

LOCAL WISDOM, 15 (2): 103-119, 2023

Local Wisdom Scientific Online Journal ISSN: 2086-3764



Appraisal of Fizzling Features of Hausa Vernacular Architecture (HVA) in Selected Areas of Jos (Cikin Gari) City Centre, Plateau State, Nigeria.

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Abstract

Keywords:

Contemporary; Dakal; fizzling architectural features; Hausa vernacular architecture; Modernism; technological advancement Dakali is a unique feature that plays a functional role in the Hausa Vernacular Architecture (HVA). However, events have revealed a gradual extinction from the streetscape due to contemporary changes in the cityscapes and the general physical development with the concomitant effect of reduction in the performance of the expected function in buildings. This paper focuses on the enumeration and documentation of buildings with or without this significant feature. It also appraises the attendant contemporary architectural design-shift. The paper adopts quantitative research approach; purposive sampling and Content analysis method in the selection of potential respondents and review of related literature respectively. This was complimented with the conduct of field survey, selective interviews and observation. Information extracted therefrom was descriptively presented. Findings revealed that out of the total of 235 selected samples, 50 buildings (about 21%) reflects the HVA features; only 14 buildings (about 5.95%), though with retained feature HVA like the Dakali, but have significantly lost the features and transiting towards the contemporary/modern trends; while, 171 (about 72.7%) of the buildings in the study area have completely been transformed. The paper concludes that there is the need for the identification and comprehensive documentation other HVA features for posterity, so as not to allow their total loss without any form of record of their historical existence, due to fast changes been experienced arising from the advent of innovative design, challenges of rapid rate of global urbanization and the trending break-through in technological advancement within our urban/city settings.

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Article History Received : Feb 27, 2023 Accepted : July 13, 2023 Published : July 15, 2023

Local Wisdom Scientific Online Journal

1. Introduction

Vernacular Architecture is considered an important manifestation of a people's culture born as a result of their natural environment where they inhabit (Creanga, et al, 2010; Silva, et al.2021). Danja, et al (2017a) in a study asserted that, Vernacular Architecture (VA) of the northernpart of Nigeria is like any other place in the world, it is characterized by certain features which was shaped by the people's culture, tradition, religion, religion, artistry and the materials available within the region. Subsequently, Bera, (2019) defined VA as buildings which were constructed using local technology, craftsmanship and locally available building materials ensuring climatic comforts to the users. Thus, it depicts the environmental, cultural and historical features of a particular region as well as a specific time period. Danja, et al (2017b) further define Vernacular Architecture as a building/structure or a constructed shelter of a group of people according to theirethnicity, culture, traditions, religion and environment which is constrained by their climate, locally available materials and their unique features (Eneh, et al, 2010).

Hausaland is a name given to cluster of states which grew up around several of these towns north of Niger-Benue confluence since around eleven century they were not important international trade deports until the fifteen centuries. The Hausas have their towns fortified with fence (Ganuwa, n.d; Danyer, 1978). Danja, et al (2017b); Umaru, et al (2022) described the Hausa-Fulani as diverse but culturally homogeneous people living in the northern part of Nigeria with a civilization dating back to a millennium; which was evident from their cultural heritages and ancient buildings/structures. In Nigeria, VA is a description of building materials, forms, and techniques leading to traditional forms of architecture, especially concerning the architecture of the three major ethnic groups which are namely; the Hausas in the northern region of Nigeria, the Yorubas in the southwestern region of Nigeria and the Igbos in the Southeastern region of Nigeria(Jolaoso, et al, 2019; Auwalu 2019).

Whereas, Jos as a colonial creation was built to serve the tin mining industry of the Plateauprovince. It was not until 1904 that the European firms established commercial operation in the Plateau. Many mining prospectors and engineers came to the Plateau, especially to Bukuru and Naraguta located south and north of the present-day Jos (Labourers came from almost all the Hausastate, some administered through their kings in search of livelihood), while the actual nucleus of the settlement of Jos was Tin Area Limited mine at Gangare. (Urquhart,1977).

The Hausas settled in both Tudun Wada and Naraguta and with the arrival of the Zaria lightrail, gave birth to Jos, later settled also by the Hausas. The Niger Company Limited building of stores amongst others that began to stimulated growth necessitating development of residence area. Jos became segmentation into two sections (the Native town and the Township areas). The native section of the town was inhabited mostly by the Hausas who through the native chief ruled the native town as the native authority (Urquhart, (1977).

Babatunde Adekoyejo Jolaoso, Muhammad Murtala Bello, Auwalu Nasir Umaru, Sani Tal Adamu

Definition of terms

Birni – City (Umar, et al., 2019; Bilyaminu,

2017)

Birane (Plural) - Cities. (Umar, et al., 2019)
Gari - Town (Umar et al., 2019)

Tsakiyar Gari-Central Core, (Olotuah, et al., 2016)Wajen Gari-Outer Core (Umar, et al., 2019)Kofar Gida-A Forecourt (Olotuah, et al., 2016)Cikin Gida-Central Courtyard (Abiodun, et al.,

2016)

Turuka – Bedroom (Olotuah, et al., 2016)
Shigifa – Second entrance hall (Olotuah, et

al., 2016)

Dandali - Traditional Hausa house open

space (Urbani, 2020)

Zaure - Entrance hall, lobby, foyer

(Bilyaminu, 2017) *Zauruka* (Plural) - Entrance halls (Abiodun et al., 2016, Urbani, 2020) *Falo* - Living Room (Umar, 2019; Noma et

al., 2022)

Bandaki – Toilet (Umar, 2017)
Dakin Girki – Kitchen (Umar, 2017)

2. Literature Review

Vernacular Architecture (VA)

Vernacular architecture (VA) is an indigenous identity of structures made up of local materials and creates a reflection of a nation depicting its geography, topography, climate, local building materials, techniques, etc. It impacts positively communities worldwide, creating a sense of belonging, cultural identity, and historical context. It is a style which fulfil all the needs of local people by means of construction materials, nature, showing their culture and tradition, environment, history, economy and need of local people. VA folk building growing in response toactual needs, fitted into environment by people who knew no better than to fit them with native feeling. It is basically a sign of identity, that gave a glimpse of culture, place, society of a particular region (Alam, et al & Zhang, et al, 2022,)

In Nigeria, VA can be given as a description of building materials, forms, and techniques leading to traditional forms of architecture, especially concerning the architecture of the three major ethnic groups which are namely; the Hausas in the northern region of Nigeria, the Yorubasin the southwestern region of Nigeria and the Igbos in the Southeastern region of Nigeria (Auwalu, 2019). The northern Nigeria geographically speaking occupies about two third of the total land mass of the country. While the Hausa (states) communities existed as collection of independent cities situated in what became northern Nigeria today by the British during and after their rule (Kashim, 2014).

The Hausa People

The Hausas in west Africa form a large group of people linked together by a common lifestyle, even though today, it can be seen that they lived in almost every country of the world. In Nigeria, they are found within the savanna region, comprising of a large population in states like Bauchi, Gombe, Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto and Zamfara, with smaller numbers in other states of the northern Nigeria and other part of the country as a whole (Eneh, et al 2010). They are found in Jos Plateau state where they lived

Local Wisdom Scientific Online Journal

since the arrival the European minersin the 1900 from the start of the British rule in Nigeria which started in the eighteenth century andpeaked in the twentieth century (Urquhart, 1977; Adamu-Tal, et al 2017; Bikam, et al, 2020).



Study Area

Figure 1. Native Town, Jos (Sectional) **Source:** Urquhart, 1977

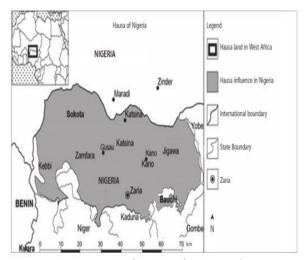


Figure **2.** Map of West Africa NorthernNigeria. **Source:** Bikam, et al, 2020

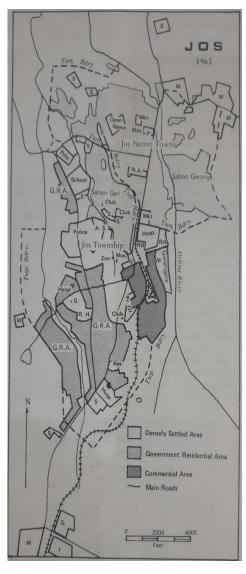


Figure **3.** Map of Jos (in the 1900). **Source:** Urguhart, 1977

Some Selected Features of Hausa Vernacular Architecture (HVA) of Northern Nigeria

The study takes into account the selected features of Hausa vernacular architecture of the NorthernNigeria, which includes the *Dakali, Zaure, Kofar gida, Shigifa, and Cikin gida*. It is in this stride that, architectural expression is construed to be frequently evolving into new forms and materialsin contrast to the characteristics of previous styles, or building concepts and techniques, just in thelikes of languages Umar et al (2019). Danja et al (2017) asserted that, vernacular architecture of the northern Nigeria has many peculiar features which distinguishes it from any other. This view was corroborated by Olotuah, *et al.*, (2016) and advocated the need for domestic privacy and safety of the inhabitants been cogent factor informing the spatial planning of the typical traditional Hausahouse. Moreso, the typical

Babatunde Adekoyejo Jolaoso, Muhammad Murtala Bello, Auwalu Nasir Umaru, Sani Tal Adamu

natural domestic architecture of the Hausa/Fulani people is a vivid element of their physical and spiritual culture, wherewith their house forms express the collectiveaims and desires of their communities for an ideal environment suited for their lifestyle rather than individual goals; which is greatly influenced by the dominant Islamic religion. Therefore, their typical layout plan is essentially of two houses in one, comprising the outer male visitors' receptionarea and the restricted area for the women (Schwerdtfeger, 1982 in Olotuah, et al, 2016; and Umaru, et al, 2022). This clearly defines the public and private areas of the house, which are largely respected by the public.

The two key zones in a typical Hausa dwelling are the forecourt zone (*Kofar gida*) and the centralcourtyard zone (*Cikin gida*). The forecourt (*Kofar gida*) serves as a transitional zone between thecompound's core and the public domain. Before reaching the central courtyard zone (*Cikin gida*), one must pass through complicated entranceways (the *Zaure* and *Shigifa*) that restrict access and views into the compound's interior. There was a feature known as *Dakali*, which was the first reception area for male guests and located in the forecourt zone (*Kofar gida*). figure1, plates 1, 2 & 3 refers, wherewith, for someone to get to central courtyard zone (*Cikin gida*), he/she has to pass through the *Zaure*, that serves as a reception room, as well as the main entrance hall, beyondwhich male visitors are not allowed but female visitors can proceed thereon into the central courtyard zone (*cikin gida*) through a second entrance hall (shigifa), (Umaru, et al, 2022; Olotuahet al., 2016; and Ajufoh, et al, 2019).

Dakali as a Fizzling Aspect of Hausa Vernacular Architecture (HVA).

According to Bikam, et al (2020), Hausa building layout practices were conscripted by Islam, wherewith the building is segmented into three (3) distinct parts - the forecourt (*Kofar gida*), the entrance hall/foyer system (the *Zaure/Shigifa*), and the courtyard (*Cikin gida*), where the roomsand other personal spaces exist (Umaru, et al, 2022). Danjuma, et al (2020) opinioned that, Architecture is one of the means of cultural expression. Thus, it is expressed through architectureby designing buildings that have cultural elements reflected on them.

The influence of modernism and westernization have had significant impacts on the Hausapeople's vernacular architecture, particularly on some of its distinctive features such as the <u>Dakali</u>. Other notable factors responsible for fizzling experience is attributable to the emerging increase inmigration/traffic volume arising from increase in socio-economic and physical /infrastructural development activities in Nigeria, wherewith the importance of the Dakali and other features of Hausa Vernacular Architecture have been relegated or somewhat obliterated (Jolaoso, et al., 2019; Mukhtar, et al., 2020).

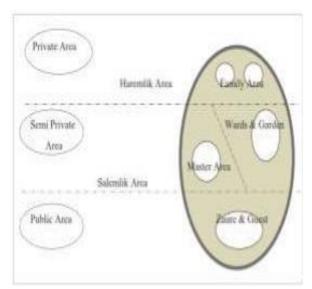


Figure 4. Typical Conceptual Hausa layout



Figure 5. Hausa traditional housing layout



Plate 1. The forecourt zone (Kofar Gida showing theDakali and the Zaure, the main entrance hall)Source: Umaru, et al (2022).



Plate **2.** *Dakali* and *Zaure* Entrance Hall *Source*: Umaru, et al (2022).

3. Method

Purposive sampling and content analysis method were adopted in selecting the study area, sample size (buildings), and in extracting the array of features of Hausa vernacular architecture respectively. This was complimented with field survey through opinion polls in the form of interviews, observation and case study conducted on two hundred and thirty-five (235) samples selected by stratified random sampling method upon which the selected vernacular features of Hausa architecture were investigated. Google map software was deployed to generate images of the study area on street-by-street basis to capture/enumerate buildings characterized by the features of Hausa Vernacular Architecture but had physically lost the *Dakali* features. These images wereused to reconcile the total number of buildings as illustrated in figure 6. This was further complimented with

Babatunde Adekoyejo Jolaoso, Muhammad Murtala Bello, Auwalu Nasir Umaru, Sani Tal Adamu

the review of related relevant literature on the subject matter upon which a well-structured questionnaire was administered on the respondents to extract relevant information/data. Results were thereafter discussed and descriptively presented.

The study area is located in the *Cikin gari*, i.e., an area in the old Jos city centrepredominantly inhabited by the Hausas/Fulanis. It is denoted by the red lines (line-dash-dot) in figure 2 and mainly used for residential purposes. It is abutted on the westward side by Bauchi Road; on the northward side by Mango Street; on the eastward side by Masallacin Juma'a street; and on the southward side by the Jos-North Local Government Area secretariat, the Fire Service Station, and Dogon Agogo. There are a total of eleven (11) streets/roads in the area. *Bauchi* road, *Zaria* bypass, *Masallacin Juma'a* street, *Shehu* street, *Balarabe* street, *Yandoka* street, *Turaki* street, School Line, *Dankarfalla* street, *Muhmmadu Borno* street, *Audi* Street, and *Bakano* street which are all in Jos, Plateau State, Nigeria. The character and structure of the study area comprises of buildings in use, buildings with vernacular features, buildings without vernacular features (especially *Dakali*) and buildings in modern/contemporary architectural styles in the study area. The study population was derived from the satellite image generated by Google Maps and the on-the-spot physical counting of the buildings in the study area.



Figure 6: Google Image of the Study Area **Source**: Google Map (accessed Monday, 2022), Umaru, et al (2022).

Local Wisdom Scientific Online Journal

4. Result, Findings and discussions

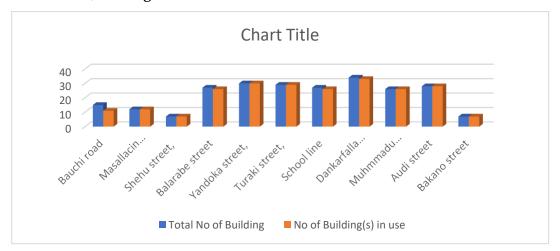


Figure 7. Buildings Inventory

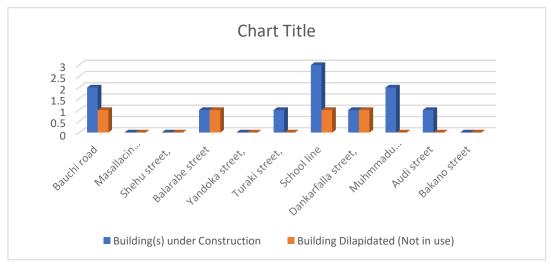


Figure 8. Buildings Inventory

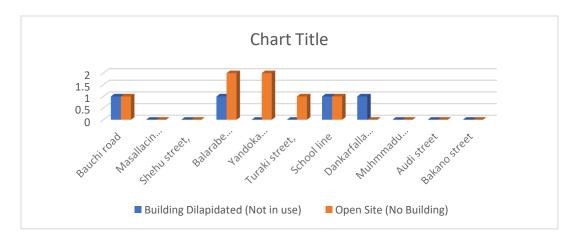


Figure 9. Buildings Inventory

Figures 7–9 illustrates the results of the field survey, which indicates that, 50 buildings (about 21% of the selected study samples) were observed to have lost the distinctive vernacular (*Dakali*) features, while only 14 buildings (about 5.95% of the selected

Babatunde Adekoyejo Jolaoso, Muhammad Murtala Bello, Auwalu Nasir Umaru, Sani Tal Adamu

study samples) retained other vernacular features but are in entire loss of the *Dakali* identity. It also revealed a reduction in the number of buildings with the distinctive vernacular features due to changes or accretion or structural additions arising from the influence of foreign taste/value and the lack of integration with the development of contemporary changes/modern technology.

Therefore, the transitional changes as response to the emerging trends has resulted into diminishing in or fizzling of the symbolic identity of the Hausa vernacular architecture. The layout of the buildings under consideration further revealed a significant disappearance of the *Dakali*, butsome of the buildings are reflective of some other distinctive features, such as the relics of *Zaure/Shigifa*, and others. Thus, the building layout has been altered, slightly modified, and resulting into a reduction in the performance of the expected functional values. Other reasons for the diminishing in or fizzling of the symbolic identity of and loss of the features are the attendant benefits of contemporary physical development/transformation or urban regeneration and urbanization.

Table 1. Buildings with/without Vernacular Features and with Modern Architectural Style

No	Street	No of Building(s) inuse	Total No of Building(s) with Vernacular Features (Dakali)	Total No of Building(s) without/fizzling Vernacular Features (Dakali)	No. of Building(s) in Modern/Contemporary Architectural Style
1.	Bauchi road	11	2	1	8
2.	Masallacin juma'a street	12	1	1	10
3.	Shehustreet,	7	3	1	3
4.	Balarabestreet	26	2	1	23
5.	Yandokastreet,	30	5	1	24
6.	Turakistreet,	29	7	1	21
7.	School line	26	5	1	20
8.	Dankarfalla street,	33	10	2	21
9.	Muhmmadu Borno,	26	2	2	22
10.	Audi street	28	11	1	16
11.	Bakano street	7	2	2	3
	Total	235	50	14	171

Table 1 illustrates the current street-scape or outlook with existing/traces of Hausa vernacular architecture on some buildings; however, it was gathered through oral records that almost all of the original buildings within the study area were constructed with HVA style; and that, due to facility upgrading/renewal or urban regeneration, the features became lost as these buildings were demolished and re-built in the new/contemporary architectural styles. Table 1 alsorevealed that, 185 (about 79%) buildings were generally

Local Wisdom Scientific Online Journal

transformed the style of design and layoutpattern into new looks, forms and styles ones (buildings by accretion/alterations with or without vernacular features or into a complete modern/contemporary architectural styles), arising from the influence of foreign taste/materials, emerging technology, urbanization and urban regeneration. The study-result also revealed that, there are 171 (about 72.7%) transformed buildings into modern/contemporary architectural styles with gates, gate houses and fence walls where the feature of *Dakali* is completely lost, as gathered through field oral narration and observations.

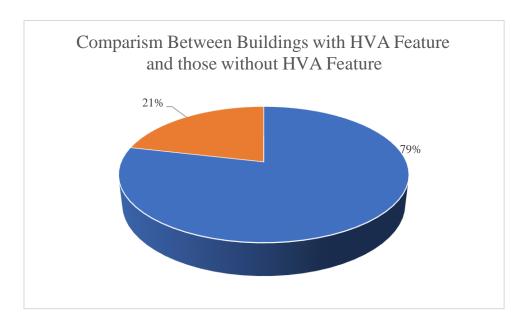


Figure 10. Comparison Between Buildings with HVA Feature and Those without HVA Feature

Findings from Case studies

The findings from a total of two hundred and thirty-five seventeen (235) case studies whichwere selected by stratified random sampling method (see plates 1–35) upon which the selected vernacular features of Hausa architecture were investigated, it was observed that both the *Zaure* and the *Dakali* are of various sizes, forms and layouts that have undergone transformation due to alteration, modifications, and/or accretions, thus resulting into loss of Hausa vernacular architecture character; loss of preservation and conservation of heritage values.

It further revealed that, of a total of 235 selected buildings currently in use/inhabited, fifty (50) of them bears the features of Hausa vernacular architecture, while about fourteen (14) of the selected buildings are without the features of Hausa vernacular architecture. Findings from the extracted information as indicated in table 1, figure 10 and plates 3-35 revealed that, 171 of the selected buildings have not only lost traces of *Dakali* as a distinctive Hausa vernacular architecturestyle, but they have completely transited and transformed in building character into modern/contemporary architectural styles, which were largely attributable to influence of foreign taste/materials, emerging technology, urbanization; urban regeneration; and challenges of security and privacy.

Babatunde Adekoyejo Jolaoso, Muhammad Murtala Bello, Auwalu Nasir Umaru, Sani Tal Adamu



Plate 3: Buildings with fizzling feature (Dakali).



Plate 4: Buildings with fizzling feature (Dakali). Source: Authors' Field Survey, 2022- Balarabe street. Source: Authors' Field Survey, 2022- Balarabe street, Jos.



Plate 5: Building with fizzling feature (*Dakali*). Source: Field Survey, Yandoka street, Jos.



Plate 6: Building with fizzling feature (Dakali) Source: Field Survey, Turaki street, Jos.

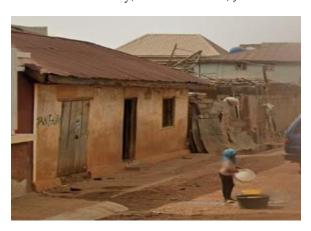


Plate 7: Building with fizzling feature (Dakali) Source: Field Survey, School line, Jos.



Plate 8: Building with fizzling feature (Dakali) Source: Field Survey, School line, Jos

Local Wisdom Scientific Online Journal



Plate 9: Building with fizzling feature (*Dakali*) *Source*: Field Survey, School line, Jos



Plate 10: Building with fizzling feature (*Dakali*) *Source*: Field Survey, School line, Jos



Plate 11: Building with fizzling feature (*Dakali*) *Source*: Field Survey, Dankarfalla street, Jos



Plate 12: Buildings with fizzling feature (*Dakali*) *Source*: Field Survey, Dankarfalla street, Jos



Plate 13: Buildings with fizzling feature (*Dakali*) *Source*: Field Survey, Dankarfalla street, Jos



Plate 14: Buildings with fizzling feature (*Dakali*) *Source*: Field Survey, Dankarfalla street, Jos

Babatunde Adekoyejo Jolaoso, Muhammad Murtala Bello, Auwalu Nasir Umaru, Sani Tal Adamu



Plate 15: Building with fizzling feature (Dakali) Source: Field Survey, Dankarfalla street, Jos



Plate 16: Building with fizzling feature (Dakali) Source: Field Survey, Muhammadu Borno Street, Jos



Plate 17: Building with fizzling feature (Dakali) Source: Field Survey, Muhammadu Borno Street, Jos Source: Field Survey, Layin Audi, Jos



Plate 18: Building with fizzling feature (Dakali)



Plate 19: Building with fizzling feature (Dakali) Source: Field Survey, Layin Audi, Jos



Plate 20: Buildings with fizzling feature (Dakali) Source: Field Survey, Layin Audi, Jos



Plate 21: Building with fizzling feature (Dakali) Source: Authors' field Survey, 2022-Layin Audi, Jos



Plate 22: Building with fizzling feature (Dakali) Source: Field Survey, Masalachin juma'a street, Jos

Local Wisdom Scientific Online Journal



Plate 23: Buildings with fizzling feature (Dakali) Source: Field Survey, Masalachin juma'a street, Jos



Plate 24: Building with fizzling feature (Dakali) Source: Field Survey, Bauchi Road, Jos



Plate 25: Building with fizzling feature (Dakali)



Plate 26: Building with fizzling feature (Dakali) Source: Authors' field Survey, 2022- Bauchi Road, Jos Source: Authors' field Survey, 2022- Bauchi Road, Jos

All the field survey/case studies carried out reveals loss of this feature. The study area comprised a total of two hundred and thirty-five 235 selected buildings currently in use, however, of these number, buildings with signature vernacular feature stood fifty (50) with additional fourteen (14) without this feature that is simply fizzling or lost due to one reason or the other (seetable 1)



Plate 27: Modern/contemporary Building, Bauchi Road, Jos Source: Authors' field work, 2022



Plate 28: Modern/contemporary Building, Balarabe street, Jos



Plate 29: Modern/ contemporary Building, School line, Jos

Babatunde Adekoyejo Jolaoso, Muhammad Murtala Bello, Auwalu Nasir Umaru, Sani Tal Adamu



Plate 30: Modern/contemporary Building, Dankarfalla Street, Jos



Plate 31: Modern/contemporary Building, Layin Audi, Jos



Plate 32: Modern/contemporary Building, Masalachin Juma'a Street, Jos



Muhammadu Borno Street, Jos Source: Authors' Field Survey, 2022



Plate 33: Modern/contemporary Bldg. Plate 34: Modern/contemporary Building, School line, Jos



Plate 35: Modern/contemporary Building, Yandoka Street, Jos

5. Summary, Conclusion and Recommendation

Dakali has been identified as one of the distinctive fundamental features of HVA, whose fizzling or extinction tendency is becoming so loud and clear, as a result of changes in its form and layout of their buildings. This paper has therefore, provided pictorial evidence of the disappearance of some typical and distinctive features of Hausa vernacular architecture. The Dakali, in spite of its usefulness and functions, it is fizzling out and gradually going towards extinction, if deliberateaction is not taken in earnest to nip it in the bud. The paper also elicited the traces of transitional changes from known and established HVA modern trends in Hausa traditional architecture, particularly in terms of form, layout, construction materials, and technology.

The study concludes that there are several other changes eating up virtually all of the identified fundamental features of HVA, thereby transiting it into today's contemporary modern Hausa Architecture, where traditional materials and technology are completely removed and replaced by new (modern) or contemporary building materials and emerging technologies, as evident in the case studies. The paper is expected not only to stimulate and provoke further study on all other fizzling and lost features of Hausa Vernacular Architecture, but to also pave way for their enduring identification, detailed documentation and preservatory legacy of their historical existence for posterity, due to current global urbanization rate, rapid changes in the field of innovative design and the trending breakthrough in technological advancement as seen within oururban settings

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