

## Art & The City New life for Art and practice in abuja Nigeria

A Final Study Design

by

Aniekan Bassey-Etuk

#### **Abstract**

An Exploration of Architecture as art in the representation and appropriation of traditional Nigerian Architecture. The Nigerian Architectural scene is currently a collage of frameworks leftover by colonialism, and foreign modernist concepts. Unfortunately, this structure has not adequately addressed the ecological, cultural or climatic needs of the average Nigerian. This project attempts to integrate traditional Nigerian architecture and its design principles with modern architecture using the Abuja Arts and Craft village as a design site. The design approach utilised scales including; location -topographic and climatic considerations-, materiality, form and function, to deduce design implementation strategies, and design considerations include; adapting to the natural landscape and the already existing forms, and preservation of the sites identity.

## Acknowledgements

I wish to express my sincere appreciation to everyone who showed me great support and offered help on this arduous journey.

To my professor Brian Gibbs, thank you for the constant motivation and challenge to think deeper.

To my committee members for all the support and ideas, inspiring me to break convention.

To my parents, Chioma & Bassey Etuk you mean the world to me, thank you for all the support throughout this journey, I definitely cannot thank you enough.

To my Sister, Emem Etuk you are my rock

and to all my colleauges, friends and aquinttances, who without their support and input, this project could not have reached its goal.

with love Aniekan.

#### **Committee Information**

ROBERT WARDEN	
COMMITTEE CHAIR	ARCHITECTURE DEPARTMENT
ANDREW TRIPP	
COMMITTEE MEMBER	ARCHITECTURE DEPARTMENT
JUNE MARTIN	
COMMITTEE MEMBER	LAUP DEPARTMENT
BRIAN GIBBS	
STUDIO PROFESSOR	ARCHITECTURE DEPARTMENT

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# Northtern Region Southwestern Region Southeastern Region Capital 10 Art and The City: A new life for art and practice in abuja

#### Introduction

This chapter will provide a brief introduction, and highlight the problem statement, articulating the following;

- Basis: Provide information about the problems with modern Nigerian buildings.
- Aim of the Project: Provide arguments for using Nigerian traditional architecture and art.
- Importance (necessity) and Potential: Link art and architectural development in Nigeria with economic, and social development. Other advantages include Climate and environmental considerations, resource sustainability, and cultural restoration and identity.
- Proposed solution/Recommendations: An integration of Nigerian Architecture and Modern Architectural Principles with building materials.

"Nigeria's vernacular architectural heritage is not just neglected, but actually denigrated." 1

1) Prucnal-Ogunsote , B. (n.d.). Reflection of Culture and Climate in the Vernacular and Modern Architecture of Akure. Department of Architecture, Federal University of Technology, 1–8.



fig. 1



fig. 2

figure 1) National Arts Theatre, Lagos, Nigeria figure 2) Palace of Culture and Sports, Varna, Bulgaria Spanning an area of approximately 23, 000 square meters, and standing well over 31 meters, the National theatre is considered an architectural masterpiece and a cultural landmark, intrinsic to the modern dialogical art and tourism in Nigeria.

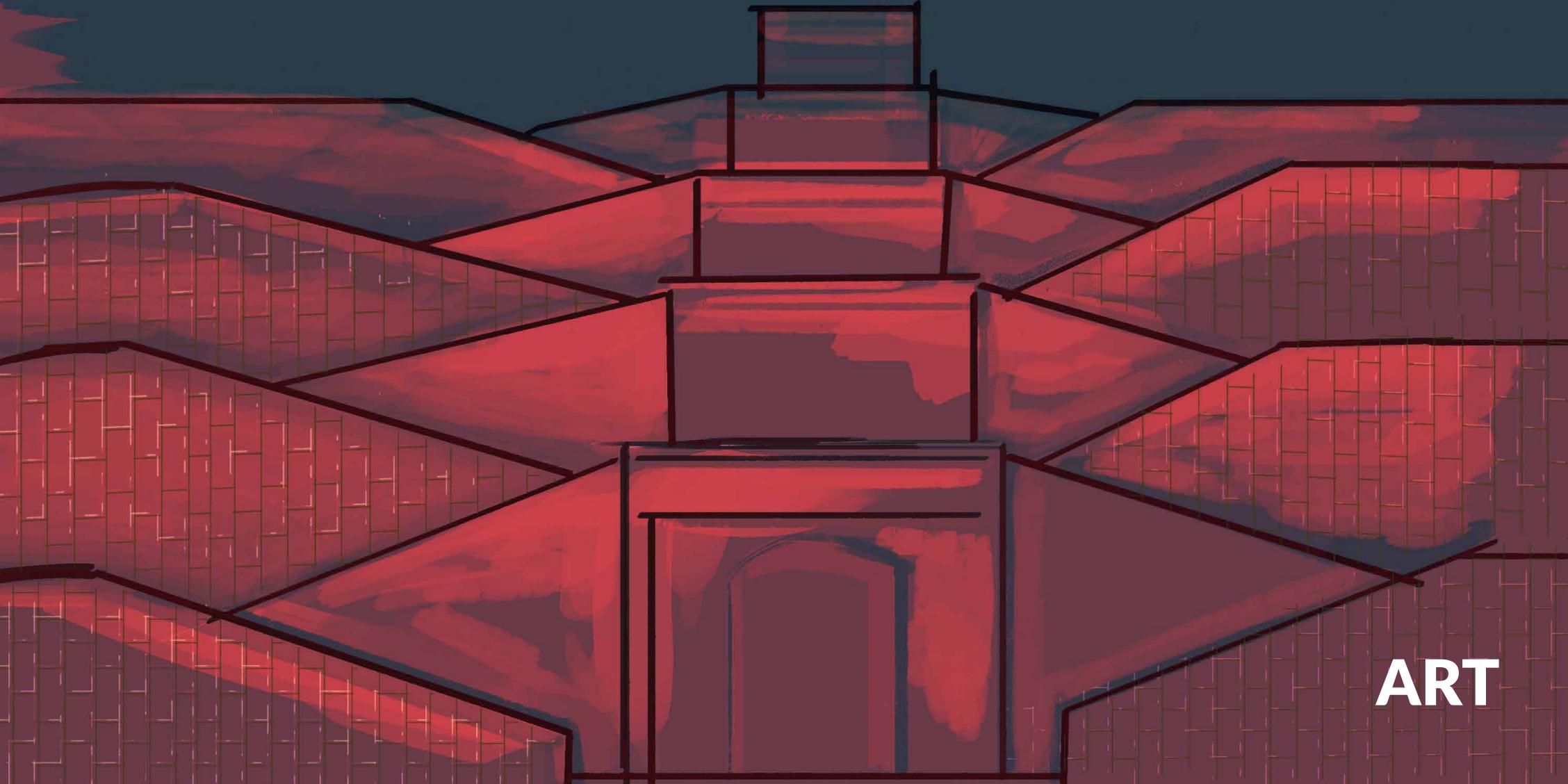
Commonly described as the primary centre for national art and tourism, and home to several prolific Nigerian art pieces -housed in an onsite gallery-, the National Theatre may be considered an encapsulation of modern architecture as it relates to art in Nigeria today . It was constructed in 1976 by the Bulgarian Construction Company Technoexportsroy, in preparation for the 1977 Festival of Arts and Culture, and its design is a replica of the Palace of Culture and Sports in Varna, Bulgaria, shown in figure 1 and 2.

Very little historical style including traditional stylearchitecture, is reflected in modern contemporary architecture in Nigeria. Contemporary Nigerian architecture consists of a concussion of foreign/ western style buildings/structures. An exploration of simple geometric forms with exposed parapet windows, characterised by the use of concrete external walls reinforced by concrete, steel, or aluminium sun shading devices; modern Nigerian architecture is one of the direct reverberations of colonialism. A collage of a framework left by colonial masters, and an older generation of architects who were educated abroad on modernist ideas of architecture, these concussions do not adequately address the social, climatic, cultural and geographic needs of Nigeria or Nigerians, neither do they integrate, reflect or take into consideration Nigerian art in any of its iterations; from ancient Nok style sculpting and Ibo ukwu style carvings.

This paper argues that there are a number of elements of traditional Nigerian architecture and art styles particularly carved wood and sculpting- that can be studied and applied to improve modern architecture in Nigeria; which may effectuate the development of an architectural identity. This paper focuses on the appropriation of traditional Nigerian Architecture. It is important to note that Nigerian architecture varies vastly across tribes, Nigeria has a diverse culture, with over 400 ethnic groups, that are far from homogenous in both socio-cultural structure and ideological orientation. In terms of art style, this project focuses primarily on the integration of carvings and sculpture as representation of ancient and modern art in Nigeria.

<sup>2)</sup> Trust. (2018, April 4). An Inside Look at The National Theatre. Retrieved February 3, 2020, from https://hotels.ng/guides/the-national-theatre-lagos/

<sup>3)</sup> Prucnal-Ogunsote, B. (n.d.). Classification of Nigerian Architecture. AARCHES, 1(6), 48–56. Retrieved from https://desmo.biz/images/Architecture.pdf



#### **Context**

This chapter aims to highlight the evolution of art and architecture in Nigeria -with reference to the regional variation in art forms, characteristics and legacies-, and to posit arguments for considering traditional architecture and art.

"Contemporary Nigerian art refers to art works produced in the last ten decades by indigenous Nigerian artists who have been exposed to western oriented art programmes either directly through attendance of universities..... or indirectly through self-education. It is not institutionally controlled or guided, but that it is intensely a personal expression and removed from the strictures of traditional ethnic usage and functions"<sup>4</sup>

4) Irivwieri, G. O. (2016). The Concept and Evolution of Art Styles/ Schools in Contemporary Nigerian Art. American International Journal of Contemporary Research, Vol. 6(No. 5), 130–135. Retrieved from http://www.aijcrnet.com/journals/Vol\_6\_No\_5\_October\_2016/15.pdf

Art work on page 14 (right page) by David Adamu(Altedaves) titled "Sarauniya"



fig. 3



figure 3) Northern Style Architecture, Northern Nigeria figure 4) Ancient kano Wall, Kano Nigeria.

figure 5) Tubali style Arhitecture

figure 6) Northern Style Architecture, Northern Nigeria figure 7) Northern architecture murals.



fig. 5



fig. 6



ig. 7

#### The Evolution of Nigerian Architecture

The evolution of Nigeria's built environment is influenced by forces of colonialism, religion -specifically, the spread of Christianity from the Atlantic Ocean to the backwoods, and the spread of Islam from the Sahara Desert Southwards- the Trans-Saharan trade, and the return of freed of slaves from Brazil through Serra Leone. While Southern Nigeria is influenced mostly by Afro Brazilian and colonial architecture, Northern Nigeria embraced Islamic elements brought by the Arab traders from North Africa which eventually metamorphosed into Hausa traditional architecture. Nationwide, traditional architecture manifests in the application of regional building materials and construction technology, both of which have rich lessons that may be introduced in modern or contemporary structures.

#### 15th - 17th Century

Northern Nigeria's architecture featured; ribbed vaults, domes, sculpted and painted external murals, and spatial arrangements directly influenced by Islamic religious beliefs. Buildings comprised of individual egg-shaped units of earth plastered adobe (locally called tubali), presented in a monolithic form. A typical house was composed of rectilinear and circular spatial units, a border wall; formed by wall segments linked together, and roofing; a linking of shallow domes and vaults.

5) Mai, M. M., & Khalil, S. I. (2019). Sources of Nigerian Architecture in the 21st Century. Journal of Civil Engineering and Architecture, 13(6). doi: 10.17265/1934-7359/2019.06.006



fig. 8



fig. 9

figure 8) Igbo style Architecture figure 9) Yoruba Style Architecture. figure 10) Tubali style Arhitecture

figure 11) Igbo Community village Square, Eastern, Nigeria figure 12) Igbo Roof Design, Eastern Nigeria



fig. 10



fig. 11



**Southwestern Nigeria** was characterised by large urban social groupings. These "public buildings", including, the king's palace -also regarded as the court house- and the market square, generally dominated the central areas of old cities. Residential houses were built in large compounds with each room opening into a common "courtyard" with large verandas - an important component for environmental control and sociocultural exchanges.

**Southeastern Nigeria** had a similar community arrangement to the southwest, as well similarities in building materials and techniques. The main difference lay in the fact that buildings in the southeast were ranked in importance based on their respective distances to the community/compound head's residence. It is this not improbable to suggest that traditional Nigerian architecture is characterised by adobe walls, vaults, domes, courtyards, verandas and large overhanging roofs.







fig. 14

figure 13) Colonial Era Relics, Lagos Nigeria figure 14) Colonial Era Relics, Lagos Nigeria

figure 15) "Aguda" Yoruba-Brazilian home, Lagos Nigeria figure 16) Afro Brazilian style Architecture, ILorin, Nigeria



fig. 15



#### 18th - 19th Century

Colonial rule pervades the 18th and 19th century in Nigerian, fostering an era of "civilization", and the introduction, and proliferation of public buildings such as; schools and learning institutions, vocational spaces, banks, hospitals, courthouses and residences. Nigerian architecture evolved in this era, to a marriage between local materials, and expressions and elements typically ascribed to British architecture of that time, including; large overhangs and verandas, and relatively grandiose places of worship. Building constructions comprised generally of timber framed masonry structures elevated significantly above ground, covered with corrugated iron sheets and large shaded windows.

The abolishment of the slave trade was another significantly defining moment for architecture in this period. It led to the return/migration of many displaced Africans to Nigeria, and with them the architectural influences and styles of their former countries of captivity. Of these people, most numerous and thus most impactful, were the Afro Brazilians. Storey houses, and churches with strong gothic elements -typical of Afro Brazilian architecture were introduced. These buildings were characterised by; sand-crete blocks, heavy ornamental pillar embellishments and moulded balustrades. A good number of these structures still exist in Lagos, and a few relatively old Southern cities such as Calabar and Ibadan, and in Kano, and Kaduna of Northern Nigeria.

5) Mai, M. M., & Khalil, S. I. (2019). Sources of Nigerian Architecture in the 21st Century. Journal of Civil Engineering and Architecture, 13(6). doi: 10.17265/1934-7359/2019.06.006



fig. 17



fig. 18

figure 17) Obafemi Awolowo University, Osun, Nigeria figure 18) International Architecture style influence, Nigeria

figure 19) Obafemi Awolowo University, Osun, Nigeria figure 20) Obafemi Awolowo University, Osun, Nigeria



fig. 19



fig. 20

Architecture in Northern Nigeria went through a peculiar evolution during this era. Structures in the region are characterised by Islamic elements such as geometric designs, proportion and aesthetics. Popular in that era was the dome shaped mud roof, reflective of a distinctive façade, evocative of Northern African cities. As opposed to giving way to British structures, buildings were constructed with imported building materials. Rather than affect the form of building, the structures became more decorative as old mud walls gave way to; elaborate moulded designs -executed with cement-, painted walls and figurative patterns.

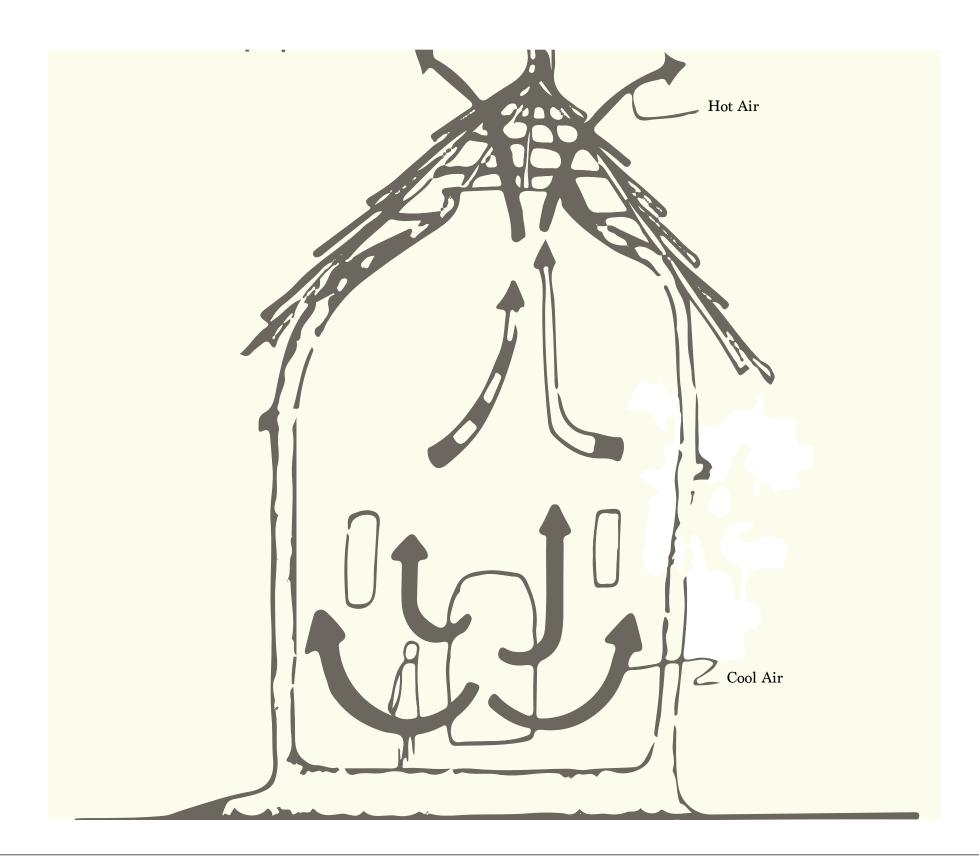
#### **Post Colonialism**

The culmination of colonial rule left indigenous architecture in Nigeria; a mishmash of foreign influences superimposed on elements deeply influenced by foreign cultures and religion.

Economic growth and development saw foreign trained Nigerian architects, often in collaboration with their British contemporaries attempting to design buildings suitable for regional climate and conditions. Characterised by simple geometric forms, concrete external walls, with, concrete, steel or aluminium sun shading devices; there was little or no integration of traditional architecture.

Architecture historians posit that this phenomenon was inevitable as these architects were trained in the "modern world".<sup>6</sup>

6) Where Is The "Indigenous Nigerian Architecture"? (2011). Qualitheia Capital, 17, 1-2. Retrieved from https://nairametrics.com/wp-content/uploads/2013/02/where-is-th-indigenous-Nigarchiecture.pdf



Section through Hausa Kundandami Source: https://www.legit.ng/1152667-history-hausa-traditional-architecture.html

## Post- Modern Architecture in Nigeria, the way forward; Arguments for Introducing Traditional Architecture and art

As established in previous sections, the modern built environment in Nigerian presents a bizarre amalgamation of indiscriminate transplants of foreign concepts, and an abandonment of traditional architecture. As such, these structures do not adequately address the physical and cultural residential needs of the average Nigerian. Further to this, architectural structures tell a story and reflect the history, evolution and culture of the people and community where they exist. Consequently, Structures, such as the National theatre -described in the first section- which are often identified, restored and preserved for their significant cultural importance, do not adequately reflect the historical or cultural elements of traditional Nigeria.

#### Taking Advantage of Natural and Readily Available Local Resources

Although it may be argued, and rightly so, that colonialism is a significant aspect of Nigerian history, shaping the nation culturally, socially and economically, and so European influences on Nigerian architecture cannot be overlooked or underestimated; the concern is that traditional structures and by extension traditional architecture is being overlooked in contemporary Nigerian architecture.

Even with the establishment of local architecture schools in Nigeria, the focus on traditional architecture in the curriculum is paltry. This is not for a lack of availability of skill, expertise or even knowledge of traditional architecture, there is more than enough local knowledge and expertise of traditional Nigerian art, history and architecture to direct attention towards; preserving history and culture through preserving built structures, and integrating traditional elements in contemporary structures.

Orthodox architectural schools of thought posit architecture as a social activity, which effectuates cultural legacies; as such, it is not improbable to suggest that the identification and preservation of remnants of indigenous architecture is a plausible first step. As a case study, the Government of Mali, another West African country, initiated policies that encourage and directed architects, artists and the academic community, towards research in traditional and historical architecture leading to the adoption of old techniques, elements and styles, currently being incorporated into today's modern styles and forms. Nigeria has a rich history of stylised symbolic structures; preservation of these structures is the first step in recognising and acknowledging traditional architecture.

<sup>7)</sup> Chikwendu, G. (1987). The Traditional Architecture of the Igbo Nigerian, Retrieved from: https://gala.gre.ac.uk/id/eprint/8750/6/Godwin%20Chikwendu%20Nsude%201987.pdf

<sup>8)</sup> IBID

<sup>9)</sup> IBID

#### Creatively Shaping the Nigerian Architectural Identity

Considering the biodiversity and multicultural nature of Nigeria could induce architects to develop structures that portray and emphasise the nations uniqueness, consequently creating an architectural identity. The oxford dictionary describes creativity as the use of skill and imagination to make something new or to produce art. Generally, creativity is induced in bursts of illumination whilst solving problems. An architect looking to integrate traditional elements with the modern structural environment, will regularly solve problems, and define new enquiries relevant to the project being executed or designed, these concepts may initially be considered novel, but may eventually become accepted, defining the architectural identity of the community.<sup>10</sup>

#### **Climate Considerations**

Subjective arguments aside, the global trend towards more sustainable habitats, with ecological and climatic considerations makes a case for integrating traditional architecture with contemporary Nigerian architecture.

Akinloye et., al carried out an analysis of the structures in Southwestern Nigeria in relation to the climatic considerations of each region.

The study determined the climate variability within Southwestern Nigeria with an aim to propose appropriate building design solutions in six selected towns. The study established there are indeed climatic differences between the various towns as a result of relative distances from the ocean; as such, the Southwestern region of Nigeria cannot be characterised as having a homogenous warm humid climate. Further to this, the study showed that while there are regional variations in terms of spacing, materials used to construct walls, and provisions for rain protection, there is a general homogeneity in design solutions with respect to orientation layout, air movement, size of openings and roofing materials. It is thus not improbable to suggest that; peculiarities of regional climatic variables a key consideration during the design of buildings, is a step neglected in contemporary Nigerian architecture. 11

Prucnal - Ogunsote studied modern structures in Akure, a Southwestern state situated in the Coastal Design Zone according to architectural design recommendations. In this design zone, it is advised that;

- structures maintain East-West orientation with open spacing to maximise breeze penetration, rooms be single banked with permanent vents;
- body height windward windows protected from rain and direct sunlight be located on North and South.
- walls are light with low heat capacity,
- roofs are light with reflective surface and cavity.
- no outdoor sleeping space is required, and protection from heavy rain is pertinent.

In summary, the region requires buildings with proper cross-ventilation and proper protection from extreme climatic conditions such high irradiation and heavy rain.

The study found the buildings in Akure to be only partially adapted to the climate. Structures are erected with mud bricks, asbestos ceiling tiles, roof overhangs, window fins and verandas and balconies additions. The study argues that the traditional courtyard design is a much better response to the climate than the vernacular architecture.

The traditional Yoruba houses (referred to as ile by the locals) were characterised by the following; a rectangular plan, a single entrance gate which provided access to a number of inner courtyards, and a series of separate apartments occupied by close families. These structures were built to protect its occupants against extreme weathers by utilising; steep roofs, deep overhangs, courtyards and thick adobe walls. however, it should be noted that this traditional architecture had its limitations due to the fact that materials used for construction were not durable enough during the extreme weather conditions. A fusion of modern solutions and materials, with the traditional architecture, should address these limitations.<sup>12</sup>

<sup>10)</sup> Chikwendu, G. (1987). The Traditional Architecture of the Igbo Nigerian, Retrieved from: https://gala.gre.ac.uk/id/eprint/8750/6/Godwin%20Chikwendu%20Nsude%201987.pdf

11) Prucnal-Ogunsote . B. (n.d.). Reflection of Culture and Climate in the Vernacular and Modern Architecture of Akure. Department of Architecture, Federal University of Technology, 1–8.

<sup>12)</sup> Prucnal-Ogunsote, B. (n.d.). Reflection of Culture and Climate in the Vernacular and Modern Architecture of Akure. Department of Architecture, Federal University of Technology, 1–8.





#### Location

The proposed project site is an Arts and Craft market located at the Central area of the Federal Capital Territory, Abuja, Nigeria. The capital of Nigeria, Abuja is one of the fastest a growing cities in Africa, it is situated right at the centre of Nigeria, above the intersection of the River Niger, and River Benue. Abuja was chosen specifically because of its central location and neutrality to the different tribes; the residents of Abuja consist of Nigerians from all over the country, with very few indigenes.

The project site referred to as the "Arts and Craft Village" is a unique market characterized by round huts -which serve as stalls and exhibition rooms for the artists- built with red clay and roofed with thatching, dirt paths, sculptures and floral gardens. The market exudes a wistful ambience and is an ode to Nigerias historical heritage. Tourists and art lovers visit the market to purchase art, learn about art, commission artisans, and most importantly experience artists creating art. My project proposes an expansion of the current establishment, along with addressing pertinent issues faced on site.









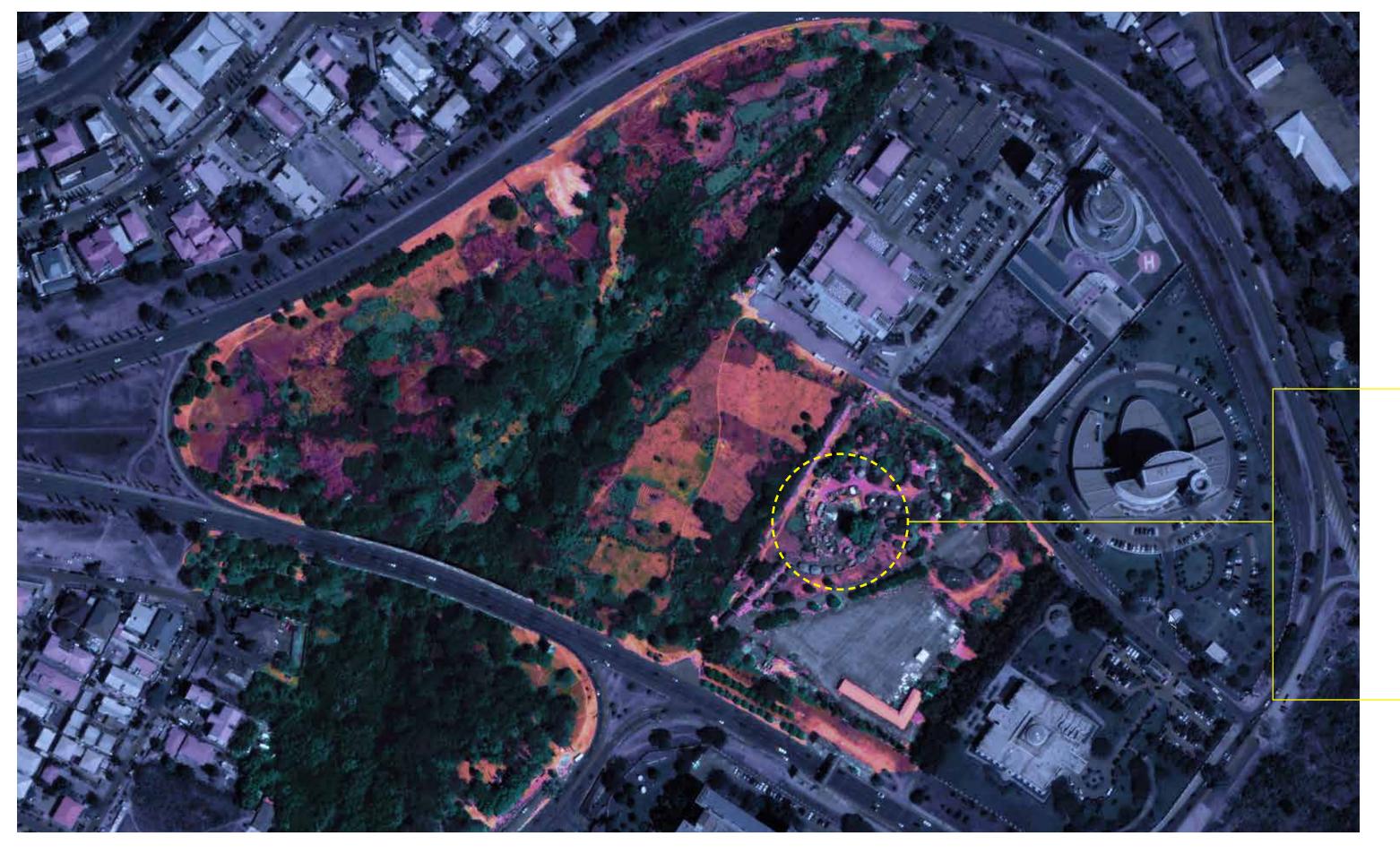


## **Site History**

Originally established in 2003 as a site to exhibit Arts and Crafts during the Commonwealth meeting for the various Heads of Government, Abuja arts and crafts village has since been adapted and managed as a tourist site by the National Council for Arts and Culture.

It is aptly named Arts and Crafts village because of its rustic setting of thatched houses and hut-like structures. Since its establishment, the site has seen an organic growth in its market base stemming from the traditional African structure and arrangement of the site; a bird eyes view scan of the vicinity around the market shows a stark juxtaposition between the market and the other establishments around, including a megamall, a national library and a 5 star hotel.

This project focuses on Illustrating the potential for merging selected elements of traditional Nigerian Architecture with modern principles of Architecture.



## **Existing Site**







## **Site Analysis, Circulation and Traffic Flow**

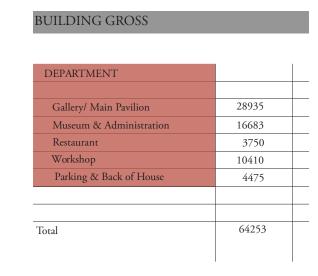


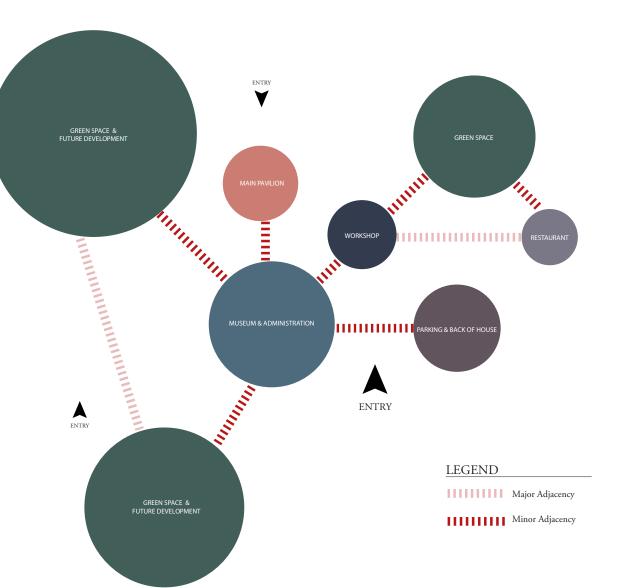
#### BUILDING INFORMATION

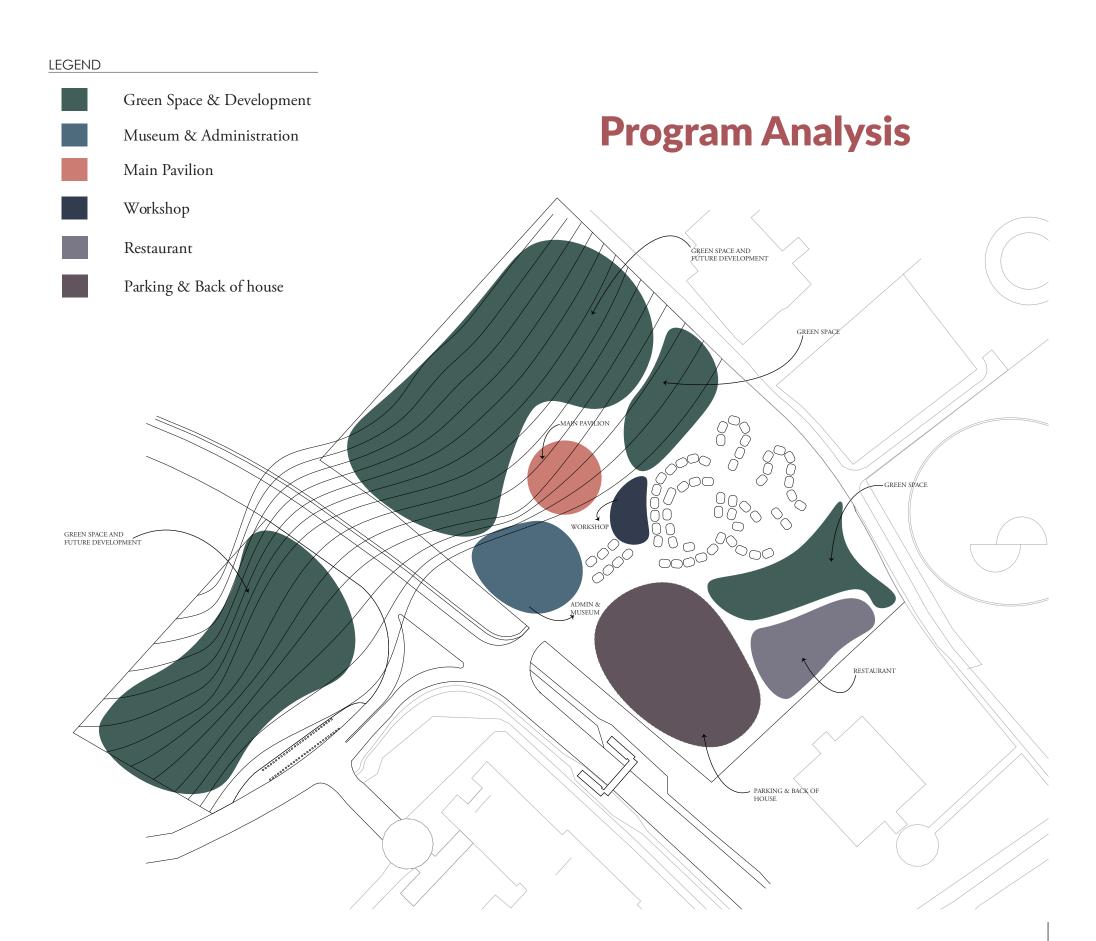
Total stalls SQF		2800
Remaining SQF		2800
Total SQF of Site	3	60,000

#### **FUNCTIONS**

SPACES ALLERIES	SQFQ	UANTITY	1. SQF
ALLEKIES Garden Gallery	3880	1	3880
Gallery Gallery	2200	4	8800
Art Hall	4250	2	8550
Restroom	480	varies	480
Transition Space	312	2	624
Art Storage	864	1	864
Total (DNSF)	23148		
x 1.25 for Circulation	28935		
IUSEUM & ADMINISTRATION			
Museum Shop	900	1	900
Multipurpose Hall	315	2	630
Restroom	480	varies	480
Transition Space	312	2	624
Art Storage	864	1	864
Auditorium	1980	1	1980
Entrance	2750	1	2750
Secondary Entrance	650	2	1300
General Storage	864	1	864
Offices	2304	1	2304
Gift Shop	650	1	650
Total (DNSF)	13346		
x 1.25 for Circulation	16683		
ESTAURANT			
General Storage	1800	1	1800
Offices	480	varies	480
Kitchen	300	2	600
Total (DNSF)	3000		
x 1.25 for Circulation	3750		
x 1.2) for Circulation			
VORKSHOPS			
Art Storage	864	1	864
Restroom	480	varies	480
Digital Workspace	1152	2	2306
Workshop	1560	2	4680
T 1/DMCP	8328		
Total (DNSF)			
x 1.25 for Circulation	10410		
ACK OF HOUSE Parking	2100	1	2100
Back of House Functions	2100	1	2100
Dack of Flouse Functions	1480	1	480
T-t-1 (DNICE)	3580		
Total (DNSF)			
x 1.25 for Circulation	4475		





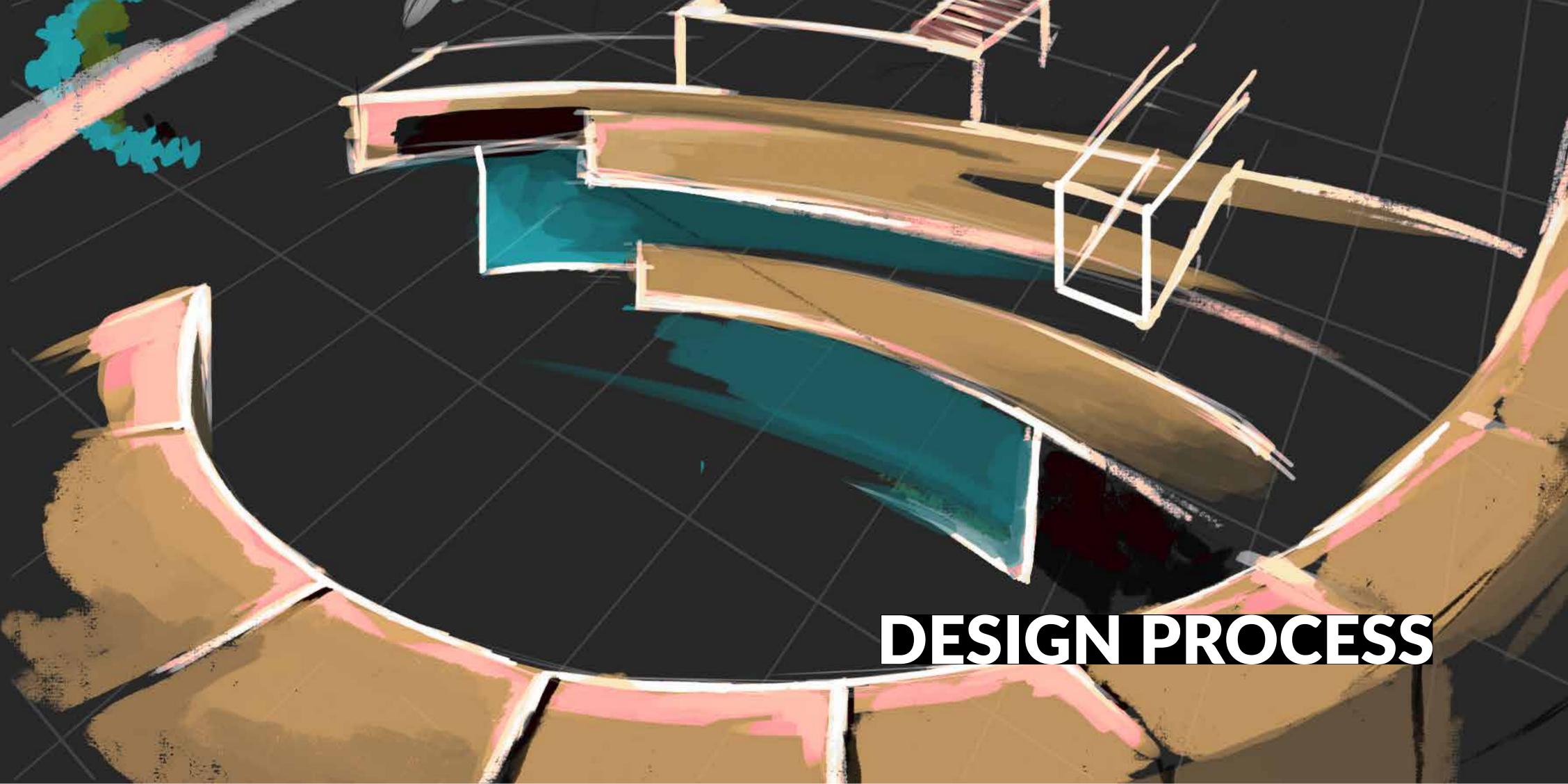


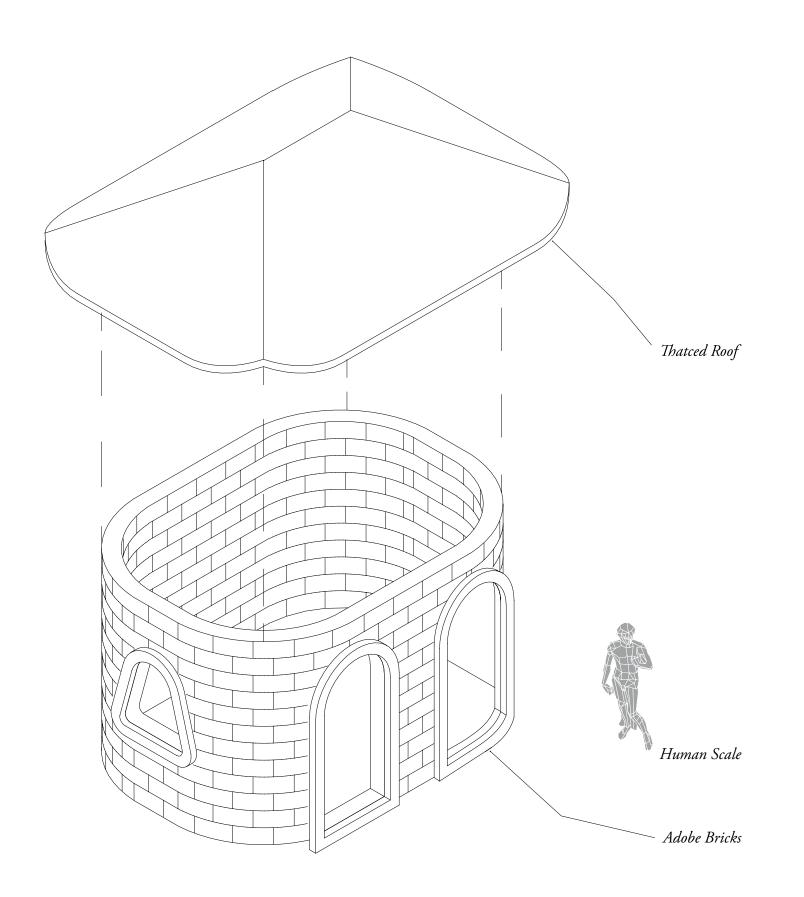


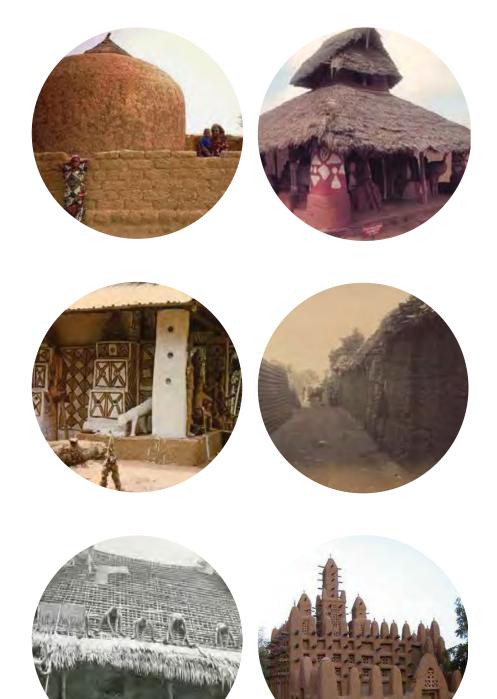
## **Master Plan**

- Transportation (taxi park)
  Sheraton Hotel
  Ladi Quali Center
  Jabi Arts and Craft Village
- Yar. Adua Museum

- PTFD Company Access Bank Silverbird Mall







# Materiality and Characteristic Study

In this section, the established characteristics of Traditional Nigerian Architectures, as well as the materiality, were considered and explored with the utilization of digital paintings.

Explorations from the abstraction of the themes were made to investigate what the study would mean in a modern architectural language

In the earlier section, the characteristics of Traditional Nigerian Architectures were established as;

Adobe walls, Vaults, Domes, Courtyards, Verandas, and Large Overhangs

## **Exploration Directory**

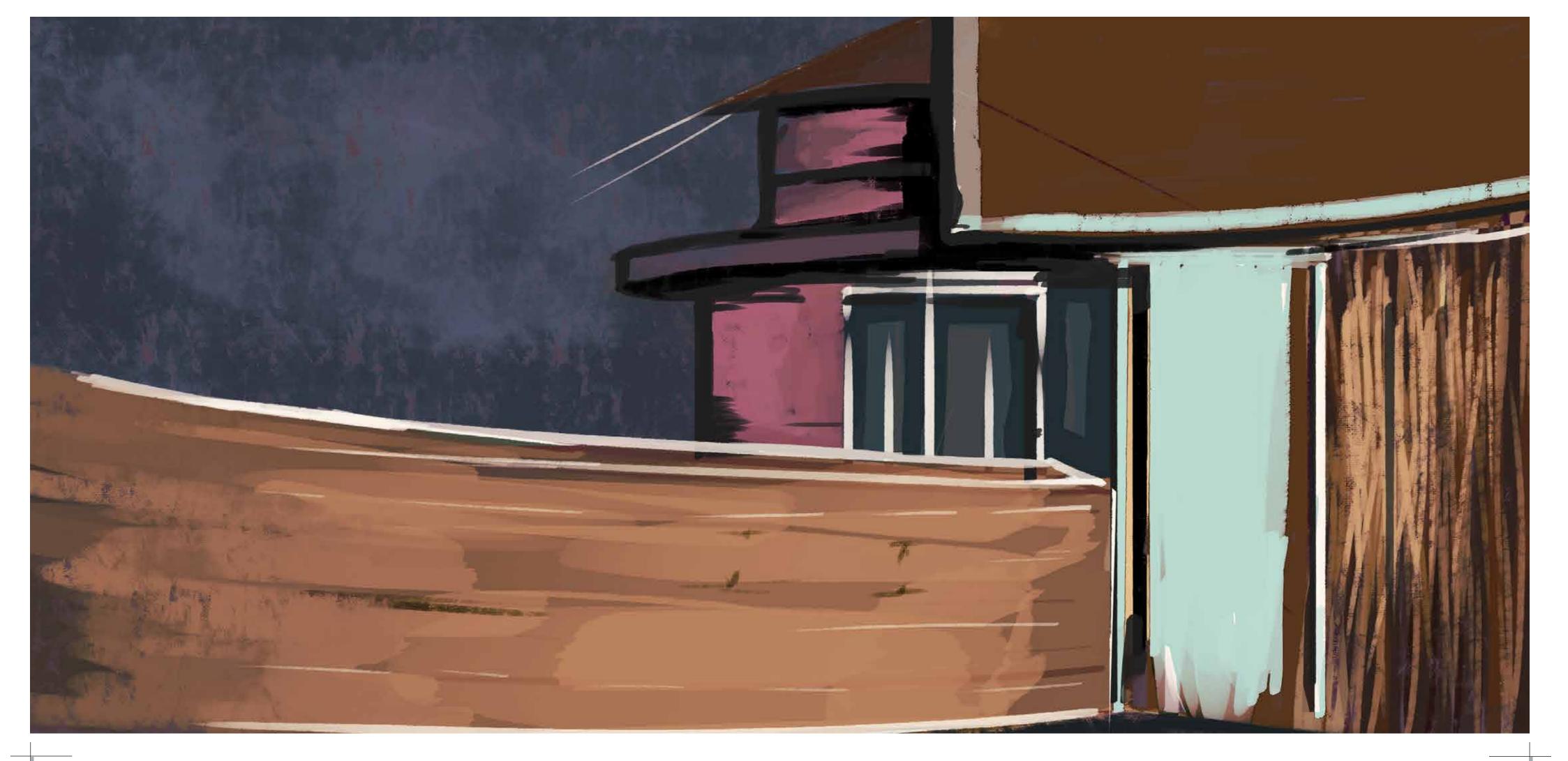
#### Exploration 1 - page 48 - 49

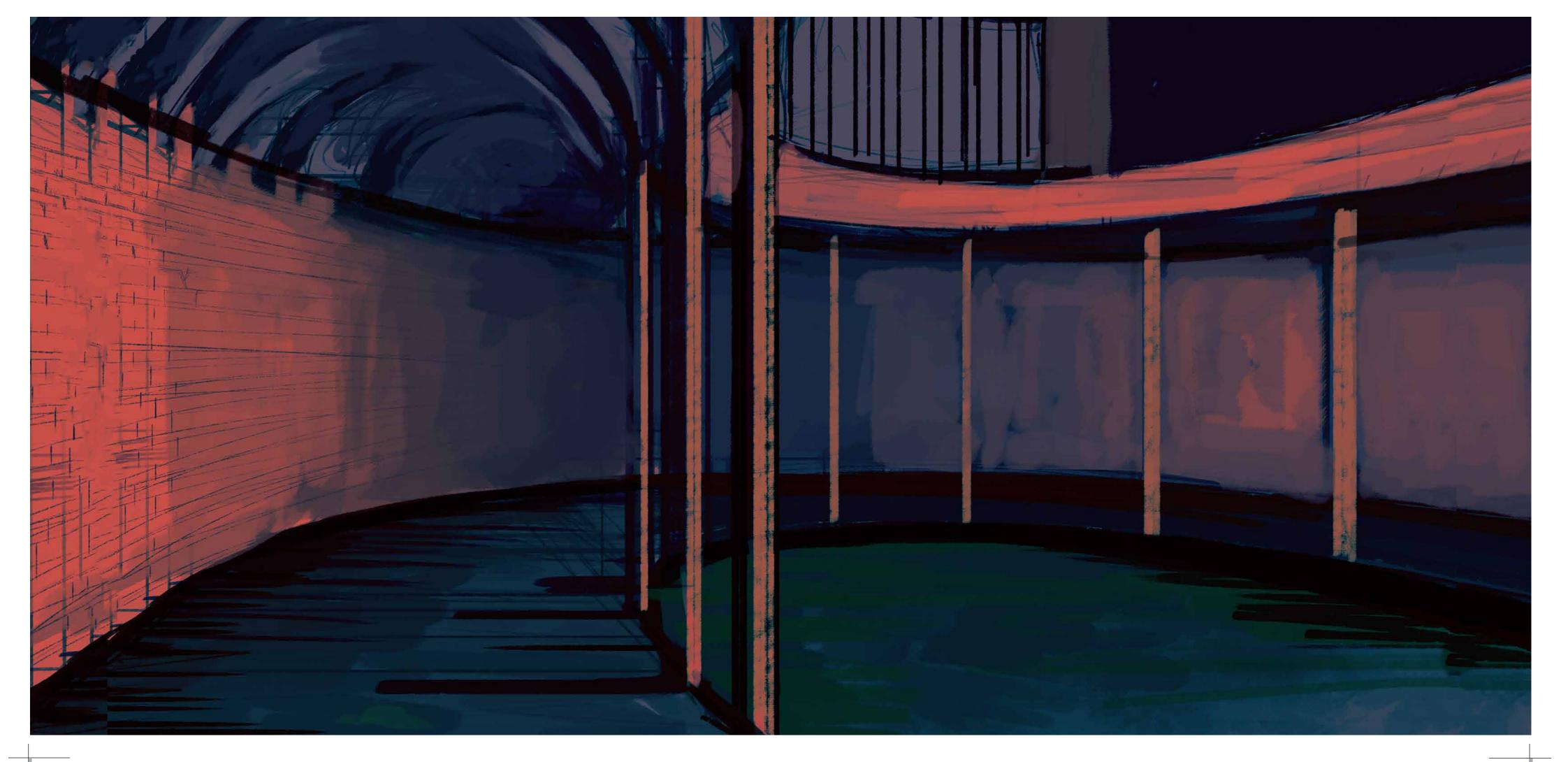
Exploration of materials - like wood, adobe bricks, glass- into a composition of abstract building facades

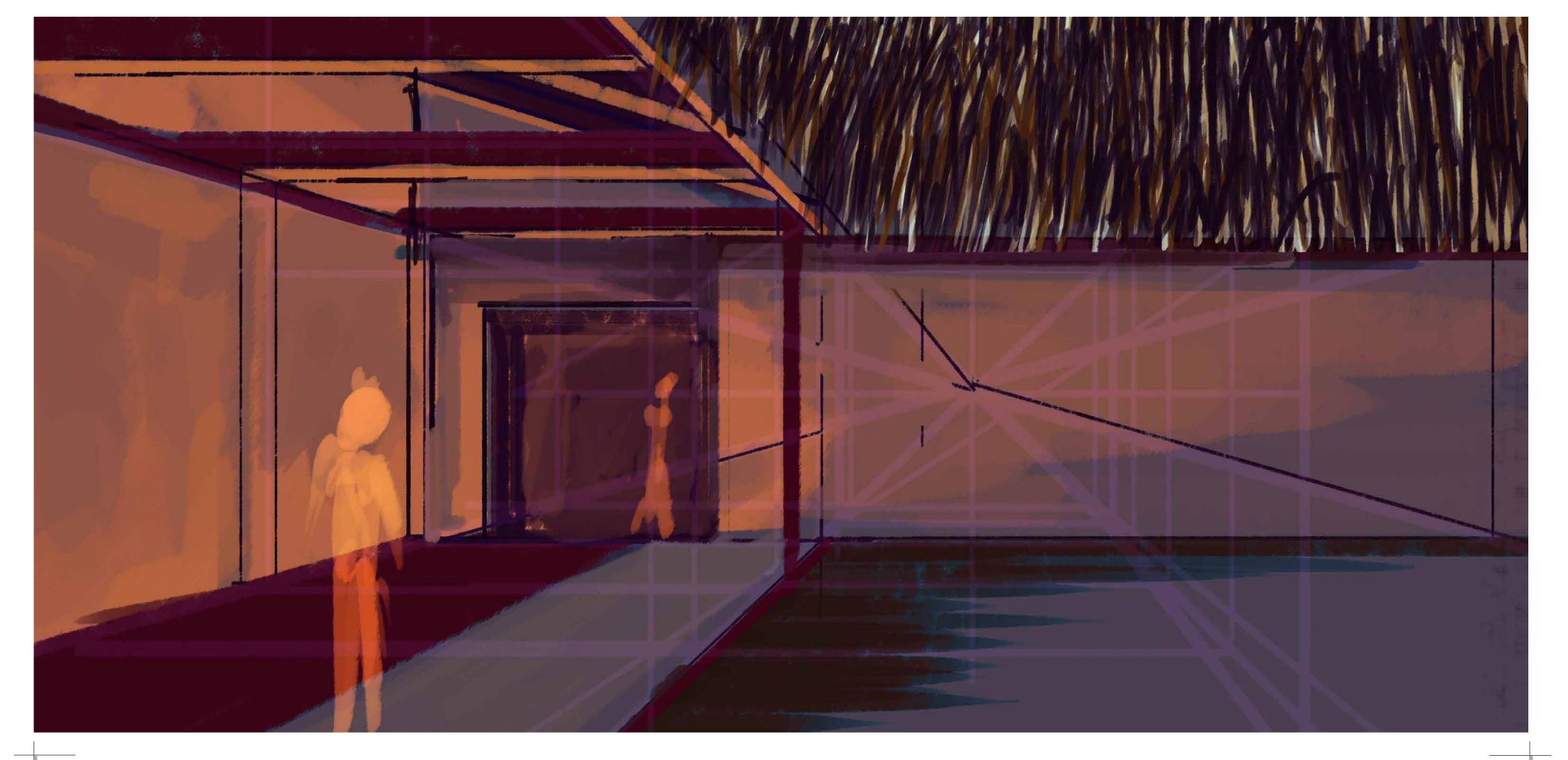
#### Exploration 2 - page 50 - 51

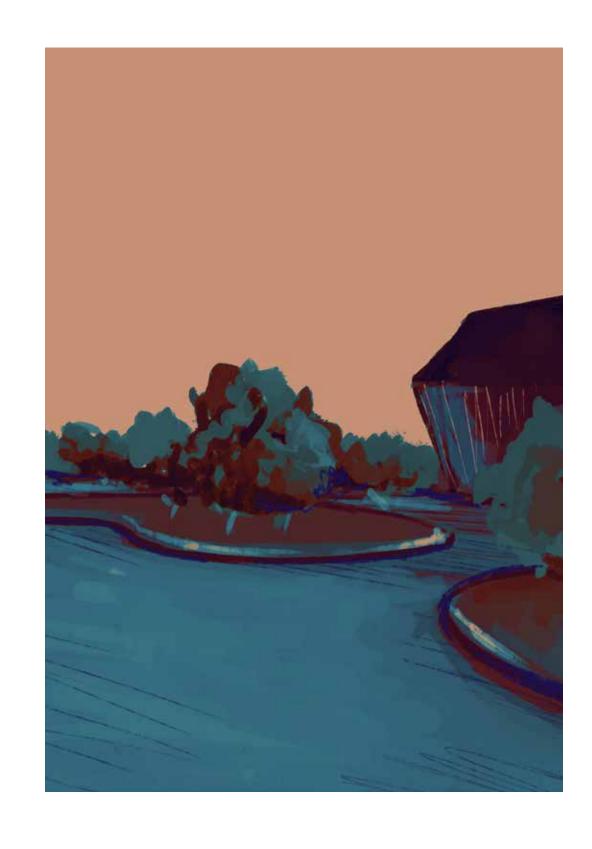
Exploration of characteristics like vaults, verandas, courtyards with materials like adobe walls, wood, brick, glass etc.

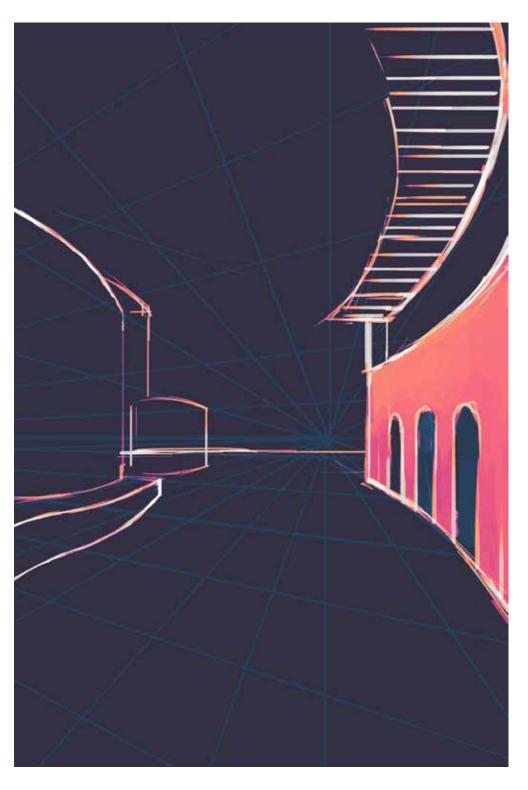
Exploration 3 - page 52 - 53
Exploration of characteristics like large overhang, verandas, courtyards with materials like adobe walls, wood, thatch









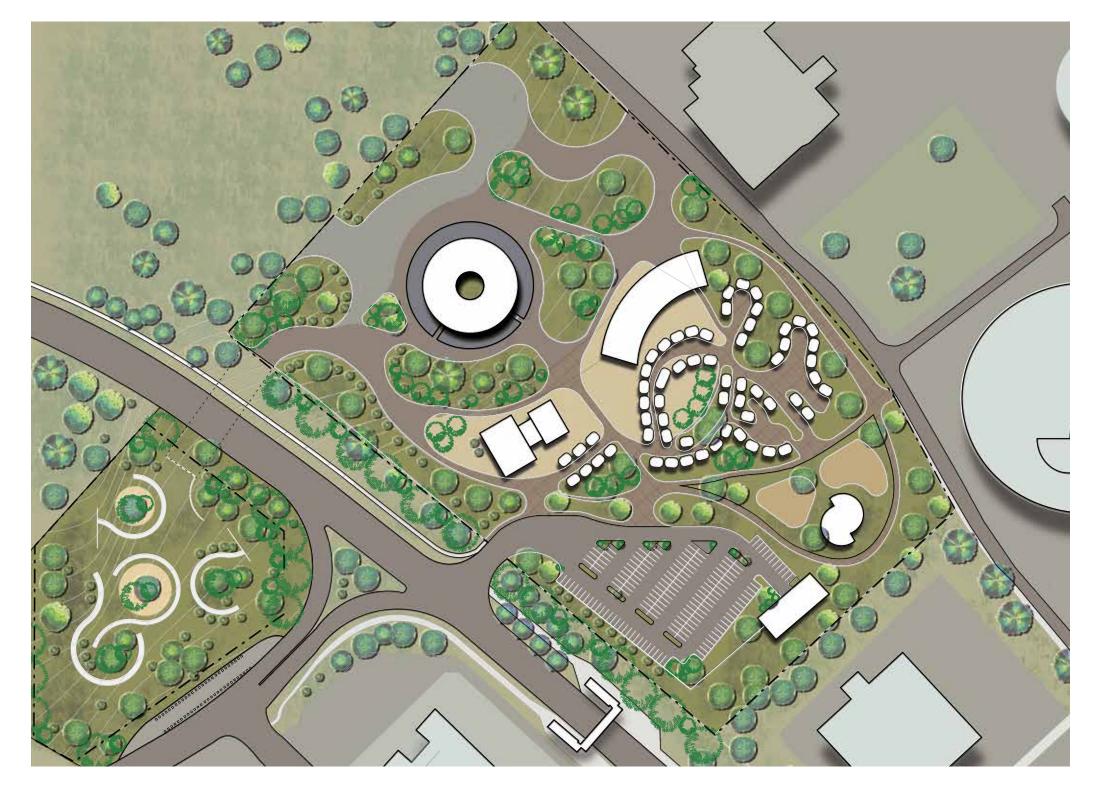


## **Other Explorations**

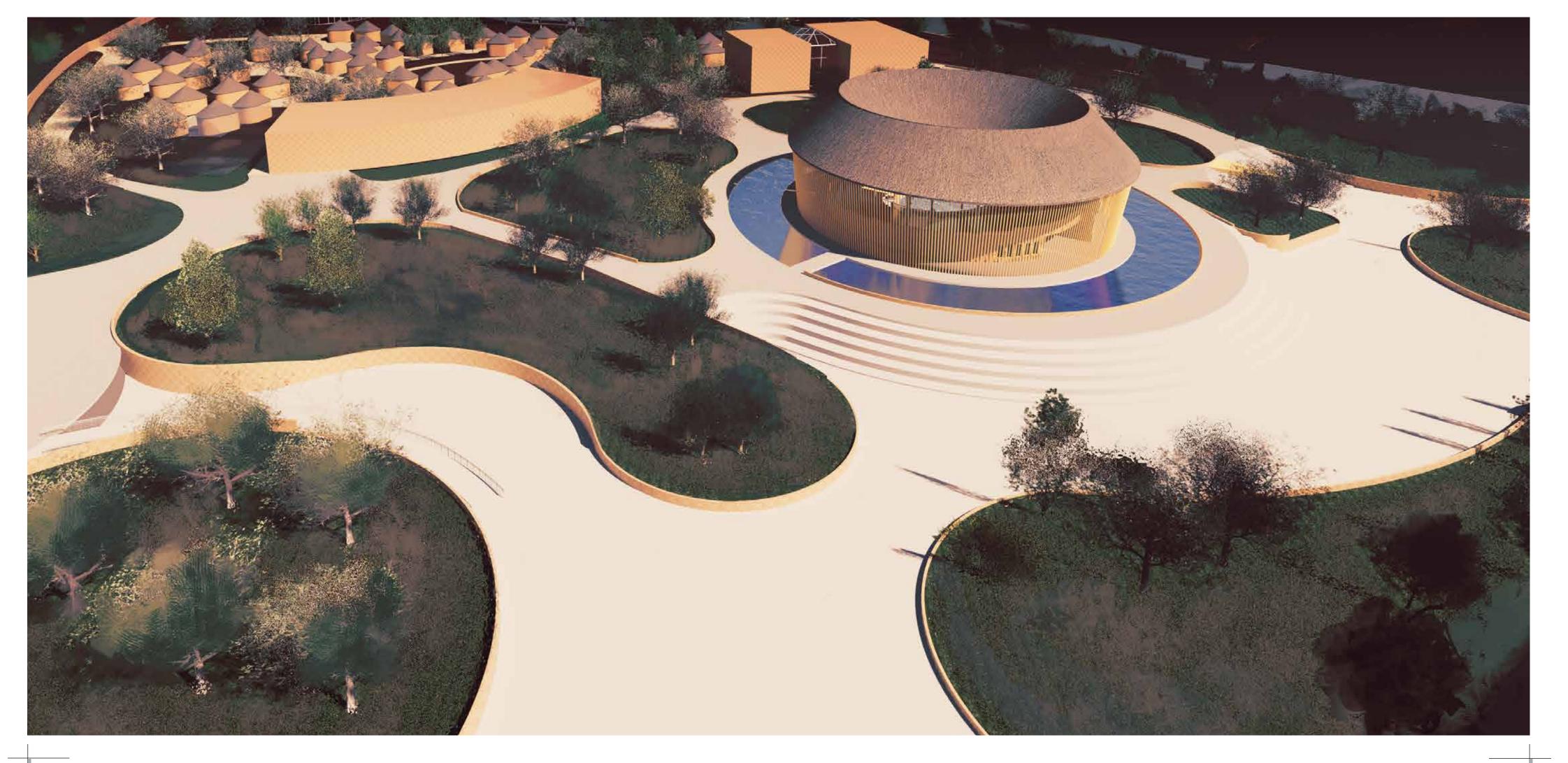




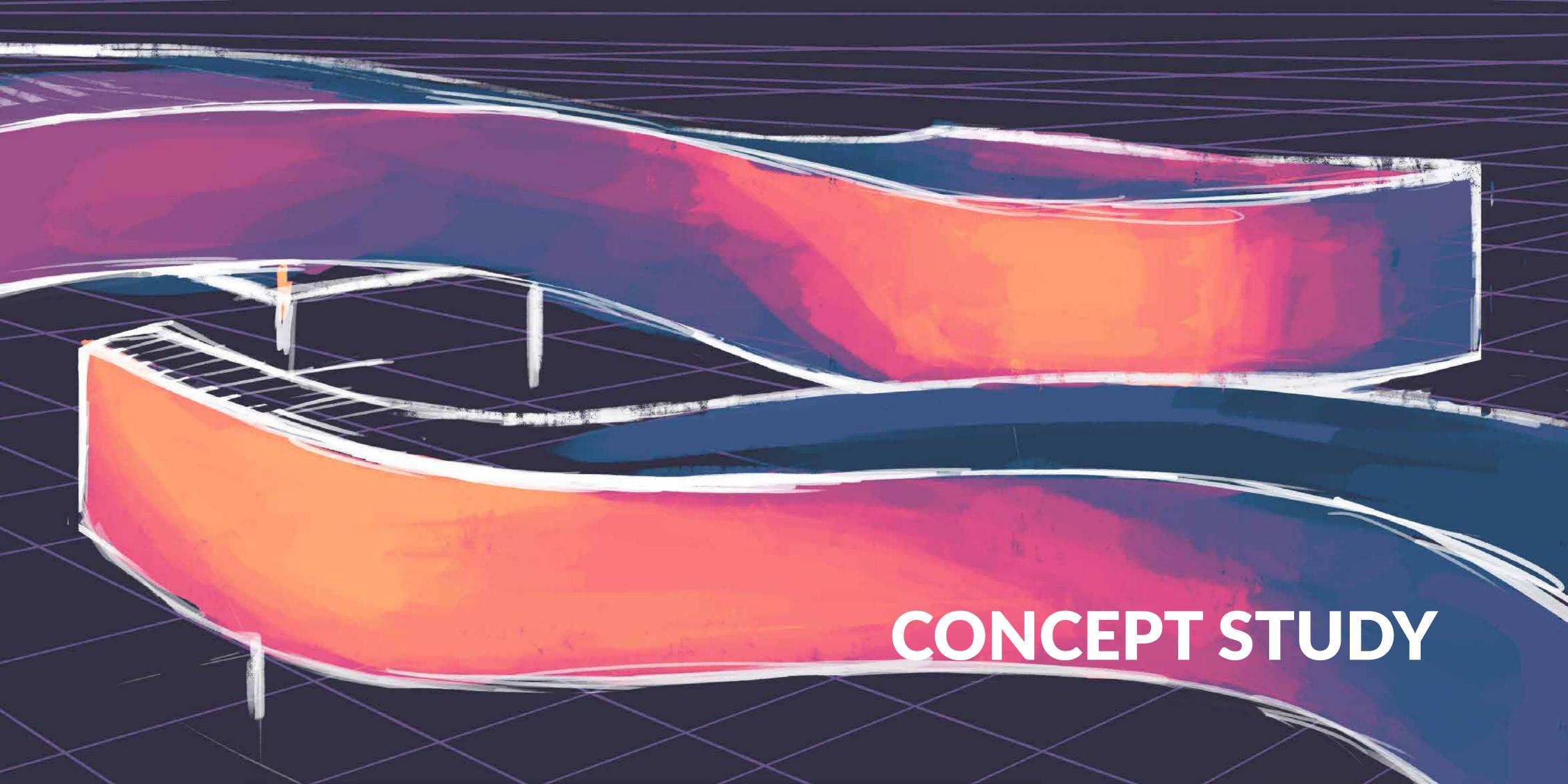
#### Site Plan











"The eye is the first circle; the horizon which it forms is the second; and throughout nature this primary figure is repeated without end. It is the highest emblem in the cipher of the world. St. Augustine described the nature of God as a circle whose centre was everywhere, and its circumference nowhere."

Ralph Waldo Emerson

### **Concept Study Directory**

Concept Study 1 - page 68 - 69

Exploring Circles, arranged in a vertical order, Spaced at certain Intervals, center to center

Concept Study 2 - page 70 - 71

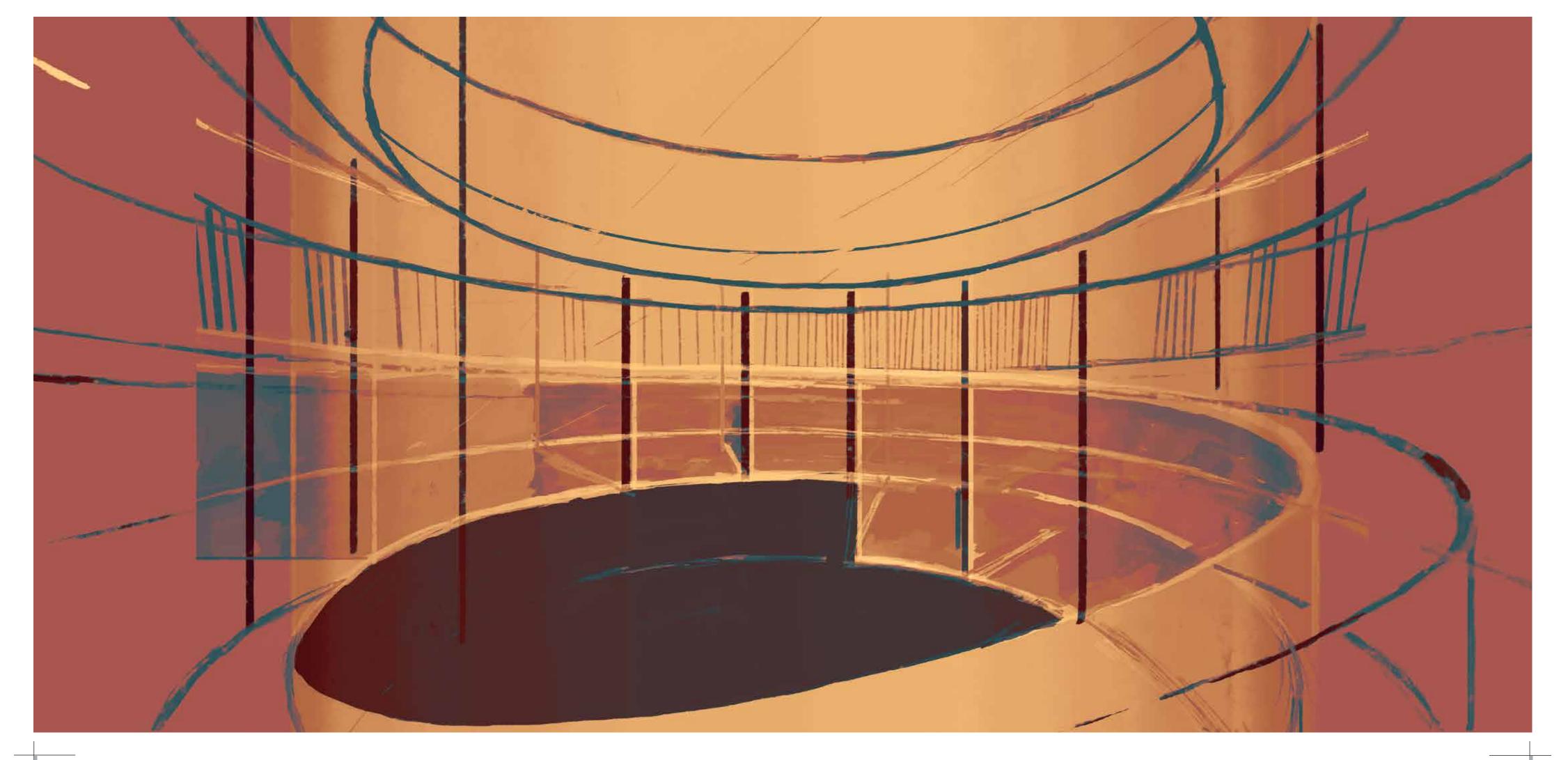
A continuation of Concept study 1, defining architectural language in the abstraction.

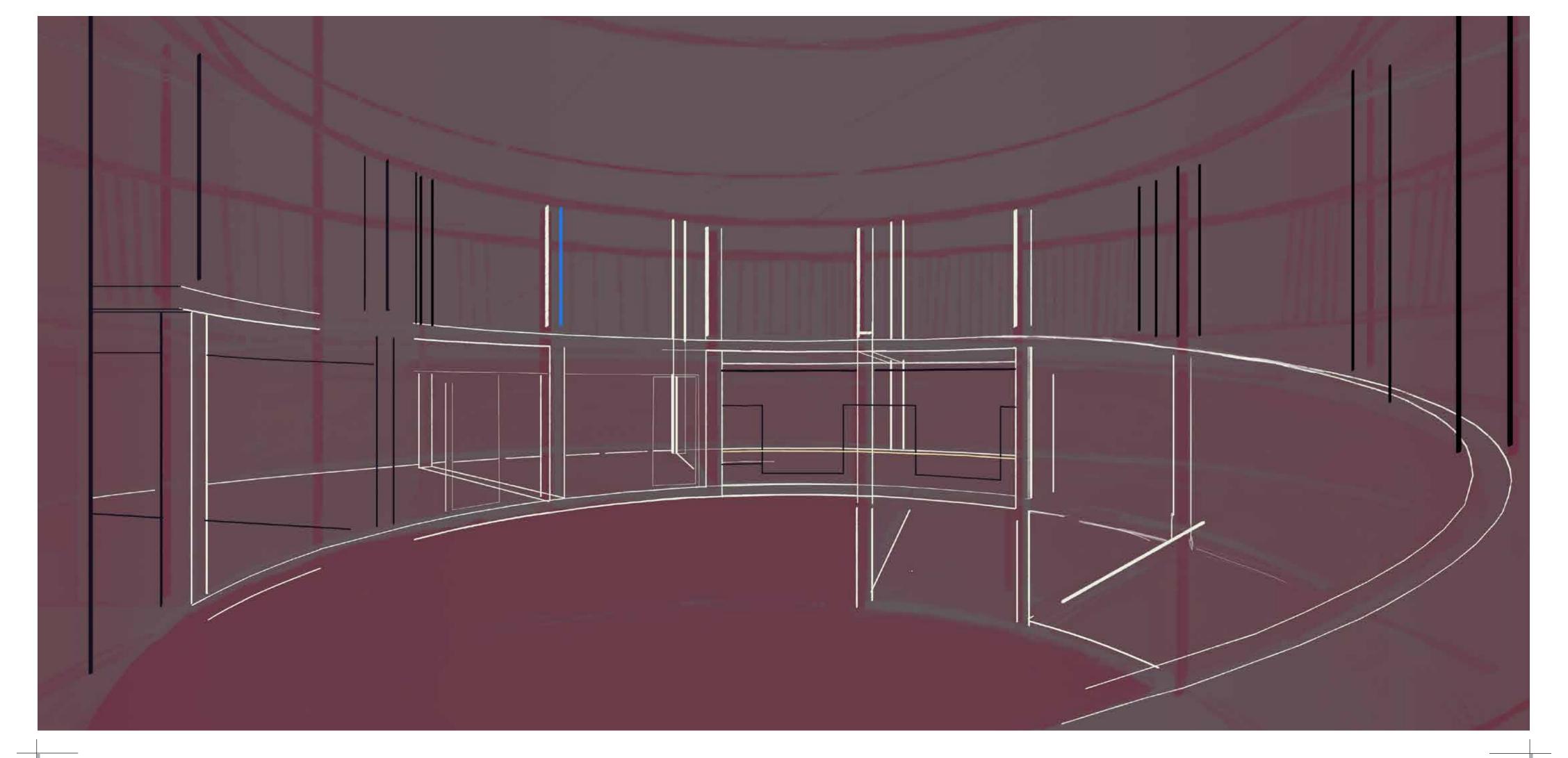
Concept Study 3 - page 72 - 73

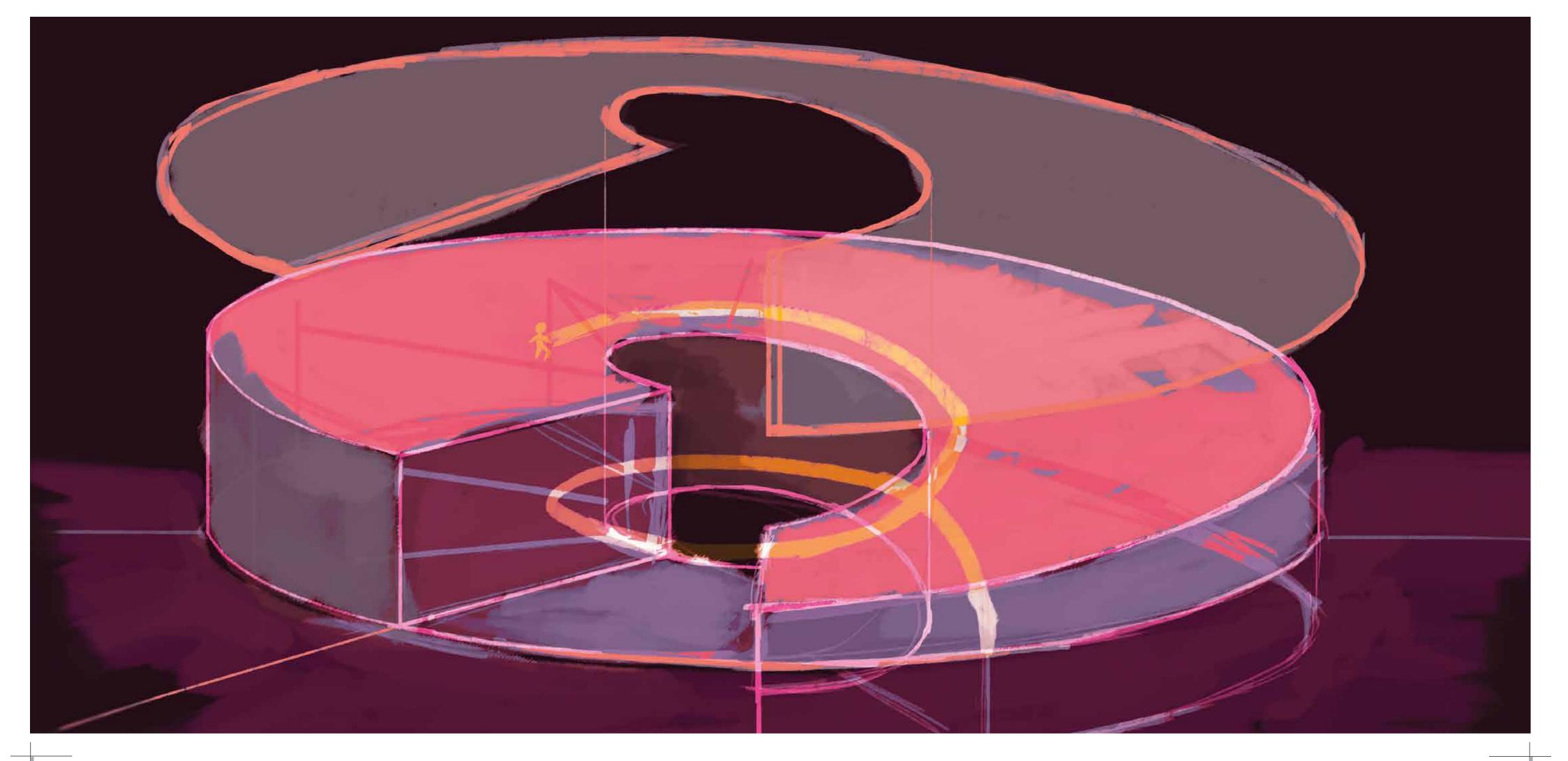
**Exploring how the Circle Concept translates into Form** 

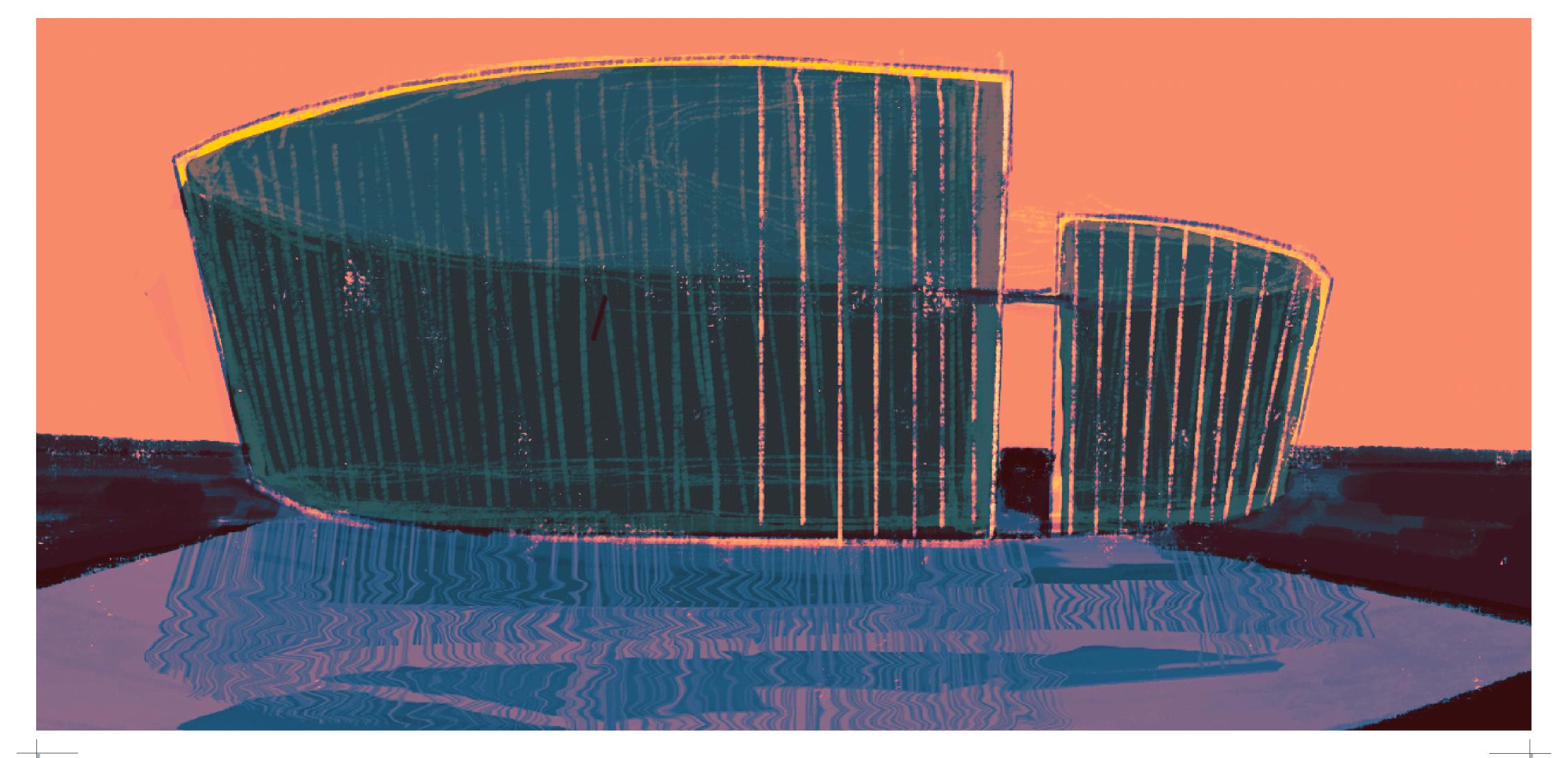
Concept Study 4 - page 74 - 75

**Explorating Reflection and Opacity** 



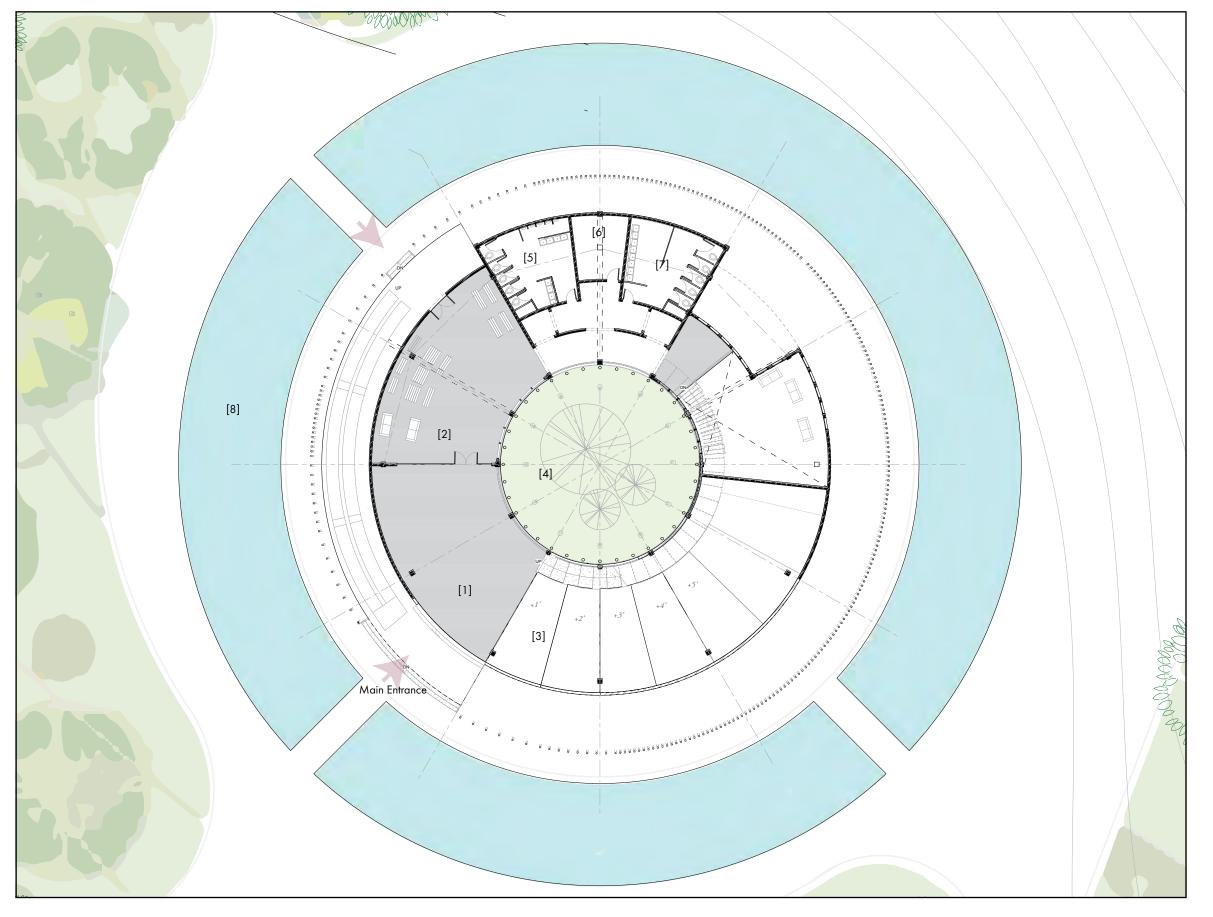






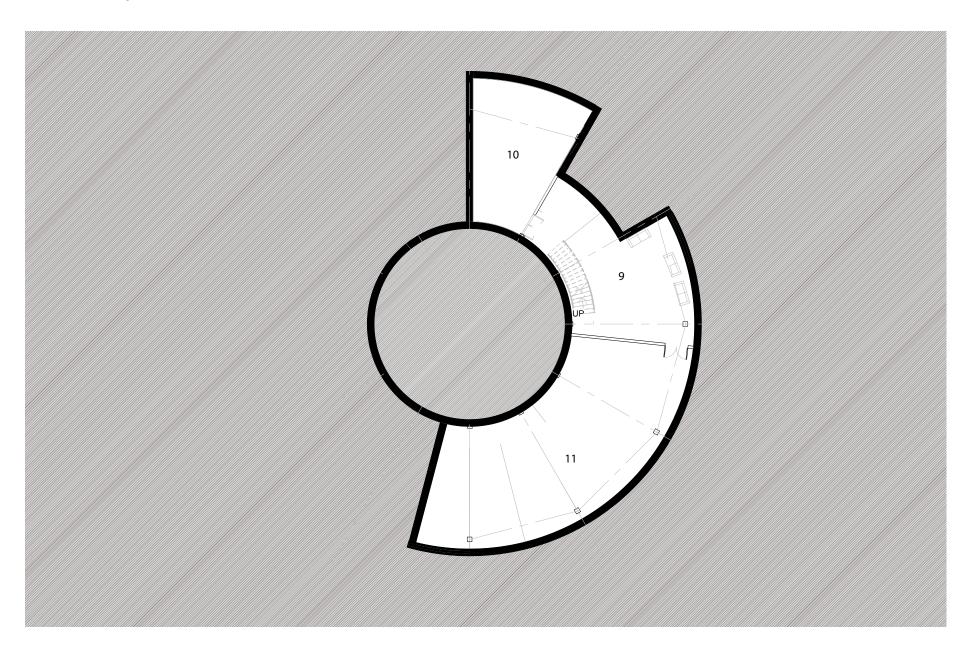


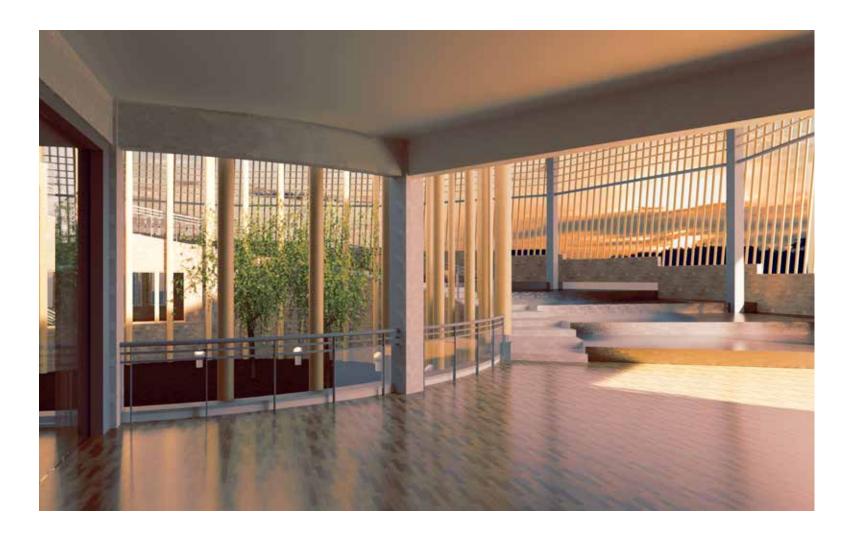
### Ground Floor Plan - scale 1: 200



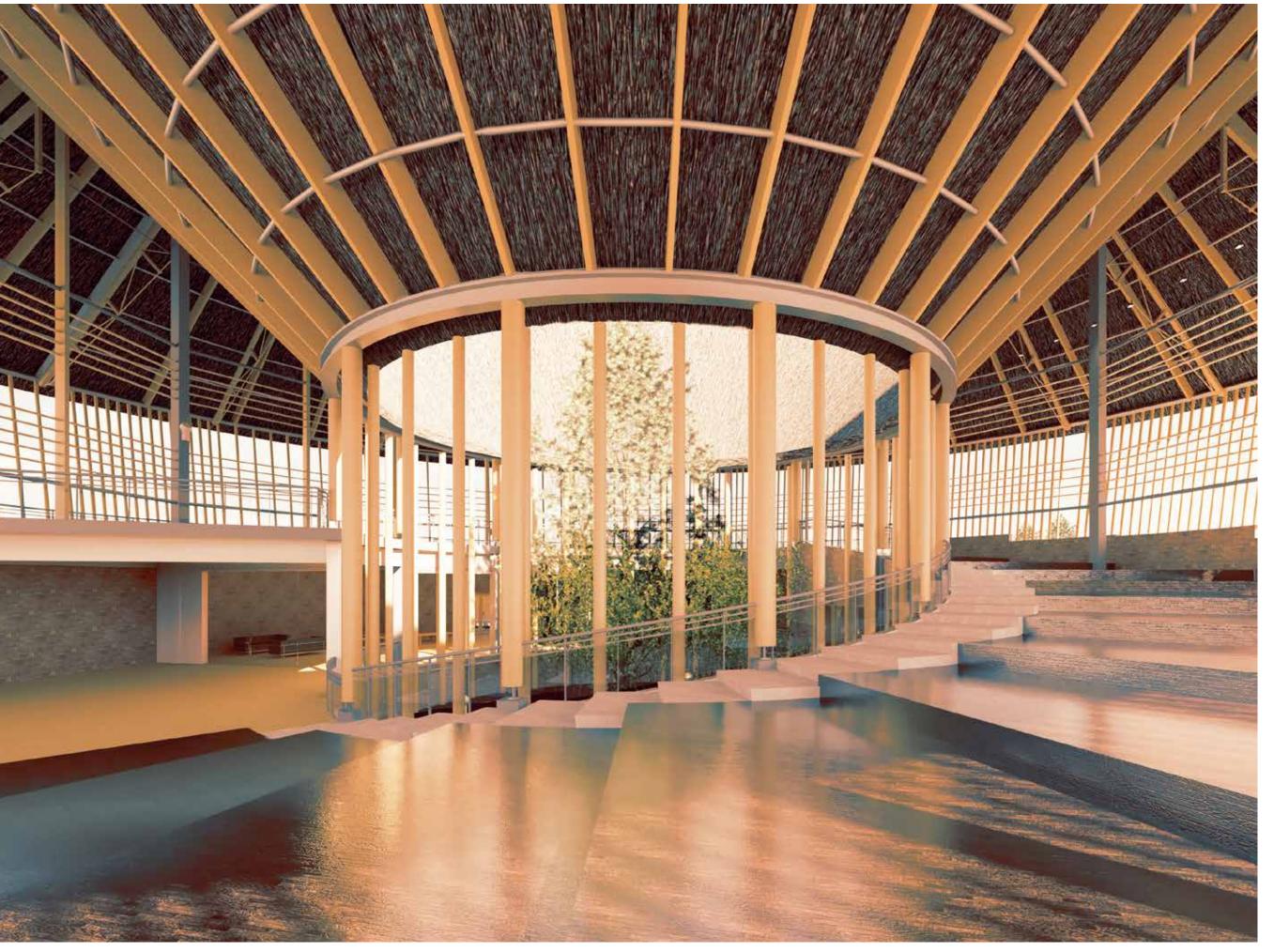
# **Architectural Design**

-1 Level Floor plan scale 1: 200

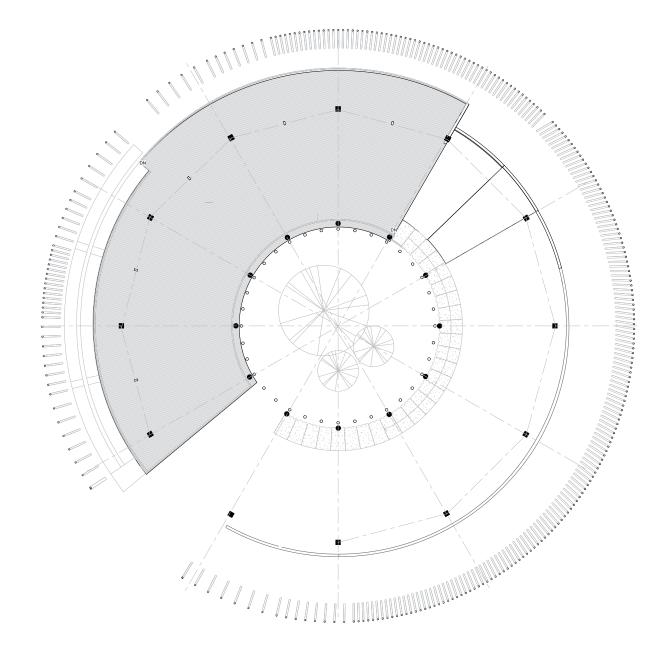


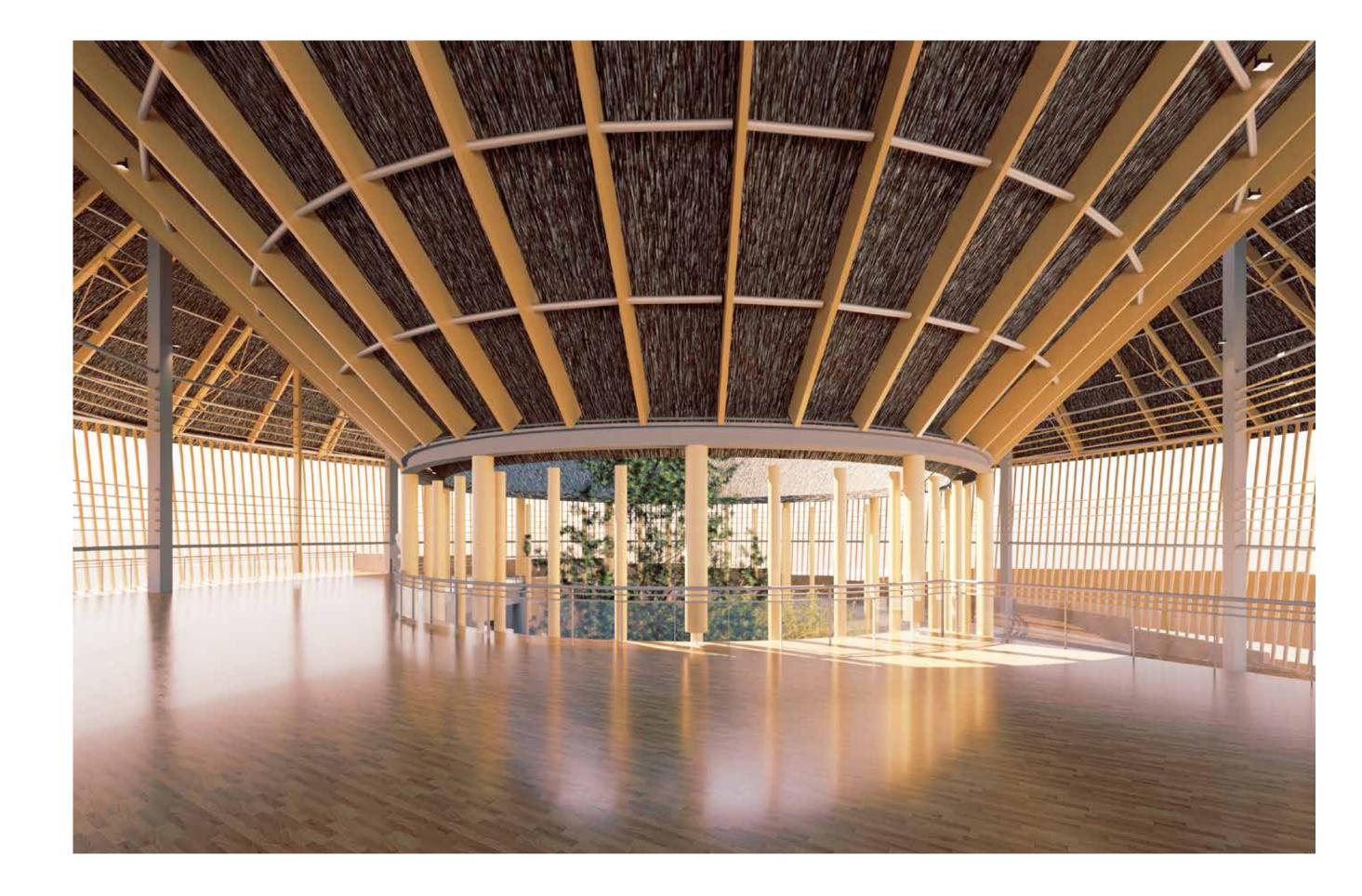


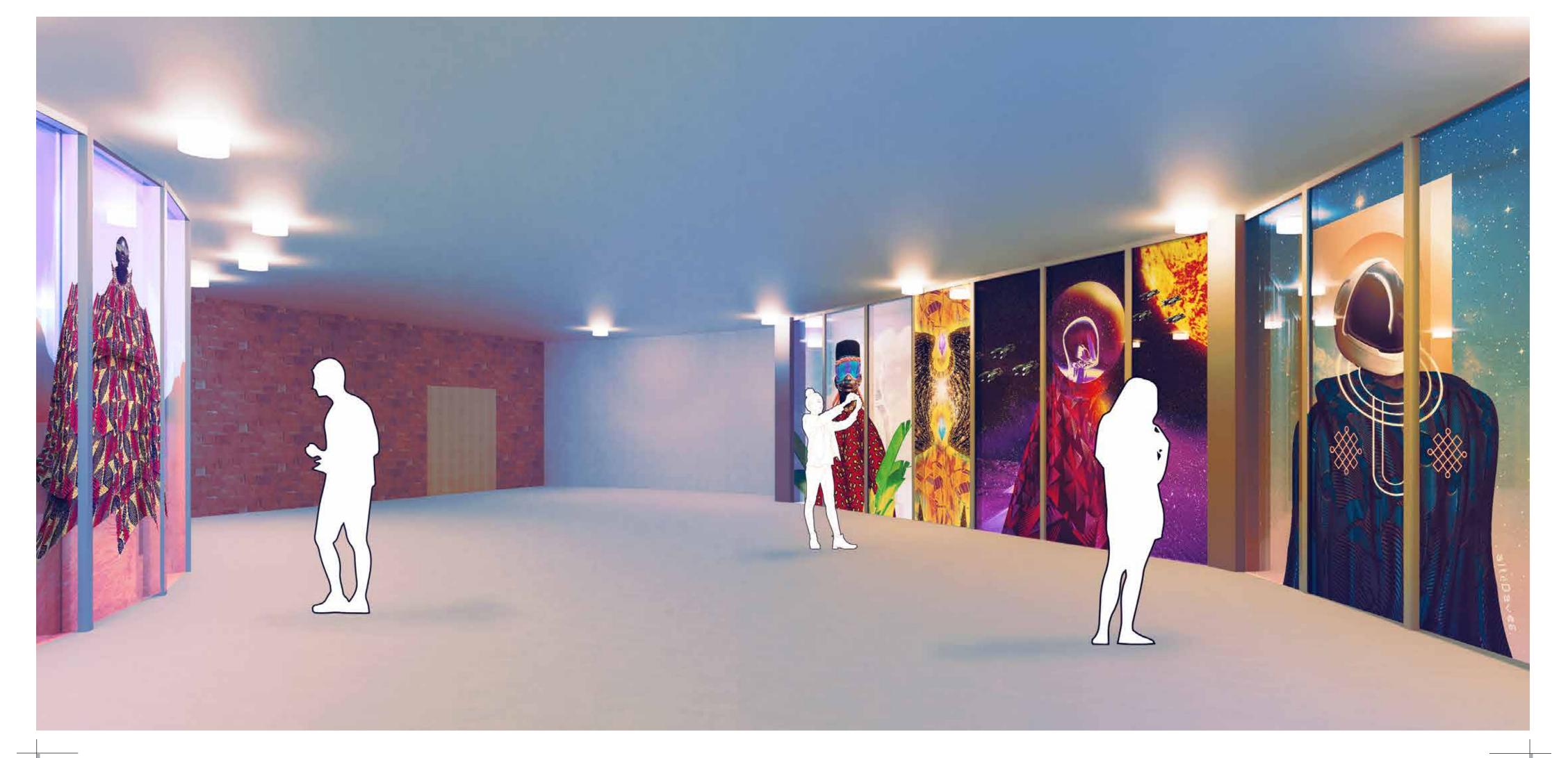




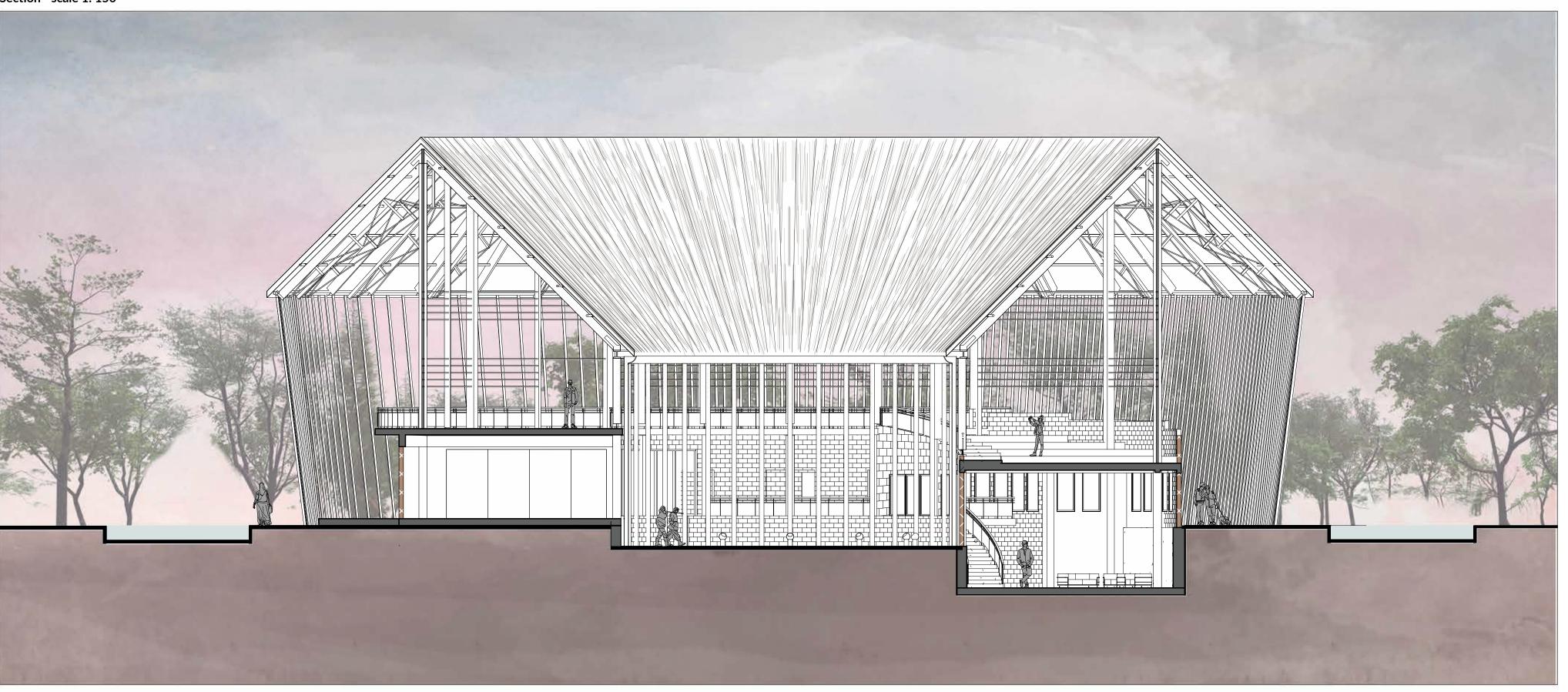
First Floor Plan - scale 1: 200







Section - scale 1: 150





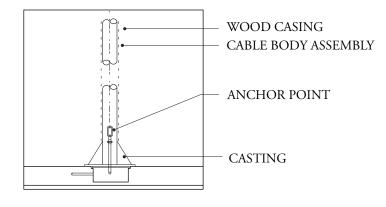


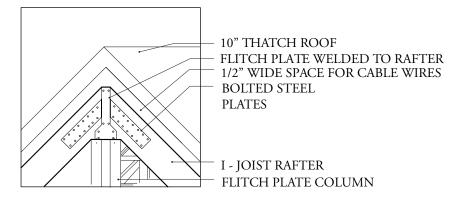


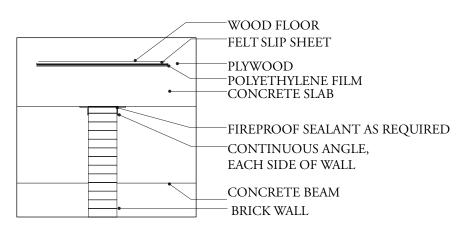


# 

# WOOD FLOOR FELT SLIP SHEET PLYWOOD POLYETHYLENE FILM CONCRETE FLOOR SLAB Exterior FLASHING CONCRETE FOOTING

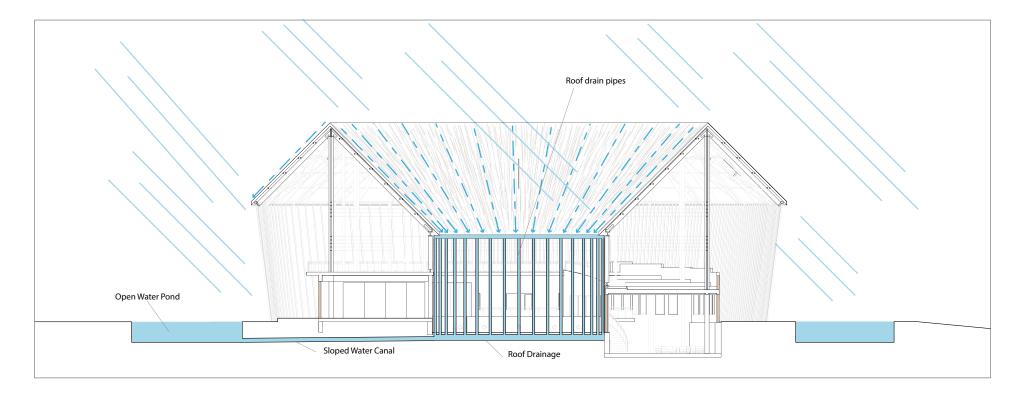


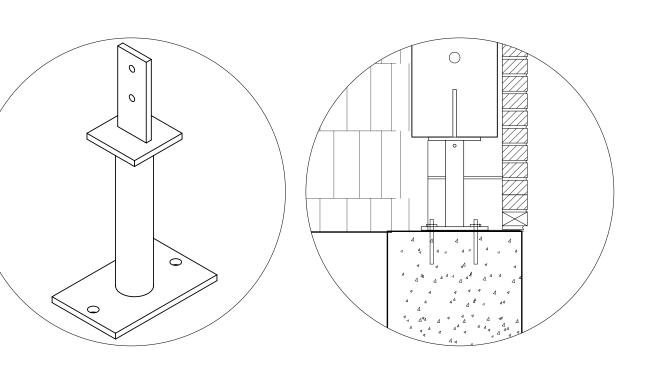


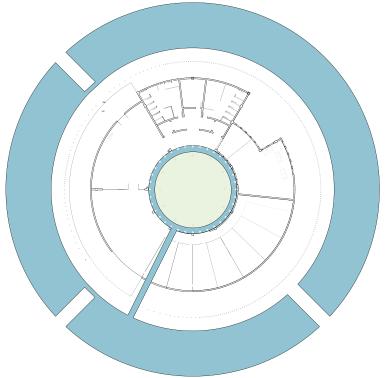


### **Details**

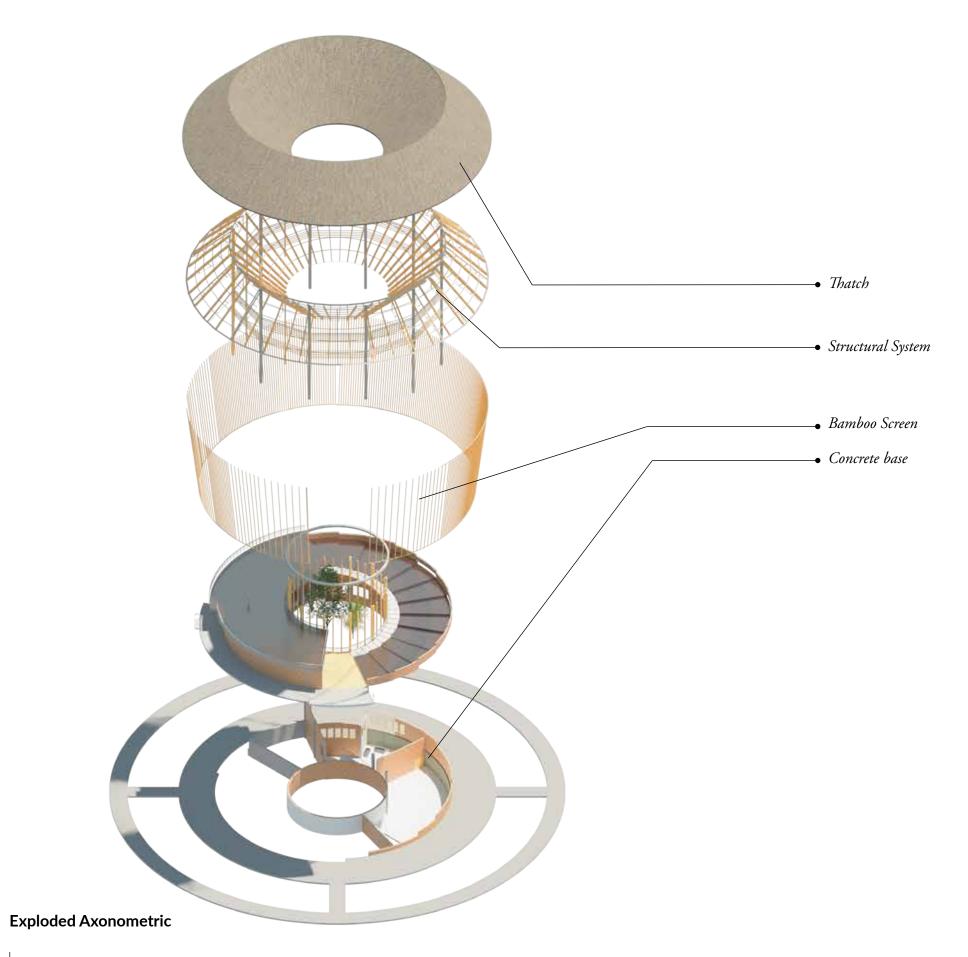
# **Structural Design & Analysis**

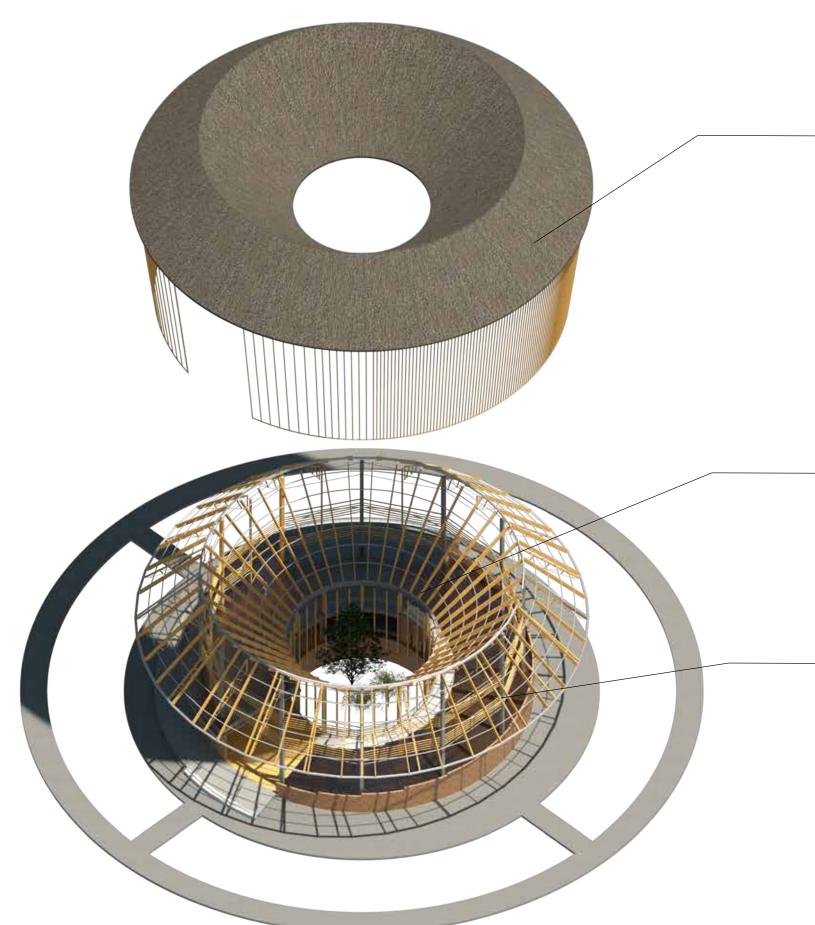






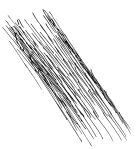
**Wall Section** 





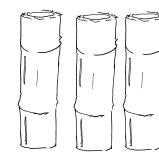
# **Materiality**

Thatch



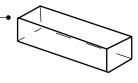
Locally Grown and Harvested thatch is layered on a series of rafters and cable structure

Bamboo drainage pipe screen



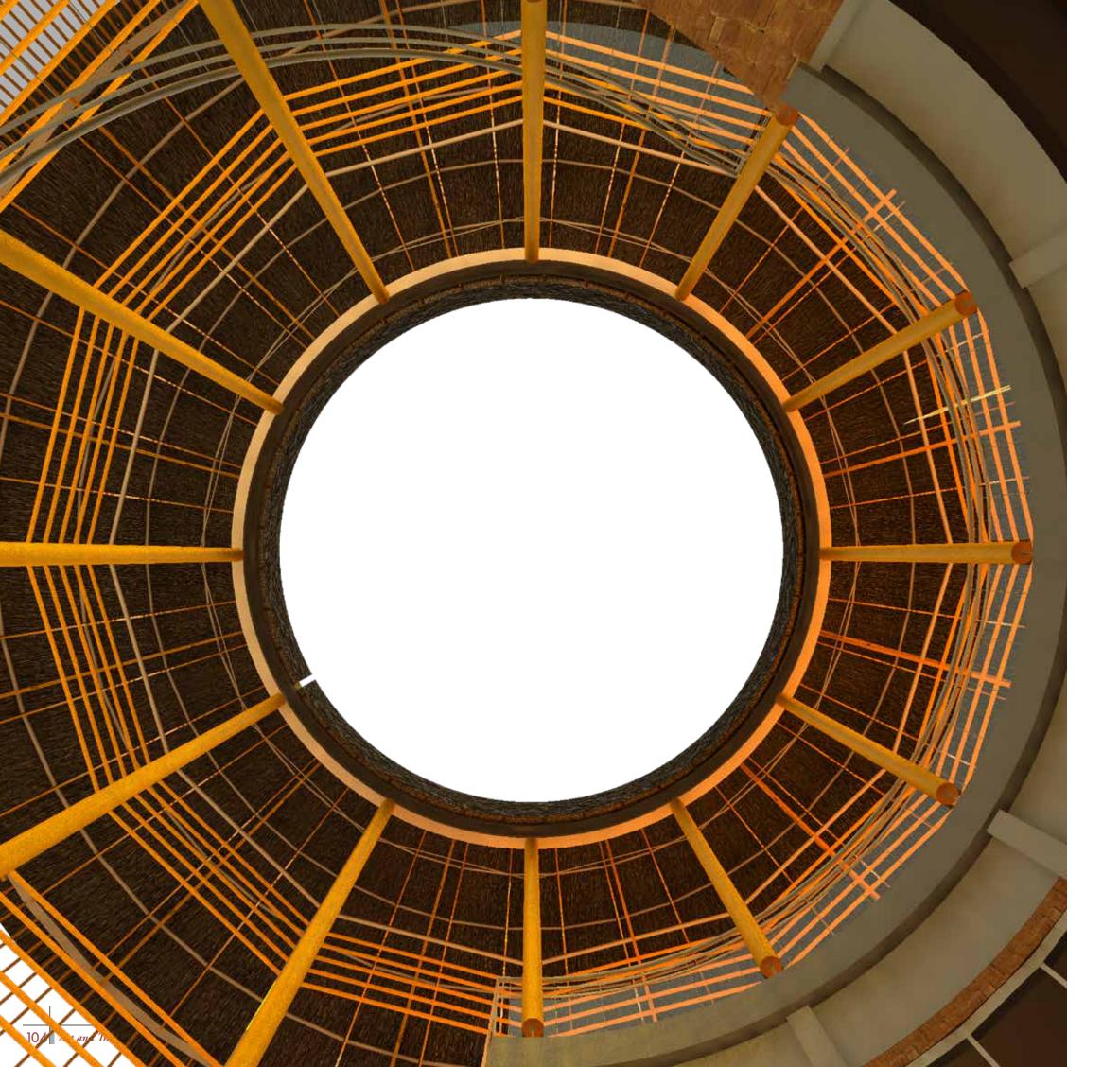
Bamboo is used as an encasement for the drainage pipes

Clay Brick Facade



Clay bricks formed on-site by the community, enhancing participation of local community





### **Conclusion**

This project aims to revisit traditional Nigerian architecture and its design principles in lieu of integrating these concepts with modern architecture in Nigeria, with the use of local materials in achieving cultural Identity and sustainable architecture in Nigeria. The Arts and Craft market, situated at the central business district of Nigeria's capital, Abjua, was chosen as the project site.

The design approach utilised scales including; location -topographic and climatic considerations-, materiality, form and function, to deduce design implementation strategies. This created an art district that not only serves aesthetic functions, but creates opportunities for networking, learning and marketing for the artists.

Key factors considered in the design approach include; adapting to the natural landscape and the already existing forms, and preservation of the sites identity. These may be achieved by utilising cost effective and locally sourced materials within the geographic area. Successful rumination of these factors will reduce the cost of production and speed up construction time, and engender left over resources that can aid in other aspects of the design. This project reveals that re-introducing elements of traditional Nigerian Architecture is possible and advantageous to the Nigerian Architecture cultural identity.

### **Bibliography**

- 1. Biobaku, S. (2018, May 6). Nigerian House Types: How Many Do You Know?: Private Property. Re trieved February 2, 2020, from https://www.privateproperty.com.ng/news/nigerian-house-types/
- 2. Where Is The "Indigenous Nigerian Architecture"? (2011). Qualitheia Capital, 17, 1–2. Retrieved from https://nairametrics.com/wp-content/uploads/2013/02/where-is-th-indigenous-Nig-architecture.pdf
- 3. Prucnal-Ogunsote, B. (n.d.). Classification of Nigerian Architecture. AARCHES, 1(6), 48–56. Retrieved from https://desmo.biz/images/Architecture.pdf
- 4. Prucnal-Ogunsote, B. (n.d.). Reflection of Culture and Climate in the Vernacular and Modern Architecture of Akure. Department of Architecture, Federal University of Technology, 1–8. Reflection +of+Culture+and+Climate+-+sdngnet.com.pdf
- 5. Akinloye, L., Joseph, A., & Makinde, A. (2017). Analysis of Climate of Southwestern Nigeria for Building Design. International Journal of Constructive Research in Civil Engineering, 3(3). doi: 10.20431/2454-8693.0303004
- Trust. (2018, April 4). An Inside Look at The National Theatre. Retrieved February 3, 2020, from https://hotels.ng/guides/the-national-theatre-lagos/
- 7. Mai, M. M., & Khalil, S. I. (2019). Sources of Nigerian Architecture in the 21st Century. Journal of Civil Engineering and Architecture, 13(6). doi: 10.17265/1934-7359/2019.06.006
- 8. creativity. (n.d.). Retrieved from https://www.oxfordlearnersdictionaries.com/definition/english/creativity
- 9. Chikwendu, G. (1987). The Traditional Architecture of the Igbo Nigerian, Retrieved from: https://gala.gre.ac.uk/id/eprint/8750/6/Godwin%20Chikwendu%20Nsude%201987.pdf

## **Appendix**

### List of Images

https://imeobionitsha.org/otu-onitsha-waterside-early-20th-century/

https://www.artstreetecture.com/streetview/country/159-bulgaria

https://www.legit.ng/1152667-history-hausa-traditional-architecture.html

http://allinnigeria.com/listing/national-art-theatre/

https://netstorage-legit.akamaized.net/images/vllkyt4o8tj85p0hf.jpg?imwidth=900

http://wikimapia.org/232973/Palace-of-Culture-and-Sports

https://medium.com/@adedotunaderibigbe/does-nigeria-have-an-architecture-identity-crisis-b4934530ce0a

https://www.aljazeera.com/indepth/features/nigeria-ancient-kano-wall-disappears-history-180404081626828.html

https://medium.com/@adedotunaderibigbe/does-nigeria-have-an-architecture-identity-crisis-b4934530ce0a

https://www.ijcua.com/index.php/ijcua/article/view/38/234

https://medium.com/@adedotunaderibigbe/does-nigeria-have-an-architecture-identity-crisis-b4934530ce0a

https://www.ijcua.com/index.php/ijcua/article/view/38/234

https://www.researchgate.net/figure/Afro-Brazilian-style-architecture-in-Ilorin-Nigeria-Photograph-by-Stephen-Folaranmi\_fig3\_323601613

https://medium.com/@ontheplumetrail/we-didn-t-eat-much-chocolate-during-my-childhood-in-nigeria-c091d5a4cb2d

https://medium.com/@adedotunaderibigbe/does-nigeria-have-an-architecture-identity-crisis-b4934530ce0 and the substitution of the substitution of

https://www.wallpaper.com/architecture/bauhaus-ife-campus-nigeria-documentary

