

ARCHAEOLOGY AND THE STUDY OF EARLY URBAN CENTRES IN NIGERIA

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ABSTRACT This paper describes the various relief, drainage and land use systems and vegetation types present in Nigeria to highlight possible contributions of ecological factors in the evolution of urbanism in Nigeria. The paper also reviews the few historical and archaeological data available on early urbanisation in this region; thirdly, it discusses the problems of urban archaeological research in the sub-region and the role of such factors as ecology, centralized or quasi-centralized authority and interregional trade in the development of urbanism in Nigeria.

Key Words: Urbanization; Geographical information; Historical survey (oral and written); Archaeological data; Funding.

INTRODUCTION

There has been a long debate among scholars on the definition of the term, urbanization, given their different experiences from different parts of the world. The writer does not intend in this paper to go into such a debate.

Although it is generally accepted that the presence of writing and monumental architecture in the archaeological record is clear evidence of a high level of social and economic complexity (Childe, 1950; Sjoberg, 1960: 33), "it is certainly not correct to assume that increasing organisational complexity, leading to urbanism will necessarily be manifested by these two features" (McIntosh & McIntosh, 1992: 623). As pointed out by Okpoko (1987: 243), even though urbanization is a universal concept, signifying changes in man's interests, activities and values, and appearing to have been related to increasing functional specialization in human societies, its characteristics and processes of manifestations differ from place to place given the environmental and socio-cultural/political conditions peculiar to the different areas.

It should be noted that although information (oral and written) on early forms of urbanization in Nigeria is scanty and reflect mostly the economic aspect, it has been useful in locating ancient towns and in throwing some light on their sizes and functions. Written sources are more available for the savanna zone in the north, which had early contacts with the Arabs due to the trans-saharan trade, than for the forest zone in the south. Written sources for the south, for example, Yorubaland, Edoland, and Igboland, are recent and date mainly to the period of the coming of the Europeans. However, in both zones we need to make use of oral traditions, written records and ethnographic data for information on ancient towns. Hence in this study

“one may consider a pre-European settlement as urban if the particular settlement is mentioned in written records, oral sources or known through archaeological survey and excavations as being large, relatively dense and, above all dominating the neighbouring settlements in the areas of its location, in economic, social, religious and political respects” in line with Effah-Gyamfi (1987: 230). This operational definition takes into account the fact that urban phenomenon which is a product of culture should be seen and appreciated within that context (Effah-Gyamfi, 1987: 230). Making use of ethnographic, historical, oral traditional and archaeological evidence this paper attempts to demonstrate that the bulk of the early urban centres in Nigeria were not directly derived from external influences but were truly indigenous development resulting from such factors as ecology, centralized or quasi-centralized authority and inter-regional trade interacting with one another in various ways and degrees.

GEOGRAPHICAL INFORMATION

An understanding of the contrasting environmental conditions within Nigeria is useful for understanding of the relative impressive level of urban development in this country.

Nigeria comprises seven relief regions based on land units or common land form assemblages (Fig. 1):

- (i) the creeks and lagoons (which include the coastline and a strip of recently deposited sand about 10 km inland from the coastline);
- (ii) the Niger delta (mostly swamps with a few islands of solid red earth);
- (iii) the coastal plain (gently undulating and about 75 km wide in the west and wider towards the east);
- (iv) the river basin troughs (valleys created by the Rivers of Niger, Benue, Gongola, Cross, Kaduna, Sokoto and Anambra);
- (v) the inselberg landscapes which are generally undulating but marked by numerous hills and occasional flat-topped ridges; for instance, summits of the hills found north of the Abeokuta-Ibadan-Ondo axis range between 300 m and 600 m above sea level and a similar topography stretches from Kontagora to Gombe, with the Jos plateau itself covering about 8000 km². Further east the Biu plateau east of Gongola covers about 5000 km² and the inselberg topography continues to the border highlands;
- (vi) the Chad basin-areas with extensive landscape stretches from Gumel through Nguru and Maiduguri as far as Lake Chad and dropping from 300 m to 240 m above sea level; and
- (vii) the eastern highlands, chain of hills which include Bamenda Hills in the south and Mandara Hills further north culminate in the Alantika Mountains south-east of Maiduguri. The southern hills, with an altitude varying between 600 m and 2000 m form the headwaters of the Benue's southern tributaries (Akintola, 1982: 8).

“Nigeria has three distinct drainage systems—short swift-flowing coastal rivers, the inland drainage system of the Chad basin and the long plateau rivers” (Akintola,

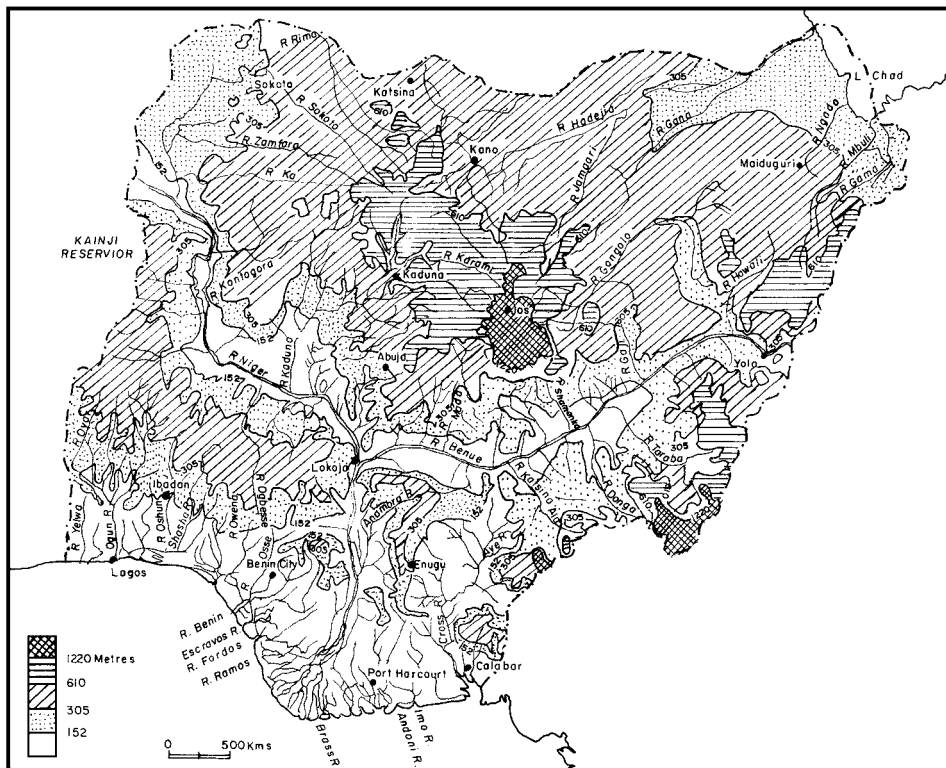


Fig. 1. Nigeria: Relief and Drainage (After Akintola, 1982: 9)

1982: 8). The coastal rivers include the Ogun and the Benue (west of the Niger), the Imo, Cross and Anambra Rivers (east of the Niger). The main inland drainage system consists of Yobe and its tributaries taking their waters from the Jos plateau to Lake Chad. This lake also receives the drainage of the Biu plateau from the Ngadda and Mbili Rivers. Nigeria contains about a quarter of the Chad basin and 10% of the Lake itself. The Niger-Benue system occupies 65% of the country while the Niger and its main northern tributaries, the Sokoto and Kaduna Rivers, flow over the Basement complex north of Lokoja (Akintola, 1982: 8).

Forest and savanna of various types constitute the two broad types of vegetations in Nigeria (Fig. 2). The forest communities which cover the southern parts of the country with mean annual rainfall of over 1150 mm are made up of the following:

- (i) coastal; forest and mangroves, found along the coastal creeks, estuaries and lagoon littoral;
- (ii) deltaic swamp forest with fresh water occurs extensively in the Niger Delta and in the flood plains of the large rivers (e.g. Ogun Forest Reserve);
- (iii) moist lowland forest, but presently high forest, is restricted to few forest reserves in Ondo and Benue areas and in the Cross River basin along the border with Cameroon; and
- (iv) forest-savanna mosaic, characterized by the “derived savanna” vegetation

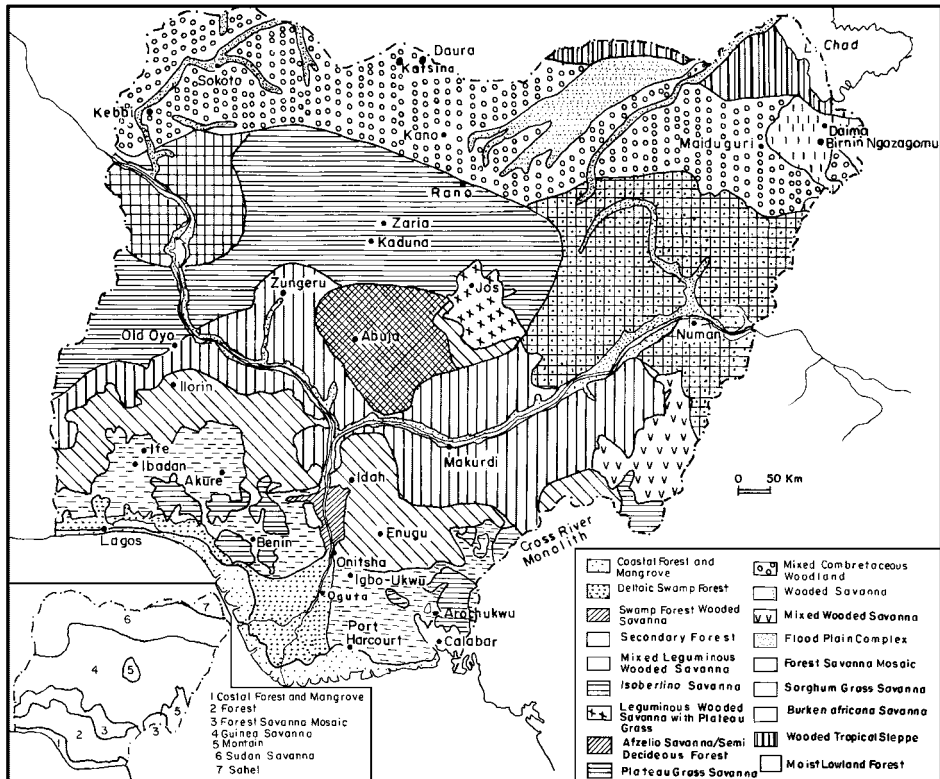


Fig. 2. Nigeria: Vegetation (After Areola 1982: 25)

varying rapidly over short distances, where “low forest, dense woodlands and thickets alternate with open tree and grass savannas” (Areola, 1982: 24).

The savanna communities comprise:

- (i) the Guinea savanna, the largest vegetation zone in Nigeria covering much of the sparsely populated Middle Belt;
- (ii) montane vegetation, found around Jos as leguminous wooded savanna and in the Mambilla plateau above 1450 m;
- (iii) Sudan savanna marked by longer and severer dry season than in the Guinea zone;
- (iv) Sahel savanna, with less than 500 mm of annual rainfall with the dry season up to nine months; and
- (v) flood plain complexes which is “a mixture of several vegetation types found on river plains including riparian forest in areas otherwise too dry, and seasonally inundated tree, grass and palm savanna regardless of latitude” (Areola, 1982: 24-25).

As seen from the above, Nigeria straddles two distinct major natural regions:

- (i) the southern forest zone succeeding the stretch of swampy, mangrove vegetation inland from the coast and occupying one third of the country;

and

- (ii) the grasslands or savannas of varying characteristics occupying the remaining two thirds (Mabogunje, 1968: 44).

But the striking feature of these two main vegetal covers is their great variety of plant species found very useful either locally or in the exchange economy. Wood, the chief product from Nigeria's forest and also to some extent from secondary forest and derived savanna zones has been and is widely exploited through out the country as timber poles, scaffolding, planks and stakes, and also as firewood or for burning of charcoal.

Some of these trees—some wild, some cultivated and some tended in semi-wild conditions—produce useful fruits, nuts and seeds. Some tree species are still exploited for their sap, tannin, latex or wax. Some leaves and herbs were and are still used together with roots and barks in medicinal preparations. The leaves of *Pandanus* spp were commonly used for making mats and baskets, and those of the palm tree used in making brooms. The raphia leaves were used for roof-thatching, rafters and brooms. A wide variety of woody lianas found in the forests were and are still used in making ropes, scouring pads, twine and cordage.

The plant communities harbour many wild animals and birds valuable as food. And the savanna belt is well-suited for the growth of wild game. Hunting has been an important traditional occupation in every part of Nigeria. Meat from bush animals accounted for a large proportion of the protein supply in the diet of the vast majority of the rural population. However, the game population of Nigeria has dwindled considerably in recent years as a result of indiscriminate killing (also see Mabogunje, 1971).

“Broadly speaking, however, land use systems in Nigeria can be correlated with the major eco-climatic zones” (Areola, 1982: 28). Lumber, root- and tree-crop production are prevalent in the humid forest region while the sub-humid Sudan savannah belt to the north specializes in grain crop and cotton production. Between these zones, the derived and Guinea savanna zones combine the grain and root-crop economies (Areola, 1982: 28). But the intensity of land use within the sub-divisions of each of the ecological zones is related to differences in soil, topography and population distribution patterns. For instance, in Onitsha-Orlu and Nsukka-Okigwe areas, pressure on land has drastically reduced the fallow period. Here soil and gully erosions are serious. The woodland of the Niger/Benue troughs are very dense because of low population and within this zone there are numerous flood plains which are intensively cultivated, with rice, millet, yams and sugar cane as major crops. Palm groves cover several thousands of kilometres of south eastern part of Nigeria while the groundnut belt covers the north-central Sudan zone which has light, friable northern drift soils and sub-humid climate favouring the crop. To the south and east are the cotton- and tobacco-growing areas. Cotton is grown on the heavy Zaria clay soils (Areola, 1982: 28).

It is possible that the land use systems and the various relief and drainage systems and vegetation types containing different kinds of resources influenced in different ways and degrees various human activities and the history of human settlements and their patterns. These settlement and activity patterns in all likelihood could also have influenced the processes of evolution of urbanism in these zones.

EARLY URBAN CENTRES—A HISTORICAL SURVEY

In the north Kanem-Bornu, as the name implies, was a two phased empire of the Kanem and Bornu. The Kanem phase had its foundation in the first millenium A.D. when the Magumi nomads are said to have united the sedentary Zagawa and Kanuri people living in the northeast of present Lake Chad into a kingdom of Kanem with its capital at Njimi. Njimi was abandoned by about the 14th century for another well-fortified capital at Ngazargamu, west of Lake Chad. This capital thrived during the reign of Mai Idris Aloma (1571-1603).

Kano was powerful enough to embark on military expansion from about 11th century A.D., and built city walls between the 11th and 12th centuries.

From 14th and 15th centuries onwards Hausaland began to be absorbed into the trans-Saharan trade system. As time went by each Hausa city saw the benefits of such trade and tried to capture strong trading centres. Zaria, for instance, was strong enough by the 15th century, under the legendary Queen Amina (said to have been the first real Hausa empire builder) to embark on military exploits and build city walls in various areas she conquered. Also by the 15th century Katsina had developed as a terminus of the trans-Saharan route and a commercial centre for the whole of Hausaland.

In the first half of the 16th century, Kebbi became an imperial power while in the second half of the same century Kwararafa rose as a strong force. Also by the 16th century, Zamfara (an agricultural city hemmed in by other powerful cities, such as Kebbi, Ahir, Gobir, Katsina and Kano) became powerful enough to extend her influence and to fight wars to the River Niger. Rivalries and conflicts between the leading cities prevented any of them from forming a virile empire. However, each of the Hausa cities performed specific functions connected with the growth and security of the various cities. Thus, for instance, Gobir, located at the fringes of the desert "served as the northern outpost of Hausaland." It guarded the whole of Hausaland against attackers, especially the Tuaregs, from the desert. "Zaria to the south was the procurer of slaves while Kano and Katsina were trading cities; Rano was an industrial centre while Daura remained the spiritual home of the Hausa" (Mabogunje, 1968: 105).

By 1517 the Igala kingdom with its capital at Idah was strong enough to engage in a major war with the Benin kingdom. Boston (1968: 7-8) dated the beginnings of the present Igala kingship at Idah between the 13th and 16th centuries.

The Yoruba in southwestern part of Nigeria and in some parts of the Republics of Benin and Togo organised themselves into many kingdoms. The most prominent among these were Oyo, Ekiti, Ondo, Ife, Egba, Ijebu, Igbomina and Awori kingdoms (Oguntomisin, 1988: 227). The Yoruba oral tradition points to Ile-Ife as the most ancient city in Yorubaland.

The Old Oyo empire was one of the largest and most powerful Yoruba kingdoms. The expansionist Oyo was resisted from the 14th century onwards by Borgu and Nupe because they feared their being absorbed into Oyo. Borgu and Nupe also feared that Oyo might take a strategic position in the trans-Saharan trade to the disadvantage of both kingdoms. The capital of Oyo was eventually sacked and the people moved to Igboho, but after a period, the rulers of Oyo returned to their former

capital and improved on their military technique and administrative machinery.

According to Mabogunje (1968: 78) the Yoruba towns grew basically as administrative centres “and over the centuries had evolved elaborate power structure and hierarchial system of administration both at the city level and the level of a kingdom.” For instance, Old Oyo empire was divided into four provinces.

The size of the Benin kingdom with its capital at Benin-city varied according to different periods as a result of conquests, dynastic connections, trade contacts and sentimental ties (Igbafe, 1977: 16).

Omoregie (1982: 7-9) identified the different independent communities as areas and streets in present day Benin City. He further claimed that the *Odionwere* system (the rule of the oldest man in a given community) underlay the political practice of these communities. The *Odionwere* held his position by age and was the supreme authority in his village — holding the spiritual, political and judicial powers. He ruled with a council of village elders, *Iko Edievbo*. The closely juxtaposed villages formed a common council, *Iko Edionwere* (plural of *Odionwere*), for the purpose of solving inter-village problems. As the *Edionwere* in the village communities formed *Iko Edionwere*, they established a medium for unifying all the thirty-one village communities of Ubini (Benin). It was a council of equals. The measures and directives were not usually very effective in all the individual communities, but such measures and directives at least laid the foundation for administering villages through councils. The oldest of them all known as *Oka Edionwere* was the head of the council. Assisting him was another *Odionwere* known as *Okaiko*. *Oka Edionwere* was usually very old and senile, so *Okaiko* took charge. When this opportunity came to Igodo—a prominent *Odionwere*—a leader in a community called Iduunwunvbioto, he transformed this leadership into the Benin monarchy.

Igodo began the *Ogiso* monarchy in pre-colonial Benin. Under him, the Benin monarchy embodying various communities was called *Igodomigodo*, meaning town of towns, as well as the land of Igodo. It is said that he removed political authority from the *Edionwere* and retained the system as a sub-ordinate authority. The pre-*ogiso* era is said to be before 900 AD, and *Ogiso* era and the establishment of the Benin kingdom is placed at around 900-1300 AD.

The Igbo communities have been generally described as acephalous, but Igbo village-group states with their capitals at Nri, Arochukwu, Onitsha, Oguta, Aboh and Osomari—have been well-studied and documented (Nzimiro, 1972; Onwuejeogwu, 1981; Dike & Ekejiuba, 1990). However, state formation was a recent phenomenon in Igbo history. Apart from Nri, these village-group states developed in the 17th century as a result of contacts with the neighbouring Igbo and non-Igbo groups and later, as a result of the trans-atlantic trade. Nri and Arochukwu in the 13th and 17th centuries, respectively, had considerable populations to visit and supervise various settlements that dotted parts of Igboland. Like the Yoruba towns, these Igbo towns grew basically as administrative centres.

PROBLEMS OF URBAN ARCHAEOLOGY IN NIGERIA

The Central Place Theory has been used by researchers to describe the nature and

function of urban hierarchies (Christaller, 1933; Losch, 1954). This theory assumes *inter alia* that “the true urban centres are those where people are employed largely in non-agricultural activities,” in an economy largely devoted to trading and other activities. “Such an economy requires that certain goods and services which cannot be provided everywhere should be made available at central places for the benefit of the population within the defined tributary areas” (Mabogunje, 1968: 137-138). But it should be noted that it was only with increased food production (resulting in food surplus) and improved distributive network that urban centres in most parts of West Africa began to concentrate on either technological or socio-political activities (Andah, 1976: 2). Even presently, “a large segment of the population of Yoruba town dwellers is engaged in agriculture” (Gugler & Flanagan, 1979: 20). Finally, the assumption of the “existence of a homogenous area of uniform population and purchasing power” does not hold for Nigeria where such homogeneity never existed (Mabogunje, 1968: 149). Therefore, as rightly pointed out by Sinclair (1987: 32), it is difficult to determine the extent to which the assumptions “underpinning the Central Place Theory developed for Europe can be projected into the mediaeval African circumstances.” In the Benin case, for instance, it is difficult to determine the central place in this region, and,

... what constitute central places for the distinct cultural phases discerned archaeologically and/or also for the different specialist activities such as food production, iron working and subsequent manifestations of metal working since such would serve as the basis for characterising the different kinds of settlements, as well as determining what “leap” or “leaps” in the record should constitute town and then urban formations (Andah, 1982: 70).

Another concept in geography very useful for archaeological investigation is the rank-size rule, which, according to geographers working in various parts of the world, holds that consistent relationship exists between the ranks and sizes of settlements in an urban system (McIntosh & McIntosh, 1992: 625). “This relationship has been observed so frequently that it is accepted as an empirical regularity; the rank-size distribution is a recurring urban signature” (McIntosh & McIntosh, 1992: 626). McIntosh and McIntosh (1992: 622-641) used this concept and its principles to effectively study urban origins in the Middle Niger of West Africa. However, this rule cannot be applied to early urban centres in Nigeria, because presently there has not been any systematic archaeological investigations in Nigeria dealing with urban origins, and most investigations so far had no regional focus. Therefore, sizes of settlement have not been discerned and cannot be ranked. Also methods used in the various archaeological investigations so far undertaken in this region differ from one researcher to another. Presently, we cannot therefore carry out efficient comparison of these sites and of a large number of assemblages/information from the different sites. Due to dearth of archaeological data, for instance, the nature and size of settlements that gave rise to the Igbo-Ukwu civilization and the Akwanshi (monolith) traditions of the upper and middle Cross River cannot be determined. Indeed such towns as Birnin Ngazargamu, Kano, Zaria, and Idah in northern Nigeria are yet to be studied archaeologically. The settlement mounds (including Daima) and the *firki* plains of Bornu, northeast of Nigeria and the burial sites/mounds associated with

these settlements need also to be investigated archaeologically. In the forest region we know very little about the several cities which were very likely associated with the Yoruba and Edo kingdoms; the Igbo, the Cross River and Delta peoples.

Urban archaeology in Nigeria, as in other parts of West Africa, also suffers from poor preservation of archaeological features and artefacts. Even the few that were preserved risk rapid destruction due to construction of new roads, bridges, and other structures.

Another major problem for archaeological investigations in Nigeria is the lack of adequate funding in the size of the fund will determine the scale and nature of the undertaking.

However, having studied critically relevant information and the few archaeological sites available I attempt here to locate these sites on a map and in their ecological zones to discuss:

- (i) the nature of transformation from pre- to early urban and latter urban settlements in terms of settlement features, and material cultural items;
- (ii) structural changes (including artifactual changes) within the settlements which may suggest changes in socio-political organisation;
- (iii) the ecological and cultural factors that the settlers responded to.

Indeed there is the need for an interdisciplinary approach for the study of urban origins and growth. As already noted, the work of geographers is a useful source of analytical techniques to the understanding of the distributional data about ancient settlement patterns (Redman, 1978: 230). Hence some models and concepts useful to urban geography are also useful to urban archaeology.

ARCHAEOLOGICAL SURVEY OF EARLY URBAN CENTRES

The few archaeological investigations undertaken in Nigeria have yielded useful information which throw light on aspects of early urban phenomena. In the savanna/grassland zone, for instance, Connah (1981) in his archaeological investigations in the Lake Chad region of Nigeria located nearly one hundred sites and identified six types of archaeological sites. These include settlement mounds, occupation mounds, flat settlements, quarry sites, burial sites and surface exposures. Test excavations have been conducted on seven sites in various ecozones and one, Daima, has been subjected to major excavation and study. This *firki* settlement site in the Lake Chad basin of Nigeria, contains evidence of occupation which spans from Late Stone Age to Iron Age. Evidence suggests that this area was occupied for almost 1,700 years duration (570 BC - 1060 AD). The people who occupied the area were most probably organised in relatively small groups. Perhaps the only early urban centre in the northeastern part of Nigeria studied archaeologically to some extent is Birnin Ngazargamu (the seat of Bornu empire) founded in 1470 and abandoned in about 1809, after its destruction by the jihadists (Connah, 1981: 220-236). Archaeological investigations and aerial photography reveal that of Birnin Ngazargamu was a flat area about 2 km across and "enclosed by a large earthen rampart about 7 km-high which had five entrances." Foundations of fired-brick buildings have been found, consisting of a central complex thought to have been the

palace of the *mais* (kings). Smaller structures were inside the enclosure. These smaller structures were scattered throughout the area and Connah suggested that they were the residences of other leaders (Connah, 1981: 220). The pock-marked appearance of the site from the air according to Connah (1981: 229) suggests that the inhabitants of the site lived in wood, corn-stalk and grass structures. However, the palace site at Birnin Ngazargamu is made up of slightly elevated area covered with bricks, well-fired to a red colour, which appear to have been made in moulds to some pre-determined standard size. "The palace seems to have consisted of a number of brick walled enclosures rather than buildings in the strictest sense: the area enclosed are mostly too large to have been roofed and presumably contained buildings of more ephemeral materials" (Connah, 1981; 232).

The Center for Nigerian Cultural Studies of Ahmadu Bello University, Zaria, has sponsored important studies of some early urban centers in the northern parts of Nigeria. The investigations focused only on one prominent feature, the walls, which were built for defense. Attention has not been paid to construction style, layout and evolution nor to the cultural materials of the wall-builders; that is, not much work has yet been done to combine the work on the walls with the investigations of the cities they encompass (Effah-Gyamfi, 1986; also see Obayemi, 1975; Sutton, 1975). Effah-Gyamfi later began an archaeological project on ancient sites Kaduna, Sokoto and Kano States in late 1978 "to find out to what extent the ancient urban sites in these states are related both in time and space." Due to logistic problems he selected Turunku as a case study in the Kaduna state; Rano in Kano and Birnin Kebbi for Sokoto states. Effah-Gyamfi later admitted it was too early to draw any conclusions about the evolution of the features and objects studied in Turunku without studying such parts in and around New Turunku and the adjoining hills (Effah Gyamfi, 1986).

Not much archaeological work has been done in Igalaland. After the excavation of Ojuwo Ata Ogu mound at Idah in 1966 by Steve Daniels, the present writer carried out archaeological investigations in Idah in 1980 and located five mounds, including Oketekakini.

The two radiocarbon dates obtained from Ojuwo Ata Ogu site range between the 13th and 16th centuries, while available evidence from the smoking pipes suggest that the Oketekakini site dates between the 17th and 19th centuries, at least tentatively (Okpoko, 1984: 21-39).

Ojuwo Ata Ogu mound was said to have been built by a female Ata-Ebelejonu - to oversee her subjects. It should be noted that Ebelejonu was one of the first four Igala royal ancestors, whom Boston (1968: 7-8) described as proto-dynastic ancestors "who were not sharply differentiated from each other." As already pointed out, Boston (1968: 7-8) placed the date of the beginning of the Igala kingship between the 13th and 16th centuries. These dates correspond with the dates from Ojuwo Ata Ogu, the earliest archaeological dates so far obtained in Igalaland. We can then rightly assume that by the 13th century indigenous processes of social stratification and urbanism were present in Igalaland and one of the factors that stimulated such processes was the ability of the Igala to exploit the available upland and riverine resources in the valleys of Rivers Niger and Anambra.

In Yorubaland, in the southwest forest region of Nigeria, detailed archaeological researches have so far been restricted to Old Oyo and Ife. Old Oyo lies within longi-

tudes 40 26 - 40 21 E and latitudes 80 56 - 90 03 N. It is within the southern Guinea savanna zone of Nigeria. The site was the former capital of Oyo Empire and it was abandoned about 1837 as a result of Fulani jihad of the last century. Before this jihad, the capital used to be known as Katunga by the Hausa. Since its abandonment it has never been re-occupied. It is now a Game Reserve.

Although professional and amateur archaeologists and various historians visited and commented on Old Oyo, the first archaeological investigations of this city were carried out by Willet between December 1956 and January 1957. Willet recognised two pottery traditions at Old Oyo: the Diogun style and another style which Soper later called Mejiro. Willet also recognised the artisan's mark on some of the dye vats recovered from his excavation. This mark was identified with the ones he later found at Ilorin, thereby confirming the historical relationship between Old Oyo and Ilorin. Finally, Willet recognised the occurrence of a Late Stone Age microlithic industry (Willet, 1962: 261-272) which was overlain by Yoruba occupation materials mentioned above.

Soper carried out archaeological investigations of Old Oyo from 1973 to 1979. He and Darling reconstructed from their findings a good and complete map of Old Oyo wall system. The circumferences of lengths of the walls were as follows: Wall 1: 7.5 km; Wall 2: 18 km; Wall 3: 12 km; Wall 4: 16 km; Wall 5: 6 km; Wall 6: 16 km. The areas enclosed by these walls were as follows: within wall 1: c.235 hectares; within Wall 2: c.2010 hectares within Walls 3/4 c.2975 hectares; between walls 6 and 2: c.2155 hectares; between Walls, 2, 5 and 6: c.615 hectares. The only surviving remnants of a free-standing wall were parts of wall 6.

The early occupation of the site by the makers of Diogun style pottery preceded the entire existing wall system. Wall 1 seems to be primarily a palace enclosure, rather than early town wall, defending the first nucleus of the city; Wall 2 appears on the present evidence to be the earliest 'City' wall; Wall 5 appears to be a contraction of the northern loop, and Walls 3/4 a further contraction on this side coupled with an additional line of defence beyond Wall 2, suggesting an abandonment of what ever policy motivated Wall 6—consolidation of the defence of the city proper. The relative dating of Wall 5 vis-avis Wall 3/4 is not directly deducible. At the final phase of defensive activity it was Wall 2 which provided the major line of defence, probably in the form of a deep ditch and relatively low bank (Soper & Darling, 1980: 60-81).

Soper's excavations also confirmed

- (a) Willet's pottery typology that Diogun style probably preceded (1100 ± 110 A.D.) the Mejiro style (1300 ± 80 A.D.) and
- (b) the relationship between Old Oyo and Ilorin by the recovery of vessel types akin to the ones at Ilorin today with similar artisan's mark. But the presence of maize-cob roulette impression on some of the potsherds and smoking pipes recovered at a plateau area north of Oke-Arin gives an additional post 15th century date (Agbaje-Williams, 1983: 6-13). Soper also located the palace reservoir, 'a large depression of about 100 metres in diameter and probably with a capacity of two million gallons' (Soper, 1975).

Agbaje-Williams carried out archaeological investigations of Old Oyo from 1979-

1983. He exposed most of the surface materials within the sixty square-kilometers of the ancient city and determined the range and distribution of archaeological features. He also examined “those features which were considered to contain useful demographic and archaeological data” (Agbaje-Williams, 1983: 136). He estimated the population of Old Oyo in 18th century as 60,000 to 140,000.

In 1981, Agbaje-Williams excavated four selected sites. Analysis of the sherds from these sites also indicated that ceramic tradition of Old Oyo differed from that of Ife, hence, the need to reconsider the nature of the relationship between Ife and Old Oyo (Agbaje-Williams, 1983). He obtained four radio-carbon dates from his excavations: 1185 ± 90 B.P. (765 ± 90 A.D.); 1160 ± 90 B.P. (790 ± 90 A.D.); 900 ± 80 B.P. (1050 ± 80 A.D.); 810 ± 80 B.P. (1140 ± 80 A.D.), thereby pushing the culture history of Old Oyo to 8th century.

Fagg (from 1953-55) and Willet (from 1956-61) studied the Ife walls, but a thorough exploration of the town in search of earth works by Ozanne (1969) revealed that a most complex wall system of the medieval period underlay the 19th century defences.

According to Ozanne (1969: 31), the archaeological evidence indicated that there were “three distinct main periods in the growth of Ife”:

- (i) the Early Ife which “was simply a scattered cluster of hamlets; traditions count them as thirteen”;
- (ii) the Medieval Ife—defined in the building of the first wall—most certainly the inner one. According to Ozanne (1969: 32), “the communities packed in these areas must have had a more elaborate social structure than those of the autonomous hamlets of early Ife. The fact of building a wall indicates a single though segmented polity, in which relations must have been very carefully ordered.” Charcoal recovered from the Medieval layers at Ita Yemoo have produced dates of 960, and 1060. If these dates are reliable, the charcoal may have been relics from an early stage in the town development. However, other pavements contained sherds with maize impressions. Maize was certainly not introduced to West Africa before the sixteenth century, so it is likely that the medieval town may still have flourished in the 17th century;
- (iii) finally, the modern town of Ife is most unlikely to be older than 1600/1650. “There is some degree of continuity between the medieval and modern towns. The former must have survived well into the 16th century and even perhaps into the mid-17th century” (Ozanne, 1969: 32).

Apart from the work of Ozanne the archaeology of Ife was also undertaken in broader historical perspective by Willet (1960), Eyo (1974), Garlake (1974) and Eluyemi (1992).

Since 1897, historians, ethnographers and anthropologists have contributed to the understanding of the culture history of ancient Benin. It was, however, in the mid-1950 that the first excavation was undertaken in Benin by the late A.J.H. Goodwin. He located the Clerks' Quarters site but failed to locate the legendary palace of the *Ogiso* (King). After Goodwin, both Willet and Ciroma carried out rescue excavations in Benin in 1959 and 1960 respectively. In the 1970's Darling studied the wall complexes in the Benin environs. Connah,

who worked through the 60's has conducted the most extensive archaeological investigations of Benin city and environs to date. Even though Connah's work in Benin was meant clearly to be salvage, it is very much a testimony to his ingenuity and ability that it turned out to be more than salvage in both conceptualization and scope of execution (Andah, 1982: 63).

Connah (1972: 27), excavated four main sites in Benin: the Benin Museum dated by radiocarbon to 1305 ± 105 A. D.; Clerks Quarters dated to 1180 ± 105 A. D. and 1310 ± 90 A. D. (Daniels statistical calculations gave maximum likelihood estimate of 1255 A. D.); two places in the innermost of the earthworks (charcoal from beneath the wall with a radiocarbon date of 1340 ± 105 A. D.) and the Usama (a place site of the early Obas of Benin) with a radiocarbon date of 1500 ± 105 A. D.

Connah also identified walls found to comprise a complex network of linear earthworks, which he believed to be older than the innermost wall. He thought that the walls suggested a manner in which the city came into being; "a process of slow fusion of scattered villages having allegiance to a central authority till Oba Ewuare in the 15th century constructed a true urban unit with a formal urban defence" (1972: 33). Connah further inferred from the essentially meandering character of the outer-walls that they were agricultural boundaries rather than military defences as is the case with the innermost wall. The defensive wall according to him, required a considerable labour organised under a centralised government, such as of Oba Ewuare, the Great (Connah, 1972: 33). Egharevba (1960) estimated from oral tradition that this inner city wall was constructed at about 1460. Interestingly, as mentioned earlier, a charcoal sample from beneath the wall gave a radio-carbon date of 1340 ± 150 A. D. (Connah, 1975a: 32). This agreement of the radiocarbon date with oral tradition and historical sources makes the middle 15th century a plausible date for the construction of 'this huge earthwork' (Connah, 1975b: 49). Also tradition has it that Oba Ewedo moved the palace from Usama to an area in the centre of Benin city, known as Clerks' Quarters in about 1255. And in apparent agreement, four radiocarbon dates from earliest deposits in the Clerks' Quarters point to around middle of the 13th century (Connah, 1972).

Connah has been able to outline a sequence of Benin cultural history from about the 13th century onwards. His work, however, has not thrown much light on the evolution of settlement in Benin and the related areas. Although we do not know presently when iron was first used in Benin area, evidence from Taruga in the Jos plateau region suggests that iron was used in the savanna areas of Nigeria as far back in time as 5th century B. C. Dates from Nsukka area in the forest zone also span from the 5th to the 2nd centuries B.C. (Okafor, 1992: 437). It should be noted that the material cultures of ancient Igbo-Ukwu, Ife and Benin development, represent high points of Iron Age development. Given iron tools and weapons the forest would be made to yield great wealth (Connah, 1975b: 248). Although the skill of the metalworkers of ancient Benin is well known, excavation revealed elegant bronze bracelets made possibly as early as 13th century and iron knives most probably of similar date with a 'distinctive Benin shape.' The versatility of Benin's metal craftsmanship was revealed by the presence of such objects as nails, tack and staples (Connah, 1975b: 251). The archaeological evidence also suggested the use of oil

palm nuts possibly as early as the 13th century. Also by 13th century, there is evidence that a similar iron saw capable of cutting timber as hard as iroko was in use. The information also derived from the charcoal suggests that hardwood in general were exploited from an early period. Also important are the implications of the possibly 13th century cloth fragments that were excavated from the Clerks. Quarters identified by a leading textile research institute in Britain. The report of the institute as quoted by Connah maintains that “from the accuracy and precision with which the yarns and fabrics were made, and the intricacies of the patterns, it seems certain that they were made by skilled craftsmen of a fairly advanced civilization” (Connah, 1975b: 251). Therefore by the 13th century, Benin was already at a very high level of technology—the incipient stage of this technology may date to antiquity. The development of complex society in Benin with its attendant growth of urbanization, technological, social and religious organization suggests that the first occupation of Benin environs dates to ancient times. As correctly noted by Connah (1972, 1975a: 245), “the emergence of Benin, however, resulted basically from a highly successful exploitation of their environment by an iron-using people.”

Finally, “the survival of ground stone axes in Benin ritual, and their copying by Benin ‘bronze-casters’ suggest that the area may well have been inhabited since Late Stone Age times” (Connah, 1972). It should be noted, however, that Shaw’s findings at Iwo Eleru near Akure, (about 170 kms from Benin) has demonstrated that about 11,000 years ago (Late Stone Age period) man was already living in the rain forest of southern Nigeria (Shaw & Daniels, 1984). Ground stone axes are relatively common in this zone. Connah (1975b: 247), therefore maintained that ground stone axes used in Benin rituals should be studied against this background. He also suggested that man inhabited Benin during the Late Stone Age period, and by at least 3000 years B.C.

Shaw in 1959-60 and 1964 excavated three sites at Igbo-Ukwu in the forest zone of south eastern Nigeria. They were “a store house of regalia” (Igbo Isaiah); a burial chamber/shrine and a cistern (Igbo Richard) and pits. These sites date to the 9th century.

Shaw (1970; 1983) and Onwuejeogwu (1981: 162-170) associate the Igbo-Ukwu finds with the institution of *Eze Nri* (priest king of Nri) which is still present at Nri and Oreri.

Shaw (1970: 284-5), was of the opinion that Igbo-Ukwu was a part of the trans-Saharan trading network as far back as the 9th century. He suggested that the wealth exhibited at Igbo-Ukwu was based on the export of ivory, slaves and kola-nuts to the north, and copper and other necessities for bronze casting, beads and probably cloth were received in return. Afigbo (1971: 205-18) agreeing with Shaw, wrote that by the 9th century A. D. a large portion of Igboland was already the scene of highly artistic culture—a culture which derived its sustenance from an economy based partly on food production and partly on wide-ranging commercial contacts.

The Onwuejeogwu (1977) have, however, suggested relatively local sources (Abakaliki, Afikpo, Calabar areas and Benue trough) for the raw materials used in the manufacture of the bronze objects. Chikwendu and Umeji (1979) support them. Whatever be the case, much of these trading connections and technological development in Igbo-Ukwu and related areas by the 9th century can be properly

explained in the context of indigenous processes of trade expansion, social stratification and urbanism (McIntosh & McIntosh, 1981: 602-611).

DISCUSSION AND CONCLUSION

From the above geographical, historical and archaeological evidences emerge three main factors of ecology, centralized or quasi-centralized authority, and inter-regional trade that interacted in different ways and degress to promote early urbanization in Nigeria. Some geographers argue that the rise of urbanism in the Nigerian Sudan zone, as in the Western Sudan as a whole, can be attributed to “the extensive open grassland country which, apart from being climatically healthy and agriculturally productive offered great scope of unobstructed human movement and organisation.” And as a result, inter-regional and international trade flourished in this zone in the medieval period and led to the rise of various kingdoms and empires. Areola (1991: 200-201) wrote that “the stability provided by these economic and political developments facilitated the rise of urban centres such as Katsina, Kano and Zazzau (Zaria).”

Erim (1994: 103-104) has also argued that the ecology of the Middle belt of Nigeria evidently influenced the emergence of urbanism and state formation among the Igala, Idoma and Nupe from about the 13th and 17th centuries. This is because the ecology of the Middle belt region helped in the production of abundant food supply which encouraged specialization of occupation and long-distance trade.

In Igboland, Arochukwu, probably from about the 17th century, rose as an urban centre due to its important location in the Cross River region as “a focal point of trade between hinterland producers and the coastal traders.” The founders of this settlement, the Akpa, exploited and developed the indigenous resources and institutions of pre-Akpa inhabitants to generate the surplus which produced and sustained the Aro system (Dike & Ekejiuba, 1990: 35-36; 56, 94-129). Onitsha, Aboh, Oguta and Osomari also came into prominence as urban centres around the 17th century because of their strategic location along the Niger where they exploited the land and riverine resources and from where they controlled inter-regional trade with their nearby and distant neighbours, and, later, the trans-Atlantic trade with the Europeans (Nzimiro, 1972: 1-19).

The ecology of south western Nigeria is quite suitable for agricultural activities. For instance, the extensively cultivated high grasslands of Yorubaland with largely sandy loams, produced and still produce such crops as yam, cassava, maize, beans, cotton and tobacco. Food surplus would have encouraged occupational specialization and trade. “Trade based on agriculture and craft production was thus a major element in the (rise and) survival of Yoruba towns” (Mabogunje, 1968: 79). And as already pointed out, the emergence of Benin resulted basically from a highly successful exploitation of the environment by iron-using people (Connah, 1972: 37).

Another factor relevant in the development of urban centres in parts of Nigeria is centralized authority. In Benin, according to tradition, Igodo began the *Ogiso* monarchy (900-1130) and removed political authority from elders, and bringing the various communities under his control. In the 14th century a defensive wall was

built around Benin. This defensive wall, according to Connah (1972: 33), required a considerable labour force organised under a centralized government.

In Yorubaland, according to Mabogunje (1968: 76), “towns arose largely as a form of ‘colonial settlements’ among indigenous peoples.” These Yoruba towns grew out of conscious attempts by the dominant group to “control the unorganised mass of aborigines found in the region. Present in the history of many of the towns are references to numerous hamlets and villages being forced to break up and move into the town” (Mabogunje, 1968: 76). This tradition continued into the early 19th century when the present Oyo town was founded. To achieve this, most of the inhabitants of “several of the surrounding towns and villages within 16 to 32 kilometres of the town ... were forced to move into the new town” (Mabogunje, 1968: 76-77, Johnson 1921: 281).

Njimi, the first capital of Kanem-Bornu empire developed into an urban centre as a result of the incursions of Magumi nomads into the northeast of present Lake Chad. These nomads united and brought under one political control the Zagawa and Kanuri peoples. With robust agricultured specialization and trade, they expanded territories through warfare. Later, in the 14th century, Birnin Ngazargamu, became the capital of Kanem-Bornu empire which reached its apogee in the 16th century.

Each of the Hausa towns over time tried to develop centralized authority to organize its peoples socially, politically and economically. Each of these towns engaged in territorial expansion through warfare. Cohen, (1978), built a thesis on the origins of city and state in pre-colonial times with special reference to Northern Nigeria, a thesis which Andah (1982: 67), believes may hold true for the beginnings of some cities and states in northern Nigeria. This thesis, as summarized by Andah (1982: 67), asserts,

that small autonomous villages compacted and swelled in numbers behind large earth works built for defensive purposes. Once this occurred the most common form of pre-state dispersed settlement, through community fusion, became nucleated. Members of these larger communities gave up farms near their own household, lived closer to one another, experienced more disputes and increased their reliance on leadership for settlement of disputes. This produced strong pressure on the leaders to specialize and they ultimately differentiated into a titled nobility under a monarch and his royal court.

In Idomaland, for instance, true states (urbanism) emerged in Igumale and Agila between 1600-1700. Evidence suggests “that the peopling of these states was a slow process during which two ruling families came from Idah in the west and Kwararafa in the east” and succeeded in wielding the heterogenous elements within each of these states into a single state system with complex political structure and its resultant urbanism (Erim, 1994: 105). The same also held true amongst the Igala whose indigenous population, consisting of a number of moities each under its own patriarch in the early days of their histories, was brought under one centralized authority from about 13th-16th centuries (Erim, 1994: 107).

Finally, it should be noted that although the trans-Saharan trade played a significant role in the rise of cities and states in parts of Northern Nigeria, it is not yet easy to determine its role in the rise of towns and states in parts of southern Nigeria

(Yorubaland, Edo land, Igboland, etc). It is also not clear how far the trans-Saharan tradition with its economic inspiration led to the rise of urbanism in Kanem-Bornu areas. For instance, even though “northern Nigeria derived some economic inspiration from Songhai empire in the west, it was also strongly influenced by the Kanem-Bornu empire in the east” (Mabogunje, 1968: 50).

Also information from travelogue and the Kano chronicle suggest that the involvement of both Bornu and the Hausa states in the international commerce across the desert appears to have been somewhat later than in areas farther west. This seems to suggest that inter-regional trade was very effective in this zone (Bornu-Hausa states) before it was absorbed into the trans-Saharan trading network from about the 14th century. Therefore, it is possible that inter-regional trade brought about the rise of many urban centres in northern Nigeria even though we have rather limited information about them. The Kano chronicle only mentions city formation in parts of northern Nigeria in the 14th-15th centuries with roads built from Bornu to Gwanja in the early 15th century and camels first used in Hausaland during this period (Mabogunje, 1968: 54).

Like in Bornu and Hausaland, inter-regional trade was also well organised in other parts of Nigeria for exchange of goods/services, and trading activities contributed significantly to the rise of urban centres in these various areas. Amongst the Yoruba, for instance, there were periodical markets where exchange of goods and services took place between people of one locality or nearby localities. There were also inter-kingdom markets where people of different kingdoms were brought together for business transactions but with intervals of once every eight days.

There are some evidence that trading relations had developed between Yorubaland and Benin Kingdom and between Yorubaland and the northern parts of Nigeria long before the advent of the British (Mabogunje, 1968: 74-77). Most probably from about the 13th-15th centuries the Benin had trading relations with the Igbo-speaking areas west of the Niger. By 1517, for example, the Benin and Igala engaged in a major war probably in an attempt by each of the kingdoms to control west Niger areas and their trading networks.

Amongst the Igbo, trading activities became “ritualized by associating markets with the supernatural beings called *Eke*, *Oye*, *Afor* and *Nkwo*,” and such activities permeated all parts of Igboland. Historical and archaeological evidences show that at least from about the 9th century the Igbo traded with their nearby and distant neighbours as far as the Benue trough through numerous intermediaries (Onwuejeogwu, 1981). Such trading connections can also be explained in the context of indigenous processes of social stratification and urbanism.

Much archaeological researches are yet to be done from both local and regional perspectives to understand the character and nature of early urban settlements and changes through time and space; and to understand in greater detail, the role of such specific factors as food production, ecological and cultural/historical settings (including rituals and religion) and types of economic activities which made possible the emergence of urban settlements in this sub-region.

For such programmes of research to succeed, there is much need for long-term collaboration between archaeologists and other scholars from related disciplines, such as anthropology and sociology, history, and urban geography, I suggest that

Nigeria should be divided, for convenience, into distinct ecological zones to be thoroughly and systematically investigated. Finally, serious efforts should be made to solicit funds and relevant equipment from universities, other government agencies, private sectors and international organisations. But before this, efforts should be made to educate government policy makers and developers on the urgency for archaeological researches in this area before artifacts are completely destroyed by developmental projects and vagaries of nature. Such education is necessary to illicit moral, financial and material support necessary for proper and smooth investigations.

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