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CASE STUDY

Significance of house-type as a determinant of residential quality in Osogbo, Southwest Nigeria



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Residential quality;
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Abstract

This study investigates the effect of house-types on the assessment of residential quality in Osogbo, Nigeria. Through a questionnaire survey, this study employs a stratified systematic sampling method to select 406 (10%) households from three (3) major residential districts of Osogbo. Data are analyzed using descriptive statistics and one-way analysis of variance (ANOVA). The study showed that 80% and 14.8% of the respondents live in contemporary vernacular houses, that is, the “face-me-i-face-you” house, and western apartment houses, respectively. Meanwhile 2.5%, 1.5%, and 1.2% of the respondents live in duplexes, single family houses, and traditional courtyard dwellings, respectively. This result suggests that in Osogbo, the Yoruba traditional courtyard house-type is gradually being replaced by the contemporary vernacular house and the western apartment house-type. Confirming the linear relationship and level of significance among the variables, the ANOVA Test F -value is 2.17 (where $p < 0.05$ probability level), which indicates that house-type significantly affects the assessment of residential quality in Osogbo. The need for the government and others involved in housing delivery to consider the appropriate house-types for and residential preferences of end-users within different sub-cultures when planning for future housing in Nigeria is highlighted.

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1. Introduction

Housing is crucial to national development and socio-cultural growth in any human society. Housing is universally acknowledged as the second most essential human need after food and is considered a major economic asset in every nation. Internationally, housing is recognized as a

factor for the assessment of human development and societal civilization (UNO, 1976). Hayakawa (1983) noted that, "housing which does not provide space for contemplation will not allow for the growth and development of individuality. Thus, housing not only contributes to the development of man physically and mentally, but also contributes to the growth of culture and human morals." In a broader sense, housing profoundly affects a wider aspect of family and community life and wellbeing. Housing is an issue that not only touches on the life of an individual, but also has the potential to contribute to national development (Agbola, 1998). Housing quality, cost, and availability are crucial to an individual's quality of life (Jiboye and Ogunshakin, 2010). In essence, a house is a perfect reflection of the social system that creates it, manifesting its level of development, content, and degree of civilization, attainment, and human development (Jiboye et al., 2005). However, studies have shown that housing is more than shelter and that the habitability of a house depends not only on the physical characteristics of the dwelling, but also on the social, cultural, and behavioral characteristics of users (Oladapo, 2006; Jiboye, 2010a).

In Nigeria, the house is a space within which a generation of families expresses its existence and preserves the history and identities of lineage. Families discover themselves according to their lifestyle and the dictates of the cultural values of the society to which they belong. The family house, therefore, is a symbol of social identity and community recognition. The origins and development of the house are thus a reflection of civilization and function to suit a peculiar culture and class needs (Awotona et al., 1994; Godwin, 1997; Jiboye and Ogunshakin, 1997, 2010). Nevertheless, the social and cultural values of people vary from one society or civilization to another, and these variations significantly affect their housing. For instance, the traditional house-type in Nigeria is the compound house, which varies in pattern and form for different ethnic groups (Yoruba, Ibo, and Hausa). These variations are the products of the socio-cultural peculiarities of different ethnic groups (Awotona et al., 1994). Experiences of the Gwari people in Abuja and those of the Kitale tribe in Kenya are specific examples of such housing peculiarities, because of which the alternative resettlement housing scheme provided by the government were abandoned for the lack of socio-cultural and spatial relevance (Muller, 1984; Dawan, 1994). However, the dictates of present-day urban life, the development of newer building materials, coupled with the emerging globalization that facilitated cultural contact with other civilizations, have affected urban house types in developing nations, including Nigeria (Ojo, 1966; Mills-Tettey, 1989). Consequently, the majority of urban houses lack originality and spatial relevance to the occupants (Awotona et al., 1994; Jiboye and Ogunshakin, 2010). In addition, such houses manifest functional inadequacies and a generally degrading environment in the form of slums and squatter dwellings (UN-HABITAT, 2006; Jiboye, 2010b).

The provision of satisfactory housing that meets prescribed standards of quality and user needs, expectations, and aspirations has always been the goal of every public housing program in Nigeria (Ibem and Aduwo, 2013). However, the UN-HABITAT (2006) report noted that over the past few decades, despite laudable efforts by the government, public

housing has failed to achieve this goal in the country. The reality is that African urban dwellers expect their dwellings to have certain qualities that are in accordance with their own living style (Muller, 1984; Jiboye et al., 2005). However, one of the peculiar features of most dwellings in many urban areas in Nigeria is the absence of user responsive and culturally determined housing. Paramount among several reasons adduced on why buildings perform poorly in meeting user needs and expectations is the lack of adequate knowledge of changes in user needs and preferences by architects and other professionals who design, construct, and maintain buildings. This lack of knowledge can evidently be attributed to inadequate research on this subject (Ibem et al., 2013). The direct input of government and housing professionals has further aggravated the problem because the designs of the majority of existing units are patterned along foreign housing types and culture. In view of this issue, Fatoye and Odusami (2009) suggested that for the housing sector to improve the quality of housing being produced, user needs and expectations, as well as the extent to which such needs and expectations are met, should be explored and understood through regular performance evaluations (Ibem and Aduwo, 2013). Therefore, the need to consider user needs and values is imperative in the determination of qualitative housing.

Although residential quality studies have gained increasing attention in recent times, the majority of such studies was foreign and focused mainly on factors affecting the quality and performance of construction, particularly in public or social housing programs within specific housing environment (Chan et al., 2006; Phillips et al., 2008; Saari and Tanskanen, 2011; Djebarni and Al-Abed, 1998; Shinnick, 1997). A few studies conducted locally have focused on the perception of residential quality in selected neighborhoods (Ebong, 1983; Ibem, 2012); whereas others addressed the socio-cultural dimensions and patterns of housing quality (Akinola, 1998; Jiboye et al., 2005; Olayiwola et al., 2006; Jiboye 2010b). However, little or no attention has been directed toward the aspect of residential quality, which highlights the importance of house-types and dwellings that meet the housing needs of end-users in their quest for suitable shelter in Nigeria. Therefore, by positing the case of Osogbo, this study aims at examining the significance of house-type, a socio-cultural parameter in the determination of acceptable and qualitative housing in Nigeria. The objectives of this study are to: identify and examine the house-types in Osogbo; assess residential quality in terms of neighborhood and dwelling acceptability to the occupants; and determine the relationship between house-types and residential quality in Osogbo. The outcome of this study will provide feedback for housing research, as well as serve as a basis upon which planners and housing development agencies could formulate the appropriate criteria and policies in the design and development of qualitative and user-responsive house-types in urban areas of Nigeria.

1.1. Theoretical issues

The issue of housing is complex and multi-dimensional. However, evidence abounds in the literature that housing is more than mere shelter (Wahab, 1983; Ogedengbe, 2005; Oladapo, 2006; Jiboye, 2010a). The World Health

Organization (1961) described housing “as the provision of any physical structures, used for shelter. This includes all facilities, equipment, services and devices needed for healthful living.” **Gans (1962)** and **Raven (1967)** opined that the concept of housing is related to the social, behavioral, cultural, and personal characteristics of occupants, in addition to the physical, architectural, and engineering components of the home. **Onibokun (1985)** described housing as a unit of the environment that profoundly influences the health, efficiency, social behavior, satisfaction, and general welfare of the community. Housing reflects the cultural, social, and economic values of a society as it is the best physical and historical evidence of civilization in a country. According to **Eltinger (1977)**, the life of man has its natural center in what happens in, around, and from his house. Good quality housing is therefore considered as the provision of the foundation for stable communities and social inclusions (**Oladapo, 2006**). In specific terms, housing is connected with the essence of life as it affects the totality of life in every way.

History recalls that man has tried reshaping his environment to provide himself with suitable shelter. Therefore, the socio-cultural attributes of man are very important parameters in the determination of suitable housing (**Olayiwola et al., 2006**). **Rapoport (1969)** had observed that, “house-form is not simply the result of the physical forces or any single causal factor, but it is also the consequence of a whole range of socio-cultural factors - the specific characteristics of culture - the accepted way of doing things, and the socially unacceptable ways and implicit ideals which affect housing.” The human dwelling, according to **Osasona et al. (2007)**, “is one such tangible thing imbued with cultural identity. Globally and traditionally, the house has always evolved based on both physical and socio-cultural considerations.” Thus, every civilization produces its own house-forms, which are highly reflective of historically prevalent cultural values and objectively conditioned by the structural system of social organization (**Awotona et al., 1994**). **Teymurr (1992)** and **Gur (1994)** observed that culture is a holistic, synergetic, complex, and dynamic phenomenon, and when combined with the built form, both change in space and time. The need to consider user's socio-cultural preferences in housing design and development thus constitutes a critical issue in the achievement of adequate and qualitative housing.

As regards quality, **Jones (1979)** defined housing quality as the degree of worth and a state of general excellence of a thing. Quality is an attribute of standard explained as the required, expected, or accepted level. It is also a product of subjective judgment that arises from the overall perception of individuals toward what they see as significant elements at a particular point in time. In housing, quality has been defined as a measure of the acceptability of the dwelling at a given time and place and in a given set of cultural, technological, and economic conditions. Housing quality is a product of the residents' perception, attitude, and experience (**Olayiwola, 1997**; **Jiboye, 2010b**). Although several factors have been identified to determine the quality of residential development (**HC, 2007**; **Lawrence, 1990**; **Jiboye, 2010b, 2012**; **Ibem, 2012**), **Rapoport (1976)** and **Lawrence (1987)** explained that traditional values, house-types, and patterns, among others, are major relevant

determinants of quality in housing. However, the use of relevant inputs of human values in housing development has not been fully explored in most developing countries, including Nigeria. Therefore, government, planners and housing developers require such inputs and values in housing policy formulation, design, and development to provide adequate housing as well as user-dwellings. For this reason, the case of Osogbo is being examined.

1.2. Background of the study area

Osogbo, a modern as well as traditional city, was founded in the late 18th century. Osogbo is situated on latitude $7^{\circ}46'$ North of the equator and longitude $4^{\circ}33'$ East of the Greenwich Meridian (**Figure 1**). The town consists of two local governments, namely, Osogbo and Olorunda, with their headquarters at Oja Oba and Igbonna, respectively. Osogbo became the capital of Osun State in 1991, and its current population figure is 499,999; whereas the total land area is approximately 2875 km². Over the years, the town has grown spatially after state creation (**Osun, 1992**; **Awe and Albert, 1995**; **Adenaike, 1991**; **Robert, 2007**).

The morphology of Osogbo exhibits the features of a typical traditional Yoruba town with three zones of spatial development, the core of which is the center consisting of Oba's palace and the traditional market referred to as “Oja Oba”, which is surrounded by a high concentration of residential units. Next to the core area is the intermediate zone, which consists of a fairly concentrated residential development, whereas the outer part is the newly developed residential area. In this zone, existing residential units are sparsely distributed (**Ojo, 1966**; **Egunjobi, 1995**).

Osogbo has undergone considerable growth in recent times, as influxes of people were necessitated by spontaneous development owing to its status as a state capital, as well as the corresponding increase in commercial activities. A brief tour around the town reveals the existence of different types of house-forms, ranging from the pre-colonial, traditional compound, and extended family dwellings, which are found mainly in the core area. The intermediate area consists of the contemporary “face-me-i-face-you” vernacular dwellings, as well as the Afro-Brazilian types dating back to the pre-independence period; whereas the periphery of the town consists of many modern multi-apartment and single-family dwellings. However, a few traditional and contemporary dwellings interspersed with the modern ones in this zone, but most of the residential districts in Osogbo are generally interwoven with some commercial and administrative developments.

2. Method of data collection

A questionnaire survey was conducted to collect information on the existing house-types and respondents' ratings of the dwellings and neighborhood characteristics in the study area (the list of variables is presented in **Table 3**). A total of five different house-types were determined, namely, (i) the contemporary vernacular house, typically referred to as “face-me-i-face-you”, which is characterized by two strips of linearly arranged rooms along a central corridor, each facing the other within a rectangular shaped form; (ii) the

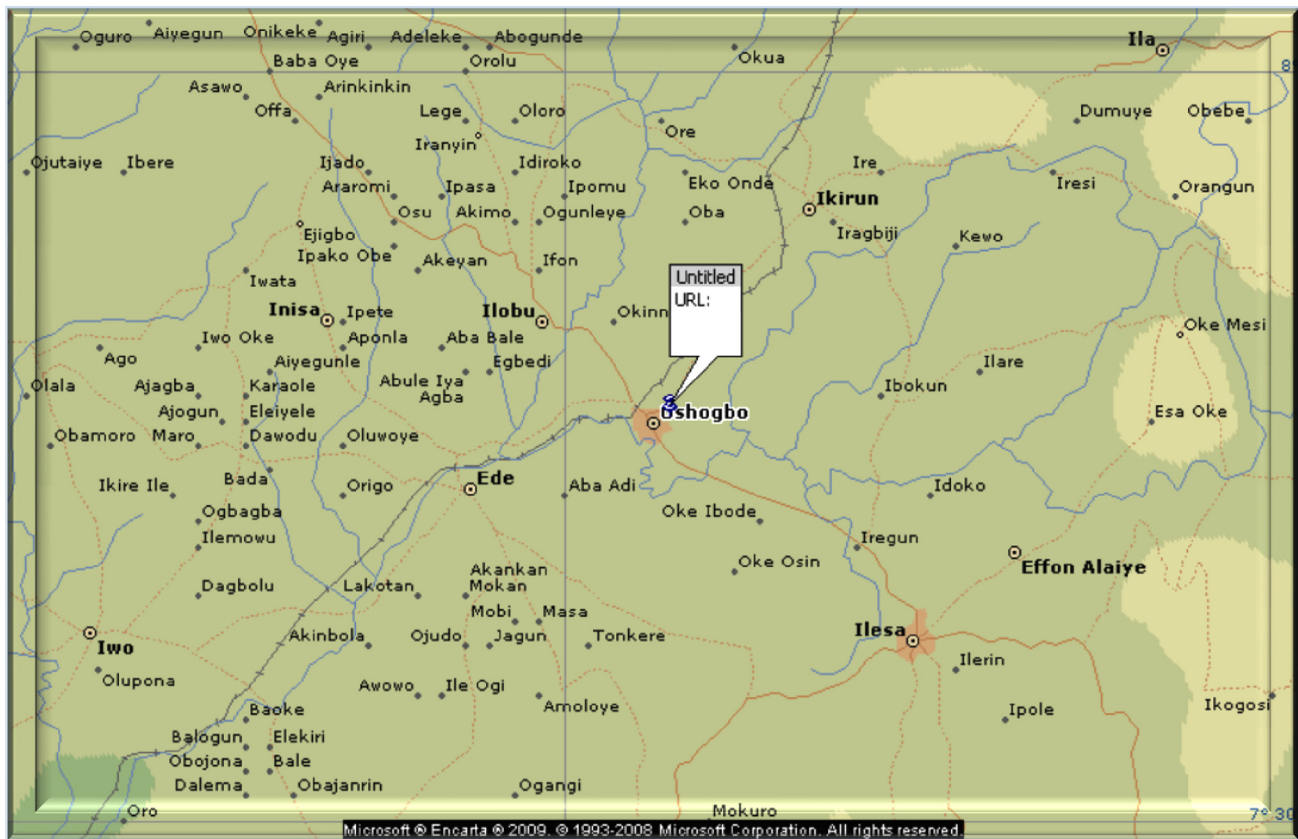


Figure 1 Geographical location of Osogbo, Nigeria.

Source: Microsoft Student, 2009.

apartment type, which consists of two to four bedrooms, a family lounge, kitchen, and other conveniences, with two or more of each type arranged as detached or semi-detached multi-apartment housing; (iii) the *duplex house-type* comprises single-detached or semi-detached dwellings each occupying two floors; and (iv) *single family bungalow* is a dwelling unit consisting of several rooms, family lounge(s), kitchen, and other conveniences, which vary according to the family size or structure. The fifth house-type is the *traditional courtyard housing*, which is historically associated with the Yoruba ethnic origin in Nigeria. This type is characterized by a series of rooms arranged either in a square or rectangular form around a central courtyard (see, Jiboye and Ogunshakin, 2010; Awotona et al., 1994; Mills-Tetley, 1989).

Existing documentation revealed that Osogbo consisted of three zones of residential development, namely, the inner traditional core area (Zone A), the intermediate area (Zone B), and the newer residential periphery (Zone C) (Ojo, 1966; Egunjobi, 1995). Osogbo has approximately 4110 housing units. These units were stratified into the three zones based on the pattern of residential concentration and density in each zone. Thus, Zone A has 960 units; Zone B has 900, whereas Zone C has 2249 housing units. Using the stratified systematic sampling method cited by Dixon and Leach (1977), we took samples from each of the zones. Consequently, respondents from 96 households were selected from Zone A, 90 from zone B, and 225 from Zone C. These figures represent 10% of the total sample of

households in the study area. Out of the 411 questionnaires administered to household-head respondents, only 406 were retrieved for the analysis (see Table 1). Facilities were rated using a five-point rating scale, whereas data were analyzed using descriptive statistics and one-way analysis of variance (ANOVA) to determine the relationship between house-types and respondents' perception of residential quality. Although a demographic analysis of households does not fall within the scope of this study, a brief illustration of the data indicates that 56.6% are male, whereas 41.4% are female. Moreover, 80% of this ratio of respondents are 31 years and above, with 82.8% of them married. The survey also revealed that 97.5% are from the Yoruba ethnic origin, whereas 2.0% and 0.5% are from Igbo and Hausa origins, respectively. Typical of the Yoruba ethnic setting is the adherence to a large family size. Thus, 70.9% of the households in Osogbo had more than six persons.

2.1. Results and discussion

Table 2 presents the data on existing and identifiable house-types in Osogbo. The result shows that 80% of the respondents live in the contemporary vernacular "face-me-face-you" house. Moreover, 14.8% and 2.5% of the respondents occupy apartment and duplex houses, respectively; whereas only 1.5% and 1.2% of the respondents indicated that their dwellings were single-family and traditional courtyard

dwellings, respectively. This result suggests that the traditional Yoruba courtyard house-type is fast giving way to the contemporary vernacular house, that is, the “face-me-i-face-you” and the western apartment house. This finding substantiates Ojo (1966), Mills-Tettey (1989) and Jiboye et al. (2005) “noting that the effects of cultural contact, present day urban life and improved technology have had tremendous influence on the housing types in Nigeria.” Consequently, a shift has been evident in the cultural values and preferences of the Yoruba people of Nigeria. Moreover, the vernacular house-type was found to satisfy the socio-cultural needs of its occupants equally in terms of functionality, patterns, and spatial adaptability.

2.2. Assessment of residential quality in Osogbo

Table 3 presents a list of the 27 assessed neighborhood and dwelling attributes. Following Phillips et al. (2008) and Jiboye (2010b), the attributes were classified into four main quality indicators, namely, (i) neighborhood amenities, (ii) building design, (iii) dwelling features, and (iv) dwelling facilities. A five-point rating scale ranging from “0 to 4” was employed. The quality indicators were rated as either “very inadequate” or “very bad” to “very adequate” or “very good.” Table 4 contains data on the perceived residential quality indicators for Osogbo.

As shown in Table 4, 95.1% of the respondents claimed that the facilities within their housing neighborhood were inadequate. Meanwhile, 4.4% of the respondents claimed the facilities were fairly adequate, and only 0.4% of the respondents claimed the facilities were adequate. The finding reveals that neighborhood amenities and infrastructure are generally inadequate in the study area. This finding suggests that most households and residents in Osogbo do

Table 3 Classification of selected housing quality variables.

(a) Neighborhood facilities	(b) Building design
1. Market/shopping area	1. Spatial pattern
2. Restaurant	2. Building outlook
3. Bank	(c) Dwelling features
4. Cinema	1. Floors
5. Post Office	2. Windows
6. Play ground	3. Wall finishes
7. Health centre/clinic	4. Ceiling
8. Community center	5 Walls
9. Place of worship	6. Roofs
10. School	7. Kitchen, toilet and bath fixtures
11. Electricity	(d) Dwelling facilities
12. Pipe-borne water	1. Ventilation
13. Refuse disposal	2. Privacy
14. Accessibility	3. Lighting
	4. Spatial adequacy

not have access to necessary facilities within their neighborhood, which could be responsible for the unsatisfactory housing situation in the study area. This result is unexpected for Osogbo. As a capital city, Osogbo is expected to receive better attention from the government in terms of providing basic infrastructural facilities. As regards house-types, Table 2 shows that the vernacular “face-me-i-face-you” (rooming house) dwelling is predominant. As a result, 70.4%, 25.4%, and 2.7% of the respondents claimed that the design of their dwelling was fair, good, and very good, respectively. Only 0.5% and 1.05% of the respondents claimed that their building design was either bad or very bad (see Table 4b). This result further affirms household preference and the acceptability of the contemporary vernacular house. The finding suggests that most households in Osogbo have probably lost bearing with the Yoruba cultural heritage and traditional housing values inherent in the courtyard housing system. This finding supports earlier assertions by Teymurr (1992), Gur (1994), and Jiboye et al. (2005) that “culture is a dynamic phenomenon which along with the built form changes in space and time.”

As shown in Table 4c, 53.2% of the respondents rated their dwelling features as fair, 40.2% perceived the features to be in good condition; whereas 5.4% of the respondents rated them to be in very good condition. Only 1.0% and 0.2% of the respondents perceived the dwelling features as bad or in very bad condition, respectively. This result indicates that the quality of the building features is relatively low based on the fact that the majority of household respondents rated these features as fair. The lack of proper or adequate awareness on housing maintenance and improvement by most households in the study area could be responsible for this housing inadequacy. When the result of the dwelling facilities was analyzed, a good number of the respondents (69%) were found to have rated the adequacy of

Table 1 Selection of samples in the study area.

Zones	Total housing units per zone	No. of samples retrieved per zone (10%)
A—core	960	96
B—intermediate	900	90
C—outskirts	2249	220
Total	4109	406

Table 2 Classification of house-types in Osogbo.

Categories	Number	Percentage (%)
Face-me-i-face-you	325	80.0
Flat/apartment dwelling	60	14.8
Duplex	10	2.5
Single family bungalow	6	1.5
Traditional court-yard	5	1.2
Total	406	100.0

Table 4 Assessment of neighborhood and dwelling quality indicators.

	Rating	Frequency	Percentage
(a) Neighborhood Facilities Scale			
0	Very inadequate	-	-
1	Inadequate	386	95.1
2	Fairly adequate	18	4.4
3	Adequate	2	0.4
4	Very adequate	-	-
Total		406	100.0
(b) Building design scale			
0	Very bad	4	1.0
1	Bad	2	0.5
2	Fairly good	286	70.4
3	Good	103	25.4
4	Very good	11	2.7
Total		406	100.0
(c) Dwelling features scale			
0	Very bad	1	0.2
1	Bad	4	1.0
2	Fair	216	53.2
3	Good	163	40.2
4	Very good	22	5.4
Total		406	100.0
d. Facilities in dwelling			
0	Very inadequate	6	1.5
1	Inadequate	11	2.7
2	Fairly adequate	280	69.0
3	Adequate	55	13.5
4	Very adequate	54	13.3
Total		406	100.0

their dwelling facilities as fair. Only 13.5% and 13.3% rated the facilities as adequate and very adequate, respectively. Moreover, 2.7% and 1.5% of the respondents perceived the facilities as inadequate or very inadequate, respectively (see Table 4d).

This result is similar to that discussed earlier on the perception of dwelling features. Thus, the level of adequacy of these dwelling facilities can also be considered to be relatively below the desired and expected standard. The earlier observations by Olu-Sule (1993), Olayiwola et al. (2006) and Jiboye (2010b) on the deplorable conditions of facilities in most urban areas, particularly within Osogbo, further confirmed this finding. Considering the magnitude of this poor housing quality and the need for its improvement in Osogbo, previous studies (Olayiwola et al., 2006; Jiboye, 2010b) had shown that the majority of households were unable to source the needed funds to initiate any form of housing improvement or repairs. This finding further confirms earlier observations by Berry (1980) and Gur (1994), indicating that the lack of funding for housing renovation constitutes one of the causes of persistent deplorable housing conditions in most urban areas in developing countries. The need to improve the quality of urban housing,

particularly as regards to neighborhood infrastructural facilities, thus requires urgent intervention from the government through improved funding and granting of incentives to households in affected areas. However, the next section is based on an examination of the effects of house-types on the perception of residential quality in Osogbo.

2.3. Relationship between house-types and residential quality

Table 5 presents the result of the ANOVA test to verify the level of significance between house-types and residential quality. This finding shows that the sums of squares between and within groups of the variables are 746.47 and 34,500.76, respectively. Moreover, the mean squares between and within groups are 186.62 and 86.04, respectively, yielding an *F*-ratio of 2.17, which is significant at the 0.05 probability level. This result indicates that house-types significantly influence the perception of residential quality in Osogbo. Thus, users' perception of residential quality was influenced by the dwelling types in terms of suitability and acceptability of neighborhood facilities,

Table 5 ANOVA test of significance between house-types and residential quality.

Source of variation	Sum of squares	Mean square	Df	F	P
Between groups	746.47	186.62	4	2.17	0.005*
Within groups	34500.76	86.04	401		
Total	35247.22	272.66	405		

*Significant at 0.05.

building design, dwelling features, and facilities. The assertion by Rapoport (1976) and Lawrence (1987) on the relevance of house-types and patterns to housing quality is thus validated by this finding and corroborates an earlier assertion by Olayiwola et al. (2006) that, “the socio-cultural preferences of man; which also consider dwelling types are very important parameters in the determination of suitable and qualitative housing.”

3. Conclusion

This study investigated the significance of house-types in the determination of residential quality in Osogbo, Nigeria. The main objectives were to identify and examine the house-types in Osogbo, assess residential quality in terms of the neighborhood and dwelling acceptability to occupants, and determine the relationship between house-types and residential quality in Osogbo. The study revealed that the contemporary vernacular “face-me-i-face-you” house predominates over the traditional courtyard house in Osogbo, thus indicating that the traditional house-type has already given way to and is being replaced by the vernacular type. Compared with other house-types in terms of acceptability, the finding also indicates that the vernacular house is more acceptable to most occupants, as a significant proportion of households were found to occupy this type of dwelling in Osogbo. Considering the quality of housing, the study showed that most of the respondents perceived the quality and adequacy of their dwellings (explained in terms of the building design, dwelling features, and facilities) to be relatively above average; whereas the infrastructural facilities available within the housing neighborhood were found to be inadequate. Furthermore, the study revealed that house-type significantly influences users’ perception of residential quality in Osogbo.

The finding of this study has implications for residential planning in Nigeria and reaffirms the need for housing planners and development agencies to consider relevant aspects of users’ dwelling preferences, which include their quest for appropriate house-types, when conceptualizing housing designs and residential development. Rather than designing buildings based solely on planners’ standard, attention should also be directed toward how the buildings will be used in practice as well as their cultural fit. Houses must serve the everyday needs of the people for whom they are designed; hence, design must merge beauty with utility.

Considering the need to ensure user-dwellings in our cities, housing researchers and planners of the built environment must make relevant inputs that would form the

basis for rationally explaining and achieving qualitative housing. One such input is to generate relevant data on specific spatial-interactive behavior and attitudes of households. What must be considered in this regard is the relevance of design approaches to the particular culture in question, which should include, among other issues, user acceptability of dwellings, satisfaction of habits and lifestyles in terms of functionalism, and the adaptability to changes. Further research effort is therefore required along this direction to gain a comprehensive and more realistic approach to the housing requirement.

The policy implications of this study’s finding suggest that while urban residents should have access to a suitable house-type that fulfills their housing needs and aspirations, the quality of urban housing, and by extension, the quality of life for urban residents, can be enhanced if urgent attention is paid by government to the provision of basic social amenities and infrastructural facilities. To upgrade the quality of the existing urban housing stock, adequate awareness should be created among residents regarding the need for housing improvement. Financial resources should be provided by the granting of interest-free soft loans to low-income households to encourage them to improve their dwellings in affected areas. Furthermore, operational housing and urban development policies should incorporate the views of the end-users in the conception, eventual development of housing, and urban renewal programs to make them relevant and effective. The contributions arising from such inputs will undoubtedly yield a positive solution toward the realization of a user-responsive qualitative housing and an overall improvement of the urban environment in our cities.

References

- Adenaike, F.A., 1991. The Pioneers. Osun State of Nigeria.
- Agbola, T., 1998. The Housing of Nigeria. A Review of Policy Development and Implementation. Development Policy Centre, Ibadan (Research Reports no. 14).
- Akinola, S.R., 1998. The pattern of Housing quality in Osogbo, Osun State, Nigeria. *Ife J. Environ. Des. Manage.* (Obafemi Awolowo University, Ile-Ife) 1-2, 109-120.
- Awe, B., Albert, O., 1995. Historical development of Osogbo. In: Adepegba, C.O. (Ed.), *Osogbo: Model of Growing African Town*. Institute of African Studies. University of Ibadan, Nigeria.
- Awotona, A., Mills-Tettey, R., Ogunshakin, L., 1994. Multi-habitation and cultural structures. Experiences from Nigeria. A book of readings. Department of Architecture, Obafemi Awolowo University, Ile-Ife Nigeria and CARDO Newcastle, U.K..
- Berry, J.W., 1980. Cultural ecology and individual behavior. In: Altman, I., Rapoport, A., Wohlwill, J.F. (Eds.), *Human Behavior and Environment. Advances in Theory and Research*. Plenum press, N.Y.
- Chan, A.P.C., Wong, F.K.W., Lam, P.T.I., 2006. Assessing quality relationships in public housing: an empirical study. *Int. J. Qual. Reliab. Manage.* 23 (8), 909-927.
- Dawan, P.D., 1994. Urban development and population relocation in Abuja, Nigeria. *Ekistics* 366 (367), 216-217.
- Dixon, C., Leach, B., 1977. Sampling methods for geographical research. *CATMOG Geogr. Abstr.* 17, 33-35 (University of East Anglia Norwich).
- Djebarni, R., Al-Abed, A., 1998. Housing adequacy in Yemen: an investigation into physical quality. *Property Manage.* 16 (1), 16-23.

- Ebong, M.O., 1983. The perception of residential quality: a case study of Calabar, Nigeria. *Third World Plann. Rev.* 5 (3), 273-285.
- Egunjobi, L., 1995. Osogbo: aspects of urbanization, physical planning and development. In: Adepegba, C.O. (Ed.), *Osogbo: Model of growing African Town*. Institute of African Studies, University of Ibadan, Nigeria.
- Eltinger, J., 1977. Housing is the starting point. *Ekistics* 44 (261), 109.
- Fatoye, E.O., Odusami, K.T., 2009. Occupants' satisfaction approach to housing performance evaluation: the Case of Nigeria, Paper Presented at the RICS COBRA Research Conference Held at the University of Cape Town, 10-11 September, 2009. Downloaded from: <http://www.rics.org/cobra> on February 22, 2010.
- Gans, H., 1962. *The Urban Villagers Group and Class in the Life of Italians*. Free press, New York.
- Godwin, J., 1997. The house in Nigeria, an exploration. In: Conference proceedings on the House in Nigeria. Department of Architecture, Obafemi Awolowo University, Ile-Ife Nigeria. 23-24, July.
- Gur, S.O., 1994. House preferences of users at different phases of acculturation. *Ekistics* 366 (367), 176-181.
- Hayakawa, K., 1983. Housing poverty in Japan. *Ekistics* 50 (298), 4.
- Housing Corporation (H.C.), 2007. *Housing Quality Indicators (HQI)*. Version 4. (For NAHP 08-10). April. Available from: http://www.hqi.org/NAHP08-10/HQIForm4_April_2007.pdf (accessed November, 2009).
- Ibem, E.O., 2012. Residents' perception of the quality of public housing in urban areas in Ogun State, Nigeria. *Int. J. Qual. Reliab. Manage.* 29 (9), 1000-1018.
- Ibem, E.O., Aduwo, E.B., 2013. Assessment of residential satisfaction in public housing in Ogun State, Nigeria. *Habitat Int.* 40, 163-175.
- Ibem, E.O., Opoko, A.P., Adeboye, A.B., Amole, D., 2013. Performance evaluation of residential buildings in public housing estates in Ogun State, Nigeria: Users' satisfaction perspective. *Frontiers of Architectural Research*. Available from: <http://dx.doi.org/10.1016/j.foar.2013.02.001>. (accessed 23.07.13).
- Jiboye, A.D., 2010a. *Feedback on Public Housing Satisfaction in Nigeria. A Practical Approach for Housing Development*. LAP Lambert, Germany.
- Jiboye, A.D., 2010b. Evaluating the pattern of residential quality in Nigeria: The case of Osogbo, Township. *Sci. J. Facta Univer.* 8 (3), 307-316 (Architecture and Civil Engineering. University of Nis, Serbia).
- Jiboye, A.D., 2012. Post-occupancy evaluation of residential satisfaction in Lagos, Nigeria: feedback for residential improvement. *Front. Archit. Res.* 1, 236-243.
- Jiboye, A.D., Ogunshakin, L., 1997. The death of the house. The Maroko experiences. In: Conference proceedings on the House in Nigeria. Department of Architecture, Obafemi Awolowo University, Ile-Ife Nigeria. 23-24, July.
- Jiboye, A.D., Ogunshakin, L., Okewole, I.A., 2005. The socio-cultural dimension of housing quality in Osogbo, Nigeria. *Int. J. Housing Sci. Appl. Coral Gables USA* 29 (2), 153-164.
- Jiboye, A.D., Ogunshakin, L., 2010. The place of the family house in Contemporary Oyo town, Nigeria. *J. Sustainable Dev.* 3 (2), 117-128 (Canadian Center of Science and Education, Canada).
- Jones, C., 1979. Housing: the element of choice. *Urban Stud.* 1 (2), 179-204.
- Lawrence, R.J., 1987. What makes a house a home? *Environ. Behav.* 19 (2), 154-168.
- Lawrence, R.J., 1990. The qualitative aspects of housing—a synthesis. *J. Build. Res. Pract.* 2, 121-125.
- Mills-Tettey, R., 1989. Climate, environment and indigenous construction in Nigeria. A survey of some house-forms. *Housing Sci.* 13, 31.
- Muller, M.S., 1984. Traditional cultural identity in new dwellings of urban Africa. *Ekistics* 307, 355-360.
- Ogedengbe, P.S., 2005. The challenges of cooperatives in the provision of housing in Nigeria. In: Conference Proceedings on Globalization, Culture and the Built Environment, vol. II, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Ojo, G.J.A., 1966. *The Layout and Morphology of Yoruba Towns*. Yoruba Culture of Ile-Ife: University of Ife. Nigeria and London University Press.
- Oladapo, A.A., 2006. A study of tenant maintenance awareness, responsibility and satisfaction in institutional housing in Nigeria. *Int. J. Strategic Property Manage.* 10, 217-231 (Vilnius Gediminas Technical University).
- Olayiwola, L., 1997. Environmental quality in Nigeria. A case study of a University Living Quarters. *Ife Plann. J. Community Dev. Study Team* 1 (1), 71-76.
- Olayiwola, L.M., Adeleye, A., Jiboye, A.D., 2006. Effect of socio-cultural factors on housing quality in Osogbo, Nigeria. In: International Symposium on Construction in Developing Economies: New issues and challenges. Santiago, Chile. January, 18-29.
- Olu-Sule, R.A., 1993. Housing facilities and urban environmental quality. In: Taylor, R.W. (Ed.), *Urban Development in Nigeria*. Planning, Housing and Land Policy. Avebury. Montclair, New Jersey, U.S.A.
- Onibokun, P., 1985. Socio-cultural constraints on urban renewal policies in emerging nations. The Ibadan case. In: Onibokun, P. (Ed.), *Housing in Nigeria*. NISER. Ibadan, Nigeria.
- Osasona, C.O., Ogunshakin, L., Jiboye, A.D., 2007. The African woman's right to security through sanitation: from the dwelling unit to the neighborhood. In: Proceedings of the International Conference on the Right to Live in Africa. Trieste, Italy. 9-10 November.
- Osun, 1992. *State of the Living Spring*. Ministry of Information. Osogbo, Osun, Nigeria.
- Phillips, S., Martin, J., Dainty, A., Price, A., 2008. Analysis of the quality attributes used in establishing best value tenders in the UK social housing sector. *Eng. Constr. Archit. Manage.* 15 (4), 307-320.
- Rapoport, A., 1969. *House-form and Culture*. Prentice-Hall Press, Englewood Cliff, New Jersey, U.S.A..
- Rapoport, A., 1976. Socio-cultural aspects of man-environment studies. In: Rapoport, A. (Ed.), *The Mutual Interaction of People and Their Built Environment*. The Hague, Monton.
- Raven, J., 1967. Sociological evidence on housing. *The home environment. Archit. Rev.* 161 (42), 236-245.
- Robert, S., 2007. "Nigeria". Microsoft Student. (DVD) Redmond. WA, Microsoft Corporation.
- Saari, A., Tanskanen, H., 2011. Quality level assessment model for senior housing. *Property Manage.* 29 (1), 34-49.
- Shinnick, E., 1997. Measuring Irish housing quality. *J. Econ. Studies* 24 (1/2), 95-119.
- Teymurr, N., 1992. A theory of change in architecture. In: Conference Proceedings on Environmental Metamorphosis, IAPS 12. Marmaras Chalkidiki, Greece.
- UN-HABITAT, 2006. *Nigeria*. In: National trends in Housing e Production Practices, vol. 4, Nairobi: United Nations Centre for Human Settlements.
- U.N.O., 1976. Housing policy guidelines for developing countries. U.N. Department. of Economic and Social Affairs. U.N. Report, ST/ESA/50, New York.
- Wahab, A.B., 1983. *More Than Shelter*. An Inaugural Lecture Series. University of Ife. University Press, Nigeria.
- W.H.O., 1961. World Health Organization. Technical Report Series no. 225.