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STUDIES TOWARDS UNDERSTANDING ARCHITECTURAL WAYFINDING

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ABSTRACT

Purpose: Wayfinding, a concept that has been in existence since antiquity has however, in recent times been ignored by architects and other key players in the industry resulting in the prevalence of situations in which buildings' internal and external spaces are clogged and plagued with signs and directional signboards; thereby defeating the core intent and purpose of such spaces and facilities. This paper was aimed at educating Architects and other key players in the building industry on the concept and principles of wayfinding as it relates to architectural practice.

Design/methodology/approach: The information relevant to the research were derived from the review of related literature followed by the survey research design. Data were collected by administering 80 copies of questionnaire to Architects comprising 40 Architects in Port Harcourt, Rivers State and 40 Architects in Akwa Ibom State respectively. The structured questionnaire targeted towards revealing the level of knowledge and familiarity of Architects with the concepts and principles of wayfinding; level of consideration of wayfinding as key design element; level of adoption of concepts and principles of architectural wayfinding as key design elements; amongst others. The responses were collated, grouped and results from each point above was represented graphically using pie charts.

Findings: The study revealed that the level of knowledge of Architects on the concepts and principles of architectural wayfinding is very poor. Reasons for the poor level of knowledge about the concept of wayfinding, its principles as well as methods of application as deduced from the questionnaires were: Lack of what wayfinding was in general; Inadequate knowledge of what the concept of architectural wayfinding; Little or no familiarity of what the principles of wayfinding was and what they had to do with architecture; amongst others. The study also revealed that Architects found it difficult to navigate in internal building spaces once it becomes more complex with instances of being lost in such spaces or being totally confused.

Originality/value: The concept of architectural wayfinding as well as the principles of architectural wayfinding was discussed and subsequently, the principles of architectural wayfinding was grouped into two possible implementation phases - (*Design and Post Design Phases*) by the author. The study recommended that for buildings to be easily navigable, architects must understand the concept of architectural wayfinding and incorporate the various principles of wayfinding into their designs.

Keywords: Architectural wayfinding; circulation; planning; urban design; wayfinding.

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1. INTRODUCTION

Architecture may be defined as the art and science of creating spaces, modification of space into form for human habitation and activities (lawrence & Low, 1990). The science of space creation for human use and interaction encompasses diverse intricate processes which include but are not limited to the following: (i) Study of human needs and characteristics; (ii) the conception of abstract space, its prospective function and its relation with other spaces and activities and to the environment; (iii) the creation of abstract links or spaces for navigation (circulation spaces) for movement between activities; (iv) Development of sketches into fully developed architectural drawings - floor plans, site layouts, sections, perspectives and subsequently fully constructed structures that makeup the built environment. (Herbert, 1966)

More often than not, architects, when commissioned to create building designs such as hospitals, universities, shopping malls, airports, museums, and so on; do so such that the end users of these buildings experience key issues in navigation (wayfinding issues) (Passini, Rainville, Marchand, & Joanette, 1998). This is mostly because, architects, at the conceptual and development stages of creating buildings focuses on the creation of facilities with activity spaces as well as accompanying circulation or navigation spaces but invest little or no thought into the ease for which the end users of such facilities will likely orient themselves and navigate through such created spaces in reality (Passini, Rainville, Marchand, & Joanette, 1998). Some of the reasons responsible for the above are: wayfinding is not seen as a major part of the design process from the onset and as such knowledge about its existence is given little or no thought; if and when factored into design, it is often seen in a disembodied style way; and lack of adequate knowledge about wayfinding, its principles, methods of implementation and systems of wayfinding available.

Thus, the following questions are posed: what is wayfinding? Should wayfinding be considered an aspect of architectural design thought? What ways can wayfinding be implemented towards creating more navigable internal and external built spaces? The paper thus sets out to answer those questions. As such, the research work is aimed at educating Architects and other key players in the building industry in Nigeria on the concept and principles of wayfinding as it relates to architectural practice. The above aim will thus be achieved through a study into the concept of wayfinding as it pertains to urban design and planning; discuss on architectural wayfinding; wayfinding principles and grouping of architectural wayfinding principles into two phases (Design and Post Design Phases).

2. REVIEW OF RELATED LITERATURE

2.1. What is wayfinding?

Wayfinding encompasses all the ways in which humans and animals orient themselves in spaces and navigate through spaces and from places to places both in the natural and built environment. The concept of wayfinding has been in existence from antiquity. Early sailors and navigators traversed vast expanses of waters and land on end reading stellar objects such as position of stars, sun, moon, tides and wave movements, seasonal changes and animal migrations (birds in flight). As civilizations advanced, transportation networks

were developed (roads, bridges, aqueducts, water charts and channels) and way pointers in form of stone pillars were erected along such paths to denote distances, destinations, mile markers, and so on.

In recent times, the advancement of societies into complexes with the creation of complex road networks, urban spaces, as well as means of transportation thus instituted the need to augment movement through these complex urban spaces using objects, markers, maps, directions, graphic symbols, buildings, and so on. Studies of wayfinding emanated and the first mention of wayfinding was in kevin Lynch's book "The image of the City" published in 1960; where he described wayfinding as user experience of orientation and choosing a path within the built environment. He defined wayfinding as "a consistent use and organization of definite sensory cues from the external environment".

Subsequently, other scholars tried defining and explaining wayfinding based on their diverse fields of discipline and areas of expertise. Brunye, Mahoney, Gardony & Taylor (2010) postulated that wayfinding is the process of identifying a current location and knowing how to get to a desired destination as quickly as possible. (Fewings, 2001 in Charisse Farr, Anna & Kleinschmidt, Tristan & Yarlagadda, Prasad & Mengersen, Kerrie, (2012)). Wayfinding is the propensity to get to desired destinations in the natural and built environment. (Passini, Rainville, Marchand, & Joanette, 1998). Allen, Knasic, et al (2010) also expressed wayfinding as the specific way in which wayfinding depends upon the research field.

Wayfinding and its application cannot be discussed, isolating circulation and circulation plans; as circulation is directly related to orientation in spaces. Bitgood (2010) identifies three paramount elements to visitor orientation and circulation: conceptual orientation, wayfinding and circulation. Orientation incorporates a mindfulness and comprehension of the subject matter of the facility. Circulation portrays how guests advance through the facility; and poses questions such as:

a. What pathways do they take?
b. Do visitors circulate the way the designers intended?
c. Do visitors miss key spaces because of the architectural design of the facility?
d. Which direction do visitors turn when they reach choice point?
e. Do visitors have a circulation strategy?
f. Do they simply wander more or less aimlessly?

Wayfinding or "Locational orientation" a term used by Bitgood (2010) involves being able to find or locate places in a facility. (Bitgood, 2010). Natapov, Saskia, Dalton, & Holscher, (2015) points out that methods for circulation plans are based on analyses of the physical characters and capabilities of diverse user groups (Physical strength, age, disabilities, and others.) which sets architectural models for the components of roofs, entryways, windows, steps, walkways and others.

Most of practical compositional arrangements and environmental settings are not founded on unitary examples of development but rather involve a mix of circulation designs that can be built from different geometric guidelines or by joining components from the diverse sorts (Natapov, Saskia, Dalton, and Holscher, (2015). Clark & Pause, (2005) characterizes circulation designs casually, in spite of the fact that, there is no immovably settled circulation typology. Passini (1996) in Natapov, et al (2015) proposes that 'gestalt' or 'great structure' of the circulation frameworks (for example a square, a cross, a L-shape) can help in the comprehension of complex layouts when the individual notices the particular single shape as a hidden underlying rule; this can in turn educate and, in this manner, help wayfinding attitudes.

Urban planners and other allied professionals are mostly concerned with the physical properties of circulation frameworks which are ordered with the accompanying base

structures: Linear, Circular, Network and others. (Natapov, Saskia, Dalton, and Holscher, 2015) for which they utilize in the creation of urban spaces and cities, planning of transportation networks and others. Architects deal with circulation in respect to movement of people between different activities and zones in buildings in built environment.

2.2. Wayfinding in urban design and planning

Urban designers and planners incorporates the use of signages; landmarks in form of buildings, statues; natural elements such as streams, rivers, lakes, mountain ranges, etc.; meteorological and astronomical phenomena (direction of sun, position of moon, stars) as well as movement of animals to aid orientation of people as well as movement of people in urban spaces. Over the years new and innovative technologies such as GPS systems; Adaptive spatial engines; Human interface devices with interactive features; conceptual maps, detailed street maps with street panoramic views; traffic information services; and others; have been developed, tested and marketed with the sole aim of improving navigation through the urban landscape. Some of the techniques adopted by various developed nations of the world include although not limited to the following:

Pavement Painted Directions: This incorporates the detailed graphical description of proposed direction on curbsides or pavements. The city of Las Palmas has adopted this rather cost effective and simple method to inform navigators of their positions and possible route choices through careful colour delineation and directional markings.



Figure 1: Painted sidewalk showing direction of movement; destination point; as well as estimated time of arrival on foot.

Source: www.travelwayfinding.com/urban navigation design/#Pavement_Sidewalk_Painted_Directions

The Thin Blue Line: The 'walking line' a technique which is not new, has been in use in places such as coach and train stations, airports and hospitals. The cost for wayfinding of a clear blue line, which tourists and pedestrians can trace, tends to be very significantly cost and time effective when compared to designing, manufacturing and installing what otherwise would require a dozen or so signs. Once again, maintenance is the key to making this form of wayfinding system effective.

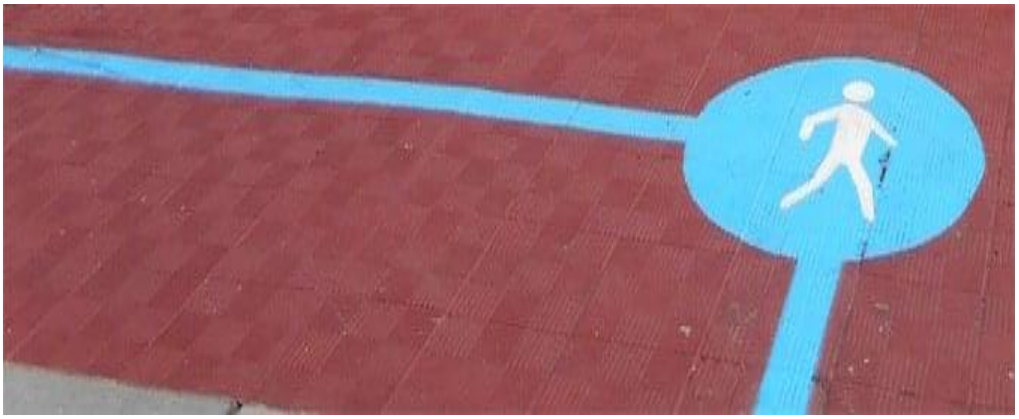


Figure 2: Blue line marking direction for pedestrian movement
Source: www.travelwayfinding.com/urbannavigationdesign/#Thin_Blue_Line_A_Simple_Solution_in_Urban_Navigation_Design

Working with Local Transportation Providers: It is comforting and relieving to know that you are in safe hands whilst visiting and navigating an unfamiliar terrain or place. Other developed countries of the world have adopted and coerced with transport providers to make navigation easier. Buses are painted and decorated with informative city-scape information, colours and codes.



Figure 3: Local city sighting bus in Madeira
Source: www.travelwayfinding.com/urban-navigation-design/#Workin_with_Local_Transportation_Providers

The Use of Street Maps and Directional Aids: This is not a new technique but it is a very effective technique for easily navigating through complex terrains and city-scapes. This is made available to people in form of billboards, posters, *etc*.

In Nigeria however, the exploration of wayfinding solutions and techniques has been over the years, limited to the adoption of GPS and static Highway as well as inter-state signage and road furniture. This is has thus proven useful over the years but, with the rapid rate of changing city-scape and environments, new and innovative technologies must thus be sought after and implemented.

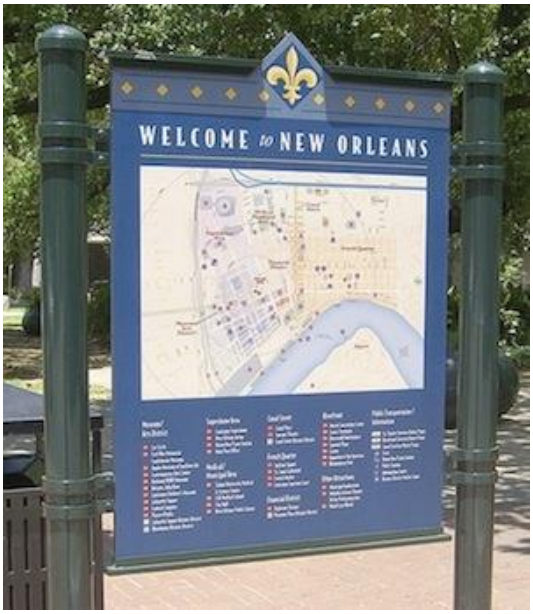


Figure 4: City map of New Orleans highlighting way-pointers and notable places
Source: www.googlesearch.com

2.3. Architectural wayfinding

Architectural wayfinding configuration addresses-built components, including spatial arranging, enunciation of form-giving highlights, circulation frameworks and environmental communication. Wayfinding configuration is integral to universal design since it advances simple comprehension and utilization of built elements at all scales. Successful wayfinding design allows people to attain the following:

1. Determination of location within a setting (building or urban setting)
2. Determination of prospective destination
3. Development of a movement plan (from location to destination).
4. Execute the plan and negotiate any required changes (Mayor's Office for People with Disabilities, 2001) in (Hunter, 2010).

Characterized as far as spatial critical thinking, Passini et al, (1998) places that wayfinding is made out of three interrelated procedures:

1. Decision-making and the development of a plan of action
2. Decision executing, converting the plan into action and behaviors at the right place and time
3. Information gathering and treatment which sustains the two choice-related procedures. (Passini, Rainville, Marchand, & Joanette, 1998)

Passini graphically illustrated three levels of decision making using a scenario of moving from a location x to "Turtle Atoll". Here, he breaks down the series of choices to be processed and actions to made based on the above three decision making processes. The trend of thought and decision-making processes is evident in everyday activities – decision to visit a museum, decision on what exhibits to visit, decision of museum curator on the proposed paths to be followed during exhibitions, movement plans, and a lot more.

Fewings (2001) in (Farr, Kleinschmidt, Yarlagadda, and Mengersen, 2012), distinguished two fundamental sorts of wayfinding – 'recreational', 'resolute or crisis'. Farr, et al (2012) goes on further to clarify that 'Recreational wayfinding affords an individual the chance to tackle issues that can be a wellspring of fulfillment and delight. Resolute or

Emergency wayfinding presents a situation where the essential thought process is to discover one's way in the most methodological way. This sort of wayfinding manages time when contrasted with the previous and the multifaceted nature of the earth impacts enormously and straightforwardly on the time taken in this sort of wayfinding.

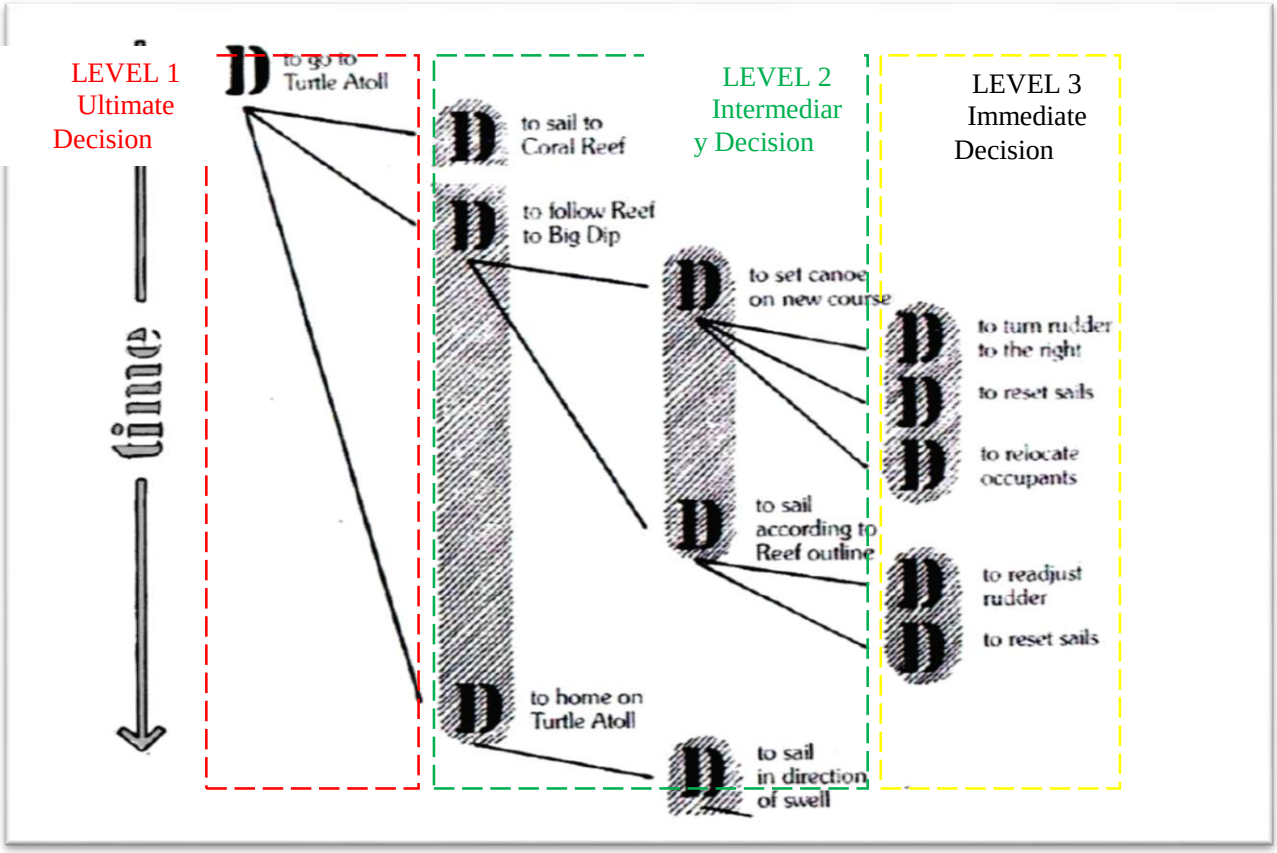


Figure 5: Decision Diagram Adopted from Passini (1984, p.156)
Source: (HAO, CHING, & Yen, 2009)

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When the concept of wayfinding is mentioned, there is the great temptation to think only of signs and graphics. Architectural and interior design components are just as important. Adequately planned Architectural spaces will have signals inalienable to the building's design which can intuitively direct a user. (INTERNATIONAL HEALTH FACILITY GUIDELINES, 2016).

The main architectural wayfinding elements include the following:

1. Zones: Regions described by a specific component or capacity and given a unique personality
2. Paths/Circulation: distinct areas for movement to and from destinations.
3. Landmarks or Markers: objects/components used to demonstrate a position/region along a course or at an end point.
4. Nodes: a point in a system/framework at which pathways meet or branch; for the most part a point where a choice should be made.
5. Edges: how the borders of a path, zone or hub is characterized. (INTERNATIONAL HEALTH FACILITY GUIDELINES, 2016)

These elements are explored in the layout of spaces and circulation and the design of physical spaces to enhance wayfinding and minimize the use of tags, slings and arrows which most times, only aids in confusing the end user.

2.4. Principles of wayfinding

Downs and Stea (1973) in Farr, Kleinschmidt, Yarlagadda, and Mengersen, (2012) suggested that wayfinding could be separated into a four-step procedure involving:

Orientation: The ability of a user to find out where they are with respect to nearby markers and the required destination
Route Selection: Picking a course that will in the long run lead to the ideal goal.
Route Control: The constant control and confirmation that the individual is following the selected route.
Recognition of Destination: The person's capacity to understand that they have arrived the ideal destination. (Farr, Kleinschmidt, Yarlagadda, & Mengersen, 2012).

It is on the back drop of the above that the principles of wayfinding were developed and these principles as presented here comes from both the research of museum exhibits and the study of environmental psychologists, cognitive scientists, and others who study how humans represent and explore their physical environment; (mfoltz, 1998). As listed in the International Health Facilities Guidelines, these principles being eight (8) in number are consequently the methods and ways in which wayfinding can be incorporated into the internal spaces of buildings and these are listed and discussed below:

Create an Identity at Each Location, Different from all others: spaces should be different from others in an overall design layout as this aid in recognition and overall cognitive mapping of position and orientation with respect to the overall layout of the design. This guideline demonstrates that each spot should work, to some degree, as a milestone – an unmistakable perspective in the bigger space. (mfoltz, 1998) This principle was deduced from the Research work of Arthur and Passini (Arthur and Passini 1992), where the notions of ‘identity’ and ‘equivalence’ for speaking of perception of places were introduced. They went further to clarify that personality is the thing that makes one piece of a space discernable from another, and comparability is the thing that enables spaces to

be gathered by their regular traits. (INTERNATIONAL HEALTH FACILITY GUIDELINES, 2016); (mfoltz, 1998).

Use Landmarks to Provide Orientation Cues and Memorable Locations: Landmarks serve two useful purposes. The first is as an orientation signal; the second is as a particularly significant area. While the former enables the navigator or user of a space to identify his current location, he can say something about where he is, and which way he is facing in the space he imparts to the milestone (Locational Orientation). The later creates a shared vocabulary platform for which verbal and written descriptions of locations or routes can be achieved. 'Landmarks related with choice points, where the guide must pick which way out of numerous to pursue, are particularly valuable as they make the area and the related choice increasingly important (INTERNATIONAL HEALTH FACILITY GUIDELINES, 2016); (mfoltz, 1998)

Create Well-Structured Paths: For a path to be well-structured, they must possess a set of characteristics such as: continuous; having clear headings (beginning, middle and end) when viewed in each direction (mfoltz, 1998). They should confirm progress and distance to their destination along their length; and a navigator should easily understand which direction he is moving along the path by its 'directionality' or "sidedness". (INTERNATIONAL HEALTH FACILITY GUIDELINES, 2016); (mfoltz, 1998)

Create Regions of Differing Visual Character: This principle deals with the division of spaces into regions of distinct set of visual attributes (colors, textures, forms, shapes, and others) to assist in wayfinding. The character that separates a space can be some part of its visual appearance, a refinement in capacity or use, or some property of its substance that is reliably kept up inside the area of room yet not without.

Locales of spaces in structures might not have promptly characterized limits as they will in general cover, or their degree might be in some part subjective; yet there is a generally agreed space said to be within a sector of space, and an encompassing territory said to be outside it (mfoltz, 1998).

Minimal Navigation Choice for Users: In the event that there is a story to tell, spaces ought to be structured so it is intelligible for each course the navigator may take. The fundamental story ought to be imparted by each way the navigator can consume through the space. Opportunities for temporary routes, side-visits, and investigation can fan out the primary way, in the long run coming back to continue the fundamental story (mfoltz, 1998).

Use of Sight Lines to Reveal what is ahead: This principle deals with creating a visually accessible space(s) for which view in a distinct direction is made extensive and tailored with a purpose to attract visitors to that direction. In a display space, in which the first-time guest has questionable desires as to its degree and reason, sight lines are significant methods for giving enough data about what is ahead to urge the guest to move further. Sight lines give long narrow samples of unfamiliar spaces. To make a sight line more interesting, the design can adopt a strategy of creating an "attractor" – a goal to navigate toward. This might be some feature (sculpture, art work, and others) that is striking and unusual (mfoltz, 1998).

Provide Signs at Decision Points to Help Wayfinding decisions: Signs should be placed, where necessary, at decision points on the floor layout (most preferably, the use of sculptures, or multi directional arrow heads or beacons). decision points are points where

the visitor must settle on a wayfinding choice (regardless of whether to proceed with a specific course or alter course). (mfoltz, 1998)

Use Survey View (Navigational Floor maps or Vistas): make floor maps which visitors will use as a navigational guide. It puts the entire space inside the guide's view, and a couple of sorts of choices can be made instantly. Outline points of view can similarly give reason to the visitor's mental guide; and the mental guide, arranged with the image of his environment, can be amplified expeditiously with experience grabbed from genuine course in the space. (mfoltz, 1998)

The above set of principles can thus be classified into two main categories - *during design* and *post-design*; and these intrinsically affect the circulation design designs and results. Principles such as – *creation of distinct spatial identities, Use of Land marks, Creation of differing visual characters, Minimal Navigational Choices, Use of Sight lines to reveal what is ahead*; can be integrated and achieved during the design stages. The *provision of signs at decision points as well as use of survey views* are achievable post design.

3. RESEARCH METHODOLOGY

The information relevant to research were derived from both primary and secondary sources of data collection. Survey method was adopted for the primary source of data collection involving issuing of questionnaires to 80 architects comprising 40 architects in Port Harcourt, Rivers state and 40 architects in Akwa Ibom State respectively; which served as respondents to a structured questionnaire comprising 13 questions targeted towards revealing the level of knowledge and familiarity of architects with the concepts and principles of wayfinding; level of consideration of wayfinding as key design element; level of adoption of concepts and principles of architectural wayfinding as key design elements; and others. Questionnaires were rated on a 5-point Likert ordinal scale for which scale points were presented as follows: 80-100% = 5 (very good); 60-80% = 4 (good); 40-60% = 3 (average); 20-40% = 2 (poor); 0-20 = 1(very poor); the responses were collated, grouped and results from each point above was represented graphically in percentages using pie charts. Secondary sources of information were derived from literary publications, textbooks, online journals.

4. DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1. Data presentation and analysis

Information derived from the questionnaires are thus presented and discussed as follows. The questionnaires comprised of 13 questions of which information derived from the different questions. On the background section of the questionnaire (Figure 6), 15(18.75%) of respondents identified themselves as theorist and educators in Architecture; 30(37.5%) identified themselves as practicing/commissions architects only; while 35(43.75%) of the respondents identified themselves as players in both fields of theory and practice. It also revealed that 12.5% were 0-6years into practice; 18.75% were 7-12years into practice; 25% were 21-30years into practice; 6.25% above 30years of practice

experience, with a majority of the respondents (37.5%) having an average of 16years of practice experience.

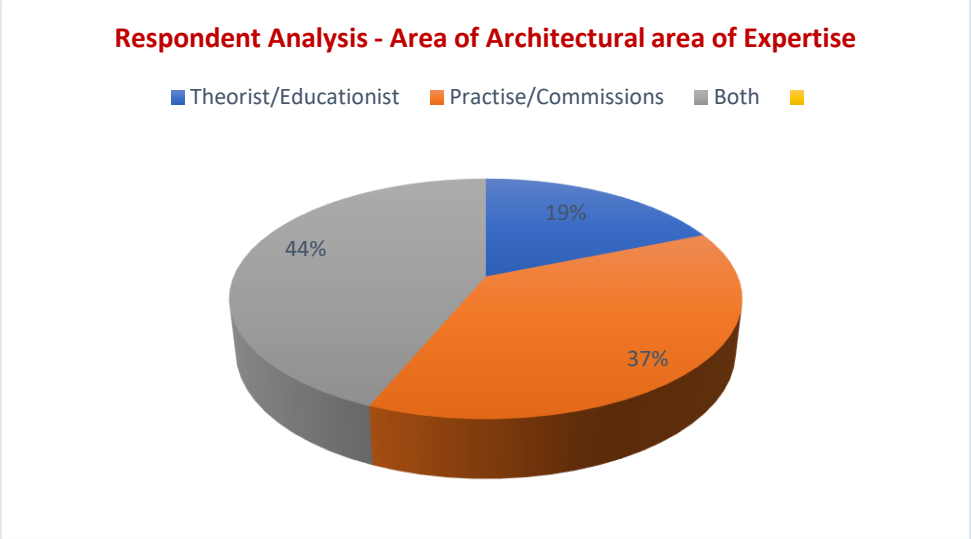


Figure 6: Graphical presentation of responses on the area of architectural area of expertise

It was revealed, from the pie chart below (Figure 7); that 50% of the total number of respondents had very weak knowledge about the concept of wayfinding; 25% of the total respondents had fair (weak) knowledge of the concept of wayfinding; 10% had average knowledge of the concept of wayfinding; 12.5% of the respondents had a strong knowledge and only 2.5% of the total number of respondents had very strong knowledge of the concept of architectural wayfinding.

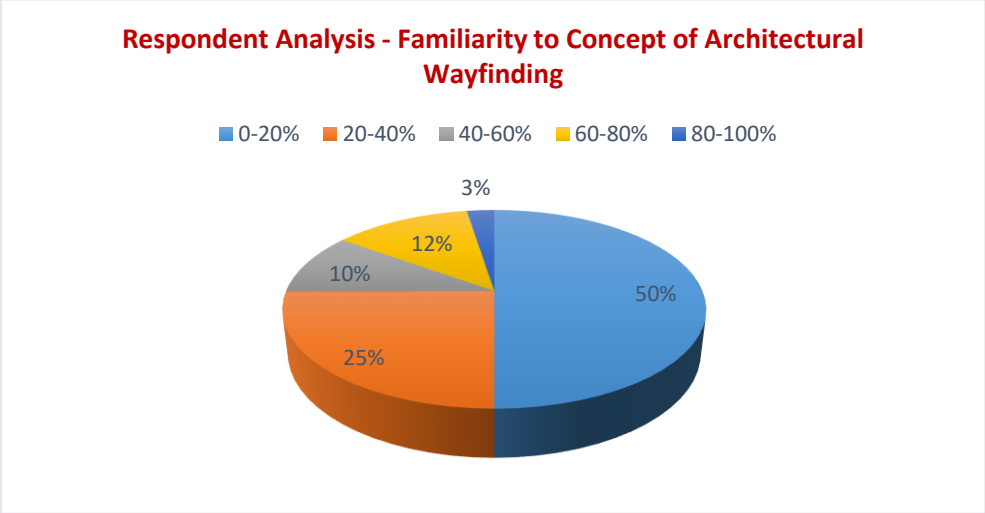


Figure 7: Graphical presentation of responses on the level of familiarity with the concept of architectural wayfinding

In Figure 8, it was revealed that 43.75% of the total number of respondents had very poor knowledge about the principles of architectural wayfinding; 50% of the total respondents had poor (weak) knowledge of the principles of architectural wayfinding; 3.75% had average knowledge of the principles of architectural wayfinding; 2.5% of the

respondents had a strong knowledge and none of the respondents had a very strong knowledge of the principles of architectural wayfinding.

In theory and practice of architecture (Figure 9); 12.5% (10 respondents) of the total respondents agreed that wayfinding should be considered a key design element; while 12.5% (10 respondents) totally disagreed on considering architectural wayfinding, a key design element. 75% (60 respondents) were not sure of their stance on the issue. The respondents pointed out several reason(s) for the above choices; and these will thus be discussed subsequently.

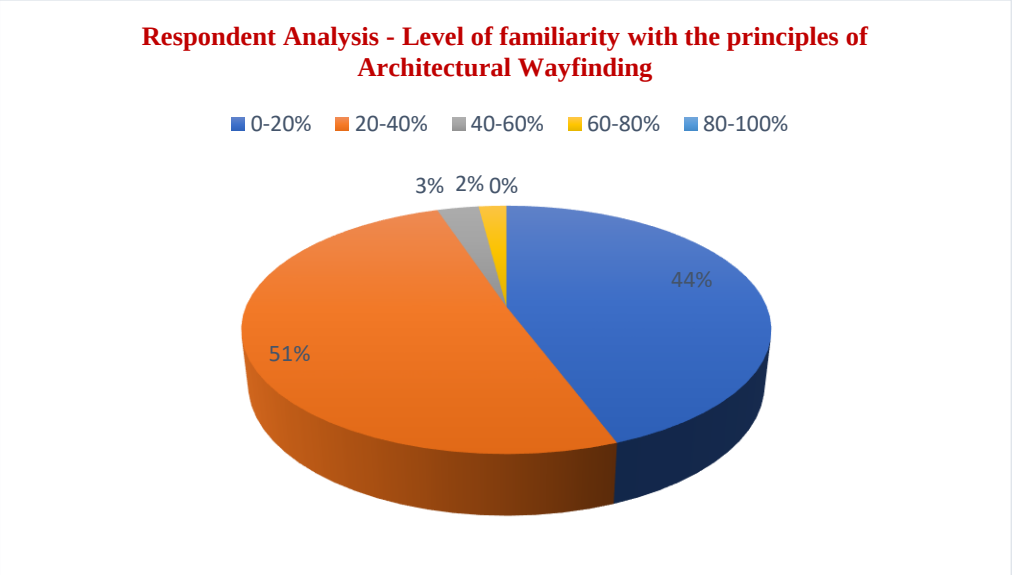


Figure 8: Graphical presentation of responses on the level of familiarity with the principles of architectural wayfinding

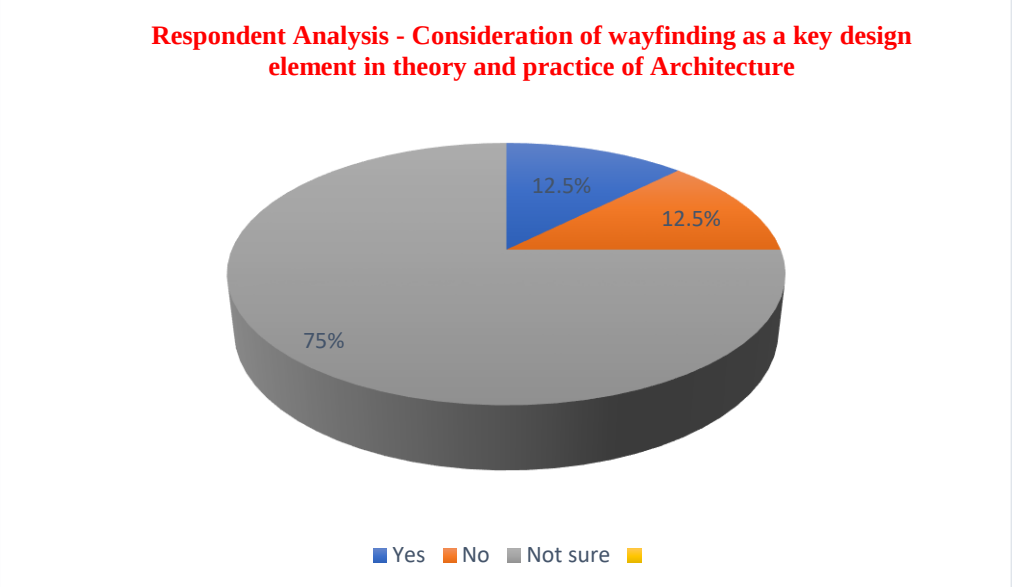


Figure 9: Graphical presentation – consideration of wayfinding as a key design element in theory and practice of architecture

Furthermore**,** 6.25% of respondents considered adopting wayfinding as a key design element; 31.25% did not consider adopting wayfinding as a key design element; and 62.5%

of the total number of respondents were not sure whether they adopted wayfinding as a key design element

4.2. Discussion of findings

From the presentation of data above, it is evident that 12.5% of respondents had an average knowledge of what the concept of architectural wayfinding was; only 2.5% of the total respondents had a very strong knowledge of the concept of architectural wayfinding. Also, 3.75% and 2.75% of the total number of respondents had knowledge of the principles of architectural wayfinding respectively. In theory and practice of architecture; 12.5% (10 respondents) of the total respondents agreed that wayfinding should be considered a key design element. 6.25% of respondents considered adopting wayfinding as a key design element.

In contrast to the above, 50% of the total number of respondents had very weak knowledge about the concept of wayfinding; 25% of the total respondents had fair (weak) knowledge of the concept of wayfinding; 10% had average knowledge of the concept of wayfinding. 43.75% of the total number of respondents had very poor knowledge about the principles of architectural wayfinding; 50% of the total respondents had poor (weak) knowledge of the principles of architectural wayfinding. 12.5% (10 respondents) totally disagreed on considering architectural wayfinding, a key design element. 75% (60 respondents) were not sure of their stance on the issue. 31.25% did not consider adopting wayfinding as a key design element; and 62.5% of the total number of respondents were not sure whether they adopted wayfinding as a key design element.

The reasons for the poor outcomes in responses based on the questions as presented on and collated from the questionnaires are:

i. Lack of what wayfinding was in general.
ii. Inadequate knowledge of what the concept of architectural wayfinding.
iii. Little or no familiarity of what the principles of wayfinding was and what they had to do with architecture.
iv. Poor consideration of wayfinding as an integral design element and as such, little or no thought into its importance and effects.
v. Wayfinding was generally attributed only to urban and city planning
vi. wayfinding thought of as just the placement of graphic signs and symbols as seen in airports, large malls, train stations, etc.
vii. Wayfinding is considered a field of study on its own and as such architects should not be bored with the task of acquiring such skills.
viii. some respondents gave no reasons.

The glaring effect is pointed out where 50% of respondents confessed to being lost in internal building spaces as deduced from the questionnaires. It is quite unbelievable; an architect being lost in the complex of spaces that he is presumed a master of. This thus greatly necessitates the need for this paper as it will greatly educate the masters of the building society as well as other key players on the various ways in which the intelligibility of internal building spaces can be enhanced towards user experience satisfaction.

For the minority of architects that had an average to strong knowledge of what wayfinding was, its principles and methods of application as well as respective implications with respect to inadequate consideration into its relevance; outlined some interesting reasons such as: wayfinding is an essential aspect of every design endeavor as it outlines how easily people will move and respond to directional changes in a complex navigational spaces in the internal building environments created by the architects. Another reason is

that the incorporation of wayfinding thus aids in revealing key design issues with respect to choice of material types, shape and configuration of spaces; type of circulation plan(s) to adopt with respect to ease of navigation. Also, it aids in paying more attention to salient details during design. The salient details being choice of colors and exploration of user cognitive ability whilst using the internal spaces. Above all, the overall user experience in the buildings created are thus greatly enhanced.

Considering wayfinding in the early stages of design thus eliminates the need to flood internal building's spaces with signs and directional symbols; thus defacing the intended aesthetic as well as utilitarian purpose of such building's spaces.

5. CONCLUSION AND RECOMMENDATIONS

This study aimed at educating architects on the architects and other key players in the building industry on the concept of architectural wayfinding. The study adopted a survey method in which questionnaires were issued to 80 respondents (architects). Data from the questionnaires were analysed and it was revealed that the level of knowledge of architects on the concepts and principles of architectural wayfinding is very poor. Several reasons were pointed out to be the cause of such results; some of the reasons pointed were: Architects do not consider wayfinding as a major part of the design process and as such knowledge about its existence is given little or no thought; if and when wayfinding is factored into design thought, it is often seen in a disembodied style; lack of what wayfinding was in general; inadequate knowledge of what the concept of architectural wayfinding; amongst others.

The glaring effect is pointed out where 50% of respondents confessed to being lost in internal building spaces as deduced from the questionnaires. It is quite unbelievable; an architect being lost in the complex of spaces that he is presumed a master of. This thus greatly necessitates the need for this paper as it will greatly educate the masters of the building society as well as other key players on the various ways in which the intelligibility of internal building spaces can be enhanced towards user experience satisfaction.

It is not only pertinent to design buildings which are aesthetically pleasing; but also buildings in which her internal spaces are as easily navigable as possible without the use of extensive signage and symbols which not defaces the building, but creates a negative user experience index which can be very detrimental in situations of emergencies. Architects in all fields of disciplines are thus implored to avail and acquaint themselves with the various concepts and principles of wayfinding as listed and discussed in this paper and further enrich the quality of their architectural master pieces.

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