



## Integration of Open Spaces in an Art Gallery Design to Enhance Spatial Experience in Lagos Nigeria

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### ABSTRACT

*Art galleries serve as important cultural institutions that provide spaces for artistic expression, public engagement, and cultural preservation. However, the spatial quality of many gallery environments can sometimes limit visitor interaction and overall experiential engagement. This study investigates the integration of open spaces in art gallery design as a strategy for enhancing spatial experience within the context of Lagos, Nigeria. The research aims to identify how architectural open spaces such as courtyards, atriums, terraces, and transitional outdoor areas may influence visitor movement, perception, and interaction within gallery environments. A qualitative case study approach was adopted, involving the systematic review and analysis of fifteen documented architectural and scholarly studies related to gallery design and open space integration. The findings reveal recurring design themes including spatial openness and visual continuity, indoor–outdoor spatial relationships, flexible circulation patterns, environmental comfort through natural lighting and ventilation, and opportunities for social interaction within gallery environments. The study suggests that integrating open spatial elements within art gallery architecture may contribute to improved visitor orientation, enhanced environmental quality, and more engaging cultural experiences. Within the climatic and socio-cultural context of Lagos, open space strategies could provide adaptable and environmentally responsive design solutions. The research contributes to architectural discourse by highlighting the potential role of open space integration in shaping more experiential and contextually responsive gallery environments.*

**Keywords:** Open space, integration, Art gallery, Spatial experience, Lagos, Nigeria

### INTRODUCTION

Art galleries has increasingly evolved from static exhibition enclosures into dynamic cultural environments that seeks to shape visitor perception and engagement. Contemporary architecture discuss suggests that the quality of spatial experience may play a significant role in determining how artworks are encountered and interpreted (Pallasmaa, 2012; Zumthor, 2006). Rather than functioning mainly as a container for art objects, galleries are progressively understood as experiential environments in which spatial configuration, light, movement, and openness can collectively influence visitor interactions. Spatial experience in architectural settings is often described as a multidimensional phenomenon that's shaped by visual continuity, circulation logic, enclosure, proportion, environmental comfort, and psychological perception. Research in environmental psychology and architectural theory points out that spatial arrangement may affect ones cognitive mapping, emotional response, and behavioral patterns within the built environment (Ching, 2015; Mallgrave, 2018). Within gallery contexts, such spatial variables could possibly influence how long the users remain in exhibition spaces, how they navigate displays, and how they translate artistic narratives.

In recent years, various studies have examined design strategies that are aimed at enhancing the users experience in galleries and museums. Flexible layouts, adaptive exhibition spaces, and improved environmental systems have been explored as a means of improving the users engagement and functional performance (Black, 2016; Smith, 2018). However, although these studies contribute to discussions on gallery functionality and user satisfaction, the specific integration of open spaces as a deliberate spatial strategy appears to receive comparatively limited focused attention, particularly in rapid urbanizing African contexts. Open spaces in architectural design may include courtyards, atriums, internal voids, semi-open transition zones, and interconnected outdoor slash indoor environments. Such spaces are often related with visual permeability, natural ventilation, daylight penetration, and spatial relief within enclosed

structures. In tropical urban environments, these features may contribute to environmental moderation and psychological comfort (Olgyay, 2015; Koenigsberger et al., 2017). It seems plausible that open spatial elements within gallery design could enhance legibility, encourage intuitive movements, and provide moments of pause that deepens visitors engagement with the exhibited works.

This gap suggests the need for more scholarly attention to the relationship between spatial openness and experiential quality within art gallery environments. It seems reasonable to propose that deliberate integration of open spaces could potentially enhance circulation clarity, environmental comfort, and psychological engagement, even though it may not be possible to establish direct causal relationships between specific spatial elements and visitor perception. This study aims to examine how open spaces can be integrated in art an art gallery design and to explore how the integration could enhance the users spatial experience in lagos, Nigeria.

The specific objectives intends to:

1. Identify and analyse different forms of open spaces commonly integrated into art gallery design.
2. Investigate how the incorporation of open spaces may influence circulation patterns, visual connectivity, and user perception within gallery settings.
3. Propose design considerations that could potentially enhance spatial experience through the strategic integration of open spaces in art gallery design.

#### **Keywords and definition of terms**

1. **Integration:** relating it to my topic it simply means the incorporation of spatial elements within an architectural composition.
2. **Open spaces:** In this research it refers to the areas around or within a gallery that are somewhat or fully unenclosed. They include courtyards, atriums, transitional zones, internal voids, and semi-open circulation areas.
3. **Art Gallery:** is a building or section where works of art such as paintings, sculptures, pottery, glass, and weaving are displayed for public viewing and may contain art and art supply sales (Law Insider Dictionary, 2022).
4. **Gallery:** This is a space or structure dedicated to the display of artwork (Merriam-Webster Dictionary, 2022).
5. **Spatial Experience:** this is described as the perceptual, psychological, and sensory responses individuals may have when interacting with a built environment.
6. **Lagos, Nigeria:** this refers to the metropolitan and climatic context within which this study is situated.

## **LITERATURE REVIEW**

### **Spatial Design Within Cultural and Exhibition Environments**

Various recent studies has particularly investigated open spaces. For example, Ataoğlu, Yavuz, and Acar (2023) reviewed museum open spaces and identified 4 groups of factors that may affect visitors satisfactions, they include planning and design, social, functional, and perceptual factors. All these factors could affect visitor satisfaction within museum open spaces, suggesting that these areas could potentially function as meaningful extensions of gallery architecture and social life within cities. Based on literature synthesis and limited survey data, these findings indicate that open space design realises its effects through a combination of social interaction, functional adaptability, and perceptual comfort rather than through singular design prescriptions.

### **Spatial Configuration**

This shows evidence that integrated and visually permeable spatial arrangements has a tendency to attract attention and promotes wayfinding more effectively than closed layouts. A study in Shanghai used visibility graph analysis and physiological measures to show that high connectivity values in exhibition halls are associated with high visual accessibility and intensity of visitors attention, suggesting that spatial openness might enhance how the legible the layouts are in the gallery and potentially contribute to a more favorable user experience indicators.

### **Visitor Behaviour and Experience**

The relationship between spatial arrangement and visitor behavior in museum settings has been the subject of several studies. Medaković (2024) investigated the potential effects of spatial characteristics on visitor engagement, including circulation patterns, visual continuity, and transitional spaces. According to the study, visitor movement patterns, dwell time, and levels of interaction with displayed works may be impacted by spatial organization. The results seem to suggest that spatial openness and layout organization may affect how visitors navigate exhibition venues, even though the research mainly focused on museum facilities rather than art galleries particularly. Therefore, it might be claimed that including open spaces into gallery design could improve visitor engagement with exhibitions and help create clearer circulation patterns.

### **Experiential and Perceptual Dimensions**

This suggests that the designed environment is not merely a backdrop for exhibitions but a co-constitutive element of the experience itself. Coutinho and Tostões (2020) have argued that exhibition spaces should be reimagined as content rather than simple containers, asserting that physical galleries can facilitate engaging and meaningful aesthetic experiences when architecture and exhibition are considered in an integrated framework. Related work on visitors' interaction in multimedia galleries reveals that experiential design elements, including spatial flexibility, sensory stimuli, and interactive zones, may foster meaningful engagements among visitors. This potentially improves the perceptions of place and invites longer or more engaged interaction with exhibited works.

### **Multi-Sensory Quality of Open Spaces**

Beyond individual galleries, spatial experience research in broader public and cultural contexts points to the multi-sensory quality of open spaces as central to meaningful engagement. For example, research on multi-sensory spatial experience indicates that atmosphere, generated through visual, haptic, and auditory interactions, positively correlates with affective responses and behavioral intentions in public spaces. A finding that may transfer insights to gallery settings were open spaces intersected with sensory perception.

### **Space Adequacy and User Experience in Nigerian Galleries**

Examining this Studies provides contextually relevant evidence that the physical characteristics of gallery environments may influence psychological well-being, comfort, and engagement among visitors. A 2024 study was conducted from Osun State and it reported that spatial layout and direct visual access influence its users decisions to explore exhibition spaces, highlighting the importance of well thought out spatial organisation for user experience, especially in contemporary Nigerian settings.

### **Evolving Role of Gallery Design**

Other literatures underscores the evolving role of gallery design in relation to user-centred priorities, reflecting a broader shift in architectural thinking from object-focused display toward experiential engagement. Research into flexible gallery spaces have be carried out and it emphasises that adaptability as a strategy is used for improving user experience by responding to various user needs, curatorial approaches, and patterns of use. Such studies suggest that contemporary galleries are increasingly required to accommodate changing exhibition formats, varying visitor flows, and multiple forms of interaction, which fixed and rigid spatial configurations may not be able to support adequately. Spatial flexibility can be often achieved through open or hybrid spatial arrangements, it appears to enable galleries to function as a dynamic environment rather than static enclosures. Open spaces may allow for reconfiguration of exhibition layouts, facilitate smoother circulation, and support informal social interaction, thereby contributing to a more inclusive and responsive spatial experience (Adewunmi & Ajayi, 2022). In regards to this, flexibility is not understood solely as physical reorganization but also as experiential adaptability, where spaces can support multiple interpretations and modes of engagement over time.

### **Spatial Configuration and Openness**

Even though several of these studies focus mainly on museum environments rather than art galleries specifically, they collectively suggest that spatial configuration and degrees of openness may play a major role in shaping user experience. Research on museums have demonstrated that spatial qualities such as visual permeability, circulation clarity, and the presence of transitional or open areas may influence visitor movement, orientation, and perceptual engagement (Black, 2016; Ataoğlu, Yavuz, & Acar, 2023). While these findings cannot be directly generalised to art galleries, they provide helpful conceptual insights into how spatial organization may affect experiential outcomes within exhibition-based environments.

The potential effects of spatial architecture on visitors' perceptions and experiences in cultural and exhibition settings have been the subject of more recent architectural research. In particular, open spaces appear to have a crucial influence in defining how people engage with museums and galleries. For instance, Ataoğlu, Yavuz, and Acar (2023) analyzed museum open spaces and identified various groupings of criteria that may influence visitor happiness, including planning and design aspects, social interaction, practical usability, and perceptual qualities. According to their findings, open spaces in cultural buildings might serve as more than just transitory spaces; they might also promote social interaction and environmental comfort in exhibition settings. The use of open spatial elements may improve environmental quality and spatial perception, according to research on architectural environments. According to Okiemute et al. (2025), open spatial designs can enhance environmental conditions by facilitating stronger physical and visual interactions between inner and external locations. Such spatial integration could facilitate more comfortable and interesting visitor experiences in gallery settings.

Visitors' navigation and interpretation of exhibition spaces seem to be significantly influenced by spatial configuration. According to research on spatial organization in exhibition settings, layouts with visual permeability and spatial connection may promote visitors' better orientation and movement patterns. Higher spatial connection values were linked to improved visual accessibility and stronger visitor attention patterns, according to Dai et al.'s (2025) analysis of exhibition spaces utilizing spatial analysis methodologies. These results imply that increased intelligibility in exhibition layouts may be facilitated by spatial openness. In a related perspective, Igdalova et al. (2025) emphasize that relationships between exhibition areas and open transitional spaces could influence how users perceive spatial continuity within cultural buildings. According to their research, visitors may find it simpler to comprehend the building's spatial organization when spaces are visually related, which could enhance their overall spatial experience.

The design of exhibition spaces may actively influence the visitor experience, according to an increasing number of architectural researchers. Galleries may have an impact on visitors' perceptions and interpretations of artistic displays in addition to serving as storage spaces for artwork. According to Jangid and Junghare (2025), adding spatial openness, environmental quality, and sensory interaction into exhibition venues can improve visitor engagement through experiential design tactics. According to their research, architectural features including open circulation areas, natural lighting, and spatial transitions may enhance visitor experiences. Open areas have the ability to function as transitional settings in this situation, enabling visitors to progressively travel between display zones while retaining spatial awareness and sensory engagement.

The multisensory aspects of architectural environments are another topic that is often studied in studies on spatial experience. Variations in light, airflow, sound, and visual perception are frequently possible in open areas, which may affect how people feel about a place. According to Okiemute et al. (2025), by allowing natural sunlight, ventilation, and visual engagement with neighboring environments, open spatial contexts may improve atmospheric aspects within architectural settings. Visitors may feel more at ease and have more pleasant emotional reactions as a result of these environmental features. Through the creation of visually and environmentally stimulating spaces, these sensory attributes may improve the overall spatial experience in gallery settings.

Research carried out in Nigerian cultural contexts provide crucial contextual information about how spatial design may affect the experience of visitors. According to Bakare et al. (2025), who studied gallery environments in Nigeria, visitors' interactions with exhibition spaces seemed to be influenced by visual accessibility and spatial layout. According to their research, visitors may be more inclined to actively explore display areas if there is obvious spatial order and visual links. These results may emphasize the significance of careful spatial planning in gallery design within the framework of quickly expanding urban

areas like Lagos. Therefore, including open spatial aspects into gallery settings may enhance visitor engagement, comfort, and accessibility.

Gallery architecture's function seems to be altering in response to shifting expectations about cultural participation and visitor engagement. In exhibition settings, modern design strategies place a greater emphasis on adaptability, spatial openness, and environmental interaction. According to research by Igdalova et al. (2025) and Dai et al. (2025), visitors' perceptions and navigation of exhibition spaces may be influenced by spatial connection and openness. In a similar vein, Ataoğlu et al. (2023) point out that open spatial features in museum settings may promote social interaction and perceptual comfort. Additionally, Jangid and Junghare (2025) suggest that by including environmental and spatial design factors, experiential architecture solutions may improve visitor engagement.

Kamila and Sunarya (2025) contributed to this body of work by emphasizing how specific interior elements such as spatial scale, lighting contrast, and circulation openness may encourage extended visitor stays and interactive behaviours within gallery interiors. Their findings suggest that spatial openness and fluid circulation correlates with behavioural markers of engagement, pointing to the importance of intentional spatial design in shaping visitor movement and experience within the exhibition environments.

Although many of these studies focus primarily on museums rather than art galleries specifically, their findings appear to collectively suggest that spatial openness may play a meaningful role in shaping visitor experience. Therefore, by enhancing circulation, environmental quality, and perceptual engagement within gallery contexts, the incorporation of open spatial elements like courtyards, atriums, and transitional outdoor areas could potentially improve spatial experience.

### **Conceptual Framework**

This study is grounded on the assumption that architectural spatial strategies may influence user perception and experiential outcomes within gallery environments. Based on architectural theory, environmental psychology, and exhibition design studies, the framework positions the integration of open spaces as a spatial design strategy that could potentially shape the quality of spatial experience in art galleries.

Open spaces inside gallery architecture may include courtyards, atriums, internal voids, semi-open circulation zones, and transitional outdoor–indoor interfaces. Existing literature proposes that such spaces can influence environmental performance, visual permeability, and circulation flow (Ma et al., 2023; Kamila & Sunarya, 2025). Open spaces may operate as mediating elements between enclosed exhibition halls and the broader urban or climatic context. Rather than functioning merely as aesthetic features. The integration of open spaces is conceptualised in this study not as only just the presence of voids, but as the conscious incorporation into the spatial system of the gallery. It appears plausible that when open spaces are intentionally integrated, they may contribute to:

1. Enhanced visual connectivity
2. Improved spatial legibility
3. Climatic moderation through natural ventilation and daylight
4. Transitional pauses within circulation sequences

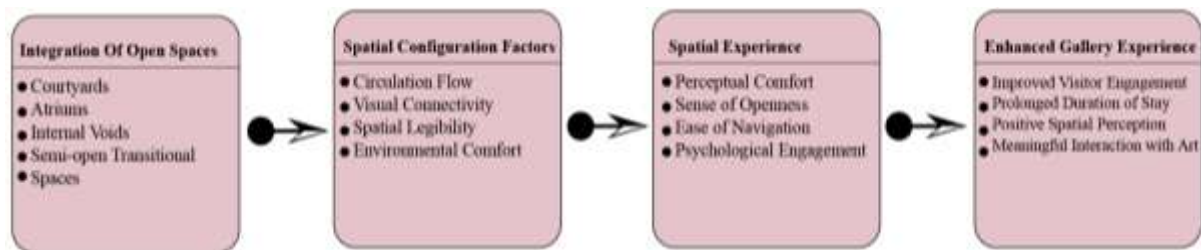
Spatial experience is known as a multidimensional construct encompassing perceptual, psychological, and sensory responses to built environments. Research proposes that factors such as enclosure, openness, scale, light, and movement patterns may shape emotional and cognitive engagement within cultural settings (Medaković, 2024; Coutinho & Tostões, 2020).

In gallery contexts, spatial experience may manifest through:

1. Perceived comfort
2. Ease of movement and orientation
3. Duration of stay
4. Emotional resonance
5. Visual engagement with exhibited works

The framework guides the identification of variables, the selection of evaluative parameters, and the interpretation of my findings in the examining of relationship between open space integration and spatial experience in art gallery design.

Fig. X: Conceptual Framework for the Integration of Open Spaces and Spatial Experience in Art Gallery



Design

### Research Gap

Several limitations remain evident, even though contemporary literatures acknowledges the importance of spatial configuration in shaping visitor engagement. Many studies are focused mainly on museum environments rather than specifically on art gallery designs, where spatial sequencing and intimacy may differ in scale and intention. While research has examined flexibility, lighting strategies, and environmental performance, hardly any studies appear to point out and critically examine the integration of open spaces as an obvious spatial strategy that influences experiential quality.

A large percentage of empirical investigations are found in European or Asian contexts. There appears to be quite limited research that explores how open spatial strategies function within rapidly urbanising African cities, particularly Lagos, Nigeria. Existing Nigerian studies tends to assess functional adequacy or lighting performance rather than the experiential suggestions of spatial openness. These observations recommends a gap in the literature regarding: The deliberate integration of open spaces in art gallery design, the experiential implications of such integration, and the contextual dynamics influencing the relationship within Lagos, Nigeria. These study is therefore seeking to address this gap by examining how open spaces may be strategically integrated into gallery architecture in other to enhance the spatial experience within a tropical urban context.

### RESEARCH METHOD

This methodology uses a qualitative approach which is the use of a case study review method. The reason for this approach is informed by the exploratory nature of the research, which seeks to look into how the integration off open spaces in art gallery designs maybe able to enhance spatial experience. Rather than trying to establish causal relationships, the study aims to integrate existing knowledge while identifying spatial patterns, design strategies, and experiential outcomes reported in previous studies, that are reoccurring,. A qualitative case study review is considered appropriate as it allows for an in-depth examination of documented architectural projects and scholarly investigations within real-world contexts. This study approach enables the study analyse how open space integration has been conceptualised and applied across different gallery environments, while also acknowledging stuational differences.

This case study review involves a systematic examination of (15) written literatures and documented gallery projects that have been published between 2020 and 2026. These studies were picked because they address themes that are related to:

1. Open spaces in architectural or gallery design
2. Spatial experience or user perception
3. Museum or art gallery environments
4. Context responsive or experiential design strategies

The data for this study will be gotten fully from secondary sources like academic journals, architectural publications and documented obtained through data bases such as google scholar and academic publishers. The data collected will include text descriptions, analytic discussions, diagrams and findings that relating to spatial design and user experience. The case studies gotten are going to be analysed by using

thematic content analysis which involves identifying reoccurring themes, concepts and design strategies relating to open space integration and spatial experience

The analysis is guided by the study's conceptual framework, with particular attention given to the relationships between:

1. Open space integration
2. Spatial configuration factors
3. Spatial experience

The study's conclusions depend on the breadth, precision, and methodological rigor of the evaluated literature because it uses secondary data. Although the case study review method enables general comparison insights, it might not adequately capture user views unique to each Lagos gallery visitor. However, the technique offers a formal foundation for comprehending how open space integration may impact spatial experience and for identifying design concerns pertinent to gallery architecture in Lagos Nigeria, by concentrating on a variety of contemporary research and documented situations.

## **RESULTS AND DISCUSSIONS**

The results of the qualitative case study review carried out in this study are presented in this chapter. The research was predicated on a methodical review of fifteen (15) documented studies and architectural literature about the incorporation of open space in art gallery settings. In order to find recurrent spatial design techniques and experience results related to the use of open spaces in gallery architecture, the evaluated materials were examined using theme content analysis, as described in the methodology. The chapter is divided into two main sections. The findings section presents the patterns and observations identified from the reviewed literature without interpretation. The discussion section then interprets these findings, explaining their possible implications for spatial experience within art gallery design, particularly within the context of Lagos, Nigeria.

### **Findings**

The analysis of the fifteen reviewed studies revealed several recurring themes relating to the integration of open spaces in gallery design. These themes include spatial openness and visual continuity, indoor/ outdoor relationships, circulation flexibility, environmental comfort, and social interaction opportunities within gallery environments.

#### **Spatial Openness and Visual Continuity**

The use of open spaces in gallery settings frequently results in a sense of visual consistency across various exhibition areas, according to a number of studies examined in this study. Open courtyards, atriums, or transitional outdoor areas seemed to offer continuous visual links between interior rooms in numerous documented designs, which might aid visitors in maintaining spatial orientation when exploring gallery environments. According to some of the studied literature, open spatial arrangements enable visitors to interact visually with several gallery spaces at once. Visitors may view the gallery as a continuous environment rather than a series of separate rooms, which seems to foster a more fluid spatial experience. Furthermore, some case studies showed that architectural openness might lessen the sense of spatial confinement that is occasionally connected to conventional enclosed display spaces. In many instances, galleries with open spaces or inside courtyards appeared to promote visitors' increased spatial awareness and visual investigation.

#### **Indoor–Outdoor Spatial Relationships**

The association between outdoor open spaces and inner gallery spaces is another recurrent finding from the literature assessment. The incorporation of terraces, sculpture gardens, landscaped courtyards, and semi-open exhibition areas as transitional areas between the gallery's interior and the outside world was documented in a number of architectural case studies. Open spaces frequently seemed to serve as spatial buffers in these investigations, mediating the transition between the natural environment and developed form. Such transitional spaces may bring natural elements like greenery, daylight, and fresh air into the gallery atmosphere, as was often stated in the reviewed literature. A few known projects also emphasized the use of outdoor exhibition spaces, such as gardens or open courtyards, where artwork is on

show. Beyond traditional indoor exhibition settings, these spatial designs seem to provide people other ways to experience art.

### **Circulation Flexibility within Gallery Spaces**

The circulation patterns of visitors in gallery venues that incorporate open spaces are a third motif found in the evaluated studies. Open courtyards or central atriums may affect how people navigate exhibition spaces, according to a number of architectural case studies. Open areas seemed to serve as spatial anchors or orientation nodes in the building layout in several instances. These areas were frequently placed in key locations within the gallery layout, which would have made it possible for spectators to move between several exhibition pathways. Additionally, compared to strictly linear circulation systems, galleries with open spatial layouts may offer more flexible movement patterns, according to certain studies. Different routes through exhibition areas may be available to visitors in such settings, potentially leading to a variety of spatial experiences.

### **Environmental Comfort and Daylighting**

The evaluated literature also frequently addressed environmental issues. The incorporation of open spaces may enhance natural lighting and ventilation in gallery settings, according to a number of case studies. Open courtyards, skylights, and atrium spaces were frequently cited as architectural features that seem to let more light into interior show spaces. These characteristics were also linked to passive ventilation techniques that could improve interior environmental comfort in some reported projects. According to the literature, open spaces can offer shaded outdoor areas where guests can stop or rest while visiting galleries. These spaces have occasionally been said to enhance the general comfort of the gallery setting.

### **Opportunities for Social Interaction**

The use of open spaces as places for casual social contact inside gallery environments is another recurrent theme in the studied literature. Courtyards, plazas, and outdoor meeting areas that seem to invite visitors to converse, relax, or think back on their gallery experience were noted in a number of published case studies.

### **Discussion**

The results of the literature review point to a number of potential connections between the integration of open spaces and visitors' spatial experiences in art museum settings. The discussion that follows aims to assess the data's possible importance in regard to gallery architecture and visitor perception, even though the findings themselves show discernible patterns from the analyzed research.

### **Open Spaces and Perceived Spatial Experience**

The findings' identification of visual continuity and spatial openness may imply that open areas can enhance the spatial experience in gallery settings. Greater visual connectedness may improve spatial legibility and visitor orientation, according to prior architectural study. Therefore, it is possible that incorporating courtyards, atriums, and interior voids could make gallery spaces seem more cohesive and easy to navigate. This perspective is consistent with past research indicating that spatial openness may promote exploration inside architectural environments and lessen psychological perceptions of enclosure. However, it is also possible that the effectiveness of such strategies depends on careful spatial planning, as excessive openness could potentially reduce the controlled viewing conditions often required for certain artworks.

### **Indoor–Outdoor Integration and Experiential Diversity**

The results concerning the spatial linkages between indoor and outdoor areas seem to indicate that including open spaces could increase the variety of experiences that can be had in gallery settings. Galleries can offer visitors moments of spatial contrast between enclosed and open environments by integrating gardens, courtyards, or outdoor exhibition spaces. By incorporating pauses and transitional experiences into museum circulation paths, some architectural researchers contend that this kind of spatial diversity might enhance visitor engagement. In the context of gallery design, these transitional areas could

give visitors a chance to relax, think, or analyze artwork in their minds before moving on to later exhibitions. In climates similar to Lagos, where outdoor conditions can be significant in shaping architectural design, the integration of shaded open spaces may also contribute to environmental comfort while maintaining a connection to the surrounding environment.

### **Circulation Flexibility and Visitor Movement**

The results pertaining to circulation flexibility indicate that visitors' movement across gallery environments may be influenced by open spatial nodes like courtyards or atriums. Visitors to galleries with open spatial anchors may feel more free to take different paths rather than adhering to a strict order of exhibition rooms. This finding seems to be in line with the body of research on museum studies, which frequently highlights how crucial intuitive navigation is to raising visitor pleasure. Visitors may be able to choose how they travel through the gallery with flexible circulation systems, which could result in more varied spatial experiences. Nevertheless, it is possible that too many circulation options could lead to confusion if spatial cues and wayfinding strategies are not clearly defined.

### **Environmental Benefits of Open Spaces**

The results pertaining to natural ventilation and daylighting may also suggest that the incorporation of open spaces has an impact on gallery architecture in terms of the environment. According to a number of research, architectural openings like atriums and courtyards can support passive environmental management techniques. However, the introduction of natural light in gallery settings needs to be carefully balanced with the need to preserve delicate artworks. Therefore, to make sure that environmental advantages do not jeopardize exhibition conditions, architectural solutions like regulated skylights, shaded courtyards, or filtered daylight may be required.

### **Social and Cultural Dimensions of Gallery Open Spaces**

Additionally, the literature review seems to emphasize the social aspect of open spaces in gallery settings. In addition to serving as circulation areas, courtyards, plazas, and outdoor seating areas can also serve as casual meeting places where guests converse, relax, or talk about artwork. In this way, galleries may become more expansive cultural and social hubs rather than just exhibition-focused locations. This view is consistent with current trends in museum design that prioritize community engagement and public participation within cultural institutions. The incorporation of such open spaces may potentially improve the cultural accessibility of gallery institutions in Lagos, where public gathering places are frequently highly appreciated in metropolitan surroundings.

## **CONCLUSION**

The analysis carried out in this study suggests that the incorporation of open spaces into the architecture of art galleries may have a significant impact on the spatial experience of visitors. Open spatial features like courtyards, atriums, gardens, and terraces may enhance visual connectedness, allow for more flexible movement patterns, and provide a wider range of spatial experiences in gallery settings, according to the reviewed research. According to the study, natural lighting and ventilation techniques could improve the environmental quality of gallery buildings. It is crucial to remember that in order to guarantee that exhibition conditions continue to be suitable for the preservation of artwork, such solutions would probably necessitate considerable design attention. Additionally, by offering places for casual meeting and interaction, open spaces seem to assist the social and cultural purposes of galleries. These areas have the potential to expand galleries' functions beyond exhibition settings into more expansive cultural and social hubs. The incorporation of open spaces in gallery design may be especially pertinent in the context of Lagos, where urban social culture and climate frequently promote outdoor contact. Therefore, adding well planned open areas to gallery buildings may help create more captivating and culturally sensitive places.

## **RECOMMENDATIONS**

Based on the findings of this study, several recommendations may be considered for architectural design practice and future research relating to art gallery environments.

1. Architects designing art galleries may consider incorporating internal courtyards or atrium spaces within gallery layouts. These spaces could potentially enhance visual connectivity and provide orientation points within the building.
2. Additionally, designers could think about incorporating transitional places like semi-open exhibition rooms, sculpture gardens, or terraces. These areas might give guests the chance to view artwork in a variety of spatial settings while yet feeling a connection to the natural world.
3. Circulation systems that provide visitors with alternative routes through exhibition rooms may be advantageous for future gallery designs. Strategically placed open areas within a building's plan may serve as spatial anchors to facilitate flexible visitor movement.
4. Architects may investigate the use of open spaces as a component of passive environmental techniques in climates like Lagos. While lowering dependency on mechanical systems, courtyards, shaded outdoor spaces, and regulated daylight openings may enhance environmental comfort.
5. Open areas meant for casual gathering, leisure, and conversation may also be beneficial to gallery designs. These areas might help create a more welcoming and socially active cultural setting.

### **Contribution to Knowledge**

By investigating how the incorporation of open spaces in art gallery architecture may affect spatial experience, especially in the setting of Lagos, Nigeria, this study adds to the body of previous architectural research. Although earlier study has examined the architecture of museums and galleries in various locations, there doesn't seem to be much that focuses on the connection between open spatial design techniques and the visitor experience in tropical urban settings like Lagos. This study identifies important spatial design motifs that seem to influence gallery experiences through a thorough review of fifteen published studies. These include chances for social engagement in gallery settings, circulation flexibility, indoor-outdoor spatial linkages, visual consistency and openness, and comfort.

The study also emphasizes how open space integration may be useful as a gallery architectural design technique in Lagos-like climates. By highlighting the potential use of courtyards, atriums, and outdoor display areas, the study makes recommendations for design elements that could improve visitor engagement while taking environmental factors into account.

Although the findings are based on literature analysis, the study provides a conceptual framework that may assist architects, designers, and researchers in understanding how open spatial elements could influence the experiential quality of gallery environments. This may serve as a foundation for future empirical studies focusing on gallery users and spatial behaviour within cultural buildings.

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