

Harmonizing Quietude and Community: An Architectural Framework for Enhancing "Third Place" Dynamics in Tropical Public Libraries

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Abstract

Public libraries serve as vital community institutions that extend beyond book repositories to function as "third places" that support social interaction and community cohesion. This study situates public libraries within the third-place framework, emphasising their role in promoting engagement and cultural exchange. It examines the challenges tropical climates pose to user comfort and tranquillity, including heat, humidity, and noise pollution. Comparative case-study findings showed that the Rivers State Library lacked effective third-place zoning and acoustic separation, whereas the Dunoon Library Precinct successfully incorporated these strategies to support both quiet study and community interaction. In response, the proposed PLOOK Model integrates user-centred spatial zoning, acoustic control, climate-responsive design, and inclusive communal spaces to strengthen public libraries as resilient third places in tropical contexts. The study highlights the importance of sustainable, well-being-oriented design in supporting lifelong learning, social inclusion, and community engagement.

Keywords: Public Libraries, Library Architecture, Third Place Dynamics, Community Interaction, Harmonising Quietude, Social Cohesion.

Introduction

Public libraries have long been regarded as essential institutions within communities, providing access to knowledge and resources and a space for individuals to engage in intellectual pursuits.(Cruz, 2018) However, the role of public libraries goes beyond being repositories of books; they have also been recognized as "third places" that play a crucial role in cultivating community interaction and social cohesion.(Houpert, 2020) This study aims to contextualise public libraries as third places and explore the challenges posed by tropical climates to the design of these important community spaces. (Oldenburg, n.d.)

Defining "third places" and their social importance in cultivating community interaction beyond the home and work is essential to understanding the unique role those public libraries play in society. The concept of "third places" was first introduced by sociologist Ray Oldenburg in his book "The Great Good Place," where he identified these spaces as social settings that are distinct from home (the first place) and work (the second place). Third places are characterised by an informal and welcoming atmosphere where individuals from

diverse backgrounds can come together, engage in conversations, and build social connections. (Oldenburg, n.d.)

Public libraries embody the qualities of third places, emphasising accessibility, inclusivity, and community engagement. They serve as neutral grounds where individuals can gather, interact, and participate in various activities beyond reading books. Public libraries host community events, workshops, and programs that cater to the diverse needs and interests of their patrons, making them vibrant hubs of social and cultural exchange. (Oldenburg, n.d.)

However, designing public libraries to fulfil their role as third places can be challenging, especially in tropical climates, where environmental factors such as heat, humidity, and noise can affect user comfort and tranquillity. Tropical regions experience high temperatures and humidity levels throughout the year, making it essential for public library designs to prioritise ventilation, shading, and thermal comfort. Additionally, noise pollution from surrounding urban areas or busy streets can detract from the peaceful and contemplative atmosphere essential for a library setting. (Oldenburg, n.d.).

Statement of the Problem

Public libraries in tropical countries face substantial design issues that jeopardise user comfort and the libraries' ability to serve as lively third places owing to unfavourable environmental elements such as high temperatures, humidity, and noise pollution. The ability of existing library designs to promote community engagement and well-being is limited because they frequently fail to incorporate effective acoustic and climatic adjustments or to sufficiently divide quiet study sections from social spaces. To enable public libraries in tropical regions to serve as robust, inclusive, and engaging community centres, an architectural framework tailored to tropical climates should be developed. This framework should facilitate distinct study areas that are intentionally quiet and separate from spaces designed for interactive and social activities, while integrating these elements into a cohesive structure. This study aims to provide such a framework.

Aim of the Study

This study aimed to propose an architectural framework that maximises the potential of public libraries as third places while addressing the challenges posed by tropical climates.

Scope of the Study

By integrating tranquillity and community dynamics in the design of tropical public libraries, this study seeks to enhance the third-place qualities that are essential for promoting community interaction and social cohesion in the library. This study explores various design strategies and considerations that can be implemented to create public libraries that are not only comfortable and functional but also conducive to social interaction and community engagement. We will examine case studies of public libraries in Rivers State that have successfully integrated elements of tranquillity and community dynamics into their design,

drawing lessons and insights that can be applied to future projects in Nigeria. Public libraries are essential community venues that support lifelong learning, foster social interactions, and strengthen communities. They are more than just structures that house books. By comprehending the concept of third places and the difficulties presented by tropical climates, we may build public libraries that are not only resilient to environmental variables but also thriving centres of community participation and cross-cultural interchange.

Research Objectives

- i. To propose an architectural framework that addresses the challenges posed by tropical climates in the design of public libraries as third spaces.
- ii. To explore design strategies and considerations that can enhance the third-place qualities of public libraries in tropical climates
- iii. To examine case studies of tropical public libraries that have successfully integrated tranquillity and community dynamics into their design.

Research Questions

- i. What challenges do tropical climates pose in designing public libraries to serve as third spaces?
- ii. How can architectural design strategies be implemented to create tropical public libraries that are comfortable, functional, and conducive to social interaction?
- iii. What insights can be drawn from case studies of tropical public libraries that have successfully integrated elements of tranquillity and community dynamics into their designs?

Study Area

This study was conducted in Rivers State, located in the Niger Delta region of Nigeria, which is characterised by its amphibious geography, comprising both riverine and upland areas, with approximately 45% of the state being riverine. Rivers State covers a land area of 11,077 km², with a population of approximately 7.3 million as of 2016, ranking sixth among Nigeria's 36 states. The specific site for this research is in the state capital, making it a pertinent context for examining the design of public libraries in tropical environments. The presence of multiple public libraries in this region, including the Rivers State Library in Port Harcourt, underscores this study's relevance. These libraries serve diverse populations and face unique challenges related to tropical climate conditions, such as heat, humidity, and noise pollution. However, existing library facilities in the area often reflect traditional designs that inadequately address the balance between quiet study zones and social interaction spaces, highlighting a gap in architectural adaptation to tropical third-place environments. This research aims to close this gap by proposing design strategies tailored to the climatic and social context of Rivers State, thereby enhancing the role of public libraries as inclusive, resilient, and engaging community hubs in tropical settings.

Literature Review

Theoretical Framework

The theoretical framework of this study was created by carefully examining previous studies that examined the idea of "third spaces" and looked at how they affect social inclusion and community cohesiveness.(Mehta, 2024) This framework seeks to provide a thorough understanding of the complex effects of public libraries as third spaces and the associated notions by analyzing literature from various fields and synthesizing pertinent theories and viewpoints.(Houpert, 2020) It provides a brief historical review before defining, examining, and grouping the relevant hypotheses in the literature. "How do public libraries integrate the third space model in new, and or old library architectures while maintaining quietude, and increased community engagement?" is the main research topic of this study.

The Third-Place Model and Quietude

Third places, as proposed by Oldenburg (1999), are informal gathering spots that are separate from home (first place) and work (second place), where individuals come together to socialise, relax, and build a sense of community. These third places play a crucial role in fostering social cohesion and community building. Characteristics such as accessibility, affordability, and a welcoming atmosphere are essential for creating spaces that promote interaction and connection among individuals (Oldenburg 1999). Internal community relations and communal values are also integral to the functioning of third places, as they help create a sense of belonging and shared identity among members (Lawson, 2004)

In urban public spaces, the concept of quietude plays a significant role in influencing individual well-being and environmental psychology. The components of quietude, such as restorativeness and pleasantness, contribute to creating spaces conducive to relaxation and introspection(Herranz-Pascual et al., 2019). Soundscapes and noise reduction strategies are particularly important in densely populated urban areas, where high levels of noise pollution can have detrimental effects on individuals' mental and physical health (De Paiva Vianna et al., 2015). In tropical urban contexts, the influence of natural elements and urban blue-green spaces on sensory perception and tranquillity further highlights the importance of incorporating green spaces into the built environment to enhance overall well-being (Bressane et al., 2024).

Architectural strategies play a crucial role in promoting community well-being in public spaces. The integration of cultural, social, and sustainability dimensions in green architecture helps create spaces that are not only environmentally friendly but also conducive to social interaction and community engagement(Linkon & Cucuzzella, 2025). Responsive façade design, which mediates environmental and social dynamics, is particularly relevant for tropical climatic adaptations, as it can help create comfortable and energy-efficient spaces that promote social interaction (De Souza et al., 2024). Place attachment factors also play a significant role in influencing user engagement and comfort in public spaces, with public libraries serving as important community anchors that nurture a sense of belonging and connection among individuals(Ujang et al., 2018).

In the context of library spaces, user-centric design approaches are essential for creating environments that cater to the diverse needs and preferences of library patrons. Existing frameworks for library space planning emphasise the importance of balancing sanctuary, collaborative, interaction, and community spaces to create inclusive and welcoming environments for all users (Meena, 2024). Technological advances in intelligent libraries have also played a significant role in enhancing user experience and community engagement by providing innovative services and resources that cater to the evolving needs of library patrons (Pachgade, 2025).

Defining Third Spaces and the Role of Libraries

To establish a conceptual foundation, it is crucial to define third spaces and their potential functions. Third spaces, as conceptualised by Mehta and Bosson (2009), are environments distinct from both home and work settings. Oldenburg (1999) further defined third spaces as 'nothing more than informal public gathering places. The phrase "third spaces" derives from the consideration of our homes as the first places in our lives and our work as the second. Note that the terms places and spaces are used interchangeably in this section. These spaces provide opportunities for relaxation, social bonding, and leisure activities. (Pachgade, 2025) While various places can serve as third spaces, this study specifically focuses on public libraries and their capacity to promote social inclusion and community cohesion.

Libraries as Catalysts for Social Inclusion

Public libraries have long been considered vital organisations that promote social inclusion and overcome societal gaps. They are democratic venues that welcome people from all walks of life and provide equal access to knowledge, resources and opportunities. (Pacino, 2022) refers to libraries as democratic venues because they uphold the basic principles of democracy, including fairness and equality (Rasmussen & Larsen, 2025). Scholars such as Laerhoven and Buschman (2011) stress libraries' democratic potential, emphasizing their role in empowering underrepresented populations, supporting lifelong learning, and promoting social justice. (Buschman, 2024) proposed a comprehensive model that explored the relationship between libraries as third spaces, social inclusion, and community cohesion. Their framework considers the physical aspects of libraries, the range of resources and services they offer, the programs and activities that facilitate social interaction, and the symbolic value of libraries as inclusive spaces for the elderly. By integrating this model into the theoretical framework, we gained a deeper understanding of the mechanisms through which public libraries impact social inclusion and community cohesion.

The Public Library as Social Infrastructure: Balancing Interaction and Quietude

Public libraries transcend their traditional identity as static archives and function as vital social infrastructures that foster community resilience and connectivity. These spaces serve as physical conduits for social interaction, enabling the formation of relationships across diverse demographic strata (Buschman, 2024). This "meeting place" phenomenon allows for the exchange of lived experiences and cultivation of social capital, which are essential for urban inclusion and civic cohesion. (Qi et al., 2024)

Beyond quiet study, libraries act as dynamic venues for community engagement through programmed activities, such as lectures, performances, and collaborative workshops (Olurayi & Lucia, 2021). Within the context of an integrated architectural framework, these social functions represent the library's "active" nodes. The challenge for contemporary design, particularly in the urban landscape of Port Harcourt, lies in facilitating this robust social fabric and "Third Place" magnetism without infringing upon the acoustic requirements of zones dedicated to quietude and cognitive focus. Ultimately, the library's success as a social infrastructure depends on its ability to harmoniously host both high-energy communal interaction and high-concentration individual study through strategic spatial and acoustic zoning design. (Kishimoto et al., 2025)

To effectively evaluate the library's performance as a "Third Space," this study adopts and adapts the multidimensional framework proposed by Rawhouser et al. (2017). By pivoting this social impact model toward an architectural lens, we can measure how design interventions, specifically regarding quietude and focus, reverberate across individual, communal, and systematic scales. (Baum & Valins, 2024).

Evaluating the Library as a Third Space: A Multi-Scalar Approach

Individual-Level Impact (Micro Scale):

This study scrutinises the intersection of spatial design and personal well-being. Aligning with Objective III, the impact was measured by how successfully the library facilitated "deep work" and psychological comfort. Through qualitative interviews and behavioural mapping, we can move beyond general metrics of "satisfaction" to understand how specific acoustic environments either hinder or enhance a user's cognitive flow and sense of belonging. The library's value as a third space is defined by its ability to provide a sanctuary for personal growth that the home or workplace may lack. (Xiao & Aletta, 2016).

Community-Level Effect (The Meso Scale)

This dimension examines the library's role as a social catalyst and the "Third Place" dynamic. In the densely populated urban context of Port Harcourt, libraries must foster intergroup harmony among diverse demographics. The evaluation focuses here on spatial zoning (Objective II): can the architecture successfully host collaborative community interaction and silent individual study within the same envelope? Impact is measured by the strength of social networks formed and the lack of "sonic friction" between different user

groups, determining whether the spatial hierarchy encourages inclusive cohabitation or leads to territorial conflict.(Small & Adler, 2019).

Systemic Impact (The Macro Scale)

The wider socioeconomic and policy ramifications of library architecture are addressed from a systemic viewpoint. This study evaluates how an integrated design, such as the Integrated Architectural Framework, fits national objectives for social integration and education by examining government papers and Rivers State's urban development plans. The degree to which these architectural designs can be scaled up or incorporated into upcoming public infrastructure policies, guaranteeing that the library continues to be a strong pillar of the city's social fabric, determines their impact. (Melik, 2023).

Synthesis for Research Alignment

By reforming the framework of Rawhouser et al., this study moves beyond a purely sociological critique to spatial assessment. It acknowledges that the "impact" of a library is not merely found in its book collection, but in the complex interplay between the physical environment (acoustics and zoning) and the social outcomes (cohesion and focus). This nuanced view ensures that the proposed architectural design for the Port Harcourt libraries is grounded in measurable human and systemic benefits.

The Evolving Role of Public Library

The contemporary evolution of public libraries marks a transition from passive archives to proactive "makerspaces" and socio-technical hubs designed to mitigate urban fragmentation. (Hernández-Pérez et al., 2020) By integrating contemporary scholarship, including the collaborative creative models of (Mathuews & Harper, 2020) and the immigrant integration frameworks of Johnston and Audunson (2019), this research reconceptualises the library as an adaptive "Third Space" capable of addressing modern societal challenges. For the architectural context of Port Harcourt, this evolution necessitates a design paradigm that balances high-activity participatory zones with protected areas for cognitive focus, ensuring that the library remains an inclusive, resilient catalyst for both individual empowerment and systemic social cohesion.

Defining Harmony between Quietude and Community

Tranquillity is a complex multisensory experience that is influenced by cultural contexts and social interactions. In their study on "Defining Harmony between Quietude and Community", Smith et al. (2018) conceptualised tranquillity as a multisensory experience that supports social interaction without noise conflict. This understanding is crucial in architectural design, as the built environment can either enhance or detract from the overall sense of tranquillity within a community.

According to Smith et al. (2018), achieving harmony between quietude and community requires careful consideration of the acoustic environment, spatial layout, and visual aesthetics of the built environment. By creating spaces that promote tranquillity and social interaction, architects can foster a sense of community well-being that enhances residents' overall quality of life.

Community Well-being as an Architectural Objective

Community well-being is increasingly recognised as a key objective of architectural design. By emphasising participatory design processes and incorporating local cultural elements, architects can create spaces that foster a sense of ownership and social cohesion within the community (Jones & Brown, 2019). This approach enhances the overall quality of life of residents and promotes sustainable development and resilience within communities.

In their study on "Community Well-being as an Architectural Objective," Jones and Brown (2019) highlight the importance of incorporating local cultural elements into architectural design to create spaces that reflect the values and traditions of the community. By involving residents in the design process, architects can ensure that the built environment meets the needs and preferences of the people who will use it.

Climate and Environmental Factors in Tropical Environments

Environmental and climatic considerations play a crucial role in architectural design, particularly in tropical contexts, where issues such as thermal comfort and soundscape modulation are of utmost importance. By addressing facade strategies and urban greening, architects can create spaces that are not only aesthetically pleasing but also environmentally sustainable and comfortable for residents (Wong & Lee, 2020).

Wong and Lee (2020) emphasised the importance of incorporating passive design strategies, such as natural ventilation and shading, to enhance thermal comfort in tropical climates. By utilising green facades and rooftop gardens, architects can mitigate noise pollution and create a more pleasant soundscape for the residents. These strategies not only improve the overall quality of life of residents but also contribute to the sustainability and resilience of built environments.

Conceptual Model

The proposed conceptual model positions public libraries as the definitive central nexus where four critical social and architectural dimensions converge to redefine urban infrastructure. Occupying the vertical poles of this framework are Quietude and Social Inclusion; the former represents the library's elevated role as a sanctuary for cognitive restoration and intellectual focus, while the latter serves as the foundational anchor, ensuring that the facility remains a democratic and barrier-free entry point for all demographic strata. Along the horizontal axis, community cohesion and third-space dynamics intersect to facilitate the generation of social capital. While community cohesion focuses on the structural bonding and shared identity developed through group interaction,

the third-space dimension highlights the library's capacity for informal, non-institutional engagement and leisure. Together, these four vectors transform the library from a static repository into a dynamic, multidimensional environment where individual contemplation and collective belonging are harmonised through singular, integrated architectural synthesis.

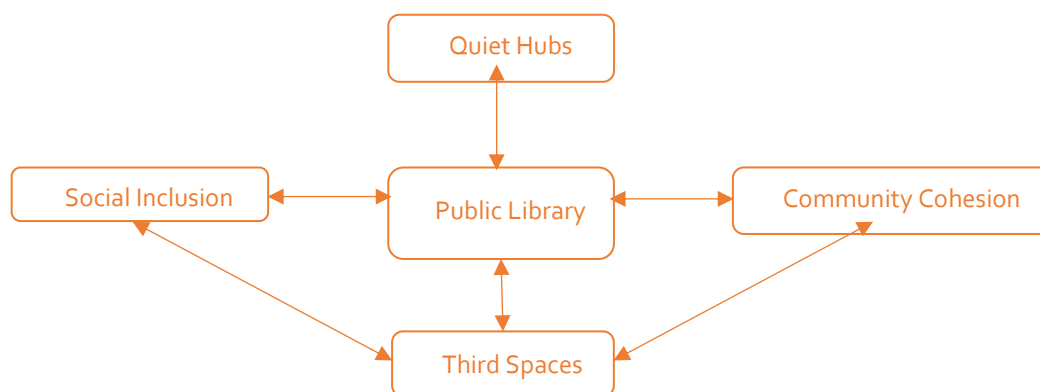


Figure 1: The multi-dimensional library model: Balancing quiet sanctuaries and collaborative Third Spaces to foster social inclusion and community cohesion.

Source: Author

Conceptual typology of a Third-place Design

The design shows how to balance quiet spaces and social interactions to create a tropical public library that serves as an open and layered Third Place environment. It features elevated platforms, open ground areas, and terraced community decks, creating different levels of intimacy, from quiet reading areas below to more active meeting spots above. This The use of tree canopies, open-air pathways, and flexible structures aims to respond to the region's tropical climate. It focuses on providing natural ventilation, soft daylight, and shaded outdoor spaces to keep users comfortable and encourage them to stay longer in the space.(Ow & Chan, 2024) The design includes amphitheatre-like steps and scattered seating to create an informal setting that encourages social interaction, which is a key feature of a Third Place. Collectively, the design proposes a non-institutional, landscape-integrated library typology in which architecture dissolves rigid boundaries between learning, leisure, and social exchange. This demonstrates how spatial fluidity, environmental responsiveness, and programmatic hybridity can be harmonised to support contemplative use and vibrant community life within contemporary public libraries.

Methodology

Study Design

This study employed a qualitative research approach to analyse how public libraries function as third spaces that promote social inclusion and community cohesion in tropical climates. Data collection involved semi-structured interviews with library staff and patrons

at the Rivers State Library, allowing for the exploration of diverse perspectives on the role of libraries in harmonising community dynamics. Additionally, an in-depth case study analysis was conducted on the Rivers State Library, complemented by a comparative international case study of the Dunoon Library Precinct in South Africa. Literature was sourced from published books and journals indexed on platforms such as Google Scholar, ResearchGate, and Scribd, focusing on keywords such as public libraries, library architecture, third places, and enhancing quietude. The literature review was limited to full-text English publications from the past five years. This framework enabled a comprehensive understanding of the architectural strategies that enhance third-place qualities in tropical public libraries.

Data Collection

This study employed a qualitative research technique to provide a comprehensive analysis of how public libraries function as third spaces that promote social inclusion and community cohesion in tropical climate regions. Qualitative techniques are particularly useful for evaluating subjective experiences, perceptions, and social interactions in specific contexts (Rosenbaum, 2005). This approach enables a comprehensive understanding of how public library design, particularly in the tropics, uses architectural frameworks to successfully implement third-place dynamics through data collection techniques such as semi-structured interviews with librarians and patrons and observations, in keeping with the study's focus on harmonising quietude, community, and third-place dynamics in tropical public libraries.

Semi-structured Interviews

Semi-structured interviews are a useful method for gathering the various viewpoints of library employees and patrons about the influence of libraries as third places. These interviews made it possible to explore participants' experiences and perceptions in a flexible but supervised way (Hopf, 2004). Participants were encouraged to express their opinions about public libraries' role in harmonising tranquillity and community, enhancing third-place integration, social inclusion, and community cohesiveness through open-ended questions.

Table 1: Distribution of One-on-One interview for the study

This interview was conducted with multi-dimensional methods, ranging from one-on-one interview with the librarian, a focused group with the children and young adults with a semi-structured questionnaire.

S/N	Sampled participants	Participant Demographics	Participants
1	Staff (Librarian)	40+	1
	Patrons	20 – 39	2
		13 – 19	3

S/N	Sampled participants	Participant Demographics	Participants
		0 – 12	7

Source: Case study documentation

Case Study Evaluation Matrix

Table 2: Case Study Evaluation Matrix

S/N	Performance Pillar	Analytical Lens	Core Evaluative Focus
1.	Strategic Spatial Logic	Zoning & Circulation	Mapping the gradient from "Active Social Areas" to "Deep Work Units" and assessing the efficiency of user flow and programmatic hierarchy.
2.	Acoustic Shielding	Sonic Integrity	Examining the interplay between sound-absorbing materials, buffer zones, and physical separation to mitigate noise cross-contamination.
3.	Tectonic & Skin Performance	Materiality & Envelope	Analysis of façade systems and material palettes for durability, thermal lag, and their contribution to the library's visual identity.
4.	Bioclimatic Synergy	Environmental Response	assessing the orientation, daylighting techniques, and passive cooling to reduce energy consumption, and improve occupant comfort.
5.	Socio-Technical Infrastructure	Digital & Operational	Assessing the "hidden" systems: Wi-Fi density, automated building management, and seamless integration of power/data.
6.	Communal Magnetism	The Third Place	Measuring the library's success as a "living room for the city" by evaluating inclusivity, lingering comfort, and social spontaneity.

Source: Case study documentation

Data Analysis

Interview data were analyzed using thematic analysis to identify recurring patterns related to quietude, thermal comfort, social interaction, accessibility, spatial zoning, and user satisfaction within the selected public libraries. Audio-recorded interviews were transcribed and reviewed repeatedly to ensure familiarity with the data. Initial codes were assigned to meaningful statements and observations, after which related codes were grouped into broader themes reflecting the study objectives and research questions. The themes were subsequently compared across participant groups and case-study sites to identify common challenges, successful design responses, and context-specific differences. Field observations and behavioural mapping records were used to support and verify the interview-based interpretations.

The ratings presented in Table 3 were determined through a structured case-study assessment matrix. Each library was evaluated against key criteria derived from the study objectives, including climatic responsiveness, acoustic control, provision of quiet study areas, availability of social and collaborative spaces, spatial zoning, accessibility, user comfort, and support for third-place activities. Ratings were assigned by comparing evidence from site observations, interview responses, architectural features, and available documentary information for each case. A higher rating indicated stronger performance in meeting the identified criterion, whereas a lower rating indicated limited provision or inadequate integration of the relevant design feature. The combined ratings enabled a comparative assessment of the case studies and informed the proposed architectural framework for tropical public libraries.

Results and Discussions

Case Studies

Two case studies were considered, one local and one international, both in the tropical context.

Case study 1: Rivers State Library

The Rivers State Library, a notable project by the architectural firm James Kubiti & Partners, was commissioned by the Rivers State Government and completed in 1971. Located on Bernard Carr Street in Port Harcourt, Rivers State, Nigeria, the building occupies a significant footprint of 4,300 square meters and serves as a primary cultural and educational landmark in the region.

Key Deductions

- i. The Rivers State Library lacks a third-place dynamic and functions more as a traditional public library.
- ii. There is no clear separation between quiet study and social zones in libraries.
- iii. Significant "acoustic leakage" in open-plan areas; lacks the modern buffering needed for multifunctional use.
- iv. Wood, glass, sandcrete blocks, perforated brick facades, timber windows, and concrete/tiled/timber floors were used to determine the acoustic response. They rely mostly on passive systems, which are insufficient for the required quietude.
- v. The interior volumes are compromised by outdated furniture, failing floor materials, congested space, lack of community space, and insufficient lighting.
- vi. Minimal digital infrastructure; currently relies on traditional analogue systems for collection management.
- vii. Highly successful as a local landmark, the architecture respects the urban fabric and climate of Rivers State.

Case study 2: Dunoon Library Precinct

Completed in 2019, the Dunoon Public Library is a landmark, three-story facility designed by architect Ashley Hemraj in collaboration with the City of Cape Town's Urban Sustainability Unit. Commissioned by the Western Cape Government as part of the Dunoon Learning and Innovation Precinct, the R42-million project serves as a "beacon of hope" for a community of 80,000 residents. The building is characterised by its resilient steel-frame construction and flexible interior design, including mobile shelving and an adaptable rooftop, allowing it to evolve with the community's future needs. Integrated sustainable features, such as double-glazing, natural lighting, and sound-insulated music pods, address the local need for high-quality and quiet study environments within a dense urban context.

Key Deductions

- i. Dunoon Library integrates learning, recreation, and community functions
- ii. It supports social vibrancy through flexible, user-centred spaces, such as informal seating, collaborative areas, community rooms, and dedicated zones for children, events, and workshops.
- iii. The building separates active public functions from quieter reading and study zones while maintaining visual connectivity among spaces.
- iv. Use of acoustic ceiling systems to reduce reverberation. Shelving units and partitions were used as sound buffers. Soft furnishings and absorbent finishes were used in reading areas.
- v. According to Mngomezulu, (2025), the library precinct incorporates shipping containers and sustainable design features such as motion-sensor LED lighting, optimised natural lighting and ventilation through window and container arrangement, green wall installations for insulation and cooling, and greywater systems that recycle wastewater for irrigation and toilet flushing.
- vi. Landscaping and shaded outdoor areas improve microclimates. The building orientation responds to the sun path and prevailing winds.
- vii. Public computer stations and internet access. Flexible infrastructure supporting events and educational programs is also required.

Assessment of Case Studies

This study examined whether the selected public library case studies effectively integrated design strategies that promote quietude and dynamic third places. The following table evaluates each case study against these design strategies using the benchmarks outlined below.

A- Excellent

B- Good

C- Average

D- Not Implemented

Table 3: Table Showing Case Studies Assessment Matrix

S/N	Assessment Criteria	Case Study	A	B	C	D
1.	Spatial Zoning & Programmatic Distribution	Rivers State Library				•
		Dunoon Library Precinct		•		
2.	Acoustic Performance	Rivers State Library			•	
		Dunoon Library Precinct		•		
3.	Materiality & Envelope Systems	Rivers State Library				•
		Dunoon Library Precinct	•			
4.	Environmental Responsiveness	Rivers State Library		•		
		Dunoon Library Precinct	•			
5.	Technological & operational integration	Rivers State Library				•
		Dunoon Library Precinct	•			
6.	Third Place Dynamic	Rivers State Library				•
		Dunoon Library Precinct	•			

Source: Case study documentation

The assessment of the case studies revealed that Rivers State Library inadequately implemented design strategies that promote quietude and third-place dynamics. There is little to no distinction between quiet zones and social areas, and the acoustic design fails to effectively mitigate the surrounding noise. In contrast, the Dunoon Library Precinct successfully integrated design strategies that enhanced both the quietude and dynamics of a third place. While the architecture of both libraries respects their respective local contexts, it extends well beyond a mere façade to create spaces that enhance quietude and third-place dynamics. Public libraries serve as vital community centres, functioning as third places that are integral to the heart of communities (Kofi & van Melik, 2026). To be effective as third places, public libraries should focus on several key factors: spatial zoning, acoustic design, building envelope systems, technological integration, and environmental responsiveness.

The Plook Library Model

The PLOOK Model, an acronym for "Public Low-Obligation Open Space for Knowledge," represents an original architectural typology developed in this research to address the crisis of urban fragmentation and the "institutional chilling effect" of traditional libraries. While the term phonetically mirrors the Scots word for a "spot" or "mark," it is repurposed here as a strategic node or micro-destination within the urban fabric.

The PLOOK Model is defined as a non-prescriptive, permeable zone, either integrated into a larger library complex or functioning as a standalone pavilion, designed to lower the "barrier to entry" for public engagement. Its theoretical and practical depth is rooted in three core pillars:

1. The Principle of Low-Obligation Engagement

Unlike the primary library interior, which often demands specific behavioural codes (silence, transition, or academic intent), the PLOOK zone operates on the principle of low obligation. This creates a "frictionless" environment in which community members can linger without a defined purpose. In the context of Port Harcourt's urban density, this provides a necessary "social safety valve" that fosters inclusivity by welcoming individuals who might otherwise feel alienated by formal institutional spaces. (Ewing, 2022)

2. The "Spot" as an Urban Catalyst (Place-making)

By identifying as, a "spot," the PLOOK model draws from place-making theory. It is not merely a corridor or room, but a destination defined by its distinct atmosphere. Architecturally, this is achieved through spatial fluidity using elevated decks, shaded canopies, and informal seating to create a sense of ownership among users. It serves as the "active" counterbalance to the paper's goal of quietude, sequestering high-energy social interactions into a dedicated, bioclimatically responsive pavilion to protect the silent zones of the main library.

Knowledge as a Social Currency

In the PLOOK model, "Knowledge" is redefined from the consumption of static texts to the exchange of social capital. This facilitates participatory learning in makerspaces, oral storytelling, and collaborative problem-solving. By providing an "open space" for these activities, architecture acts as a scaffold for community cohesion, allowing diverse demographic groups to intersect serendipitously.



Figure 2: Image of a Conceptual Third Place Design prototype for integration into existing libraries or built as a standalone

Source: Author's Sketch

Alignment

The PLOOK model serves as a physical manifestation of the Third Space dynamic. Its inclusion in this study provides a concrete design solution to the central research question: How can a library host vibrant community life while maintaining the sanctity of silence? The PLOOK spot becomes the "social lung" of the library, filtering the noise and energy of the city into a productive, inclusive, and low-pressure environment for collective growth.



Figure 3: Image of a Conceptual Third Place Design prototype for integration into existing libraries or built as a standalone; showing the open decks.

Source: Author



Figure 4: Image of a Conceptual Third Place Design prototype for integration into existing libraries or built as a standalone

Source: Author



Figure 5: Image of a Conceptual Third Place Design prototype for integration into existing libraries or built as a standalone

Source: Author

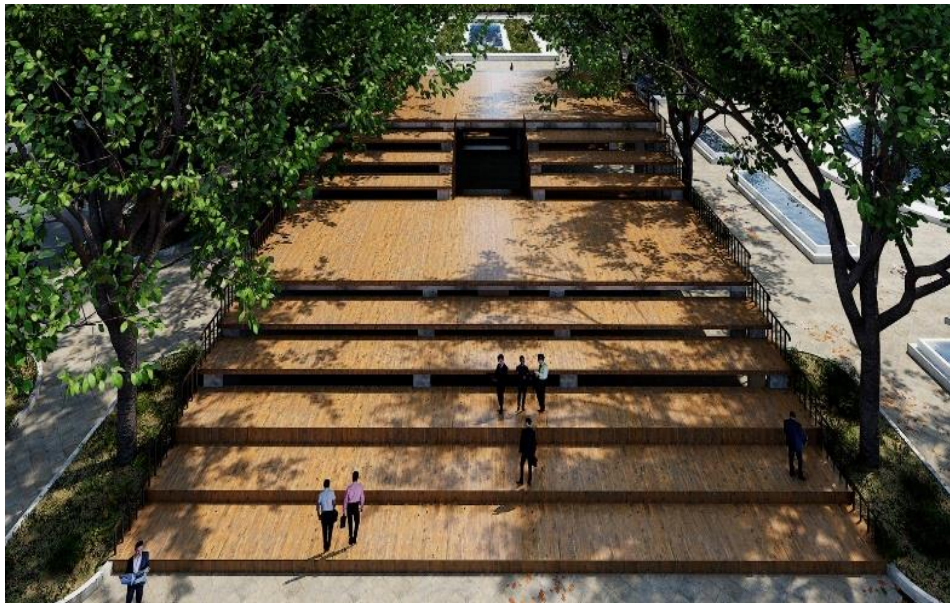


Figure 6: Image of a Conceptual Third Place Design prototype for integration into existing libraries or built as a standalone

Source: Author



Figure 7: Image of a Conceptual Third Place Design prototype for integration into existing libraries or built as a standalone

Source: Author

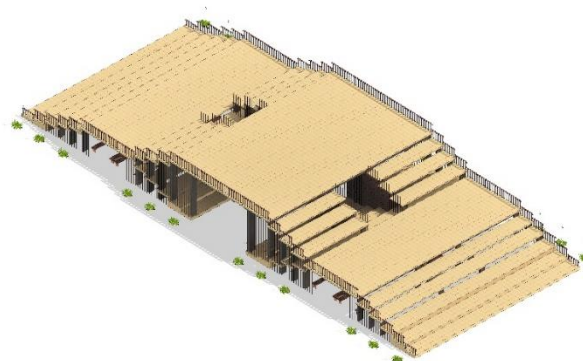


Figure 8: Image of a Conceptual Third Place Design prototype for integration into existing libraries or built as a standalone. Showing the 3D

Source: Author

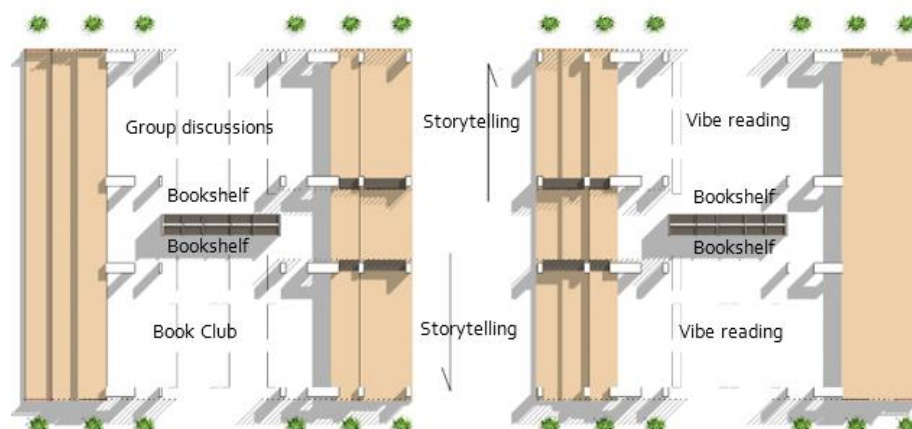


Figure 26: Floor Plan of the Proposed Third Place Design prototype for integration into existing libraries or built as a standalone.

Source: Author

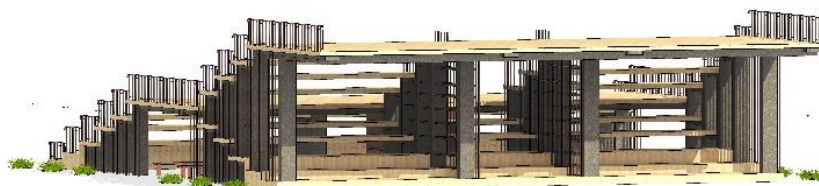


Figure 10: 3D section View of the Proposed Third Place Design prototype for integration into existing libraries or built as a standalone.

Source: Author

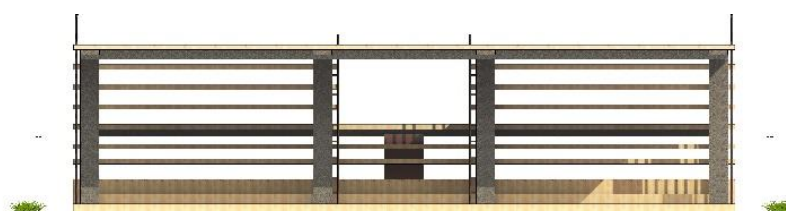


Figure 27: 3D section View of the Proposed Third Place Design prototype for integration into existing libraries or built as a standalone.

Source: Author



Figure 12: Elevation View of the Proposed Third Place Design prototype for integration into existing libraries or built as a standalone.

Source: Author

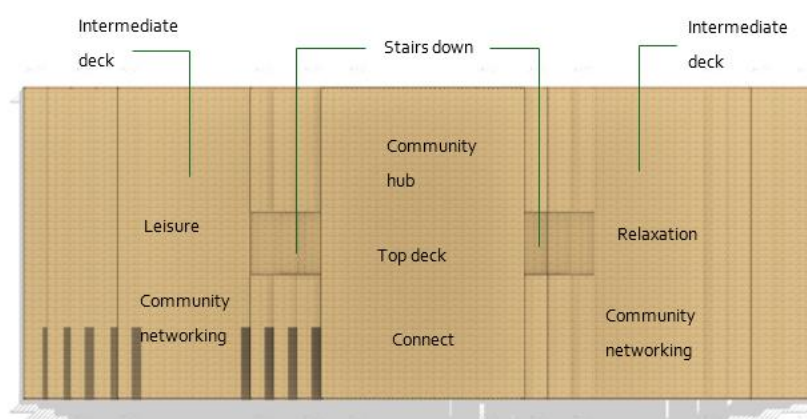


Figure 13: Top View of the Proposed Third Place Design prototype for integration into existing libraries or built as a standalone.

Source: Author

Conclusion

In conclusion, the theoretical framework of defining harmony between quietude and community, emphasising community well-being as an architectural objective, and addressing environmental and climatic considerations in tropical contexts is essential for creating sustainable and resilient built environment. By incorporating these principles into architectural design, architects can create spaces that promote tranquillity, social interaction, and overall well-being in communities. Further research and collaboration between architects, urban planners, and policymakers are needed to advance these principles and create spaces that enhance the quality of life of residents in tropical contexts in the future.

Recommendations

Holistic Design Approach: Architects and designers should embrace a comprehensive understanding of public libraries that transcends mere aesthetic enhancement. Future projects should integrate natural systems, patterns, and materials holistically, encompassing site planning and orientation, spatial organisation, and user experience.

Contextual Application: Public Library design strategies must be tailored to the cultural, climatic, and ecological context of each location

Material Selection and Sustainability: Designers should prioritise the use of locally sourced, sustainable, and nature-compatible materials that reflect the surrounding environment and minimise ecological impact.

User Experience and Well-being: Future public library designs should emphasise how spatial configurations, natural light, ventilation, and visual connections to nature enhance comfort, relaxation, and emotional well-being for users.

Further Research: Additional empirical studies should be conducted to assess the measurable impacts of public library design, such as user satisfaction, energy performance, and ecological balance, to bolster evidence-based design decisions.

Ethical Consideration and consent

An informal focused-group interview was conducted with children aged 0 – 12 years at the Rivers State library board in Rivers State, verbal consent was obtained from the children librarian/guardian at the library and assent from participating children where developmentally appropriate. Participation was voluntary, and participants were informed of the informal nature and purpose of the discussion, with their privacy and anonymity maintained throughout the study.

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