as it is discovered that to understand the built environment, one needs to build up an understanding of the culture, religion and social set up of a community as well as the geography and history of the region in question. In traditional contexts the separation of art from daily life, or a building from social interaction patterns is not possible. An interdisciplinary interpretation is attempted to address the issue of how people interact with the environment and how they shape their spaces at the micro and macro levels. An eco-systemic 'construct', a 'reading' of the context is articulated to identify the milieu within which the 'artefact' exists and how it developed/develops within that framework of peoples' beliefs and social interaction systems.

There are a number of limitations that need to be taken into consideration, one of these being the lack of previous research in the area from an interpretative, architectural point of view.

1.7 THE SPECIFIC BASIS OF EACH SUB-PROBLEM

Sub-problem 1: Despite the large amount of literature on vernacular architecture, there is no relevant interpretative framework with which to study the selected region, with its particular characteristics. Definitions of architecture exclude vernacular contexts. A philosophical approach thus needs to be identified, and a theoretical base articulated, so that architecture can be viewed eco-systemically within prevalent paradigms of thought and practice.

Hypothesis 1: In a study of the architecture of the northern riverain Sudan, where little architectural interpretation has been attempted and where institutional architecture is almost non-existent, there is relevance in approaching an architectural

inquiry from an eco-systemic, inter-disciplinary viewpoint. Architectural theory, which resonates with the realities of a context, may be the basis for a framework for architectural study relevant to the selected region.

Sub-problem 2: The study context needs to be identified eco-systemically. This needs to be initiated by the articulation of social, political, cultural and religious descriptions and the identification of the recurring themes in the literature of the region.

Hypothesis 2: It is believed that through the eco-systemically based identification of recurring themes in the literature of/on the region, essential and incidental attributes of the place and culture can be articulated. This can become a tool in interpretation of tangible/ intangible artefacts, spatial interventions, and social practice.

Sub-problem 3: Relevant tangible artefacts need to be identified with a focus on the built environment. This analysis progresses from the level of the body/clothing and is extended to the scale of shelter/house and finally the village/urban centre.

Hypothesis 3: Careful and purposeful selection and analysis of a group of tangible artefacts that refer to the recurring themes can articulate the characteristics of the delineated context on the scale of the body, the shelter and the village, and be used in revealing the meaning inherent in the built culture.

Sub-problem 4: Relevant intangible artefacts of the culture of the northern riverain Sudan, need to be identified and analysed to enable further reflection on the meanings behind certain physical and spatial manifestations of that same culture.

Hypothesis 4: Careful and purposeful selection and analysis of relevant intangible artefacts can articulate the hidden characteristics of the built culture of the northern riverain Sudan region and elaborate on the themes that guide this study.

Sub-problem 5: Relevant tangible and intangible artefacts of the culture of the northern riverain Sudan need to be placed into an eco-systemic framework for use in architectural interpretation, research and education. This framework must enable articulation of structural relationships between intangible and tangible aspects of built culture and place making in the northern riverain Sudan.

Hypothesis 5: An understanding of the built culture of the northern riverain Sudan requires the identification of significant relationships between tangible and intangible aspects of the region. Inclusion of the studied relationships into an eco-systemic framework will expose the role of intangible culture in space appropriation patterns and its implication on the character of place making in northern riverain Sudan, where a rich culture is expressed through architecture.

1.8 IMPORTANCE OF THE STUDY

Sudan is seen to be a melting pot of many cultures existing at the fringes of both the Arab world and Africa. It has been a relatively neglected area of research, in part due to the overwhelming culture of Egypt, but also due to the unfortunate legacies of long periods of foreign rule, inherited poverty and socio-political instability.

This study could narrow a gap in the history of settlements in Africa. It can be a starting point, not to document, but rather to use existing documentation to interpret the culture of the area and how it has made its mark on the spatial and physical characteristics at various scales from the town/village to the individual house. It could also encourage the further documentation of a region that is rapidly changing as the importance of the little understood architecture is exposed.

This study is meant to provide a much-needed framework for research and a basis for architectural education in the country. Due to Euro-centric approaches to education and a history of colonialism, many architectural academics in the Sudan take little pride in local culture and how it has reflected on the built environment. Architectural production in the country is characterised by imitation and a rootless character. The global regionalist trend is yet to influence Sudanese architectural culture, even though there are some attempts at emulation, these are usually misguided or politically motivated. Sudanese professionals are sometimes isolated from mainstream society and have little appreciation for what can be learnt from it. A history of recurring political dominance, due to successive military coups, is also a factor that has inhibited professional and academic explorations as universities are targeted to propagate political ideologies and curricula and approaches strictly monitored. The Sudanese are forever tied up in heated political debates leaving little

time or effort for intellectual discourse. Perhaps discourses such as this one can help break the cycle of fruitless animosity.

For over a decade, the Sudan has been isolated from the international community. Those who leave rarely return. The seclusion of universities means that many approaches are outdated and irrelevant. Individual studies are scattered and undocumented and the academic scene is dominated by obsolete approaches and general neglect as people are caught up in an everlasting struggle for daily survival. This study needs to be seen in the light of these realities. For example, the researcher opted to go to Bergen rather than Khartoum to gather information. The Sudan appears to be continuously in a state of curfew. Anyone with a camera on the streets is under surveillance and targeted by security forces. This situation is slowly changing as the country comes under international pressure and as more oil reserves are discovered. Yet, the disruption that has happened at academic institutes will take long to remedy.

The study sets out to challenge isolated approaches in Sudan in searching for links between traditional identities and contemporary developments. Much of what is happening is seen to be an inaccurate representation of the past, and a naive interpretation of a complex reality. The re-writing or re-interpretation of history has been a much-contested issue in the cultural scene of the past few years. The role of architects in challenging this trend has been minimal, probably because the profession has never really reached a stage of maturity as far as contextual approaches to design are considered. These debates have had at least one positive outcome: current research efforts are more focused on local contexts. Yet, authorities still perceive the built environment to play a major role in conveying ideas about political ideologies, and innovative architects, planners and artists are delegated a secondary role in the process of new buildings and developments.

Interest in the thesis topic was motivated by a visit to the archaeological sites in Meroe in 1996 when the author questioned the amazing disparity between the remains of the old Nubian kingdoms and the material culture of the region today. Again a question that initiated the investigation was the predominance of the *shaykh's qubba* (conical domed tomb under which a religious leader is buried) in the region's landscape. It presides over villages, towns and even over a large city like

Omdurman, yet, very little exists in terms of interpretative architectural research on its significance.

The dynamic interplay of a variety of factors that determine changing approaches to space and place is expressed and used to illustrate the differences between two different eras in the region's history. The interchange between the artefact, context and researcher's approach is recognized as affecting the outcome of this research endeavour.

The research is important as a framework for further inquiry, a framework for the teaching of architectural history and theory in the Sudan and as an experiment in testing the eco-systemic approach of the Department of Architecture, University of Pretoria.

1.9 THE QUALIFICATIONS OF THE RESEARCHER

The candidate is a BSc-1988 and MSc-1995 (Architecture) graduate, University of Khartoum, Sudan. The candidate also obtained a Post-Graduate Diploma from the Institute of Housing Studies in Rotterdam, the Netherlands, in 1992. Since completing the first degree the candidate has been involved in teaching at Khartoum University till 1996. In 1998 the candidate took up the post of lecturer at the University of Pretoria, South Africa, where she is still working. Teaching responsibilities comprise the teaching of theory (design methods – the topic of the candidate's masters thesis), housing theory and design.

Previous and on-going research has been on design theory, design methods (procedural design theory), teaching approaches relevant for architecture and housing, including current practice, delivery and resultant landscapes.

CHAPTER 2: PHILOSOPHICAL APPROACH AND RESEARCH METHODOLOGY FOR THE CONTEXTUAL STUDY OF ARCHITECTURE

2.1 SUB-PROBLEM 1

Despite the large amount of literature on vernacular architecture, there is no relevant interpretative framework with which to study the selected region, with its particular characteristics. Definitions of architecture exclude vernacular contexts. A philosophical approach thus needs to be identified, and a theoretical base articulated, so that architecture can be viewed eco-systemically within prevalent paradigms of thought and practice.

2.2 HYPOTHESIS 1

In a study of the architecture of the northern riverain Sudan, where little architectural interpretation has been attempted and where institutional architecture is almost non-existent, there is relevance in approaching an architectural inquiry from an eco-systemic, inter-disciplinary viewpoint. Architectural theory, which resonates with the realities of a context, may be the basis for a framework for architectural study relevant to the selected region.

2.3 OUTLINE OF CHAPTER 2

A philosophical approach is identified and articulated. Information sources, issues of language and its implications, artefacts and their classification all influence the final interpretation. Definitions of these are elaborated. The importance and difficulties of using sources from other disciplines are discussed.

As an introduction to the area of study, the issue of why Africa needs to be tackled individually is tackled. This includes the symbolic content of ritual and ceremony. New religions, Islam and Christianity, as well as Western colonialism are discussed as the three major cultural influences in Africa.

Aspects of characteristics of relevant types of African art are identified. The region does not exist in isolation and is therefore viewed within a broader context. An understanding of vernacular architecture exposes the most appropriate unit of study in regional contexts. From this understanding, architecture is thus re-defined and the

northern Sudanese idiom identified. Ultimately, a relevant theoretical basis for the study is achieved.

2.4 METHODS, SOURCES AND SCHOOLS OF THOUGHT

2.4.1 Eco-systems of paradigms

“At certain times in history, specific ways of thinking about the world have predominated. Each particular worldview can be termed a paradigm. Different paradigms may co-exist and overlap.” (Oliver, 2000: 72)

Kuhn (Gelernter, 1995: 269) introduced the term ‘paradigm’ as a universally accepted worldview that is ‘violently’ replaced by another. These revolutionary milestones intercept episodes of peaceful agreement. It is an approach articulated in architectural terms by Fisher (1992) and further articulated in studies at the Department of Architecture, University of Pretoria. As an example, in a study on the early Ionic capital, its founding history is explained as design evolution and the degree of ‘fit’ between this particular architectural element and its paradigmatic context. An understanding of this element, in its built context, is understood as “emanating from an ordered data base” (Bakker, 1999: 4). In a proposal for the teaching of history, Fisher (1993: 10) describes an ‘eco-system of paradigms’, where the prevailing paradigms of various historical episodes can be articulated. This entails the selection of historical milestones, the manifestations of those on a broad spectrum of disciplines, the identification of artefactual material and the development of a relevant vocabulary with which these can be articulated. This study also tries to illuminate transition periods rather than just focus on the points of transition – the milestones. A plurality of simultaneous worldviews is acknowledged where many ideas co-exist at any time. This theme is evident throughout the study.

Artefacts are approached in the sense that no ‘thing’ stands alone, but rather pertains to a whole setting of importance in its interpretation. The world is a collection of inter-dependent entities. Things are what they are by virtue of their relationship to each other. Things or artefacts are further broadened to include intangible concepts and values. After all, Heidegger does equate ‘thinking’ with ‘dwelling’ (Cooper, 1996:92). In 1954, Heidegger (1889-1976) wrote that: we build because we are *dwellers* (Krell, 1977: 326). Therefore artefacts/things, including buildings, make our existence/thinking evident.

2.4.2 Dialectic processes, absolutism and relativism

“You can... never claim that any particular thought is correct for ever and ever. But the thought can be correct from where you stand.” (Gaarder, 1991: 301)

“Knowledge is thus both perceptual and conceptual – the joint product of perceiving and thinking. We can only think what cannot be perceived; we cannot know it.” (Urmson, 1960: 149).

In order to be able to engage with previous bodies of knowledge, the research follows a dialectic process of reasoning and only claims to achieve as much as possible in terms of accuracy. A structured pattern of questioning assists in revealing the meaningfulness of the stated problem and in the testing of the set hypotheses of the dissertation. The ‘truth’ of an interpretation constitutes a concept or synthesis representing a part of a wider framework involving a number of disciplines. Within such a framework, it is difficult to see that a completely ‘untrue’ concept could exist.¹

An antithesis to prevalent ways of approaching architecture in the northern Sudanese region is proposed: the focus is on interpretative, rather than, descriptive research. This is a critical form of analysis. The synthesis of this process will constitute a new thesis for future ‘cycles’ of analysis and research on architecture in the Sudan. As in any scientific investigation, the outcomes of the research are open to debate and re-interpretation. This does not undermine the significance of the study.

This dialectic mode of inquiry, rooted in the rationalist school of thought, is used to give a certain order to inquiry based on experience and perception. The hypotheses have been set according to intuitive analysis and observation. These need to be tested in order to provide a platform for further research.²

¹ According to De Bono (1994: 66), “Absolute truth overrides the reality of complex system interactions.” He explains how truth favours analysis and description rather than creativity and design (De Bono, 1994: 66, 113 and 128).

² Phenomenological reduction requires emptying the consciousness of everything that is derived from scientific inference or rational thinking (Gelernter, 1995: 224). Where this study departs from this way of thinking is in the assumption that this form of inquiry will lead one to absolute pure data of consciousness or authentic reality (ibid). The isolation and study of artefacts through this phenomenological method is deemed important to the study. The difference is in the expected outcome where a philosophical relativism is believed to pertain more to an existential way of thinking. Perhaps the superimposition of a rationalist structure on a phenomenological inquiry will be seen as a contradiction. Yet, it is believed that intuitive perceptions, subjected to academic inquiry is a valid research approach and this is tested in the following dissertation. This study borrows from a wide variety of sources and different schools of thought. This attempt “...to reconcile the subjective self with an objective world.” (ibid, 259) is long-standing. Both Husserl and Descartes would then examine an object by detaching it from its context and examining its essence. An object’s essential attributes are

Blaise Pascal (1623-1662) and Renè Descartes (1596-1650), in the 17th Century, were on either side of this struggle between Rationalism and Existentialism. Descartes' rationalism was opposed to Pascal's view of human life as paradoxical. Descartes' 'method' implied that he could only accept beliefs that were 'clearly and distinctly' true, through logical and mathematical reasoning (Urmson, 1960: 73). On the other hand, Pascal's theories were based on the concept of probability and he attributed the same importance to belief or disbelief, in terms of religious faith, for example, claiming that there is no rational ground for either (Urmson, 1960: 211).³

As Descartes, Georg Wilhelm Friedrich Hegel (1770-1831) believed that a rational understanding of humanity and history could be achieved through dialectic reasoning (Russel, 1979: 702). Again, Søren Kierkegaard (1813-1855) opposed this and as a continuation of Pascal's theory stressed the uncertainty of the human situation.⁴ In either case, the Existential ideas of 'choice' and the focus on each individual's unique vocation are what determine the difference between the Rationalists and the Existentialists.⁵

Of major importance in this struggle between the two ways of thought are the writings of Edmund Husserl (1859-1938) and his ideas on Phenomenology. There is a thin line between Existentialism and Phenomenology, the latter defined as the descriptive analysis of subjective processes, objects as 'constituted' in consciousness (Urmson, 1960: 133).

Husserl's 'intuitive study of essences', referred to as the 'study of things themselves', means that everything, including thoughts, can be made evident through

thus identified through 'phenomenological reduction' (Hale, 2000: 96 and Urmson, 1960: 217). In this study, it is attempted to not only detach physical objects and examine them, but also intangible aspects of a culture such as feelings, beliefs and attitudes: "...the organisation of the environment is a mental act before it is a physical one..." (Rapoport, 1977: 15).

³ This approach pertains to Empiricist thought in that it is the "...body that brings us into touch with the world of external reality." (Russell, 1979: 151); Kant's proposition states that we cannot 'know' without the help of sense-perception (ibid. 679).

⁴ Kierkegaard strongly attacks Hegel's systematic analysis of existence (Urmson, 1960: 152), declaring that this is not feasible, since an understanding of existence cannot be systematically constructed.

⁵ As the age-old adage goes, you only see what you know. You know what can be 'named', thus, we can understand our relationship to an environment in terms the language we use to describe it. Structuralism, as a philosophy of language, would explain how the built environment acquires 'meaning', thus strong links can be found between language and meaning in the built environment.

phenomenological enquiry. This type of enquiry focuses on objects as they are encountered.⁶ A phenomenological approach to architecture involves a 'return to things', as opposed to abstractions and mental constructs of the rationalists. *Things* consist not only in the concrete phenomena of our life world, but also comprise more intangible phenomena such as feelings (Norberg-Schulz, 1976:3). A real or authentic *thing* concretises or reveals life in its various aspects.

Heidegger's 'environmental phenomenology' introduces natural elements and philosophy to describe places, an approach elaborated by Norberg-Schulz (1980). Attention to the character of dwellings and how they are made is important in achieving a phenomenology of place. Phenomenological approaches bring the idea of existence, the notion of doubt/uncertainty, as well as faith in the correctness of choice and individual experience, to architecture.

This concept is employed in the study by relating visible aspects of built culture to the particular location and people's understanding of place. It makes a valuable contribution, in combination with other theories, in achieving a meaningful interpretation of people's interaction with a particular landscape.

2.4.3 Phenomenology of the body

"Just as we think architecture with our bodies, we think our bodies through architecture." (Frascari, 1991: 1)

Maurice Merleau-Ponty (1906-1961) brought to phenomenology the idea of the 'lived body'. For this philosopher, consciousness is not just something that goes on in our heads. Rather, our intentional consciousness is experienced in and through our bodies. He believed that the body, as a living organism, by which we 'body-forth' our possibilities in the world. A person's intentional existence is lived through the body. We understand the world through understanding our own bodies. We project onto the world our understanding of the body, and this has crucial spatial manifestations for any research into place making patterns.

⁶ Drawing on Immanuel Kant (1724-1804), who first distinguished between 'perceiving' and 'thinking', the phenomenological approach identifies 'things' through experience rather than description. It focuses on cognition and perception. That is why it is of such great value to architectural thinking. There is an actual real world that surrounds us; we perceive identically, yet cognition is individual (Rapoport, 1977:4).

Taking the above into consideration, it becomes possible to understand apparently ambiguous 'things' through our understanding of the body, as we tend to project onto the world our perceived body images.

Inscription of perceived universal and social order on the body are extended onto clothes, shelter and ultimately into place-making practices. This is not a unique practice. Quatremère de Quincy's (1772-1849) theory of type (hut/tent/cave), discussed later, and his theory of imitation explains abstract and direct imitation of nature. Lavin elaborates:

"When architecture was considered to be imitative, the path to its natural model was almost always described as indirect: thus the human figure became the model of the orders through its reduction to a system of proportion, or a central plan imitated the divinity by reproducing its perfection through geometry." (1992: 106)

Man imitated his form through proportion systems, in settlement patterns, architectural forms and other made objects. Abstract human qualities are sometimes ascribed to buildings (Lavin, 1992: 146). Anthropomorphism, the extension of human characteristics and attributes to buildings and edifices – has long been a part of architectural practise and theory. Representation of architecture in bodies, and of bodies in architecture, is first known with Vitruvius in the First century B.C., in his analogies between the proportions of the human body and buildings (anthropometric proportions). He narrates methods of anthropomorphic practice in Hellenistic-Roman tradition (Morgan, 1960: 72 and Frascari, 1991: 1). While it may not be a universal trait, anthropomorphism in architectural form and settlement layout are also known to be prevalent in specific African environments.

This phenomenon is extremely important to the particular case study of this dissertation where ideas of 'body' have profound bearing on various forms of cultural expression. The seclusion of women, sub-divisions within the home and movement patterns of people in a settlement are strongly inter-related and they are all reflections of peoples' perceptions of the differences between men and women expressed through their body images and the creation of boundaries around the body.

These boundaries are a response to human activity. They do not necessarily have to be static and may be dynamic and changeable, as will later be discussed. Clothes

and shelter are seen to mediate between the body and the environment. These boundaries protect/hide or express/accentuate accepted notions of 'body'. The body is constantly in motion. This is elaborated by Klinck (2002: 71) and represented diagrammatically below:

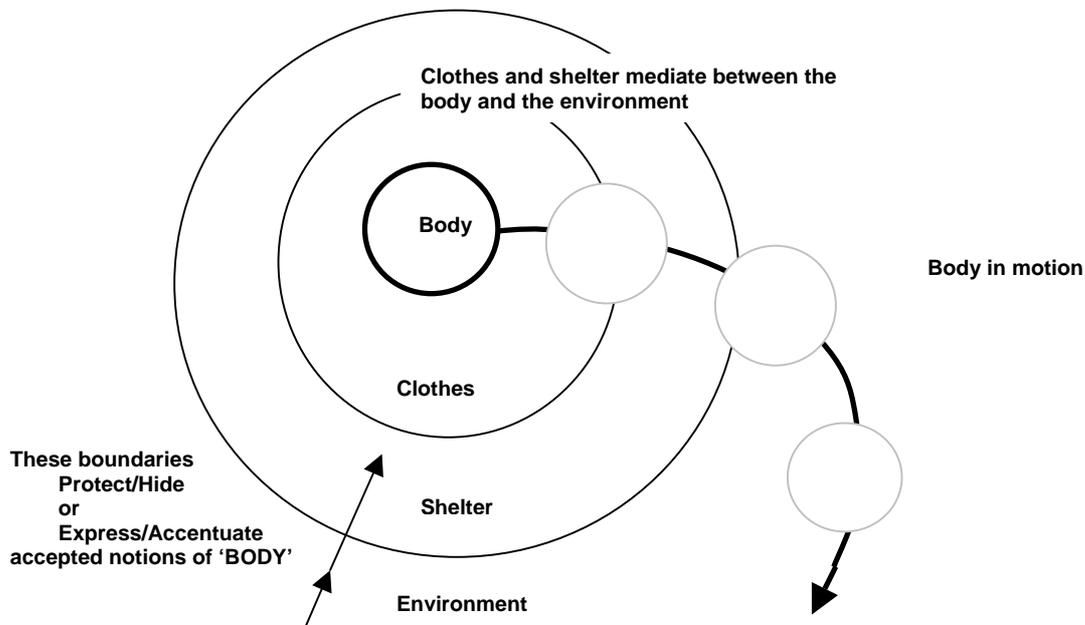


Fig. 2.1 Diagram generated by the author from writing of Klinck (2003: 71)

2.4.4 Recapitulation

Thus, the philosophical setting of this enquiry is articulated. Thinking is equated with dwelling; therefore the tangible becomes a representation of the intangible. Existential exploration is believed to lead to a sense of belonging through making existence evident. Things come into consciousness through experience rather than description. For these reasons the acceptance of the value of subjective understanding implies a focus on experience and choice rather than abstract constructs only. The perception of the body is seen as central to this construct.

To enable this approach to the research, several factors need to be looked at in terms of the sources, methods of analysis and strengths and shortcomings. These are tackled below.

2.5 SOURCES, LANGUAGE, CLASSIFICATION AND INTERPRETATION

2.5.1 Information sources

Bonta (1979: 147-148) explains how an author's motives, beliefs, values and biases can influence the assessment and interpretation of a context, as well as what is selected for inclusion in an interpretative text. He explains that interpretation is also influenced by the 'channels used to gain information'. The approach of this thesis focuses on analysis of a context through various texts and photographic images. The subject is included in the interpretation. These written and pictorial materials have not been produced consciously to study the built environment.⁷

2.5.2 Language

"Being able to use words properly was a great advantage, for the more words you knew the meaning of, the better you could think." (Holm, 1965: 83)

One reason for subjectivity in interpretation is due to the influence of the language being used in a selected text. Language is not only a communicative tool, but also a 'thinking' tool. It reflects thought processes, values and attitudes. Edmund Leach explains Claude Levi-Strauss' understanding of language:

"At one level it allows man to communicate and form social relations and at another it is an essential element in the mysterious process we call 'thinking', in that we must first categorise our environment and then represent these categories by symbols ('elements' of language, 'words') before we can 'think' about them." (Brawn, 1991: 13).

Price explains it as follows:

"Language is not a window onto the real world but is, rather, the stuff of thought itself. Individuals are born into a society which already contains sets of institutions, practices and a common language from which the individuals construct the world and themselves." (1984: 11).

Detecting certain terminology in descriptive texts, and how it is used, can become an effective tool in constructing a description of a context. "One cannot separate what is said from the manner of saying" (Hale, 2000: 94). This argument can be extended to understanding the meaning of architecture. Architectural meaning construction is unnecessarily split into a dichotomy between material/functional constructs and

⁷ This has been done previously to study vernacular contexts, most notably by Amos Rapoport (1982: 11). Being drawn into the interpretation of the text or image (as an artefact in itself), rather than the context that it is supposed to portray, is a possibility. An individual distinctive process of selection and consequential analysis is not seen as a shortcoming. It is perceived to enrich the study.

social expression. The two cannot be separated. The social aspect of building and space-use patterns (what is being expressed) cannot be separated from the physical and spatial concretisation of these aspects (visible/material manner of expression).

It was Quatremère de Quincy who first introduced the idea of architecture as language, which reflects societal meanings – a way of thinking that originated in the 18th Century. Quatremère's core theory, the link between architecture, society and language, can be traced back to Vitruvius (Lavin, 1992: 60). Structuralist analysis cannot provide a complete representation of a context – nevertheless, while it is not used as a core method for exploration in this study, is deemed useful in providing a temporary view of a series of specifically identified, discernable hierarchical systems. The structural linkages between systems can then be explored within an ecosystemic construct, which allows for inclusion of more non-structuralist modes of understanding.

2.5.3 Artefacts and their classifications

In Structuralist terms, any artefact can be viewed as a signifier, what it is, and a signified, what 'idea' it holds. This analysis constitutes the science of Semiology developed by Ferdinand de Saussure (d. 1916) and applied by the anthropologist Lévi-Strauss in cultural analysis. Reality is never the most obvious – meaning emerges from the way that basic units are combined into systems (Hale, 2000: 136-137). Lévi-Strauss reacted to the subjectivity of Existentialism by an excessive determinism aimed at seeking a more 'objective means of analysing and interpreting reality' (Hale, 2000: 139). Roland Barthes (1915-1980) also influenced by Structuralist thinking, yet questioning the determinist nature of Lévi-Strauss, interpreted words either by category or position within a sentence. The "syntagmatic" (sequential) is contrasted with the "systematic" (categorical) approach (Hale, 2000: 139 and 141).

The gridded structure showing the elements of semiology, developed by Barthes (portrayed by Hale, 2000: 140 and Leach, 1974: 49), has been adapted to the requirements of this particular study:

Language/Code	System Parts of speech nouns, verbs	Syntagm Sentence
Clothes/Garment System	Set of pieces that cannot be worn together, variation corresponds to a change in meaning	Juxtaposition in the same type of dress of different elements
Food System	Set of foodstuffs	Sequence of dishes chosen
House/Family Accommodation System	Set of stylistic variations of the same layout/form/materials – selection is based on meaning	Juxtaposition of different layouts/form/materials in the same contexts
Furniture System	Stylistic varieties of a single piece	Juxtaposition of different pieces in the same place
Architecture System	Variations in style of a single element of a building	Sequence of the details at the level of the whole building
Settlement Village/Town Rural/Urban System	Variations in settlement layout and relation of buildings to each other and to streets and open spaces	Sequence of the buildings at the level of the whole settlement

Table 2.1 Constituents of the tangible culture of a people.

The sum of these languages/codes constitutes a chosen or perceived range of the tangible culture of a people. How these tangible aspects of a culture are intertwined with intangible constructs is elaborated later. According to Levi-Strauss, when we construct artificial things, devise ceremonies or write histories, we are imitating our “apprehension of nature: the products of our culture are segmented and ordered in the same way as we suppose the products of nature to be segmented and ordered.” (Leach, 1974: 16). Thus a method of analysis is formulated where:

- the phenomenon to be studied is defined in relation to two or more terms
- a table is constructed of possible permutations of these terms
- connections are analysed

This method is used in structuring concepts dealing with tangible/intangible artefacts. The quest for order in our understanding of artefacts influences our attempts in the search for the origins of artefacts.

2.5.4 The origins of artefacts

“The ‘whatness’ of an object can be learned through the ‘whyness’ of it.... knowledge about an object is based on understanding or recognizing the causes of that object.”
(Turan, 1990: 9)

Turan (1990: 9) explains how understanding the artefact through material, the form into which material enters and its use as insufficient because it only applies to the appearance of an object. The social connotations embodied in any artefact comprise

a part of the three structures of the artefact as explained by Thieme and Eicher (1987: 122-123).⁸

The design disciplines have always borrowed from other disciplines in an attempt to achieve something tangible, as design process (as distinct from its products), is a somewhat obscure activity (Osman 1996: 42). Some researchers refer to biology or sociology to explain the built culture of a people. Gottfried Semper (1803-1879) had a notion of architecture that assumes that: "...as in biology, the search for origins was a search for laws; architecture ought to have these too." (Brawne, 1991: 17).

Rykwert (1972: 30) elaborates on Semper's method: "...it certainly shows a positivist way of attacking the problem; indeed when Semper comes to classify artefacts, he classifies them by their feel and durability."⁹ Semper proceeds to identify the tent as the primary form of the house. Quatremère searches for origins of built artefacts in the way that people acquired their food. The first homes of agriculturalists, hunters or herders are identified as the hut, cave or tent simultaneously (Lavin, 1992: 41). This aspect is tackled critically in a later section.

The origin of form in architecture has always been a tantalising aspect for researchers. Perhaps before attempting to analyse form, a method of classification needs to be identified.

2.5.5 More on Classification – the Concept of Multiple Characteristics

"Any grading system is meaningless... There is one way to understand another culture. Living it. Moving into it... At some point understanding may come. It will always be wordless. The moment you grasp what is foreign, you will lose the urge to explain it. To explain a phenomenon is to distance yourself from it." (Høeg, 204)

Classifications can be historical, stylistic or typological (Bonta, 1979: 167). He explains that:

⁸ Where access to the artefacts themselves is not possible the researcher uses the following structures: iconic structure, the photograph, and in descriptive texts, the syntax. The visual image may convey information not easily readable from descriptive texts. This is the method used in this study.

⁹ He proceeds to explain how Semper's categories correspond to four groups of trades: weaving, ceramics, carpentry and masonry. Deducing, thus, that the first artefact is a knot or a daisy chain. While this study does not ascribe to the positivist attitude espoused by Semper, the idea of classification is employed to be able to locate the architecture of the region in a wider context and to be able to relate it to similar building practices.

“A corpus of buildings with geographical boundaries – such as an entire city or a section of it – may seem more manageable than one with stylistic boundaries... Geographical areas, even small ones, usually display a variety of different expressive systems juxtaposed against each other... The same is true also of chronological units such as centuries or decades. The locus of the expressive system, in my view, lies in the interpretations.” (Bonta, 1979: 223).

Amos Rapoport's influential essay, “Defining Vernacular Design”, of 1990, focuses on the influence of culture on space use, and the influence of space use on architecture from a cross-cultural perspective.¹⁰

Rapoport further describes 3 taxonomies using Multiple Characteristics:

- Epistemic (properties of a phenomenon)
- Genetic (presumed causes of a phenomenon)
- Functional (presumed effects of a phenomenon)

He explains how classifications and taxonomies have heuristic value and are based on order and generalisation. It is impossible to deal with wholes, therefore the need to dismantle and decompose (before reassembling) (Rapoport, 1990: 69. this concept is further explained in Rapoport, 1990, 54-55). Epistemic classifications are then divided into:

- Classical – based on various intuitively grouped characteristics.
- Numerical – polythetic and quantitative based on numerous carefully defined characteristics. (Rapoport, 1990: 70)

Of interest is the shift from monothetic to polythetic, or single to multiple, characteristics that is described in terms of the various fields such as archaeology or science. The convergence of the various disciplines means the rejection of monothetic classifications.

Rapoport's main premise is that it is not possible to use a single characteristic to distinguish among entities as complex as built environments and that “...multiple characteristics become more useful the less clear-cut the case.” (Rapoport, 1990: 71. “A framework for studying vernacular design” by Rapoport, 1999: 60, is also referred to). In complex cases, Rapoport proposes that study begins with Intuitive Gestalt

¹⁰ This assists in the interpretative process. Different cultures are compared in terms of how 'the same space becomes a series of different settings' or how 'the sequence of settings is based on social status, relationships, etc.'. For example, proximity and efficiency are emphasised in some contexts, while the sequence is based on sacred relationships for the others.

Perception as a hypothesis, which is then tested ‘more rigorously and possibly quantitatively’ – i.e. starting with paradigm cases (extreme examples) and then moving on to more subtle ones (lists of characteristics) (Rapoport, 1990: 72). This concept is proposed as suitable for the interpretative framework constructed in this study – it is also articulated in the conclusions. Overlaps with other terminology included in the interpretative framework are explained in 2.5.6 below.

2.5.6 Interpretation

“I know that trying to figure things out leads to blindness, that the desire to understand has a built-in brutality that erases what you seek to comprehend. Only experience is sensitive.” (Høeg, 1993: 261)

Explanatory, rather than descriptive, approaches are complex, as this

“...type of treatment involves and requires anthropological and historical information and explanation as well as sociological and psychological. This ‘information’ is not limited by empirical data, but demands a theoretical framework within which to work.” (Turan, 1990: 12)

Juan Pablo Bonta (1979) describes a paradigmatic approach to interpretation. He states that by looking at problems within the paradigm of communication – that is, meaning as decoded by the receiver should largely coincide with meaning as encoded by the emitter. The shortcomings of this are that there is no proof that designers intended to communicate anything at all and it fails to explain the process of reinterpretation. He also identifies the problems with Umberto Eco’s approach of distinguishing primary (designer intended to communicate) and secondary (those that come later and are beyond the designers control) meanings in a work of architecture. His alternative is the paradigm of interpretation that is limited to the facts that can be validated empirically such as:

- People do assign meaning to their environment, in ways, which are not random but are governed by canons and are subject to historical change.
 - Designers have the ability to produce forms that are meaningful to other people as well as to themselves.
 - Meanings assigned to a form throughout its life-span are far more varied and complex than any single interpreter could possibly envisage – even if the interpreter was the designer himself.
 - Designers may try to anticipate the meaning people will assign to their forms. They may even manipulate form in order to suggest certain meanings to the interpreters.
 - Interpreters sometimes feel that designers intend to communicate something. But this is a belief of the interpreter, not an intention of the designer. What is at stake is a special kind of interpretation, not a special type of design.
- (Extracts from Bonta, 1979: 226-227)

Thus: “Interpretation can be successful even where communication fails.” (Bonta, 1979: 227). There is no such thing as an ‘objective’ description of a building: “Buildings can be described only from the point of view of certain interpretations, which entail value judgements and refer to classes.” (Bonta, 1979: 165). Even incorrect interpretations then reflect beliefs operating within society at certain times.

Fisher explains the concept of a hierarchy of interpretations:

“A hierarchy of interpretations can be distinguished within the temporal strata of cultures. The artefactual material, the artefactual type, and the artefactual style all need to be ascertained... Within the interpretative hierarchy each act of interpretation is directed at a particular object type and accessed through a different historical system.” (1992: 38)

This interpretative hierarchy of Panofsky (1968: 40-1)¹¹, originally intended for investigating Renaissance art, is re-interpreted and articulated by Fisher: The levels of interpretation are broken down into pre-iconographic interpretation (descriptive), iconographic interpretation (associative) and iconological interpretation (speculative)(1992: 38-39).

2.5.7 Signs, Symbols and Interpreters

As a conclusion to the above, it is emphasised that metaphysical systems (like religion or spirituality) and commonplace daily life each play a role in creating a cultural order of meaning and activity, metaphysics being expressed in everyday places and routines (Geertz, 1973: 23). Conceptualised symbols and metaphors, rather than abstract and de-conceptualised logical manipulations, serve as the tools for assigning and apprehending order and meaning in people’s lives, especially in places where literacy is of limited importance. Vagenes (1998: 150) elaborates that where there are numerous taboos in a society, and where relationships are governed by avoidance or deep respect, signs and symbolic manipulations with objects are very important.

Vagenes (1998: 151) further elucidates that any object used in specific ways can become a sign. Any constituent of a community structure (such as ‘gender’ in Vagenes’ research) can be approached in terms of the following:

¹¹ Panofsky believed that Renaissance attitudes to art removed the ‘object’ from the inner world of the artist’s imagination and placed it in the ‘outer world’ (Gelernter, 1995: 97) – this can perhaps be adapted to attempts at interpretation in this field of study.

- Spatial and material aspects
- Social relations
- Symbolic/cultural expressions (Vagenes 1998: 124)

It is acknowledged that one can recognise a culture by being shown a part of it. Each of the codes, pertaining to a specific cultural context, conveys certain messages. All of these messages are similar in meaning. If 'body' is added to the top of the list, it becomes apparent that each of these cultural manifestations is in reality as extension of body images. In very religious cultures with strongly contained gender roles, these images are strongly linked to gender differentiation.¹²

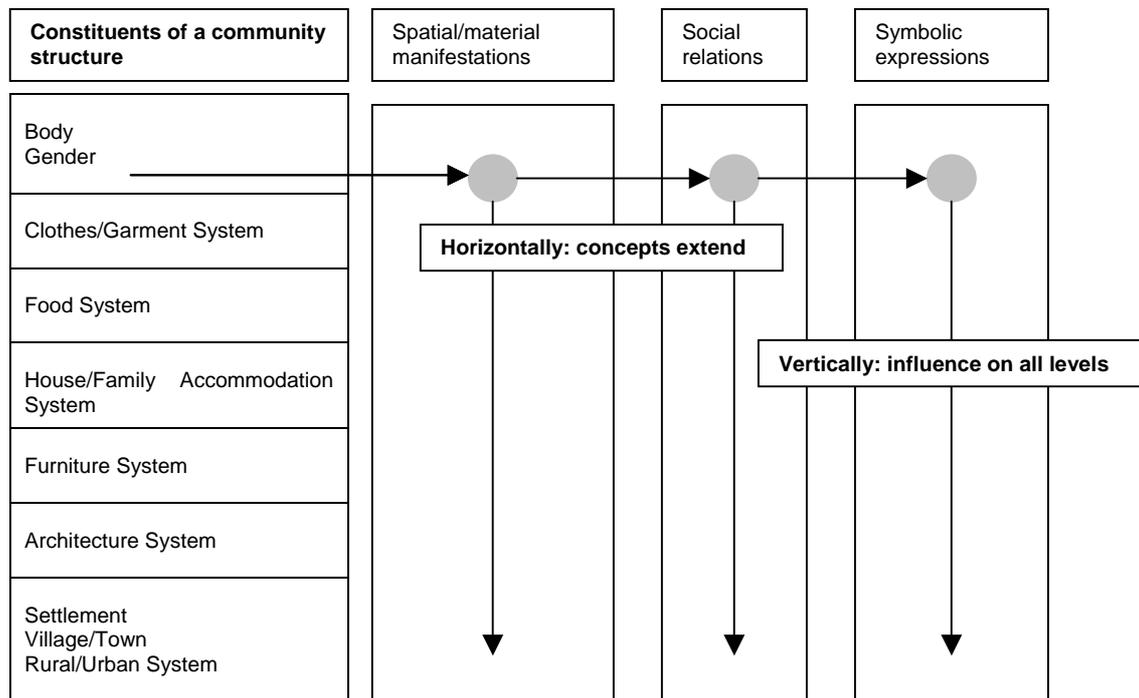


Table 2.2 Codes that make up a cultural context

Place making and spatial movement extend personal body images, making them larger in space and time; they also reflect social relations and symbolic expression. The maintenance of tradition, through the consistency of meaning in each language/code, or what has been alternatively termed the constituents of a community structure, is served by the encoding of space with critical social symbols and ordering devices. Ritual defines these spatial patterns and the symbolic content of ritual is thus acknowledged.

¹² This may be even clearer in very religious cultures with a patriarchal dominance. This aspect needs more research.

2.5.8 Recapitulation

The above sections have identified the constituents of the tangible culture of a people. These elements are broken down into spatial/material manifestations, ensuing social relations and inherent symbolic expressions as possible categories for research. This greatly assists in the selection of artefacts relevant to a particular study context. The multiple characteristics of any artefact are acknowledged. A method of analysis, whereby phenomena related to artefactual material is studied in relation to identified terms, their permutations and the analysis of possible connections between them is considered essential. The breaking down of an interpretative process, and the three levels of interpretation, namely descriptive, associative and speculative, set a base for the methodology followed in the remaining sections of this dissertation. Interpretation based on the above is seen to be possible only through interdisciplinary investigation.

2.6 INTERDISCIPLINARY INVESTIGATION: THE VALIDITY AND DIFFICULTIES OF USING A VARIETY OF SOURCES TO UNDERSTAND ARCHITECTURE

This dissertation approaches architecture in an explanatory, rather than descriptive manner. Anthropological, historical, sociological and psychological information and their interpretation become imperative to the success of the study. More meaningful interpretations are obtained by interdisciplinary investigation. Relying on data from one discipline is limiting.¹³ Social conscience, religion and ethics give order to a society that is no doubt reflected in space appropriation – that is, how people adapt their spaces to suit a particular understanding of relationships and activities. The degree of social segmentation and its relation to space segmentation is an important aspect of study. Social structure represents the key influence on the organizational configuration of domestic space at the level of the community and the individual house.

¹³ In Rapoport's writings on vernacular architecture, he points out that "...evidence comes from many disciplines... it also makes available new approaches and new methods that "come with" these disciplines." (1990: 43). In earlier writings he also explains how the study of vernacular architecture may generate new fields of study "...at the intersection of two or more previously unrelated disciplines." (Rapoport, 1982: 10). He believes that the boundaries defining disciplines are sometimes arbitrary (Rapoport, 1977:4).

Kinship systems and structural themes in society such as gender and attitudes to life and death mean that relevant research needs to be referred to before one can achieve a meaningful reading of the architectural expressions of a people. In the context studied, power relations affect spatial arrangements within the home and gender related subdivisions. There are many clues to be derived from the study of linguistic terms used for spaces and buildings. All of these cannot be studied without reference to other disciplines. The nature of architecture itself means that other disciplines need to be referred to constantly.

Movement patterns of people through/within a country no doubt influenced interaction and cultural amalgamation. They also assist in generating an understanding of where people settled. The study of these can be found in historical and geographical records. The impact of the natural environment and people's perception of it is vital to creating a picture of a culture. This aspect is seen as pivotal to the premise of this thesis and some of the themes pertaining to this approach are explored below:

2.6.1 The Architecture/Culture/Environment Dialectic

"When man alters nature, he himself is altered... (man) interacts with nature and transforms it. But in the process nature also interacts with man and transforms his consciousness." (Gaarder, 1991: 299)

There is a great deal of academic debate on the relationship of culture and environment to architecture.¹⁴ Culture and the built environment are sometimes seen as one and the same units. Some scholars challenge this (refer to various authors in Kent, 1990). Generally, culture is expressed through behaviour and space use, which ultimately determine architecture. Kent (1990: 3) admits that the physical environment is delegated a very minor role in this scheme as it is only seen as a broad limiting factor. This is problematic as the environment is seen to have a strong impact on culture and people's outlook on life.¹⁵

¹⁴ Environment-Behaviour Studies have been strongly advocated by Rapoport in various writings. His "EBS-based design theories" are an attempt at taking a "more explicitly "scientific approach." (Rapoport, 1990b: viii and other sources). The author has been cautious of the term "scientific" in these writings, and the attempt to challenge the so-called "art metaphor" in design theory (Rapoport, *ibid*, vii). Thus, concepts are used selectively. It should be noted that Rapoport does support the view that cultural variables are more important than climatic ones (*ibid*, 44).

¹⁵The German word 'Weltanschauung', meaning philosophy of life, world outlook, views, creed or ideology interestingly contains the term 'Welt' which means world, earth, people, society, humanity or universe (Cassell's New German Dictionary, 1974: 562). A philosophy of life is strongly linked to context as a totality.

An issue of dispute among scholars is to what extent is the physical world is a determinant of architectural form and the use of space. Because a spiritual understanding of the physical world is believed to be a determining factor in terms of social ritual and religious practice, it ultimately becomes a determining factor of architecture that contains such ritual or practice. This dialectic is discussed more in subsequent chapters.

According to Kent (1990: 44-45), form, organisation and use of space are determined by naturally fixed, flexible and culturally fixed factors. This is a limiting construct if one considers that climate and topography are considered naturally fixed elements, especially in a region where there have been drastic climate changes through time.

It is acknowledged by Kent (*ibid*) that each factor modifies the effects of the others. In this case it is seen that none of the factors are really 'fixed'. The difference between them would then be the rate at which they change.

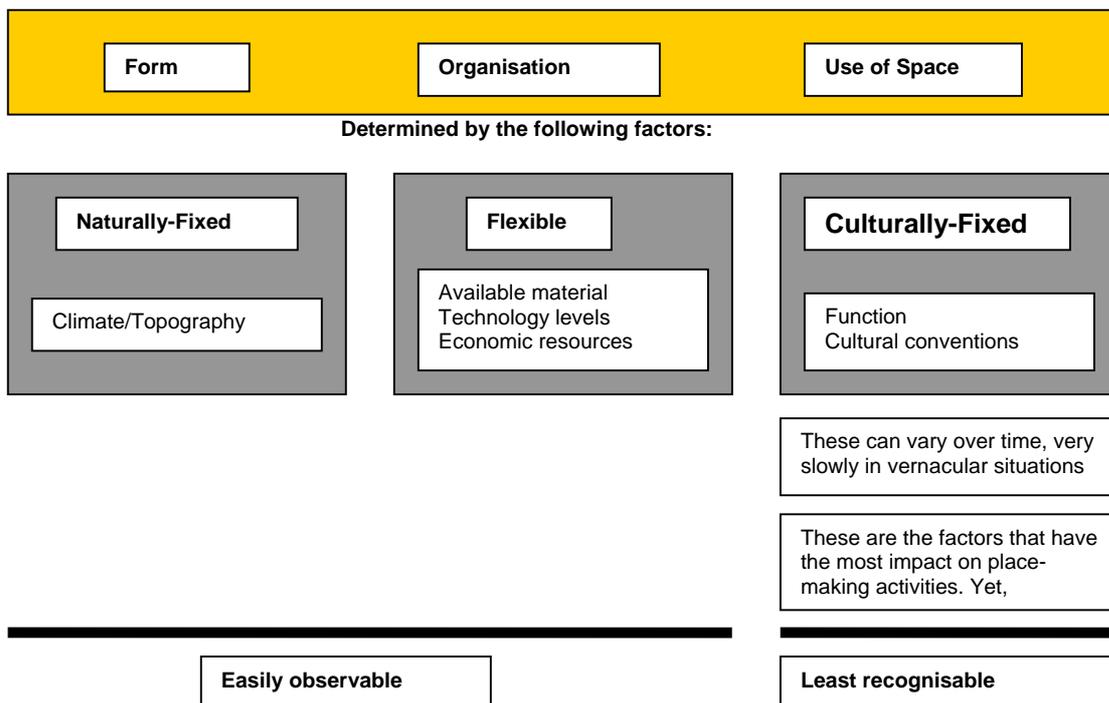


Table 2.3 Determinants of form, organisation and use of space (adapted by the author from Kent, 1990).

This construct is valuable in comparing to what degree different factors are observable or not. Naturally fixed as well as flexible factors, which comprise available material, technology levels and economic resources are said to be easily

recognisable in archaeological remains (Kent, 1990). It is the culturally fixed factors, comprising function and cultural conventions that have the most impact on built form, yet they are the least recognisable in remains. These factors vary over time, even though the change is slow in vernacular situations.

There are a variety of approaches to studies concerned with climatic changes and their impact on culture. Quatrémer de Quincy looked at the way people acquired their food in relation to their social structures and architecture. Similarly, some researchers see natural areas as defining cultural areas, invoking food sources as environmental determinants: “The dominant archaeological paradigm in prehistoric archaeology since the 1920’s emphasizes the role of the mode of subsistence in cultural evolution.” (Hassan, 2000: 125). The environment needs to be understood in two ways: as it is (was) and as it is (was) perceived (Hassan, 2000: 127). How the “...known environment relates to the “real” environment is also discussed by Rapoport (1977: 25). In the following sections, the inquiry of environment is looked into in terms of climate and landscape as the first is seen to have profound influence on social organisation and state systems, and the latter is believed to affect our worldviews in relation to sensory stimulations gained from the surroundings.

2.6.2 Perception of climate

“The historical relationship of humanity to climate is a story that remains substantially untold.” (McIntosh, Tainter and McIntosh, 2000: 1)

Social components of adaptation to climatic change are largely invisible to observers (McIntosh, Tainter and McIntosh, 2000: 5). Some illuminating considerations on the issue of climate change are as follows:

- Humanity interacts not directly with nature but with its perceptions of nature, and it acts on those perceptions.
- A major portion of any human response to climate or other environmental change is through behaviours that are intangible: changes in social networks, in relations of reciprocity, or in the cosmology that defines the place of humanity in nature.
(Excerpts from McIntosh et al, 2000: 6)

Archaeological records show that many flourishing ancient societies suddenly collapsed. There are indications that in many cases this was a result of sudden and persistent environmental change (<http://www.igbp.kva.se/cgi-bin/php/sciencehistory.show>). Where agriculture is possible, sedentary lifestyles predominate and these give rise to ‘civilisations’. Temperature changes may have previously limited agricultural

practice and encouraged people to adopt nomadic lifestyles, for example. Human presence is integral to the eco-system and not overlaid onto it, human behaviour is nested in the biophysical and is not isolated from it (McIntosh et al, 2000: 15). Culturally created perceptions of climate are generated through collective social memory, which results in active processing of climatic information and its transmission from generation to generation. “Social memory is thus the source of metaphors, symbols, legends and attitudes that crystallize social action.” (McIntosh et al, 2000: 24-25).

Of importance to this study are the concepts embodied by the previous writers in terms of the relation between complex societies and hierarchical organisation of society. This is discussed as the ability of a system to maintain its structure in the face of climate change, a society’s resilience. Heterarchy, the horizontal integration of multiple overlapping social lattices with different centres, such as a tribal system, is compared to hierarchy where there is a vertical integration of networks of power and information, streamlined by ranking various systems, such as in a kingdom. In the latter, few decision makers means quick responses to change, in the former the decision making involves everyone and is therefore slow but information is not lost in the process (McIntosh et al, 2000: 13).

Hierarchical	Hetrarchical
Kingdom	Tribal councils
Streamlined information	Information available to all
Quick decision-making in the hands of few – bureaucratic	Slow decision-making as all are involved in the process

Table 2.4 Two forms of social structure and their characteristics

One may speculate that hierarchical systems led to the production of massive monuments. As explained by Elvin (2004), regarding Chinese environmental history: “Politics and the state played crucial roles in encouraging and shaping environmental changes.” (McNeill, 2004). The architectural production of different regions of Africa can be gauged based on these systems of adaptation. The northern riverain region of Sudan would then be assessed according to historical episodes with major differences in climatic conditions. Other disciplines will be referred to in this

investigation at a later stage of the study. Before that can be done, some other aspects important to this theoretical framework are discussed below.

Another aspect of interest in relation to the table above is that climate change may result in a breakdown in social order, which could be perceived as a breakdown in cosmic order: "This was likely to generate feelings of pessimism and fear of an apocalypse, as well as notions of future salvation at the hands of a saviour." (Hassan, 2000: 136).

Before that, it is explained that climate change and responses to it depend on how people perceive it: "Individual perceptions and memories are subject to selective retention. Actions become a part of the social memory if they are accepted by a sizable segment of the population and are passed on to future generations. Such cultural actions are likely to become integrated in the cultural fabric of thoughts, discourse and practice." (Hassan, 2000: 121). Events are fabricated and modified in folklore, practices in order to preserve social memory (Hassan, 2000: 136). Preservation of memory of past crisis is crucial in order to help people deal with future crisis (Tologa, 2000: 181).

To understand interaction between people and their environment in the past one needs to rely on relics from the past as articulated by Hassan (2000: 128-129): remnants from lived existence such as modifications of a landscape, physical remains of material objects, graphic signatures of art or scripture, residues of human activities and oral or written traditions.

2.6.3 Perception of landscape

"Landscape is the visual signature of a territory (a vista) that is partially formed by the people who inhabit it." (Crumley, 2000: 193)

"It is only by a complete understanding of how the landscape is, that we fully understand the 'genius loci' or 'spirit of place'. The concept of 'genius loci' denotes the essence of place." (Norberg-Schultz, 1976:4, 5)

Our perception of landscape has an influence on our worldviews, discussed above. The topography, vegetation, colours and sense of openness or enclosure are all aspects that are part of our cognition of the environment. Place making activities are our response to this. Some forms of landscape create a strong sense of direction.

Some create a sense of unity or disjunction. Natural features provide structural elements that help us determine order in landscape composition. The natural order of the cardinal points also represents cosmic symbols as agreed-upon meaning, an extension of social beliefs. This will become more apparent as the study progresses. Rapoport believes that: "Nearly all landscapes are cultural landscapes." (1990: viii) and that people interact with their environments through meaning (ibid, 42).

Norberg-Schulz explains that a feeling of intimacy and a unified visual image are characteristics of some natural landscapes, but are absent in others. To him a quality of place is generated through a combination of striking external relations and exteriority. A 'place' can thus appear as a figure on a natural background (1979: 114-115). Rapoport notes that among Australian aborigines, "...meanings of place are frequently stronger and clearer in locales where there are striking and noticeable environmental features." (Rapoport, 1982: 26). It is clear that there may be other categories of landscape that lead to specific ideas of place - the understanding of place in the study region needs further investigation.

2.7 ARCHITECTURE DEBATED

2.7.1 Vernacular architecture

The vernacular is the 'language or dialect of a particular country' according to The South African Pocket Oxford Dictionary (1994: 1084). Thus, each setting has its own dialect; yet, some characteristics are shared due to the similar mode of production in all the settings. Despite its appropriateness, importance and valuable lessons, vernacular architecture exists as a separate entity from institutionalised architecture 'with the beginning of labour specialisation and the ensuing dawn of stratified society' (Turan, 1990: 3). Architecture is seen to be the product of architects. In traditional contexts people are seen to be 'without architecture' or architecture is seen to exist 'without architects' (Turan, 1990: 5).

The qualities of vernacular architecture are similar to the products of craft-evolution. Artefacts that came into being as craft were characterised by their non-mechanised nature and their beauty by virtue of their direct resonance with functional need of the society and often the response to limitations and opportunities posed by regionally available material. This indicates that the qualities inherent to vernacular artefacts were societal constructs passed on from one generation to the other (Osman, 1996:

24). In this situation, change happened very slowly over long periods of time. Institutionalised architecture separated the maker from the designer. It also shortened, the previously very long, evolutionary process through the use of design-by-drawing, modelling and computation.¹⁶

Until recently architectural history mostly ignored complex interpretations in favour of dealing with individual buildings. “Architectural history became the record of isolated cases as if they existed outside of society and a discourse of countless casualties.” (Turan, 1990: 9). Rapoport states that traditional mainstream architectural history has had a bias towards “important” works that are subjectively selected (1990: 11). It has also emphasised “hero” figures, and neglected many practicing architects (Rapoport refers to Niels Prak in his book, *Architects, the Noted and the Ignored*, 1984).

In this study there is a different view: According to Rapoport, architectural history “... has emphasised the “hardware”, the visible products. But the environment is best conceptualised as the organisation of space, time, meaning and communication, or alternatively, as the relations between people and people, people and things, and things and things.” (*ibid*).¹⁷

Lekson states that in terms of vernacular architecture, “architecture is town planning or it is nothing.” (1990) The settlement, or the community, is the basic architectural unit. The community is defined as the daily face-to-face social network. To study the community, which in turn, defines the settlement, patterns of interaction need to be identified.¹⁸

The study of vernacular settings means looking at the built environment as a totality and not as an assemblage of individual buildings, thus conventional methods of architectural history serve no purpose in these endeavours. One of the assumptions

¹⁶ These concepts have been articulated by Christopher Jones in his 1976 book ‘Design Methods, seeds of human futures’.

¹⁷ This further justifies the need for a term to define these relationships, thus the use of “intangible artefact” in this study. This seems to be the basis of Rapoport’s theory of Environment-Behaviour Relations (EBR): the study of these relationships, not only of fixed elements, but also of semi-fixed and non-fixed features (Rapoport, 1990: 13). Here it is expanded to the non-existence of features as well, where people use the open space for various activities and rituals.

¹⁸ A settlement can often have many communities as explained by Rapoport. This becomes evident in the proceeding sections of the study.

of this thesis is that individual structures would give little light as to the nature or meaning of the environment and it seems that this is a basic characteristic of vernacular contexts anywhere.¹⁹ If there is a statement made by the built environment it is a collective statement and not an individual one, unlike the institutional approach to architecture where the building is isolated, unique and designed to stand out.

Norberg-Schulz believes that to dwell means the establishment of a meaningful relationship between people and their environment. A house repeats the basic structure of the environment – it becomes a microcosmos: “To dwell means to belong.” (1984) The use of space is also influenced by the lifestyle of the people concerned. He compares the role of the house in the cold north (‘my home is my castle’) to other contexts where daily life takes place outdoors and the house serves a semi-public purpose. This also represents the ‘medina’ typology of Islamic cities where individual houses are also not easily identified within the urban fabric. It also reflects some of the qualities associated with vernacular settings.

These two modes of habitation imply that the single building, within an urban matrix, would be characterised by anonymity and dependence, while in other cases the building is an autonomous object of identification. Most architectural theory focuses on the latter, thus it is unsuited to the study of vernacular contexts.

Many times the distinctions between vernacular and institutional architecture are attributed to subjective factors such as levels of sophistication or beauty. It was seen appropriate here to debate this.

2.7.2 What is beauty?

“The peasant wanted to build a house for himself, his kin and his cattle, and he has succeeded. As his neighbour and his ancestor succeeded. As the animal succeeds, guided by his instincts. Is the house beautiful? Yes, just as beautiful as the rose and the thistle, the horse and the cow.” (Loos in Rykwert, 1972: 27)

Because the concept of beauty is such a pervasive aspect of architectural evaluation, its role in understanding the value of vernacular architecture is explored. Beauty is culturally determined. As a starting point for the discussion, a commonplace definition

¹⁹ This approach is strongly supported by Lekson and the author has found it applies to the case study in question. It may perhaps be further tested in future studies of other contexts.

is put forward: According to The South African Pocket Oxford Dictionary (1994: 72), beauty is 'a combination of shape, colour, sound that pleases the senses.' Or 'pleasing to the eye, ear, mind'. But this applies to only the physical appearance of a product, and if the first statement holds true, the concept of beauty by definition differs between cultures, societies or individuals.

The meaning of beauty can be expanded to include relevance, function and process. Turan refers to this as 'environmental wisdom' (1990: 8), that is natural and accumulated knowledge that influences the development of built form. Environmental wisdom is appropriate environmental response. 'Beauty and wisdom are rarely found together' is not true in the case of vernacular architecture (Turan, 1990: 8).

Pevsner (1963) uses 'aesthetic appeal' to draw the distinction between architecture and building (refer to Brawne 1991: 146). Aesthetics is explained as: 'of or sensitive to beauty' (The South African Pocket Oxford Dictionary, 1994: 14). From the above it becomes clear that making the distinction between architecture and building, in terms of 'aesthetic appeal', is limited in accuracy and significance.

Quatremère de Quincy excludes from the designation 'architecture' any building that has a purely material function (Rykwert 1972: 37). A product of natural circumstances and the imitation of natural models do not 'raise' building to the status of architecture. Emulating nature through taking up the proportions of the human body, as the Greeks did, is assumed to have 'raised' their craft to a 'great art'. Quatremère de Quincy was shouted down at the Ecole des Beaux-Art in 1826, according to Rykwert, due to his ideas being perceived as static and limited in progress (1972: 38). He quotes Algorotti's notion of architecture being different from painting, poetry or music:

"These have in a certain sense, merely to open their eyes, contemplate the objects around them, and base a system of imitation upon them. Architecture on the other hand, must raise herself on high through the intellect, and derive her system of imitation from ideas about more universal things, far removed from human sight. It might almost be said with good reason that she has the same place among the arts as metaphysics has among the sciences..." (Rykwert, 1972: 63).

Rykwert (*ibid*) refers to these ideas as being smug. This conceited approach to architecture is still evident among architects today. This can be detected in the fact that, unlike other disciplines, architecture is still perceived as esoteric and

incomprehensible to the general public. Architects and architecture seem to exist in isolation in an impenetrable sub-culture.

Architectural activity is partly a process of technification. In distinguishing between the work of a mere builder and a master builder, between the dwellings of a common person and a dignitary, between the ordinary building and the important building, and between human, animal shelter or religious, public function, through emphasising the superiority of the monumentalised or technified artefact, there is a resultant, artificial focus on a small percentage of building activity only. This focus is what the history of architecture has promoted. This undermines its relevance and accuracy.

2.7.3 African architecture

“Unspecialised cultures make little, if any distinction between the concepts of beauty and functionality. All art originates within a specific cultural context, and is used to reinforce belief, customs and values, and is for the most part oriented positively towards humankind’s search for a secure and ordered existence.” (Dippenaar 1987:129)

The triple heritage (as articulated by Mazrui, BBC series and Parrinder, 1976) of the culture of most African contexts complicates investigation into the art and architecture of these regions. Merged identities of ‘Islamic’ or ‘African’ are difficult to disentangle. Again, in Africa, there are fewer preserved remains of historic objects than for instance in the West, architecture is often very fragile and short-lived, there are many gaps in the historiography of architecture, and the systematic practice of conservation of built culture is only recently becoming prevalent.²⁰ Also, existing historic objects are not necessarily dated or related to certain people or events (Adahl, 1993: 141). Western architectural history theory, if it wants to pronounce on African architectural history, needs to be extended and adapted to accommodate for these major differences. Methods of analysis should be relevant.

There are those who would argue that criteria for assessing architecture that prevail in Western societies might be used universally. Yet, if we cannot create a theoretical base more relevant to the abovementioned African vernacular contexts, many valuable lessons will be lost and cultures will go undocumented. African built culture cannot be appreciated using conventional architectural theory that is biased towards

²⁰ Other objects of African art and useful objects have been preserved and documented to a greater extent than built culture.

western civilisation. For example, the so-called Sudanese-style characterising buildings in the savannah belt of sub Saharan Africa, is not considered to be more than 'shelter' (Adahl, 1983: 132). It is seen as a technique rather than aesthetics. This attitude exposes how limited western architectural views are in terms of understanding African architecture.

Elleh (1997: 345) states that architecture is the least developed of African art forms. This statement is rejected since the assessment of architecture of the region is based on an irrelevant understanding of architecture. Small scaled, non-permanent or short-lived architecture are all valid architectural responses to specific ecologies and situations and on the whole, African architectural responses to climate and social settings are extremely successful. There are no doubt communicative problems when a work is produced in one setting and observed in another. In terms of the cultural content of architecture, Balogun (1979: 34) distinguishes between the form, which is accessible and understandable, and the content, which is inaccessible, to outsiders. He states that there are no commonly shared elements with Western culture that allow for valid interpretations. There is also no shared definition of art. A work of art in one context may be considered a religious or cult object in another.

Balogun makes a controversial statement:

"African architecture has seldom given rise to massive monuments and constructions, with the possible exception of the city of Zimbabwe... it is mostly devoted to structures of modest proportions." (Balogun, 1979: 69)

This is inaccurate as it excludes the cultures of Nubia, Egypt and Ethiopia. Elleh explains:

"In east Africa, Kenya, Tanzania, Mozambique and Uganda, there are many monuments built from stone. These monuments attest to the existence of empires or states that were organised beyond the agricultural societies of Africa. According to Professor Mazrui (1986), the theme of gloriana was founded by the dynastic empires of Africa which also believed in using stone and brick to erect durable testimonies to their lifestyles." (Elleh, 1997: 45)

If monumentality is considered a condition for architecture, then Adahl (1997: 134) identifies it in the structures of West Africa: "The simplicity and serenity of the construction and the moulded, almost melted shapes, still permit monumentality; the total impression is overwhelmingly forceful." But perhaps monumentality should not be a condition for architecture, as the living spaces of ordinary people will become

excluded from our academic debates. Brawne's (1991: 134) explanation of Louis Kahn's definition of a 'school' as a 'man sitting under a tree talking to a student', a definition where there is no mention of the word 'building' seems to be more suited to a broader understanding of architecture, more relevant to the context under study. Yet, this gives rise to the question of architecture being mere function. It can also be seen differently: architecture being space appropriation in any form.

Elleh (1997: 45) shows how the small houses, or huts, typical of Africa, are hybrids of much earlier forms that evolved in the Nile Valley when societies began to develop and farming became a profession. Elleh (1997: 47-48) believes that African architectural history is complete only when the whole continent is taken into consideration as he sees the similarities throughout the continent to be more than a coincidence. He also sees Ethiopia and the Sudan as strategic starting points for such a study.

"The characteristic peculiarity of Meroitic architectural design is the practice of joining harmonic rectangles which determine the outer limits of the plan. The 'Inner Harmony' of the Egyptian type of sacral building develops into an 'Outer Harmony' principle in Meroitic times." (Hinkel, 1991: 222)

It can be argued that, if decoration is perceived as 'primitive' while focus on space and form are seen as 'sophisticated', many of the structures of Africa can be classified as sophisticated, as people did not just assert themselves through decoration. The assumption that Greco-Latin art is the ultimate culmination of artistic development that evolved from eras of 'primitive art' is very Euro-centric and limited. Such an assumption denies the value of the preceding origins as well as extraneous art forms that were partly its morphological and syntactical inspiration (*inter alia* Oriental art forms) and excludes many successful environmental interventions from the architectural debate.

Aesthetic appreciation in Africa cannot be viewed in isolation of the function of an artefact and the criteria cannot be universal, an approach advocated by Shinnie (1991: 49). Trans-Saharan trade routes throughout Roman times and the mediaeval period means that the interaction of Nubia with Egypt was very powerful and was a major reason for cultural fusion in Africa.

“The Nile Valley allowed communications between the Sahel-Savanna and Mediterranean North Africa. Whoever controlled Nubia controlled this corridor, and with it the prosperity of Egypt.” (Horton, 1991: 264).

For all of these reasons Elleh (1997: 49-50) believes that future research will support the notion that there is a strong relationship between ancient Egypt and Africa south of the Sahara.

2.7.4 African spirituality

“The spiritual is fundamental to African life, and their whole world is seen as a spiritual arena, in which the interplay of psychic forces are experienced. Religion is an ontological phenomenon that pertains to the question of existence or being, in which people live in a religious universe which starts before birth and continues after death.” (Parrinder, 1976:28)

In Africa, artefacts are not made to be admired but to be utilized, such as use in religious and social rituals. There is no distinction between art as a separate genre and everyday life, as in dance or song for example. Artistry is not an end in itself but a means to an end, it is not practiced outside of the setting to which it belongs, for entertainment. The artefact does not signify anything in isolation:

“... because of it and in conjunction with, the context of beliefs and rituals to which it belongs, for the good reason that it is but one of many instruments in a coherent ensemble to which it contributes meaning and from which it derives significance.” (Balogun, 1979: 38-40).

Balogun does not agree with the statement that ‘religion is at the root of all African art’ finding it too wide a generalisation. There is some truth to it if religion is considered to be at the base of life itself, and it is Balogun himself who claims that art and life cannot be separated in this context. In Africa, God is considered to be too exalted and too distant to be concerned with human affairs and agents are then necessary to intervene in the day-to-day activities of people. The concept of the *bayān* of a *shaykh*, in Sudan, is an African concept:

“Some sign or ensemble of signs must be found to distinguish this human agent from other human beings and establish the fact that for the duration of the rites he has ceased to be a human being and has become the avatar of the divinity or ancestor whose presence is being evoked.” (Balogun, 1979: 42).

The importance of the ancestors, another major factor in African spirituality, is not evident in Sudanese culture.

2.7.5 A Sudanese idiom

“By means of the phenomenological method, we may “think” about things and disclose their “thingness.” Phenomenology ought to become the gathering middle of education, and hence the means which may help us to recover the poetic awareness which is the essence of dwelling.” (Norberg-Schulz, 1984: 135)

Schulz distinguishes use (multi-dimensional) as being different from function (one-dimensional). To dwell is not merely to have a roof over one’s head. It is multi-faceted, incorporating all human actions. Place is more than location. Place is where man dwells – architecture is thus an element that signals place. Sense of place is mythical, cosmological, a latent spirit inhabiting a particular site, which architecture pays homage to, makes explicit and questions. Place and place-making means reading what exists, thus making its essence manifest and extend it. “We have to develop our poetical intuition and intend the world in terms of qualities rather than quantities.” (Norberg-Schulz, 1984: 135).

Approaching architecture in Sudan, Existentially, ‘dwelling’ needs to be defined with sensitivity towards the differences apparent in that context. The method of identifying a Sudanese Architectural idiom has been structured as follows:

- Identifying context
- Identifying recurring themes (including a definition of the identity of a people)
- Understanding identity through the physical artefact at a variety of levels
- Understanding identity through intangible constructs

Architectural categories are derived from this analysis and are place-specific; they are not abstract. Norberg-Schulz (1984) identifies three domains of dwelling: collective, public and private dwellings. Also, belonging and participation as collective or individual values, are exemplified through dwelling (The dominance of collective values or individual values is investigated later in this study).

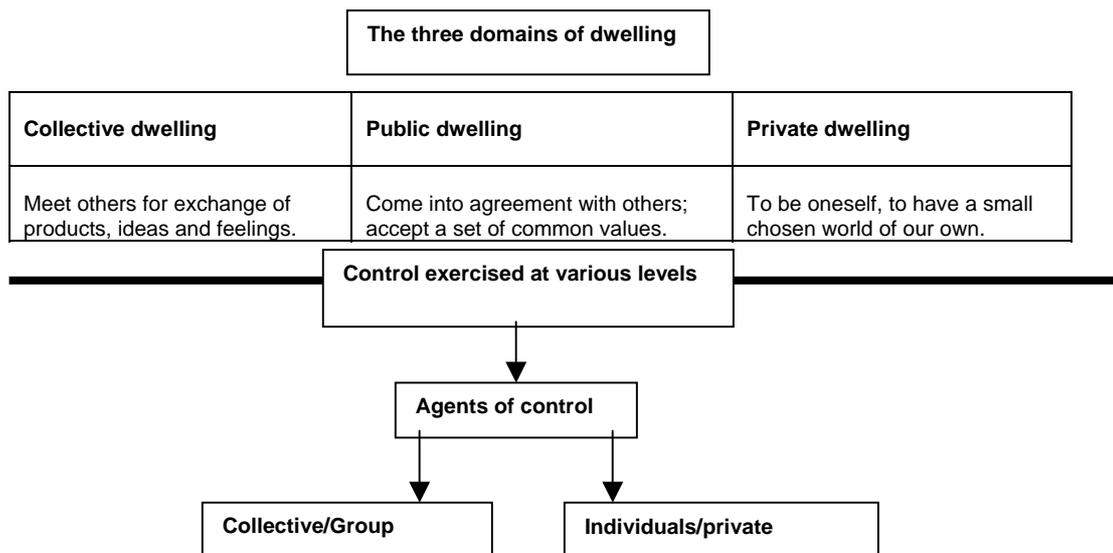


Table 2.5 The three domains of dwelling and agents of control

Ordinary, individual experiences are related to larger wholes of human existence, by applying and extending contemporary architectural theory to a vernacular context. The context is not the “elsewhere” or the “other”. Interpretation implies that some distance must be maintained, one needs to move out of the boundaries of a phenomenon in order to be able to see it clearly and to appreciate it. This also means that one needs to move out of the borders of a discipline. The place, the people, the activities, the networks as well as the undomesticated landscape ‘make’ the architecture of the region.



Fig. 2.2 and 2.3 Rudimentary structures in the Gezira region, the Sudan (Photographed by author, January 2000).

In the northern riverain Sudan, buildings blend in with the landscape, and with the rest of the built environment, not by chance but by choice. Rapoport states: “...all

environments are designed!” (1990a: 78 and 1990b: 17). Thus, there is meaning to be read into choices concerning any context outside the realm of institutional architecture. Rapoport supports this (1977: 15-16) where he proceeds to explain the limitations of choices in traditional situations – this is debated in this study as value systems sometimes impose these limitations, as Rapoport himself later acknowledges (*ibid*, 24). Sometimes these choices may result in extremely rudimentary structures (Fig. 2.2 and 2.3); they may also result in no building at all. Both of these decisions are elevated to the realm of ‘architecture’ and studied within the knowledge embodied in the discipline.²¹

2.8 A RE-DEFINITION OF ARCHITECTURE²²

“...the art in architecture is preponderant only in the tomb and the monument. Loos wants to show further that the artist is concerned with future generations, but craftsmen, such as the architect, with the present. The architect... must aim at creating a particular feeling in his spectator about the building he is designing. And he concludes, “When walking through a wood, you find a rise in the ground, six foot long and three foot wide, heaped up in a rough pyramid shape, then you turn serious, and something inside you says: someone lies buried here. That is architecture.”” (Loos in Rykwert, 1972: 27-28)

Norberg-Shultz’s interpretations of Heidegger have provided another definition of architecture: a ‘building’ does not represent anything. It rather brings something into presence. The temple makes the god present. It ‘fits together’ what shapes the destiny of man and makes all things on earth visible (Norberg-Schulz, 1984: 114).

“A building, a Greek temple, portrays nothing. It simply stands there in the middle of the rock-cleft valley. The building encloses the figure of the god, and in this concealment lets it stand out into the holy precinct through the open portico...the temple and its precinct, however do not fade away into the indefinite. It is the templework that fits together and at the same time gathers around itself the unity of those paths and relations in which birth and death, disaster and blessing, victory and disgrace, endurance and decline acquire the shape of destiny for the human being... Standing there, the building rests on the rocky ground. This resting draws up out of the rock the mystery of that rock’s clumsy yet spontaneous support. Standing there, the building holds its ground against the storm raging above it and so first makes the

²¹ It is interesting to note that the limitations of traditional approaches to architectural history and theory not only exclude vernacular architecture from architectural debates, but also vital aspects of so-called developed societies: “...in our own culture, both in domestic and nondomestic situations, semifixed-feature elements tend to be used much – and are much more under the control of users; hence they tend to be used to communicate meanings. Yet, they have been ignored by both designers and analysts who have stressed fixed-feature elements.” (Rapoport, 1982: 92).

²² The meaning of architecture according to the South African Pocket Oxford Dictionary (1994: 40) is ‘Design and construction of buildings, Style of building... Architect, designer of buildings, supervising their construction, person who brings about a specific thing, Greek: *arkhi* (chief) and *tektōn* (builder)’.

storm manifest in its violence. The luster and the gleam of the stone, though itself apparently glowing only by the grace of the sun, yet first brings to light the light of the day, the breadth of the sky, the darkness of the night the temple's firm towering makes visible the invisible space of air... The templework, standing there, opens up a world and at the same time sets this world back again on earth, which itself only thus emerges as native ground... The temple, in its standing there, first gives to things their look and to men their outlook on themselves". (Heidegger in Norberg-Schulz, 1984: 113-114).

Thus, Norberg-Schulz concludes that "By means of the building the place gets extension and delimitation... the meaning of the place is revealed by the building." (1984: 117). In this sense knowledge of an object is based on the context surrounding its existence. This does not elevate the history of architecture to the study of the building. It also does not imply a disregard for the physical shape of things, but rather an appreciation that form has been shaped by environmental responses and is an extension of cultural beliefs and practice. In the study of architectural meaning, form and content cannot be separated.

People who have no building techniques at all, for example the aborigine tribes of central Australia (Rykwert, 1972: 185-188), cannot be excluded from the architectural debate. Objects are used for ritual and then destroyed. By referring to the abstract, geometrically rigid and regular artefacts, Rykwert interprets the (temporary) constructs of the aborigines as exhibiting features of the 'initatory hut' without actually enclosing space:

"... it seems to me remarkable that a people who only adopt an excruciatingly uncomfortable form of enclosure as a temporary expedient, devise this extraordinary construction and endow it with all the majesty of a hope which the Apocalypse was to glorify." (1972: 189).

Vitruvius viewed the architect as master of craft – *fabrica*. The heart of his treatise was: *firmitas* (strength), *utilitas* (utility) and *venustas* (beauty). It is seen that traditional responses to the environment through building can then be rightfully classified as architecture. In vernacular architecture, form and content are valued more than applied ornamentation.

The concepts of architecture as articulated by Vitruvius (translated by Morgan, 1960) encompass many aspects of architecture that correspond to the intelligence of vernacular architecture in particular:

- Arrangement: Reflection and invention (Book I in Morgan, 1960: 14)
- Order (*ibid*: 13)

- *Eurythmy* – graceful, agreeable (*ibid*: 14)
- Symmetrical – corresponds to harmony, *symetria* – harmony of assembled parts, relation of parts to the whole (Book III, *ibid*: 72)
- Advantageous distribution – management of materials, site (Book VI, *ibid*: 174), economy (Book I, *ibid*: 16) and climatic suitability (*ibid*: 170-173).

Vernacular architecture is a source of practical and theoretical knowledge and an appropriate response to the environment. In traditional contexts, the person-nature dialogue is refined and well developed. Through learning about the interface between culture and technology as well as building activity and social relations, the scope of architecture is broadened beyond function and aesthetics. It raises questions otherwise excluded from architectural debates. It leads to concerns about what must be done, thus combining theory and practice (Turan, 1990).

Living spaces shape social interaction and vice versa. Living spaces are anywhere that people have lived. Habitation models are reflections of social hierarchies and interaction. Contemporary theory, pertaining to space and place, can be applied to vernacular situations and they need to be studied as intelligent architectural responses. Architectural practice has existed since people first started constructing shelter for themselves. The same way that design has existed since earliest times, but only its processes were transformed from craft-evolution to design-by-drawing and beyond. Building and constructing were some of the earliest occupations of people, Turan therefore states, perhaps even older than the commonly cited 'oldest profession' (1990: 5).

Words related to 'art', 'skill', and 'craft' are linguistically associated with the action of constructing in some places (Turan, 1990: 6). In Afghanistan, a Sufi (a religious person) is also used to refer to a master builder (Kasimee and McQuillan, 2002). The Arabic word, *ya'amir*, build, implies wealth. In Sudan, *binna*, building, is associated with 'order' as in *albinyan almarsoos* (Gasim, 1985: 132). *Marsoos* means set together and combine otherwise separate pieces (Gasim, 1985: 454). The word building is related to expertise and a special ability. If the separation between architecture and non-architecture refers to the quality of work, the product of non-professionals cannot be dismissed as non-architecture (Turan, 1990: 7).

Thus, for the purpose of this study, architecture is defined as follows:

Architecture is any people's spatial response, comprising the patterns of its appropriation and use. It is extensions on the environment that create places that support cultural beliefs and practice. These constructs may be temporary or permanent. A meaning of a place is, not only, revealed in a building but also in how people move, act, react to and use its defined space.

2.9 SUMMARY AND CONCLUSIONS

The differentiation between institutional and vernacular architecture is acknowledged, and the values of the latter are identified to explain the limitations of prevalent, conventional definitions of architecture and to achieve a broader understanding. Interdisciplinary investigation allows for that broader understanding of architecture. A multi-disciplinary study would utilise professionals from various fields of study or disciplines. This study uses achievements and insights from various disciplines. The various disciplines that are included in this multidisciplinary investigation are all vast fields of study in their own right, making the most advantageous utilisation of the possible understandings forthcoming from these disciplines difficult to achieve – it is accepted that the author probably only touches on the surface of these disciplines and selects what is of direct relevance to the study. Applications of theories may be deemed crude, yet, a matrix, portraying the interconnection of architecture/culture/environment, is achieved through this process.

African culture is seen as a hybrid mix of cultures. The meeting point between Africa and 'the outside world' is investigated. Relatively new religions, Islam and Christianity, as well as colonialism have created unique situations where all forces have merged to formulate the history of the continent. The character of art in Africa is different from western conceptions and needs a relevant theory base for its study. It is seen that even the Sudan within Africa has its unique identifying features, and further, Northern riverain Sudan within the Sudan. This theoretical base is essential to achieve relevance to this particular region, within the accepted discipline of vernacular architecture. Though unique, the region does not exist in isolation. It needs to be viewed within its larger context as well as in terms of its contact with the whole continent and world culture.

The research process is seen to have an impact on the final interpretation arrived at through this enquiry. It is also a reflection of the author's motives and value system. It

is not an impartial process. Thus, information sources, the language used and classification systems adopted reflect on the outcome of the research. The core of this discussion is the concept of 'multiple characteristics' and levels of interpretation relevant to the inquiry of the meaning of place. The structure and approach of this thesis has been derived from these concepts.

Conventional approaches to architecture have been challenged and this approach has been supported by a literature review. A definition of architecture that is appropriate to the studied context is achieved and an appropriate theory base for the study of the architecture of the region is set up. Thus, the problem has been addressed and the hypothesis supported.

CHAPTER 3: AN ECO-SYSTEMIC CONSTRUCT OF NORTHERN RIVERAIN SUDAN

3.1 SUB PROBLEM 2

The study context needs to be identified eco-systemically. This needs to be initiated by the articulation of social, political, cultural and religious descriptions and the identification of the recurring themes in the literature of the region.

3.2 HYPOTHESIS 2

It is believed that through the eco-systemically based identification of recurring themes in the literature of/on the region, essential and incidental attributes of the place and culture can be articulated. This can become a tool in interpretation of tangible/ intangible artefacts, spatial interventions, and social practice.

3.3 OUTLINE OF CHAPTER 3

This chapter is initiated by looking at the history of the region. The reasons behind the delimitation of the area of study are articulated and justified. The recurring themes are then expressed through an intensive literature review. The origins of the people are explained and elaborated. The identity of the northern riverain people is established as a political and a religious concept. The northern Sudanese riverain people are thus introduced.

3.4 THE CONTEXT: ITS HISTORY AND ITS VALIDITY AS AN AREA OF STUDY

Three main civilizations lived on this land, extending along the Sudanese Nile valley from the present northern border with Egypt to the town of Sennar on the Blue Nile and Kosti on the White Nile: the Kushites, the Meroites and the Funj (refer to Table 3.1).

The Kushites had their centres at Kerma and then at Napata. The peak of this kingdom's strength started around 2000BC and it ended around 900BC (this is according to Hakim (1988: xv) who refers to a variety of authors. The Neo-Kushites ancestral phase started in 1070 BC (Hakim, 1988: xv). There is some confusion among historians regarding the Napatan and the Meroitic cultures. During the Meroitic phase, two cultures seem to have co-existed. Hakim states that:

“... the evidence reveals a marked degree of cultural continuity in which I find it very difficult to justify the presence of either a hiatus or a duplication of culture at any one time. Indeed, while evidence for cultural continuity is overwhelming, there is a marked absence of evidence to indicate otherwise.” (Hakim, 1988: 9).

He therefore proposes to extend the term Meroitic to the whole period from the tenth century BC to the fourth century AD (Hakim, 1988: 10).

Kerma emerged as the capital of Kush in about 2000BC at the time that Egypt conquered Nubia. In the 8th Century BC, Kush became known as a great power with its new centre at Napata. This new independent state played a major role in the politics of Africa and the Middle East for about 1000 years (Nothling, 1989: 43). Kushite interest in expansion seemed to concentrate on the northern regions rather than to the south (*ibid*). When Kush lost control of Egypt, Napata remained as a religious capital while Meroe became the new centre. Expansion interests were then re-directed to the south (Nothling, 1989: 44-45). Table 3.1 identifies the historical milestones in the development of the Nubian region while Fig. 3.1 locates the area geographically showing the extent of Nubia and Kush during 700BC and 1750BC simultaneously. Also note the location of the main cities in relation to the Nile cataracts.

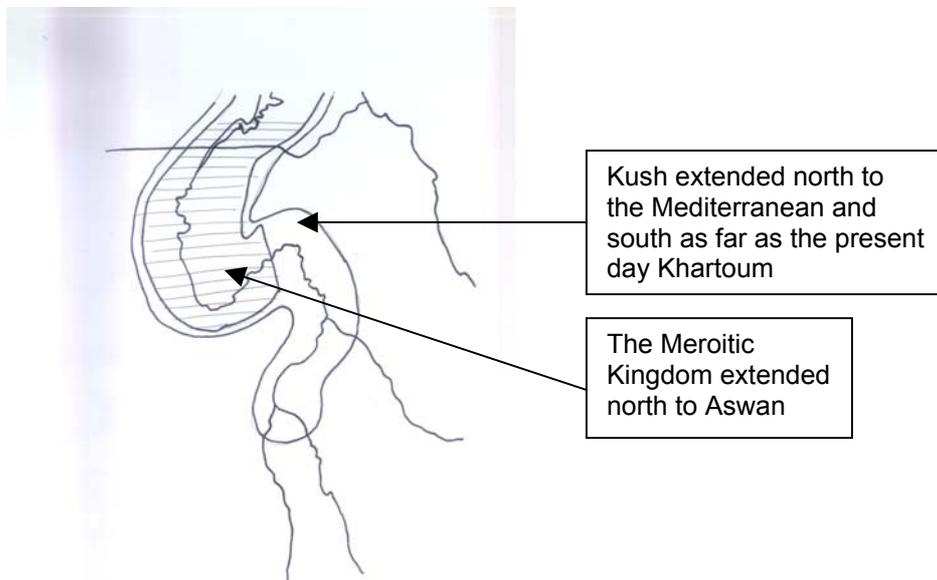


Fig. 3.1 Nubia and Kush between 700BC and 1750BC. Diagram by author adapted from Meyer (2003).

The area of study does fairly represent the extent of the Meroitic Kingdom at its peak. Hakim (1988: 79) states, based on various sources, that it:

“... extended from about Wadi Al Arab, just south of Maharaqa (Heirasycaminos – the southern limit of the Ptolemaic and Roman Dodecaschininos) to near Sennar on the Blue Nile and Kawa – Geteina on the White Nile (Arkell 1966: 136; Vercoutter 1962: 265) and perhaps even beyond this towards Malakal and Bahr el-Ghazal (Wainwright 1947: 22; Kirwan 1956: 16). On the west of the Nile the extent is still unknown while on the east the Meroites did not seem to have extended their occupation beyond the western Butana (Hintze 1959:170).”

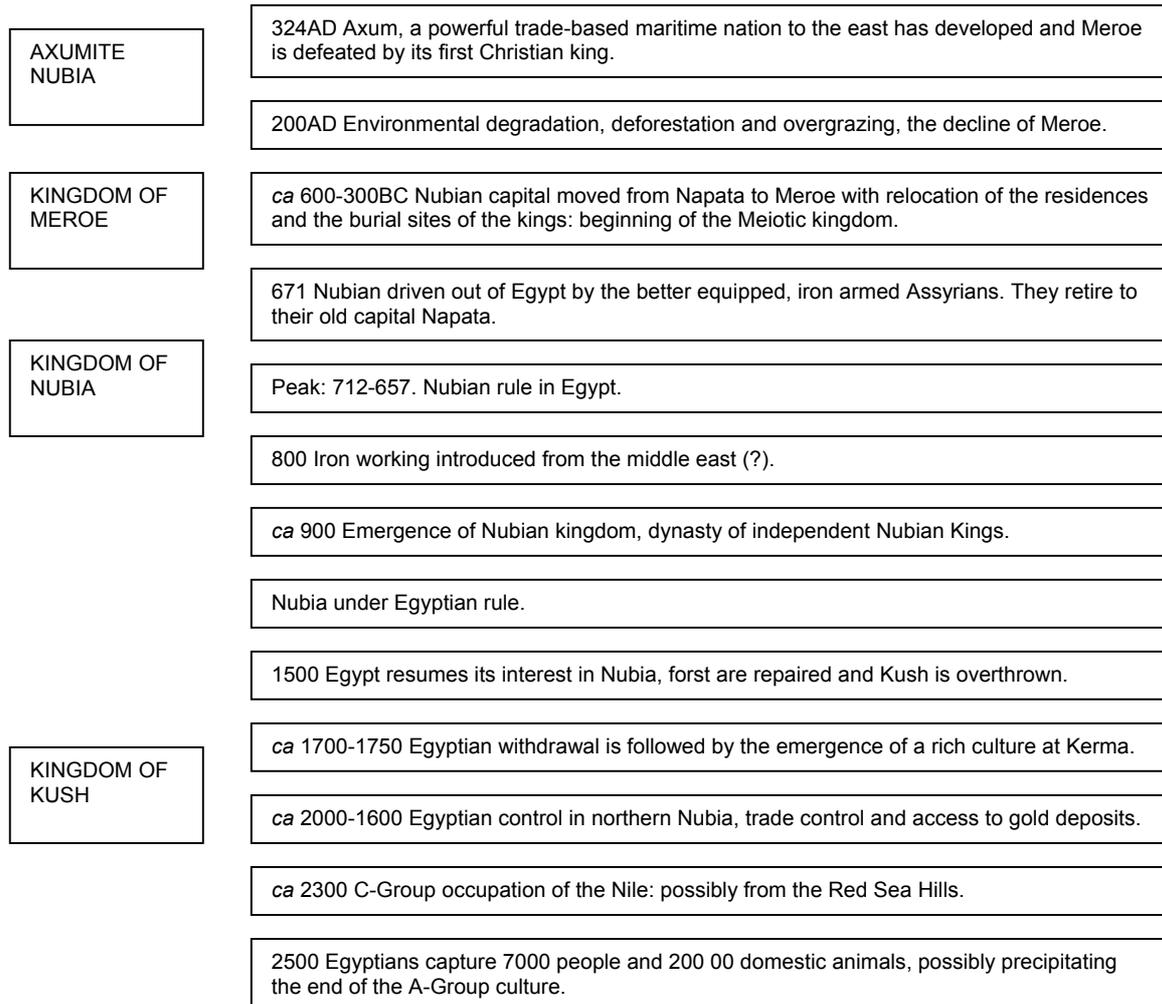


Fig. 3.2 Historical episodes (Diagram by author adapted from Meyer, 2003).

Decline in the major civilizations in the region was initiated when Meroe broke up into three Nubian Kingdoms that accepted the Christian faith in the 6th Century. Meyer (2003) dates the decline to an earlier period (200AD) and attributes it to corresponding environmental degradation (Fig. 3.2). This issue will be further elaborated later in the study.

To the north were Nobadia (with its centres at Faras and Qasr Ibrim) and Makuria (al-Muqarra)(with its capital at Old Dongola) (Jakobielski, 1987: 231-233). These were later unified into one state. The Kingdom of Alodia ('Alawa) was further south and had its capital at Soba (Fig. 3.3). Ethnic, linguistic and economic factors differentiated between the three kingdoms. Alodia ('Alawa) was primarily a slave trading state and was omitted from the terms of the Baqt (Jakobielski, 1987: 232 and 234). Blood ties between the thrones of Dongola and Soba ensured friendly relations between the two kingdoms. The border between the two southern kingdoms was the area between the 4th and 5th cataracts. Alodia ('Alawa):

“... embraced beside the traditional territories of Meroitic culture in the Butana and on the eastern bank of the Nile, also the fertile areas of Gezira up to at least Sennar; it doubtless bordered with Ethiopia.” (Jakobielski, 1987: 231)

It is seen that Alodia ('Alawa) provided another step in the development of the region under study. Ties with the previous cultures were not completely severed and the line of cultural continuity was still maintained. Makuria (al-Muqarra), with its capital in Dongola, was a unifying element integrating the Nubian community (Jakobielski, 1987: 235). Yet, the geographical extent of these kingdoms, the fact that they were divided rather than unified and the duration of their existence did weaken their impact and influence on the present day Sudan.

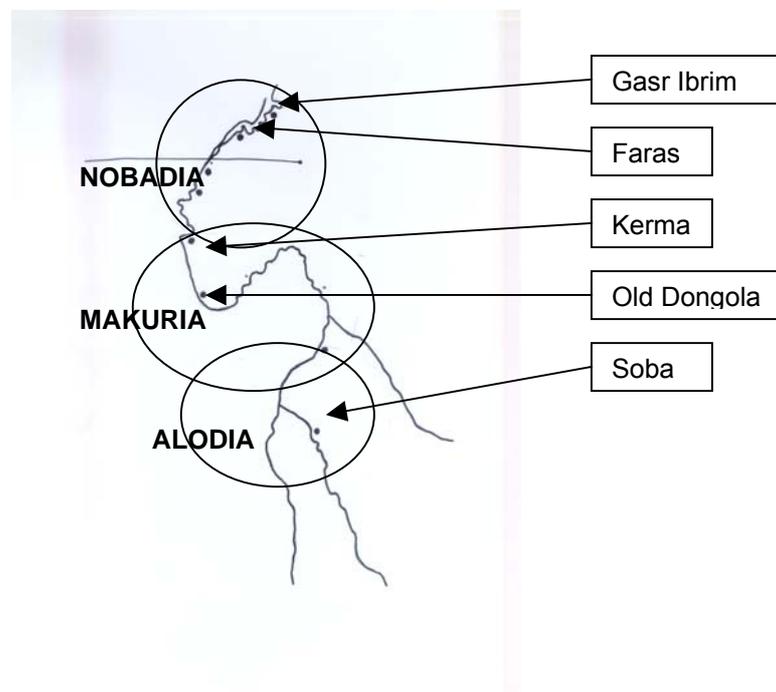


Fig. 3.3 Diagrammatic representation of the three Christian Kingdoms by the author.

Geographically, Alodia ('Alawa) still retained the extent of the Meroitic kingdom to the south – and this later also became the extent of the Funj Kingdom, assumed to be the real boundaries of the country before the foreign invasions of the Turks (1821-1882) and the Egyptians and British (1889-1956).

“The relations of the Fatimids, the Ayyubids, and the Mamluks with the Arabs in Upper Egypt and their policies towards Nubia led gradually to the erosion of its strength. The Mamluk policy, as it was in its final form, aimed at the conversion of Nubia into a vassal kingdom. This design hastened the process of Islamization. The Arabs who entered in large numbers with the Mamluk armies intermarried with the royal family and assumed power. Finally... the Nubian Kingdom was not so much overthrown as turned inside out – the royal family became both Islamized and Arabized. The collapse of 'Alawa was mainly due to the gradual ascendancy of Arab tribesmen, whose movements into the interior were stimulated by the exhaustion of the mines, and by the decline of the trade routes after the destruction of 'Aydhāb and the fall of al-Muqarra, which had for centuries hindered Arab migration through the Nile valley.” (Hasan, 1967: 90).

The Nubian archers of Makuria (al-Muqarra) resisted Arab invaders for centuries until they concluded with them the Baqt treaty in 642 AD. During this time, a matrilineal system of succession prevailed and was the reason that the Arabs gained positions of power such as chieftainships. Finally, the Banu 'l-Kanz married into the Nubian royal family and seized the throne (Hasan, 1967: 124-125). Between the signing of the Baqt and the emergence of the Funj kingdom, the character of the northern Sudanese people gradually evolved. According to (Hasan, 1967: 128), after the fall of Dongola there was a dark age in the history of the Sudan, the story of which is taken up by local tradition. The immigrants did not come in the form of invasions, but as small successive parties of peaceful nomads (Hasan, 1967: 128). There were no doubt some local clashes and tribal warfare (Hasan, 1967: 129), but no major wars occurred during this period.

In 689AD another threat was facing Alodia ('Alawa), invaders apparently coming from the southern parts of the Gezira: “These invaders were, I would hazard, the ancestors of the Funj.” (Hasan, 1967: 130). Alodia was also under threat from al-Muqarra, who came to collect slaves, “... probably for the purpose of paying the Baqt.” (Hasan, 1967: 130-131). Another reason for the disintegration of the kingdom was the isolation of the church. Links with churches elsewhere were severed by the middle of the 13th Century (Hasan, 1967: 131).

Two new forces then came into being with the collapse of the Nubian kingdoms: the Arab 'Abdallab group with their centre in Qarri and the Funj with their centre in

Sennar. The Funj exerted their influence over the 'Abdallab Arabs but also created a partnership with them that greatly influenced the future character of the country. The extent of the Funj kingdom is unknown.

“The Ottoman conquerors of Egypt (923/1517), like the Mamluks before them, soon clashed with their southern neighbours and subsequently annexed northern Nubia as far as the third cataract, making this region a frontier province against the Funj kingdom.” (Hasan, 1967: 134).

The territories of Makuria (al-Muqarra), Alodia ('Alawa) and the Beja from the beginning of the 16th Century became united under the Funj (Hasan, 1967: 134).

“The Kingdom of Sennar, founded in A.D. 1504, was a federation of principalities extending from the 3rd cataract in the north to the Abyssinian frontier in the south; eastwards it reached the Red Sea at Suakin along the caravan routes from Berber and Shendi; south-eastwards the nomads of the Butana were its vassals. Westwards the kings of Sennar obtained for a short period some power over the dry steppe-lands of Kordofan and even the Nuba hills; but it was only during the second half of the 18th century (sic) that this vast western region played any important part in the history of Sennar, whose south western frontier was, in effect, the White Nile.” (Crawford, 1951: 1)

According to Holt & Daly (1988: 28) the coming of the Funj did not necessarily disrupt the already existing social and political systems. This means that there was continuity for a long period of time:

“Amāra Dūnqas was the first ruler since Meroitic times to unite under one authority the whole riverain Sudan north of the equatorial swamps. The older ethnic and political units of medieval times, however, did not evaporate with the coming of the Funj overlordship; rather, the kings of Sinnār seem to have incorporated them as an integral and permanent part of the new governmental system.”

Expansions in the Meroitic and Funj eras determined the boundaries of the present Sudan (Fig. 3.3). Foreign contacts and the establishment of trade routes affected the future character the country and the location of major towns. Western Sudan has always been strongly linked to the history of northern riverain Sudan, especially after the Mahdiyya (1882-1898). The west maintains its own identity though Greater Khartoum has emerged as the unifying force between all Sudanese regions. The Fur Kingdom in the 16th Century was a strong entity that interacted with the kingdoms to the east of it. Even though the Funj expanded to the Nuba Mountains at some time this was for a short period and did not have a strong impact in the future development of the two regions and did not transform the identity of either.

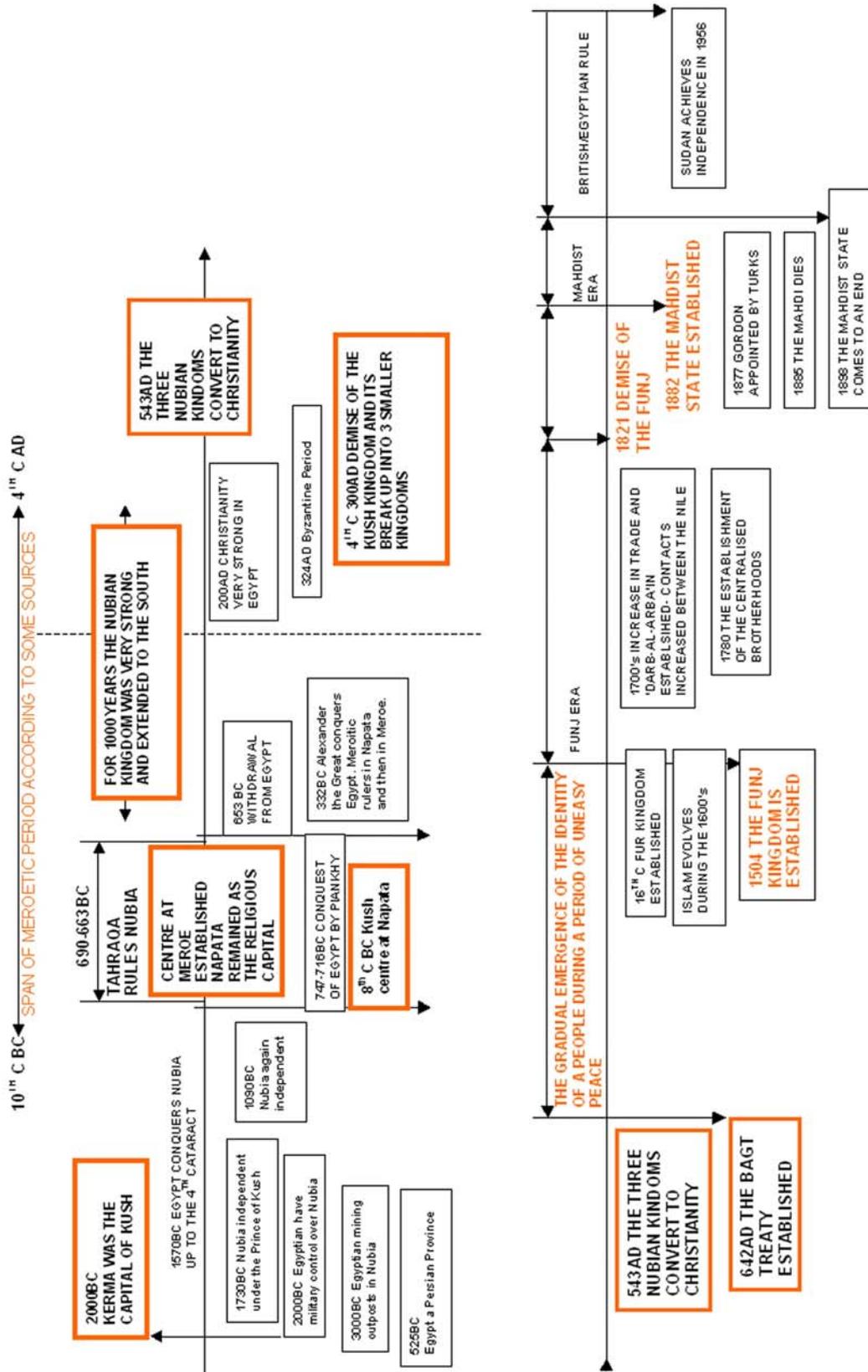


Table 3.1 Historical timeline.

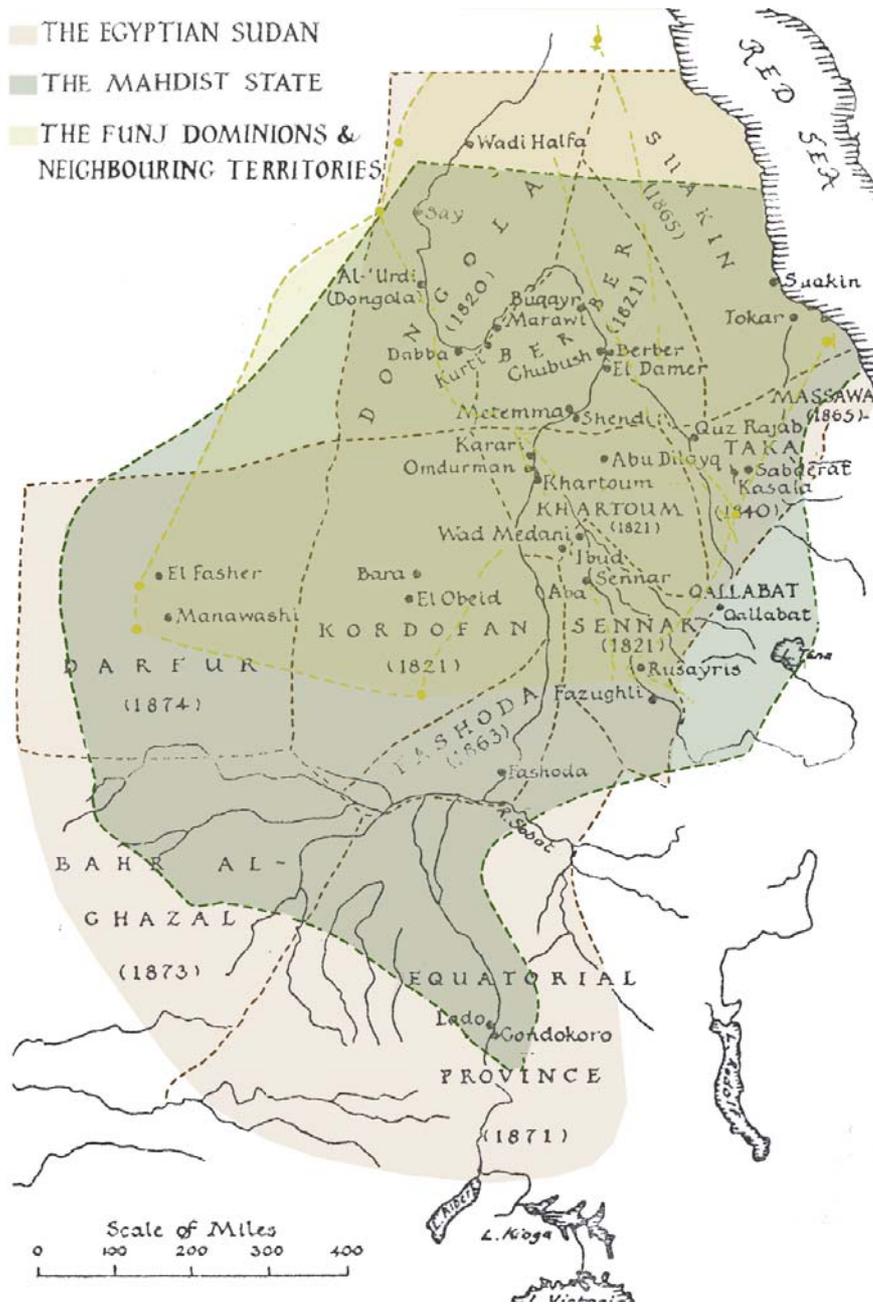


Fig. 3.4 Rough boundaries of the Sudan at different phases adapted from Holt and Daly (1988: 239-241)

It could be asked whether the west of the country can be excluded from this study, being predominantly Muslim, similar to the riverain regions. Both the western Sudan and the northern riverain Sudan are historically part of the Sudanic belt, extending from the west coast of Africa to the east. They are inevitably linked culturally, yet the culture of the riverain regions revolves around the Nile and through contacts with Egypt. These are aspects missing in the west and thus, two cultures are created with, undeniably, many similarities.

The sub-division of Africa after the period of European colonisation disrupted the homogeneity of these areas. Resultant countries were not cohesive as cultural entities and disparities gave rise to severe conflicts (see the present-day extent of the Sudan in Fig. 3.5). “By 1900, in half a century, all Africa was mapped, explored, estimated and divided between the European powers.” (Wells, 1922: 289).

In this scramble for wealth and political power, Europe disregarded the history of the continent and the existing cultural forces. For this reason, this thesis looks only at the old boundaries of the country where this cohesiveness is still evident and where there is a sense of shared aspirations of a people – a shared history, culture and religion. It could be asked whether in that sense northern and southern Nubia, separated by the northern border with Egypt, could be treated separately. The delimitation does accept the political subdivisions; even though it is acknowledged that the Egyptian and Sudanese Nubia will have many similarities. The fact that the available literature divides between the two makes it difficult to tackle both areas in this study.

The area of study has historically been called ‘the land of the blacks’ or *bilad al sudan* (Beshir, 1968: 1) or the southern lands; its people have been known as the Ethiopians, meaning burnt faces.

“Ancient Arab historians gave the name Sudan to the vast lands beyond the Great African desert. But, while ancient Sudan, which meant the land of the black people, embodied a broad geographical and human spectrum, modern Sudan with its present state boundaries came to existence only at the beginning of this century.” (<http://www.sudan-embassy.co.uk/infobook/history.php>).

The delineation of this area could be a contentious issue when regarding the present day political upheavals in the country and the long-running tensions between north and south, and more recently between the west and the centre and among western tribes themselves. The author has no separatist motives, no political statements to make through these delineations, but derives these from the academic process followed.

The study leads to the conclusion that the northern riverain Sudan is a definable region with its own identity and its unique history and it has prevailed as a distinct

area throughout the various historical episodes of the country. This conclusion is reinforced through the following sections.

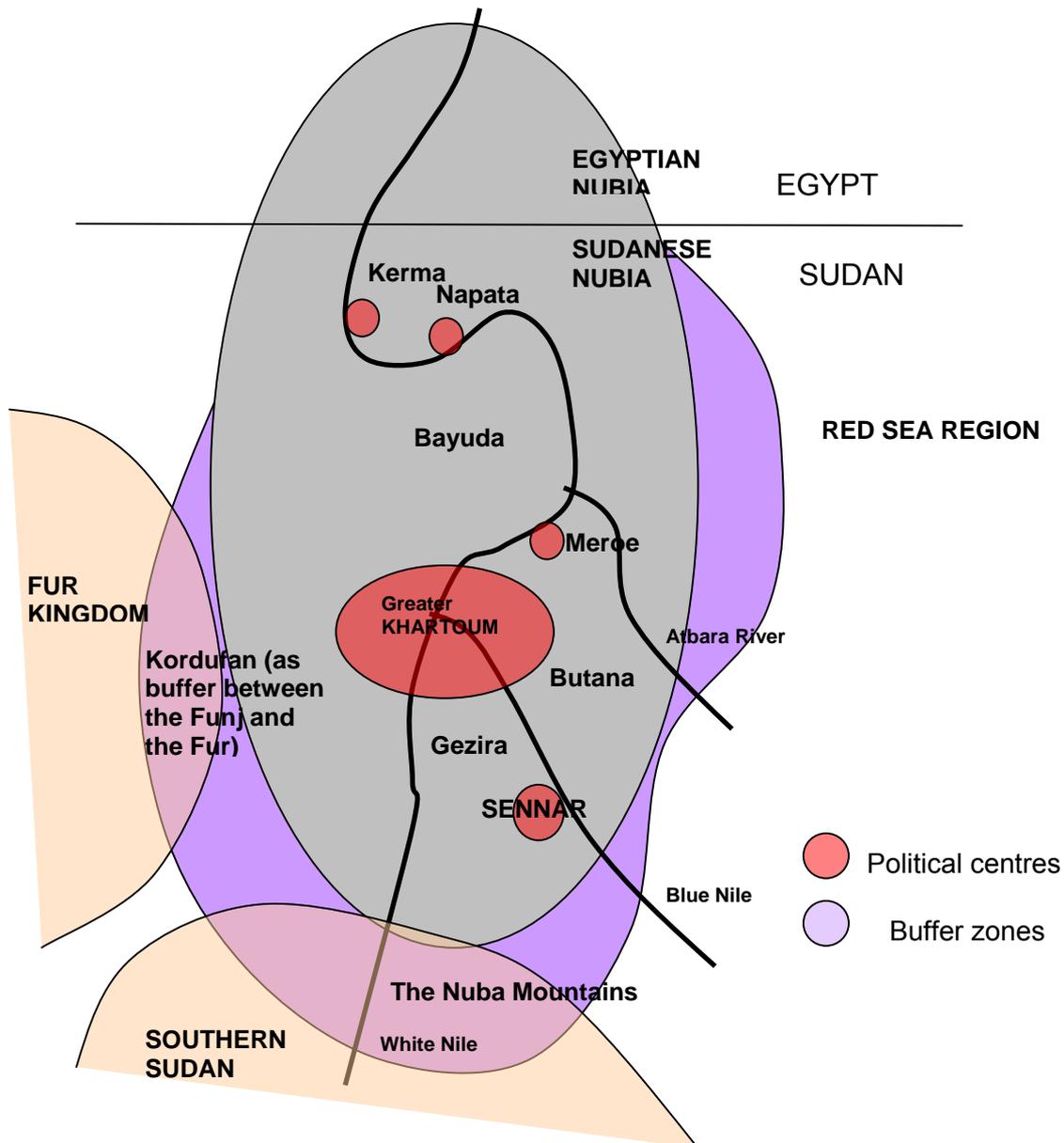


Fig. 3.6 A diagrammatic representation of the region under study (denoted by the colour grey, except for Egyptian Nubia) and its surroundings.

3.5 RECURRING THEMES IN THE LITERATURE ON THE REGION

It is appropriate to investigate recurring themes in the reviewed literature on the region under study. These will guide the process of study and inform the approach and structure of the thesis. They will also give an indication as to what clues are significant and need to be identified, where the information may be obtained and of an appropriate methodology to adopt in interpretation.

The following themes relate specifically to the northern riverain regions. Some aspects may have been characteristic of the region through many centuries, some of them more recent, yet all of them are evident today.

3.5.1 Social conscience, religion and ethics

Features of social conscience, religion and ethics, particular to the northern riverain Sudan, dominate literature on the region. It is evident that this society is guided by very strict laws of interaction in a system that is 'other-determined', in the sense that sanctions such as shame and ridicule predominate rather than a sense of guilt, as is emphasised in western societies. It is a system that presupposes a high degree of shared norms in the society.

“Nordenstam considers Sudanese ethics to be predominantly other-determined and outward-oriented, internally consistent, a comprehensive system centering around the notions on courage, generosity, honour, dignity and self-respect... There seems to be a contradiction in these ethics between the self-determined elements, which derive from Islam, and the other-determined elements, which derive from popular ethics.... ” (Kronenberg, 1987: 393).

Nordenstam (1968: 109) previously reciprocated these concepts through interviews done among students at the University of Khartoum. He states that: “The popular Sudanese ethic seems to be clearly shame-oriented.” (Nordenstam, 1968: 110). Conformity is detected as a result of this system of ethics, and where the university students would consider a socially accepted notion to be incorrect they would justify that through referring back to a religious principle (Nordenstam, 1968: 116).

The impacts of this approach are far-reaching and deeply rooted in Sudanese culture therefore the resultant social rituals dominate life in the Sudan:

“We are convinced that ethics have a more profound effect on the behaviour of Nubians than do immediate economic gains. They are closely connected with a continuous cycle of ceremonial activities, as well as with an economic system of shared ownership (and quarrelling).” (Kronenberg, 1987: 394).

The enculturation of the concepts of *muruwwa* (manliness) for example, begins very early in the life of a Sudanese. Kronenberg explains how many childrens' games in Nubia represent a technique for disgracing the loser:

“The child learns to pay heed to the shame or honour manifested towards it by others. The highest value is placed on public opinion and on the fear of disgrace. Village gossip is an important external sanction, for when everyone knows everything about every person, one must avoid 'being talked about'.” (1987: 393)

Of the Hadendawa nomads of eastern Sudan, Vagenes says that talk, or gossip, is a forceful mechanism that people fear (Vagenes, 1998: 170). This is very much evident in the region in question. Vagenes goes on to explain that of the economic capital, cultural capital and symbolic capital of the people, symbolic capital has historically been more emphasised. This is expressed by the males through strength and control and by the women through virtue and self-control, this reputation being maintained through seclusion (Vagenes, 1998: 171-172). Men's honour is seen as equivalent to the socially accepted conduct of the women of their family (Vagenes, 1998: 177).

Burckhardt (1822: 32) wrote:

“In no part of the eastern world, in which I have travelled, have I ever found property in such perfect security as in Ibrim. The inhabitants leave the Dhourra in heaps on the field, without a watch, during the night; their cattle feed on the banks of the river without anyone to tend them; and the best parts of the household furniture are left all night under the palm-trees around the dwelling; in short the people agreed in saying, that theft was quite unknown in their territory. It ought, however, to be added, that the Nubians, in general, are free from the vice of pilfering.”¹

In a recent study carried out by SaferAfrica on safety and crime in various African cities, the conclusions on Khartoum mention religion as a deterrent for criminal activities (Mohamed and Karam, 2003: 26). One can question whether these deterrents were not rooted in more ancient social customs that preceded Islam. What is interesting though is that, despite the fact that Sudan is among the poorest countries in the world in terms of income and human development and in addition to its long-term civil war, crime is still low: “With an estimated population of more than five million, Greater Khartoum has a low crime rate in comparison with other major cities in the world.” (Mohamed et al, 2003: 7). It needs to be noted though, that crimes of violence among Nubians rarely come before courts as their code of honour means that family matters should be settled within the family and outsiders must not know of them (Kronenberg, 1986: 396).

An other-determined ethical system presupposes a high degree of shared norms in a society (Nordenstam, 1968: 113). Religious values create a ‘strain of inward-orientation in the informants ethics’, continues Nordenstam (1968: 114). This contradiction is acknowledged, yet the other-determined system of ethics has

¹ This feature of the Nubians is mentioned again, in the same source page 136.

generated the most visible aspect of this society, which is discussed in the following section:

3.5.2 Elaborate social interaction systems

Cloudsey (1983) explains the concept of *hinniya* (loosely translated as 'kindness'). It is very important for a woman to be considered as *haneena* (kind) in the community. This means that a large amount of time is spent on exchanging visits, gifts and providing help in material goods or through actual assistance in daily chores but especially during rites of passage and religious and social rituals. Through these concepts an intricate and well-organised system is set up which is equivalent to the institutionalised social support systems of the west.

Cloudsey perceives this focus to be bound with the ethics of honour and generosity as part of the Muslim religion. But she sees all of these efforts as being directed to the extended family only. "... to reach out beyond the family to different sections of the society is not considered..." (Cloudsey, 1983: 21-22). Her claim that in Muslim society there is no tradition of allegiance beyond the extended family is highly controversial and not very accurate but this is beyond the scope of this discussion. What is evident is that social networks do focus greatly on the extended family or fareeq:

"The family is for the Sudanese a 'reservoir' which combines economic security, political influence, social support, and psychological assistance. Especially for the non-professional women who hardly have any possibilities to make contacts outside the family, the associations with relatives and friends are of utmost importance. These associations have a complicated field of interaction of reciprocal rights and duties as a consequence. They make up the economic as well as the social security, for instance with respect to "public opinion"; not only do they protect against personal injury, but also guarantee emotional security, and in particular entertainment.

On the one hand these associations are enlivened through occasional informal visits and sporadic exchange of favours; on the other hand they are dutifully expressed and fermented on special occasions, such as weddings, *bikah* ceremonies, circumcisions, and Islamic feasts, where it is a duty for the members of an extended family to participate." (Ismael, 1982: 181).

One of the tenets of Islam, other than care for blood relatives, is that fellow Muslims should be cared for as well as neighbours. This is very obvious in the northern riverain culture and becomes visible through the giving of *sadaqa* (alms) to the poor on a variety of religious occasions and through lifecycle rituals in which neighbours

are fully involved, even when they are not blood relatives. This is explained in later chapters.

Cloudsey (1983) emphasises the fact that social conscience is intricately bound up with religious beliefs. Kronenberg on the other hand believes that the rituals and ceremonies were evolved as a means to integrate and syncretize members of a disjointed community into joint action:

“Nubians developed a practical attitude to historical events by conquering their conquerors; for the invaders stayed, abandoned their former ways of life and adopted the Nubian language and culture. The social structure of a Nubian village is a mosaic pattern of families or lineages who share the same culture or language but maintain their own identity and distinctiveness by claiming different ethnic origins. This ‘genealogical compartmentalization’, as we may call it, is the response of the Nubian culture to history: Nubians assimilate the politically or otherwise dominant foreigners by ascribing to them a separate status in the web of Nubian society. But isolation and disintegration is overcome by elaborate and obligatory ceremonial activities. Participation and symbolic gift-exchange on the occasion of the rites de passage of any member of the Nubian community is an ethical duty. Ceremonial and ritual activities not only integrate and syncretize members of the community into joint action but attempt to bridge the gap between human and super-human as well.” (Kronenberg, 1987: 389-390).

3.5.3 Complex and intricate kinship system

According to Ferraro (1998), the so-called ‘Sudanese kinship system’ is the most complex of all kinship systems as it is the most descriptive, with the largest number of terminological distinctions. The system permits the recognition of socio-economic differences (Ferraro, 1998: 184). An uncle from the mother’s side is identifiable from an uncle from the father’s side, through the term used. In daily life and for major decisions, such as marriage, the type of relationship between people determines many aspects of interaction. For example, marriage to the first cousin from the father’s side is seen as better than a first cousin from the mother’s side. Yet, the mother’s side of the family are perceived as being more *haneenin* (kind) and protective of the child. Therefore, for example, maternal uncles will protect a woman from the wrongdoings of her husband or his family. Patrilineal dominance influences contacts, and therefore people tend to focus on the male line of relatives (Bannaga, 1987: 101). Yet, historically, a matrilineal system of succession prevailed and played a major role in the political transformation of the country. The non-Arab practice of inheritance meant that wealth and power were passed on to a sister and her sons

(Hasan, 1967: 127). This system previously enabled new-coming Arabs to gain wealth and political and social power through marriage.

3.5.4 The slave trade, racism and political power

Despite the fact that Nubians are a minority in the Sudan (Voll, 1985 and Kronenberg, 1986), they have consistently had more political power and a higher social status:

“The antithetical figures of the brown-skinned, slender, generous and honourable Nubian and the black, strong but clumsy, greedy and wanton Negro are standard types in Nubian folktales.” (Kronenberg, 1986: 391).

Arab descent has been, and still is, a source of pride and distinction (Holt and Daly, 1988: 3). The Funj rulers, for example, adopted an Arab ancestry to increase their prestige among Muslims and to enhance their moral authority over their Arab subjects (Hasan, 1967: 174). The northern elite has always determined Sudanese policy and development (Ibrahim, 1979: 194). Because of the harshness of the rest of the country, the riverain people were always stronger politically. Holt and Daly (1988: 4) explain how the nomads would have to exchange animals for vegetable foods and in bad years had to become dependant on the settlements along the Nile. Mazrui (1998: 125) also explains how the Arabic language has become an indigenised tongue with a powerful constituency of native speakers and that the language and thus the speakers of the language, are powerful forces in the society.

The slave trade has had a major role to play through the different eras of the Sudan's history. Descent is the most important means of defining status. This may be a result of the centuries that slavery has existed in the region. The Baqt Treaty specified commodities to be exchanged between the Arabs and the Nubians, slaves being one of those commodities:

“Ye people of Nubia, ye shall dwell in safety... so long as ye abide by the terms settled between us and you... Every year ye shall pay 360 head of slaves to the Leader of the Muslims... without bodily defects, males and females, but no old men nor old women nor young children.” (Drower, 1970: 74).

The advent of Arabs and the superiority given to people of Arab descent meant that racism and differentiation between people was further emphasised.

Slaves were obtained from Dar Fur and Kordufan in the west, or from south of Sennar or Ethiopia. Slaves were a principal export from the region. Shendi was at a major crossing point of trade routes and a trading destination. In the 1800s, the eve of the *Turkiyya*:

“Not only did slave caravans pass through Shendi, but a large number, estimated at about 5000, were annually sold in the market or the adjoining private houses.” (Bjørkelo, 1989: 25).

The slaves were a commodity, exported and exchanged for trade, but they were also employed in houses, the fields and in the herding of animals by the local riverain tribes (Bjørkelo, 1989: 25). Thus, the issue of slavery is a key in the portrayal of the constructed identity of the region.

Slave trading had ceased before the conquest and the British/Egyptian condominium agreement in 1899. But there were still cases of forced capture of individuals and the existence of slave captured in the old days who worked the land and as servants. The administration did not call for the immediate freeing of all slaves – as that would have disrupted the economy significantly – but rather tried to keep the existing slaves with their ‘masters’ as long as they were not badly treated. They also tried to introduce a wage-labouring class to replace the slave-labouring class (Beshir, 1968: 20).

Kronenberg quotes Hayder Ibrahim who wrote in 1979 that:

“It would not be an exaggeration to say that northern riverain Sudanese groups could be counted among the most intolerant societies as regards their relations with the ‘slaves’. These groups, being marginal ethnic groups between the Arab and Negroid spheres, became preoccupied with their ‘purity’ and ‘noble’ origin.” (1986: 396)

Unfortunately, the above statement applies to northern Sudanese attitudes, today, perhaps as strongly as it did in the 1970’s. Adams also wrote in 1977 (p. 64) that: “Nubian society is not notably class-structured along occupational lines, but it is still to some extent caste-structured along ethnic lines.”

3.5.5 Trade routes

The functions of ancient routes that cross through the country have been trade, travel, transport of mine products and the transport of pilgrims. Famous Arab travellers such as Ibn Khaldoon travelled on the Adu-Hamaythira-Aidhab Road,

which penetrated the eastern desert from Egypt to the port of Aidhab (destroyed by the Turks in 1426 AD), on their way to Mecca. The Suakin-Berber Road is regarded as one of the oldest routes connecting the interior of the country to the Red Sea coast. The Pilgrim's Road also penetrated the Sudan from the west to Suakin, to bring pilgrims to Mecca from Mauritania, Chad, Niger, Mali, Senegal and Cameroon. It was famous during the Meroitic, Christian and Funj Kingdoms. The Forty Days Path connected the western Sudan with Egypt (<http://www.sudani.co.za/Tourism/Historical%20and%20routes.htm>).

According to Bjørkelo (1989: 3), the ecology of the region under study and the available technology have a limited range of economic adaptations: that is irrigation, agriculture and animal husbandry. This meant that people had to search for other means of livelihood, trading being one of them (Refer to Figs. 3.7 and 3.8).

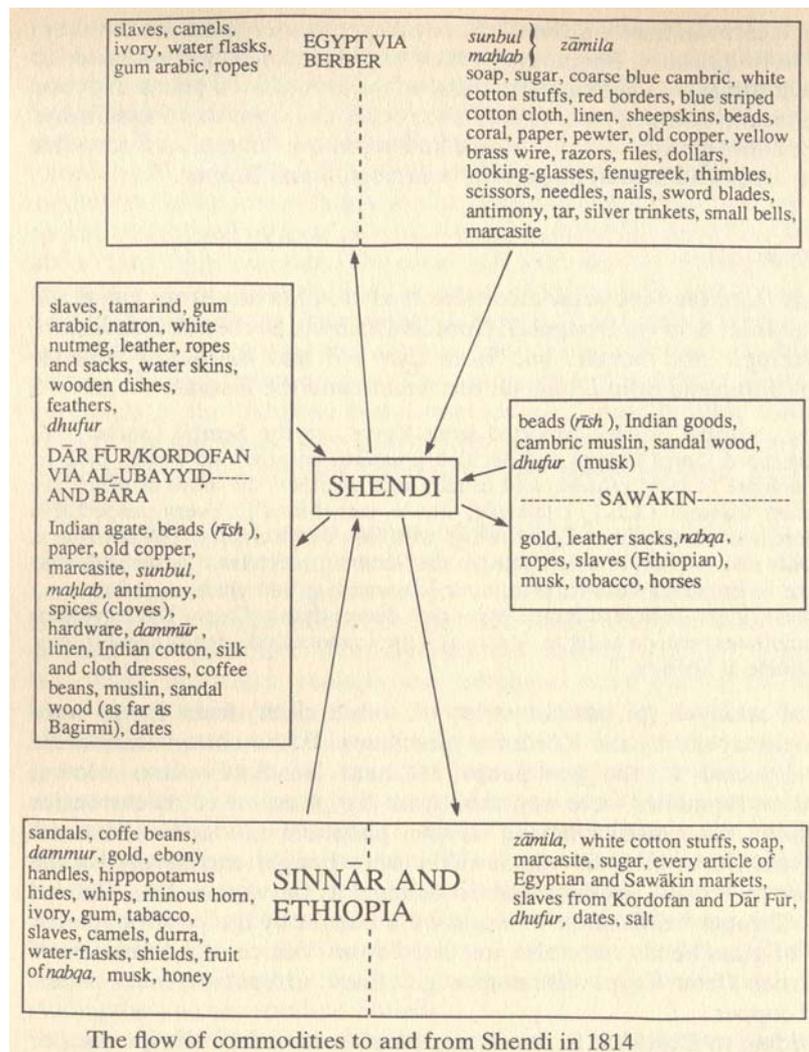


Fig. 3.7 Goods being traded to and from Shendi (Bjørkelo, 1989: 24)

There is a long tradition of immigration in the region² in search of increased income and work opportunities. The term *jalaba* refers to people from the northern riverain region who travel to the west and south of the country in search of trade opportunities. *Jalaba* is derived from *jalab* meaning to fish or the hook used for fishing. It also refers to 'bring' or people who have come from other regions (Gasim, 1985: 229). These *jalaba* traders played a major role in the spreading of Islam through the different regions of Sudan and in the mixing of people of different origins.

Caravan routes criss-crossed the land, with prolonged stops at places that then developed urban features through the creation of varied activities at these locations (Fig. 3.7). These became the later cities of the region. Muslim pilgrims used the same routes. Also, all of these factors in unison, created a dynamic that generated the features of the country, including places of settlement and fusion of cultures.

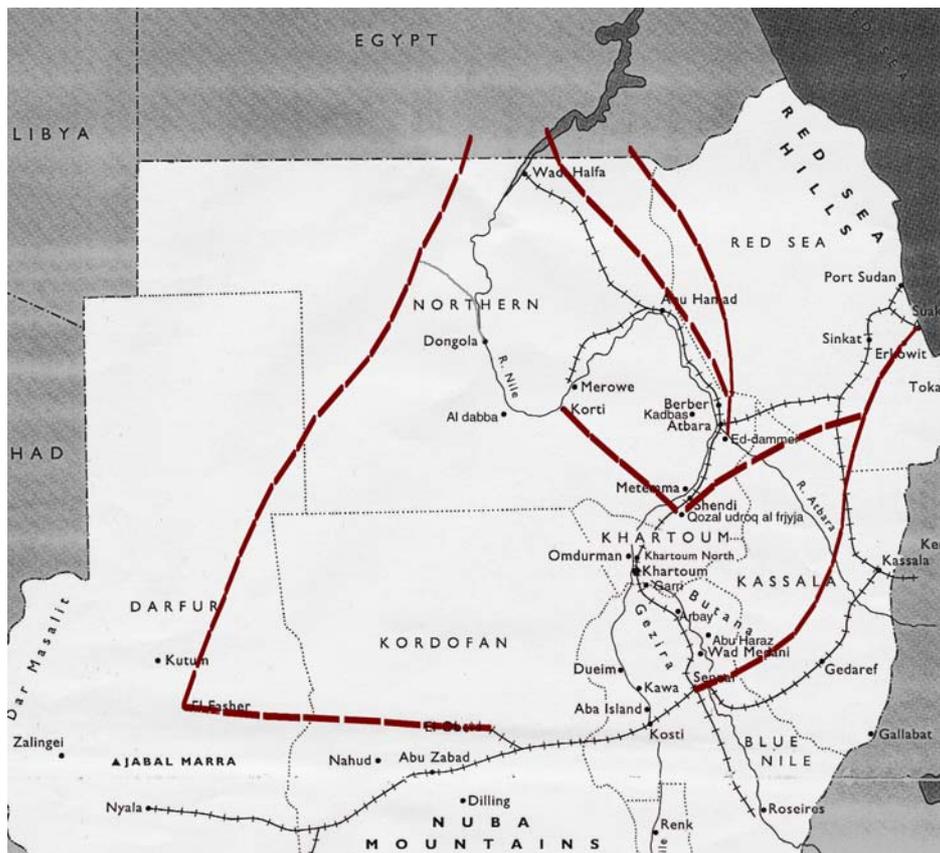


Fig. 3.8 Trade routes between the major towns of the northern Sudan indicated in orange.

² Adams (1977: 61) explains this pattern of migration in search of better livelihoods and proceeds: "All evidence suggests that the pattern of Nubian labour migration (which was apparently established as early as the Egyptian VI Dynasty) has continued uninterrupted until modern times."

3.5.6 The harshness of the environment, the desiccated landscape and the poor economy

“Where, O God, is the shade? Such land brings forth nothing but prophets. This drought can be cured only by the sky.” (Salih, 1969: 109)

The Sudan is characterised by its barren, desert climate and its flat topography. The arid and semi-arid areas in the north constitute a large percentage of the area of the country. There are few mountain ranges, none of which are in the area of study. Being under the influence of the trade winds, the Sudan is hot in summer, with scarcely no rain in the north. The rain increases dramatically in the southern regions. The weather is warm and dry in the winter. Severe sandstorms, *haboobs*, are frequent between April and October in the north (<http://www.sudan-embassy.co.uk/infobook/geography.php>). These *haboobs* are one of the most challenging aspects of the climate that designers have to deal with. Two elements of the environment penetrate everything: the sun (Norberg-Shultz, 1979: 115) and the sand.

There is uncertainty as to the nature of the environment in which in which the pre historic cultures of Nubia developed; some believe that the desert conditions were prevalent in the Sahara during most of its history, while others envision longer periods when north Africa was “rolling savannah or woodland” (Adams, 1977: 102-103). But it is generally agreed in the literature that there were drastic changes in the climate in northern Africa, with alternating wet periods and dry periods throughout the last two million years (ibid).

Meyer (2003) believes that the desiccated natural environment has existed since about the 4th Century AD. The Sahara desert was formed some 5000 years ago and has only been hyper arid for the last 2000 years. This roughly coincides with the disintegration of the large unified and powerful Nubian kingdom into smaller and less influential Christian kingdoms (Meyer, 2003). In 2500BC, changing climate in North Africa led to the desiccation of the Sahara. The pastoralists moved into Nubia (private conversation and documents, Meyer, 2003). Till today the Sahara has a wide variety of vegetation types: perhaps a remnant of a time when it was more fertile.

Studies done on the Kassala region (on the Sudan-Ethiopian border) indicate that there were two dry episodes: end of the 3rd and end of the 2nd Millennium BC. After the second arid episode there was a short humid episode and then the definitive arid

conditions. These results were checked against archaeological records of settlement patterns. The results coincide with the transition from the late Kassala period of scarce settlement around the end of the 2nd Millennium BC, to smaller settlements spread over the landscape. The re-organisation of settlements in this region coincided with the complete disappearance of crop traces in the archaeological records, and to the highest presence of domesticated fauna. Later, more complete desertification probably led to highly nomadic pastoralism in the Sudanese Kassala region, as compared to the highly organised statal system of the pre-Axumite Kingdom in the then more fertile Ethiopia (<http://www.pages.unibe.ch/shighlight/shighlight.html>).

Where agriculture is possible, sedentary lifestyles predominate and these give rise to 'civilisations'. The Arabs were therefore not the only reason why the people of the region adopted nomadic traits. Temperature changes must have limited agricultural practice and encouraged people to adopt an Arab lifestyle which, coming from the Arabian Peninsula, was based on experience in dealing with harsh and arid conditions.

"The Sudan is a hard land. Its geography leaves relatively few choices of life-style to those who win their livelihood there, and the economic and social patterns that arise from the land are tenacious and deeply rooted in antiquity." (Holt and Daly, 1988: 3).

The Nile, which moves through it, is a life-giving source yet in a subtle, non-invasive sort of way. According to Norberg-Shultz (1979: 115), there are no lush, fertile and dramatic valleys along its banks. It would be more accurate to say that these lush and fertile valleys do not extend far back into the desert areas, but are a narrow strip along the rivers. There is a historical dependence on the rivers and the amount of cultivable land it provides.

"Excessively low Niles meant famine, and when the opposite happened, water-wheels (*sāqiyas*) and houses could be destroyed and fertile slopes and islands could be washed away or replaced by sand." (Bjørkelo, 1989: 56).

Life depended on natural forces over which people had no control. Many parts of the country appear to be hostile and uninhabitable. Away from the riverbanks, much of the landscape is undomesticated. Settlements exist as separate incidents in a sea of space, apparently disconnected except for the people most familiar with the region. The migration of Arabs to the region may also have been caused by climate change

on the Arabian Peninsula, especially the Arabs who migrated in ancient times, that is the Beja (Beshir, 1968: 4).

3.5.7 Sudanese Sufism

The spiritual concerns of Islam are expressed through various Sufi sects with mystics as their nuclei. Religious attitudes in the Sudan are probably similar to those in east and West Africa. Islam went through similar phases of development in these regions, as did Sufism. Despite its peculiarities and the gradual infiltration due to the Baqt agreement, Sudanese Islam was strongly linked to that of Africa. This is the result of a number of reasons. Islam penetrated the Sudan across the Red Sea and through Egypt directly, but another important point of penetration was via its western borders from the rest of Africa (Fig. 3.9). Thus, the religion travelled along the northern coasts of Africa and then across the desert regions of inland Africa until it reached the Sudan. One may speculate that a major reason for this was the route of travel to Mecca. These avenues of Muslim penetration have had profound influence on the nature of Islam that did finally reach the Sudan. The contact with Africa had a number of repercussions, one of them being an acceptance of older African traditions in new religious practices.

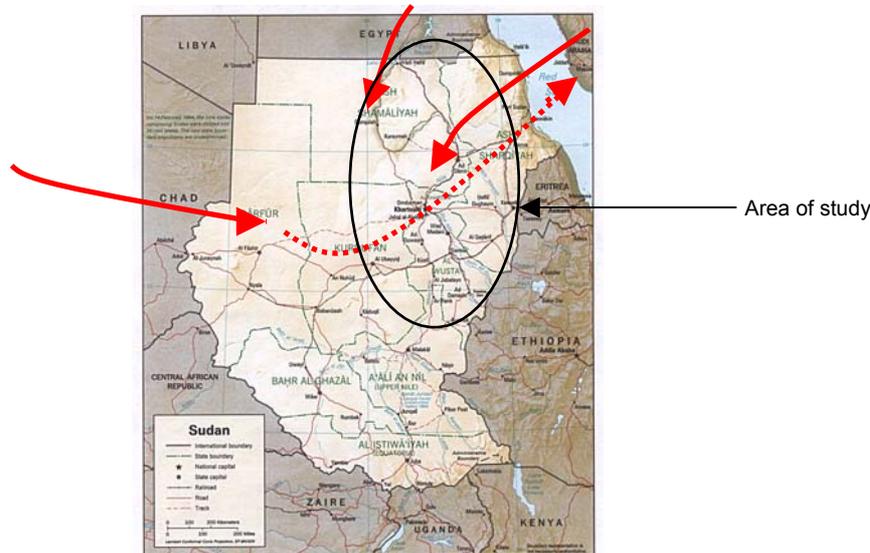


Fig. 3.9 Routes of Muslim penetration into the Sudan. The route taken by people from west and northwest Africa to the pilgrimage in Mecca is shown as a dotted line.

“The main stream, but not its original cradle, is Islam as it reached the Sudan after a long journey in history and in different lands. Some of the first ‘Ulama came from Hijaz, Egypt, North Africa, and many fu_kra migrated from west Africa. The local culture that had taken place before the Arab and Moslem penetration was conveyed by the local women as a result of intermarriage; this culture was not a selective one but assimilated many old Egyptian and Coptic traits.” (Ibrahim, 1979: 125-126).

Ibrahim (1979: 160) elaborates on the penetration of Sufism:

“The Sufi orders penetrated into the Sudan, synchronizing with the decadence of intellectual Sufism in the fifteenth century. For this reason the Sufism which entered the country was more practical, ritual and rather superficial than intellectual and philosophical, or in other, Sufi, words an “external” Sufism and not “internal” Sufism; the former concentrates on rites while the latter concentrates on meditation.”

He explains the impact of the above on a village in northern riverain Sudan:

“One can conclude that the orthodox Islam of the seventh century, the philosophical Islam during the contact with Persia, Greek or Indian ideas reflected in many Islamic schools after the expansion of the Islam, and the Islam of the fundamentalists salafiain [traditionalists] of the nineteenth century had no effect on the villagers’ culture. The popular Islam in the village is a harmonious blending of the old cultures, and many non-Islamic traits remain one with the new religion, which has a great flexibility to accommodate local conditions. Islam tried from the beginning to integrate the local beliefs. In the Arabian Desert Islam absorbed many old Semitic superstitions and practices, e.g. many rites of the present pilgrimage, but in many cases did not replace the rites and customs of the indigenous population. In the Sudan they accepted the Islam without totally uprooting their old Nubian, Coptic or non-Islamic beliefs but they tried to give them an Islamic meaning... the carriers of Islam were mainly traders and nomads who were themselves on the periphery of the orthodox Islam, and their contact and relation with the Sudanese culture was not one of dominancy, but of interaction and dynamic incorporation of the non-Islamic components in the new religion.” (1979: 134).

Due to a complex amalgamation of influences and reasons, including the difficult natural and climatic conditions, the role of the *shaykh* (a religious leader) came to dominate in Sudanese society. Many of the *shaykhs* originated from the *Maghrib*, North African region. Peoples’ hopes were expressed through what the *shaykh* can do for them, and so a cult of saints evolved into one of the most characteristic aspects of Sudanese society till the present day. This aspect dominates social life and still plays a major role in present-day political affiliations.

3.5.8 The *shaykh*’s cult

Sudan’s culture is dominated by Sufi cults as is evident from the numerous *shaykh*’s qubbas (domes indicating places of burial) scattered through the country. “The center for this cult is the tomb or burial place of a holy man.” (Barclay, 1964: 182). The reader is referred to Chapter 4 and the Glossary for further explanations and examples.

“A shaikh may not show his miracle *karama* during his life-time, or his holiness may be controversial after his death; in such cases he may give evidence *ya-bayin* in one way or another after his death. If this happens the people are obliged to build a shrine or his tomb may be encircled with stones, and the place is called *bayan lit*.”

manifestation... the place will be visited by many people and many flags and pieces of cloth are to be seen on the bayān.” (Ibrahim, 1979: 152).

Before the transition to the Middle Eastern and North African pattern of organised Sufi brotherhoods, around 1780, Sufi practice was characterised by the pattern of individualistic *fuqara* (holy men) typical of the Sudanic belt. This refers to the east-west strip spanning from the Red Sea to the West African Atlantic Coast. These decentralised, ancient *tariqas* (Sufi orders) were autonomous and each had their own *silsila* (chain of spiritual descent) as compared to the centralised, reformist brotherhoods of the early 19th century (Karar, 1992). Loyalty to the *shaykh* and to the *tariqa* still dominates Sudanese daily life.

“Spiritual authority has, throughout the history of the Sudan, been the most decisive factor in stabilising and consolidating of political and temporal authority. The Sudanese attitude towards religion, and especially mysticism and Sufism, has undergone no actual change in its essence but only in its methods, rites and intensity, as the people are now more occupied with worldly interests.” (Ibrahim, 1979: 152).

3.6 IDENTITY OF A PEOPLE: WHO THEN ARE THE NORTHERN SUDANESE?

“What race are you?” she asked me. “Are you African or Asian?”

“I’m like Othello – Arab-African,” I said to her.

“Yes,” she said, looking into my face. “Your nose is like the noses of Arabs in pictures, but your hair isn’t soft and jet black like that of the Arabs.”

(Salih, 1969: 38)

The above sections have identified aspects of the region that come up incessantly in the available literature. This has helped in the construction of the region’s identity as a historical synthesis of a variety of people and forces. The core culture is that of the Nubians. Who they are, where they came from and how long they have been there can only be speculated. One theory says that they were desert dwellers (hunter gatherers), who moved to the Nile after a period of extreme desiccation and developed agriculture very early in history (Hassan, 1987: 25). The Nubians are today divided by a political boundary between Egypt and the Sudan. The Aswan dam later reinforced this separation. The dilemma for the academic researcher is that this division has also divided the literature describing the Sudanese and Egyptian Nubia (Kronenberg, 1987: 390). These one people have somehow come to have a favoured position in the Sudan and a disadvantaged one in Egypt (Kronenberg, 1987: 391).

Many tribes claim Arab descent, for the reasons explained above. These are Barabra and Ja’ali groups, the Fazara camel nomads of north and south Kordufan and the

nomadic or semi-nomadic Jahayna groups (Holt and Daly, 1988: 3 and 6). Yet, it is the 'Abdallab groups who came to be viewed as the supreme representatives of the Arabs as:

“The Rufa'a, found on the Blue Nile, preserve some memory of a distinct origin. Their ancestors lived in geographical proximity to the Juhayna, both in the Hijaz and in Upper Egypt... In the late fifteenth century an Arab population, probably of varied origins, became sedentarized at the junction of the Blue and White Niles under a chief from the Rufa'a named 'Abdallah Jamma'. He and his successors, the 'Abdallab, became prosperous from the tolls levied on the desert Arabs during their annual nomadic cycle, and were recognized by the Funj rulers of Sennar (1504-1821) as paramount chiefs of the Arabs.” (Holt et al, 1988: 6).

Between the Arab tribes there were non-Arab enclaves that played a major role in creating the identity of the people through interaction. The Fur Kingdom, in the west, established in the 16th century was perhaps the most important contact. The Nuba Mountains became a refuge to a pagan tribe as the Arabs came to dominate the plains of Kordufan (Holt et al, 1988: 8), but their cultural influence was minimal. The Ta'aysha of the west have enormous influence on the identity of the region being researched due to mass migration to Omdurman during the reign of Khalifa 'Abdullahi (1885-1898), successor of the Mahdi. It is important to acknowledge the influences on the region and the limitations of a description of the social and political set-up of the region as its identity is constantly under transformation. Aspects described merely represent the most abiding characteristics and the most visible.

The Funj were an obscure people who came from the south (Holt et al, 1988: 6). The genesis of the kingdom is shrouded in mystery. Some speculate that they were of Shilluk origins.

“The Shilluk now occupy a comparatively small area on the western bank of the White Nile, but formerly their range was much more extensive. As late as the mid-nineteenth century their northern limit was the island of Aba, thirty years later to be the cradle of the Mahdia. Until the early years of the Turko-Egyptian regime, they raided the Arab settlements down the White Nile, and one such raid is said to have led to the foundation of the Funj kingdom by a band of Shilluk warriors.” (Holt et al, 1988: 3).

The same authors further elaborate:

“The origins of the Funj have been a tantalizing problem for modern students of Sudanese history, and various interpretations have been placed on the scanty data available, not always with due criticism of the sources or caution in the deductions made. The Funj have been regarded as immigrants to the Blue Nile from the Shilluk of the White Nile (as stated by Bruce), from Bornu, or from Ethiopia. More recently the White Nile hypothesis has been revived, but the immigrants are now presented as the

bearers of ancient Nubian culture to their new homeland. A recent contribution by an anthropologist suggests that the enquiry itself has been wrongly formulated, and that the origin of the Funj should not be sought in tribal migrations but in the status and function of the group so designated. Essentially, however, the problem remains unsolved. Without fresh data (possibly from archaeology), and without a more rigorous investigation of the linguistic and historical data which have been adduced in support of the various hypothesis, further progress appears unlikely.” (Holt et al, 1988: 28)

What is evident is that the kingdom is a source of pride to present-day Sudanese. These sentiments are richly expressed in the long, intensively descriptive poem by Mohammed ‘Abd al Hay: *al ‘aodah ila Sennar*, *The Return to Sennar* (1999). Many of the identifying features of the country were developed during the Funj era. These include the Sufi culture and its rituals, the boundaries of the country, the external influence trade and contact and attitudes to material culture.

Today the issue of identity is a contentious political one. It could be one of the causes of the social and political upheavals in the country. Religion and language were important power tools throughout the history of the country. Deep conflicts arise in terms of allegiances: to the Arab nations or to the African continent. This is evident in terms of the culture. Ahmed Etayib’s *Sudanawiyya* theory emphasises that the Sudanese are neither Arab nor African but are a distinctive people in their own right (personal conversations, 1992). The issue of identity not only creates a national crisis but a personal one as well. Ibrahim (1979: 203) explains the concept of the *effendiyya* (a term used to denote educated men) and how Sudanese intellectuals are drawn between their education (mostly based on western concepts) and their local culture. Northern Sudanese intellectuals will still view non-Arabicized groups and those perceived to be descendants of slaves with a degree of contempt. These sentiments are rarely expressed explicitly but play a key role in the structuring of society.

Identity, and links with Arab lines of descent, has always implied power and political affluence. It is a main reason for the social and political upheavals in the country. Language is also one powerful tool in this struggle. The supremacy of Arabic in Egypt was not challenged as strongly as other places by the colonialists, thus Egypt was the source of the spread of the language in the Nile valley:

“Northern Sudan was increasingly Arabized partly as a result of the impact of Egypt. Many Sudanese resented Egypt’s political influence. Paradoxically, most of them

nevertheless embraced Egypt's cultural, linguistic and religious leadership." (Mazrui, 1998: 16).

In the Sudan, English is neither the medium of the state nor society (Mazrui, 1998: 78). Egypt, Sudan and Iraq's refusal to join the commonwealth was partially a linguistic decision (Mazrui, 1998: 207). Mazrui identifies Arabic as a hegemonic language in the Sudan:

".... a dominant indigenous or indigenized tongue with a large and powerful constituency of native speakers... Both the speakers of the language and the language itself are powerful forces in the society at large." (1998: 125).

This is compared to a preponderant language, which is triumphant in itself, but its native speakers not necessarily so, or compared to imperial languages which came with a dominant external power and had not developed a large enough number of native speakers (Mazrui, 1998: 125). In this particular context, the influence of language and the religion are indivisible. Both became important power tools throughout the history of the country. And they both gave northern riverain people their 'new' identity: Arabic speaking Muslims of mixed descent.

Within that definition exist many others invisible to outsiders, yet intensely influencing power structures: that is the perceived 'purity' in terms of Arab descent. This exists in parallel to the professed superiority of the Nubians, some of them who still retain their Nubian languages as a mother tongue and have protected their ethnicity by limited intermarriage with Arab groups, such as the Halfawiyin. This leads one to the conclusion that it is contact, of either the Arabs or the Nubians, with people from further inland in Africa, that can generate racist attitudes and not necessarily towards people of Nubian-Arab descent. But these perceptions and attitudes do not change the identity of the people as a homogeneous group: Arabic speaking Muslims of mixed descent, with alleged affiliation to various tribes from the Arabian Peninsula, based on which they define their status in northern Sudanese society. These people are a product of intermarriage between Nubians, Arabs and Africans from further south and west of the northern Sudanese Nile valley.

3.7 SUMMARY AND CONCLUSIONS

An eco-systemic construct of the concrete and abstract aspects of the region is achieved through a reading of the physical and cultural history of the region to determine its boundaries, its natural characteristics and its people. It becomes

evident that the delineated area has a shared identity and can therefore be viewed as a separate entity from the rest of the country.

Recurring themes in the literature on the region point to complex origins of the people, rooted in Nubian/African and Arab descent. Social and political implications of the alleged lines of descent are articulated. The identity of the northern riverain people is established as a political and a religious concept. The northern Sudanese riverain people are thus introduced as Arabic speaking Muslims of mixed descent, with alleged affiliation to various tribes from the Arabian Peninsula, based on which they define their status in northern Sudanese society. Though they appear as a homogenized group to outsiders, it is acknowledged that status-granting factors are intricate and highly adhered to, yet subtle in the way of expression.

Through the above, the sub-problem has been addressed. The set hypothesis has been demonstrated in that recurring themes in the literature of/on the region have exposed the essential and incidental attributes of the delineated culture. This is acknowledged as a useful tool of interpretation. The presence of physical artefacts and the form of spatial interventions will be viewed in the light of this eco-systemic construct of the study context.

CHAPTER 4: PEOPLE AND PLACE: THE IDENTITY OF THE REGION THROUGH SELECTED ARTEFACTS

4.1 SUB PROBLEM 3

Relevant tangible artefacts need to be identified with a focus on the built environment. This analysis progresses from the level of the body/clothing and is extended to the scale of shelter/house and finally the village/urban centre.

4.2 HYPOTHESIS 3

Careful and purposeful selection and analysis of a group of tangible artefacts that refer to the recurring themes can articulate the characteristics of the delineated context on the scale of the body, the shelter and the village, and be used in revealing the meaning inherent in the built culture.

4.3 OUTLINE OF CHAPTER 4

This chapter sets out to investigate the determinants of the spatial and physical structure and character of the area under study. Through analysis of the available literature and through personal experience and observation, it became apparent that buildings as artefacts were delegated a secondary role in the cultural set-up of the region – though it needs to be noted that there is rapid transformation in Sudanese society, especially in its recent history.

Firstly, building and place-making activities can be explained through an understanding of the structuring principles of the society at lower level configurations. Thus, this chapter starts with an analysis of perceptions of body images, related clothing forms and their associated meanings in the region under study.

Secondly, several of the themes investigated revolve around the house, such as the symbolic relationship between the house and the tomb, the influence of the cardinal directions on house layouts and a reading of people's attitudes to 'house' or 'habitation models'. This is deemed important as the 'house' is seen to be a vital unit where the attitudes of a society are manifested.

Finally, the establishment of religious centres in Sudan, the nuclei for urban centres, is explored. Some religious centres are referred to, leading to a review of the

Omdurman centre. The qualities of these centres, now sacred sites of visitations, are identified. The relationship between the bearers of Islam to the country and the later teachers of Islam is recognised.

The intention of the chapter is to explain the positioning of architecture in a cultural realm by studying it in relation to other artefacts and modes of expression. A summation is then presented on the issue of the importance (or lack of) placed on the physical artefact in society. Stating the outcome of the above investigations concludes the chapter.

4.4 GENDER ROLES AND BODY IMAGES

Biological sex is a natural given while gender perceptions are social constructs (Vagenes, 1998: 96). Gender perceptions govern our ideas of body and relations between men and women and social ritual. It is not restricted to understanding the role of women in a given society but extends to all social structures involving both sexes. In the northern riverain Sudan, these relationships were transformed by the arrival of Islam. New lifestyles were adopted and the equivalent of the *harem* established. This became more evident after the invasion of the Turks. The roles of women were not only assigned to the home as they also came to have a very important function as the guardians of tradition, expressed through body images.

Perceptions of the body play a major role in the structuring of social space and ultimately on settlement patterns. This has been discussed in Chapter 2. It is not clear how this has changed through time or when the seclusion and veiling of woman gained prominence. Islamisation no doubt played a major role. Apparently, even after people converted to the new religion, old forms of dress and exposure to the external world (that is outside the home) were still common. The more affluent the family, the more secluded the woman were, as they did not have to go out and work in the fields or practice any other type of income-generating activity.

“There are reasons to believe that the position of women became encircled by ever more restrictions throughout the nineteenth century, particularly among the better-off who could afford to clothe and seclude their womenfolk properly.” (Bjørkelo, 1989: 55).

This is still apparent today, but the form of it is changing as girls and woman from most families, and all well-to-do families in particular, are almost unremittingly being

exposed to the outside world through education and later practicing professions. These domains of educational institutes at various levels, and later professional contexts, have come to be seen as 'suitable' for woman. Traditionally woman who had to work due to economic circumstances would be midwives, tailors or food sellers/vendors (Barclay, 1964: 15). Based on the author's observations, these are currently considered to be menial jobs that 'expose' woman unnecessarily. This appears to be contradictory as work in any form exposes a woman to the external world.

Exposure in any form has not significantly changed the form of social interaction at the level of the home and neighbourhood, from which one can infer a continuous influence on the construction of space. These are still assembled to reinforce the physical enclosure of women and the external exposure of men. Again, from the author's observations, the advancement of woman in the academic and professional fields has not changed her role much within the home and among her family. It has also not changed the ideas revolving around the body and concepts of femininity and masculinity, though the visible forms of expressing this may have been slightly changed and modernised.¹

It must be noted that ideas of female subordination and concepts of emancipation are very different in the riverain society and cannot be judged using Western beliefs. Vagenes makes the same observation regarding the Hadendawa of eastern Sudan. She states that, for this people, Western images of woman and emancipation are not desired (Vagenes, 1998: 91). The same can be said of the riverain people. Concepts of desirable relations between men and women and desirable roles for woman can only be judged using the standards and values of a specific people.

Today, many Sudanese women view the lifestyle of the West as being demeaning to women. The author has observed this even among highly educated Sudanese women. This is to be acknowledged within a context that greatly values the education and professionalism of women. Sudanese womens' liberation movements (including that affiliated to the Islamic political movement) have been some of the most powerful

¹ Though the visible aspects of the culture seem to be very modern (western), in terms of daily routines of people, their clothing etc., many of these actually conceal underlying adherence to traditional approaches to concepts of the body. This would be an interesting aspect for future research on the region.

since the 1960's, not only compared to Arab and African states, but also compared to various European states. The most visible feature of the subordination of women today is expressed in various restrictions on dress forms, rarely in terms of access to work or education.

The table below is used as a starting point to identify gender differences. Researchers use this to explain female subordination. Here, it is used in a loose manner to initiate a discussion on gender roles and later on body images.

Nature	Culture
Domestic	Public
Reproduction	Production
Female	Male

Table 4.1 Gender differences (Vagenes, 1998: 92)

It should be noted that Vagenes (1998: 92-95) goes on to discuss this construct critically in terms of its Western limitations and, for example, the under-valued perceptions of reproduction. This is beyond the scope of this study. She also explains that the spatial connotations of the public/private divide and reproduction/production divide are blurred with the Hadendawa, and that economic activity spans several households, age groups and both sexes. She therefore argues in favour of a continuum between notions of interior and exterior to replace, what she terms, rigid dichotomies of the above.

In order to relate the above concepts to the study context, Table 4.1 has been extended to include spheres of interaction, beliefs (and corresponding ritual), social roles, duties and contacts existing in the riverain area. This is portrayed as follows:

Female	Male
Feminine – expressed through gestures, dress, roles, contacts and body mutilations	Masculine – also visibly expressed and reinforced through social practice
Guardians of tradition and pre-Islamic beliefs and ritual.	Guardians of the Muslim faith according to the Quranic scriptures. These divisions in roles have a profound influence in terms of 'spheres of activity' as explained by Kronenberg (1986: 394).
Zar (rituals for interacting with the spirits). <i>Zar</i> is one way by which a woman can cross over to traditionally male domains through dress form and actions	Zikr (poetry for remembrance of the <i>shaykhs</i> and Prophet Mohammed). Again, here men cross over into traditionally female domains through openly expressing emotion and through dancing
Healing sought with the Fuqara (poor, religious men, religious healers) or through <i>Zar</i>	Healing sought with the Hakim (medical assistant – literally wise man) or the Basir (traditional healer). Contact with the Imam (prayer leader at the mosque)
Social networks traditionally restricted to home, neighbours and relatives – the <i>fareeq</i>	Wider social networks through education and professions
Social order through gossip . Actions revolving around emotions and persons	Order through politics . Actions revolving around more abstract concepts
Traditional restriction to the private, domestic sphere. Major role is house keeping and child-rearing	Exposure to the public sphere . Major role as breadwinners through work outside the home
Contact with others revolves around the concept of Mujamalat , loosely meaning socialising (Nordenstam, 1968: 75, refers to it as 'amiability'; Kronenberg defines it as 'a person's interest and active participation', 1986: 394).	Contacts as Wajibat or duties ("The fulfilment of the social and ceremonial obligations", Kronenberg, 1986: 394). This is perhaps perceived as more essential and of a higher status.

Table 4.2 Gender perceptions, roles and social/cultural domains present in the northern riverain area.

This must not be read too strictly as male/female roles shift and the corresponding domains are transient and fluid. Women appear to be subservient actors in this process. Yet, they play a major role in day-to-day decisions and the functioning of a community within the set structures. Vagenes (1998: 182) refers to them as 'disguised actors'. Crossing over between domains is perceived to happen through actions and not necessarily by traversing space. For example, a man gossiping is referred to as a woman. For a female to have access to traditionally male domains, in the physical as well as social sense, she must be either very young or very old. Dress forms that cover the body and act as a boundary in the physical sense also give her more freedom of movement. If a woman is perceived to be ill and is being treated through *zar*, she will also be permitted to act out of line with tradition and to practice 'male' actions such as wearing a *jalabiya*, smoking or drinking alcohol.

Generally, the conservatism expressed visually is contradicted verbally by the explicit use of the Arabic language, in descriptions of womens' bodies, for example.

Reinforcing ideas of feminine/masculine is expressed through body images. Circumcision, tattoos and scarification are all ways of extending these concepts onto the body. Inscription on the body of perceived universal and social order are further extended onto clothes, shelter and ultimately into place-making practices.

4.5 DRESS FORM AND MEANING

Study of dress forms enables one to identify characteristic approaches to their use and symbolic significance that shed light on space and place making. Conformity and identity are two such aspects, as well as the potential to express group affiliation. As discussed in Chapter 2, cultural codes are perceived as extensions of body images, an attitude closely linked to gender issues. Material, techniques of production, colours, methods of wearing garments and associated meanings are important aspects of study as they initiate debates in terms of similarities/differences to ways of inhabiting space. The development of clothing forms in terms of external influences, through foreign contacts and trade, illuminate the origins of cultural practices.



Fig. 4.1 and 4.2 Unidentified Sudanese man and woman in 1920 (www.sudan.net)

4.5.1 Conformity, identity and group affiliation

4.5.1 i) Conformity – *albas al bi'jib al nas*

Thieme and Eicher (1987: 116) distinguish between forms of dress that enhance and reveal individual identity of the wearer and those that conceal individual identity. As in many conservative societies, in northern Sudan, conformity is encouraged and

deviation from the 'norm' is discouraged. It may be even more evident in this region because of 'other-determined' ethical systems mentioned in Chapter 3. A well-known saying that sheds light on the other-determined ethical and cultural system is: *awkul al bi'jibak wa albas al bi'jib al nas* (eat what you like but wear what people like) (Gasim, 1985: 1032).

Al-Amin explains how 'good' and 'bad' are seen to be the degree of conformity to traditional behaviour or deviation from it:

"Villagers consider those who acquire strange habits or misbehave as deviators from the way of their people and from Islam. Such people who do not observe the rules of tradition are usually shamed and considered misfits and bad." (Al-Amin, 1989: 8-9)

They would also say that in the past, people used to be better mannered, 'simpler in their clothes and way of life and humbler in their conduct'. This is perceived as positive as it meant that people were more generous, stable and faithful.

4.5.1 ii) Identity – *al shilookh*

For the above reasons, people are very conservative about dress forms. This is palpable still today. Traditionally, some distinguishing factors have nevertheless been evident, such as *shilookh* (Fig. 4.2). These are cuts into the skin of the face leaving permanent markings, originating probably around the 1820's according to Hasan (1976: 76). They differentiated between ethnic groups and also expressed individuality. When tribal distinctions became less dominant, the *shilookh* came to have even more aesthetic reasoning as the *al-shalakha* (the women doing the *shilookh*) now chose suitable designs to complement a woman's face. For men it remained as a method of distinguishing tribes. The patterns used reflect the mix of cultures evident in all aspects of life: the T-shaped pattern is very similar to a cross, for example (Hasan, 1976: 74).

Al-shilookh have been used to get rid of *al-sibr*, a kind of magic that is believed to make people's lives very difficult. If one is believed to have been cursed with *al-asabeer* (plural of *sibr*) he/she is given *shilookh* of a different tribe, for example, confusing the person's identity thus, the curse will not affect them. If the spirit of a dead relative is not to hover over a child, he/she will be given *shilookh* that are different to the norm of that particular social grouping (Hasan, 1976: 83). In West Africa the same concept is applied by dressing a sick female, for example, in male

dress, so that the evil spirits cannot identify her. In Sudan, women wear male clothes and do what are traditionally considered male actions, such as drinking or smoking, during *zar*. This resembles another approach used by the Sudanese to dispel misfortunes by naming a child in an unfamiliar term or a name that is considered to be ugly, or is associated with other tribes, to dispel the evil eye.

4.5.1 iii) Group affiliation

Group affiliation is an important structuring aspect of life and is expressed through dress forms thus, reflecting the values and beliefs of a group's cultural patterns. Dress forms communicate an individual's position within a group (Theime et al, 1987: 116). It is perceived as a quest for order in all aspects of life, including the individual's personal appearance. Thus, *al shilookh* have been important to distinguish between tribes.

4.5.2 Clothing as environmental control

Dress, no doubt also reflects people's response to climate. Big garments that hang freely over the body protect from the harsh sunrays and from the dust, even though the obvious/accepted interpretation is that it is Islamic dress. Several layers of loose fitting garments, in light colours, are the norm for both men and women. The reality that the northern riverain people are very conservative and do not change their dress forms easily may be due to the fact that the weather is excessively hot and western form of dress is unsuited to the climate (Barclay, 1964: 8). The function of the skin is supplemented by extensions on our clothing and shelter. Clothing acts as an environmental control system in the same way that the skin regulates body temperature. Shelter has a further regulatory function and all three components work together in creating a comfortable climatic environment.

The skin, the flexible covering of a body, is *jild* in Sudan. Used in different ways it can also mean *al-dar*, the home or the place, *al-ard*, land or it can mean *asl*, origin: *ho ma min jildatna*, he is not from our 'skin' meaning origins. *Al-jood qat'an min al-jilood* refers to very poor people who will still be generous to others even if they have to cut from their own skin to give (Gasim, 1985: 230-231).

Clothes, garments worn to cover body and limbs, are referred to as *libs*, which are used for *satr al jism*, cover the body. It is also interesting to note that body; *jism* also

refers to 'model' or 'idea', or image representing a physical artefact (*tajasam*, *taṣawar*) (Gasim, 1985: 221).

Shelter, to protect from danger, bad weather and refuge, to conceal or defend, can be translated into *qitaa: al-asbaa' al wahid ma biyqaty al wash*, one finger will not cover the face. *Al-qitaa* is that which covers. '*Ala qadr ghitaak mid kr'aak*, stretch your legs only as far as your cover (Gasim 826). Shelter can also mean *satarah* (again from *satr*) what covers. *Mawaa*, *sakan* (abode) or *dul* (shade) can all be used to refer to shelter. *Al 'indo dulala yarfa'ha foq raso* says he who has a *dulala* (something that shades) should lift it over his head (Gasim, 1985: 696).



Fig. 4.3 Man and woman in traditional attire. The man is wearing a '*araqi* and '*ima* (turban). Formal attire would mean that a *jalabiya* would be worn over the '*araqi*. Notice that the woman has her face covered with the *tob* (Potter, 1984: 125).

The meanings of words associated with skin, clothing and shelter are similar and convey strong feelings about the notion of protection or shelter, which, as will still be elaborated, is not necessarily focussed on the physical act of sheltering. The word *satr* is seen as key to the understanding of the concept of *sutraa*, protection and cover.

4.5.3 *Sutraa* and *hijab*: the *tob*

In terms of religious principles, both sexes have to cover larger parts of their bodies than what is generally accepted in non-Muslim contexts. Men need to be covered from the navel down to the knees and the women have all their bodies covered except for the hands and the face (See Fig. 4.3). The latter is referred to as *hijab*.

Hajab (Gasim, 1985: 257) is defined as *satr* (defined above), or as *hirz yuktab fihi shay wa yulbas wighaya lisahibihi fi za'mihim min tatheer al silah wal 'ayn*, that is an amulet with writing (usually verses from the Quran) that is believed to protect one from weapons or the evil eye. Protection from the evil eye or bad luck and protection of the woman's body from the eyes of men are treated with the same degree of importance. People will cover their hair, if they have beautiful hair, from the view of others, male or female, for example. They will cover their child from people they believe could harm them if they admire them.

Cover, physical *sutraa* or protection, has traditionally been achieved with the *tob*: a continuous run of 4.5 meters of fabric that is wrapped around the bodies of both men and woman. This serves the climatic and social functions very well. The difference between the male and female *tobs* is in the method of wearing and in the colours used. Men will wrap the *tob* around the body with each end thrown over each shoulder (Barclay, 1964: 8) and women will wrap it so that one end is thrown over the left shoulder. The woman's *tob* is still visible today as the traditional Sudanese dress. Women wear it throughout the day and also cover themselves with it when lying down (Gasim, 1985: 188). It is not known for how long the *tob* has been the traditional form of dress for women of this region, but in some depictions of dress in the pre-Meroitic age a man is shown naked, while the woman is wearing a wrapped white angle length skirt with the open edge in the front (Adams, 1994: 3). Because of its versatility, it is worn while resting, working or visiting. It usually covers the body up to the ankles, but when a woman is working in the fields, for example, the *tob* is raised higher up so that it resembles a short dress. Underneath the *tob*, a woman will usually wear a short dress.

Unlike the *'ibaya* (a long, loose cloak worn over clothing as *hijab*) in other Arab contexts, the *tob* is not necessarily removed once a woman is in the house. Perhaps the woman will just change into a house *tob*, i.e. *tob bayt*. Thus, it allows the men and the woman more freedom of movement within the house, freeing space from strict physical separation. It should be noted that the Nubian in the far north of the country do wear a form of *'ibaya* usually in black. These are tribes that have retained their pre-Arab identity and language. These are not discussed here.

4.5.4 Wrapping containers, wrapping bodies

According to Adams (1994: 1), a unique technique of textile wrapping (dated to 1550 BC) has been discovered in archaeological sites in Sudanese Nubia, which gives a lattice effect. It is believed that the intention was originally to imitate bead network as some of the vessels found were covered with ornamental beaded pot-nets. Later, in Meroe, it was used as a decorative border on the edges of woven cloth rather than as pot-net containers (Adams, 1994: 2-3): "...the beaded pot-nets, which furnished the original inspiration for the wrapping technique, are seen on jebana pots in the central Sudan today." (Adams, 1994: 5-6)(The *jebana* is a clay coffee pot – refer to Glossary).

Adams (1994: 5-6) continues to explain how the fringe tassels of open work borders were mostly the same colour as the fabric to which they were attached: that is the colour of un-dyed raw cotton. In some cases it is dyed in blue. These fringed materials were also used as ornamental clothes and furnishing fabrics. Though decorative wrapping techniques are not as common today, they were used till quite recently (See Glossary at the end of this document).

The interesting concept of 'wrapping' has persisted through the ages in the region (Figs 4.1, 4.2 and 4.3). Till today, both men and woman will wrap their bodies in a *tob*. The *tob* acts as *hijab* in an adaptable way. It covers the woman's body so it is hidden from sight. It is also sometimes wrapped around a woman's hand when she is shaking a man's hand in greeting. 'Wrapping' seems to have strong symbolic meaning in this society of the northern riverain people. This becomes apparent again in the way that the body is prepared for burial discussed in a later section.

4.5.5 Dress forms: history and origins

"The wall behind Saeda and Ashara the hairdresser was of sun-dried brick plastered over with brown mud. The bricks and plaster were made from Nile silt and donkey manure. The wall was very old and had been replastered many times; there were cracks and loose material adhering to it. The sun was setting and some of its rays filtered onto the wall, pink and brown. The figures before me cast their shadows on this wall – the hands working dextrously on the hair. The stillness of the heads and shoulders took me back two thousand years to the reliefs on the temple walls of ancient Meroe..." (Cloudsley, 1983: 32)

Adams (1994: 5) believes that Meroitic dress styles were derived from ancient Egypt. He states that most clothing was plain white and the use of colour was limited,

usually restricted to blue. Clothing decoration was provided mainly by rich textures: pile weaves, ribbing, fringes, and wrapped open work borders. The coming of Christianity around 550 AD meant new clothing styles. These were modelled from Roman apparel, with mantels and tunics prevailing. It is important to note that the decorative emphasis later changed from texture to colour (Adams, 1994: 5).

Up until the 1800's women went unveiled and the young girls wore nothing but a *rahāt*, a girdle of leather tassels around their waists (el-Tayib, 1987: 44). Both men and women used *kohl* for the eyes. Both sexes rubbed their bodies with scented oils and for special occasions people would use a mixture of sheep's fat with musk and pulverised sandalwood for massages. These cosmetics are still a part of the culture today.

Foreign influence is strong in terms of dress and cosmetics and beauty treatments, yet many processes of perfume making and body rubs have been linked to the pharaohs or more recently to the Funj. Indian influence is evident; yet, it is difficult to draw a line between what is Sudanese and what has been adopted from other cultures, since they have totally merged. Foreign-made artefacts become incorporated to such an extent that they become a part of the culture. "[The] 'traditional' costume of Sudanese women is quite distinct and relatively recent." (el-Tayib, 1987: 40). Foreign influences on Sudanese dress that can be seen today came mostly during the Turkiyyah because of organised trade. The Mahdiyya rather isolated people and puritanical reform and rejection of foreign ways was encouraged (el-Tayib, 1987: 44-45).

Influences followed trade routes: Weaving techniques were borrowed from Egypt, while clothing and cosmetics were brought by caravans from the East and became a part of the culture's identity. Beads were imported and manufactured locally (el-Tayib, 1987: 42-43). Clothes worn by the Funj Kings or the Shaykhs showed that many luxury items were being imported via the Red Sea ports. The predecessor of the *tob* as it is known today was the *farada* made in Shendi with a coloured boarder (el-Tayib, 1987: 44). The *dammur* is the most revered material and is discussed further below (refer to the Glossary for more descriptive information on the above).

4.5.6 Attitudes to mechanization and material as economic currency

“...knowing how to weave the tribal cloth, the magic of which is that as long as it is woven, the tribe exists; as long as you know how to weave it, so do you.” (Walker, 1989: 256)

The *dammur* exists till today: the mother of a bride will still give the bridegroom a *dammur tob* usually used as cover when sleeping. There is a long history of spinning cotton in the region. The role it plays in the economy and also as a medium defining status is significant. This material is almost always white with a blue border.

Hand spinning was more revered, as ‘satisfactory results could not be expected from machine-ginned cotton, in which the fibres were worn and matted’. The varied quality of the thread was seen to add to the ‘attraction of homespun *dammur*, which was strong, light, soft and durable’ (Daly and Forbes, 1994: 190-1).

The cloth was used as a medium of exchange before the Turkish invasion in 1821 and cotton was an important component of the subsistence economy of that region (Bjørkelo, 1989: 72). According to Bjørkelo (1989: 31), documentary evidence shows how land was being exchanged for *tob dammur* between the 1770’s and 1820:

“A locally-made and controlled medium of exchange was used to facilitate this process. Access to *dammur* was fairly equally distributed, at least in moderate quantities, as it could be produced in the households.”

Market mechanisms were established using a locally made material.

4.5.7 Clothing and associated meanings

Dress forms, used in specific ways by social agents, become a sign and are assigned meanings by these social actors. The social/ideological aspects that influence spatial/material manifestations are important to develop and understand the context (Vagenes, 1998: 150). People ascribe meanings to certain objects, colours or clothing that indicate importance or power (Abu Salim, 1992: 9-11). The gestures (manipulation of garment when wearing), effects on posture, gait, freedom or restriction of the body movement that this style generates all constitute a part of the symbolism of garments (Theime et al, 1987: 116).

Female dress symbols are more easily identified than male dress symbols. Dress form and colour and the beautification processes and rituals are strongly adhered to and reflect different stages and situations in a woman's life:

"Sudanese women have very definite ideas on what constitutes beauty and they devote a great deal of time to the pursuit of it. This is as true of the poor women in the grass hut as it is of the wealthy housewife in Omdurman...The beauty they pursue lies not in the cultivation of the arts nor in the creation of works of art; they are less concerned with beauty around them than in creating beauty in and about their personal selves. While there are very strong sexual overtones about their preoccupations, these are not exclusive. Women are concerned with personal beauty because of the expectations of other women and even more vitally because they perceive that their mental and physical well-being rests on the care they take of their bodies and themselves. It should be emphasised that this is apparently felt more strongly by Sudanese, particularly Sudanese women, than has been noted in many other parts of the world, and it gives a very distinctive, not to say dramatic or sensual, tinge to their culture." (Kenyon, 1991: 230)

The seclusion of women mentioned earlier, is important in terms of how much of her body is covered. Traditional gender roles have been linked to the domestic domain and the woman is seen to be in an enclosure, be that of her home or by enclosing her body with garments. Personal appearance maintains gender distinctions. Hair, colour, skin, texture, dress, movement and even circumcision are all carefully delineated to maintain differences between the sexes (Kenyon, 1991: 230). This author goes on to confirm an aspect that is focused on in this study: "...the maintenance of gender differences is a much more effective method of segregation than the erection of physical barriers." (Kenyon, 1991: 230).

4.5.8 Clothing and national identity

It is evident that some ancient techniques and materials disappeared, some re-appeared after many centuries and some are still in existence. Basketry techniques are still maintained while decorative wrapping techniques are disappearing, for example. It is also apparent that some of the techniques were unique to the region, some evident in artefacts today. Colour appears to have gained more significance during Christianity. But, till today, reverence is reserved for textured, white material and where colour is used there is a historical preference for blue. Wrapping material around the body is still predominant as a dress form and the practice appears to be rooted in the ancient history of the region, despite the many foreign influences.

The question of national identity and riverain peoples' affiliation to the Arab or African world has been discussed elsewhere. Clothing plays a major role in this dilemma. Today, a new process of Sudanisation is being encouraged. This can be described as detribalisation and integration into a Sudanese national identity and lifestyle (Vagenes, 1998: 160). The concept is mainly realized in urban areas (Vagenes, 1998: 294) where the process has influenced the apparent changes in dress, many times politically motivated. Today, the Arab *'ibaya* and scarf are seen as often as the *tob*. Unfortunately, the religion that previously merged with local tradition is now seen to be in conflict with it.

4.6 CLOTHES, BUILDINGS AND SPACE USE

Clothes, buildings and space use, in combination, are seen to reinforce and maintain the gender order of the region. Both dress forms and buildings are forms of climate control and comfort regulators; therefore, the algorithm skin/clothes/shelter is explored this manages to include the range of spatial scales included in the study.

Psychological comfort relates strongly to values and beliefs of a community. These concepts are transposed onto any physical context to make it more suited to the cultural identity of a people. This does not always have to be in the form of space-manipulation, but can be achieved by dress form, positioning of the body within the space and the movement of the body in space. Through observation, it becomes apparent that people from different cultures use the same space in different ways and that the movement patterns are varied.²

There are two ways of assessing the degree of psychological comfort of space. The sense of moving through a space, kinaesthetics, is difficult to measure, describe or predict (Groak, 1992: 83). Distance may be a medium of separation as important as a physical barrier, thus space acts as a buffer/transitional zone, as a 'wall', and as a regulator of daily activities, setting up a system that is respected and adhered to. Space thus, acts as a separation 'wall' with its characteristics defined by distance or

² The author has noticed this in striking ways in gatherings of different social groups in the same space, at the same time.

the size of a gap, acting as a substitute for the mass or thickness of a conventional wall.³ But distance is not necessarily the only form of separation.

Socially established organisations of space, proxemics or the sense of interpersonal space is the distance at which we position ourselves from other people. It is a particular form of comfort that varies from culture to culture (Groak, 1992: 83 and Altman and Vinsel, 1977: 182). As seen above, in Sudan creating 'distance' between a male and a female can sometimes be expressed by a simple wrapping of the hand by the *tob*, or by wrapping the *tob* around the face so that only the eyes are visible.

"In building science 'comfort' is principally expressed in terms of human physiology and sensations. But as our responses to external stimuli are informed by sensory perception, they are affected by experience – personal or social, deliberate or accidental, confusing or coherent, intimate or remote, pleasurable or painful, mundane or traumatic. Although structured by physiology, they are also learnt and/or interpreted." (Groak, 1992: 84-85)

Groak (1992: 85) elaborates on a 'holistic concept of total comfort', which is only in part determined by a building or by services provided. It is stated that for someone reading a book, that the 'book maybe as important as the room'. When talking of the seclusion of women in a Muslim context, the attire may be as important as a screen or wall. Maintaining distance between people may be another form of 'barrier'.

By thus broadening the concept of comfort, a variety of interpretations of the social practices regarding clothing, as religious expression or conformity and as physical and psychological comfort regulators, are allowed for. Yet, spatial extensions of these concepts are no doubt apparent and reinforce understanding of body images and expression through clothing. These are explored in the following sections.

4.7 DETERMINANTS OF HOUSE FORM AND LAYOUT

The basic shelter containing a family unit is perceived as a further extension of body images and clothing. This structure articulates social concepts at a larger scale, and is a higher-level configuration within which stylistic variations represent the same, shared social meaning through layout, form or material. "*The higher-level configuration dominates the lower level; and the latter is dependant on the former.*"

³ "...space serves as a medium within which communication occurs." (Altman and Vinsel, 1977: 183). These two authors proceed to distinguish between intimate, personal, social and public distance; cultural differences are acknowledged as well as the varieties within the same cultural groupings (ibid: 189-191).

(Habraken, 1998: 32). Thus, a house design, for example, will determine dress forms (the lower-level configuration). To explain: if male/female domains are not screened off from each other then people of that culture will cover their bodies in certain ways and act in certain ways to maintain a 'barrier' that compensates for the lack of a physical barrier. The lower-level configuration of body or garment transforms more easily and with greater frequency, thus maintaining stability at the higher-level configuration of the house (Habraken, 1998: 42-43).

The house comprises all of these lower-level configurations: body/garment/utensils, food, furniture, partitioning and building. The house provides continuity within the neighbourhood structure, mostly through its internal partitioning. Stylistic variations at the building level are not disruptive to the social functioning, even though, traditionally, they are not frequent. An inquiry is initiated in the following sections and elaborated in Chapter 5, which deals with the invisible forces that maintain stability in northern riverain settlements.

4.7.1 Social Structure and spatial articulation: hierarchical differentiation in the physical environment – changes through time

Social structure represents the primary influence on the organisational configuration of domestic space of a community and the individual house (as discussed in Chapter 2). Within the house itself different *loci* have degrees of importance attached to them based on related functions. Houses have been seen as models of society (Donley-Reid, 1990: 114). They are also seen to convey social structure from one generation to the other; they set up divisions and hierarchies reinforcing underlying principles of a culture. House layouts maintain the importance of certain people, and thus power structures, within a community (*ibid* 115).

There is very little information available on domestic architecture through the different eras (Hakim, 1988: 79).⁴ Typical of general history and architectural historical writings the focus is always on accommodation of the royals, palaces and major public

⁴ Even more difficult to obtain, is information on settlements and house typologies of the present. Rapoport compares the situation of sub-Saharan Africa with the rest of world: "...it proved almost impossible to obtain data, in spite of major effort... the situation in many traditional settlements of sub-Saharan Africa is a puzzling anomaly and needs investigation." (Rapoport, 1990b: 456-457). The value of this study is in contributing to establishing a tradition on writing about the architecture of the region.

buildings and religious buildings. From what information could be sourced, such as plans or photos of buildings that have not been measured or documented, it appears that there was historically more complexity and more sub-division of functional space than there is in present day house forms. Shinnie (1967: 156-157) describes one Meroitic house (refer to Glossary) with a repetitive arrangement in groups of two rooms. The cooking pots and the fireplace have always been found in the main room so it appears that most activities took place indoors; the smaller room seems to have been a store. This pattern was repeated in many houses and it is assumed that they were the dwelling places of small communities or large extended families. Later in history, houses became less compact: "...houses are rarely built directly contiguous to one another, and structures of more than one storey are unknown." (Adams, 1977:50).⁵ This is still a characteristic of Sudanese villages today.

In the pre-Turkish and Turkish eras:

"House types in the Northern Sudan included both flat roofed mud-houses (*murabba*), round huts (*qutṭiyya* or *tukul*) and rectangular shelters of mats (*rakuba*), depending on wealth, domestic stability, regional security and many other factors." (Bjørkelo, 1989: 54).

In reality, and till today, a family *hosh* (compound) may contain all three types mentioned by Bjørkelo. That is, the rectangular rooms (*murabba*' literally means 'square') as the main part of the house, the *qutṭiyya* or *tukul* may be used as the kitchen and the *rakuba* may be used as a cooler sitting/sleeping area or for outside activities including cooking.

Generally, it is accurate to say that the rectangular typology is strongly linked to the riverain regions:

"Flat-roofed mud-houses and dried brick houses were associated with the North, being suitable to a climate with little or no rain. Outside this area, such 'Berberine houses', to quote Brocchi, were a sign of northern immigration, traders particularly, and reflected the wealth and position of their owners. Also in the north such houses, with the characteristic court-yard walls (*hōsh*) surrounding them, were first built by the traders and well-to-do villagers. Thus low status *qutṭiyyas*, *tukuls* and *rakūbas* were far more widespread in the riverain villages than today. In the years of political

⁵ Adams (ibid, 356-358) offers descriptions of earlier settlements of the Meroitic era, which had 2- and 3- storey houses and where class differentiation was evident through the size and qualities of the dwellings. 'Ordinary' houses of that time were densely clustered, while houses of apparently wealthier groups were identifiable as a separate family unit and stood slightly apart. This comparison between the forms of social expression evident in village and town morphologies of the different eras needs to be further researched.

disturbances before the Turkiyya, mud-houses ceased to be built in the most threatened areas, since *quṭṭiyyas* were cheaper to build and the building could be moved and hidden in an emergency.” (Bjørkelo, 1989: 54 and 1984: 96).

The mud house prevails in the region, and other forms are a response to exceptional circumstances. As Prof. O’Fahey communicated in a private conversation: “...the buildings are rectangular along the Nile and become rounder and rounder as one moves away from the river to the west” (2002). Bjørkelo (1989: 55) elaborates:

“Walled courtyards of different materials may well have had a long history in the Sudan, but they gained a particular socio-economic significance from the eighteenth century onwards as a sign of wealth, prestige and female seclusion in the north, and as a sign of Nubian, Arab and Islamic penetration in the diaspora.”

The rectangular form definitely did have a longer history in the region as is evident from ancient archaeological sites. There were two types of settlement in the Meroitic Kingdom: that of the urban agriculturalists and of the semi-nomadic pastorlists of the Butana *wadis* (valleys). The first comprised rectangular houses built in mud brick. The settlement of the Butana consisted only of a Hafir and a temple, sometimes with a priest’s house (Hakim, 1988: 80). Some round straw huts have been found in the Nile valley (Hakim, 1988: 80-81 and Crawford, 1951 in various images of villages as depicted in the Funj era). As in later eras, the straw huts were apparently associated with the housing of the commoners. Arkell recounts how an ambassador of Salah ed-Din al-Ayubi to Christian Dongola, describes that: “The king had ridden bare-back on a horse out of his palace, the only building in Dongola not constructed of grass.” (1955: 192).

The start of the decline in the building sophistication, evident in the earlier eras of the region, is always dated to the Christian period and after:

“No more of the stoutly built unit houses were constructed after the end of the Christian period... At some period before modern times there occurred a still more radical simplification in Nubian domestic architecture. The unit house design with its ‘interior plumbing’ gave way to the rudest of two-room huts, in which one room was presumably occupied by the male members of the family and the other by the females.” (Adams, 1977: 581)

Looking at palace designs, about which there is more information, it is apparent that plans were highly segmented and compartmentalised (Refer to the ancient palace of Wad-Ban-Naga in the Glossary). This typology seems to have persisted through the

eras: detected from the images of the Shaygiyya castles during the Funj and the Khalifa house built during the Mahdiyya in Omdurman also in the Glossary.

From these developed a house type typical of the region, described by a number of writers:

“...though most houses are made of a combination of mud and manure, several are of fired red brick... The ‘house’ usually consists of a compound (*hawsh*) containing a number of small, usually one- or two-room, buildings, surrounded by a wall from five to seven feet high. Each compound has at least two doors on the street – one considered the men’s entry, which any stranger may approach, and the other considered the women’s entry, which only persons close to the family may use. The men’s entry is always the more elaborate doorway. Some doors are made of iron with grillwork on the upper part and are painted, bright green being the favourite colour. Others, less pretentious, are either unpainted iron or wood.” (Barclay, 1964: 4).

The interiors of the compound may vary, but the shared characteristics, as explained by Barclay, are as follows:

“The men’s entry leads into an open court, to one side of which is a guest’s or men’s building. This is usually a separate structure with the typical rectangular shape and flat roof. It has a porch and one or two rooms.” (1964: 4).

For more details on house designs and examples of plans and from please refer to the Glossary at the end of this document. This house form is the most predominant and is the one used for the discussion on house design and layout below.

4.7.2 Social themes concerning gender roles and their impact on house layout

Gender roles and gender segregation no doubt play a major role in the structuring of residential buildings, especially in a Muslim context. Many activities associated with women, although highly structured, are perceived as being less formal. The men’s domains almost always have a more formal character. Women’s activities are always performed within the house, be it her family’s house or another house, while men’s activities extend to the streets, the public spaces, the mosque and the *suq* (market). The *hosh*, the most conspicuous feature of the Sudanese house, is divided into two sections that are visually screened off from each other: *Hosh niswan* and *hosh rijal*. The rooms, *tukul* (kitchen) and *rakuba* (veranda) are associated with the *hosh niswan*, while the *daywan*, prominent in size and elaboration, faces the *hosh rijal*.

The typical plan form generated from these requirements is the *qurfatayn makhloofat* or crossed rooms shown in Fig. 4.4. The principles of this simple plan form are found

even in modern day houses in the capital city, as they provide for convenient screening off of the men/women domains without resorting to the addition of expensive walls and partitions (Fig. 4.5). Often the barriers are visual and social rather than physical. For example, there is no door between the men/women areas. The separation is socially accepted and adhered to.

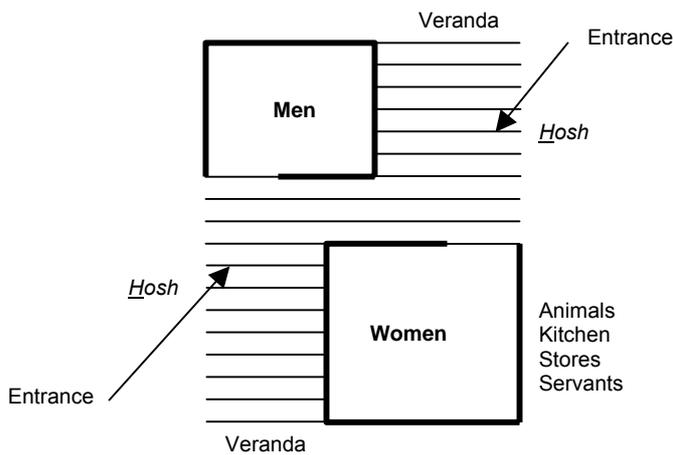


Fig. 4.4 A typical pattern in house design: *qurfatayn makhloofat*.

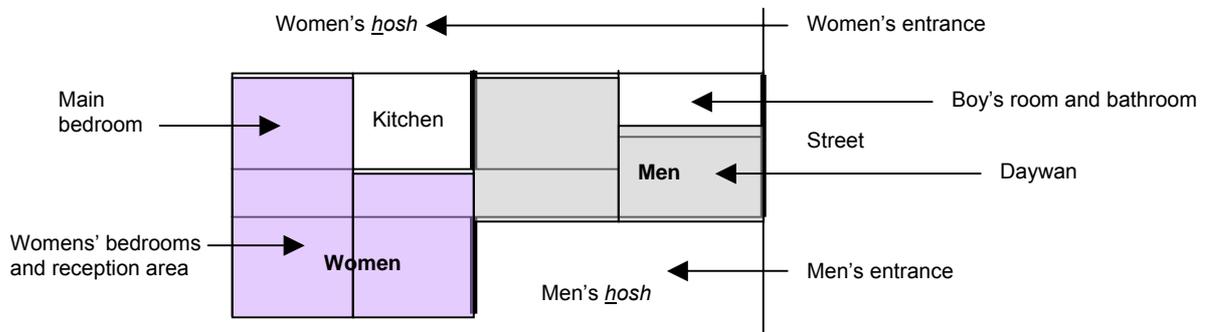


Fig. 4.5 A modern interpretation of the *qurfatayn makhloofat* in a Khartoum house built in 1992.

4.7.3 Connotations of the word *bayt*

Literally translated, the word *bayt* means house. But it does not always refer to a physical structure. It can also mean wife or family. Many times it implies a single room – a house could be one room where all the functions take place such as sleeping, cooking, eating, bathing or storage. When the word *bayt* is mentioned it can be understood as the women's domains within the house. This is probably due to the fact that this is the centre of their world, whereas the public spaces are the domain of

men. Houses are built by men, yet inhabited mainly by women as they spend the most time in them and carry out most activities within the confines of their own house or the houses of relatives, neighbours, friends. Women maintain the daily rhythm of life within the house.

The *daywan* is *bayt al-rijal* (men's house), and the rest of the house is *bayt al-niswan*. (*Bayt* is house, *rijal* men and *niswan* women). Thus, the *daywan*, even though it is within the house, has more of a public than private function. Cloudsey (1983: 167) describes how the *daywan* may run the whole length of a house and dominates in size (refer to the Glossary).

Thus, the meaning of the word *bayt* is very loose and allows for many interpretations. This is obvious from the way that a house is used. Men's areas of habitation extend beyond the boundaries of the house. Various social groups may use the same place but at different times (Donley-Reid, 1990: 115). The women, for example, can use the *daywan*, when the men are away or on the occasions when the men use the street or a neighbouring house. Fluid space-use patterns are still evident today.

4.7.4 Privacy and the individual's use of space

The contrast between "micro" personal/parameters with "macro" social/shared ones is seen to be less evident in this context. Vagenes (1998) explains how the Hadendawa, of eastern Sudan, are never alone. Silence is seen as an indication of psychological problems and solitude is unnatural and unhealthy. This attitude is very similar to that of the riverain communities. Spatially, public and private zones are difficult to identify. Male and female zones are accessible to all males or females in the community at most times of the day.

Concepts of individuality and privacy, predominating in Western society, do not apply here. Being independent or different is taboo. Distinct characteristics and actions among people are traditionally rare. This no doubt implies that the creation of private space, free from intrusion and public interest, is viewed with suspicion. Most activities, decisions and daily functioning of people are under the critical scrutiny of all members of the community at most times of the day. Perhaps this is a reason for the apparent simplicity in the structure of the house.

These attitudes are still prevalent but slowly but surely changing as peoples' lifestyles change and as privacy is valued more.

4.7.5 Time as a structuring element in place making – nomadic cycles

Another important theme in house layouts is related to the time of the day and linked activities: "The round of life and activity corresponds closely to the daylight hours." (Adams, 1977: 50). Time and space are seen as equally important structuring elements. In traditional agricultural societies the day starts early, due to the extreme heat. The men would leave the house after morning prayers at sunrise. They would return at noon for a siesta and lunch and leave again for their work after the sun cools in the late afternoon. After sunset prayers is the time for socialising. The courtyards are prepared: swept, sprayed with water and the '*angaribs* (traditional wooden beds – refer to Glossary) brought out and people find relief in the coolness after the harshness of the day. The day is structured as follows:

- *Fajr-duqush* (sunrise) prayers
- *Sabah* (morning) tea
- *Duha* (late morning) work time
- *Ghayloola duhr* (noon-afternoon) breakfast- siesta- prayers- lunch
- '*Asr – duhriya* (late afternoon) work time
- *Maghrib* (sunset) tea
- '*Isha* (evening) prayers, meal and end of activities

As mentioned above, female space is extended when men are away. Thus, time acquires spatial significance. The *daywan* becomes the domain of women at certain times, when the man is supposed to be working outside the house. For a man to be there at those times is unacceptable.

The different times of the day, the related activities as well as the changing seasons all contribute to a pattern of nomadic movement within the house. In a *hosh*, people rotate throughout the day, following the *duh* or shadows as the sun move across the sky. Nomadic transient patterns are reflected at many levels in Sudanese towns and villages. One representation of this, at the micro-level, is that architecturally undifferentiated functional *loci*, where life occurs as social and religious ritual and everyday activities, are contained within a single enclosed, semi-enclosed or open space. Such *loci* are not necessarily separated.

Nomadic rotation, what Kazimee and McQuillan (2002: 25) call circular 'migration' within the courtyard, relates to diurnal rotation. It creates a spatial order related to time and orientation. The house is a microcosm of other spaces and public buildings where the same cycles take place. These rhythms and movement, from internal to external space and between different parts of the external spaces, reflect formal and informal gatherings throughout the day. Daily, seasonal and social cycles influence the way the outdoor spaces around a house are used.

The majority of functions are performed outdoors and the courtyards and streets become 'outdoor rooms', while built areas are used mostly for storage or sleeping during the short winter season. The following quote refers to a typical mosque in a northern village:

"For about nine months of the year sunset and evening prayers are recited outside the mosque in the mosque compound to take advantage of the cool evening breeze. The mosque building itself is used only during the daytime and on winter evenings or in a rainstorm." (Barclay, 1964: 163)

Other nomadic characteristics are makeshift structures and temporary spatial arrangements, which are the norm for different social functions, such as *zar*, *bikkah* or weddings. Makeshift kitchens are also an important feature as cooking space is shifted from internal to external spaces. The buildings and surrounding courtyards fulfil their function of providing living space for the different activities within the house in a suitable environment, in terms of the dust and the heat that characterise the climate.

Traditional rituals are not necessarily accommodated for in a permanent manner, but are rather contained in an open space that remains empty after the people have dispersed. These kinds of habitation patterns are made possible by the climate. It also represents a memory of cultural traits of the spatial freedom of mobility of the nomads (Kazimee et al, 2002: 28).

Similar to other Muslim contexts the courtyard plays a central role in daily life, not only in the home but also in public buildings. Lee explains that:

"The antiquity of the courtyard as a feature of domestic architecture has by no means been satisfactorily established. Archaeological evidence suggests that courtyards were not constructed with Christian and pre-Christian houses, so probably the

courtyard was brought to Nubia by the Arabs after the thirteenth century A.D. as Nubian and the areas to the south were being converted from Christianity to Islam. The courtyard in Islamic architecture is one of many devises designed primarily to provide seclusion for the women of the family, and was probably taken over by the Nubians for this reason.” (Lee, 1969: 37)

This influence in terms of space use and built form is interesting, but the non-tangible influence of nomadic patterns is still evident at all levels as well as in a traditional sedentary pattern of life. Kazimee (et al, 2002: 23) in Afghanistan, describe this as ‘co-existing modes of living’.

Figure 4.6 below explains the above concepts by example. This house in Shendi is approximately half a century old. The subdivisions follow the typical *qurfatayn makhloofat* pattern.

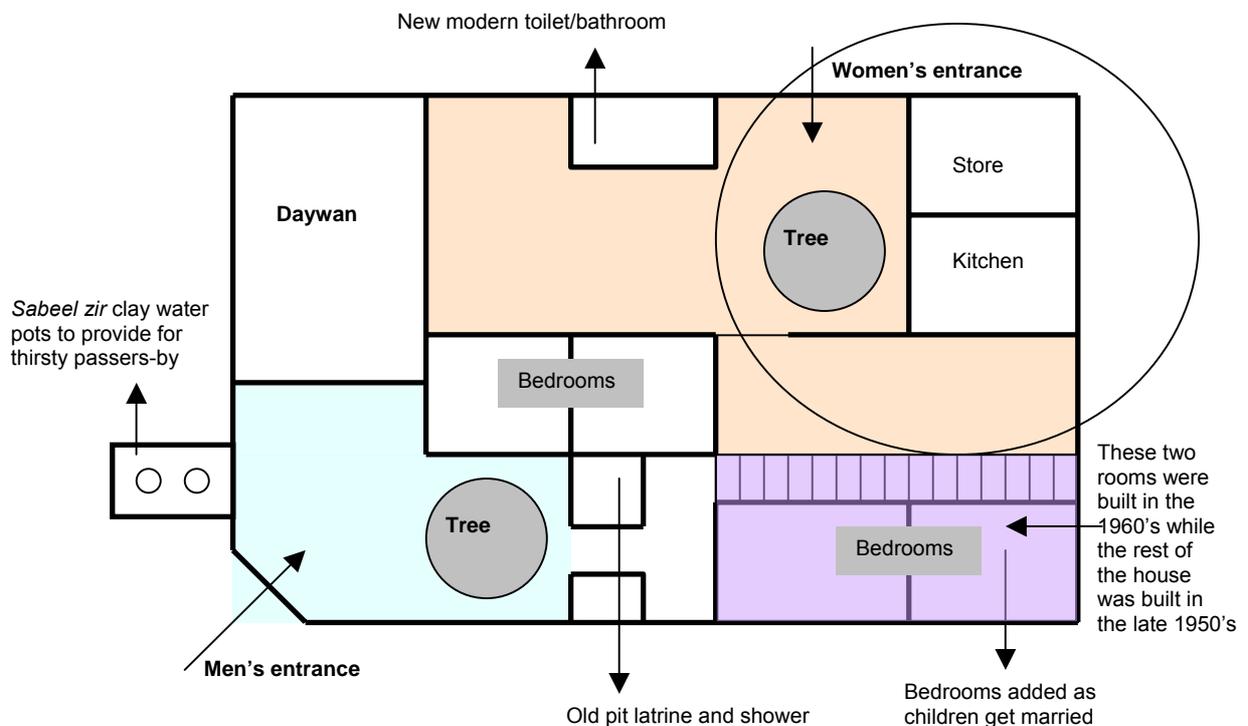


Fig. 4.6 Old Shendi house. The different colours denote men and woman courtyards. The area indicated by a circle is enlarged in Fig. 4.8.

An enlargement of the women's section of the house illustrates how patterns of use interchange between in and out.

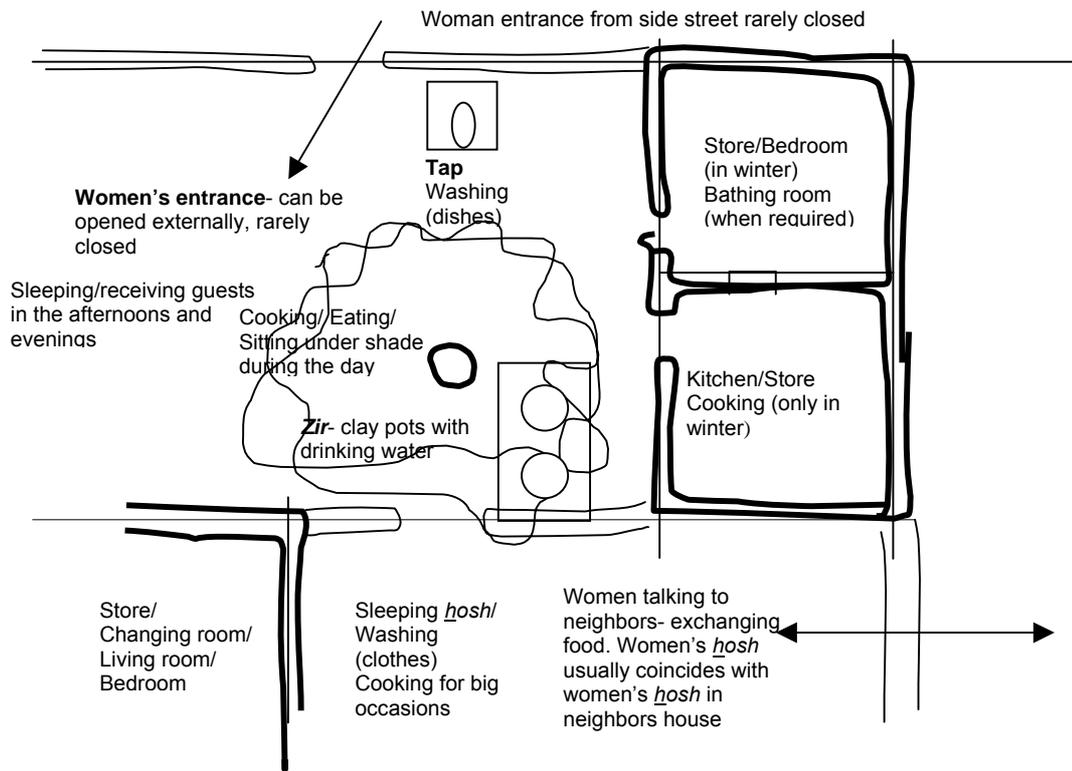


Fig. 4.7 Indoor rooms/Outdoor rooms in a Shendi House

The fact that the women's entrance is rarely closed indicates that the functions of this part of the house are strongly linked with activities in neighbouring houses. The rooms are all multi-purpose in function. Rooms are mostly used as storage spaces. This applies to the kitchen as well, as most cooking takes place under the tree outside.

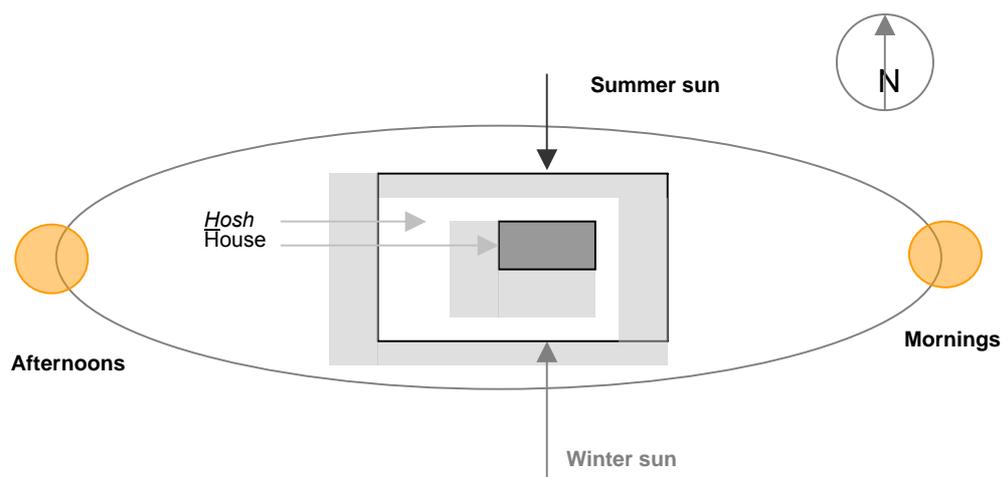


Fig. 4.8 Sun directions and shadow pattern on a summer morning (on a simplified plan).

Figure 4.8 above explains how people would follow shadows during the day, within the courtyard and out on the streets. The rotation cycles would differ in winter where people would be trying to get more sun on the southern sides of the buildings and courtyard walls. Thus, there is continuous migration within the courtyards and on the streets with set patterns during a summer or winter day.

4.7.6 The cardinal directions and spatial perception

The east is referred to as *dar ṣabah* or *bilad ṣabah* (Gasim, 1985: 658), meaning 'home' or 'land' of the morning. It can also mean *qidam* – the front. The east usually implies the *qibla* (direction of Mecca) and not the exact eastern direction. Thus, east is used to refer to *qibla* in all the riverain regions from Kosti to Halfa, even though some of them may face northeast for *qibla*. *Dar Ṣabah* also refers to the land of the Nile, which is referred to as the 'land of the morning'. The west is seen to be the rear, *dar al qarib*. North is *safil* (below), while south is *ṣa'eed* (above). This probably relates to the direction of the flow of the Nile (Osman, personal communication: 2002).

Anything that people want to be blessed will be done while the person is facing east, such as *jirtiq* (wedding ritual) or *henna* (decoration with henna) of the bridegroom. Spatial ordering with reference to the cardinal directions was gradually lost in practice due to more complex design of houses and the implications of formal planning. Generally it is preferred that a house be oriented towards the east and toilets oriented towards a neutral axis (that is, not towards the east or west).

The inclination to perceive the east direction as blessed may have reinforced existing racial attitudes towards the west. Everything positive is associated with the east: the morning, the rising sun, the *qibla* and the Nile. That the east is referred to as the 'front' emphasises the importance it is given in this culture.

Though the apparent reason for the importance of the easterly direction is that it is the direction of Mecca, its importance can be traced back to ancient pre-Islamic eras. The main figures in the decoration at a leading Meroitic temple, without exception, face east (Hakem, 1988: 204). The main temple building in this complex is approached on the east, apparently a recurring pattern in the archaeological regions of Sudanese Nubia (Hakem, 1988: 200 and 217). The carved shapes on the city wall

at Meroe, that is surrounding the royal city, are found predominantly on the east side (Hakem, 1988: 24). It should also be noted that one difference between the Egyptian pyramids and the Nubian pyramids, is that in the latter the pyramids are all on the east side of the Nile. It is unclear what the significance is but domestic quarters at temple complexes were often located on the south side rather than the north (Hakem, 1988: 218).

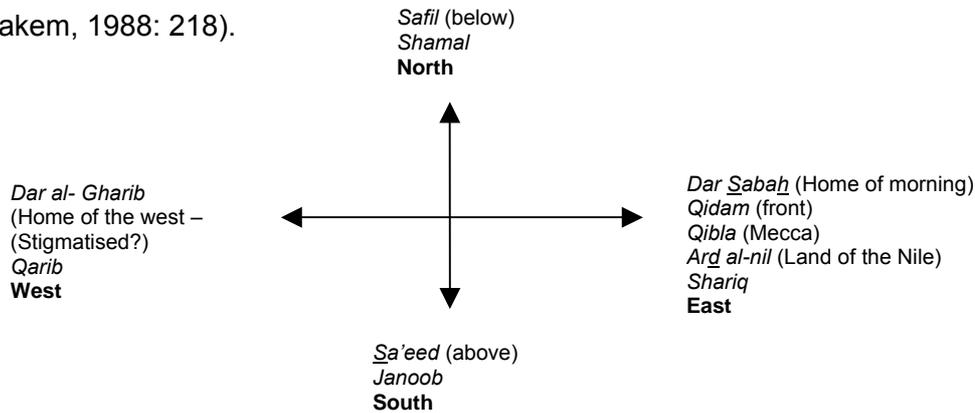


Fig. 4.9 The cardinal directions and associated symbolism.

The indication of periods of time and directions in space relate to these four directions. The seasons, “rhythms of Sun, Moon and Earth” (Critchlow, 1976: 58) break up the year and influence cosmological numbers. Many Sufi beliefs relate to the cardinal directions. To what extent this has influenced spatial patterns still has to be determined.

4.7.7 Symbolic relationship between burial and dwelling

There is a relationship between the way people bury their dead and the way that they inhabit space. It is possible to understand the one by studying the other. The manner in which communities react to death and burial is a significant indicator of how they react to life.⁶ The same is true for the riverain region, as the method that people are buried reflects their outlook on life, which also reflects on their modes of environmental intervention.

⁶ This aspect is clearly evident when comparing the different burial systems in the various historical episodes of the region. These have been described, with elaborate illustrations, by Adams (1977). A future study could use that information to further test this statement. This is beyond the scope of this section, where the focus is on current practice. The Glossary includes some examples from different eras. It would perhaps also be interesting to see if the supposition is relevant for the other religious faiths, though it must be added in the specific case study, which spans episodes where the people adopted different religions, and from initial review of literature and drawings, burial practice change according to beliefs; the same beliefs that influence dwelling forms and settlement layouts.

In this region, the way that the body is prepared for burial, how the grave is prepared and how the final prayers are performed (according to the Muslim faith) seem to have influenced the way that the community views the world as a whole. And it could be seen as reflecting on the way society operates and how that is manifested physically. The simplicity of the ceremony is key to the beliefs of the religion. Graveyards do not seem to have the same symbolic significance as in other societies. The dead person has moved on: there is no elaborate ceremony. It is immediate, quick and simple. What is quite elaborate is the mourning process that could previously last for up to forty days. Lengthy periods for these ceremonies have changed, as previously they were designed to accommodate for camel transport, which took up several days (Barclay, 1964: 266); now ceremonies may be just three days long.

The body is wrapped in white cotton cloth; a silk wrap is sometimes kept in the house and used to take the body to the burial place. It is then removed and kept for another death. After the creed is recited in the deceased ear, and the corpse is washed according to Islamic principles: "The deceased is dressed in the hand-sewn garb of the pilgrim to Mecca. The corpse is finally wrapped and carried to the cemetery." The corpse is carried on an *'angarib* (Barclay, 1964: 261). The washing of the body (performed in the same manner as other ritual washing) and the attire reinforce the symbolic allusion to the trip to Mecca, a final pilgrimage. The concept of 'wrapping', mentioned previously, is again evident.

The grave is dug and a rough mud brick vault is built over the corpse, before the pit is filled with earth again. People are buried lying on their right side with their faces towards the east.

"...a hole is dug extending north and south a little longer than a man's height, two meters wide, and seventy-five centimetres deep. At the bottom of this hole another is dug the length of the person, to a width of about one foot and a depth of one meter. The body is deposited in the second hole on its side so that the head, resting on a clay pillow, is to the south and the face is towards the *qibla* at Mecca. The arms and the legs are extended. The opening containing the body is bricked over and the rest filled with dirt. After seven months stones are usually placed at the head and the foot of the grave. These may be ordinary rough stones or square plaques, sometimes inscribed with the name of the deceased and Koranic verse." (Barclay, 1964: 262).

Stones and flags distinguish the graveyards. There are rarely elaborate edifices, except for a religious shaykh. Orientation of the graves is perhaps the most important structuring factor. The location of the country, on the northeast of the continent, with

Mecca, the *qibla*, to the east, has meant that the east orientation has gained immense significance in the culture of the people. This does not always have positive repercussions as we see below.

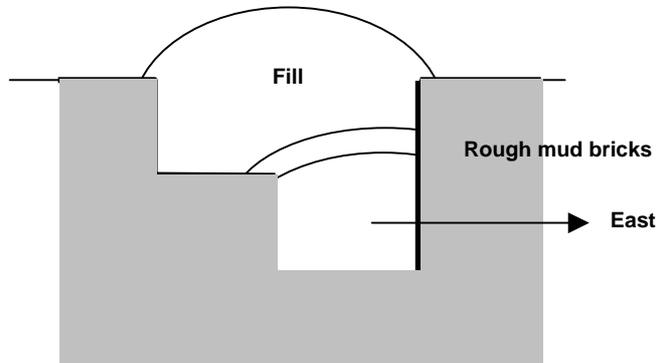


Fig. 4.10 A typical northern Sudanese grave.

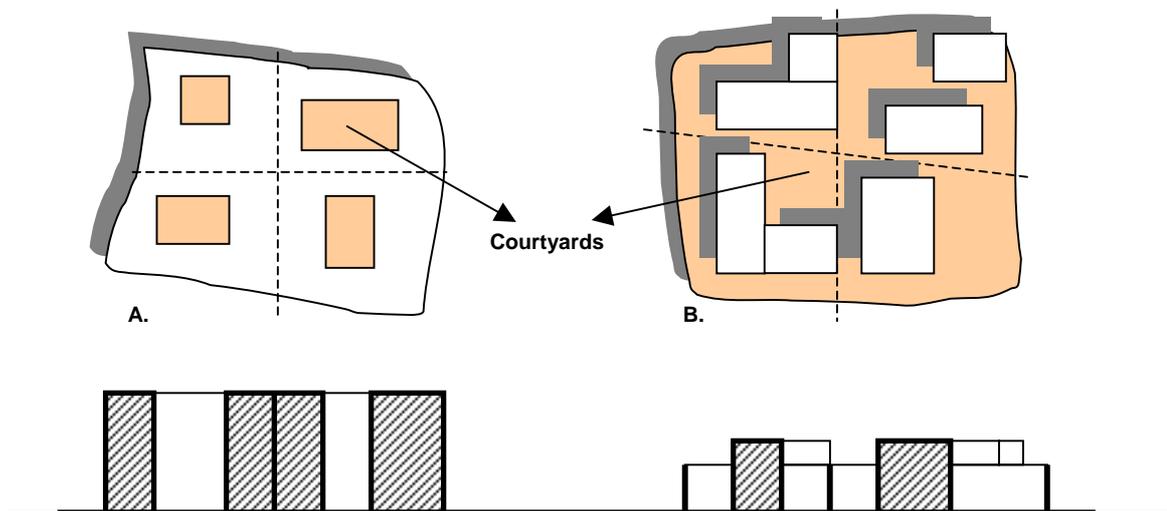
4.7.8 The courtyards, the streets and the public spaces

Like in many Muslim contexts, the house has precedence over the street in village, town and city layouts. The residential units are not easily identified within the urban matrix. This results in irregular streets and open spaces in the public domains. In private domains, left over garden and courtyard spaces are the norm. This often results in alleyways left between the building and the external wall. Square, rectangular or L-shaped blocks of buildings and their positioning separate *hosh rijal* and *hosh harim* or *niswan*. The *hosh rijal* and *hosh harim* usually correspond with *hosh rijal* or *harim* of the neighbour's house. This is the result of subtle negotiation processes that are not formally articulated. Dewar and Uytendogaard (1991) refer to this as 'negotiated reactions', an 'alchemy of design and social interaction', which add complexity to an urban setting. This is considered to be one of the identifying features of successful urbanism.

Kitchens open onto *hosh harim*, even if they are incorporated as part of the main building, but they are more frequently separate. Even in present day Khartoum, wealthier families will have one small kitchen within the house and a large kitchen in the courtyard. Servants' rooms, ablutions, stores and animal pens are also grouped near the *hosh niswan*. House models express transience, movement and temporality. Internally and externally, the same space becomes a series of different settings. This ultimately impacts on the town/village layout where forms are less consolidated, more

fragmented, compared to the typical 'medina' layout of other Arab cities. Several houses create the courtyards spaces, rather than one family house surrounding a private courtyard.

An aspect needing to be researched is to what extent identifiable residential units implied nuclear, or extended, families in traditional villages. Hantub, across the river from Wad Medani, was previously like a maze with no identifiable boundaries to a family unit, when visited by the author in the 1980's. It is not known to what extent that was typical of other villages and towns or unique to that town. But, generally, the domains between different family homes also merge through visits and the sending of food and gifts. The morphology of villages/towns sometimes dissolves the distinction between one family home and the other.



A typical medina layout: a family house surrounds each private courtyard – the buildings create the street edge. This is a courtyard typology.

The situation in many parts of Sudan: high densities are maintained yet houses are less consolidated, that is, more fragmented – the street edge and privacy for the family space is achieved by a 2 meter high wall surrounding the *hosh*. This is a compound typology.

Fig. 4.11 Comparison between the morphology of Sudanese towns and villages and that of other Muslim cities.

Lee (1969: 37) explains how a variety of courtyard forms can be found right next to each other in some villages, where the Arab courtyards would have small rooms scattered around within it and the Nubian courtyard would have rooms lined with numerous connected rooms in a larger space. Both still apparently pertain to the compound typology; it is the location of rooms, the size of the courtyard and the relation of the rooms to each other that differs.

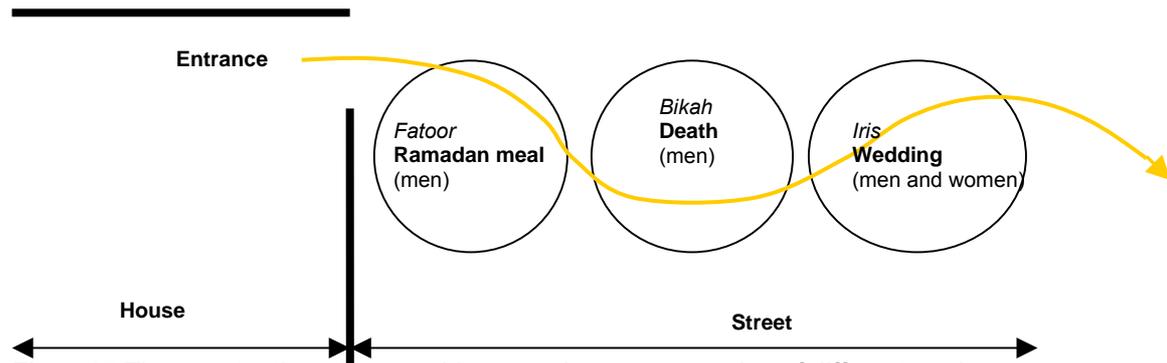


Fig. 4.12 The streets: the same outside space becomes a series of different settings.

Rapoport identifies the 'street' as a morphological unit and relates the different uses of streets to speed and spatial requirements (1990b: 298). He explains that, where streets are used mainly for walking (low speed), they have certain characteristics and are used differently. This unit, street, can thus be defined morphologically or as a behaviour 'setting' for particular activities (*ibid*).

The streets in the region under study, as behavioural settings, support Rapoport's hypothesis that there are certain characteristics (attributes of pedestrian streets) that are supportive of 'walking' (*ibid*, 303) (Fig. 4.6). As different settings are experienced in the same street at different times, this creates a degree of complexity, which Rapoport relates to the concept of Multiple Characteristics in defining the attributes of vernacular contexts (*ibid*, 287 and 296).

The above hypothesis identifies attributes that are found in this particular case study, such as 'high levels of enclosure' on pedestrian streets, but some of attributes that are not found in the region under study, such as rich texture and elaboration of detail (*ibid*, 284). The author relates this to the harsh temperatures and glare, which result in forms being more moulded, with lack of intricate detailing and dependence rather on massing and the play of shadows.⁷

4.8 SHAYKHS, VILLAGES, TOWNS AND TOMBS

The 'urban centre' is an important artefact. How it originates and develops can give valuable clues as to the attitudes of people to life and, ultimately, to how people inhabit space and the creation of place. This is researched eco-systemically by

⁷ These characteristics relate more to Rapoport's descriptions of streets designed for high-speed, rather than for walking. The comparisons are interesting and would make for a good topic for future research.

appreciating the Sudanese religious centre/urban centre within its complex, multi-faceted context of the northern riverain region.

The establishment of religious centres in Sudan, the nuclei for many urban centres, was greatly influenced by Sudanese Sufism. Spiritual life and loyalties affected urbanism processes and patterns of habitation. Some religious centres are used as examples to explain this. The qualities of these centres, now sacred sites of visitations, are identified. The relationship between the bearers of Islam to the country and the future teachers of Islam is recognised. It is concluded that there was a paradoxical relationship between the migrant Arabs and the sedentary Nubians on the banks of the Nile, that is, between nomadic lifestyles and urbanism.

It needs to be emphasised that other factors that influenced the development of urban centres such as trade, agriculture, military and political issues. But the context is considered to be unique in terms of the large number of centres that did develop as religious centres initially. It is also acknowledged that while an urban centre may have been initially a religious centre, there were probably a combination of reasons that led to the establishment of the religious centre in a particular location.

In many cases, the nucleus for a settlement is perceived to be a religious *shaykh*. Around the *shaykh's* religious school a village would develop, which systematically and gradually developed into a town. On his death, a *shaykh* would be buried in a *qubba*. This became a visitation site for the *shaykh's* followers in a town, which would by then have grown into an urban centre of significance. This is the pattern of Sudanese urbanism that is elaborated below.

4.8.1 Islam and Sufism

The establishment of the Funj Kingdom in 1504 was an event of great significance in the history of the Sudan. The *Ṭabaqat* by Ibn Dayf-Allah (1727-1809/10) written in 1753 (Hasan, 1992: 17-18), a biographical dictionary, is a major literary source of Sufi history. According to its author, the state of Islam when the Funj came to power was that of ignorance as there were no schools of learning (*'ilm*) or of the Quran. Karrar (1992, 16) explains that this is sometimes disputed as schools such as Halfayat al-Muluk and al-Sababi, in the present day area of Khartoum North, existed in the pre-Funj era. This means that there may have been a number of settlements,

initially established as religious centres, even before the 16th Century. Refer to Fig. 4.13 for location of places mentioned in the following text.

Before the transition to the Middle Eastern and North African pattern of organised Sufi brotherhoods, around 1780 (elaborated by Karrar, 1992: 20), Sufi practice was characterised by the pattern of individualistic *fuqara'* (holy men) typical of the Sudanic belt. This refers to the east-west strip spanning from the Red Sea to the West African Atlantic Coast. Individualistic *shaykhs* came to dominate daily life and were scattered through the countryside. This contrasted strongly with the highly centralised and bureaucratic authority of the Funj in Sennar, yet these systems co-existed. These decentralised, ancient *ṭariqas* (Sufi orders) were autonomous and each had their own *silsila* (chain of spiritual descent) as compared to the centralised, reformist brotherhoods of the early 19th Century.

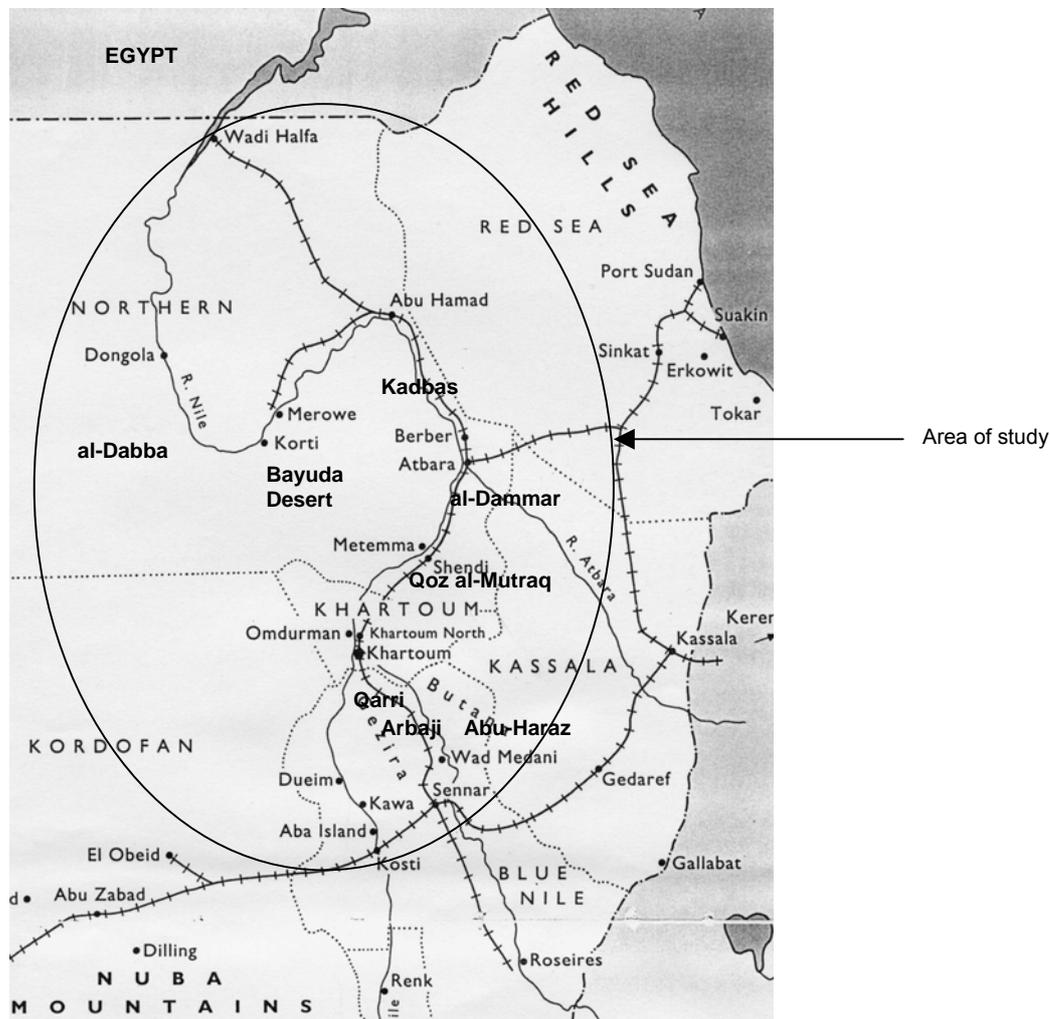
Loyalty to the *shaykh* and to the *ṭariqa* dominates Sudanese daily life even today. Many aspects contributed to this dependence on a shaykh. Political persecution by the Funj and the later Turkish rulers meant that people were disenfranchised and poor; the harsh natural environment and the daily struggle for survival were additional factors, as were as political instability and the resultant insecurity felt by the ordinary people. Consequential fatalism in peoples' attitudes meant dependence on the shaykhs and his miracles. These are well-researched aspects of Sudanese life, but spiritual life and loyalties have not been extensively explored in terms of how urban centres were initially located or how the Sudanese inhabit space.

4.8.2 Bearers of the new religion, Nile dwellers and teachers of Islam

According to Badri (1970: vi), the society that existed at the beginning of the 16th Century in the Nubian region comprised three heterogeneous groups: Christian Nubians had reverted to pre-Christian ritual, xenophobic 'pagan' Nilotics practiced traditional animistic beliefs and immigrants introduced vague Islamic beliefs. It is explained that Islamic theologians had to yield to the influence of debased Islam, as it was more adaptable to widespread working of miracles and use of ritual. Newcomers to the region were absorbed into the existing culture, despite the strong influences they brought. The assimilation between the cultures that resulted is described in Chapter 3.

The nomads had come to the region to escape authority and Mamluk power, which they resented, and to seek pasturage. The traders were seeking a free independent life – they formed small tribal groups and gained political dominance through the African matrilineal tradition of succession. Their codes of *'adah* and *'urf* still override the *Shari'a*, Islamic law (Badri, 1970: 7-8).

“The nomad of the Sudan regards the sedentary man as a toiler, eating only after severe labours, whereas he is a gentleman living on the income from his capital, i.e. his animals. In fact, one of the greatest misfortunes that can overcome a nomad is to become sedentary. The nomad Arab prefers his freedom to the confinement of the town, which soon corrupts the young and undermines the family structure.” (Verity, 1971: 25)



4.13 Places mentioned in the text: map of North East Sudan from Daly and Forbes (1994: 22-23) with additions by the author.

A symbiotic, sometimes contradictory relationship developed between the new arrivals and the original people of the region. This is the situation to which teachers of Islam during the Funj era, many of them non-Sudanese or half-Sudanese, had to

adapt. Sufi rituals became a hybrid mix of inherited Muslim, Christian and 'pagan' African ritual. Also, transient models, as opposed to those based on permanence, reflected not only nomadic practices of movement and temporality but also an attitude based on less concern for worldly possessions and wealth. Urbanisation and material wealth were despised. In fact, a well-known nomad curse is: "May God make you live in cities."

"The Bedu place great value on austerity and asceticism. The harder one's life the less one eats or drinks- and this is minimal. The harder one drives oneself the greater one's esteem. So things of luxury are usually scorned. One would rather sit on the ground than on a seat; one would rather sit upright than sprawl; one must give, not take. Generosity is paramount; one must share what food one has with anyone who is near..." (Verity 1971: 35)(The Bedu are nomadic tribes of Beja origin in the Red Sea Hills of the Sudan).

These sentiments are shared between the nomads and the Sufis. The Sudanese word *feki* refers to the local successors of the missionaries of the early Funj period. The word is a combination of *faqir* (poor) and *faqih* (someone erudite in Islamic legal matters and jurisprudence or *fiqh*.). This is defined as *rajul al-din al-warai'*, the man of religion (Gasim 1985: 869) – *warai'* means God-fearing, pious person. The combination of the two words not only expresses people's attitude to people learned in *'ilm*, but also the importance attributed to 'living simply', to the extent that these values are seen as one and the same.

The approach of the local *fekis* to religion was different to the approach of the original *shaykhs*; whose writings were elaborate religious studies. Sudanese *shaykhs* focussed on the ritualistic. Sudanese Sufism was superficial rather than intellectual or philosophical. To use Muhammad al-Hassan bin Muhammad 'Uthman al-Mirghani (d. 1869) as an example, his writings were short works of a devotional nature when compared to the writings of his father, Muhammad 'Uthman al-Mirghani (d. 1852), who was a Meccan *'alim* and a student of Ibn Idris. Thus, Muhammad al-Hassan is perceived as a miracle working holy man (Karrar, 1992: 87).

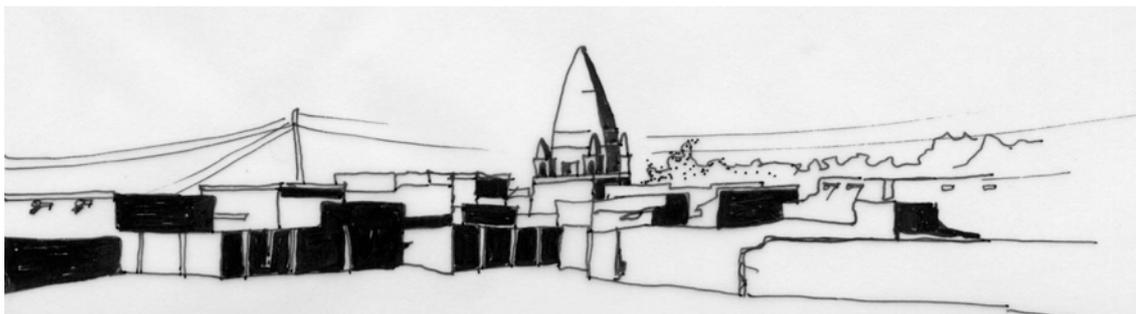
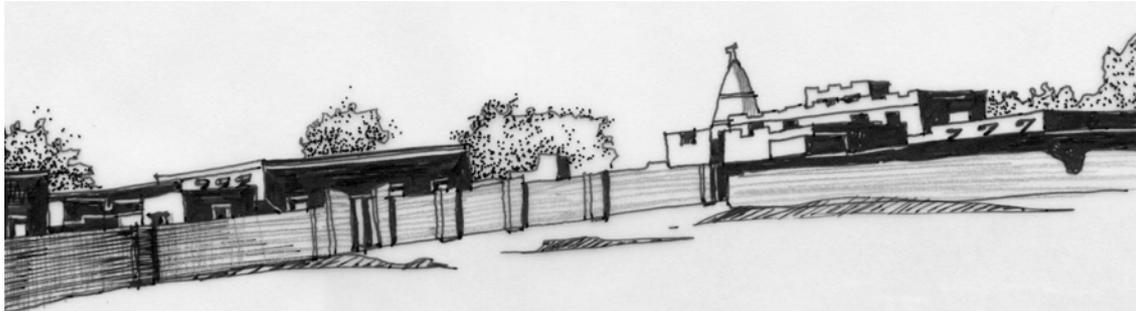
Despite the fact that the two modes of living, sedentary and nomadic, co-existed historically (refer to Meroitic domestic architecture mentioned above), after Islam, there was a bias towards urbanisation as the early Muslim teachers regarded this as a condition for religious learning. That is, they favoured the life of the Nubian riverain

dwellers to the lifestyle of the nomads. The city for the Muslim stands for the setting that permits people's interaction with God (Spahic, 2003: 153).

“To the Muslim, a town was a settlement in which his religious duties and social ideals could be completely fulfilled. Canon law permits performance of the obligatory communal prayer in the open air, and it does not prescribe for its validity a minimum of participants. The community prayer of the Friday noon service, however, may be held only in a fixed settlement with a permanent population, of whom at least forty legally responsible men must be present to make the ceremony valid. In the later period the consensus of the learned seems to have insisted that the Friday prayer should take place under a roof in a fully walled mosque.” (Grunebaum, 1955: 142).

Grunebaum further explains how these stipulations excluded the nomads from full participation in the rituals of his faith. Conflicts between sedentary and nomadic lifestyles are ancient in the history of the region and have been manifest more recently in history, such as the concerns that emerged among the nomadic Shukriyya when the traditionally sedentary Halfawi Nubians were relocated to the Butana region due to the construction of the Aswan dam (Sørbø, 1985: 136).

4.8.3 The Nuclei of Urban Centres: the Religious Centre



Figs. 4.14 and 4.15 Villages on the Khartoum-Shendi route sketched from photographs taken in January 2000 by the author.

Elleh uses Mazrui's concept of triple heritage in Africa to analyse African cities. In Khartoum, for example, Islam meets Africa within the structure of an

“...iron grid world of Western functional-spatial determinism that was based on the Union Jack.” This idea is probably most apparent because greater Khartoum is physically three cities. “No city in Africa wears the symbols of the cultural trilogy – traditional African Egypto-Nubian culture, Greco-Roman and later Western culture, and Islamic culture – more than Khartoum, the capital of the Republic of Sudan.” (Elleh, 1997: 154).

Elleh elaborates:

“In the Sudan pure and absolute Islam meets Africa proper. Khartoum is at the centre of several worlds, which also includes the iron grid world of Western functional-spatial determinism that was based on the Union Jack. The directions of the city plan are thus as Islamic as they are Britannic, and the union of African, European, and Islamic architectural vocabularies reinforces the triple heritage concept.” (1997: 158)

New centres, established as religious centres during the Funj era, were deliberately located where there was previously no settlement. This is one of the most unique features of these urban centres. In the case of Omdurman, there was a purposeful attempt to avoid settlement in Khartoum, as it was associated with the non-believers. Such attitudes have, in a number of cases, influenced decisions to move away from existing settlements. So the integration of the three forces that make up African cities was implemented in a reversed manner and very reluctantly. Islam, being seen as the main identity in the newly established centres, gradually became incorporated with more ancient and African traits. The western characteristics superimposed on the existing setting came later. The intention was to create an urban centre based purely on a Sudanese interpretation of the religion.

Many villages and towns were established as centres of trade on trade routes, and were sometimes far from the banks of the Niles. The eastern town of Geddarif was previously known as Suq Abu Sin, indicating its original function as a market. It was on the route linking Sennar with Suakin. Dueim, on the White Nile, was a centre of trade linking the riverain region with the west. Shendi was once a major terminus of caravan routes from the east of Sudan. Some *ṭariqa* shaykhs were very successful in existing trading towns.

Yet, the new religious centres of learning were mostly in the Gezira. Many *masids*, centres of a *shaykhs'* cults, are clustered around the Qarri and Arbaji areas (Badri, 1970: 130). Thus, the main source of income was agriculture and land played a central role in the economic and social organisation of people. The following centres are just examples of a pattern that dominated Sudanese urbanisation and many

other villages or towns could have been used as examples such as Abu Haraz or Wad Medani (Hill, 1970: 28). These examples were selected from a number of non-architectural sources that focussed on Sufi sects in the region. Their portrayal is simply to express how, in many cases, the reason behind the selection of a location for a town depended on the religious beliefs of a people.

Grunebaum (1955: 145) refers to towns that developed around a sanctuary, the hermitage or tomb of a saint, as spontaneous developments, as he comments that they evolved without systematic planning on the part of a governmental body, or even against the wishes of a ruler (where he refers to Shiite Kerbela), when compared to 'created' settlements. Spontaneous cities grow over a long period of time, but it is evident that created cities have to become spontaneous to flourish, as political power alone will not maintain them (Hourani and Stern, 1970: 9-10).

It will be seen below that many of these urban centres developed through systematic planning on the part of the *shaykhs*, but it is true that most of them were under limited governmental control. The Shaykh here may be considered as the founder through a deliberate act of creating an urban centre.⁸ It needs to be emphasised here that the following towns are mainly portrayed to show how they were initiated and where. There is not enough information available regarding a detailed study of their various morphologies.

4.8.3 i) al-Dammar

This town has a large weekly market for livestock to which the surrounding nomads, the Hadendawa, bring their camels to be sold. It is the centre of the Majadhib religious sect. The fact that the inhabitants mainly work in 'Atbara (a major town to the north, at the confluence of the 'Atbara and Nile rivers)(Badri, 1970: 18) indicates that its establishment was for religious reasons and a means of livelihood for its inhabitants had to be sought elsewhere.

⁸ It would have been interesting to be able to elaborate on the morphological characteristics of these urban centres and find out how the religious centre has influenced the town layout. This is seen to be an opportunity for future research, firstly descriptive and documentation and then interpretative. The placement of mosques and *qubbas* and street layouts is only well documented in Omdurman and this is discussed in the following sections.

According to Abd Allah al-Tayyib, as quoted by Badri (1970: 97), the 'College of Damir' started 400 years ago where the village of al-Shaadinab now stands, south of this present site of the al-Dammar town. The foundation of a college by Shaykh Hamad al-Majdhab al-Kabir (1693-1776) in al-Dammar started a new era in the tradition of learning, as it transferred the centre of learning from the already urbanised riverain towns to the countryside, and thus introduced *'ilm* to the nomads, to whom Hamad belonged. Yusuf Badri, partial to urban lifestyles, explains how the *'ulama* (religious scholars) contributed to the urbanisation process and how the first building to be erected was always the *masjid* (mosque):

"It was not natural that the Arabs should continue in such a state of stagnation, living all their lives in tents. Therefore the *'ulamā*' took the lead in attracting them to urban life. Two main factors had to be considered in deciding the nature of the attractions. First a suitable site had to be found where the nomads could find enough grazing for their herds. Secondly there had to be adequate provision for their social and cultural needs. To this end Hamad chose a strategic site, in the middle of the pastoral district, which lay at the conjunction of the 'Atbrāwī and the Nile, so that he could command both the trade route and the grazing lands. There on a plateau overlooking the 'Atbrāwī, observing that it was free from disease bearing insects and flies, he erected a simple *masjid* built of wood and thatch. In order to add to the popularity of his new sanctuary among the nomads, he called it Dammar, a word which was derived from their own technical terms of pastoralism, which according to their practice, is the mating period for cattle and sheep. He thus connected his chosen abode with an important event in the life cycle of the nomads." (1970: 90-91)

Al-Dammar is described as being, at the time of the original shaykh, a large settlement of 500 houses built with some uniformity in regular streets. Hamad developed the area to be more appealing for the nomads by digging wells, erecting a guesthouse and watering troughs. He then convinced the nomads to leave the young boys behind during *nushuq*, the nomad's outward journey from the river to the desert during the rainy season. The boys were taught at the newly erected *khalwa* (Quranic school) and, in the tradition of the *khalwa*, a fire was built around which students of the Quran would study.

To attract the nomads even more to the faith Hamad wrote a book of poems and set it to music, which he taught to some disciples who accompanied the *fareeqs* (nomad settlements) during *nushuq*. Badri believes that due to the nomad's fascination with linguistic ability, as well as other factors, al-Dammar grew into a large town (Badri, 1970: 91-93).

4.8.3 ii) Hillat Khojali

Another *shaykh* who attempted to initiate a process of urbanisation in a very deliberate and structured manner was Shaykh Khojali (d. 1743) (Karrar, 1992:37). His college, established at Hallfaya, in the present-day Khartoum North, contributed to the process of urbanisation in the area. His choice of site encouraged the development of an urban centre around it. With the rulers help, he acquired estates and annexed schools, hostels, guest rooms and large residential areas to the mosque.

Shaykh Khojali refused the traditional pattern of the *'ulama's* and wore magnificent clothes, soft shoes and good perfumes (Karrar, 1992: 135 and Badri, 1970: 115). He was also know for his concern for women and is praised for teaching them how to pray. This is interesting as the *masids* and mosques are predominantly the domains of men. Generally, Khojali's teachings and religious establishment survived because of his willingness to adapt to changes in society (Badri, 1970: 118).

4.8.3 iii) Wad Hassuna

Wad Hassuna was established by Shaykh Hassan wad (son of...) Hassuna who died in 1664-5 (Karrar, 1992:27). A grandson of a *Maghribi* immigrant from Tunisia he was celebrated for protecting the people against the rulers (Ibrahim, 1979: 152). Wad Hassuna is is inhabited by his descendants, known as al-Hussunab, who claim *sharafi* descent, that is, relatives to the Prophet Mohammad. Shaykh Hassan's Qadiri centre of learning was new in that it was deep in the country, away from the river, between the Red Sea and Sennar. The Qadiriyya is one of the ancient de-centralised *tariqas*, established by Abd al-Qadir al-Jilani (d. 1166) of Persian origin (Karrar, 1992: 23).

This village was a centre of hospitality. It was situated on the caravan route to Suakin and a large *hafir* (reservoir) and mud huts were built for wayfarers and guests. "Certain observers said that his guest houses were equal in number to those of the king at Sennar." (Badri, 1970: 141. He refers to Ibn Dayf Allah in the *Tabaqat*). In spite of his wealth it is said that he lived a very frugal life and his diet was mainly durra porridge and milk, his clothes were a short shirt and long trousers, he was often bareheaded and barefoot and he preferred the solitude of the countryside. He also wore a course dammur, rough hand-woven cotton cloth.

When he came to the village from the countryside, it is said, the shaykh was always greeted with much fanfare and drum beating. His stays at the village would be brief. He always had a *'alim* (religious scholar) with him as he had not studied *'ilm*. He would receive visitors in an orderly fashion in his *daywan* (room for receiving visitors). The last to be received were the patients who would pay for their treatment, sometimes in gold (Hasan, 1992: 139-140). This no doubt contributed to the sustenance of the village.

His *masid*, which contains his tomb, was built in 1669 and was an important sanctuary and his *hafir* a source of water but according to Badri, the village has grown little because the caravan route no longer passes through it and new roads were constructed further east. Social and economic change led to the development of new urban centres at the expense of the original *masids* (Badri, 1970: 144-145).

4.8.3 iv) al-Fijayja

Mohammad bin (son of) Sirhan al-'Awdi, *Sughayrun* (another Qadiri teacher), eldest son of Fatima bint (daughter of) Jabir, followed his maternal uncles the *Awlad Jabir*. He combined *ilm*, *'amal* (performance, action or practice), *fiqh* (Islamic law, jurisprudence) and Sufism and taught at the school of *Awlad Jabir*. *Awlad Jabir* were the most eminent religious teachers in the northern region during the second half of the sixteenth century:

“The four sons of Jabir were like four elements; each one had its own virtue. The most learned of them was Ibrahim, the most worthy Abd al-Rahman, the most pious Abd al-Rahim, and their sister, Fatima, was their equal in learning and faith.” (Karrar, 1992: 27).

Because of the envy of *Sughayrun*'s maternal cousins, he accepted the invitation of the Funj Sultan Badi I (1611-1616/7) and went to Dar al-Abwab near Shendi (Karrar, 1992: 28). According to Ibn Dayf Allah (Hasan, 1992: 225) he placed his *saqiyya* (water wheel) in a boat and left for the land of the *Shayqiyya*, a northern Sudanese riverain tribe, with his family and his sons: *Fa adkhal saqiatihī fi markab wa qanjar ila dar al Shayqiyya bi ahlihi wa awladihi*.

It is said that after hours of disagreement with his students, he was guided by the *Khadir* to settle in Qoz al-Mutraq, south of Shendi, which was then an area of bush. The name *Khadir* is not mentioned in the Quran, he is believed to be a helper of

Moses – many folktales revolve around his character. Settling there, he made a small clearing and al-Fijayja was granted to him by Sultan Badi and became one of the centres of religious and legal education in the northern Funj territories. After Sughayrun's death the school continued under his son. When the son died in 1675-6 "...his pupils were said to number about a thousand, most of whom became jurists and judges over a vast area that extended as far as Waḍai (Dar Ṣulyh) in modern Chad." (Karrar, 1992: 28).

Fija means 'open', 'move apart' or 'create space between'. It also means widen (Gasim, 1985: 841 and *lisān al-'arab*). The word implies a clearing, an identified space or a place. This is of interest as these centres were mostly established on land that had otherwise not been used or identified for settlement purposes. This reinforced the idea that the location of settlements or schools of learning were identified through divine guidance.

4.8.3 v) al-Fara'/al-Qubba

Al-Kabbashi established his own Qadiri branch (*fara'*) and travelled widely in the Gezira instructing people in both *fiqh* and Sufism. At Qarri, the former capital of the Abdallab, he settled in a large area of wasteland, *ghaba*. The bush was teeming with wild animals, which attacked the Abdallab livestock; they requested him to pray to God to drive them off. In return for his prayers, al-Kabbashi was granted the area, which came to be known as al-Fara' (literally meaning "the branch"). After his death the village was known as al-Qubba (the dome) after his domed tomb (Karrar, 1992: 32).

4.8.3 vi) Kadbas

Shaykh Ahmed Al Ja'ali established a village of Kadbas on the west bank of the Nile across from Berber. On '*Umra* (minor pilgrimage) he was instructed by the prophet Al Khadir to detach himself from worldly matters. On returning, Shaykh Ahmed entered into a seven-year retreat in a *ghar* (artificial cave built in imitation of the prophet who retreated to a cave for religious devotions) built at Kadbas. After he emerged he contacted all the well-known Sufis asking to be initiated. He was told that the one who will initiate him would come to him. A Persian mystic later came to Berber and initiated him. It is believed that he arrived there by divine guidance (Karrar, 1992: 34).

4.8.3 vii) Um Dubban

Shaykh 'Ubayd wad Badr met Al-Hassan al-Mirghani in Mecca who prophesised that Ubayd would establish a religious centre in a place where there is a 'tree with many flies'. The *khalwa* and Sufi centre at Um Dubban (literally 'mother of flies'), near Khartoum North is considered to be one of his miracles or *karamat*. Some believe that 'dubban' or flies actually refers to bees (Karrar, 1992: 80). The centre is now known as Um Dawanban (light that is revealed).

4.8.3 viii) al-Sanniyya

This village was established at the foot of Kassala Mountain, al-Taka in eastern Sudan, as a centre for the Khatmiyya *tariqa* of Mohammad al-Hassan bin Mohammad 'Uthman al-Mirghani. The village was later renamed al-Khatmiyya. It is interesting to note that this village attracted followers from all over Sudan (Karrar, 1992: 63 and 72). It is unclear if this created a new social dynamic or if it was merely a continuation of the old establishments. Looking at the economy of the village one could assume that it leaned to the latter as social hierarchies appear to resemble those of the slave establishments.

The economy of the village is also an indication of the economy of other villages set up initially as religious centres. Followers of the Khatmiyya showed loyalty to spiritual masters by granting shares (*shaqiqa*) in agricultural land or offering one or more palm trees. Some gave away sons and daughters to serve as attendants to the Mirghani family referred to as *Awlad al Bayt* and *Banat al Bayt* (literally 'the boys of the house' and 'the girls of the house'). The female *huwarat* offered to act as links between the female members of the Mirghani family and the female followers of the *Tariqa* (Karrar, 1992: 93).

Like Shaykh Khojali, al-Mirghani disliked the exaggerated dress and asceticism (*taqashuf*) of dervishes. So it is apparent that not all the *shaykhs* insisted on *taqashuf* like Shaykh wad Hassuna.

4.8.4 Descriptions of religious centres

The characteristics shared by all religious centres, around which urban centres developed, are elaborated below. Regardless of the size or the importance of the centre, it always had at its origins a *feki* and a *khalwa*. This section paints a verbal picture of how everyday life took place in these hubs of spiritual and social values.

Orthodox *'ilm* had its centres at the *khalwa*, an 'elementary school' conducted by one teacher, a *feki*, and could have a student population of several hundred. Its main purpose was to learn the Quran by heart and teaching was arduous. The *khalwa* was also a social centre and a guesthouse. The *feki* also visited the sick at home to recite from the Quran; he prepared amulets for protection from the evil eye and was given *bayad*, any form of gift or payment.



Fig. 4.16 Khalwa boy dipping a reed pen into ink for writing sections of the Quran on a *loh* (wooden board)(Photograph obtained from the Sudanese Embassy, Pretoria, 2000).

More *'ilm* was sought at the *masjid*, college, where a *'alim* was the teacher. These *masjids* played a large role in the formation of large villages, which became the nucleus for the future towns and cities of modern Sudan in the same way as the Sufi *masids*. Some *masjids* had a dual function where both *'ilm* and *tariqa* were observed. The centre of a saint's cult was the *masid*. Here the teacher was the *shaykh* of a *tariqa*. The *muridin* are the students of a *tariqa* discipline and they did not necessarily undergo literary tests as the *masjid* students did. Their tests were humility, obedience and worldly renunciation, the Sufi tests. This had very little in common with scholarly or intellectual Sufism.



Fig. 4.17 Dervishes in a procession in Khartoum (Photograph obtained from the Sudanese Embassy, Pretoria, 2000).

The religious centre was usually a large walled *hosh* (courtyard) that contained the *masjid*, *qubba*, guesthouses and the 'alim's private quarters (Fig. 4.18). Typical of Muslim spatial interpretation, any place where a person prays, or people gather for worship, acquires a sacred quality. Sanctity is not necessarily embedded in the built form. The *hosh* was where most functions took place and the *halaqa*, circle (of worshipers), the most sacred construct of the space. The village grew around these forming an urban centre for trade and cultivation with the *feki*, 'alim or *shaykh* as the prime mover of the village, which often bore his name (Badri, 1972: 33-44).

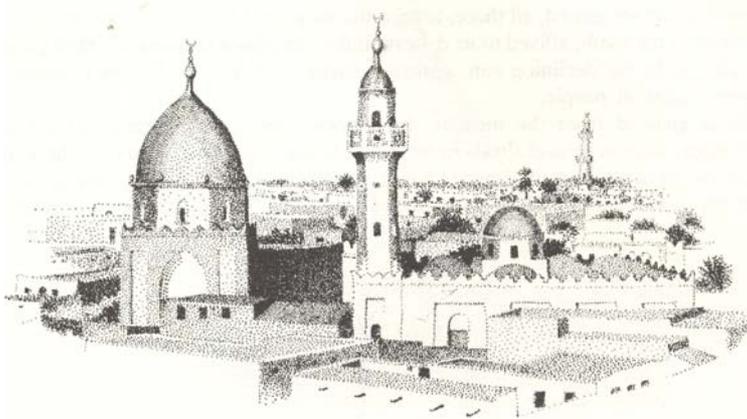


Fig. 4.18 “The domed *gubba* and minaret of Sheikh Gharieb Allah el Tayer” (Potter, 1984: 127)(*Tayer* literally means ‘the one who flies’. *Shaykh* Gharieb Allah was believed to be able to fly).

It is only *fekis* who are honoured by burial in a *qubba* and this maintains their status at the top of the social pyramid. There are some exceptions, the religious leaders buried in *Qubbas* in Abu Haraz near Khartoum are also political leaders (personal communication Omer S. Osman, 2003) but these are exceptions and not the norm. As mentioned elsewhere, these centres of learning are male dominated. Women mainly visit the *qubbas* for offerings and blessings, *baraka*, referred to as *ziyara*, and only rarely for 'ilm.⁹

⁹ Rapoport explains, of the southern Sinai, how: “the holy tomb is a very precise image of territorial claims on the land and of the Bedouin’s conception of territory as embodied in the group. As such it clearly structures communication. [The] two functions of tombs or shrines of saints – of marking ownership and structuring interaction and communication – were also found among the Nubian along the Nile before their relocation in New Nubia.” (1982: 191). To what extent these territorial claims influenced the location of various religious centres in the region of study still has to be studied. He also explains how different groups of people used tombs of saints to identify groups of people who also had different house and village forms (ibid. 141-142). The author could not find any information on these aspects and they will have to be covered in future research.



Fig. 4.19 Qubba of Shaykh Idris wad Arbab. Sketch by author from Crawford (1953: 73).

There are no doubt variations on this pattern of urbanisation. A future study could perhaps compare between these towns mentioned here, where the major reason for their establishment was religious (albeit other secondary reasons), with towns like Berber, Shendi or Al-Mattama (across the river from Shendi).¹⁰ The location of the different elements of a town or village is important to study in the future. To what extent the market, the mosque, *khalwa* or *qubba* complex affect the morphology of these urban centres is unclear. Bjorkelo (1984: 97) describes linear, cluster and nucleated villages. He also states that settlement morphology was mainly influenced by kinship, geography and economy (*ibid*).

“Shendi and its sister-town al-Matamma are located in a relatively fertile and well-populated area. Shendi could therefore have grown out of an earlier village; in fact, Shendi retained many ‘village’ features. However, its geographical position as a meeting-point of caravans, at least during more peaceful periods, as well as its function as the seat of a local king, were factors which turned the town into a major trading centre.” (Bjorkelo, 1989: 16)

One variation on the pattern of urbanisation listed above is Omdurman. It is perhaps the most interesting of town to research simply because of its magnitude. In other African cities of this size one would find a European style centre as a nucleus with the surroundings acquiring local characteristics. Omdurman’s initial centre is the *qubba* complex, and it was established initially as a military camp. This is further explained below.

¹⁰ Thank you to Bjorkelo for the suggestions.

4.9 OMDURMAN

Despite the military character of the Mahdiyya, and the initial establishment of Omdurman, their capital, as a military camp, it still follows in the pattern of Sudanese urbanisation. A town developed around the tomb of a shaykh, the Mahdi, and it was quickly populated by his followers. The first settlement in the area was established by Shaykh Hamad wad Umm Maryum (ca. 1646-1730) who moved there with his followers from Tuti Island and built a *khalwa* (Kramer, 1991: 44 and Ibn Dayf Allah in the *Tabaqat*). Kramer (1991: 44) explains that: “This would accord with a familiar pattern in Sudanese history, namely the founding of a settlement based on the family and retinue of a teacher or holyman, examples of which abound.”

Later, in the 1880s, the Mahdi, the divinely guided, was believed to have appeared to establish justice. He dedicated his efforts and those of his followers to ridding the country of its Turkish invaders. In late 1884 the Mahdi arrived at Daym Abu Si'd, south of Omdurman, to support the siege of Khartoum. General Gordon (Gordon was a European appointed by Khedive of Egypt Ismail (1863-79) as administrator in Sudan. He was the last Turkish governor (<http://www.sudan-embassy.co.uk/infobook/history.php>) and had built a fortress in Omdurman, in 1884, to guard the western flank of Khartoum. Its commandant was asked to surrender, which it did, and three weeks later in January 1885 Khartoum fell to the Mahdi, Gordon was killed, and Omdurman started to flourish.

The Mahdi's intention was not to establish a city but to have a large open space to assemble his troops for jihad. As a result Omdurman became a campsite and al-Mahdi remained at Daym Abu Si'd while his followers stayed in Khartoum. When visiting his campsite, in June 1885, he died and was buried in the future location of Omdurman.

His successor, al-Khalifa 'Abdullah, chose Omdurman as his capital, referred to as *buq'at al-mahdi*, the place of the Mahdi. The Mahdi had previously opposed settling in the capital of the Turks, as he had opposed living in el-Obayyid after its capture and referred to the following *aya* from Surat Ibrahim:

“And you dwelt in the dwelling-places of those who wronged themselves, and it became clear to you how We did with them, and how We struck similitudes for you.

They devised their devising, and their devising is known to God, though their devising were such as to remove mountains.” (Kramer, 1991: 46-47).

Thus, the domain of the unbelievers, Khartoum, was rejected. Omdurman was also close to the site of Karari, regarded as the site of the eventual and decisive clash between the believers and the infidels. It also lay at trade routes to the west and had a natural harbour. The strategic depth of the western hinterland was beneficial for security, as the Ta’aysha clans, to which the Khalifa could retreat, inhabited it. For all these reasons Omdurman quickly grew into a centre for the Mahdiyya.

Calls to immigrate to Omdurman by the Khalifa ‘Abdullah aimed to centralise the riverain Sudanese and the Egyptians who possessed the administrative skills crucial to the Mahdiyya. People moved and carried with them wood and other materials from their Khartoum homes. The depopulation of Khartoum was firmly implemented in September 1886. Khartoum was plundered and lay in ruins. Many Sudanese poured in to pledge their oath of allegiance to the Khalifa and the town grew. The Ta’aysha and Baqqara tribes immigrated to Omdurman in 1889, contributing to the famine during that year. The new tribes also shifted the political and social balance of the city and this led to institutional developments.

Omdurman’s initial character was military with Gordon’s fortress serving as the garrison for the *jihadiyya* or professional soldiers. There was an open buffer zone between this and the general population by the orders of the Khalifa. The settlement patterns of the city reveal a dynamic relationship between the Mahdist government policy, traditional practices and social interaction. In the centre was the mosque and the Mahdi’s grave and the homes of the major families. The *suq* (market) was at the edge of the town, on the desert side, because the economy depended on cattle and camels.

Till today the city is divided into sections inherited from that era. Bayt al-Mal was the previous treasury and Bayt al-Aman was the weapons depot. The Masalama was a quarter for former Christians and Jews who converted during the Mahdist uprising. They lived by the *suq* area and engaged in trade. The Ta’aysha westerners inhabited the south of the city and in the north and north western sectors people were riverain in origin and mercantile by nature. Egyptians, former employees of the Turkiyya regime who now served the Mahdist state, lived near Bayt al-Mal on the river. There

was a great mix of tribes and a growing population; thus, structural changes were eminent (This spatial construct is derived from the descriptions of Omdurman obtained from Kramer, 1991: 45-49 and 51-59).

Kramer (1991) explains that the dynamics of social relations allowed for more complex and fluid settlement patterns than these divisions suggest. The divisions, known as *fareeqs*, a military term, did not necessarily mean social rifts but was a means of organisation. At times of threat, the Khalifa shifted people around and removed, from around his home, people with questionable loyalty to increase space for his *mulazimin*, personal bodyguards (Kramer, 1991: 200 and 202).

In 1888 the re organisation of the *suq* and the building of the Mahdi's tomb took place. The entire population, tribe-by-tribe and district-by-district, shared the labour as it was claimed that all would, thereby, gain entrance to heaven. The tomb became the religious and ideological symbol of the city (Kramer, 1991: 59).

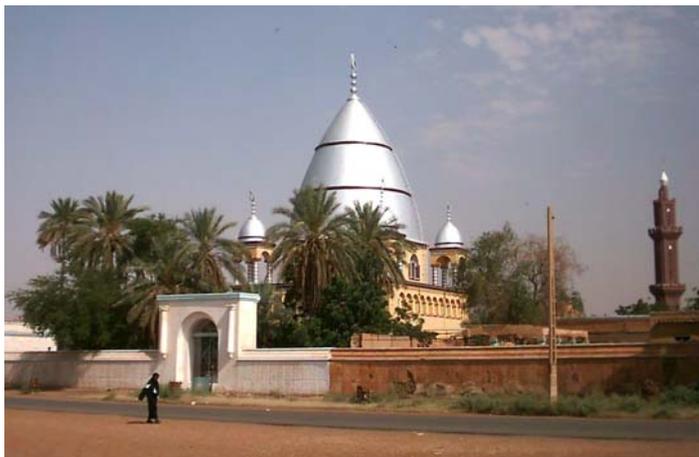


Fig. 4.20 Mahdi's Tomb, Omdurman (Photograph by O. S. Osman, 2003).

There was a critical period of political upheaval during 1889-91, after which the Khalifa ruled as a full autocratic sovereign. He attempted to express his power through buildings and large public work projects, the largest being a stone wall enclosing the administrative quarter of the city. The wall became a barrier between the Khalifa and his people and he then rarely ventured out to the people sending others to officiate the parades and the prayers. Separate mud structures were added for the Khalifa's *mulazimin*.



Fig. 4.21 The Khalifa House (Photographed by O.S. Osman, 2003).

Around 1894 Omdurman again took on the character of a military camp with weapons distributed to the people and an increase in the mulazimin, roads were widened, curfews enforced and all coffee shops closed so stories of the victories of foreign invaders could not be exchanged (Kramer, 1991: 62-63). The British now also rallied for the support of the invasion of Sudan to free it from its oppressive rulers. In 1896 major defensive measures began in the city and more troops and all food produced in the rest of the country was sent to Omdurman. The British started the construction of the railway to bring troops deeper into the country and the Mahdist state came to an end in September 1898, when the Ansar, followers of the Mahdi, attacked General Kitchener's troops at Karrari. (Kitchener was the leader of the Anglo-Egyptian invasion in the Sudan between 1896 and 1898)(<http://www.sudan-embassy.co.uk/infobook/history.php>). There were 11,000 casualties, the city was bombarded and the administrative capital transferred back to Khartoum.



Fig. 4.22 The Qubba viewed from the roof of the Khalifa House, showing part of the original dome that was destroyed by the British in 1898 (Photograph by O.S. Osman, 2003).

The history of the development Omdurman is representative of urbanisation in other parts of the country, but at a larger scale and with a more profound influence symbolically. In this case, the *shaykh*, the prime motivator, was an important figure for all Sudanese through his liberation efforts. The identification of a place for

settlement, the development of this settlement around the burial place of a shaykh and the symbolic significance of the city as related to religious beliefs are all factors that indicate that Omdurman was typical of the unique pattern of Sudanese urbanisation.

The difference in the magnitude of the urban manifestation of the values of a people are apparent in that, for most Sudanese, Omdurman still contains the holiness, *baraka*, of the Mahdi and his family (more so for the *ansar* – a strong political movement in the country till today). It is now considered the national capital, the symbol of the values of the people, while Khartoum is the administrative capital. Other villages and towns that developed around the burial places of various *shaykhs* would, by comparison, have significance for a limited number of people who are followers of that particular *shaykh*.

4.9.1 The morphology of Omdurman compared to the Medina Typology

Elleh (1997: 336) explains that African cities influenced by Islam have various shared characteristics. A comparison between Omdurman and other African cities is attempted in Table 4.3. The differences between the town layouts of Omdurman and al-Fashir in the Western Sudan are striking in Figs. 4.24 and 4.25 (Daly and Forbes, 1994). It is thus noted that while the two towns are both examples of Muslim contexts influenced by Islam, it does not mean that this interaction will necessarily produce the same layout. A map of Omdurman during the Mahdiyya is constructed, in Fig. 4.23, from fragmented sketches of plans of the city found in Abu Salim (1991: 214 and 215).

The Arab geographer Yaqt (d. 1229) identifies two indispensable characteristics of a town: a *jami'* (Friday service mosque) and a permanent market (in Grunebaum 1955: 141). A Muslim town, when compared to a classical town, does not include gymnasiums and theatres. These functions are compensated for by the social and educational aspects of a mosque, and later, from the 11th Century, by the institutions for legal and religious learning (Grunebaum 1955: 141). The *jami'* according to Grunebaum (1955:145) is placed along the main thoroughfare, or the crossing of the two main thoroughfares, which is marked by a square as is the case in Omdurman. The *jami'* is the political and the religious centre, with the house of the ruler next to it.

It is also the intellectual centre of the town (Grunebaum, 1955: 146). These are the characteristics of the city of Omdurman till the present day.

African cities influenced by Islam	Omdurman from the Mahdiyya to present
Medieval in character ¹¹	Medieval in character – in terms of the planning of the city
Compact labyrinth dwellings	Compact labyrinth dwellings
High population density	High population density in comparison to other cities, historically and today
Defence structure wall or ditch	Defence structure wall constructed during the Mahdiyya
Uniformity of building height	Uniformity of building height
Large civic buildings, mosque, etc. that break the uniformity	Large civic buildings, mosque, khalifa's house, Mahdi's Qubba, Bayt al-Mal, Bayt al-Aman, etc. that break the uniformity of the city and provide focal points and nodes
Square near the head person residence	Square near the khalifa's house where the complex contains the focal points of the city and where official functions are held
Major roads leading up to that square	Major roads leading up to that square evident from photographs, almost radiating out from the centre
Fully utilised public and semi public spaces	This applies in most Sudanese towns

Table 4.3 Comparison between Omdurman and other African cities influenced by Islam.

¹¹ Hourani (1970: 12-13) explain how, what is usually called and Islamic city today, was actually the interaction of Muslim culture superimposed on the existing structures of Greco-Roman cities. Because of the gradual encroachment of the shops and dwellings onto the broad avenues, the cities took up their current form. This is an interesting point but it does not explain the same characteristics of the cities where there were no previous Greco-Roman establishment. Here the term medieval is used to denote irregular and narrow streets, and a centrally located focal point. The morphology of Omdurman coincides in very interesting ways with the listed descriptions of the common characteristics of Muslim cities by Hourani (1970: 20-24) and also descriptions of Baghdad by El-Ali (1970: 99-100).

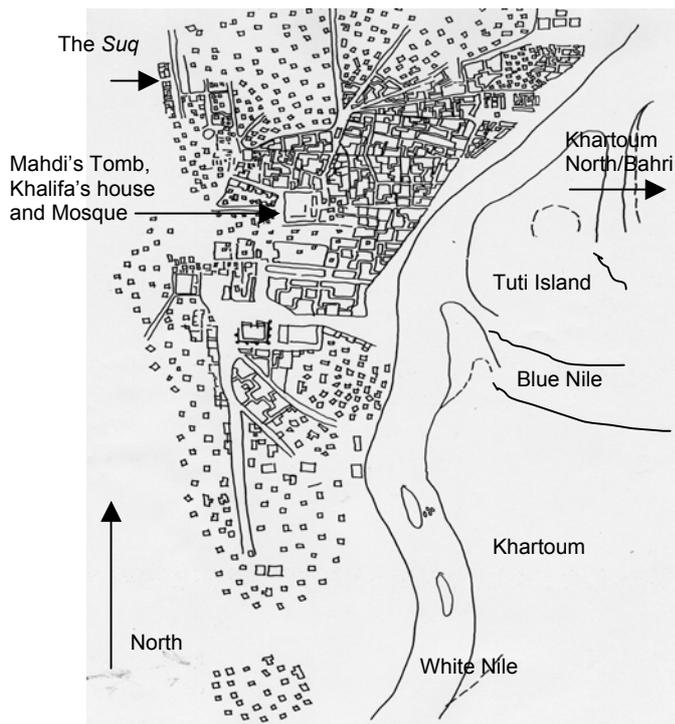


Fig. 4.23 Morphology of the city of Omdurman during the Mahdiyya (Re-drawn by author from maps in Abu Salim (1991: 214 and 215)



Fig. 4.24 Aerial photograph of Omdurman taken around 1930 (Daly and Forbes, 1994: 67).



Fig. 4.25 Aerial photograph of al Fashir, capital of Darfur in the Western Sudan, taken in 1916 (Daly et al, 1994: 139).

4.10 SUMMARY AND CONCLUSIONS

The problem statement of this dissertation has been articulated through the study of selected artefacts. Some distinguishing factors have emerged and these are summarised below.

Many spatial and physical manifestations of the culture are perceived to be extensions of concepts relating to the body and to gender differentiation. The most spatially expressed factor is femininity being internally focussed and masculinity being externally focussed. As with patterns of space, clothing is a powerful tool of social control. Power structures are maintained through dress forms related to certain points in a person's life. Symbolic aspects of dress form reinforce concepts of masculinity and femininity. Some may see this as reinforcing male supremacy and perpetuating women's subordination and seclusion. Women's subordination is perhaps a reality, as in many contexts, but this aspect needs to be seen contextually to avoid imposing a Western gaze on a different social system.

Both house and dress forms were found to be modes of expression that reinforce gender differentiation and maintain social structures. Separation of each house into male/female domains meant that women had a lot of freedom of movement in the community. Thus, a woman's home could be seen as all women's domains in a village. At the domestic level, barriers between male/female domains are visual or social rather than physical. Many times the distinction between male and female realms dissolves.

Similar to building forms, conformity seems to be the norm in dress forms. For example, identity is sometimes expressed as *shilookh*, but this is always group identity and rarely individual identity. Expressing individuality is taboo. Certain clothes are also associated with political figures and this maintains their status regardless of the house type. In the context under study, the physical house does not necessarily define respect or standing.

Different materials and techniques associated with fabric production have inherent symbolism. What is accepted or rejected or revered depends on many factors, including what is encouraged by the *shaykh* of a *tariqa* for example. It is obvious that the roughness of *dammur* is very respected, as well as the patched clothing of the dervishes, *al-mubarqaa'*, expressing simple lifestyles and lack of concern for wealth.

While the idea of social differentiation through dress form has persisted through history, the form of clothing has evolved. Present day Sudanese clothing is a result of a large mixture of external influences. It is also apparent that the present-day accepted forms of Sudanese dress are actually quite recent inventions and they are still being transformed through political pressure. The loss or undermining of local tradition is a concern.

Personal space and interacting with spaces depends on the cultural traits of a people. As a Muslim culture, domains are identified mainly as male or female. Yet, it is elaborated that in the context of study physical expression of segregation is more relaxed since clothing restrictions compensate for the apparent spatial freedom. Freedom of movement within the home and at the level of the community is defined by the degree of cover of the body. The *tob*, for men and women, is a mobile shelter.

Women are evidently under more pressure of conform to dress patterns that maintain the segregation required by culture and religion.

In the context of study, it is believed that physical appearance is strongly linked to mental state. The interconnectedness of forms of dress, beautification techniques, social ritual and linguistic terms is noted. All appear to serve similar purposes in different forms: gender differentiation and separation, mental health, physical healing and keeping evil spirits at bay. *Satr* is perhaps the most expressive term as it is at the root of the meanings of many words relating to well-being, protection and social acceptance. It refers, not only, to physical cover, but also to protection from the evil eye and from the eyes of others who may envy you. It is protection bestowed on one by God as in: the protector is God, *al-satar Allah*. It refers to words for both clothing and physical shelter.

The other important feature highlighted by the inquiry, is the transient patterns of habitation that emerged at both the scale of the village and the smaller scale of the home. The nomadic backgrounds of the inhabitants, as well as Sufi beliefs, have influenced people's approach to life in which the physical artefact is often despised. Fewer possessions mean that within the house activities are very mobile and move between inside and outside depending on the time of the day, the season or the social rites being performed.

The idea of comfort in space finds specific expression in the study area. In a Muslim culture, separation needs to be maintained between male and female. This separation may be in the form of mere 'distance', or in the form of artefacts, such as clothes or walls. Expression of that separation may be in dress forms, rituals or cosmetics. These may be more important than built form or space articulation. Body images, extended to clothing systems, further extended to architecture or building systems, support social functions.

A general pattern is identified in the initial establishment of centres of religious learning. Many times the identification/selection of a location is based on a vision or by supernatural guidance. This is reflected in the names attributed to the locations. Urbanism is considered a condition for teaching *'ilm* and Sufism to the people. This conflicted with the nomad's way of life, which the Arabs greatly valued. Some

considered the sedentary living of the original inhabitants to be superior. This is some kind of paradox. The Arab nomads who introduced Islam to the Sudan were later confronted with the attitude of the Sufi *Shaykhs* who believed that urbanism is a condition for *'ilm*.

Each urban centre had a masjid, masjid, a khalwa and guesthouses. Aspects of urban living were introduced. Later the *shaykh's* dome would be built there and it would become an area of visitation. The urban centre would develop around these. The religious centres were mainly situated on land suitable for cultivation. Some centres were situated on then existing trade routes, which became redundant after the construction of modern roads and colonial imperatives.

While some *tariqa shaykh's* encouraged *taqashuf* or a frugal approach to life, some rejected that. *Shaykhs* acquired much wealth from gifts and payments in crops, gold or even people as servants but mostly a *shaykh* was more revered if he lived very simply. Generally, the adopted lifestyle of the *shaykh* and his followers is seen as a continuation of previous lifestyles. Even *shaykhs* of the centralised brotherhoods became assimilated to Sudanese Islam to a great degree.

Previous studies on the northern Sudan have focussed on specific areas or towns or buildings, but these have largely been descriptive, as opposed to being interpretative. By looking at the characteristics of the region from a distance, by stepping out of the conventional boundaries of one discipline, a more complex picture is drawn. It is concluded that spatial mappings of social themes are relatively unambiguous and that non-traditional symbols and practices are reconciled with the traditional in a never-ending symbiotic process. This skill has been important for the original inhabitants of the region as, due to the strategic location, they have always had to contend with new visitors, as peaceful migrants or invaders.

Thus the set problem has been addressed through the study of the tangible culture and exposure of aspects of order underlying the structuring of place. The recurring themes identified in the previous chapter have been elaborated. Social conscience, religion and ethics play a major role in space appropriation from the level of the body to the level of the urban centre or city. Elaborate social interaction systems have a profound influence on the day-to-day activities of people yet these are not always

easily seen physically. Power relations control social interaction and thus space organisation. Slave trade, racism and political power established status hierarchies but still have to be further investigated, preferably using case studies. Trade routes determined where towns were located and the influences that were brought into a region. The harshness of the environment and the poor economy raised the status of the religious leader and created elaborate social systems as a survival mechanism. Sudanese Sufism influences levels of authority, thus the influence of *shaykhs* and where they came from. The *shaykh's* cult generated a unique form of Sudanese urbanisation.

CHAPTER 5: MAKING VISIBLE THE INVISIBLE: THE INTANGIBLE CONSTRUCT

5.1 SUB PROBLEM 4

Relevant intangible artefacts of the culture of the northern riverain Sudan need to be identified and analysed to enable further reflection on the meanings behind certain physical and spatial manifestations of that same culture.

5.2 HYPOTHESIS 4

Careful and purposeful selection and analysis of relevant intangible artefacts can articulate the hidden characteristics of the built culture of the northern riverain Sudan region and elaborate on the themes that guide this study.

5.3 OUTLINE OF CHAPTER 5

This chapter sets out to investigate some of the intangible phenomena that have been exposed through the study of physical artefacts in the previous chapter. Underlying values and belief systems were found to be crucial determining factors when trying to understand the spatial and physical set-up in the region.

A construction of the meaning of this aspect is firstly attempted by understanding socio-economic systems and patterns of interaction. Thereafter, corresponding ritualistic practices are investigated as well as attitudes to art and artefacts/knowledge and creativity. An endeavour to decipher social attitudes evident in the literature of people from the region is also attempted.

Subsequently, themes of the intangible culture of the region are articulated, referring to relevant theory and anthropological writings. The culture as 'text' is broken down into its components and the intangible 'world' of the northern Sudanese riverain peoples is articulated into categories. Clues to these are detected in writings and traditional sayings of the region.

As discussed in Chapter 2, within the idea of architecture as language, architecture necessarily reflects societal meanings. The link between architecture, society and language, is therefore addressed critically.

5.4 THE CONSTRUCTION OF THE MEANING OF A PHENOMENON

A consistent phenomenon that has become evident through the study of artefacts in the previous chapter is that underlying values and belief systems have a major role to play in determining the spatial and physical set-up of the region – that is, place-making activities that reflect people’s intervention with the environment. This section of the chapter attempts to break this phenomenon down into its components and to explore their meaning.

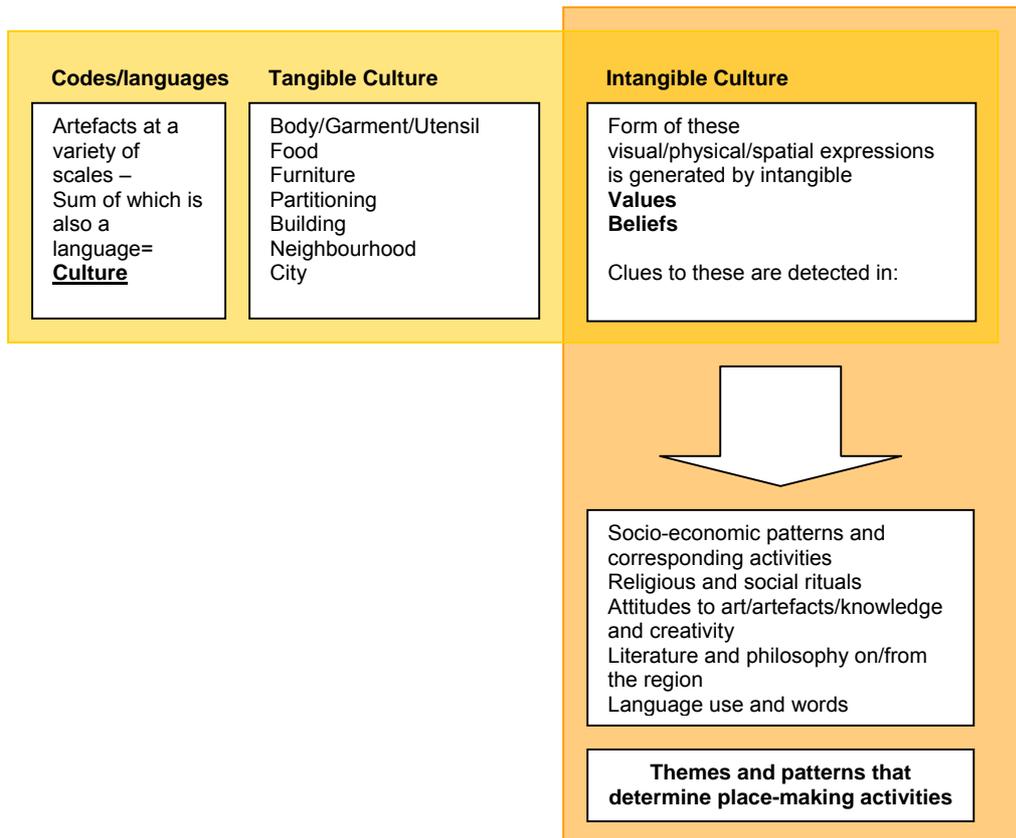


Table 5.1 Tangible and intangible culture: Construct of aspects of culture relevant to the context, explored through various themes and patterns.

Table 5.1 above illustrates the starting point of an investigation into the nature and the meaning of the stated phenomenon. Subsystems of a wider cultural realm of the region are articulated. The architectural categories explained in Chapter 2, are further elaborated. The investigation is initiated by referring to Habraken (1998), who explains the environment in terms of levels of intervention, systems of creation and agents of control over each level. These levels of intervention progress in scale from the body to the settlement or city level. These levels vary in control from private to public.

The physical form of these expressions and the territorial (place) agreements are based on cultural aspects – understanding negotiated by all the parties involved in

the set-up of a community. Power forces of dominance and dependence no doubt play a role in maintaining equilibrium in the social structure.

Analysis of Table 5.1 will be continued in section 5.5 when the variable and the invariables of the themes and patterns of this culture will be investigated in terms of resultant place-making activities.

5.5 SOCIAL SYSTEMS

Patterns of interaction are what identify the community as a unit through their adopted activities, schedules and routines. Excessive social activities originate in values that have become an identifying feature of the Northern Sudanese people. The same symbolic meaning is experienced in these various activities and this is what makes up the community's culture (Vagenes, 1998: 152).

5.5.1 The *Fareeq* community network

A community has been defined as the daily network of face-to-face interaction. Most networks of interaction between people are based on their *fareeq* or their neighbourhood. A *fareeq* will also have ties with other *fareeqs*. This interaction implies frequent visits and assistance in the form of finances, food and most of the time a helping hand in ceremonial occasions. *Fareeq* is an Arabic term describing a corporate unit of nomadic groups, two to four settlements headed by a *shaykh* (Kenyon, 1991: 21). The term *shaykh* is also used to denote a leader and not necessarily a religious man. *Fareeq* people derive their identity from the group corporate identity "a powerful impact on the everyday lives of its members and can exert considerable pressure on people to conform to social norms." (Ferraro, 1998: 249).

Fareeqs constitute a *hilla* or village. "Social and economic life found its form and substance in the village, where neighbours were also most often relatives." (Bjørkelo, 1989: 45). The demarcation of the *fareeq* is strong in peoples' consciousness and is reflected in their patterns of interaction, but it is not necessarily apparent in the settlement layout. People from different *fareeqs* may be neighbours.

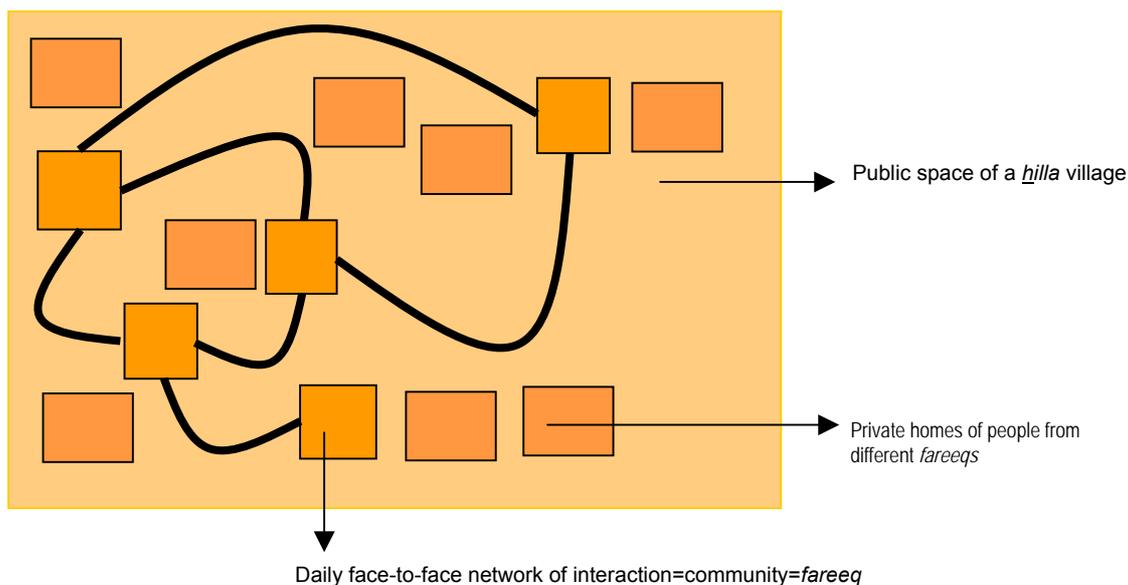


Fig 5.1 The *Fareeq* within a village setting.

As seen in the previous chapter women are involved in *mujamalat* (socialising) as opposed to the *wajibat* (duties) of men. Never-ending social obligations dominate people's lives. The nature of social structure represents the primary influence on the organizational configuration of domestic space at community level and the individual house.

A woman is perceived as *haneena* if she maintains networks with her *fareeq*:

“These networks are individual and female-oriented. They are maintained by women visiting assiduously and they are activated by the sort of social occasions that demand a great deal of assistance from other women: life crisis such as birth, circumcisions, engagements, marriages, funerals, thanksgivings, or karamat of varying sorts. Women's input is in terms of both personal services and financial help and is often totally independent of the men in their families.” (Kenyon, 1991: 21)

The above refers to the functioning of a village but can be used to explain contacts between families in Khartoum, or other urban centres, and their interaction with their village of origin. Tangible ways of expressing loyalty to the family of origin can be seen in visits and gifts to the village and also in guests who come to the city and have to be entertained (Banaga, 1987: 100-101). It is sometimes difficult to identify the nuclear family in this set-up.

5.5.2 The nuclear family

It is extremely difficult to differentiate between public and private – to identify where a family's communal life ends and private life begins. A nuclear family is identifiable in most households but their life is elaborately intertwined with day-to-day activities and energies of the *fareeq*. As seen in the previous chapter, the distinction between one

family home and the other sometimes dissolves and is not visually evident in village morphology. This is a reflection of daily patterns of interaction and inter-dependence. Close proximity and functional connection suggest the presence of broader, kin-based residential groups, while single discrete and well-defined enclosures of modest size indicate single-family residential patterns (Kent, 1990: 166). Physically, in terms of the morphology of a village, the latter is evident. Yet, in terms of the daily functioning of a village, activities cross the physical barriers and blur them.

5.5.3 Segregation of the sexes

The dual social world in the Middle East where men are progressive and liberal and women are conservative and inward focused also applies to the riverain region (Kronenberg, 1987: 392). This wider duality also creates a duality within each individual – complying with the standards of the clan as opposed to self-realisation. For example, a woman's status remains firmly anchored in the female sphere regardless of her education (Kronenberg, 1987: 392). 'Progressive' males must comply with 'un-progressive' attitudes within the family or clan.

This segregation between the sexes is expressed in many forms, few of which are physical. Food preparation, for example, takes up a large portion of the day for a woman. A man's role is to provide the food through working outside the home. The sequence of eating is as follows: first the men, then the women and finally children. This is achieved with a circulating tray – a large one that can carry many plates – a mobile dining table.

As seen in the previous chapter, it is difficult to strictly differentiate between men and women domains within the house, especially as the woman has a degree of freedom in terms of movement (this has been linked to dress form allowing woman more freedom) and social practice that means that she is within her domain in all the women zones of the houses included in her social network.

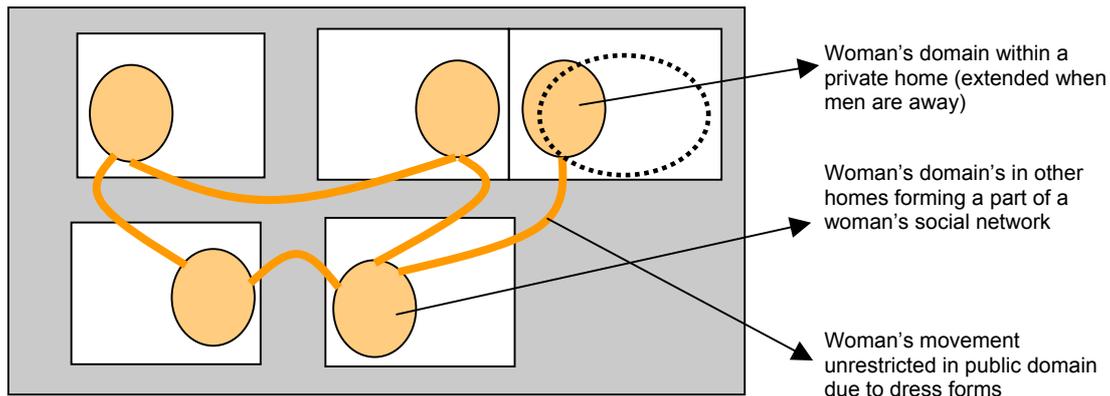


Fig. 5.2 The movement patterns of women in a neighbourhood.

5.5.4 Personal appearance as a form of gender differentiation

Lack of strict physical segregation is compensated for by strict gender differentiation. This is apparent in dress forms, as mentioned above and in the previous chapter, in cosmetics and in separate rites of passage. In terms of cosmetics and beautification techniques, women spend a great deal of their time in this pursuit. This applies to all the economic groups. "The beauty they pursue lies not in the cultivation of arts nor in the creation of works of art; they are less concerned with beauty around them than in creating beauty in and about their personal selves." (Kenyon, 1991: 230). Also refer to Ismael (1982: 78), where in one case study a woman spends about three hours on beautification in one day. Many of the beautification techniques have been in existence since ancient Nubia.

In addition to being associated with physical and mental well-being, personal beauty is related to maintaining gender differences. Kenyon refers to this as ideational separation: "...the maintenance of gender differences is a much more effective method of segregation than the erection of physical barriers." (1991: 230)

5.5.5 Milestones and activities

Dominant life cycle rituals are associated with the four life milestones, namely birth, circumcision, marriage and death. All rituals associated with the first three can be attributed more to indigenous customs than to Islam (Kenyon, 1991: 232). Many rituals linked to these life milestones are intended to protect from the evil eye, the jinn and other spirits. This is investigated later. In all of these the house/ neighbouring house/ adjacent street or public space is transformed to accommodate people and functions. There is spontaneity inherent to these space-use systems – the immediate appropriation of a space for different functions.

5.5.6 Social sanction – maintaining social order

In the elaborate social interactions systems mentioned above, one must remember that the role of a woman as an intermediary of important information is also important in the social construct (Ismael, 1982: 181). This is a part of the informal system of social sanction. No formal laws are violated, but these informal mechanisms ensure that people stick to the social norms. Socialisation is also a means by which social norms are passed on from one generation to the other (Ferraro, 1998: 248) and an instrument for control. Ferraro explains the tools as follows:

- Public opinion/Being talked about
- Isolation/Gossip, ostracism, rumour, sarcasm, derision

Another social ordering principle is achieved through respect for elders and the past. This has been and still is a major structuring factor in Sudanese society. Al-Amin (1989: 9) sees three broad social groupings: Children younger than 12, unmarried adults and married adults. There is little mixing between these groups in public (Al-Amin, 1989: 10).

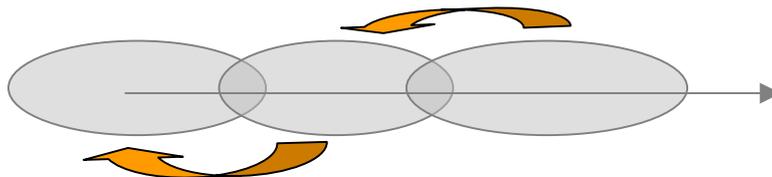


Fig. 5.3 Overlaps between the different age groups – indicating a ‘passing-down’ of information from generation to generation.

5.6 ECONOMIC SYSTEMS

Historically, the economic system of the region depended on trade and agriculture. A *saqiyya* (waterwheel – see description and images in Glossary) system of production, with joint cultivation and rights in shares in the produce dominated before the Turkish invasion:

“...people belonging to a saqiya defined their ownership rights in terms of shares in the wheel and the land, rather than in physically demarcated plots, and received from the produce according to their number of shares and labour input.” (Bjørkelo, 1989: 59).

The system depended on agreement/negotiation on the water wheel, the animals and slaves.

The Turkish administration attempted to impose a market oriented agricultural and fiscal policy and this contradicted with existing subsistence systems. This changed the economic structure of the region negatively:

“Cash crops were found to have exhausted the soil, the animal motive power, and the wheel, and limited the space and time left for food production. The cutting of trees to clear land for government schemes, to build boats and to get fuel for the steam-powered river boats was another serious attack on the eco-system.” (Bjørkelo, 1989: 140)

Since before the Turkiyyah, land ownership has been highly prized but cheap labour and slaves previously worked it, so there is a dislike for agricultural work. This has been regarded as an obstacle to progress (on the ja’ali tribe in Bjørkelo, 1989). From early on trade and crafts were means of supplementing household incomes, or full-time occupations (Bjørkelo, 1989: 5).

Formal systems, till today, are supplemented by elaborate informal systems rooted in social attitudes explained in the previous section. These include hospitality (*diyafa*) and *nafeer*, where neighbouring household participated in building, or work in the fields, and were treated with food and drink.

Yet, generally, the region provided few opportunities for wealth and thus emigration started very early in history: “...this phenomenon...can be traced back as far as the old empire in Egypt.” (Kronenberg on Nubian emigration, 1986: 398). It became more marked due to Turkish economic policy and harassment during their reign. Immigration has been a major form of gaining wealth, with men leaving to travel west or south to trade and to send back money to their families in the northern, riverain region: these traders are known as the *jalaba*, travelling traders or slave traders. This is still the case today, the only difference being that the people of these regions have ventured further a field, starting with the Gulf States and Saudi Arabia. Another difference is the type of service being marketed. Northern Sudanese in general, and Nubians especially, continue to show interest in their place of origin, with which they maintain contact (Kronenberg, 1986: 398).

Trade activities have had a role in the structuring of the daily rhythm of life in villages and towns. This is still felt today where traditional markets are more, or equally, dynamic when compared to western style shopping areas. Al Suq al Arabi in Khartoum is located to the south of the western style centre and is always buzzing with activity. In Omdurman, Suq Libya was originally established by smugglers in the 1970’s who brought their goods across the border from Libya. Suq al Naqa is the cattle market of the western Sudanese nomads. The traditional Suq Omdurman (shown on the outskirts of the city during the Mahdiyya and now engulfed by a growing metropolis) thrives on strong informal networks within the country and

outside its borders. Suq Sa'ad Qishra in Khartoum north, Bahri, depends on 'suitcase traders' who bring in goods from Egypt, Saudi Arabia and Syria. It is interesting to note that, today, many of these traders are women operating in the informal networks that they excel at. Daily activities revolved around economic activities in one form or the other. Bjørkelo here describes Shendi on the eve of the Turkiyya:

"Except around midday, people would engage in various cultivation activities depending on the season. Occasional visits by the traders or the passing of larger caravans would stir up extra activity; a trading relative might stop to bring presents or necessities to his family. Some villagers would seize the opportunity to barter foodstuffs and handicrafts for utensils, spices, perfumes, medicines and so forth." (Bjørkelo, 1989: 54).

Religious centres of learning were and still are maintained by charity and endowments. During the Funj these were supplied by the sultan in land or slaves but mostly given by the locals in labour, food or clothing. During the Funj eras, when the *feki* or *'alim* or *shaykh* chose his abode he was granted the land by royal decree and an estate for cultivation with slaves may be included. The size of the estate was related to the piety or sagacity of the *'alim* or *shaykh* and a *nafeer* was used to construct the buildings. The first to be erected is the *masjid*.

The cost of upkeep was gained from the land, which was worked by slaves and students (the *masjid* and *khalwa* closed during the cultivation season, July-October) and from grants, presents and alms and any private business that the *feki* may conduct. It was very much a people's initiative and the role of the sultans is limited. The *qubba*'s are a source of revenue even today, for the heirs to the *feki*, as visitors come with offerings as their ancestors did 300 years ago to the original *feki*. It is believed by many that life in the religious centres encouraged handouts and laziness (this information is mainly from Badri, 1970: 33-44).

5.7 STATUS AND POWER SYSTEMS

Western social evolutionary theory assumes a rise in social complexity, internal stratification and central authority. It is generally believed that, as societies become more complex their spaces become more function specific. Administrative segmentation would then result in changes in residential occupation (Kent, 1990).

This has not been the case in the region under study. Socio-political dynamics varied greatly between the different eras, but power became decentralised after periods of high control rather than the opposite. It is speculated that later in time, the influence of social status on settlement designs became less evident perhaps as poverty

became more widespread, as the Turkish authorities became more brutal and as Sufism and the *shaykh*'s cult became more dominant in the day-to-day life of people.

Systems of segregation were reinforced, in a deliberate and controlled manner, during the British colonial period through building and planning regulations, where residential 'classes' were formalised, progressing from first-grade to fourth-grade. Each was distinguished by plot size, building heights, setbacks and materials (Osman, 1996).

As discussed in Chapter 2, economic or climatic factors are easily observable determinants of changes in house forms and settlement layouts. While the importance of these is not undermined, it is seen that the impact of cultural change is more profound, yet less recognizable.

A crucial aspect of culture is no doubt power and leadership establishments. Power relations are important in designing and maintaining a particular built environment. And in a two-way process, architecture plays an active role in structuring social hierarchies and creating power strategies. This is explored more below:

5.7.1 Kushite and Meroitic eras

There was elaborate social stratification in the Kushite and Meroitic eras. In the early Meroitic eras, the choice of Kings through blessing by oracles ensured that political power and religion were inseparable (Hakem, 1988:97). The post of King was hereditary, and the decision of succession was taken outside the temple, yet the oracular custom was a recognized endorsement by the God, Amun-Re (Hakem, 1988: 97-98). Hakem (1988: 98-99) goes on to explain how the King would be selected from the royal family in Meroe (the political capital) and then proceed to Napata (the religious capital) for formal ratification of his new post. Reisner (1930: 92 in Hakem, 1988: 100) quotes the declaration by Pi'ankhy (one king of the neo-Kushites, 747-716 BC) (Hakem, 1988: XV) on his stela (royal inscriptions):

“gods may make a king,
men may make a king,
but only Amun-Re made me”

Political establishments dominated society in the Meroitic eras but validation of political authority through religion was paramount. It was in reality, not the priests who decided on succession, but the military leaders, top men of the royal family and

high-ranking officials (Hakem, 1988: 101-102). In the pre-Islam eras, the political leader dominated.

5.7.2 Christian era

When the centralised power of a large kingdom under one throne is discontinued and the Christian era emerges, this is characterised by the break-up into three small kingdoms and from then on the kingdom is run more as independent decentralised states.

Secular governance during the Christian era may have been the result of the Coptic Church believing in a separation between the state and religion (<http://www.copticcentre.com/two.html>). Political establishments maintained their dominance. The ruler claimed spiritual supremacy and controlled the church.

5.7.3 Arab penetration

The arrival of the Arabs around 642 AD, meant new power relations, which resulted in differences in spatial arrangements within the home, gender-related sub-divisions and different social hierarchies. The resulting acculturation had an impact on how people viewed the environment and how they intervened through buildings and space manipulation.

Hierarchical relationships between people and the importance assigned to them are strong but not so evident physically. Space became less segmented and more multi-purpose. It was more gender specific, in a fluid manner, as this changed depending on circumstances. Surprisingly, there were fewer physical sub-divisions, which did not correspond to the more elaborate social segmentation that emerged due to new socio-political dynamics. Barriers became social rather than physical.

During the 'gap'¹ in history, 642-1504, a paradigm shift occurred whereby religious individuals became key figures within the social order. In the present Sudan, rapid industrialisation is paralleled by a belief by many that religion and the state are inseparable. This is a pivotal concept in Islam, where the purpose of man is perceived as being the correct service of God, and the primary function of a

¹ The use of the term 'gap' here denotes the recognition that there was a transitional phase between the major historical civilisations of the region. Though these civilisations differed drastically in their forms of expression (one leaving behind massive monuments and the other remembered through intangible concepts) they were both highly centralised and had significant influence beyond their borders.

government is to make the rendering of such a purpose possible (Gruenbaum, 1955: 143). Sometimes the religious leader claimed supremacy and even became the political leader in the Mahdi's case.

Similar patterns during the transition period are unknown due to the little information available about this era in terms of how and why the transformation took place. What is evident though is that, after the 'gap' in the history of the region, a new paradigm emerged where the *feki* gained predominance over the political ruler. It is only the *feki* who is buried under a *qubba* and seldom a political leader. It is still the *qubba* that rises above other buildings in towns and villages, and even in a major city like Omdurman. Thus, the two structures the *qubba* and the mosque came to have supremacy functionally and visually. Perhaps clues to the reason for this transition can be found in the power structures of the Funj.

5.7.4 Funj era

Before the Turkish invasion, status and power were reflected in the unequal distribution of land, water wheels, animals and slaves among the peasants (Bjørkelo, 1989: 4). Another ranking system was also based on occupation:

“Blacksmiths, fishermen and woodcutters had the lowest status among free men. Religious learning and sanctity, expressed in the ability to cure sick people and perform miracles, bestowed great prestige and respect. Family ties with prominent lineages or the ruling elite, as well as with holy men, were sources of status and prestige, irrespective of secular wealth.” (Bjørkelo, 1989: 55).

The socio-political structure of society was based on a vertical structure based on status, but with a horizontal structure cutting through this. The following is a diagram based on Bjørkelo (1989) but with the religious leader added as having a high social position, perhaps comparable to the king or the political leader. One of the similarities between the two is the fact that the holiness of a religious *shaykh* can be inherited. Sometimes the relation between the political leader, king, and the religious leader is one of mutual gain enabling them both to have authority, as the king can gain public support through the *shaykh*. The religious leader gains land and material support from the king in return.

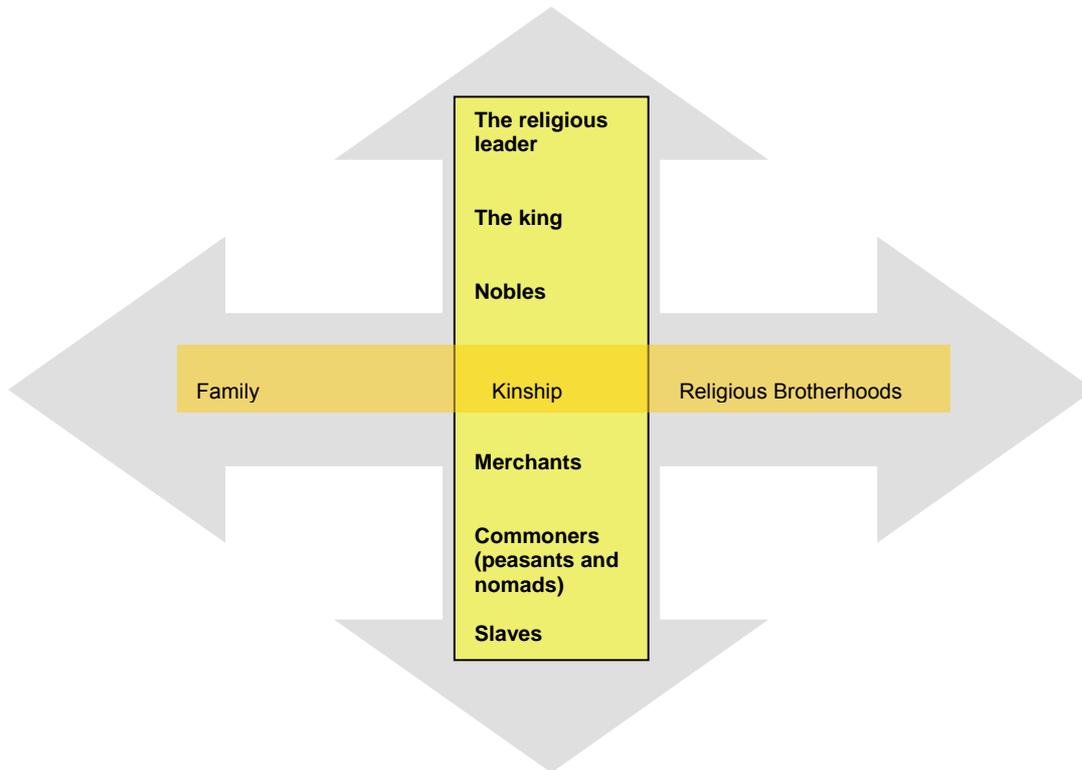


Fig. 5.4 The two dimensions of status during the Funj era.

Later, the *shaykh* (nobles, administrative rather than religious) was retained by the Turkish administration as the head of a village. This *shaykh* may represent someone among the peasantry who was wealthier but: “The majority of the village shaykhs, however, did not differ much in the lifestyle from the peasantry to whom many of them belonged.” (Bjørkelo, 1989: 49).

The Funj king’s court officials were subdivided into categories on the basis of their relationship to the seat of authority (Spaulding, 1985: 15).

“After mid-century [16th Century] the court was swollen by the admission of large numbers of holy men (*fugarā*, singular *faqīh*) and petty noblemen (*arbābs*), who were placed together following the mosque staff. Finally, under the last sultans, positions at court were given to a variety of their personal attendants – physicians, tailors, freedmen, religious advisors, and masseurs.” (Spaulding 1985: 16)

The ideology of the Funj state was that of the subordination of the majority to a few. It was a heterogeneous society with several regional sub-cultures, yet forged into a coherent whole (Spaulding 1985: 120). The ideology of Sennar extended beyond the reference to the community and its material realities – it contained elements of religion (Spaulding, 1985: 122). Gradually the strength of the centre at Sennar decreased while lower status leaders on the peripheries gained importance.

There was a high level of control in the kingdom as the king had to know of anyone who entered his kingdom, such as merchants and caravans: rapid courier to the capital dispatched information (Spaulding, 1985: 8-11).

5.8 RELIGIOUS SYSTEMS

5.8.1 Protection from the spirits

In all major ceremonies and celebrations of life's milestones, it is attempted to protect the principle person from evil spirits. That may be the bride, the circumcised child or the newborn baby. The jinn and their living spaces, areas avoided by the villagers: huge trees, thorny shrubs, the fields, mountains, uninhabited places, latrines, cemeteries, dustbins and ruins are avoided (Ibrahim, 1979: 141). Despite this, "... it seems that the spirits occupy every corner in the village and hover in every place; the question is how do the villagers survive such danger?" (Ibrahim, 1979: 142). There are a variety of artefacts, rituals and substances that are believed to provide protection. These tools of protection are summarised as follows:

5.8.1 i) The Quran

This is done by simply reading the Quran or by bringing in a holy man to do that. A *hijab* (amulet) can also be worn which contains verses from the Quran.

5.8.1 ii) White and shiny things

Milk is, till today, used in many ceremonies as well as bright coloured *garmasis* (*Firkah* – refer to Glossary) and bright coloured string, beads and gold. The *jirtig* ceremony performed for a bride and bridegroom will include wearing of these materials and artefacts and also in the spraying with milk.

5.8.1 iii) *Bakhour* incense/substances of strong smell or taste

Bakhour is used at all major ceremonies and is used often on a daily basis in many households till today. There are different types of *bakhour* for different ailments or different occasions.

"The wedding continued for seven days, and on each day the bakhur was placed at the doorstep of the brides room, over which the groom stepped seven times each morning and evening." (Dafallah, 1975: 59, also descriptions of the use of these various 'tools' in p.58).

5.8.1 iv) Loud sounds

Ululating and gunshots are common in wedding celebrations or other important occasions.

5.8.1 v) Sacrifices and food types

This is an important aspect of Sudanese life. Any special occasion needs to be marked by a *karama* (sacrifice) whereby meat or *balila* (boiled maize, chickpeas or other grains and seeds) or dates are distributed or a sheep killed. These are done as an offering of thanks. Many sacrificial ceremonies are carried out at the Nile (see below).

5.8.1 vi) Protection in numbers and words

Protection is also sought in numbers (Ibrahim, 1979: 143 and Barclay, 1964: 189). A person will go to a *feki* and there is a ritual where special numbers would be etched onto a square metal surface, which is worn as a ring. Critchlow explains that: "Magic squares... serve as an interpreter of the cosmic order that dominates all existence." (Critchlow, 1976:42). The author did not find enough information on this concept as related to Sudanese practice, yet it is apparently related to Muslim heritage.

"The pre-eminence of number was confirmed by... great Islamic mathematician al-Khwārasamī... he quotes the prophet Muhammad as having said 'Praise God the creator who has bestowed upon Man the power to discover the significance of numbers.'" (Critchlow, 1976:42).

The rituals described below involve numbers in one form or the other: 7, 14 and 40 being the most common. The reason for the use of these particular numbers is undecided, but clues may perhaps be sought in the following:

"Seven is... intimately connected with the Moon. The Moon is to be taken as the feminine principle in this perspective, measuring the heavens in a passive manner, complementing the assertive, masculine role of the sun." (Critchlow, 1976: 59).

"...the Vedic square... was the basis of a whole mathematical system which contained a numerical model of the universe. In AD 770 the Muslims integrated this North Indian system into their own synthesis of ancient systems... Seven is at the centre of the Vedic square, which may indicate the origin of its importance." (Albarn, Smith, Steele and Walker, 1974: 10).

"By the principle of doubling, seven becomes fourteen, a fortnight or half a month. From an esoteric viewpoint, according to Shi-ism, the prophet is the source of light, a light which is transmitted through the Imams as the 'Muhammadan Light' (*al-nūr al-muhammadīyah*); it was transmitted through his daughter Fatimah (as mother of the Imams), through 'Ali her husband, and so to the twelve Imams. Shi-ism thus describes the importance of light by naming this line 'the fourteen pure ones'." (Critchlow, 1976: 59).

It must be noted that for the Sudanese (who are Sunnis and not Shi-ites), the number 14 is of significance in many of their rituals. How these numbers have been extended onto the built environment (if at all) is unclear. In Islamic art and architecture of other countries strong connections between decoration, form and numbers can be found. This is not clear in the case of the Sudan; the numbers are rather reflected on rituals. Various words or surahs from the Quran, repeated in sequences of 3, 7, 40, for example, are also believed to offer protection. Some words are associated with certain Sufi cults.

5.8.2 Rituals

While most of the literature on the Meroitic era focuses on the tangible remains in the form of buildings and physical artefacts, most of the literature on the Funj is about the rituals and the people. Many of these relate to the strict rules of protocol followed by visitors to the king's court such as: heads had to be bowed and the forehead struck against the ground, three seating postures were assigned to people of various ranks, communications of the king were made through an intermediary seated on the right of the king on a low stool below the throne. The king gave his sceptre to those authorised to speak and took it back to impose silence (Spaulding, 1985: 12-14). Till today, rituals are the most visible and interesting aspect of the culture rather than tangible artefacts. A verbal portrayal of some of these rituals is displayed below:

5.8.2 i) Visits to burial places

People would sometimes visit the graves of relatives or holy men. They would place stones and flags around the grave. If it were considered the grave of a holy person, sweets and coins would be buried in the sand so that other visitors might find them (personal communication, E. Osman, 2003).

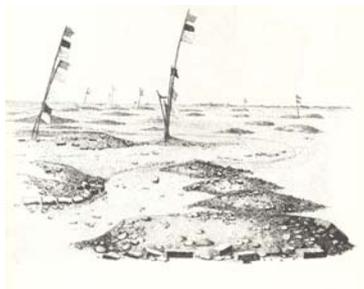


Fig. 5.5 Flags at a graveyard (Potter, 1984: 73)

5.8.2 ii) Flags and colours

Sentiments towards certain colours and their meanings were reflected in the use of flags (Abu Salim, 1992: 112): "On the graves of holy men white flags are placed."

(*Wa 'ala maghabir al awliyya wa amakin zuhurahum tuwda'a al a'alam al bayda*). Sufi sects put up flags (*rayat*) of differing colours to express the roots of the sect and their connections with other sects. These colours were then used on their flags, turbans (*'ima*) or *khirqaa* (patched clothing of the Sufis, Abu Salim, 1992: 52): "The Sufis expressed meanings using colours." Each village has flags that are put up on religious occasions; Omdurman had a store for flags and drums (Abu Salim, 1992: 113-115).

The Mahdi carried a green flag representing the Samaniyya tariqa. It gained much importance as a symbol of the Sufi beliefs of the Mahdiyya (Abu Salim, 1992: 118-119). The army of the Mahdiyya was divided into three each with a different colour of flag: black under the leadership of the Khalifa Abdullahi and that represented the people of the west, the green flag represented the Arabs of the white Nile under Ali wad Hilu, the red flag Khalifa Mohamed Sharif Dongula of Berber, Khartoum and the *jelaba* of Sennar (Abu Salim, 1992: 119).

Flags were not just used for religious purposes. Women sellers of *marisa* (traditional beer) raised a white flag in their homes when there was *marisa* available and lowered it when there was no *marisa* (Abu Salim, 1992: 118). After the introduction of Sharia (Islamic religious law) in the 1980's, home brewed alcohol, though abundant, has since been done in strict secrecy. Abu Salim (1992: 118) tells how previously a seller of Marisa would call on 'shaykh Idris', a holy man, to help her sell her Marisa, and how she would distribute some of it for free as a sadaqa (alms giving) for the soul of the shaykh. This mix of the Islamic with the traditional is mentioned again below.

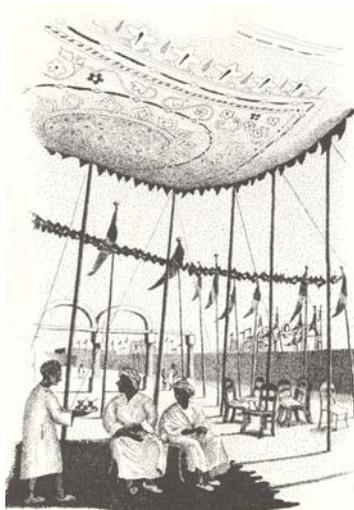


Fig. 5.6 Flags at a celebration of *Moolid* (the prophet Mohamed's birthday)(Potter, 1984: 72).

5.8.2 iii) More on colour

“The colours classification among the Shaiqiya, or generally all the Arabized groups, has a different application, e.g. akhadr green sometimes means blue or dark black in addition to the common known meaning. azrak i.e. blue, means black and aswad, i.e. black, is used only among the more sophisticated people who think their colour system reflects their environment in which black and green are the widespread colours, e.g. plantations, faces, women’s dresses, etc.” (Ibrahim, 1979: 95).

Colours appear to be viewed very differently among the northern riverain groups. Spaulding (1971: 101) explains how “the explorer Caulliaud (1821-1825) learned that the kingdom of Sinnār was composed of “six classes, so distinct that there is not one individual who does not know to which he belongs.” These classes were distinguished by ‘colour’. Yet, these colours only referred to skin colour to a limited degree: they were more related to facial features or hair type. For example, the Funj were copper coloured (Spaulding, 1971: 102). Till today, people are referred to as yellow, blue, green, red and a Sudanese would know exactly what that would imply.

5.8.2 iv) Rituals at the river bank

“Often when driving or walking along the river road in Omdurman at dusk a little band of women was to be seen in the gathering darkness wending their way to the sandy bank, or perched on the wall under a tree. Close to the mud walls of the khalifa’s defences against Kitchener’s gun boats a bright yellow taxi might come to a halt and disgorge its customers as near as possible to the water’s edge. Their tobés would be white for the occasion and would closely round them. A grandmother would probably be holding the new infant inside her tobé. Some of the older women would have arranged their tobés so that their mouths and noses were also covered, showing only their eyes...

When we had disembarked at a suitable stretch of river, which was little frequented... both uttered a prayer separately to Allah the Merciful. They thanked him for this child. They thanked him for all their own children and for making them productive. He was gracious and bountiful but they really had enough children now. Allah the All Powerful heed their prayer! They had had enough children. Give them no more!

Affaf washed her hands and feet and then her face. Water was placed on the child’s forehead. A prayer was said. One of the women had brought some dates and millet which she threw into the river. At one time it was the custom to bring all the clothes and rags containing the faeces produced by the baby during the forty days and throw these into the river too- then all things unclean and connected with the birth would be washed away for ever.” (Cloudsley, 1983: 157-158).

One aspect of Sudanese rituals that has been passed down through the ages and seems to be rooted in pre-Islamic ritual is the fact that many activities revolve around the river Nile and many blessings are sought from the river. It has been mentioned elsewhere that old traditions were not rejected with the coming of Islam. Ethnological patterns reflected Christian customs, such as the drawing of a cross on a child’s forehead, which was washed of on the 40th day after birth in a ceremony similar to baptism. A mother will still take her newborn baby to the river with her close relatives and pour water on the child’s forehead while reciting prayers in an age-old ritual

resembling a baptism. Though these rituals are gradually fading away, they have been practiced till recently and are still in the author's memory. Generally, *Sharia* and theology are neglected and replaced with miracles, *karamat*, and panegyric verse, *madeeh*. (Badri, 1971: 5-6 and viii and Cloudsey, 1983: 157-158).

Many riverain tribes practice these old rituals. The Nubians, in the far north who have kept their own languages despite Arabic influence, but have been Muslims since early in history, practice many rituals that express the above:

“During the performance of the wedding contract, in accordance with the Nubian tradition, seven women took a dish full of fatta – bread, soup, boiled rice and meat – and went to the river bank where they ate part of it and threw the rest into the water to feed the ‘angels’. They then washed the dish and filled it with water and one of the ladies put her ring into it; they then carried it carefully to the bride's house. When they arrived, they washed her face and head with the water and covered her with the garmasis cloth. They call this water moyat el shihada.” (Dafalla, 1975: 57).

Again during the same wedding ceremony above, which lasted for seven days:

“At dawn the bride and bridegroom, accompanied by their relatives and friends, walked to the river bank, where they washed their faces direct from the Nile and sprinkled water on each other.... On their way home the young men beat the groom lightly with (...) palm branches. When they arrived at the house they were offered tea and breakfast.” (Dafalla, 1975: 59).

“On the seventh day a party of women carried the new-born child to the river with a big dish full of fatta out of which they ate, and then threw the rest into the river to feed the ‘angels’. Then the mubkhar (a small container full of antimony powder) was set smoking, and a certain woman would carry the child and step over it seven times. When this was finished, they threw all the clothes used by the baby during his first week of life into the river and filled a pail with river water, bringing it back with the child to his mother in the house. The mother would meet them at the gate and wash her face with river water.” (Dafalla, 1975: 61).

On the fourteenth day:

“...the room was smoked with bakhur. Then some women brought branches of date palms with which they swept out the four corners of the room, calling upon the angels of the merciful to accompany them to the river.” Again they went to the river and the mother stepped over a mubkhar seven times, and again everything they brought from the house was thrown into the river. (Dafalla, 1975: 62).

5.9 APPROPRIATION OF SPACES FOR RITUALS

Traditional rituals – linked to a Sudanese understanding and interpretation of religion – define space and dwelling. Mens' rituals and womens' rituals are sometimes different. Generally, the first being based on some understanding of Islam while the latter are based on what Trimmingham believes to be pagan ideas: “... as a result of sex division the men are Muslim and the women are pagans.” (Ibrahim, 1979: 133 on Trimmingham, 1968:46). What is interesting is how they are practiced, with which

artefacts and in which type of space. The common thread will be summarized at the end.

5.9.1 Death

Death is a significant event in any culture; in the Sudan it is a major social occasion:

“In the case of a death, the house of the deceased is immediately turned into a mourning house, i.e. all chairs and beds are removed from the rooms and yards, and mats are placed on the floor, on which the mourners sit. In the men’s quarters, *hosh rigal*, it is, however, the custom today is to provide chairs for the mourners. The relatives, neighbours and friends of the deceased visit the mourning house regularly, and especially the following days have to be observed: the first, third, seventh and fortieth day. It is expected that all close relatives, neighbours, and friends appear during the first day.”

“The widow and close female relatives, like daughters and sisters of the deceased, will continue sleeping on straw mats for weeks or months.” (Ibrahim, 1979: 51-52).

5.9.2 Marriage

A house is quickly and efficiently transformed for different functions. A part of a bridegroom’s wedding henna celebration in Nubia is described as follows:

“... a red birish, which is a fine mat of dyed wheat stalks and palm leaves was laid on the ground. A big dish containing henna powder, mixed with water into paste, and small bowls and bottles of Indian oils, were placed before the birish. Then the place was flooded with girls and women coming in, all singing songs praising the forefathers of the groom. The groom, who was by this time dressed in light clothes, was made to lie on the birish, and the henna ceremony was carried out by the old lady most closely related to him. At first she daubed the soles of his feet and fingers and palms with Indian oil, and then applied the henna paste all over them. At this time all his unmarried friends took a small amount of the oil and henna and applied it to their fingers and palms for good luck.” (Dafalla, 1975: 55-56).

A description of a wedding party in Omdurman goes as follows:

“A cluster of men surrounded the players. Some were in shirts and trousers, a few in suits, the rest in long flowing white or cream jellabias with emmas on their heads. They moved easily to the rhythm of the music, forwards to the drummer and back, making their own individual circle, musing in thought. Each held one hand high above his own head, clicking his fingers firmly to the rhythm and, when his dance was done, stepped back to his seat and watched others dance.” (Cloudsley, 1983: 62).

In all of the descriptions notice the use of all the ‘tools’ mentioned previously to get rid of bad spirits as well as the quick re-organisation of a space:

“If the brides father possesses a shot-gun he may herald the beginning of this party by discharging it into the air. Mahmoud, however, did not have a gun. Instead, Hamad appeared brandishing a hippo-hide whip. Immediately the women of Mahmoud’s family uttered joy-cries, each chorus answered by a chorus answered by a chorus from the groom’s party and the bride’s guests and relations. Then the young girls beat drums and all the children join in, singing and clapping to the rhythm. The chairs and

benches were arranged in rows, the men on one side, the women on the other.” (Cloudsey, 1983: 53).

The immediate creation of temporary circles is practiced in all forms of rituals, social and religious:

“All the guests stood in a wide circle in the street, with the women all together. The singers stood by the central open space with the orchestra, while a team of ten men stood in a row at one end facing an equal number of girls at the other end.” (Nubian wedding party in Dafalla, 1975: 56).

5.9.3 Religious ritual and corresponding space: the *halaqa*

At a religious centre of a Sufi sect, on certain known days there would be *halaqat zikr*, literally circles for remembrance, where men and women would gather for *madeeh* of the prophet and the shaykh and his forefathers. The men would surround the *madaheen*, the men performing *madeeh*, who walked within the circle. The women would be grouped on one side of the circle or stand behind it. They would be smaller in number, clapping or ululating at the climax when the *shaykh* joins the circle and, it is told, performs a miracle, such as enabling people to jump from high places without being hurt (description from E. Osman, personal communication, 2003):

“...another file of youth appeared in the *halaqa* carrying glittering swords which they rubbed into their clenched hands. When they pulled them and held up their palms and the swords, their palms were unharmed and the swords had become blunt.” (Badri, 1970: 206).

Much food is then made available for everyone.

At the *khalwa*, the major ceremonial function occurred when a panel of *fekis* would test the students' ability to recite the Quran. The wooden tablets used for writing the Quranic verses were decorated with colourful paintings, fresh firewood was brought, white sand from the nearest water course was spread on the ground and *'anqaribs*, bedsteads for the panel of examiners, and mats were prepared for distinguished visitors. After the 'test' the student would be declared a *hafiz* and his family distributed dates and *balila*, boiled corn (These descriptions are from Badri, 1970).

The religious centre was usually a large walled *hosh* (courtyard) that contained the *masjid*, *qubba*, guesthouses and the *'alim's* private quarters. Typical of Muslim spatial interpretation, any place where a person prays, or people gather for worship, acquires a sacred quality. Sanctity is not necessarily embedded in the built form. The *hosh* was where most functions took place and the *halaqa*, circle (of worshipers), the most sacred construct of the space.

5.9.4 *Zar*

Another ceremony mainly practiced by women for the healing of various ailments, is that of zar:

“On the day of the actual ceremony the shaikha [women shaykh] and her assistants begin by preparing a spacious room or baranda [verandah] in which mats are spread. They bring the instruments, drums and a brass washbasin *tashit*, which are used for hot rhythmic music, and some accessories such as coats, jalabiyas and sticks *tarbawsh* are put in a strategic corner of the room to be seen by those present.” (Ibrahim, 1979:172).

“A big room is cleared and covered with straw mats, and mattresses are placed alongside the walls for the visitors. Opposite the entrance door sits the *sheikha*, surrounded by her female assistants. The required utensils, like incense, perfume, spears, umbrella, clothes, alcohol, and cigarettes are placed in her vicinity. The middle of the room is left empty for the dances.” (Ibrahim, 1979: 57).

In all of the above, there is a strong sense of space demarcation for religious purposes these comprise the use of stones, flags and various colours. The *birish* (straw mat), and the *'angarib* (wooden bed), are central in most rituals. And, of course, dress and henna identify the central person in any ritual. The ‘tools’ of protection appear in all the rituals in one form or the other: words, sacrifices, scents and sounds. Few of these are in the form of physical artefacts; most have cosmic significance expressed in intangible ways.

5.10 KNOWLEDGE AND CREATIVE SYSTEMS

5.10.1 Attitudes to knowledge and creativity

It must be noted that there is great resistance to change in traditional contexts in general. Among Sudanese in traditional settings, any discussions on religion that may lead to doubt in God are avoided. Creative ability is sometimes attributed to the *shaytan* or devil:

“It is very common among the educated to hear or read about the Satan of poetry, *shaytan* al-sh'ar, as they believe that all the creative actions of aptitudes stem from wady 'akbar, or the valley where the Satans of genius inspire the people to compose poetry or create works.” (Ibrahim1979: 139).

Ibrahim places such attitudes within the broader context of Islam:

“... knowledge, for the Moslem scholars, was not so much a reaching out to the unknown (research), as it was a mechanical process of amassing the 'known': the known being eternal and given, is unchangeable. Thus the acquisition of information and the deduction from accepted premises were most important methods of knowledge.” (1979: 130).

Learning for the Sufis is very different from accepted theological teachings. It involves and understanding of cosmology:

“A cosmos by definition presupposes an ordered universe. Cosmology is the logic of or study of the laws and intelligence inherent in this ordered universe... The overriding principle for Islam is the unity of existence and therefore of the universe. This unity has an inner and an outer aspect – a hidden as well as a manifest aspect. From this it follows that there is an inner as well as an outer way of studying cosmology. The outer embraces sensible observation, the inner is appreciating the expression of cosmological laws within one’s own structure. The goal of spiritual disciplines is to unite the inner and the outer, the greater and the smaller, into an inseparable integrity.” (Critchlow, 1976: 57).

Life as a temporary, transitional stage is taken very seriously and for that reason very little concern is given to physical artefacts. This is expressed in the poetry of the Butana:

“People’s value cannot be measured by their clothes
Do not be deceived by clothes when values are bare
Life/things are not theirs
People are temporary keepers of these
Like a thirsty camel, carrying water in travel”

*(Al nas fi al-‘irood ma taqisa bi taybana
Ma yagorak libasan wa al ‘irood ‘aryana
Diy! huras riziq mitl al takano amana
Zay ibl al raheel shayla al saqa wa ‘atshana)*
(author unknown)

Many sayings and poetry revolve around the dialectic relationship between *jawhar*, essence, and *mazhar*, image. Like many cultures, external image is valued, but, in comparison to *jawhar*, it is delegated a secondary position in the cultural set-up of the context. This concept is central to Sufi thought and is reflected in many folk stories of the Sudanese.

A repeatedly told story, which demonstrates this concept, relates how Shaykh Farh wad Taktook went as a visitor to a certain household. He was not treated with much concern until he left and returned with a *guftan* (a beautiful cloak), after which he was treated with much respect. When he was presented with food he put the sleeve of his *guftan* into the food and said his famous words: “*kul ya kumy qabl famy*” (eat my sleeve before my mouth).

5.10.2 Literature

“Fawzia’s mother, Nazeerah, an angel to the eyes. Fresh, smiling always. She visits her neighbours and loves them. She is the first to bring a tray of food on mujamalat for mourning. She is the first to lend a helping hand in times of happiness.” (Mekki, 2001, 75)

The following two extracts from Eltayib Salih’s novel, *Season of Migration to the North*, give an idea of what daily life is like in that context. They capsule a whole attitude to people and life:

“My mother never wearied of telling me of those who had died that I might go and pay my condolences and of those who had married that I might go and offer my congratulations, and thus I crossed the length and breadth of the village offering condolences and congratulations.” (Salih, 1969: 4)

“...Mustafa during his whole stay in the village had never done anything which could cause offence, [that] he regularly attended the mosque for Friday prayers, and [that] he was ‘always ready to give of his labour and his means in glad times and sad’- this was the way in which my grandfather expressed himself.” (Salih, 1969: 6-7)

El Tayib Salih is still considered a leading literary figure in the Sudan even though this, his most influential novel, was written in 1969. It expresses many aspects of the northern riverain culture that have been categorised in this dissertation. It emulates the characteristics of the region and the people found in other anthropological and historical studies. In the following, he compares a character in the novel with the harsh environment:

“He is no towering oak tree with luxuriant branches growing in a land on which nature has bestowed water and fertility, rather he is like the sayal bushes in the deserts of the Sudan, thick of bark and sharp of thorn, defeating death because they ask so little of life.” (Salih, 1969: 73)

Another example, expressing the heat, dust and the salvation provided by the river, the water and the cool breeze:

“...the closely-packed village houses, made of mud and green bricks, while our donkeys press forward as their nostrils breath in the scent of clover, fodder and water. These houses are on the perimeter of the desert: it is as though some people in the past had wanted to settle here and had then washed their hands of it and quickly journeyed away. Here things begin and things end. A small girdle of cold, fresh breeze, amid the meridional heat of the desert, comes from the direction of the river like a half-truth amidst a world filled with lies. The voices of the people, birds and animals expire weakly on the ear like whispers, and the regular pattering of the water pump heightens the sensation of the impossible. And the river, the river but for which there would have been no beginning and no end, flows north-wards, pays heed to nothing; a mountain may stand in its way so it turns eastwards; it may happen upon a deep depression so it turns westwards, but sooner or later it settles down in its irrevocable journey towards the sea in the north.’ (Salih, 1969: 69)

Salih’s vivid descriptions resemble many houses in the region. The focus is always on the activities and the people; the actual physical structures recede as a mere background, never controlling it, simply acting as a setting for everyday life:

“Entering by the door of the spacious courtyard, I looked to right and to left. Over there were dates spread out on straw matting to dry; over there onions and chillies; over there sacks of wheat and beans, some with mouths stitched up, others open. In a corner a goat eats barley and suckles her young. The fate of this house is bound up with that of the field: if the field waxes green so does it, if drought sweeps over the field it also sweeps over the house. I breath in that smell peculiar to my father’s house, a discordant mixture of onions and chillies and dates and wheat and horse-beans and fenugreek, in addition to the aroma of the incense which is always floating up from the large earthenware censer.” (Salih, 1969: 72)

Aboulela laments the changed lifestyle in Khartoum where the buildings come to have more dominance than previously, when life happened outdoors:

“At night we used to sleep outdoors. We used to pull our beds out at sunset, so that the sheets would be cool later. It was so hot that sheets taken out of a cupboard, spread out to lie on were too unpleasant, they had to be cooled first. Every night, I saw bats in the clouds and the grey blur of a bird. And around the moon was another light, always the same shape. In the distant past, Muslim doctors advised nervous people to look up at the sky. Forget the tight earth. Imagine that the sky belonged to them alone. Crescent, low moon, more stars than the eyes looking up at them. But the sky was free, without any price, no one I knew spoke of it, no one competed for it. Instead, one by one those who could afford it started to sleep indoors in cool air-conditioned rooms, away from the mosquitoes and the flies, away from the azan at dawn. Now when they build houses, when they build apartment blocks, they don't build them with places for people to sleep outdoors. It is a thing of the past, something I remember from my past.” (Aboulela, 1999: 39)

Eltayib Salih also expresses how changes have affected the villagers and changed the character of a place through time:

“I stood at the door of my grandfather's house in the morning, a vast and ancient door made of harraz, a door that had doubtless been fashioned from the wood of a whole tree. Wad Baseer had made it; Wad Baseer, the village engineer who, though he had not even learnt carpentry at school, had yet made the wheels and rings of the water wheels, had set bones, had cauterized people and bled with cupping glasses. He was also knowledgeable about judging donkeys that seldom did anyone from the village buy one without consulting him. Though Wad Baseer is still alive today, he no longer makes doors as that of my grandfather's house, later generations of villagers having found out about zan wood doors and iron doors which they bring in from Omdurman. The market for water-wheels, too, dried up with the coming of pumps.” (Salih, 1969: 70)

5.10.3 Language and words

In Muslim societies literacy is highly valued. The first word of the Quran is *Iqraa*, meaning read or recite. The use of symbols is an important structuring factor of this society as many others even though words are a major form of expression. Even in cases where a person is illiterate, their use of the Arabic language may be extremely sophisticated. Many illiterate people memorise the Quran. There is great importance to speech and linguistic ability, with the characteristic figures of traditional Sudanese culture being the poets and *fakis* (Ibrahim, 1979: 177-178). There is amazing disparity between the conservative use of visual expression and the explicit use of words. Even in a visual art such as painting, one will find that Sudanese revert to the use of words as a form of expression:

“The Sudanese painter Ibrahim Salahi is greatly influenced by Islamic writing, and earlier also by African masks. His paintings include writing and sometimes faces, half human, half bull, with a stubborn stare. He tells us that words come to him as he works, and some of these appear on his work. “I find I've done them without realising it. Some of it is prayer mostly. Some... is poetry; some from the Koran... some of it is... meaningless...” (Galevo, 1986: 17)

This portrays a complex coming together of a multi faceted history. The triple heritage is again manifest, through African culture, in the form of African imagery in the mask, Muslim culture, in the form of the importance attributed to words and through Western culture with the concept of painting as a profession and an art form.

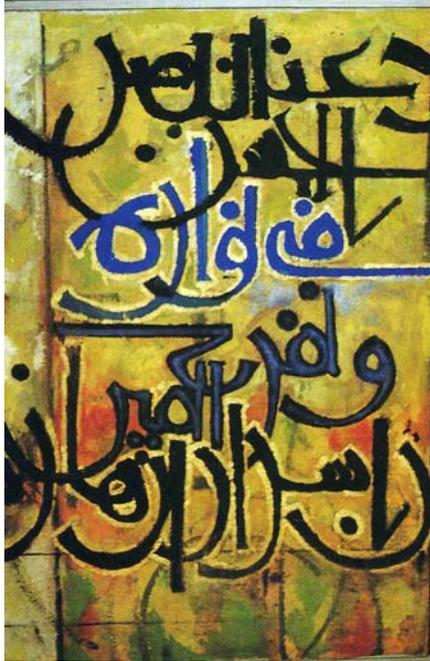


Fig. 5.7 Painting by Ahmed Shibrain (Sulayman, 2000: 52)

Language is not accidental (Vagenes, 1998: 60). The relationship between the meaning of architectural elements, and the meaning of the words used to refer to them, is an important aspect of study in general. In the culture of the riverain region, many physical artefacts symbolise values and beliefs. The loose meaning of the word *bayt* (house) has been discussed previously: Houses cannot be built (*'amarat* also could imply prosper) when intentions are not good. (*Ma 'amarat biyoot wa alniya kharbana*)(Gasim, 1985). Notice the interchanging meaning of *amarat* – implying both built in the physical sense and prosper.

Miriq, *raṣaṣ*, *wareed*, *'aorooq*, *amina*, are names of various components in local building. What these names mean (the language source) and how these meanings are reflected in folklore and poetry provide access to more intangible values of the society. In a *manaḥa* (a song for a person who has died – reflecting mourning and grief) it is said: Like the *miriq* (beam) (this refers to the dead brother) that has broken and scattered the *raṣaṣ* (purlins)(*Ziy almiriq alinkasar wa shatat elraṣaṣ*)

Raṣaṣ probably originates from the word '*raṣ*' (to layer, arrange, organise). *Al-amina* is a forked timber member that is placed to prop up a beam when it starts sagging.

The name probably originates from *aman*, security. This is usually in the middle of a room. *Ras elshay* means ‘fixed parts to each other and grouped them’. *Rasaṣ* can mean ‘columns of timber carrying the roof of a house’. A *mirig* is a column of wood that carries the *rasaṣ* of the roof (Gasim, 1985: 1080)(Refer to the Glossary).

The words used to describe building components express a vision of the building as providing security and order. Yet, these concepts are always related to a broader concept of security and order inherent in relationships and people’s values.

5.11 THEMES AND PATTERNS THAT DETERMINE PLACE-MAKING ACTIVITIES

The above fragments that relate to socio-economic patterns, activities and rituals, attitudes, literature and language, all serve to create a portrait of the northern riverain people of the Sudan. They are perhaps similar to other cultures in many aspects and unique in some. The themes emerging from the above explorations are articulated in the following sections:

5.11.1 Cultural space/natural space

The interwoven categories of cultural and natural space have been articulated in the writings of Levi-Strauss. He developed a *schema* of men/animals/deities:

Men in cities – Domesticated animals Nomads – Roaming animals	Wild animals	God/Spirits
Culture	Nature	Other world

Table 5.2 *Schema* of the relationship between this world and the other world: based on Levi-Strauss in Leach (1974: 76).

Levi-Strauss elaborates that culture is ourselves, it is conscious and is equivalent to the *Ego* in Freudian terms. Nature or food is unconscious and is equivalent to the *Id*. “Cooking is thus universally a means by which nature is transformed into culture.” (Leach, 1974: 31). Culture is everything created by humans as opposed to things created by nature (Ibrahim, 1979: 125). At some point in the history of anthropology, the concept of culture (capabilities and habits) came to be seen as a notion of text – something resembling a discourse (Asad, 1986: 141).

Cultural language is the sum/system of languages including the spoken language, clothes, food, gesture or posture: Each of these being a code conveying a particular message. These messages are familiar in meaning. The culture of the whole

northern, riverain Sudan took on a similar form through history (Ibrahim, 1979: 126). Many of the concepts in northern riverain culture revolve around the notion of this world and the other world. The polarity of the other world, for the northern Sudanese, is expressed in the diagram below. ‘People’ bridge the schism between these two worlds of good/evil. The Quran supports this: the existence of the unseen/metaphysical world is articulated. In everyday life, there is “...a progression from the worldly/material/profane sphere to that of the sacred/spiritual/Islamic, via realms of life cycle drama and spiritual crisis.” (Kenyon, 1991: 229).

God/Allah	Angels	People	Jinn	Devil/Shaytaan
	Created from light	from clay	from fire:	
			from the flame	from the smoke

Table 5.3 *Schema* representing the relationship between this world and the other world for the Northern riverain Sudanese people. .

According to Sufi tradition, humans may ascend this succession depending on the degree of Islam (submission to Allah). In an extreme scenario, in the teachings of Mahmood Mohamed Taha, it is believed that there are different phases of faith whereby one can become a *Mumin* (believer) or a *Muhsin*, progressing to a ‘complete person’, closer to God (personal communication, Osman, 2004). (This Muslim thinker was executed by the Nimeri regime in the 1980’s for his unconventional teachings). Generally, it is believed by many, that to be a follower of a *shaykh* is seen as vital in any process of becoming closer to Allah and his teachings: “He who has no shaykh, his shaykh is Satan.” (Muhammad Uthman al-Mirghani in Karrar, 1992: 126).

As seen in previous sections, many clues to the above structure of the ‘world’ can be identified. These clues are detected in words, rituals and artefacts. These are the signals that expose the structure of a people’s experience and make it visible to the researcher. Thus, Table 5.1, at the beginning of chapter, can be referred to again to explain the levels of control and the agents of control.

5.11.2 Levels of control/Agents of control

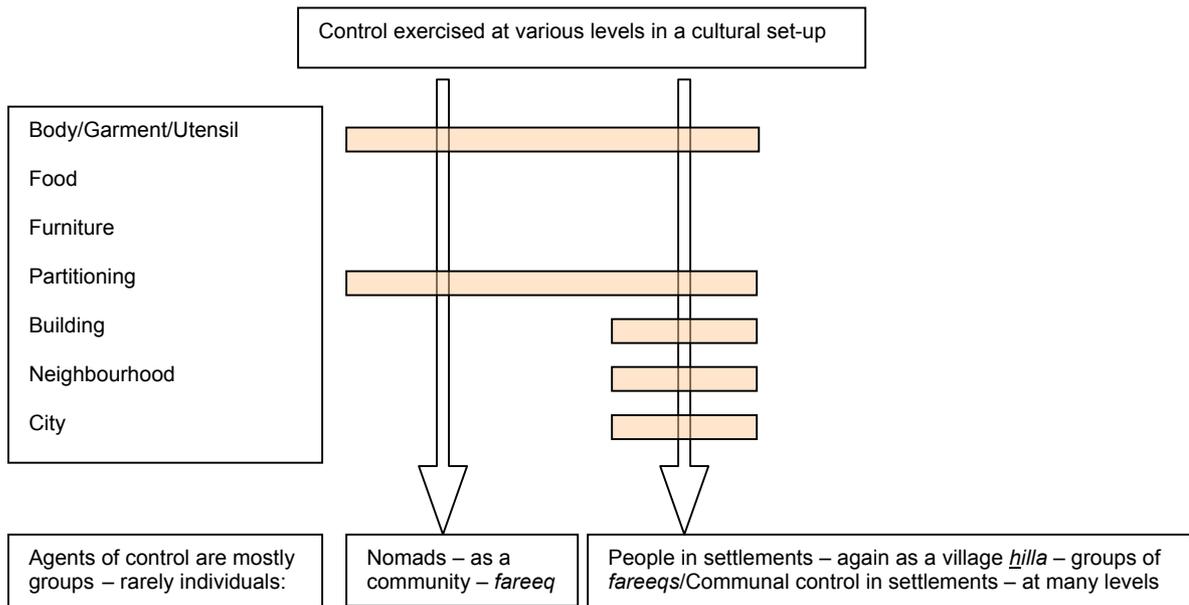


Table 5.4 Levels and control in the northern Sudanese environmental setting.

Habraken explains that certain environments are sustained through the order achieved by various actors (Habraken, 2000: 29). He elaborates that a:

“...built environment may be described solely in terms of live configurations operating on different levels. In doing so, we describe it as dynamic form controlled by people, fully taking into account that built environment is the product of people acting.” (Habraken, 1998: 28).

These actors:

“...communicate, negotiate, bargain and cooperate. Such direct interactions are necessary for built environment to remain in stasis, and they have their own conventions. Although agents may contest portions of a built environment, it exists to be shared as a whole. Hence, reaching formal consensus is an important aspect of the environmental game.” (Habraken, 1998: 29).

Habraken refers to configurations under the unified control of a single agent as ‘live configurations’. “Thus defined, a live configuration “behaves” like a single self-organizing entity.” (Habraken, 1998: 18).

The single agent in Table 5.4 is the community as an entity. The orange blocks indicate the aspects that are under some form of communal control. Both the ‘body/garment/utensil’ and ‘partitioning’ are indicated as ‘live configurations’: they are under the control of a single agent, in this case the community. ‘Utensil’ is included as being that which is presented to others, such as a circulating food tray. ‘Food’ and ‘furniture’ are seen to be more under the control of a single agent rather than the

community, even though social norms may place pressure to conform to some food types related to certain occasions. Kent explains the issue of control as follows:

“...low social complexity is a situation usually regarded in anthropological terms as synonymous with organization based on principles of kin-relationship, genealogy, and shared supernatural force rather than hierarchical stratification and separated central power. Individual members of such societies adhere to conceptual realities that emanate from implicit acceptance of group-exclusive supernatural and relationship unity, a relatively holistic world view that stresses communal rather than individual identity. On the domestic level this conceptual structure applies to the basic communal group and its living space, tending to downplay architectural segmentation of each domestic activity or activity sets.” (Kent, 1990: 167)

Individual houses within a *hilla* village form a continuum and speak a similar visual language (subtle variations on typology), yet they are under the control of separate agents. This configuration cannot be seen as ‘live’. Yet, the internal layout of the houses, identifying male and female domains, is a live configuration as it is governed by the social norms of the community as a whole. As seen in the previous figures (5.1 and 5.2), a woman’s domain extends to neighbouring houses. Thus, control does not always imply ownership. The house belongs to one owner, but there are two live configurations at work in determining the characteristics of this house: the one exercised by the owner and the other one exercised by the community in the form of social norms.

These levels of control can be learnt through observation, but the underlying forces are not always evident. A cluster of houses may be wrongly seen as a unit, many of which comprise a *hilla* (village). In reality, it is the *fareeq* that is the lowest denominator of a village set-up. Yet, these forces are invisible and can only be detected through understanding the socio-economic patterns, religious and social ritual and people’s cultural attitudes.

“...Uniformity results from removing personal initiative from the creation of the artifact.” (Habraken, 1998: 272). There is limited variety within a given typology.

Variable themes are restricted to food and furniture levels. Everything else seems to be controlled by social constraints. Clothing form may appear to be under the control of a single agent, the individual concerned, but in reality it is under the control of the community as a ‘live configuration’. A well-known saying goes as follows: “Eat what you wish but wear what others like.” This control of the community is even exercised on the body as certain cosmetics, including henna and perfumes, indicate various life cycles and are extremely important in terms of gender differentiation.

Yet, despite the overall control of the community, and despite the fact that the individual house is not easily identified in a traditional village, levels of control do remain distinct. To remain stable, an environment avoids horizontal relationships between live configurations (Habraken, 1998: 34). Within a single village, individual houses are under the control of different agents. “Territory and its markers subdivide space, allowing similar configurations to coexist on the same level.” (Habraken, 1998: 34). But, the homogeneity evident in this situation leads one to believe that the ‘higher-level configuration’ at work here, that dominating the ‘lower-level configurations’, is intangible and unseen.

5.12 INTANGIBLE VALUES AND PHYSICAL/SPATIAL IMPLICATIONS

5.12.1 Origins of built artefacts in the northern riverain region

Quatremère de Quincy’s ideas on the origins of built form have already been mentioned.² He explained that distinctions between architecture were to be made based on social structure rather than on technical or aesthetic development (Lavin, 1992: 20-21). Since the hut, cave or tent (originating in the ways that people acquired their food) had a social model, architecture had to be explained in social terms (Lavin, 1992: 41). His agenda was to elevate architecture believed to originate from the hut as it was seen to be a superior form as compared to that originating in either the tent or the cave.

Hunting Fishing	Caves/diggings	Stone: uniform, simple, enormity rather than proportion, identical, repetitive, solid, monotonous
Sheparding	Tents	Frame structure and skin covering
Agriculture	Huts	Wooden: Rich, varied, complex and ordered, taste, delicacy, lightness

Table 5.5 Origins of built form according to Quatremère de Quincy.

Quatremère de Quincy uses this to explain the relationships and differences between ancient Greek and Egyptian architectures. This generalisation would be inaccurate in every way if the idea of multiple origins were not considered – something that he supported in an initial essay in 1784 and then rejected in its publication in 1804.

“Quatremère maintained that there were two different ways for architecture to imitate, one tangible, the other abstract. One is based on the first models of the original

² Quatremère de Quincy has had a profound influence in writing on vernacular or type. The author acknowledges the limitations of his theory – its flaws have been exposed. His ideas have helped to gain more insight into the problem of understanding the built form in the Sudanese region.

dwelling of each country, the other is based on a knowledge of the laws of nature and of the impressions our soul receives from perceiving relationships between objects.” (Lavin, 1992: 109).

It is explained that Chinese architecture was born of the former process where the tent form was simply duplicated.

The Nubians have acquired their food through all three methods at various phases in their history. In this region, the Nile cuts through the land un-dramatically. There are no hills and mountains and few caves. His theory fails to explain the use of columns in Egyptian architecture. The arguments could be extended to include the similar Nubian architecture. Contacts between hunters, shepards and farmers, resulting in architectural influences are also not well addressed.

Yet, Quatremère de Quincy’s theory is accurate in the description of resultant structures. The built structures resemble caves. Thick walls, small openings, if any, lack of detailing and massiveness. Whether this is an imitation of previous shelter options is debateable. How people discovered it to be a form of shelter highly suited to the climate and the terrain is open to speculation.

What is more interesting in the theory, and relevant to the social patterns identified in the above sections, is the idea of sheparding. Imitation of the tent is seen as ‘direct’ and tangible in Chinese structures and the descendant forms of the hut are seen as more superior, because they are based on knowledge of the laws of nature and a perception of relationships between objects rather than direct imitation. Quatremère de Quincy claimed that adherence to the principles rather than the forms of nature, are what made the hut more superior (Lavin, 1992: 109). This is of course debatable. One can see in the ancient architecture of Europe stone buildings that directly imitate the building methods of a timber hut. But, this is not the intention of this discussion.

Though the limitations of this theory are exposed, it still provides an interesting platform for debate when considering the origins of built artefacts in the region of study.

5.12.2 Intangible/abstract imitation of original forms

Looking more closely at nomadic culture one can see that later imitation of primary forms was/is very sophisticated. Nomadic culture holds the following views:

“The nomad of the Sudan regards the sedentary man as a toiler, eating only after severe labours, whereas he is a gentleman living on the income from his capital, i.e. his animals. In fact, one of the greatest misfortunes that can overcome a nomad is to become sedentary. The nomad Arab prefers his freedom to the confinement of the town, which soon corrupts the young and undermines the family structure.” (Verity, 1971: 25).

“...the life of the Kababish revolves around the needs and lives of their camels, which are their lifeblood; a man's wealth is determined by the number of camels he possesses – his home is made from the hair of the camel, his containers from its skin, his food is its milk and meat, his means of transport its back, his source of income its sale, his increase in wealth its breeding – and he will buy a wife with camels. Thus the life of a nomad is directed to supplying water and grazing for his camels and, in consequence, is regulated by the rainfall and the amount of water available at any time of the year.” (Verity, 1971: 27)

“... the Bedouin possesses nothing that cannot be moved by two people, and virtually nothing that is not absolutely necessary to his way of life...” (Verity, 1971: 34)

“The Bedu place great value on austerity and asceticism. The harder one's life the less one eats or drinks – and this is minimal. The harder one drives oneself the greater one's esteem. So things of luxury are usually scorned. One would rather sit on the ground than on a seat; one would rather sit upright than sprawl; one must give, not take. Generosity is paramount; one must share what food one has with anyone who is near...” (Verity, 1971: 35)

In present-day habitation models one clearly sees the influence of sheparding as a lifestyle, not in built form as such but in space use patterns, something that is not addressed by Quatremère's theory. Abstract imitation of nomadic patterns means that activities are many times contained in an open space that remains empty after the people have dispersed. Space demarcation is expressed through temporary measures, such as laying of loose stones or the putting up of flags.

In terms of buildings, temporary living in the open air is expressed in many ways: Interior surfaces are exterior surfaces; very little differentiation is made between the two, material and finishing is identical. Furniture is light and easy to carry by one person. There is no differentiation between the furniture used within rooms or in the courtyard.

Functions alternate easily between inside and out. The house house/courtyard/street are seen as a continuum acting as a stage for accommodating the uninterrupted series of activities. Spaces are quickly and easily appropriated to house different functions. Everything resembles the putting up of a camp on arriving at a desired location by a nomadic group.

5.13 SUMMARY AND CONCLUSIONS

Northern riverain culture, as 'text', is broken down into its components and the 'world' of the northern Sudanese riverain peoples is articulated into categories: progressing from the subliminal that is routed in God and the Quran, to the profane and worldly, through the corresponding extreme of the 'other world', that of the spirits. Clues to the above are detected in writings and traditional sayings of the region.

In this 'other-determined ethical culture' it is found that compliance with socially accepted systems of duties and socialization. This is based on an elaborate process that maintains coherence and stability in the social and economic structures of communities. Some of these processes are based on religious values rooted in the Quran or Muslim tradition; some of them are older African customs of pre-Islamic Nubia. All of them have corresponding ritualistic practices.

Anything that is believed to remotely clash with Islamic beliefs or may lead to a questioning of the Quran is avoided. Change is resisted and creativity is attributed to the *shaytaan*. Art is treated with suspicion and physical artefacts are despised. This has generated strong attitudes to artefacts, which is further expressed through the literature of people from the region. This leads one to the conclusion that language and words are highly valued as opposed to the physical artefact. Great importance is attributed to speech and linguistic ability. The linguistic creativity of the poets and the *fekis*, and how it is appreciated, creates an interesting situation when compared to the general attitudes to creativity mentioned above.

'This world' and 'the other world' co-exist, overlapping, in the minds of the people and influence everything from their patterns of space-use, use of words, use of colour and everyday activities. Many clues to the above can be detected in writings and traditional sayings of the region. Cultural and natural spaces are differentiated. Within the cultural realm, various levels of control are identified and their corresponding agents of control. It is concluded that cultural configurations are mostly under the control of groups rather than individuals. Many of the resultant configurations are generated from unseen and intangible social forces based on conformity. It has also become evident that in this 'other-determined ethical culture', compliance with socially accepted systems of duties and socialization blur the distinction between public and private levels of control.

The origins of present-day habitation models are traced back to the influence of shepherding as a lifestyle, not in built form as such but in space use patterns. Nomadic cycles are detected within the cave like structures characterising the built forms of the region. The idea of multiple origins initially advocated by Quatremère de Quincy is used as well as cross-cultural contacts to explain the resultant place-making patterns in the region.

A structure of intangible phenomena is articulated. This has allowed reflection on the meaning inherent in environmental expression. Sub-problem 4 has been resolved. The themes of the study, from Chapter 3, have been elaborated using this structure and the significant influence of the intangible culture on tangible manifestations has been substantiated. Thus, the hypothesis has been supported.

CHAPTER 6: A THEORETICAL, INTERPRETATIVE FRAMEWORK FOR THE STUDY OF SUDANESE ARCHITECTURE

6.1 SUB PROBLEM 5

Relevant tangible and intangible artefacts of the culture of the northern riverain Sudan need to be placed into an eco-systemic framework for use in architectural interpretation, research and education. This framework must enable articulation of structural relationships between intangible and tangible aspects of built culture and place making in the northern riverain Sudan.

6.2 HYPOTHESIS 5

An understanding of the built culture of the northern riverain Sudan requires the identification of significant relationships between tangible and intangible aspects of the region. Inclusion of the studied relationships into an eco-systemic framework will expose the role of intangible culture in space appropriation patterns and its implication on the character of place making in northern riverain Sudan, where a rich culture is expressed through architecture.

6.3 OUTLINE OF CHAPTER 6

This chapter attempts to achieve a consolidated interpretation of the spatial and physical manifestations of culture in the northern riverain Sudan. Many aspects discussed below are speculative and tentative, but the rationale of the inquiry is based on the results of the previous chapters. It is attempted to understand spiritual influences on place making activities, as a phenomenon, through the articulation of a personal reading of the context. The history of the region is explained through a display of paradigmatic milestones and intervening episodes of socio-economic and cultural formation. The northern Sudan location in Sudan, in Africa, is expressed within a current global academic realm. The intangible aspect of Sudanese architecture, and its relation to the tangible, becomes discernable through interpretation.

6.4 TOWARDS AN INTERPRETATIVE FRAMEWORK

Through the study of the context, within the framework of the identified themes recurring in the literature on the region, it has been possible to construct one understanding, an eco systemic reading of the context from an architectural point of

view. This construct is not only of the tangible phenomena, but also of the intangible. Things/artefacts become more than just materials or objects. Physical 'things' are seen as reactions to context, in which materials or objects are concretised. The concept of artefact is extended to include conventional wisdom existing in the form of values, ideas and words.

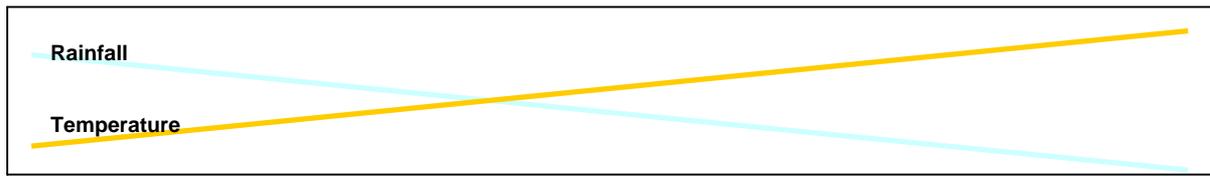
The concept of 'environmental phenomenology' (explained in Chapter 2) is used in this interpretation. The influence of the natural environment is articulated through philosophically based analysis. A phenomenology of place is achieved through deep understanding of the milieu in which a physical artefact is conceived and implemented. Superficial readings of the everyday world or mere cultural imagery are avoided as a more profound understanding of a phenomenon is aimed for. Images are thus explained in terms of their mythic values and tradition is reinvented and portrayed as theory. The essence of an event is aimed for, its underlying reason exposed.

While the author has not attempted a phenomenological interpretation of the landscape, towns and individual buildings, aspects of phenomenology enabled the use of a reflective attitude, resulting in the identification of several hypotheses relevant to the study. Paradigm cases were developed out of recurring themes in the literature of/on the region. These are elaborated in the following sections. The result of one paradigm case that emerged very strongly is the vast difference in the material culture of different historical episodes.

6.5 A COMPARISON BETWEEN CULTURES OF VARIOUS HISTORICAL ERAS

Remnants from lived existence such as modifications of a landscape, physical remains of material objects, graphic signatures of art or scripture, residues of human activities and oral or written traditions show a marked difference between the different eras. In the post Islam eras archaeological remains show a lack of material imagery. These changes in social structure coincide with episodes of climate change. The desiccated natural environment, the identity of the region as it exists today, has existed since about the 4th Century AD.

The diagrammatic representation of increased temperatures and lower rainfall is related to the major historical episodes in Table 6.1 below.



2000BC-1000BC	1000BC-300AD	300AD-642AD	1504-1821	1882-1898	1956-Present
---------------	--------------	-------------	-----------	-----------	--------------

These periods were interspersed with episodes of foreign rule, by Egyptians in the Kushite and Meiotic eras and:

Emerging identity **Turkish/Egyptian** **British/Egyptian rule**

Kushite	Meroitic	Christian	Funj	Mahdist	Independence till present day
Centralised power first at Kerma then at Napata	Centralised power at Meroe of	Split into three kingdoms	Centralised but power shared with various chiefs and originally an alliance with the 'Abdalab Arabs	Centralised but short lived and always at war	Centralised but anti-government groups operating in south (since mid 50s) and west (since 2003) of the country
Highly hierarchical	Further away from Egypt and more independent – highly hierarchical	Divided village-based society*			
Expansion interests to the north	Expansion interests to the south	Limited power and strength	Expansion interests but no significant success	Expansion interests to spread Islam	Split by civil war
Kushites: food producing society – extensive trade activities – elitist society Meroites: excessive food production – significant wealth through trading and mining (Meyer, 2003)		Environment desiccated – limited economic activities	Food producing society and extensive trade activities	Pre-occupation with war and religious issues	Preoccupation with war during most of this period – excessive deforestation and desertification
Kushites: massive monuments and rich material culture – buildings of various functions some of them still unknown – stone artefacts and fine pottery: Egyptian influence with traditional elements – large burial mounds Meroites: again massive monuments expressing power and wealth – own language developed to replace Egyptian hieroglyphs – kingdom of the blacksmiths – iron-smelting industry fuelled by abundant forests (Meyer, 2003)		Rich imagery in the form of coloured frescos – iconology associated with the catholic church – converted castles as churches – development of a church form of mud, bricks and stone (Meyer, 2003)	Much of the imagery is associated with the body and with dress forms as well as rituals of the kings court – little in terms of buildings	Frugality encouraged – little material expression	Material culture as a power tool – new imagery to reflect Arab/Muslim affiliation and suppress African affiliation – highly influenced by other cultures and is in state of rapid transformation
Contacts with other great civilizations such as the Greeks and the Romans		Minimal contacts with the Coptic mother church in Alexandria or other countries	Contact with other countries through trade and travel	Contact with others discouraged	Since the 1980's external contact has been discouraged – changing due to international pressure and discovery of oil reserves
Religion and ruler are one and the same – as the hereditary succession of the crown still had to be validated by the god		Mingles secular authority with organised religion*	Muslim kingdom – religious ideals propagated by individualistic <i>fuqara</i>	Religious state	Secular state after independence then religious state since the 1980's
Kush is always under threat from Egypt which wakens the kingdom – Meroe evolves as further removed from the northern power but is finally weakened, one of the reasons being deforestation due to long-term mining activities (Meyer, 2003)		Too disconnected from other churches to be of significant power – finally succumbs to Arab/Islamic pressure	Power at the peripheries became stronger as that of the centre declined – Kingdom gradually weakened till overthrown by Turks	Migration to Omdurman drains resources of the country, leads to famine – non-production weakens the state	Khartoum as a drain on the resources of the country – depletion of natural resources and desertification

Table 6.1 A comparison between cultures of the different eras in Northern riverain Sudan.

Why these changes occurred between the different ages is an issue of speculation. The changes revolve around the following issues: Why centralised, unified power is dominant in one age and de-centralised power in another; to what degree the society is hierarchical and elitist or homogeneous; what kind of expansion interests those in power had; the kind of material culture produced; contacts with other people and whether religious power and political power were combined or separated.

Traditionally, the study of society has been perceived as a measurable discipline, which employs the techniques of natural science (Oliver, 2000: 77). This is seen in some assumptions that social change adheres to a set of rules that is applicable to all societies, anywhere. Accepted Western social evolutionary theory assumes a rise in social complexity, internal stratification and central authority (Kent, 1990: 167) and it has generally been believed that, as societies become more complex their spaces become more segmented (Donley-Reid, 1990: 115 and Kent, 1990: 129). In the region under study, space became less segmented and more multi-purpose in character, as well as more gender specific. In the Sudan, society has fluctuated from periods of elaborate stratification and segmentation to relative simplicity and lack of elitism depending on economic situations and religious and political influences. The Western assumption of unremitting progression to complexity is not a reality here.

One key concept in theories of social change refers to 'adaptability', including, but not limited to, the adaptation to environmental change: "One such line of theory postulated a general movement from magic to religion to science." (Schneider, 1976: 3). Schneider (1976: 4) explains that elements of each have always existed: that is science, religion and magic have always co-existed. One can see in the above table, that religion has always been a strong force. It has intermingled, and still does today, with ancient pagan beliefs that may comprise a belief in some form of magic.

The role of the king in Egypt was to provide for his people under his reign (Hassan, 2000, 136). The Funj king was:

"...the provider of a safe and fertile homeland; he taught people how to extract gold; he instructed them to cover their nakedness. A Nubian king, it was said could 'make live, or make die.'" (Spaulding, 1985: 127).

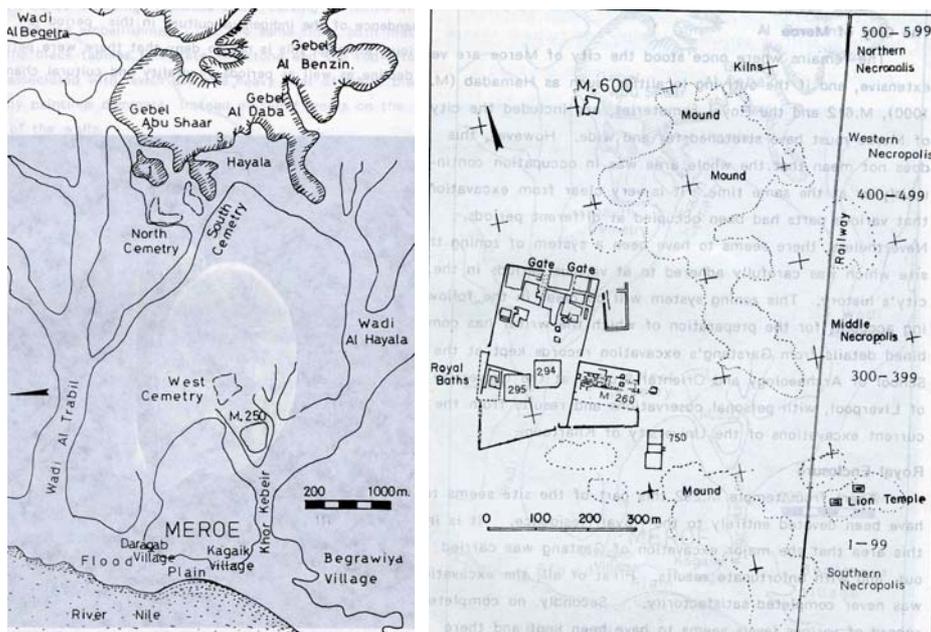
Origins of evil were explained in legends (Spaulding, 1985: 127). This can possibly explain the disintegrating central leadership as the climate became harsher and people were not sufficiently provided for.

The separation, or integration, of political power and religion has inevitably been linked to religious beliefs through time. Elitist social structures and complexity reflected on settlement planning at micro- and macro- levels. Certain spaces were reserved for certain sections of society and there were several segregated classes of architecture defined by location, elaboration and content (Hakim, 1988). Social hierarchies were more evident in layouts. Judging from the layout of the city of Meroe (Figs. 6.1 and 6.2), status-segregation was evident in the settlement:

“The ordinary population of Meroe lived further eastward, southward and northward of the Royal city, in houses built generally of mud-brick, though in the late period, re-used red bricks were employed. These were built on or near the iron slag heaps. They seem to have been set up as simple structures at the edge of the town, constantly shifting from one part to the other.” (Hakem, 1988: 27)

Strict zoning appears to reflect a high degree of centralised control on environmental interventions. The industrial activities at Meroe were consistently located on its eastern side, a zoning pattern that spanned the history of the town (Hakem, 1988: 27). From documented buildings it is also apparent that spaces were highly segmented and mono-functional.

Meroitic culture demonstrated the presence of a strong administrative system and highly evolved integrative structure. Urban identity reveals the existence of organising principles that allowed mobilisation and control of large labour forces affecting long-range planning projects and maintaining a hierarchical social order that determined the general living conditions and settlement location of the urban population. Also, domestic segmentation accompanied increasing differentiation of socio-political authority and parallel formalization of residential status difference – the former expressed through diversification of monumental architecture, and the later through standardised variation in domestic construction style and settlement placement (Kent, 1999: 165-167). This explains the segmented and status-defined city planning in Meroe.



Figs. 6.1 and 6.2 The topography of Meroe and the layout of the town (Hakem, 1988: 16 and 18). The zoning of Meroe seems to have persisted through the ages despite changes in the size of the city: Hakem studies this through the consistent location of the Royal residence in relation to other parts of the town (1988: 17-18).

Elitism is a strong identifying characteristic of the pre-Islamic era. It is defined by political power and material wealth. Discriminatory mind-sets are acknowledged as a key feature of Sudanese attitudes; yet, the materialization of this is not so visible. This follows in the general pattern of the history of the region, where the intangible came to acquire a higher status than the tangible. Thus, social patterns were not necessarily reflected physically or spatially. Status-determined built form or site location was more dominant in the pre-Islam eras and class differences are rather marked by a tangible display of artefacts as a source of pleasure rather than subsistence.

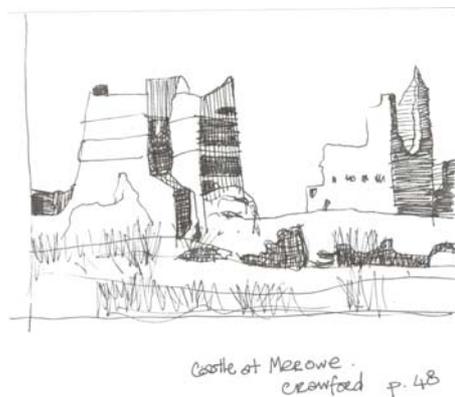


Fig. 6.3 Castle at Meroe from the later Funj era. Drawing by author from Crawford (1951: 48).

Crowfoot (1911: 40) believes that the palace at Musawart es-Sofra and temples in the Nubian Desert, further away from the river, belonging to the rulers of Meroe were not inhabited for long periods of time. According to him:

“...they were the superfluous works of a dynasty great in peace and prosperity. They were useful, no doubt, for a short period in the year... Did they inherit from a line of nomad ancestors this love of the pleasant desert valleys far removed from the cities by the river...?” He compares them to the “Blue Sultans of Sennar, who used to migrate during the summer rains to a high gravelly ridge midway between the Blue and the White Niles...?” (Crowfoot, 1911: 41).

Crowfoot continues as follows:

“This dynasty... passed away before the middle of the 4th Century of our era, and the country fell for a time at least under the power of a black tribe of lower culture. With this change comes a cessation of all building in the interior, although cultivation may have continued as before. The change came rapidly and without observation; in the quarry on the hill above Nagaa, from which the stones of the temples were cut, are large blocks almost detached from their beds, but left as if the order to cut and lower had suddenly been cancelled. On the riverbanks there was no such complete disruption; many characteristics of the delicate pottery found upon these sites recur on the finer wares to be seen at Christian sites..., which flourished between the 8th and 10th Centuries of our era. With the Christianisation of the country all the gains of indigenous and imported culture were not lost, much persisted, as did many a less pleasing social custom, but the persistence was confined to the valley of the Nile; in the uplands the moment which had created houses and temples of masonry in remote valleys came probably and ended with a single dynasty.” (1911: 41)

This is an interesting aspect, comparing the riverain culture to that of nomadic cultures further inland. The fact that he ascribes the expression ‘minor culture’ to the Funj is highly questionable. Yet, it was definitely a different culture that did not correspond to Western concepts of development and civilization, reflected as material objects and monuments.

Material culture must have been greatly influenced by religion. Meroitic art was distinct and can be detected in the “...well-rounded female figures, in the highly individual pottery styles, and in the use of motifs and subjects not familiar elsewhere.” (Shinnie, 1967: 100). The favourite subjects of Meroite artists were the elephants and lions, which are rarely seen in Egyptian art – African elephants used in warfare in Ptolemaic and Roman times were trained by Meroites (Shinnie, 1967: 100-101). The fine ceramic art of Meroe is a shared characteristic with the pottery of the Christian era (Shinnie, 1967: 114-116). Some of these material expressions were no doubt a result of extensive contacts with other civilizations, though their uniqueness makes them easily identified as Meroitic by archaeologists. Graeco-Roman formulae of

classical correctness were employed (Shinnie, 1967: 119). Christian symbols were an important aspect of the Coptic Church. Icons were used to depict the image of God (<http://www.Copticcentre.com/two.html>).

The advent of Muslim nomads reinforced already existing nomadic traits. The religion they brought with them prohibits the use of the human figure in any art form. The early focus of the religion on reading and learning no doubt had an influence on the lack of importance attributed to imagery in the religion, and when used the focus was on abstract patterns and plants. As mentioned previously, the one important place for the Muslim is where the haj rites are undertaken:

“To be a Muslim requires five commitments: belief in Allah, prayer, fasting, pilgrimage and almsgiving. Four of the five are opportunities to demonstrate one’s faith. A place is necessary only to the pilgrimage. The obligatory prayers may be offered anywhere. Fasting requires no specific site. For the pious Muslim the mosque has become a site for prayer and a site for fasting, but it is not a building for either.” (Highlands, 1990: 57)

Sacredness is embodied in the body of the individual worshiper rather than on the physical space that contains him/her, a mosque for example. Sanctity may be embodied in a praying person rather than a building. It is embodied in the halaqa, a group of people performing a ritual, the circle of people singing the praises of the prophet, rather in the form of the space that contains them. The sanctity of the place is contained in the ritual being performed and disperses with its conclusion. This unique approach to ‘place’ has influenced space use immensely. This is often reflected in other domains, as the character of the space ‘being’ the activity/rite performed.

The establishment of the Funj Kingdom brings another aspect to the history of the region, that of elaborate rituals. Spaulding explains how the court ritual in Sennar was:

“...an elaborate and well-orchestrated drama that not only enunciated the formal acts of the state, but also ceremoniously reconfirmed the right of the state to exist and of those present, including the King, to hold their assigned positions within it.” (1985: 6-7)

Spaulding also explains that the physical setting of these rituals, the palace complex, was not a building type that could survive the elements, being built of packed earth.

And so the story of the Funj continues in history sources as one that focuses on rituals and the extensions of status and beliefs on the body, attire and cosmetics. Visitors to the state of Sennar felt that the architecture had no symmetry or beauty (Spaulding 1985: 8). To what extent this is true is debatable, but there were no monuments that were to survive the deterioration of time or that were comparable to the remains of the earlier kingdoms.

Ethics are seen as a means of control. Externally determined rather than internally determined, based on guilt rather than what is right or wrong. This intangible characteristic of the northern Sudanese people has led to a degree of conformity. This is an aspect that has thus had major impacts on how people inhabit space or shape their physical artefacts. The homogeneity that is manifested visually is, thus, traced back to ethical control systems of the society. Differences in built form and space use are thus, traditionally, very subtle and not so apparent.

An aspect of social change is the degree of personal freedom in various social constructs (Schneider, 1976: 11). This is a contentious issue if one considers the importance that is attributed to freedom in Western cultures, together with a rather judgemental attitude with which any other culture is assessed. This has been avoided in this study. Various social phenomena are approached in a non-judgmental manner to enable understanding.

The conservatism expressed through dress forms conflicts with the many sexually implicit gestures associated with the method of wrapping a garment around one's body. This is comparable to the use of explicit words in poetry to describe women's bodies and romantic sentiments, relative to the apparent conservatism expressed in everyday life.

There was much material imagery and prosperity when Nubia was at its most powerful under one leadership, as when the climate was moderate, land was fertile and much wealth could be generated. Abundance and riches previously encouraged foreign contacts and trade, as well as political supremacy and lavish lifestyles. Lack of prosperity has already been identified as a paradigmatically linked expression of a perceptible frugality in physical expression in later eras. Nomadic lifestyles and contempt for urbanism and material wealth has also been mentioned.

The coming of Islam was simultaneous with the most impoverished eras, in terms of climate and ultimately in terms of economic gain. Crowfoot states that: "Fashions in building change very rapidly during periods of prosperity." (1911: 38). He attributes the discovery of various building types in Meroe, existing side by side, in the absence of great mounds (thus they are the work of a short period and not a long series of generations) to periods of wealth. This point is another important reason why the material culture changed so dramatically between the different eras: because of poverty, people simply could not afford to experiment with building types, perhaps, among other reasons, leading to the visual homogeneity.

Harsh environments have led to defeatist attitudes. People are despondent about their fates and despair concerning the lack of control they have over their lives. Thus, they depend on the *shaykh* to protect them. This fatalism is reflected spatially in very powerful ways in terms of patterns of urbanisation that prevailed at certain historical periods, space use within the home and in other *loci* of social and religious ritual, and in the sanctity (or lack of) that is attributed to the tangible artefact, be it built form or non-architectural.

Another problematic sequence refers to a supposed evolution of professions through time: moving from hunters to shepards, to agriculturalists to industrialised societies (Schneider, 1976: 14-15). Ancient Meroe was an industrial society through their extensive iron-smelting activities (Shinnie, 1985: 28). Iron smelting continued through the Christian period (Shinnie, 1985: 30). The region has been known for its mining opportunities since early in history – that is one of the reasons why the Egyptians have always shown interest in it. Later in history, the region is more known for its subsistence agricultural activities. The so-called stages of development cannot be applied strictly to any one context. Assuming that all societies go through the same processes of evolution has been a contentious issue (Schneider, 1976:33-36), and it does not apply in the area of study.

Sometimes social change has been perceived to occur when there has been a transformation from homogeneity to heterogeneity, using living organisms as an analogy. This is explained through one example of the separation of economic activities from the kin or family. Yet, these two structures have an inter-dependent existence (Schneider, 1976: 6-7). In the pre-Turkish eras, a *saqiyya* system of

economy meant that economic activity was kept within the family, not necessarily with a regulating centre. Where the saqiyya or the land belonged to one person on whom many depended for either the irrigation of their land or as a source of paid labour, a type of feudal system developed.

With the imposition of taxes and the heightened control of the Turkish rulers on matters such as what type of crops to plant, this system disintegrated, the Turks were rudely introducing the country to western forms of economic activity. These changes are no doubt linked to the form of authority. In the former case, authority was decentralised and represented by the leading figure of the family, or the feudal landlord. In the latter, it became separated from the family and was centralised through political power. In this system, the different parts of a society become highly interdependent, when for example a family is no longer able to sustain itself. This becomes problematic if that ability at sustenance is taken away before a complete system of support is set up to maintain it. This is perhaps another reason why the material culture of the region deteriorated as the preoccupation became daily sustenance.

This focus in terms of economical structure above, leads one to consider Marxist theory. A Marxist interpretation of Sudanese history has been articulated by Al-Gadal (1992). This dialectical interpretation views social change in the Sudan as being linked to the means of production and who owns them. Growing discontent among the peasants in the feudal systems in the pre-Turkish eras is perceived to have given rise to the weakening of the Funj kingdom, for example. Before the Turkiyya, private land ownership was recognised and the Turks confirmed these rights by issuing proof of ownership (Bjørkelo, 1984: 104). This approach is limited as it delegates a minor role to religion. The approach is refuted through the different stages of interpretation of this dissertation, even though the relationship between belief and action is obscure. Some may delegate belief a minor role in social practice (for example Marx), while others may assign belief a more influential role (for example Weber) (Turner in Schneider, 1976: 97).

The form of religion may also have a great role to play in social change. The way that the religion of Kush and Meroe influenced the day-to-day life of commoners is still unclear. Catholic inclinations of the Coptic Church probably meant that attitudes

revolved around the belief of predestination (Schneider, 1976: 92-97). Perhaps this was the seed for the fatalistic attitudes apparent till today. It could also have influenced less concern for material expression, as one could not differentiate between the 'saved' and others by the quality of life they lived.



Fig. 6.4 Church in Old Dongola Sketch by author from Crawford (1951: 34).

From the above case, attitudes to material wealth, which is linked to sedentary living, and asceticism, which is linked to nomadic living, are exposed. Self-denial, moderation and self-discipline – the values of the nomads – emerge as Sufi tests of humility, obedience and worldly renunciation. Again, materialism and imagery was delegated a minor position in terms of social priorities.

Social and religious ritual gained an essential, unifying role. These rites ensured conformity, as mentioned earlier, and they also ensured that harmony presided between original settlers of the region and newcomers over the ages. This was imperative for the survival of a people, and their culture, who existed at the crossroads of several worlds. The transience and fluidity of the places they created to host social and religious rituals, are due to a summation of all the structural links and factors mentioned and explored above.

Ibrahim (1976: 11) believes that the true birth of an Arabic culture in the Sudan started with the Funj, while indicating that the filtration of this culture started earlier in history but was formalised and accepted then. He goes on to explain that Sudanese thinking is inevitably linked to the 'learning' that was brought into the country by the Muslim teachers and its mode of transmission was the Arabic language (Ibrahim (1967: 11-18). He articulates that Sufism, though common in all Muslim countries, took a unique turn in the Sudanese context, in that it entered the country with Islam.

That is, in the Sudanese mind Islam and Sufism are one and the same thing. Thus, the spread of Sufism in the region was wider than in any other context (Ibrahim, 1967: 18).

The above comparison between the different eras is not exhaustive. It offers rich opportunities for further research into the architecture of various historical episodes and the reasons for changes in material culture. This places the architectural debate in its correct setting: a cultural manifestation that is strongly linked to socio-economic changes within a specific context.

6.6 AN ALTERNATIVE INTERPRETATION OF SUDANESE HISTORY

Generally, the history of Sudan is divided into two eras, namely pre-Islam and post Islam. Major changes occurred with the advent of the new religion and due to the manner by which the religion was disseminated. This dissertation rather acknowledges the 'lost', vague stretch of time between the signing of the Baqt treaty and the establishment of the Funj Kingdom. It is believed that the shape and form of Sudanese society and culture as it stands today mainly evolved in that era. This does not undermine the importance of other factors such as British, Egyptian or Turkish influences, but rather sees the introduction of Islam as an important event, expressed as a shift in Sudanese history. Identifying a unique approach to the study of this specific region is procedurally important and will assist in creating a methodology of research that is perhaps very relevant to African contexts.

An eco-systemically based framework is constructed with which the relationships between the prevailing paradigms of diverse historical episodes can be articulated. The historical milestones are indicated in the timeframe in Chapter 3. Society's changing ideas/concepts through time, which determined social systems, were not a reaction to a 'given' set of circumstances. Three factors were also going through alterations. Over a very long period of time climate changes were imminent. Foreign or local rulers and their policies were also in a constant state of transformation. And the profile of the population was never stagnant due to the accessible location of the area.

Climate change has always been linked to the growth and the demise of major civilizations. Nubia is no different. The Sahara desert was formed some 5000 years

ago and has only been hyper arid for the last 2000 years. This roughly coincides with the disintegration of the large unified and powerful Nubian kingdom into smaller and less influential kingdoms.

The images of elephants on the walls of temples, that are now in arid areas with little animal life in them, lead to speculation about how the inhabitants of the region must have interacted with a entirely different environment in very different ways. Some speculate that these images were the result of trade contact with India. Yet, the significance of a previous ecology and habitat of the region cannot be ruled out. Climate changes and their linkage with building forms and material use are probably easily detectable in archaeological finds, but the linkage between climate and people's beliefs and attitudes is more obscure. This 'dynamic interplay' of a variety of factors that underpins changing approaches to space and place, has been identified and used to compare two different eras in the region's history.

Supposed Nubian contact with India is an aspect that has caused much speculation (Shinnie, 1967: 100 and 113). The *hafir* (water diggings) at one Meroitic site has been attributed to Indian influence by some researchers. Elephant figures, as mentioned above, and three-headed figures found on Meroite images, have created speculation that Indian influence must have been strong. Till today, dress forms, cosmetics and wedding rituals have a striking resemblance to Indian culture. But Hakem (1988: 223) argues that some elements, claimed to be Indian-inspired, may just as easily be purely Meiotic, as the appearance of elephant-lion motifs started at earlier dates than those suggested for Indio-Meroitic contact.

There was a complex combination of aspects underlying the transformation in that region. The premise of this dissertation is that the linkage between climate change and spiritual beliefs was strong. This had an influence on habitation models. The fact that spirituality often revolved around the Niles, through various rituals linked to rites-of-passage, also indicates the role it had to play in the well-being of people and their daily livelihood.

The nature of a landscape is interrelated with climate. Till today, much of the Sudanese landscape is undomesticated. Settlements exist as separate incidents in a sea of space, apparently disconnected except for the people most familiar with the

region. Refer to the poets of the Butana, the region between the Nile and the Atbara River, who build up vivid images of the area with so much detail, names of regions and descriptions. To them it is not the undifferentiated landscape apparent to the outsider. This landscape has impacted on the riverain people's approach to life.

The transformation that occurred during this climatic transitional phase can only be re-discovered through the study of its manifestations. This comprises the characteristics of artefacts before and after it. Through the study of these artefacts lost ideas may be recovered and a re-construction of past thoughts achieved. History (time), geography (space) and cognition as three dimensions of analysis (Crumley, 2000: 194), can be utilised in generating interesting insight. This concept provides rich opportunities for further research.

6.7 NORTHERN SUDAN IN THE CONTEXT OF SUDAN AND AFRICA

Due to similar contacts through the eras, some of the characteristics of the region are shared with not only the whole of the Sudanic belt, but also with the coastal regions of Africa on the east. These include the *feki*, spiritual guidance embodied in an individual; similar climates and climate changes, as well as the impact of the Arabs and European colonisers. The last impact has developed a pattern of urbanisation and space use that can only be further investigated through a comparative study, which falls outside the scope of this study.

There are no doubt major differences as well as similarities. The *Baqt* Treaty was not only historically unique as a diplomatic agreement; it was also an exceptional approach by the Muslim crusaders who, till then, had spread the religion through wars and invasions. This resulted in the development of a different form of Islam and a different approach to religion.

Northern Sudan may have stronger cultural links with the ancient Sudanic belt than the southern parts of the country. This needs to be appreciated in any research on the area. Ali Mazrui's analysis of Africa as a 'triple heritage' is still to be applied in meaningful ways to the environment and in terms of architectural responses. It can be used to identify common trends and shared characteristics in the environmental responses of Africans. Ahmed Al-Tayib's 'Sudanowiyya' (Personal communication, 1992) is another theory that can be used as a tool for analysis of the Sudanese

responses as being uniquely Sudanese. Mohammed Salih explains how the National Movement for the Study of the Sudanese Culture:

“...has established a very strong school of ‘Sudanology’, which believes that Sudanese culture is uniquely Sudanese and not a basket full of bits and pieces of Arabic/Islamic/African elements.” (1986: 423).

This, again, provides rich opportunities for future research.

6.8 SUDANESE ARCHITECTURE

From the debate of the study so far, it can be concluded that architecture in various ways, is a strong expressive force in the region. This is apparent in the frugality of the post-Funj eras, as it is obvious in the massive monuments of the Meroitic era. It is also evident in significant ways in the reaction to the harsh taxation laws of the Turks or the segregation of the British.

Any spatial or built manifestation of a culture that conveys a meaning, or creates a particular reaction in the user or spectator, is architecture. The above, changing architectures are as beautiful as the purpose they served, be it functional or spiritual. The choice of a people to attach importance to, or reject the physical object is an architectural decision. The relationship of a people with climate, politics and economy, which may ultimately be expressed in simplification of buildings and the embodiment of architectural significance in the ‘activity’ or ‘event’ or even in the ‘physical body’ of those performing the action. These are all architectural responses.

Northern riverain Sudan acted as a permeable, frontline border where Arab met African. A basis has been created for the identification and research of other such regions in Africa. Cultural and religious influences reinforced certain themes in northern riverain Sudanese life. Religious systems combined with commonplace daily life each played a role in creating a cultural order of meaning and activity. Spiritual beliefs are embedded in everyday places and routines. Space contains sacred significance. This has been evident through the different historical phases of the northern riverain Sudan.

6.9 AN ECO-SYSTEMIC FRAMEWORK FOR THE STUDY OF SUDANESE ARCHITECTURE

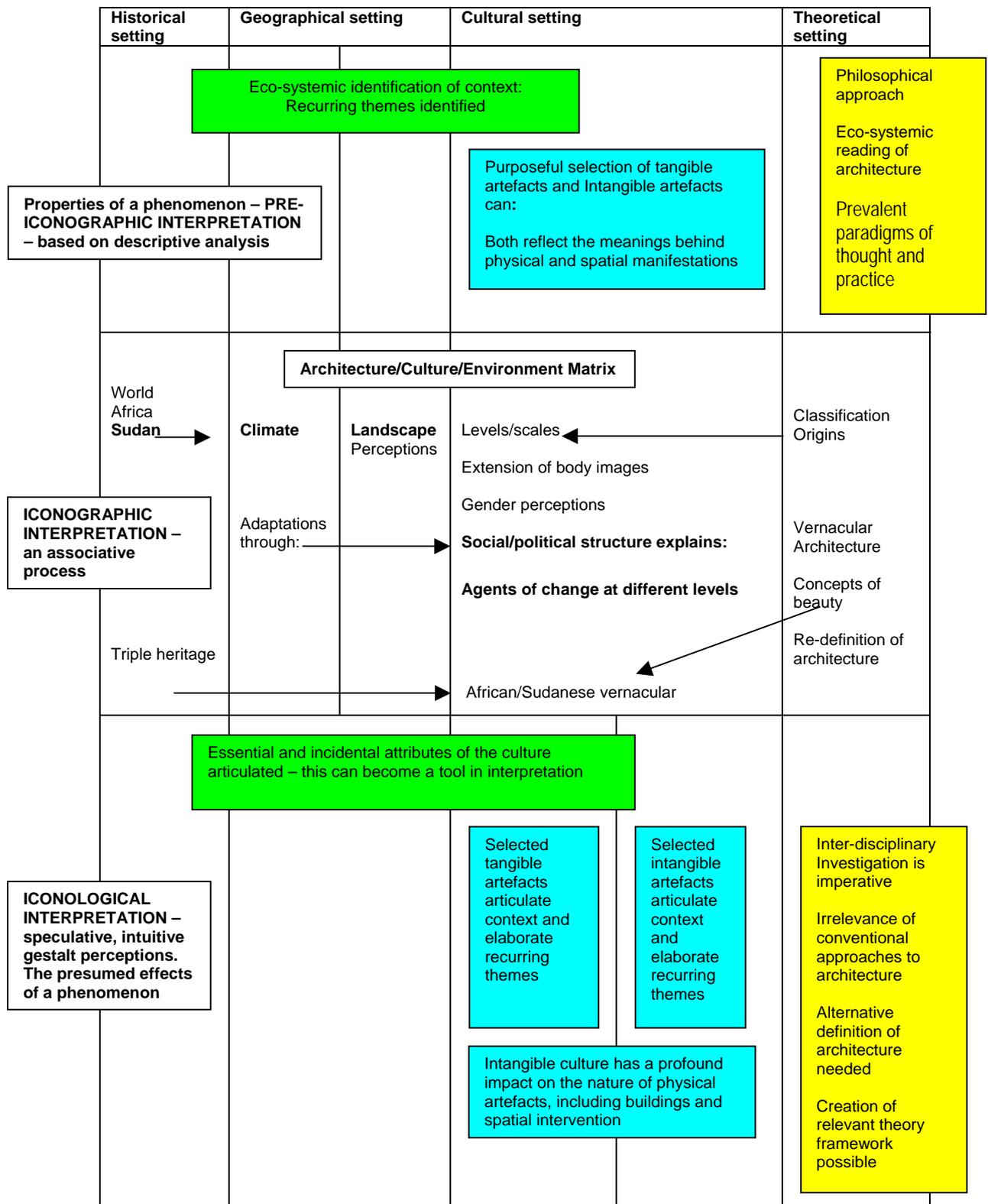


Table 6.2 Space and place in northern riverain Sudan: a framework for teaching and research.

Table 6.2 above places the problem of this dissertation, and its historical, geographical, cultural and theoretical setting, into a usable model for further research into the architecture of the region.

6.10 CONCLUSIONS

In the previous chapters, the focus has been on explaining and interpreting various phenomena, tangible and intangible. In this chapter the focus has been a comparison between the different phenomena, placing them in a diachronical framework and trying to understand structural relationships underlying certain transformations in time.

The eco-systemic analysis of the context developed in Chapter 3 and elaborated in Chapters 4 and 5 is used in constructing an interpretation of the region of study. The underlying forces that determine spatial responses and the creation of artefacts have been articulated. Thus the problem is addressed. Spiritual beliefs emerge again and again as major determinants in spatial interventions such as urbanisation patterns, the location and morphology of towns, as well as use of space within the house, in outdoor spaces and streets. Architectural expression is seen to encompass any form of space use and decision-making. Due to the fact that many monuments in the region are from the ancient Meroitic era and that later remains are smaller in scale, or in some cases non-existent, supports the set hypothesis.

An eco-systemic framework for interpretation has been further elaborated by means of addressing the sub-problem. Spiritual beliefs are established as a major motivator behind spatial intervention. A general comparison between various historical periods further illustrates this statement. Thus the hypothesis has been supported.

CHAPTER 7 RECAPITULATION, ACHIEVEMENTS, DELIMITATIONS AND COUNTER-ARGUMENTS, CONCLUSION AND OPPORTUNITIES FOR FURTHER RESEARCH

7.1 RECAPITULATION

This study was initiated by the identification of the properties of various spatial and physical phenomena of the riverain region of the northern Sudan. These characteristics were then intuitively grouped into categories: historical, geographical and cultural settings. The last category is the theoretical setting pertaining to accepted academic paradigms, schools of thought and research methods.¹ This descriptive, pre-iconographic interpretation allowed for the articulation of the main problem of the dissertation. The inquiry required an identification and articulation of an appropriate philosophical approach, and an eco-systemically based description and analysis of the tangible and intangible features of an identified context. Interdisciplinary interpretation was deemed imperative to this approach.

The second level of interpretation, iconological, was speculative. Through initial intuitive gestalt perceptions it was decided that there needs to be a reason behind the frugal physical manifestations of the culture of the specified area. It was then hypothesised that associative, iconographic interpretation can show that there is deeper meaning rooted in an approach to life derived from religious beliefs. This is believed to be a form of architectural expression. A comparison between the tangible and intangible remains of the Funj kingdom and of the earlier kingdoms of Nubia was seen to be a possible method of testing the above statements. A framework could then be constructed that allows further research and facilitates the teaching of architecture in the northern riverain Sudan.

¹ Correspondence was detected among some of the theoretical sources accessed that may not be obvious initially. The author acknowledges various influences in thinking, the major ones being Ecosystemic approaches to architectural history as articulated by Fisher (1992) and applied by Bakker (1999), the interpretative hierarchy of pre-iconographic, iconographic and iconological interpretation as developed by Panofsky for understanding Renaissance art (1967) and adapted by Fisher for use in architectural interpretation (1992), Rapoport's approach to vernacular architecture through the concept of Multiple Characteristics (1990) as well as Habraken's categorizing the environment into various identifiable levels and agents of control (1998).

The main problem and hypothesis were then broken down into 5 sub-problems and hypothesis as shown in the table below, where the final column indicates whether the problems were solved and the hypothesis supported:

<p>Sub-problem 1 Despite the large amount of literature on vernacular architecture, there is no relevant interpretative framework with which to study the selected region, with its particular characteristics. Definitions of architecture exclude vernacular contexts. A philosophical approach thus needs to be identified, and a theoretical base articulated, so that architecture can be viewed eco-systemically within prevalent paradigms of thought and practice.</p>	<p>Hypothesis 1 In a study of the architecture of the northern riverain Sudan, where little architectural interpretation has been attempted and where institutional architecture is almost non-existent, there is relevance in approaching an architectural inquiry from an eco-systemic, inter-disciplinary viewpoint. Architectural theory, which resonates with the realities of a context, may be the basis for a framework for architectural study relevant to the selected region.</p>	<p>Conventional approaches to architecture have been challenged and this approach has been supported by a literature review. A definition of architecture is achieved. A theory base for the study of the architecture of the region is set up. Thus, the problem has been addressed and the hypothesis supported.</p>
<p>Sub-problem 2 The study context needs to be identified eco-systemically. This needs to be initiated by the articulation of social, political, cultural and religious descriptions and the identification of the recurring themes in the literature of the region.</p>	<p>Hypothesis 2 It is believed that through the eco-systemically based identification of recurring themes in the literature of/on the region, essential and incidental attributes of the place and culture can be articulated. This can become a tool in interpretation of tangible/ intangible artefacts, spatial interventions, and social practice.</p>	<p>An eco-systemic construct of the region is achieved through the identification of recurring themes. Thus the sub-problem has been addressed. This is acknowledged as a useful tool of interpretation. Therefore the hypothesis has been supported.</p>
<p>Sub-problem 3 Relevant tangible artefacts need to be identified with a focus on the built environment. This analysis progresses from the level of the body/clothing and is extended to the scale of shelter/house and finally the village/urban centre.</p>	<p>Hypothesis 3 Careful and purposeful selection and analysis of a group of tangible artefacts that refer to the recurring themes can articulate the characteristics of the delineated context on the scale of the body, the shelter and the village, and be used in revealing the meaning inherent in the built culture.</p>	<p>Artefacts, at a variety of scales, have been selected and analysed. Thus the problem is addressed. Scrutiny of the stated problem has led to a deeper understanding of the underlying order in space-use patterns. The reasons behind the tangible manifestation of the culture have been exposed.</p>
<p>Sub-problem 4 Relevant intangible artefacts of the culture of the northern riverain Sudan, need to be identified and analysed to enable further reflection on the meanings behind certain physical and spatial manifestations of that same culture.</p>	<p>Hypothesis 4 Careful and purposeful selection and analysis of relevant intangible artefacts can articulate the hidden characteristics of the built culture of the northern riverain Sudan region and elaborate on the themes that guide this study.</p>	<p>A structure of intangible phenomena is designed. This has allowed reflection on the mean inherent in environmental expression. Thus the problem is resolved. The themes of the study have been elaborated using this structure and influence of the intangible construct on tangible manifestations has been substantiated. The hypothesis has been supported.</p>
<p>Sub-problem 5 Relevant tangible and intangible artefacts of the culture of the northern riverain Sudan need to be placed into an eco-systemic framework for use in architectural interpretation, research and education. This framework must enable articulation of structural relationships between intangible and tangible aspects of built culture and place making in the northern riverain Sudan.</p>	<p>Hypothesis 5 An understanding of the built culture of the northern riverain Sudan requires the identification of significant relationships between tangible and intangible aspects of the region. Inclusion of the studied relationships into an eco-systemic framework will expose the role of intangible culture in space appropriation patterns and its implication on the character of place making in northern riverain Sudan, where a rich culture is expressed through architecture.</p>	<p>An eco-systemically based interpretative framework is constructed, thus addressing the sub--problem. Spiritual beliefs are established as a major motivator behind spatial intervention. A general comparison between various historical periods further illustrates this statement. Thus the hypothesis has been supported.</p>

Table 7.1 Sub-problems, hypothesis and outcomes.

From the culmination of the achievements indicated in the above table, it can be stated that the main hypothesis is supported and main problem resolved. Throughout the process, it was found that some of the themes identified had immense influence on the built culture of the region; some of them had more subtle influence. All of the information found, relevant to the initial research question asked, is given whether or not the results are in accord with the initial assumptions. None of the hypothesis above were defeated yet some of the themes emerging out of the literature review did not have as profound an influence on the built culture of the region as initially assumed by the author. In some cases this may simply be a question of insufficient information. This is explained in more detail in the table below that portrays achievements.

7.2 ACHIEVEMENTS

The following table breaks down the achievements of this research in terms of the initial themes identified in Chapter 3.

Identified themes in literature	Tangible and intangible manifestations	Aspects for special consideration
Social conscience	Extensions of social conscience, religion and ethics onto day-to-day activities and space appropriation have been elaborated in Chapter 4. This has been broken down into various themes and patterns that determine place-making activities in Chapter 5. These are further translated into cultural/natural space perceptions, levels/agents of control and abstract imitation of original forms. In Chapter 6, ethics as an externalised force determining ritual and unifying people is recognised.	This aspect of northern riverain Sudanese culture has been determined as a major constituent of a framework on research into the architecture of the region. Traditional visual homogeneity that has resulted from social conformity is acknowledged. This is validated as a major driving force in spatial intervention and material expression. Though the initial assumption that social conscience plays a role in place making has been supported in this study, it still provides further opportunity for research.
Social interaction systems	Social conscience influences place making through the social interaction systems that it generates. This is broken down in the social networks of men and women in Chapter 4 where interaction and space interventions are understood in terms of body images and extensions of these onto clothing, shelter and urban developments. This is further articulated in Chapter 5 where community networks are explained as well as the dissolution of boundaries between public and private and men and women zones. In Chapter 6, the transience and fluidity of the places created to host social and religious rituals is acknowledged as a prevailing approach to 'place'.	This, again, has proved to be a major determinant of place making and is another constituent in this framework. Systems of interaction are very elaborate and complex, yet their material/spatial manifestation is very simple and understated. Thus, one of the initial conjectures of the thesis regarding the frugal expression of the culture has proved to be correct.
Kinship systems	The kinship systems of this region have been identified as being complex. This permits the recognition of socio-economic differences. It is speculated in Chapter 4 that there are certain patterns of interaction between people generated by kinship. These do not necessarily always coincide with religious decree. This determines peoples'	This issue is still largely speculative and is based on personal observation and experience. It provides an opportunity for further investigation.

	dress forms and movement within a house to a significant degree. This issue emerges again in the discussion on social systems in Chapter 5.	
Slavery	The historical reality of the slave trade is acknowledged as well as its generation of racist attitudes prevalent till today. In Chapter 4, it is seen how these attitudes influence the seclusion of women in terms of dress forms and movement within the home. It is also debated whether slavery had any manifestations in house form or urban layouts regarding class segregation. The socio-economic set-up is further articulated in Chapter 5, where slaves are identified in the hierarchy of importance during the regions' main historic episodes. It is seen that, again, despite its deep cultural influence, racism and separatist attitudes are not so visible on house forms and urban layouts today as they probably were in the pre-Islamic eras.	This issue is acknowledged as a major component of this framework and offers excellent opportunities for comparative studies and case studies. Lack of information has led to some of the conclusions being speculative and tentative.
Trade routes	Migratory patterns are highlighted. The routes used for movement determined the future places of settlement as well as foreign influences. In Chapter 4, it is seen that many centres of learning, that is later towns, developed on trade routes. Chapter 5 illuminates how the passing of caravans affected the daily activities of people and the location of the suq area.	This aspect is a valuable addition to the framework. Its importance has been justified through the research. Morphological documentation of urban centres, as case studies, which could have been used to further develop the argument is lacking.
Harsh environments	The environment is looked at in terms of climate and landscape. The northern riverain Sudan is generally perceived as a harsh land. The maintenance of thermal comfort using garments and shelter forms is acknowledged in Chapter 4. Environmental control is also looked at in terms of movement patterns in courtyards, determined by sun rotation. Another vital aspect explored in Chapter 5 is the influence of climate on power structures in a society. Centralised and decentralised systems of power are seen to have greatly influenced the material culture of the region.	This factor has proved to be of pivotal importance in the study of material culture in the region. This has been substantiated considerably through reference to current literature. It perhaps provides one of the richest prospects for further research. It may answer many questions about the drastic changes in the material culture of the region through time. It also brings to light pertinent queries as to what extent climate change has influenced human behaviour in the past, and how humanity will face future climatic deterioration.
Sufism	Sufism is determined as a major driving force in the region. Its form is similar to that of Sufism in other regions, but it has many uniquely Sudanese qualities. This is clearly manifested in urbanisation patterns as seen in Chapter 4. The existence of the 'other world', that of the spirits and their hierarchical progression, is explained in Chapter 5. The influence of this on peoples' spatial perceptions is deemed crucial.	The importance of Sufism in the cultural set-up is corroborated through the literature and analysis. This makes it an important component of this framework. The Sufism of the region is a vehicle for the amalgamation of the African and the Islamic. This is confirmed through the available data and subsequent analysis. An aspect that needs further inquiry is the influence of Sufi hierarchy, line of ascendancy, on spatial hierarchy. This can be studied through the analysis of the <i>madeeh</i> , for example.
Shaykh's cult	Sufism is expressed through the <i>shaykh's</i> cult. This is marked by the <i>shaykh's qubba</i> , the importance and characteristics of which are explained in Chapter 4. Spatial implications determined by the socio-cultural-economic positioning of the shaykh in society are looked at in Chapter 5. Appropriation of spaces for the cult rituals has proved to be an aspect of extreme importance.	Life rotates around the shaykh, thus the <i>shaykh's</i> cult is an important part of this framework. The <i>halaqa</i> as the most sacred construct of the cult is acknowledged and this provides for an exciting opportunity for research into whether its spatial influence has been broader.

Table 7.2 Themes particular to the northern riverain context and aspects for special consideration.

It can be seen that various assumptions and hypotheses have been validated, while others require further research. This is based on the context, as it exists today, yet in the thesis different eras have been looked at to validate certain points.

7.3 DELIMITATIONS AND COUNTER-ARGUMENTS

The delimitations of this study have been listed in Chapter 1.

The area under investigation has been restricted to the northern riverain region. This delimitation has been substantially supported in the study. It refers to an “idea” of a homogenised place and people rather than a politically sub-divided country. The inclusion of Egyptian Nubia may have been more accurate in terms of a unified identity, yet the problems that would have arisen in terms of the literature search would have complicated this research. It must also be noted that certain peoples of the north still maintain their strong Nubian identity, that is, as it was before the Arab infiltration. They maintain many of their cultural traits and language. These may be better identified with the Egyptian Nubians. This has not been dealt with in this study.

It was stated initially that there would be no specific time limit to the study and no chronological order in the design of the thesis: this has proved problematic as it has led to some confusion as to what is located in the past as compared to present practices and beliefs. This aspect is perhaps a flaw in the research procedure.

It was also indicated that the artefacts to be examined will be selected at the discretion of the author and are not intended to be exhaustive. Existing conclusions and interpretation of artefacts influenced the selection of these artefacts. Interpretation is inextricably interwoven with analysis – sometimes it becomes a special aspect of analysis rather than a distinct operation.

The built environment is looked at in its totality rather than as individual buildings. This has been a successful approach as it has enabled the researcher to expose hidden forces that structure the use of space and place making activities in the region. Non-quantified data has therefore been subjected to analysis, quantification and categorisation. This would not have been achieved through the analysis of individual buildings.

Another aspect that may be critically viewed relates to the philosophical premise of the study: the superimposition of a rationalist structure on an existential inquiry may be seen as a contradiction. This is a possible aspect for further research.

7.4 CONCLUSIONS: INTERFACE: ISLAM MEETS AFRICA

The contact of the carriers of Islam with the northern riverain culture of the Sudanese was not one of dominancy, but of interaction. This dynamic resulted in the character of the Sudanese of the northern riverain region as it is today.

Interdisciplinary interpretation has been used to address the issue of how people interact, or have historically interacted, with the environment and how they shape their spaces at the micro and macro levels. An eco-systemic 'construct', a 'reading' of the context as it exists today was 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 was defined as any cultural agent and, for the purpose of this study, is not restricted to mean a physical object but has been expanded to include ritual, social practice and linguistic agents and these are explored within their contextual settings.

The selected artefacts cover a progression of scales, from the level of the village/urban centre, houses and the body and clothing forms. This was not decided on from the outset, but rather developed as links emerged through the research between these different forms of expression. From these broad guidelines, linguistic terms became apparent, social practices and sayings that elaborated on the preliminary concepts. The research evolved out of issues pertinent to the area rather than out of an abstract theoretical assignment that may be irrelevant to the region.

The social set-up, religious beliefs and cultural practices evident in the area mean that the accepted categories referring to the built environment could not be clearly identified from the outset. It is difficult to draw the line between public and private. The three domains of dwelling merge: that is the collective dwelling, public dwelling and private dwelling. Collective values dominate rather than individual values, even within the home.

The daily activities, schedules and routines 'make' place and define the architecture. *Mujamalat* and *wajibat* (duties and socialising) are important environmental structuring agents. The line between them appears to dissolve. There is also a thin line between religious and social ritual. Social associations or interactions comprise a vital part of the map that identifies the culture and the people. This has implications on the community unit with which the architectural environment can be identified and interpreted. People share a repertoire of meanings, which they strategically bring into action in the form of social practice. This ultimately influences space appropriation patterns. The multi dimensionality of architecture is inevitable.

It has been found that space and place making are better understood by broadening conventional definitions of architecture. People, activities and networks are seen as the basic canons of architectural place making. As pieces of a puzzle, the tangible and the intangible, can all address the theme of models of habitation. Western social evolutionary theory has been found inadequate when interpretation of the area is attempted. The assumed rise in social complexity that leads to internal stratification and central authority is inaccurate. It was found that social complexity is not necessarily expressed through central authority or more sub-divided spaces in this particular context.

The initial observations of the context led the author to the assumption that there must be some reason for the frugality evident in the physical manifestations of the culture. The economical and restrained forms of expression sometimes appear crude and insipid. Uniformity in form and colour creates a built environment that merges with the surrounding earth tones. The lack of detail or ornament seems to result from an elusive mindset that is hard to grasp or comprehend. Strict compliance to social laws seems to compromise individuality. Through a process of structured inquiry, it has become evident that social structure, which greatly influences the configuration of built form, reflects the character of the natural environment to a great extent. Thus, architectural expression has taken on different forms through time, especially when comparing different eras with drastically different climates.

The physical expression of collective, public or private dwelling, as a concept, results in buildings that become micro cosmos of their surroundings, reflecting the ground, sky and the horizon. The traditional northern Sudanese house, for example, is a

continuum of materials and activities. Nothing is absolutely fixed. The interior surfaces are the exterior surfaces, which are of the earth. Functions alternate easily between in and out, and even between neighbouring houses as well as between the house and the street. The house, courtyard and street have been perceived as a continuum creating an uninterrupted series of spaces and activities. The house alternates between its private and public functions. The street becomes the house when more space is needed for functions usually associated with the private home such as sleep, eating or receiving guests.

Place making activities are guided by people's ability to come to terms with their environment. There is a degree of homogeneity in the built environment of the context under study and personal expressions through the form of the buildings or the use of colour or pattern are only evident in moderation and in a subtle manner – This has been linked quite strongly to communal restrictions – a wish to conform – as well as a belief in frugality. In traditional village contexts, individual houses blend in form and colour with the natural landscape and the surrounding buildings. They express unity with others. Traditional building practice has been elevated and studied with respect to the knowledge embodied within it.

This dissertation studies, from an architectural point of view, one African setting's interaction with Islam. It has proved to be an important interface for the two cultures. From a phenomenological perspective, 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.² 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 study has been an attempt to find a way of partially exposing what is concealed and to put it in a usable format for future researchers.

² According to Popper, without a theory of what to look for, data may not reveal any pattern at all (Gelernter, 1995: 129).

7.5 OPPORTUNITIES FOR FURTHER INVESTIGATIONS

- The philosophical premise of the study may be a possible seed for further critical investigation. The relevance of a rationalist structure for a thesis, which is in essence an existential inquiry, may be analysed in studies on similar contexts or topics.
- The relevance of the research methodology to an African context may be analysed. There are aspects of African studies that are common and some that are unique. These need to be identified by architectural researchers.
- The role of social conscience, religion and ethics on place making.
- The relationship between burial systems and social systems and the impact on the built environment thereof. Illustrations of burial pits of various eras in the study region as depicted in Adams' seminal work, "Nubia, Corridor to Africa" (1977) can be an excellent source for future analysis and interpretation.
- Further study on the relationships between clothes forms and space use.
- The relationships between culture and space use and comparisons between different cultural groupings using the same place.
- Comparison between forms of social expression evident in village and town morphologies throughout the different eras in the region.
- The qualities of streets and open spaces in the region.
- The location of the Shaykh's tomb and territorial claims on land.
- Social interaction patterns and how they influence the structuring space. Though this has been tackled, it can be elaborated through the use of case studies.
- Kinship patterns and how they influence on space use are still to be investigated.
- Slavery and racial perceptions and their influence on space appropriation at the micro and macro scales: Status determined space use. Though the concept of race and space has been touched upon, it needs further research.
- The morphological documentation of urban centres and to what extent their layouts were influenced by passing traders. Emergent towns and their characteristics need to be studied.

- The categorized documentation of buildings, building types, building components, building materials, structural and organisational principles, modular principles and decorative elements in the region of the northern riverain Sudan. The Glossary at the end of this document is brief and is only intended to offer the reader, with no background on the Sudan, a feeling for the context, its colours and textures. It could be expanded in a future study into a comprehensive, systematic document of great value to students, teachers and researchers of architecture.
- More elaborate analysis of climate change through the ages and its influence on social structures and material culture.
- Order and line of authority in Sufism: Extensions of Sufi orders in social structure and space appropriation. The influence of the hierarchical structure evident in the order of authority of the *madeeh*, religious poetry, on spatial hierarchy.
- The spatial influence of the concept of the *halaqa*.
- More elaborate research into the relationship between language and the meanings associated with space and place.
- Different cultural groupings within the northern riverain regions can be more thoroughly investigated: the differences and similarities between them and how these are expressed through place-making patterns. The Nubians at a time in history, prior to Christianity, worshiped fire. Some of the rituals today relate to that era. This has not been tackled in this study; neither has its spatial implications.
- The relationships and similarities between Egyptian Nubia and Sudanese Nubia.
- Railways lines, initially constructed by the British to transport troops and weapons in their fight against the Mahdi's followers, became an important aspect that influenced the location of towns, trades within those towns and town layouts. The collapse of rail travel led to the deterioration of these towns. This could be an aspect of study as important as that of the older trade routes. Comparisons between them would be interesting in terms of different locations and morphological layouts of towns.

- The interpretations in this thesis comprise various speculations and ideas. Actual research findings are portrayed in line with tentative results. No links with research findings of other relevant research findings have been possible, as interpretative approaches to the architecture of the region have not yet been attempted. This study provides such an opportunity for other architects to react critically to an individual interpretation.

LIST OF REFERENCES

- ABD ALHAY, M. 1999. Al 'aodah ila Sennar. Al A'mal al Shi'riyya alkamila. Cairo: Markaz aldirasat al sudaniyya.
- ABOULELA, L. 1999. The Translator. Edinburgh: Polygon.
- ABU SIN, M.E. & Davies, H.R.J. (Editors) 1991. The future of Sudan's capital region. A study in development and change. Khartoum: Khartoum University Press.
- ABUSABIB, M.A. 1995. African art: an aesthetic enquiry. Unpublished Doctoral Dissertation, Uppsala University.
- ABUSALIM, M.I. 1980. Al-Saghiyya. Khartoum: Institute of Afro-Asian Studies, Khartoum University Press.
- ABUSALIM, M.I. 1991. Tareekh al-Khartoum. Beirut: Dar al-Jeel.
- ABUSALIM, M.I. 1992. Adawat al-hukm wa al-willayya fi al-Sudan. Beirut: Dar al-Jeel.
- ABUSALIM, M.I. 1993. Al-athar al-kamila lil imam al-mahdi. Khartoum: Khartoum University Press
- ADAHL, K. 1993. The Islamic architecture and art in Sub-Saharan Africa: a problem of identity in Granqvist, R. (Editor) 1993. Culture in Africa, an appeal for pluralism. Uppsala: The Scandinavian Institute of African Studies, p. 131-143.
- ADAMS, N. K. 1994. Ancient lace of Nubia and the Sudan: a unique decorative tradition, Sudan Studies Conference. Boston, p. 1-7.
- ADAMS, W. T. 1987. Islamic archaeology in Nubia in Hägg, T. (Editor) 1987 Nubian culture past and present. Sixth International Conference for Nubian Studies in Uppsala, 11-16 August 1986. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien, p. 285-292.
- ADAMS, W.Y. 1977. Nubia. Corridor to Africa. London: Allen Lane, Penguin Books Ltd.
- AHMED, A. M. 1987. Al-shi'r wa al-mujtama' fi al-sudan. Qiraat fi al-shi'r al-sudani al-hadeeth wa al-muasir fi al-sudan. Khartoum: Dar al-Wa'ay.
- AL-AMIN, S. 1989. Respect for tradition and the past in Sudanese village culture in 1989. Al-maathoorat al-sha'biyya, October 1998, Arab Gulf States Folklore Centre, English Publications, p. 6-13
- ALBARN, K., S., STEELE, S. & WALKER, D. 1974. The language of pattern. London: Thames and Hudson.
- AL-FARUQI, L. I. 1987. Unity and variety in the Islamic architecture of the Maghrib, Africana Journal Vol. XIV, No. 2&3, p. 190-204.
- AL-GADAL, M.S. 1992. Tareekh Al-Sudan Al-Hadeeth 1820-1955. Khartoum: Sharikat al-Amal.
- AL-HAKIM, A. M. A. 1965. Al-zakharif al-mi'amaria wa tatawuruha fi mantiqat wadi halfa. Janib hadeeth min al-fan al-nubi. Khartoum: Shuubat al-dirsat al-sudaniyya, Khartoum University.
- AL-SHAHI, A. & MOORE, F.C.T. (Translators) 1978. Wisdom from the Nile, A collection of folkstories from Northern and Central Sudan. Oxford: Clarendon Press.
- ALTAYIB, M. A. [S.a] Farah wad taktook halal al-mashbook. Khartoum: Dar al-tabia' al-'arabi.
- AL-TAYIB, M. A. 1991. Al-Masid. Khartoum: Khartoum University Press.
- ALTMAN, I., WOHLWILL, J. (Editors) 1977. Human behaviour and environment. Advances in theory and research. Volume 2. New York: Plenum Press.
- ALTMAN, I., VINSEL, A. 1977. Personal space: an analysis of E.T. Hall's Proxemics framework, in ALTMAN, I., WOHLWILL, J. (Editors) 1977. Human behaviour and environment. Advances in theory and research. Volume 2. New York: Plenum Press, p. 181-260.
- ANDERSON, J. (Editor) 1999. Towards Gondwana alive. Promoting biodiversity and stemming the Sixth Extinction. Volume 1. Pretoria: Gondwana Alive Society.
- ARKELL, A.J. 1955. A History of the Sudan from the earliest times to 1821. London: The Athlone Press, University of London.

- ASAD, T. 1986. The concept of cultural translation in British Social anthropology in Clifford, J. & George, E. M. (Editors) 1986. Writing culture. The poetics and politics of ethnography. London: University of California Press, Ltd, p.141-164.
- BADRI, Y. 1970. A survey of Islamic learning in the Funj State 910-1236 a.H./1505-1820 A.D. Unpublished B. Litt. Thesis, University of Oxford.
- BAKKER, K. A. 1999. A corpus of early Ionic capitals. Unpublished Ph.D. Thesis, University of Pretoria.
- BALOGUN, O. 1997. Form and expression in African arts in Sow, A. I., Balogun, O., Aguessy, H. & Diagne, P. (Editors) 1997. Introduction to African culture: general aspects. Paris: UNESCO, p. 33-81
- BANAGA, M. Y. 1987. Family and community life in a housing estate: Elsha'biya, Khartoum North in Mohamed-Salih, M. A. & Mohamed-Salih, M. M. A. (Editors) 1987. Family life in Sudan. Khartoum: Graduate College Publications, No. 18, University of Khartoum.
- BARCLAY, H. B. 1964. Buurri Al Lamaab. A suburban village in the Sudan. [S.I.] Cornell University Press.
- BEDRI, B. 1969. The memoirs of Babikr Bedri. Translated from Arabic by Badri, Y. & Scott, G. London: Oxford University Press.
- BJØRKELO, A. 1984. From King to Kāshif, Shendi in the Nineteenth Century. Ph.D. Dissertation, University of Bergen.
- BJØRKELO, A. 1989. Prelude to the Mahdiyya. Peasants and traders in the Shendi region, 1821-1885. Cambridge: Cambridge University Press.
- BONTA, J. P. 1979. Architecture and its interpretation. A study of expressive systems in architecture. London: Lund Humphries Publisher Ltd.
- BOOTH, N. 1977. African religions: a symposium. New York: N.O.K. Publishers Ltd.
- BRAWNE, M. 1991. From Idea to Building: issues in architecture. Boston: Butterworth Architecture.
- BROADBENT, G., BUNT, R. & JENCKS, C. (Editors) Signs, symbols, and architecture. Chistester: John Wiley & Sons.
- BURCKHAARDT, J. L. 1822. Travels in Nubia. London: John Murray, Albemarle street.
- CASSELL'S NEW GERMAN DICTIONARY, 1974. (1957) Betteridge H. T. (Editor). London: Cassells & Company Ltd.
- CLIFFORD, J. & GEORGE, E. M. (Editors) 1986. Writing culture. The poetics and politics of ethnography. London: University of California Press, Ltd.
- CLOUDSLEY, A. 1984. [1981] Women of Omdurman. Life, love and the cult of virginity. 3rd Edition. London: Ethnographica.
- COOPER, D. E. 1996. Thinkers of our time. Heidegger. London: The Claridge Press.
- CRAWFORD, O.G.S. 1951. The Fung Kingdom of Sennar, with a geographical account of the Middle Nile Region. Gloucester: John Bellows Ltd.
- CRAWFORD, O.G.S. 1953. Castles and churches in the Middle Nile Region. Occasional Papers, No. 2. [S.I.] Sudan Antiquities Service.
- CRITCHLOW, K. 1976. Islamic patterns. An analytical and cosmological approach. London: Thames and Hudson.
- CROWFOOT, J.W. & GRIFFITH, M.A. 1911. The island of Meroe and Meroitic inscriptions Part 1 Soba to Dangêl. Edited by Griffith, F. LL. London: The Offices Of the Egypt Exploration Fund.
- CRUMLEY, C. L. 2000. From garden to globe: linking time and space with meaning and memory in McIntosh, R., Tainter J. A. and McIntosh S. K. 2000. The way the wind blows. Climate, history and human action. New York: Columbia University Press, p. 193-208
- DAFALLA, H. 1975. The Nubian exodus. London: C. Hurst & Company.
- 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.
- DALY, M.W. (Editor) 1985. Modernization in the Sudan. New York: Lilian Barber Press.
- DE BONO, E. 1994. Parallel thinking: from Socratic to de Bono thinking. [S.I.] Penguin

- DEWAR, D. & UYTENBOGAARD 1991. South African cities: a manifesto for change. Cape Town: Urban Problems Research Unit, University of Cape Town.
- DONLEY-REID, L.W. 1990. A structuring structure: the Swahili house in Kent, S. 1990. Domestic architecture and the use of space. An interdisciplinary cross cultural study. Cambridge: Cambridge University Press, p. 110-125.
- DROWER, M. 1970. Nubia. A drowning Land. London: Longmans Young books Limited.
- ECO, U. 1980. Function and Sign: The Semiotics of Architecture in Broadbent, G., Bunt, R. & Jencks, C. (Editors) 1980. Signs, symbols, and architecture. Chistester: John Wiley & Sons, p. 11-7.
- EI-ALI, S.A. 1970. The foundation of Baghdad, in HOURANI, A.H., STERN, S.M. 1970. The Islamic City. A colloquium. Oxford: Bruno Cassirer, p. 87-102.
- ELLEH, N. 1997. African architecture, evolution and transformation. New York: McGraw Hill.
- EL-TAYIB, G. 1987. Women's dress in the northern Sudan in Kenyon, S. (Editor) The Sudanese women. Khartoum: Graduate College Publications, No. 19, University of Khartoum, p. 40-66.
- ERIKSEN, T. H. 1995. Small places, large issues. An introduction to social and cultural anthropology. London: Pluto Press.
- ESPOSITO, J.L. & VOLL, J. O. 1996. Islam and democracy. Oxford: Oxford University Press.
- FERRARO, G. 1998. Cultural anthropology: an applied perspective. USA: West/Wadsworth.
- FISCHER, M. M.J. 1986. Ethnicity and the Post-Modern Arts of Memory in Clifford, J. & George, E. Marcus (Editors) 1986. Writing culture. The poetics and politics of ethnography. London: University of California Press, Ltd, p. 194-234.
- FISHER, R. 1992. An ecosystemic role for architectural style: bearing 'the plan' in 'mind'. Unpublished PhD Thesis, University of Pretoria.
- FISHER, R. 1993. A paradigmatic teaching of architectural history, Acta Academica, Bloemfontein.
- FRASCARI, M. 1991. Monsters of architecture: anthropomorphism in architectural theory. Savage: Rowman and Littlefield.
- FRESCURA, F. 1982. Finding a role for rural architecture in Energos, Public Affairs Department of Mobile, Southern Africa, No. 7, p. 65-76
- GAARDER, J. 1991. Sophie's world: a novel about the history of philosophy. London: Phoenix.
- GALEVO, S.F. 1986. African art in search of a new identity in Okpaku, J.O., Opubor, A.E. & Oloruntimehin, B.O. (Editors) 1986. The arts and civilization of black and African peoples. Lagos: Centre for Black and African Arts and Civilization, p. 11-20.
- GAMMA'A, F. 1991. Qiraa fi al-adab al-sudani al-hadeeth. [S.I.]
- GASIM, A. A. 1985. Qamoos al-lahja alamia fi al-Sudan. Cairo: Matabi' al-Maktab al-Misry al-Hadeeth.
- GEERTZ, C. 1988. Works and lives. The anthropologist as author. Stanford: Stanford University Press.
- GELERNTER, M. 1995. Sources of architectural form. A critical history of Western design theory. Manchester: Manchester University Press.
- GLEICHEN, Lieut. -Colonel Count (Editor) 1905. The Anglo-Egyptian Sudan, a compendium prepared by officers of the Sudan government Volume 1. Geographical, descriptive, and historical. London: Printed for His Majesty's Stationary Office, by Harrison and Sons, St. Martin's Lane.
- GRANQVIST, R. (Editor) 1993. Culture in Africa, An appeal for pluralism. Uppsala: The Scandinavian Institute of African Studies.
- GREENLAW, J.P. 1976. The coral buildings of Suakin. Northumberland: Oriel Press.
- GROAK, S. 1992. The idea of building. Suffolk: E & FN Spon.
- GRUNEBAUM, G.E.V. 1955. Islam. Essays in the nature and growth of a cultural tradition. Wisconsin: The American Anthropological Association, George Banta Publishing Company, Menasha.

- HAALAND, R. & SHINNIE, P. 1985. (Editors) African iron working – ancient and traditional. Oslo: Norwegian University Press.
- HABRAKEN, J. (Editor Teicher, J.) 1998. The structure of the ordinary. Form and control in the built environment. Cambridge, Massachusetts: MIT Press.
- HÄGG, T. (Editor) 1987. Nubian culture past and present. Sixth International Conference for Nubian Studies in Uppsala, 11-16 August 1986. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien.
- HAKEM, A. M. A. 1988. Meroitic architecture. A background of an African civilization. Khartoum: Khartoum University Press.
- HAKIM, B.S. 1994. The “urf” and its role in diversifying the architecture of traditional Islamic cities, in Journal of Architectural and Planning Research, 11:2 (Summer), p. 108-127.
- HALE, J. 2000. Building ideas: an introduction to architectural theory. Chichester: Wiley.
- HAMILTON, J. A. C. (Editor) 1935. The Anglo-Egyptian Sudan from within. London: Faber & Faber Limited.
- HARHOUF, A. [S.I.] Images in Sudanese poetry. Khartoum: Printing Centre.
- HASAN, Y. F. 1967. The Arabs and the Sudan, from the seventh to the early sixteenth Century. Edinburgh: Edinburgh University Press.
- HASAN, Y. F. 1976. Al-shilookh aslaha wa wasifataha fi sudan wadi al-nil al-awsat. Khartoum: Institute of Afro-Asian Studies, Khartoum University Press.
- HASAN, Y. F. 1992. [1970] Ibn Dayf Allah, Muhammad al-Nur Kitab al-Tabaqat fi khusus al-awliya wa l-salihin wa'l-ulama wa'l-shuara fi'l-Sudan, haqag wa alaq aliyhi wa qadam lahu. 4th Edition. Khartoum: Dar al-taalif wa al-tarjama wa al-nashr, shu'aabat abhas al-Sudan, Ma'ahad al-Dirasat al-Afriqiyya wa al-Asyowia, Maktabat al-Dirasat al-Sudania, Gamia'a al-Khartoum.
- HASSAN, F. 2000. Environmental perception and human responses in history and prehistory in McIntosh, R., Tainter J. A. & McIntosh S. K. 2000. The Way the Wind Blows. Climate, History and Human Action. New York: Columbia University Press, p. 121-140.
- HEIDEGGER, M. 1954. Building Dwelling Thinking. Translated by Hofstadter, A. 1971. Poetry, Language, Thought. New York: Harper Colophon Books, p. 145-161 in Krell, D. F. 1977. Martin Heidegger. Basic writings from Being and Time (1927) to The Task of Thinking (1964). London: Routledge and Kegan Paul, p. 323-339.
- HESS, J. B. 2000. Imagining architecture: the structure of nationalism in Accra, Ghana, Africa Today, Vol. 47, No. 2, p. 35-57.
- HIGHLANDS, D. 1990. What's indigenous? An essay on building in Turan, M. (Editor) Vernacular Architecture. England: Aldershot & Vermont: Avebury, Gower Publishing Group, p. 31-66.
- HILL, R. 1970. On the frontiers of Islam: two manuscripts concerning the Sudan under Turko-Egyptian Rule 1822-1845 Clarendon Press, Oxford.
- HØEG, P. 1993 [1992] Smilla's sense of snow. Translated by Nunnally, T. New York: A Dell Book.
- HOLM, A. 1965. I am David. Oxford: Heinemann Educational Publishers.
- HOLT, P.M. & Daly M.W. 1988. A history of the Sudan, from the coming of Islam to the present day. London & New York: Longman Group, Ltd.
- HOURANI, A.H., STERN, S.M. 1970. The Islamic City. A colloquium. Oxford: Bruno Cassirer.
- HOURANI, A.H. 1970. Introduction: The Islamic city in the light of recent research, in HOURANI, A.H., STERN, S.M. 1970. The Islamic City. A colloquium. Oxford: Bruno Cassirer, p. 9-24.
- http://encarta.msn.com/encyclopedia_761572710/Nietzsche_Friedrich_Wilhelm.html 2004/04/21
- <http://orac.sund.ac.uk/~os0tmc/myth.htm> 2004/05/10
- <http://oregonstate.edu/instruct/phl302/philosophers/descartes.html> 2004/05/10
- <http://pratt.edu/~arch543p/readings/Heidegger.html> 2004/04/22
- <http://www.copticcentre.com/two.html> 2004/05/03 13.22

- <http://www.emory.edu/EDUCATION/mfp/Kuhnsnap.html> 2004/05/10
- <http://www.igbp.kva.se/cgi-bin/php/sciencehistory.show> 2002/11/27
- <http://www.island-of-freedom.com/KANT.HTM> 2004/05/10
- <http://www.marxists.org/reference/archive/hegel/> 2004/04/21
- http://www.maths.tcd.ie/pub/HistMath/People/Pascal/RouseBall/RB_Pascal.html 2004/04/21
- <http://www.pages.unibe.ch/shhighlight/shhighlight.html> 2004/02/17
- <http://www.phenomenologycenter.org/phenom.htm> 2004/04/22
- <http://www.phenomenologycenter.org/phenom.htm#2> 2004/05/10
- <http://www.smerus.pwp.blueyonder.co.uk/lamp2.htm> 2004-05-12
- <http://www.sudan-embassy.co.uk/infobook/geography.php> 2004/02/11
- <http://www.sudan-embassy.co.uk/infobook/history.php> 2004/02/11
- <http://www.sudani.co.za/Tourism/Historical%20and%20routes.htm> 2003/03/27
- <http://www.webcom.com/kierke/bio/writer4.html> 2004/04/21
- IBN DAYF ALLAH, M. A. *Kitab al-Tabaqat fi khusus al-awliya wa l-salihin wa'l-ulama wa'l-shu'ara fi'l-Sudan*. As presented by Hasan, Y. F. 1992. [1970] 4th Edition. Khartoum: *Dar al-taalif wa al-tarjama wa al-nashr, shua'abat abhas al-Sudan, Ma'ahad al-Dirasat al-Afriqiyya wa al-Asyowia, Maktabat al-Dirasat al-Sudania, Gamiaa al-Khartoum*.
- IBRAHIM, H. 1979. The Shaiqiya: the cultural and social change of a northern riverain people. Wiesbaden, Steiner.
- IBRAHIM, M. M. 1989. *Al-fikr al-sudani awsulaho wa tataworaho*. [S.I.]
- ISMAIL, E. T. 1982. Social environment and daily routine of Sudanese women. A case study of urban middle class housewives. Berlin: Dietrich Reimer Verlag.
- JENKINS, T. H. 1987. Invisible African design visible: a library bibliographical essay and guide to African architecture, planning, art, and design, *Africana Journal*, Vol. XIV, No. 2&3. New York: Holmes & Meier Publishers, p.171-189.
- JONES, C 1976. Design methods: seeds of human futures. London: John Wiley & Sons Ltd.
- KARRAR, A. S. 1992. The Sufi Brotherhoods in the Sudan. London: C. Hurst & Company.
- KAZIMEE, B. & MCQUILLAN, J. 2002. Living traditions of the Afghan courtyard and aiwan, Traditional Dwellings and Settlements, Review Vol. XIII, No. 2.
- KENT, S. (Editor) 1990b. Domestic architecture and the use of space. An interdisciplinary cross cultural study. Cambridge: Cambridge University Press.
- KENT, S. 1990a. A cross-cultural study of segmentation, architecture and the use of space in Kent, S. (Editor) 1990. Domestic architecture and the use of space. An interdisciplinary cross cultural study. Cambridge: Cambridge University Press, p. 127-187.
- KENYON, S. (Editor) 1987 The Sudanese women. Graduate College Publications, No. 19, University of Khartoum.
- KENYON, S. 1991. Five women of Sennar. Culture and change in Central Sudan. Oxford: Clarendon Press.
- KLINCK, T. 2002. body, performance, boundary in Mori, T. (Editor) 2002. immaterial ultramaterial architecture design and materials. Cambridge: Harvard Design School, p. 71-73.
- KRAMER, R.S. 1991. Holy city on the Nile: Omdurman, 1885-1898. PhD dissertation, Philosophy and History, Northwestern University, Evanston, Illinois.
- KRELL, D. F. 1977. Martin Heidegger. Basic writings from *Being and Time* (1927) to *The Task of Thinking* (1964.) London: Routledge and Kegan Paul.
- KRONENBERG, A. 1986. Nubian culture in the Sudan in the 20th Century: State of Research in Hägg, T. (Editor) 1986. Nubian culture past and present. Sixth International Conference for Nubian Studies in Uppsala, 11-16 August 1986. Stockholm: Kungl. Vitterhets Historie och Antikvitets Akademien, p. 389-418.
- LAVIN, S. 1992. Quatremère De Quincy and the invention of a modern language of architecture. Cambridge, Massachusetts: MIT Press.
- LEACH, E. 1974 [1970] Claude Lévi-Strauss 1970-1974. 2nd Edition. University of Chicago Press.

- 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.
- LEE, D. R. 1969. The Nubian house: persistence of a cultural tradition, in Landscape. Issue 18 (winter), p. 36-39.
- LEE, D. R. 1969. Factors influencing choice of house type: a geographic analysis from the Sudan, in The Professional Geographer. Volume XXI, Number 6, November, p. 393-397.
- LEKSON, S.H. 1990 Cross-cultural perspectives on the community in Turan, M. (Editor) 1990. Vernacular architecture. England: Aldershot & Vermont: Avebury, Gower Publishing Group.
- LEMAY, E. C. & PITTS, J. A. 1994. Heidegger for Beginners. New York: Writers and Readers Publishing.
- LISAN AL'ARAB [S.a.] *lil alama ibn al-Manzoor* Edition no. 1,02. [S.I.]
- LOCOCK, M. (Editor) 1994. Meaningful architecture: social interpretations of buildings. Great Britain: Avebury.
- MARION, J. 1998. Reduction and givenness. Investigations of Husserl, Heidegger, and phenomenology. Translated by Carlson, T A. Evanston, Illinois: Northwest University Press.
- MAZRUI, A. A. 1986. The Africans: a triple heritage. Boston: Little Brown.
- MAZRUI, A. A. & ALAMIN M. 1998. The power of Babel. Language and governance in the African experience. Chicago: David Philip Publishers, University of Chicago Press.
- MCCALL, D. F. & BAY, E. G. (Editors) 1975. African images. Essays in African iconology. Boston University Papers on Africa, Vol. VI. New York: Africana Publishing Co.
- MCINTOSH, R., TAINTER J. A. & MCINTOSH S. K. 2000. The way the wind blows. Climate, history and human action. New York: Columbia University Press.
- MCLUHAN M. 1967. The mechanical bride: folklore of industrial man. London: Routledge & K. Paul.
- MC NEILL, J.R. 2004. Human impact on the Chinese Landscape, in Science, Volume 304, p. 391-392.
- MEKKI, B. K. 2001. Ahzoajat al makan, majmoo'a qisasiyya. Khartoum: *Dar Sidra liltibaa wa al nashr*.
- MEYER, A. 2003. Civilisations. The Nubian kingdoms of the Sudanese Nile River Valley. Unpublished documents, obtained from Anderson, J. Pretoria Botanical Institute.
- MOHAMED, S. E. & KARAM 2003. Planning for crime prevention the case of the city of Khartoum. Pretoria: SaferAfrica
- MOHAMED-SALIH, M. A. & MOHAMED-SALIH, M. M. A. (Editors) 1987. Family life in Sudan. Graduate College Publications, No. 18, University of Khartoum.
- MORI, T. (Editor) 2002. immaterial ultramaterial architecture design and materials. Cambridge: Harvard Design School.
- MOTLOCH, J. L. 1991. Introduction to landscape design. New York: Van Nostrand Reinhold.
- NEEDHAM, R. 1972. Belief, language, and experience. Oxford: Basil Blackwell.
- NORBERG-SCHULZ, C. 1976. The phenomenon of place, Architectural Association Quarterly, 8(4), p. 20-9.
- NORBERG-SCHULZ, C. 1980. Genius loci. Towards a phenomenology of architecture. London: Academy Editions.
- NORBERG-SCHULZ, C. 1984. The concept of dwelling. On the way to figurative architecture. New York: Electa/Rizzoli.
- NORDENSTAM, T. 1968. Sudanese ethics. Uppsala: The Scandinavian Institute of African Studies.
- NOTHLING, F.J. 1989. Pre-colonial Africa: her civilizations and foreign contacts. Johannesburg: Southern Book Publishers.
- O'FAHEY, R. S. & SPAULDING, J. L. 1974. Kingdoms of the Sudan. London: Methuen & Co. Ltd.
- O'FAHEY, R.S. 1995. Sufism in suspense: The Sudanese Mahdi and the Sufis, Sufism and its opponents, an international symposium, Utrecht University, p. 2-18.

- OKPAKU, J.O., OPUBOR, A.E. & OLORUNTIMEHIN, B.O. (Editors) 1986. The arts and civilization of black and African peoples. Lagos: Centre for Black and African Arts and Civilization.
- OLIVER, P. (Editor) 1971. Shelter in Africa. London: Barrie and Jenkins.
- OLIVER, P. 2000. 101 key ideas: philosophy. London: Hodder Headline.
- OMER, E. B. 1985. The Danaqla traders of Northern Sudan, rural capitalism and agricultural development. London: Ithaca Press.
- OSMAN, A. 1996 Design methodology in architectural education: the case of Khartoum University Unpublished M.Sc., Khartoum University.
- OSMAN, M.A. AND MOHAMMED, A.A. 1987. Materials and techniques for wall construction in Sudan in U.N. Economic and Social Commission for Asia and Pacific. 1987. Building materials for low-income housing London: E&PN Spon, p. 208-212.
- PALOMBINI, A. A possible new approach to palaeoenvironment: models and agronomical tools, Napoli University, Italy in <http://www.pages.unibe.ch/shighlight/shighlight.html>
- PANOFSKY, E. 1968. Idea: a concept in art theory. Translated by Peake, J.J.S. New York: Harper and Row.
- PARRINDER, E. 1970. African traditional religion. Wesport, Con: Greenwood Press.
- PARRINDER, E. 1976. Africa's three religions. London: Sheldon Press.
- POTTER, M & POTTER, A. 1984. Everything is possible: our Sudan years. Gloucester: Alan Sutton Publishing.
- PRAK, N. 1984. Architects, the Noted and the Ignored. Chichister: John Wiley and Sons.
- PRICE, S.R.F. 1984. Rituals and power: The Roman imperial cult in Asia Minor. Cambridge University Press.
- RABINO, P. 1986. Representations are social facts in Clifford, J. & George, E. M. (Editors) 1986. Writing culture. The poetics and politics of ethnography. London: University of California Press, Ltd., 234-266.
- RAMAN, P. 2003 Book Review: Architecture: presence, language, place by Norberg-Shultz, C. in Leading Architecture Jan-Feb 2003.
- RAPOPORT, A. 1977. Human aspects of urban form. Towards a Man-Environment approach to urban form and design. Oxford: Pergamon Press.
- RAPOPORT, A. 1982. The meaning of the built environment. A nonverbal communication approach. Beverley Hills: Sage Publications.
- RAPOPORT, A. 1990a. Defining vernacular design in Turan, M. (Editor) 1990. Vernacular architecture. Avebury, England: Aldershot & Vermont, Gower Publishing Group. p. 67-101.
- RAPOPORT, A. 1990b. History and Precedent in Environmental Design. New York: Plenum Press.
- RAPOPORT, A. 1999. A framework for studying vernacular architecture, in Journal of Architectural and Planning Research, 16:1 (Spring), p. 53-64.
- RUSSELL, B. 1979. (1946) A history of Western philosophy. London: Unwin Paperbacks.
- RYKWERT, J. 1972 On Adam's house in paradise. The idea of the primitive hut in architectural history. New York: The Museum of Modern Art.
- SALIH, T. 1969. Season of migration to the North. Translated from Arabic by Denys Johnson-Davies, D. London: Heinemann Educational Books Ltd.
- SCHNEIDER, L. 1976. Classical theories of social change. New Jersey: General Learning Press.
- SHINNIE, P.L. 1955. Excavations at Soba. Occasional Papers, No. 3, Sudan Antiquities Service.
- SHINNIE, P.L. 1967. Meroe: a civilization of the Sudan. New York: Frederick A. Praeger.
- SHINNIE, P. 1985. Iron working in Meroe in Haaland, R. & Shinnie, P. (Editors) 1985. African iron working – ancient and traditional. Oslo: Norwegian University Press, p. 28-35.
- SIHLONGONYANE, M. 2000. Rootless and Ruthless, Africa Insight, December, 2000, Vol. 30, No. 3-4, p. 18-25.

- SIMONE, T. A. M. 1994. In whose image? Political Islam and urban practices in Sudan. Chicago and London: The University of Chicago.
- SIMPSON, S.R. 1985. Town planning and development during the Condominium: Two extracts from a memoir in Daly, M.W. (Editor) 1985. Modernization in the Sudan. New York: Lilian Barber Press, p. 73-84.
- SKOROPSKI, J. 1976. Symbol and theory, a philosophical study of theories of religion in social anthropology. Cambridge: Cambridge University Press.
- SOLOMON, R. C. 1987. From Hegel to Existentialism. Oxford: Oxford University Press.
- SØRBØ, G. M. 1985. Tenants and nomads in Eastern Sudan. A study of economic adaptations in the New Halfa scheme. Uppsala: Scandinavian Institute of African Studies.
- [THE] SOUTH AFRICAN POCKET OXFORD DICTIONARY, 1994 (1987) Oxford University Press Southern Africa.
- SOW, A. I., BALOGUN, O. AGUESSY, H. & DIAGNE, P. (Editors) 1979. Introduction to African culture: general aspects. Paris: UNESCO.
- SPAHIC, O. 2003. Some universal and timeless lessons of the prophet Muhammad in urban planning and development in Technology and management for sustainable building Third Conference in the Series on Sustainable Built Environments, CSIR, Pretoria, p. 152-163.
- 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.
- SPAULDING, J. L. 1985 (Series Editor: Marcus, H. G.) The heroic age in Sinnār African Studies Centre, Michigan State University.
- STEAD, D. & TURAN, M. 1990. A statement on placemaking in Turan, M. (Editor) 1990. Vernacular architecture. England: Aldershot & Vermont: Avebury, Gower Publishing Group, p. 102-121.
- STEAD, D. 1990. The ten smudge pots of vernacular building: Notes on explorations into architectural mythology in Turan, M. (Editor) 1990. Vernacular architecture. England: Aldershot & Vermont: Avebury, Gower Publishing Group, p. 20-30.
- STERN, S.M. 1970. The constitution of the Islamic city, in HOURANI, A.H., STERN, S.M. 1970. The Islamic City. A colloquium. Oxford: Bruno Cassirer, p. 25-50.
- SULAYMAN, A. 2000. Ahmed Shibrain. *Yabda alraṣm kasin'aa wa yantahi ila mihna insaniyya, Al-Safeer*, 1st Edition, 1st Year, December, 2000, Ministry of Foreign Affairs, Khartoum, Sudan, p. 52-53.
- THIEME, O. C. & EICHER, J. B. 1987. African dress: form, action, meaning, Africana Journal, Vol. XIV, No. 2&3, p. 115-138.
- TOGOLO, T. 2000. Memories, abstractions, and conceptualization of ecological crisis in the Mande world in McIntosh, R., Tainter J. A. & McIntosh S. K. 2000. The Way the Wind Blows. Climate, history and human action. New York: Columbia University Press, p. 181-192.
- TURAN, M. (Editor) 1990. Vernacular architecture. England: Aldershot & Vermont: Avebury, Gower Publishing Group.
- URMSON, J.O. (Editor) 1960. The concise encyclopedia of Western philosophy and philosophers. South Africa: Century Hutchinson.
- VAGENES, V. 1998. Women of interior, men of exterior, the gender order of Hadendawa nomads, Red Sea Hills, Sudan. Dr. Polit. Degree, Department of Geography, University of Bergen.
- VERITY, P. 1971. Kababish nomads of Northern Sudan in Oliver, P. (Editor) 1971. Shelter in Africa. London: Barrie and Jenkins, p. 25-35.
- VITRUVIUS, P. 1960 (1914). The ten books on architecture. Translated by Morgan, M. H. New York: Dover.
- WALKER, A. 1989. The temple of my familiar. New York: Penguin.
- WALZ, T. 1975. House decoration in Lower Nubia in McCall, D. F. & Bay, E. G. (Editors) 1975. African images. Essays in African iconology. Boston University Papers on Africa,

Vol. VI., p. 190-221.

WELLS, H. G. 1922. A short history of the world. Middlesex: Penguin.

WOOD, D. 1992. (Editor) Derrida: a critical reader. Great Britain: Blackwell Publishers.

ZANAR, R. M. 1971. The problem of embodiment: some contributions to a phenomenology of the body. The Hague: Nijhoff.

ZASLAVSKY, C. 1973. Africa counts. Number and pattern in African culture. Boston, Massachusetts: Prindle, Weber & Schmidt, Inc.

Space, place and meaning in northern riverain Sudan

Amira Omer Siddig Osman

Supervisor: Prof. K. A. Bakker

Submitted in fulfilment of the requirements for the degree

Philosophiae Doctor (Architecture)

Faculty of Engineering, the Built Environment and Information Technology

University of Pretoria

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

Amira Omer Siddig Osman

Studieleier: Professor K.A. Bakker

Voorgelê ter vervulling van die vereistes vir die graad

Philosophiae Doctor (Argitektuur)

Fakulteit vir Ingenieurswese, die Bouomgewing en Informasietegnologie

Universiteit van Pretoria

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.

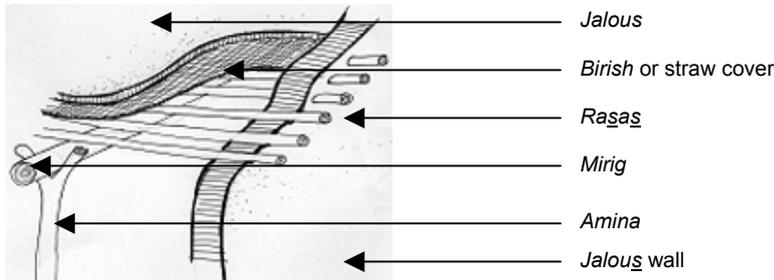


Fig. 1 A traditional building (drawing by author).

'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

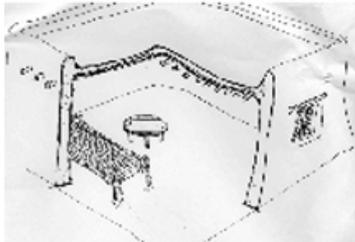


Fig.3 A typical room *qurfa*, room with the 'angarib as the main piece of furniture (drawing by author).

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*.

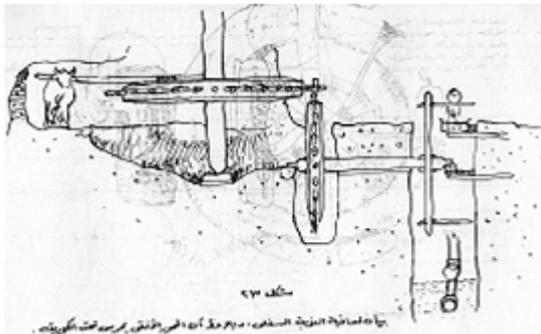
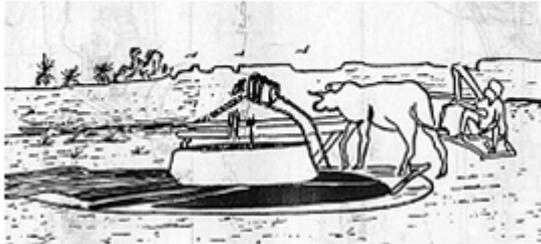
Sabeel – a water pot placed on the road and continuously cleaned and filled by a person/family as a *ṣadaqah*, a good deed done in the hope of Allah’s blessings. A drinking fountain or public fountain on the roadway that is made as charity: “*Makan lilshurb ‘ala qari’at al tareeq ju’il fi sabeel allah.*”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

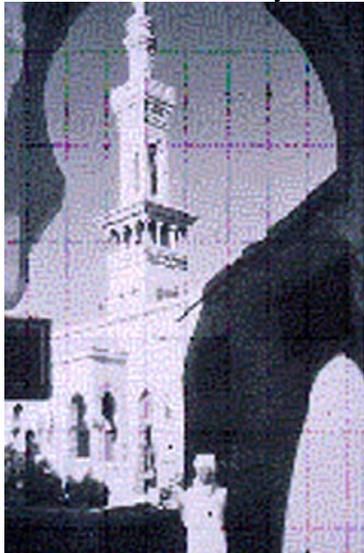
“It is not the habitation of a deity, sanctified by his Presence, but a place set aside for public prayer and for hearing the word of God in the Koran.” (Greenlaw, 1976: 62)^v.

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).

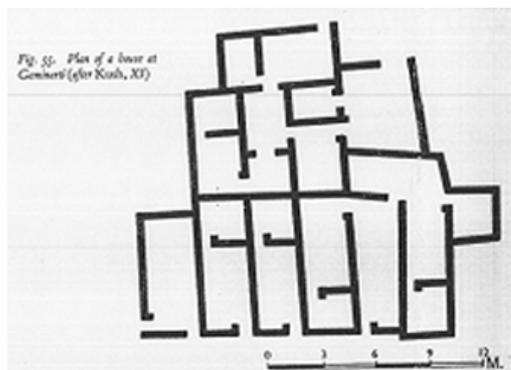


Fig.14 Plan of a house at Gaminarti in the north (Shinnie, 1967: 157)^{xii}.

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}.

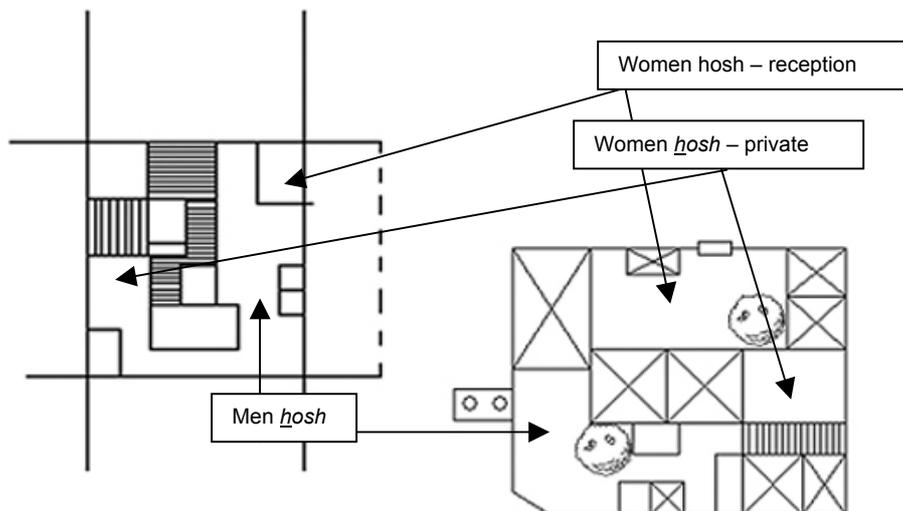
This is Cloudsey’s description of a *daywan* (p. 167)^{xvii}:

“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)

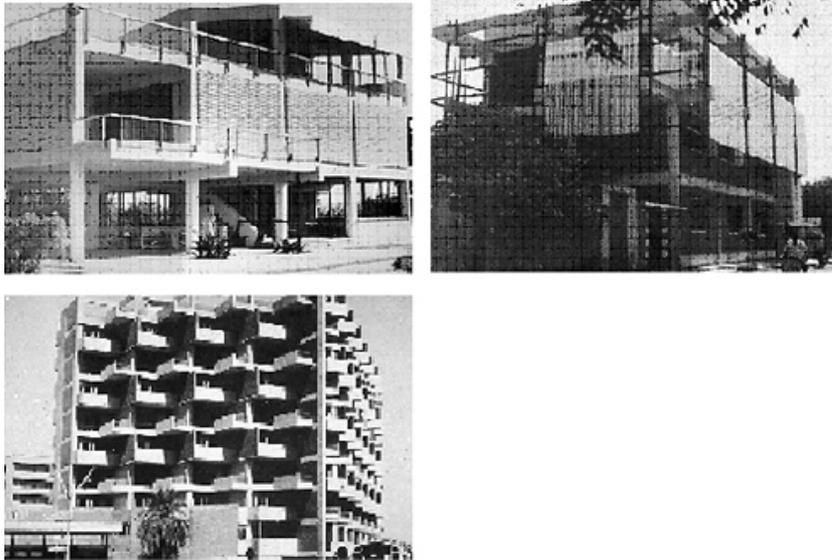
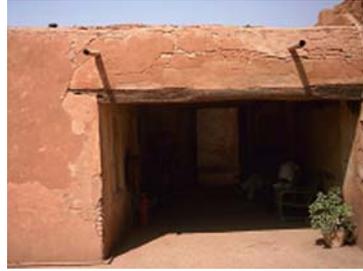


Fig.26-28 Residential buildings designed by Abd el-Munim Mustafa in the 1960's (Photographs obtained from O. Osman, 1999). These follow in the Khartoum Style – a regional interpretation of modernism that took the climate of the Sudan into consideration. It would be interesting to study plans of these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

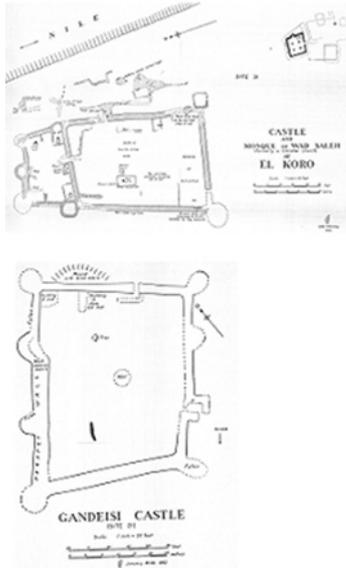


Fig. 35 Castle and mosque at ElKoro (Crawfords, 1953: 31).
Fig. 36 Gandeisi castle (Craford, 1953: 29).

c. Pottery, decoration stone reliefs on buildings.



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

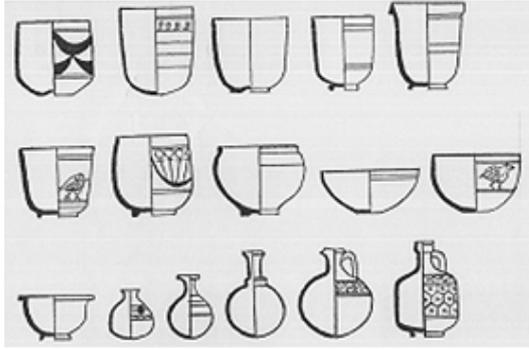


Fig. 38 Meroitic pottery (Shinnie, 1967: 114)



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

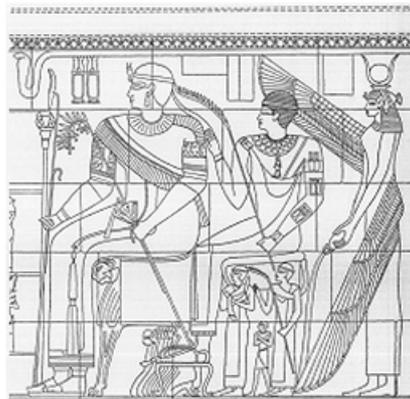


Fig. 40 Relief from the pyramid chapel of Nahirga (Shinnie, 1967: 109

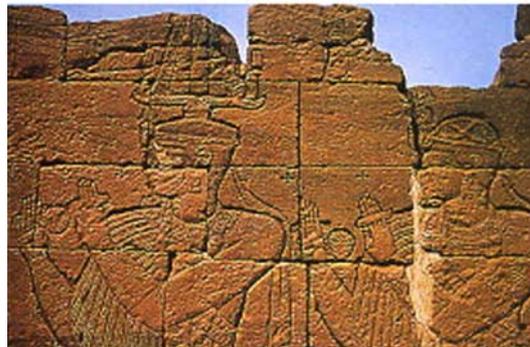


Fig. 41 Relief at Old Meroe (Photograph by author in 1996).



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).

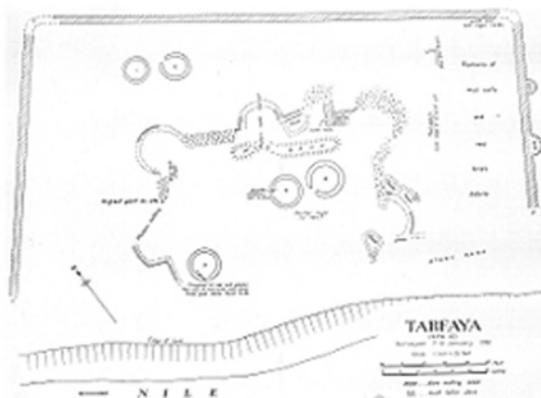


Fig. 50 Tarfaya, a fort (Crawford, 1953: 15).



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).

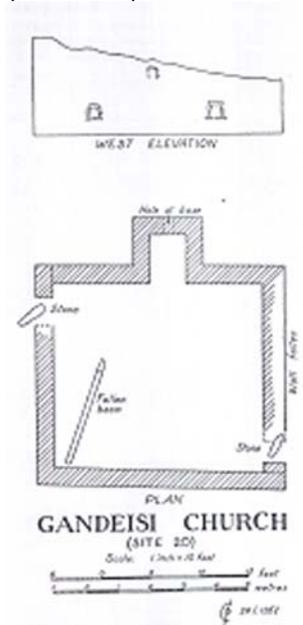


Fig. 52 Gandeisi church (Crawford, 1953: 27).

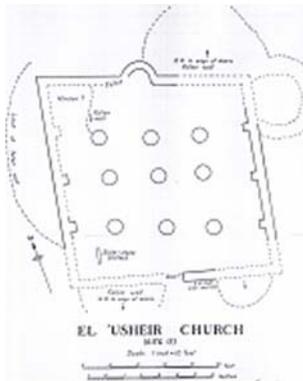


Fig. 53 ElUsheir church (Crawford, 1953: 21).



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).

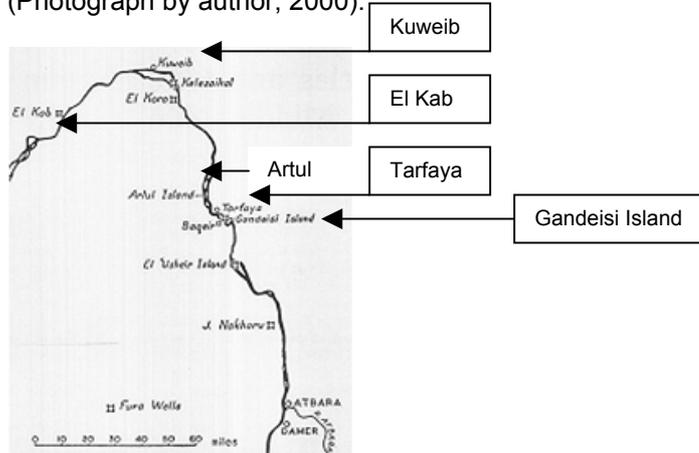


Fig. 60 Some sites mentioned above (Crawford, 1953: 8)