Desegregated Categorisation of Architectural Heritage in Selected Cultural Landscapes of North-West Nigeria

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Abstract: *The paper explored the conventional understanding of Architectural Heritage (AH) for recontextualisation. Presently, AH primarily focuses on the built aspects of heritage within the framework of the Authorized Heritage Discourse (AHD). However, in the context of contemporary discourse and a shift towards Afrocentric heritage conservation and sustainability, there is a need to reevaluate and reclassify architectural heritages for holistic interpretation that ensures relevance and practical management in Sub-Regions and Africa as a whole. The study specifically examines indigenous African cultural landscape sites of North-West Nigeria, where heritage features integrate tangible and intangible elements as a strategy for continuum for sustenance. Using a constructive philosophy and a theoretical understanding of the value of significant places in heritage discourse, the researchers identified key architectural features and recategorize them. The study employed the Multi-Criteria Decision Analysis (MCDA) technique, specifically the Multi-Attribute Value Theory (MAVT) method with ANOVA test, for data analysis. The findings revealed the presence of both tangible and intangible heritage features across the selected sites. Hypothesis indicated significant difference in desegregated categorisation of architectural heritage features within cultural landscapes sites. The architectural heritage features were further recategorized into four layers; progressing from the 'most dominantly' visible layer, to the 'dominant' course, then 'supportive' underlayers and lastly the 'least dominant' practices. Study concluded that architectural heritage resources are diverse and extended beyond traditionally defined categories within the studied sites. Identified features layers challenges existing typologies and encouraged reconceptualization based on a multilayered approach. Therefore, the unique attributes of indigenous settlements features needed to be recognised and adapted for transgenerational heritage management. The study recommends further investigation into the transitional nature of the desegregated and reclassified architectural heritage layers by heritage experts. Recategorization of architectural heritage within cultural landscapes of indigenous communities has the possibility to stimulate sustainable cultural landscapes management in Nigeria.*

Key Words: Architectural Heritage, Desegregated Categorisation, Cultural Landscape Settlements, Heritage Discourse Perspectives and North-West, Nigeria

1. Introduction

AHD and the concern for an Alternative Heritage Discourse (ALHD) perspective has become quite pertinent and thus serves as the driving force in the paper's argument for heritage features desegregation and recategorization. Scholars have demonstrated that the heritage concept and discourse can be visualised in two dimensions; visible and the invisible, movable and immovable, material and immaterial or tangible and intangible (Lenzerini, 2011; Vecco, 2010).

Hence the diverse strain of discourse on architectural heritage and its categorisation requires careful study and recontextualization. In Africa segregation of architectural heritage as tangible or intangible does not express the contextual reality of these heritage features and its sustenance possibilities. Architectural Heritage (AH) redefinition is here considered a requisite for sustainable management of cultural landscapes within North-West Nigeria and most of African heritage sites. Significant heritage features amongst indigenous settlements in Nigeria are not identified, even where so identified are inappropriately categorised. These concerns

therefore require desegregating the AH and recategorizing them according to the understanding of the critical stakeholders who are an integral part of the sustainability template. In that vein, Kwanashie (2002) enthused that the prevalent dominant unitary view of Northern Nigeria is deceptive and inimical to its diverse identity and resource base. Desegregation for recategorization is therefore significant to cater for the diverse resource base of Northern Nigeria, in respect of the cultural landscape settlements. The relevance of identity quest of the selected cultural landscape settlements understanding, its communication for mutual benefit is central to the paper. ICOMOS (2003) however, stated that charters were developed to identify for listing of AH either as tangible or intangible. Identification therefore remain the striking force for heritage documentation process towards their conservation within any community and hence the significance of desegregation for recategorization. Hadjri and Boussaa, (2007) observed that identification of architectural heritage for documentation around the physical perception, spatial relationship and social value essence of stakeholders. Understanding these critical attributes of any heritage features is significant in undertaking suitable identification towards appropriate understanding, categorisation for desegregated grouping as will be undertaking later in the study. Consequently, the current highly Eurocentric skewed principles, requires a reassessment if there would be an internationally acceptable heritage documentation process as universal products (Lenzerini, 2011; Olotuah and Olotuah, 2016; Rapoport, 2005). The evolution of architecture as a process and its strategic place in defining broader architectural heritage over the years did shaped the paper argument. Rapoport (1969 and 2005) studies reported on culture, architecture and design including the evolving house forms did served as a strategic base work for the paper enquiry. Rapoport argument on architectural heritage significance is particularly relevant in recontextualizing African society.

Malgrave and Goodman (2011) also assert that creating unique neuroaesthetic perceptual forms of experiences, evolving pathways and ethnological viewpoint are critical in developing AH identity for any cultural landscape.

Zubairu, Abdulrahman, Ayuba and Adedayo (2012) argued for the significance in identifying heritage features across Nigerian cultural landscapes towards their documentation and subsequent preservation. Lixinski (2013) support the argument for diversity of opinion in heritage discourse as against Smith (2011) entrenched position based on AHD perspective. Indigenous position to evolve unique identity attributes for heritage documentation and possible desegregation was thereby encouraged. Lixinski further argued that AHD perspective have rather provoked the essence of tangible and intangible heritage as distinctively unique yet a holistic feature of relevance in formulating an ALHD. ALHD ensures heritage interpretation results from its understanding through community participatory decisions processes that are reflective of their context for sustainability. Hess and Oliver (2013) stated that the identification of heritage features was significant in defining European explorers and later colonisers perception of African architecture as it was in the case of Djenne and Mopti in Mali. An alternative viewpoint is here being advocated based on the socio-cultural reality and holistic nature of African heritage features. Hence the evolution of AH is implicit within each era's socio-cultural, economic, political and technological inspiration for a cultural settlement (Maduka, 2013). Africa has always had an identity unique to them and their values over the years that required being acknowledged and given consideration. Unfortunately, in order to maintain Eurocentric views in projecting Africans as uncivilised, once any major architectural master piece was identified, they were vandalised or completely destroyed as it was in the case of the Benin kingdom (Tayo, 2017). Due to such Europeans attitude and its debilitating policy strategy that had denied Africa some of its major architectural master pieces; to forestall such possibility in the now and future, identification for documentation of AH is critical in heritage discourse perspective. Identity is strategic in heritage discourse, as it was demonstrated in the case of Stonehenge worshipers that moved blue stones from wales to Salisbury, which served as religious/burial ground or a lunar calendar surrounded by circular ditch of significant in stone age Britain (Jarus, 2017). The Stonehenge legacy as the oldest prehistoric monument has continue to provoke interest on indigenous heritage studies.

African traditional practices still prevalent are dead ancestors being an integral part of the living generation of believers in terms of their folklores and ritual practices indeed even their built settlement habitation identity features (Ndemanu, 2018). The diversity of features is indicative of the broad spectrum of cultural landscapes heritages amongst African communities. Human habitat is said to be composed of tangible and intangible heritage features such as; architecture, monuments, relics, artefacts, artistic icons,

celebration and folklores (Gholitabar, Alipour and da Costa, 2018). The restorative discoveries processes are consequent upon identified heritage features documentation within the appropriate socio-cultural value perspectives (Hadjri & Boussa, 2007; ICOMOS, 2003). Hadji and Boussa further stated that tangible heritage identity conservation is hinged on social, cultural, political and its media significance. Nigerian architectural heritage resources are highly threatened due to continuous level of deterioration, misuse by tourist and local bearers (Odumade, 2017; Osiboye, 2016; Salihu, 2017). Thus, heritage discourse perspectives must be in consonance with the indigenous socio-cultural reality for appropriate understanding and sustenance. Appropriate identification of heritage resources is a significant step in documenting and subsequently conserving the heritage features across Nigeria (Imalwa, 2018).

The people's environment is also central to evolving their architectural identity in addition to Rapoport's assertion on the place of socio-cultural value in AH identity categorisation (Sa'ad, 1991). Current architectural heritage categorisation as variously stated is not reflective of the reality as it concerns African viewpoint. The need for definitive research-based position for asserting a desegregated categorisation of heritage amongst indigenous cultural landscapes is significant. Even rural tourism development is best situated on community-based resource which is an expression of the people's value system (Tagowa, 2010). Community-based resource management was demonstrated in Sukur cultural landscape of Adamawa State, where participation, protection and preservation of AH is categorised and takes into cognisance cultural landscape unique features. Similarly, Vecco (2010) asserted that selection criteria of heritage should be in accordance to an integrated approach that ensures value, historic status, cultural place, identity and interactive memory of stakeholders. It is such argument that further encouraged the need for a segregation of identified AH features within the selected cultural landscapes of North-West Nigeria. Once the segregation based on stakeholders' significant value is attained, then the prospect for the heritage features sustenance could be guaranteed. Rikko and Gwatau (2011) depicted architectural heritage features as evolving from the societal language and its understanding of the varied attributes that categorise its morphological identity. That is why ahead of deed, text and actions, architecture has remained the principal bearer of civilisation (Youssef, 2015). Interpretation and presentation of architectural heritage features transcends a people's understanding and meaning processes throughout a timeframe. Through all history, architectural heritage has been dominant in categorising heritage resources and therefore the preferred conservation strategy for future generation. In North-West Nigeria, appropriate categorisation of identified heritage could enhance their sustenance for now and in the future.

Versaci (2016) stated that worthy historical testimonies for preservation are considered as monuments. Hence amongst indigenous communities, the acceptable and functional categorisation in accordance to stakeholders' perceptual value are determinant of their preservation prospects. Appropriate categorisation is therefore critical to community-based heritage preservation in cultural landscapes of North-West Nigeria. Similarly, Olotuah and Olotuah (2016) stated that the spatial development is based on cultural unique attributes of Hausa traditional housing form and its categorisation. Spatial compound planning in Northern Nigeria is related to the socio-cultural development of gender-sensitive circulation in Hausa settlements. In Northern Nigeria, most heritage identity and documentation are essentially based on the Hausa cultural value systems and resources (Chigozie, 2018). There are however very diverse heritage resources of different ethnic nationalities across the Northern part of the country which require careful study and documentation. Nmadili (2020) enthused that in the course of making a case for new pedagogy for teaching African centred architecture and community development there will certainly be need for desegregation of the prevailing world view on AH particularly with respect to African cultural landscapes. National Commission for Museum and Monuments (NCMM) is the main body responsible for architectural heritage identification documentation and listing in Nigeria (NCMM, 2004). Unfortunately, it seems to be totally overwhelmed or suffers from scanty resources for various aspects of its stated role. Consequently, NCCM is grappling with heritage features across the country that have decayed, deteriorated and in danger of being loss. The concern of identifying and documenting new ones seems far-fetched, however recently during Nigeria centenary over one hundred features were set for listing (Okpalonozie & Adetunji, 2021; Tijani, 2022).

The study concern for identity issues and the appropriate categorisation of Architectural Heritage (AH) is a critical discourse perspective

now and particularly so amongst indigenous communities in Africa. Identification attributes of cultural landscapes features within communities in African settlements has indicated diversities regarding AHD world view. It is therefore significant for any worthwhile study of the often abandoned, forgotten or highly deteriorated sites to be appropriately identified then categorized in accordance with prevalent cultural value significance of the people. The dominant attributes of Outstanding Universal Value (OUV) are anchored on Universal Significance, Authenticity (Originality), Material Integrity, Protection and Management Practices. Inappropriate value placement almost certainly entrenched non-relevance and lack of performance in any setting. Broadly, the paper aims to desegregate architectural heritage in selected cultural landscape of North-West Nigeria for recategorization towards having sustainable heritage features. Specifically, the study objectives are;

1. To identify architectural heritages in selected cultural landscapes of North-West Nigeria.
2. To desegregated for categorization of architectural heritage in selected cultural landscapes of North-West Nigeria.

2. Methodology

The study is anchored on the constructive philosophy and the theoretical place of value as a significant multifarious attribute in heritage discourse (Saunders, Lewis & Thornhill, 2012). Quresh (2020) stated that constructive viewpoint is concern with the socio-cultural actors' phenomenal activities that creates participants construction and cultural deciphering. Data source is mixed sequentially explained (Gyadu-Asiedu, 2011). The study is undertaken within North-West Nigeria region, specifically in Kandu, Kwatarkwashi and Nok cultural landscape sites of Kebbi, Zamfara and Kaduna States. Study population is unknown, but included local bearers, professionals as experts and development partners. The study sample size used is 384 per each selected site in accordance to Mugenda and Mugenda (2012). The research method adopted case study documentation using open-ended and structured questionnaires (Uji, 2009). Furthermore, study instrument was validated through stated criterion, content and construct. While the instrument reliability was based on Cronbach Alfa at 0.8971; which indicates that the instrument construct satisfies internal consistency test. Since the instrument Alfa value is more than 0.7, it confirmed that the internal consistency met reliability construct (Allu, 2014; Maina, 2013; Pallant, 2010). Multi-Attribute Value Theory (MAVT) is a Multi-Criteria Decision Analysis (MCDA) tool for resolving complicated real-life challenges; assessing their varied options for mitigating or solving concerns (Mustajoki et al., 2011). Giove, Rosato and Breil (2011) argued that MAVT is the ground, which exclusive value(s) are committed to preference for decision-makers perceived action. The Multi-Criteria analysis technique was used for a diversity of stakeholders' technical information on the heritage's degradation and socio-cultural value attributes preferences. MCDA is often examined using a mixed-method towards guaranteeing a transparent and robust process of decision. The MAVT technique and MCDA approach are used for ranking assorted alternative options. MCDA was used through; defining of variables, then each alternative variable was evaluated separately based on individual attributes, as well as assigning of attributes relative weight and overall alternative evaluation of aggregated weights and single-attribute evaluations, then performing sensitivity analysis for appropriate recommendation was undertaken (Abstante, Bottero, Greco and Lami, 2012; Jansen, 2011). MAVT is adaptable to varied and often contradictory, multidimensional and incommensurable objectives of heritage features (Ferretti & Comino, 2015). Study analysis used case study thematic according to Cohen, Manion and Morrison (2011) and Yin (2009). Similarly, Multi-Attributes Value Theory (MAVT) technique was used for analysis of closed-ended questionnaires using the Criterium Decision Plus 4 software for the data analysis of respondent's preferences and inclination as in Ferretti and Comino (2015) as well as ANOVA for hypothesis testing.

3. Results

3.1 Research Question One (1): What are the identifiable architectural heritage features in the selected cultural landscapes settlements of North-West Nigeria?

Across the three selected cultural landscapes of Nok, Kwatarkwashi and Kandu in North-West Nigeria there abound several categories and forms of architectural heritage features. The features were presented based on the defined categorisation in accordance with accepted dominant heritage discourse perspective. However, what is obvious is that the

set out conventional categorisation based on AHD is not practicable in all the study sites; based on their unique holistic cultural milieu. An interview of stakeholders and authors' observations across the three sites indicated abundance of the features in various categories and domains as illustrated in Table 1 and 2.

Table 1: Identified Architectural Heritage Features within Selected Cultural Landscapes of North-West Nigeria

S/N os	Identified Architectural Heritage Categories/Domains	Specific Architectural Heritage Features Based on the Settlement sites		
		Nok	Kwatarkwashi	Kandu
1	Tangible Cultural (Monuments, Group of Buildings & Sites)	Old settlements Ruins, Cave Barns, Welfare Cave, Dry Stone Gates/Wallings, settlement southern entrance Moat, Bernard Fagg Compound, museum compound, Burial graveyard (single or multiple).	Security/City Entrance Gates, Moat/Marshy plains, Old settlements Ruins (main Dukurawa, Gulba Bias, Homawa I &II,etc), dry stone ruins, Cob and wattle house form, potsherd floor interior and external finishes.	Pristine indigenous settlement layout, family compounds, thatched round huts, granaries, City Gates (Salla, Kakakomo, Bini ise & Doribaba), Burial ground/ Ancestral grave sites, Colonial security outpost
2	Natural (Geological formation/Physiological areas/Threatened Species)	Tree of life, Rock Top Springs, Rock Hiding Tunnels, Streams, Cactus as fence/hedge, Mountain Cactus, Duruku Hedgerows, Stone boulders for erosion control and farm boundary markers, paved walkways	Kotorkoshi hills and rock outcrops, Rock water Springs, Rohogi Hiding Cave/ Shrine, Tanda Fadimatu (Large Rockoutcrop grinding stone) Angudidi Sacred Tree (Initiation Groves), Rock shelter/Administrative office, Rock Python Snakes, Eagles & their Sacred Habitat, Hedgerows, Kwatarkwashi river, dried-up hilltop Lake/ponds, Hyena, Gorilla, Monkeys, Crocodile, Tamada bats	Hills and valleys, Doribaba Sacred Grove(Guardian Cobra Abode) Spring and Streams, paved pathways, Gibigibini (red earth) cave, Kakan Komo (Sacred tree).
3	Mixed Cultural Heritage Landscapes (Clearly defined landscape-parks& gardens, organically evolved landscape-relics or fossils & associated cultural landscapes-powerful natural elements of religious, artistic and cultural significance)	Terra Cotta heads (male & Female), Open Court Shrine(Young male initiation rites): Sacred monoliths at all shrine sites, Appellate Court/will declaration site (Rock Shelter); Syeik Zyee Rinkum (widowhood rites sacred forest), Terrace Farmland, Mining sites, Sacred Monoliths & extraction sites	Dyepits, mining pits, Terrace Farmlands, Tanda Fadimatu (outcrop multiple grinding point), Rock shelter for traditional elders meeting and sacrifices	Terrace farmlands and Kakan Komo Initiation Shrine site. Diverse colour mining sites for walls decorative desings.
4	Intangible Oral Tradition and expressions (undertaken within architectural spaces of courtyards, family fire place-hearth, village square)	Tree of life as instrument for warning against impending disaster and healing of extremely rare diseases once purity amongst the people is maintained.	The spiritual significance and power of the Dukura hill which is the initial settlement site of Kwatarkwashi. Indigenes visit it as often and present personal needs and petitions for spiritual intervention and has proven it efficacy.	Warfare stories of rain and whirlwind. Ancestral rain water provision in cases of severe drought or enemies siege as confirmation of divine providence and presence with the people in right stand with the ancestors.
5	Performance Art (Village Square)	Traditional wrestling, Maidens Dances, Marriage Ceremonies, Manga(magical/Fire dance)	Daukan Mikiya(Eagle Dance & Festival), Baura (initiation rites &Wrestling contest), Dukura hill maiden rites (Virgin dance), Takai (youths dance), Lella (running dance), Asawara (male and female dance), Bori spirit dance.	Wrestling Matches, Ohola (new year festival for youths), Gulmo (young adult-13to16yrs old farming tours for prospective in-laws)
6	Social Practices, Rituals and Festive Events (Village square, Shrine and Sacred Grove/Forest)	Male initiation rites, Reincarnation rites, Widowhood Mourning Rites, Childbirth/ Naming ceremony, Hwub Bveik (poring libation rites), masquerades appearances, rite of passage to puberty, Marriage ceremony, female circumcision/body scarification and nose notches	Kalankuwa (harvest festival), Hunting Expedition, Fishing Festivals, Initiation Rites for young adult male.	Kakan Komo (traditional feast & initiation Rites), Dipisko (elders feast) Takaba (Widows mourning rites), Dibiti (Gulmo age grade festival during raining season), Chikuku (sacrifice/appreciation rites) Wyella (fire tracing), Hunting and Fishing Practices.
7	Knowledge and Practices concerning nature and universe (Courtyard, Terrace farmland, Craft centres)	Storytelling with respect to nature and human relationship; Hunting and Fishing Events, farming practices	Farming, fishing, trading practices to instil training on family life and provision for the youths to hand over to subsequent generation.	The supernatural powers during wars or severe drought that uses whirlwind for defence and rainfall at odd seasons. Golmo (young male farming services for betrothed girls towards marriage, teaching them responsibility to family),
8	Traditional Craftsmanship (Blacksmith hut, craft shed and terra cotta centres)	Pottery making, weavings (basket, fishing nets, mats, beddings),calabash carving, mines smelting furnace, mining processing basin/pools, corn stalk string instruments, ngasha (bounded fire sticks), entrance wall decoration (sun/evil eye symbol) on hut or old settlement rock entrance point.	Master builders, craftsmen, Dyeing, Blacksmith, Weaving (mat, baskets and asabari), Knitting, mines processing on rock basins beside lake and pond	Pottery Making, decorated Carvings, chifusa(decorative wall motif with colour clay), Chibenike (young gulmo members jointly building shade or rest rooms for initiates), Salla (settlement gate/boundary reinforcement), kibego (fishing basket), Kigwe (corn stalk bed), Ate (grass door), sipili (entrance door), edigwe (fire sticks)

Source: Field Survey

Table 2: Selected Architectural Heritage Feature Plates within Cultural Landscapes of North-West Nigeria

Source: Field Survey

3.2 Research Question Two (2): How are the identified architectural heritage features desegregated for categorisation within the selected cultural landscape settlements of North-West Nigeria?

3.2.1 Architectural Heritage Catgorisation Value Tree Relationship

Categorised preferences of stakeholders are here analysed using the Multi-Attribute Value Theory (MAVT) technique; being a significant idea

in Multi-Criteria Decision Analysis. The applications of MAVT seek to describe a decision maker's value function over two or more objectives and associated criteria. According to the MAVT methodology, the elicitation procedure consists in defining a value function for each indicator; this value function allows for scaling the indicators between 0 and 1 in order to aggregate non-commensurable items. In MAVT, the preferences of the stakeholders' identified architectural heritage features are modelled with numerical weights reflecting the relative importance of stated criteria.

Figure 1 illustrates the value tree relationship of the three sites with respect to their key architectural heritage attributes that are significantly relevant in determining the weight value of the stakeholder's responses and the specific weight is as shown in the weight value ranking in Table 3. The attributes T1 to T9 are considered as tangible heritages, while T10 to T14 make up the intangible heritage domains of architectural heritages. Further descriptions of the shown Tree Values attributes are indicated within the weight chart for better understanding. The value tree relationship indicates the pattern of interaction amongst the critical attributes of architectural heritage of tangible and intangible features within the three cultural landscape sites.
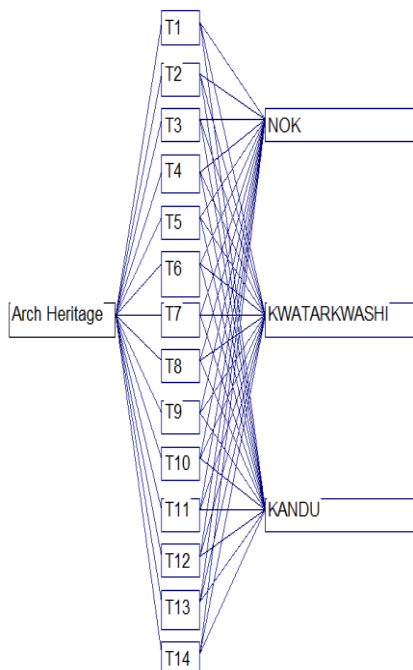

Figure 1: Architectural Heritage Feature Categorisation Tree Value with the Sites, Criteria and their Attributes
Source: Field Survey

3.2.2 Architectural Heritage Categorisations Criteria Weight Value

The overall values and the ranking of the stakeholders' preference of architectural heritage features within selected landscape settlements encompassed Tangible and Intangible features. The features are as indicated in Table 3 where the "Buildings has 92% weighted value" being the most preferred attributes according to the set of weights of architectural heritage feature in NOK site. This is followed by Performance Arts, Cave Dwellings and Combined Structures, Traditional Craftsmanship, and Shrines. In Kwatarkwashi, "Social Practice, Rituals and Traditional Craftsmanship" were considered most preferred architectural heritage feature with 90% weighted value. This is sequentially followed by "Buildings, Performance Art and Cave Dwellings and Combined Structures". In Kandu, "Social Practice and Rituals" was the most preferred architectural heritage feature with 95% weighted value. It is followed by "Burial Sites, Oral Traditions and Expressions, Buildings and Terrace Farmland" which were also significantly preferred by various stakeholders. Generally, across the three settlements, the criteria weighted value indicated that "Buildings" are the most preferred attributes by stakeholders, followed by Social Practice, Rituals and Performance Arts.

Also, based on the three sites, the results revealed that "Kandu Site" is classified as the best alternative (preference) and most significantly preferred base on the stakeholders' preference for architectural heritage feature at 0.838. It is followed by Kwatarkwashi at 0.832 and then Nok at 0.787.

Table 3: **Architectural Heritage Features Categorisation MAVT Preferences**

Code	Attributes	MAVT Preferences by Sites			Average Criteria Weight	Rank
		NOK	KWA	KANDU		
T1	Buildings	0.92	0.89	0.91	0.89	1
IT3	Social practice and Rituals	0.82	0.90	0.95	0.88	2
IT2	Performance Arts	0.85	0.89	0.87	0.87	3
IT1	Oral Tradition & expressions	0.79	0.86	0.92	0.857	4
IT5	Traditional Craftsmanship	0.84	0.90	0.81	0.85	5
T3	Shrines	0.84	0.81	0.86	0.837	6
T7	Terrace farmland	0.74	0.86	0.91	0.837	7
T4	Cave dwellings & combined structures	0.85	0.89	0.71	0.817	8
T5	City wall/moat/Gate/fence	0.71	0.88	0.81	0.80	9
T6	Burial sites	0.67	0.79	0.94	0.80	10
T9	Scared Grooves	0.83	0.7	0.84	0.79	11
IT4	Knowledge and practices on Natural & universe	0.74	0.81	0.77	0.773	12
T2	Monuments	0.80	0.77	0.71	0.76	13
T8	Cultural landscape element	0.78	0.76	0.7	0.747	14
	Results	0.787	0.832	0.838		

Source: Field Survey

3.2.3 Architectural Heritage Desegregated Categorisation Sensitivity Analysis

A comparison of the ranked lists of alternatives is produced by MAVT technique and it

is performed to assess result sensitivity to MCDA method choice and or change in criteria weighting as in Figure 2. This type of comparison further validates and gives confidence to the MCDA site preference and suitability results. Thus, as it is possible to see, out of the three alternatives stakeholders had more preference for the tangible and intangible architectural heritage features in Kandu. Categorised features have the best performances in the considered sensitivity scenarios of the stated site; suggesting to have most essential contribution to the architectural heritage feature for documentation and subsequent categorisation within the selected cultural heritage landscape settlements.

The graph illustrates the sensitivity analysis carried out on architectural heritage, as reinforcement of the observed respondents weight values based on the sites. From the graph as in Figure 2, it can also be seen that T1 (Buildings) at 0.92 sensitivity as the most preferred architectural heritage for Nok. In Kwatarkwashi, the most preferred architectural heritage by stakeholders is IT3 (Social practice and rituals) and IT5 (traditional craftsmanship) at 0.90 sensitivity level. In Kandu IT3 (social practice and rituals) at sensitivity level of 0.95 and T6 (Burial Sites) at sensitivity level of 0.94 are the most preferred architectural heritages.
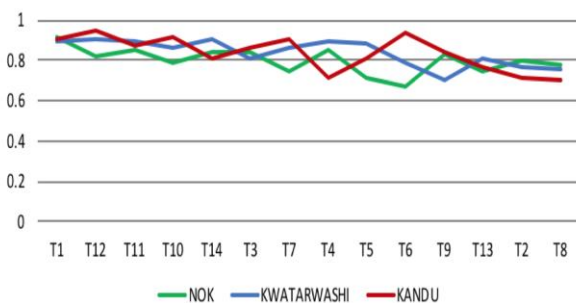

Figure 2: Architectural Heritage Features Preferences Sensitivity Analysis Across Selected Cultural Landscapes Sites
Source: Field Survey

3.2.4   Hypothesis One (1)
H_0: There is no significant difference in the Desegregated categorisation of architectural heritage features within selected cultural landscapes of North-West Nigeria.
H_1: There is significant difference in Desegregated Categorisation of architectural heritage features within selected cultural landscapes of North-West Nigeria.

The estimated result of analysis of variance (ANOVA) as shown in Table 4 revealed that null hypothesis (H_0) is rejected, since $P<0.05$ level of

significance and conclude that there is significant difference in the categorisation of architectural heritage features within selected cultural landscape settlements of North-West Nigeria. Correspondingly, from the Tukey HSD test, it was observed that there is no significant difference in stakeholders' categorisation of architectural heritage feature in Kwatarkwashi (4.17 ± 0.19) and Kandu (4.20 ± 0.3) landscape settlement. This connotes that there is synergy between the preferences of stakeholders on architectural heritage features categorisation in Kwatarkwashi and Kandu landscape settlements but not with Nok at 3.96 ± 0.28 significant difference level.

Table 4: ANOVA of Architectural Heritage Features Categorisations

Stakeholders	N	Mean ± SD rating	ANOVA	
Nok	337	3.96 ± 0.28[a]	Total DF	987
Kwatarkwashi	431	4.17 ± 0.19[b]	F. value	104.518
Kandu	220	4.20 ± 0.31[b]	P. value	0.001

Mean with different superscript within the same column are significantly different at (P<0.05)
Source: Field Survey

4. Discussion and Summary of Findings

Paper discussion is based on the set-out study objectives of identification of available architectural heritage and the observed desegregated categorisation within the selected cultural landscapes settlements in North-West Nigeria. Furthermore, the stakeholder's interpretation and presentation of identified heritage features in accordance with their understanding was also here discussed towards ensuring continual relevance and sustainability within their socio-cultural context.

1.   Identity of Architectural Heritage Features
Features here were first identified based on stated conventional typologies of tangible and intangible. However due to the holistic nature of cultural landscapes within study areas, the features were desegregated based on respondents' heritage Dominant amongst the identified tangible features are; old settlements ruins sites, entrance gates and dry-stone walls, built traditional pristine settlements, cave dwellings and barns, sacred groves, initiation shrine sites as well as burial grounds as variously listed by respondents traversing the sites. Similarly, features like; the tree of life, hill outcrops, hilltop springs, monoliths, various extinct or threatened animal species were

equally identified. Other features are terra cotta figurines, abandoned dye pits and iron smelting furnace and terrace farmlands. The intangible architectural heritage features are: the daukan mikiya ceremony, festivals, baura wrestling, ohala, gulmo initiation and burial rites), dukuwa hill was a place for spiritual consultation of the ancestral spirits by indigenes of Kwatarkwashi. Very unique and interesting cultural arts and crafts including; pottery, terracotta, weaving, knitting, dyeing and decorative art (horus eye and colour patterns) are prevalent within the three study sites.

Similarly, Imalwa (2018) affirmed the significance of heritage identification survey as central for documentation and thus its ultimate conservation. Identified heritage features therefore, set restorative discoveries process after documentation within a socio-cultural context after due documentation is undertaken (Hadjri & Boussa, 2007; ICOMOS, 2003). Here then is the essence for the first objective of this paper's study. The result analysis is in congruence with Odumade (2017), Osiboye (2016) and Salihu (2017), which elaborated on disappearing heritages, their deterioration concerns leading to highly threatened architectural heritage resources in Nigeria. Once heritage features are identified then their documentation could proceed towards formal listing and indeed their conservation across generations.

As it was in the case of stone hedge dwellers that moved blue stones from wales to Salisbury (Jarus, 2017), the study observed similar movement of the tall(female) and short(male) monoliths from the southern part of Nok hills near the moat boundary line to the open court (initiation shrine) location. It is only at the open court that there are two installed monoliths in Nok. In other shrine (initiation) sites within the old and current Nok settlement there was observed only one monolith at each shrine site. Seemingly, the open court was used by all gender within the community. Communal meetings, dialogue and socialisation under the leadership of the Kpop ku and the elders often took place at the open court in Nok. There was the movement of stone monoliths (Male and Female) across one end of Nok settlement to another, where they served as the outer court shrine emblem of authority. The observed movement of boulders across great distances in Nok and Salisbury could be argued as evidences of the cultural evolutionary processes from the stone age, through to bronze and iron ages in the two sites.

There are other very interesting identified features like, the "Eye of Horus" often referred to as evil eye or in some other renditions as "wadjet" is basically symbolic for protection and royal power. It is also an indication or aspiration of healthy life in Egyptian hieroglyphic writings and symbols. In Nok and Kandu decorative art, the presence of the 'evil eye' hieroglyph within old settlement rock entrances and the built traditional huts entrances to residences probably served as a significant link and evidence of the tie in heritage and the current dwellers in the case of Nok. In Kandu, it affirmed the extensive coverage of the Nok cultural spread across most of Northern Nigeria. In like manner the myth of 'tree of life' found in Nok; appearance and disappearance in Nok and Egypt alternatively, could point to the possibility of having only one of its type in the world.

This study analysis identifies diverse heritage features that indicated the availability of tangible and intangible heritage features across the three cultural landscape sites. Such adventure as this reinforced the argument by Zubairu, Abdulrahman, Ayuba and Adedayo (2012) on the need for further studies be undertaken on diverse resources across the country. The diverse resource features, demonstrated the enormous resources available and the potentials of local, national and world heritage centre listing, which can engender and support the Alternative Heritage Discourse (ALHD) perspective for national development and adapting appropriate conservation strategies.

Glaring reality within the three cultural landscape site is that most of the heritage features cannot strictly be categorized based on the set out tangible and intangible domains being practiced by Eurocentric World Heritage Centre (WHC). The study's result analysis identified contemporary template of categories of AH features from the conventional mould. Study observation therefore, evokes the necessity to evolve an alternative template for architectural heritage identity; which is composite and integrative. Once such holistic template of heritage identity and categorisation have been established away from the tangible and intangible identity features, an enduring process of listing for effective conservation strategy will evolve Interestingly, the study's unconventional finding was in line with Gholitabar, Alipour and da Costa (2018), which posited that human habitat is made up of material and immaterial heritage such as; architecture, monuments, relics, artefacts, artistic icons, celebration and folklores. This study reveals the broader variety of the indigenous architectural heritage features across the Northern region of Nigeria. It has also aid in discouraging the Hausa sole identity characterisation of Northern Nigeria and exposing its rich resources for national

development (Chigozie, 2018; Nmadili, 2020; Rikko & Gwatau, 2011).

The study analysis on multifarious nature of AH also supports the ideal of cultural and physical elements influences on settlement and dwelling forms as in Sa'ad (1991) and space as symbolic in Osasona (2001). Additionally, Kwanashie (2002) stated that the unitary North and its heritage projection and perception need review due to ethnic diversity, religious variance, political leaning and leadership structure. The study findings have therefore been able to validate the variety of the heritage features within the study's geopolitical zone and supports Kwanashie (2002) assertion that is why Nduka (2020) argument of architecture as both a physical and a spiritual expression is here reinforced. Nmadili (2020) further advocated an independent Afrocentric design language evolution, which the study result analysis supports. The proposed AH identity form should therefore be holistic and congruous for all features as they exist in consonance with one another in practice. Here the tangible is considered as propelled and sustained by the intangible, while the intangible is often expressed in the tangible; reaffirming the cyclical integrated and sustainability concept of indigenous African heritages as an Alternative Heritage Discourse (ALHD) Perspective.

In identifying the architectural heritage features across the three selected cultural landscapes, it was unexpected that there will be such similarity of features and the respondent's preferences independent of status categorisation. The finding further affirms instinctive unity of humanity despite propounded categorisation and segregation base on tribe, tradition, religion and cultural milieu in Nigeria. The study AH features identity similarities across the different sites, could also be indicative of how nearby our ancestral division might have gone in the North and even the country at large.

2. Architectural Heritage Features Desegregated Categorisation

The study's second objective analysis observed that there are no significant differences in the mean preferences of architectural heritage by respondents/stakeholders across the three selected sites. Here architectural-heritage-preferences is viewed as a process-product feature; the intangible activity is considered the process, which ultimately evolves into a tangible product supporting Rapoport (1969 and 2005) as well as Olotuah and Olotuah (2016). The study's finding specifically indicated that 'tangible built architectural heritage features' preference is most evident then followed by 'the socio-cultural practices' across the three study sites. Furthermore, while the study's findings with respect to significance of built heritage did reinforced Youssef (2015) arguments that architecture had stood out as the principal bearer of all civilization ahead of deed, text and actions. The argument of architecture as indicator of civilization was also demonstrated from the middle ages through the 18th century and the industrial revolution. Despite the rich intangible AH features across the three sites, the seemingly dominant built features particularly in old settlements is still left as testament of the once flourishing culture. It should be noted that in African indigenous community, the tangible is driven at the instance of the intangible, this could explain the low ranking of the monuments by respondents; which the Eurocentric's consider as the principal heritage. The argument by Smith (2015) that the tangible heritage is mostly presented as a representative perspective on heritage discourse is further affirmed by the findings. Conversely, the strong place of intangible heritage resource base in determining tangible heritage features and preferences cannot be underestimated.

The study's architectural heritage preference analysis further demonstrated that the tangible heritage features are reinforced by the intangible resources based of each study settlement communities. The tangible heritage foundation in the study is laid through intangible socio-cultural practices and rituals, performance arts, oral tradition and expressions as well as craftsmanship being the next significant underlying preferred heritage attributes layers within the three sites. Lenzerini (2011) and Vecco (2010) argued on the assortment of heritage features based on different socio-cultural strains viewpoints. Hasbollah (2014) and Mangut (2012) also opined that the different perspectives are often physically and visibly expressive; in this instance, as built heritage. The finding on tangibility of intangible heritage features also confirms Vecco (2010) argument. Here, the study result analysis has merged heritage discourse into one, the past testimonies and its goods; which is being driven by the intangible resource base well supported in Smith (2011).

Significant placement of socio-cultural practices in heritage resource identity preferences and its management, also conformed to Hadjri and Boussaa (2007) statement that while the physical and spatial features of heritage are critical, it is however the social factor which is the most significant with respect to heritage stakeholders' perceptual preferences. Olotuah

and Olotuah (2016) also affirmed that indigenous architectural heritage is firmly hinged on socio-cultural, climatic, political and economic reality of the society. The socio-cultural significance was similarly identified in Sukur heritage site, which require gradual but firm reorientation of indigenous community members with supportive policy and strategy towards maintaining the OUV of the sites (WHC/ICOMOS, 2018). Therefore, if the three cultural landscape sites are to be sustainable in the long run, their socio-cultural preferences must be critically understood and prominently maintained as viewed by stakeholders.

Therefore, the dominance of built heritage features study's finding closely reinforced by social processes is in consonance with other studies as argued by Lixinski (2013, Smith (2011), Versaci (2016) and Rapoport 2005. In the above listed studies, architecture is considered both as a process and a product. It is imbued by spiritual and physical activities that are expressed as intangible or tangible heritages engrossing past history and present inspiration for future adaptability (Nduka, 2020). Furthermore, architecture is said to evolve wholesomely from the socio-cultural, economic, political and technological expressions of Africans (Maduka, 2013; Rapoport, 2005; Rikko & Gwatau, 2011). Currently, architectural heritage is an expression of the post-modernist worldview of diversity in cultural significance for strategic sustainability and peaceful coexistence (Hess & Oliver, 2013; Mallgrave & Goodman, 2011). Herein, the study affirmed the synergy of the tangible and the intangible resources as a form of architectural heritage categorisation in North-West Nigeria's cultural landscape settlements and by extension indigenous African communities. The study established that heritage conversation particularly amongst indigenous cultural landscapes settlements should be heritage bearers centred, while being directed or coordinated for inclusiveness by other stakeholders (experts and partners) in differing capacity.

Considering the result analysis across the three sites indicated that built heritage preference in Nok is however in contrast to the reality. Here, most traditional indigenous buildings are decayed, demolished and or reconstructed based on contemporary form and structures in current settlement. Probably the global significance of the Nok archaeological findings might have also influenced respondents' perceptual preference of its tangible built features. It could also be due to the presence of the National Museum within the Nok settlement. Built AH serves as resting place for visitors to the cultural landscape site. Likewise, is the famed Benard Fagg compound littered with abandoned iron smelting furnaces. These historic features could be the influence on respondent's perception on built heritage within Nok settlement. In Kandu, the unique yet mostly lost indigenous traditional fractals compound-huts architecture made it quite worthy of preference by most visitors and the older indigenous bearers. After all, most tourist can only reminiscence on such huts from their past experiences since they are currently lost to decay and destruction. Kwatarkwashi site's dominant preference for buildings might be in connection with the current evolved traditional Hausa compound morphology. In the present form, space hierarchy and privacy are dominantly upheld and in tandem with their Islamic faith and current traditional Hausa Architecture of Kwatarkwashi. Furthermore, the respondents view of architecture seems detached from their traditional past of round huts as seen in other indigenous heritage of Sub-Saharan Africa due to Trans-Sahara Trade influences.

Shrines significant preference in Kandu indicated its current relevance even during contemporary festivities and burial rites. Following is Nok which could be due to past ritual being retold to visitors by Nok museum guides and lastly the Kwatarkwashi being the least significant. Kwatarkwashi's low ranked position on shrine perceptual preference though significant might be due to the strong religious affinity for Islam. There are strong efforts made at divorcing bearers from their past traditional spirit (iskoki) worship sites. The significance of cave dwellings and combined structures are quite manifest in Nok with respect to, the welfare cave, cave barns and rock shelter that were used even in recent past. In Kwatarkwashi, domineering hill outcrops and cave dwelling sites are the major visible remains of reference for tourists that still exist apart from the ruined settlements and dye pits. The cave structures are an emblem of the former thriving rich cultural lifestyle (iskoki worship) that impact on all visitors' perceptual consciousness.

Terrace farmland are quite dominant in Kandu due to the presence of the elderly inhabitants within the old settlement and the active use of the sacred sites with the spiritual head (chief priest) and elders still living within the old settlement site. In Nok, there is still visible remains of the terrace farmlands and stones as boundary markers and several hedgerows using cactus. For Kwatarkwashi, the terrace farmlands are within the old settlements, however they are still in use by indigenous dwellers of the present day Kwatarkwashi.

City walls, Moats, Gates and Fences are considered an integral part of most settlements and the individual compound layouts. In all the three cultural landscape sites, security is an important consideration for siting and protection of the settlements. The chosen sites are on top of hills and surrounded by security gates and or fences with strategically sited moats in case of Nok and Kwatarkwashi. Nok and Kwatarkwashi have stone as their city gates and walls including foundations for most dwellings and are still visible. In Kandu, the dominant material is earthen walls with stone foundations and fences for dwellings.

Burial sites were an integral part of the Kandu compound morphology and configuration. In case of most African tradition and still being practice, the dead are considered an integral part of the living folklores and belief system (Ndemanu, 2018). The dead ancestors within the grave sites are considered as spirits worthy of worship and served as guardians from the afterlife. In Kandu the ancestral grave sites are prominently at the compound entrance and remnants of libation offerings are often very visible. Similarly, in Nok settlement, same could be adduced. However, with the strong influence of Christianity, burial ground significance is of less importance. Currently, grave site libations are not poured in Nok settlement on graves sites; however, the grave sites are within the vicinity of the family compound as ancestral relationships seems not completely lost. For Kwatarkwashi cultural settlement, the dominance of Islam has eroded most bearers' affinity to their past ancestral spirit dwellings. Thus, except within the ruined sites, virtually all current burials are done in a secluded site at the present town's outskirt. It must be stated that Kwatarkwashi is the most urbanized of the three sites, hence deliberate attempts to follow modern town planning segregated zoning might have also influenced burial ground siting in an exclusive zone.

Sacred grove sites in Nok and Kandu are still visible and in fairly good state, due to relevant festivals or initiation rites that are still being undertaken in some sites particularly within Kandu and visited by tourist in the case of Nok. The Kwatarkwashi sacred sites are mostly abandoned and destroyed, worthy of mention only when tourists visit and during research endeavours.

The lower placement of knowledge and practices on nature and the universe as well as monuments and landscape elements show a demonstration of the low level of indigenous knowledge amongst most respondents and the strong influence of modern Eurocentric viewpoint on heritage discourse. In fact, the low oral knowledge transmission skills of the past are quite suggestive of the current low state of African perception and thus their preferences. Thus, in most African indigenous cultural landscapes that have survived years of aggressive Eurocentric abuses, the prevalence of knowledge transmission has remained their saving grace as in Sukur (Tagowa, 2010). Conversely the place of monuments amongst indigenous African cultural heritage can be said to be at the least dominant practices. The position is prevalent because, most structure's magnitude can be said to be of less significance relative to the socio-cultural processes being undertaken within a site or around the structure. The observed low preference level of monument is also indicative of how variant our heritage significant value differs from that of the western world (Lenzerini, 2011; Malgrave and Goodman, 2011).

Application of MAVT technique was able to establish that the architectural heritage features are diverse in nature and usually presented a holistic unit in cultural landscape of African settlements. Regardless the nature of the process and product is such that it could be recategorized in a form of an evolving layers. The layers are an expression of the opinion of different stakeholders across the three sites as well as capturing the diversity of the AH attributes. The ability of the study analysis technique to expose variety of strands of respondents view in a harmonious form make the technique worthy of applicability in a multifaceted professional subject as architectural heritage.

It was however unexpected that the cultural landscape elements and monuments were the least significant architectural heritage as perceived by the stakeholders in the study analysis. Mallgrave and Goodman (2011) stated that if any architectural design features will continue to be relevant, they must consider individuals and communities' neuroaesthetic preferences. In essence, if any built heritage and indeed other heritage features will remain applicable, their perceptual preferences must be appropriately contextualised. This study is driving the researchers towards an in-depth analysis of the visible in the context of the invisible.

In summary, the results or findings demonstrated Architectural heritage features are significantly diverse and holistic in the study sites. Furthermore, the built heritage preference can be desegregated as in various levels of dominance visible in all the three sites with underlying factors of socio-cultural significance. For practical purposes the optimal perceptual preference of architectural heritage within the selected cultural landscape

settlements of Nok, Kwatarkwashi and Kandu is here desegregated and categorised into four Evolutionary Layers. Firstly, the Most Dominantly Visible Features (Buildings), secondly the Dominant Underlying Course of the features such as social practices, rituals, performance arts, oral traditions and expressions as well as traditional craftsmanship. Thirdly are Supportive Underlayers such as shrines, terrace farmland, cave dwellings and combined structures, city walls, moats, gates, fences, burial sites and sacred groves. Fourthly is the Least Dominant Practices with respect to knowledge and practices, monuments and cultural landscape elements as illustrated in Figure 3.
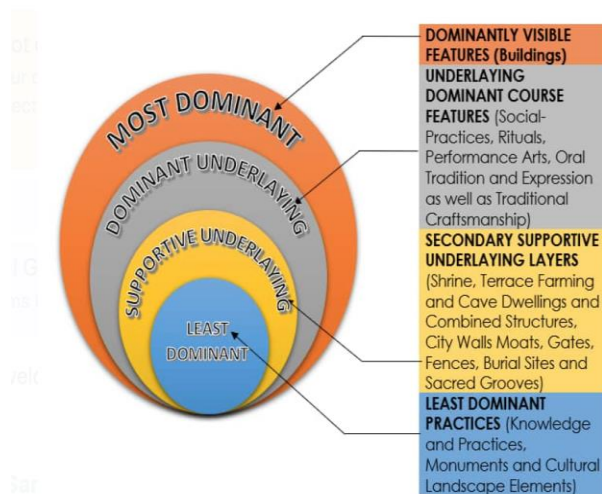

Figure 3: Desegregated Categorisation of Architectural Heritage in Selected Cultural Landscapes of North-West Nigeria
Source: Field Survey

The four layers of perceptual preferences within the selected sites graduated from the outer visible to inner non-visible architectural heritage features which is an expression of the evolutionary theoretical processes of architectural heritage features. It is worthy to emphasise here that no clear demarcation could be made from one layer to the other rather, all perceptions are transitional in nature. Also, all layers of AH features categories are considered significant based on respondents' opinion. Therefore, every tangible heritage clearly has its intangible process and vice-versa. Monumentality is theoretically hereby desegregated as less significant in architectural heritage evolution relative to socio-cultural relevance in the expressiveness of its tangible built heritage features. This finding expressed an important philosophy in African indigenous architectural heritage features, their value significance and listing strategic sequence for any site.

5. Conclusion and Recommendations

Architectural heritage in North-West Nigeria and most of Sub-Saharan Africa is an integrated and holistic mould. The often-projected segregated categories of AH as tangible and intangible does not really fit into the Afrocentric world view. Integrated form of heritage discourse perspective, particularly in Sub-Saharan Africa, Nigeria and indeed the Study area affirm the significant place for an Alternative Heritage Discourse viewpoint towards sustainable indigenous heritage features. The study therefore recommend as follows;

1. It is important to state that the architectural heritage identification is critical to any form of heritage listing and in the case of most indigenous African communities the need for identification and documentation is particularly significant to be undertaken by relevant government agencies in liaison with the local communities. The identification should be broadly based on the interpretation and presentation of their understanding of socio-cultural significance for particular people and or settlements.

2. Further identification and documentation of architectural heritage should be encouraged by all relevant agencies and professionals as a means of national cohesion and purposeful natural resource conservation, tourism valorisation, economic growth and development.

3. Since monumentality is considered the least dominant practice in the cultural landscapes settlements studied, it indicates that for architectural heritage within these communities to be sustainable, it requires consideration of their significant socio-cultural value above the monumentality of the features by the National Commission for Museum and Monuments (NCMM) as they prepare criteria for heritage listing.

4. It also requires that NCMM should immediately undertake a critical review of prevailing heritage listing criteria to align with the local community order of preference of architectural heritage features in their cultural landscapes. The possibility of giving indigenous heritage listing criteria different from that of contemporary global heritage listing criteria is important.

Further research should be undertaken that desegregates for categorisation the identified heritage features as observed in this study for reaffirming the study perspective towards propounding an indigenous African worldview that is in consonance with the prevailing reality of our cultural landscapes in Northern Nigeria and the Sub-Saharan region in general. Furthermore, the unique features of each desegregated layer of categorisation could be reviewed in line with similar studies across the region and Africa towards creating a framework for desegregated architectural heritage categorisation that encourages conservation within the traditional conservation system as practices amongst indigenous communities of Africa. Such desegregated identified layers could also serve as sustainable tourism beacon in future site development proposals.

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