

HOUSING TRANSFORMATION'S DELIVERY POTENTIAL IN DEVELOPING ECONOMIES

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ABSTRACT

The twenty first century witnessed a proliferation of concepts and models of new housing development especially in industrialized countries. As such, these are manifestations of their kind of housing transformation. Developing societies on the other hand, experienced more of alterations, and extensions of residential units in urban environment, in response to rural urban population shift. Both societies' transformations involve shaping the built form physically, moderated by social and psychological motives. It could be argued that a conceptual framework of the built environment derived from a variety of influences: structural context, the mediating role of institutions and agencies (like development control), the individual and collective human actions, and their contextual representations. A case study qualitative research of urban fringes traces the characters of an indigenous housing pattern impacted by rapid urbanization, due to a political decision. These transformations in three decades and their motivations are chronologically evaluated. The result is a social theory rooted in the built environment disciplines, to elucidate how and why we build places and dwell in spaces that are once contradictory, conforming, liberating and illuminating. It clearly shows a significant increase in housing supply in a variety of occupancy, within the same lateral space.

Key words: indigenous housing, transformation, social theory, and built environment.

1.0 INTRODUCTION

The paper is in four parts. First, the main research findings of a doctoral degree research are discussed. This covers the traditional housing characters typical of the Gbagyi cultural setting; their transformation over time; and motivations for such a transformation. Secondly, theoretical implications of findings are discussed. Recommendations for housing policy, practice and literature come next. The fourth section concludes the paper.

1.1 Discussion of Findings

It is imperative to highlight the research objectives, the main findings and their implications future settlements and cultural identity. The research objectives are:-

- Identify the characteristics of Gbagyi traditional housing pattern;
 - Evaluate the ways in which Gbagyi housing pattern transform spatially; and
 - Establish motivations of such transformations.
- However, the research undertaking assumes that:-
- i. Self-help delivery mode accelerates spontaneity or informality in housing;
 - ii. Specific problem of spontaneous built environment is compounded by lack of development control; and
 - iii. Urbanization of peri-urban settlements breeds cultural change (acculturation) of the indigenous Gbagyi community.

1.1.1 Housing Characters at the Inception of FCT (1976-1986)

Gbagyi people in peri-urban Abuja were rural dwellers that relied on tilling the soil for livelihood. Other rural norms typical of them include wood fetching, pottery, blacksmith and traditional medicine. They lived compounds (group of dwelling units with common facilities). Each extended family compound was thatch and iron roof cover on mud round and rectangular huts. Rooms were spread around common spaces or courtyards. Though bath rooms were normally provided in each compound, toilets were rare, as it was customary to defecate in the bush. Those were Gbagyi housing characters at the inception of the federal capital territory Abuja, in 1976. Gbagyi Rural housing norms gradually adjusted to semi-urban in the late eighties.

This rural lifestyle typical of the Gbagyi homogeneous society had to play host to majority of the urban poor that trooped into the new found land, in search of livelihood. Consequently, a multiplicity of other ethnic groups from all over Nigeria settled among the Gbagyi community. First as tenants, and later some managed to own their residential units. To this end, the Gbagyi community was gradually urbanizing. Invariably, its extended family culture of communal lifestyle was subjected to cash economics socially; individualism psychologically; and spatial economics physically. All these psycho-spatial dynamics were Gbagyi's response to its acculturation (cultural change); coupled with disequilibrium in dwelling demand and supply.

1.1.2 Housing Pattern Transformation, 1987 – 1991

Peri-urban Abuja settlements shifted from their rural environment from 1987 to 1991. For one, this era witnessed high volume of infrastructural constructions. For another, high population shift from other parts of Nigeria to FCT-Abuja followed the first phase of relocation of federal government activities from Lagos. The political turning point and its attendant urbanization was another blow Gbagyi housing. Therefore, its housing pattern transformed physically, socially and psychologically in response to urbanization, and acculturation; self help delivery mode, spontaneity, and rental income.

Mud round huts are typical African rural housing types to date. However, corrugated iron sheets are fast replacing vegetable materials. And curvilinear residential layouts have given way to rectilinear spatial order especially in semi-urban and urban settlements. Gbagyi housing pattern is no exception in this regard. Moreover, Gbagyi housing pattern adjusted physically in the application of materials. It also fused the discrete residential units set around open spaces or courtyards, into compact housing type with minimum courtyard(s). Socially, the extended family owner-occupier compound fragmented into owner-tenant and rental only housing typologies. Psychologically, wage earning eroded communal responsibility of Gbagyi society.

At the intermediate stage of FCT-Abuja (1987-1991), transformation of Gbagyi housing was motivated rental income; socio-cultural requirements of meeting family needs for accommodation; seclusion of women by Muslims families; and pagan practice of ancestor worship. However, the consolidation of Abuja (1992 to 2006) was characterized by rental income as a priority motive for housing adjustment.

1.1.3 Consolidation of Housing Pattern Transformation, 1992 to 2006

Field observation data indicate a variety of physical housing transformation patterns. These could be grouped into add-on (external addition) and add-in (internal alteration). Three data sources, 204 quantitative purposive surveys; field observation of 21 sampled compounds; and in-depth interview of their respective compound heads all converged on the dominance of residential extensions. Although internal modifications were also common, they are limited to change of use, say conversion of peripheral rooms to shops; connecting adjoining spaces; and provision of ensuite toilets. Common add-on transformation is the filling of gaps in building set-backs to provide more rooms. Housing typology also shifted from

1.2 Transformation Trend of Gbagyi Spatial Identity

The thesis analyzed of Gbagyi traditional housing transformation in peri-urban Abuja, from a dual perspective of housing delivery and spatial identity. Spatially, Gbagyi dwelling characters of courtyard housing; characterized by granaries and ancestral attachment of the living to the dead; social cohesion via extended family system; and provision of core housing system for bachelors' were identified. These features manifested in various housing typologies, such as owner-occupier, owner/tenant and rental only. A gradual transformation of the traditional setting in response to globalization due to urbanization, and its attendant acculturation was evident socially, physically and psychologically. The research indicated the retention of some core housing values and the lost of peripheral others to modernization.

As indicated in the grounded theory developed from the research data, the widely spread individual residential structures gradually increased in quantity and density, thereby amalgamating (fusing) into more compact wholes. A communal labor force for subsistent crop production, as well as collective responsibility to the extended family characterized Gbagyi social identity. Such a rural lifestyle degenerated through fission into individualism with the adoption of cash economy. Consequently, agricultural practice nose-dived; the adoption of wage labor became an urban norm. Thereafter, admission of tenants into more extended family compounds adjusted the social housing typology into a dominant owner/tenant dwelling.

Rental income became a prime motivation for housing transformation, especially at the consolidated era (1992-2006), when most federal activities took place in Abuja. Rental housing seems to emerge as a dominant typology in peri-urban Abuja. For one, Gbagyi indigenes, as landowners are prone to subdivide their traditional family compounds as well as farmlands for sale willing developers. However, many Gbagyi families constructed rental dwellings to meet demand.

Gbagyi spatial identity is physically transforming by external extensions and minor alteration (spatial configurations), thus coinciding with Tipple (1991:4). However, Tipple's (2000:23) choice theory of housing transformation seems to take precedence over his threshold of stress theory. This stems from the fact that the choice to move or improve in peri-urban Abuja depends on tenants and property owners respectively.

1.3 Transformation as a Housing Supply Strategy

In developing countries like Nigeria, where an effective formal housing delivery system is lacking, majority of urban population resorted to informal settlements to secure accommodation. A study of urban housing from 1976 to 2005 has shown the deplorable conditions. Ogu and Ogbuozobe (2001) cited Jagun (2003) to affirm that 75% of the dwelling units in Nigeria's urban centers are squatter dwellings. The United Nation Development Program (UNDP), through a series of its Human Development Reports, Nigeria consistently showed that the proportion of Nigerians dwellings poorly ranged from 34.7% in 1992 to 47% in 1997. All data sources for this research confirm this fact. Architects involvement was limited to conversion of compounds to institutional use, like school, hotel, and commercial complex.

The diminishing government capacity to supply surveyed and serviced plots has left residents without any alternative than to construct and transform their housing units informally. As the National Urban Development Policy of Nigeria observes, inadequate housing is a major problem facing cities in the country and which often manifests itself in, among others, the inability of supply to cope with demand, poor housing conditions, and paucity of basic infrastructure services and amenities (FRN, 1997). Ogu and Ogbuozobe (2001:473-492) cautions on Nigeria's enormous housing challenge.

Housing transformations in Karu community should be regarded as a natural response to housing demands, as well as to satisfy other needs created by the rapid urbanization and globalization.

Research findings on housing transformation in some parts of Africa indicate the application of different approaches to developing or changing built structures in striving to meet increasing housing demands. Researches by Tipple (1991 and 2000), Kellet et al (1993) and Tarekegn (2000) indicate that transformation has led to an increase in size and quality of houses. In Zimbabwe, for instance, the housing transformations used non-conventional building materials, identified as “shark”. “Shacks-only transformers are householders who have made no other extension to the house than building one or more wooden sectional sheds which are normally rented out to separate households” (Tipple, 2000:296).

The magnitude of transformation in Karu community is remarkable. Out of 204 sampled compounds, about 75% have been transformed in one way or another. Modification of different housing types ranged from minor alterations to major extensions, thereby increasing the supply of dwelling spaces. These transformations have greatly increased the number of dwelling space in terms of both housing units as well as rooms for renting. Socially, the twenty-one in-depth surveyed compounds indicated cumulative occupancy of about 205 people, in 43 families, at the incipient stage (1976-1986). Due to the relocation of the presidency to Abuja, (1987-1991 i.e. intermediate stage), the population jacked up to 463 inhabitants, made up of 82 families. As at 2005/2006, the sampled population raised to 111 households, with over 700 members.

After transformation, the number of rooms increased from 118 to 232 rooms first decade of FCT Abuja, providing accommodation for 193 and 437 people respectively. This is an increase of about 97% of the former housing stock and 126% of the population after transformation. The consolidation of FCT-Abuja in the 1990s up to 2006 witnessed an increase of residential accommodation by another 41% and population by 35.5%. These figures show that the kind of housing transformation process taking place in Karu community play a significant role in the supply of houses to cater for the increasing city population. The selection of samples favors gatekeepers, for convenience, age, and reputation community members of those settlements. Transformation of housing units in Karu community provides rental rooms. Most the housing units studied were either partly or fully rental. Many low earners prefer to rent a room in this area for easy to their work places.

2.0 Theoretical Implications of Findings

2.1 Contribution to Global Housing Transformation Evaluation

Transformation of Gbagyi housing is an attempt to add to the existing literature to the subject. A scrutiny informal housing within an indigenous cultural group, Gbagyi, invaded by the urban poor migrants reveals a lost of some character of spatial identity to urbanization, though some core housing values are still conceptually retained.

Globally, housing transformation is not limited to the developing countries like Nigeria; even developed societies adjust their residences to meet changing needs, or simply to make a mark or stamp on the environment. Stamping the environment or setting usually aims at personalization. Transformation for personalization is more common in developed societies, than the developing. This may be due to affordability and taste differentials of the respective societies.

The research shows the retention of the vernacular courtyard housing system, but of diminishing size. As opined by Mumtaz and Wegelin (2001), most of the living accommodation in the research site gets subdivided, the services remain the same. The kitchen and the bathroom become shared by more people than initially planned for. Worse still, kitchens are turned into rental rooms; building setback filled up to accommodate rental shops. However, as the property gets overloaded and overcrowded, its rental value is supposed to go down, and especially if rent controls are enforced, instead it goes up demand outstrips supply. The rents are no longer enough to justify repairs. This further compounded by galloping inflation. Thereafter, most compounds go into limbo, living out a slow death. In some cases, their fortunes were revived, a general overhaul of the area as part of an urban renewal program.

2.2 Revisiting Housing Typology Classification Theory

Type as an analytical tool is a theoretical underpin of this research. It is a method of analyzing and classifying housing units. The typological analysis of residential buildings carried out by Lawrence (1994), preceded studies of the relationship between the functions ascribed to spaces and their relative position including the interface between the private domain of each tenement and the shared collective spaces, providing access from each tenement to the public domain of the street.

Lawrence suggested five criteria for the classification of housing types. This provides a basis of housing typology in this study. In the present study, the classificatory criteria of the number of rooms, layout, spatial organization and number of floors plays an important role in classifying housing types. Some of these variables were applied in housing modification. Lawrence used spatial organization of the floor plan in relation to the means of access from the public realm of the street to the private realm of each dwelling. This criterion was employed in the present study although the public realm in this context is not well defined by streets.

In many sections of the informal settlements like Karu community, indoor and semi-public open spaces and footpaths, providing accessibility to individual dwelling units, define the indoor-outdoor inter-phase. This is a modification of Lawrence's application of this criterion, whereby streets form the major domains of the public realm.

Another classification criterion is that of the socio-economic variable related to income and social status as in working class or middle class. This criterion again is less relevant in informal settlements. Further, the situation of middle class residents in Karu community is poorer, than the working class of the West where Lawrence employed his classification. This situation makes application of this criterion inappropriate in study area.

The criterion of building materials for instance timber framed, brick or stone walled used by Lawrence is irrelevant in the context of Karu community where concrete blocks, mud and corrugated iron sheets are basic building materials. The housing transformation process involves a systematic replacement of mud walls and temporary fences with concrete blocks. The future concrete block walls roofed with corrugated iron in informal housing construction seems bright.

2.3 Flexibility, Participation and Enabling Theories

In the 1970s, John Turner's ideas had a considerable impact on the conception of informal settlements. Subsequently the strategies for improving housing by the United Nations, the World Bank and aids organizations adopted Turner's ideas. For Turner the inner city shantytown relate to desperate situations, while the peripheral areas are associated with people's own efforts (Turner and Fichter, 1972). They anticipated that the peripheral informal settlements would develop in middle and working class areas. Karu community informal settlement is about five kilometers from the Abuja city center. It is one of the squatter settlements easily accessible to the city's economic opportunities, especially by the migrant poor.

Both categories are involved in the process of transformation producing housing to meet their needs. Like John Turner, also John Habraken examined housing problems, taking into account flexibility, participation and enablement as basic parameters of design and planning practice. Habraken's approach differs from the conventional housing supply. According to him, user participation is crucial in production efficiency of dwelling units, due to dynamism (Habraken, 1998). To this end, he advocates for flexible architectural designs that accommodates for change and incremental growth. Karu community residents may be viewed as agents in the housing process where construction activities must be understood as integral part of the process. Flexibility of residential designs to accommodate extension raises a fundamental issue of infrastructural economics. Inevitably, a compromise between design flexibility and affordable plot size is necessary.

The present study has shown that the transformation process has led into an increased supply of housing but the government has not enabled the process. According to Tipple (2000:127), Israel is one only country that has encouraged housing transformations via its housing agency. It provided loans for interior functional changes, extensions and replacements. In the same vein, Malaysian financial institutions advertise loans for housing modification, as observed in public places.

2.4 Application of Housing Adjustment Theories

One of the theoretical premises reviewed in this research relates to housing adjustment, "improve or move". The main argument by Tipple (2000) and Seek (1983) has been the motivation to housing improvement. Seek defines home improvement as additions, alterations or renovation of dwellings. This definition makes the theory relevant to the study of transformation in Karu Community, because the main issue is to understand housing transformation process taking into account extensions and alterations.

3.0 Recommendations

A positive attitude to informal settlements as a housing strategy is hereby suggested. This lends support to Mumtaz's (2001) position to minimize confrontation and rigid development control of informal settlements. Instead, collaboration, economic empowerment and facilitation of access to housing by the vulnerable urban poor should be promoted. Following are some pointers as suggested by Mumtaz (2001):

With the collapse of the formal housing delivery system in most developing countries, the informal housing seems to be the only option for the urban poor. Such an alternative involves access to land through community leaders or organized invasion; building construction without planning permission; connection to public mains through communal effort; and transformation to increase housing supply. However, the current situation suggests a synchrony of informal housing with the transformation.

In recognition of the role of the informal housing delivery system to meeting needs of the majority of citizens, especially in urban settings like Abuja, Cairo, Jakarta and Lisbon, some policy recommendations are necessary. In view of the pros and cons of informal housing delivery system in general, and the on-going housing transformation in particular, regularization of Gbagyi settlements is urgently required. Economic support such as cottage industries for the production of building materials; conversion of waste to wealth (biogas digesters); refuse collection and management; and the construction of rental dormitories. Other supporting requirements include governments' enabling role, community participation, and professionals.

3.2 Housing Typology

The practice of building low-rise single storey housing units leads to high building density, settlement sprawl and congestion; thereby making it expensive to access infrastructure such as roads, water and electricity supplies. Even maintenance and uneconomic use of land becomes real. Some of these housing types e.g. L type and U type are appropriate layouts for hot-humid climates. However, problems associated with city sprawl and lateral expansion; is a prevailing transformation pattern in this research. Settlement regularization should encourage vertical housing transformations. Such a move requires government's financial and technical support. This strategy leads to the creation of outdoor space, reducing the plot coverage to improve the quality of outdoors spaces to on economize infrastructural investment.

3.3 Lessons for Architects and Planners

A large number of the urban poor live in informal settlements, and transform their dwellings through extensions and alterations. Such efforts are devoid of professional inputs; as such lead to

excessive high housing density, over-utilization of plots leading to the deterioration of living conditions. This problem is, among others, may be minimized if architects and planners contribute informally to informal housing development.

It is necessary that professionals play an active role in supporting housing construction and transformation taking place particularly in low-income informal settlements. They should take into account the availability of basic needs for housing, like finance and technology, in terms of building materials and specialized skills. There is, for instance, the need for flexible designs, suited for alteration and extension, to meet the needs of the poor. Architects and planners should also learn to minimize the social distance between them and the bricklayers. These three set of professionals should reduce barriers to effective communications.

Architects and planners need to appreciate that even urban poor in informal settlements require technical support to secure affordable housing. The professionals ought to endeavor to use their skills in assisting these poor housing developers to realize their objectives to humane housing. This will ensure the appropriate building response to climatic, as well as developers' socio-economic peculiarities.

Architects should promote the application of traditional building materials, while policy makers must sustain cottage industries and other job opportunities. Urban land should be made accessible to job opportunities for the urban poor. Architects should popularize the potentials of local building materials especially earth products, as successfully applied in Mali, Algeria and Egypt. Let rise among us architects, a team of bear footed professionals, who lead my example, live among the poor, set standards of service to humanity decently.

4.0 Conclusion

Gbagyi housing pattern transformed from rural urban housing models. Urbanization and its attendant globalization led the host Gbagyi community respond to the economics of demand and supply. Consequently, the ethnic traditional housing characters shifted from rural to urban norms. Moreover, housing typology adjusted from predominantly extended family to household rental or owner/tenant compounds. This commercial tendency set in the second decade of the capital territory, culminated into an epoch of mix residential cum commercial transformations at different scales. Rental income motive is a consequence acculturation of the indigenous hosts by the relocating migrants especially from Lagos. By the third decade of FCT-Abuja, socio-economic housing component has edged out cultural and behavioral values, especially among the non-Muslim community.

Housing transformation in this research has proved its potentials to enhance housing supply. However, the self imposed community development control is apparently less effective. For now, it generated lateral expansion at the expense of uneconomical use of land. A solution to this economic dilemma requires sustainable policy on indigenous settlements in Abuja urban fringes. The current indecision on the issue only complicates the execution of Abuja regional and action plans, as outlined in its master plan. It is worth reminding policy makers and planners of the need conserve vernacular settlements in urban environments as preached by UNESCO. Gbagyi spatial identity deserves continuity in response to change.

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