

Population Challenges And The Nebulous Architecture Of Abuja, Nigeria: The Problem Of Abuja, Nigeria

Obiadi Bons N., Nzewi N. U.

Abstract: Abuja has not been considered as a thing in itself because the inhabitants have not perceived the city as a place to live and meet life obligations. The architecture of Abuja has gone through changes from the original interest of the Master Plan of the city. The Abuja urban actors have not worked to create different urban models, using the basic urban elements of enclaves, armature and heterotopia. It has not occurred to them, that, a beautiful and delightful city environment is an oddity, some would say, an impossibility because of the poor implementation of the Abuja Master Plan and the use of nonprofessional in the execution of the principles of the Master Plan. These resulted in slum settlements within the Central City area, inadequacy of housing, a greater population of the inhabitants are without decent places to live and resorted to living in make-shift homes, the architecture of the urban poor, in Abuja.

Keywords: Architecture, population, urbanization, development, housing, economy, communities, growth

Introduction

Drift in Architecture and Urban Planning. A global perspective tells the story of this global shift and transformation, highlighting the role of architects, urban designers, planners and their clients: central government, local governments, communities, non-governmental organizations (NGOs), developers and world institutions in city planning and development (Shane, 2011: 12). This is accomplished through the urban actors and the urban actors adopt urban design models and elements to achieve that goal in city planning, development and transformation. The first theme (model), in city transformation is that, the urban actors need to cooperate not only in building the city, but to maintain and regenerate it, to modify and transform it. Cities are about people living together, and this requires organization and skills in managing the affairs of the local community and larger city (Shane, 2011: 14). According to Shane (2011), as cities have grown, so has the need for organization that leads to the second theme of cybernetics: urban modeling and self-organization. This enables the urban actors to process far more information than before, looking for self-organizing, interactive patterns and emergent conceptual models in the complexity of cities in the 1960s. The third thread in this story of urban transformations is the idea that urban actors manipulated a limited set of urban elements in building their urban models and cities. The three important urban elements employed by urban actors in constructing cities are enclaves, the armature and the heterotopia.

Enclave is a more or less bounded space like a field in the countryside, a piece of urban property with a wall around it or an open space like a square at the center of a city surrounded by buildings (Shane, 2011). Enclave, a part of a country entirely surrounded by foreign territory: viewed from the position of the surrounding territories (Collins, 2012). An armature is a linear spatial organizing device, like a street or highway with sequential, numbered houses or axis. Urban actors often use armature as the approach to an enclave, to cut through enclaves or as the link between two attractors (Shane, 2011). The concept of "urban armatures," referring to any set of main streets, plazas, and major public buildings linked by means of arches and fountains that connect one end of the city with the other, has been chiefly analyzed in central and western Roman contexts (MacDonald 1986). Before MacDonald's study, the prevailing viewpoint held that Roman city planners in the Republican period and into the Augustan age imitate Greek models based on rigidly orthogonal axes (e.g., Ward-Perkins 1974). In contrast, MacDonald stresses the innovativeness of Roman cities in their organically-generated urban armatures. The prolonged development and additive nature of these urban armatures contrast starkly with customary notions of theoretical city planning. Instead of following a strict gridded plan, this theory demonstrates how a flowing spatial unity pulls strolling pedestrians along from city gates to all-important forum complexes in the city center, easing the transition from one region to the next. The traditional way of studying and visualizing a city's urban development uses multiple diagrams denoting public buildings, communal spaces, and residential areas present in a given period (Ratté 2008). Figures 1.0 and 1.1, looked at two different models of urban armatures and how city actors manipulate the spaces for the comfort of the users.

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Figure 1.0.Edmonton, Canada Redevelopment Plan's Armature

Source: Google (September 26, 2015)



Figure 1.1.Michael Van Valkenburgh Associate Inc's Project Image (vvainc.com)

Source: Google (September 26, 2015)

Heterotopia is a specialized urban element, an enclave that has multiple interior subdivisions that can hold conflicting urban activities in the same place at the same time (often in section). It is an important place for urban experimentation and change, handling non-conforming urban activities and contributing to the overall ability of the city through its capacity to host change (Shane, 2011). Shane (2011) further indicated that heterotopia was borrowed from French philosopher, Michael Foucault's writing that pointed at prisons, hospitals, clinics, asylums and courthouses as heterotopias of deviance that help to give birth to modern city by removing people who were ill, could not work or did not fit in the city, accelerating the shift to modern, efficient industrial society. Throwing more light, Foucault (1979) indicated that, heterotopia is a concept in human geography to describe places and spaces that function in non-hegemonic conditions. These are spaces of otherness, which are neither here nor there, that are simultaneously physical and mental. Over the years, a dazzling variety of spaces have been explored as illustrations of heterotopia, including: Arab-Islamic architecture, environmental installations, libraries, museums, Masonic lodges, early factories, gardens, performance prototypes, women's colleges, landscapes, gated communities, Buddhist sites, band rooms, pornographic sites, cybercafés, shopping malls, burial sites and the body of the vampire (Foucault, 1979). The fourth thread the urban actors used in city transformation involves the ability of urban actors to reflect on their work, reorganize elements and transform models to fit local circumstances and time. This ability to reflect,

adapt, discuss and change is very important to the continual creation of new urban forms and the adaptive reuse of older ones. According to ArchDaily (2014), design in architecture and urbanism is guided by two distinct complementary languages: **a pattern language**, and **a form language**. The **pattern language** contains rules for how human beings interact with built forms – a pattern language codifies practical solutions developed over millennia, which are appropriate to local customs, society and climate. A form language, on the other hand, consists of geometrical rules for putting matter together. It is visual and tectonic, traditionally arising from available materials and their human uses rather than from images. Different form languages correspond to different architectural traditions, or styles. The problem is that not all form languages are adaptive to human sensibilities. Those that are not adaptive can never connect to a pattern language. Every adaptive design method combines a pattern language with a viable form language; otherwise it inevitably creates alien environments (ArchDaily, 2014). ArchDaily (2014), further states that architectural design is a highly complex undertaking. Heretofore, the processes at its base have not been made clear. There have been many attempts to clarify the design process, yet we still don't have a design method that can be used by students and novices to achieve practical, meaningful, nourishing, human results. In the absence of a design method and accompanying criteria for judging a design, things have become very subjective, and therefore what is built today appears to be influenced largely by fashion, forced tastes, and an individual's desire to garner attention through novel and sometimes shocking expressions. The pattern language codifies the interaction of human beings with their environment, and determines how and where we naturally prefer to walk, sit, sleep, enter and move through a building, enjoy a room or open space, and feel at ease or not in our garden. The pattern language is a set of inherited tried-and-true solutions that optimize how the built environment promotes human life and sense of wellbeing. It combines geometry and social behavior patterns into a set of useful relationships, summarizing how built form can accommodate human activities (ArchDaily, 2014). ArchDaily (2014) indicated that, the importance of a pattern language for architecture was originally proposed by Christopher Alexander and his associates. A fairly general pattern language was discovered and presented by Alexander, who emphasized that, while many if not most of the patterns in his pattern language are indeed universal, there actually exist an infinite number of individual patterns that can be included in a pattern language. Each pattern language reflects different modes of life, customs, and behavior, and is appropriate to specific climates, geographies, cultures, and traditions. It is up to the designer/architect to extract specific non-universal patterns as needed, by examining the ways of life and tradition in a particular setting, and then to apply them to that situation and would apply to the urban poor settlements in Abuja, in Sustainable Spatial Housing Design, retaining and spatially integrating the settlements with the Capital City infrastructure. Living architecture is highly dependent on patterns, which shape buildings and spaces accordingly. A pattern is a set of relationships, which can be realized using different materials and geometries. Architects, however,

confuse patterns with their representation, i.e. what an arrangement looks like. Patterns are not material, though we experience them with our senses. It is far more difficult to understand them intellectually, and almost impossible to grasp patterns from within a world-view that focuses exclusively on materials (ArchDaily, 2014). Pattern languages have evolved, and, as with all evolved system, they have developed an extraordinary degree of organized complexity. It is not possible to understand all this complexity, let alone replace it by a design method based on deliberately simplified rules. And yet, that has been the basic assumption of twentieth-century architects: that we can simply replace all the evolved architectural solutions of the past with a few rules that someone has made up (and which don't even have the benefit of experimental verification). The form language, on the other hand, is strictly geometrical. It is defined by the elements of form as constituted by the floors, the walls, the ceiling, the partitions, and all the architectural components or articulations, which together represent a particular form and style of building. A form language is a repertoire of forms and surface elements that can be combined to build any building, and so it represents more than just a superficial style. The form language depends on an inherited vocabulary of all components used in the assembly of a building; rules for how they can be combined; and how different levels of scale can arise from the smaller components. It is a particular and practical conception of tectonic and surface geometry. One extremely successful form language, the "Classical Language" relies on a wide range of variations of the Classical style of building based on Greco-Roman ancestry (ArchDaily, 2014). After centuries of Classical buildings, even with varied and successful adaptations to local climates, conditions, and uses, the Classical form language remains intact. Every traditional architecture has its own form language. It has evolved from many different influences of lifestyle, traditions, and practical concerns acting together to define the geometry that structures take as the most natural visual expressions of a particular culture. A form language is a set of evolved geometries on many different scales (i.e. ornamental, building, urban) that people of a particular culture identify with, and are comfortable with (ArchDaily, 2014). In Abuja, Nigeria, the reverse is the case. According to ArchDaily (2014), every traditional architecture has its own form language. It has evolved from many different influences of lifestyle, traditions, and practical concerns acting together to define the geometry that structures take as the most natural visual expressions of a particular culture. Abuja has not had a particular architecture not to mention and known, environmental development direction. In 1975, the idea to transfer the capital of Nigeria from Lagos to Abuja was conceived. Subsequently, Abuja became the capital of Nigeria and the relocation process was stamped, contrary to the environmental development conditions and development policies of the established Abuja Master Plan. The stamped relocation of the Nigerian capital city from Lagos to Abuja already created the dislocation of Abuja Master Plan implementation. Subsequent to this, is the lack of adequate urban infrastructure, facilities and amenities for the relocated population. These, accompanied by rapid urbanization resulted in spontaneous growth of slums, shanty towns and

ghetto settlements in the city center and surrounding territory. These informal settlements are partly of the original indigenes and partly settlers, who were cut up by urbanization process. The situation is heightened by demolition exercises especially, during the Mallam Nasir el-Rufai administration of the Federal Capital Territory, from 16 July 2003 to 29 May 2007 and steady influx of migrants which cumulatively have resulted in greater population having no housing and sustainable residential environment, and the formal areas being invaded by the informal urban dwellers (Obiadi, 2017). The inadequate development of the city, coupled with the distortion in the Master Plan implementation gave rise to:-

- (a) Spontaneous emergence of informal settlements especially, within the Central areas of the city. A situation which predominates up till date.
- (b) Urban spatial distortions
- (c) Unplanned and undeveloped City Center periphery, an attempt to remain within reach to place of work by the urban poor.

As the urban poor was now seen to be housed (settle or squat) in areas not meant for them. It was then that the Federal Capital Development Authority started demolition of houses of the urban poor settlements, who now, moved to the planned, but undeveloped areas within the City Central Area periphery. They have done these as they derived their livelihood from jobs offered within the Central City areas; be it public or private jobs (Obiadi, 2017). This is as noted by Uji and Okonkwo (2007), that the urban poor are people, "frustrated by the inadequacies and failure of the conventional approaches to provide urban shelter and services to a significantly large enough proportion of the poor in the urban areas of the developing nations, these ever-increasing class of urban populations have to resort to squatting on public or private land, either by invading and forcefully occupying or leasing such land (illegally subdivided) on which they hurriedly construct (through self-help) their shelter from any available materials using any readily affordable and available technology."

The aims of this work

This work aims at focusing on the challenges of Abuja architecture by urban population increase, the development of urban poor settlements because of inadequacy of housing, making the urban poor settlements meaningful within the urban spatial equilibrium: management of architecture and space. According to Hiller (1996), the relationship between human beings and space was, at a deep level, governed by two laws: laws of spatial emergence, by which the larger-scale configurational properties of space followed as a necessary consequence from different kinds of local physical intervention; and laws of generic function by which constraints were placed on space by the most generic aspects of human activity, such as the simple facts of occupying space and moving between spaces. Hiller (1996) further stated that, to a significant extent, the spatial forms of cities are expressions of these laws, and that if we wish to understand them we must learn to see them as "things made of space," governed by spatial law whose effects, but not whose nature can be guided by human agency. One implication of this argument will be that twenty-century design has often

used spatial concepts for urban and housing areas which fall outside the scope of these laws, creating space which lacks elementary patterning which these laws have normally imposed, in some shape or form, in the past. If as is argued here, such laws exist, then it will be necessary to revise current concepts of the well-ordered city back in the direction implied by the laws. The spatial emergence and generic function guiding the relationship between human beings and space have for centuries, guided the architecture of cities.

Research Method

This work investigated the problems and challenges of population on the architecture of the urban areas that resulted in housing inadequacy, slums and urban poor settlements especially in Abuja. The dynamics of the world economy has changed and greatly impacting the socio-economic conditions of every society. Today, the world economy is in a period of rapid and dramatic change, and the question of just how we will connect to this new world is the single most important issue of our life. We are living in a time of contradiction. A time of role reversals, a time in which old expectations are violated so frequently that new expectations cannot form. Many of these contradictions center around connections to the world (Kanter, 1995). The world is now connected and affecting the old operational mechanisms of most establishments. It is a new world and with changes. The changes are affecting the building industry and especially, the practice of architecture, with daily increase in the population of the urban areas, urbanization and housing inadequacy. **As a result of these, different authors are reacting to these changes and differently. Based on that, the writers, adopted qualitative research method that embraced information from secondary data sources including, literature reviews from journals, previous works and book.** The disciplinary area of focus are the population of the urban areas and their architecture, or better said, architecture and housing inadequacy in the urban areas especially, focusing on Abuja, Nigeria. As a result, the writers evaluated the opinions of the experts in the field and used that in supporting their argument that, the population of Abuja, Nigeria is affecting the Architecture and housing supply of the area consequently, proposed the adoption of High-rise building approach for Abuja, Nigeria's urban poor settlement areas.

The Architecture of Cities and Towns

According to Curran (1983: 5), a society is an active organism, always in the process of becoming, always in the process of change. So are the forms it creates, which at once express and support this dynamic process. The forms that societies have produced in past eras can be seen as records of distinct value systems. This is particularly apparent when there have been dramatic changes in value systems and the associated forms. Between the middle Ages and modern era, there have been three distinct approaches to the organization of the city. Referring to these as "orders" of organization, they have reflected changing value systems. In addition to expressing different modes of usage and different modes of human interaction, these orders also expressed different ways of relating to the natural environment. Of the three pre-modern orders, the

earlier, the "closed" order, is associated with the medieval era (Figure 1.2).

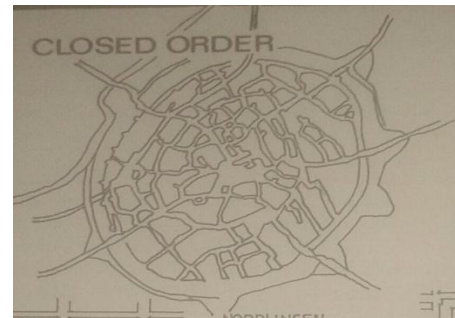


Figure 1.2. The Closed Order
Source: Curran Raymond

A small number of cities (and portions thereof) built within this order remains intact today. The second order, the "structured" order, is found in Renaissance cities and their derivatives, the baroque and neoclassic cities (Figure 1.3). Heavily influenced by earlier Greek and Roman concepts, this order provided organizational principles for many of the cities we live in today (Curran, 1983: 5).

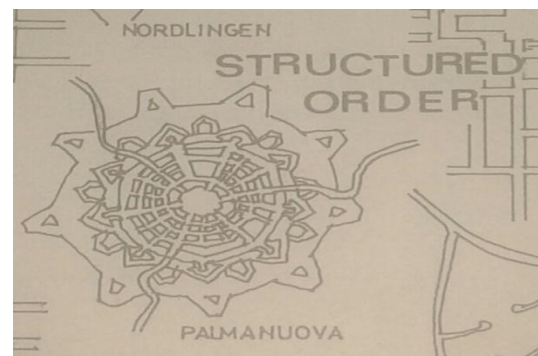


Figure 1.3. Structured Order
Source: Curran Raymond

The next order, the "pragmatic" order, is associated with the industrial era. This order is the basis of many cities in America (Figure 14).

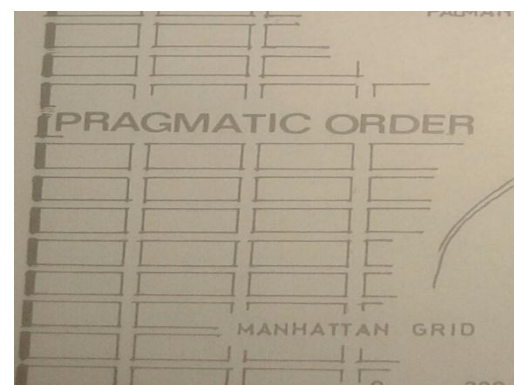


Figure 1.4. Pragmatic order
Source: Curran Raymond

The most recent order, the “open” order, is associated with the modern era (Figure 1.5).

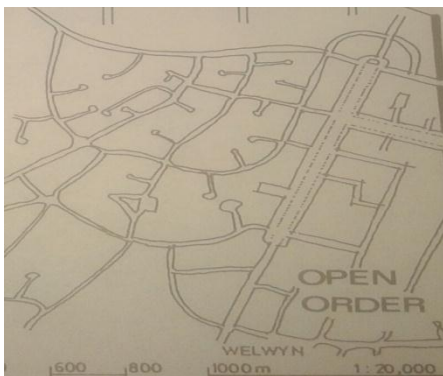


Figure 1.5 Open Order
Source: Curran Raymond

The history of architecture is a succession of “spatial conceptions” [conceptions of spaces] (Siegfried, 1962) and that is because space can be defined in many manners. We can define it as a place where man sets in contact with the force of nature.

Urban Actors and Elements in Spatial Integration

As indicated by Curran (1983:5), in the many recent debates about the city, one point of agreement is becoming increasingly shared: that the true value of the city is not measured only in terms of its real estate, but also in terms of its use value, that is, in terms of how it affects people in their day-to-day experience. Much of our daily experience of the city occurs within the collectively shared public spaces, or the public domain. Not only does the public domain provide for most basic of the city’s functions, access, but it also provides for and contains many other functions and activities synonymous with urban life. These have traditionally been organized, such as markets and public festivals, as well as spontaneous, including everything from the promenade and the meeting of friends to the appropriation of spaces for play, commerce, and display (Curran, 1983: 5). A major part of the urban experience is the experience of the public domain. In addition to providing for a variety of ways to get from one place to another, the public domain provides many spaces for a wide range of additional functions and activities. Both planned and spontaneous, these uses, together with access, provide what can be described as the “glue” that bonds people together as well as all the individual parts that make up the city (Curran, 1983: 5).

Urban Elements in Spatial Integration

Within the past decades, the architecture of different cities have gone through changes and according to Shane (2011), different urban actors in different periods during the last 60 years worked to create different urban models, using the basic urban elements of enclaves, armature and heterotopias. A beautiful and delightful city environment is an oddity, some would say an impossibility (Lynch (1985: 2). According to Lynch (1985: 3), a legible city would be one whose districts or landmarks or pathways are easily identifiable and are easily grouped into an overall pattern and that legibility is crucial in the city setting. Although

clarity or legibility is by no means the only important property of a beautiful city, it is of special importance when considering environments at the urban scale of size, time, and complexity. To understand this, we must consider not just the city as a thing in itself, but the city being perceived by its inhabitants (Lynch, 1985: 3). Environmental images are the result of a two-way process between the observer and his environment (Lynch, 1985: 3). There seems to be a public image of any given city which is the overlap of many individual images. The content of the city images, which are preferable to physical forms, can conveniently be classified into five types of elements: paths, edges, districts, nodes, and landmarks (Lynch, 1985: 46) (figure 1.6 and plate 1.0).

1. Paths. Paths are the channels along which the observer customarily, occasionally, or potentially moves. They may be streets, walkway, transit lines, canals, railroads, etc. For many people, these are the predominant elements in their image. People observe the city while moving through it, and along these paths the other environmental elements are arranged and related.

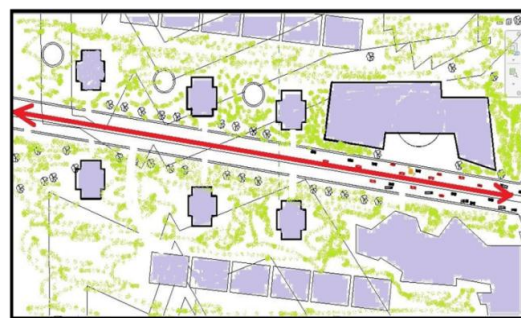


Figure 1.6. Path
Source: the author



Plate: 1.0. Path in perspective
Source: the author

2. Edges. Edges are the linear elements not used or considered as paths by observer. They are the boundaries between two phases, linear breaks in continuity: shores, railroad cuts, edges of development, walls. These edge elements, although probably not as dominant as paths, are for many people important organizing features, particularly in the role of holding together generalized areas, as in the outline of a city by water or wall (plate 1.1).



Plate 1.1. City Edge
Source: the author

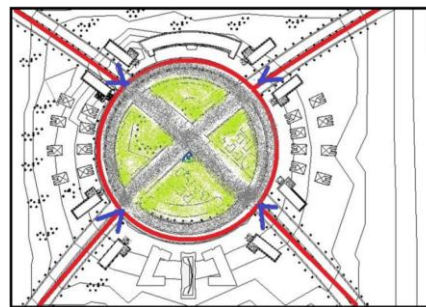


Figure 1.8. Node
Source: the authors

3. Districts. Districts are the medium-to-large sections of the city, conceived of as having two-dimensional extent, which the observer mentally enters “inside of,” and which are recognizable as having some common, identifying character. Always identifiable from the inside, they are also used for exterior references if visible from the outside. Most people structure their city to some extent in this way, with individual differences as to whether paths or districts are the dominant elements. It seems to depend not only upon the individual, but also upon the given city (figure 1.7).



Figure 1.7. An urban District.
Source: the Author

4. Nodes. Nodes are points, the strategic spots in a city into which an observer can enter, and which are the intensive foci to and from which he is traveling (figure 1.8.). They may be primarily junctions, places of a break in transportation, a crossing or convergence of paths, moments of shift from one structure to another. Or the nodes may be simply concentrations, which gained their importance from being the condensation of some use or physical character, as a street-corner hangout or an enclosed square. Some of these concentration nodes are the focus and epitome of a district, over which their influence radiates and of which they stand as a symbol.

5. Landmarks. Landmarks are another type of point-references, but in this case the observer does not enter within them, they are external. They are usually a rather simply defined physical object: building, sign, store, or mountain. Their use involves the singling out of one element from a host of possibilities. Some landmarks are distant ones, typically seen from many angles and distances, over the tops of smaller elements, and used as radical references. They may be within the city or at such a distance that for all practical purposes they symbolize a constant direction. Such are isolated towers, golden domes, great hills (plate 1.2).



Plate 1.2. Landmark
Source: the authors

Urban Population Housing Solutions in other parts of the world

The primary aim of this study is the population challenges of the architecture of the urban areas especially, focusing on Abuja, Nigeria and her urban poor housing concerns. In light of that, this study looked into retaining the existing Abuja urban poor settlements in their current locations with high-rise building options. This study reviewed how other countries with urban housing problems handled similar issues. Literature reviews indicated that, almost all the advanced countries adopted High-rise building approach, which became possible with the invention of elevators (lift) and abundance of building materials. It is a widely accepted fact that the towers and skyscrapers are advantageous in housing accommodation, in urban areas with high population density and decreases the cost of municipal infrastructure. Plates 1.3 to 1.14 are the high-rise buildings used in other parts of the world in solving their urban population housing problems. They accommodate more

people per unit of area of land when compared with single family buildings and low rise apartments. In Asia, especially, East Asia countries; Japan, China, Singapore and Korea with high land prices, almost their entire population live in High-rise buildings (Obiadi, 2017). After the Korean War, the South Korean government built many

residential towers to accommodate her increasing population and the practice continued, and has been transformed into tower blocks accommodating shopping malls, convenient facilities, housing and parking systems (Tower Block, 2013).

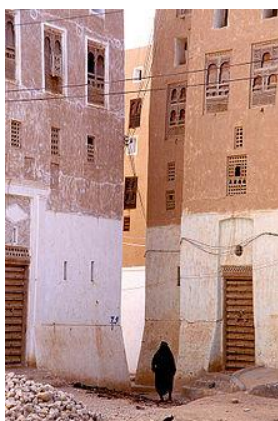


A.



B

A. Plate 1.3. High-rise residential apartment, Hong Kong.
 B. Plate 1.4. Numerous High-rise apartments in Navi Mumbai, India
Source: Internet (November 15, 2014)



A



B

A. Plate 1.5. Shibam, Yamen 16th century tallest mudbrick buildings in the world.
 B. Plate 1.6. Bow, London, United Kingdom three tower blocks of Crossway before their refurbishment.
Source: Internet (November 15, 2014)



A



B

A. Plate 1.7. Ballymum, Dublin, Ireland Flats
 B. Plate 1.8. Storey Red Road Estate, Glasgow, at the time of construction, the tallest public housing towers in Europe. Now condemned like a lot of 1960s British High-rise buildings
Source: Internet (November 15, 2014)



A



B

A. Plate 1.9. Waterloo, Sydney, Australia Housing commission towers
B. Plate 1.10. South Korea Tower block apartment (typical)
Source: Internet (November 15, 2014)



A

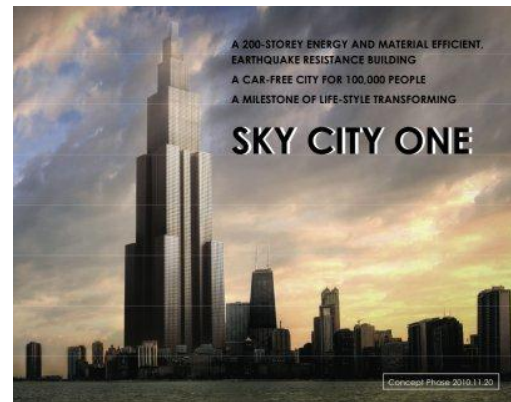


B

A. Plate 1.11. Tokyo's proposed Sky City 1000
B. Plate 1.12. Sky City Changsha Helicopter View
Source: Internet (November 15, 2014)



A



B

A. Plate 1.13. Umeda Sky Building in Osaka
B. Plate 1.14. Sky City or Sky City One, China
Source: Internet (November 15, 2014)

Literature reviews indicated that the most enduring quality of the city is its form. The initial impact it has upon the stranger arises from the appearance of its form. The city is something to be seen and delight-in (Amole, 1997). Lynch (1985) indicated that, like a piece of architecture, the city is a construction in space, but one of vast scales, a thing perceived only in the course of long spans of time. Lynch, further indicated that, although clarity or legibility is by no means the only important property of a beautiful city, it is of special importance when considering environments at the urban scale of size, time, and complexity. To understand this, we must consider not just the city as a thing in itself, but the city being perceived by its inhabitants (Lynch, 1985). Having been clearly stated, this work explored adopting urban design principles that would address the above mentioned attributes. According to Curran (1983), within the urban context, the expressive qualities of buildings extend beyond individual structures. Here one must consider not only the form of a building relative to other buildings, but also the role it plays in defining public spaces. Like built forms, the spatial forms of public spaces also convey essential information. The forms of buildings, determined by their shapes and sizes, can be highly expressive and a vital source of information in our understanding and use of the city. Built and spatial forms provide the basic context for the urban experience (Curran, 1983).

Conclusion

Reality: change of attitude to innovative creations (Mechanical, Water and Electrical Supports). The Abuja government needs to adopt High-rise building approach in solving her urban population and housing problems. According to Obiadi (2017), the society must change her ways of looking at new initiations. The notion that, "it will not work" needs to stop and "it will work, try it" needs to be adopted. Only through that can the society innovatively forge and move ahead. The argument is, with the Abuja's epileptic electrical and water supplies, how can such proposal survive? There is nothing wrong with innovative endeavors. Almost all the Nigerian communities are flooded with boreholes, providing culinary water supply to the citizens. Dependency on public water supply has dwindled and fast becoming a thing of the past. The same scenario equally applies to electricity supply in virtually, all the Nigerian communities. Innovatively, electrical generator companies are producing efficient generators capable of steadily supplying electricity to large communities and uninterrupted. In most cases, rich and big companies that solely depended on electric generators for their electricity supply are doubling their generators in case of breakdowns. An added advantage is the invention and introduction of "inverters" (battery electric storage with capacity to generate electricity for a long period of time although, depending on the battery capacity). The High-rise building approach if adopted, will work in Abuja, but the society must first, disabuse her mind that it will not work. If they work in advanced world, they will work in Abuja, Nigeria with abundance of high powered electric generators and high level of ground water for the boreholes. Lifts and elevators are not supposed to inhibit creativity, but expand it. Nevertheless, the issue of sustainability (Obiadi, 2017).

REFERENCES

- [1]. Amole Bayo, 1997. *The Architecture and City Building: New Roles? The City as Home: Who are the Builders? The Nigerian Institute of Architects, Oyo State Chapter.*
- [2]. ArchDaily (2014) *A Theory of Architecture Part 1: Pattern Language vs. Form Language.* Retrieved from: <http://www.archdaily.com/488929/a-theory-of-architecture-part-1-pattern-language-vs-form-language/>
- [3]. Collins William (2012). *Collins English Dictionary - Complete & Unabridged 2012 Digital Edition* © William Collins Sons & Co. Ltd.
- [4]. Curran Raymond J. (1983). *Architecture and the Urban Experience.* Van Nostrand Reinhold Company. New York. P51
- [5]. Foucault, Michel (1971 and 1979). *The Order of Things.* New York: Vintage Books.
- [6]. Geddes and Grosset (2005) *Webster's Universal English Dictionary*, David Dale House, New Lamark, ML11 9DJ, Scotland –p18
- [7]. Hiller Bill (1996). *Space is the Machine. A Configuration theory of Architecture.* Cambridge University Press.
- [8]. Kanter Moss Rosabeth (1995) *World Class, Thriving Locally in the Global Economy.* Simon and Schuster, Rokyfella Center, 1230 Avenue of the Americas, New York, NY 10020. 19-25
- [9]. Lynch, Kevin (1985). *The Image of a City.* The M. I. T. Press: Massachusetts Institute of Technology Cambridge, Massachusetts, and London, England. p. 1, 3, 105.
- [10]. MacDonald, W. 1986. *The Architecture of the Roman Empire: An Urban Appraisal.* Vol. 2. New Haven: Yale University Press.
- [11]. Obiadi, B. N. (2017). *Evolving Modalities for Sustainable Spatial Housing Design for the Urban Poor in the Federal Capital Territory, Abuja, Nigeria.* Department of Architecture, Faculty of Environmental Studies, University of Nigeria, Enugu Campus, Enugu, Nigeria
- [12]. Ratté, C. (2008). "The Founding of Aphrodisias." In *Aphrodisias Papers IV: New Research on the City and its Monuments.* Journal of Roman Archaeology Supplementary Series Number 70, edited by C. Ratté and R. Smith, 7-36. Portsmouth: Thomas-Shore.
- [13]. Shane, David Grahame. 2011. *Urban Design Since 1945: A Global Perspective.* Everbest, China

- [14]. Siegfried Giedion, Space, Time and Architecture (1941) 1962, in reference to an air view (fig.8) of the medieval Italian town of Bagnocavallo. Giedion's source was Luigi Piccinati, "UrbanisticaMedioevale" in Urbanistica deal AntichitàadOggi (Florence 1943).
- [15]. Tower Block (2013) Retrieved from: http://en.wikipedia.org/wiki/Tower_block
- [16]. Uji Zanzan Akaka and Okonkwo Madubueze Moses (2007) Housing the Urban Poor, User Involvement in the Production Process, EDPCA Publications, Enugu, Nigeria.:11-17
- [17]. Ward-Pekins, J. (1974). Cities of Ancient Greece and Italy: Planning in Classical tiquity. New York: George Braziller