

Culture and Land-Use Dynamics in Obafemi Awolowo University's Staff Quarters

Lekan Sanni¹ and Adewale Adunola²

1. Department of Geography, Obafemi Awolowo University, Ile-Ife, Nigeria

E-mail: lysanni@yahoo.com

2. Department. of Architecture, Obafemi Awolowo University, Ile-Ife, Nigeria

KEYWORDS Culture; cultural traits; land use pattern; residential area; Yoruba's residential district

ABSTRACT Yorubas in Southwestern Nigeria, have a culture of having provisions for multiple uses - like commercial, crafts, light industrial and so on - in their residential areas. Contrary to the provisions of the master plan on which the design of Obafemi Awolowo University, Ile-Ife, Nigeria, is based, this cultural trait is noticed to be manifesting in the evolving land use pattern in the University's staff quarters. This study examines these manifestations. The approach of the study is identifying buildings that are currently being used for both residential and other uses on the base map of the staff quarters. The map is then subdivided into quadrants of equal sizes and Poisson distribution is applied to investigate the pattern of distribution of these multiple-use buildings in the study area. Investigations revealed that commercial and service activities in the staff quarters are at present arranged such that most families travel less than half a kilometer to purchase basic daily needs like bread, candles and soft drinks. Poisson distribution test reveals that these multiple-use buildings (housing the various commercial/service activities in the staff quarters) tend towards clustering. This is similar to what operates in traditional Yoruba residential quarters ('adugbos'). This research has thus been able to show that the study area is gradually being transformed to conform to Yoruba traditional communities. Recommendations are offered to integrate these findings into land use planning in the study area and in other similar places.

INTRODUCTION

"Culture" has been defined in diverse ways by different authors. The one most appropriate for this paper is that given by McGee et al. (1980:51) as "any piece or pattern of behaviour, attitude, value, belief, or skill, that people learn as members of human groups, plus the manipulation of any material item derived from these attributes."

"Culture" is often used in sociological literature in two different ways. First, it is used in the abstract, general sense to refer to that universal human phenomenon, common to all human kind, at all times and in all places. Second, the term is used to refer to culture as it is manifested by a particular pattern of ideas, behaviour, and material artifacts that characterize that group and distinguish it from the other such group. In this sense, the term refers to a culture, as used in the phrases "in our Culture ...", "Japanese culture" etc. (McGee et al., 1980: 65).

Convergence of opinions in the literature point out that culture is a learned behaviour; culture is a system; it is diverse; and is symbolic. Culture is also dynamic. Four parts of a cultural system are identified in literature as material, non-

material, norms and folkways. Material culture consists of physical or material objects, things, made or used in the natural state by human. Non-material culture consists the laws, customs, habits, and ways of doing things, plus ideas, attitudes values and beliefs. Norms are cultural rules and guidelines for regulating interaction and using and doing things. Folkways are the customs i.e. norms specifying the ways things are usually done.

Another aspect of culture as a system is the concept of cognitive culture. This consists of the "mental" aspect of a cultural system: ideas, attitudes, values and beliefs. These cognitive elements of culture provide members of a society with a framework for viewing the world and a means of constructing and understanding reality. They consist of thoughts that give a society its distinctiveness (McGee et al., 1980: 56).

Culture is diverse in the sense that each culture is different from other cultures. This general acceptance of the ideas of culture being diverse has led to the notion of cultural relativity, which sees each culture as being a unique adjustment to a particular set of circumstances. For instance, in the built environment, cultural diversity is reflected in diverse architectural

styles and the arrangement of spaces within and between buildings.

Since people from diverse culture interact continuously in space, no culture is totally insulated from others. They continue to borrow and adapt from other cultures. This often leads to hybrids of cultures. But each culture usually maintains some cultural traits that are transmitted to the coming generations no matter the number and / or duration of contacts with other cultures. These cultural traits, especially in material terms, are easily seen as 'stamps of identification' on the parts of the residential areas in which each culture predominates.

Residential areas have generated a lot of researches. Investigations have been carried out on their structure, form and composition (Aguda, 1994; Sanni, 1997). Efforts have been made to explain the level of provision of social facilities and amenities in various residential density areas (Olatubara, 1994; Sanni, 1983). Studies have also been conducted on level of living of residential areas of many Nigerian cities (Abiodun and Boateng, 1987; Ogunjumo and Olatubara 1997). Investigations have also been conducted on determinants of choice of residential areas in urban areas (Olatubara, 1994). This study intends to add to the existing literature on residential areas by seeking to provide answers to these very important questions:

- (i) If a set of people is accommodated in an environment designed on principles alien to their cultural background, will they ultimately adjust to the dictates of the environment or will they modify that environment to conform to their cultural dictates?
- (ii) To what extent will they succeed in achieving whichever option they choose?

The staff residential quarters of Obafemi Awolowo University, Ile-Ife, Nigeria, are chosen as a case study. Most of the inhabitants of the study area are highly educated. This helps in reducing possible effects of illiteracy on our findings. The remaining part of this paper is divided into five. Immediately after this introduction is a review of morphological structure of Yoruba residential districts. This is followed by a review of the study area. The fourth part, the research methodology, is followed by results and discussions. In the last part, suggestions are offered to integrate research's findings into land use planning of the study area and other similar places.

MORPHOLOGICAL STRUCTURE OF YORUBA RESIDENTIAL DISTRICTS

Yoruba race constitutes one of the major tribes in Nigeria. Found mostly in the Southwestern part of the country, and extending their natural domain to as far as Togo republic, the race has a culture that is generally noted to have significant influence on the morphological structure of their settlements. The morphological structure of Yoruba towns follows that of Ile-Ife, the oldest Yoruba city, generally acclaimed the cradle of the race. Before the advent of colonialists, Yoruba settlements were noted for their general pattern of having the King's (Oba's) palace at the centre. Very close by at the centre were the king's market and the most important place of worship. From the center, arterial roads that divided the town into quarters ('adugbos') radiated to the outskirts. Each quarter comprised an administrative unit and is in turn divided into series of compounds ("Iles"). Each quarter had a High Chief to whom all the heads of 'compounds' in his 'quarter' were responsible, and who in turn was responsible to the king. These quarters divided the town into sectors starting from the central square toward the outskirts. They were arranged round the palace in a sort of satellite formation making each area of the town fairly homogenous. The High Chiefs of the quarters lived in their palaces very close to the centre and lesser citizens had their 'compounds' farther down towards the outskirts.

The 'compound', which constituted the urban residential unit, housed members of an extended family, which formed a kind of corporate group characterized by particular common socio-economic and cultural activities. There was specialization of functions per "compound" ("compounds" of blacksmiths, of weavers and so on). In its original traditional form a traditional compound was composed of an external perimeter wall in "banco" along which were articulated a series of adjoining rooms, inward-looking, served by a verandah looking towards an open court. Colonialism with its attendant emphasis on nucleated family encouraged individuals to construct buildings for their nucleated families. Initially, these were constructed on the collapsed part of the compound ('Ile'), but later, the courtyard was filled. In this way, the perimeter wall give way and all that was left was a group of houses called "agbo-Ile" ('a group of houses') (Sanni, 1997).

Each 'quarter' contained a 'mini-market place', places of worship, spaces for relaxation, working and social intercourse. Round these 'mini-market places' cluster commercial activities. At the town level is the principal market or markets serving the whole town and its surrounding region. Within the quarters, commercial/service activities providing goods and services for everyday needs are provided within the compounds. Itinerant traders hawking goods from house to house also help ensure that residents do not necessarily have to move far to purchase daily needs. The terrain of the whole city, viewed in terms of commercial and service activities, could be described as "exhibiting clusters in some places while ensuring that no part is left unserved". This is still true of most Yoruba towns.

THE STUDY AREA

Obafemi Awolowo University, Ile-Ife, indisputably one of the most beautiful university campuses in Black Africa, is one of the few whose physical growth and development is based on a pre-prepared master plan. In line with the ideals of its founding fathers, and in cognizance of the socio-cultural setting of the site, the consultants proposed a master plan that makes adequate provisions for both the present and future needs of the university. The beauty of the university campus is enhanced by the use of beautiful architecture, landscaping, creation of beautiful walkways and open spaces.

Land use pattern of the built-up area of the campus could easily be classified into three - the central area; students' residences; and staff quarters. The central area of the campus forms the melting pot of everybody in the campus, and constitutes the "life wire" of the university. This central area houses the academic area, the administrative block, the library, and places for entertainment, recreation and sports. This central area separates the residences of students and the staff: students to the left and staff to the right.

Halls of residences are provided for students' accommodation. To take care of students needs for food, three cafeterias were provided in this part of the campus. Each Hall of residence also had butteries where daily needs like provisions could be bought at very reasonable prices. Students could also patronize 'mini market' in the students' union building in the central part

of the campus. Close to the students Halls of residence is the Health Centre where health facilities are provided round the clock for both students and staff of the University.

On the other side of the central part of the campus is located the staff residential quarters. This is divided into junior and senior staff quarters. The staff quarters contains over five hundred housing units for senior academic and administrative staff and more than thirty semi-detached units for junior staff. Junior staff quarters are located towards the end of "Road 7" linking the campus with the city of Ile-Ife via the 'second gate'. This places members of junior staff - who are normally expected to be less mobile than senior staff - at an advantage of easy interaction with both the campus and the outside community.

The whole of the staff quarters is well planned with great care. The uniformly consistent and attractive environment, based on the principles of garden city planning features, is planned to give a sense of belonging. The consultants believed that "maintaining the attractiveness of the staff quarters and expanding it in size ... is critical for the growth of the university" (Egboramy, 1981: 94).

The primary function of the staff quarters, as envisaged by the consultants, was purely residential. As such, other uses like commercial, industrial and such uses were separated completely from these quarters. For commercial purposes, Leventis Stores was created and located between the academic area and the residential quarters. Residents of the staff quarters were thus expected to patronize either the central part of the campus or Leventis Stores for food, household wares and daily basic domestic needs. This, we note, is alien to the existing cultural arrangements of Yoruba land in which the study area is located. Though other factors like mass exodus of students to the staff quarters because of inadequate accommodation in the students' hostels might play some roles in the evolution of the resultant land use pattern, it is the belief of the researchers that the cultural traits of the inhabitants play more significant roles. The resultant land use dynamics of the study area is thus investigated in relation to the cultural traits of the inhabitants. Hence, in this study, the existing land use dynamics in the study area is explained mainly in terms of cultural traits of the inhabitants by examining the extent to

which the Yoruba-dominated residents of the staff quarters have either adjusted to the dictates of the environment or have modified this environment to conform to Yoruba traditional residential districts.

METHODOLOGY OF STUDY

In carrying out this study, a base map of the staff quarters was obtained, and the study area visited on many occasions to identify on the map buildings that were currently being used for multiple uses. Efforts were made to limit these buildings to those in which the users erect makeshift shops; publicly display their wares; or erect signposts advertising their wares. Each building was counted once no matter the number of non-residential activities that might be taking place in either (or both) its main building or (and) the adjoining boys' quarters. This study did not include itinerant traders that use private vehicles to hawk their wares from house to house. Uncoordinated 'night markets' specializing in sweets, bread, and the like stuff, springing up in many parts of the staff quarters were also not included in the study. The base map, excluding open spaces and exclusively non-residential spaces, was then divided into eighty-two (82) quadrants of equal sizes. The number of multiple-use buildings that fall within each quadrant was then counted and recorded. Poisson distribution was then applied to investigate the pattern of distribution of these multiple-use buildings.

Random sampling technique was employed to administer a set of pre-tested questionnaires to investigate the residents' perception of existing land use pattern in the study area. In all, a total of 120 questionnaires were administered.

RESULTS AND DISCUSSIONS

Investigations revealed that multiple-use buildings housing commercial and service activities within the staff quarters are at present arranged such that most families travel less than half a kilometer to purchase basic daily needs like bread, candles, matches, soft drinks etc. Distribution on quadrant-basis is presented in Table 1 below.

Of the 82 quadrants into which the staff quarters was divided, 41 (50%) have no multiple-use buildings at all. 21(25.6%) have only one; 13 (16%) have two; 5 (6%) have three; none (0%)

Table 1: Spatial distribution of multiple-use buildings

No of Multiple-Use Buildings per Quadrant (f)	No of Quadrants (x)	No of Buildings (fx)
0	41	0
1	21	21
2	13	26
3	5	15
4	0	0
5	0	0
6	2	12
Total	82	74

Source: Authors' Field Work, 2001

have four or five; and 2(2.4%) have as high as six such buildings.

It is worthy to note that multiple-use buildings appear to be more common in the junior staff quarters than in the senior staff quarters. For instance, while the four quadrants of the junior staff quarters account for thirteen of these buildings, at the rate of 3.25 per quadrant, 78 quadrants of the senior staff quarters account for 61 such buildings, averaging only 0.78 such building per quadrant. Though the cause of this observation might not be immediately forthcoming, the existing Federal Government's policy of recruiting significant majority of the junior staff cadre from the immediate vicinity of such establishments while the senior cadre is usually filled mainly on merit might play a significant role.

Poisson distribution was conducted to investigate the pattern of distribution of these multiple-use buildings in the study area. To do this, we use the formula:

$$\text{Variance } (\sigma^2) = \sum(X - \bar{X})^2 / n - 1$$

$$\text{Where } \bar{X} = \sum fX / \sum f$$

Variance mean ratio was then calculated using the formula:

$$\text{Variance mean ratio} = \frac{\text{Variance for total No. of multiple-use building}}{\text{Average No. of multiple-use building per quadrant (Okoko, 2001:90)}}$$

(Details of computation is presented in the Appendix) Variance mean ratio is computed to be 1.68.

The rules for determining the level of clustering are:

- i. If the variance mean ratio is less than 1.0, the distribution is regular.
- ii. If the variance mean ratio is 1.0, the distribution is random
- iii. If the variance mean ratio is greater than 1.0, the distribution is clustered.

Since we have a variance mean ratio of 1.68, we can say that the distribution of multiple-use buildings in the study area tends towards clustering. This is similar to what operates in traditional Yoruba quarters. This study has thus shown that the study area is gradually being transformed to conform to Yoruba traditional community.

Of the one hundred and twenty residents randomly interviewed, as high as 68% perceived the resultant land use pattern as a blessing since services are now within easier reach of the residents. 23% perceived it as nuisance, while the remaining were indifference. Variations were observed in the perception of student and non-student respondents. A high degree of correlation (of 0.83) is found to exist between being a student and liking the existing land use pattern, while lower degree of correlation (0.21) was observed for being a non-student respondent and liking the existing land use pattern.

CONCLUSION

This article investigates the influence of culture on the morphology of residential districts.

It can be deduced from the findings of this research that the cultural background of inhabitants plays a significant role in shaping the resultant land use pattern of residential districts. Based on these findings, the following specific recommendations are made:

- Planners should always endeavour to take the cultural background of anticipated

inhabitants into consideration when planning residential districts.

- With specific reference to the study area, efforts should be made to coordinate activities of traders and service providers within the staff quarters.
- Concerted efforts should also be made to ensure that noise-generating activities are discouraged from locating in the staff quarters.

REFERENCES

- Abiodun, J.O. and S. Y. Boateng. 1987. "The Spatial Pattern of Residential Inequalities in Ibadan Metropolitan Area." *Ife Social Science Review*, 10(1 & 2): 7-25.
- Aguda, A.S. 1994. "Urban Growth and Problems in Nigeria Cities: The Case of Ilesha." *Ife Research Publications in Geography* 4: p 1-4.
- Egboramy Co. 1981. *University of Ife, Ile-Ife, Nigeria, Master Plan*. Ile-Ife: University of Ife Press.
- McGee R. et al. 1980. *Sociology: An Introduction*. New York: Holt, Rinehart and Winston.
- Ogunjumo, A. and O. Olatubara. 1997. "The Myth of City Centre Pivotal Influence in Urban Residential Location Decision: A Study of Ibadan, Oyo State." *Ife Research Publications in Geography*, 6(1 & 2): 26-35.
- Okoko, E. 2001. *Quantitative Techniques in Urban Analysis*. Ibadan: Kraft Books.
- Sanni, L. 1983. *Appraisal Study of Provision of Utility Service and Facilities in Residential Areas: A Case Study of Akarabata Layout in Ile -Ife*. B.Sc. Dissertation, University of Ife, Ile - Ife.
- Sanni, L. 1997. "The Morphological structures of the Old Core Area and the New Residential Layouts of Ile-Ife." *Ife Social Sciences Review*, 14(1 & 2): 25-32.

APPENDIX

$$\text{Variance } (\sigma^2) = \sum(X - \bar{X})^2 / n - 1$$

Where n = 82

$$\bar{X} = \frac{\sum fx}{\sum f} = \frac{74}{82} = 0.9$$

i.e. the number of multiple-use buildings per quadrant = 0.9

Determinant of variance

Event	Calculation of Variance	Variance for the number of multiple-use buildings
σ^2 of occurrence of 0 multiple-use building	$\sigma^2 = (0-0.9)^2/81=0.01$	$\sigma^2 \quad X \quad 41 = 0.41$
σ^2 of occurrence of 1 multiple-use building	$\sigma^2 = (1-0.9)^2/81=0$	$\sigma^2 \quad X \quad 21 = 0.00$
σ^2 of occurrence of 2 multiple-use building	$\sigma^2 = (2-0.9)^2/81=0.01$	$\sigma^2 \quad X \quad 13 = 0.19$
σ^2 of occurrence of 3 multiple-use building	$\sigma^2 = (3-0.9)^2/81=0.05$	$\sigma^2 \quad X \quad 5 = 0.27$
σ^2 of occurrence of 4 multiple-use building	$\sigma^2 = (4-0.9)^2/81=0.12$	$\sigma^2 \quad X \quad 0 = 0.00$
σ^2 of occurrence of 5 multiple-use building	$\sigma^2 = (5-0.9)^2/81=0.21$	$\sigma^2 \quad X \quad 0 = 0.00$
σ^2 of occurrence of 6 multiple-use building	$\sigma^2 = (6-0.9)^2/81=0.31$	$\sigma^2 \quad X \quad 2 = 0.64$