THE EVOLUTION OF HAUSA HOUSING CULTURE: FROM TRADITIONAL TO MODERN

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THE EVOLUTION OF HAUSA HOUSING CULTURE: FROM TRADITIONAL TO MODERN

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Ga al'ummar Hausawa, wannan sadaukarwa ce gare ku. To my Hausa people, I dedicate this to you.

DECLARATION OF ORIGINALITY

I hereby declare that I am the sole author of this thesis and that this is the true copy of my thesis, including the final revisions, approved by my thesis committee. All data and information have been obtained, produced, and presented in accordance with the rules of research ethics and principles of academic honesty. As required by these rules, to the best of my knowledge I have acknowledged ideas, thoughts, and any copyrighted material in accordance with the standard referencing rules. I certify that any part of this thesis has not been submitted for a degree or diploma in another educational institution.

Rahma Sarki Ibrahim

ABSTRACT

Across centuries, the architecture of a people has silently chronicled their history, values, and way of life. Among the Hausa of Northern Nigeria, the home has always been a living symbol of identity, social and political structure, and cultural continuity. Yet, the Hausa living culture, entrenched for centuries in tradition, is being challenged by rapidly urbanising landscapes and increasingly westernised forms of dwelling. The courtyards that once echoed with shared meals, family tales, and neighbourly bonds are disappearing, and the spatial hierarchies that preserved privacy whilst maintaining social relations are dissipating. In an era of emerging normalities, significant questions arise: What is being maintained and what is being left behind? This study explores the evolution of Hausa housing culture, examining the transition from traditional to modern homes and its implications for cultural identity, social practices, and privacy. Through fieldwork, surveys of traditional and modern homes, spatial analysis, and interviews with homeowners and architects, the study identifies key changes in the layout and function of domestic spaces, such as living rooms and kitchens. The findings suggest that modern housing layouts have largely forgone the compartmentalisation of spaces that existed in traditional homes. Privacy structures and spatial hierarchies that were emblematic of traditional Hausa homes were dismantled. The research reports considerable changes in spatial arrangements, such as buffer zones and courtyard spaces that were integral to the sociocultural dynamics of traditional Hausa dwellings. Social interactions, privacy customs and the continuity of cultural practices have been modified by these changes. The study finds that modern Hausa homes, influenced by Western design, often feature open-plan layouts that blur the boundaries between public and private spaces, impacting both psychological comfort and the ability to maintain traditional social hierarchies.

Additionally, the shift towards individualistic lifestyles in today's residential spaces has eroded the communal connection that traditional space encourages. The study also identifies a partial revival of traditional elements in contemporary designs, such as design motifs, but argues that modern homes often neglect the psychological and social needs that these spaces fulfil. The research advocated for a more reflective approach to house design in contemporary Hausa society that enables functional needs, one that balances functional needs with the preservation of cultural memory. The research suggests that housing should be designed for both privacy and social connection, particularly to the collectivist nature of the Hausa, while also accommodating the demands of modernity. The study recommends re-evaluating housing and urban policy in Nigeria, especially those shaped during colonial times, that have failed to account for the diverse cultural and religious needs of the vast ethnic and religious groups in Nigeria. The research recommends including anthropologists and theologians in developing policies to promote culturally relevant, sustainable and culturally acceptable housing solutions that protect cultural values, help build social integration and improve livelihood.

Keywords: Hausa architecture, housing culture, privacy, comfort, spatial evolution

ÖZET

Yüzyıllar boyunca, bir halkın mimarisi sessizce onların tarihini, değerlerini ve yaşam biçimlerini belgeledi. Nijerya'nın kuzeyindeki Hausa topluluğu için ev, her zaman kimliğin, sosyal ve siyasi yapının ve kültürel sürekliliğin yaşayan bir sembolü olmuştur. Ancak yüzyıllardır gelenekle şekillenmiş olan Hausa yaşam kültürü, hızla artan kentleşme ve giderek daha Batılı hale gelen konut biçimleri tarafından tehdit edilmektedir. Eskiden ortak yemeklerin, aile hikayelerinin ve komşuluk bağlarının yankılandığı avlular yok olmakta, mahremiyeti korurken sosyal ilişkileri sürdüren mekânsal hiyerarşiler çözülmektedir. Yeni normallerin ortaya çıktığı bu çağda önemli sorular gündeme gelmektedir: Neler korunuyor, neler geride bırakılıyor? Bu çalışma, Hausa konut kültürünün evrimini inceleyerek gelenekselden moderne geçişin kültürel kimlik, sosyal pratikler ve mahremiyet üzerindeki etkilerini araştırmaktadır. Bu çalışma, saha çalışmaları, geleneksel ve modern evlere dair anketler, mekânsal analizler ile ev sahipleri ve mimarlarla yapılan görüşmeler aracılığıyla, oturma odaları ve mutfaklar gibi ev içi alanların düzeni ve işlevindeki önemli değişiklikleri ortaya koymaktadır. Bulgular, modern konut planlarının büyük ölçüde geleneksel evlerdeki mekânsal bölünmüşlüğü terk ettiğini göstermektedir. Geleneksel Hausa evlerine özgü olan mahremiyet yapıları ve mekânsal hiyerarşiler ortadan kaldırılmıştır. Araştırma, tampon bölgeler ve avlu alanları gibi geleneksel Hausa evlerinin sosyokültürel dinamikleri için hayati olan mekânsal düzenlemelerde büyük değişiklikler olduğunu göstermektedir. Sosyal etkileşimler, mahremiyet adetleri ve kültürel pratiklerin sürekliliği bu değişimlerden etkilenmiştir. Çalışma, Batı tasarımı etkisindeki modern Hausa evlerinin, çoğunlukla kamu ve özel alanlar arasındaki sınırları bulanıklaştıran açık plan düzenlerine sahip olduğunu ve bunun hem psikolojik rahatlığı hem de geleneksel sosyal hiyerarşilerin korunmasını etkilediğini

ortaya koymaktadır. Ayrıca, günümüz konut alanlarında bireysel yaşam tarzlarına yöneliş, geleneksel mekânların teşvik ettiği topluluk bağlarını zayıflatmıştır. Çalışmada, modern tasarımlarda geleneksel ögelere —örneğin süsleme motiflerine— kısmi bir dönüş olduğu tespit edilmekle birlikte, modern evlerin bu mekânların sağladığı psikolojik ve sosyal ihtiyaçları çoğunlukla ihmal ettiği belirtilmektedir. Bu çerçevede Çağdaş Hausa toplumunda işlevsel ihtiyaçları karşılamanın yanı sıra kültürel hafızayı da koruyan bir konut tasarım yaklaşımı savunulmaktadır. Konutların hem mahremiyeti hem de sosyal bağlantıyı —özellikle Hausa halkının kolektivist doğasını— destekleyecek şekilde ve aynı zamanda modern yaşamın gereklerine uyum sağlayacak biçimde tasarlanması gerektiği ileri sürülmektedir. Özellikle sömürge döneminde şekillenen ve Nijerya'daki geniş etnik ve dini grupların çeşitli kültürel ve dini ihtiyaçlarını karşılamayan konut ve kentsel politikaların yeniden değerlendirilmesi önerilmektedir. Araştırma, kültürel değerlere saygılı, sürdürülebilir ve kabul edilebilir konut çözümleri geliştirmek için antropologlar ve ilahiyatçıların da bu politikaların geliştirilme sürecine dahil edilmesini tavsiye etmektedir; bu tür çözümler kültürel değerleri koruyacak, toplumsal entegrasyonu destekleyecek ve yaşam kalitesini artıracaktır.

Anahtar Kelimeler: Hausa mimarisi, konut kültürü, mahremiyet, konfor, mekansal dönüşüm

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TABLE OF CONTENTS

DECLARATION OF ORIGINALITY iv
ABSTRACT v
ÖZET vii
ACKNOWLEDGMENTS ix
LIST OF TABLES xiii
LIST OF FIGURES xiv
LIST OF ACRONYMS AND ABBREVIATIONS xviii
1. INTRODUCTION 1
1.1 Research Gap 6
1.2 Research Question 7
1.3 Research Objectives 10
1.4 Methodology 11
1.5 Scope and Limitations 15
1.6 Thesis Structure 15
2. HOUSING CULTURE 18
2.1 Introduction 18
2.1.1 Definition of Housing Culture 21
2.1.2 The Role of Privacy in Housing Culture 23
2.1.3 The Role of Comfort in Housing Culture 27
2.2 Hausa Housing Culture 30
2.2.1 The Hausa Culture and The People 30
2.2.2 Hausa Settlement Culture 39
2.2.3 Privacy in Traditional Hausa Housing 56
2.2.4 Comfort in Traditional Hausa Housing 62
2.3 Contemporary Hausa Housing 67
2.3.1 Contemporary Housing in Nigeria 67
2.3.2 Historical Influences on Modern Housing in Nigeria 70
3. CASE STUDY 77
3.1 Data Collection 80
3.1.1 Traditional Houses 80
3.1.2 Contemporary Houses 89

3.2 Data Analysis 100
3.2.1 Traditional Houses 100
3.2.2 Contemporary Houses 103
4. DISCUSSIONS 110
4.1 Architectural Changes and Cultural Tensions in Nigerian Housing Culture 110
4.1.1 Challenges to Traditional Privacy Norms in Modern Designs 110
4.1.2 Adaptation Through Hybrid Housing Models 111
4.1.3 Cultural Resistance and Postmodern Architecture 112
4.1.4 Material and Aesthetic Transformations 113
4.1.5 Consequences of Urban Planning and Western Design 114
4.1.6 Resilience in Blending Tradition and Modernity 114
4.2 Impact on Privacy and Comfort 115
4.3 Results and Discussions of Analysed Case Studies 120
4.3.1 The Shift in Courtyards 121
4.3.2 The Shift in Kitchens 124
4.3.3 The Shift in Living Rooms 127
5. CONCLUSION 130
REFERENCES 136
APPENDICES 149
APPENDIX A. SURVEY QUESTIONS 150
APPENDIX B. INTERVIEW QUESTIONS 155

LIST OF TABLES

Table 1: Comparison of spatial depth in traditional and contemporary houses..... 107

Table 2: Comparative Analysis of Traditional and Contemporary Hausa Houses Based on Cultural and Sustainable Architectural Features 108

LIST OF FIGURES

Figure 1: Research Methodology Framework 14

Figure 2: Introduction Summary 17

Figure 3: Layers of privacy in traditional Muslim homes. (Othman et al., 2015)..... 27

Figure 4: Hausaland in the 17th-18th centuries showing the Hausa Bakwai and neighbouring states/empires. (Nwanodi, 1989, p. 84) 31

Figure 5: Map of Hausa tribe in Nigeria and Niger Republic. (Hausa Language Map, 2025) 33

Figure 6: Sample of a decorated wooden tablet with an inscription of Surah al-Fatiḥa. (Kurfi, 2017) 38

Figure 7: An abstract of Zaria city. (Nwanodi, 1989, p. 85). 40

Figure 8: Aerial view of ancient Kano City, Northern Nigeria. (Yahuza & Gurdalli, 2023) 40

Figure 9: Plans showing an urban pattern. Circulation and road network, including home entrances, Zaure in Daura and a house plan in Kazaure. (Moughtin, 1964, p. 25) 42

Figure 10: Plan and section of the Mallawa House, Zaria City. (Moughtin, 1964, p. 27) 44

Figure 11: Housing form and kinship structure. (Nwanodi, 1989, p. 87)..... 46

Figure 12: A section through a typical flat roof and dome roof. (Haruna, 2016)..... 48

Figure 13: The process of makuba application done by hand. (A history of Hausa Architecture, 2022) 49

Figure 14: Makuba representation on Gidan Makama. (Author's fieldwork)..... 49

Figure 15: Northern Knot or Arewa Symbol or Dagin Arewa. (Aliyu & Haruna, 2021) 51

Figure 16: Decorative walls (Maigaskiya, 2019) 51

Figure 17: A decorated doorway. (Moughtin, Oc, & Tiesdell,1999) 52

Figure 18: Hausa building elements. (Author's archive, 2023)..... 55

Figure 19: Showing Hierarchy for achieving family privacy in the Muslim home. (Babangida & Katsina, 2018) 57

Figure 20: Concept and layout of a typical Hausa compound. (Umar et al., 2019). 60

Figure 21: Typical Hausa Traditional Compound in Kano. (Umar et al., 2019)..... 62

Figure 22: Load Lugard Hall (1914) in Kaduna State showing colonial response to regional style. (Vwa, 2013)..... 69

Figure 23: Aerial view of urban Kano, Nigeria. (This is Nigeria, 2024) 70

Figure 24: Colonial Style Building. (Prucnal-Ogunsote, 2001) 71

Figure 25: Postmodern house displaying a northern cultural symbol, the Arewa knot. (Aliyu, 2015)..... 74

Figure 26: Literature review summary 76

Figure 27: Examples of plans and their J-graphs. (a)Deep tree-like structure, (b)Shallow tree-like structure, (c) ring-like structure. (d) ring-like structures. (Hillier, 2007)..... 79

Figure 28: Traditional House 1 – Urban Plan. (Google Earth Pro, 2025)..... 80

Figure 29: Traditional House, Case 1— Gidan Alkali Kabiru (Author's fieldwork).... 80

Figure 30: Traditional House 1 façade sketch (Author's fieldwork)..... 81

Figure 31: Traditional House 2 – Urban Plan. (Google Earth Pro, 2025)..... 83

Figure 32: Traditional House, Case 2— Gidan Dallatu (Author's fieldwork)..... 83

Figure 33: Traditional house 2 courtyard sketch (Author's sketch)..... 85

Figure 34: Traditional House 3 – Urban Plan. (Google Earth Pro, 2025)..... 86

Figure 35: Traditional House, Case 3— Gidan Gwangwazo (Author's fieldwork)..... 87

Figure 36: Traditional house 3 entrance façade. (Author's sketch)..... 88

Figure 37: Traditional House 3 primary courtyard sketch. (Author's sketch) 88

Figure 38: Contemporary House 1 – Urban Plan. (Google Earth Pro, 2025)..... 89

Figure 39: Site plan, Contemporary House 1. (Author's Fieldwork)..... 90

Figure 40: Contemporary house 1 façade sketch (Author's sketch)..... 90

Figure 41: Contemporary House 1 – Kazaure Residence. (Author's fieldwork) 91

Figure 42: Contemporary House 2 – Urban Plan. (Google Earth Pro)..... 93

Figure 43: Site Plan. (Author's fieldwork)..... 94

Figure 44: Contemporary House 2 – State Road Residence. (Author's fieldwork)..... 94

Figure 45: Contemporary house 2 front façade and compound sketch. (Author's fieldwork) 95

Figure 46: Contemporary House 3 – Urban Plan. (Google Earth Pro, 2025)..... 97

Figure 47: Contemporary House 3 site plan. (Author's fieldwork.)..... 97

Figure 48: Contemporary House 3–Suleiman Crescent Residence. (Author's fieldwork.) 98

Figure 49: Contemporary house 3, primary entrance sketch (Author's fieldwork) 99

Figure 50: Justified graph of Case 1— Gidan Alkali Kabiru 101

Figure 51: Justified graph of Case 2—Gidan Dallatu 102

Figure 52: Justified graph of Case 3—Gidan Gwangwazo 103

Figure 53: Justified graph of Case 1— Kazaure Residence 104

Figure 54: Justified graph of Case 2— State Road Residence 105

Figure 55: Justified graph of Case 3— Suleiman Crescent Residence 106

Figure 56: IMB Plaza, Lagos. (ThisDay, 2021) 112

Figure 57: The sense of place. (Pahl-Weber et al., 2013)..... 117

Figure 58: Map showing dandali and the houses around. (Abubakar, 2016)..... 122

Figure 59: Typical Hausa Traditional Compound (Muhammad-Oumar, 1997)..... 122

Figure 60: Diagram showing the courtyard, its accessibility and the outdoor kitchen 127

LIST OF ACRONYMS AND ABBREVIATIONS

GRA: Government Residential Area

IDP: Islamic Design Principles

J-GRAPH: Justified Graph

JASS: Justified Analysis of Spatial Systems

SWT: Subhanahu Wa Ta'ala.

WC: Water Closet

1. INTRODUCTION

From Leopoldville in Central Africa to Birfaz-Fez in Morocco, and from Dakar to Port Sudan, Hausa is the most widely spoken language in Black Africa, with over 80 million people who are not necessarily Hausa by birth speaking it, according to El-Nafaty (2013). Today, the majority of Hausa people live in southern Niger, Northern Nigeria, or West Africa. Sabiu and Sarwar (2019) note that their language is the lingua franca in West Africa, and they comprise one of the largest and most powerful indigenous ethnic groupings in Africa. Though a very small percentage of Hausa people are Maguzawa, who hold animistic beliefs, the Hausa culture and environment are primarily based on Islamic surroundings. Nevertheless, the Hausa people are the largest ethnic group in Nigeria (Sabiu & Sarwar, 2019).

For centuries, one of West Africa's largest ethnolinguistic groups, the Hausa people, have created homes that fluidly integrate functionality and cultural significance. Hausa housing culture is more than simply shelter–it is a living representation of tradition, identity, and societal values. The purpose of traditional houses is not just to physically accommodate one's way of life; they are also built to maintain privacy, hierarchy, and communal engagement while still responding to the region's hot, semi-arid climate. The Hausa people are mostly found in Northern Nigeria and span across parts of the Niger Republic, Ghana, Benin Republic, Cameroun and other West African lands. They are historically known for their craftsmanship, cultured urban centres, flourishing trade routes, unique building heritage, and urban space development.

In housing design, Rapoport (1998) distinguishes between "function" and "meaning," asserting that meaning often precedes basic needs in shaping environments. He emphasises that activities' cultural and ritual significance—rather than just their

functional requirements—determines the organisation of space, form, transitions, materials, and decoration. These activity systems, rooted in lifestyle and cultural values, reflect diverse understandings of comfort, order, and environmental adaptation. However, modern housing often overlooks these embedded meanings, leading to a disconnect between design and lived experience. The imposition of foreign architectural models has often eroded local cultural identities, particularly in postcolonial contexts like Nigeria. Archer (2005) complements this view by highlighting how contemporary architecture increasingly draws on social theory, recognising the built environment as an active force that shapes culture and human interaction rather than a passive reflection of societal needs.

At a macro level, the meaning of home varies across cultures; thus, architecture embodies more than shelter—it represents identity, social institutions, and cultural continuity. Mallett (2004) explains that home is a dynamic, multifaceted space imbued with emotional, social, and cultural meaning. While basic domestic functions like sleeping or cooking are universal, their spatial organisation varies widely across cultures and time periods (Hanson, 1998). These spatial patterns are shaped by—and reinforce—norms about what should be grouped or separated, revealing deep-seated cultural logic. Architecture, especially in its vernacular form, does not merely reflect society but actively shapes social relations and cultural practices. Drawing on social theory, this perspective underscores architecture's transformative power. Lawrence (1983) stresses that understanding traditional buildings requires attention to intangible socio-cultural elements, such as religion, spatial organisation, and language, beyond their physical attributes. In Hausa society, for instance, the home serves as a vital site of cultural transmission, where collective values, traditions, and identities are maintained and passed

down through generations.

Understanding the history of housing in the Global South requires an appreciation of traditional and vernacular architecture as cultural responses to local climate, available materials, social structures, and values such as privacy, spatial hierarchy, and communal living. In the case of Hausa architecture, these values shaped the logic of domestic space long before the influences of modernisation and globalisation. Traditional housing was climatically responsive, socially functional, and integrated with its environment, fostering comfort, social interaction, and privacy. Designs emphasised natural ventilation, daylighting, and the strategic organisation of space while maintaining geometric balance and visual harmony.

The spatial configuration of Hausa settlements is deeply interwoven with the social, cultural, and religious practices of Hausa society. Located in Northern Nigeria, Hausaland is characterised by flat plains with agricultural activity shaped by seasonal rainfall—farming in the wet season and crafts and social life in the dry. As Moughtin (1964) notes, the historical development of Hausa cities was influenced by trans-Saharan trade and population movements from North Africa, leading to the emergence of urban centres with complex administrations, skilled craftsmanship, and pre-capitalist economies. These cities were typically compact, walled, and surrounded by bush hamlets, yet they retained vast agricultural tracts within their enclosures, blending rural and urban life. Traditional Hausa homes reflect this duality: arranged around a central courtyard, they accommodate extended families while adhering to gendered spatial norms such as segregating men and women. The evolving form of the house—as men progress through life stages—demonstrates a dynamic pattern of settlement rather than a fixed typology. This spatial logic mirrors Hausa societal values that emphasise respect for elders, social

hierarchy, and communal identity, which is further reinforced through festivals and collective rituals (Adeleke, 2005; Ibrahim, 2017; Moughtin, 1964).

Rooted in vernacular traditions, Hausa houses exemplify climate-responsive and culturally meaningful architecture through features such as thick walls, small openings, shaded courtyards, and ornately decorated façades (Ajufoh & Abubakar, 2019; Haruna, 2016). Constructed using local materials and indigenous knowledge, these homes demonstrate sustainable building practices that harmonise visually with the environment while fostering social cohesion, including unique roofing styles (Ibrahim et al., 2024). The shift in discourse from the term 'traditional' to 'vernacular' architecture reflects a growing appreciation for local building styles that respond effectively to climate and cultural values (Orbasli & Vellinga, 2020; Weichart, 2023). Vernacular architecture is defined as "a local style in which ordinary houses are built" (Cambridge Dictionary) — houses constructed by local communities without professional architects that embody cultural and environmental significance shaped by social identities and domestic rituals. As Lawrence (1983) and Hourigan (2015) argue, understanding vernacular architecture requires an interdisciplinary approach, recognising that building practices extend beyond physical materials to reflect complex social, cultural, and symbolic meanings embedded in everyday life.

Aliyu et al. (2022) argue that traditional architecture is a clear reflection of human effort and a society's character, where the cultural elements embedded within the architecture reveal the local identity of the community, and they further suggest that concepts such as "culture of a place," "traditional concepts of a place," and "Indigenous features" are not only inherent in these architectural forms but are also deeply explored and interpreted within academic disciplines. Consequently, Foucault's notion of built

environments shaping identity and social relations, according to Archer (2005), resonates with the Hausa concept of community. The design of spaces contributes to individual and collective identities, as the arrangement and use of space reflect the community's values and social structures. This interplay between architecture and identity illustrates how built forms, especially homes, sustain cultural practices and social cohesion.

However, as Nasidi (2024) highlights, Hausa architecture is often evaluated through a Eurocentric lens, where the term “traditional” is used pejoratively, unlike the more valorised “classical” in Western discourse. This bias diminishes the cultural value of African architecture and obscures its contributions to urban development. Despite such framing, the evolution of the Hausa urban form reflects not only adaptation to modern technologies but also the persistence of cultural meanings embedded in spatial organisation, decoration, and orientation—features that continue to shape identity in both rural and urban contexts.

In the case of Hausa architecture, a combination of formal education, employment systems, and changing gender roles was evolving how the Hausa people utilised their domestic space within their homes. Traditional homes catered for extended families and communal living arrangements, but modernisation created lifestyle changes and housing that downplayed the significance of large courtyard homes, which allowed for lone home living only for the nuclear family. Consequently, the design of Hausa homes was also informed by introducing global architectural trends through media migration and international trade. Later, the younger generation preferred modern designs, embracing a Western-style plan over the traditional layouts featuring enclosed and divided spaces.

Modernism’s focus on technology and breaking from tradition reshaped architecture globally, but not all contexts embraced it. This universalising adopted

architecture vocabulary was often at odds with local values and identities, leading to critical reactions and the emergence of new groups that sought to restore relevance and identity to the cultural and physical framework. In the developing world, Alsayyad (1995) argues that architects are reinventing tradition, giving rise to a new vernacular that responds to contemporary needs. This reinvention often replaces earlier modernist models once tied to nation-building. Today, cultural identity is increasingly expressed through traditional forms to resist globalisation's homogenising effects (Danjuma et al., 2020). To navigate this balance, Alsayyad (1995) suggests architects must engage deeply with a culture's historical, ethnic, religious, and regional specificities—including its colonial past and national formation. These factors are integral to how people define and express identity through the built environment.

Modernists' neglect to adhere to regional identity when designing and executing projects has led to the failure of the conservation and restoration of historical buildings. More importantly, this approach has contributed to the erosion of specific regional and cultural identities (Bilyaminu, 2017). In Northern Nigeria, this has significantly accelerated the disappearance of traditional architectural styles in homes, replacing them with modern designs that often disregard cultural and climatic considerations. Amidst modernisation, the Hausa housing culture embodies a sense of identity that represents an existing value of community over individualism, privacy over openness, and continuity above total change.

1.1 Research Gap

Hausa housing cultural evolution is key to the relationship between tradition and modernity in built environments. Ever since, Hausa architecture has been influenced by the environmental conditions, social structures, and cultural norms of the region, lending

it a perfect base to build homes that incorporate a healthy balance of cultural continuity and contemporary design. These spaces being defined, used, and perceived in a certain way influences how people interact, as well as their comfort and identity preservation in a particular setting. While globalisation and urbanisation have reached their soaring fame, there must be a greater effort to document and explain how housing culture is changing for Hausa people in Northern Nigeria. This will help architects, urban planners and decision-makers to develop culturally sensitive homes meeting both traditional and modern needs. It also engages with the wider conversation surrounding vernacular architecture and sustainable living by showcasing the ways that variables that may condense traditional methods of spatial usage can translate to more efficient spatial solutions.

1.2 Research Question

Housing is more than a shelter in a Hausa culture; it is an extension of the social structure, values, and traditions. Hewn from clay, traditional Hausa homes are intentionally designed to portray cultural priorities. Nonetheless, developments in Northern Nigeria outpace these culturally rooted spatial meanings with predominantly Western-style designs. While the literature on Hausa architecture is increasing, it primarily addresses its tangible aspects, such as decorative patterns, thermal comfort, and structural methods, neglecting essentially the cultural value of space and how it has changed with modern housing. Hourigan (2015) emphasises the need for a more inclusive and flexible understanding of vernacular architecture, recognising its importance in reflecting the cultural and historical fabric of societies, stating that architectural history tends to prioritise monumental and elite structures, often neglecting the significance of

vernacular buildings, calling for a shift in focus to include the everyday built environment and the lives of ordinary people.

The Hausa housing traditions and knowledge risk losing value and being eradicated due to modernisation and globalisation. Housing constructions contain testimonies of climate adaptations, social conventions, and cultural elements. Inadequate documentation and evaluation may lead to the extinction of Hausa housing practices and their values. Urban expansion and the proliferation of modern building materials have led to new houses that do not reflect Hausa's cultural practices and lifestyle. Examining the evolution of Hausa housing provides an important perspective to extract cultural parameters for modern home solutions that consider functional needs, cultural dimensions, social patterns, privacy needs, and gender relations. The Hausa people are further conflicted by appropriating environmentally beneficial homes in new urban settings, as they are a formerly nomadic culture. So, the transition from traditional housing to modern housing poses relevant questions. This study attempts to bridge this gap by tracing the evolution of Hausa housing culture as it relates to spatial arrangements, the use of spaces, and the lived experiences of residents. This thesis seeks to find answers to the following questions:

1. How has the change in the cultural identity and social practices of Hausa communities impacted the transition from traditional to modern Hausa houses?
2. How have privacy needs shaped the evolution of the spatial organisation of Hausa houses?

3. How do traditional Hausa homes' layouts and spatial organisation facilitate social interaction, community bonds and hierarchy with Hausa culture, and how do these aspects change in modern design?
4. To what extent do Hausa people perceive modern housing as enhancing or limiting their comfort, privacy and sense of home compared to traditional architecture?

This study hypothesises that;

1. The evolving cultural identity and social practices of Hausa communities—such as increased individualism, changing gender roles, and urban lifestyles—have driven the transition from communal, spatially integrated traditional Hausa houses to modern housing types that prioritise privacy, nuclear family living, and contemporary aesthetics over traditional social structures;
2. The spatial organisation of Hausa homes has evolved without much emphasis on privacy, with the traditional layout laying a strong focus on the separation of public and private space. Modern houses, over time, have redefined privacy in their spatial layout by separating zones mainly horizontally;
3. Traditional Hausa houses also have specific layouts and spatial arrangements that serve to create space for community interaction and facilitate forms of social hierarchy activities based on cultural roles integrated into family dynamics. In contemporary design, these elements vary, with more relevance given to a more open layout and lesser priority given to hierarchical division in space, possibly affecting the social dynamics and sense of community that exist with Hausa families;
4. The Hausa people's cultural identity and social behaviours have been profoundly impacted by the shift from traditional to modern housing due to colonisation,

urbanisation and globalisation, which has, in turn, altered communal interaction, privacy rules and spatial organisation. The rise of modern housing, with its integration of international trends, has arguably diminished the focus on communal living and traditional customs, offering rise to individualised lifestyles that challenged premodern cultural values and social customs. In some cases, modern housing offers modern material comforts. Still, some users may consider it a less effective housing option because it rarely embraces their traditional values.

1.3 Research Objectives

1. This thesis aims to understand how the Hausa home has evolved in terms of spatial uses.
2. This thesis examines the impact of modern housing on culture, practices, privacy and comfort in Hausa communities.
3. Additionally, this study seeks to identify changes in layout that may influence cultural continuity and everyday social behaviour.
4. To analyse the importance of privacy in home design and if there are any changes resulting from modernisation.
5. A key focus is to examine how spatial design promotes or limits social interaction and reflects cultural hierarchies.
6. Lastly, the study aims to identify the relationship between architectural form and cultural preservation.

1.4 Methodology

The study employs an ethnographic approach focusing on sustainable design features of traditional houses and their acclimatisation to contemporary designs to adequately explore the evolution of Hausa architecture in Northern Nigeria. Given that the method provides a comprehensive knowledge of the cultural, social, and environmental factors influencing architectural practices, ethnography was selected. This research employs a multifaceted approach to investigate Hausa vernacular architecture, beginning with qualitative interviews conducted with prominent architects. Experienced architects were interviewed to understand how traditional and modern Hausa homes are designed and used, specifically focusing on culturally sustainable practices, significance, and meaning—the influence on modern design and the challenges associated with integrating these elements into contemporary projects. Through semi-structured questions, these interviews seek to glean insight into the various facets of Hausa architectural traditions, leveraging the expertise of architects to identify promising avenues for further exploration. This method was adopted as it allowed some flexibility in the answers so architects could provide more pertinent information related to the subject while directing their responses to achieve the objectives of the research. Follow-up questions were asked where necessary, allowing the architects to elaborate and add additional observations regarding their case-specific experiences. The interview followed a set of questions with the following key themes: perception and influence, cultural and historical importance, challenges and opportunities, and environmental and social interactions.

The interviews were conducted virtually and physically, lasting between 30 minutes to 1 hour. The participants were selected through intentional sampling, targeting

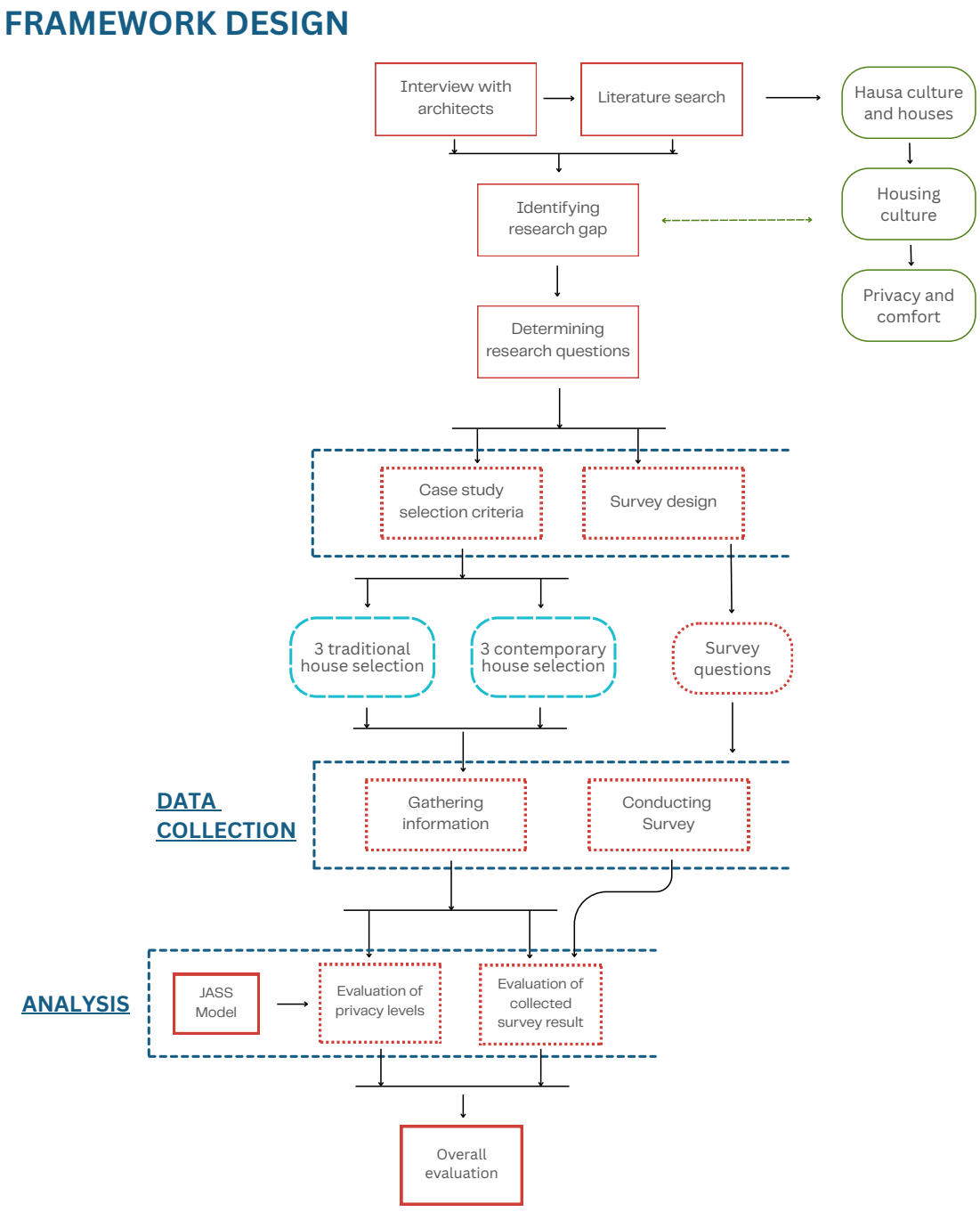
architects with experience and expertise in Hausa architecture. A total of 10 architects were interviewed, all of whom have had various experiences in architectural practice and research. The main selection criteria were experience in project design and building that incorporated Hausa architecture and knowledge of cultural sustainability in housing design. This ensured that they grasped the research's aim and responded in depth based on their experience in design and on-site. Their reflections serve as a foundational framework guiding subsequent phases of the study. More than 25 architects were invited to participate in the study, but the majority did not respond. A wider range of professional viewpoints could have offered more insights. Thus, this limitation may have affected the comprehensiveness of the findings.

Following the interviews, field surveys were conducted with Hausa homeowners to gather first-hand data on space utilisation within their homes. These surveys delve into house owners' perceptions of space, patterns of usage, and cultural influences shaping spatial organisation. Six houses, three traditional and three contemporary, were selected primarily based on their representation of Hausa cultural elements, cultural relevance, and environmental context, representing both rural and urban contexts. The fieldwork involved the visitation of homes built in traditional and modern styles.

Data collection involved qualitative surveys with homeowners to capture perceptions of comfort, privacy, and sustainability, and a theoretical framework was created according to the literature review. Additionally, detailed on-site observations documented spatial data, material usage, environmental strategies, design details and cultural elements. Plans were sketched and analysed to compare spatial relationships and accessibility. Understanding homeowners' daily spatial usage, privacy needs, and cultural influences required a semi-structured interview. The data was analysed using a

comparative framework to identify patterns in spatial organisation, privacy, functionality, and sustainability. The Justified Analysis of Spatial Systems (JASS) model was used to understand the level of depth of privacy while showing variations in accessibility. This methodology enabled a comprehensive comparison of traditional and modern Hausa houses, highlighting trade-offs between cultural sustainability and modern practices. Some of the findings were based on the literature review and survey.

Figure 1: *Research Methodology Framework*



1.5 Scope and Limitations

The methodology of this study, which included observation, photography, and fieldwork, faced several limitations. As an outsider, having access to all parts of the houses was difficult, and some homeowners restricted the use of photography. Accessibility to detailed architectural plans for certain houses was also a challenge, and there was insufficient time to locate more houses with available floor plans. The contemporary houses studied were limited in number, and gaining access to the homeowners was particularly challenging. Additionally, some homes fit the criteria for the study; however, their respective owners were unable to spare time to answer questionnaires and participate in the survey due to their busy schedules. There were also several ideal examples of traditional homes that could have significantly enriched the research, but time constraints prevented the collection of dimensions and detailed drawings. Overall, the position of the researcher as an external observer limited both access and the depth of insights into private household spaces.

1.6 Thesis Structure

The first chapter discussed the background of the thesis, including the research aims, hypothesis, methodology, statement of the problem, gap, and the entire structure of the study.

The second chapter presents an extensive housing literature review, starting with a general definition of housing and its relevance. It then focuses on the various views of privacy and psychological comfort within domestic spaces. Following this, the conversation continues with a deeper understanding of Hausa culture, the people and the key factors shaping traditional housing design, such as spatial organisation, social norms, and cultural values. Lastly, the chapter explores contemporary housing in Northern

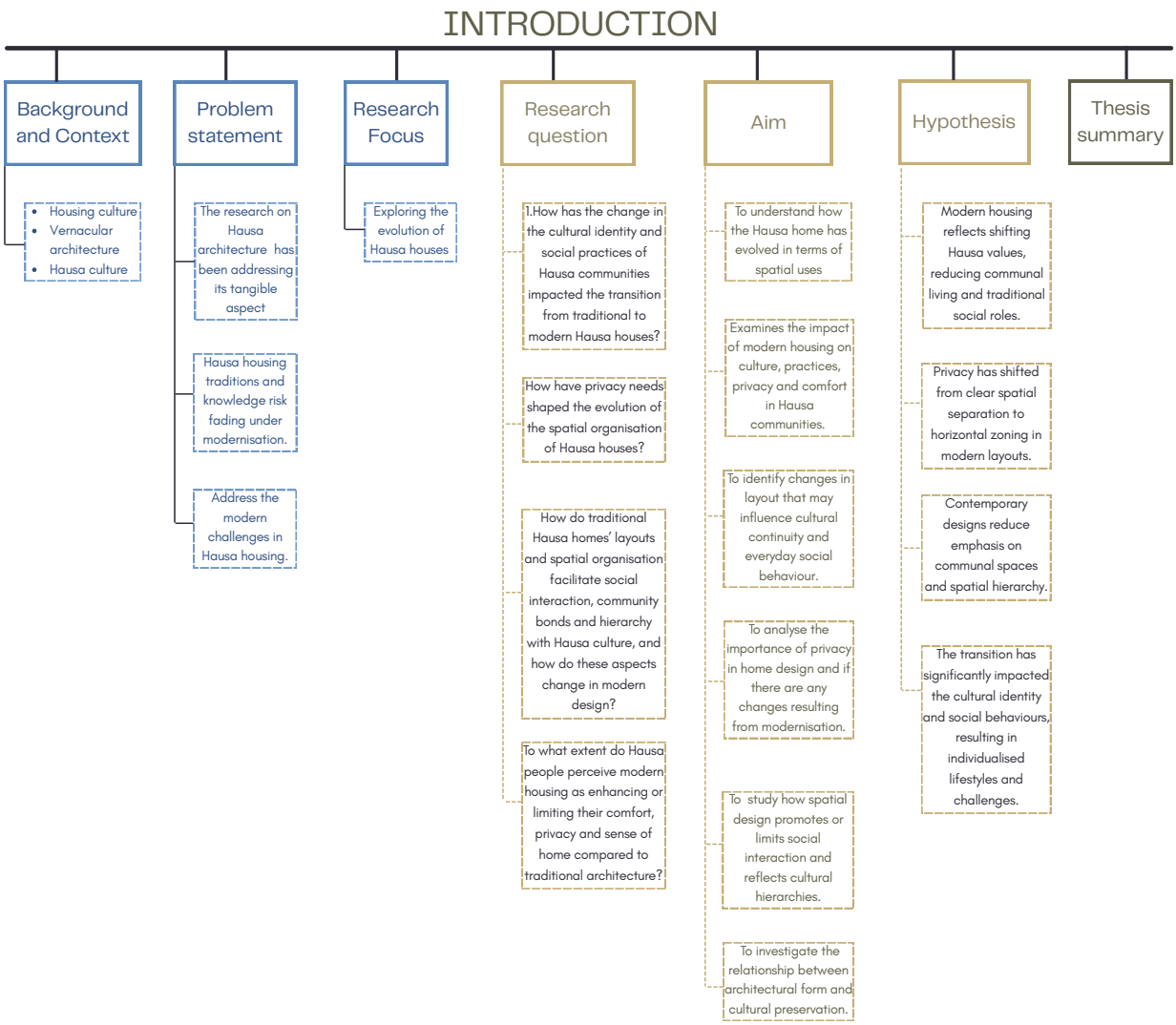
Nigeria, discussing the impact of colonialism on housing culture and architectural development over time.

The third chapter is about the case studies, where the data collected is analysed, and the findings are discussed. The evolution in the layout and design of both traditional and contemporary Hausa houses is elucidated through sketches, diagrams and graphs.

The fourth chapter discusses the architectural transformations of Hausa houses and the cultural tensions arising as a result of these changes. It explores how such transformations affect privacy and comfort, focusing on the evolution of major spaces such as courtyards, kitchens and living rooms, all of which have changed dramatically over time.

Chapter five is dedicated to the conclusion and addresses the main findings of the research. It readdresses the research questions and the aims presented in the first chapter, providing insights based on the analysis undertaken through the thesis. It ends with some reflections on the implications of the study and potential areas for future research.

Figure 2: *Introduction Summary*



2. HOUSING CULTURE

2.1 Introduction

Housing culture is a complex and multifaceted concept that reflects a society's values, traditions, and practices through its built environment. Rapoport (1998) defines housing as a comprehensive concept encompassing the physical structure and the entire residential environment, including its organisation of space, time, meaning, and communication as a cultural landscape composed of fixed, semi-fixed, and non-fixed features, as well as a system of settings designed to support specific activity systems, lifestyles, and social variables. He also explores the various definitions of culture and categorises them into three views, emphasising its complexity and role in shaping human behaviour and environments: a way of life, a system of meanings, and adaptive strategies related to ecology. Rapoport states that housing is seen as a direct manifestation of a culture's values and norms reflecting the social structure, beliefs, and practices of the community that occupies it; the design and form of houses are influenced by the cultural identity and heritage of the people, serving as a physical representation of their way of life (1969) since culture encompasses a spectrum of beliefs, knowledge, education, customs, and values cultivated by society, shaping its unique worldview and guiding its development, influencing various domains of life, notably in art, architecture, urban planning, and lifestyle choices, underscoring its profound impact on societal norms and practices (Naqizadeh, 2000). Hanson (1998) also noted that the house is a complex and deeply layered space, one that is deceptively familiar but also rich and sophisticated. The dual responsibility required of designers in defining the formal and experiential aspects of visual space makes it a central focus of study in architectural theory.

Amos Rapoport (1969) explains that “culture” originates from the Latin word ‘colere’, which means to cultivate or care for. Merriam-Webster (2020) defines culture as “the customary beliefs, social forms, and material traits of a racial, religious, or social group”. Culture encompasses a spectrum of beliefs, knowledge, education, customs, and values cultivated by society, shaping its unique worldview and guiding its development, influencing various domains of life, notably in art, architecture, urban planning, and lifestyle choices, underscoring its profound impact on societal norms and practices (Naghizadeh, 2000). Culture, extending beyond environmental development programs, encompasses a complex combination of distinctive material, belief, spiritual, emotional, and cognitive attributes that define a specific organised community or nation. Similarly, Rapoport (1969) describes culture as the ultimate creation of a human community, arising from its fundamental drive for self-fulfilment and continuity. He explains that culture is expressed through various forms, including art, literature, clothing, customs, language, religion, and rituals.

Different cultures have reflected different ideas about family roles, privacy, and social engagement in housing design. The use of space in housing culture varies from material need to symbolic meaning and comfort. In Japan, housing designs focus on communal living, while English housing culture focuses on individuality or autonomy from the community (Ozaki, 2002). Likewise, some traditional societies, such as the Arabs and the Hausas, have fairly clear public and private space boundaries that ensure functional and social balance (Al-Mohannadi, 2019; Aliyu & Ismail, 2023). Ozaki (2002) stated that with industrialisation came work and home separation, impacting housing culture in Western society. They expanded on how this shift was in favour of privatised living, creating legislation that established manufactured privatised living spaces; thus,

private and public areas of the home began to be much more defined. Privatised living as a social status increased the longing for personal privacy in housing and influenced design changes throughout history.

On the contrary, traditional housing in communal societies, like the Hausa, emphasises separation and privacy through gender-specific spaces and multi-generational arrangements (Haruna, 2016). The layout is further shaped by religious influences, in which spaces like prayer rooms in Islamic cultures and sleeping quarters are allocated based on cultural norms of modesty and family hierarchy. In this multi-layered approach to privacy, communal living and personal boundaries are balanced, which aligns with the general idea that vernacular architecture is a dynamic blend of lifestyle and activity systems that are based on cultural values.

Housing has to do with more than providing shelter; housing is a social and cultural construct in which the norms, values and traditions determine housing practices. Cultural differences in housing practices prove that housing is a social and cultural construct influenced by customs, beliefs, and conventions rather than simply a place to live. According to Rapoport (2000), culture affects housing; it is related to cultural norms, values, and traditions. Despite similar activities happening in homes, he points out how different each housing form has been from culture to culture and from history. The reason for this variation is ‘cultural differences’, informed by vernacular architecture, which follows lifestyle and activity systems. Instead, contemporary housing is influenced by professional design, written rules and increased mobility, resulting in more formalised environments of cultural diversity. However, it should be noted that at the centre of this differentiation, the embedded culture exemplified through housing tends to remain crucially significant in terms of lived experience.

2.1.1 Definition of Housing Culture

Housing culture consists of not only physical but also a complex mixture of physical, social, and cultural elements that determine the experience and use of homes and, therefore, cannot be reduced to physical structures (Rapoport, 1998). The design of homes, their spatial configurations, and the materials used often serve as social and cultural identity, and the housing itself can change depending upon the needs of the community, which are often shaped by external factors. Rapoport (1969) asserts that while physical factors such as climate and material are secondary, sociocultural factors, such as religion and family type, are the major determinants of housing forms. Housing choices reflect the cultural taboos, customs, and traditional practices that are acceptable or ideal in a particular society. Housing culture can, therefore, be described as how a society's traditions, practices, and values are expressed in the design, use, and organisation of living spaces.

Housing culture is essentially a matter of the exchange between human behaviour and spatial organisation. Cultural norms and societal values play a decisive role in the organisation, as well as the use of space in both traditional and modern societies, and these housing arrangements are deeply driven by these norms and values. In traditional societies, collective values such as communal living, gender segregation, and respect for elders shape architectural features like courtyards for family gatherings, separate zones for men and women, and hierarchical space allocations for different generations, with privacy maintained by ensuring designated personal spaces for individual family members, with features like courtyards for communal gatherings, gender-specific areas within the home, and layouts that reflect cultural or religious practices. Othman et al. (2015) mention that these designs are sometimes necessary to encourage respect and

independence, especially in large families where privacy is reinforced with the areas reserved for personal reflection or solitude. On the contrary, modern societies, especially those influenced by Western individualism, prefer to give priority to autonomy and flexibility, introducing open plan layouts, without strict spatial separation (Despres, 1991). This shift demonstrates the changing cultural framework in which housing is defined and used, as its meaning and function are transitioning from designs rooted in collective traditions to those centred on individual preferences and lifestyles.

As indicated by Després (1991), cultural values and practices have impacted homes, first by being symbols of identity and of social status or community belonging through ancient motifs or materials. Layouts are a result of cultural norms of family structure: collectivist cultures lay stress on communal spaces that are oriented towards extended families; individualistic cultures accentuate the private areas. Functional spaces in homes, such as kitchens, tend to be central gathering places in some cultures, like Türkiye, Indonesia, and Morocco, and utilitarian spaces in others, such as Germany, Sweden, and Norway. Finally, in Islamic societies, prayer or communal meals are also rituals and daily practices, which, along with enclosed courtyards and high walls, dictate home organisation, as they guarantee privacy and modesty. On the other hand, the way traditional Japanese homes are built embodies the principle of simplicity and harmony with nature, using sliding doors, open spaces, and creating adaptive spaces. On the subject of the layout of a home and its relation to fortune and well-being, Despres posited that in many Asian cultures, a home carries symbolic meaning—the Feng Shui, which reflects cultural value, and in Western cultures, aesthetics would come into play in the design considerations (1991).

Homes, in turn, also change based on the environmental contexts that influenced their design, like thick walls in arid regions, as seen in sub-Saharan Africa, especially in the Hausa homes or insulating walls with heat-storing features. It also includes cultural tastes manifested in aesthetic preferences in decoration, colour, layout, and ownership concepts, which vary from individualistic, as in the case of homeownership concepts differ, with some societies valuing homeownership as a marker of personal success and others favouring communal living (Despres, 1991). These variations show the housing culture as a medium to express beliefs, adapt to environments, and deal with social relationships, therefore highlighting the complex link between the homes and person-environment relationships.

Regions differ in their housing culture, but it consistently gives insights into a society's values and priorities (Lawrence, 1991). As modernisations continue to disrupt traditional practices, cultural changes in housing are a means of observing the tensions involved in maintaining cultural identity while responding to new cultural demands. Thus, Indigenous peoples tend to have a special relationship with their homes that is particularly related to their cultural heritage and their relationship to the land and often considered as an extended part of their identity and history, being part of their traditions and spiritual beliefs, while the modern setting of homes is dedicated to efficiency and proximity to services (Despres, 1991). The relevance of this perspective is especially important in studying Hausa housing, where traditional values of privacy and comfort collide with the process of moving towards modernity.

2.1.2 The Role of Privacy in Housing Culture

By promoting the need for privacy, individuals and families are provided the basic social material requirements from which to pursue other interests while shaping social

dynamics among households and communities. According to Corlett, to protect human dignity and self-respect, privacy is needed so that people can have intimate relationships and pursue their purpose without being interfered with by others (2002). In housing culture, Torabi and Embi (2017) introduced privacy as a control of unwanted interaction depending on various factors, including cultural norms, individual preferences and social relationships, emphasising that privacy is not a single entity but a variable outcome influenced by different factors such as physical layout, social relationships and cultural contexts. Privacy is not a universal concept, and its significance and expression are more or less varied widely across cultures, as it is reflected in the organised form of space within the homes and in how private and communal areas are delineated (Rapaport, 1969). The arrangement of housing units is influenced by privacy, which results in the segmentation of internal spaces based on cultural values (Abu Elreish & Prima, 2021).

The perception and manifestation of privacy are perceived differently across cultures. As Rapoport (1969) notes, family structure is a tool in shaping the perception and priorities of privacy. Privacy is not as emphasised in some societies, such as in Africa, the Middle East, and South Asia, where extended family living is a common phenomenon, and shared spaces are across multiple generations. On the other hand, cultures with an individualistic ideology, to a great extent, the nuclear families such as those in Europe and North America, have emphasised the need to create private spaces within the house. In these settings, privacy is often embedded in a group-oriented setting by strategically separating public and private zones in a home. For example, design elements such as courtyards and high walls of Islamic housing allow families to be shielded from being observed by the outside world and conform to the priority of gendered privacy. These principles are implemented through architectural designs that feature layered spaces for

privacy and spaces that are flexible in their layout, balancing religious accommodation with hospitality (Othman et al., 2015).

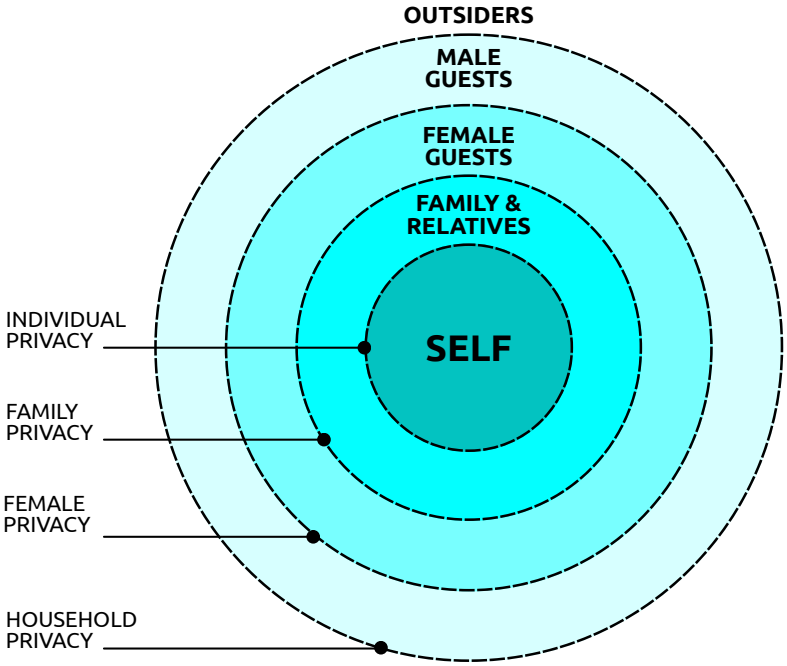
Architectural designs are heavily influenced by the need for privacy, which determines housing layouts, space allocation, and key design elements. In architecture, the need Tomah et al. (2015) exemplify that in architecture, privacy is reflected in how internal spaces are organised and grouped based on their functions, stating that spaces with similar purposes are arranged into distinct zones to achieve a logical and functional flow while maintaining a hierarchy of privacy ensuring that areas designated for specific activities and users provide appropriate levels of seclusion or accessibility. For instance, public zones like living rooms and dining areas are designed to be more open and welcoming, accommodating guests and general interactions; Semi-private zones, such as family rooms, serve household members and close visitors, while private zones, like bedrooms and bathrooms, are reserved for personal or family use, ensuring maximum privacy.

For instance, Indonesian traditional homes seem to use space as a hierarchy by separating male and female spaces for privacy, along with cultural customs regarding hospitality. Othman et al. (2015) mention the work of Azizah and Putri (2013) whereby the notion of hijab–modesty is used to design houses in the city of Surakarta, Indonesia, illustrating the role of modesty and female physical privacy in Islamic architecture (Figure 3). Through various architectural and spatial strategies, this integration is achieved to align with Islamic principles. Boundaries are created, using architectural features such as walls, fences and landscaping to provide an element of privacy from neighbours, and sightline control is achieved through the placement of windows and doors to maintain visual privacy. This is further supported by spatial organisation that

separates zones for various activities, including family gatherings and guest receptions, so the family life remains private and can accommodate visitors. Indonesian homes also include local architectural styles and materials to reflect community practices in line with Islamic values. Acoustic and olfactory privacy are similarly considered, and designs are minimised to avoid noise intrusion and prevent cooking odours from polluting living spaces for greater comfort and privacy within the home.

Although modern homes in urban settings are often challenged to meet traditional privacy requirements with contemporary, space-efficient functionality and aesthetics, these are at odds with traditional Islamic privacy requirements in Indonesia (Othman et al., 2015). As housing culture evolves, the challenge lies in reconciling traditional privacy needs with modern living standards. Understanding how privacy is integrated into housing provides insight into how societies navigate the tension between cultural identity and contemporary lifestyles, a theme central to the evolution of Hausa housing.

Figure 3: *Layers of privacy in traditional Muslim homes. (Othman et al., 2015).*



2.1.3 The Role of Comfort in Housing Culture

The term “comfort” derives from the late Latin confortare, meaning “to render strong” or “to alleviate pain” (Maldonado & Cullars, 1991, p. 35). This etymology highlights its role in enhancing human well-being. Somerville (1997) described comfort as feeling safe, relaxed, and at ease within one's home environment, encompassing physical aspects —layout and amenities and emotional aspects— feelings of belonging and acceptance. Comfort is closely tied to the experience of privacy; when individuals feel they have adequate privacy, they are more likely to experience comfort in their homes. Comfort in housing encompasses physical and emotional dimensions influenced by cultural and environmental factors. Physical comfort involves lighting, ventilation, and spatial adequacy, while emotional and psychological comfort is tied to privacy, security, and the thoughtful organisation of space, fostering a sense of ease and satisfaction

(Somerville, 1997). Rapoport (1984) emphasises that culture plays a crucial role in shaping these notions of comfort, influencing how societies respond to site and climate, utilise materials and technologies, and define environmental quality. At the same time, these perspectives on the interaction between cultural values and environmental adaptations in formulating homes illustrate elements of physical and psychological needs.

Othman et al. (2015) note, as do others, that the interpretation of comfort can differ with culture, as Muslims in different countries develop home designs that accommodate local norms and practices to ensure comfort in the physical space, but also in the cultural space. The comfort, they said, encompasses hospitality, where the living spaces are designed to accommodate guests in accordance with Islamic traditions, with separate areas for male and female guests, ensuring the home remains welcoming yet private. Comfort in such societies as in many parts of Africa, including the Hausa community, is based on balancing social interaction and privacy. On the contrary, the idea of comfort in Western societies has moved towards the comfort of the home as a place where home-centred living is prioritised and the home is a sanctuary for personal leisure and enjoyment (Ozaki, 2002). Comfort in Western individualistic societies often connotes personal autonomy, and housing is designed with private zones for each family member, including private bedrooms and bathrooms. For instance, the Arab Muslim homes are structured as having clearly defined public and private areas in order to provide comfort by way of controlling access to personal areas, especially those used by women (Ali et al., 2022), and at the same time accommodating social and communal activity.

Privacy plays a central role in achieving comfort in housing. In many cultural contexts, including the Hausa, privacy ensures that residents can carry out personal and familial activities without external intrusion (Agboola & Zango, 2014), contributing to

emotional comfort and psychological well-being. Architectural features such as courtyards, secluded entrances, and segregated spaces for men and women are paramount in ensuring privacy, directly contributing to comfort in Muslim residences. This is achieved by planning the layout very carefully, so as to separate the public and the private zones so that family members can go about their daily lives without being intruded upon. For instance, kitchens and living rooms should be laid out such that it decreases visibility from guest areas, and sleeping rooms should be located in a manner to give distinct areas for their male and female children while they go through puberty so that privacy and comfort may be reinforced in the home (Ali et al., 2022). These features in the design allow households to continue to observe cultural traditions like practising hospitality and gender segregation, while at the same time feeling that they have control over their own living environment.

To modern housing, however, a new set of challenges has emerged that, in many cases, have denied the concept of comfort and privacy by creating complex and often overwhelming spatial experiences. Vwa (2013) mentions Fredric Jameson's 'postmodern hyperspace' concept, where the postmodern environment is characterised by sensory intensity and a high degree of complexity, which overloads conventional spatial logic and changes the way that the occupant perceives space. According to Vwa (2013), postmodernists prioritise space's flexibility and experiential aspects, focusing on understanding the creation of new spaces and places, navigating diversity within these spaces, and exploring the connections that unify what might traditionally be seen as distinct or separate areas. As Al-Mohannadi (2019) suggests, house practices in Qatar were drastically affected by globalisation and rapid urbanisation, in which modernism has brought architectural problems, including poorly integrated modern villas, residents'

dissatisfaction and the mismatch between housing layouts and socio-cultural values of Qatar. Meanwhile, the interplay between privacy and comfort has become one of the key factors in housing culture. Understanding how different societies design for comfort through privacy provides insight into broader cultural values and the challenges posed by modernity, a theme that is particularly significant in the evolution of Hausa housing.

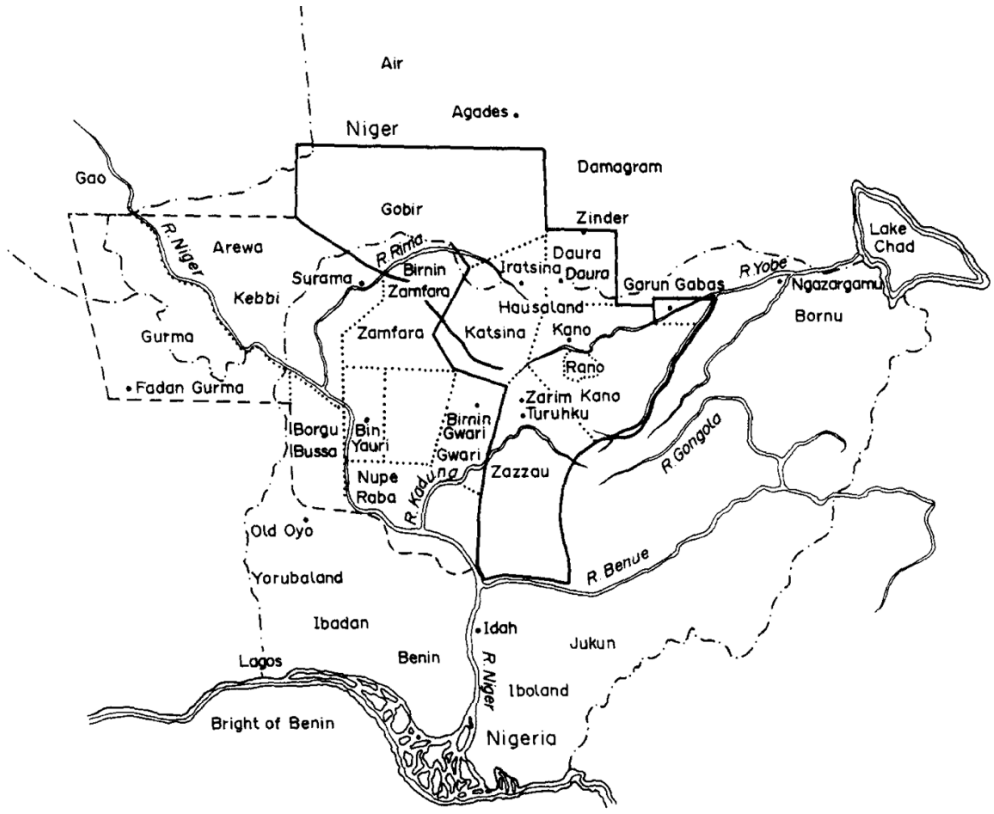
2.2 Hausa Housing Culture

2.2.1 The Hausa Culture and The People

Culture is not static; it evolves over time in response to environmental, historical, and social changes, but it remains deeply connected to identity and community. In this sense, culture is both a reflection of people's lived experiences and a framework that dictates how individuals relate to each other and their surroundings.

According to Sa'ad (1981), the term "Hausa" serves as a linguistic designation for the people of northern Nigeria and southern Niger Republic who speak the Hausa language as their native tongue. While the Hausa officially recognise and refer to themselves by this term, it appears to be a relatively recent collective designation, as no evidence suggests that such a unifying term existed during Leo Africanus's visit to Western Sudan around 1515. Sa'ad further notes that even today, many Hausa individuals identify more strongly with their city of residence rather than exclusively with the broader term "Bahaushe," which translates to "a Hausa man", individuals referring to themselves as "Bakane," "Bakatsine," "Bazamfare," or "Bagobiri," based on whether they come from Kano, Katsina, Zamfara, or Gobir, respectively (see Figure 4). The Hausa people are one of the largest groups in Nigeria.

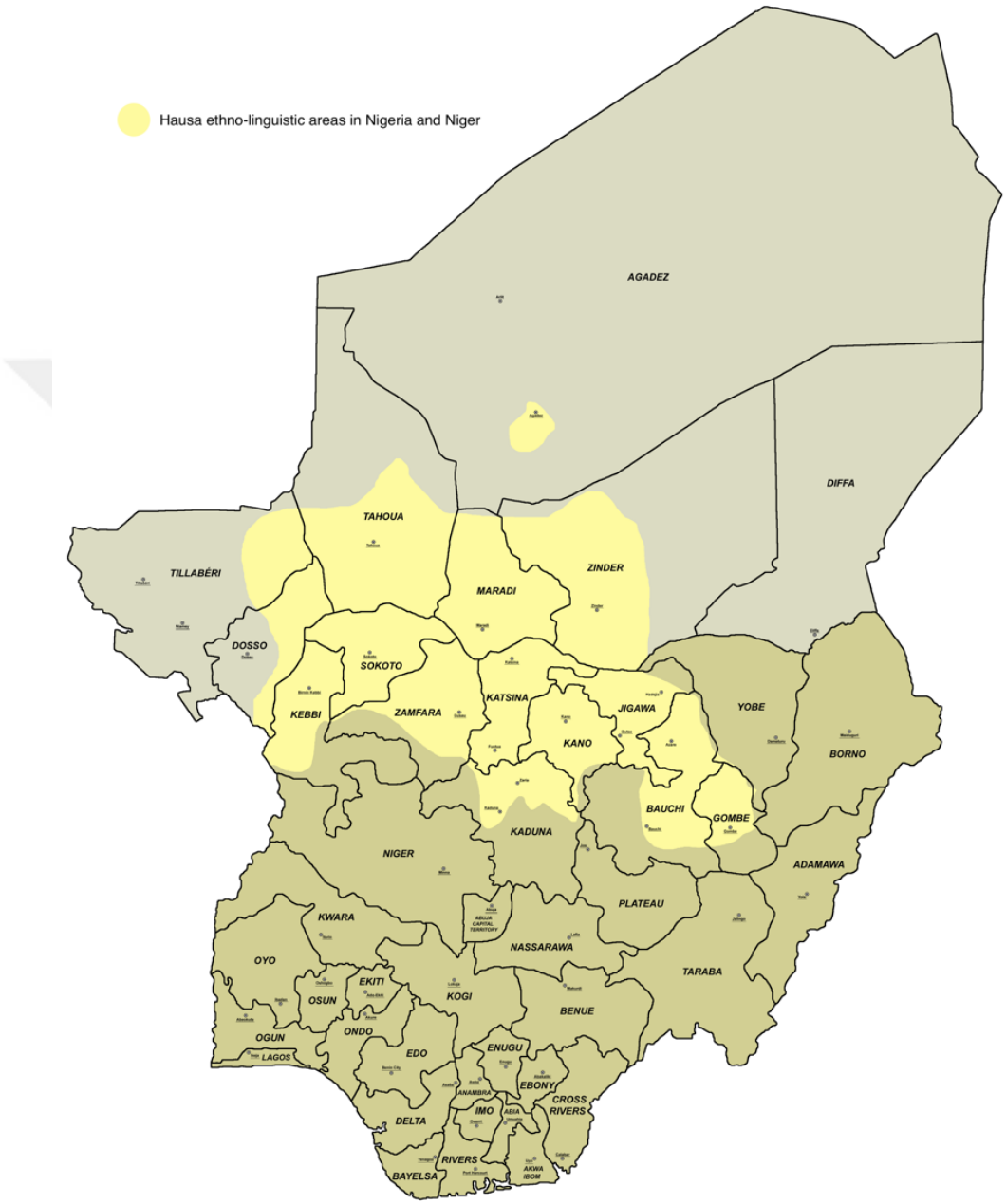
Figure 4: *Hausaland in the 17th-18th centuries showing the Hausa Bakwai and neighbouring states/empires. (Nwanodi, 1989, p. 84)*



The Hausa people are one of the largest ethnic groups in West Africa, predominantly located in Nigeria, Niger, as shown in Figure 5, and parts of Chad, Ghana, Cameroon, and parts of Sudan (Britannica, 2024). Agboola and Zango (2014) describe them as a dominant group in northern Nigeria, with their culture deeply rooted in trade, agriculture, and craftsmanship. In Nigeria, they primarily inhabit cities like Kano, Sokoto, Zaria, and Katsina, and their language, Hausa, incorporates elements of Arabic. Historically, the Hausa were known for their urban settlements and developed centralised city-states, known as the Hausa Bakwai—Daura, Kano, Zaria, Gobir, Katsina, Rano, and Biram, established by 10th or 11th century CE (Sa'ad, 1981), are characterised by walled cities, monarchical governance, and bustling trade centres. Elleh (1997) claims that a man called Bayajidda, who killed a snake that was obstructing people's access to water from a

well in Daura city, established these 7 Hausa states. Prominent, well-established cities such as Kano and Zaria play significant roles in trade, politics, and Islamic scholarship. In the 14th century, Islam became a dominant religion, shaping their cultural and social structures, although some pre-Islamic practices persisted (Aliyu et al., 2022). Initially semi-autonomous, these Hausa states were influenced by neighbouring empires like Kanem-Borno in the 13th century and Songhai in the 16th century, with Islam playing a key role in their political and cultural evolution (Sa'ad, 1981).

Figure 5: *Map of Hausa tribe in Nigeria and Niger Republic. (Hausa Language Map, 2025)*



Adeyemi (2008), in his book Meaning and Relevance in Nigerian Traditional Architecture, noted the Islamic influence on Hausa architecture, tracing it back to two primary connections. He cited The Kano Chronicle, stating that towards the end of the 15th century, Songhai notables and scholars visited Katsina and Kano, likely influencing

the local architecture with their Islamic beliefs. In the late 16th century, Arab merchants travelled from the far north through Tripoli and Kano, eventually settling in Kano. This settlement established direct contact with Arab-Moorish architecture, further impacting the region's architectural development and the influence of Islam on their customs. These ties led to innovations in Hausa mosque building, with early similarities to Mali and Songhai types giving way to Hausa innovations in mosques like the Bauchi Mosque (1812), the Sultan Bello Mosque in Sokoto, and the Zaria Old Friday Mosque (1836), and the Zaria Mosque is said to incorporate all the architectural forms and techniques of the Hausa culture (Adeyemi, 2008).

Economically, the Hausa are skilled in subsistence agriculture, growing crops like millet and sorghum while excelling in crafts such as dyeing, weaving, leatherworking, and silver-smithing (Agboola & Zango, 2014). They are renowned for their trade, particularly in leather goods and other commodities. Early agricultural societies were autonomous family groupings that practised community-shifting agriculture, according to Elleh (1997), referencing Moughtin and Abdullahi Smith. The extended family, which shaped social life, economic systems, and production techniques, served as the foundation for these societies. The Hausa states, with a pre-capitalist economy and advanced administration, were characterised by high population densities within walled settlements, where individual compounds housed 100–500 people per acre (Moughtin, 1964). Moughtin also highlights the hierarchical and exploitative nature of the society, stating that Muslim Hausa communities viewed pagan tribes as a source of slaves, legitimising the capture of non-Muslim groups. Slaves were used both as labour and as a form of wealth, with officials often founding slave settlements as a means of economic

investment. This practice underpinned the social and economic system of Hausaland at the time.

Islam plays a fundamental role in shaping Hausa's cultural identity. The Hausa people are predominantly Muslim, and their religious practices are deeply interwoven with daily life. Saad (1981) notes that Islam was introduced to Hausaland in phases, beginning with Katsina's rulers converting in the 13th century, followed by Kano's rulers under Yaji dan Tsamiya in the 14th century. The religion's influence deepened in the late 15th century through missionaries like Al-Maghili during the reigns of Muhammad Rumfa of Kano and Muhammadu Korau of Katsina. Islam shaped governance and religious practices and introduced architectural innovations, such as the construction of mosques and grand palaces like Kano's Gidan Rumfa. By the 16th century, Hausa states fell under the influence of Songhai, except for Kebbi, which resisted and maintained independence. The 17th and 18th centuries were marked by political instability, including internecine wars and external threats from groups like the Jukun. However, the 19th century saw a unification of Hausaland under Usman Dan Fodio's Fulani-led jihad, which replaced the Habe dynasties and centralised governance, fostering peace and enabling the spread of Hausa architectural techniques across the region.

Saad highlights that the jihad initially discouraged architectural advancements, as early Fulani rulers prioritised modesty and religious pursuits, considering Islam provides a framework for ethics, behaviour, and social organisation, influencing everything from dress codes to dietary practices (1981). However, by the 1820s, the second generation of rulers embraced Hausa cultural practices, including the construction of grand palaces and decorated buildings, reflecting the luxurious lifestyle of pre-jihad rulers. Despite the impermanence of mud as a building material, surviving structures like the Kano Palace

gates and pre-jihad mosques demonstrate the technological and aesthetic achievements of Hausa master masons.

Saad (1981) emphasises that Hausa is a key marker of cultural identity in the Hausa language. While foreign influences expanded its vocabulary, the language developed in situ and exerted a strong influence on neighbouring dialects. Hausa's dominance in trade, crafts, and urban organisation further solidified its role in shaping the socio-cultural landscape of West Africa (1981). The Hausa language ranks as the second most widely spoken indigenous language, with around 120 million African speakers (Yahuza & Gurdalli, 2023) and is the most spoken native language in Nigeria. Dialects of Hausa remain mutually intelligible and are grouped into two main categories: the Sokoto and Kano varieties.

Moreover, Saad points out that Hausa has been both a borrower and lender of linguistic terms, especially in areas such as trade, governance, and crafts, influencing and being influenced by neighbouring languages. Despite adopting Islam, the Hausa rulers maintained existing social institutions and customs, allowing traditional Hausa religion and practices to coexist with Islam, resulting in a unique harmony between the two belief systems within Hausa society. The Hausa language encapsulates a rich and multifaceted cultural heritage, as evidenced by its enduring utilisation of the Ajami script, which is rooted in Arabic orthography and dates back to pre-colonial epochs. Kurfi (2017) noted that Ajami was a major vehicle for the expansion of Islam in sub-Saharan Africa, playing a role in Muslim women's education, civic engagement, and political discourse. He added that even Christian missionaries used Ajami to translate the Bible to reach Hausa and Fulani speakers. The Kanuri people, situated in Northeastern Nigeria in Borno state, were pioneers in adapting the Arabic script for local languages in Nigeria, influencing the

Hausa literary and calligraphic tradition, referred to as the "ajamisation of aesthetics" (Kurfi, 2017). Ajami was used by Hausa Islamic scholars and calligraphers in their artistic and literary expressions as handwritten Qur'ans, educational materials, and decorative inscriptions (See Figure 6). It has been instrumental in maintaining the Hausa identity, socialising Hausa, and sustaining cultural practices on the one hand while reinforcing Islamic influence in Hausa society.

This script, as noted by Philips (2004), continues to be prominently present in contemporary religious and literary spheres as a tangible link to Hausa's cultural identity and linguistic tradition. Hausa culture also thrives through its oral traditions through its rich storytelling, poetry and musical expression in tandem with the Ajami script. Hausa organisations that hold such oral practices are more than vessels for cultural narratives; they are also dynamic transmission conduits between generations for the survival of Hausa history across time. He also mentioned that the literary scene of the Hausa language is wondrously deep and diverse, with numerous genres like poetry, prose and religious texts. Among the important manuscripts are Riwayar Annabi Musa, written by Kano scholar Abduallah Suka, c. seventeenth century, which throws important light on the linguistic development as well as the literary capabilities of the Hausa people. Indeed, the colonial era also saw the emergence of several institutional developments, such as Hausa language exams for Northern Nigeria civil servants, which is an indication of how important the Hausa language was as a lingua franca in the regional socio-political context (Philips, 2004). But the change from Ajami to the Roman has been a matter of contention –debate has moved from colonial influence on pure pragmatism, or to the more compelling idea that standardised orthography can have positive socio-political outcomes for Hausa-speaking regions.

Figure 6: *Sample of a decorated wooden tablet with an inscription of Surah al-Fatiḥa. (Kurfi, 2017)*



The Hausa people have a rich tradition of living in densely knit communities of people who shared an interest long before Islam was introduced. In various ways, Islam's arrival further strengthened this communal bond. The communal living that developed from mutual support and cooperation was the seed for the close Hausa communities. This pre-existing sense of community was further strengthened with the coming of Islam, which focused on the traditions of unity, equality, and social responsibilities, cementing the bonds of the Hausa. Such celebrations as weddings, naming ceremonies and funeral rites are important parts of Hausa culture and normally require spacious compounds or neighbouring areas within traditional Hausa homes or communities. Additionally, congregational prayers in Islam play a great role in promoting social interaction amongst the Hausa. Even during the five daily prayers, the community cohesion is enhanced through connecting with other nearby family heads. Friday congregational prayers bolstered this social network to a five-kilometre radius, to a greater extent, facilitating a communal engagement. Similarly, Eid congregational prayers are important biannual

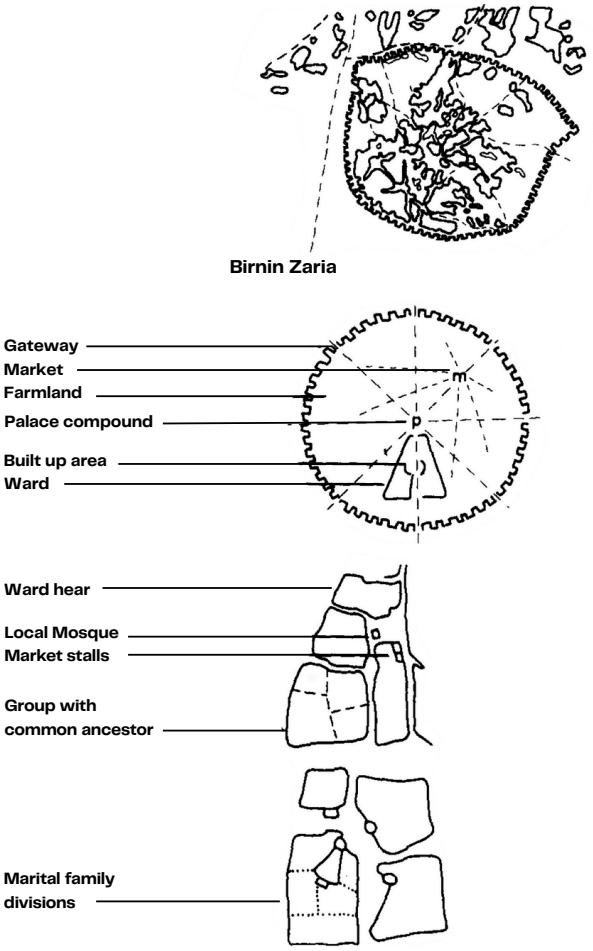
events that invigorate community ties and allow interaction with families town-wide or with heads of families from a group of villages, thus cultivating social cohesion (Haruna, 2016).

Culture from Rapoport's (2005) point of view means unique beliefs and attitudes that make the lifestyle, identity, arts and intellectual endeavours of a group or community unique to them. Leveraging this framework, culture, as explored, has a primary role in shaping Hausa's way of life, identity, perception, artistic expression, and intellectual accomplishments. When this framework is applied to the Hausa society, it is evident that culture in general has a great deal to do with the way their life is and the way they see themselves and the way they express themselves and achieve in intellectual life. Therefore, these cultural elements provide a framework for understanding the changes in the Hausa Traditional architecture of residence.

2.2.2 Hausa Settlement Culture

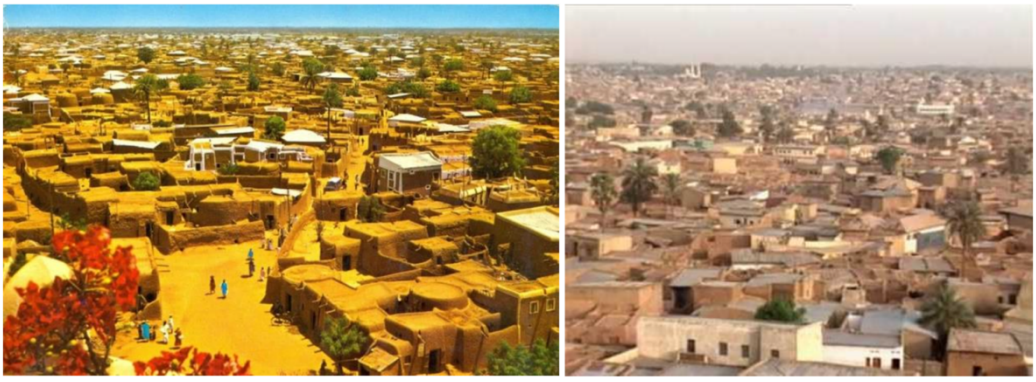
Hausa communities have a very strong social and architectural connection, where their social hierarchy influences the design and arrangement of their settlements. Historically, Hausa society was divided into several groups: aristocracy, merchants, scholars, and labourers, each occupying different societal roles that shaped the urban fabric. Typically, the wealthier households built larger, more complicated homes close to communal spaces. In contrast, the working-class populations built simpler dwellings. Despite differences in wealth, Hausa communities traditionally favoured close-knit settlements where neighbours often interacted within shared spaces, which provided a sense of community and security. This form of urban living challenges modern concepts of privacy and space, where density is often viewed as disorderly, but it reflects the importance of solidarity in Hausa culture (Muhammad-Oumar, 1997; Nasidi, 2024).

Figure 7: *An abstract of Zaria city. (Nwanodi, 1989, p. 85).*



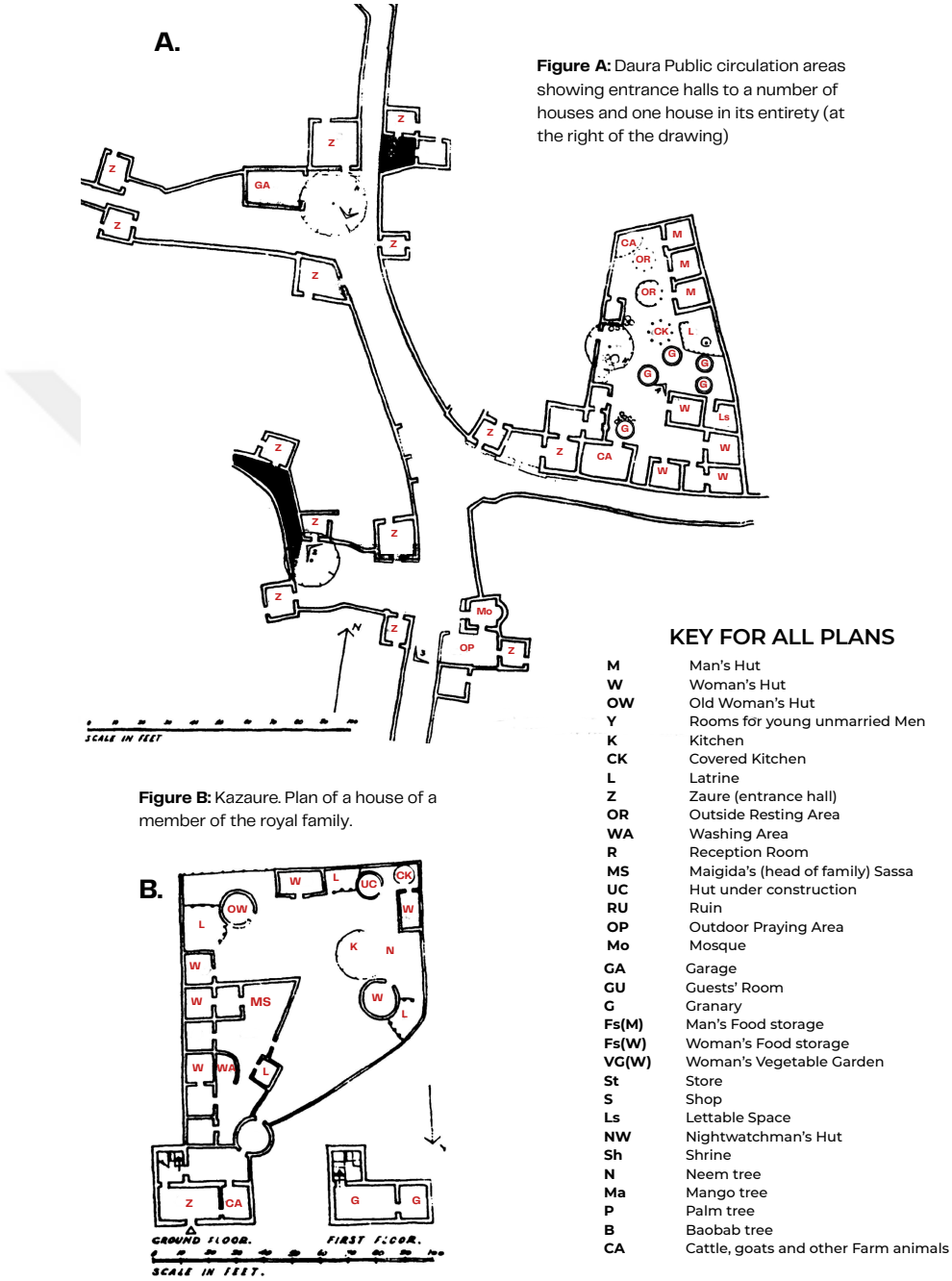
Note. Within the settlement there would be one or more focal points - the market, the palace, they are not necessarily located together. Routeways run from these focal points to the gates of the settlement. In between these routeways lie wards -groups of walled compounds with narrower passageways, traditionally always inhabited by people sharing a common ancestor.

Figure 8: *Aerial view of ancient Kano City, Northern Nigeria. (Yahuza & Gurdalli, 2023)*



Within these settlements, specific spaces played pivotal roles. Central locations like the mosque, the emir's palace, and the marketplace formed the backbone of urban organisation. The mosque was a focal point for religious activities, promoting social interaction among community members. The two central points: Politically, the emir's palace signified power, while economically, the market was the centre for commerce (see Figure 7). As shown in Figure 7, several key focal points could be identified within the settlement in Zaria City, such as the market, the palace, and, following the Jihad, the Friday Mosque—though these were not always situated in the exact location (Nwanodi, 1989). He added that the main routeways extended from these focal areas toward the city gates, while the spaces between these routes were occupied by wards—clusters of walled compounds interconnected by narrower passageways. These hubs were strategically placed in each settlement, enhancing their accessibility. In larger Hausa towns, the urban layout was often subdivided into wards–ungugoyi, but these tended to be based on kinship, family ties, and occupation. Each ward had places for essential activities such as prayer, governance and commerce. The spatial distribution reinforced established kinship as a social interaction and architectural planning (Auwalu, 2019; Lodson et al., 2018). Residential neighbourhoods demonstrate the hierarchy of settlements, demonstrating the social roles and weights of residents due to wealth or having higher-status families living on what is presumed to be the better side of town.

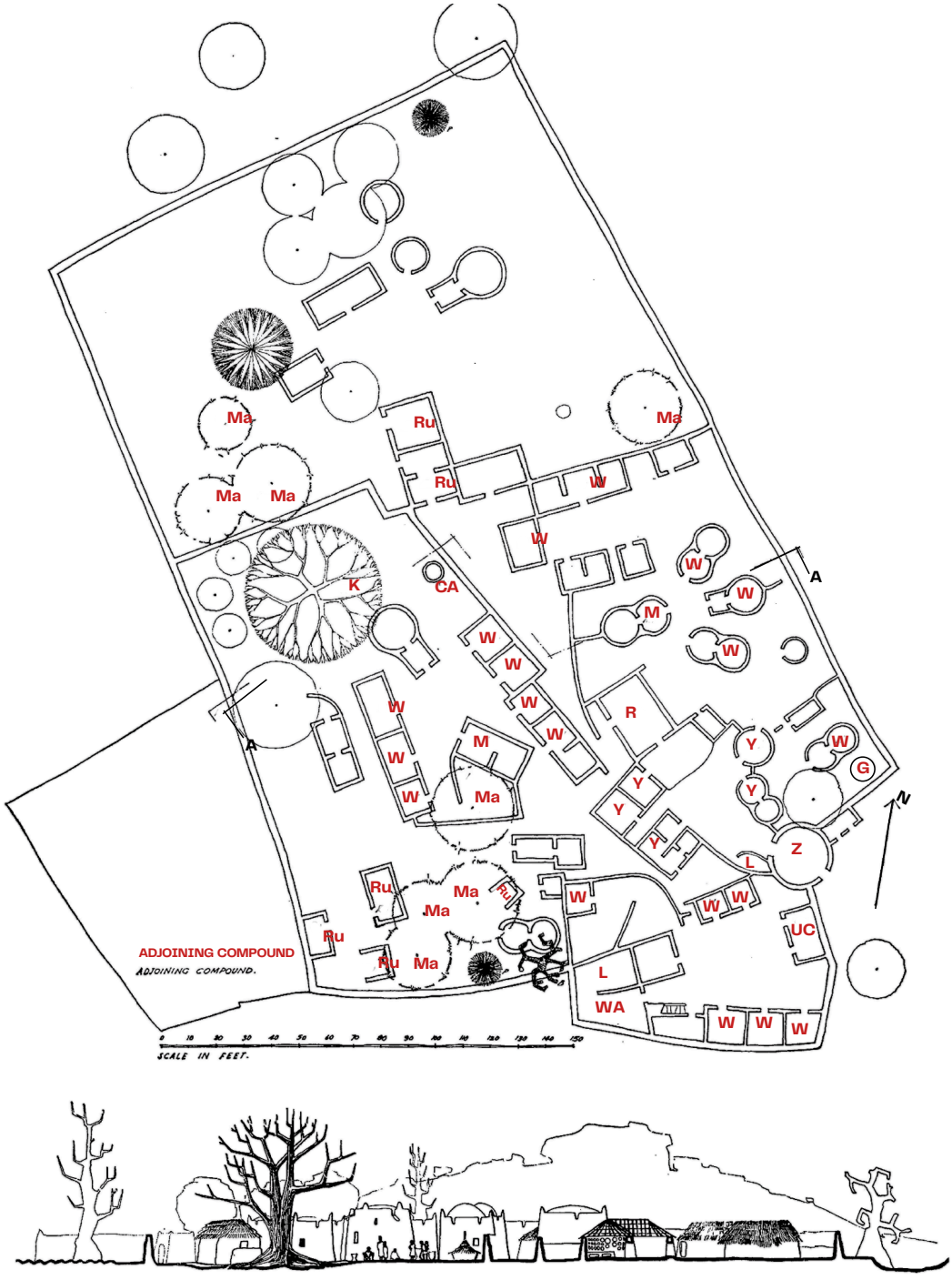
Figure 9: *Plans showing an urban pattern. Circulation and road network, including home entrances, Zaure in Daura and a house plan in Kazaure. (Moughtin, 1964, p. 25)*



The Hausa home also follows the layout pattern that affirms family and community dynamics. The typical Hausa house is based on a courtyard (tsakar gida),

serving as the heart of the house and is used for both practical and social activities (see Figures 9 & 10). Within the layout, the rooms are placed around the central open space, and domestic activities such as cooking, washing and socialising are close together. The zaure (a reception hall or entrance foyer), is a transitional space between the private areas of the home and the outside world that serves as an important space. This space allows the family to receive visitors while maintaining some degree of privacy. In addition to the zaure, the inner courtyard is reserved for more intimate family interactions, and kitchens or service areas are typically separated from the living quarters, creating both functional and privacy benefits (Aliyu & Ahmad, 2019; Muhammad-Oumar, 1997). This design highlights the flexibility of the Hausa home, which can grow or shrink according to the needs of the family, whether expanding due to the addition of new members or contracting when fewer spaces are necessary.

Figure 10: *Plan and section of the Mallawa House, Zaria City. (Moughtin, 1964, p. 27)*



KEY

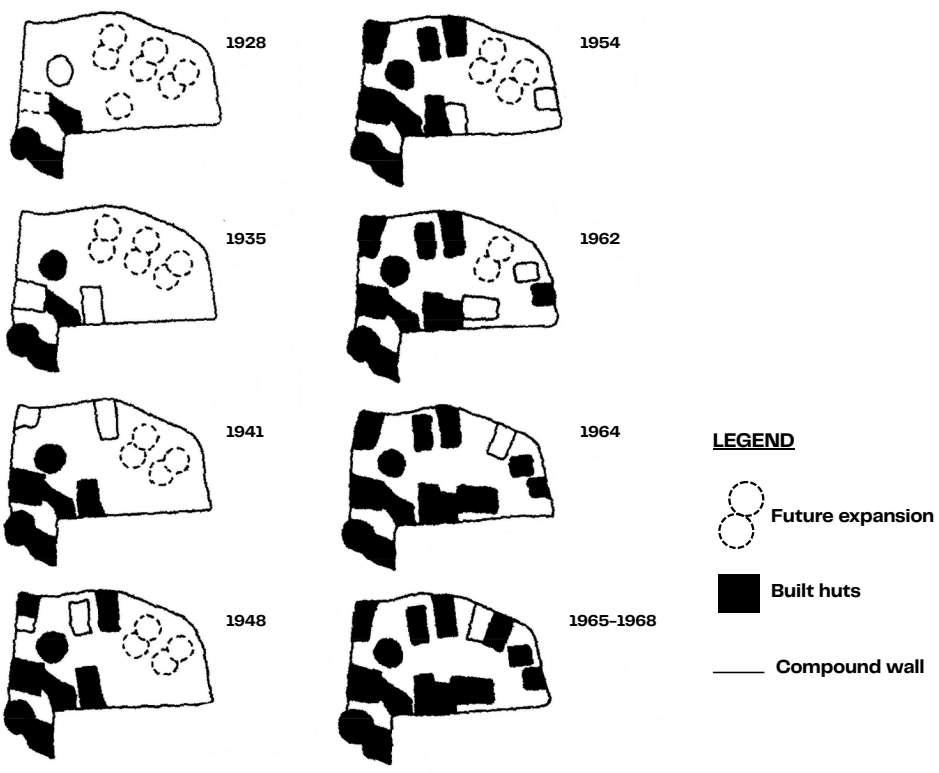
M	Man's Hut
W	Woman's Hut
CA	Cattle, goats and other Farm animals
Y	Rooms for young unmarried Men
K	Kitchen
CK	Covered Kitchen
L	Latrine
Z	Zaure (entrance hall)
G	Granary
WA	Washing Area
R	Reception Room
MS	Maigida's (head of family) Sassa
UC	Hut under construction
RU	Ruin
N	Neem
Ma	Mango tree

The spatial divisions within the home also align with traditional gender roles, which remain prominent in Hausa society. Typically, women's spaces are found in the inner, more private sections of the home, such as the courtyards where domestic activities, including cooking and childcare, take place. This division ensures that women's privacy is respected, with distinct spaces for sleeping, cooking, and other domestic duties. In polygamous households, each wife might have her own space within the compound, located close to other wives, yet providing a level of independence. Men, conversely, often occupy the more public or semi-private spaces, such as the zaure or soro (a secondary reception hall, typically located immediately after the zaure, serving as an intermediate space between the entrance and the private areas of the house), where gatherings and family meetings occur. This architectural division mirrors the broader social structure of the Hausa community, where privacy is defined not only by physical boundaries but also by the social roles assigned to each gender (Adamu, 2005; Sa'ad, 1981). These spaces serve both functional and symbolic purposes, reflecting respect for family dynamics and privacy needs.

As Hausa families grow and change, their homes also evolve. Initially, a typical Hausa household might begin with a basic structure consisting of a few key elements like the central courtyard and reception hall. However, as the family expands or their social status rises, additional rooms, such as bedrooms, kitchens, and other service spaces, may be added, transforming the layout (see Figure 11). This architectural expansion is not merely practical but also symbolic of the family's changing position within society. The head of the household might occupy the largest or most prominent space, while other family members—children, wives, or extended kin—are accommodated in more secluded or private areas. The evolution of the house reflects the hierarchical nature of the family

structure, with spaces becoming more distinct as the household grows in size and wealth (Muhammad-Oumar, 1997; Nwanodi, 1989). The expansion of the home could involve adding more stories or increasing the complexity of the structure to accommodate the family's changing needs.

Figure 11: *Housing form and kinship structure. (Nwanodi, 1989, p. 87)*



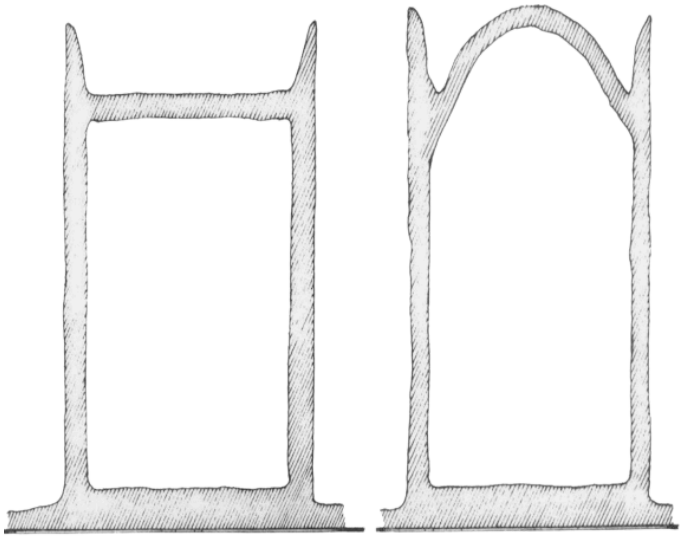
Note. The development of the Hausa dwelling over time appears to be related to kinship structure. The entrance hut(s) and the compound wall are often the only parts of the dwelling to remain in their original position throughout the existence of the dwelling.

Hausa architecture is distinguished by its building elements, construction techniques, material choices, design motifs and finishes. These reflect functionality and cultural identity since traditional building methods rely on locally sourced materials. In Hausa land, indigenous construction materials primarily involve earth, timber, reeds,

grasses, and stones as essential materials (Agboola & Zango, 2014; Moughtin, 1985). The region of Northern Nigeria, inhabited by the Hausa people, is situated in the Sahel savannah, an area characterised by hot and dry climatic conditions, with significant temperature fluctuations between day and night. Traditional Hausa buildings are designed to adapt to these environmental factors (Lodson et al., 2018) by featuring limited and small openings, aiming to minimise the entry of dust and reduce exposure to the intense heat and brightness of the sun. Walls are plastered using mud mixed with either potash or juice from the locust bean plant. This mixture helps to strengthen and protect the walls.

The roofing of structures varies based on their shape. Round huts typically feature conical thatched roofs crafted from cornstalks and grass. Meanwhile, rectangular buildings commonly have flat mud roofs constructed from robust and insect-resistant palm tree timber, known as azara. These timber pieces are arranged in a herringbone pattern and covered with mud plaster on both sides. However, a specialised waterproof plaster enhances the roof's durability. Additionally, many houses in the area have flat or vaulted mud roofs instead of thatched roofs. This choice was made to reduce the risk of fires in urban areas, which later resulted in policies being implemented to discourage the use of thatched roofs in cities and initiated the significant difference in architectural styles between urban and rural areas in Hausa land (Agboola & Zango, 2014).

Figure 12: *A section through a typical flat roof and dome roof. (Haruna, 2016)*



In Kano, Katsina, and Sokoto, where rainfall is sparse, most of the earth's roofing is flat and designed to accommodate limited precipitation. Conversely, as one moves southward towards Zaria, where rainfall is heavier, roofs tend to be dome-shaped, allowing for faster rainfall runoff (Haruna, 2016) (Figure 12). The choice between flat and domed roofs depends on the local precipitation levels: flat roofs prevail in regions with minimal rainfall, while domed roofs are favoured where rainfall is abundant, facilitating efficient water drainage. A distinctive characteristic of typical Hausa houses found in rural and urban settings is the incorporation of thicker walls and smaller openings. These houses often feature external finishes adorned with engraved designs using mud Makuba (Figures 13 & 14). Additionally, decorative elements such as zanko (pinnacles) or Kashin Magani, which beautifully express the unique aesthetics of Hausa architecture, are often found at the top of the building (Ajufoh & Abubakar, 2019).

Figure 13: *The process of makuba application done by hand. (A history of Hausa Architecture, 2022)*



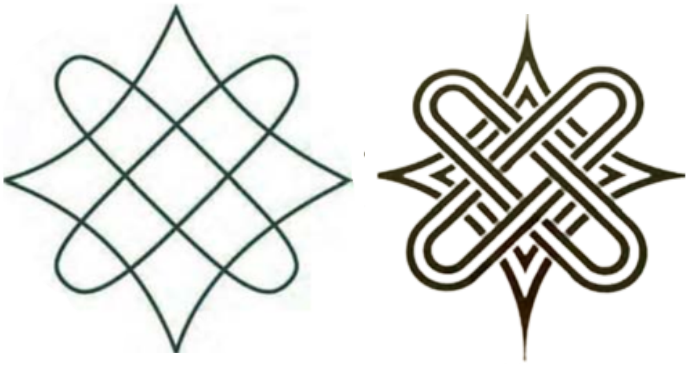
Figure 14: *Makuba representation on Gidan Makama. (Author's fieldwork)*



Traditionally, Hausa decoration was an integral part of the building process, typically undertaken by the general builder and executed during the final phase of

construction when the last coat of plaster was applied (Moughtin, Oc, & Tiesdell, 1999). In Adamu's (2005) analysis, decoration in Hausa traditional architecture is divided into surface design, calligraphy, and ornamentation. Ornamentation in Hausa traditional architecture can be classified into scroll pattern ornamentation, interlocking, and interior angle symbol patterns. Scroll pattern ornamentation is characterised by leaf, triangular, rectangular, and circular motifs, predominantly in white and grey colours, adorning the façade (Figures 15 & 16). This decorative practice, prevalent among the affluent and royal families, enhances visual appeal and conveys cultural identity and social status. Interlocking lines, Northern knot—dagin arewa or tambarin arewa in the Hausa pattern—form a three-dimensional design, converging in a semi-circular shape at each endpoint (Figures 15 & 17). Since ancient times, the Hausa cultural identity has been uniquely marked by dagin arewa, a distinct symbol in their architectural designs and traditional embroidery (Figure 15). This symbol is a hallmark of identity for the northern Hausa community, carrying profound traditional and cultural significance (Aliyu & Haruna, 2021). It symbolises authority, power, and wealth and is often used to build elements and traditional dresses or gowns of Hausa political leaders, particularly the aristocrats or monarchs.

Figure 15: *Northern Knot or Arewa Symbol or Dagin Arewa. (Aliyu & Haruna, 2021)*



Initially stemming from pre-Islamic animism, Hausa wall decoration motifs often depict natural objects or animals tied to the group's totem. With the arrival of Islam, Islamic symbols based on Arabic writing and holy artefacts were incorporated (Moughtin, Oc, & Tiesdell, 1999).

Figure 16: *Decorative walls (Maigaskiya, 2019)*



In the case of mud buildings, their structural stability depends on adequately maintaining the surface finish. It is noted that the annual resurfacing of buildings was a

communal ritual among the Hausas involving the entire community, with the creation of patterns serving as a simple expression of this ritual and reaffirming ownership (Moughtin, Oc, & Tiesdell, 1999). They added that in Hausa cities, the display of decoration has historically been limited, with ornamentation often reserved for a select few structures. Kabir (2016) noted that ornamentation, such as patterns, symbols, and decorations, serves as an aesthetic element and carries cultural, social, and symbolic meanings. Traditional Nigerian architecture is characterised by ornamentation denoting social status, cultural identity, authority, and power.

Figure 17: *A decorated doorway. (Moughtin, Oc, & Tiesdell,1999)*



These decorative elements can adorn a single facade of the ‘zaure’, depending on the occupant’s status and preferences. Graffito, a decoration method, involves applying layers of different-coloured wall plasters and creating designs by scratching away the

upper layers. Agboola and Zango (2014) cited Denyer's (1978) fieldwork, where he observed that this decoration might have magical or religious significance. Furthermore, intricate interlacing arabesque relief forms embellish the street facades of Hausa buildings, often symbolising wealth and social status within the community. Aliyu et al. (2022) suggest that in Hausa communities, the intricate and high-quality engraved designs on the wall surfaces of royal palaces or aristocratic homes likely signified social status and levels of royalty. Another key characteristic of Hausa facade decorations is the use of mud horns—known as zanko (singular) or zankwaye (plural), displayed along their buildings' parapets (Figure 18). This architectural detail adds a lighter and more picturesque quality to Hausa structures.

The architectural addition of pinnacles, zankwaye draws inspiration from Arab architectural influences and has emerged as a hallmark of Hausa architecture (Ibrahim et al., 2024) and Hausa turban—rawani. Umar (2008) emphasised the significance of zanko in Hausa traditional architecture, stating that a master mason equated it to a bull without its horns or a chief without his headgear. Indararo, sprouts or roof gutters are a key element in Hausa architecture and are often found on buildings with flat roofs. In the ancient times, they were made by potters using clay or an alternative traditional material, the deleb palm. Later on, they switched to iron-thin sheets made by blacksmiths. The zanko, rawani and indararo are architectural elements that "form the essential trinity to the external aesthetic characteristics of traditional Hausa architecture", Saad (1981).

Hausa architecture, renowned for its use of mud structures, has evolved as Hausa builders have gained a deep understanding of the properties of their materials. According to Ibrahim et al. (2024), initially, mud was reinforced with reeds or straws to create stronger bricks. Earth as a building material dates back to 12000 BC in Hausa traditional

architecture, with simple, cost-effective, and self-built structures prevailing. When properly maintained, these earth buildings proved to be structurally sound and environmentally friendly, enduring for many years. Land stones are employed for foundations in regions with heavy rainfall due to their moisture-resistant qualities. Layers of stones or uncoursed rubble are strategically placed to manage moisture movement from the foundation upwards. Azara timber, sourced from male palm trees, is crucial for formwork and roof elements in Hausa architecture. These timbers are renowned for their rigidity, weight, resistance to termite damage, and long-term durability, often lasting decades without signs of decay.

Plaster covers the wall surfaces and other building elements for protection and decoration. In Hausa traditional architecture, plaster types are categorised based on material content. Makuba plaster, named after the fluid from the skin of a locust bean tree, improves water impermeability and protects it from termites. Laso plaster, known as local cement, is a relief decoration made from mud and protected from rain. Shafe plaster adds viscous fluid from locust bean pods or Acacia trees to the black earth, enhancing texture and durability.

Figure 18: *Hausa building elements. (Author's archive, 2023)*



The central courtyard of Hausa homes is one of their most defining features. It acts as a vital domestic and social hub, an open space. Central to the daily rhythm of the house, it is a place where children can play, people gather, and work can be done. The courtyard becomes a venue for religious observances, festivals, and communal events, thus augmenting its role in the social and cultural features of Hausa life. It is a physical and symbolic space, a place that serves both the domestic aspects of daily living as well as the communal aspects of daily living (Aliyu & Ismail, 2023; Markus, 2016). The courtyard exemplifies a cultural emphasis on interaction, cooperation, and collective identity, where the boundaries between the private and the public are seamless, and the house becomes part of the whole community.

Embodying values like privacy, family, and social cohesion, as well as emotional, social, and spiritual needs, housing carries intangibility, reflecting culture and serving not just its tangible purpose. Spaces and buildings in a community are arranged in accordance with its cultural practices, with building styles playing a central role in defining cultural identity, as different cultural groups practice different ways of organising and structuring

spaces in their homes to reflect their traditions and lifestyles (Danjuma et al., 2020). The advancement of humans beyond mere dwellings to the ideal cultural built environment is where culture must be an integral part of an architectural practice, from immediate skills derived from that sense of place (Aliyu & Haruna, 2021). In Hausa communities, design considerations are culturally based, and these criteria shape social interactions as well as physical structures in making traditions and an identity in contemporary architectural practices.

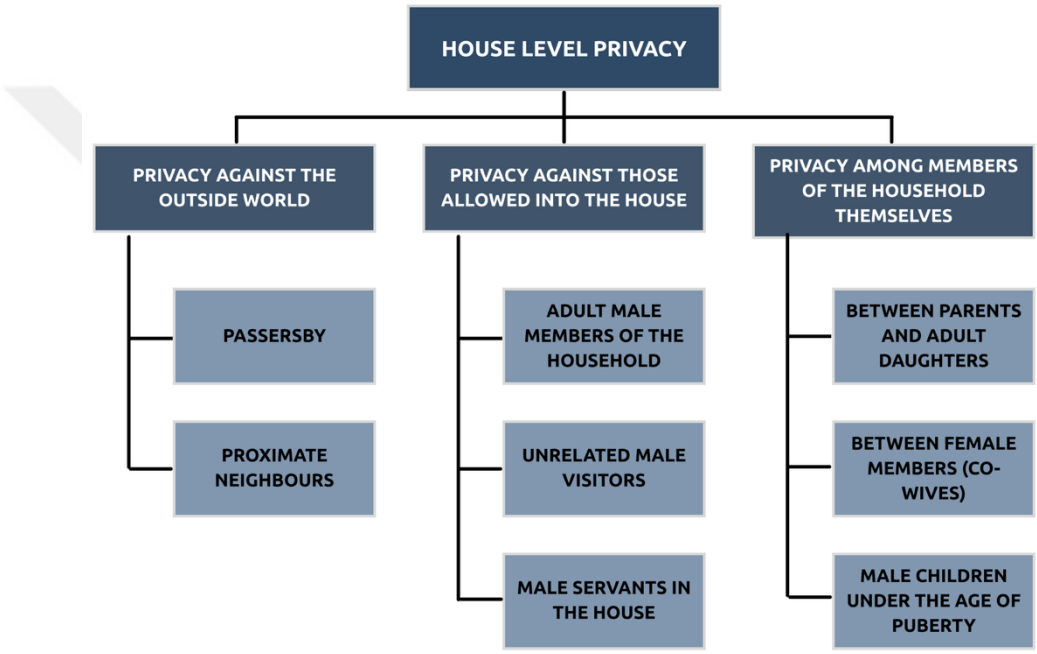
Hausa homes are built using an architecture that is deeply linked to the people's cultural and social practices. Hausa architecture is based on the values of family, privacy, and community. It is a house that can be adapted to the ever-changing needs of the household without disregarding cultural norms and social roles of the household setting. The design of Hausa homes, with their emphasis on flexible space usage, gendered spatial divisions, and communal living, highlights the deep connection between architectural form and the social structure of the community. These homes evolve, and they still represent the values of privacy, social cohesion and cultural sustainability.

2.2.3 Privacy in Traditional Hausa Housing

Privacy is a fundamental aspect of the Hausa household, which is pivotal in influencing the design and layout of entire compounds. Privacy is significant across cultures, although it is interpreted and implemented differently depending on the cultural contexts (Rapoport, 1969). According to Babangida and Sani-Katsina (2018), in Muslim houses, privacy is very important and it is classified into visual, acoustic and olfactory privacy. The aim of these categories is to prevent unlawful activities of looking, listening and smelling, particularly from the kitchen. They say that to achieve such privacy, Islamic Design Principles (IDP) should be integrated into architectural designs. For example,

windows that are raised to add to visual privacy on facades prevent passersby or neighbours from having a direct or indirect view. Moreover, perimeter fences form physical barriers that guarantee privacy as well as security.

Figure 19: *Showing Hierarchy for achieving family privacy in the Muslim home. (Babangida & Katsina, 2018)*



The Hausa people follow the Malikiyya school of thought, which gives much importance to the sanctity and privacy of the domestic domain. The belief system has a strong influence on architectural practices in Hausa buildings, due to the blending of Islamic principles with cultural norms. These principles imply that entrances are designed to obstruct direct views into internal areas of the house that are designated for family members to access private spaces, while guests can only enter specific family areas. Architectural measures aimed at enhancing family privacy include small, external apertures that provide ventilation and block sightlines, and large openings facing interior courtyards to avoid privacy violations (Aliyu & Ismail, 2003; Kahera, 1987; Saad, 1981).

These architectural adaptations have cultural and legal implications for Islamic architecture in Hausa society.

Andersen (1977) describes how the layout of Hausa towns served as both a practical defence mechanism and a means to ensure privacy. He stated that the maze-like arrangement of houses was intentionally designed to disorient visitors and trap unwelcome outsiders. While the main streets were wide, most others were narrow, permitting only single-file movement by animals or people, thus creating natural barriers around each household. In Kano, these winding streets protected the Muslim principle of privacy and played a defensive role, confusing potential intruders and enhancing the town's security. Traditional Hausa houses incorporate clear spatial divisions to uphold privacy. Spaces within the household are segregated, with distinct areas designated for men, women, and guests, including a specific section for the head of the household. Islamic teachings prioritise privacy and the segregation of spaces, particularly for women, to maintain cultural and religious values, as depicted by Babangida & Katsina (2018) in Figure 19. For example, entrances are often designed with inner spaces to prevent direct visualisation of the house, ensuring that family members' rights are protected while fostering harmony within the household and the surrounding community. Similarly, the Zaure (entrance hall) serves as a multifunctional space for security, reception, and communal gatherings, while private family rooms remain secluded, accessed only with permission (Abu Elreish & Prima, 2021; Aliyu & Ismail, 2023).

The courtyard system is a central feature of Hausa architecture, symbolising both openness and connectivity while preserving privacy. Courtyards act as hubs for social gatherings, ceremonies, and daily routines, balancing the need for social interaction with seclusion. Saad (1986) asserted that courtyard plans are the predominant spatial

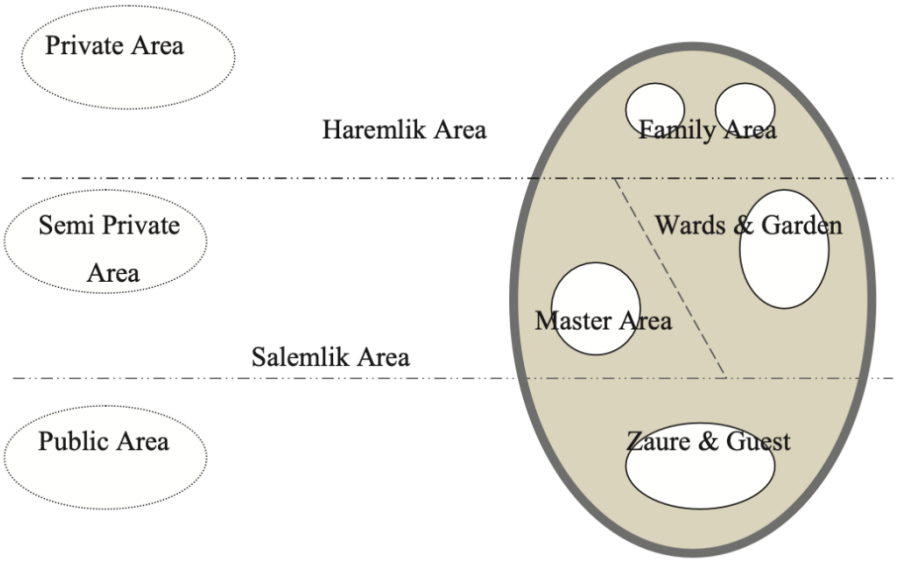
organisation in the region, adept at providing the requisite privacy. This design approach in its origins predated the introduction of Islam, and this explains the ability to accommodate extended families, satisfy privacy needs, while dealing with the challenges inherent in the region's warm climate (Ajufoh & Abubakar, 2019). In terms of privacy, the traditional Hausa compound consisted of two main parts: the front or Zaure, an open space that mainly served the household head—maigida and the rear section with women's quarters around a central courtyard. This arrangement is in line with Islamic design principles that the privacy and seclusion of women must be adhered to (Agboola & Zango, 2014 Muhammad-Oumar, 1997).

The Hausas place a high value on community bonds, which is evident in their utilisation of a versatile entrance area known as the zaure at the outer core of the compound, fostering social interaction. The family head utilises this as a solitude space, where he entertains guests and engages in some crafts. Umar et al. (2019) state that the zaure(reception) performs security, protection, reception, privacy, moral considerations, ethnic representation, decorative purposes, as well as administrative functions. Open areas with an elevated platform in front of family homes known as dakali (a raised platform located at the frontage of a traditional Hausa house) serve as gathering spots for the family head and neighbours to relax and socialise. Meanwhile, the courtyard is also a multi-functional area: it is a playground for kids, a washing and cooking area for women, a space for crafts, or a venue for celebrations, festivals, and ceremonies, including child naming, funerals, or a place to welcome guests and settle disputes.

The conceptual organisation of traditional Hausa homes features three distinct zones: the inner core (private spaces primarily for women, often including a backyard for animal rearing and waste disposal), the central core (semi-private spaces centred around

courtyards for family activities), and the outer core (public spaces for interaction and entry) as shown in figure 20. Islamic purdah dictates these spatial divisions, creating accessible and non-accessible zones to maintain privacy. High compound walls shield interiors from public view, while facilities like kitchens and toilets are positioned at the periphery for health, cultural, and privacy reasons. Additionally, open spaces are incorporated to support minor cultivation, animal rearing, and future expansion (Umar et al., 2019).

Figure 20: *Concept and layout of a typical Hausa compound. (Umar et al., 2019).*



As mentioned earlier, the entrance area, the zaure(reception hall), is equipped with private gates, the soro (secondary reception) and shigifa (this is another transitional or buffer space, typically positioned before a bedroom, similar to the zaure in function), to oversee movement in and out of the house and screen visitors, thereby maintaining privacy for the family, especially the women. Trees and shrubs are strategically planted to block views from the outside, providing further visual privacy and shade for the men to sit under, especially in the evenings. Certainly, gender spaces are separated for modesty

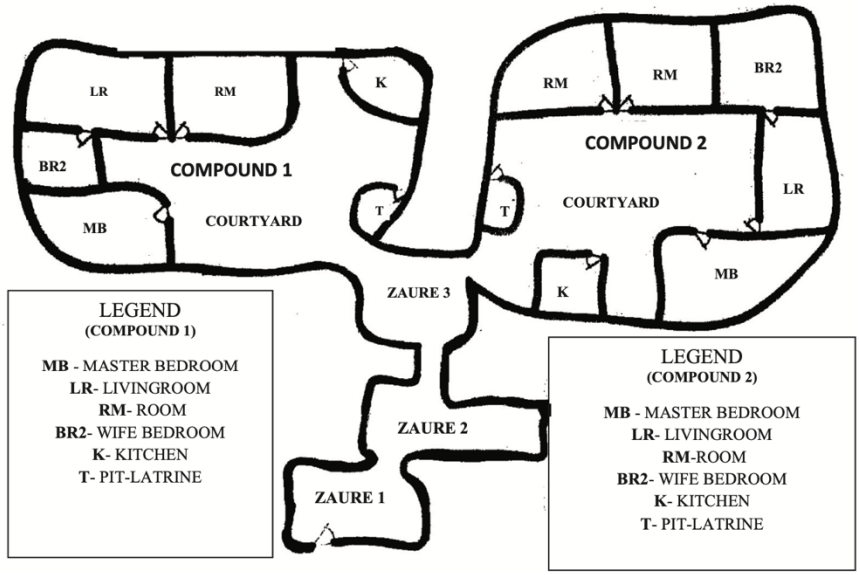
and privacy, particularly for older female members within a Hausa household. A designated women's area, the Haremlik, is the deepest part of the house, offering private space strictly for family members. This ensures privacy for co-wives, parents, daughters, and other female family members or visitors. Architectural elements like walls, partitions, raised and screened windows, and separate living spaces for different demographics further enhance privacy within the household (Babangida & Sani-Katsina, 2018).

Segregation within Hausa homes aligns with the Haremlik (women's quarters) and Selemlik (public areas) architectural framework, reflecting both cultural norms and functional purposes. While public areas promote social interactions, private zones ensure the household's seclusion. The Zaure exemplifies the practicality of Hausa design, combining cultural values with functional efficiency by serving as a space for security, reception, and communal activities. Courtyards at the same time represent the community's dynamic social life in which interactions and daily routines of the family can be performed, while at the same time promoting the privacy of the family members (Aliyu and Ismail, 2023; Ibrahim et al., 2024).

Sa'ad (1981) asserts that privacy is part of cultural and religious tradition. In terms of the design of homes, features such as blank compound walls, secluded entrances and staggered layouts are designed to ensure visual and spatial seclusion. The entrance is carefully positioned so that it does not directly face onto adjacent homes or streets; the women's quarters are furthest from the entrance, creating a layered hierarchy of privacy (see Figure 9). These architectural strategies aid in maintaining the sanctity of the home as a place where physical rituals, cultural customs and daily life take place outside of external influence. Privacy is important to women because it assures them a safe and comfortable environment, whereas for families, it secures the home as a haven for

harmony and sanctity. The demonstration of privacy as an essential element of Hausa architectural heritage attests to the enduring significance that spatial design has in determining comfort and gender expectations of the society.

Figure 21: *Typical Hausa Traditional Compound in Kano. (Umar et al., 2019)*



2.2.4 Comfort in Traditional Hausa Housing

Comfort in traditional Hausa housing is deeply intertwined with the cultural values of privacy and communal living, fostering a sense of emotional ease and social harmony. Comfort is closely tied to the experience of privacy; when individuals feel they have adequate privacy, they are more likely to experience comfort in their homes. According to De Macedo et al. (2022), comfort in living spaces is also influenced by cultural practices and norms, noting that comfort derives from the details of spatial organisation and design elements that acknowledge psychological and social needs which, in turn, lead to different expectations in personal spaces, shared areas, and the overall layout of a living space or apartment. In the Hausa cultural context, comfort is

created through spatial organisation and design elements that acknowledge their psychological and social needs.

The psychological comfort derived from privacy in Hausa traditional homes aligns closely with Archer's (2005) assertion that the physical environment profoundly shapes how individuals think, perceive themselves, and interact with others. In Hausa architecture, privacy is not merely a practical concern but a cultural necessity, intricately woven into the design of spaces to promote mental well-being and a sense of security. The hierarchy of spaces within the compound—from the zaure (reception hall) to the sashen mata (women's quarters)—is carefully designed to control access, ensuring that private spaces remain shielded from outsiders. Like other vernacular architectures around the world, Hausa houses convey a sense of control and personal space by designing zones of varied levels of interaction (public, semi-public, private), which allows household members to maintain some control while at the same time creating an isolated realm for the women. For women who experience seclusion and rest on some level of psychological comfort, privacy is measured by the action of intrusion from the exterior social sphere.

While this study centres on psychological comfort, thermal comfort also plays a significant role in Hausa housing culture. As Hitchings (2009) and Nicol & Roaf (2017) highlight, thermal comfort is not a universal standard but a culturally and climatically adaptive phenomenon, shaped by everyday practices, local materials, and social expectations—offering valuable insight into how sustainable and context-sensitive housing solutions can be developed. In the case of Hausa housing, thermal comfort, according to Batagarawa & Baba (2022), is not solely based on the knowledge of climate science. However, instead, it is a culmination of cultural wisdom, the use of locally available materials, and adaptive environmental practices. Although religious and cultural

requirements dominated the design process, thermal comfort is inherently achieved through the culturally embedded use of earth, passive management of airflow, and utilitarian window and wall arrangements.

Haruna (2016) observes that in Hausa culture, the conceptualisation of privacy and comfort goes beyond just the functional advantages that are suitable for the user. Traditional Hausa architecture prioritises spatial arrangements that are congruent with its culture and provide privacy that is aligned with cultural, social structure, and religious expectations. While privacy and comfort represent immediate physical requirements, more importantly, they represent the cultural values of respect, dignity, and family harmony. Since Rapoport (1969) underscored that meaning is a primary aspect of the environment, it can be inferred that it influences the spatial organisation and transitions in Hausa homes. For example, the designs and principles that are featured in Hausa traditional housing structure– such as high compound walls, labyrinth pathways and non-aligned entrances, and screened off internal spaces –reveal the essence of these cultural and social values, ensuring that residents feel protected, respected, and at peace within their homes.

In Hausa homes, the sense of comfort is closely tied to the preservation of privacy, as the spatial arrangement ensures that individuals can retreat into spaces that offer security and peace from external intrusions. Haruna (2016) writes that separation from neighbours is undertaken through building high walls, limited exterior openings, and private spaces for either men or women to balance communal spaces and the different aspects of intimacy. These general notions of privacy provide a public and socially acceptable perspective commensurate with the Hausa's social and cultural practices. Hausa homes typically consist of three distinct zones, usually public, semi-private, and

private, which all provide space for specific activities while preserving family life. Separate living zones for men and women further enhance comfort by respecting cultural norms of gender segregation, allowing each group to occupy spaces tailored to their roles and needs. The thoughtful arrangement of communal and private areas strikes a balance between fostering social interaction and maintaining personal boundaries. For instance, the zaure is typically used as a common space for receiving visitors and men, while protecting the family quarters, where women, children, and female visitors are entertained. While the intentions and orientations of the zaure are very important for functionality, desire, and purpose, they also provide peace of mind and clarify order within the household.

The role of the courtyard in Hausa dwellings exemplifies the integration of comfort and cultural values. As Somerville (1997) describes, comfort encompasses feelings of safety, relaxation, and ease within one's home environment, including both physical aspects, such as layout and amenities, and emotional aspects, such as belonging and acceptance. The courtyard, as a central feature, symbolises cultural heritage and community life, facilitating household social interaction and harmony. Markus (2016) highlights the versatility of courtyards, which serve as playgrounds for children, cooking and washing areas for women, spaces for crafts, gathering places for families, and venues for celebrations, festivals, child naming ceremonies, and funerals. Mai and Shamsuddin (2008) further emphasise the courtyard's role as a sanctuary for cultural and religious practices, creating outdoor spaces that support communal living. The courtyard transcends its physical dimensions, serving as a timeless emblem of Hausa culture and a vital, nurturing hub for communal life. Aliyu and Ismail (2023) also point out that courtyards enrich social relationships and strengthen bonds among family members and

neighbours through shared experiences and storytelling sessions, enhancing emotional and psychological comfort.

The interpretation of comfort as culturally specific, as described by Othman et al. (2015), closely relates to Hausa architecture, where the design of homes aligns with societal expectations and cultural practices. In Hausa dwellings, comfort goes beyond the physical layout to include privacy, which fosters a sense of security, introspection, and personal autonomy. Like Islamic traditions, as they stated, it can be inferred that while Hausa homes focus on hospitality, they intentionally design spaces with boundaries for guests and different groups, like men and women. This dual emphasis on privacy and hospitality reflects the cultural norms of Hausa society, balancing social connectivity with personal well-being and creating a home environment that supports both self-identity and harmonious relationships within the community.

Heijs and Stringer's (1988) arguments about psychological comfort resonate deeply with the principles of Hausa traditional homes. Privacy, as a cornerstone of Hausa housing design, fosters feelings of safety, relaxation, and personal autonomy, which are essential components of residential comfort. The physical layout—including high walls, controlled access points, and distinct zones—enhances this psychological comfort by regulating social interactions and creating spaces for self-expression and introspection. These design elements align with cultural expectations and serve as practical manifestations of the balance between personal autonomy and communal living. The courtyard further complements this by providing a versatile space for interaction, reflection, and respite, reinforcing the sense of security and harmony within the household.

Ultimately, traditional Hausa housing reflects a deep awareness of the interplay of cultural values, spatial arrangement, and psychological possibilities. Auwalu (2019) succinctly defines Hausa Vernacular Architecture simply as the activity of shaping the environment to cater for Hausa traditions as comfortably and efficiently as possible. By combining these syntheses of spatial arrangement and cultural concerns, inhabitants feel free, safe, respected, and engaged with their culture, rendering their traditional house a notable means to achieve comfort through privacy.

2.3 Contemporary Hausa Housing

2.3.1 Contemporary Housing in Nigeria

Although vernacular architecture is present everywhere and, in all eras, most of the time, it is frequently associated with rural architecture rather than with urban architecture, which has historical roots and is more prevalent in Global South civilisations than in the North (Weichart, 2023). As a global phenomenon, modern architecture emerged as societies evolved and adapted to industrialisation, urbanisation, and globalisation. Modern housing is typically distinguished by its standardised designs, contemporary building materials, and reaction to current social and economic realities, in contrast to traditional housing, which typically relies on cultural values and regional customs. This period was characterised by the emergence of techno-utopias that envisioned an ideal living environment facilitated by prefabricated components and industrial production methods (Paans, 2019).

By the late 1950s and early 1960s, modern architecture in Nigeria became more evident, especially in southern cities, where glass and concrete linear facades dominated building designs. However, in eastern Nigeria, Western models were adopted with little

regard for local context, prioritising the creation of “up-to-date” and progressive structures. Modern concepts continued to proliferate throughout the 1970s and 1980s, especially in northern states like Kaduna, as a consequence of the founding of architectural schools in the 1960s, one of them in Zaria, a city in Kaduna. These developments were driven by the oil boom, which spurred urbanisation, economic growth, and the demand for modern business and residential spaces.

Vwa (2013) explained that Postmodernism, as a movement, began to appear in various artistic fields during the 1960s and 1970s, with its influence being particularly prominent in architecture. A Notable event that marked the end of a modernist era was the destruction of the Pruitt-Igoe housing project in 1972, symbolising the beginning of postmodernism, which embraced a pluralistic and inclusive approach to design (Jencks, 1992). The rise of modern housing introduced concepts such as functionality, efficiency, and aesthetic appeal. But these changes sometimes came at the price of long-standing cultural customs, especially in areas where imported housing types conflicted with deeply rooted local beliefs and ways of life.

Drawing on Jameson (1994), Vwa stated that Postmodern architecture marked a shift from the purist principles of Modernism by reintroducing ornamentation, referencing historical traditions, and reviving past styles that Modernist architecture had rejected. Rather than attempting to recreate the past, postmodern architecture sought to cultivate designs that were relevant and sensitive to local surroundings by taking inspiration from historical, cultural, and vernacular themes. This broader global transition laid the groundwork for significant shifts in housing across Africa, including Nigeria.

Figure 22: *Load Lugard Hall (1914) in Kaduna State showing colonial response to regional style. (Vwa, 2013)*



The European misconception that African planning was fundamentally faulty or disorganised is refuted by Anderson's observations of Kano's architectural style and town-planning techniques (1977). This idea, Nasidi (2004) argues, was primarily promoted to diminish African civilisation and validate the Western colonial agenda. By recognising the intentionality and sophistication behind Kano's urban layout, Anderson refutes the colonial view that sought to depict African methods as inferior or inadequate. While globalisation and modernisation bring opportunities and challenges, Ugbam et al. (2014) argue that the erosion of Nigerian culture is largely the uncritical assimilation of foreign practices.

Figure 23: *Aerial view of urban Kano, Nigeria. (This is Nigeria, 2024)*



2.3.2 Historical Influences on Contemporary Housing in Nigeria

The British colonial legacy influenced architecture and town planning in Hausa regions, particularly in Kano, in three main areas: materiality, design, and form. The style, appearance, and construction methods of traditional Hausa architecture were drastically changed by the introduction of modern European building materials (Nasidi, 2024). This shift introduced new technologies and physical changes, departing from local building traditions, marking the beginning of a new era in Hausa housing (Figure 24).

Figure 24: *Colonial Style Building. (Prucnal-Ogunsote, 2001)*



Owamoyo and Tabibi (2023) reported that colonial rule in Nigeria brought Western-style housing and urban planning, which profoundly altered indigenous architectural traditions. The adoption of grid layouts replaced the organic, communal arrangements typical of Indigenous settlements, while standardised housing units were introduced to align with European ideals of functionality and aesthetics. Similarly, Barau (2011) explained that colonial authorities-imposed planning systems for administrative and economic convenience contrasted sharply with the organic, spontaneous growth of traditional Hausa cities shaped by Islamic and indigenous African principles. Examples of such colonial systems include establishing segregated residential areas like Sabon Gari and the Nassarawa GRA in Kano, separated from the old city by buffer zones. These designs prioritised uniformity and practicality but often disregarded the cultural nuances of privacy, communal living, and spatial hierarchy intrinsic to traditional Hausa homes.

The shift away from traditional housing forms was further linked to the rising money economy and the introduction of rent-seeking activities, which encouraged rental housing development and the construction of rooming houses for migrants. The colonial

urban agenda led to the breakdown of the compound system as wealthier families began constructing modern houses focused more on external facades and private ownership, distancing housing forms from their traditional communal roots. Chokor's analysis suggests that these new urban housing forms reflected colonial economic interests and individualistic ideals, moving away from the cultural and social functions that traditional compounds once served (2005).

The post-colonial era saw even more dramatic change, especially during the oil boom of the 1970s. Economic prosperity from oil revenues aided in the rapid movement toward urbanisation and increased demand for housing. Aliyu (2015) describes the oil boom's profound implications for urbanisation, economic development and housing preferences in northern Nigeria. The sudden burst of wealth during this time period spurred rapid development and the building of modern residential typologies. These developments were informed by postmodern architectural trends, and by that time, postmodernism had been steeped in global contexts. In northern Nigeria, postmodernism initiated a response to local contexts by the late 1980s, with architects and builders exhibiting consideration for traditional surroundings, cultural identity, and environmental comfort (Vwa, 2013). This movement attempted to combine the global context from which it was derived with local values, forming hybrid designs, which could be born out of contemporary global values whilst accommodating modern life with its cultural priorities.

The oil boom in Nigeria during the late 1970s created a strong movement towards modernism in the design profession, resulting in the building industry preferring to use imported materials such as cement, concrete, and glass rather than indigenous methods (Ayuba et al., 2020). The modern materials and construction technologies were seductive

enough to diminish the use of indigenous building practices, and contemporary finishes became a normative option to consider. The social and psychological needs of Hausa residents, especially women, whose roles and activities have historically revolved around the private sphere, were repeatedly jeopardised by this shift. Contemporary housing design, with its roots firmly in Western design history and aesthetics, came to lack important components of Hausa design, like spatial complexity that provided privacy and comfort and decorative motifs.

The incorporation of standardised layouts to emphasise openness and visibility upset the equilibrium of cultural and religious values associated with traditional Hausa homes. Courtyards, central to Hausa housing, to ensure ventilation and privacy, were either reduced or eliminated. With the traditional Hausa house type, the organisation of space was important to retaining tradition with respect to the separation of male and female spaces, as well as having places of segregation for family activities. Modern housing, where layouts were driven by functionality and aesthetics, often ignored such aspects of space, leading to tensions between perceived designs and expectations of privacy and comfort within the context of a traditional house.

Raji and Aliyu (2021) discuss the critical role of cultural sustainability in architecture, explaining how cultural aspects shape architectural products and material culture in fast, urbanising places. The authors embrace cultural sustainability as a means to preserve community identity and express a need for architects to incorporate values and traditional culture into their architectural products. Their stance highlights the clash between modernity and traditional housing, remarking that while modern housing provides upgrades to materials and construction techniques, it creates the challenge of losing aspects of cultural identity and comfort in Hausa society.

In response to these challenges, some architects and homeowners sought to incorporate traditional elements into modern designs, creating hybrid models that blend modern functionality with the cultural priorities of Hausa living. For example, modern Hausa homes began incorporating features like zaure (entrance halls) and bunkuru (family quarters) alongside modern materials like concrete and glass, as well as the Hausa design motifs (figure 25). These hybrid designs ensured that inhabitants could keep their privacy and cultural customs even in modern housing forms by maintaining the psychological and physical barriers between public and private places.

Figure 25: *Postmodern house displaying a northern cultural symbol, the Arewa knot. (Aliyu, 2015)*

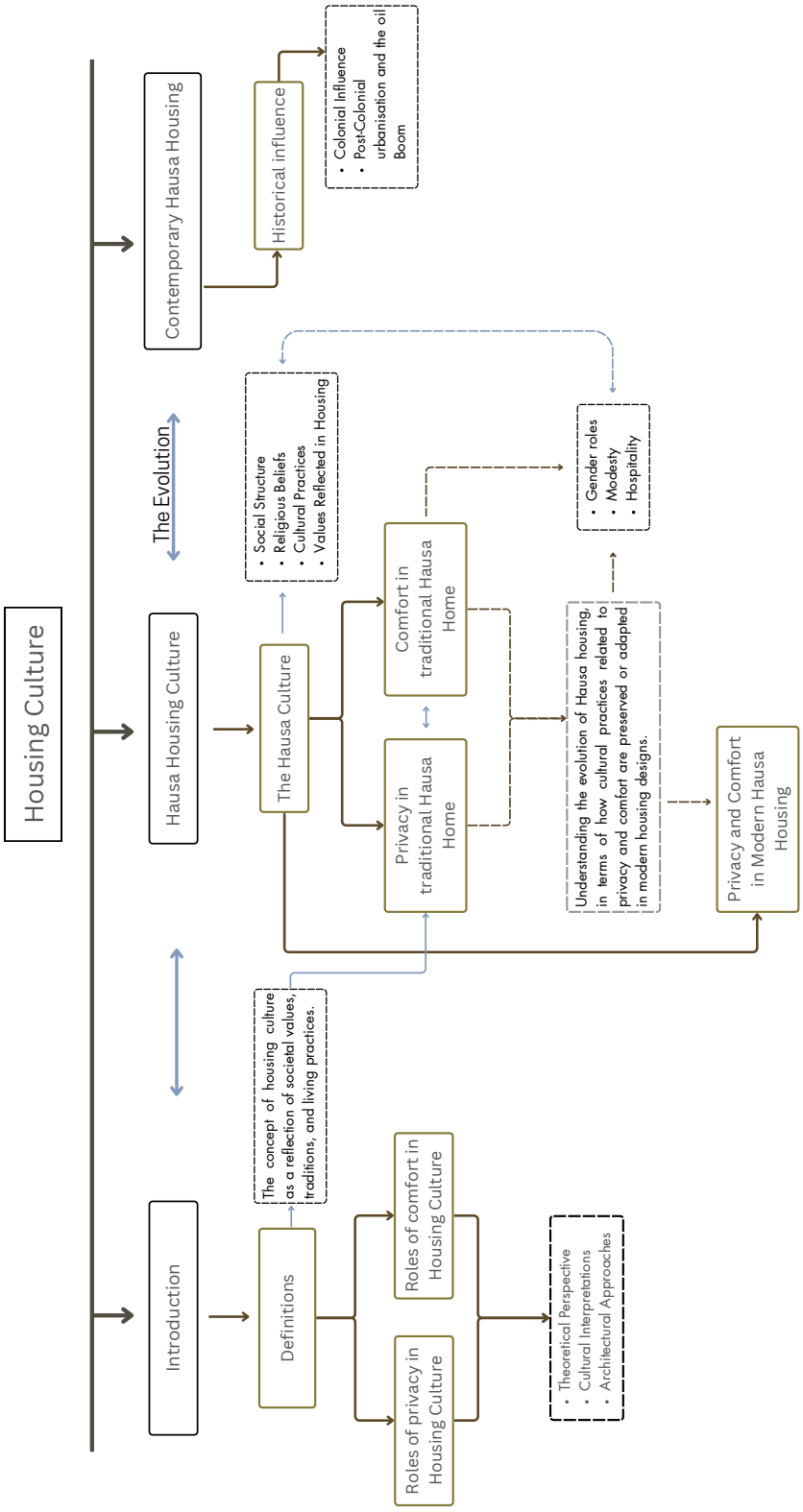


As reported by Ayuba et al. (2020), the wealth arising from the oil boom created a demand for Western-style housing patterns that were focused on aesthetics or utility, rather than the more customary demands for comfort and privacy. Wealthier families and public figures like Emirs and Kingsmen developed a preference for contemporary styles of architecture as it signified social status through the use of imported materials and

modern finishes, such as cement plaster wall coatings, instead of traditional finishes such as clay or adobe. The use of cement plaster instead of plastering surfaces in mud or clay for floor and wall finishes represented a shift to a more contemporary aesthetic by the early 1990s.

This blending of modern and traditional features illustrates the resilience of Hausa cultural values in the face of rapid urbanisation and modernisation. In an attempt to satisfy the needs of contemporary living, architects and homeowners are reinterpreting ancient ideas of seclusion and comfort in hybrid housing types, which show a continuing interaction between tradition and technology. These efforts reflect a broader attempt to maintain cultural dignity and identity while embracing contemporary architectural practices.

Figure 26: *Literature review summary*



3. CASE STUDY

This chapter consists of two parts: data collection and analysis. There are six case studies in total, three traditional homes and three contemporary homes. These houses were considered for analysis based on evaluations of spatial organisation, privacy, psychological comfort and cultural sustainability in Hausa homes. The research highlights how colonialism has affected the identities associated with the vernacular architecture, while evaluating the degree of altered or preserved Hausa values. These houses were selected based on their ability to represent old and modern homes, respectively, corresponding to the period of construction.

All these houses have a unique interpretation of the Hausa home, with each home having its spatial layout, Hausa symbols and elements such as dagi (design motifs), zanko (pinnacle), rufin gini wanda yake da kusurwa mai siffar zobe (dome) and indararo (gutter), etc. The selection was also based on accessibility to information, such as floor plans, and house owners' willingness to participate in surveys and interviews. Each case study is analysed based on three main themes: spatial organisation on how spaces are arranged and access control; privacy and comfort, how spaces maintain social norms by facilitating gendered spaces and intermediate zones using the Justified Analysis of Spatial System model (JASS); and cultural continuity and change by studying how contemporary houses preserve or deviate from traditional Hausa principles.

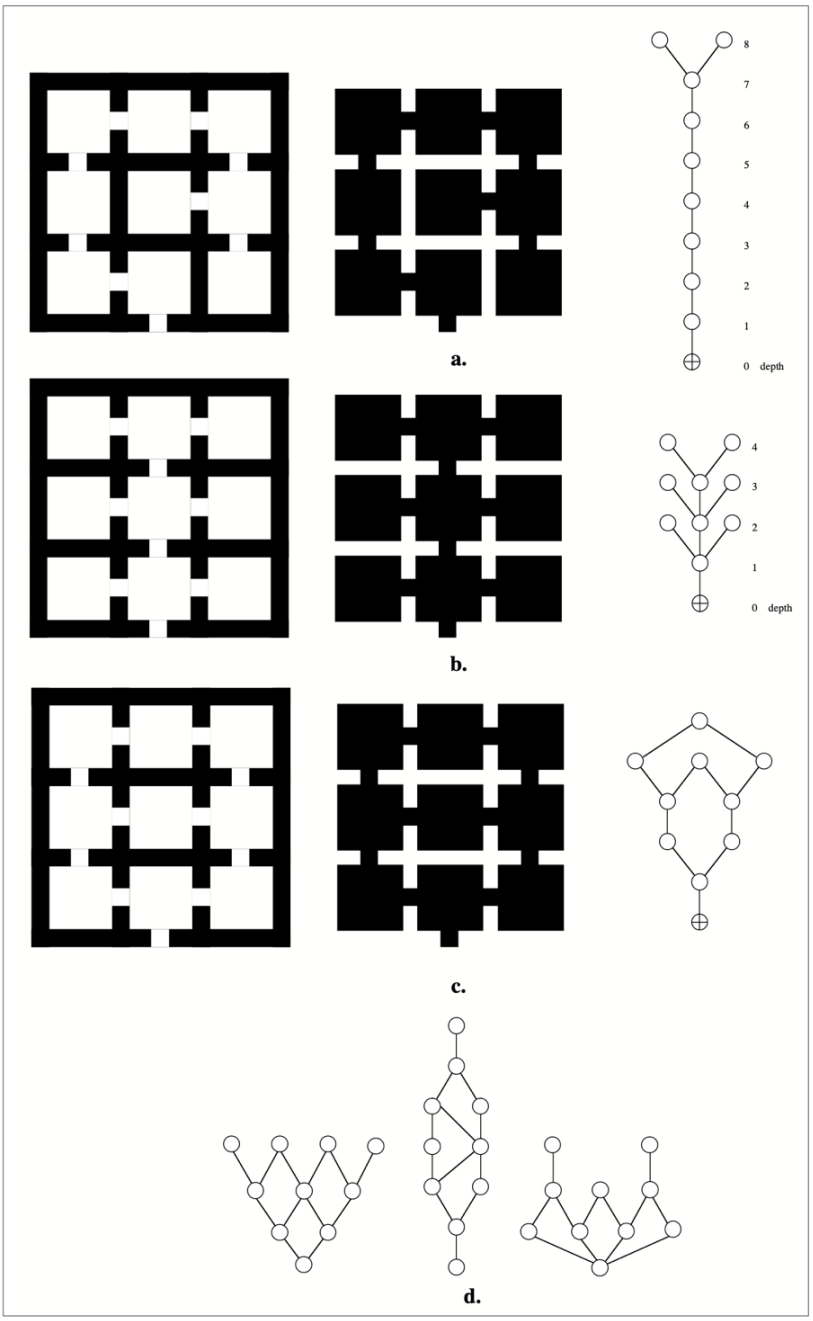
Understanding spatial organisation requires tools that reveal the depth and connectivity of different spaces. According to Hillier (2007), J-graphs (Justified graphs) visually represent the depth and connectivity of spaces, showing how different spatial arrangements affect movement and accessibility. These graphs visualise accessibility and the hierarchy of spaces, simultaneously revealing spatial depth (how deep a space is

within a layout). They help analyse how open or restrictive a spatial structure is. A Jass graph has two types of structures: a Tree-like structure (linear graph) and a ring-like structure (ringiness—looped graph). The tree-like structure comes in two variations: a linear layout (deep tree), which shows fewer choices for movement, leading to more intrusion and less privacy (Figure 27.a), while a branched layout (shallow tree) allows for more differentiated spaces, creating communal gathering and privacy possibilities (Figure 27.b).

In a linear graph, spaces have clear accessibility relationships, often reflecting strict social or functional zoning. This shows that there is a limited choice of paths, and people must follow a single route to navigate from one space to another. In contrast, a ring-like structure (Figure 27.c) or loop occurs when there are multiple paths between spaces with extra edges beyond the number required to form a tree. This gives room for seamless circulation, enabling a less restricted movement. In a looped graph, spaces are integrated efficiently, offering alternative movement paths. This supports flexibility of movement within the spatial layout. The arrangement of rings influences spatial dynamics by either increasing openness and enhancing more effortless movements or bolstering privacy by limiting access to deeper spaces using fewer connections. Figure 27.d shows three conceptual J-graphs that appear to be theatrically different, yet they are all the same graph, justified from the perspective of a different region inside the arrangement. They appear to be completely different structures due to changes in depth and ring characteristics. These disparities in spatial representation shape how culture is conveyed through architectural and settlement forms while also functioning as an effective instrument for architectural inquiry and innovation (Hillier, 2007). It can be inferred that

the same building can appear differently depending on which space is chosen as the root of the graph, revealing multiple perspectives on spatial relationships.

Figure 27: *Examples of plans and their J-graphs. (a)Deep tree-like structure, (b)Shallow tree-like structure, (c) ring-like structure. (d) ring-like structures. (Hillier, 2007).*



3.1 Data Collection

3.1.1 Traditional Houses

Case 1—*Gidan Alkali Kabiru* (House of Alkali Kabiru)

Figure 28: *Traditional House 1 – Urban Plan. (Google Earth Pro, 2025)*



Figure 29: *Traditional House, Case 1— Gidan Alkali Kabiru (Author's fieldwork)*

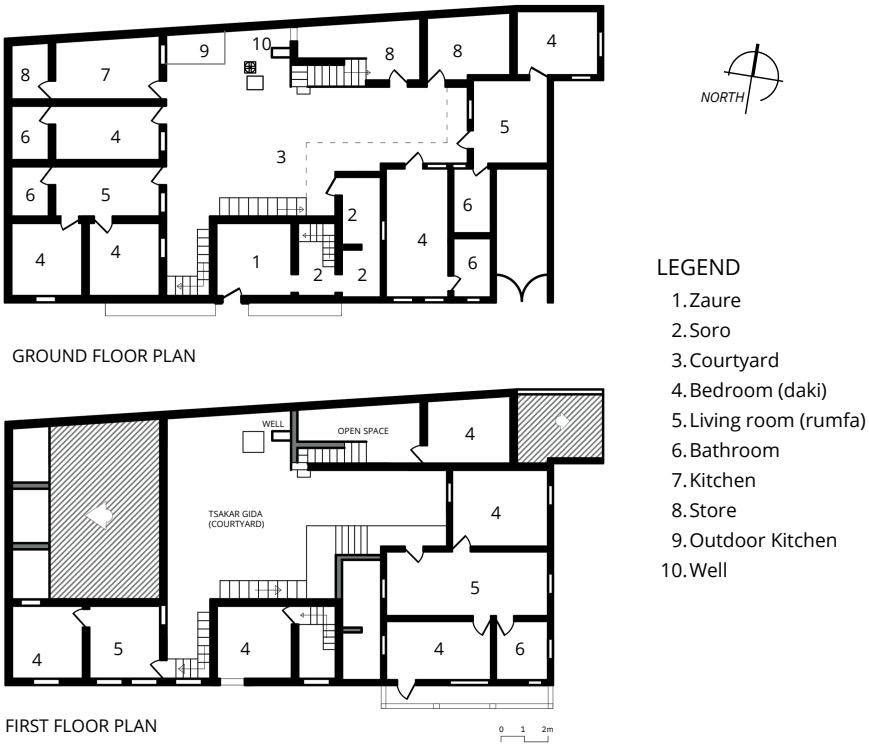


Figure 30: *Traditional House 1 façade sketch (Author's fieldwork)*



Gidan Alkali Kabiru is located in Kofar Nassarawa, the old historic city of Kano—Cikin Gari. It is a large, multigenerational household with three wives and a total of thirty-one children, whose ages range from 28 to 65 years. The number of residents in the house changed over time, as children left for marriage, school, or work, while others remained or returned temporarily. The house never accommodated all family members at once, reflecting a flexible household structure that adapts to shifting family dynamics.

This house features one controlled entrance, the zaure, which is designed to limit direct visibility into the inner parts of the house; this space provides a buffer zone for guests, ensuring privacy right from the entrance. Moving inwards, there are a series of soro—pl. soraye, before accessing the central core, which is where the courtyard is located. The strategic placement of the soro serves as an additional layer of privacy, acting as a maze before granting access to the rest of the household. It is a multifunctional space used as the living room in the daytime and a sleeping area for the boys in the nighttime. This design prioritises privacy while accommodating flexible daily activities. At the heart of the house is the courtyard, a semi-private space that supports family activities like cooking and relaxing, and playgrounds for kids while maintaining privacy from outsiders. It is a key element of Hausa homes that supports family interaction and cultural practices.

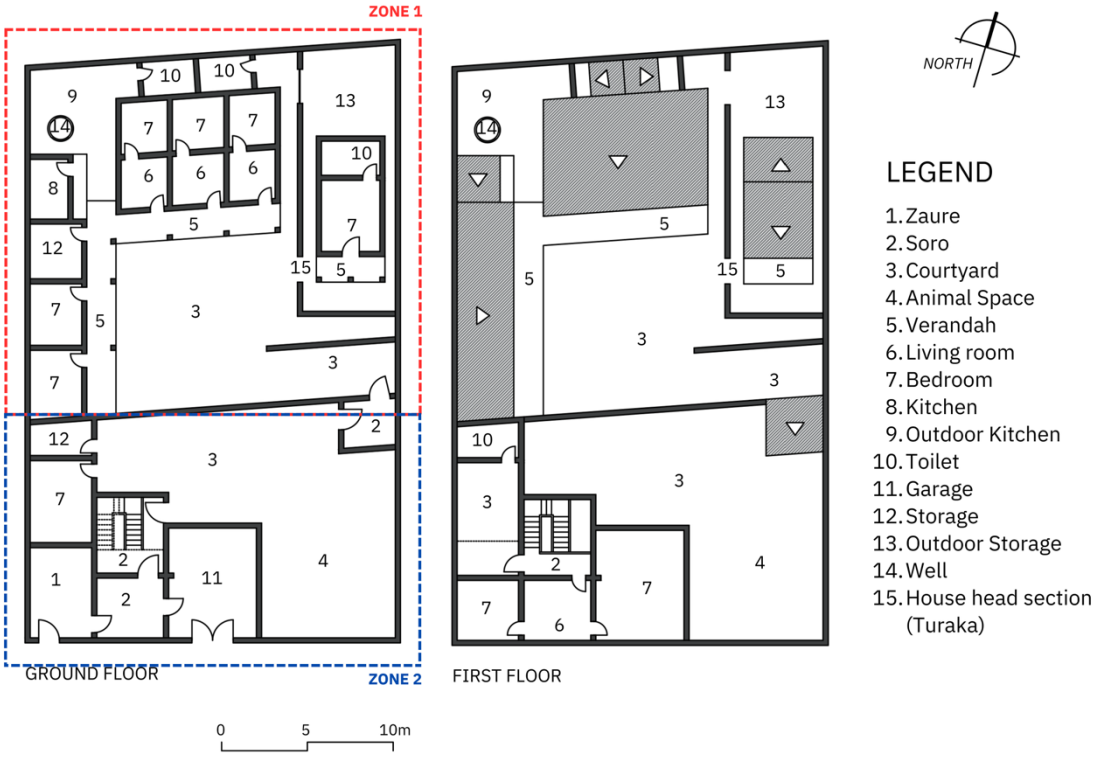
The bedrooms are meticulously placed deeper in the house layout to shield these intimate spaces with layers of transitional spaces to maximise privacy for the family. So, to access the bedrooms from the courtyard, one has to pass through the living room, which is attached to the bedroom. Acknowledge as a critical self-sustaining feature, and the well is strategically placed for accessibility while respecting the overall spatial organisation. Attached to the kitchen is an outdoor kitchen and an outdoor store on either of its sides. The kitchen placement is done at the corner to give the women added privacy while working, particularly while male guests are present. It is placed away from the space they often host. The lasting value of Hausa architectural principles in meeting environmental and cultural demands is demonstrated by this arrangement. This home's spatial layout demonstrates the timeless importance of Hausa architectural principles in satisfying cultural and environmental demands. The home demonstrates a design concept that strikes a balance between privacy, utility, and cultural traditions via the purposeful use of transitional spaces, multipurpose sections, and the intentional positioning of crucial components.

Case 2—*Gidan Dallatu* (House of Dallatu)

Figure 31: *Traditional House 2 – Urban Plan. (Google Earth Pro, 2025)*



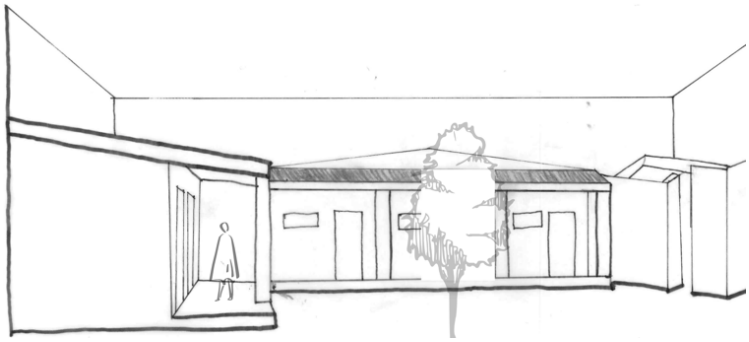
Figure 32: *Traditional House, Case 2— Gidan Dallatu (Author's fieldwork)*



Gidan Dallatu traditionally accommodated a large extended family, including the patriarch, his three wives, nine daughters, ten sons, and more than ten additional relatives. The age range of the household members spanned from 35 to 80 years. The number of residents fluctuated over time due to marriage, schooling, and employment, with the household reaching between twenty-five and thirty-five people at its peak. Today, the house is occupied by only four people: one daughter, her young daughter, and three unmarried sons. This shift reflects the broader transition from extended to smaller households in contemporary Hausa urban life.

This house has one single entry from the Zaure (1). There is also another entrance from the garage, as seen in Figure 32, which is often locked. There is a controlled entry to an extent because both entrances link to the first Soro, which is the second space from the Zaure and the second space from the garage (12). Therefore, the first Soro is a transitional space that ensures visitors do not have direct access to private areas. This is an essential cultural aspect of the Hausa community. Zone 1 layout in Figure 32 separates communal spaces like the inner courtyard and the living rooms from private spaces. There are two large courtyards adjacent to each other. The first courtyard is mainly for the men and their activities with horses since the horse stable is also located there, along with their food storage and other utilities for the animals. A second courtyard for the women and children is connected by a series of buffer zones, the soraye—pl. Soro. This courtyard acts as the nucleus of the home, providing ventilation and allowing for visual privacy while ensuring family interactions.

Figure 33: *Traditional house 2 courtyard sketch (Author's sketch)*



Spaces are well segregated, with each having a specific function. Bedrooms are arranged deeper within the layout, emphasising the layered approach to privacy. The bedrooms all have living rooms connected to them, serving as transitional spaces for the bedroom. This enhances extra security since bedrooms are considered the most intimate spaces. Their strategic placement minimises exposure to visitors. There are distinct spaces for specific activities, such as animal space, and indoor and outdoor kitchens are placed away from living areas, reducing noise and odours affecting private areas. The stores, well and garage are thoughtfully placed at the periphery, ensuring functional efficiency without compromising privacy. The well is placed next to the kitchen, easily accessible by all house dwellers. There are two stores: one for the animal's food and utilities and the other for food and other household items. Open features like courtyards and verandas enable social interactions within the family and among close visitors while maintaining the private-public divide. The outdoor spaces are directly connected to the living room, which is also a space that facilitates togetherness.

This traditional house demonstrates an architectural approach rooted in privacy, functionality, and cultural influences. The layout of spaces is thought out, with the L-shaped room organisation demonstrating a well-coordinated private and communal space. The layout contributes to a home that balances the needs and comfort of the family. The

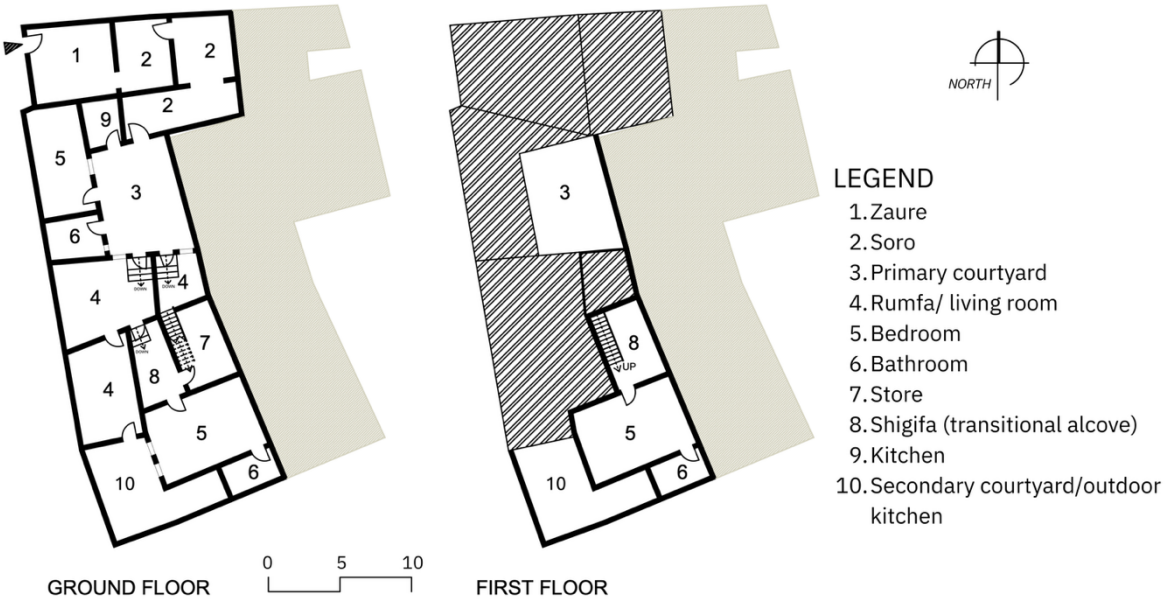
overall house reflects the religious and cultural values of privacy and flexible spaces prevalent in traditional Hausa architecture.

Case 3—*Gidan Gwangwazo* (House of Gwangwazo)

Figure 34: *Traditional House 3 – Urban Plan. (Google Earth Pro, 2025)*



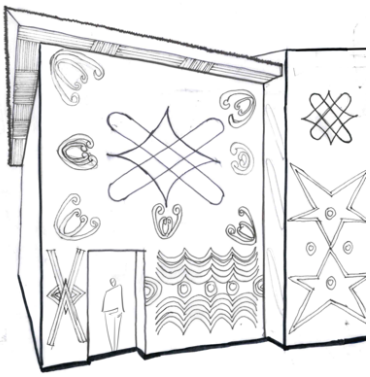
Figure 35: *Traditional House, Case 3— Gidan Gwangwazo (Author's fieldwork)*



Gidan Gwangwazo housed a relatively small family, consisting of a wife, three daughters and one son, whose ages range from 52 to 63 years. Over the years, the house also temporarily accommodated a few relatives, until they married or moved out. Despite its modest size compared to other traditional compounds, the house reflects key features of Hausa domestic life, including flexibility in hosting extended family and a spatial arrangement that balances privacy with communal interaction.

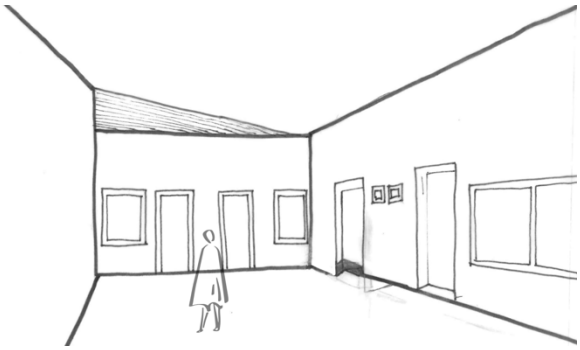
This house is also located in the historic city of Kano, in a neighbourhood within the Kano city walls. This house has one entrance from the zaure, a reception space adorned with design motifs. Positioned after the zaure is the series of soro, a passage space that reinforces privacy by controlling movement into the house. During the day, the soro is mostly used as an indoor sitting and dining area by men or the household head and his company, while at night, it serves as a sleeping space for the boys, maintaining flexibility in use.

Figure 36: *Traditional house 3 entrance façade. (Author's sketch)*



After soro comes the primary courtyard, a semi-private space for family activities that facilitates ventilation and daylighting. There are two courtyards: the primary courtyard and the secondary courtyard. The primary courtyard functions just as a Hausa courtyard functions, providing an open space for social gatherings, while the secondary courtyard is strictly used by house members, especially women. The outdoor kitchen is located in the secondary courtyard. Other private outdoor activities are done in this courtyard, like air drying clothes, henna application, hairdressing, and other beauty routines. The primary courtyard is surrounded by the key space, rumfa (living room) and bedrooms. This ensures a balance between openness and seclusion. The indoor kitchen is accessed from the primary courtyard.

Figure 37: *Traditional House 3 primary courtyard sketch. (Author's sketch)*



The bedroom and bathrooms are placed in the deepest part of the house, ensuring privacy. With the bathrooms distributed efficiently across the house, this arrangement likely offers more modern sanitation than a typical traditional house. The rumfa is usually located next to the courtyard and serves as the first space encountered when entering the inner parts of the home. This rumfa marks a connector space to the innermost zone, providing a buffer between the central core and the inner core. Shigifa is a space situated before the bedroom, like an alcove. This added transitional zone is usually an extension of rumfa. Shigifa space is mostly attached to the husband's room or the wife's room and is not commonly found in other bedrooms. Attached to the shigifa is a storage strategically located for security reasons.

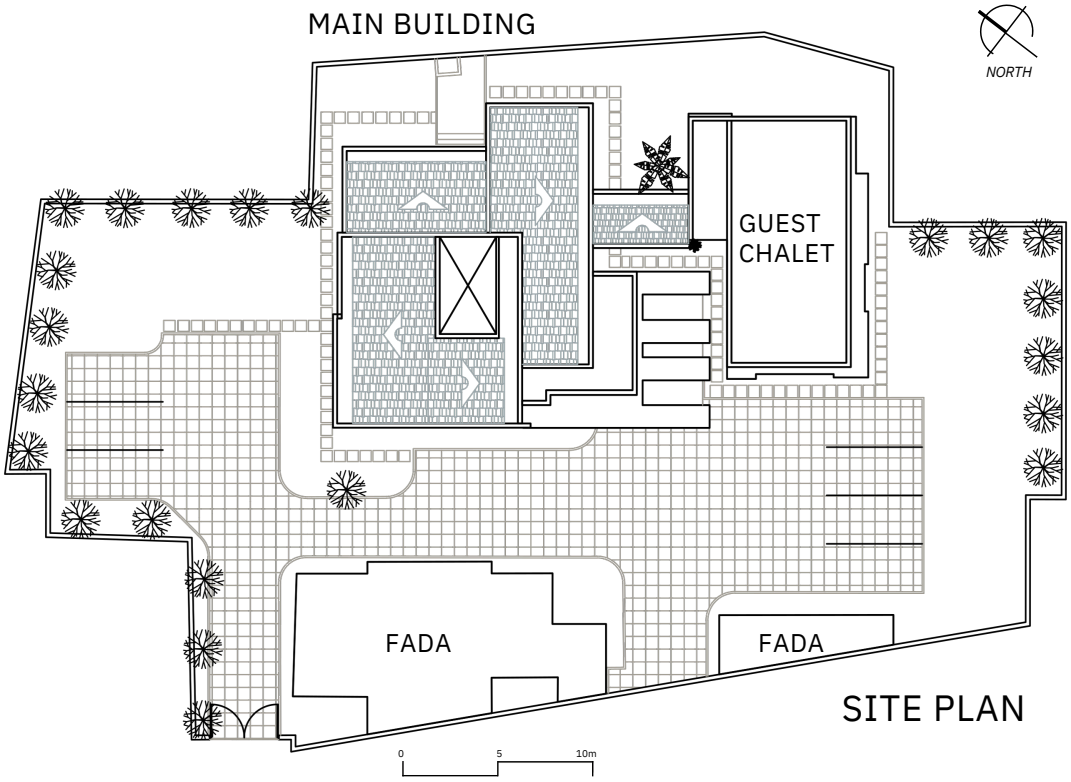
3.1.2 Contemporary Houses

Case 1—Kazaure Residence

Figure 38: *Contemporary House 1 – Urban Plan. (Google Earth Pro, 2025)*



Figure 39: *Site plan, Contemporary House 1. (Author's Fieldwork)*

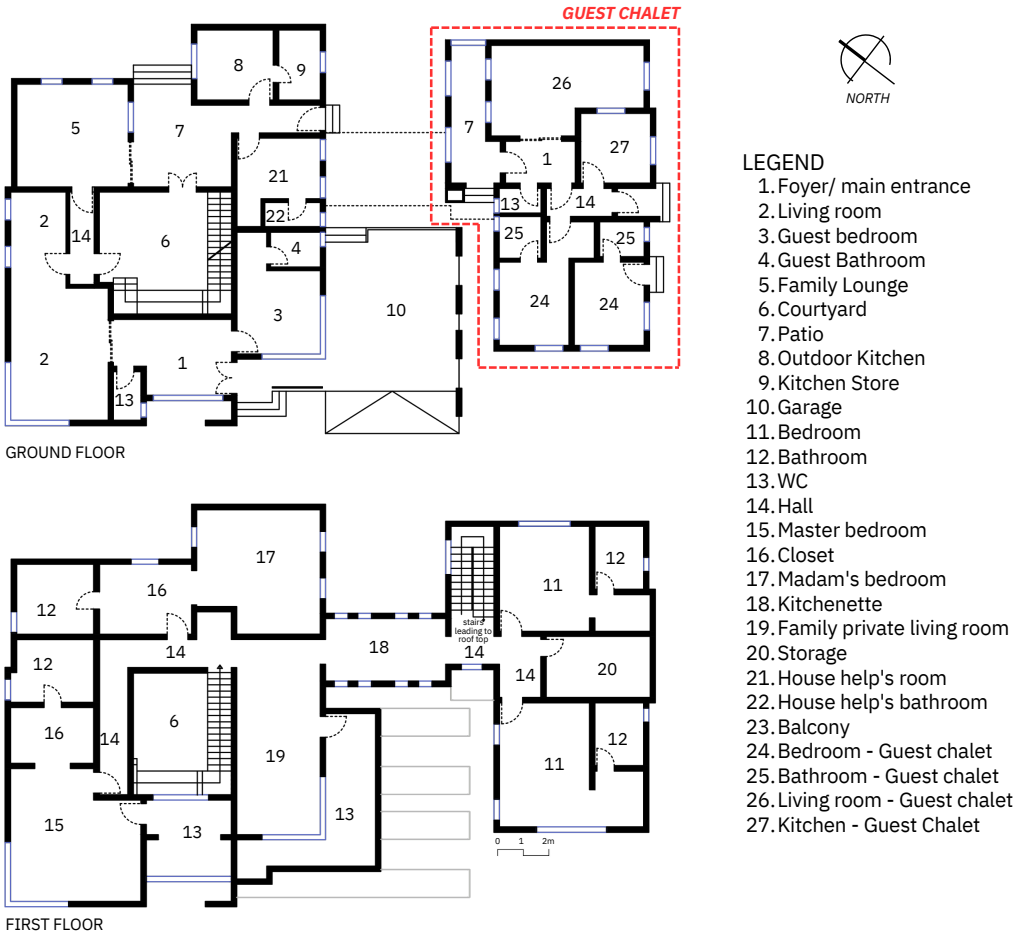


Note. Fada is a Hausa term referring to a royal court, typically the seat of traditional authority where the king (Sarki) or kingsmen (Hakimai), and other title holders reside and govern. It may also denote the broader complex housing royal officials, courtiers, and administrative functions.

Figure 40: *Contemporary house 1 façade sketch (Author's sketch)*



Figure 41: *Contemporary House 1 – Kazaure Residence. (Author's fieldwork)*



The Kazaure Residence accommodates a nuclear family of six: a couple and their four children—three daughters and one son—ranging in age from 12 to 5 years. This demographic setup reflects the shift toward smaller household sizes typical of contemporary Hausa homes. The spatial layout supports this structure, with designated bedrooms for parents and children, as well as a clear separation between public and private zones.

This house is divided into three parts: the fada, the guest chalet, and the main building. Fada is a formal space or office for performing traditional duties, such as receiving visitors, holding consultations, dealing with local matters, and conducting

dispute resolution by the Emir (king) or kingsmen. The guest chalet is equipped with two en-suite bedrooms, with a kitchen, a patio, a living room, and a dining area. The chalet has a guest WC by the foyer or entrance. It has two entrances, from the rear entrance that leads to the kitchen and a main entrance from the patio. The two bedrooms are not connected. One bedroom is accessed from the hallway in the house, while the other bedroom is accessed by the rear entrance adjacent to the service entrance. This reflects traditional Hausa homes where guest accommodations were placed near or separate from the main household.

The main house had three entrances: one main entrance and two from the rear, one of which is a secondary entrance for the female guests, and the other is the service entrance, which is by the kitchen. The foyer, equipped with a WC, created a transitional zone preventing direct access to private areas for guests needing to use the washroom. The female guestroom is accessed from this entrance, ensuring visitors do not have uncontrolled access to the main house. The guest chalet is for male guests, while the guest area inside the house is for the female guest. This house further demonstrated a clear public and private space hierarchy by introducing vertical zoning. The living room, the dining room and the family lounge function as semi-public gathering areas. The bedrooms on the first floor are deeply nested for privacy. The upper floor has a private lounge with a balcony and kitchenette. The master bedroom and madam's bedroom—the wife's bedroom—both have walk-in closets and bathrooms. On the other side is the children's ensuite bedroom, which is strategically placed next to the kitchen for convenience. The upper floor is accessed through the courtyard.

The courtyard is a defining feature of this house; although it is small, the children play here, promoting family bonds and air circulation. The courtyard is connected to the

patio, which extends outside, providing additional semi-outdoor space. The courtyard is covered and protected from the rain but not fresh air. The kitchen was deliberately placed away from the main building for cultural continuity since traditional kitchens are detached from the house. This is a semi-detached outdoor kitchen. The first floor provides more private family spaces, further isolating them from the public zones below.

Case 2—State Road Residence

Figure 42: *Contemporary House 2 – Urban Plan. (Google Earth Pro)*



Figure 43: *Site Plan. (Author's fieldwork)*

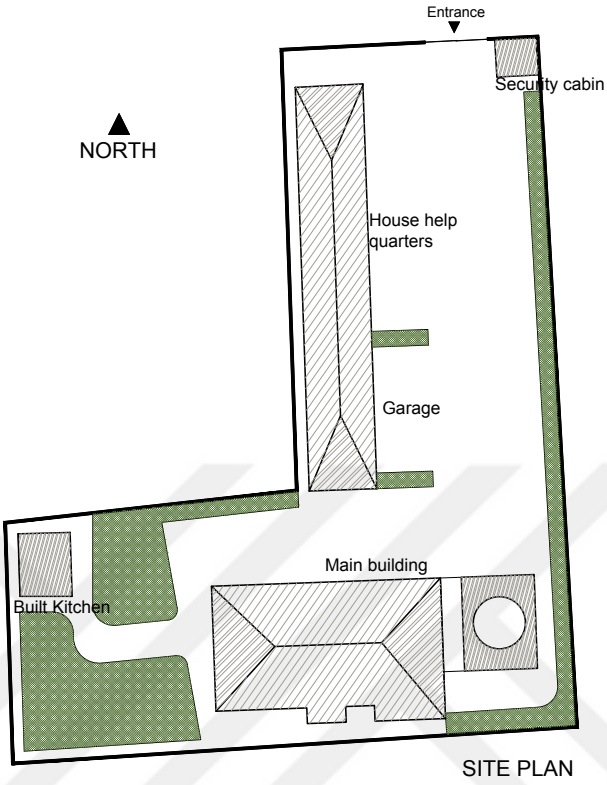
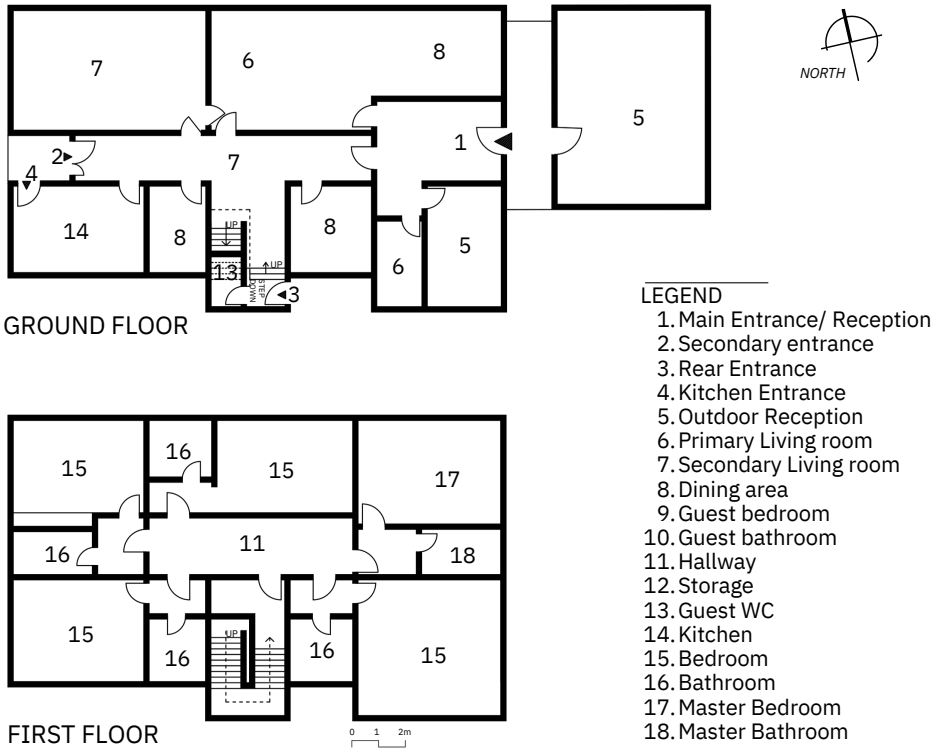


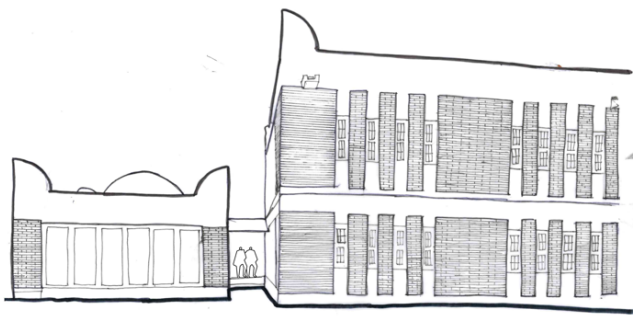
Figure 44: *Contemporary House 2 – State Road Residence. (Author's fieldwork)*



The State Road Residence is home to a nuclear family of six: a husband and wife, and their three daughters and one son. Family members' ages range from the late twenties to the late thirties. While the house previously accommodated some relatives temporarily, it now functions solely as a nuclear household. The layout supports smaller, self-contained families, reflecting a broader shift toward reduced household size, greater privacy, and individualised space in contemporary Hausa housing.

This house is located in the urban district under Nassarawa GRA. The Site has four buildings, one of which is the main house. The other buildings are a security room, garage/household quarters, and an outdoor kitchen. There are four entrances: one is the main entrance accessed from the front yard, one from the rear, two from the back lawn, one of which is a service entrance from the kitchen, and the other is the female entrance. These entrances provide a layered transition before accessing the main house. The outdoor reception is a room usually for male guests who are not close relatives or close friends. This prevention of direct intrusion is a design element of the Hausa culture.

Figure 45: *Contemporary house 2 front façade and compound sketch. (Author's fieldwork)*



The guest area is separated from family spaces, as seen in the figure above. The guest room is accessed from the entrance and reception area, ensuring that the visitors

remain in designated zones. The guest WC is used by the stay-in guests and the visiting guests. This placement further limits access to the provided area, minimising guest movement into family quarters. The primary living room has a dining area attached to it, which is mainly used by the household head and his company. It is a semi-public space ensuring that eating and socialising are away from the inner parts of the house, which is usually reserved for women. The hallway acts as a buffer leading to the secondary living room and other private bedrooms located in the deepest part of the layout. The secondary living room is reserved for female guests and house members. The female guest WC is under the stairs, opposite the rear entrance. This layout avoids shared facilities, reflecting a shift towards modern comfort while respecting traditional notions of privacy and hospitality. The kitchen is positioned in the corner, adjacent to the secondary living room, making it easily accessible for the wife and the house help while away from public spaces. It is also easily accessed from the outdoor kitchen and outdoor store.

Case 3—Suleiman Crescent Residence

Figure 46: *Contemporary House 3 – Urban Plan. (Google Earth Pro, 2025)*



Figure 47: *Contemporary House 3 site plan. (Author's fieldwork.)*

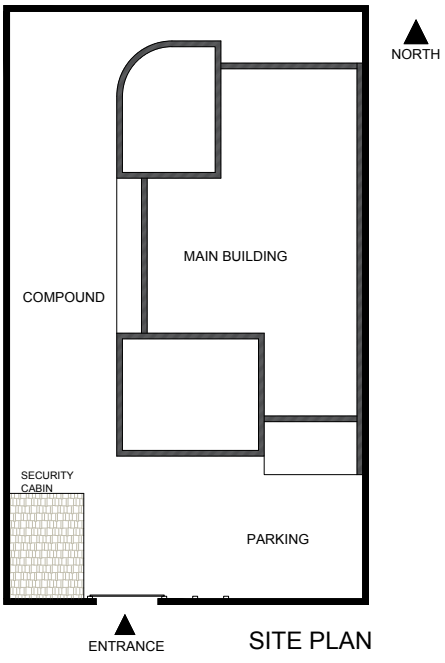
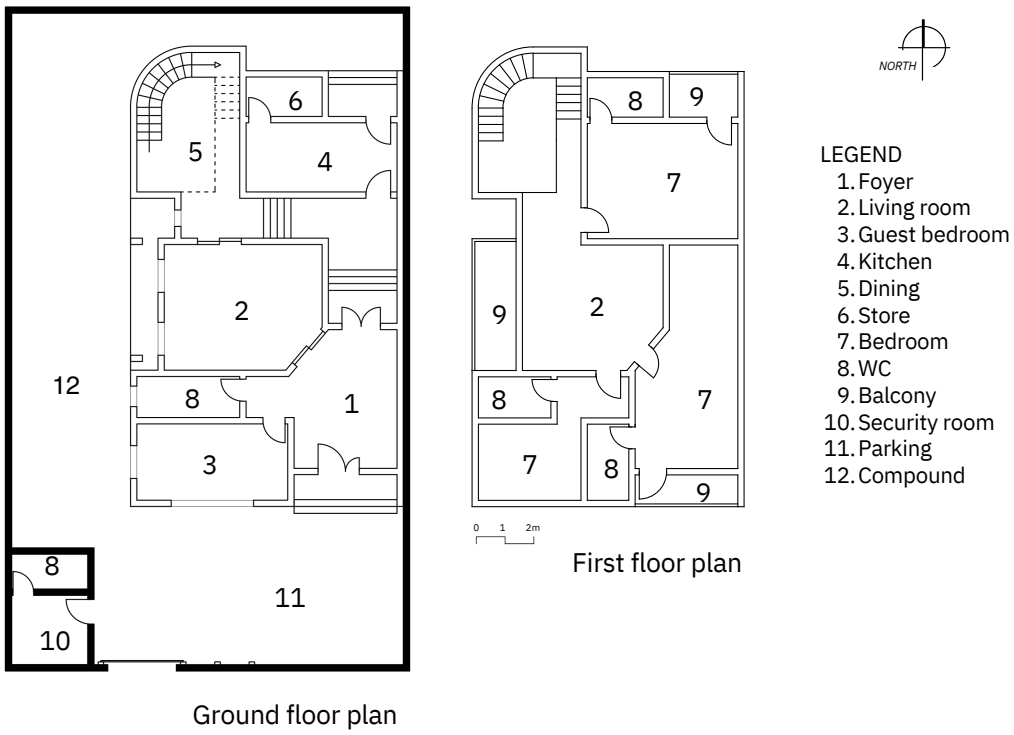


Figure 48: *Contemporary House 3–Suleiman Crescent Residence. (Author's fieldwork.)*

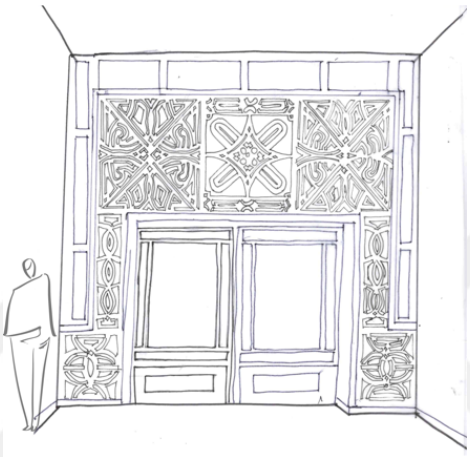


Suleiman Crescent is home to a nuclear family of seven: a couple with five children—one daughter and four sons, aged 17 to 30. The household is structured around modern urban living, with spaces designed to provide privacy, comfort, and clear functional zoning for each family member. As with many contemporary Hausa homes, the residence reflects a shift away from the extended family model toward smaller, self-contained units.

This house is located in Nassarawa residential area. This contemporary house showcases a structured approach to privacy and space organisation, balancing traditional cultural values with contemporary needs. The house has two entrances: the main entrance, adorned with design motifs and the rear entrance, which is the kitchen entrance. The main entrance has a foyer that serves as an entry buffer, limiting direct access to private areas. It is also a waiting area for the guests, equipped with seats. This aligns with the Hausa

concept of zaure, providing controlled interaction with visitors. The location of the guest bedroom near the entrance informs us that it is for male guests since, in Hausa culture, visitors, particularly men, do not intrude into family spaces.

Figure 49: *Contemporary house 3, primary entrance sketch (Author's fieldwork)*



Moving further, the primary living room is positioned for social interactions, while the private living lounge is positioned upstairs, with bedrooms surrounding the space at a deeper level. This arrangement ensures that family members are able to maintain privacy from external guests. The guest WC is intentionally placed to control the unnecessary circulation of the guests. The WC serves both the stay-in guests using the guest bedroom and the visiting guests.

The kitchen, the dining room, and the store are clustered for convenience. Nevertheless, the entrance from the kitchen is primarily used as a service entrance for the househelps. The dining room has direct access to the living room. The staircase is accessed from the dining area, leading to a deeper private zone, as well as the bedrooms and the family living room. These ensuite bedrooms are grouped to enhance family togetherness. All these bedrooms are ensuite. The balcony and compound provide an

outdoor extension of living areas. The balcony serves as a semi-outdoor space, improving air circulation and natural light. The house is equipped with a parking space for one car and an ensuite security room,12 ensuring controlled access and safety.

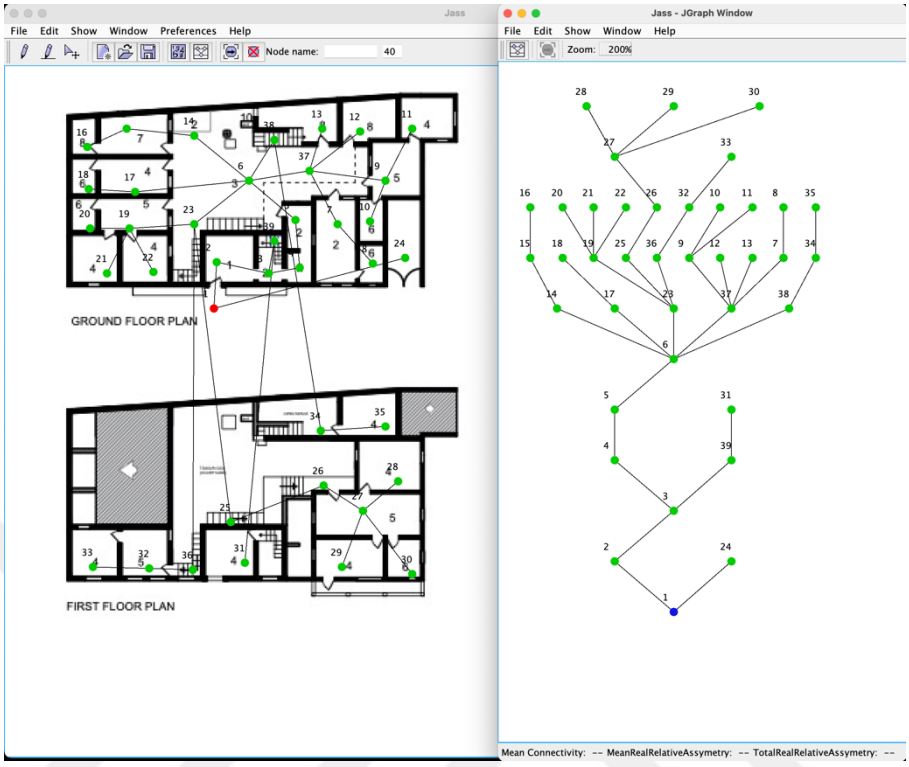
3.2 Data Analysis

3.2.1 Traditional Houses

Case 1*: Gidan Alkali Kabiru*

Figure 50, the J-graph below, outlines a deep tree structure with a total depth of 11, representing a hierarchy of space. The layout begins with the zaure, followed by the soro, a semi-public buffer space, and becomes more exclusive as the layout deepens beyond the zaure and into the bedrooms and bathrooms. The layout, therefore, enforces traditional Hausa values or ideals around restricting access and movement, particularly the privacy and domestic life of women. The tree-like structure represents their social ordering and demonstrates how traditional Hausa architecture is embedded within cultural and social meanings.

Figure 50: *Justified graph of Case 1— Gidan Alkali Kabiru*

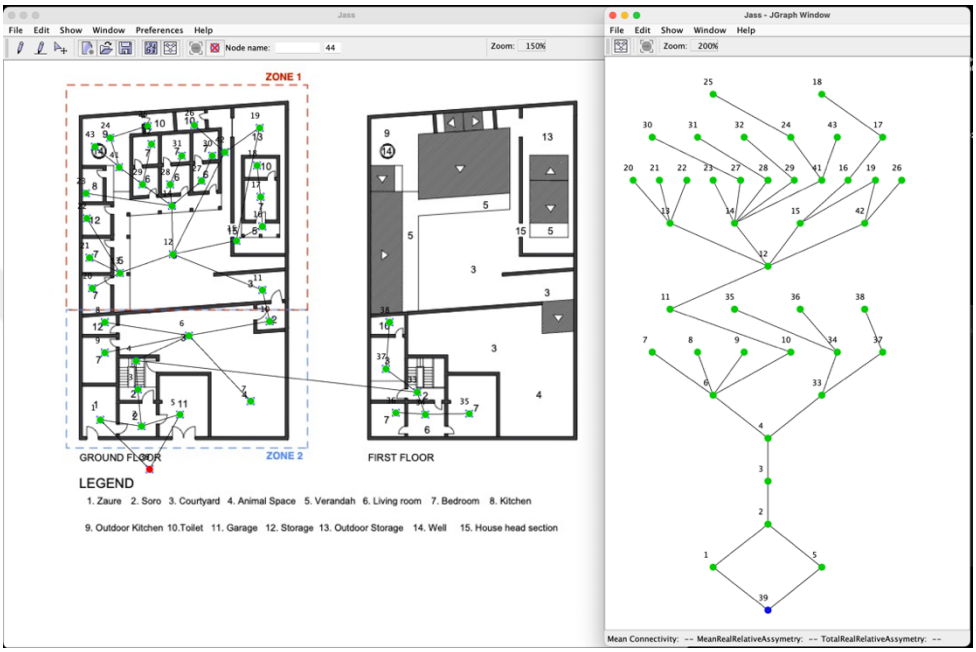


Case 2: *Gidan Dallatu*

Figure 51 presents a J-graph analysis of depth levels and accessibility. The graph has a tree-like structure showing that the depth level is 13, with the bathrooms the farthest space to access. The graph for this house reveals a tree structure with a depth level of 13, which indicates complexity with intermediary spaces controlling access to private spaces. This depth indicates a polygamous household with spatial separation and gendered use of space. The placement of the bathroom below the depth level of 13 aligns with the cultural expectations of privacy for bodily functions and ritual cleanliness within Muslim Hausa culture. The design demonstrates the cultural use of spaces for maintaining traditions and beliefs related to modesty, family hierarchy, and gendered social interaction. In this regard, the figure 51 provides insight into understanding these cultural values and social

practices in relation to the architectural space across generations and how the architecture could inform and be shaped by them across generations.

Figure 51: *Justified graph of Case 2—Gidan Dallatu*

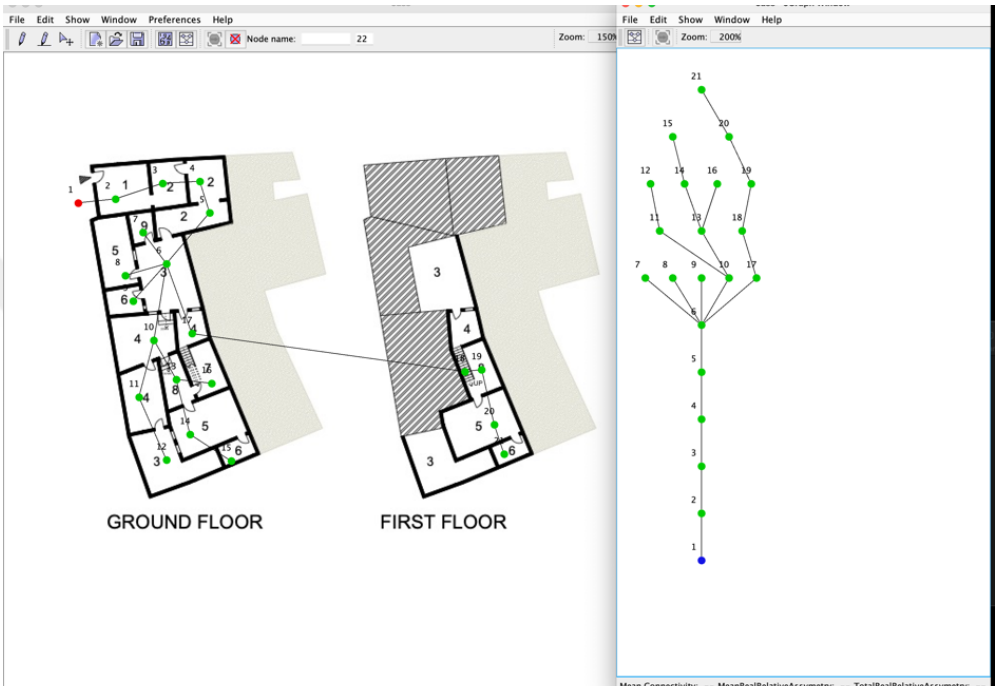


Case 3: *Gidan Gwangwazo*

This J-graph (Figure 52) indicates a tree-like spatial structure with a depth of 11, just like the hierarchy indicated in Case 1. The movement from the entrance to private spaces such as bedrooms and bathrooms certainly describes a conscious spatial ordering to protect the inner life of the household. The bathroom areas at the bottom of the ordering signify the prioritisation of privacy and seclusion, particularly with regard to hygiene and personal rituals. The ordering conveys respect for cultural attitudes regarding modesty and Islamic values, while also legitimising social practices that restrict outside access from those parts of the household considered most intimate. The tree-like structure

indicates clear boundaries and unidirectional flows of movement, further supporting the description of each element in the house having a defined social function.

Figure 52: *Justified graph of Case 3—Gidan Gwangwazo*

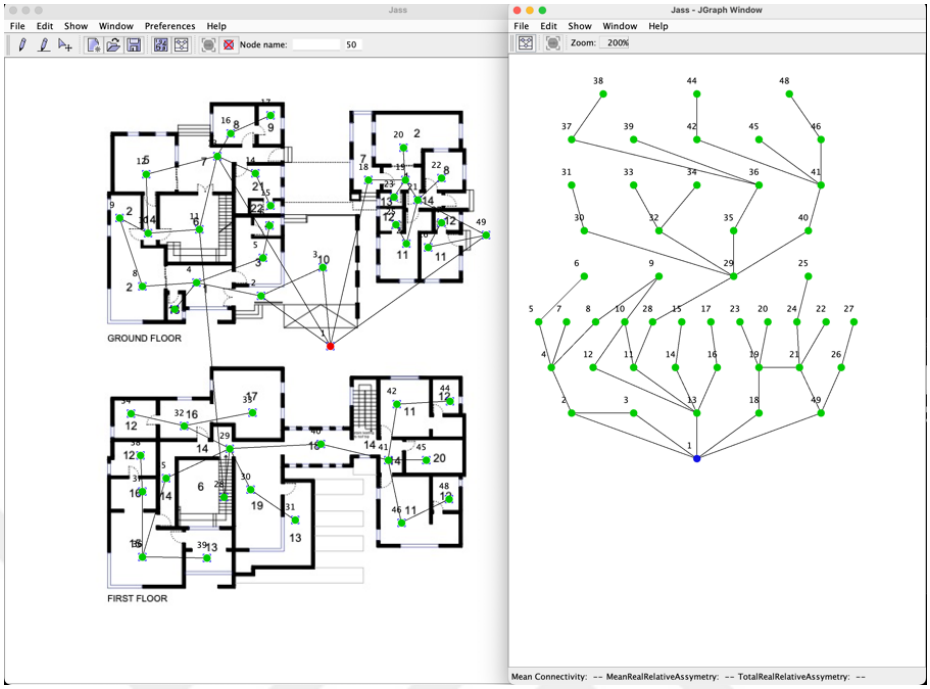


3.2.2 Contemporary Houses

Case 1: Kazaure Residence

There is an evident influence of zaure present in the foyer for controlled access, while the soro is replaced by family lounges and private living areas. The central courtyard is retained as a core cultural element, while the outdoor cooking area pays homage to traditional Hausa practices. This layout balances modern comforts with cultural values, ensuring privacy and efficient space use. The figure below shows a J-graph analysis of depth levels and accessibility. The graph shows a shallow tree structure, illustrating that the depth level is 9, with bathrooms being the deepest spaces.

Figure 53: *Justified graph of Case 1— Kazaure Residence*

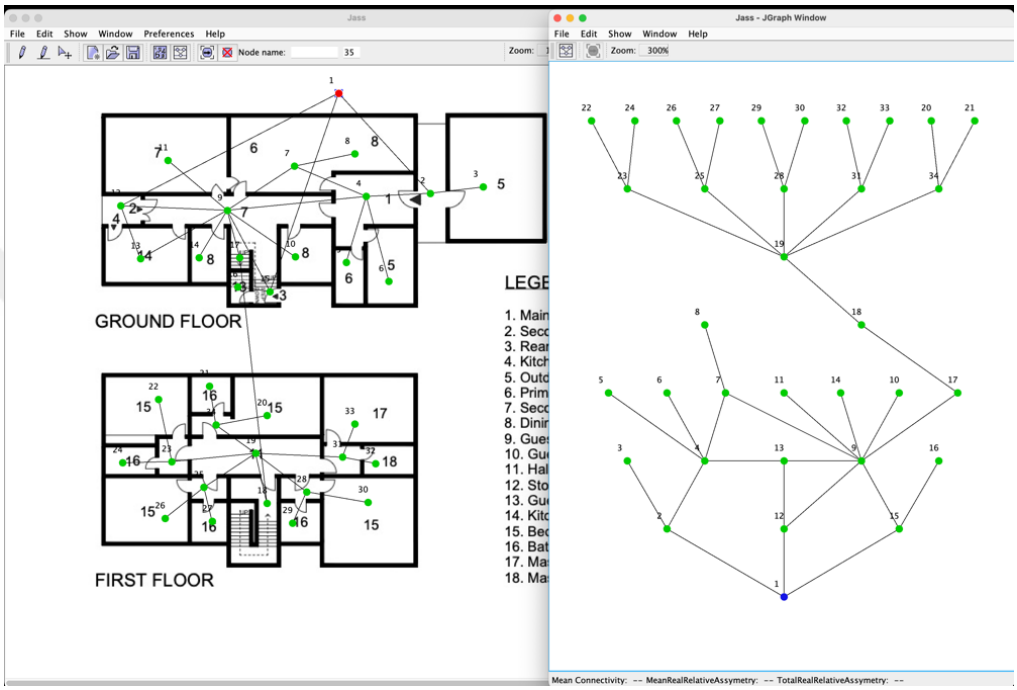


Case 2: State Road Residence

This J-graph (Figure 54) represents a ring-shaped structure with a depth-level of 8, the shallowest out of all the houses, indicating a considerable departure from the linear, hierarchical arrangement of traditional houses toward a more flexible, interconnected spatial structure. The entrance space comprises a reception area like a zaure that establishes barriers to entrance and privacy from the outside world. With hallway connections and bedrooms on the first floor, these contemporary houses mirror the transitional role of the traditional soro that separates public and private modes of space. However, relative privacy is gained through zoning and vertical separation with distinct spaces for guests, family, and service. Bathrooms remain the deepest area in the configuration, suggesting continuity in the importance of cultural processes related to privacy for semi-intimate functions. This case illustrates a more contemporary

interpretation of Hausa spatial principles that emphasise efficiency and zoning while retaining the core issues of privacy and access control.

Figure 54: *Justified graph of Case 2— State Road Residence*

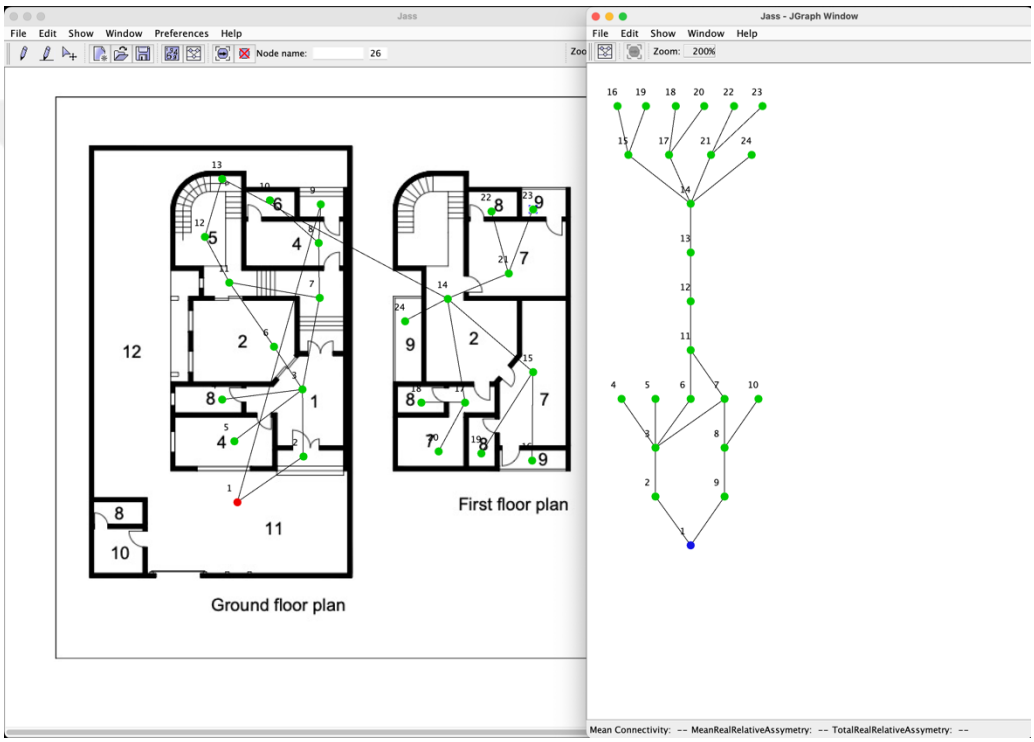


Case 3: Suleiman Crescent Residence

The J-graph in Figure 55 illustrates a ring-like structure, with its depth level of 9 indicating a less hierarchical and more interconnected spatial arrangement. The ground floor is particularly ringy, with multiple circulation pathways, and these paths also lessen the overall layering of spaces that often provide privacy. The building has two entrances, so this heavily lessens access control, and thus, the zaure is less of a gatekeeping-type element. While the hallway and the guest room each strive to serve the same function, the overt layout limits their effectiveness. However, cultural values are being observed through the notion of vertical zoning: private bedrooms are upstairs, while the guest room, the kitchen, the dining area, and one living room remain on the ground floor, enabling a

degree of public/private separation. Bathrooms occupy the deepest space, maintaining a respect for the function of private space. Although the ground floor layout deviated from traditional spatial depth, the complete layout nevertheless demonstrates cultural consideration with vertical separation and zoning.

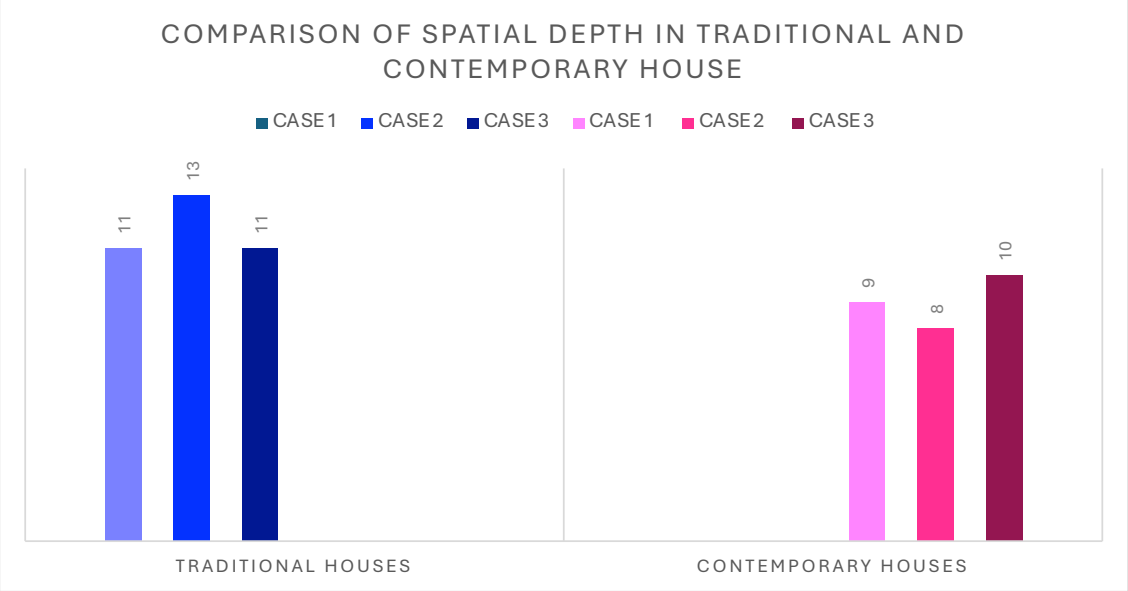
Figure 55: *Justified graph of Case 3— Suleiman Crescent Residence*



The Tree-like structures are more prevalent in traditional Hausa homes because, typically, these houses have one entrance, a hierarchy of space and controlled access. Each space is connected in a linear or branching format, limiting movement and thereby ensuring privacy. The depth in houses also increases as you move inwards, showing that more private spaces are deeper in the structure. Spaces like bathrooms and bedrooms are highly isolated from the public, reinforcing cultural privacy values, especially for women. Ring-like structures are more common in contemporary houses because they are more

open and interconnected. The spaces are linked in loops, creating multiple access routes (as in figures 53, 54, and 55). This allows guests to navigate spaces without passing through private spaces. However, privacy is compromised to an extent where there is less hierarchy of spaces arranged; therefore, maintaining strict privacy boundaries tends to be more challenging. Traditional tree structures enforce privacy through depth and restricted access, while contemporary ring-like structures prioritise flexibility and ease of movement, often at the expense of strict privacy control.

Table 1: *Comparison of spatial depth in traditional and contemporary houses*



The average depth of traditional houses is 11.6, while the average depth of contemporary houses is 9. The traditional houses have more private and secluded spaces than the contemporary ones, while spaces are more connected to each other, hence the ring-like structure in the JASS graph. This resulted in more complex or maze-like pathways in the traditional houses, while the contemporary houses have more direct movement patterns. There is evidence of stronger separated spaces in traditional houses

compared to their contemporary counterparts, which shows more integrated and open zones. Accessibility in traditional houses requires passing through multiple spaces, while in contemporary housing, spaces have immediate accessibility, hence the ring-like structure in the JASS graph. Ultimately, the traditional house relies on spatial depth to reinforce privacy and hierarchy, while contemporary houses clearly favour efficiency, connectivity and open circulation.

Table 2: *Comparative Analysis of Traditional and Contemporary Hausa Houses Based on Cultural and Sustainable Architectural Features*

		CASE STUDIES	ZAURE	SORO	HIERARCHY DEPTH	GENDERED ZONING	COURTYARD/ OUTDOOR COOKING	VERTICAL ZONING	ACCESS & MOVEMENT CONTROL
TRADITIONAL HOUSES	CASE 1	**Gidan Alkali Kabiru**	Yes – clear controlled entrance	Yes – distinct semi-public	Deep (Depth 11)	Yes – gendered and polygamous	Yes	Partial – some zoning	Linear, restricted access
	CASE 2	**Gidan Dallatu**	Yes	Yes	Very Deep (Depth 13)	Yes – strong gender & family separation	Yes	No	Linear, very controlled
	CASE 3	**Gidan Gwangwazo**	Yes	Yes	Deep (Depth 11)	Yes – maintains cultural modesty	Yes	Partial – only one bedroom upstairs	Linear, controlled access
CONTEMPORARY HOUSES	CASE 1	**Kazaure Residence**	Symbolic foyer, acts as access point. 3 entrances	No	Shallower (Depth 9)	Partial – less gender segregation	Yes – outdoor kitchen	Yes – vertical zoning	More direct, less restricted
	CASE 2	**State Road Residence**	Reception-like entry. 4 entrances	Hallway used as buffer	Shallower (Depth 8)	Partial – vertical & zoned	No	Yes – vertical zoning	More interconnected
	CASE 3	**Suleiman Crescent**	Two entrances, less Zaure function	Guest room serves buffer	Moderate (Depth 9)	Partial – vertical separation	No	Yes – vertical zoning	Ring-like, multiple paths

Note. This table summarises key spatial and cultural characteristics across six case studies, highlighting how traditional Hausa houses maintain deeper hierarchical organisation and stronger gendered zoning, while contemporary houses adapt these features with modified layouts and modern zoning strategies. The analysis underscores the evolving relationship between spatial configuration, cultural continuity, and sustainable design principles.

The evolution of Hausa housing demonstrates a dynamic balance between cultural preservation and modern adaptation. Traditional design principles emphasising privacy, social hierarchy, and controlled access continue to influence contemporary spatial

configurations, even as new layouts favour greater openness and flexibility. Key cultural features such as the zaure, soro, courtyard, and gendered zoning reflect sustainable social practices embedded in the architecture. Contemporary houses reinterpret these elements to accommodate changing lifestyles while striving to maintain cultural identity and social values. This synthesis of traditional and modern design reveals lessons in culturally informed architectural sustainability—highlighting how spatial ordering, social functionality, and cultural symbolism can guide the development of housing that respects heritage while meeting contemporary needs.

4. DISCUSSIONS

4.1 Architectural Changes and Cultural Tensions in Nigerian Housing Culture

The evolution of housing in Hausa society has been shaped by the global spread of modern architectural styles, colonial interventions, and changing socio-economic landscapes. Paans (2019) introduced the concept of the "generic eternal," describing a universal design approach in modern architecture that often lacks local identity. While this aesthetic seeks timelessness, it frequently results in austere, generic environments disconnected from cultural realities. Hausa architecture suffered greatly from this tendency, and as a result, foreign-trained native architects adopted contemporary architectural concepts like linearity and simplicity. These principles began to integrate into Hausa housing in the 20th century, starting with styles such as the "Brazilian Style," introduced by freed slaves returning to Nigeria, and later culminating in the widespread influence of modern architecture in residential and institutional buildings (Vwa, 2013).

4.1.1 Challenges to Traditional Privacy Norms in Modern Designs

Modern housing designs introduced during the colonial and post-colonial periods significantly impacted traditional notions of privacy in Hausa homes. As a way to establish privacy and gender segregation, traditional Hausa homes had distinct spatial zones such as the tsakar gida (courtyards), bunkuru (family quarters), and zaure (entry hall). These elements safeguarded family life while maintaining religious and cultural values. However, changing to open-plan designs and limiting courtyard space in contemporary housing has blurred public/private delineations, violating privacy conventions (Aliyu, 2015). The significance of these spaces in family life persists, but their roles have evolved due to changes in design that introduce external windows for

light and ventilation. In their traditional form, courtyards allowed for gatherings of family, served as a way to separate male and female guests, and were used for ventilation. In postmodern homes, courtyards were changed to be more utilitarian. This change functions as an example of difficulty in balancing traditional spatial arrangements with modern architectural trends.

4.1.2 Adaptation Through Hybrid Housing Models

Yıldız (2006) argued that in developing countries, maintaining cultural continuity amid rapidly changing social structures requires more than preserving the physical features of traditional living environments, such as typologies, norms, and formal appearances. Instead, they emphasised the need to focus on plan concepts, spatial meanings, and symbolic elements, suggesting that successful housing patterns should not merely replicate traditional forms but reinterpret the cultural hierarchy embedded within them. This has been embraced by the Northern Hausa communities, who have responded with resistance, but also by adapting to modernity while preserving their cultural values of privacy and comfort. In response to this situation, hybrid housing models have emerged, fusing traditional aspects of space with modern materials and practices. For example, many modern Hausa homes still reflect the zaure and bunkuru daily, but are commonly built with modern materials like concrete and glass. These hybrids preserve the important cultural norms surrounding their privacy while conforming to the social pressures attributable to modernity and urbanisation (Vwa, 2013). He mentioned that courtyards in modern homes embodied flexibility, allowing for family gatherings within a private courtyard space, despite their smaller scale, space, and functionality compared to traditional courtyards. Yet, these spaces maintain the cultural essence of seclusion while offering modern conveniences.

4.1.3 Cultural Resistance and Postmodern Architecture

Hausa communities have actively resisted aspects of modern architecture, disregarding cultural values, which led to the rise of postmodern architecture in Nigeria during the 1980s. Because postmodernism welcomed cultural, historical, and traditional values, architects were able to combine indigenous forms and aesthetics with contemporary building techniques. Early examples, such as the IMB Plaza in Lagos, showcased this shift with features like plastic forms and regional influences (Aliyu, 2015; Vwa, 2013). In northern Nigeria, postmodern design became more popular during the 1990s, when residential structures began to use classic elements, including domes, parapet roofs, and Islamic themes. Also, some traditional forms were reinvigorated, such as courtyards, reception halls, and entrance homes, balancing modern needs with their cultural meanings. Together, these designs show how Hausa architecture merges the global with the local.

Figure 56: *IMB Plaza, Lagos. (ThisDay, 2021)*



4.1.4 Material and Aesthetic Transformations

Modern housing designs also introduced significant material changes, moving away from traditional Hausa building methods that relied on sustainable materials like mud and thatch. Concrete, corrugated iron sheets, and contemporary finishes were used, which was a change from methods that were appropriate for the climatic and natural systems of the area (Barau, 2011). In an effort to control the tropical environment, these materials led to lower thermal comfort conditions and cooling systems, which could often be unaffordable for many in the community. Owamoyo and Tabibi (2023) highlight the tension between foreign Western designs and Hausa's multifaceted socio-environmental conditions. In their review of vernacular architecture in Nigeria, Aikpehae, Isiwele, and Adamolekun (2016) discussed how globalisation, urbanisation, and modernisation complexly affected the materials used in vernacular architecture. Specifically, in the northern and western parts of Nigeria, most traditional houses were made primarily from mud, while in the eastern part, wood and adobe (a mix of clay, straw, and water) were the more common materials. This distinction highlights regional differences in building practices influenced by the availability of materials and local cultural preferences before the broader changes brought about by modernisation affected architectural styles and materials. Prominent people in Hausa society, such as the Emirs and elites, often adapted modern styles to reflect their social status.

The traditional clay wall decoration incorporated by indigenous builders was usually substituted with cement plaster and radiant pigments, along with floor and wall finishes shifting from natural materials to smooth cement mortars (Ayuba et al., 2020). These aesthetic changes reflect an ongoing negotiation between traditional practices and modern influences.

4.1.5 Consequences of Urban Planning and Western Design

Colonial and post-colonial urban planning systems imposed Western concepts that disrupted traditional land management practices in Hausa settlements. Barau (2011) criticises the colonial and post-colonial urban planning structures as unsustainable, too expensive, and disconnected from the local context. Deterioration of public health and a disconnection of socio-culture are all observable consequences of the loss of public open spaces, spontaneous urbanisation, and environmental degradation in urban Hausa areas. These difficulties draw attention to the conflict between native eco-friendly activities and urban design in the Western manner. Chokor (2005) contended that urban planning in Nigeria must combine traditional social values and modern housing, not simply copy Western models; thereby helping preserve the unique identity of communities. He suggested that modern housing development could be modified and/or functionally designed to add some similarity to traditional compounds by retaining a central social place, courtyards, and social interaction spaces. He elaborated that housing clusters could be arranged in circular or square formations to preserve communal ties instead of colonial rank-and-file housing or modern rectangular lots that have no historic familiarity with culturally-rooted communities. While Hausa society's shift from a traditional communal, socially/spiritually connected design to a more individualistically Western style is observable, it also represents a transcultural confusion presently formed by globalisation (Ugbam et al., 2014).

4.1.6 Resilience in Blending Tradition and Modernity

Hausa communities continue to adapt traditional notions of privacy and comfort to the context of modernisation. They do this by adapting the spaces of courtyards, zaure, and bunkuru to modern living by physically combining them in a contemporary home.

Such hybrids lend flexibility to (and resistance against) modern demands while reaffirming social aspects of the very culture that urbanisation and globalisation threaten. These spaces preserve the social and psychological identity provided by privacy.

4.2 Impact on Privacy and Comfort

The advent of modern housing has brought significant changes to the spatial and functional dynamics of homes globally, and Hausa housing in Northern Nigeria is no exception. Traditionally, Hausa homes were carefully planned to align with cultural, religious, and environmental needs, with privacy and comfort as the primary design factors in their layout. But modern housing, which is frequently shaped by international architectural styles and economic realities, has brought a new set of dynamics that call into question the Hausa Homes' essential values of privacy and comfort. The evolution of these deeply ingrained notions in Hausa culture demonstrates the tension between preserving traditional values and adjusting to modern living.

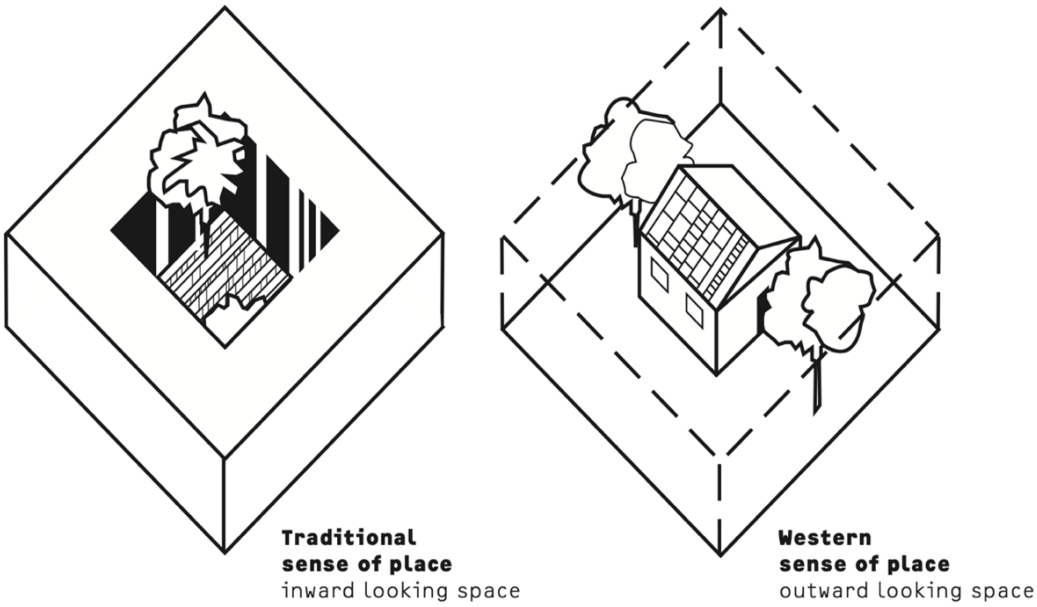
While traditional compounds do provide social relevance, Chokor (2005) asserts that these traditional housing complexes are less likely to be viewed as even remotely appealing in today's architectural style, which distinguishes the gap between the traditional dwelling types and urbanite selection. Chokor (2005) emphasises that urbanites often privilege the physical qualities of housing: namely, the quality of construction, function, and space in the context of housing rather than the social meanings associated with traditional designs. Urban poverty notwithstanding, many still appear willing to prioritise a modern home with more bedrooms and space, suggesting a transition from the commune-styled nucleated dwelling types of rural life to more segregated and individualistic housing forms.

The adoption of Western housing designs conflicted with the expectations of privacy and comfort that are embedded in the Hausa way of life. As Barau (2011) noted, traditional Hausa housing was built around enclosed courtyards that offered privacy to family members, especially women, while still reflecting the cultural values of Islam. In contrast, colonial housing designs frequently featured open layouts and minimal regard for the culturally ingrained need for seclusion, which caused discomfort among residents. Pahl-Weber et al. (2013) discuss the traditional sense of place, stating that it is deeply tied to inward-facing spaces and private spaces, while the modernist sense of place is on par with outward exposure style housing (see Figure 57). This evolution of housing style in northern Nigeria has disrupted social and spatial practices, leading to disharmony between culture and built environment. Aliyu and Ismail (2023) added that such transformations not only compromise the security and privacy of residents but also weaken their sense of identity and connection to their cultural heritage. Similarly, Agboola and Zango (2014) note that modern housing layouts prioritise functionality over cultural and religious needs, often reducing transitional spaces and exposing private areas to external views. This shift undermines the Islamic principles of seclusion and disrupts the cultural balance of Hausa architecture. In an interview with experienced architects, Architect 3 noted that:

> *"Religion plays a very important role in how spaces are used, especially in Hausa Muslim households. There's a strong emphasis on modesty and separation between genders, so people are really conscious about privacy. Most families don't want male and female visitors to mingle freely within the home, so the layout has to reflect that. That's why you'll often see separate spaces for men and women, or areas that are more restricted and private—especially for the women in the household. It's not just about tradition; it's also tied to religious beliefs and daily practices. So, when designing, gendered privacy becomes a key*

consideration, especially in more conservative homes. In cases where some level of mixing does occur, it is usually limited to the shallowest parts of the home—typically the reception or entrance areas. These spaces act as a buffer, allowing interaction without compromising the privacy of the more secluded family areas deeper in the house" (2024, personal communication).

Figure 57: *The sense of place. (Pahl-Weber et al., 2013)*



The courtyard, a central element of traditional Hausa homes, has been one of the most affected aspects of modern housing. Markus (2016) described the courtyard as the heart of the Hausa home, offering outdoor space for cultural and religious activities while symbolising its functional and social importance. It provided a private, open-air space for domestic activities, ensuring that family life remained hidden from the public gaze. Sthapak and Bandyopadhyay (2014) emphasised that the inward design of courtyards enhanced olfactory privacy, reduced noise, and offered versatile outdoor living spaces. The loss of courtyards in modern architecture, however, has changed housing culture by

replacing social, inward-facing areas with solitary, outward-facing residences (Rapoport, 2007). Within Hausa villages, this shift has changed the cultural dynamics, reduced social interaction, and lessened common spaces. The absence of courtyards in many modern homes has resulted in a significant loss of privacy mechanisms. Rapoport (2007) argues that traditional courtyard houses provided distinct, enclosed outdoor spaces that helped maintain privacy, especially from the public sphere. In contrast, modern homes often replace physical barriers, such as walls, with less effective mechanisms like fences or gates. This has led to a less nuanced separation between public and private domains, making preserving interior privacy in modern housing layouts challenging.

In a documentary, El-Wakil (2022) expanded in detail concerning the metaphysical significance of courtyards, describing them as the "soul" of the home, reflecting a microcosmic interpretation of the macrocosm; this also embodies the cultural and spiritual core of Hausa residential architecture. Courtyards have substantial effects on how much people cherish and value their homes. To illustrate this point, he shared an instance where a client who is a renowned businessman declined to sell their house despite receiving a highly profitable offer because of his family's strong attachment to the courtyard, where they enjoyed spending quality time with friends and relatives (El-Wakil, 2022, 18:30). This devotion to the home displays how courtyards work as a focal point for social interaction and the revival of communal living customs that were previously essential to Arab culture. Thus, these architectural elements foster a feeling of community within the house and improve individual comfort.

Modern housing developments, with their open entrances and direct external views into interior spaces, undermine the cultural and religious principles of modesty and seclusion, such as Purdah (the practice of female seclusion to maintain modesty and

privacy, often through clothing or spatial separation), integral to Hausa society. The equilibrium between the public and private spheres is disrupted by these designs' diminished focus on spatial segregation, which affects the Hausa houses' customary sense of security, identity, and cultural harmony, according to Aliyu and Ismail (2023). Modern housing falls short of providing the same degree of comfort and utility as traditional homes by ignoring these crucial cultural and social factors, which causes a separation from the beliefs and lifestyles of the people it serves.

Despite these complications, Hausa communities have managed to develop and repurpose new designs to accommodate their cultural needs. While hybrid housing is emergent by definition, these assimilation models incorporate familiar traditional spatial arrangements with modern construction materials and methods. In recent postmodern residential design, particularly in Northern Nigeria, designers have been cautious about incorporating some cultural elements from Islamic and Hausa traditions in their designs for the sake of maintaining cultural sustainability (Aliyu, 2015). These adaptations of spatial arrangements draw on their religious and cultural imperatives that encourage zoning in relation to gender-specific zoning, privacy considerations by adjacency or distance, and smaller courtyard spaces. These modern-day courtyards consciously demonstrate efforts to find a middle ground between an enduring ideal productivity of modern culture and a continuing Hausa real necessity, although these courtyards are significantly smaller, and by definition, from the outset, terribly unusable.

The evolution of Hausa household design reveals a complex reciprocity of traditional values and modern influences. While conveniences such as water and electricity are offered in modern housing, it does little to compensate for the diminishing of the psychological and cultural comfort of the traditional Hausa home. For many,

comfort is not necessarily tied to material comforts; it has more to do with dwelling in a constructed environment that represents their values, safety, and facilitates a pleasant family and community life. Traditional Hausa housing featured important design elements such as courtyards, which, while becoming less useful, reflect the importance of sustainability for cultural identity in the design of homes. Architects and planners must continue to explore ways to harmonise modern innovations with the cultural and social needs of Hausa communities to ensure that privacy and comfort remain central to their housing experience.

4.3 Results and Discussions of Analysed Case Studies

All three traditional houses have a courtyard, showing that the house is inward-looking. This emphasises the function of the courtyard as a central feature of the traditional homes that serve as an outdoor space enclosed within the houses. It ensures privacy as all activities happen within the home rather than being exposed to outsiders. This is particularly lacking in contemporary houses, except in case 1. Modern houses have discarded the concept of inward-looking spaces. Consequently, instead of having a courtyard, these homes have gardens, patios, front yards, back yards, etc. This transition exposes activities that were traditionally private to the outside environment.

In traditional homes, domestic activities like cooking, washing, drying clothes and socialising are done in the courtyards. In contrast, these activities considered private have been shifted to front yards and backyards in modern homes, making them publicly visible. Women and children comfortably enjoy outdoor spaces while being shielded from view in a traditional setting, while in a modern setting, their activities become visible to people within the compound or the neighbouring buildings. The absence of a courtyard in modern designs resulted in a simplified and direct layout. This design tends to blur

boundaries between private and public areas, leading to a loss of privacy and controlled access. Gupta & Joshi (2021) argue that the versatility of courtyards makes them a timeless and sustainable architectural feature.

4.3.1 The Shift in Courtyards

The courtyard is a significant aspect of the Hausa culture to the extent that, on an urban scale, there are town squares called dandali (an open communal space used for social gatherings, meetings, and leisure in traditional Hausa settlements); according to Umar (2008), it serves as the breathing space within a tightly knit network of compounds, functioning as an area for parking vehicles, praying, trading, cultural performances, meetings, and relaxation under the natural canopies of trees. Saad (1981) noted that the larger agora or dandali within a neighbourhood typically accommodates a cottage mosque, a small market, a Quran school, and, in contemporary times, a modern primary school. Society events and other functions are carried out in these spaces. Umar & Yusuf (2019) stated that dandali has evolved into the modern-day cultural centre in some villages, as these spaces have traditionally served as platforms for various performances, like an arena. According to Muhammad-Oumar (1997), as homes are centred around a courtyard, the ward is organised around its dandali, and the housing block is structured with its fangali (an intermediary space—larger than a private courtyard but smaller and more localised than a dandali—likely serving as a transitional or semi-public area where residents of a block can gather, interact) at the core, and the town is defined by its market at the centre.

Figure 58: *Map showing dandali and the houses around. (Abubakar, 2016)*

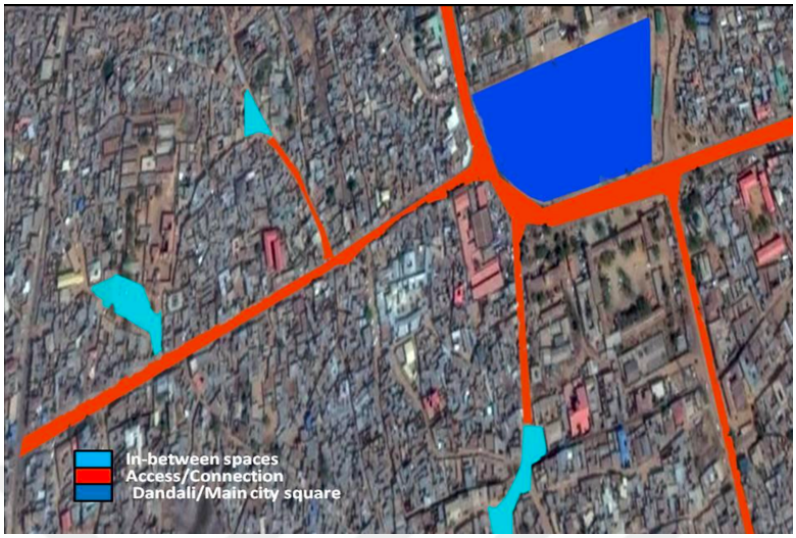
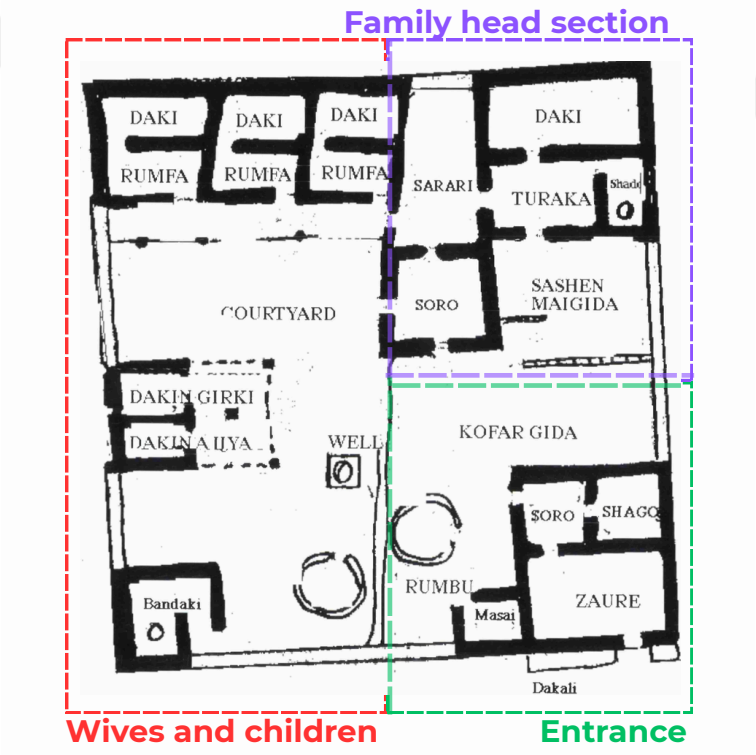


Figure 59: *Typical Hausa Traditional Compound (Muhammad-Oumar, 1997)*



Just as the dandali provides communal space and structure at the urban level, the courtyard serves a similar role within the traditional Hausa home, acting as a central

organising element that influences spatial depth and circulation. The gradual transition from the outer core to the central core and inner core in traditional houses is layered by the courtyard in terms of spatial depth, which connects different parts of the home, maintaining circulation within the enclosed domain. The shift toward outward-facing spaces makes them easily visible to passersby, as some boundaries are marked by shrubs, while others rely on low fences in certain neighbourhoods. Nevertheless, semi-detached and fully detached housing models favour driveways, front yards and open balconies instead of courtyards since the innermost spaces in a house are traditionally associated with domestic activities.

The inward-looking houses provide significant thermal comfort changes, acting as a natural cooling system, allowing hot air to rise, thereby reducing indoor temperature. Walls around the courtyard provide shade and reduce direct solar heat gain since most traditional houses are made of laterite. Additionally, Al-Hussayen (1995) noted that courtyards are crucial for climate adaptation and passive cooling, providing shade and temperature regulation in hot-arid regions and enhancing ventilation in hot-humid regions. The walls oftentimes help maintain moisture in dry climates. The enclosed feature of the courtyard reduces exposure to strong winds and storm dust, which is common in Northern Nigeria during the rainy season.

In contrast, contemporary houses without courtyards adopt an outward-looking design, which is more suitable for urban areas because this design requires a larger plot due to bylaws and setback laws. Since modern construction is done with concrete and steel, it is significantly hotter compared to laterite because it absorbs heat, making indoor spaces hotter, hence relying on active cooling strategies. High boundary walls, usually up to 4m, are erected, which are aesthetically unappealing and obstruct ventilation in

contemporary houses (Al-Hussayen, 1995). Open front and backyards contribute to increased dust accumulation while also reducing both visual and acoustic privacy. Gupta & Joshi (2021) suggest that while courtyards are historically and environmentally significant, urban planning constraints hinder their widespread adoption in modern cities. They suggest that reinterpreted courtyard forms can offer high-density, energy-efficient, and socially sustainable housing solutions.

Contemporary house Case 1 –Kazaure Residence presents a modern reinterpretation of the traditional courtyard, though with notable differences in function and spatial integration (Figure 60). The courtyard is significantly smaller than those found in traditional Hausa homes, and while centrally located, it does not serve as a primary transitional space unless one is accessing the upper floor. The staircase leading upstairs is situated within the courtyard, but the entire ground floor can be navigated without passing through it, making it less of a central hub for movement. Unlike traditional open courtyards, this one is covered with glass, preventing rain from entering the house while maintaining open sides for ventilation. Additionally, access to the courtyard is through the patio and hallway rather than the living areas, resembling the traditional approach where courtyards are reached via the zaure or soro. However, this courtyard offers more privacy compared to its traditional counterpart, as it is enclosed with doors, limiting accessibility and visibility. The multiple entrances and interconnected spaces on the ground floor further reduce reliance on the courtyard as a passageway, emphasising its evolving role in contemporary Hausa homes.

4.3.2 The Shift in Kitchens

Moreover, just as the courtyard has undergone changes in spatial organisation and privacy, the kitchen has also evolved significantly. The traditional kitchen is typically

located outside, within the courtyard or adjacent to the courtyard, and cooking is always done outside under a shade. In some houses, there are two kitchens: an indoor and an outdoor kitchen. The indoor kitchen primarily serves as a storage room where cooking, eating utensils and firewood are stored, but the cooking is always done outside. Although the indoor kitchen is used for storage, there is still a storage room for raw food items and grains. Traditional cooking methods involve firewood, charcoal, and clay stones(murhu), which often require ventilation due to the smoke. The outdoor placement prevents indoor heat build-up, making the house thermally comfortable in hot seasons. These kitchens were often located in secluded areas near the courtyard, maintaining privacy and facilitating communal cooking. Hausa culture, rooted in hospitality and communality, often encourages women to cook together with extended family members or neighbours gathered around in the courtyard. Traditionally, during festive seasons and other gatherings like weddings, women would gather around to prepare meals in a shared, collaborative setting. Beyond its practical purpose, this communal cooking serves as a social function that strengthens kinship bonds and reinforces a sense of togetherness.

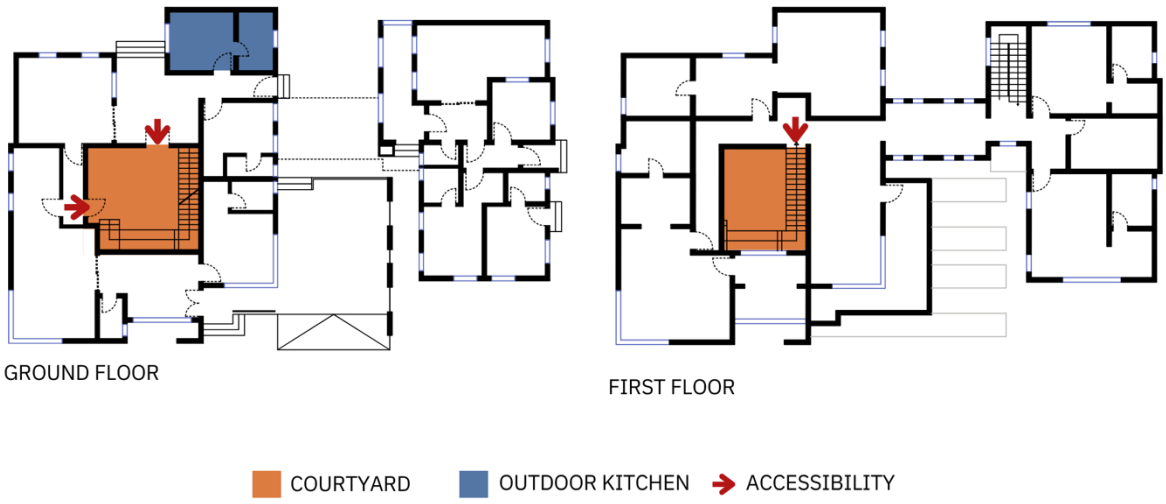
On the contrary, the modern kitchen is made as part of the main building and part of the house. They are usually positioned at the back of the house and accessed through the dining room. In some houses, it is not uncommon to see an additional indoor kitchen that is separate from the main building, often to be found in the backyard. This kitchen is a service kitchen and is largely used for heavy cooking. Like any modern kitchen, these kitchens are equipped with modern appliances too, including electric cookers, gas stoves, and many other appliances, reducing the need to use firewood.

The indoor kitchen is more visible to guests, which could be seen as a departure from traditional patterns where cooking remained in seclusion away from non-house

members. In some cases, indoor kitchens contribute to heat build-up that demands mechanical ventilation in kitchens with poor ventilation. These kitchens completely rely on exhaust fans to suck away the smell of food from the house, yet this solution is rarely sufficient on its own and typically requires additional appliances for effective air circulation. In today's day and age, cooking has become an individualised activity, showing a shift in social dynamics and family structures. Ekhaese (2011) maintains that the kitchen and eating areas have always been essential but have evolved from being secluded and courtyard-based to more integrated and structured within the home. The organisation of these spaces has changed, especially in modern and contemporary homes, influencing functionality, social interaction, and cleanliness.

Among the contemporary homes analysed, Case 1 – Kazaure Residence stands out for its modernised approach to the traditional kitchen and courtyard. Unlike typical modern homes, where kitchens are fully enclosed within the main structure, this design features a detached but built-in kitchen connected to the house through a patio. While positioned outside the main living quarters, it remains a defined and functional space, offering a unique blend of separation and accessibility (see Figure 60).

Figure 60: *Diagram showing the courtyard, its accessibility and the outdoor kitchen*



4.3.3 The Shift in Living Rooms

Before the advent of living room spaces, traditional homes relied on courtyards, rumfa, and soro as socialising and multifunctional spaces where daily activities took place. Modernisation brought the shrinkage and absence of courtyards, shifting social interactions indoors. This led to the development of dedicated social rooms for hosting guests. Just as the kitchen became a defined enclosed space within the house, so did the emergence of living rooms. Unlike the traditional homes where social interactions were fluid, they were simultaneously hosted in rumfa, soro, along with courtyards; modernisation, with its principle of functionalism, where design is driven by purpose, divided these activities, creating a fixed living room for guests. This shift reflects changing lifestyles, privacy concerns, and Western architectural influences, just as seen in the evolution of the courtyards and kitchens.

Traditionally, socialisations were fluid and would happen in different places depending on the time of the day and the type of people being hosted. Rumfa, often found in big houses, is a semi-private reception-like space before the bedroom used for resting, socialising and occasionally, hosting visitors. Soro is also used as a living room for men because it is a part of the outer core, hence more public. Also, it is a transitional space leading to the courtyard. The courtyard is the most versatile of them all, and most socialisation is done here because of its size, versatility, and central location. The influence of modernisation came about with the colonial masters. They introduced Western architectural ideologies of functionalism, simplicity, and more integrated open plans as opposed to the maze-like patterns the Hausas had. The shift from multi-use spaces to function-specific rooms materialised as part of modern housing layouts. Some modern homes are maintained as double living room systems where one is for men, and the other is for women, reflecting a continuity of cultural values of privacy and gender segregation deeply rooted in the Hausa culture. When asked about the influence of Hausa traditional housing culture on contemporary spatial identity, Architect 3 —who has been practising for over 30 years— explained that:

> *"I think the influence of Hausa traditional architecture (HTA) on contemporary housing in Nigeria is often more subconscious than deliberate. Most people might not intentionally reference traditional elements, but you still see them emerge in certain ways—especially in the way space is used. Take the sitting room, for instance. In many Nigerian homes today, the living area is unusually large compared to what you might find in other parts of the world. That's not random—it's a cultural response. In Hausa culture, like in many Nigerian settings, hosting large numbers of guests is very common during social events or family gatherings. So, that expectation naturally carries over into how people design or build their homes today. Then there's climate responsiveness. Traditional Hausa houses were designed to cope with high temperatures—thick*

walls, small openings, and shaded courtyards. Modern homes may not always replicate these techniques directly, but the need to adapt to heat still influences choices like ventilation, layout, and material selection. So, even if it's not always explicit, there's a cultural and environmental continuity between traditional and modern housing." (2024, personal communication).

This transformation in living room design reflects a broader shift from fluid, multifunctional spaces rooted in cultural and environmental logic to compartmentalised, function-driven layouts influenced by modern ideals. Yet, as the interview reveals, traditional values—such as hospitality, climate adaptation, and gendered space use—continue to shape contemporary living rooms, even if subtly. Thus, while the spatial language has changed, the cultural dialogue persists.

5. CONCLUSION

The study has explored the architectural development of Hausa homes, particularly focusing on spatial usage, highlighting the changes in domestic arrangements and functionality. It has also looked at how contemporary housing culture has influenced or affected cultural practices, privacy and comfort in Hausa homes. By examining these evolutions of spatial arrangements, the research explains the larger implications for cultural sustainability in modern architecture through contemporary housing adaptations. Additionally, the research has identified changes in housing layout that may deter or facilitate cultural continuity transmission and daily social activity. By evaluating whether modernisation led to significant changes in privacy customs and spatial organisation, it has investigated the function that privacy played in the household. Furthermore, the study has investigated how Hausa households' traditional hierarchy is mirrored in their spatial design and how it either encourages or discourages social interaction. Lastly, it examines the relationship between architectural form and cultural preservation, arguing how the built environments perpetuate or modify certain customary values over tradition.

The study has shown important changes in the spatial configuration of the Hausa homes, especially in the layout and function of living rooms and kitchens. The result demonstrates that contemporary housing has changed the conventional nature of these spaces and their social dimensions, that is, their greater role. Moreover, the most significant change is the absence of courtyards and transition spaces, which were an integral part of the Hausa housing sociocultural contexts; in addition, they provided spaces for social interaction, privacy and psychological comfort. The elimination of these components has impacted psychological comfort, life in the home, social interactions and continuity of culture. Modernity has changed how the spaces are perceived, altering

conventional spatial hierarchies and the relationship between privacy and publicness in the home.

The first research question sought to understand how changes in Hausa communities' cultural identity and social practices have influenced the transition from traditional to modern housing forms. The findings indicate that shifts in everyday social behaviour, such as reduced communal living, changing gender roles, increased emphasis on nuclear family privacy, and urban lifestyle patterns, have played a significant role in redefining the spatial organisation of the home. Traditional courtyard-based layouts, once central to Hausa cultural life and social interaction, have been replaced or reinterpreted in ways that reflect these evolving values. In modern houses, the courtyard, if present, no longer serves as the cultural and social core of the household but instead functions primarily for climate control or aesthetics. This suggests that the transformation in housing is a response to deeper sociocultural changes rather than the primary driver of those changes. The evolution of the Hausa house, therefore, mirrors the ongoing transformation in Hausa society. This phenomenon reflects broader shifts across Nigeria, where cultural changes and urban lifestyles reshape traditional housing forms in various communities.

In response to the second research question, which investigated the influence of privacy in Hausa housing culture as a major consideration in design and spatial layout, historically and in modern-day settings, there is an absence of clear distinction between the three distinct zones found in a typical Hausa layout. The modern house concept has integrated these zones into one that lacks transitional spaces. This is a major factor that affects privacy and psychological comfort in the houses. House members can only enjoy complete privacy on the upper floor. The ground floor has no guaranteed privacy due to

the spatial layout. This research also explored how Hausa traditional techniques have aided in the conservation of cultural values in construction and how modern construction techniques have influenced or supported the role of Hausa traditional architecture in conservation. Hausa homes are made of materials that adapt to the local climate, allowing natural insulation, thermal comfort and ventilation (Haruna, 2016).

Continuing from earlier discussions, the third research question addressed how spatial design reinforces, restricts, or enables social structure, hierarchies, and interactions and whether these mechanisms within traditional spatial design are comparable to those of their modern counterparts. As seen in the case studies, the traditional houses gave more importance to space hierarchy than the contemporary houses. Contemporary homes often adapt to a more open layout that blurs traditional spatial boundaries. This, in turn, can dilute spatial cues that have previously shaped social behaviours and thus may shape the hierarchy of space, privacy and interaction in a household. Hence, while traditional spatial design persistently found ways to sustain cultural and social mechanisms in its layout, contemporary arrangements reflect a change in the position of space in relation to these roles.

Lastly, this question examined how the transition from traditional to contemporary housing has influenced the Hausa's cultural identity and social behaviours. The results reveal a distinct shift in their day-to-day and community life. Traditional housing facilitated group living via inward-facing courtyards with clustered housing units that assisted housing extended family structures, and collective eating, storytelling and child-rearing. Modern housing, however, reflects Western trends with emphasis on nuclear families with partitioned space and individuality. These spatial changes, it appears, have resulted in weakened traditional practices and fraying social relations.

While residents see modern homes as more efficient and practical, they frequently mention a loss of cultural significance and privacy. Therefore, many residents see modern architecture, while convenient, as less functional in creating the rich social and cultural fabric that characterised the Hausa sense of place in the home.

Lately, the revival of Hausa traditional architecture has been about building elements such as dagi (design motifs), zanko (pinnacles), Arabic inscriptions, and indararo (gutter). While these are important and nurture a sense of belonging and identity by physically reflecting local traditions and customs, modern designs have often neglected the social and psychological needs that space radiates to its users. Therefore, contemporary Hausa housing should acknowledge that privacy is both physical and psychological; it is not just about walls and fences; rather, it is about how spaces are designed to support personal space and strike a balance between space for interaction and solitude. Maintaining a balance between autonomy and control is often disregarded in a rapidly chaotic developing environment by designing residential buildings that honour private and public life boundaries.

Additionally, spaces could be designed for socialising or conversing and simply meeting individual needs. Rather than meeting specific individual needs, spaces should be intentionally crafted to promote socialising and foster dialogues since the Hausas are known for their large gatherings and collectivist nature. With this in mind, homes should be less compartmentalised and have more flexibility, allowing users to modify and personalise their spaces according to their changing needs.

Furthermore, many times, there is a frequent gap between the past and the present in contemporary design. Homes could be designed to tell stories of memories past; through the architectural composition of spaces, incorporation of craft, or by the

preservation of spatial zoning. Contemporary architecture can support the continuation of cultural legacy while embracing new requirements by adding features that respect cultural memory, whether through traditional crafts or other aspects of the preservation of historic layouts.

It is imperative for architects, designers and urban planners to critically reassess the policies that were implemented during colonialism that are now deeply ingrained within the Nigerian cultural fabric. Nigeria is an ethnically and religiously diverse nation with over 300 ethnic groups and 500 languages, according to Green (2003), and more than three religious affiliations, according to Ajaji et al. (n.d). Given the diversity, a one-size-fits-all solution to housing and urban policies is ineffective because every group has long-established, unique customs. Decision-making procedures should be sensitive to regional differences and create policies that truly respond to the needs of the people to enhance their quality of life, which will, in turn, improve society at large.

Thus, it is suggested that anthropologists and theologians could participate in the formation of housing and urban policies for the respective geo-political zone or state from their unique perspective, such that the policies align with the cultural and religious values of the community. This strategy would promote culturally sustainable development, protect culturally sustainable development, preserve cultural uses of spaces, enable cultural transmission and ultimately increase the livelihood of Nigerian cities and rural areas.

Moreover, while this study focused on the courtyards, living room and kitchen, future research could extend the analysis to other spaces within the home, such as bedrooms, bathrooms and other functional areas. A detailed independent examination of these spaces would provide deeper insights into their roles in privacy, comfort and

cultural practices. A holistic analysis that integrates findings from all domestic spaces would offer a more comprehensive understanding of how Hausa homes function as an interconnected spatial system and how they have evolved as one entity.

In protecting Hausa architecture, we protect more than just structures; we are protecting a way of life, a common memory, and a cultural identity that has been formed from centuries of lived experience. If architecture is a reflection of culture, to recreate our places of habitation on the basis of our current identity and without our heritage is simply a brick-by-brick erasure of who we are.

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APPENDICES

APPENDIX A. SURVEY QUESTIONS

Spatial Features

I. Layout and Design:

- How would you describe the layout and design of your home?
  - Traditional with central courtyards and enclosed spaces
  - Contemporary open-plan design
  - A mix of both

1. Orientation and Layout:

- How is your home oriented in relation to cardinal directions (North, South, East, West)?
  - Traditional orientation (e.g., facing Makkah)
  - Modern orientation
  - Not considered

2. Space Utilization:

- How are the spaces in your home used throughout the day? (e.g., multi-functional spaces that change usage from day to night)
  - Very dynamic
  - Moderately dynamic
  - Static (same use throughout the day)

3. Central Courtyards:

- Does your home feature a central courtyard? If yes, how is it utilised?
  - Yes, for social gatherings
  - Yes, for ventilation and cooling
  - No

4. Room Connectivity:

- How are the rooms in your home connected to each other?
  - Open-plan design with minimal partitions
  - Rooms connected via hallways or corridors
  - Separate, enclosed rooms with individual entrances

II. Functional Spaces:

- How effectively do the spaces in your home serve their intended functions (e.g., living, cooking, sleeping)?
  - Very effective
  - Effective
  - Neutral
  - Ineffective
  - Very ineffective

1. Designated Spaces:

- Are there specific rooms designated for particular functions (e.g., separate kitchen, living room, bedrooms)?
  - Yes, very clearly designated
  - Somewhat designated
  - No, multifunctional spaces

2. Living Areas:

1

- How well does the living area accommodate social interactions and gatherings?
  - Very well
  - Adequately
  - Poorly

3. Cooking and Dining:

- Is the kitchen separate from the dining area, or are they combined in an open-plan design?
  - Separate
  - Combined
  - Other (please specify)

III. Privacy:

- How well does your home's design cater to the need for privacy?
  - Excellent
  - Good
  - Average
  - Poor
  - Very poor

1. Private vs. Public Spaces:

- How is privacy maintained between public and private spaces in your home?
  - Clear separation (e.g., separate floors, distinct zones)
  - Moderate separation (e.g., partitions, curtains)
  - Little to no separation

2. Access Control:

- How is access to private areas (e.g., bedrooms) controlled?
  - Doors with locks
  - Visual barriers (e.g., screens, curtains)
  - No specific measures

IV. Natural Elements:

- To what extent does your home incorporate natural elements such as courtyards, gardens, or natural ventilation?
  - Extensively
  - Moderately
  - Minimally
  - Not at all

1. Ventilation:

- How is natural ventilation achieved in your home?
  - Through windows and doors
  - Courtyards and open spaces
  - Mechanical ventilation systems
  - Other (please specify)

2. Daylighting:

- How is natural light maximised in your home?
  - Large windows

- Skylights
- Light wells
- Minimal reliance on natural light

3. Thermal Comfort:

- How does your home's design contribute to thermal comfort?
  - Thick walls for insulation
  - Use of shading devices (e.g., awnings, pergolas)
  - Natural ventilation strategies
  - Modern HVAC systems

V. Adaptability:

- How adaptable is your home's design to changes in family size or needs?
  - Highly adaptable
  - Moderately adaptable
  - Slightly adaptable
  - Not adaptable

1. Flexible Spaces:

- Do you have spaces that can easily be adapted for different uses (e.g., a room that can serve as both a guest room and an office)?
  - Yes, many such spaces
  - A few such spaces
  - No, spaces are fixed in the function

2. Future Modifications:

- How easy would it be to modify or extend your home in the future to accommodate changes in family size or lifestyle?
  - Very easy
  - Moderately easy
  - Difficult
  - Very difficult

Cultural Sustainability

1. Cultural Practices:

- How often do you use specific areas of your home for traditional cultural practices (e.g., communal gatherings, religious rituals)?
  - Frequently
  - Occasionally
  - Rarely
  - Never

I. Cultural Symbols:

- Are there any cultural symbols or motifs integrated into the spatial design of your home? (e.g., decorative elements, layout inspired by cultural beliefs)
  - Yes (please specify)

- No

II. Cultural Practices:

- How does the spatial layout of your home facilitate traditional cultural practices (e.g., communal meals, prayer areas)?
  - Very well
  - Moderately well
  - Poorly
  - Not at all

2. Symbolism:

- Are there symbolic elements in your home's design that reflect Hausa cultural values?
  - Yes (Please specify)
  - No

3. Cultural Identity:

- How important is it for you that your home reflects Hausa cultural identity?
  - Very important
  - Important
  - Neutral
  - Unimportant
  - Very unimportant

4. Traditional vs. Modern:

- How do you perceive the balance between traditional and modern elements in your home?
  - Predominantly traditional
  - Balanced
  - Predominantly modern

5. Preservation:

- What measures do you take to preserve traditional architectural elements in your home?
  - Regular maintenance
  - Use of traditional materials
  - Consultation with cultural experts
  - None
  - Other (Please specify)

Space and Culture

1. Spatial Comfort:

- How does the spatial comfort of traditional Hausa homes compare to contemporary homes?
  - Traditional homes are more comfortable
  - Contemporary homes are more comfortable
  - No significant difference

2. Cultural Reflection:

- Which type of home better reflects Hausa cultural values and practices?
  - Traditional Hausa home
  - Contemporary home with traditional elements
  - Contemporary home without traditional elements

Culture and meaning – [Open-ended response]

1. Cultural Significance:

What specific architectural features in your home hold cultural significance for you? (e.g., decorative motifs, structural elements)

2. Cultural Transmission:

How do you believe your home's design aids in transmitting cultural values to the next generation?

3. Community Interaction:

How does your home facilitate interaction with the community and neighbours?

4. Cultural Continuity:

How does your home help maintain continuity with past traditions while accommodating modern needs?

5. Personal Stories:

Can you share any personal stories or experiences that highlight the cultural significance of your home's design?

5

APPENDIX B. INTERVIEW QUESTIONS

INTERVIEW QUESTIONS

1. How do you perceive the role of Hausa traditional architecture in Nigeria's contemporary architectural landscape? How have Hausa architectural principles influenced contemporary design trends or contributed to cultural identity in urban and rural settings?

2. How does housing reflect or preserve cultural practices? Do you think modern housing still serves the social and cultural functions traditional homes once did?

3. In your architectural practice, to what extent does Hausa traditional architecture serve as a source of inspiration for your designs? If it does influence your work, could you elaborate on specific aspects of Hausa architecture that inspire you?

4. Are there particular values (e.g., gendered spaces, visitor areas) that still shape your design or usage of space?

5. How do you translate these principles into contemporary architectural compositions? Are these features still functionally or symbolically relevant in today's context?

6. Can you describe a housing project where Hausa architecture played a significant role in the design concept or execution? What were some of the key considerations during the design process? What design decisions were made to uphold these values?

7. From your perspective, what cultural and historical importance does Hausa architecture hold in the broader tapestry of Nigeria's architectural heritage? What do these patterns reveal about lifestyle, beliefs, or social structure?

8. What challenges or opportunities have you faced when collaborating with clients or stakeholders who may hold varying viewpoints on integrating Hausa architectural elements into contemporary constructions?

9. Moving forward, how do you envision the trajectory of Hausa architecture, especially amidst the swift urban development and cultural transformations unfolding within urban landscapes? What adaptations or innovations might arise to harmonise traditional Hausa architectural principles with the demands and dynamics of contemporary urban contexts?

10. Do you think privacy and traditional space-use patterns will continue to evolve? What adaptations might ensure cultural continuity in modern contexts?

11. How does Hausa architecture interact with its environment, considering climate responsiveness, physical integration with the landscape, social dynamics facilitation, cultural identity reflection, and accommodation of religious practices?

12. Are there lessons from the environmental responsiveness of traditional homes that are useful for contemporary housing design?