Culturally-Inspired Low-Cost Housing Solutions: An Afrocentric Approach for Kano, Nigeria

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ABSTRACT

Significant cities in developing countries are undergoing an enormous migration of people from countryside regions. This migration from the countryside was mainly to develop careers and expect a higher salary for survival. This is vital in the Kano region, Africa, which annually indicates a large influx of low-income immigrants to urban cities, resulting in a lack of affordable housing to accommodate these immigrants' needs. Qualitatively the low-cost housing in Kano Nigeria, and many countries in Africa, has not been satisfactory to the family housing needs like comfort, social, cultural, and religious demand. The focus of the paper is to identify the importance of the Afrocentric cultural approach to spatial development in low-cost housing schemes where two existing case studies are carried out within the Kano metropolitan using a mixed methodology approach (document analysis and direct–observation) through the hermeneutic research paradigm. Findings relating to better space-making for low-income housing design projects transitioning to an Afrocentric cultural lifestyle was highlighted. This study may help in constructing a new development scheme towards the approach of consciously designed low-cost housing with a sense of Afrocentric culture according to the needs of the African people. By having a deeper understanding of the African people's needs, the outcome of the future built environment can provide more than just the minimum requirement for low-cost housing but instead focuses on the sense of community role for its design emphasis. The government and relevant authorities should work with low-cost housing providers, developers, and designers to provide better living places to elevate the quality of life for African society towards positive living and improve their health development.

Keywords: Afrocentric Culture, Spatial Organization, Low-Cost Housing, Kano Nigeria.

INTRODUCTION

Culture is the history of a people's past and present, as well as a projected picture of what will happen in the future (Palang, Külvik et al. 2019). A people's culture evolves with time, transitioning from one form of civilization to another (King, Abo-Zena et al. 2017). As individuals interact within their social environments, culture both shapes and is shaped by the creation of communities. Elements such as language, religion, morals, customs, literature, technology, and art emerge from these relationships. It's important to recognize that culture also has a material aspect, encompassing structures and monuments that evoke nostalgia and are fundamentally rooted in beliefs and value (Hadi Zare and Kazemian 2015). Hadi Zare and Kazemian (2015), further explain that architecture acts as a link between culture and society, significantly contributing to the formation of cultural identities. It goes beyond merely providing shelter, as it is closely connected to the expression of cultural beliefs and values (Johnson 2003). Architecture, as a cultural phenomenon, derives from and influences culture, and it

can, of course, represent human concepts (Lawrence and Low 1990).

Therefore, the direct influence of culture on architecture means that cultural changes naturally lead to significant transformations in architectural principles. These shifts not only challenge established concepts but also contribute to the development of new ideas that shape the relationship between architectural theories and cultural understanding.(Golany 1995). Architecture is an art form that blends creativity, technological innovation, and the satisfaction of human needs (Hughes, 2004). The goal of architecture is to design spaces that enhance the human experience, making individuals feel more alive, fulfilled, and connected. Referring to Vitruvius's principles, architecture is the art that harmonizes Utilitas (functionality), Firmitas (structural integrity), and Venustas (beauty), or in modern terms, it unites human behavior, technology, and aesthetics. (Koirala 2016). It is widely acknowledged that architecture is shaped by various factors, including social, physical, cultural, environmental, economic, and political influences. However, do we truly prioritize balancing these elements to create designs that enhance human comfort? Architecture is always guided by a set of laws and regulations that are deeply connected to the needs of people and the communities they inhabit, which are ultimately products of culture (Falola 2008). Consequently, humans consistently express themselves through social and cultural means (Ikudayisi and Odeyale 2019). Architecture is the artistic practice of creating aesthetically pleasing, habitable spaces for people. Culture is embodied and conveyed through architectural forms. (Selcanezgi 2019).

The three most prevalent issues are highlighted below. Research has indicated that housing presents significant challenges in various cultures, especially in developing countries like Nigeria. Noah and Çağnan (2021) assert that rapid urbanization and

economic growth have intensified the issue of inadequate housing. Furthermore, swift changes, rising property values, speculative activities, an influx of low-income immigrants, and inadequate planning further complicate housing challenges for lower-income populations (Jiboye, Adebayo et al. 2020, Ezeanah 2021). Urbanization has led to a range of issues, including inadequate housing, unplanned development, poor maintenance of existing buildings, aging infrastructure, insufficient social amenities, waste management challenges, crime, and health risks (Maina 2013). Additionally, homes in urban areas often lack adequate infrastructure, suffer from poor ventilation, and may have poorly designed bathrooms and kitchens, along with ineffective waste disposal systems (Nwalusi and Okeke 2021). Other challenges in urban housing include inadequate planning, the proliferation of slum areas, and the presence of dilapidated structures(Ojoko, Abubakar et al. 2016). Moreover, the erosion of cultural identity, the gradual decline of social values, and rising crime and insecurity contribute to the housing crisis. Unfortunately, many housing designs, especially those in mass housing initiatives led by state or federal governments, fail to address these critical needs. Additionally, a significant issue in the housing sector is the state's lenient policy regarding the regularization of housing constructions by local and state authorities (Ali, 2018).

This study aims to highlight the significance of an Afrocentric cultural approach to spatial development in low-cost housing schemes, driven by two primary objectives: first, to acknowledge the value of this approach; and second, to enhance the quality and affordability of housing for low-income individuals, particularly in light of missing key elements such as zoning and hierarchical structures. The results of this study are crucial, as they will provide an overview of the low-cost housing situation and its built environment in the Kano metropolitan area.

Insights from the selected case studies will propose a framework to better understand targeted interventions in the Afrocentric artistic approach to sustainable housing. Additionally, this framework will help forecast the influence of policymakers, architects, builders, and surveyors on the evolution of innovative Afrocentric cultural practices. The study also aims to identify and accurately assess the necessary criteria to establish a design decision framework. The literature review is organized into three parts to support the research objectives. The first section defines Afrocentrism and its characteristics, which is essential for understanding the key variables that influenced the case studies of Afrocentric architecture. This includes architectural drawings, photographs, and observational research related to low-cost housing findings. The second section focuses on the development of affordable housing in Nigeria, exploring various typologies and the necessity for accessible, contemporary low-cost housing. This discussion is critical for the third section, as it helps identify the factors within the selected case studies that will inform the conceptual model framework for data analysis. The following sections will delve into these three topics in detail.

BACKGROUND

Definition and Characteristics of Afrocentrism

Afrocentrism is a framework based on the idea that African people must reclaim their sense of agency to achieve true understanding and empowerment (Asante 2020). The Afrocentric paradigm provides a transformative framework aimed at addressing the disorientation, marginalization, and lack of agency experienced by Black individuals. (Asante 2009). According to (Asante 1998), Afrocentrism analyzes ideas, concepts, events, personalities, and political and economic processes through the lens of Black individuals as active subjects rather than passive objects. When Black people view themselves as central to their own history, they recognize themselves as agents, actors, and participants in shaping their reality, rather than as outsiders marginalized in political and economic contexts (Asante 2009). Humans have come to understand that this paradigm articulates all phenomena within the essential frameworks of space and time.

Moreover, it is acknowledged that relationships develop and knowledge grows in proportion to our ability to understand spatial and temporal dimensions (Asante 2020). The prominence of African cultural patterns defines Afrocentrism, which signifies "African-centeredness." Rather than aggressively challenging others, it seeks to rectify historical narratives by placing Africans within their own historical context. It calls for the recognition of African contributions to all facets of civilization within the broader scope of world history (Chawane 2016). Asante (2009) added to strengthen this argument, it is important to note that Afrocentricity is one of many cultural perspectives that contribute to the development of multiculturalism in education. Afrocentricity is not in opposition to Eurocentricity, nor does it seek to replace it; rather, it aims to enrich the educational landscape by offering a diverse range of viewpoints that reflect the complexity of global cultures (Asante 1995). Afrocentrism is rooted in the harmonious coexistence of countless cultures and is essential for fostering genuine multiculturalism(Chawane 2016).

Definition and Overview of Afrocentric Culture and its Influence in African Architecture

Afrocentric Architecture is a term used to describe the architectural styles and practices that are inspired by African culture and history (Folkers and Van Buiten, 2019). It is relatively new field of architecture, having emerged in the late 20th century, but it draws

on a long tradition of African building methods and design principles (Okwumabua, 2020). According to Asante, (2020) the development of Afrocentric architecture gained momentum during the post-colonial era, as architects, scholars, and cultural activists sought to break away from the colonial legacy and embrace an architecture that celebrated African identities, traditions, and aspirations. It emerged as part of the broader Afrocentric intellectual and cultural movements that aimed to challenge Eurocentric perspectives and affirm the value of African contributions to global culture (Asante, 1998). Afrocentric architects often use local materials and traditional building techniques, and they often incorporate symbols and motifs from African art and culture into their designs (Adetunji, 2017). They may also use African geometric patterns and shapes, and they may create buildings that are designed to be in harmony with the natural environment (Chawane, 2016). Afrocentric architecture is a growing movement that is gaining popularity around the world (Oye, 2021). It is a way for African people to express their cultural identity and to create buildings that are both functional and aesthetically pleasing (Okwumabua, 2020). Adams, (2023) asserts that, refocusing the attention on architecture

history of ancient Africa civilizations will unravel their culture rich architecture from which design ideas and inspiration for Afrocentric designs can be drawn from. Also, a case study of these indigenous civilizations will reveal traditional design and construction methodologies which can be integrated into the students' contemporary design projects.

Influential Factors that Shaped Afrocentric Architectural Elements

Afrocentric Architecture is the Translation of culture, Aesthetics, spirituality, and local Materials and the development of the Philosophies of African people into their built environment (Okwumabua 2020).

Culture

Culture originates from the term cultivation, implying that one has "grown" through knowledge or experience (Falola 2008). Being cultured can also imply that a person is well-versed in the arts or possesses a sense of refinement (Gidado, Maulan et al. 2022). Suppose a society's culture may be critiqued. In that case, it's only natural that its architecture (the physical manifestation of the people's way of life through form and space) is also criticized as shown in (Figure 1).

Figure 1: Building Facade showing Afrocentric elements.

Source: Archdaily, (2022)

▪ **Aesthetics**

Aesthetics involves the appreciation of beauty and is shaped by an individual's personal taste. Architecture, on the other hand, is a process that encompasses planning,

designing, creating, building, and executing different types of spaces that are not only functionally efficient and cost-effective but also visually appealing as shown in (Figure1) (Erdoğan 2018). The two key factors in building design are form and function.

Functionality is the primary concern in space design, while form, or aesthetics, is tied to emotions and personal experience (Arenibafo 2017).

Figure 2: Building Facade showing the Afrocentric elements

Source: Arch Daily (2008-2022**)**

- **Spirituality**

Spirituality in place" refers to the concept of identifying qualities in the built environment that, through their physical design, enable users to experience a deeper sense of meaning in their surroundings (Okwumabua 2020). Understanding and establishing a connection between architectural design and spiritual experience is crucial, as it allows users to later appreciate the significance, beauty, poetics, atmosphere, and other intangible, invisible qualities of a space (Benyon 2019).

Local Materials

Since ancient times, the selection of construction materials was primarily determined by local availability. As a result, the materials used often had natural origins, either inorganic (like stone) or organic (biological). Examples include earth, stone, wood, thatch, shells, and other naturally sourced materials as shown in (Figure 3) (Okwumabua 2020). Additionally, these materials are more cost-effective and sustainable, as they are well-suited to local climates (Biering 1991).

Figure 3: Showing the use of local materials.

Source: ArchDaily (2008-2022)

- **Development Philosophy**

Architecture philosophy is a branch of art philosophy concerned with architecture's aesthetic value, semantics, and linkages to cultural evolution (Fisher 2015). Fisher (2015) Philosophies, in essence, impact artistic ideas, preconceptions about how the environment should be, and the architect's innate aesthetic inclinations and experience as shown in (Figure 4). Architects are affected by formalized philosophy to expose themselves intellectually and culturally in various periods (Okwumabua 2020).

Figure 4: Showing Development philosophy.

Source: Adapted from CPDI Africa

Affordable Housing Development in Nigeria and Related Typologies

A house is not only a physical space where people live but also a space where social interactions and rituals occur (Erdoğan 2018). A home is laid out according to how it is to be used. Thus, according to a number of sociological and historical research on housing, the design of a home expresses underlying cultural values and norms that constrain the options for how to use space (Rapoport 1969). As shown in (Figure 5) housing history is inextricably linked to human social, political, and economic growth (Fattah, Badarulzaman et al. 2018). Housing is one of man's top three wants and is essential to survival (Gambo, Kunya et al. 2021). Therefore, its availability has always been critical to man's requirements. Nigeria has experienced tremendous urbanization during the previous ten decades (Aule and Moh'd Jusan 2019). This is mainly due to fast urbanization in tandem with population increase and rural-urban migration fueled by rapid socioeconomic development (Sani and Mahasti 2013).
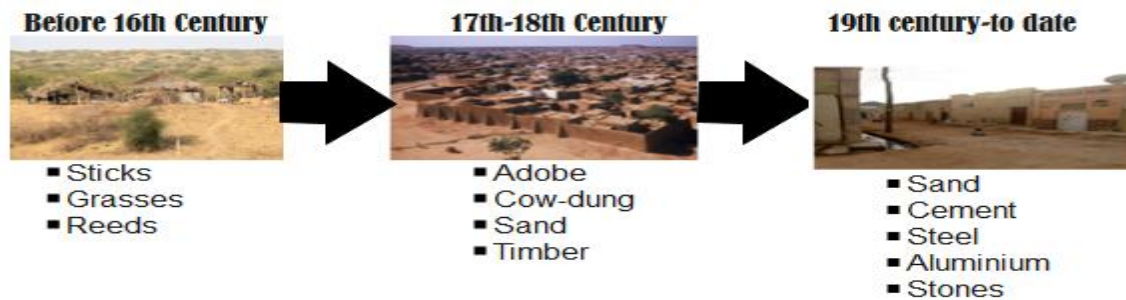

Figure 5: Evolution of Architecture.

Source: Researcher (2022).

The housing crisis in Nigeria, especially in metropolitan centers, has reached a catastrophic level (Abdullahi 2021). This problem is rising day by day (Adegoke and Agbola 2020). It is becoming increasingly evident that most of the metropolitan population lives in dehumanizing living circumstances. Therefore, the reseacher observed many issues plaguing Nigerians low-cost housing development within kano which are: issue one- The issue of Most Nigerians living in substandard homes and unhygienic conditions as shown in (Figure 6) (Kożuchowski and Kwiatkowski 2019, Adediran, Oladejo et al. 2020, Ezeanah 2021), issue two- Rapid urbanization and

economic growth have compounded the problem of insufficient housing (Bello and Egresi 2017, Noah and Çağnan 2021) ,issue three- Nigeria's construction industry focuses on modern building materials, with little regard for climate change in building performance and sustainability (Dorcas Mobolade and Pourvahidi 2020), issue four- Affordability difficulties abound in Nigeria's property market (Adegoke and Agbola 2020). Housing provision has mainly aimed at the sub-sector of the middle and high-income population who can invariably afford to pay cash or get access to mortgage finance from public financial institutions (Olugbenga, Yusoff et al. 2017) issue five-Another concern in the housing sector is the state's permissive policy on regularizing housing buildings by state and local government entities (Ndubueze 2009, Olotuah and Ajenifujah 2009, Ali 2018).

Many governments prioritize resolving housing-related problems for the populace, especially those with poor and lower-middle incomes. Most of this population cannot afford to build for themselves or effectively utilize the housing units without assistance (Choguill 2007, Un-Habitat and Programme 2011). To meet the housing needs of these populations, numerous intervention options have been developed, one of which is the provision of Low-cost housing an Afrocentric cultural approach could be an alternate solution for providing affordable housing for low-income earners and at the same time will serve as an avenue for restoring the region cultural heritage. Low-cost housing developed as a government intervention method in several nations to address the housing requirements of the population segment that, without assistance, cannot afford suitable housing at current market rates (Davis 1997, Assaf, Bubshaitr et al. 2010).

Figure 6: Existing informal slum areas.

Source: Researcher fieldwork(2022)

Definition of Low-Cost Housing

According to a World Bank report from 1975, Low-cost Housing is housing units created to a minimum but suitable level and priced for the poor. Since then, this definition has changed in light of the Un-Habitat and Programme (2011) study, which refers to the homes as mass-produced homes of an acceptable grade accessible to low-income groups. However, considering variations in national economies, the designation of a low-income group may change in different circumstances (Oladapo 2001, Ogbu and Adindu 2012). The differences in economics suggest that each country will have its definition of Low-cost housing.

Figure 7: Proposed low-cost Housing Development

Source: Family Homes Funds Ltd (2019).

Furthermore, the study attempts to see how the Afrocentric cultural approach will be combined with modern architectural ideas to assure a long-term future for low-income earners in Kano, Nigeria. First and foremost, traditional architecture must be preserved. Traditional structures were designed by people who wanted to create living places that blended in with their environment and communicated a sense of culture (Ikudayisi and Odeyale 2019). According to Le Corbusier, traditional architecture is ideal because it meets residents' social and physical needs. According to Le Corbusier, traditional architecture embodies harmony between human needs and the environment (Fardous 2019). Traditional architecture is defined as evolving from the cultural and natural environment (Danja, Li et al. 2017). The harmonious relationship between the building, environment, and socio-cultural context is highly valued in traditional architecture.

Characteristics of Spatial Organization for Low-Cost Housing in Kano

Architecture is frequently considered to be a synthesis of form, function, and technology subject to predetermined constraints like time, money, and laws (Nugroho, Citraningrum et al. 2020). According to Preiser and Vischer (2006) asserted that, more than 2000 years ago, Vitruvius recognized three qualities of architecture: utilitas (functionality or the utility value: the social dimension), firmitas (strength and rigidity: the technological dimension), and venustas (beauty: the artistic or aesthetic dimension) (Awaluddin, AMR et al. 2021). There appears to be ongoing agreement regarding the significance of functional quality in architectural design. The researcher concurs with this viewpoint and aims to demonstrate how the idea of functional quality may be quantified and expressed in real terms, with special reference to the residential building designs that gave rise to numerous low-cost homes in Kano State. In the development of housing designs, it is important to understand the housing needs of the target market (Chambliss, 2007; Wentling, 2011). Household determinants can be grouped into four namely: Privacy, space usage, Hierarchy, and Zoning as shown in (table 1).

Table 1: Determinants of spatial organization for housing

Determinants	Characteristics	Problems
Privacy	Private area: Bedrooms and toilets Public area: Kitchen, sitting rooms dining Open space: courtyards, varenda	To obtain the physical forces as well as socio-cultural elements in their broadest sense. The demand for privacy varies between cultures, and people in a given society differ from one another depending on their manner of living and social standing.
Space Usage	Sizes of rooms Location of rooms, Number of rooms.	To analyze if the room sizes are up to standard. To evaluate how adequate the number of rooms will be according to the family size.
Hierarchy	Shape Size Placement	To analyze the element that appears more important in comparison to other elements in the design. The past or present should be referenced in low-cost Housing so that it will feature aspects of architectural design in the region's cultural heritage.
Zoning	Use of land Height and bulk of the building Size of building to land Relation of building to the environment.	Use of land- Residential areas could be divided into zones with low, medium, and high population densities. Height and bulk of building: The maximum number of stories for a building in a given zone, i.e., should be one to two stories, should be determined. Size of building to Land: has a needed setback and a prescribed percentage of built-up area, open space, and setback Ex-50 percent 60 percent built up 40 percent open spaces for parking, utilities, and landscaping about the whole size of the property. Relation of Building to the environment: focuses on the size of the building, how it is situated concerning a particular street or region, and the smallest setbacks that are required between the building line and the boundary.

The determinants are essential for this study's benefit in Kano, Nigeria as it is the precursor for a better-low-cost housing scheme that determines a sustainable environment to enhance the occupant's quality of life as shown in (table 1). Before conducting a detailed case study analysis, the following section elucidates the methodology and analysis procedure using the explanatory building technique from the selected case study of the three existing case studies within the study area.

MATERIALS AND METHODS

In this study, document analysis was conducted on selected buildings, with each building critically observed using the spatial arrangement determinants as shown in (table 1). The interpretivism paradigm was employed as the study's approach, as it involves both locals and researchers, promoting human participation in the interpretation process. One key method for analyzing observational data is semiotic analysis, which explores meaning and signs.

This approach is seen as a valuable contribution as it offers fresh perspectives on the Afrocentric cultural approach to housing, viewed as a system of "signs," and provides insights for further research on the topic.

The study draws on the theories of Saussure on sign relations, Barthes on levels of signification, and Gottdiener on interpreting the built environment, using these frameworks to analyze and interpret data from observations. These concepts are then applied to understand the design of Afrocentric housing. The study ultimately aims to propose optimal design recommendations for Afrocentric cultural housing.

The research methodology is divided into two sections. The first phase focuses on observing the physical design characteristics of two affordable housing case studies in Kano, with the goal of understanding Afrocentric housing design. The data collected from these observations was then used to propose a design framework for Afrocentric cultural homes to meet the study's objectives.

The study adopts a mixed-methods research strategy, combining qualitative and quantitative approaches through case studies. Three low-cost housing estates in Kano—Danladi Nasidi and Kundila—were selected for analysis. These case studies were chosen based on two main criteria: the rapid urbanization and economic growth in the region, which led to an influx of low-income migrants, and the poor planning that resulted in housing provisions often conflicting with official laws and plans.

The second criterion is most of the housing in question did not meet the user's needs most low-income earners reside in slums and squatter settlements scattered around the city as shown in (Figure 6). Studies (Ibem, Ayo-Vaughan et al. 2018) Over 50% of Nigeria's estimated 89.75 million urban residents live in poor housing conditions, with the majority being low-income earners. For data collection, case studies and direct observation were used to gather information on a low-cost housing scheme in Kano, Nigeria, as outlined in (Table 1). This approach is crucial for addressing the study's objectives, which highlight the significance of the Afrocentric cultural approach to low-cost housing. The goal is to develop a sustainable design framework that aligns with the Afrocentric culture of the local population.

The analysis of study findings was conducted using the two selected methods, as shown in Figure 3. To interpret the data gathered from direct observation, methods like hermeneutics and coding were employed. These methods were used to understand and analyze the internal and external design of low-income housing by reading and interpreting the built environment effectively.
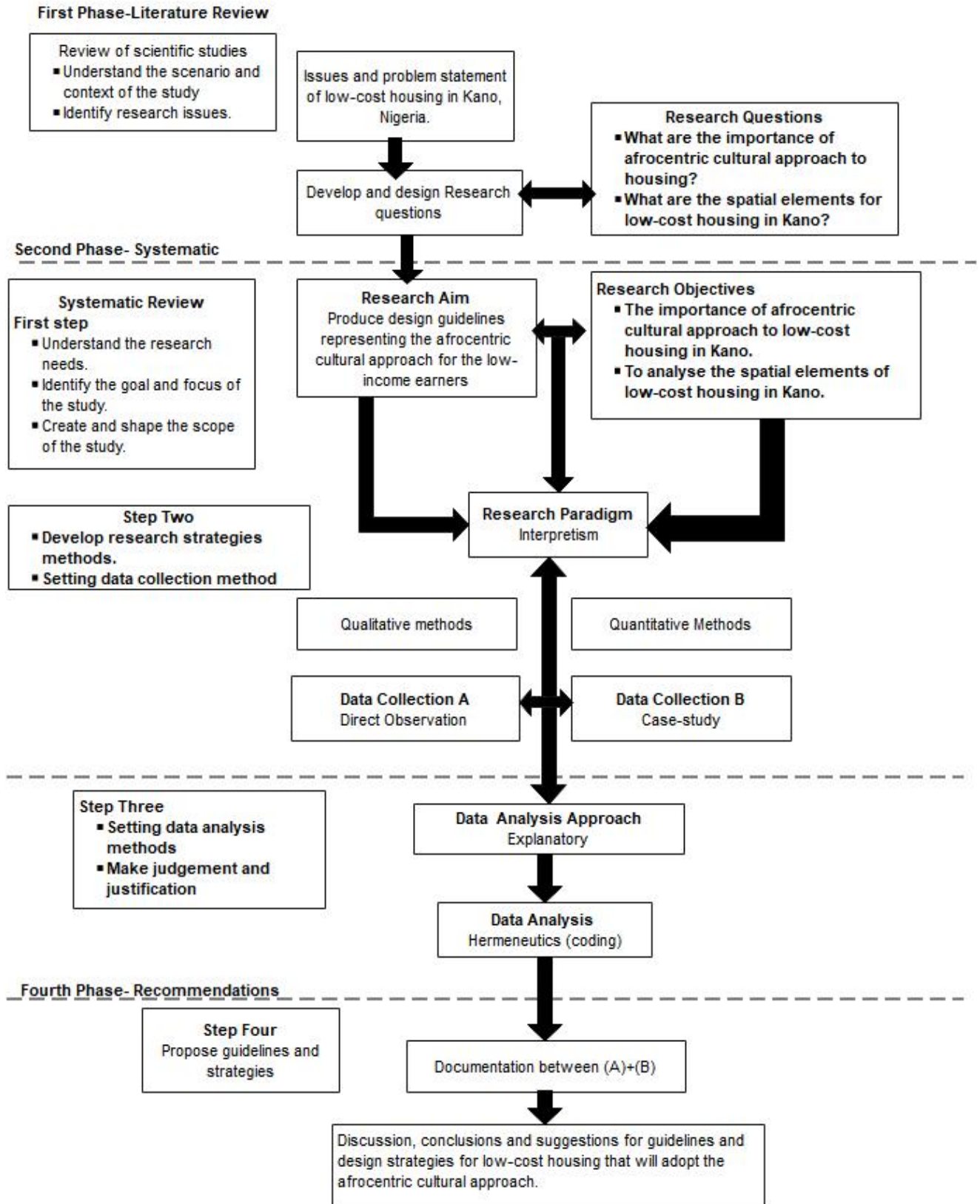
Figure 8: Research Methodology Framework

Source: Researcher.

A survey was carried out to achieve the literature review of this study on the Afrocentric cultural approach to housing in low-cost housing development in the northern part of Nigeria. Data was collected from architects to determine their perceptions of the Afrocentric cultural approach to low-cost housing development their knowledge, expectation, and attention. Kano was chosen as the study region because it is the second most populous state and one of the states experiencing urban drift because it is a commercially based state.

RESULTS

For this study, Danladi Nasidi housing estate and Kudila Housing Estate Zaria Road were chosen as the case study. Danladi Nasidi Housing is a low-cost flat located in the mariri kumbotso local government area and Kundila housing estate located in Zaria Road Tarauni local government area of kano respectively. The Danladi Nasidi housing area was developed over 25 years ago and the kundila housing estate was developed over 35 years. Units were based on owner occupiers to civil servants. Now, the value of Danladi Nasidi and kundila Housing Estate has doubled. Due to its strategic location and easily accessible by high roads, it has been

one of the fastest-selling low-cost flats within kano. Direct observation enables diverseness and vastness of context. It is also intended to provide better access to the subject matter. In this case, direct observations are beneficial to the study.

Case Study A (Kundila Housing Estate)

One of the earliest housing developments in Kano State was Kundila housing which is a government low-cost housing estate erected by the military governor Audu Bako in the southern portion of the city in Tarauni local Government area. Eight hundred and twenty seven (827) houses of 2, 3, and 4 bedrooms make up the building. Before it was sold to the individual inhabitants, this estate was distributed on an owner-occupier and monthly rental basis. The neighborhood is furnished with a network of asphalt roads, streetlights, retail spaces like corner stores, a mosque, a hospital, and marketplaces as shown on the map location on (Figure 9). In Kundila Housing, it is observed that the majority of the houses have transformed because they were prototype houses with no space for garages and the rooms were not spacious enough for the typical Hausa type of architecture.
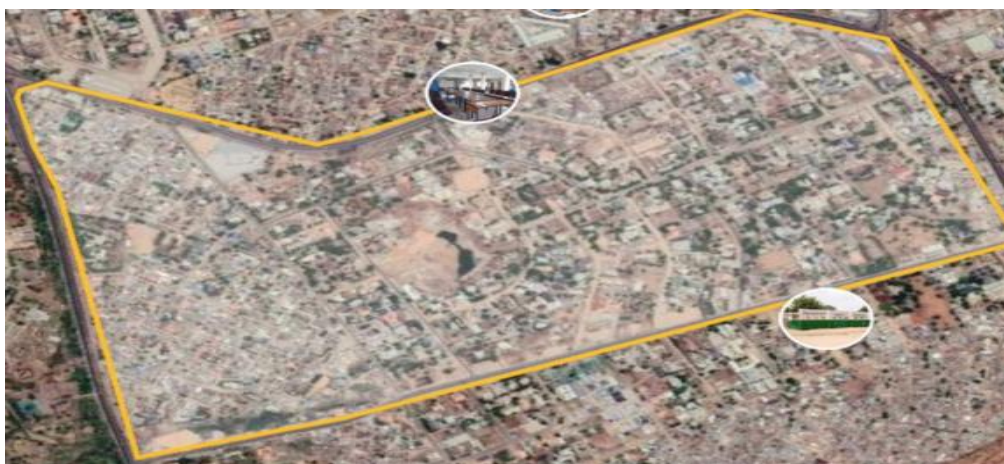

Figure 9: Map location showing Kundila Housing Estate.

Source: Authors Fieldwork (2022).

Figure 10*: Existing low-cost at Kudila Housing Estate

Source: Author's fieldwork (2022).

Case Study B (Danladi Nasidi Housing Estate)

Danladi Nasidi is a government housing estate located in Kumbotso Local Government Area, Kano State, consisting of 4,000 housing units sold to state civil servants on an owner-occupier basis, specifically for low-income residents. None of the plots were allocated or sold before the houses were built, meaning that residents had no opportunity to carry out any construction work themselves; the homes were built and then allocated.

It was observed that the facilities provided in these prototype houses were inadequate. The houses lacked sufficient space for garages or courtyards, and the rooms were not spacious enough to reflect the typical Hausa architectural style. As a result, poor construction quality, limited space, and numerous maintenance issues—such as leaks and cracks in the walls—led to low levels of satisfaction among residents, as evident in the condition of the structures as shown in (Figure 12).
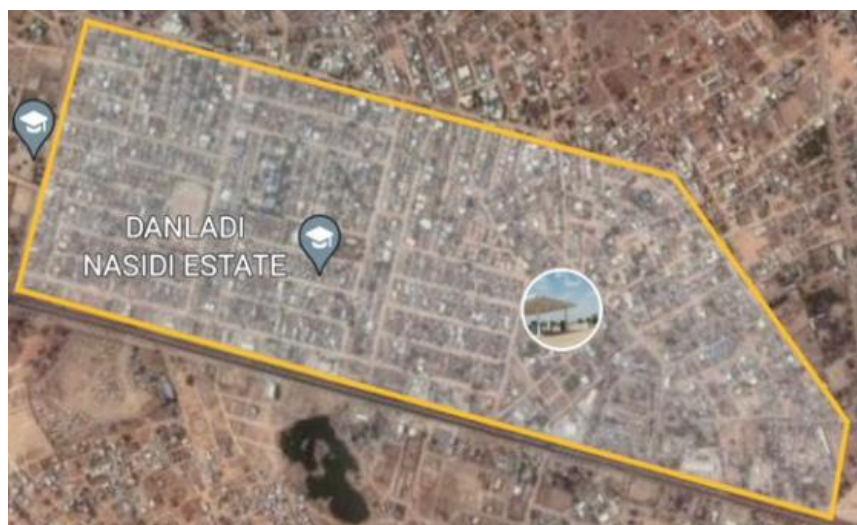

Figure 11: Map location showing Danladi Nasidi Housing.
Source: Researchers Fieldwork (2022).

Figure 12: Existing low-cost housing at Danladi Nasidi.
Source: Researchers field work (2022).

Table 2: Findings from Architectural design Approaches in the Selected Case Studies.

Determinants	Casestudy A (Kundila Housing Estate)	Casestudy B (Danladi Nasidi Housing)
Privacy	Architecture in Hausa is heavily influenced by religion. The majority of Hausa people in northern Nigeria follow the Islamic faith, which advocates the segregation of men and women. Since the visitor's area and the family space are not separated in the above plan, it is not possible to avoid contact between non-family members and family members, especially women.	When internal spaces are arranged and related functions are divided into designated zones to achieve functional integration based on a hierarchy of privacy with relation to activities and users, the idea of privacy may be seen and understood.
Space Use	Have a space functionality that is clear that includes universal space for various activities such as relaxing, rearing and occasions.	The sizes of the rooms are up to standard. The courtyard is not centralized that causes distraction in circulation within the structure.
Hierarchy	The private zone which is designed for a specific, The semi-private zone designated for use by all family members,The public zone which is primarily utilized for entertaining guests. As observed from the CSA above we can see that the private area is within the public zone.	For CSB hierarchy has been partially been achieved as we can see that toilets that are suppose to be within the private zone is at the public zone, Therefore, it is important to consider privacy while designing a residential plan. Functional zones should be properly allocated, and creative ways should be used to

		divide or connect them.
Zoning	The zoning is divided into low, medium and high density and the location for the kundila housing is categorize medium density, and the maximum number of stories is 1,2& 3.	The region is allocated specifically for residential buildings, but as per CSB's observations, there should only be a maximum height of two (2) storeys. However, given how frequently people abuse setbacks and extensions, the area has become unplanned.

DISCUSSION

Current research on affordable housing considers a wide range of standards and elements, including affordability and sustainability. However, the majority of these projects have not been implemented, and the Nigerian government continues to make significant investments in housing without seeing any progress as seen in table 2. The researcher(s) observed a disconnect and complete lack of collaboration between stakeholders in the housing sector when it comes to the cultural spatial organization within the structure, despite academics' emphasis on the need for affordable housing with an Afrocentric cultural approach that will help preserve the region's cultural heritage as shown in (Figure 12). Based on the study's findings, we can therefore draw some inferences about how to improve the Afrocentric cultural approach to the spatial organization for contemporary low-cost housing to increase household tranquility.

Privacy: The primary roles of "Zaure" are security, protection, reception, privacy, morals, ethnic ideas, adornment, and management. The Hausa traditional architecture supports this. Contrary to what is seen in the current case studies, a fairly broad space in the neighborhood requires congregational gatherings to celebrate social occasions like naming ceremonies, wedding ceremonies, and a playground for kids, among other things.

Zoning: Zoning is used to implement planning goals and development limits. The setbacks in the Kundila and Danladi Nasidi housing estates are violated and taken advantage of with commercial buildings, fence extensions, and hawker sheds. Since humans use practically every piece of land for social and economic activity, albeit sporadically, strategic town and site planning is always necessary. A systematic and organized spatial order from a public space, to semipublic and to private space. Interior conditions create a sense and meaning of belonging and personalization through the spatial experience by the user. So an extensive review of urban planning should be of utmost important when it comes to designing of low-cost housing.

Hierarchy: In designing modern low-cost housing the hierarchy should follow the traditional Hausa housing which is conceptually subdivided into (3) parts or layouts namely; an Inner core (private area) private space belongs to certain individuals, such as a bedroom and toilets, A central core (semi-private area) The semi-private zone designated for use by all family members, such as the living room, family or dining room, and kitchen, and an Outer core (public areas) The public zone which is primarily utilized for entertaining guests. This space may include a formal sitting room and/or a formal dining room and a courtyard.

Space Use: Residential unit layout in Hausa modern low-income housing should be influenced by a number of variables, including the household's financial situation, cultural values and beliefs, lifestyle preferences, and dynamics of the family structure. For instance, wealthy households can build more rooms to increase comfort. Low-income families might be compelled to share a space for overlapping activities, which would make everyone feel crowded. Additionally, in more traditional societies, it

is necessary to create a physical barrier between communal and public locations because of and as a result of gender disparities. In the end, this necessitates two distinct entry zones, guest rooms, and a formal dining room with one for men and one for women. Additionally, in large families, it becomes vital to provide a variety of areas with various spatial requirements to accommodate different stages of life.

In summary, the low-cost housing represented in these two case studies were not successful in representing the value of the Afrocentric cultural approach in spatial organization as they could not fully benefit from these low-cost Housing due to problems in terms of the provided space. As observed, improvements and enhancements as they feel the architectural design is inadequate and does not work well. As a result, the low-cost Housing did not show case the value of Hausa traditional architecture and cultural heritage of the region.

Table 3: Similarities and Differences of the existing case studies

S/NO.	Kundila Housing Estate		Danladi Nasidi Housing Estate	
	Similarities	Differences	Similarities	Differences
1.	Courtyard	Centralized courtyard	Courtyard	Side Courtyard
2.	Veranda within the structure	Smaller rooms	Veranda within the structure	Bigger rooms
3.	Absence of garage	No sitting room	Absence of garage	Sitting room available
4.	There is only one shower and toilet available	Storage is available even though is small	There is only one shower and toilet available	No provision for storage area
5.		The kitchen is open within the veranda		There is an access door to the kitchen

Even though, they were intended to represent two different building typologies, both case studies failed to show the integration of Afrocentric cultural elements in architectural design methodology by incorporating specific Afrocentric architectural elements in producing distinctive style compositions. Even though both scenarios were designed with the idea of transformation in the architect's mind, the study above clearly reveals a distinct integration level of the Afrocentric technique as shown in (Figure 10 & 12). However, as the Afrocentric architectural approach gives leeway for interpretation, this does not indicate that one building is better than the other. Both subjects are regarded as failed illustrations of their respective architectural typologies and functions.

CONCLUSION AND RECOMMENDATIONS

Low-income design projects transitioning to an Afrocentric cultural lifestyle, this research will create a paradigm shift in Kano's future building industry. As a result, the researcher worked hard to create a design framework for the Afrocentric cultural Approach to Housing in Northern Nigeria (Kano) to reclaim the region's culture and tradition. Furthermore, the study attempts to see how the Afrocentric cultural approach will be combined with modern architectural ideas to assure a long-term future for low-income earners in Kano, Nigeria. First and foremost, traditional architecture must be preserved. People who designed traditional buildings aimed to make homes that complemented their surroundings and conveyed a feeling of culture.

The aforementioned information makes it abundantly evident that when developing low-cost dwellings, four primary factors—appropriate building privacy, hierachy, space usage, and zoning—contribute to the level of welfare of the residents. The importance of this, however, cannot be overstated because it may result in a comfortable and active lifestyle. In order to improve the household quality of life in terms of comfort and health, particularly in urban areas, the government, including developers and involved housing authorities, should take all these factors into consideration when building and collaborate with home designers and the private sector. Moreover,it will help in creating a far better living environment that enhances the cultural history of the region's architecture, the Nigerian government, including developers and housing authorities, should take these cultural values into account.

Finally, architects are crucial in helping to restore and preserve the ethnic group's rich history and heritage and in giving local builders a platform to participate in the creation of contemporary buildings. And teaching them about scale and proportion, typical door and window sizes, zoning in buildings, working together to see how both ideas would be blended, and developing low-cost, modern housing that blends in with Kano's vibrant Afrocentric culture. Academics and architects should support and promote Afrocentric cultural discussions, seminars, and symposiums so that, future architects are informed from the beginning of their studies.

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