

**Traditional Earth Houses in Vittin, Tamale:
Identity and perception of the tradition-modernity conflict.**

Irene Appeaning Addo[#]

Abstract

The tension between tradition and modernity extends into African traditional architecture. The desire to become modern is pushing people to change from the climate suitable traditional houses found in the Northern Region of Ghana. The study sought to explore the influence of modernity on traditional buildings in Vittin, a peri-urban community in the Tamale municipality. Using focus group discussions and photography, the study explored some of the tradition-modernity tensions that exist in African traditional architecture. Although respondents associated identity and tradition with the round earth houses built in the past, they explained that in contemporary times urbanisation, status, economic issues, sustainability and the sense of belongingness were push factors for change. The research concludes that conscious effort needs to be made for earth constructed houses to be sustainable otherwise the technology will completely disappear and this may impact the traditional beliefs and practices of the people. It is proposed that there is the need to relook at traditional architecture to make them durable and sustainable and the indigenous knowledge and architecture of the people need to be documented.

Keywords: African Architecture, Tradition, Modernity, Identity.

<http://dx.doi.org/10.4314/contjas.v4i1.6>

[#] Research Fellow, Institute of African Studies, University of Ghana

Résumé

La tension entre tradition et modernité s'étend dans l'architecture traditionnelle africaine. Le désir de devenir moderne pousse les gens à abandonner les maisons traditionnelles pourtant adaptées au climat de la région Nord du Ghana. L'étude cherche à explorer l'influence de la modernité sur les bâtiments traditionnels de Vittin, une communauté périurbaine de la ville de Tamale. Par le biais de groupes de discussion et de photographies, l'étude analyse un nombre de tensions entre la tradition et la modernité qui existent dans l'architecture traditionnelle africaine. Bien que les participants associent l'identité et la tradition aux cases rondes construites dans le passé, ils expliquent qu'aujourd'hui l'urbanisation, le statut, les questions économiques, la viabilité et le sentiment d'appartenance sont des facteurs incitatifs de changement. La présente recherche conclut qu'un effort réfléchi doit être fait pour que l'architecture traditionnelle devienne durable sinon cette technologie pourrait disparaître et qu'en retour cette situation pourrait avoir des répercussions sur les croyances traditionnelles et les pratiques de la population. Il est proposé de revoir l'architecture traditionnelle en vue de la rendre durable et viable. Le savoir-faire indigène et l'architecture populaire doivent être documentés.

Introduction

Even with the contending and overlapping forces of migration, globalization and modernization shaping the Africa present, African identities and the disciplinary discourses with which we engage them, tradition continues to play a major role in both the articulation of African issues and their resolution. Africa's position in the world, the nature of African subjecthood and lifeworlds, continue to be a function of the tensions between tradition and modernity. African identity is constructed by the shared values and world views, as well as by both intangible and tangible cultural artifacts. In much of disciplinary discourses on Africa, rituals, ceremonies, performances, traditional art forms, traditional occupations, and family systems, nature (flora and fauna) are readily deployed as tropes for discussions on the tradition-modernity conundrum.

Traditional architecture does not often feature in discussions of the rural milieu in Africa as a counterpoint to urbanization and modernity. However, this tension between tradition and modernity is palpable in architecture; in what is described as African traditional architecture and modern architecture. Yet very little attention is paid to the instrumentality of traditional architecture as a site of perceptions, identities, and meaning in the evolving contexts of African modernity.

This study proposes to fill this gap by studying traditional architecture in the tradition-modernity conundrum from both ethnographic and architectural perspectives. The research that informs this paper was aimed at unveiling some of the tradition-modernity tensions that exist in African traditional architecture bearing in mind not only that the tradition, culture and identity are reflected in the kinds of houses people build and live in (Pallasmaa, 2007) but cultures and traditions are also subject to change. The study took into account changes in the construction process as the first step in the building process, then the physical changes in the form of the building shape and materials used. This is followed by a discussion of the perceptions of some youths and residents regarding the construction of traditional earth houses in contemporary times in relation to notions of identity and modernity. Furthermore, the study interrogates the stereotypical conceptions and practices of alienation devolving from the youth pertaining to a 'modern house' and a 'traditional earth house'. Lastly, the research concludes on where to place traditional earth houses on the cline between tradition and modernity from the Ghanaian perspective and as evidenced by the discussions of African traditional architecture.

Tradition and Culture

Tradition in Africa is defined as any cultural product, including values, practices and institutions, that was created or pursued by past generations and that have been preserved by successive generations and have persisted to the present (Gyekye, 1996:164). UNESCO (2000) defines culture as

... that whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social groups. It includes not

I. Appeaning Addo: Traditional Earth Houses in Vittin, Tamale

only arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs.

Thus, the tradition and culture of a people is embodied in their religion, worldview, literature, media, art, housing, architecture, cuisine, dressing, gender, marriage, family, lifestyle, social customs, music and dance (Salm and Falola, 2002). Each culture has its dignity and value which must be respected and valued.

Since African traditions are valued and cherished, any change in these traditions is often met with resistance and change may thus be very slow. This assertion is confirmed by Gyekye (1996) who suggests that Africans are reluctant to wean themselves from the customs, practices and modes of thought of the ancestors and this has led to the characterization of African societies as outmoded and traditional in nature. Meanwhile, cultures and traditions are not sacrosanct but dynamic as a result of demographic, economic, political, environmental, scientific and technological changes with Gusfield (1967) observing that societies are not static and what may be described as traditional today may also be a product of change some years ago.

Modernity

Modernity, described as the actual and current as opposed to the former, previous or foregoing (Whyte, 2004) is an ongoing process that has time and space associated with it. According to Escobar (2004), modernity has identifiable temporal and spatial origins and it is associated with the European seventeenth century reformation and enlightenment and the French revolution. Europeanisation of Africa in the seventeenth century also led to modernism. Modernity is often measured by comparing modern societies to premodern or postmodern ones.

According to Wade (2007), it is about exploring how “local,” usually non-Western people, adapt objects, ideas, and symbols from global circuits of production, consumption, and knowledge, indigenizing, resignifying, appropriating, and hybridizing them in the process and perhaps generating

“multiple” or “alternative” modernities (p. 51). Associated with modernity is the invasion and loss of the unique local culture of a society. The notion of modernity can also be understood by looking at change from "traditional" societies to "modern" societies where this change may have led to industrial and ideological revolutions and resulted in the growth of cities as societies became urbanized. Wong (2010), in citing Kwok, explains that modernity causes the individual to be freed from this "tradition-bound" mindset and to "reconstruct" his or her mindset or self-identity from a plurality of roles.

Between tradition and modernity

Consequently, there is a misconception that tradition and modernity are opposed and constitute perhaps the two most consistent rivals in contemporary African polity (Orobator, 1991:273) with modernity being one of the most diverse and contested concepts in literature (Frisby, 2004). However, the two concepts are intertwined and cannot be separated from each other since they both impact on the culture of a society and change with time and space.

Within the tradition-modernity paradigm, the village or the rural setting has come to be equated with certain modes of being and certain paradigms of identity that are deemed to be pre-modern, unsophisticated, uncivilized, primitive and backward (Salm and Falola, 2002). According to these authors, the conflict between tradition and modernity stems from colonial contact and the introduction of cultures, civilizations, and political systems that conflicted with the African worldview. The tension between tradition and modernity in Africa plays out in various spheres; in village-city relationship, rural-urban relationship, gender relations, agrarian-industrial/manufacturing/oil-based economy, local identities-state identity, national-traditional authority (Salm and Falola, 2002).

African Traditional Architecture

African traditional architecture in Ghana and other parts of Africa has been studied both in the past and in contemporary times from ethnographic,

anthropological, architectural and archeological perspectives. In the past, the problems associated with African housing from the public health perspective (Atkinson, 1950), followed by Prussin's (1974) determination to prove the viability of African traditional architecture, and Mark's (1995) study on the European-African cultural interaction have not unearthed the underlying tensions between tradition and modernity as reflected in the traditional houses. Again, in contemporary times, African traditional houses have been studied from archeological perspective (Agorsah, 1985), from the spatial organisation angle and fabric of the traditional houses (Steyn and Roodt, 2003), and from the perspective of developing sustainable methods for revitalisation and conservation of earthen architecture for dissemination (Bertagnin and Castellanos, 2010). In addition, Oppong and Badu (2012) also studied building materials preferences in the warm-humid and hot-dry climates and the suitability of such material in earth houses in Ghana and concluded that peoples' preferences were driven by aesthetics instead of climatic conditions. The unsuitability of the building material used in construction and the consequences associated with its use in the hot climate often impacts on households' housing satisfaction (Addo, 2015). There are also building maintenance challenges when these 'modern' materials are spoilt and need to be replaced (Addo, forthcoming 2016).

Architectural identity and the Tradition-Modernity Conflict

Architectural identity are qualities and properties of an urban physical setting that provide the individual with a sense of place (Saleh, 1998), and according to Mark (1995), the development of a distinctive style of architecture, suited to the climate and making use of locally-available building materials was one of the results of the establishment of Portuguese and Luso-African trading communities in Africa. Thus, pre-colonial trade links have provided architectural identities to some communities in Africa.

However, architectural identity is gradually being lost as a result of social and cultural changes as well as institutionalized changes imposed by planning

and architectural practices and ‘civilization’ of our cultural values (Saleh, 1998; Pallasmaa, 2007). The loss of architectural identity has resulted in tensions between tradition and modernity because contemporary buildings have impaired our sense of locality and identity and have rather accelerated our alienation and estrangement instead of integrating our worldview with our sense of self (Saleh, 1998; Pallasmaa, 2007). Instead of architecture reuniting us with our locality, the modern architecture has rather detached us from our localities in terms of the landscape, local materials, skills and cultural patterns (Pallasmaa, 2007). However, Noble (2011), is of the opinion that there is no need for the conflict; rather he suggests that these new African identities have instead inspired impressive works of architecture which cannot just be thrown overboard.

African traditional earth houses are described as one of the most endangered forms of cultural and built heritage (Radivojević et al., 2014). This is because these houses are regarded as primitive, less durable and less resistant to floods and thus needing to be replaced (Dietz et al., 2013). There is also a notion that the performance and image of traditional earth houses in societies and cultures do not fit into contemporary times due to new legislations, new technologies, new technical training, changing public awareness of sustainability, and global knowledge-sharing (Zami and Lee, 2011),

Unfortunately, these developments have all served to inhibit the continued construction and use of earth buildings. Meanwhile, Bosman and Whitfield (2015) argue that earth constructed houses allow for local skills transfer, apprenticeship, community participation, improved sustainability, and positive utilization of available material, resources and technology of a community. This position is buttressed by Du Plessis (2001) who argues that the availability of natural materials from the immediate environment of traditional communities had led to the development of indigenous construction practices that cause very little waste. According to Du Plessis, (2001), the traditional construction practices provide us with examples of sustainable construction patterns leading to sustainable settlement patterns.

However, there are divergent opinions on the modernisation of earth houses. While some authors have called for modernisation of traditional houses for reasons of protection and optimization of energy use in these buildings (Radivojević et al., 2014), others have supported the continued use of earth buildings because they use an alternative building material which is comparatively cheaper than using conventional brick, concrete and steel (Zami and Lee, 2011). Invariably, these mixed opinions on traditional earth houses underlined with the quest to modernize, have questioned the very existence of such houses in contemporary times. A small community in the Tamale Municipality in the Northern Region of Ghana — Vittin village found in the suburbs of Tamale (Figure 1) will serve as a case study.

The Study Area - Vittin

Vittin is located in the south eastern part of the Tamale metropolis. It is a peri-urban community located about 4 kilometers from central Tamale. About 11.5 square kilometers in area it shares boundary with Kukuo to the north, Tua to the south, Dabokpaa to the east and Kpanvu to the west (Lampsey, 2009). A majority of the people in Vittin are ethnically Dagomba.

In the 1980s Vittin was more of a peri-urban farming community. However, by the mid-1990s, Vittin was transformed into an urban community in terms of infrastructure and residential development. The transformation of Vittin can be explained by its location along the main trunk road leading from Tamale to Tugu, that is the on the Salaga road.

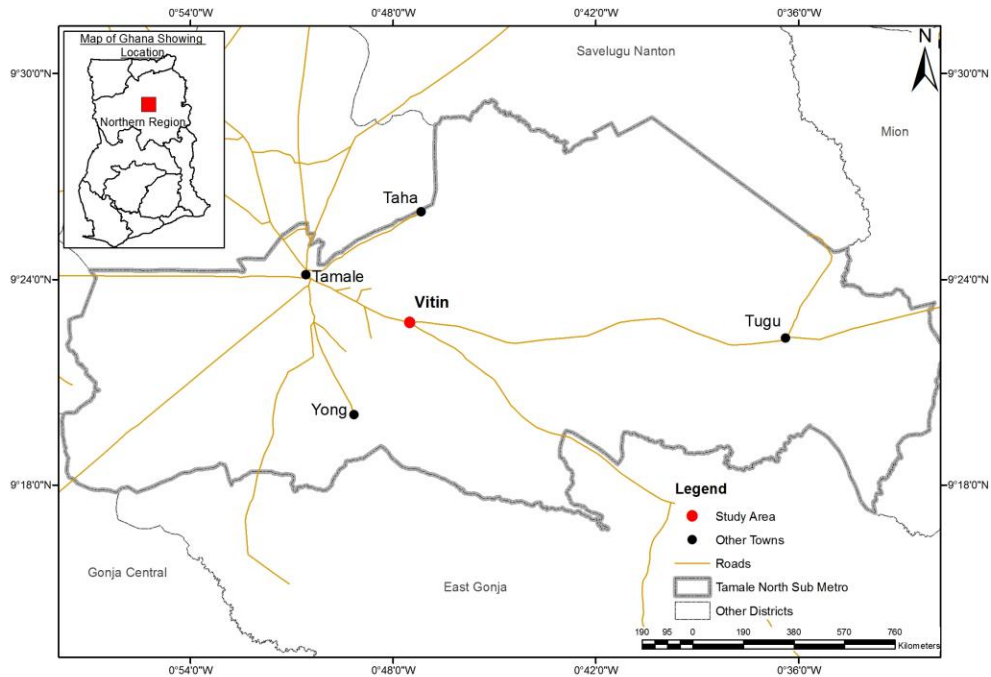


Figure 1: Map showing the study area along the main Tamale-Salaga road.

Yet the old part of Vittin still retains many characteristics of a traditional community, as shown in the photograph in Figure 2. Some of the houses in the old part of the community are still constructed in earth although this is fast changing as they are being replaced with cement houses. For example, the old part of Vittin has both the old palace constructed with mud and the new palace constructed with cement blocks built next to each other. The development of single dwelling housing units is a modification from the traditional multifamily compound housing pattern that may accommodate many members of the extended family. These developments, according to Gyasi et al., (2014), are indications of urbanisation in Vittin. Gyasi et al. (2014) report that, residents of Vittin and other villages surrounding Tamale considered loss of traditional values and negative influence of Western cultures among the youth as some of the negative effects of urbanisation.



Figure 2: A view of the old part of the Vittin showing traditional houses and the development of new houses in the background.

There is only one rainy season — from May to October, and the dry season is characterized by dry Harmattan winds from November to February. The maximum diurnal temperature is around 40 degrees Celsius and the minimum temperature is around 25 degrees Celsius. The general trend in Tamale indicates that while rainfall is becoming more variable, temperatures are rising (Gyasi et al., 2014). Hafiz (2014) has also documented the devastating effects of flooding resulting from rainstorms in the Tamale Metropolitan Area. For example, on 28th June, 2014 several houses were flooded, roofs of houses were ripped off, personal effects and foodstuffs were washed away and 6 houses completely collapsed during a rain storm in the Tamale Metropolis (Mahama, 2012). As such climatic occurrences impact on the mud houses, households begin to entertain the idea of building their houses with cement blocks. Census data shows that the number of earth houses in Ghana is decreasing. In 2010, about 34% (1,991,540) of all the outer walls of the existing housing stock was

constructed from earth, mud bricks and mud, a decrease from 50% in 2000 (GSS, 2002; GSS, 2012). Note that the use of mud, swish or adobe as a building material in Ghana is not banned in the National Building Regulations. Although the national trend shows that traditional earth houses are decreasing, the Northern Region still has a number of mud buildings. In 2010 almost 73% of all buildings in the Northern Region of Ghana were constructed from earth.

Methodology

The study used focus group discussions, in-depth interviews and photographs to explore the influence of modernity on the traditional houses in Vittin. While the focus group discussions solicited for peoples' opinions, the photographs were used to document the changes observed. According to Folch-Lyon and Trost (1981), focus group research is used to gain insight into the dynamic relationships of attitudes, opinions, motivations, concerns, and problems related to current and projected human activity. Romm (2015) has used focus group discussion to appreciate the indigenous ways of people knowing collectively and constructing their understandings of social issues in education. One of the benefits of focus group discussion is that they do not discriminate against people who cannot read or write and they can encourage participation from people reluctant to be interviewed on their own or who feel they may not have anything to say (Kitzinger 1995). A semi-structured guide was used to conduct two focus group discussions in Vittin. Using a semi-structured guide the key areas regarding housing construction, modernity and perception were explored and the interviewer and the interviewee were free to diverged in addressing specific topics that answered the research questions and also served to guide the facilitator in moderating the discussions (Gill et al., 2008).

Members of the focus group consist of men and women, the youth and the elderly. The youth formed one group while the elderly formed the second group. The interviewer first undertook a reconnaissance survey of the community and contacted a community facilitator who is the youth chief and also a teacher in the Tamale Metropolis. A house-to-house approach was adopted to recruit members for the focus group discussion. The condition for

inclusion in the focus group was that respondents should be staying in a compound house that has part or all of it constructed in earth. No respondent was selected from houses constructed with only cement walls. Again respondents should be willing to take part in the discussion. In all, thirty houses were enumerated although in some of the houses there were no willing respondents and some of the houses were empty because people had left for the farms.

The first focus group comprised four males and three females who were aged between 40 and 75 years. The discussion was held on 14th July, 2015 beginning at 7:00am and ending at 8:15am. It was held in the compound of one of the discussants. The second group comprised the youth who were aged between 20 and 36 years. In all, there were five males and five females. The discussion was held on 26th July 2015 from 8:15am to 10:46am. The criteria applicable in the selection of the first group were used to recruit members for the second focus group except that it was relatively easier to get people to volunteer as the second one was held on a Sunday. Vittin is predominantly a Moslem community. The youth group met at a community gathering spot under a big tree in the community.

The elderly group answered questions that examined the tradition of earth houses in the study area. They were also asked about the construction methods in the past and the changes observed in the mode of construction, the building material used and building shapes. The youth group had questions that explored the construction methods presently used in the community, changes that have occurred in the building shapes, material and room temperatures in earth houses. Getting to the end of the discussions, respondents' general perception of earth houses in the 21st Century and the influences of modernity on the earth houses within the community were explored. This is because the youth group had travelled and as some of them had or were working outside the community it was assumed that they were more likely to form an impression of what a modern house was. The mode of communication for both discussions was Dagbani. Some of the constraints were budget and time

although the responses received from the two groups on the construction methods were similar to each other. That served as a validation check and justified the two focus group discussions.

Data Analysis

The discussions for the two focus groups were recorded, transcribed and analysed systematically. The content was analysed by coding similar responses from the two groups under four themes namely, the construction process, the shape and building material, the general impression of the people with regards to earth houses in the 21st Century and the perception of modernity influence in the community. The presentation of results is grouped under these four themes and vignettes were used to illustrate the thematic areas.

Results

The construction process

Traditional earth houses constructed in mud was the predominant house type in Vittin village. Respondents mentioned that almost every household lived in such a house and very few houses were built with cement blocks. The respondents were proud of their houses and commented that mud houses were associated with Dagombas and Dagombas originally lived in beautiful round mud houses. These round mud houses were one of the symbols of their identity and gave them a sense of place. Even for those who lived in cement block houses, they fully identified with those living in mud houses because of the kith and kin relationships that exist among them. They recently changed their houses but until then, they were also living in mud houses. A male respondent remarked explicitly:

I live in a cement block house together with this lady but it is like we all feel part of the mud houses because even in our houses we have some rooms that are built with mud.

To the respondents, it did not matter whether you live in an earth house or cement block house because they have all lived in earth houses before and they still have family members sleeping in them.

Traditionally, the construction of the houses was done by the male members of the household and the community while the pottering activities and finishing of the walls were the preserve of the female members of the house and the community. In the past, land was first acquired by presenting kola nuts to the *tendaana* (earth priest) and asking for a piece of land to build. This has changed and now a household intending to build will need to buy the piece of land. The land is then cleared and the elders in the community are informed of the intention to build. They do not contract masons to build the earth houses. The elders organise themselves and those who know how to build the houses will then come together and mark out the *tandɔyu* (foundation), pour enough water into it to make it soft and easy for building the next day. Meanwhile the *tandi* (sand) for construction is mixed with *kom* (water) and left to soak well till the next day. It is then moulded into round-shaped blocks and left to dry. The moulding of the bricks is done by the aged people and children. The trenches are marked and dug out by the men, the women fetch water, cook for the men and do the plastering while the children help by running errands for the elders and carrying the bricks to the masons. The plastering material is a mixture of *Beeni* (clayey soil), *Naɔa bindi* (Cow dung) and *Tandi*. An elderly woman described her plastering experience thus,

...we the women ... plaster the houses. To give the building a beautiful dark colour, we go to the bush and get some dori (Dawadawa pods), boil it well and get a blackened solution from it. We then use this solution and sprinkle onto the walls and floor of the houses. Once you come and see it you will admire the colour.

According to the elders, it was the usual practice to first build the *payaba duduɣugu* (women's kitchen) followed by the woman's room before the man's. A medium sized room is about 12 feet (3.6 metres) square, a women's room is

9 feet (2.7 metres) square, and the *zɔŋ* (the living hall) can be wider than 18 feet (5.4 metres) depending on the owner's preference. The rooms are arranged in accordance with the age of the children in the house. Once you enter through the *zɔŋ*, the first room is for the *yili bi kpema* (eldest son), followed by the next elder son, in that order till you get to the last one. A typical compound may have from about four to seven rooms. Each room may house up to seven persons.

In the past, house building was considered a shared community responsibility. This traditional system of building has changed as skilled builders are hired to construct the houses instead of depending on community involvement. Again, the men now build and plaster the houses with very little involvement of the female members. The women were less involved in the plastering of the buildings in Vittin although the practice goes on in other villages.

The shape and building material

Traditionally, Dagomba mud houses are shaped round and roofed with thatch and they can last up to 80 years if they are well maintained as shown in Figures 3, 4 and 5. Previously, there were no limits on the extent of land a household could occupy. As the community became urbanized, households are now occupying small plots of land. An old man explained that in the past they could build as many as 14 rooms on their plots but now they can only build up to 8 rooms on a plot of land. The mud walls, round shape and thatch roofs are changing. People are building room units with cement blocks, gradually moving away from mud. The rectangular shaped cement blocks are also influencing the shape of the buildings. According to the youth discussants, it is easier to build a right angled building corner with the cement blocks than constructing a round shaped building. There are now fewer skilled builders who can construct round houses. This remark from a male respondent paints the picture that,

Another reason is that it is difficult to find masons who can use cement blocks to build a round house ... so when you want to build with cement

I. Appeaning Addo: Traditional Earth Houses in Vittin, Tamale

blocks it is more convenient and easy to make it square other than round. The masons also charge higher for round houses because of the difficulty in building and also because such masons are scarce.

Another change observed was the use of metal sheets on newly constructed houses instead of the existing thatch roofing system. The youth response to this observation was that it was more expensive to roof the buildings with thatch. The thatch roofs will have to be redone every 3-4 years. A discussant explained that,

It is very worrying when you notice that your thatch has to be changed. You can place an order for it [thatch] and it may take a long time to come and when that happens, you have to endure all kinds of inconveniences. Previously, the thatch used to be everywhere, you could just go behind your house and cut them for roofing but now that people have built everywhere, they have become scarce.

As the communities become urbanized, these species of grass become extinct from the community and households now have to travel long distances to procure the thatch. On the other hand, households have quick access to metal roofing sheets.



Figure 3: A mosque under construction using ‘modern’ building materials.

Although it is more expensive to initially acquire the metal sheets the inconvenience associated with thatch roof makes the metal sheets more preferable. Some of the thatch roofs are underlain with plastic sheeting. By introducing the plastic layer, the thatched roof becomes impermeable to rain water.



Figure 4: Family house depicting the traditional architecture of thatch roof, mud walls and round shape.

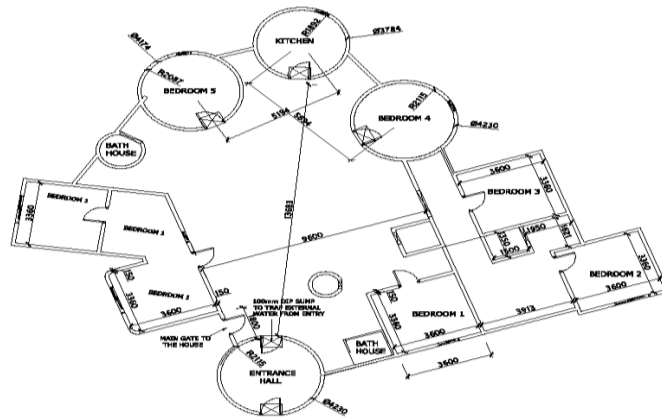


Figure 5: Plan of family house: the circular shaped buildings represent the traditional huts while rectangular shaped buildings are recent additions that are described as ‘modern’

The materials used to plaster the mud walls were also undergoing change. Although the usual practice is to employ a mixture of mud and cow dung to plaster traditional mud houses, households use bitumen mixed with mud and cement plaster as a finish over the mud walls. All the respondents agreed that this recent procedure is very expensive and that cow dung was readily available. According to respondents, introducing bitumen and cement as external wall finish prevents the external walls from eroding. They commented that these changes are driven by the desire to seem 'modern' (like the city dweller). A comment from a respondent on the modernity aspect of change:

You think we just want to live in earth houses for its sake? We also would like to live in better structures like the ones you see in other areas. It is just that for now most people around cannot afford to build 'modern buildings' that is why you find all these houses. Once people make money and they want to build they will definitely not build an earth house. They will do something different and that is why you find some houses built with cement.

Furthermore, participants were of the view that tenants would prefer to rent cement block houses than mud houses. A woman commented that, *"People in town have rented their houses and they are now making money from it. But no one will ever come here looking for a mud house to rent"*.

They anticipated that taking in tenants would be a source of additional income in future. In addition to modernising their housing, using bitumen and cement mortar to finish the external walls or building with cement blocks would prolong the life span of the buildings. From the study, it was observed that door and window openings to the cement built room units were larger than in the existing mud houses.

According to the people when they started building in cement and using metal sheets, they introduced large window openings because the rooms were becoming warmer than the mud houses with thatch roofs. In addition, the metal roofs were noisier than the thatch roof when rain drops on the roof and playing children throw stones on to the roofs.

Perceptions of the people

Respondents' perception of earth houses in the 21st Century was a mixture of pride and rejection. The immediate reaction of the respondents regarding mud houses with thatch roofs in Vittin village was pride because these old houses are a symbol of their traditions, culture and identity. Their fathers and forefathers built those houses and they inherited them. Hence, they also have to perpetuate the tradition. Plainly put, these houses immediately describe who they are as 'Dagombas'. They mentioned that the Vittin village is one of the oldest villages in Tamale and they build their houses with earth. A man commented,

For me, I think that living in an earth house simply tells who you are or what you believe in. We are traditional people (indigenous Dagombas) so our houses still defines us as Dagombas. If a stranger should come here today and go to the next area, he/she will know that we are the Tiŋbihi (Indigenes) ... when you find an area like this ... within the city, it tells you that we are the real citizens. The others in the nice/beautiful areas are just strangers. We represent the kali (culture) of our people and we are proud of it.

Not only were the people proud of their tradition and culture but they were of the view that by maintaining their identity in this kind of housing, they command respect, "... *people respect you because they know that you are a Tiŋbia (Indigene)*". According to respondents, even though some people have negative perceptions about living in earth houses, they believed that their tradition must be preserved, "our tradition is our tradition". They were of the opinion that earth houses must be important for the researchers to be doing a study on them.

On the other hand, when the youth respondents were probed on their future housing plans, they all responded that they would not build their future houses in mud although they valued their tradition and culture. In a reaction, a man said: "*We live here but when we are capable we will build modern houses and leave these ones*". They admitted that a household living in an earth house can be described as poor, however, none of the participants labelled such

households as backward, primitive, under developed or not modern. None of those words were used by the youth to describe the occupants of earth houses because they were either staying in such houses or had extended families staying in the mud houses although some had built and rented out 'modern' houses in the city. From discussions, building earth houses gave an impression of a village detached from the 'city'. There was no sense of belongingness. A female respondent commented that,

You can even see that this area does not look like we are part of Tamale. The main town is much different from here. This place looks like a typical village and not part of the city. We also want to be part of the city so we have to change the way we build our houses.

They explained that most of the households were still living in mud houses because they did not have the financial means to build cement houses. Cement houses, according to the discussants, "*look more decent and stronger than our mud houses*" and it shows a households' prosperity, "*... one is becoming rich*". A question was asked whether households would build with earth if they were given an opportunity to build today and they had to explain their reasons.

No I will not because I have to also build a nice house for my children so that they can have a decent and a comfortable living. I was born here and so I would not want to see my children in houses like this again. They deserve something better so as for me I will not spend my money to build an earth house (Female 1)

Go to town and see the kind of houses people out there are building. When we also get money we will not build houses like this again. Our parents didn't have money that was why they built these but we have to do something different. It has even started. Most of the young men in this area have built nice houses in town but no one has built with earth (Male 1).

We also will one day turn this area into a 'posh' area. Some of us will even build storey buildings here. Earth houses are there because people don't have money to build better ones. The moment they get money, they will not build such a house (Male 2)

I. Appeaning Addo: Traditional Earth Houses in Vittin, Tamale

Just look at Mba Nakoha (Mr. Butcher), when his children started making money they have completely pulled down their house and built a full compound house with all the necessary facilities. When we also get money we will do same. We have no option now and so that is why we are living in these houses (Female 2).

Perception of a modern house

Respondents' perception of a modern building was explored and depicted in Figures 6 and 7. This question was specifically addressed to the youth. In their response, the respondents cited the Dakpema chief palace and the Tohazie hotel as examples of modern houses but with cultural elements as captured in Figures 8 and 9. A male described a *zaaman yili* (modern building) as,

A building that has all the things that makes life comfortable, such as toilet, shower, nice kitchen, etc. When you also enter such a house you will appreciate and know that it is worth living in it.

Another also associated modern houses with the kind of houses that the football celebrities occupy. A third respondent said the house should be built with cement blocks, have a nice design and a good paint and it should have floor tiles. In addition, a modern house should have CCTV cameras and glass casement windows. From the response, one could tell the influence of watching television on the respondents. The respondents, using examples, argued that earth houses were changing and becoming 'modern' in nature. The examples cited included two hotels and two chief palaces.

If you look at the Tohazei hotel (in Tamale) for instance, it's like an earth house but built with cement blocks. They are modern buildings with air condition in all the rooms. Even when you enter inside they are well decorated.



Figure 6: The Vittin chief's palace depicting a modern house. The walls are built with cement blocks and painted. It is roofed with metal sheets instead of thatch.

Just go to Gulkpegu Naa's palace (The Paramount Chief of Tamale) and see how nice they have built their earth houses with concrete and have roofed them with nice metal sheets. You will admire it. So the earth houses are changing and becoming modern. Also, Dakpema Naa's palace (The Chief of Tamale) has similar structure. They are so nice and they have even put air conditions in the rooms.

I. Appeaning Addo: Traditional Earth Houses in Vittin, Tamale



Figure 7: The reception hall of the palace in Vittin with floor tiles, ceiling fans, wide sliding windows and a chandelier. It meets the expectations of a modern building.



Figure 8: The Dakpema Chief's Palace in Tamale



Figure 9: The Tohazie hotel in Tamale.

Discussion

The traditional architecture in Vittin is changing in design, shape, construction and the building material. The reasons assigned for the change include status aspirations and the desire for durable buildings; urbanisation and a sense of belongingness; and renting as a source for economic development. Again the responses presented different meanings to modernity and to what extent this is reflected in housing. It was clear from the responses that the expression of modernity is reflected in the building materials used and access to certain amenities in the house. Modernity is thus associated with the cement houses in the urban areas, such as the Tohazie Hotel in Tamale and the Vittin chief's palace.

Dietz et al. (2013) made an observation that mud houses are giving way to cement block houses because they are more durable and resistant to floods. Roofing materials are changing from thatch or mud to metal for the same

reason. Again, the introduction of wider windows have improved ventilation in the rooms, which, according to Dietz et al. (2013), has reduced the prevalence of air-borne diseases in the Northern Region. Cassiman (2008) also observed the modernisation in earth housing among Kasena and suggested that migrants' houses often display an intensified exposure to urban and "western" housing styles, in the form of design, plan, materials, or interior decoration.

The location of Vittin in the peri-urban area of Tamale and along the Tamale-Salaga road makes it readily accessible from Tamale. Hence this rural-urban linkage, population mobility and migration between the peri-urban and urban areas has an influence on the building characteristics of the community. Urbanization has also resulted in the influx of people from different places. As a result, broad spectrums of more or less distinct cultural traditions are brought into close proximity to one another (Wong, 2010). Such a plurality of distinct cultural traditions has an impact on the individual's values, practices, culture and worldview. As the village becomes urbanised and a part of the Tamale Metropolitan Area, households staying in traditional mud houses are compelled to replace their mud houses with contemporary cement block houses, which the respondents explained are more lettable and give good returns. Furthermore, with urbanisation, the farmlands are being used for housing development and this has affected supply of thatch, sticks and mud. The scarcity of thatch materials for roofing has provided additional impetus compelling the people to consider roofing their houses with metal roofing sheets while the short supply of mud, in terms of no vacant farm land to dig trenches, is making the people turn to cement blocks.

Migration and exposure to urban infrastructure coupled with the desire to preserve the buildings over a long period of time under the changing climatic conditions, is also contributing to the use of contemporary building materials such as cement and metal sheets. Cassiman (2008) identified technological development and modernisation of earth houses in the Northern Region of Ghana as a result of migration and the returnee's penchant for building new rooms with expensive materials and with new designs. From the study,

building of 'modern' houses was viewed as a sign of economic improvement in the lives of the families. Technology has been defined as the creative means to a variety of ends and a means to create and control a human-built world (Hughes, 2004).

These changes and modernisation in the traditional earth houses is not a recent phenomenon. It began in the British colonial era when Tamale was selected as the new site for their northern headquarters. In 1907, the European quarters was built away from the existing African settlements. These buildings were built with stones and skilled labour from southern Ghana. According to MacGaffey (2007), the chiefs in the Northern Region were urged to follow suit, which invariably implied that they were to copy the imported house designs. According to the Europeans, housing development will then become planned and the kind of building material used will make the new buildings 'durable' compared to the existing traditional houses. Thatch roofs were seen as havens for mosquito breeding and mud houses and centuries-old swish round buildings with thatch roofs were also described as slum housing (MacGaffey, 2007). These introductions by the colonial officers compelled the households to modify their buildings. The affluent households copied these colonial buildings presuming them to be models of a new modernity. Meanwhile, these new changes took place in the urban areas and not necessarily in the villages. Households in the village continued to build in mud.

All these factors have together informed and shaped the sociocultural expectations of households in the study area. Yet the typically traditional societies are under pressure to become modernized in these contemporary times. When that happens, these societies are locked in positions of powerlessness and structural dependence.

Conclusion

The trends in modernisation of earth houses in Vittin make the future of these houses bleak. The loss of the traditional architecture could greatly impact

on cultural practices, identities and the traditions of the people. Although tradition evolves and changes, effort must be made to preserve the indigenous architecture. A society without its traditions has no past and may lack civilisation. This point is also reinforced in the responses of the people when they mentioned that living in an earth house in Vittin is synonymous with being a true Dagomba, i.e. Dagomba *Tigbihi*. Unless a conscious effort is made to make earth-constructed houses sustainable, the technology will completely disappear which will also make a part of the traditional beliefs and practices of the people disappear. There is the need to develop alternative ways of preserving those buildings for posterity and to document the indigenous knowledge of the people and to improve on the technology, where necessary. While the existing traditional values should not be considered as blocks to diffusion and acceptance of innovation, the best of traditions and modernity should be combined synergistically. Earth constructed houses can indeed be made more durable and long lasting.

REFERENCES

- Addo, I. A., (forth coming, 2016). Housing maintenance in multi-habited low income houses in Accra. *Journal of International Real Estate and Construction Studies*. Nova Science Publishers.
- Addo, I. A., (2015). Assessing residential satisfaction in multihabitation in Greater Accra Metropolitan Area (GAMA). *Urban Studies*. Pp. 1-20 DOI: 10.1177/0042098015571055 Sage Publication

- Agorsah, E., K., (1985). Archeological Implications of Traditional House Construction Among the Nchumuru of Northern Ghana. *Current Anthropology*, Vol. 26, No. 1, pp. 103-115
- Atkinson, G. A. (1950). African housing. *African Affairs*, 49(196), 228-237.
- Bertagnin, M., and Castellanos, C., (2010). World Heritage Earthen Architecture Programme (WHEAP). Capacity building and training. Mission report to Benin. Report prepared under UNESCO contract. 46 Pages
- Bosman, G., & Whitfield, C. (2015). Perceptions of vernacular architecture. In Mileto, C., Vegas, F., Garcia, L., Christini, V., (eds.) *Vernacular architecture: Towards a Sustainable Future*, Proceedings of the international conference on vernacular heritage, sustainability and earthen architecture, Valencia, Spain 11-13 September, 2014. pp. 157-162.
- Cassiman, A., (2008) Home and Away: Mental Geographies of Young Migrant Workers and their Belonging to the Family House in Northern Ghana, *Housing, Theory and Society*, 25:1, 14-30, DOI: 10.1080/14036090601151210
- Dietz, T., van der Geest, K. and Obeng, F. (2013). Local perceptions of development and change in Northern Ghana. In: Yaro, J. (ed.) *Rural development in Northern Ghana*. Nova Science Publishers, New York. pp. 17-36.
- Du Plessis, C. D. (2001). Sustainability and sustainable construction: the African context. *Building Research & Information*, 29(5), pp. 374-380. DOI: 10.1080/09613210110063809
- Escobar, Arturo (2004). "Beyond the Third World: Imperial Globality, Global Coloniality and Anti-Globalisation Social Movements." *Third World Quarterly* 25 (1): 207–230.
- Folch-Lyon, E., & Trost, J. F. (1981). Conducting focus group sessions. *Studies in family planning*, Vol. 12, No. 12, pp 443-449.
- Frisby, D. (2004). Analysing modernity: Some issues. In Hvattum, M., Hermansen, C., (eds) *Tracing Modernity: Manifestations of the Modern in Architecture and the City*, Routledge. pp 3-22.
- Mahama S.,(2012), Rainstorm Disaster in the Tamale Metropolis. Ghana Red Cross Society. Accessed on 20th June, 2015. http://redcrossghana.org/index.php?!=news&news_id=10&!=News
- Ghana Statistical Service (GSS) (2002). 2000 Population and Housing census. Summary report of final results.

- Ghana Statistical Service (GSS) (2012). 2010 Population and Housing census. Summary report of final results.
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204(6), 291-295.
- Gusfield, J. R. (1967). Tradition and modernity: Misplaced polarities in the study of social change. *American Journal of Sociology*, Vol. 72, No. 4, pp. 351-362.
- Gyasi, E.A., M. Fosu, G. Kranjac-Berisavljevic, A.M. Mensah, F. Obeng, G.A.B. Yiran and I. Fuseini. (2014). Building Urban Resilience: Assessing Urban and Peri-urban Agriculture in Tamale, Ghana, Padgham, J. and J. Jabbour (eds). United Nations Environment Programme (UNEP), Nairobi, Kenya
- Gyekye, K. (1996). *African cultural values: An introduction*. Sankofa Publishing Company.
- Hafiz A. T. (2014). *The impact of flooding on social services in the Tamale metropolis of Ghana*. M.Sc. thesis submitted to the Department of Agricultural Engineering, Kwame Nkrumah University of Science and Technology.
- Hughes, T. P. (2004). *Human-built world: How to think about technology and culture*. University of Chicago Press.
- Kitzinger, J. (1995). Qualitative research. Introducing focus groups. *BMJ: British Medical Journal*, 311(7000), 299–302.
- Lamprey, F., (2009). *Participatory GIS Tools for Mapping Indigenous Knowledge in Customary Land Tenure Dynamics Case of Peri-urban Northern Ghana*. M.Sc. Thesis submitted to the International Institute for Geo-information Science and Earth Observation, Enschede, Netherlands.
- MacGaffey W., (2007). A History of Tamale, 1907-1957 and Beyond. *Transactions of the Historical Society of Ghana*, New Series, No. 10, pp. 109-124.
- Mark, P., (1995). Constructing Identity: Sixteenth- and Seventeenth-Century Architecture in The Gambia-Geba Region and the Articulation of Luso-African Ethnicity. *History in Africa*, Vol. 22, pp. 307-327
- Noble, J. A. (2011). *African identity in post-apartheid public architecture: white skin, black masks*. Ashgate Publishing, Ltd.
- Opong, R. A. and Badu, E., (2012). Building Material Preferences In Warm-Humid And Hot-Dry Climates In Ghana *Journal of Science and Technology*, Vol. 32, No. 3, pp 24-37.

- Orobator, S. E. (1991). Tradition and Modernity in African Polity: Conflict or Co-Existence? *Africa*, Anno 46, No. 2, 273-281.
- Pallasmaa, J. (2007). Tradition and Modernity: The Feasibility of Regional Architecture in Post-Modern Society. *Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition*, Princeton Architectural Press, New York, 129-139.
- Prussin, L. (1974). An introduction to indigenous African architecture. *Journal of the Society of Architectural Historians*, 33(3), 183-205.
- Radivojević, A., Blagojević, M. R., & Rajčić, A. (2014). The issue of thermal performance and protection and modernisation of traditional half-timbered (bondruk) style houses in Serbia. *Journal of Architectural Conservation*, 20(3), 209-225.
- Romm, N. R. A. (2015). Conducting focus groups in terms of an appreciation of indigenous ways of knowing: Some examples from South Africa. In *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, Vol. 16, No. 1, Article 2.
- Saleh, M. A. E. (1998). The integration of tradition and modernity: A search for an urban and architectural identity in Arriyadh, the capital of Saudi Arabia. *Habitat International*, 22(4), 571-589.
- Salm, S. J., & Falola, T. (2002). *Culture and customs of Ghana*. Greenwood Publishing Group.
- Steyn, G., & Roodt, A. (2003). Two traditional African settlements-context and configuration. *South African Journal of Art History*. No. 18, pp 195-209
- UNESCO (2000). *World Culture Report. Cultural Diversity, Conflict and Pluralism* (Paris: UNESCO, 2000).
- Wade, P., (2007). Modernity and Tradition: Shifting boundaries, shifting contexts (Chapter 2). In: Nicola Miller and Stephen M Hart (eds.) *When Was Latin America Modern?* pp. 49-68.
- Whyte, I. B. (2004). Modernity and architecture. In Hvattum, M., Hermansen, C., (eds) *Tracing Modernity: Manifestations of the Modern in Architecture and the City*, Routledge. pp 42-55.
- Wong, C. K. (2010). The Impact of Modernity on Spirituality. *Global Missiology English*, 2(1).

I. Appeaning Addo: Traditional Earth Houses in Vittin, Tamale

Zami, M. S., & Lee, A. (2011). Inhibitors of adopting stabilised earth construction to address urban low cost housing crisis: An understanding by construction professionals. *Journal of Building Appraisal*, 6(3), 227-240.