

Comparative Analysis of Finishing Materials Utilized in the Construction of Cultural Centres

¹Owoseni, O. Abraham, ²Fatunmbi, M. Ololade

¹Department of Architecture, College of Science and Technology, Covenant University, Ota, 112104, Ogun State, Nigeria.

² Department of Architecture, College of Science and Technology, Covenant University, Ota, 112104, Ogun State, Nigeria.

✉: ololade.fatunmbipgs@stu.cu.edu.ng; +(234) 7037908523

Abstract:

This study evaluates the implementation of finishing materials in selected cultural centres in Lagos, Nigeria, aiming to provide insights into their role in enhancing users' experiences. Lagos's rapid urbanization and cultural evolution highlight the significance of cultural centres as hubs for community engagement and artistic expression. The qualitative study adopts an observational assessment of 3 major cultural centres – National Art Theatre, National Museum, and Freedom Park to evaluate the utilization and impact of finishing materials in these centres. Findings revealed a diverse array of finishing materials employed across the selected cultural centres, reflecting a blend of traditional craftsmanship and contemporary design influences. However, there is a gap in understanding the factors such as durability, aesthetics, and cultural relevance influencing the selection and application of these materials, as well as their effectiveness in meeting the diverse needs and preferences of users. Principal results indicate different utilization of these materials, with factors such as durability, aesthetics, and cultural relevance emerging as key determinants. Major conclusions drawn from the study highlight the need for holistic approaches to architectural design that harmonize with local cultural context while embracing innovation. This study contributes to the field by revealing the diverse array of finishing materials employed in showcasing the blend of traditional craftsmanship and contemporary design and how it affects users' spatial experiences in creating engaging and meaningful environments within cultural centres. However, further research is needed to explore the long-term durability and sustainability of these materials as well as their impact on users' spatial experiences.

Keywords: Cultural Centres, Cultural Identity, Finishing Materials, Spatial Experiences, Sustainability

1. Introduction

Cultural identity refers to a person's connection to their culture, influenced by their membership in a particular cultural or ethnic group, whereas culture encompasses the collective beliefs and attitudes that shape the way of life, identity, arts, and intellectual achievements of a particular community [15]. In Nigeria, the establishment of this Cultural Center is seen as a crucial endeavor, particularly in the bustling city of Lagos. This institution aims to be more than just an architectural symbol, a sanctuary where cultures from all over the world come together to develop understanding, unity, and shared experiences [4]. Nigeria, a nation renowned for its diverse ethnic groups and cultural customs, is aware of the importance of promoting intercultural understanding worldwide.

Finishing materials have a significant impact on how they feel, appear, and operate. These finishes serve as more than just decorative elements; they influence how people interact with and perceive the built environment, as well as helping to

establish a building's personality and ambiance. The choice of finishes can create a discordant, unwelcoming ambiance or, conversely, a soothing, inviting one. Smooth, high-gloss surfaces can imply modernism and elegance, whereas natural

wood treatments can convey comfort and a sense of connection to nature [21].

Previous research has clarified the complex relationship between architectural design and people's experiences in places because of the significance of material finishes in improving users' spatial experiences in buildings generally. [20] shed light on people's preferences for aesthetics in architectural settings. Their findings indicate that curved architectural shapes are preferred by both experts and non-experts. The importance of architectural innovations—including those involving materials and forms—in coordinating architectural design with public building objectives is expounded upon by [8].

Furthermore, studies such as those conducted by [14] brought

attention to how the physical environment shapes human experience and behavior. These studies investigate how a building's design might influence visitors' overall experience, levels of participation, and the promotion or discouragement of certain activities. [22] investigated various walling materials in residential structures in a developing nation. Furthermore, [18] looked into how satisfied users were with their degree of comfort concerning environmental design elements in academic buildings. Nevertheless, no research has looked at the significance of carefully chosen finishing touches that complement the centre's intended cultural and educational goals, fostering an atmosphere that encourages significant cross-cultural encounters and enhances user experiences.

Therefore, this study aims to assess the implementation of finishing materials in selected cultural centres in Lagos, Nigeria towards promoting environmental sustainability in the development of public spaces. To address the aim of this study, the following research objectives were formulated:

- (i) To identify finishing materials commonly used for enhancing users' spatial experience in the development of public buildings;
- (ii) To determine the extent to which the finishing materials are employed in selected cultural centres;

The study holds significant relevance across various fields and aligns with several Sustainable Development Goals (SDGs). Firstly, within the field of architecture and urban design, understanding the role of finishing materials is crucial for enhancing users' spatial experience, and creating culturally responsive and sustainable built environments. By assessing the utilization and impact of finishing materials in cultural centres, architects and urban planners can gain insights into effective design strategies that prioritize aesthetic appeal, spatial experience, and cultural preservation.

Furthermore, the research aligns with Sustainable Development Goal 11: Sustainable Cities and Communities, which endeavors to create inclusive, secure, resilient, and sustainable cities. Cultural centers are essential venues for artistic expression, community involvement, and cross-cultural contact that enhance the social and cultural life of cities. In particular, SDG 9: Industry, Innovation, and Infrastructure relates to sustainable construction methods. The study encourages innovation in architectural design and construction procedures by finding best practices in the selection and application of finishing materials. This leads to the creation of more environmentally friendly and culturally sensitive building techniques. Furthermore, the study supports the conservation of cultural heritage (SDG 11) and the advancement of sustainable patterns of consumption and production (SDG 12) by highlighting the significance of contextually aware design interventions.

2. Literature Review

2.1 History of Cultural Centres in Lagos

Lagos, Nigeria's cultural hubs have a rich history intertwined with modernity, colonial influence, and tradition. Lagos, the center of Nigeria's economy and culture, has long been a melting pot of various cultures, which makes it an ideal place

for the emergence of cultural centers [10]. The narrative starts with the native cultures of the area, each of which had a rich history of storytelling, music, dance, and art. These cultural customs served as the cornerstone for subsequently emerging trends. Lagos attracted people from all ethnic backgrounds and cultures as a major hub of trade and government with the introduction of colonial powers in the 19th century. The city's cultural scene was further enhanced by this diversity.

Cultural centers arose during the colonial era as venues for colonial authorities to exhibit their superiority in culture and further their objectives in the arts and education [10]. While European art, literature, and music were frequently exhibited at these venues, indigenous cultures were occasionally marginalized or taken over for colonial ends. Nigeria gained independence in 1960, and this led to a resurgence of interest in supporting native traditions and building national cohesion. As a result, government-funded cultural centers were established to honor and conserve Nigeria's rich cultural legacy.

During this time, major cultural hubs for artistic expression and cultural activity were constructed in Lagos, including the National Arts Theatre and the Nigerian National Museum [7]. These institutions are essential to preserving and advancing Nigeria's rich cultural legacy and presenting the nation's varied customs and past. However, there have been difficulties throughout Lagos' cultural centers' history. Cultural heritage preservation and promotion have faced threats from political turmoil, economic instability, and fast urbanization [1].

Furthermore, local customs have occasionally been eclipsed by globalization and Western cultural norms, which raises concerns about cultural homogenization [5]. Cultural centers are becoming more and more popular as venues for artistic creativity, community involvement, and cross-cultural interchange [9]. As a means of addressing the diverse needs and interests of Lagos' populace, organizations and grassroots initiatives have arisen to revitalize pre-existing cultural facilities and construct new ones.

Lagos' cultural centers now function as vibrant hubs for artistic expression and innovation, presenting a variety of performances, workshops, exhibitions, and events. They act as forums for cross-cultural communication, exchange, and cooperation and are essential in helping Lagosians develop a feeling of identity, pride, and belonging. Lagos's cultural centers' rich history attests to the people's tenacity, inventiveness, and diversity even as the city grows and changes. We can guarantee Lagos' continued status as a thriving hub for cultural innovation and expression for future generations by protecting and fostering these areas.

2.2. Finishing Materials

2.2.1 Interior Materials and Finishes

(i) Wood Finishes: Warm wood finishes for flooring, wall panels, and furniture can evoke a sense of nature and cultural authenticity, contributing to a welcoming and comfortable ambiance [24].

(ii) Glass Elements: Incorporating glass partitions or features promotes transparency and allows natural light to penetrate, enhancing visual connections between different

spaces and fostering an open, inviting atmosphere [24].

(iii) Textured Wall Treatments: Utilizing textured wall coverings or finishes adds tactile engagement, creating visual interest and contributing to a sensory-rich experience within the cultural centre [23].

(iv) Cultural Artifacts: Integrating cultural artifacts into the interior design, such as sculptures, textiles, or traditional artwork, provides a direct link to the cultural identity and enriches the spatial narrative [24].

(v) Metal Accents: Metal finishes or accents can be strategically used for architectural details, fixtures, or furnishings, adding a contemporary and sophisticated touch to the interior spaces [24].

(vi) Natural Stone Flooring: Natural stone floorings, such as marble or travertine, not only lend elegance but also contribute to the timeless and enduring quality of the cultural centre's interior [24].

(vii) Sustainable Materials: Opting for sustainable materials like bamboo flooring, recycled glass countertops, or eco-friendly wall coverings aligns with the cultural centre's goals and promotes environmental responsibility [24].

(viii) Acoustic Panels: Integrating acoustic panels with aesthetically pleasing designs addresses both functional and sensory aspects, ensuring optimal acoustics for performances and events while contributing to the overall interior aesthetics [23].

2.2.2 Exterior Materials and Finishes

(i) Glass Facades: Utilizing glass expanses enhances natural transparency, allowing natural light to permeate the interior spaces [25]. This promotes a visual connection between the cultural centre and its surroundings, contributing to an open and inviting atmosphere.

(ii) Wood Cladding: Incorporating wood cladding adds warmth and a natural touch to the exterior [26]. This material choice not only aligns with sustainability principles but also establishes a tactile and visually pleasing connection to nature, enhancing the overall sensory experience.

(iii) Metal Panels: Metal panels, with their versatility and modern aesthetic, offer opportunities for creative expression. Whether in aluminium, steel, or other finishes, they can be employed for sleek and contemporary design elements, adding a touch of sophistication to the exterior [26].

(iv) Ceramic Tiles: Durable and available in various colors and patterns, ceramic tiles provide an opportunity for creative expression. They can be used to create vibrant facades or artistic installations, contributing to the cultural and aesthetic vibrancy of the centre [27].

(v) Green Roofs and Walls: Integrating living green elements, such as green roofs or walls, not only enhances the building's sustainability but also contributes to a visually appealing and environmentally friendly exterior [28]. Greenery can be strategically incorporated for both aesthetic and functional purposes.

(vi) Concrete Finishes: Utilizing concrete finishes offers a contemporary and versatile option for the exterior. The texture and color variations of concrete can be manipulated to achieve

specific design goals while ensuring durability and longevity [29].

2.3. Finishes as Sustainable Materials

In the context of Lagos, a rapidly growing coastal city, understanding sustainable strategies for urban development is essential [11] and as a result of the pressing environmental needs of today, sustainable materials are being used in architecture design more often, particularly those about cultural centers which advances environmental goals while also greatly enhancing the user's spatial experience. Sustainable materials are important in architectural design even apart from environmental concerns [2]. These materials are characterized by their low environmental impact, renewability, and energy efficiency. They have a smaller total ecological footprint because they are harvested, processed, and produced to reduce waste, emissions, and energy use [3].

Choosing eco-friendly materials is the key to sustainable finishing. Sustainable substitutes for conventional finishes like hardwood floors or synthetic carpets are found in natural and renewable resources including bamboo, cork, and recycled wood [17]. According to [12] these materials have a reduced embodied energy and carbon footprint, which lessens the environmental impact of their manufacturing and disposal. Furthermore, recycled materials are frequently used in sustainable finishes, keeping trash out of landfills and promoting the circular economy. For wall and floor finishes in cultural centers, for example, composite materials composed of post-consumer plastics or recycled glass tiles provide long-lasting and visually appealing solutions [16].

Moreover, by using less volatile organic compounds (VOCs) and other dangerous chemicals, sustainable finishes place a higher priority on indoor air quality and health. By lowering the possibility of respiratory problems and allergic reactions, low-emission paints, sealants, and adhesives contribute to the creation of better indoor environments for people living in cultural centers. By lowering air and water pollution throughout their existence, these materials not only safeguard human health but also promote environmental sustainability in general [6]. Also, passive design techniques are frequently included in sustainable finishes to improve thermal comfort and energy efficiency. This lessens the need for mechanical heating and cooling systems and lowers operating expenses for cultural centers [19].

Sustainable finishes have advantages for the environment and human health in addition to reflecting cultural values and fostering community resilience. The utilisation of locally sourced materials and traditional techniques can be stimulated by Indigenous building traditions and craftsmanship, creating a feeling of location and cultural identity in cultural centre spaces [13]. Designing cultural centers with sustainable finishes demonstrates a dedication to environmental care and fortifies relationships with regional communities and customs. Cultural centers can act as role models for ethical design and encourage visitors to get involved with environmental and cultural issues in their own lives by emphasizing sustainability in finishes.

3. METHODOLOGY

With an emphasis on evaluating finishing materials to support environmental sustainability in the building of public spaces, this study used a qualitative research methodology. An observation guide was adopted to ascertain the degree to which finishing materials were utilized in particular cultural centers.

The study area is Lagos, the most populous state in Nigeria, which was the country's capital until recently. Known as Nigeria's commercial center, it is situated in the country's southwest. The state, which is made up of several islands, is surrounded by the Atlantic Ocean and the Lagos Lagoon. The study region was chosen because Lagos, which has a rich historical legacy that dates back to the fourteenth century, has become a melting pot of cultures, fusing local customs with other influences from around Nigeria and beyond. The city's thriving markets, varied population, and thriving arts scene all add to its cultural vibrancy and provide an ideal environment for the development of cultural hubs. Lagos is a popular travel destination for both domestic and foreign tourists because of its advantageous location along the coast, its prominence as a major transit hub, and its cosmopolitan atmosphere.

Important criteria that ensured accessibility to a wide variety of populations and representation of varied cultural expressions led to the selection of cultural centers in Lagos, Nigeria. First and foremost, the selection procedure was heavily influenced by geographical distribution. Lagos's cultural richness was captured and the demands of diverse demographic groups were met by selecting cultural centers from a variety of districts and neighborhoods. This strategy recognized the value of decentralization in promoting community engagement and participation and sought to advance inclusivity and equity in access to cultural facilities. The selection of cultural centers gave priority to historical significance and cultural relevance, in addition to geographical distribution. Venues that reflected Lagos' diverse cultural identity and had a long history and strong relationships with the community were given preference. The study's top picks for inclusion were locations with architectural significance, historical relevance, or ties to indigenous cultures. Table 2 displays the cultural centers that were picked from the sampling frame that included all of the cultural centers that were identified in Lagos, Nigeria, as shown in Table 1.

The scheduled observation guide was meticulously designed and tailored to concentrate on observable categories within the cultural centre environment, emphasizing finishing materials. This strategy is justified by the importance of finishing materials in determining the aesthetic, spatial experience, and sustainability of cultural institutions. Through its alignment with well-known sustainability frameworks like LEED and EDGE, the observation guide seeks to guarantee that evaluations are carried out with a comprehensive comprehension of sustainable design theory. The evaluation of material selection, analysis of material usage within the chosen

cultural centers, and assessment of the environmental performance of these finishing materials to improve user comfort and well-being are among the main goals. Descriptive analysis was used to analyze the data, and inferences were made regarding how much the chosen cultural centers used the finishing materials from the literature.

Subsequently, the cultural center that used these finishing materials the most extensively was chosen for a closer look. This comprehensive study is limited to concrete on-site observations and practicable physical evaluations. A digital camera was used to take pictures of the existing features in the selected centers to document them. The results were then explained using written summaries, tabular data, and graphic displays to guarantee understanding and make understanding simple.

TABLE 1
THE SAMPLING FRAME OF ALL IDENTIFIED CULTURAL CENTRES IN LAGOS, NIGERIA

SN	Cultural Centres	Location
1.	National Arts Theatre	Iganmu, Lagos Apapa Local Government, Lagos.
2.	National Museum Lagos	Onikan road, Ikoyi, Lagos 102273
3.	Nike Art Gallery	Nike Art Gallery Rd, Lekki Phase 1, Lekki 106104
4.	Freedom Park	Old Prison Ground, 1, Hospital Road, adjacent to St Nicholas Hospital, Lagos Island
5.	Terra Kulture	plot 1376 Tiamiyu Savage St, Victoria Island, Lagos 106104
6.	Omenka Gallery	24, Modupe Alakija Cres, Ikoyi, Lagos 106104
7.	Nimbus Art Centre	Maitama Sule St, Ikoyi, Lagos 101211
8.	Bogobiri House	Maitama Sule St, Ikoyi, Lagos
9.	New Afrika Shrine	NERDC Road, Agidingbi, Ikeja 101233
10.	Motherlan'	Opebi Road, Ikeja, Lagos
11.	Society for the Performing Arts of Nigeria, Lagos	Bourdillon Rd, Ikoyi, Lagos 100001
12.	Adeyemi Bero Auditorium	Oregun, Ikeja, Ikeja 101233, Lagos
13.	Heritage Centre	Ibrahim Odofin St, Eti-Osa, Lekki 1000001, Lagos
14.	Center for Black and African Arts and Civilization	Broad Street, Lagos Island, Lagos 102273
15.	Nigerian Tourism Development Corporation	Obafemi Awolowo Way, Oregun, Ikeja 101233, Lagos

TABLE 2
THE SAMPLING FRAME OF ALL SELECTED CULTURAL CENTRES IN LAGOS, NIGERIA

SN	Cultural Centres	Location
1.	National Arts Theatre	Iganmu, Lagos Apapa Local Government, Lagos.
2.	National Museum Lagos	Onikan road, Ikoyi, Lagos 102273
3.	Freedom Park	Old Prison Ground, 1, Hospital Road, adjacent to St Nicholas Hospital, Lagos Island

4. RESULTS AND DISCUSSION

This study examined the present utilization of finishing materials within the selected cultural centres. The outcomes of this investigation are delineated in the subsequent subsections.

4.1. Description and Building Characteristics of the Selected Cultural Centres

4.1.1. National Art Theatre, Iganmu, Lagos

The National Theatre, Nigeria is the primary centre for the performing arts in Nigeria. The monument is located in Iganmu, Surulere, Lagos. Its construction was completed in 1976 in preparation for the Festival of Arts and Culture (FESTAC) in 1977. Construction of The National Theatre was started by the military regime of General Yakubu Gowon and completed during the military regime of Olusegun Obasanjo. As summarized in Table 3, the complex, characterized by its distinctive modernist architectural design, comprises three main halls – the Main Exhibition Hall, the Conference Hall, and the Cinema Hall. The exterior of the National Theatre was designed, shaped, and built to look like a military hat and also features sculptures and reliefs that reflect the diverse cultural tapestry of Nigeria.

The National Theatre serves as a versatile venue for a myriad of performing arts, encompassing theatre, dance, music, and cultural festivals. Over the years, it has become a prominent space for both local and international artists to showcase their talents and contribute to the cultural vibrancy of the region. Managed by the National Theatre Corporation, a government agency falling under the Federal Ministry of Tourism, Culture, and National Orientation, the institution has played a crucial



Plate 1. Exterior view of the National Art Theatre

role in fostering artistic expression and providing a platform for the creative community.

4.1.2. National Museum, Onikan, Lagos

Nestled within the bustling cityscape of Lagos, the Nigerian National Museum is a beacon of Nigeria's rich cultural heritage. Founded in 1957 by the English archaeologist Kenneth Murray,

this national treasure trove houses a splendid collection of Nigerian art that covers a range of artifacts, ranging from elegant statuary to intricate carvings, and from absorbing archaeological finds to ethnographic exhibits. One of the museum's crown jewels is the Jemaa Head, a striking example of terra-cotta craft from the Nok culture, dating back to somewhere between 900 and 200 BC. Unearthed in the village of Jemaa—after which it is named—the artifact serves as a tangible connection to Nigeria's prehistoric past.

Despite its slightly untidy presentation, the museum offers a fascinating glimpse into the traditional life cycle of Nigerians, from birth, through death, and into the afterlife. The 'Cycle of Life' exhibit showcases an array of intriguing artifacts, including a clay Yoruba pot traditionally used to bury an umbilical cord, and an Egungun masquerade costume resplendent in a vibrant orange cape adorned with sequins, coins, and beads, which is worn during the traditional dance at a chief's funeral. The museum has displayed works of art by Nigerian artists such as Nike Davies-Okundaye, Bruce Onobrakpeya, and Ben Enwonwu.

As shown in Table 4, it is also known for its distinctive architecture, which reflects a blend of traditional Nigerian and modern design elements. It has four exhibition areas which include; Life Cycle, Nigerian Government; Yesterday and Today which is detached from the others, Patrimony and private exhibition space which covers various aspects of Nigerian culture of traditional art, religious practices, folklore, and historical events.



Plate 2. Exterior view of the National Museum

4.1.3. Freedom Park, Old Prison Ground, Lagos

Freedom Park is a memorial and leisure park area in the middle of downtown Lagos formerly known as “Her Majesty’s Broad Street Prison”. As shown in Table 5, it is rich in history standing as the first prison built in Nigeria in 1882 to suppress freedom fighters established after Britain made Lagos a colony in 1861. The initial prison structure was built in 1882 with mud walls and grasses thatch but did not last long because of the sabotage from colonial government opponents. According to Arc. Theo Lawson, opponents of British colonialism in Lagos “kept throwing fire into it and settling it ablaze and so then in

1885 the colonial government imported bricks from England and rebuilt the prison”.

In 1972, the Prisoners were moved out to Kirikiri and Ikoyi Prisons when plans were drawn up to transform the site into a creative space in 1979, the Prison was pulled down and was reduced to a dumping ground which also turned out to be hideouts for criminals.



Plate 3. View showing the historical garden of the Freedom Park

TABLE 3
NATIONAL ART THEATRE AND ITS BUILDING CHARACTERISTICS

SN	Building Characteristics	National Museum
1.	Architectural Style	Modernist
2.	Building Design	Large-scale, iconic structure with geometric forms
3.	Structural Elements	Reinforced concrete frame
4.	Finishing Materials	Concrete, glass, steel, luxalon timber, black Makina tiles
5.	Historical Context	Built in 1976 as part of Nigeria's cultural development initiatives. Renowned for its distinctive architecture and role in promoting performing arts.
6.	Sustainable Features	Incorporates energy-efficient lighting, and natural ventilation systems.
7.	Cultural Significance	Symbolizes Nigeria's commitment to the arts and cultural expression.

TABLE 4
NATIONAL MUSEUM AND ITS BUILDING CHARACTERISTICS

SN	Building Characteristics	National Museum
1.	Architectural Style	Neoclassical, Contemporary
2.	Building Design	Classic facade with modern interior spaces
3.	Structural Elements	Load-bearing masonry walls, steel reinforcements
4.	Finishing Materials	Marble, Brick, glass
5.	Historical Context	Established in 1957, housed in a historic colonial-era building. Expanded and renovated in the 21st century to accommodate modern museum facilities.
6.	Sustainable Features	Utilizes solar panels, rainwater harvesting systems
7.	Cultural Significance	Showcases Nigeria's rich cultural heritage and artifacts.

TABLE 5
FREEDOM PARK AND ITS BUILDING CHARACTERISTICS

SN	Building Characteristics	Freedom Park
1.	Architectural Style	Adaptive Reuse, Contemporary
2.	Building Design	Repurposed colonial-era prison transformed into a public park
3.	Structural Elements	Brick walls, timber framing, steel reinforcements
4.	Finishing Materials	Recycled wood, exposed brick, decorative lighting
5.	Historical Context	Formerly a colonial prison, converted into a park in 2010 as a symbol of freedom and cultural revitalization.
6.	Sustainable Features	Emphasizes natural landscaping, green spaces, and eco-friendly materials.
7.	Cultural Significance	Serves as a site for cultural events, performances, and community gatherings.

4.2. Appraisal Of Finishing Materials Utilization In Selected Cultural Centres

As shown in Table 6, The National Art Theatre, National Museum, and Freedom Park all incorporate wood finishes in their architectural elements, contributing to a warm and inviting ambiance. At the National Art Theatre, wooden accents are evident in the exhibition space on walls and ceiling as shown in Plate 4, creating a sense of comfort and intimacy for users. Similarly, the National Museum and Freedom Park utilize wood finishes in their exhibition spaces and outdoor seating areas, enhancing the connection with nature and the surrounding landscape. The selected cultural centers feature glass elements that introduce transparency, light, and visual connectivity within the spaces. The National Art Theatre's large glass windows and facade let an abundance of natural light into the inside, resulting in a dynamic interaction between the surrounding nature and the built environment. Glass is also used in the architectural architecture of the National Museum and Freedom Park, giving visitors sweeping vistas of the displays and surrounding landscape while also encouraging an open and approachable atmosphere. The National Museum, on the other hand, is notable for using textured wall treatments in its themed exhibition areas, as shown in Plate 5. These textured surfaces improve the overall museum experience for visitors by adding visual appeal and acting as a backdrop for presenting items and artwork.

Nigeria's rich cultural heritage and artistic traditions are showcased in all three cultural centers through the conspicuous display of cultural objects throughout their exhibition rooms. Cultural treasures at the National Art Theatre include engulfed artwork in the VIP area, artwork reflected in mirrors, and traditional sculptures, as Plate 6 illustrates. In a similar vein, the National Museum and Freedom Park showcase substantial collections of historical items and provide tourists with engaging and informative

experiences that honor Nigeria's rich cultural legacy (see Plates 7 and 8). In addition, the National Museum is notable for its use of metal accents, including steel fittings, wrought iron railings, and bronze sculptures, such as the punishment cell shown in Plate 9. Natural stone flooring is also used throughout Freedom Park's outdoor meeting spaces and pathways, producing an eye-catching and long-lasting surface that can tolerate weather and heavy foot activity. Reclaimed wood, recycled glass, low-emission paints, solar panels, and other sustainable elements are used in all of the buildings to lessen their negative environmental effects and to increase their energy efficiency. To provide the best possible acoustics and sound quality for live performances and events, the National Art Theatre also includes acoustic panels in its performance rooms. Because of this, the National Art Theatre also uses black markina tiles for flooring, which are long-lasting and simple to maintain. As demonstrated in Plate 10, Freedom Park is notable for its use of green walls and roofs, which incorporate living flora into the architectural design to enhance biodiversity, enhance air quality, and lessen the effects of urban heat islands.



Plate 6. The presence of Engulfed artwork in National Art Theatre

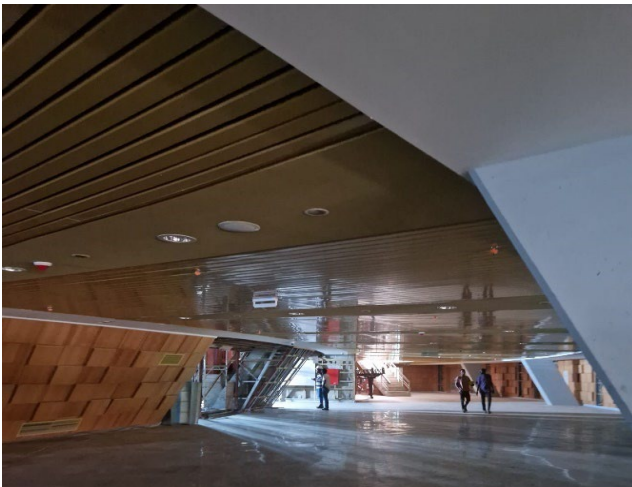


Plate 4. The presence of wooden accents in the National Art Theatre

Plate 7. The presence of Monuments in the National Museum



Theatre
Plate 5. The presence of Wall Treatment in the National Museum



Plate 8. The presence of Artifact in the National Museum
 Plate 9. The presence of metal accents in Freedom Park

TABLE 6
 UTILIZATION OF FINISHING MATERIALS IN SELECTED CULTURAL CENTRES

Finishing Materials	National Art Theatre	National Museum	Freedom Park
Wood Finishes	✓	✓	✓
Glass Elements	✓	✓	✓
Textured Wall Treatments	-	✓	-
Cultural Artifacts	✓	✓	✓
Metal Accents	-	-	✓
Natural Stone Flooring	-	-	✓
Sustainable Materials	✓	✓	✓
Acoustic Panels	✓	-	-
Ceramic Tiles	✓	✓	✓
Green Roofs and Walls	-	-	✓
Concrete Finishes	✓	✓	

4.3. Discussion

Objective (i): To identify finishing materials commonly used for enhancing users' spatial experience in the development of public buildings

The selection and application of finishing materials are crucial in shaping the spatial experience of users in public buildings. This discussion focuses on the common materials used, examining their role in enhancing sensory experiences, cultural immersion, and emotional engagement.

Wood finishes are widely used across public buildings, contributing significantly to creating a warm and inviting atmosphere. The presence of wooden elements in outdoor areas and interior spaces imparts a sense of comfort and fosters a connection with nature. The use of wood highlights the

importance of integrating natural materials into architectural design to enrich the overall ambiance and enhance user immersion.

Glass elements are another prominent feature that enhances spatial experience by introducing light, transparency, and visual connectivity. Expansive glass windows and facades allow natural light to flood interior spaces, creating a dynamic interplay between the built environment and the surrounding landscape. The emphasis on transparency not only makes the spaces feel more open and accessible but also deepens visitors' interaction with both the natural environment and exhibits.

Texture plays a vital role in enhancing users' spatial experience, particularly in areas where textured wall treatments add depth and character. Materials like stucco, exposed brick, and decorative plasterwork create visual interest and serve as compelling backdrops for various elements within the building. This focus on texture enhances the experience by engaging visitors' senses, making their interaction with the space more immersive and tactile.

The display of artifacts and decorative elements across public buildings highlights the rich heritage and enhances users' spatial experience. These buildings often feature extensive collections of historical items, traditional sculptures, and artworks. These artifacts provide educational and enlightening experiences, serving as tangible connections to cultural identity and highlighting the role of public buildings in preserving and showcasing history and heritage.

Additionally, metal accents are used effectively to balance aesthetics and functionality. Elements such as steel fittings, wrought iron railings, and bronze sculptures provide structural support while adding a sense of elegance and refinement to the interior spaces. The use of metal highlights the importance of harmony in architectural design, blending beauty with practicality to create enduring and captivating public buildings.

Objective (ii): To determine the extent to which the finishing materials are employed in selected cultural centres

The extent of utilization of these finishing materials varies across the selected cultural centers, each incorporating them to different degrees to enhance their unique architectural and cultural narratives.

At the National Art Theatre, wood finishes are extensively used in exhibition spaces, contributing to the building's warm



and intimate atmosphere. The extensive use of glass elements throughout the theatre, especially the large windows and

facades, facilitates a dynamic interplay between the interior spaces and the natural environment. Acoustic panels in the performance rooms ensure optimal sound quality, enhancing the auditory experience for both performers and audiences. Additionally, the theatre employs durable ceramic tiles for flooring, which are easy to maintain and contribute to the overall aesthetic.

The National Museum also makes significant use of wood finishes in its exhibition spaces, fostering a natural and inviting ambiance. Glass elements are incorporated into the museum's architectural design, allowing natural light to illuminate the exhibits and creating a sense of openness. Textured wall treatments in themed exhibition areas add a layer of visual interest, enhancing the presentation of artifacts. Ceramic tiles are also used in the museum, providing a durable and easy-to-maintain flooring option.

Freedom Park, which stands out for its adaptive reuse of a colonial-era prison, integrates wood finishes in its outdoor seating areas and architectural elements, fostering a connection with the surrounding natural landscape. The use of glass in the park's design allows for seamless visual connectivity, enhancing the visitor experience. Metal accents, including steel fittings and wrought iron railings, add to the park's structural and aesthetic appeal. The park also features natural stone flooring in its outdoor meeting spaces and pathways, which is both visually appealing and durable. Furthermore, Freedom Park is notable for its use of green roofs and walls, which incorporate living plants into the architectural design, improving air quality and contributing to urban biodiversity. The park's commitment to sustainability is further evidenced by its emphasis on eco-friendly materials and natural landscaping providing a model for future cultural advancements.

4.4. Limitations

It is imperative to recognize the inherent limits in the scope of this research, as they may impact the applicability of the findings. First off, the study's only focus was on cultural hubs in Lagos, Nigeria. Even though Lagos is a major center of culture in Nigeria, the results could not apply to other parts of the nation or other nations with different cultural settings. Due to variables including temperature, cultural customs, and local building codes, the use of finishing materials may differ between locations.

Moreover, while observational assessments and qualitative analysis captured the nuances of finishing materials utilization, they may have limited the depth and quantitative rigor of the findings. Incorporating quantitative measurements, such as energy consumption data or performance metrics, could have provided more robust evidence of the effectiveness of implemented strategies. The study also did not incorporate stakeholder feedback which could have provided valuable insights into practical challenges and preferences. By leveraging quantitative analysis tools and methodologies, cultural centers can enhance their environmental performance and contribute to a more sustainable built environment.

Finally, one significant drawback is that the chosen finishing materials do not have a thorough, long-term sustainability

evaluation. Although the study effectively selected and included a range of finishing materials in a predetermined amount of time, it was not intended for the study to assess the materials' long-term durability and lifecycle effects. In light of changing climatic circumstances and operating requirements in cultural centers, it is imperative to evaluate the long-term resilience and ongoing efficacy of these deployed finishing materials to guarantee their prolonged benefits and relevance.

5. CONCLUSION AND RECOMMENDATIONS

The careful selection and application of finishing materials such as wood, glass, textured surfaces, cultural artifacts, and metal accents play a pivotal role in enhancing users' spatial experience in public buildings. These materials contribute to both the aesthetic and functional qualities of the spaces, enriching visitors' sensory experiences and fostering a deeper connection with the cultural and historical context of the environment. The integration of sustainable materials further underscores a commitment to environmental stewardship and energy efficiency. By thoughtfully considering the impact of these materials on user comfort, well-being, and overall experience. These insights provide valuable guidance for creating public spaces that are functionally effective, sustainable, and enriching for their users.

Based on these findings, the key recommendations are as follows:

1. **Broaden Geographical Focus:** Going forward, studies should try to broaden their geographical scope to include cultural hubs outside of Lagos, Nigeria, as well as other areas. A more thorough grasp of regional differences in finishing materials and sustainable design techniques would be possible with this wider viewpoint.
2. **Integrate Quantitative Analysis:** Including quantitative measurements from lifecycle analyses, performance metrics, and energy consumption statistics can give important information about the efficacy and long-term effects of finishing materials in cultural institutions. In sustainable design projects, this data-driven strategy would improve accountability and decision-making.
3. **Execute Comprehensive Long-Term Sustainability Assessments:** To analyze the resilience, lifespan, and durability of finishing materials over time, thorough long-term sustainability assessments must be carried out. To achieve comprehensive sustainability outcomes, these evaluations must take social, economic, and environmental factors into account.
4. **Encourage Stakeholder Involvement:** It is crucial to involve stakeholders in the decision-making process so that sustainable design interventions meet their needs and goals. These stakeholders include visitors, local communities, and cultural practitioners. Facilitating stakeholder empowerment via education, engagement, and consultation cultivates a feeling of accountability and advances the enduring prosperity of sustainability endeavors.

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