■ **NIGERIA**

Shaping Rural Spaces: A Construction of Abak Architectural Ethnography

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Introduction

The Abak are a sub-ethnicity of the Ibibio, one of the most prominent peoples in the southeastern region of Nigeria. They are located in Akwa Ibom state (Figure 1). Although all the people in this area speak Ibibio, each segment has its own dialect. Two settlements – Ikot Ubom and Nko Otoro in the Afaha-Obong and Otoro clans respectively -- were studied critically. The mean annual temperature of the study area is between 26^0C and 29^0C, while the mean annual rainfall ranges from 2000mm to 3000mm. The locality is marked by two contrasting seasons – wet and dry. The former commences in May and ends in October while the latter begins in November and continues until April.

The very dry and dusty weather begins in December and terminates in January. These conditions are caused by the northeast wind blowing from the Sahara. However, this dusty and dry wind (locally called *ekarika*) is normally not as severe in the study area as it is in the northern part of the country, due basically to the proximity of Ibibioland to the Atlantic Ocean. The region is characterised by an intricate network of rivers, creeks and creeklets as well as a belt of mangrove swamps (Balogun 2000). Also oil palm (*Elaeis guineensis*), coconut palm (*Cocos nucifera*) and raffia palm (*Raphia vinfera*) are found in large numbers in the study area.

The Abak sub-group is famous for palm oil and kernel production in addition to its enormous skills in fishing and wood-carving. The Abak are good carvers of masks and puppets as well as other artifacts for religious, social, political and utilitarian purposes (Udo 1983). Plant cultivation and animal husbandry are major livelihoods for the Abak. In this connection, women play a vital role: Abak women occupy a key position in the promotion of household economies.

The goal of this research is to identify, analyse, interpret and document aspects of the indigenous architectural forms and settlement patterns among the Abak with a view to using such knowledge to generate new hypotheses for spatial archaeology in this locality in the future. The objectives are stated below:

- Identifying and analysing types of building materials and the techniques of construction of Abak domestic architecture as a baseline for developing an understanding of issues such as structural durability, functionality and accessibility.

- Building a typology of Abak indigenous architectural forms and their use, re-use and discard patterns through the lenses of direct field observation, mapping and documentation.

Who Needs Ethnography?

Ethnography as a sub-field of anthropology straddles the domain of archaeological enterprise. It deals basically with cultural peculiarities or specificities in order to deeply understand and appreciate the symbolic, sociological and technological underpinnings of the culture of a

Figure 1: Map of Nigeria showing Akwa Ibom State.

group of people. The archaeologist's romance with ethnography is hinged on its interpretative powers. In this connection, thoroughgoing field research rooted in direct, firsthand observation of aspects of the material lifeway of a group, occupy a central position in the scheme of things (Gardi 1974; Gosselain 2000; Kottak 2004).

Although imprints or artifacts of the past are often coded, some considerable amount of understanding can be achieved with the aid of rigorous ethnographic research. The present is to a large extent, the mirror of the past. Despite the fact that archaeology is primarily a material science, efforts are also made to construct facets of the symbolic, sociological and ideological meanings of artifacts retrieved from excavations including surface contexts. Both the physical and qualitative components of a given archaeological culture are important for a robust interpretation of the past (Bray 2007; Ogundele 2006; Ogundele and Lumowo 2009; Russell 2006). Ethnography (if rigorously handled) has the power to make archaeological artifacts speak for themselves. As a matter of fact, archaeology is mainly palaeo-ethnography.

Architectural Ethnography

In this research, an attempt was made by us to study general indigenous architecture and spatial behaviours as a gendered production of material life. The wattle-and-daub technique of house construction is very prominent among the Abak people and other Ibibio sub-groups. But before going into the details of this indigenous knowledge system, a brief historical survey will be done. As noted earlier the past blends with the present to some degree. However, there is usually space for a few modifications as a group of people face new challenges, problems and possibilities. Indigenous architecture as a component of culture is dynamic, although it retains some elements of its original form. This is the basis of ethnic or group identity

(Ogundele and Lumowo 2009).

Archaeological evidence attests to the considerable antiquity of wattle-and-daub architecture in parts of West Africa. Thus for example, the Kintampo people of Ghana designed and engineered permanent houses about the 18th century BC (Connah 1981; Phillipson 1985). These food-producing people were superb architects and engineers shaping and re-shaping their local landscape in order to engender and promote a robust human condition. Similarly, the settlers of Dhar Tichitt in Mauritania built wattle-and daub-structures at least 2,000 years ago. On the Bornu plains of northeastern Nigeria, Late Stone Age/Iron Age people constructed wood walled, clay-floored structures in their permanent villages (Connah 1981). This development can be stretched as far back in time as the late second millennium BC.

Architecture is basically an attempt to shape a given space in order to improve the human condition (Denyer 1978). This enterprise, which can be referred to as collective memory, is an encapsulation of art (including aesthetics and symbolism), science and technology. Put differently, architecture connotes ethnic/group identity, adaptation to socio-environmental realities, durability, functionality including security-consciousness, change and social exchange through time and space. Architecture is a form of symbolic communication that must be properly decoded as a precondition for developing some knowledge and understanding of a people. This is within the framework of internal adjustments as well as national and trans-national flows and interconnections. Therefore, architecture is a phenomenon embedded in social fluidity. It is about the participation (directly or indirectly) of a human group in the global community down through the ages. Architecture is a good example of the continued taking from, and giving to, the global village often in harmonious ways. Suffice it to say, that approaches enshrined in cultural particularity and to a limited extent, socio-historical generality, would be a welcome development.

Raw Materials, Gender and Building Techniques

Parcels of land for house construction are given to members of an extended family by a council of male elders. Selling of land is still an unpopular practice among the Abak. People use locally available materials including mud/clay (*mbat*), wood, bamboo (*nyanya*) and grasses for constructing their domestic architectural forms. Occasionally, corrugated iron sheets are used instead of grass for roofing. Such iron sheets come from Europe and America as well as parts of Asia. Abak architecture involves the participation of men and women in complementary and co-dependent ways. This development eminently takes the indigenous knowledge system (architecture) to the domain of gendered technical practices. In this regard, gendered division of labour is inseparable from cultural perceptions of femininity and masculinity. In other words, tasks are feminized and masculinized in order to pave the way for greater efficiency and better overall results. This situation also promotes greater unity among members of a given settlement.

Fieldwork has revealed that the Abak men dwarf their female counterparts as far as architectural/building technology is concerned. But it would be misleading to claim that the tasks performed by women are of lesser significance because their the tasks are not as laborious as those handled by men (Lyons 2007). Excavating and building wall foundations, constructing wall and roof frameworks as well as fastening of strips of woven thatch to the roof structure are for adult men and/or male children of working age. It is pertinent to note, that there is no taboo stopping women from doing any of the above tasks. The issue is more of biological considerations with an emphasis on femininity rather than cultural practice.

Gendered technical practices that are almost exclusively for female members of the community include the following:

- Carrying prepared mud to the exact location of a proposed house, for the builder cum

architect to use. The Abak architect doubles as a builder. However, men directly obtain the earth (mud) by digging pits on the peripheries of villages. The diameters of such pits vary from 1.50 to 2m. After the completion of a building, the pits are used for refuse disposal.

- Covering the excavated trenches for wall foundations with mud, after bamboo sticks have been fixed to the ground to form outlines of the rooms. A living house is usually a two-or three-room apartment. Flooring may commence as construction is in process or at the end of the exercise. Prepared clay (a mixture of clay and ash) is used for flooring. Raised floors may reach between 5 and 10cm above ground level. This exercise is based in functionality. The purpose is to prevent dampness and also to reduce the menace of termites and other harmful insects to the barest minimum.

- Preparing strong ropes from raffia palm fronds in readiness for the wooden wall structure of a house or for the roof frame.

- Resurfacing damaged floors due to intensity of use with the passage of time. Household

Figure 2: A structure for domestic animals.

chores often lead to the creation of potholes on living floors. Floor resurfacing may take place once per year depending on specific circumstances.

- Painting of house walls is done exclusively by women using a mixture of charcoal and water. Charcoal pieces from domestic fires are ground into powder and then mixed with water to form a paint that is applied with a piece of cloth or rag. After painting, the wall is smoothed with fresh cassava leaves. The use of cassava leaves prevents harmful insects, including termites, from getting access to the thatched roof. This is an indigenous conservation strategy for wattle and daub architecture among the Abak sub-ethnicity of the Ibibio.

Types of Structures

Four main types of structures were identified and studied. They are – living houses; detached kitchens; toilets (pit-latrines to be specific) and animal houses. All of these structures (with the exception of coops) are produced basically using the same techniques. However, only living houses are painted with charcoal solution. One engineering feature known as wattle-and-daub is common to all

Figure 3: Skeleton of a house.

structures except animal "houses", which are made of bamboo sticks and raffia palm. No mud is used for this latter architectural form.

The entire "skeletons" of living houses are constructed with dry bamboo sticks (*Bambusa vulgaris*) to form wall and roof superstructures. These are held together by raffia sticks arranged horizontally and then fastened with ropes. Dry bamboo sticks do not shrink easily. This quality, coupled with the fact that they are termite-resistant, makes them a good building material. Wall thickness for living houses varies from one builder to another. However, walls of living houses are thicker (between 15 and 24cm) than those of the other categories of buildings mentioned earlier (12 to 20cm). The considerable thicknesses of the walls of the former category are an engineering mechanism to ensure greater durability. Lengths of living houses range from 6 to 12m.

The mud walls of a structure can be completed within one week, depending on the number of builders involved. Prepared mud is fixed into the bamboo and raffia superstructure and then left for two or three days to dry. Wall construction with mud is done after the entire superstructure (wall and roof frameworks) has been completed and thatching finished. Mud walls without a roof can be easily destroyed by rains (Figures 2, 3, 4, 5 and 6).

Figure 4: Typical wattle-and-daub house wall.

Figure 5: Inner part of a thatched roof.

Covering the roof of a structure, especially a living house, with thatch is not a task for people lacking adequate skills. Thatching must be properly done to prevent a leak in the roof, given the heavy rainfall patterns of the region. A carefully thatched roof can last between eight and 12 months before any repairs may be needed. Abak houses have small-sized, square-like or rectangular windows to reduce the effects of cold conditions to the barest minimum.

Kitchens (*ufok ugi idem*) are usually constructed at the back of, or beside, a living house, but as noted above, the techniques of construction are the same but without any painting. According to oral information, kitchens are detached (about 4m away) from living houses as a safety measure. It is an attempt to reduce fire incidents to a minimum. Pit latrines are located at least 8m away from the main settlement area in order to promote good sanitation. On the other hand, animal "houses" (*ufok ebot*) are usually situated close to living houses and kitchens. This spatial behaviour is to ensure that domestic animals are not easily stolen in the night. Animal "houses" are made of wooden walls without mud to allow for sufficient ventilation. The door of this structure is locked at night. All categories of buildings among the Abak have raised platforms of well prepared mud or clay. This is one of the female-gendered architectural/engineering practices in the

Figure 6: Complete wattle-and-daub house.

locality. The architecture and general domestic spatial behaviour do not suggest any major socio-economic hierarchy.

Ethnoarchaeological Possibilities

Abak ethnography, with emphasis on architecture and landscape transformations including management, is to a large extent, the mirror of the past. We cannot successfully capture aspects of archaeological memories of this region without ethnography. Thus for example, pits (usually ranging between 1 and 1.5m in depth) dug for earth (mud) for construction purposes are located at the peripheries of settlements. These pits are later re-used for solid waste management (Figure 7). They gradually become refuse mounds. Four such mounds were identified at Ikot Ubom, while five were discovered at Nko Otoro with the assistance of local informants. They mark the limits of the main areas of human actions and activities – locales of high concentrations of spatio-cultural behaviours. These refuse pits provide enormous insights into the design of a speciality in Nigerian archaeology hereby christened "ethnoarchaeology of solid waste management". The rate of decay of Abak wattle-and-daub structures in the use, re-use and discard levels needs to be studied, so that the knowledge gleaned from such efforts can be used to develop

Figure 7: A pit for obtaining earth for construction.

an understanding of archaeological formation processes in the broader area. Such research has the capacity to push back the frontiers of archaeological methodology in the African tropics.

Although pit-latrines are constructed in the communities investigated, our informants claimed that this settlement trait is a reflection of the phenomenon of cultural flows and interconnections. Pit-latrines were introduced by the British during the colonial period that ended in 1960. This means that traces of such a settlement trait or feature cannot be found in an archaeological context predating the colonial period. Therefore, the occurrence of pit-latrines in an archaeological site in Abakland suggests a colonial or post-colonial period. In this regard, pit-latrines might be seen as a relative time-marker.

Postholes resulting from bamboo sticks used for constructing the superstructure of a house wall can enable us to reconstruct the layout of an archaeological settlement site (Figure 8). Therefore, the archaeologist needs ethnography as a baseline for reducing the amount of epistemological crisis in the archaeological profession to the barest minimum.

Figure 8: Bamboo fixed to a house foundation.

Conclusion

The Abak people have a rich heritage of wattle-and-daub architecture traceable to the Late Stone Age of West African history over 2000 years ago. This cultural expression of Abak architecture straddles the domain of genderization of materiality. The Abak local spaces are being shaped by both male and female settlers in complementary and co-dependent ways. Our research here has revealed four main types of architectural forms constructed almost exclusively with locally available material resources. Architectural and spatial behaviours of the Abak are an engagement in cultural identity building, change and continuity. Examples of these processes include the use of corrugated iron sheets now being used for roofing instead of thatch by some of the people. Similarly, the use of pit-latrines as opposed to bush toilets is gaining in popularity. These features are a reflection of cultural flows and interconnections, particularly with Europe since the slave trade period. Archaeologists working in this locality have a lot to gain from a good ethnographic knowledge of the people's architecture. This hinges on locating sites, understanding artifact distribution and decay patterns, as well as interpreting the images of the past in a relatively intelligible manner.

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