

GO-AHEAD ELEMENT OF DOMESTIC ARCHITECTURE: SOCIO-ECONOMIC AND CULTURAL CHARACTERISTICS OF THE RESIDENTS IN BENIN

EKHAESE EGHOSA NOEL¹ & ADEBOYE ALBERT BABAJIDE²

¹Research Scholar, Department of Architecture, School of Environmental Studies, Covenant University, Ota, Ogun, Nigeria

²Department of Architecture, School of Environmental Studies, Covenant University, Ota, Ogun, Nigeria

ABSTRACT

The domestic architecture of a traditional settlement is greatly influenced by the socio-economic and socio-cultural characteristics of its residents. Benin City which is the focus of the paper is a case of a traditional settlement undergoing domestic architectural evolution with the changing times influenced by factors of growth and development. The paper has examined the effect of socio-economic and socio-cultural characteristics as factors that partly determine the design, style, pattern, space use, organization, location and meaning as well as land use of the domestic architecture of Benin. The study employed the use of questionnaire administered to residents across the cross-section of the city. In the end, descriptive frequency tables were used to analyse the data collected from the residential zones in Benin. The research has been able to corroborate the theory that socio-economic and socio-cultural factors are some of the determinants/elements of domestic architecture of a place.

KEYWORDS: Go-Ahead Element, Domestic Architecture, Socio-Economic and Socio-Cultural Characteristics

INTRODUCTION

The residential character of a city or domestic settlement is determined by the place behaviour and decisions of individuals and families. Consequently, the examination of how residents' socio-economic and cultural characteristics impact on domestic architecture in the Benin would require, a consideration of what is being employed in this paper as the defining criteria within the concept of residential areas. According to Gbakeji and Rilwani (2009) the bases for identifying residential areas have been grouped into two major classes, which includes: Environmental characteristics of residential areas, and Socio-economic and cultural structure of residential areas. The study, however, concentrates on the Socio-economic and cultural structure of residential areas as the go-ahead element of domestic architecture. House is considered to be more than merely the dwelling unit.

It is a complex product made up of a combination of services, indoor living spaces, land utilities, place situations, outdoor living spaces, and relationships to neighbours, family members and friends (Onokerhoraye 1984). It protects, provides them privacy and security (Omuta1988). A house includes several internal and external facilities and services that make living more meaningful and fulfilling to the majority of people (Gbakeji and Rilwani, 2009). The concept of spatial preference for house-type to live in is obviously important to an analysis of residents' characteristics. Other factors that influence residents' preferences include assessment of housing costs, family sizes, qualitative housing units and environment.

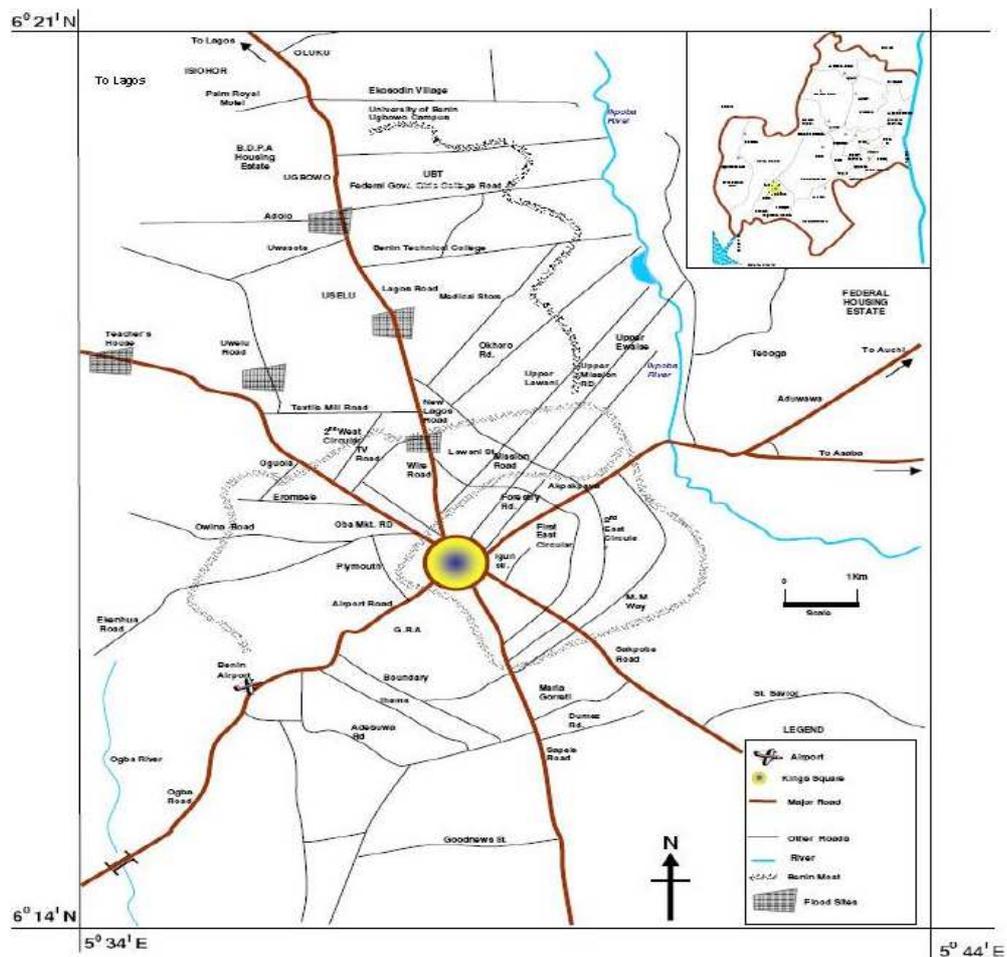
Furthermore, preferences could also be influenced by the economic, social, professional or educational background of respondents. Benin City has always been a state capital from the early days of mid-western state to Bendel state and now to Edo state. The city has always accommodated all state/federal ministries and Parastatals making Benin City a Civil Service City. This explains the very slow economic activities due to the low incomes earned from the ministry, except for some few professionals', artisans and craftsmen, traders and commercial vehicle operator. And since the City is a central point that connects to all the different part of Nigeria (south, north, east and west) road transporters benefit from the position of the Benin immensely (Ekhaese, 2011). The City has rich religious and cultural systems from the beginning, hence cultural activities are well entrenched in the life of the people. The import of all these on the residents' characteristics is low and average socio economic activities while the socio-cultural activities are high. Therefore, the residents of the City are predominantly low and medium income earners, their socio-economic life-style is constrained, but their cultural life is very buoyant, this invariably determines the house-types found across Benin City. The Domestic residential Architecture that dots the landscape of the entire city is determined by the socio-economic and socio-cultural characteristics of the residents in the City.

In order to properly understand the socio-economic and socio-cultural structure of the studied area, there is need to first of all examine the socio-economic and socio-cultural characteristics of the households covered by this study. Socio-economic and socio-cultural class may be defined as relatively permanent and homogeneous divisions in a society into which individuals or families sharing similar values, life styles, interests and behaviours can be categorized (Engel 1978; Moughalu 1982). The general concept of social status is ancient. Social scientists have not found it easy identifying one particular variable of social status; hence use is often made of proxy variables such as income, occupation, education, workplace and marital status, to measure socio-economic status. This study has also adopted this method in the assessment of the socio-economic characteristics of residential zones in Benin metropolis.

STUDY AREA

Benin City is located at latitude $06^{\circ}19'IE$ to $6^{\circ}21'IE$ and longitude $5^{\circ}34'IE$ to $5^{\circ}44'IE$ with an average elevation of 77.8 m above sea-level. Benin City is a pre-colonial city, the capital of defunct Bendel State and the present day Edo State. Benin City is underlain by sedimentary formation of the Miocene-Pleistocene-age often referred to as the Benin formation (Odemerho, 1988). The city is located in the humid tropical rainforest belt of Nigeria with a population of 762,717 according to the 1991 national population census with a projected population of 1.3 million by 2010 at 2.9% growth rate. Benin City belongs to Af category of Koppen's climatic classification. The rainy season in Benin begins in March/April and ends in October/November. Rainfalls are of high intensity and usually double maxima with a dry little spell in August usually referred to as 'August Break'. Apart from demographic transmutation, Benin City has witnessed rapid territorial expansion mainly due to rapid rural-urban migration. Since Benin City is the capital of Edo State of Nigeria. Edo State could be defined as a collection gathering of people of united yet diverse identity, who are mostly located in the mid-western part of Nigeria, West Africa (Omoigui, 2005). Edo State was created in 1991 out of the then Bendel State of Nigeria and subsequently divided into Edo and Delta States (UNDP Human Development Reports – 2003 and 2004). According to USAID reports in 2002, Edo State was estimated to have a population of 2.86 million; (in 1991, it had 2.1million, of which 64.47% live in Benin City, that is about 1,035,995 inhabitants) making it almost similar in size to Jamaica with a population of (2.74 million), and bigger than Botswana, (1.6 million) and Trinidad and

Tobago with a population of (1.1million). Edo State has eighteen (18) Local Government Areas, the Edos are cultural in their perspective and approach to life, regardless of the level of education. Therefore, the bonding of the Edo people is their strong belief in their traditions and various forms of worship, which have given a spiritual and temporal authority to the royal leadership in the State. The traditions and forms of worship are systematically being diluted by a move towards modern religious faiths with an underlying rejection of the traditional forms of worship. This has influenced the domestic architecture in Benin, contemporary architectural style are emerging along the peripheries and the new expansions of the City. The people of Benin are called Edo and the population is found mostly in and around Benin City shown in Figure 1. The map in Figure 1 shows Benin City and its inner wall, covering four Local Government Area namely; *Oredo, Ikpoba-Okhan, Egor and Ovia South-West*.

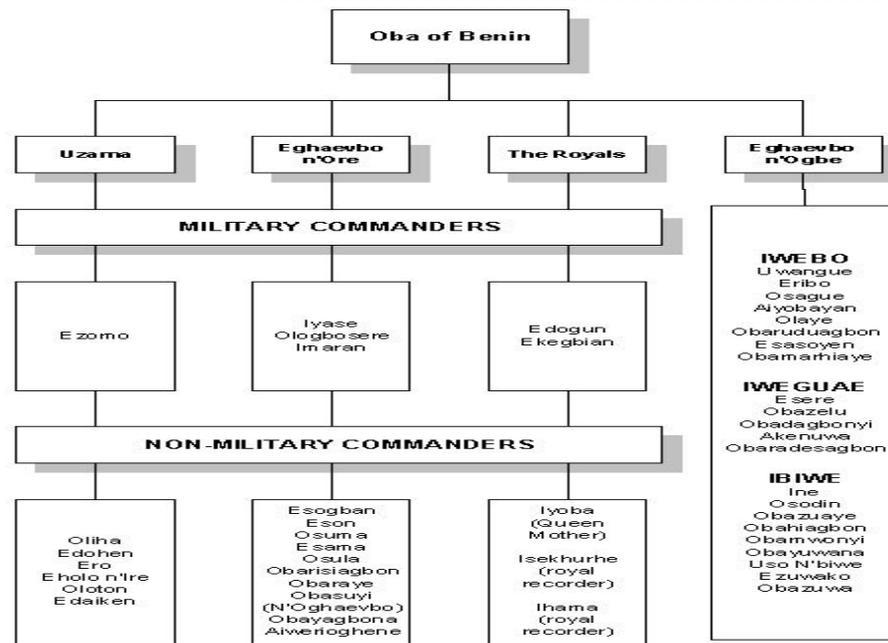


Source: Atedhor, et al, (2011)

Figure 1: Map of Benin City (Insert Edo State)

IDENTITY AND SOCIAL STRUCTURE OF EDO SOCIAL SYSTEM

There was an existence of well-defined social structure, based on the government of elders before the emergence of monarchical system. But developments which resulted in transformation of traditional values and customs may have endeared the Edos to a sense of history and tradition as a ways of life. The social system which developed in Benin City as shown is figure 2, has its origin in this kind of historical consciousness to always think of developments that are firmly rooted in the past but which will not endanger the future (Osadolor, 2001).



Source: Osadolor, (2001)

Figure 2: Benin Council in Nineteenth Century (2000)

When the seat of monarchy evolved, the settlement was a cluster of thirty-one villages with a sense of common identity based on history, tradition and beliefs of the society. The villages were aggregates of family units, as families came into working relationships, their adaptation resulted in socio-cultural change, upon which features of social and political organization began to emerge. This developmental pattern characterized all the village settlements at different phases of their transformation. In the study of Benin as an urban Centre, two major factors were involved in its development (Bradbury, 1973). The first was the natural environment supporting human settlements; and the second factor was the integration of the political systems (Onokerhoraye, 1995). This resulted in Edo socio-political structure which exists at the central and provincial level and is hinged upon the Oba and his royal court. The hierarchical ladder in Benin has the Oba as the spiritual/temporal head, having hereditary accession and succession by principle of primogeniture. The administrative agencies are tied up with structured chieftaincy and guild systems (Ndubuisi, 2006).

The seven *Uzama* ('King Maker') are next to Oba in hierarchy. In addition is *Eghaevbos*, instituted to weaken the position and authority of the *Uzamas*, as shown figure 2. They are the *Eghaevbo n' Ore* (town chief) led by chief *Iyase* (prime minister) and the *Eghaevbo n' Ogbe* (palace chiefs/Oba's personal councilors) headed by chief *Uwangu*, see figure 2. Immediately followed are the royal guilds (craftsmen) serving the physical and spiritual needs of the Oba, they are *Owina* (guild of craftsmen/artisans), *Ewaise* (guild of religious functionaries) and the palace *Iwebo*, *Iweguae* and *Ibiwe*. They reside in a specific area carved out in the palace prior to the British expedition in 1897. Due to the palace reduction and subsequent dispersal of chiefs after the expedition, the guilds were reorganized and made to spread out, thus affecting the land-use across the city from the core to the planned estate. This is why the core is inhabited by Oba and royal lineage and houses here retain the old pattern showing resilience to change. In the intermediate zone where the *Eghaevbos* are, some houses are resilient to transformation (i.e. some spaces have transformed, but the architectural style remains). But in the suburban where the royal guilds and nobles occupy, some form of resilience and adaptation has occurred in the houses.

STUDY METHODOLOGY

Since the study is examining go-ahead element, it would be good to situate it in the proper context. Go-ahead element of domestic architecture means dynamic determinants/ changing determinants of domestic architecture, according to Rapoport, in his book "House Form and Culture" he talked about factors that determine the domestic architecture of a people, place and time' and called these factors "Architecture Determinants" or "Architectural Elements" of which Socio-Cultural and Socio-Economic are amongst several other determinants. Therefore because these 'determinants'/'elements' are dynamic and changing then it can be called "go-ahead element"

A total of 1054 questionnaires were distributed across the entire Benin City in order to determine the socio-economic and socio-cultural characteristics of residents in Benin, Nigeria. The questionnaires distributions were designed in such way that requires thirty (30) research assistants to cover the entire Benin City. Each research assistant was to cover a particular area of the four residential zones as shown as Figure 3. Every residential zone was supposed to have at least between 4-8 researches assistants depending on the size of the zone. These research assistants were drawn from post graduate and under-graduate students of architecture as well as other from the allied building professions. The questionnaire was so structured that the research assistant must administer the questionnaire one on one to the head of each household, help tick the boxes provided in the questionnaire and thereafter sketch the house plan.

The variables were expressed in the question form to elicit information on its subject. The questionnaire was written in English and was expressed in simple sentences so as to ensure possibility to give clarity of intention. The questions were of both open-ended and closed types. They were pre-coded with alternative responses provided; this procedure afforded the respondents the choice of responses. The data collected for this study were analysed using both descriptive and inferential statistics. In the treatment of data, descriptive data were presented using the tables, frequency counts, percentages, mean and charts.

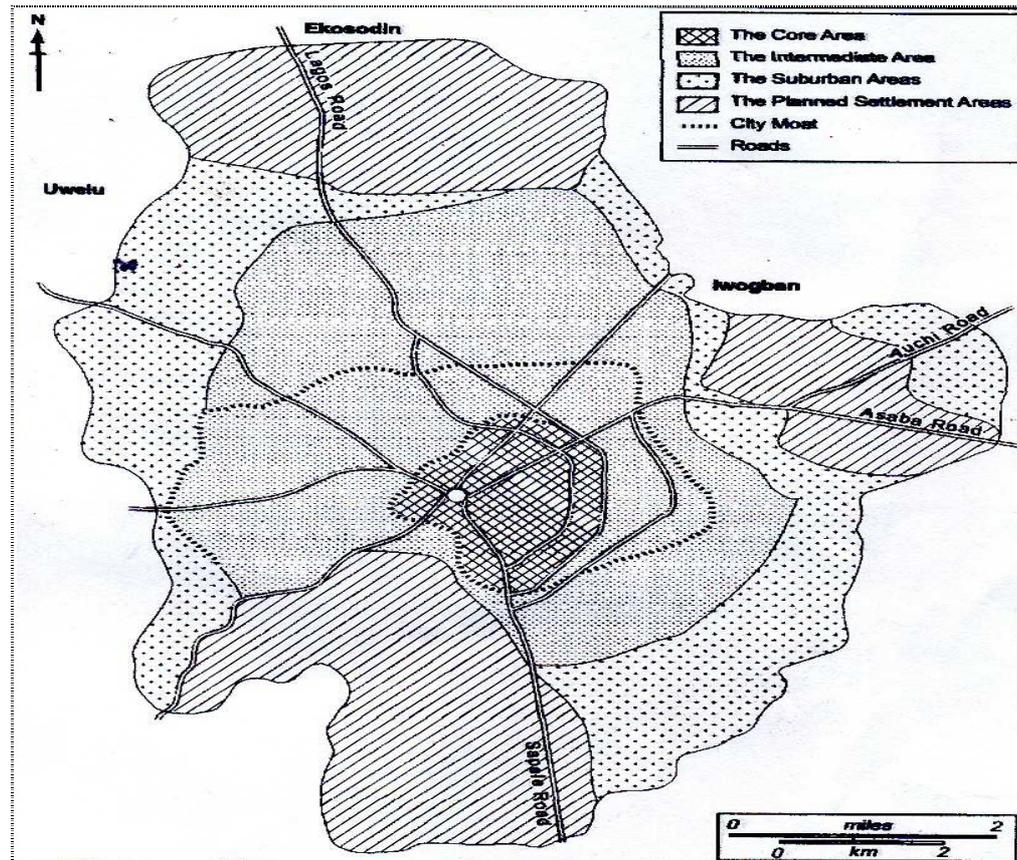
The analyses of data relied on appropriate statistical operations and the result were drawn from the household income, occupational structure, age and sex, marital status and household size, ethnic composition, educational background tenure and status of respondents to determine the socio-economic characteristics, but the socio-cultural characteristics was drawn from mainly religion and number of household. Benin City into four residential zones - 52,850 houses in Benin City in 2009, The core zone-5,020, Intermediate zone-17,980, Suburban zone-22,950 and Planned Estate zone-7,900, and 2% of the residential houses - 1054 used for the study, with details as shown in table 1.

Table 1: Numbers of Selected Residential Houses in the Four Zone of Benin

City/Town	Four Residential Zones (Location of Houses)			
Benin City (Total No. of Residential Houses)	Core Zone	Intermediate Zone	Sub-Urban Zone	Planned Estate Zone
	104 (100%)	353 (100%)	459 (100%)	136 (100%)

Residential Zones in Benin-City

A study carried out in 1994-95 divided Benin City into four residential zones and documented them as- Core Area, Intermediate Area, and Suburban Area and planned estate Settlement Area as shown in Figure 3 below.



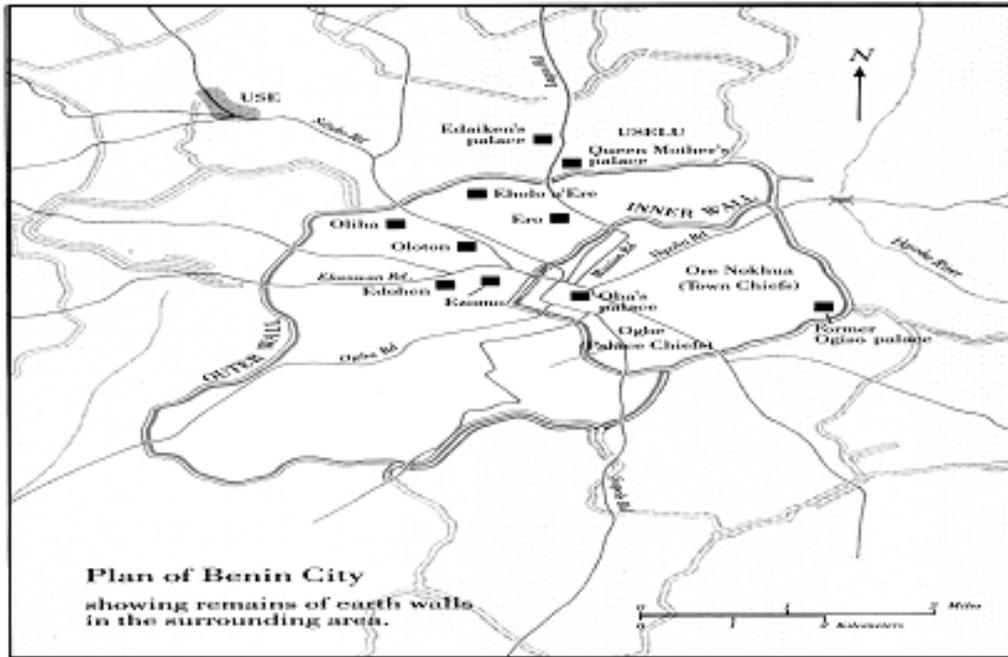
Source: Ogu (1995)

Figure 3: Map Showing Residential Zone in Benin-City

The core and intermediate residential areas of Benin are the oldest part of the City having the oldest architecture or residential spaces. The core area by its planning and arrangement is assigned to the royal families. At the centre of the core residential area is the Oba's Palace, deliberately and strategically located at the king's square (ring road) which connects all major roads to other parts of the city. Also in core, there are; the *Ogbe* Quarter (Residential Area of the Palace Chiefs) and *Ore Nokhua* (residential area of the Town Chiefs) and the former *Ogiso* Palace located within the inner wall.

The city core is today the administrative hub of state, having the house of assembling complex, *Oba* market, the museum, *Orukpota* hall, central hospital, the Benin prison and so many other parastatals. While the intermediate residential area accommodates six of the *Uzamas'* residences (*Oliha, Edohen, Ezomo, Oloton, Ero, and Eholo n'Ere*) which are located outside the inner wall, the Queen Mother (i.e. seventh member of the *Uzama*) and the *Edaiken*, (i.e. the heir-apparent) are outside the outer wall. The inner walls enclose the core residential area, but the outer wall is inside the intermediate residential area (see Figure 4).

The government reservation area (GRA), government house and other government quarters are located in the intermediate residential area. The suburban area and the unplanned settlement part of the City accommodate the residential areas of other families in Benin City. Here there are the different housing estates in the city, the government civil servants estate, the privately own estates, the public estate, the public-private partnership owned estate etc. and other institutions.



Source: Ezra (1992)

Figure 4: Plan of Benin City Showing the Core Area and Intermediate Area

Therefore a cross-section through the residential areas of the entire City reveals a chronological growth from the core residential area where the oldest form of architecture can be found. Closely following is the intermediate residential area, and then the suburban residential area and the planned settlement area where most of the contemporary architecture are built. In other words, a cross-sectional study through Benin reveals an historical evolution of house-types in the core residential area (i.e. the residential palace of the monarch and the royal families residential areas) to the most contemporary house-types in the planned residential area of the city, apart from the Oba’s family and the other royal family members (i.e. the Ogbe Chiefs and Town Chiefs), every other family in Benin migrated from villages around the City (Ezra, 1992).

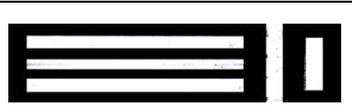
RESULTS

This further shows that a cross-sectional study will give the necessary historical perspective of growth of the ancient City of Benin. Table 2 shows a cross section of house types across the Benin City.

Table 2: The House-Types as Identified during the Field Survey

House Types in Benin		Location (Zones)	Plan form Characteristics	Categories of Types in Each Zone in Benin	Number
1	The Palace Compound House-Types -“ <i>Eguei Oto-Eghodo</i> ”,	Core residential zone		Three (3) house types	3
2	The Family Compound House-Types. -“ <i>Owa Eken</i> ”	Core residential zone			142
3	The modified traditional courtyard house-type	Core residential zone			56

Table 2: Contd.,

4	The Adapted Family-Compound Benin House,	Intermediate residential zone		Seven (7) house types	43
5	The hybrid Family-Compound Benin House	Intermediate residential zone			163
6	The Common Central Corridor House-Types (Face Me I Face You),	Intermediate suburb and planned estate residential zone			225
7	The Detached Bungalow House-Types (" <i>Owa Eken'ebo</i> ")	Intermediate, suburb and planned estate residential zone		Five (5) house types	165
8	The Semi-Detached Flat of Single Floor House-Types	Intermediate and suburb and planned estate residential zone			132
9	The Semi-Detached Flats of Double Floor House-type	Intermediate and suburban residential zone			77
10	The Detached Double Floor Villa House-Types.	Planned estate residential		Four (4) house types	20
11	The detached double floor Duplex house-types	Planned estate residential			28
Total			Eleven (11) House-Type in Benin City		1054

Socio-Economic Characteristics of Residents

Household Income

Usually, a household utilises its income to take care of the housing, feeding, clothing, education, transportation and medical expenses, among many other competing needs. Thereafter, it may consider savings. Household income plays a very crucial role in the house-types and residential zone preferences of residents. If the income is low, the household may rent an apartment, but as the income increases, it may then decide to own one, either by building or buying from the housing market. In this study, household incomes were classified into three socio-economic groups, namely low, medium and high income groups. Those in the low-income category have annual incomes not exceeding #500,000, while those earning between #500,001 and #1,000,000 are in the medium income group. The high-income group comprises those whose annual incomes are in excess of #1,000,000. Table 3 shows the distribution of household incomes per annum of the respondents across the four residential zones in the Benin metropolis. The low-income group constituting about 31.7 per cent of our total population across the four residential zones with total percentages of 27.9 in the core, 32.0 in the intermediate, 28.6 in the sub-urban and 44.8 in the planned estate respectively. On the other hand, medium income group makes up 12.5 per cent of the total population. Residential zone with high concentrations of medium income earners include core and sub-urban residential zones. The high income group are about 8.3per cent of the sample populations.

These groups of income earners are predominantly in the sub-urban residential zone. The last group in this category is the non-salary group (i.e. they are traders, self-employed, students, and applicants). These set of persons don't earn salary from governments, yet classifying them based on their annual income, they could still fall into the categories listed above. They make the remaining percentage which is about 47.1 per cent.

Table 3: Income per Annum of the Respondents

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
Less Than 100,000			46	13.1	55	12.0	41	30.1
100,001-500,000	29	27.9	66	18.9	76	16.6	20	14.7
500,001-1,000,000	45	43.3	29	8.3	46	10.0	12	8.8
1,000,001-5,000,000	16	15.4	4	1.1	31	6.8	3	2.2
5,000,001 and above	1	1.0	2	.6	22	4.8	8	5.9
Non Salary Group	13	12.5	202	57.7	229	49.9	52	38.2
Total	104	100.0	350	100.0	459	100.0	136	100.0

In the core residential zone majority of the respondents, about 43.3% earn between the range of 500,001- 1,000,000 while majority of the respondents in the other three residential zone fall under the category of non-salary group obviously because they are business owners/traders. This result shows that the various income levels will create economic differentials for respondents across the residential zone. Majority of respondents in the core zone about 89.4% are owner occupiers. Therefore the level of the income of people determines the tenure status of the occupiers and also determines the house-type to be constructed.

Occupational Structure

The occupational distribution of the respondents reflects the economic base of the study residential zones. It is evident from Table 4 that a sizeable proportion of the residents is made up of businessmen/traders, teachers, self-employed persons, civil servants, professionals, artisans, farmers and others, i.e. managerial experts and skilled production personnel in both the private and public establishments, majority of whom have their employment spread across the entire City (core, intermediate, suburban and planned estates areas) of Benin. The pattern of the occupational distribution of residents in the City equally explains their income levels per annum.

Table 4: Occupations of the Respondents

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
Civil Servants	19	18.3	50	14.2	73	15.9	16	11.9
Teachers	12	11.5	34	9.7	79	17.2	11	8.1
Business/Trade	22	21.2	111	31.5	180	39.2	52	38.5
Artisans	11	10.6	28	8.0	6	1.3	8	5.9
Professionals	19	18.3	61	17.3	64	13.9	36	26.7
Farmers	18	17.3	12	3.4	15	3.3	2	1.5
Others	3	2.9	56	15.9	42	9.2	10	7.4
Total	104	100.0	352	100.0	459	100.0	135	100.0

The majority of the respondents were businessmen and women and traders accounting for 35%, professionals

17%, civil servants 15%, teachers 13%, artisans 5%, farmers 4% and others 11%. These businessmen and women and traders cut across the residential zone evenly, revealing that the respondents were economically independent.

Age and Sex

The age structure in the study residential zones indicates a very active population, with high tendencies for productivity and a correspondingly high propensity for work. Table 5 shows the age distribution of respondents by residential zones in Benin indicates that 24.3, 27.0, 25.8 and 22.1 per cent of the respondents, respectively, are in the age brackets of 26-35, 36-45, 46-55 years and 56 and above.

Table 5: Ages of the Respondents

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
26-35			110	31.7	97	21.2	49	36.0
36-45			86	24.8	161	35.2	37	27.2
46-55	39	37.5	91	26.2	110	24.0	32	23.5
56 and above	65	62.5	60	17.3	90	19.7	18	13.2
Total	104	100.0	347	100.0	458	100.0	136	100.0

On the other hand, 67.7 and 32.2 per cent of the sample population are made up of males and females respectively as shown in Table 6

Table 6: Gender of the Respondent

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
Male	101	97.1	217	61.5	304	66.2	91	66.9
Female	3	2.9	136	38.5	155	33.8	45	33.1
Total	104	100.0	353	100.0	459	100.0	136	100.0

The majority of the respondents in the sample were males. They accounted for 713 representing 68% and 339 females accounted for 32%. The ages of the respondents as presented in table 5 revealed that 26-35 years were 256 representing 25%. 36- 45 years were 284 representing 27%; 26 per cent were 46-55 years and 56 years and above were 22%.

Marital Status and Household Size

Analysis of the marital status of our sample population shows that 761 (72%) are married, while 208 (20 %) are single. Thirty-six (3.4%), 35 (3.3%) and 12 (1.1%) were separated or divorced, widowed and widowers respectively. The household sizes of the respondents across the residential zones also show a remarkable pattern. Two hundred and seventeen (217) households, representing 20.6 per cent of our sample population, have household sizes of 1-5 persons. The corresponding figures for the 6-10, 11-15, 16-24, 25-30, 31-40, 41-50, 51-60, 61-70, 71-80 categories are 297 (79.3%) and 84 (.7%) respectively. Apart from the singles, and in some cases the widowed, which mainly report one person per household, the married in most of the study residential zones have a modal family size of between 3 and 10 persons.

Table 7: Marital Status of Respondent

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
Single			102	28.9	62	13.5	44	32.4
Married	100	96.2	229	64.9	355	77.3	77	56.6
Divorced			7	2.0	8	1.7	6	4.4
Separated			6	1.7	7	1.5	2	1.5
Widow			6	1.7	25	5.4	4	2.9
Widower	4	3.8	3	.8	2	.4	3	2.2
Total	104	100.0	353	100.0	459	100.0	136	100.0

The marital status revealed that single respondents were 208, representing 20%, married respondents were 761, representing 72% and divorced respondents were 21 representing 2%, separated 1%, widowed 4%. This shows that across the four residential zones, married respondents had the largest percentage; this again validates the fact that they are socially responsible; this has had an effect on the house-type they occupy/build.

Table 8: Number of Persons in the Household of the Respondent (Household Size)

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estates Zone	
	Frequency & Valid Percent		Frequency & Valid Percent		Frequency & Valid Percent		Frequency & Valid Percent	
1.00-5.00	4	3.90	50	14.1	120	26.2	43	31.6
6.00-10.00	40	38.5	139	39.2	215	46.9	57	41.8
11.00-15.00	43	41.3	83	23.5	95	20.7	29	21.5
16.00-24.00	16	16.5	53	15.0	25	5.5	6	4.4
25.00-30.00			17	4.8	4	.8	1	.7
31.00-40.00			7	2				
41.00-50.00			1	.1				
51.00-60.00			1	.1				
61.00-70.00			1	.1				
71.00-80.00			1	.1				
81.00-85.00							1	.7
Total	104	100.0	353	100	459	100.0	136	100.0

Ethnic Composition

A critical examination of the distribution of ethnic grouping and respondents' state of origin by residential zone reveals that the ethnic structure of Benin is very heterogeneous. The Edo are the major ethnic group, totalling 798 (75.7%) of our sample population. They are followed by the Esans with 46 (4.4%), while the Urhobos are 44 (4.2%). The rest of the sample population is made up of respondents from other States of the Federation. We discovered, in the course of field survey, that there is a very good mixture of the various indigenous and non-indigenous groups in the residential zones across the city. This apparently explains very clearly and accounts for the cosmopolitan nature and structure of the Benin. It also clearly defines the city as traditional cities in Nigeria, like Zaria or Kano where the natives live in separate parts of the city.

Educational Background of Respondents

Table 9 showing the educational background of respondents by residential zones reveals a very high level of literacy among the sample population. For example, 828 respondents (78.6%) have been educated above the primary

school level. Specifically, 336 (31.9%) have secondary education, while 492 (46.7%) are educated to the tertiary level (polytechnic, monotechnics and university levels). People of high educational attainment are highly status conscious. Besides, these people often seek for residential locations that satisfy their desires for prestigious dwellings and residential zone comparable to their jobs, their incomes as well as their personality.

Table 9: Educational Background of Respondents

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
No Formal Education	25	24.0	11	3.1	14	3.1	5	3.7
Completed Primary School	16	15.4	58	16.4	48	10.5	12	8.8
Completed Secondary School	21	20.2	161	45.6	110	24.0	44	32.4
Completed Tertiary School	42	40.4	105	29.7	273	59.6	72	52.9
Others (Specify)			18	5.1	13	2.8	3	2.2
Total	104	100.0	353	100.0	458	100.0	136	100.0

From the general frequencies run for the variables, we can draw some inferences concerning the different objectives: for example analysing the socio-economic and cultural characteristics of the residents in Benin across the entire City Table 9 shows that the majority of the respondents were predominantly literate with 47 per cent having completed tertiary education; 32 per cent having completed secondary and 13 per cent having completed primary school. Only 55 representing 5% had no formal education. 50% of the respondents without formal education are the core zone; this will go a long way in describing their socio-economic status which in-turn determines the class of house-types they occupy/build.

Tenure Status of Respondents

Table 10 showing the tenure status of respondents by residential zones reveals that more than half of the population of the respondents are actually owners of the houses they occupy. For instance, 551 of the population sample (52.3%) are the owner of the houses they live in; a total 389 respondents (36.9%) are tenants while 111 (11.6%) are free-Houser.

Table 10: Tenure Status of Respondents

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
Owner Occupier	93	89.4	146	41.5	241	52.5	71	52.2
Tenant	1	1.0	164	46.6	167	36.4	57	41.9
Free-Houser	10	9.6	42	11.9	51	11.1	8	5.9
Total	104	100.0	352	100.0	459	100.0	136	100.0

The table 10 shows that in the core zone, the majority of the respondents are owners of their houses, which is 93 out of the 104 respondents own the houses, this accounted for 89.4%, 10 (9.6%) respondents are free-Houser. Only 1 respondent is a tenant. This explains the fact that all the houses in the core are oldest in the city; it means the houses were family compound inherited. In sum, the socio-economic characteristics of residents, as spatial variables in the residential location have been studied more closely and are linked to the structural theories of city patterns.

It would therefore, be necessary to conclude that socio-economic characteristics of residents play a vital role in evolving house-types across the City. It is an incontrovertible fact that the residential character of a city or residential zone is functionally related to the locational behaviour and decisions of individuals and families. In this paper, we examine in some detail the socio-economic characteristics of residents in all the study residential zones and the discussions of the results of our analysis amply demonstrate the significant relationship that exists between socio-economic characteristics of residents and transformation of domestic space.

Socio-Cultural Characteristics of Residents

In considering the cultural characteristics of the resident, beliefs, traditions, norms and values play a pivotal role. But for the purpose of the analysis and considering the variables available, religion (i.e. beliefs) and number of households (i.e. traditions) have been used.

Religion

The respondents were predominantly religious with 88 % practicing Christianity, 4% Muslim, 5% traditional religion and 3% free thinker. Only 4 representing 0.3% fall into the category of others. The analysis shows that because the respondents are a religious people, implies that they are a cultural people and these cultural characteristics have definitely affected their domestic spaces and their house-types (i.e. domestic spaces) across the City.

Table 11: Religion of the Respondents

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
Christianity	103	99.0	287	81.3	422	91.9	112	82.4
Muslim			23	6.5	6	1.3	9	6.6
Traditional Religion	1	1.0	25	7.1	18	3.9	9	6.6
Free-Thinker			18	5.1	10	2.2	5	3.7
Others (Specify)					3	.7	1	.7
Total	104	100.0	353	100.0	459	100.0	136	100.0

Number of Households

The numbers of households occupying each of the buildings across the four residential zones were presented. 78.7% of the house-type in planned estates were being occupied by between 1-2 persons, while 93.8% and 71.5% were being occupied between 2-5 persons in intermediate and sub-urban residential zones respectively, also 64.5% of the buildings in the core residential zones were occupied by 6-10 persons and 28.9% of the buildings were occupied by 11-15 persons.

Table 12: Number of Household

	Core Zone		Intermediate Zone		Sub-Urban Zone		Planned Estate	
	Frequency & Valid Percent							
1.00-2.00								
2.00-5.00	67	64.5	331	93.8	328	71.5	101	78.7
6.00-10.00								
11.00-15.00	30	28.9						

CONCLUSIONS

The analysis done so far on the socio-economic and cultural characteristics of the residents, shows that the characteristic of residents determine to a large extent of the domestic architecture in the city. From the income of the household in city, the low, medium and high income groups are distributed across the four residential zones (core, intermediate, sub-urban and planned estate zones) in Benin as shown in figure 3, there is no specific residential zone earmarked for the poor. From Table 2 about 44.8% are in the planned estate, this is so because, the planned estate which is supposed to contain the most recent houses owner by government and are built for all categories of income earners (low, medium and high) including the cleaners and gardeners in the ministries and parastatals, the occupational structure show all the different types of occupations are spread all across the city. But most of the elite class and well-to-dos own and live around the government reservation areas (GRA) which spread across the intermediate and suburban zones of the city. Looking at the age distribution in the city across the four residential zones shows that the oldest houses are found in the core areas because it the oldest part of the city and also most of the houses are inherited. There were usually 3-4 generations of families living in the houses which imply that most of the household-head are very old and as such there are hardly any young men that are a household-head in the core residential zone see Table 4. The distribution of household size shows that the largest households are found also in the oldest part of the city which is the core and intermediate residential zones. This emphasises that fact that family compounds are mostly found in the above two residential zones. Although the educational backgrounds of the respondents are spread across the residential zone, the highly educated are often status conscious. They seek prestigious dwelling and highbrow residential area, so large percentage of the elite are found in the most recent part of the City (suburban and planned estate residential zone). Ultimately Benin City is patterned in such a way that every category of residents are spread and scattered all around the City, so that pockets of settlement are sprawling everywhere in the City and so also are house types. Therefore as the characteristics of residents vary across the different residential zone, the spaces provided in the different house-types vary also, thereby defining and identifying the various house-type across the entire City.

REFERENCES

1. Allport, F.H. (1955) *Theories of Perception and the Concept of Structure*, New York: John Wiley Press.
2. Appleyard D. (1976) *Notes on Urban Perception and Knowledge*, In Downs, R. Seta, D (Eds.): *Image and Environment*, Chicago: Aldine Publishing, vol. 2, 35 -56.
3. Atedhor, G. O., Odjugo, P. A. O. and Uriri1, A. E. (2011) *Changing Rainfall And Anthropogenic-Induced Flooding: Impacts and Adaptation Strategies in Benin City, Nigeria*, *Academic Journal of Geography and Regional Planning* Vol. 4(1), pp. 42-52.
4. Bradbury, R. E., (1973). "The Social Structure of Benin with Special Reference to the Political-Ritual Organization," PhD thesis, University of London.
5. Ekhaese E. N. (2011) *Domestic Architecture in Benin City: A Study of Continuity and Change*, an unpublished Ph.D. Thesis in the Department of Architecture, School of Environmental Science, Covenant University, Ota, Ogun State, Nigeria.
6. Engel, J.F (1978). *Consumer Behaviour*. Hinsdale, Illinois: Dryden Press.

7. Ezra, K. (1992) *Royal Art of Benin: The Pearls Collection in the Metropolitan Museum of Art*. New York: Harry N. Abrams Inc.
8. Gbakeji, J. O. and Rilwani, M. L. (2009): Residents' Socio-Economic Characteristics and the Residential Mobility Process in an Urban Space: The Example of The Warri Metropolis, Delta State, Nigeria, Department of Geography and Regional Planning, Ambrose Alli University, Ekpoma, Nigeria, in *Journal of Human Ecology*, vol. 27(1): 45-52, Kamla-Raj press.
9. Moughalu L.N. (1982). Consumer Satisfaction with Public Housing: A case study of Riverside Abakpa-Nike and Trans-Ekulu Housing Estates in Enugu, Anambra State, M.Sc. Thesis (Unpublished) Benin: University of Benin.
10. Ndubuisi, C., (2006). Art of Spirit Veneration in Benin: Olokun Mud Art Benin Socio-Political Organization, published by department of art history at the University of Wales, Aberystwyth, Ceredigion, U.K
11. Ogu, V.I. (1995). Private Sector Participation and Municipal Waste Management in Benin, Nigeria, *Environment and Urbanization*, Sage, Vol. 12 (2), 103-117.
12. Omoigui, I. (2005) How To Improve Youth Development In Edo State, a key note presentation on Excellence in Education and Culture for the New Millennium, *14th Annual National Convention of the Edo National Association of USA and Canada*, On the first report of the SFHA, (1911): (San Francisco Housing Association), vol. 13, 6.
13. Omuta, G.E.D (1988) The Quality of Urban Life and The Perception of Liveability: A Case Study of Neighbourhoods in Benin, Nigeria. *Social Indicators Research*, vol. 20: 417-440. MacMillan
14. Onokerhoraye, A.G. (1984) Urbanisation and Social Services in Nigeria, *Paper presented at a Two-day Policy Seminar on Migrations, Urbanisation and Living Conditions in Nigerian Cities, at the University of Benin*, Benin City. Vol. 12, 104.
15. Osadolor, B.O (2001). The Military System of Benin Kingdom, C.1440 – 1897, Ph.D Thesis, University of Hamburg Press, Hamburg, Germany.
16. Engel, J.F (1978). *Consumer Behaviour*. Hinsdale, Illinois: Dryden Press
17. Moughalu, L.N. (1982). Consumer Satisfaction with Public Housing: A case study of Riverside Abakpa-Nike and Trans-Ekulu Housing Estates in Enugu, Anambra State, M.Sc. Thesis (Unpublished) Benin: University of Benin.
18. Rapoport, A. (1969) *House Form and Culture*, Prentice-Hall Inc., London. UNDP Human Development reports – 2003 and 2004.
19. USAID/Rwanda, (2002), Lake Kivu methane gas triggers high hopes, available at http://www.usaid.gov/regions/afr/success_stories/rwanda.html

