ABSTRACT

This paper analyzes the changing patterns of Gbagyi housing in three decades, from 1976 to 2006. The traditional spatial order was tied to cosmology psychologically; isolated round huts physically; and tribal cohesion, socially. Focusing on housing characters and motivations of transformation, a case study research design was applied to qualitatively evaluate physical, social and psychological changes of the traditional extended family compounds. An emergent conceptual theory was triangulated with field observations to check errors. The research findings suggest a fusion of isolated housing units into a hollowed-out structure physically and fission (break up) of the tribal group socially. A fashion of individualism apparently replaces communal responsibility, with Islam and Christianity as moderators. Some identified motives for transformation are socio-economic, cultural and spatial; but economics of income generation assumes priority. Such a loss of spatial identity has a global implication on cultural sustainability of vernacular settlements in urban environments.

Keywords: Environmental design behaviour, housing transformation, spatial identity, motivation and Nigeria.

1.0 INTRODUCTION

The rate of urbanization and globalization has an impact on the transformation of traditional settlements physically and culturally. This phenomenon is most glaring in fast growing cities like Abuja, Nigeria’s federal capital territory (FCT). Here, the influx of settlers cashing in on the expanding economic opportunities has put pressure on the existing settlements to accommodate them. Nigeria, as in other developing countries, still depends more on informal housing delivery system. The traditional Gbagyi vernacular housing as observed in many traditional settings is being subjected to modifications and improvisation to accommodate more spaces for tenants. The sustainability of this housing spatial identity is hereby questioned, as the transformation affects the long established indigenous cultural values. Urbanization and acculturation apparently contribute to the gradual lost of such indigenous housing patterns. This paper analyzes the changing patterns of a case study on Gbagyi housing in three significant periods of FCT-Abuja development: incipient (1976-1986), intermediate (1987-1991) and consolidated (1992-2006). It also attempts to highlight the contributing factors for the transformation.

The paper is divided into five sections. It starts with an introduction of Gbagyi housing modifications and improvisations due to informal urbanism. This is followed by the research background that spells out Gbagyi identity crisis, and the impact of urbanization on indigenes’ worldview. Thirdly, the research method outlines the qualitative case study research design, triangulated by multiple field observations and other sources. Section 4 discusses the research results in terms of structural analysis of motives for the transformation, as well as the physical, social and psychological patterns. The final section concludes the paper with its contributions to knowledge, as well as recommendations for the appropriate integration of indigenous settlements promptly into sustainable urban environments.

2.0 BACKGROUND: GBAGYI IDENTITY CRISIS

Karu Community, made up of Karu, Nyanya and Jikwoyi villages, has been regarded as the fastest growing Abuja peri-urban settlements. In 2004, it accommodates nearly 60,000 inhabitants, and majority of who are migrants (Junaidu, 2004: 130-137; CASSAD, 2004). The destitute condition of the migrants’ coupled with the severe shortage in the supply of residential land accelerated the transformation of the traditional dwellings especially urban fringes. Balogun (2001: 103) described a typical Gbagyi housing unit to be composed of a cluster of rooms around a courtyard, with a centrally placed family granary.
This indigenous cultural group suffered identity crisis due to urbanization, and acculturation. Huntington (1996: 125) in his classic, *The Clash of Civilizations and the Remaking of World Order*, observed that the 1990s saw the eruption of global identity crisis. The post-cold war years witnessed severe identity related contestations worldwide. Joireman (2003: 13) opined that those violent manifestations of nationalism in the 1990s and early twenty first century were “surprisingly in their brutality”. Gbagyi housing pattern as manifested in vernacular housing form and spatial order is a physical identity that needs to be appraised by its characters. It has to respond to the influx of the urban poor migrants into the federal capital, Abuja. Consequently, residential transformation to meet economics of demand and supply on one hand, and the invading cultures on the other. Jega (2000), Osaghae (1995) submitted that economic forces transform several identities considerably. Oghoh (2004) noted most identities, invented or natural, real or imagined are riddled with “internal contradictions and a multiplicity of contestation layers”. Gbagyi contestation of multiple identities could be traced to inhabiting factors such as Islam, Christianity, dispersion, colonialism, modernization, urbanization, weak power base, and poverty. Moreover, Gbagyi cultural group through national and local platforms is currently coordinating efforts to sustain its identity (Je’adeyibe, 2005).

Housing, as a physical manifestation of society’s culture, is dynamic. Housing transformation is an inevitable response to changing needs occasioned by socio-economics of survival. As universally observed, families require satisfactory dwelling environment throughout their respective life cycles. Housing transformation, whether by moving, improving or a combination of both seeks to obtain satisfactory habitat.

Gbagyi is at cross roads, engulfed by conflicting dictates of religions, cultures, political decisions and survival economics. No wonder their response to such myriad influences is multi-layered. As shown in Figures 1 and 2 below, both Gbagyi traditional settlement and compound assume circular pattern.
2.1 EFFECT OF ABUJA URBANIZATION ON GBAGYI ACCULTURATION

Gbagyi people are known for arable agriculture, wood fetching, pottery, and blacksmith (Je’adayibe, 2002: 6-17). However, these subsistence farmers were dispossessed of their farmlands to accommodate the nation’s capital. Subsequently, generation of rental income became a good alternative for the indigenes and settlers alike. Therefore, it became a normal practice to rent out a part of the compound to willing migrant tenants. Moreover, the extended family labour force has been fragmented, as its youths took to white and blue-collar jobs. Farming was left mostly to the aged and the under-aged.

Acculturation refers to the process by which individuals, families, communities and societies react to inter-cultural contact (Berry, 1991). He describes four types of acculturation - assimilation, integration, rejection and marginality. A family is the smallest social unit of society. The study of the family provides the most fruitful approach to detribalization (Krige, 1997: 1-23 in Okau, 2003: 59). Dislocation of any part of the social structure affects the family, while disruption of the family affects the entire social structure (Okau, 2003: 59).

A focus on the transition process of the migrant poor in Abuja could clarify the process of culture change and its effect on housing pattern. The analysis is illustrated with field observations of squatter settlements of Karu village, Nyanya village, and Jikwoyi (phases 1 and 2). Data sources include focused interview with 13 key informants’ comprising of 2 representatives each of architects, builders, and planners and 7 community leaders; 21 compound heads were interviewed in-depth; 21 compound layouts prepared in 2006 were observed; reconstructed compound plans as at 1976-1986 and 1987-1991 were cross-checked with key informants for comments. Others are photographic records of compound settings and space utilizations as well as secondary data from available literature.

To further the discussion, it is imperative to classify Gbagyi housing features into physical, social, and psychological elements. Physical features involve nature of original compounds in terms of application of materials and layout; dwelling location; and plot demarcation. Similarly, social housing values are typology and occupancy. Psychological characters are urbanization, acculturation (cultural change) and self-help delivery mode.
4.0 RESULTS AND DISCUSSION

4.1 Structural Analysis of Motivation for Transformation

Identified Gbagyi housing characters, transformation and motivation could be linked to each other on the basis of a priori themes or components of behavioural, cultural, socio-economic and spatial (Turgut, 2001:17-25). Behavioural components relate to privacy, territoriality and personal space. Cultural components involve norms, lifestyle, and family and kinship structure. Socio-economic components are made up of income, occupation and education. Spatial components are concerned with the physical features of a dwelling such as its dimension, location and form (Turgut, 2001:17-15).

Behavioural components of Gbagyi housing characters are settlement and housing layout; domestic space, special rooms, location of tombs, and development control. These components define the use of space and the social conduct expected of members. They specify territoriality, personal space and privacy.

Socio-economic setting is defined by means of livelihood, income level and literacy level. These components determine individual capabilities to undertake transformation of their respective dwellings, the pattern of modification, and motives for such an effort. For instance, the desire to generate income could influence the conversion of bedrooms to shops, especially where such rooms adjoin streets.

Spatial setting deals with physical attributes of dwellings, such as size or dimensions, location or setting, and aesthetic qualities like building materials, appearance and layout. The spatial components include anthropometrics (use of human scale); plot coverage, concept of starter house, granaries, domestic space, settlement and compound layout. Gbagyi traditional anthropometrics involves the use of adult human pace, foot, height and thumb to middle fingertips to measure different parts of a building.

All the four Gbagyi housing transformation themes - behavioural, spatial, cultural and socio-economic were manifested in one way or another in the three decades of the FCT-Abuja. FCT-Abuja development periods namely, incipient (1976-1986), intermediate (1987-1991) and consolidated (1992-2006) were characterized by one or more of these five kinds of transformations. These are conversion of reception to bedrooms for rent; conversion of rooms adjacent to streets to shops; extension of dwellings to meet increased family needs; modification of spaces to cater for socio-cultural demands of privacy; face lifting of dwelling as a status symbol.

Nature of original compound is expressed qualitatively in the concepts of courtyard housing, location and plot demarcation or residential boundaries. Courtyard housing is a physical feature of almost all of the 21 sampled dwellings. Majority of them show the arrangement of rooms around courtyard(s). Therefore, they all coincide with the typical Gbagyi housing pattern. The owners of the traditional houses of Nyanya for example, have realized the potentiality of these dwellings to be subdivided into rental units and to generate income. Similarly, the owners of Karu have also found these houses' potential for transformation into rental shops. One major impact of Globalization especially in the third World cities like Abuja is the migration of skilled and unskilled labour to the urban centers. New opening for markets both in the national and international level further accelerated this migration process, whereby an acute accommodation shortage especially for these migrants prevails (Lo and Yeung, 1998; Kayasu, 1997). To meet this enormous housing demand, a number of traditional dwellings have been transformed in many cities and peri-urban Abuja settlements with no exceptions.

After 1992 only a few areas of the Karu, Nyanya and Jikwoyi villages retain agrarian residential features of generous courtyards and a couple of granaries. Karu Zhimi in particular, in spite of its location within an urban setting, retains Gbagyi traditional rural value. These are manifested in the retention of extended family dwelling occupation, as well as keeping of livestock, poultry and backyard gardens.

The typical Gbagyi compound in as indicated in Figure 2 differs from the modified Muslim urban type basically in the hierarchy of spaces as shown in Figure 3. While the Muslim type segregates men from women via territorial domains, the non-Muslim typical type maintained less strict privacy within the compound. The territorial boundary is limited to deterring intrusion from outside only. Once inside the compound, visual privacy is more in-door than out-door.
Unlike the Hindus of Asia who construct their dwellings according to the position of the hearth in a kitchen, Gbagyi traditional compounds focus on the family granary, which integrates with the kitchen around it into a whole. As such, circulation within the Gbagyi compound is influenced by the position of the family granary, which is centrally placed, with all other facilities radiating around it, thus, the kitchen is the main object in the orientation of the house and its circulation in Hindu and Gbagyi dwellings (Al-Naim and Mahmud, 2004). Moreover, Gbagyi and Hausa Muslims in Nigeria avoid straight axis for residential entrances, in order to achieve visual privacy of their secluded women; Chinese feng shui believes that evil spirits travel in straight lines to access human habitation, thus room openings are minimized (Hsu, 2002:12). Gbagyi pagans equally believe in deity, ancestral gods, and symbolic gods like the sun, moon stars and rain; as well as witch craft and evil spirits. This belief system has influenced the nature and size of their window openings. This explains the provision of small size windows or none at all. It is to prevent the entrance of evil spirits and witches through such openings. Therefore, Gbagyi impaired ventilation is closely associated with their myth and cosmology of avoiding evil spirits and witches (Gbagyi key informants’ views and Jarumi, 2005 in Je’adayibe, 2005: 48-59).

Another emergent physical typology is the mixed-development that combines residential and commercial uses. In this case, shops are laid out next to the main road, while rental rooms surround inner courtyards. These new developments respond positively to the urge for supplementary income by property owners and tenants. Figure 4 below is a typical example of such mixed-development.

4.2 Triple Transformation Pattern

Analysis of the qualitative data sources through systematic coding, memo writing, and concept mapping of Gbagyi housing transformation suggests that the late seventies up to mid eighties housing was characterized by rural housing norms. These include mud round huts, clusters setting around generous courtyards; and inhabited by extended families. These metamorphosed into semi-urban neighborhoods in the late eighties and early nineties. These coincide with the incipient and intermediate era of FCT-Abuja’s development respectively. During Abuja’s consolidated stage (1992-2006), these Gbagyi settlements attained urban housing norms due to population shift associated
with the relocation of Nigeria’s presidency from Lagos to Abuja. Such a trend could be classified into physical, social and psychological dimensions of housing transformation.

Physically, rectangular compounds are set around moderate courtyards, with few or no symbolic tombs; while retention of granaries, especially in semi-urban settlements; application of durable materials; internal division of space (spatial specialization); and the availability of services like portable water and electricity supply are observed (Duhau & Schteingart, 1977 in Walker, 2001). Socially, more nuclear family occupancy, admission of tenants, and cash economy has emerged. Psychologically, the lost of customary identity with ancestral spirits, and the development of individualistic lifestyle as opposed to communal sense of responsibility, cumulatively give raise to an urbanite social order.

4.2.1 Physical Pattern of Transformation

Physically, the retained universal Gbagyi housing character is the courtyard system as shown by the convergence of field observation and qualitative data. Therefore courtyard housing has survived transformation. This confirms the retention of some core values and the lost of peripheral values to urbanization and its attendant acculturation (Rapoport, 1982). Based on field observation and historical narratives, Figures 5 to 7 below illustrate a typical compound transformation in three stages of FCT-Abuja development.
The main feature of spatial setting is “space specialization” that is characterized by the use of high-density furnishings, especially by tenants. The multifunctional nature of the rural space organization gives way to specialized spatial organization. The variety of transformation patterns typical of the research site is as follows:

i. **Transformation by Slight Adjustment**: involving functional adjustment rather than the physical spatial modification of interiors.

ii. **Transformation by Addition and Division**: to increase number of the rooms for rental.

iii. **Transformation by Addition/Extension**: most common form of housing transformation in the study area.

iv. **Transformation by Total Conversion**: complete conversion of the residential units for new purposes, especially for commercial use.

v. **Total Transformation by Reconstruction**: involves demolition and reconstruction of a housing unit in terms of materials and technology.

In the consolidation period of FCT-Abuja (1992-2006), the development of bungalows even within the extended family compound as a status symbol became a vogue. Transformers attempted to make approach facades architecturally attractive at the expense of the interior. Residences of Gbagyi community leaders are typical examples. This may be attributable to their desire to command respect from their subjects and visitors alike.

It could be deduced that Gbagyi community’s response to Abuja urbanization culminated in secularization of its members’ life style; manifested in the lost of the society’s peripheral customs, yet retaining other core values. These are characterized physically by significant housing extensions and internal alterations.

### 4.2.2 Social Transformation Pattern

Socially, emergent housing concepts are typology and occupancy. As at the incipient period of FCT-Abuja (1976-1986), Gbagyi housing typology was limited to owner-occupier extended family compound, owner/tenant and rental only housing unit. 2005/2006 has fragmented these three housing types into five types. The two additional types include extended family compound cum commercial, and owner-occupier bungalow. However, field observations data of in-depth samples noted the occupancy changes over a period of three decades as recorded in the reconstructed compound histories.

Some reasons suggested by social scholars for the transformation of traditional buildings include the changing social structure of the family from extended to nuclear; the diminishing African culture of communal survival; involvement in the same economic activities generation after generation as family traditions and custom; the diversity of jobs and the mobility of the people; the maintenance of traditional dwellings; the emergence of developers and their attractive rental housing units with basic modern facilities; and finally the potentiality of the traditional dwellings to convert into rental units for income generation (Castells, 2002:266; Flanagan, 1990; Knox, 1987 in Al-Naim and Mahmud, 2004). To explore this evolution of formation, three housing patterns have been synthesized:

1. **Original family compounds as rural housing norms (1976-1986)**
2. **Break down of family compounds as semi-urban norms (1987-1991)**
3. **Rental housing as urban norm (1992-2006)**

Development control in informal Gbagyi settlements is physically determined by plot boundaries in the form of fences, trees, rocks and streets. It is customary to use landmarks to clarify boundary positions by neighbours privately. In case of disputes, community leaders mediate to resolve matters institutionally.

### 4.2.3 Psychological Transformation Pattern

Psychologically, Gbagyi Peri-urban Abuja settlements are urbanized due to population explosion, which led to multi-ethnic cultural groups from other parts of the country to congregate in Abuja. Consequently, the Gbagyi community is exposed to a multiplicity of cultures, thereby reconstructing its members’ worldview and aspirations. Human behaviour within such a setting is moderated by Islamic and Christian religious beliefs in the context of culture. So, Gbagyi community adopts contemporary housing ‘fashion’, consistent with the respective religions. This concurs with Chokor (2005:69) who opines that social changes, especially the shift from traditional communal family values to more western ways of life have variegated impacts on building forms and residential layouts. Gbagyi housing transformation is motivated by cultural, behavioural, socio-economic and spatial factors. However, socio-economic considerations are a priority due to individualism acquired from the culture of capitalism that pervades the urban life. Psychological features here relate acculturation or culture change of the indigenes due to interaction with settlers.
4.3 THEORETICAL CROSS-VALIDATION OF HOUSING TRANSFORMATION

The degree of transformation and its potentiality to change the domestic spaces of a dwelling depends on many factors such as economic return on investment. Thus, transformation of these spaces for income generation has tremendous value especially for urban poor, because income generation at home is an effective poverty alleviation strategy. Tipple and Ameen (1999) argued that though subletting rooms generate income, they criticized that it would cause poor quality living and may start to transform houses into urban slums. A vast study on the home based jobs in their domestic space showed that the most suitable place for such activities are either their courtyards, roof top or open verandas. However, due to lack of such spaces, semi-private spaces such as paths and even their bedrooms are extensively used. This indicates that the working and living spaces overlapped in their basic daily activities, such as sleeping, cooking and eating (Miraftab, 1996; Kellett and Tipple, 2000).

Housing transformation is a feature of urban centers of both developed and developing countries. Evidence from literature suggests that substantial transformation in the old dwellings even take place in developed cities like New York, London and Toronto, where big Asian communities reside (Al-Naim and Mahmud, 2004). These transformations are effected in their indoor environment in order to acquire spaces that are more habitable. Others involve converting rooms into working spaces for extra household income. Mahmud (2003) observed that it is common practice among Asians in Europe to convert rooms into corner shops. For instance, the Indian Sikh families all over England are noted to modify garage into bedrooms or workshops for garments especially by the Sylheti women (a province in Bangladesh) in East London. This transformation by the occupants is economically motivated, to meet their cultural and religious needs.

One major difference in these cities as compared to the Third World is climatic factors. The temperate ecological setting makes the physical pattern of these European houses different from their African and Asian counterparts, as they lack open courtyards within their traditional dwellings. Majority of these low-income earners live in the council or municipality housing units where rules are strict and impose with high penalties. Accordingly, such physical transformations are not as flexible as individually owned traditional dwellings. According to Tipple (1996, 2000), transformation appears to contribute more than its cost and incremental extensions in housing have demonstrated that there are considerable advantages. Studies on post-occupancy evaluation showed that through transformation, dwelling spaces along with services have improved substantially with the provision of additional habitable spaces; and additional spaces mean income generation. Thus, the dwellers become the producers of housing to some extent. Shiferaw (1998) points out that despite the inefficiencies, transformation of existing housing provides more shelter and in this way, the space becomes more efficient than any other form of buildings. Through transformation activity, another generation remains in the neighbourhood, and a reduction in occupancy rates appears feasible. In addition, transformers are less crowded than non-transformers; and with a couple of habitable rooms now available, the children of opposite sex are able to sleep separately, and the parents equally gain more seclusion from children.

Literature has shown the preponderance of housing transformation globally. Its application varies with local environment, user needs and socio-economic realities of transformers. Therefore, Gbagyi housing transformation is one of such human responses to contemporary challenges of life.

5.0 CONCLUSION

A new physical transformation pattern was observed which involves modification of housing typology; changing occupancy pattern, retention of courtyard housing system with a few granaries. On the other hand, this cultural group lost its values of myth and cosmological ties and ancestor worship. The transformation of Gbagyi traditional housing pattern in three decades presented in this research paper shows the impact of acculturation, urbanization and globalization on its spatial order. Thus housing is a product of a simple and frugal society creating its habitat within its basic means, in response to changing needs, functional requirements, affordability, and the availability of materials.

The transformation of the ideal Gbagyi traditional compound with its three semantic variations for Muslims, Christians and pagans, to more functional economic models of the twenty first century is an honest adaptation to the needs and context. Artistic quality of the housing created in the transition period of the late eighties and early nineties were indigenous adjustments inspired by cultural changes. The stylistic self-sufficiency of the Nigeria’s housing has been expressed through the numerous variations of convincing, and locally rooted traditions. The housing structures were built with the participation of the whole family initially, then by hired labour with or without family members, subsequently. Motivation becomes a driving force for housing transformation. As a link between housing characters and transformation, it serves as a psychological divide between the physical and social housing components, thereby integrating them appropriately.
The paper contributes to knowledge in terms of literature, methodology and architectural design. Previous researches (e.g. Mohammad Oumar, 1997 and 2004; and Oluyemi, 1993) on indigenous housing transformation employed spatial syntax analytical tool to evaluate various traditional housing settings. Denyer (1978), Oliver (1971) and (2003: 7), and Dmochowski (1990: 5.55-5.73) gave descriptive views of primitive settlements. Others dwelled on purely quantitative paradigm. Moreover, their research data concentrated mostly on primitive or rural housing forms. Such approaches discounted the application of traditional housing values in urban and semi-urban environments. Two main distinguishing forms of urban housing types today are traditional and non-traditional. This research answers the question of how to create a healthy residential environment that meets the inhabitants’ cultural and physical environment through effective public and private spaces. It is expected that this research outcome provide policy makers, urban planners and architects in developing economies some appropriate guidelines for future development, subsequently improving their quality-housing environment.

The problem of rural-urban migration could be solved if adequate economic opportunities are extended to the rural areas. When basic infrastructures for health, education and communication are matched with income generating activities in both rural and urban areas, rural population shifts could be stemmed. In the meantime, it is recommended that a positive attitude to informal settlements needs to be adopted as an urban housing strategy. Minimum confrontation and flexible development control of informal settlements could improve housing production by the poor. Instead, collaboration, economic empowerment and facilitation of access to housing by the vulnerable urban poor should be promoted. It is therefore imperative to enhance cooperative rental housing production in peri-urban areas. This can stem squatter housing and improve the environmental quality of indigenous settlements. However, a quick resolution of the issue of indigenous community resettlement should precede such housing development efforts. The current inability of municipalities to integrate indigenous settlements into the urban environment may result in the magnification of such development problems beyond their economic affordability. A stitch in time saves nine.

Transformation appears to be a sustainable housing delivery system that increases supply within the reach of the urban poor. Such social process is associated with physical modification of traditional housing pattern, yet retaining core values, such as courtyard planning system. Gbagyi cultural continuity in response to Abuja housing problems relates to the rapid physical and socio-economic predicaments it found itself in the last three decades.

Vernacular spatial identity is transformed physically by external extensions and minor alteration (spatial configurations). Therefore, the choice theory of housing transformation seems to take precedence over the threshold or stress theory. This stems from the fact that the choice to move or improve dwellings rests with the tenant and property owner respectively.

Community based organizations (CBOs) can sustain their leading role in enhancing community welfare of informal settlements. CBOs have the potential to enforce development control in new housing and transformation processes undertaken by self help developers. However, there is a need for training developers in housing transformation and improvement skills; improving of community facilities and services by exerting pressure on affected agencies; negotiating to secure land for basic community facilities and services; and coordinating of the various actors; and mobilizing financial and technical resources from inside and outside the community.

6. REFERENCES


