# BEYOND THE VISIBLE

## Reimagining architectural narratives from the margins

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# contents

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# editorial

Architecture is often understood through tangible manifestations—buildings, monuments and urban landscapes. However, the discipline extends beyond these visible structures, encompassing processes, narratives, and actors that operate in the margins. The 39th issue of Edinburgh Architecture Research Journal (EAR39), titled "Beyond the Visible", invited proposals that move beyond the immediate materiality of architectural surfaces to reveal the hidden memories and stories embedded within them. EAR39 explores the discipline beyond its visible structures, illuminating hidden and often overlooked dimensions of architecture. Building on our previous issue "Beyond Human", which challenged anthropocentric views of the built environment, EAR39 aims to push the boundaries of architecture as a discipline and to redefine it as an open-ended process rather than a finite product.

The issue opens with Tokie Laotan-Brown's case study, which explores the Hope Waddell Institution's Premier Building in Calabar, originally built with prefabricated Scottish materials, to show how intangible cultural narratives and memories must shape physical restoration. By harnessing local expertise, environmental practices, archival materials from Edinburgh University and regional craftsmanship, Laotan-Brown reframes restoration as a dynamic endeavour balancing historical detail, cultural identity and sustainability to maintain Calabar's architectural heritage. Following this, Julie Næss Karlsen bridges the intangible heritage with the material landscape by exploring São Jorge Island, on the periphery of Portugal, the European Union and the Azores, where volcanic eruptions and earthquakes pose a constant risk. This persistent seismic threat unveils a critical invisible structure, illuminating the dichotomy between intangible heritage and recovering landscapes.

Moving from these broader conceptual explorations, Athulya Aby's contribution goes beyond the traditional focus on the tangible, highlighting invisible actants—stories, myths, and archived narratives—shaping the community identity and memory of two Chinatowns in Calcutta, India. Through the study of archival documents and historical maps, Aby foregrounds the often-overlooked Chinese intangible heritage of Calcutta and offers an alternative understanding of architecture as a repository of marginalised heritage, narratives and memories. Catalina Lucía Agudin and Joaquín Trillo then extend the

issue's focus to Indigenous perspectives, examining how participatory design can reframe the architecture of Wichí communities in Argentina with a decolonial approach. Drawing from design exercises, the authors challenge centralised, development-driven methods while honouring local knowledge and past experiences. Their research values mobility, material connections and cultural respect, criticises modernity-oriented education, and advocates for integrating Indigenous perspectives into architectural practice.

Anna Johnson and Richard Black follow with a reflective piece on regional communities in Victoria, Australia. They reveal how existing built fabric offers insights into community resilience and heritage by examining Castlemaine, where architecture weaves heritage, community identity and issues like homelessness. Acknowledging Dja Dja Wurrung histories and marginalised narratives, Johnson and Black employ truth-telling and collaborative design to propose inclusive, sustainable spaces that respect Indigenous cultures. Further, Morwal investigates everyday spatial practices in Ahmedabad's dense housing typology, exploring how invisible social norms shape architecture. The study examines how the close-knit chawl interweaves communal identity with individual inhabitation. Using oral history and ethnography, Morwal re-examines the relationship between collective invisible agents—behaviours, movements, gender norms—and spatial demarcations of public/private and home/settlement, revealing how the architectural fabric accommodates and shapes these practices.

An alternative approach is presented through Nikola Beim's reinterpretation of Alois Riegl's seminal work "The Modern Cult of Monuments" in the digital age underpins architecture's relationship with intangible heritage. Building on Riegl's work, Beim introduces "Cult Beyond the Digital", revealing how digital technologies and non-contact recording preserve invisible aspects—memory, ageing, and intangible values. Through AI and digital documentation, this redefines preservation as a process transcending physicality, uncovering hidden narratives redefining the role of architecture and the environment in monument preservation. Finally, Guo's study of unplanned commercial districts in Guangzhou offers a contemporary urban perspective on spatial logics. Employing Actor-Network Theory, Guo treats spaces as actors, asserting that spatial conditions shape the arrangement and interaction of structures. By examining an unplanned clothing wholesale district, the research reveals invisible logics that shape urban dynamics, illustrating how spatial configurations influence

socioeconomic activities, urban growth and relationships between human and non-human actors.

The contributions to EAR39: Beyond the Visible collectively challenge conventional understandings of architecture, highlighting the invisible processes, narratives, and agents that shape our built environment. From intangible heritage and community memory to the unseen forces of seismic activity and urban logics, this issue underscores the need to expand architecture's disciplinary boundaries. By transcending materiality and embracing diverse perspectives—whether cultural, digital, decolonial, or environmental—these works redefine architecture as a dynamic and inclusive process. EAR39 invites readers to reconsider architecture as a field deeply intertwined with hidden histories, marginalised voices, and contested heritage. The issue underscores the importance of examining the unobserved dimensions of architecture, which continue to shape spaces, communities, and identities in profound and enduring ways.

Tokie Laotan-Brown

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# Unveiling the Immaterial: The Premier Wooden Building Restoration Project at The Hope Waddell Institution, Calabar

## Abstract

This paper examines the restoration and preservation of the Premier Building at the Hope Waddell Training Institution in Calabar, Nigeria, a significant colonial-era educational structure. The study actively integrates both tangible and intangible elements into the restoration process, considering historical, cultural, and environmental factors that shaped the building's original construction and its current restoration. This project critically evaluates the practical application of conservation principles like the Venice Charter (1964). While some aspects of the theoretical framework were successfully implemented, others remain a work in progress, revealing the complexities of balancing historical authenticity with modern needs. This study offers a critical reflection on heritage conservation within a postcolonial context, highlighting both the challenges and potential of restoring colonial buildings in Africa as part of a broader effort to reclaim and reinterpret these structures for contemporary use.

## Funding

## Introduction

The Premier Building holds a seminal position in Nigerian architectural history, particularly as a colonial-era educational facility that uniquely adapted imported prefabricated design to the tropical climate of Nigeria. Its assemblage in 1894, using materials like Scottish pine and corrugated iron roofing, exemplifies the colonial architectural trends of that era. Scholars such as Taylor (1996) have emphasised that such buildings serve as pivotal examples of how colonisers sought to imprint European architectural styles in African settings, blending functionality with cultural hegemony. This analysis situates the Premier Building as a crucial case study in the broader conversation about colonial architectural legacies across Africa.

The Premier Building spans 24 meters by 14 meters, standing prominently within the centre of the Hope Waddell Training Institution (H.W.I.T) campus. It is built on a solid cement base, with two symmetrical staircases flanking its entrance. Historical photographs reveal that the building originally featured four staircases on both the east and west side entrances. These staircases provide access to the main upper level, which was supported by steel pillars—a recent intervention by the student alumni in their efforts to preserve the structure in 2018. The use of corrugated sheet for the roof, considered an advanced material at the time, enhanced the building's durability and ability to withstand the humid tropical climate. The upper floorboards, made from Scottish pine, offered both strength and aesthetic

appeal, aligning with the institution's vision of a modern and progressive educational facility. In this context, the restoration team incorporated significant historical insights from archival sources, including material from the Edinburgh University Archives. The archives housed the "Special Report by Deputies Dr. Laws and W. Risk Thomson" from 1894, which detailed the original construction plans and cultural intentions behind the building. This archival material provided a crucial foundation for aligning the restoration with the building's historical and cultural context, ensuring that the preservation efforts were not only technically accurate but also historically informed. Access to this material, obtained through a collaboration with Edinburgh University Archives, further enhanced the scholarly foundation of the restoration, demonstrating how archival research can actively shape the physical restoration of heritage sites.

This project sought to balance technical refurbishment with the preservation of intangible heritage elements such as community narratives and traditional practices. These intangible components are crucial for maintaining the Premier Building's historical and social significance, ensuring its continued relevance to the communities it serves. The architectural design of the building, characterised by its single-story structure, hipped ridge corrugated sheet roof, and encompassing veranda, reflects colonial architectural adaptations to the tropical climate of Nigeria (Petzet 2004; Jokilehto 1999). The NCMM catalogued the Premier Building as a testament to both architectural ingenuity and the educational legacy of

colonial rule, yet the previous lack of preservation plans allowed the structure to deteriorate significantly.

In response to this deterioration, the restoration team adopted a comprehensive approach that extended beyond mere technical repairs (Figure 1). It emphasised the integration of 'weightless' elements—such as community narratives and cultural memories—into the restoration process, which are vital to preserving the building's cultural essence (Bouchenaki 2003; Silapacharanan 2008). This strategy aligns with contemporary heritage conservation practices, which call for the inclusion of environmental, spiritual, and cultural considerations to ensure holistic restoration (Rebec et al. 2022).



**Figure 1: Dilapidated state of the Premier Building in 2022. Photo taken by author.**
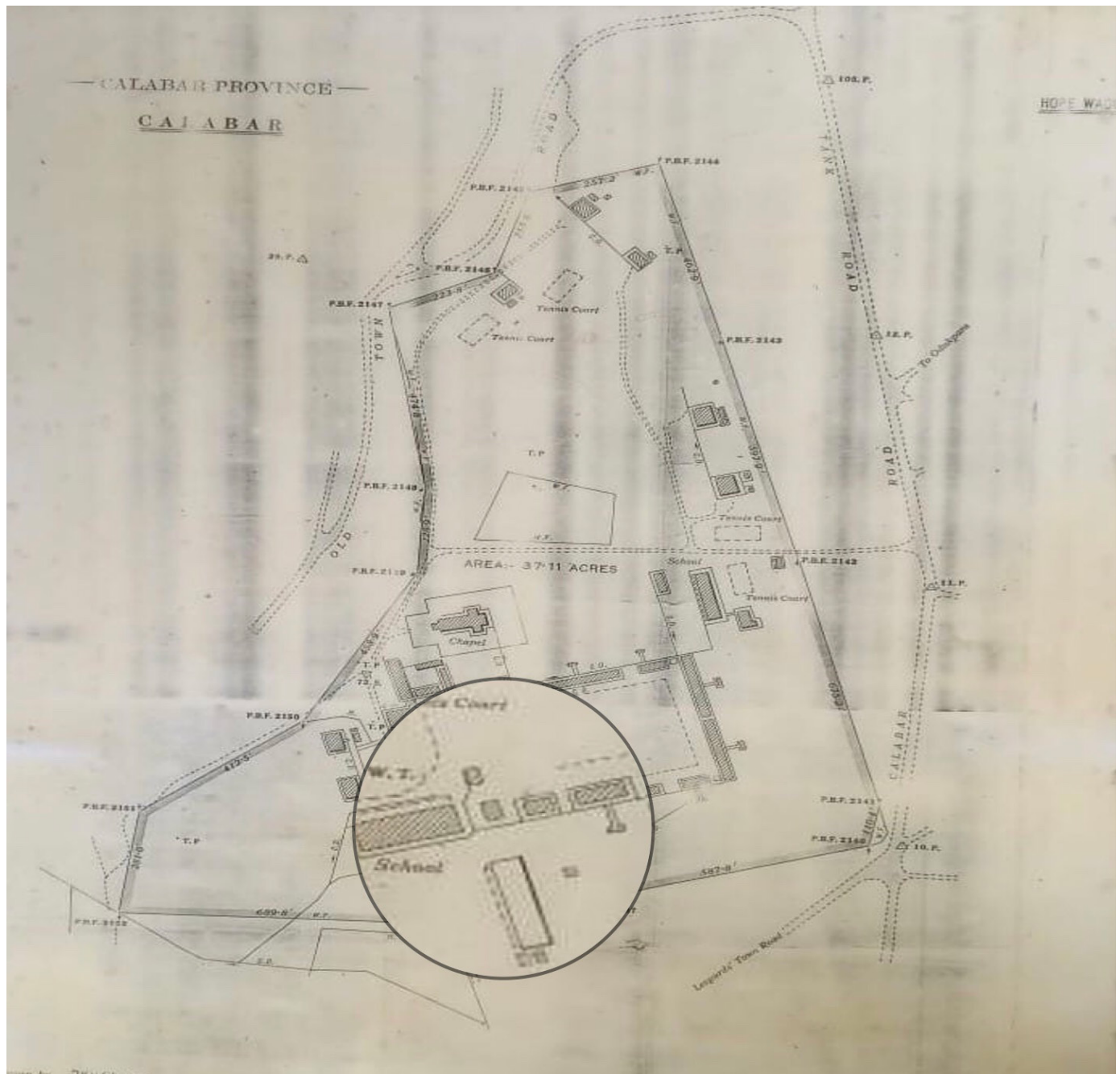
**Figure 2:** The image features a historical map of the Calabar Province, which dates back to the colonial period. This map provides a detailed, historical view of the Hope Waddell Training Institution and its surrounding area. It includes labelled buildings and geographic features, offering insights into the layout and development of the site during the earlier part of the 20th century. The map's aged appearance, with faded lines and annotations, emphasizes its historical significance and the changes the area has undergone over time. Calabar Museum, taken by the author in 2022.

The paper not only acknowledges the state of disrepair the Premier Building reached but also delves into the reasons behind its abandonment (Figure.1). A combination of shifting educational priorities, economic challenges, and the development of new facilities on the campus led to the building's gradual neglect. For instance, over the 130 years of the Hope Waddell Training Institution's evolution, several new buildings were constructed, including the Duke Town School Building (1899), Jubilee Building (1924), Science Building (1950), and Assembly Hall (1960), each reflecting the institution's changing needs and architectural trends (Figure 2). The rise of these newer facilities, constructed with materials like concrete and earth bricks, diminished the Premier Building's role on campus, rendering it a more peripheral structure by the early 2000s.

Despite this decline, the recent restoration project marked a critical turning point. The building's new role as a multifunctional space reflects both a commitment to heritage preservation and a vision for its future relevance. The restoration plan includes a "Hall of Architectural Evolution," showcasing the rich history of the institution's buildings and the architectural styles that have shaped its campus over the years. Additionally, the building will feature a "Wall of Fame," dedicated to honouring past principals and notable alumni who have significantly contributed to the institution and broader society.

The restoration project is not just about preserving the Premier Building as a physical structure; it is about reinvigorating its role within the broader cultural landscape of Calabar, ensuring that it continues to serve as a living testament to the historical and cultural evolution of the Hope Waddell Training Institution. Access to crucial materials from the Edinburgh University Archives played a key role in ensuring that the restoration was not only faithful to the building's historical context but also aligned with contemporary principles of heritage conservation, highlighting the interdisciplinary and international collaboration that underpinned the project.

## Project significance: an educational legacy in prefabricated architecture

The Premier Building at Hope Waddell Training Institution, now 130 years old, stands as a vital representation of colonial architecture, serving as one of the earliest one-story educational structures established by early missionaries in Eastern Nigeria. This prefabricated Scottish Beach House, originally designed and constructed by a Glaswegian firm, exemplifies the early architectural efforts aimed at establishing a post-elementary educational infrastructure in the region. The building, characterised by its corrugated iron sheet roof and Scottish pine walls, was assembled in Calabar at a cost of £1,200 (Taylor 1996).

The significance of the Premier Building extends beyond its physical structure, as it represents the strategic use of prefabricated construction in addressing

the architectural needs of remote and developing regions. This building not only reshaped the built environment in Africa but also symbolised the broader colonial project of imposing European norms and practices. This analysis situates the Premier Building as a crucial case study in understanding the role of prefabricated construction in the colonial era and its lasting impact on the architectural heritage of Africa. Moreover, the historical context of the Hope Waddell Training Institution further emphasises the importance of this building. Established with the support of local leaders like King Eyamba V of Duke Town, who donated the land in 1846, the

institution was envisioned as a centre for industrial and technical education, as emphasised by figures such as Mary Slessor and Dr Laws (Kalu 1996). The institution's development, including the construction of the Premier Building, reflects the interplay between local and colonial forces in shaping the educational landscape of the region. The building's role in housing Nigeria's first printing press machine and its connection to notable figures in Nigerian history further enhance its historic value, making it a landmark of both educational and cultural significance in Nigeria.



Figure 3: This image collage features close-up views of an old Heidelberg printing press machine, a historical artifact located in the Premier Building at the Hope Waddell Training Institution in Calabar, Nigeria. The various angles showcase the intricate mechanical components of the press, reflecting its industrial craftsmanship and the robust engineering typical of early 20th-century printing technology. Photos taken by Author in 2022.

## Context and background: integrating cultural heritage with conservation principles

The restoration of the Premier Building within this historic complex was not merely a technical undertaking; rather, it was a project deeply rooted in educational and historical considerations, with a strong emphasis on preserving the authenticity and integrity of cultural heritage (Petzet 2004; Jokilehto 1999). In the context of the Hope Waddell Training Institution, these principles were meticulously applied throughout the restoration process.

While the Venice Charter (1964) advocates for preserving historical authenticity, the Premier Building's restoration faced practical challenges. Due to the unavailability of original prefabricated materials, the team employed local timbers such as Black Alfara and Teak. This decision was not an attempt to replicate the coloniser's intentions but rather a necessary intervention to ensure the building's structural longevity. As Goetcheus and Mitchell (2014) argue, conservation efforts must sometimes adapt to local circumstances, particularly when original materials are unavailable. Thus, the use of local materials reflected an integration of traditional craftsmanship with modern restoration needs, aligning with the Venice Charter's principle of minimal intervention while maintaining the building's historical integrity (Article 9, Venice Charter). The restoration also involved a careful consideration of both traditional and modern roofing techniques, reflecting a broader philosophical

commitment to balancing historical integrity with contemporary needs. This balance is central to the principles of the Venice Charter, which advocates for the preservation of a site's authenticity while allowing for necessary interventions that ensure its continued relevance and functionality. Historically, the Premier Building's original roof was constructed using corrugated iron sheets—a material chosen for its durability and ease of installation, particularly in the colonial context where prefabricated materials were favoured for their practicality. However, this choice was also emblematic of the broader colonial strategy of imposing European architectural standards on African landscapes, often without regard to local environmental conditions or traditional building practices.

The decision to retain the use of corrugated iron for the roof was not made lightly. Philosophically, this choice was driven by a desire to preserve the building's historical character, aligning with the Venice Charter's principle of minimal intervention. Retaining the original roofing material was seen as essential to maintaining the building's visual and structural integrity, ensuring that it continued to convey its historical narrative authentically. However, the restoration team also recognised the limitations of the original roofing system, particularly in the context of Calabar's humid tropical climate, where traditional roofing materials such as thatch or palm fronds were historically favoured for their superior thermal insulation and water-shedding properties. To address these climatic challenges while respecting the building's historical fabric, the restoration

incorporated modern techniques to enhance the performance of the corrugated iron roof.

This included the addition of a felt underlay beneath the corrugated sheets, a technique that improves thermal insulation and reduces heat gain—thereby making the interior spaces more comfortable in Calabar's hot and humid environment. This intervention is philosophically aligned with the Venice Charter's allowance for modern materials and techniques when necessary to preserve a monument's functionality and ensure its continued use. The restoration project engaged local artisans to implement these roofing enhancements, thereby integrating traditional craftsmanship into the process (see fig. 4). This approach reflects a philosophical commitment to respecting and revitalizing local building practices, which aligns with the Charter's emphasis on involving local communities in conservation efforts. By combining traditional methods with modern improvements, the project aimed to create a roof system that not only preserves the building's historical appearance but also meets contemporary standards of comfort and durability. The strategic use of both traditional and modern roofing



**Figure 4: The artisans working on the felt underlay in the roof of the Premier Building. Photo taken by the author, 2023**

techniques in the Premier Building's restoration exemplifies a nuanced application of conservation philosophy. It demonstrates how the principles of minimal intervention, authenticity, and community involvement can be practically applied to achieve a balance between preserving historical integrity and adapting to present-day needs. This choice ensured that the building retained its historical character, allowing it to continue narrating its past (Taylor 1996).

The team embodied the Charter's call for the involvement of the local community and the inclusion of their knowledge and traditions in the conservation process. The restoration of the Premier Building was conducted in close consultation with local artisans, historians, alunmi and community members. Their input was critical in ensuring that the restoration was not only technically sound but also culturally sensitive, aligning with local practices and values. This participatory approach fostered a sense of ownership and pride within the community, reinforcing the building's role as a living component of Calabar's heritage (de la Torre 2013).

The restoration team also integrated the Venice Charter's emphasis on conserving the historical and cultural context of the building. The Premier Building was approached not as an isolated artifact but as part of the broader historical and cultural landscape of Calabar. The restoration team made deliberate efforts to preserve the building's relationship with its surrounding environment, considering factors such as its spatial orientation, visual connections with other historical structures, and its

significance in the community's collective memory (Taylor 1996; Biggs 2021). The Calabar tourist board has now included the Premier Building as part of their tour schedules.

By applying these principles, the restoration of the Hope Waddell Institution's Premier Building was not only a technical achievement but also a culturally and historically informed endeavour. The project serves as a model for how the Venice Charter can be effectively applied to conserve historical monuments, honouring their past while ensuring their continued relevance for future generations. Through this restoration, the Hope Waddell Training Institution continues to symbolise Calabar's rich educational and cultural heritage, bridging the historical past with both the present and future (Petzet 2004; de la Torre 2013).

## Materials and methods

### (a) Methodological approach

In this study, the team employed an inter/multi/transdisciplinary methodology that integrated site plans, archival research, community narratives, and traditional use restorative analysis. This methodology was critical to achieving a comprehensive understanding of the Premier Building's history, its continued usage, and its cultural significance.

By adopting this approach, the team ensured that both the tangible and intangible aspects of the building's heritage were uncovered and preserved, aligning with the broader goals of the restoration project outlined by Laotan-Brown et al. (2024) in the HWTI restoration manual.

### (b) Site plans & archival research

Archival research played a pivotal role in this project, with comprehensive investigations conducted across multiple repositories to ensure a thorough understanding of the building's historical significance. Key sources were drawn from the Hope Waddell Training Institution Archives, which provided invaluable records and documents specific to the institution's operations and architectural evolution.

The Calabar Museum Archives offered crucial local historical maps, photographs, and documents that enriched the contextual understanding of the Premier Building's role within the broader



**Figure 5: This image collage presents a visual narrative centred around the Hope Waddell Training Institution, combining historical documentation with contemporary restoration efforts. The collage is divided into sections that showcase archival materials, ongoing restoration activities, and discussions among stakeholders, alumni and community members. Photos taken by Author in 2022/2023 and collage created by Author in 2024.**

Calabar region (Figure. 2). Of particular importance was the material housed at the Edinburgh University Archives. These archives contained essential documents related to the Presbyterian missionaries who founded the institution, including the Special Report by Deputies Dr. Laws and W. Risk Thomson from 1894, which detailed original construction plans, correspondences, and reports. These documents provided valuable insights into the intentions of the early builders and the missionary agenda, which shaped the architectural and educational landscape of the institution.

The British colonial records, accessed through national repositories, further supplemented these findings with broader administrative documents, such as original commissioning reports and approvals for the building's construction. Together, these archives—including the critical material from the Edinburgh University Archives—offered a comprehensive and nuanced understanding of the Premier Building's original construction, its historical usage, and the broader socio-cultural and political factors that influenced its development (Laws & Thompson 1894). The integration of these archival sources significantly enriched the restoration project, ensuring that both the tangible and intangible aspects of the building's history were preserved.

## (c) Alunmi and community narratives

Gathering oral histories and personal stories through interviews, focus groups, and meetings with alumni and the community were central to capturing the intangible heritage associated with the Premier Building. This participatory approach not only ensured that the restoration reflected the community's collective memory and identity but also documented the cultural significance and everyday experiences tied to the building (figure 5). This method aligns with the principles of community engagement highlighted by the project team in the H.W.T.I Manual.

## (d) Traditional use restorative analysis: integrating vernacular craftsmanship in restoration

The analysis of the Premier Building's traditional uses and materials was grounded in a comprehensive study of local craftsmanship and cultural practices, with a particular focus on integrating vernacular architectural techniques from Old Calabar. This approach involved material analysis, architectural surveys, and direct consultations with local artisans to ensure that traditional methods and materials were thoughtfully incorporated into the restoration process. One of the key references for the restoration work was the architectural techniques used in the construction of Efik traditional canoe houses in Old Calabar. In Old Calabar, the Ekpe Society played a central role in managing community affairs, highlighting a complex societal structure driven by economic activities that gave rise to the canoe house system. The wealth

and prosperity of a lineage house were symbolised by the number of canoes owned by its compound. Calabar's patrilineal lineage system traces descent and inheritance through the male line. Each lineage, connected to a common ancestor, is led by a chief or headman and serves as a vital social and political unit, shaping land ownership, matrimonial alliances, and conflict resolution. These vernacular structures, known for their resilience and adaptability to the local environment, provided crucial insights into how to maintain the cultural and environmental integrity of the Premier Building. The canoe houses, constructed using locally sourced woods and designed to withstand the humid tropical climate, embody a deep understanding of material properties and environmental conditions that has been passed down through generations.

In the architectural design of traditional Efik dwellings, a veranda often occupied the front part of the structure, serving as a transitional space between the exterior and the interior. Central to these homes, a large door situated at the back of the veranda led directly into the main interiors. In fully developed plans, this central room often functioned as a family shrine, a sacred space for rituals and ancestral veneration. Another notable feature of these Efik-evolved compositions was the inclusion of a row of first-floor bedrooms, an architectural element that, while present in other regions of Arochukwu, was particularly refined in Ibibio and Efik regions. In these more opulent dwellings, the bedrooms were directly connected to the veranda, enhancing the flow and

accessibility of the interior spaces. These bedrooms often featured wooden shutters overlooking the veranda, or in some cases, a balcony that extended over the entire width of the veranda, offering both privacy and a commanding view of the space below.

The restoration team drew on these examples by adopting similar principles in the selection and treatment of materials. For instance, the traditional method of using hardwoods like Black Alfara and Teak, which are resistant to rot and termite damage, was applied to reinforce the building's structural elements. This choice not only ensured the longevity of the restored building but also honoured the local craftsmanship that has historically shaped the built environment of Old Calabar. Moreover, the architectural design of the canoe houses, characterised by their elevated platforms and steeply pitched bases, informed the restoration strategies for managing moisture and heat within the Premier Building. These vernacular design features, which are tailored to the region's climatic conditions, were adapted to enhance the building's environmental performance while preserving its historical authenticity. For example, the incorporation of traditional joinery techniques, such as mortise and tenon joints, allowed for the seamless integration of old and new materials, maintaining the building's structural coherence.

## Discussion and analysis: the interplay of heritage, community, and environmental adaptation

Preserving and adaptively reusing historical buildings is crucial for safeguarding cultural heritage while simultaneously addressing contemporary needs, as Kumar and Janardhan (2023) emphasise. Heritage buildings, according to Djabarouti (2020), are socio-material hybrids that encompass both tangible and intangible elements, which are integral to their significance. The concept of heritage, therefore, extends beyond mere physical structures, encompassing intangible elements like values, traditions, and practices that shape community identity (Harrington 2004). Zubir and Sulaiman (2004) argue that urban cultural heritage is shaped by socio-economic, technological, and political factors, all of which influence the built environment. Understanding community values and attachments is essential for meaningful heritage preservation and for fostering community participation in such projects (Harrington 2004).

TThe restoration of the Premier Building vividly illustrates the intricate relationship between architectural design and its sociocultural environment, particularly within the historical context of Calabar, Nigeria. This restoration process provides an in-depth analysis of how historical and cultural factors are intricately woven into architectural design, showcasing a deep understanding of local environmental conditions, social needs, and aesthetic preferences, as highlighted by Laotan-Brown et al. (2024). In the Premier

Building's architectural design and environmental adaptation, strategic decisions demonstrate a keen awareness of the tropical climate. The placement of the structure at the site's highest point was not only to maximise natural light and ventilation—crucial for passive cooling in the region's humid conditions—but also to implement early environmental design principles. The building's ample floor-to-ceiling height further enhances this cooling approach, reflecting a sophisticated understanding of climate-responsive architecture. The design, featuring windows placed high above the floor level, balances the need for privacy with the goal of minimizing heat gain from direct sunlight, demonstrating a nuanced comprehension of both the building's functional needs and the occupants' well-being. The strategic arrangement of doors facilitates effective circulation and aesthetic harmony, aligning with valued principles of symmetry. Ventilation, a critical aspect of the building's design, is addressed through features such as clearstory windows with wired iron mesh, effectively venting hot air and maintaining a cooler environment in functional spaces. The choice of corrugated iron and felt for roofing materials responds directly to the climatic demands of the area, ensuring the building's resilience against the elements. The historical context of the Premier Building and its material choices reveal that designers can adapt local resources to reflect the socio-economic realities of their environment. The restoration included pragmatic solutions like drains and raised floors to combat the prevalent flood risks, showcasing a proactive and resourceful approach to the region's

environmental challenges.

The cultural and historical legacy of the Premier Building is deeply embedded in its strategic location, representing a historical nexus where local traditions and external influences intersected to shape Calabar's architectural and urban development narrative. The land, originally donated by King Eyamba V and later expanded by colonial administrator Claude Macdonald, encapsulates the complex relationships between traditional leaders, colonial entities, and missionary ambitions (Kalu 1996). This legacy is reflected in the site's strategic location, a historical confluence of influences that shaped the city's architectural narrative. The architectural features of the Premier Building offer valuable insights into the broader historical and cultural milieu of its era. The design intricacies serve as a tangible record of responses to environmental constraints, resource availability, and cultural interplay. The traditional knowledge and practices that contribute to the intangible heritage of communities, as discussed by Bomi-Daniels (2022), parallel the architectural wisdom embedded in traditional building techniques. The ongoing restoration, which respects original conservation principles and maintains structural authenticity, ensures the building's continued relevance and usability. This analytical perspective not only deepens appreciation for the Premier Building's historical importance but also highlights the dynamic narrative of architectural evolution in Calabar, offering critical lessons on the intersection of colonial imposition, culture, climate, and construction technology in shaping built environments.

## Findings and analyses: uncovering heritage through integrated restoration practices

Our archival research and engagement with community narratives have unearthed previously hidden facets of the Premier Building's history. For instance, Mary Slessor's 1892 letter to the Foreign Mission Board provides crucial insights into the construction decisions and her advocacy for using indigenous materials (Proctor 2000; Odey & Onah 2019). This correspondence reveals Slessor's keen awareness of the mission's financial limitations and her strategic proposal to utilise local resources to significantly reduce costs. Her approach not only aimed at economic sustainability but also sought to embed cultural respect and local ownership within the project (Proctor 2000; Odey & Onah 2019). These findings emphasise the importance of incorporating community narratives and cultural memories into restoration processes, which enhances the cultural and historical authenticity of such projects. Slessor's letter demonstrates an early, progressive understanding of the value in employing local materials and practices, thereby fostering a sense of pride and ownership among the indigenous population. This approach contrasts sharply with the dominant colonial practices of the time, which often disregarded local cultures in favour of imposing foreign standards.

## National agendas and restitution of colonial projects

The restoration of the Premier Building at the Hope Waddell Training Institution is not just a localised architectural project; it is part of a broader national agenda in Nigeria that seeks to restitute and redefine colonial architecture within a postcolonial context. This approach is rooted in a desire to reclaim and reinterpret the colonial past, turning once-imposed structures into symbols of national pride and cultural resilience.

In recent years, there has been a growing movement in Nigeria and across Africa to restitute colonial architecture as part of a wider cultural and historical narrative that acknowledges both the challenges and the impacts of colonialism. This trend is evident in several national initiatives aimed at preserving and repurposing colonial-era buildings, turning them into museums, cultural centres, or educational facilities that serve contemporary needs while reclaiming their historical edifice.

For example, the transformation of the Old Residency in Calabar into the National Museum of Slave History represents a significant restitution of a colonial building. Originally constructed as a British administrative residence, the building has been repurposed to educate and inform the public about the transatlantic slave trade, offering a space for reflection on a dark chapter of history while asserting control over the narrative of Nigeria's past. This project, like the Premier Building restoration, aligns with national efforts to reclaim colonial spaces and reframe them in a way that resonates with contemporary cultural and historical consciousness (Godlewski 2020).

The project also resonates with the ongoing discourse on postcolonial identity, where re-appropriating colonial architecture is seen as a way to assert cultural autonomy and redefine the built environment according to local values and priorities. In the context of the Premier Building, this restitution involves not only preserving the physical structure but also reintegrating it into the community's cultural fabric. The engagement of local artisans, the incorporation of traditional materials, and the emphasis on community narratives all reflect a deliberate effort to reclaim the building as part of Nigeria's living heritage, rather than a relic of colonial dominance. The restoration of the Premier Building is deeply embedded in national agendas that prioritise the restitution of colonial architecture as part of Nigeria's cultural and historical renaissance. It demonstrates how restoration projects can serve as powerful tools for reclaiming and redefining colonial edifices, transforming them into spaces that reflect and celebrate the nation's rich and complex identity. Through this project, the Premier Building not only regains its place in the architectural and educational history of Nigeria but also becomes a symbol of the country's ongoing journey towards cultural and historical self-determination.

## Conclusion: bridging past and present in architectural heritage



**Figure 6: Restored Premier Building. Photo taken by Author in 2024**

The restoration of the Premier Building not only preserved its physical structure but also highlighted the challenges inherent in integrating intangible cultural elements into a technically driven restoration. While the project was underpinned by strong philosophical principles, the practical application revealed the complexities of balancing historical accuracy with contemporary relevance. This illustrates the importance of ensuring that future heritage conservation projects integrate both philosophical and practical considerations more fully, making restoration efforts both theoretically sound and practically viable.

The Edinburgh University Archives played a crucial role in deepening the understanding of the Premier Building's historical significance. The archives provided vital documents, including the "Special Report by Deputies Dr. Laws and W. Risk Thomson" (1894), which offered

insight into the original construction plans, the missionaries' intentions, and their broader impact on the architectural and educational landscape. The incorporation of this material not only enriched the historical context of the restoration but also ensured that the project aligned with the original vision of the building, while adapting it to contemporary needs.

The restoration of the Premier Building showcases how a balanced approach to heritage conservation can achieve the dual goals of preservation and modernisation, ensuring that historical buildings continue to serve their communities in meaningful ways. As the field of heritage conservation evolves, there is a growing need for research and practice to further integrate immaterial aspects of cultural heritage, providing more concrete evidence and applications of these concepts. Continued exploration in this area will not only strengthen the framework for preserving architectural heritage but also deepen our understanding of the complex interplay between the tangible and intangible dimensions of cultural heritage.

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# Seismic Risk and Intangible Landscape Heritage on São Jorge

## Abstract

Examining remnants of seismic crises on São Jorge in the Azores, an island where risk forms part of memories and physical landscapes, the paper seeks to contrast agency and intangible landscape heritage with the way the risk is presented through centralised risk mapping. These landscapes become visual indicators of the seismic forces operating below, creating an awareness of both future risk and past disasters. The lens of the uncanny and non-representational theory is employed to understand the landscape as a process and thus explore the intangible landscape heritage of the site. Centring landscape architectural fieldwork undertaken on São Jorge in the aftermath of the 2022 seismic crisis, the paper traces the physical conditions and intangible landscape heritage of three sites where traces and memories of seismic crisis in 1808, 1964 and 1980 are visible, preserved or otherwise present. The sites reveal the entanglement of religion, science, emigration and abandonment in seismic crisis. This paper highlights memorial culture and post-disaster practices in the landscape of São Jorge, as uncovered by field work analysis, and argues that these constitute a form of intangible cultural heritage. Resilience can be seen as intangible heritage, as it offers a way of relating to specific local environmental factors and the community as a whole. The resilience and agency within intangible landscape heritage analysed through fieldwork is juxtaposed with the centralised analysis and mapping of risk in the maps published by the European Union (EU) Copernicus programme. Risk mapping projects a possibly disruptive future onto the present land and offers a perception of the landscape centring future zones of destruction and risk. This perception adds another layer of landscape experience to the existing intangible cultural heritage of interacting with post-disaster landscapes.

## Funding

## Introduction and justification

Disasters are, most basically, terrible, tragic, grievous, and no matter what positive side effects and possibilities they produce, they are not to be desired. But by the same measure, those side effects should not be ignored because they arise amid devastation. The desires and possibilities awakened are so powerful they shine even from wreckage, carnage and ashes. What happens here is relevant elsewhere." (Solnit 2009)

This paper explores different expressions of risk and resilience in post-disaster landscapes and seismic risk analysis. Examining remnants of seismic crises on São Jorge in the Azores, an island where risk forms part of memories and physical landscapes, the paper seeks to contrast agency and intangible landscape heritage with the way the risk is presented through centralised risk mapping. Forensic disaster analysis was recently emphasised by the United Nations Office for Disaster Risk Reduction, suggesting that actively learning from past, recent and unfolding hazard events is central to creating resilience (UNDDR 2024). The consequences of a disaster rarely end the moment the dust settles, and this paper attempts to examine the intangible heritage and resilience within living with post-disaster landscapes. The community-led landscape practices following hazard events can amount to a form of intangible cultural heritage, which in turn could strengthen community resiliency to future disasters.

Utilising presence on the site as a method for design research (Milligan 2018), fieldwork forms the basis of this post-disaster landscape analysis. Landscapes can be analysed as sites containing memories and meaning (Schama 1995), and these experiences, memories and meanings can link landscapes with intangible cultural heritage (Roe 2016). The intangible landscape values of a site can be distilled through the way landscapes are experienced and the local practices through which the landscape is embodied. These body-landscape relations can be understood through a framework of non-representational theory (Macpherson 2009; Thrift 1996; Lorimer 2005; Micieli-Voutsinas and Person-Harm 2021; Waterton 2019), where the landscape is seen as emerging through practice and presence. The experience of being in a landscape where remnants of past events invoke an experience of unintentional memorialisation can be analysed through concepts of the uncanny (Trigg 2012; Mitchell and Petty 2020), giving another layer of depth to the experience of intangible cultural heritage of post-disaster sites. The lens of the uncanny and non-representational theory can be used to understand the landscape as a process and thus explore the intangible landscape heritage of the site.

The paper seeks to juxtapose the resilience and agency within intangible landscape heritage with the centralised analysis and mapping of risk in the reports published by the European Union (EU) Copernicus programme. In a world with increasing risk of climate change fuelled natural disasters, the São Jorge case can illuminate the dichotomy of hazard analysis and intangible heritage of resiliency in critical zones.

## São Jorge as a seismic landscape

Throughout the spring and early summer of 2022, the island of São Jorge was shaken by a seismic swarm, leading to widespread worries of devastation from earthquakes and volcanic eruptions. This led to intensified monitoring of the seismic movements and mapping of the possible implications of a disaster. Centring landscape architectural fieldwork undertaken on São Jorge in 2022, the paper traces the physical conditions and intangible landscape heritage of three sites where traces and memories of seismic crisis in 1808, 1964 and 1980, are visible, preserved or otherwise present. These landscapes become visual indicators of the seismic forces operating below, creating an awareness of both future risk and past disasters. The Azores archipelago is situated in the middle of the Atlantic Ocean, at a tectonic triple junction where the European plate, the African plate and the North American plate meet and create a seismic hot spot. São Jorge consists of a lifted plateau, 56 km long and 8 km wide at most, with steep sides, and debris plateaus at sea level from past landslides and eruptions. The population of 8,373, just 3.5% of the archipelago total[1], puts it at the relative socio-political peripheries of the archipelago itself and of Portugal and the European Union. Much of the archipelago's history can be read from traces in the landscape itself, showing land use, human presence and abandonment, active geological processes and disasters of the past. This paper examines the intangible heritage of risk and resilience on the island, examining remnants of seismic activity of the landscape, and the way inhabitants relate to these. This paper argues that these post-disaster landscapes and built environments, the risks embedded in future seismic movements, and the way communities interact with these, constitutes intangible cultural heritage.

## Frameworks for site-based analysis of intangible heritage

There are different typologies and methods for assessing intangible cultural heritage reflecting varying definitions of value as well as varying aims of the assessments (Taylor 2017). The intangible heritage embedded in living with seismic risk in the Azores can be seen as tied to a sense of identity and continuity recreated by communities in response to their environment, interaction with nature and their history (UNESCO 2003). Concepts of immaterial cultural heritage can also be seen through the work and definitions of the International Council of Monuments and Sites (ICOMOS).[2] Examining the vast open ICOMOS archive online[3], it appears that much is written about preserving landscape heritage sites in seismic disasters, but limited on the intangible heritage

[1] Numbers from the Azores CENSOS 2021 – Principais Resultados Definitivos

[2] Work done by ICOMOS found here: https://www.icomos.org/en/about-icomos/mission-and-vision/icomos-mission

[3] https://openarchive.icomos.org/

arising from disasters or originating in the relations between the built environment, natural disasters, and the people and practices of the landscape. Similarly, Roe (2016) reflects on how existing frameworks seem to lack the perspective that intangible cultural heritage can be living, developing or creating anew in new landscape experiences.

Texts that analyse intangible heritage use words such as immaterial and intangible (Costa et al 2015; Chatzigrigoriou et al 2021), and one could argue that these words are sometimes used to describe identical or similar phenomena. The word immaterial has been used extensively in relation to the process of creating architecture, as well as the way architecture is experienced. The immaterial is not equal to the absence of matter, but rather the perception of matter being absent, and thus dependent on the individual using or experiencing the space (Hill 2003). There is a precedent in landscape architecture to emphasise phenomenology in design (Shirazi 2012). Non-representational theory helps to understand landscapes not only through how they are experienced, but how landscapes themselves emerge through presence, practice and embodiment (Thrift 1996). Macpherson (2010) traces the development and application of the term 'non-representational theory', highlighting its different understandings and usages, as well as her own application in body-landscape relations. Non-representational theory is not necessarily a rejection of representation, but a range of theories seeking to move beyond the purely representational, and can be seen as more-than-representational (Lorimer 2005). Non-representational theory can ground landscape architecture in actual landscapes, rather than abstractions and representations, and give a fuller understanding of our sense engagements with, and entanglements within, landscapes (Waterton 2019). In recent years, there has been a turn to analyse landscapes and the built environment through the lens of non-representational and more-than-representational lenses, applying these frameworks to locality research (Ruan and Prominski 2021) and explorations of affective architecture and memories of place (Micieli-Voutsinas and Person-Harm 2021). Landscapes emerge as a dynamic process and a living relic of the past, rather than a solidified palimpsest. It could be argued that abstraction, although helpful, has taken up too much space in design, leading to a situation where "We dwell in ideas and simulations more than we do actual landscapes," (Milligan 2022). Gaining experience of the specificities of landscapes and understanding landscapes as shaped by practice past and present, makes it possible for landscape architects, planners, as well as officials working with risks and other factors in the landscape, to respond to, and analyse, complex site-specific problems.

Interpretation and memory are significant aspects of the embodied experience of landscapes. Just like the physical layers of the past are active and present in the landscape, there are layers of meaning and symbolism embedded in how we interact with landscapes (Schama 1995). Memory and place are intertwined in a multitude of ways (Schramm 2011), as

some landscapes are assigned meaning as a site for collective remembrance, with an intentional monumentality, designed to convey a memory onto visitors. There are countless examples of memorial culture being used to enforce narratives — monuments are intentional, created to reflect history as trauma (Foster 2010). The uncanny is a phenomenon mirroring memorialism, without the intentionality (Trigg 2011), covering the tension of places being familiar and strange at the same time. Mitchell and Petty (2020) highlight the different expressions of the uncanny, including the temporal aspect of the phenomenon, stating that the uncanny "invokes visions and experiences of the past and the future", a perspective that is especially relevant on seismically active sites. The perspective of the uncanny can be a useful tool to analyse both the phenomenology of a place, and how the individual's experience of familiarity, temporality, estrangement and discomfort shape their embodiment of the landscape.

The experience of being in the built environment or a landscape is also shaped by the way it is presented to us. As the seismic crisis on São Jorge in 2022 unfolded, local agencies monitored the situation closely and the EU Copernicus programme published a volcanic risk assessment, using geospatial data to create hazard maps and analyse the possible impact on people and infrastructure.[4] It is relevant to look at what is included when risks are surveyed and defined. When risk zones are drawn onto a map, they become sites either to protect or sacrifice. These reflections are key to discourse on map-making and its ontology

(Kitchin and Dodge 2007) and models of environmental simulation (Carlsson 2017). Maps, with their data and projections, become part of the way landscapes are perceived. Responding to the fleeting, but useful, nature of map-making, this paper sees the Copernicus risk map as a valuable source of information but not a complete representation of how the landscape and its inhabitants respond to hazard.

[4] Work done by Copernicus found here: https://emergency.copernicus.eu/mapping/sites/default/files/files/RRM_Reports/EMSN129_Technical_Report_v01.pdf

## Methods and materials

The three sites were chosen due to how they reflect the seismic events they have been shaped by. Building on Milligan's emphasis on "engaging our own bodies as an affective and effective medium for design research," (Milligan 2018), fieldwork is used as the main lens through which the intangible heritage of the sites are analysed. To approach and capture the phenomenology of the landscape, walking and filming the site has been a central qualitative fieldwork methodology. Additionally, the sites have been photographed and sketched, with supplementary notes of plants and materials. This methodology mirrors the landscape architecture practice of site visits, where the aim is often to impose new designs and functions onto the land. Surveying existing conditions, and leaving the landscape as is, can also be seen as landscape design (Treib 2016). Visiting a site is a way of transforming the landscape, as it emerges through presence. This methodology of phenomenology-centred fieldwork seeks to explore the body-landscape relations of the site. This can provide a lens for analysing embedded in post disaster landscapes. However, the research outcomes of this methodology, that is, the embodied encounter with a place, exists in the context of differences and power (Tolia-Kelly 2007), and should be seen as phenomenological observations rather than representations seeking to define the sites. This methodology may lead to different outcomes depending on who it is that experiences the landscape(s), their familiarity with the history or context and status as a visitor or inhabitant of the island. Furthermore, the methodology does not capture local, intergenerational and/or collective experiences of intangible cultural heritage.

**Site 1: The church tower ruin in Urzelina**



Figure 1: The ruin of the church tower in Urzelina, damaged by the 1808 eruption. The site appears well-kept, underscoring that the site has been carefully maintained by the local population through centuries of varying seismic activity and threats. Author's photograph.

## Visiting three post-disaster landscapes

In the Azores, religion is visible through small religious structures (imperios), plaques and public artworks depicting churches, and annual religious processions through the landscape. The religious aspect of seismic resilience and experiences is particularly present on the Urzelina site. Lava flows damaged the church, leaving only the tower and it has remained until today as a symbol and reminder the presence of both seismic risk and religious connotations. In the midst of earthquakes, volcanic eruptions, pyroclastic clouds and evacuations, religious processions took place (Chester et al 2022). There is evidence of similar views and religious significance of volcanic activity, often shown through processions, however this does not equal fatalism and resignation as responses to disaster. The relation between people, the land, and religion leads to practices that amount to intangible heritage. Processions are part of intangible cultural heritage both in the Azores and in other parts of Portugal, often existing outside of but parallel to the rituals of the Catholic Church. However, these spiritual practices are in decline on the mainland (Costa et al 2022). In the Azores these practices of popular spirituality have however been more robust. These religious practices could fall under the UNESCO convention's definition of intangible heritage, due to their "...response to their environment, their interaction with nature and their history, and provides them with a sense of identity and continuity," (UNESCO 2003).

During a fieldwork visit in October 2022, there were signs of plants and moss occupying the abandoned structure, however, it did not look neglected, indicating that someone was overseeing upkeep of the ruin. The maintenance, presumably undertaken by the local population, is an embodied practice performed on the site. The surrounding space appeared lush and green, and there were no obvious remnants of lava. There was certainly an experience of the immaterial on this site, in both the absence of the church structure, and in the absence of the volcanic forces destroying it. The experience of being on a site with a rather picturesque ruin juxtaposed with past disasters and future seismic movements was peculiar and can be interpreted through the lens of the uncanny (Trigg 2011). The tower was all that remained of the church, so it was not a functioning place of worship. However, the tower is imbued with a significance experienced as symbolic of religion and of resilience, a set of meanings embedded in the landscape (Schama 1996). The site of the church tower in Urzelina allows an experience of the uncanny in the contrast of present tranquility and past disaster. At the same time, the site illuminates the embodied local practices, spanning centuries, related to the ruin through its maintenance and preservation. The Urzelina ruin has survived subsequent seismic crises and can be seen as a symbol of continuous resilience in the landscape.

## Site 2: The Velas mural



Figure 2: Mural in Velas of the aftermath of the 1964 earthquake. The memorial presents a structured narrative centring both resilience and emigration, highlighting local post-disaster experiences. Author's photograph.

The varying yet persistent seismic risk of the Azores archipelago over time, and the subsequent culture of recovery and resilience leads to great variation in the way crisis is memorialised. In the central square of Velas, São Jorge's largest village, is a mural with a memorial marking 50 years passing since the February 1964 earthquake. It is estimated that 400 houses were destroyed and a further 900 damaged (Chester, 2022). The drawings and composition of the mural show both disruption and chaos, and community solidarity during the 1964 earthquake. Consisting of white tiles and blue paint, it is in the style of other murals seen on the islands.

Different motifs showcase aspects of the 1964 crisis. There is a gathering of people surrounded by furniture, cooking equipment and milk buckets underneath a shelter structure. A sea full of ships and smaller boats with the silhouette of São Jorge is shown as seen from the south, perhaps representing the evacuation of a significant portion of residents to the nearby islands. At the heart of the mural with farm animals on the roofs. The pavilion in the Velas urban park is depicted, alongside a human and more animals, and a shelter next to a ruin. Paper sheets seem to flow across the mural and turn into birds, perhaps a symbol of the emigration happening after the disaster. The background of the mural shows seismograph readings. This suggests a strong relationship to the scientific understanding of seismic crisis. However, the church still sits undamaged at the centre of the memorial, creating a link to the resilience of the Urzelina church tower.

The memorial tells a story of chaotic crisis, perhaps serving as a rationale for emigration - the population of São Jorge was halved in the six years following this earthquake. In a sense, the mural is also a memorial to those who left the archipelago, highlighting an absence in the community. However, the mural seems to uplift resiliency and solidarity, both in the moment of disaster and in rebuilding, and continuing to live on the island, highlighting the sense of community arising from disaster (Solnit 2009). Behind this resiliency lies a cultural way of relating to the environment. This tradition of adjusting, rebuilding and coping as a community constitutes an intangible heritage that is embedded in the landscape. The memorial is on the central square, yet slightly hidden, making it appear as if one accidentally discovered it is thus an expression of intentional memorialisation showcasing local post-disaster practices. This placed the embodied experience in relation with both the site as it is, a calm village square, and the memorial depicting events happening at the same place.

## Site 3: The abandoned lighthouse at Rosais



**Figure 3: The Rosais lighthouse and the Atlantic Ocean. The monumental modernist architecture is now characterized by its neglect and abandonment. Absence becomes the defining attribute of the site, and this draws people to experience the uncanniness of the ruin. Author's photograph.**

Not all post-disaster sites are memorialised, and the lighthouse run on the westernmost Rosais cliffs offers an alternative experience of ruin and recovery. The 7.2 Magnitude earthquake happened January 1st of 1980 and severely impacted communities in Terceira, as well as some areas of São Jorge and the other islands in the central group of the archipelago. The earthquake led to severe damages on the

lighthouse structure and the surrounding area, and the lighthouse keeper and their family abandoned the structure.[5] The ruin of the Rosais lighthouse offers an immersive experience of the devastation and ruin of the seismic tensions the island rests upon. During the fieldwork visit, the landscape was both tranquil and sublime as the traces of the earthquake was overgrown with ruderal plants. Still, the abandoned and visibly damaged structure gave an inescapable awareness of the earthquakes of the past and the risks of the present. This is accentuated by the steep 200 metre cliff the site rests upon, giving the landscape a fragile and stilted appearance.

The lighthouse ruin gate has signposted warnings in Portuguese and English, yet it is clear that the site is visited and that people are seeking out this experience of ruin and abandonment. The towering concrete lighthouse structure, brutalist and monumental in its own way, seemed to symbolise significance far beyond the site, or even the island itself, tied to both its utilitarian purpose and its Estado Novo modernist architecture. The site is straightforwardly experienced through the lens of the uncanny, with its scenic location juxtaposing neglected structures and seismic risk. The very visible abandonment makes the immateriality of the architecture appear almost as present as the ruinous structures. The site stands as a monument and a memory of both past and present unstable seismic conditions, and is, in some ways, experienced as more connected to the present seismic reality than the Urzelina and Velas site. Whereas intangible heritage often appears tied to

presence and practice, the Rosais site, with absence being the defining character, seems disconnected from people. At the same time, this uncanny character draws people to visit and experience the site. The lighthouse is a very visible structure as one approaches the island, appearing as an unintentional monument in the distance.

[5] https://www.amn.pt/DF/Paginas/FaroldosRosais.aspx

## Mapping risk

The seismic crises of 1808, 1964 and 1980 and their imprint in the physical landscape and intangible heritage of São Jorge, formed part of the backdrop of the 2022 seismic crisis. The Copernicus risk analysis of the 2022 seismic crisis (Copernicus 2022) sought to provide updated geospatial data, modelling of possible lava flows, and analysis of the potential impact on people and infrastructure. Risk mapping is useful because it is a set of practices using a predetermined and shared representation and style, with the result that mapping works as a tool (Kitchin and Dodge 2007), and in a crisis, these maps and datasets can provide useful information for evacuation and minimising damages. The areas marked as within possible lava flow paths can be irretrievably damaged, and are thus sites of potential future abandonment. The unpredictability of seismic crisis leads to a lived reality of living with risk over generations, and possibly living through devastating seismic disasters. Risk

mapping provides an alternative way of reading and experiencing the landscape, projecting future crisis onto present landscapes. There is a potential contrast in seeing the landscape through the lens of past disasters and resilience, and through the potential risks projected onto the landscape.

A notable aspect of the Copernicus risk analysis is the distinction between high season and low season for tourism when mapping. This may not merely be due to the increased amount of people potentially at risk, but also due to the different ways local communities and tourists need support in a time of seismic crisis. Fundamentally, both groups would need basic needs met in a crisis, as well as evacuation assistance if necessary. However, local communities have lived for generations with these risks, and may experience a crisis within a framework of experiences, narratives, practicalities and intangible heritage that is part of the local culture. Intangible heritage is important to consider in "rural, peripheral or vulnerable territories at risk of depopulation (…) as it broadens the scope for anchoring the local population," (Costa et al 2022), and the way the local population maneuvers around and interacts with post-disaster landscapes could be part of what anchors them to the archipelago. Increasingly, landscapes are visualised in terms of digital maps on phones, and in the Azorean context, this might mean that the potential seismic disruption, as projected through risk mapping, becomes part of how landscapes are embodied and experienced by both locals and tourists.

## Conclusion

The landscape fieldwork undertaken in the aftermath of the 2022 seismic crisis illuminated the variation of both physical characteristics and phenomenology of post-disaster sites in São Jorge. The sites reveal the entanglement of religion, science, emigration and abandonment in seismic crisis. This paper highlights memorial culture and post-disaster practices in the landscape of São Jorge, as uncovered by field work analysis and argues that these constitute a form of intangible cultural heritage.

Although the social contexts in which the seismic crisis of 1808, 1964 and 1980 happened within vary greatly, there is a similar thread of cultural responses to experiencing disaster and living with memories of disruption. Resilience can be seen as intangible heritage, as it offers a way of relating to specific local environmental factors and the community as a whole. Further study of Azorean relations to landscape and resilience, assessing other aspects of local agency, community and identity, is necessary to define and preserve the intangible cultural heritage of the Azores, and potentially situate it within the UNESCO framework.

Methods centring experience can illuminate aspects of risk in the landscape and built environment that seldom are expressed through map-making. Centralised risk mapping, akin to the Copernicus maps, can offer a spatial language for emergency response and planning necessary in volatile seismic situations like the Azores and in other

vulnerable regions. Risk mapping projects a possibly disruptive future onto the present land and offers a perception of the landscape centring future zones of destruction and risk. This perception adds another layer of landscape experience to the existing intangible cultural heritage of interacting with post-disaster landscapes.

The objective of the methodology, emphasising landscape architectural analysis and the embodied experience of the sites, is not in itself to define the intangible cultural heritage of seismic risk at the sites, but to illuminate its presence and the way people interact with it within the post-disaster landscape. In order to de-centre individual experiences and capture a broader scope of entanglements with the landscape, the methodology could be expanded to include a variation of local experiences of embodied presence on São Jorge or other post-disaster sites where this lens could illuminate heritage and resilience through body-landscape relations.

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# A Palimpsestic Narrative Of The Chinese Settlement In Calcutta: Spatial Indicators of Assimilation, Exclusion and Gradual Disappearance

## Abstract

''Self-imposed invisibility is the distinct characteristic of Kolkata's Old Chinatown today'' (Bose, 2016). Yet, their presence in the city is strongly felt through the Chinese breakfast street of Tiretta bazaar, hand-made leather shoe-shops in Bentick Street, Chinese owned beauty parlours and laundromats, and the week-long festivities of the Chinese New Year. Though the diaspora has maintained a cultural specificity by means of temples, clubs, schools and newspaper presses, their aspiration to assimilate is evident in their built environment. In Calcutta, the often-overlooked stories of the Chinese settlements highlight a hidden side of the city's architecture. Through the spatial study of two Chinatowns—Cheenapara, within the Central Business District (CBD), and Tangra, on the outskirts—this study explores the indicators of assimilation and assertion of identity of the Chinese diaspora in the city.

It delves into the hidden, yet pivotal spatial practices that reveal a complex interplay of inclusion, exclusion, and displacement—factors often overshadowed by the physicality of architecture. The essay is the result of the research conducted during my master's program in Architectural History and Theory from CEPT University, India, under the guidance of Dr. Sonal Mittal. The research foregrounds the intangible heritage of the Chinese in Calcutta, through a meticulous exploration of archival documents and histographical maps. By transcending the traditional architectural narrative that prioritizes tangible outcomes, this paper argues for a recognition of the invisible actants—stories, myths, and archived narratives—that mould the unseen architecture of community identity and memory. Through this lens, the paper contributes to an understanding of architecture not merely as a physical artifact but as a repository of underrepresented narratives and contested heritage, challenging the borders of conventional architectural discourse and advocating for a broader, more inclusive historiography that recognises forgotten labours and decolonial approaches.

## Introduction

"Self-imposed invisibility is the distinct characteristic of Kolkata's Old Chinatown today" (Bose 2016). Whenever spaces are rebuilt or redesigned, former evidences remain and are never completely erased. In that sense, every city is a palimpsest – a site with multiple layers of historical interventions, in terms of use and design. The appearance of new structures and new uses often means the disappearance of earlier ones.

For the Chinese diaspora in Calcutta,[1] the notion of disappearance permeates the city, hidden in plain sight through assimilation in the built environment. Though the diaspora has maintained a cultural specificity by means of temples, clubs, schools and newspaper presses, their aspiration to assimilate – to disappear into the chaos of the city - is evident in their architecture. Yet, their presence in the city is strongly felt through the Chinese breakfast street of Tiretta bazaar, hand-made leather shoe-shops in Bentick Street, Chinese owned beauty parlours and laundromats, and the week long festivities of the Chinese New Year.

Through the spatial study of the two Chinatowns of Calcutta—Cheenapara, within the Central Business District (CBD), and Tangra, on the outskirts—this study tracks the physical manifestations of the growth and decline of the Chinese diaspora in the city. By transcending the traditional architectural narrative that prioritises tangible outcomes, this paper argues for recognition of the invisible actants—stories, myths, and archived narratives—that mould the unseen architecture of community identity and memory. Through this lens, the paper contributes to an understanding of architecture not merely as a physical artifact but as a repository of underrepresented narratives and contested heritage, challenging the borders of conventional architectural discourse and advocating for a broader, more inclusive historiography that recognises forgotten labours and decolonial approaches.

[1] Presently Kolkata, but this study will be using its historical name Calcutta as the study focuses on the time period when it was so called.

## Methodology

The essay is the result of the research conducted during my master's program in Architectural History and Theory from CEPT University, India, under the guidance of Dr. Sonal Mittal. The research was completed during the COVID pandemic with online classes and travel restrictions, therefore online archives and publicly accessible information formed the database for the study.

Emulating the palimpsest methods of erasing, collating and stacking, archival materials such as maps, text, newspapers, photographs etc. are overlapped to map the sites of inclusion and exclusion of the Chinese community within the urban fabric of Calcutta. Historical events that ruptured their neighbourhoods led to displacement and dislocation of the Chinese Indians, in effect erasing their

cultural identity or reducing them to mere sites of memory.[2] Often in such cases, toponyms were the only remaining indicator linking the region to the Chinese settlement that prospered. Stacking the three – spatial study, archival materials and historic events – reveal a complex interplay of inclusion, exclusion, and displacement, factors often overshadowed by the physicality of architecture.

While the maps and other archival data provided information on the physical aspects and timelines of events regarding the Chinese settlement in Calcutta, a theoretical framework was necessary

[2] Refer to map legends.

to delve into the deeper, more nuanced aspects of immigration as a process. The data revealed the 'what' and 'when' of the community's presence, growth, and displacement, but to truly unpack the 'why' and 'how' behind these shifts, I required a framework that could address the psychological and socio-political stresses that accompany immigration.

The inclusion of Yuval Harari's (2019) two-prompt approach on immigration, from his book 21 Lessons for the 21st Century, serves as a valuable lens in this regard. His examination of immigration as a deal between host countries and immigrants allowed for an understanding of the expectations, obligations, and
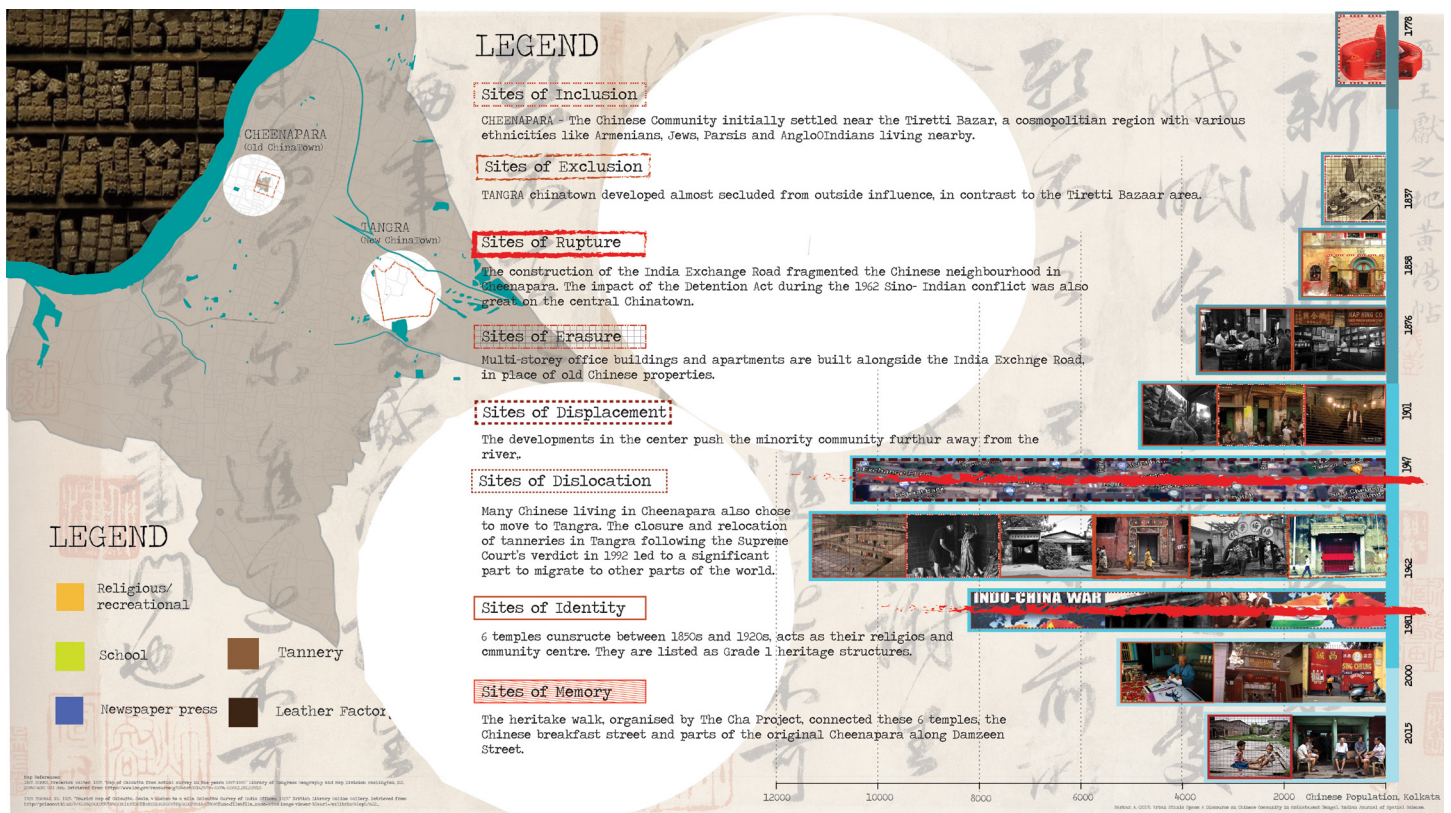


**Figure 1: The sites of inclusion, exclusion, rupture, erasure, displacement, dislocation, identity and memory are mapped using assigned legends that allow observing their overlap and inferring implications for the community. The Chinese population in Calcutta is charted as a bar chart against the years with corresponding images of spaces associated with them.**

often fraught relationships that arise in such exchanges. This framework complements the postcolonial and subaltern perspectives of the paper. His theory helped contextualize the tensions of assimilation, exclusion, and the Chinese community's oscillation between invisibility and assertion in Calcutta.

Harari's approach dissects immigration as a transactional process, with specific expectations placed on both the host country and the immigrants. The first expectation, the obligation to assimilate into local culture, mirrors the Chinese community's historical attempts to blend into Calcutta's urban fabric through architecture, social practices, and cultural institutions. The second expectation, that the host country must treat assimilated immigrants as first-class citizens, is particularly significant when analysing the challenges faced by the Chinese in India, especially in the wake of political tensions such as the Sino-Indian war. This theory allows an interrogation of whether this 'deal' of mutual obligation has been honoured or broken, offering a fresh perspective on the social exclusion, displacement, and partial erasure of the Chinese identity in Calcutta.

By choosing Harari's framework, the paper positions itself within broader discourses that not only explore subverted and marginalized histories but also critically examine how global processes of migration intersect with local histories, identities, and the built environment.



**Figure 2: Map of India showing the location of the two study areas in Kolkata (called Calcutta in present day).**

## Collision between global problems and local identities[3]

A study of the population census of immigrants that settled in Calcutta during the colonial reign reveals an intriguing phenomenon. Among the many diasporas (European, Armenian, Greek, etc.) only the Chinese increased in number after the Partition. For the Chinese-Indian community, it was the 1962 Sino-Indian war that ruptured their relationship with the city and the country, during which many were forced into internment camps.

A voice floats through the cell phone I hold close to my ears – "Bijoy, what's going on? When will all this trouble end? This does not seem right." The voice does not pause to breathe. There is a clear anxiety in that voice. And, the voice belongs to my Chinese-Indian friend from Kolkata, Asi Hong.

The above excerpt from the blog post of Bijoy Choudary (2020), a photographer who has been documenting the life of the Chinese community in Kolkata, throws light on the tension gripped within the community in the wake of the recent anti-Chinese sentiments among the Indians. With increasing propaganda against China and Chinese goods, they feel apprehensive of their future in the country.

1a-1b: Photographs taken by Bijoy Chowdhury, Humans of Little China: Walkthrough with a Kolkata lensman, July 16, 2020, Indiablooms. Accessed 10 September, 2022, https://www.indiablooms.com/life-details/L/5223/humans-of-little-china-walkthrough-with-a-kolkata-lensman.html

[3] Subtitles as frameworks borrowed from "21 Lessons for the 21st Century" by Yuval Harari.

**Image 1.a: Hupeh Association – a Chinese Club in Cheenapara, Old Chinatown.**

**Image1.b: A Chinese shoe shop at Bentinck Street, Cheenapara.**

Once almost 12,000 people strong, less than 2000 remain, composed mainly of an aging population with most of the younger population migrating to Toronto, Canada or Australia in search of better education, job opportunities and safer environments. Within Kolkata, the drastic shift in their geographic spread – from the Central Business District (CBD) to the outskirts – reflects not only the physical displacement of the community but also the erasure of cultural memory, as their presence and identity fade from the city's core and are overwritten by new urban forms.

In this scenario, it becomes important to assess the relationship between the immigrant community and the country by going beyond the visible shifts in population and geography to include the intangible narratives of displacement, memory, and identity that continue to shape their presence within the city.

## The host country 'allows' the Immigrants in?

"Everything begins and ends at the Old Chinese temple at Atchipur, where the first Chinese[4] came over 200 years ago," (Ellias 2012). Those who came in to work in the sugar mill of Atchipur moved to the city of Calcutta in 1804, where some Cantonese men, who were skilled carpenters, were already working at the ship-docks and jute mills, (Bose 2019). They wedged themselves into the 'grey town' in–between the European settled 'White' town and indigenous 'Black' town - occupied largely by other immigrants like

Armenians, Jews, Portuguese and Parsis. Bayly's Map of Calcutta in 1792 (Upjohn, n.d.) is perhaps the first to indicate the 'China Bazaar Lane'—presently known as the Old China Bazaar Road—near Clive Road. The Simms map of Calcutta (Simms 1858) from actual survey in the years 1847-1849, also locates a New China Bazaar just behind the Writer's building, of which no records can be found elsewhere.

Until 1837, the Chinese community in Calcutta was a "bachelor society" (Bose 2019, 143), made up mostly of labourers. The 20th century colonial India saw a heavy influx of migrants from colonial China due to famines and opium wars, which peaked post-World War II. Cantonese carpenters, Hakka shoe-makers, dentists and teeth-setters from the Hubei province, laundromats from Shanghai and Shandong silk-traders flocked to Calcutta in search of fortune. The demographic data suggests that a majority of the community was already settled in Calcutta before the formation of the country itself.

[4]A Cantonese sailor, Atchew Po (Yang Dazhao), established the first sugar mill of India in 1788, 80km southwest of Kolkata. The place is believed to be named after him, Atchipur.

## The 'obligation' to assimilate?

The neighbourhood or para invokes a sense of community and "often cuts across ethnic and/or class lines," (Bonnerjee 2010, 69). The Simms Map of Calcutta (Simms 1858) includes a label for a road near the Tiretta Bazaar as Cheenapara, leading us to believe that it was majorly occupied by Chinese immigrants.[5] The earliest mention of 'The Chinese Colony` is by C. Alabaster in his article in the 'Calcutta Review' in 1858, in which he describes in detail about "the temples, the graveyards, the opium-dens and the living quarters of the Chinese,"(Bonnerjee 2010, 11).

The initial migrants were mostly men, who formed associations or social clubs, usually on the basis of occupation, called huigans. Most of these huigans also had a temple built along with it, "so basically it was a social club where everyone could come to socialize, play some games and pray to their Gods," (Mukherjee 2018). These became their first sites of identity assertion. "The traditional game of Mahjong continues to be played by elders in Gee Hing Church, Sea Ip Church hosts evening abacus classes and meetings, and political discussions take place in the Voi Ling Club," (Bose 2016).

These temples, built between 1850 and 1920, serve as anchor-points for the community within the undefined boundaries of the present Cheenapara. Yet they "do not claim an explicit cultural expression through architectural form," (Bose 2016). Ionic columns on the Toong On Church façade and the arched windows and door with Corinthian columns at Choonghee Dhong Thien Haue Church display the adoption of neo-classical façade prevalent in Calcutta at the time. It was only in the interior spaces that the Chinese character was expressed. This was done using colour, calligraphy and artifacts, especially in the shrine room. Most temple buildings performed multiple functions. While the Gee Hing Church and the Hubei Association occupied the first floor, Chen's Carpentry Works functioned from the lower floor (Bose 2016). The Nanking Restaurant that functioned off the lower floor of the Toong On Church was a sought-after destination for authentic Chinese food, until it was shut down following the Indo-China War. The fact that the temples are called 'churches', is a remnant of their attempt to conceal their identity, or an attempt at legitimising themselves in the colonial city. Thus through hybridisation and multi-use typologies, the Chinese community asserted their ethnic identity while blending into the existing urban fabric.

[5] This region also has a high number of 'huts' (structures which were not made of brick and mortar) depicted by unshaded building footprints.

LEGEND

**Sites of Inclusion**

CHEENAPARA - The Chinese Community initially settled near the Tiretti Bazar, a cosmopolitian region with various ethnicities like Armenians, Jews, Parsis and AngloOIndians living nearby.

**Sites of Exclusion**

TANGRA chinatown developed almost secluded from outside influence, in contrast to the Tiretti Bazaar area.

**Sites of Rupture**

The construction of the India Exchange Road fragmented the Chinese neighbourhood in Cheenapara. The impact of the Detention Act during the 1962 Sino- Indian conflict was also great on the central Chinatown.

**Sites of Erasure**

Multi-storey office buildings and apartments are built alongside the India Exchnge Road, in place of old Chinese properties.

**Sites of Displacement**

The developments in the center push the minority community furthur away from the river.

**Sites of Dislocation**

Many Chinese living in Cheenapara also chose to move to Tangra. The closure and relocation of tanneries in Tangra following the Supreme Court's verdict in 1992 led to a significant part to migrate to other parts of the world.

**Sites of Identity**

6 temples cunsructe between 1850s and 1920s, acts as their religios and cmmunity centre. They are listed as Grade 1 heritage structures.

**Sites of Memory**

The heritake walk, organised by The Cha Project, connected these 6 temples, the Chinese breakfast street and parts of the original Cheenapara along Damzeen Street.

LEGEND

Religious/recreational

School

Tannery

Newspaper press

Leather Factor
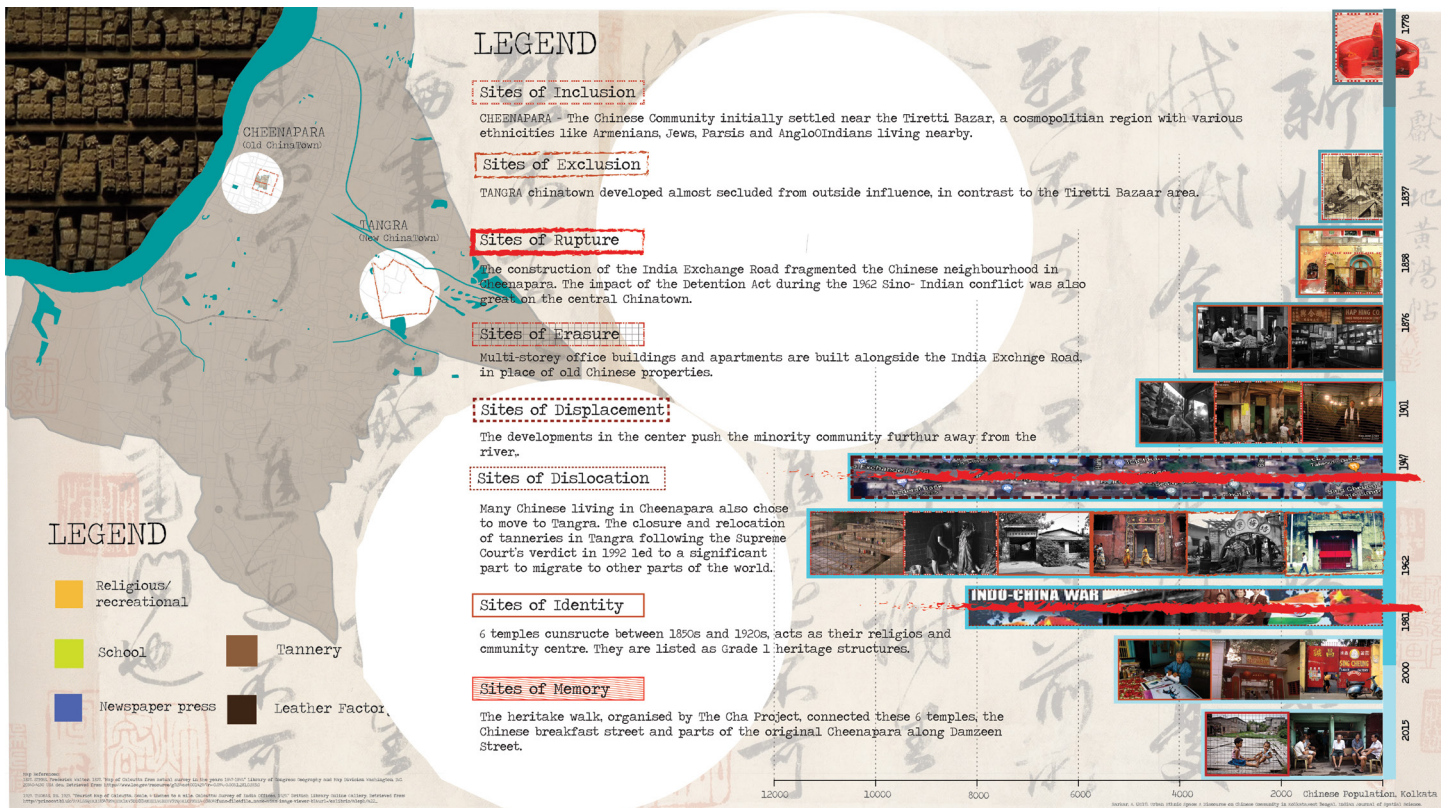
Chinese Population, Kolkata

**Figure 3: Palimpsestic mapping of Cheenapara. Relevant parts of old maps are overlapped on the present map of Cheenapara to identify sites as mentioned. The write-ups in boxes act as supporting statements from references corresponding to the site or timeline.**
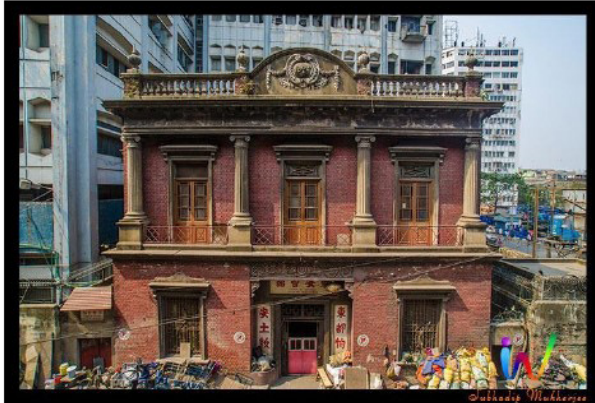
**Image 2.a: Ionic Columns on Toong On Church with Nanking Restaurant (closed) on the ground floor.**



**Image 2.b: Interiors of temple on the first floor of Toong On Church.**
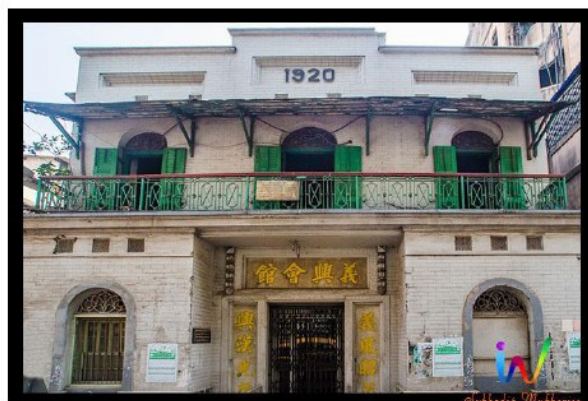


**Image2.c: Gee Hing Church disguises itself as a typical colonial bungalow of the time.**
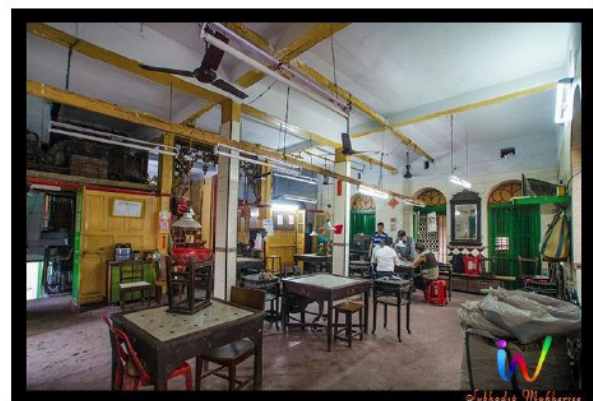


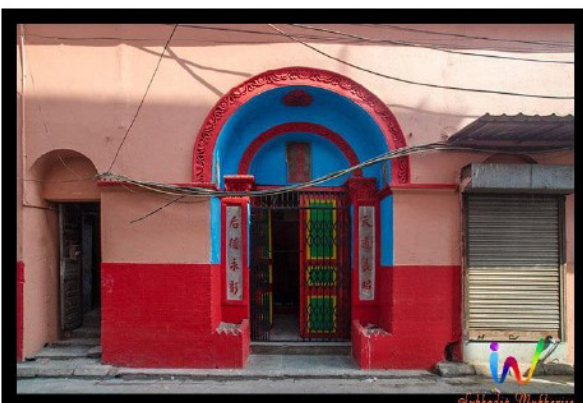**Image2.d: The club on first floor of Gee Hing Church where members play Mahjong.**



**Image 2.e: Arched windows and door with Corinthian columns at Choonghee Dhong Church. Only the inscriptions at the entrance give away any Chinese association.**



**Image 2.f: Main Temple Choonghee Dong Church. It was only in the interior spaces that Chinese character was expressed.**

2a-2f: Photographs taken by Subhadip Mukherjee, Chinese Temples and Churches of Kolkata, March 12, 2018, IndianVagabond. Accessed September 10, 2024, https://indianvagabond.com/2018/03/12/chinese-temples-and-churches-of-kolkata/.

50

## But how far should assimilation go?

In 1910, some Hakka Chinese were relocated from the CBD to the marshy wetlands of Tangra in the outskirts due to environmental concerns about their tanneries in the city. "Tangra, ...in contrast to the cosmopolitan Tiretta Bazaar area, appeared more insular," (Bonnerjee 2010, 13). This New Chinatown developed almost secluded from outside influence. The more-or-less homogenous neighbourhood is inward-facing, asserting their identity "around the community places like Pei May School, a Chinese school built by the community, and the market" (Bonnerjee 2010, 13).



**Image 3.a: Gate announcing the entry to the New Chinatown, Tangra, clearly exhibiting Chinese elements.**



**Image 3.b: High-walled, steel gated territories in Tangra reflect a more insular, guarded community as compared to the old town.**



**Image 3.c: Cheena Kali is a Hindu goddess worshipped in Tangra Chinatown. It has two Kali and one Shiva deities, which is honoured by offering Chinese food such as dumplings and noodles.**



**Image 3.d: Kim Li Loi is one of the oldest Tangra restaurants. As the tanneries were closed, several restaurants opened up, and the place became a popular spot for Chinese food lovers.**

3a-3b: Photographs taken by Alice Carfrae, China Town Kolkata, June 28, 2014, Alice Carfrae Multimedia. Accessed September 10, 2024, https://www.alicecarfraemultimedia.com/blog/2014/6/28/china-town-kolkata-private.

3c-3d: Photographs taken by Amrita Mukherjee, Chinatown in Kolkata: A Heritage of Negotiation and Survival, June, 2021, Sahapedia. Accessed September 10, 2024, https://map.sahapedia.org/article/Chinatown-in-Kolkata:-A-Heritage-of-Negotiation-and-Survival/11284.

The construction of the India Exchange Road (presently, Lu Shun Sarani) by the Calcutta Improvement Trust in 1950s through Cheenapara fragmented the Old Chinatown, displacing many more Chinese to Tangra. Lacking any territorial markers, the insertion of multi-storeyed office spaces and apartments is gradually erasing the original human scaled settlement to emerge as the 'office-para' of Kolkata.[6]

Despite the physical transformations, Cheenapara's ingrained cosmopolitan character "continues to integrate and absorb multi-ethnic communities who live in close proximity," (Bose 2016).[7] Amongst this amalgamation of diverse cultures, "the Sunday morning market ... and road names like Sun Yatsen Street and Lu Shun Sarani hold on to the Chinese presence in this area of Calcutta," (Bonnerjee 2010, 12). Formerly known as Russel Street, Lu Shun Sarani was renamed in honour of Lu Xun, a renowned Chinese writer and intellectual. The Sun Yat-sen Street is named after Dr. Sun Yat-sen, a revolutionary leader and founding father of the Republic of China. Such dedications may have been official attempts to promote historical and cultural ties between China and India. At first glance, place-naming may appear to be an innocuous exercise, a way of simply creating a means for spatial reference and orientation. Yet, toponyms are also allegories from which people draw identity, and the naming process can give insight into the history, social and political power relations of a particular place.

[6] The current name "Kolkata" is used to highlight events occurring in the present.

[7] Dislocation and emigration of other ethnic communities that existed during the colonial period brought in migrants from other parts of the country into the grey town area of Calcutta.



**Image 4.a: Tiretta Bazaar in Kolkata's Cheenapara is still popular for Chinese delicacies.**



**Image 4.b: Chinese New Year celebrations at Tiretta Bazaar.**

4a-4b: Photographs taken by Mallika Khurana, From Dragon Dances To Sui Mai Feasts: Inside Kolkata's Tiretta Bazar's Chinese New Year Extravaganza, February 12, 2024, Curlytales. Accessed September 10, 2024, https://curlytales.com/from-dragon-dances-to-sui-mai-feasts-inside-kolkatas-tiretta-bazars-chinese-new-year-extravaganza/

Although the two China towns appear to have drastically different characters, for the Chinese, the differences between the two Chinatowns were mostly in their way of living. While Cheenapara represented a more mixed neighbourhood, Tangra was more homogenous, originating from occupational requirements. For the Chinese diaspora, Calcutta becomes a palimpsest of self-imposed invisibility, by assimilation in the built environment, overlapped by indicators of identity construction through language, education and traditions.
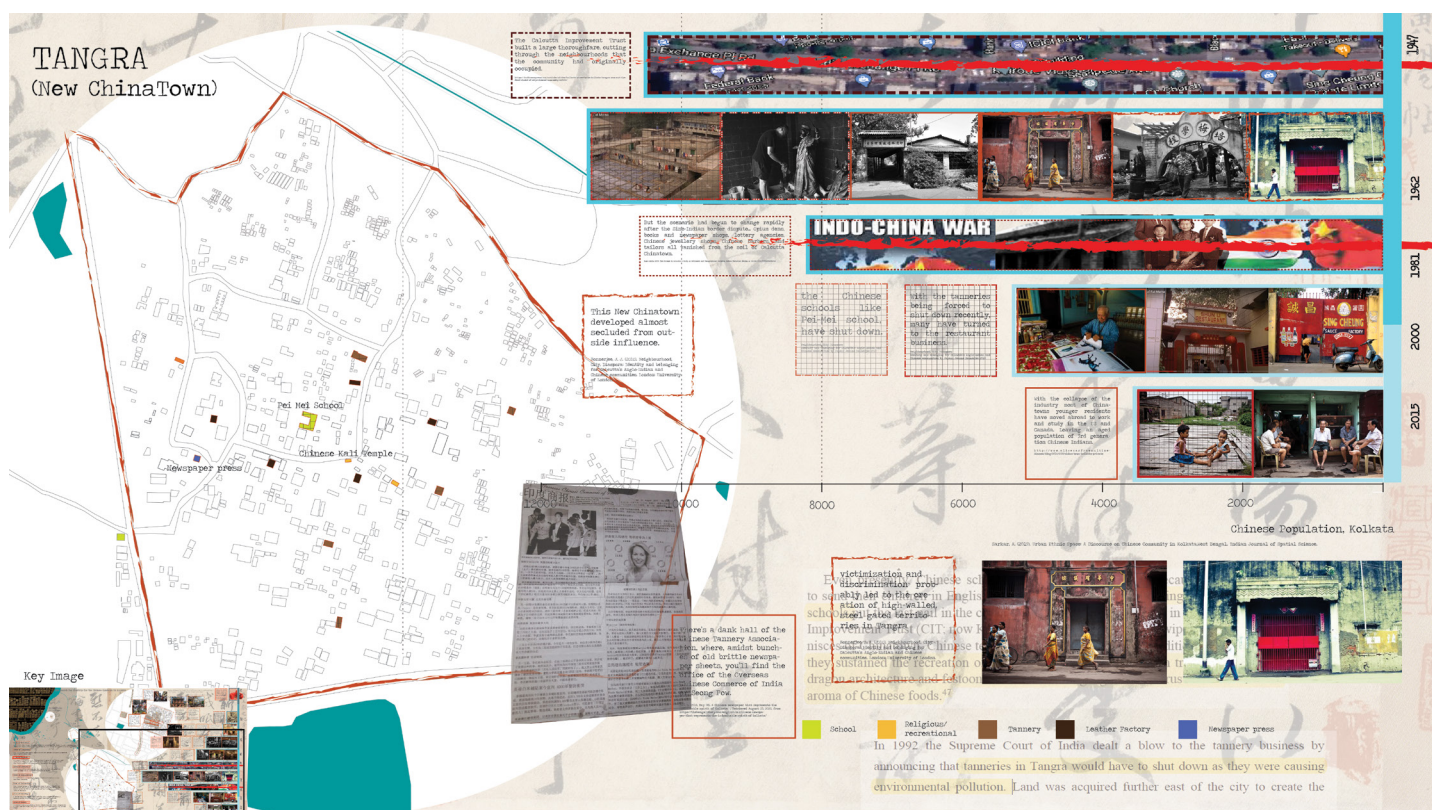


**Figure 4: Palimpsestic mapping of Tangra. Relevant parts of old maps are overlapped on the present map of Tangra to identify sites as mentioned. The write-ups in boxes act as supporting statements from references corresponding to the site or timeline.**

53

## The host country's duty?

"... Exactly how much time needs to pass before the immigrants become full members of society?" (Harari 2019, 132). The Chinese Kali Temple is a testament to the amalgamation of the Chinese and Indian cultures. However, the victimization and discrimination faced by the Chinese as a result of the Detention Act[8] following the 1962 Sino-Indo War is probably what led to the creation of high-walled, steel gated territories in Tangra (Bose 2016). Considering ethnic Chinese residents as potential spies, the Indian government ordered many Chinese-Indians to leave the country and held thousands of those who did not comply in internment camps. With the constant fear of internment, heightened distrust by the Indians and restrictions on movement, many Chinese lost their jobs and were forced to move.

One can see a disproportion even in the emigration patterns between the two towns. The Cantonese population living within the CBD were the first to leave, possibly because they were "more 'anglicised'... compared to the Hakka Chinese who lived in Tangra, making it easier for them to emigrate," observes Bonnerjee (2010, 114). It was the closure and relocation of tanneries from Tangra following the Supreme Court's verdict in 1992 that led to significant emigration of the Hakka community. The larger tanneries relocated to the Calcutta Leather Complex at Bantala while some of those who could not afford it, turned to restaurants and sauce factories and the others simply ground to a halt. The same fate awaited the first Chinese newspaper of India, the Chinese Journal of India that was started in 1935, near the Old Chinatown. With the younger generation moving out, and those who remain preferring to study in English medium schools, the Chinese schools that were once their community space are becoming a memory.[9] From the office of the only functioning Chinese newspaper press in India, in a dark hall of the Chinese Tannery Association, The Overseas Chinese Commerce of India, or Seong Pow, fights for its sustenance with only 200 subscribers (Datta, 2019).

An aged population of third generation Chinese-Indians remains in Calcutta. Though many of them hold Indian passports, recent stand-off between India and China has increased their anxieties about their life in the State. It is deeply ingrained in Nationalism "... to treat foreigners as distinctive kinds of people deserving limited right and close surveillance," (Tilly 2015). So even after the immigrants have been tolerant, will the host country ever accept them as first-class citizens?

[8] The act led to the forced relocation and incarceration of 3000 Chinese-Indians in an internment camp in Deoli, Rajasthan.

[9] Cheng–Kuo and Hing-Wah schools, which were supported by Chinese governments, were shut down after the border dispute in 1962. The Pei-Mei school, one the last Chinese Medium schools closed in 2009 due to lack of students.

## Are both sides living up to their obligations?

"Human mental identities are not like shoes; of which we can only wear a pair at a time," (Hobsbawn 1996, 1067). Chinese Calcuttans, particularly those in the city, drew upon their 'invisibility', with a dual identification as Chinese by community and Indian by nationality. However, "their identification with the nation was ruptured through the traumatic experiences during this period [of unrest during the Sino-Indo War]," (Bonnerjee 2010, 138). While their sincere effort to assimilate is evident not only in their lifestyle but also in the built environment, they are still treated as second-class citizens even in the second and third generations.[10] The lack of mutual support gradually resulted in the isolation of the diaspora from the mainstream communities.

In August 2005, the Indian Chinese Association for Culture, Welfare and Development, along with the Municipal Corporation of Calcutta put up a road sign at Tangra- 'Tangra China Town'- written in Chinese, English, Bengali and Hindi. This apparent acceptance of Chinese identity by the state, offers hope to pro-immigrationists. However, these acts might also serve to frame the Chinese community as the other—distinct and separate, rather than fully integrated into the fabric of the host country.

The heritage walk organised by The Cha Project[11] connects six temples, the Chinese breakfast street, Damzen Street and Blackburn Lane that still retain the original character of Cheenapara (Bhowmik,

2014). Still, global political turmoil is mirrored at the city level, particularly within neighborhood spaces, making Calcutta feel once again inhospitable to the Chinese Indian community.

[10] Referring to the pro-immigrationist's side of the immigration debate by Yuval Harari (2019).

[11] The Cha Project (Cities, Heritage, Architecture) is a design and creative placemaking studio based in Singapore. The group of urbanists, designers, planners, architects, engineers, artists, heritage enthusiasts, scholars and creatives lead urban revival initiatives for Kolkata's iconic neighborhoods starting with Chinatown.
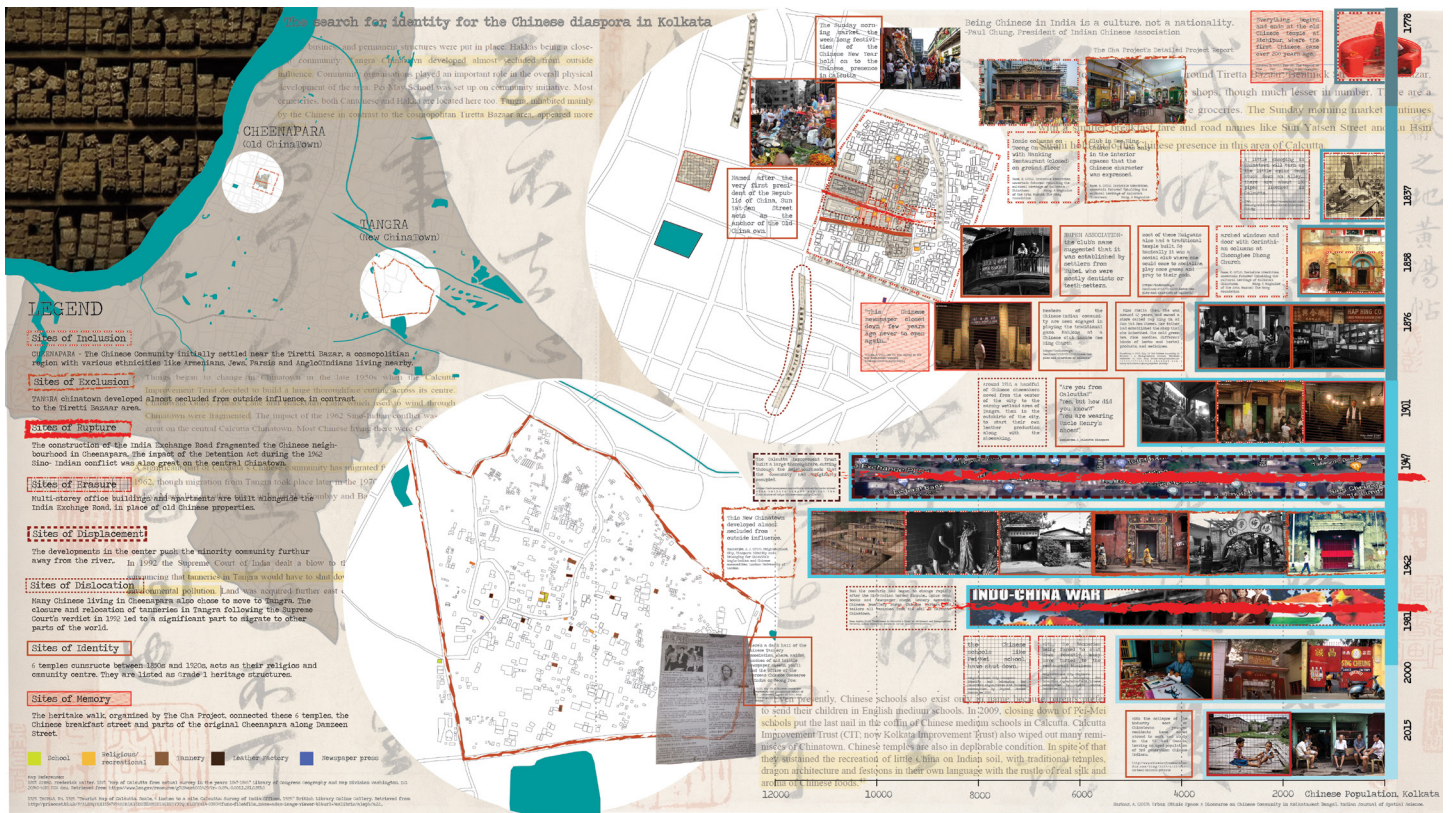
**Figure 5: Combined palimpsestic map of the two Chinatowns of Calcutta by stacking spatial study, archival materials and historic events show the role of the invisible actants—stories, myths, and archived narratives—that mould the unseen architecture of community identity and memory.**

## Conclusion

While the presence of the Chinese community in Calcutta is still prominent, the palimpsestic mapping of their settlements, read together with the socio-political events, weaves a story of inclusion, exclusion, gradual displacement and possibly eventual disappearance. Within the present-day Cheenapara, a region devoid of clear boundaries, urban redevelopment looms over the old Chinese quarters. The remaining minority is being pushed further away from the city, towards the outskirts. A more 'fortified' Tangra indicates their insecurity. The dwindling Chinese-Indian population finds solace in the few remaining temples and shops run by them. These remnants of a once thriving community serve as crucial anchor-points for the Chinese diaspora amidst the city's evolving landscape. As the younger generation continues to migrate elsewhere, a small, aging population of Chinese-Indians remains. Their fading presence is manifested through altered (and forgotten) place-names and increasing sites of memory, serving as poignant reminders of their past.

The Chinese diaspora's story in Calcutta offers a reminder that cities are not just physical entities but repositories of collective memory, stories, and invisible identities. As cities grow and change, newer layers often overwrite or erase the tangible and intangible heritage of minority groups. The experience of the Chinese diaspora illustrates that built forms are merely spatial indicators of the deeper, intangible actants that shape community identity. The methodology of palimpsestic mapping used in this research provides valuable insights for understanding the complex layers of migration, assimilation, and erasure in other geographical or cultural contexts, offering a more nuanced understanding of urban development and memory.

This study offers a blueprint for how to approach architectural and urban history from a decolonial perspective. By combining spatial study, archival research, and historical context, it becomes possible to see beyond the physical structures and understand the deeper social forces at play. The use of Harari's immigration framework further enriches the analysis by linking global immigration dynamics to local urban realities, making this approach relevant for studying migration in cities around the world.

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# Situated Design: Participatory exercises for an appropriate architecture within Wichi Indigenous communities in Argentina

## Abstract

The transfer of typologies, technologies and materials promoted by development programmes does not usually take into account the solutions of form and function with which the Indigenous communities of Central Chaco give meaning to their architecture. The contents and designs promoted from a centralised management of decisions are implemented by agencies with the capacity to influence policies that are unaware of the local conditions and the trajectories of the peoples on which they have an impact. On the other hand, it will be shown how design education in Argentina focuses on other issues. From different theoretical guidelines of Latin American critical thought, the need to decolonise the principles of modernity towards alternatives where the point of origin is to be found in subaltern knowledge will be raised. Within this framework, the work explores the logics of the social construction of habitat through participatory design processes that allow the communities to be elevated as actors with their own voice and capacity to design programmes with local identity, through action research projects in the Indigenous territory of Lhaka Honhat in the province of Salta, Argentina.

## Introduction

The way of inhabiting Gran Chaco has been modified over time. From a nomadic tradition, the Indigenous groups that lived in it designed vegetal technologies for the construction of shelters. They were organised in systems of temporary villages that adapted to the variability of the geographical conditions of the area they inhabited. As described by Argentine theorist De La Cruz (1997), the colonisation of Gran Chaco has had different expressions, based on religion, state policies and, today we could say, based on the market. This historical process has resulted in a tendency towards sedentarisation (De La Cruz 1997). However, local groups have been able to resist many of these influences, defying the advances of supposed development in the region.

This paper presents the results of research carried out within an Indigenous territory located in the current province of Salta, Argentina, on the border with Paraguay and Bolivia, also known as the Pilcomayo River area (Figure 1). This territory comprises the ex-fiscal lots 14 and 55 and is called Santa Victoria Este. From a decolonial perspective, this research proposes to establish a dialogue between the historical processes that have marked the housing situation in Gran Chaco and the issue of design education in Argentina. Furthermore, some exercises focused on architecture will be analysed, which are the result of participatory work with members of the Indigenous communities of *Lhaka Honhat[1]* that inhabit this territory and students and researchers from the Faculty of Architecture, Design and Urbanism of the University of Buenos Aires (FADU at UBA). To close, reflections are proposed

[1] Lhaka Honhat means 'Our Land' in Wichi language. It is the name of the Indigenous Association founded in 1992, which represents the five cohabiting Indigenous groups: Chorote, Chulupí, Tapiete, Toba, and Wichi.
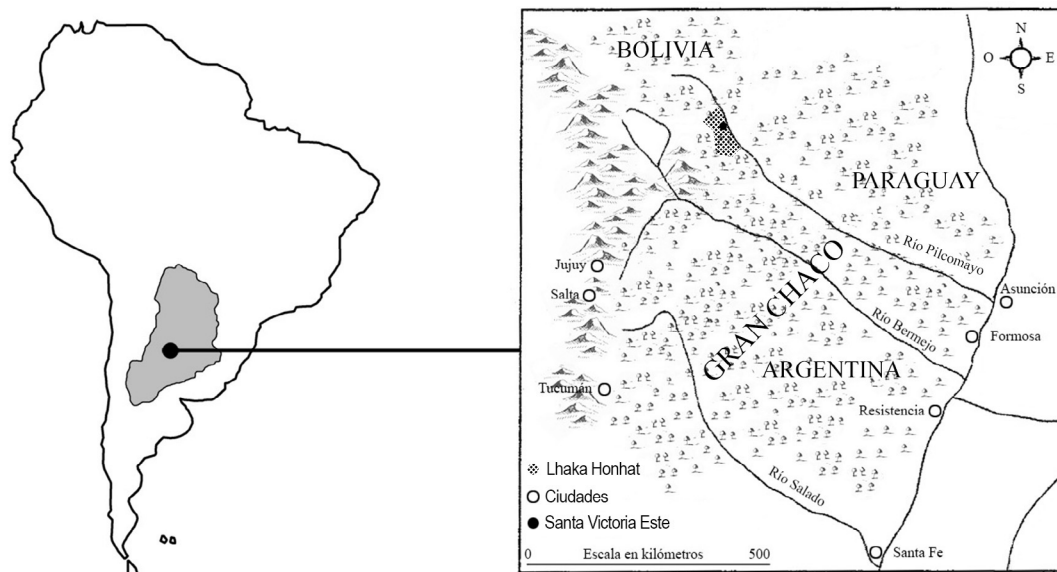


**Figure 1: Location of the Gran Chaco (own elaboration)**

on the possibilities of generating critical thinking that allow us to question current training in design degree studies to think of possible futures that have an impact both inside and outside university.

## A history of mobility
## (a) Hup, the walking house

Which people in the past used to make their houses like this: they collected branches and bent them, afterwards, they used to put straw, and on top of it some sticks for the wind not to blow the straw. People before were not used to staying in the same place, they frequently transferred to the places where they wanted to go. That was their tradition, they used to move, and they would do it peacefully, since at that time there were just Indigenous people in this region. This is how houses started to be called hup [in Wichi language], what means grass, and even when it afterwards was made of mud, it remained being called hup. (Dixon 2014: 30, own translation).

A member of the Santa María Indigenous community, Dixon, described the way of life based on mobility and the characteristics of the Wichi domestic space. His words coincide with the observations made by historians and researchers, who describe the construction of shaded shelters and the movement of family groups in the territory, as will be shown below. These buildings had common features, such as a circular or oval dome-shaped floor plan, despite certain variations in their construction or morphological techniques. Panels made of tacuara reeds and aive

or paja brava grasses were placed on a structure of curved branches tied with plant fibres (Bennett 1949; Nordenskjold 1929; Braunstein 1981). These plant solutions represent a prefabricated system, which could facilitate their execution by dividing tasks and transporting them from extraction places to assembly sites. At the same time, the entire structure was not always covered, but the cases varied according to the degree of permanence, use of the site, the incidence of wind and rain, the degree of sunlight, etc. According to anthropologist John Palmer, these kinds of buildings were usually the work of women. Afterwards, with the incorporation of the wooden support in the 20th century, this occupation shifted to men (Palmer 2005). Often the structures were limited to acting as windbreaks, and in the case of less prolonged stays, their construction was not necessary. The location was organised radially around the fire, and its area of use was marked by the clearing of the ground. The cleared sector identified the limits of a dynamic system of domestic appropriation of the landscape whose solutions were adapted to the ecological cycles of the monte (forest). The use of natural materials that made up the construction technology played a leading role in the mobility processes thanks to their biodegradable characteristics.

The concept of mobility has been reflected by authors from the early 20th century (e.g. Boggiani 1900; Karsten 1932; Palavecino 1936; among others). However, the incorporation of the toponymic perspective came later. That is, the naming of places, linking them with

criteria of classification, significance and appropriation of the areas of the monte, the scope of which becomes part of each group's sense of belonging to their area of circulation (see for example: Miller 1979; Wright 1991; Censabella 2009; Salamanca 2011; Braunstein 2012; Tola and Medrano 2014). The *monte* and water have a scope that can be considered as organisers of mobility systems. Likewise, they are transformed into many of the meanings that structure cosmological aspects, cardinal orientation schemes, spatial location parameters, and other criteria that remain valid in the occupation and use of the monte. In the case of the territory of study, a toponymic study was carried out (Lhaka Honhat 2002). This work has been a fundamental tool presented in the ongoing legal case for the rights of the territory that they ancestrally occupy (Carrasco 2009).[2] The precise request is community land rights, without internal divisions, which would allow for the continuity of mobility as a way of life and fair access to the commons.

This research has revealed that, although there is movement in the territory, it tends to take place in smaller spaces of time and place. The home is taken as the point of departure, often returning the same day to the place of settlement. In other words, there has been a process of sedentarism motivated by various factors that are discussed below.

## (b) New constructing technologies

We understand sedentarisation in the area as a historical process, associated with colonisation. De La Cruz (1997) states that there are accounts of expeditions as early as 1586. In the 18th and 19th centuries, there was an important religious influence in the area. Afterwards, there were military campaigns in different time periods to conquer the area by the state.[3] Another strategy for the demarcation of the borders of the nation state was to send criollo families (who do not consider themselves indigenous) to the Chaco region, promising to grant them land titles. This phenomenon took place at the beginning of the 20th century.

These influences of colonisation, in particular the arrival of the criollos and the missions, brought to the area new ways of life associated with sedentarisation. The new construction systems installed in the territory—for instance the wooden supports—were partially incorporated by the Indigenous groups, as reported by authors from the first half of the 20th century. The roof was then separated

[2] The case is between the Lhaka Hohnat Indigenous Association and the Argentine State. In 2020, the Inter-American Court of Human Rights ruled in favour of the five Indigenous communities represented by Lhaka Honhat, requiring the state to grant land titles as commons within six years (Carrasco 2020).

[3] For example the so-called desert campaigns during the governorship of President Julio Roca in the 1880s.

from the walls. The concept of the ranch appeared, was incorporated and redefined, and some of its technological solutions are still in use today. Its construction, from the observations during fieldwork, can be characterised as described below.

The essential comfort of shade is always guaranteed by the construction of a roof. Then, the building process continues by closing off certain sectors for the configuration of the different environments where two main uses prevail: the contained space for sleeping, and the semi-covered space where most of daily life takes place. The environments are recognised as densities or shelters materialized by the roof (shade), the shelter from the wind (protection) and the cleanliness of the terrain (limits). The kitchen can form part of this continuous space, or, as in most cases, form an independent semi-covered space in which the fire plays a leading role. Whether they are areas under the same roof or independent for complementary uses, the presence of this protection from the sun marks the structure of the house and its starting point. It can be said that Chaco domestic space is realised from the top down: first the horcones (columns), varas (beams) and largueros (rafters), the fajina or enramada (stick bundles) and the final completion of the roof with a mixture of earth and straw. Once the roof is finished, the vertical enclosures (walls, windows, doors, etc.) and floors are built in stages according to the needs of each family (bottom part of Figure 2).

The domestic unit is constructed, lived in and abandoned following the course of the nuclear family that constitutes it. Its dynamic condition, appropriate to both social cycles and mobility, endures both in memory and in the practices of today's economy. For example, significant events such as the death of a family member determine the abandonment of their room. It is dismantled or left to degrade due to the action of the rains, returning to the earth thanks to its decomposition as a natural construction system. In other words, the domestic unit is part of the symbolic and ritual values that structure it. In addition, the materials used are obtained in the monte, involving botanical knowledge of tree species, types of wood, techniques for cutting and its treatment.

Nowadays, the living way is transformed by the incorporation of state housing in the territory. These houses are conceived from the perspective of urbanity and tinged by development perspectives, far removed from local values, as analysed in Trillo et al. (2024).
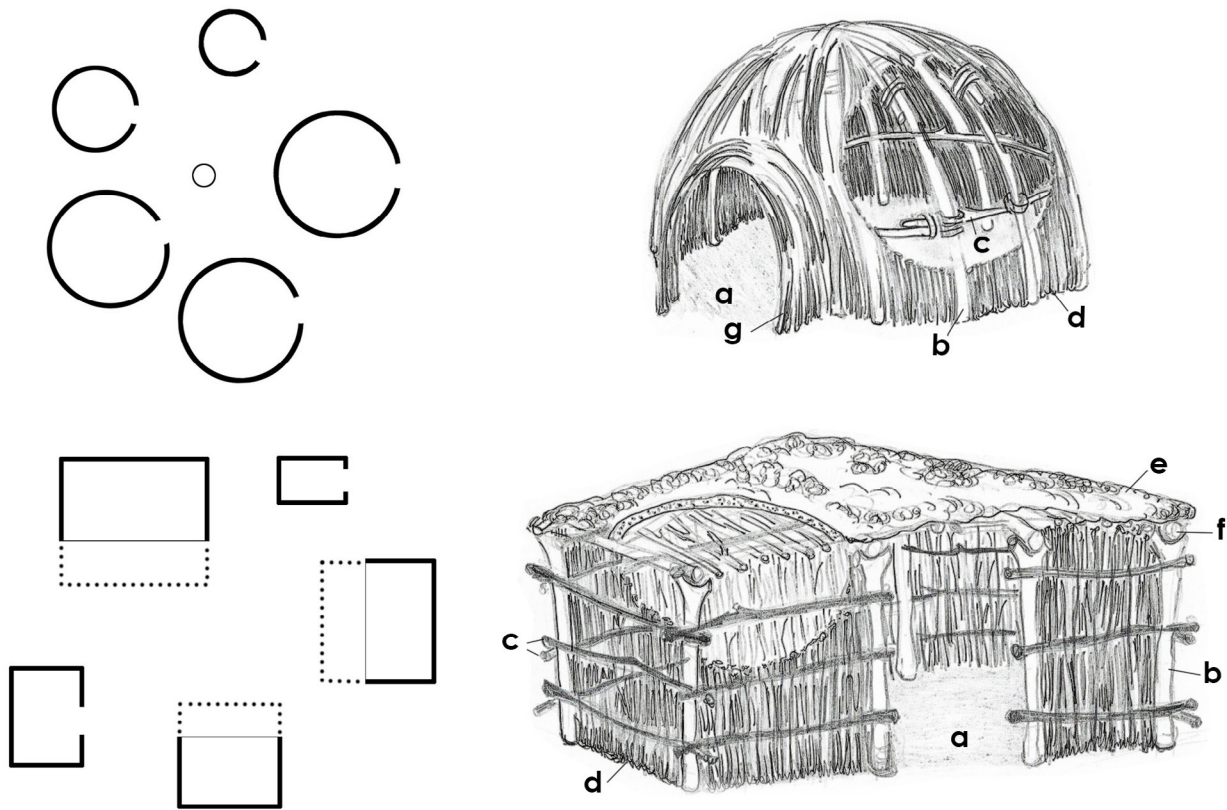
**Figure 2. Left: spatial organization. Right: Parts of the hup (house). Top: with the technologies before the incorporation of the wooden support. Bottom: current typical criollo ranch. a) lapeh / b) ch´utey / c) lëp´alkaynek / d) nofwinek / e) lhetekcho / f) lëch´otjwa / g) lëjwamek o lamäy nay (redrawn by Silvia Quintana on Montani (2017), Wichi translations by Justino Pérez in 2023.**

## Decolonial theoretical framework

To begin with, it is necessary to highlight the very conception of territory held by Indigenous groups. As proposed by Arturo Escobar, based on his work with Latin American communities, territory must be understood separately from the modern concept of land as a capital good. It is necessary to understand it, he says, as "the material and cultural conditions for the reproduction of life," (Escobar 2014: 84). In the words of Cristina Pérez, the general coordinator of Lhaka Honhat: "We have like an affection to the territory, a respect, it is not just something the territory. It is sacred'' (Perez's talk at the University of Buenos Aires. June 6th, 2023).The territory is the setting in which their way of life is reproduced, and there is an affective condition of respect for it. This conception coincides with what the Indigenous Andean thinker Espejo Ayca describes as mutual nurturing. In her work, the author explains the relationship that exists in Andean Indigenous communities with all the things that surround them. This bond, she says, is a bond of maximum respect, where the things themselves are named as subjects (Espejo Ayca 2022). In

the words of Pérez, a similar conception can be glimpsed: one of total respect and affection.

These mentioned perspectives are descriptive of a worldview, an ontology that differs from the modern Western one. It is important to revise some aspects of the Western modernity that function towards an idea of development, where other ways of knowing are oppressed. This current Western world system, which has become globalised, some authors say, is the result of different forms of coloniality (Quijano 2000; Segato 2013).

For example, the coloniality of time, which implies that the temporal proposal is conceived as a single historical line, where the past represents not only what happened some time ago, but also what happens in other parts of the world, other than the central countries. The present and the future are represented in Europe (and today the United States) and the other expressions are linked to the past. In other words, the temporal dimension merges with the geographical dimension and defines modernity. Contemporaneity does not reflect a present, but a geopolitical position (Quijano 2000; Segato 2013). Segato proposes that this idea must be overcome, thinking of groups as historical vectors in different dimensions, with a shared past and a project for a common future (Segato 2013).

This thinking of Indigenous groups associated with the past can be identified within development plans that literally follow this conception in the name of development. Formulas and funding are given, based on statistics that differ from local contexts, eradicating existing thoughts and local technologies. Within architecture, it is worth mentioning the existence of policies that respond to indicators of Unsatisfied Basic Needs (UBN) promoted by the United Nations (UN) through the Economic Commission for Latin America and the Caribbean (ECLAC). In many cases, negative consequences arise, because justifying with such measurements, local knowledge is replaced and gets lost. In the local Argentinean context, for example, adobe constructions are blamed for the nesting and proliferation of the vinchuca, the agent that transmits the *Trypanosoma Cruzi* parasite that causes the *Mal de Chagas* disease. All this persists despite numerous investigations that have mitigated the negative perception of earthen constructions by precisely identifying the risk factors for vector nesting.[4] Rurality and ancestral knowledge are directly cancelled out; they are considered obstacles to be eradicated.

In addition to these analyses, knowledge was structured in a hierarchical way, what can be seen as the coloniality of knowledge. In this conception, academic development has been (auto) placed at the top of the pyramid, what Castro Gómez (2007) calls the hybris of the zero point. In the section that follows, the focus is on how these concepts are reflected in design and architecture formal education in Argentina.

[4] See for example Rotondaro (1999), Rolón et al (2016), Mandrini et al (2018)

## Decontextualized education

Unfortunately, nowadays such things are still taught. It can be confirmed, we have learnt almost nothing. The formal and traditional educational system, and specifically in the topic [Indigenous groups in Argentina] shows an unreal reality, which keeps on being reproduced (but which they insist that we accept and naturalize). Why are Indigenous groups taught in the past tense? And not in the present, as social actors leading struggles and conquering their own rights? Why do we allow children to be taught like this? (…) This is the homework given to an 11-year-old. They lived, they settled, they harvested, they manufactured, they had, and many, many more verbs, but always in the past tense. None of them in present form. Why? Isn't it time to rethink education? (Post of Pérez. Salta city, May 2023).

The theoretical concepts outlined in the last section are evident in the quote from Cristina Pérez above. The current situation of Indigenous people is not a topic in education. Moreover, at universities, the so-called classical (European) theories are followed to the letter. Particularly at FADU, Beatriz Galán stated on several occasions that formal education avoids the context, generating content unrelated to the Argentine reality. In her words:

By default, traditional teaching [at FADU] is not systemic, it excludes context, closing the door to complex thinking. At most, what is understood by context in traditional teaching is something very immediate to the product, a scenario of use, but the product is not considered as nesting in a cultural network. (Galán 2008: 24).

The author proposes that to explain this cultural network, it is necessary to understand the context as a complex system. Innovation, according to her, should be understood as a "collective mechanism of knowledge accumulation in complex systems" (Galán 2008: 25).

This raises the need to incorporate other types of knowledge into design and architecture education. By way of exemplification, some exercises worked on in 2022 and 2023 within the framework of a network of research projects are presented below.[5] A premise was that the root should be related to the Indigenous perspectives, generating design and "architecture whose point of origin is to be found in subalternised spatial conceptions," (Mignolo cited in Farrés Delgado 2016, p.186). The research was conceived as research through design. This category belongs to the classification popularised by Frayling (1993).[6] It proposes, as called by Findeli et al. (2008), results that are relevant in three different fields: in research, in the field of design and architecture disciplines and in the field of formal education in these mentioned disciplines. In the specific case of the project, it is the participatory exercises carried out with students and researchers with FADU at UBA and members of the

[5] Agudin's PhD in Social Anthropology and Design at the University of Bern is funded by the Swiss National Foundation. This project gave rise to Research Project PIA 22-001 at FADU-UBA with the participation of researchers: Malena Pasin, Mercedes Ceciaga, Lautaro Safón, Martina Cassiau, Valeria Díaz, and the authors.

[6] Research for, about and through design.

Lhaka Honhat Indigenous communities that form the corpus of the data. In the next section, different experiences will be analysed.

## Exercises focused on architecture

Based on the experience of a work team within the territory, students from different design disciplines at FADU were offered the possibility of doing a research internship in a project anchored in that institution. From architecture, a wide range of topics were addressed, such as construction systems, form and function of the domestic unit, symbolic and ritual aspects, uses of the built space and its link with the territory. Thanks to the nature of the exercise and the students of different careers who participated (industrial, textile and graphic design), exchange experiences were obtained that allowed an enriching complement between the different disciplines. Below, the experience resulting from the relation between textile and constructive records of local knowledge is presented.

During the field work that lasted one year for Agudin, several visits to the territory for Trillo, and a weeklong experience for the students, different local groups have been accompanied in the process of collecting, spinning, dyeing and weaving the chaguar (Bromelia hieronymi). There are ethnographic references about the use of chaguar to produce textiles since the beginning of the 20th century (Lozano 1941 [1733]; Nordenskiöld 1912; Rosen 1924; Schmidt 1937; Millán

1944; among others). In the early 1990s, anthropologists von Koschitzky (1992) and Alvarsson (1992) presented a comprehensive study of textile bags, from the production process to their uses and meanings. Montani (2017), investigated the meanings of designs in ethnolinguistic works carried out among some Wichi Indigenous peoples. These patterns of figures and ornaments formed from geometries generated by the combination of coloured threads dyed with natural tint are related to vernacular names and meanings that tell local history. As part of the main lines of work, different textile figures in force in the area were surveyed (Figure 3), which reflect the great variety of designs used in the chaguar woven bags known as llicas.

Among the construction skills of Wichi vernacular architecture addressed through knowledge exchange and participatory design exercises (Figures 4–6), the use of vegetable fibres and wood for the formation of closed and open frames in the construction of walls and enclosures stands out. The closed frames are covered with earth mortar to give rise to the construction system of quincha and bahareque. The open frames are used as permeable envelopes that facilitate cross ventilation, thermal comfort and the creation of spaces. Based on this logic, both knowledge of textile and construction design were linked to materialise solutions on the architectural scale of the envelopes. For this purpose, the zigzag or elbow weave, known in Wichi as katoltes wok chojnhiche, was chosen. Based on this logic, formal proposals were made, taking the lattice to an architectural

scale. That is, considering the lattices as a significant element of the Wichi vernacular architecture, they were taken as an axis to explore participatory design alternatives applied to the construction of permeable walls used as enclosures, sunshades, partitions and other functions of containment of spaces for shade and social gathering of the family group.



**Figure 3: Patterns of textile chaguar bags from Lhaka Honhat Indigenous territory (work within the research project).**



**Figure 4: Mapping of wood and plant fibre lattices used in vernacular construction (work within the research project).**

The architectural result of the weave represents what in textile design is called a broken twill (Figure 5). For its manufacture, wooden sticks of palo bobo were used, mounted on frames using the vernacular technique of woven cane ceiling.[7]
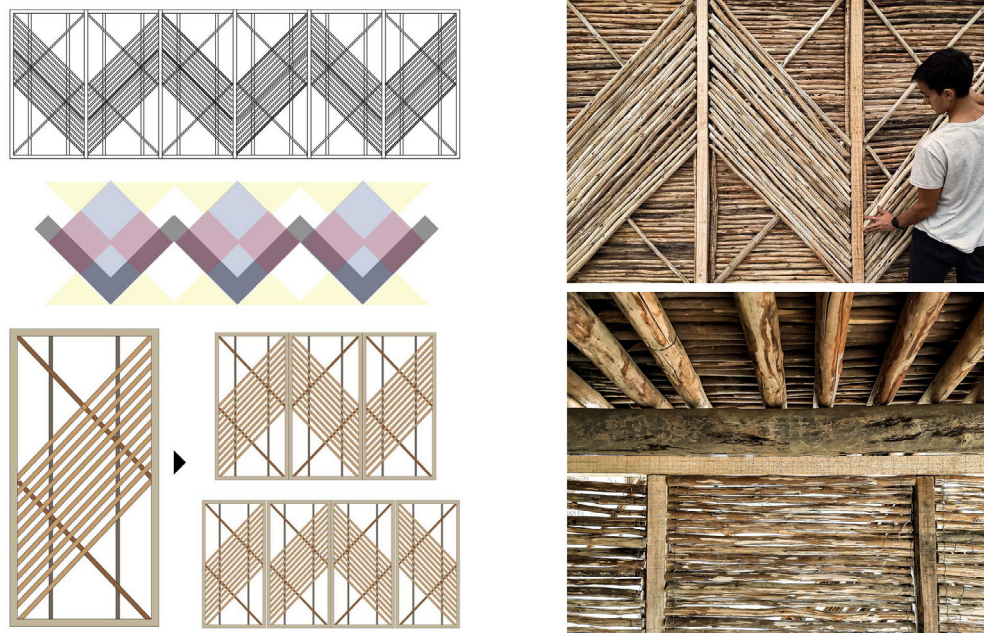
**Figure 5: Design of enclosures based on textile patterns (exercises carried out within the research project, student involved: Julián Lichy).**

Other exercises were carried out in 2023 in connection with the Garbarini Chair of Industrial Design for the FADU at UBA in the last year of the degree. Based on bibliographic research and a study trip to the territory coordinated by the authors, the project explorations were focused on shadow architectures. The documentation of local construction systems and the knowledge exchange generated in meetings and workshops have provided numerous vernacular answers that are taken as input for the search of suitable design solutions: independent wooden structure, *horcón*[8], typology of facing rooms, integrated galleries, intermediate spaces between internal and external areas, shaded roofs, envelopes, open and closed walls. All these strategies respond to peasant and indigenous knowledge that transcend beyond the material aspect of their constructions towards broader meanings that are part of an architecture with its own significances.

[8] In Spanish, horcón is the column composed by a trunk and limb stump.

On this basis, the students proposed a modular over-roof system that provides a setting for the generation of shade and cross ventilation as a thermal comfort strategy. In this way, a communal shaded space is generated to live according to the dynamics of the family group (Figure 6). The design of anchors and connecting pieces among the posts facilitates their disassembly and transportation in case of need to move them to new sites according to the economies of mobility and the environmental factors presented throughout the research. In addition, the formal proposal also refers to one of the chaguar weavings, known in the Wichi language in the area as fwokatsaj ch'otey (armadillo's ears). It is worth mentioning that the anchoring pieces respond to technical criteria that allow their resolution with tools accessible in any blacksmith workshop and low-cost materials. Beyond their passive properties for thermal control, the over-roofs are presented as an appropriate solution for water harvesting in contexts of scarcity and difficulty in accessing this resource, like this territory in winter.
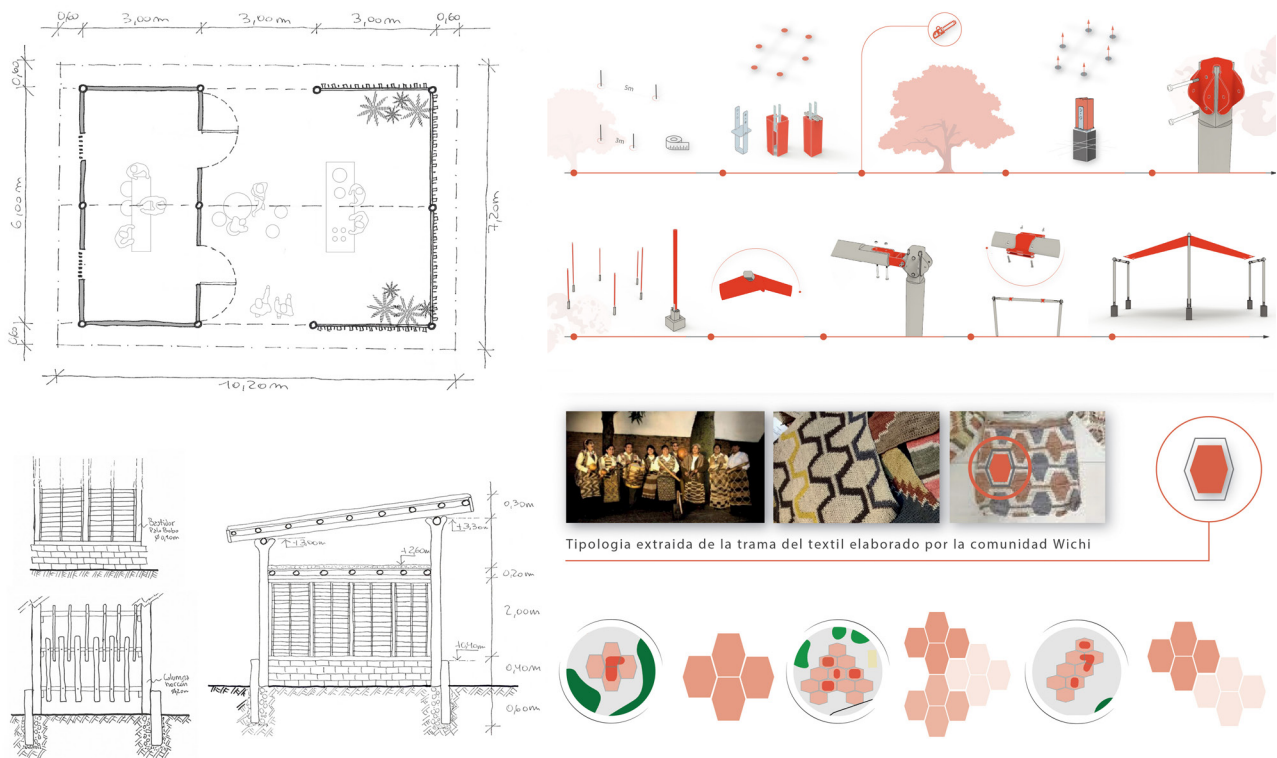


**Figure 6. Left: exercises of participatory design of a domestic unit with materials and knowledge from the monte (illustrations: Trillo). Right: design of modular and removable over-roofs for mobility (exercises carried out within the research project, students involved: Bengolea Salvador, De Rito Martin, Nigoul Joaquín).**

## Conclusion

In the exercises presented, the aim was to work beyond market logic, which strongly governs education in design and architecture today within the context of Argentina. An attempt was made to dialogue with another culture, also belonging to the country. Such works can be triggers that allow us to reflect on the professional education that is proposed in universities. Is it possible to get out of the Hybris of zero point that Castro Gómez mentions by generating dialogues of knowledge?

It is usually considered that in design and architecture studies there is an opportunity to generate innovation. On the one hand, from knowledge transmitted through words, like this paper, but also with material production, as shown by the exercises done. Far from thinking of them as finished solutions, it is proposed to see them as devices for opening dialogues, which transcend the material to allow us to reflect in a different dimension, to question historical and current parameters. It is thus considered that collective inquiry with community participation represents a horizon from which to think about innovation. We think it is necessary to question the principles of global modernity towards alternatives where participatory design processes allow communities to be elevated as actors with their own voice and the ability to design programs with local identity.

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# Living Networks: Re-imagining Regional Communities and Their Heritage

## Abstract

Working from the periphery of Djaara Country, Castlemaine Regional Victoria,120km out of Melbourne, our proposal starts from the centre of this old gold mining town and seeks to document and capture our more-than-architectural endeavour. For this narrative, the architect's business is as much about observing and taking note, revealing and paying heed, to the invisible and often intangible systems of just what is there now. Drawing from a Kraussian expanded architectural field, we have evolved a design process of building site knowledge that uncovers the histories, peripheral stories, forgotten memories and patterns of occupation. In seeking solutions to accommodate a growing community, to house those now homeless and to give more agency to our Indigenous people, we reflect on currently accepted design strategies and propose an alternative model that rethinks property boundaries and ownership, occupancy and vacancy regulations.  Our work has been resisting the additions of new buildings and instead foregrounds what already exists, to recast the accumulations of built fabric and of its interstitial landscapes as inherently value filled. In doing this we reveal an eclectic town fabric, a mix of industrial, Victorian and 20th century material that hold traces of past occupation but also reflect a kind of vibrant eclecticism that speaks more to a possible future than carbon-hungry developer-led solutions. Our essay will build an alternative spatial narrative that makes visible a process that tracks and traces the voices of those invisible and marginalised protagonists as well as the value of existing built fabric. What we aim to construct is not more built stuff, but a more robust future that accepts what is already there; the ordinary and unremarkable as well as the remarkable. Our conclusions and contributions are as much in spatialising and making active – sensible – those forgotten and intangible voices and peripheral built heritages.

## Introduction

Drawing on a deep reading of the historically and socially laden context of the regional township of Castlemaine Victoria, this paper looks behind matter to perhaps what matters most by considering how architectural design methodologies can engage invisible, marginalised systems and histories of site. We seek to reveal and reflect upon what is beyond the material to form a spatialised and active site condition: what we see as the first stage of any architectural work.

As academic partitioners from Royal Melbourne Institute of Technology (RMIT University) School of Architecture and Urban Design, our research across the last two decades has concerned broader questions of site and landscape aiming to reveal the hidden as an expanded context for the architectural project. Our work has been about the evolving and refining of what we call 'predesign' work – the design of the architectural process that works intimately with context. Our research contributes to a reading and translating of site beyond the conventions of traditional architectural site analysis. We rely upon fieldwork, direct on-site experience and collaborations combined with scholarly readings, archives, maps and pictorial collections to construct an alternative way of seeing. Expanding on the work of Carol Burns and Andrea Kahn, in their book Site Matters: design concepts, histories, and strategies, we aim to engage and make present embedded or marginalised site stories, histories and its actants. As with partitioners like COMU in Japan or Officine Gap in Vietnam, we

live in the community in which our work is situated and so part of our process is defined by on-the-ground exchanges and relationships forged in place. Resisting top-down architectural processes, we make long term engagement with the community and construct an agile design framework.

Through those processes we develop an intimate site knowledge. Operating beyond the physical, we aim to engage with unspoken stories that are often of systemic disadvantage and uncomfortable histories. These untold narratives have as much impact on the environment as a site's physical reality. For this paper we reflect upon and engage local Indigenous histories and current Indigenous communities, as well as those suffering from systemic disadvantage, the housing crisis, the communities homeless, women in need, and local support groups including My home Network, Vacant Home dwellings group, Tiny Homes on Wheels and local Indigenous activities. In doing so our research and architectural methodologies build and make visible a new understanding of site – a new reading of site.

This research coincided with the Australian architectural profession's policy change that now requires 'recognition of Aboriginal and Torres Strait Islander Peoples' ongoing connection and custodianship of Country', and includes several new competencies covering this new knowledge domain as outlined in the National Standard of Competency for Architects in 2021 (AACA Explanatory Notes and Definitions). However, for us,

this requirement for architects to engage and reconcile with our nation's First Nations peoples is inherent and for this research it is the Dja Dja Wurrung people and their Country in which we engage. For this process it is also the simple act of 'truth telling' and making evident past events that have shaped the present condition. Engaging and listening to community is paramount, and so at times our attentive silence to listen rather than act, is what is needed. In this paper, we reveal a process of observation that draws together detailed First Nations histories as well as socially orientated housing issues, all part of the process of 'healing country,' according to local Elder, Uncle Rick Nelson. Included are preliminary translations of this research into design methodologies and architectural drawings.
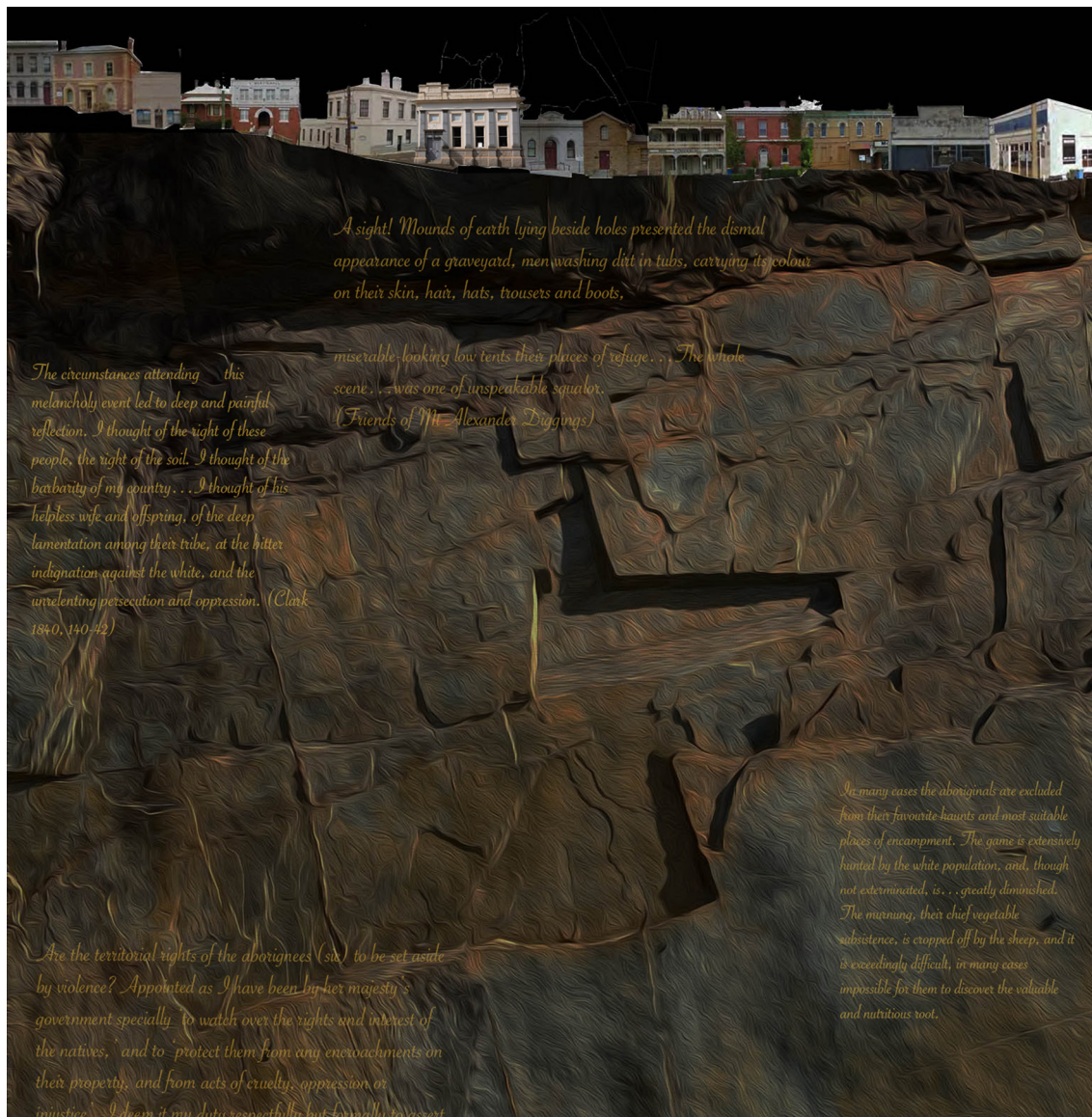


**Figure 1: Living Networks 1, created by authors Anna Johnson and Richard Black (cropped)**

## Behind the facade

The first site story we examine, and one that resides behind the colonial armatures of the town, is that of the Castlemaine's Dja Dja Wurrung people at the time of settler invasion into Victoria. The main highway is a five minute walk from the Castlemaine train station through town, groupings of 19th and early 20th century public buildings flank wide tree lined streets and form stage-like facades establishing the towns dominant visible character. Crossing the highway, the first building marking the corner is a former State Savings Bank from 1919 designed by Godfrey & Spowers architects, then a major Melbourne-based practice. This robust, handsome building described by the Victorian heritage register 'as an early example of austere classicism of the 1920s and 30s,' (Victorian Heritage Data Base) gives a refined civic elegance unusual for a country town. A few doors down, past the earliest telegraph building in Australia – a freestone building from 1852 – is the Post Office (1875). This two-story building with a clock tower in Classical Renaissance style, was designed by the now well-regarded 19th century British architect J J Clark and reveals the prominence this town gained following the discovery of gold in 1851.
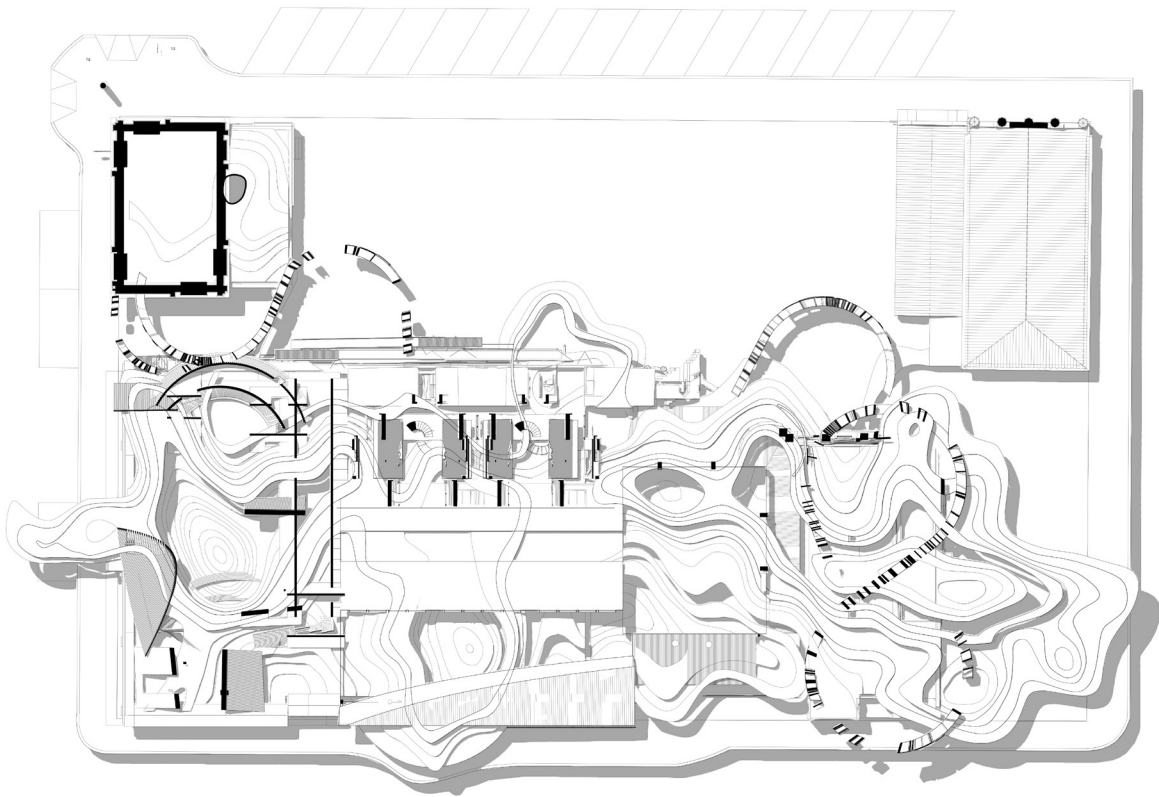


**Figure 2: Surfacing Country, created by Zhuoran Chen, Johnson Black Design Studio**

This building followed eight years after Clark's first and major commission: the Treasury Building in Melbourne (1857). This was a building that asserted clear allegiance with the British Empire in the newly founded colony of Victoria albeit still wet from the bloodshed and violence of the preceding years. However, against the grandeur of these buildings, and all they represent, a far less visible history was playing out—a cultural erasure of the bleakest kind—and one that we take up in this research. From the mid-1830s, 120km away from Clark's Treasury building, and just a few kilometres from the Castlemaine Post office, was the devasting and wholly unjust attack on the local Dja Dja Wurrung people and their Country.

The work of the architect is as much about looking and reading place, extracting a wealth of knowledge from the visible and invisible realities of site. This first glance at Castlemaine is a striking example, and our work has been to discover and build an alternative site knowledge, a network that forms what we see as the first stage of place responsive design work.

We argue to build a future for a regional town like Castlemaine, with its pressures to grow and better accommodate the current diverse community, these stories and facts of place must be told. They also form a more robust framework of resistance to what Patrick Wolfe says is the ongoing reality of Settler Colonialism (Wolfe 2018, 343-348). The first section of this paper, in part a truth-telling exercise, concerns the Dja Dja Wurrung people and their experience. As the now recognised traditional owners

of the land, the acknowledgment of that story is critical for future work in this town. Following this account and details, we show how this has translated into the first stages of spatialising and building into an alternative site narrative. Methodologically, we see the first act of design is to render visible this history, to build site drawings that represent and capture that information thereby folding it into a contemporary understanding of place. As is evident in Figure 1, the town's architecture sits somewhat ungrounded on top of the shear-exposed rockface and destructed geology of Country. Into that ancient façade, dialogues and letters from the time are inscribed onto its surface. Further on (Figures 2 and 3), two other strategies concern the active disruption of that dominant colonial fabric described above, a destabilising of those self-assured facades and institutions to alternatively fold into them the landscape and the physicality of the Country. Inverting the dominant relationship of building and landscape, these design moves rupture pre-existing stability and demand a rethink of buildings' signification, boundaries and program.

This first story begins in 1836 when the new British Colonial administration appropriated the lands of the Dja Dja Wurrung as the Loddon District—an area of 2500 square kilometres. An event that irrevocably threatened if not ended, the lives and traditional livelihood of the First Nations peoples (Attwood 2017, 5). Here, it should be noted that the Australian Indigenous community had already been devasted by two smallpox epidemics brought in by colonial explorers

and traders in 1788 and 1829. Before 1788 the Aboriginal population had been about 60,000 with the Dja Dja Wurrung population numbering between 3,000 – 4,000, but by 1840, it was reduced to about 2,000 (Attwood 2017, 6).

This invasion into the Port Phillip District (Melbourne) coincided with the establishment of the Aboriginal Protectorate in 1836, under the authority of senior protectorate George Augustus Robinson, set up to protect the rights of Aboriginal people of the Port Phillip District of the New South Wales colony (what would become Victoria in July 1851). As has been studied by historian Bain Attwood in unprecedented detail, much of the events and exchanges that took place between the Dja Dja Wurrung and the colonists is revealed from the journals and exchanges between those tasked with 'protecting' the Aboriginals and administering the colonisation. There is not scope in this paper to discuss the complexities and injustices of that protectorate system—most significantly that they were instructed to 'civilise' and Christianise the Aboriginals. Important here are several insistences in which these people did serve to protect them and attempted to have those who harmed the Dja Dja Wurrung people tried in court. As will be discussed later, this protectorate system contributed to the wellbeing and cultural continuity of the rapidly diminishing Dja Dja Wurrung people albeit within the greater framework of wrongdoing and injustice inherent to British colonialism.

For this research, it is the exchanges

of George Augustus Robinson and then Loddon District protectorate Edward Parker that are important and details of these are critical for building our site research. Through their work and humanitarianism, this pair came to recognise (to varying degrees) the injustices enacted by colonists and the dire consequences for the Aboriginal people. On one of Parker's first tours of the Loddon district in 1840, in search of a location to set up the 'protected reserve,' he noted that these new pastoralists took the Dja Dja's Wurrung's most precious land. Reporting to Robinson he wrote, 'the very spots most valuable to the aborigines [sic] for their productiveness—the creeks, water courses, and rivers—are the first to be occupied' (Parker 20 June 1839). Over the next years, displaced from their land, and with their food shortages drastically reduced by 'white man's stock' led to massive cultural compromise and conflict for the Dja Dja Wurrung people from the 1830s and onwards (Parker 20 June 1839). Violence was commonplace. Often made up of prisoners of the Crown, the enforcing Border Police were notoriously quick to punish. This, along with the conviction that they were superior, led to the ease at which they inflicted aggression. For the protectorates, this was upsetting. One instance led to the death of a young Indigenous man 'savaged' by the mounted police and affected the Chief Protector Robinson who wrote in his journal on 27th January 1840:

> The circumstances attending this melancholy event led to deep and painful reflection. I thought of the right of these people, the right of the soil. I thought of

the barbarity of my country…I thought of his helpless wife and offspring, of the deep lamentation among their tribe, at the bitter indignation against the white, and the unrelenting persecution and oppression. (Clark 1840, 140-42)

Having served in the army or the British East India Company, some of the pastoralists were also skilled, in fact trained, to administer harsh punishment and kill (Attwood 2017, 54). The situation in the late 1840s continued to deteriorate. Deprived of their former food sources, the Aboriginals starved. Women were forced into prostitution by the men or turned to it themselves in exchange for food or supplies. Inevitably, this led to the spread of venereal disease. At this time, Parker set up at the protectorate station at Larrnebarramul at Mount Franklin in 1841 (known also as Franklinford) and established a genuine exchange with the Aboriginals based on the care and attention he took to learn their customs and culture. This was reciprocated by some of the Dja Dja people who valued his support and friendship, and a genuine relationship was formed. In his journals Parker had noted:

> In many cases the aboriginals [sic] are excluded from their favourite haunts and most suitable places of encampment. The game is extensively hunted by the white population, and, though not exterminated, is…greatly diminished. The murnung, their chief vegetable subsistence, is cropped off by the sheep, and it is exceedingly difficult, in many cases impossible for them to discover the valuable and nutritious root. (Parker 20 June 1839)

As a result of this, he concludes, 'The unfortunate aborigines (sic) are in a state of destitution, deprived of much of their ordinary means of subsistence'. Parker also recognised that, 'It is an important and unquestionable fact that the Aboriginal's are not insensible of their original right to the soil.' (Parker 20 June 1839)

During its peak, the station at Larrnebarramul had up to 170 Aboriginals that came and went as they pleased driven by seasonal changes, ceremonial needs with children, woman or younger people often staying (Attwood 2017, 118). On one occasion, it was recorded that Larrnebarramul was visited by large groups of Dja Dja Wurrung people (over 300). Not uncommon in this situation, the colonialists and local pastoralists had sexual relations with the Dja Dja Wurrung woman—we imagine non-consensual. A devasting result of this was that by 1841, nearly 9/10ths of the woman on the station had syphilis rendering them infertile and infecting newborn babies (many of whom died).

Remarkable about this history, and noted by historians such as Attwood, is that some of these settlers advocated for the rights of the Aboriginals in ways not dissimilar to the claims made by Aboriginals and their supporters in the 1960s and 70s. As is evidenced by Parkers' report to Robinson from Sept 1, 1839 – 29 Feb 1840, he writes:

> Are the territorial rights of the aborignes [sic] to be set aside by violence? Appointed as I have been by her majesty's government specially 'to watch over the

rights and interest of the natives,' and to 'protect them from any encroachments on their property, and from acts of cruelty, oppression or injustice', I deem it my duty respectfully but formally to assert the right of the aboriginals [sic] to the soil and its indigenous productions until suitable compensation be made for its occupation by reserving and cultivating a sufficient portion for their maintenance. (Parker 1 September 1839-29 February 1840)

If it were not for those stations—despite the problems—it has been noted there would have been even less Dja Dja Wurrung people remaining.

## Gold: upside down country

By the time gold was discovered in Dja Dja Wurrung country, the livelihood and population of this community was greatly diminished. Today and visible from the train ride from Melbourne to Castlemaine 5 kms from the town centre, is the Castlemaine Diggings National Heritage Park, assessed in 2004 as being a significant landscape to the State of Victoria. Within this now turbulent landscape all sliced up, with piles of stone, carved-up rockfaces and the traces of hand labour all around, gold was discovered in 1851. Upending the landscape, the Country and those that lived on it, this event also transformed 'the demographic, social, political and economic complexion of Australia …' (Friends of Mt Alexander Diggings). With the landscape turned into what Dja Dja Wurrung people now refer to as upside down country, this mining site was described by a local in 1852, James Robertson, as:

A sight! Mounds of earth lying beside holes presented the dismal appearance of a graveyard, men washing dirt in tubs, carrying its colour on their skin, hair, hats, trousers and boots, miserable-looking low tents their places of refuge…The whole scene…was one of unspeakable squalor. (Friends of Mt Alexander Diggings)

But from that unspeakable squalor, and in less than a decade, 5 million ounces of gold were extracted. An amount equal to over 18 trillion Australian dollars—nearly 10 times more than Australia's current GDP.

This wealth came at a great cost for the Dja Dja Wurrung people. Although wiser to the opportunistic ways of settlers and some spoken English, by the end of the Gold Rush in 1863, the Dja Dja Wurrung people were recorded as numbering just 38. The previous year, saw the completion of JJ Clarks Treasury building with its gold vaults in the basement all ready to receive the bullions, but by this time the rush was over and the gold fields a ruin along with the traditional lands of Dja Dja Wurrung. Their camping areas along the creeks and streams had become alluvial sites; trees, plants and wildlife had been destroyed and sacred sites violated (Attwood 2017, 149). To feed the mines, the forests of central Victoria had largely disappeared; the hills around Castlemaine were almost bare' (Lawrence and Davies 2016, 15).

Despite the entrepreneurial spirit demonstrated by the Dja Dja Wurrung and their attraction to the goldfields for its possible employment and activity, the going continued to be very tough.

Several of the mining community had genuine interest in engaging with the Dja Dja Wurrung in a positive way, but for the most part exchanges and relationships were exploitative. With much of their traditional lands destroyed, the Dja Dja Wurrung were often severely malnourished. Although eating the floury products of the miners and consuming alcohol, this was no substitute for their previously nutritious diet of vegetables, fish and meat. Additionally, in the crowded circumstances of the mining villages, respiratory illness and gastric problems were widespread and many became too unwell to work, hunt or gather food (Attwood 2017, 157).

It was not until 28th March 2013 that a Recognition and Settlement Agreement between the Dja Dja Wurrung People and the State Government of Victoria was signed bringing the 'Dja Dja Wurrung People back into the landscape…
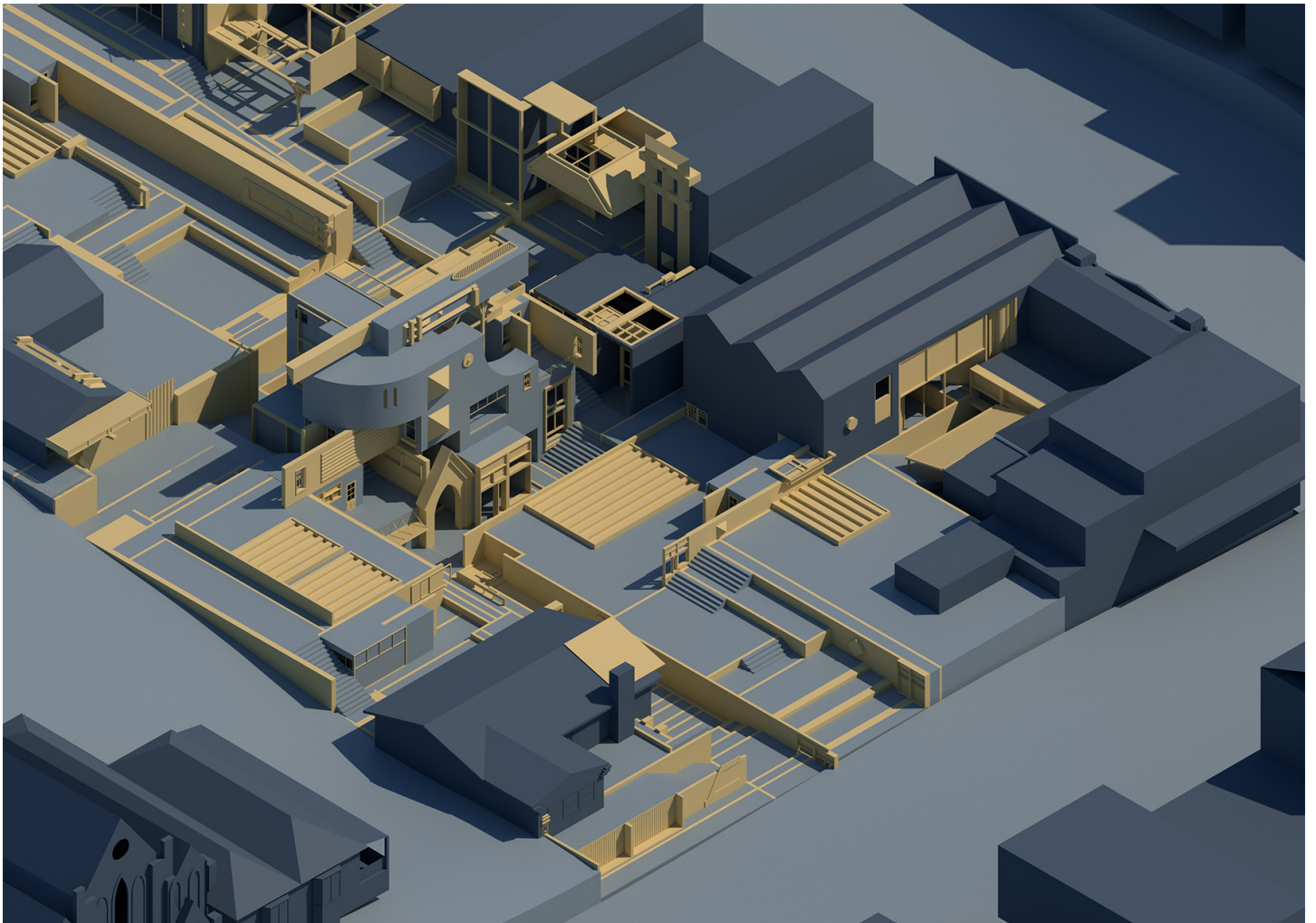


**Figure 3: Disrupting the existing to make habitable, created by Joel Oster, Johnson Black Design Studio**

and no longer being invisible,'(Dja Dja Wurrung Clans Aboriginal Corporation). In that agreement, the Dja Dja Wurrung also acknowledged the value of the protectorates. Now the Dja Dja Wurrung are growing in strength and their agenda to heal country is directly connected to living sustainably and affordably on Country, as said by local Elder Uncle Rick Nelson part of Mount Alexander Community Wellbeing Economy project.

A counter reading of Upside Down Country, used to explore modes of interpreting the built fabric of Castlemaine, extends this research into our design studio teaching. Holding narratives already discussed, these are used to critically explore existing conditions and disrupt the dominant colonial fabric through operations of inversion, disassembly and reassembly, exploring new forms of collaboration between: the vibrant vernacular (Figure 4), modes of occupancy (sharing resources, land) (Figure 5); surfacing Country within the most urban situations (Figure 2); and making habitable space through re-evaluating existing spatial hierarchies between property boundaries and built fabric, and between land ownership and degrowth (Figure 3).

## Social justice: housing as a human right

Returning to the current day Castlemaine and turning off into Mechanics Lane is the Senior Citizens club, a cream brick building in the 1960s modern style of regional Australia. Looking past the well-proportioned facade and examining the

entrance and its cantilevering roof closely, there are traces of another marginalised and not quite visible protagonist—an elderly homeless woman. This winter has been unusually cold with temperatures of minus 4 degrees. Today a large, striped shopping bag and camp mattress tucked into that modest entrance, are the only sign of last night's sleeper. Traces of rough sleepers are all across the town, folded into the doorways and porches of the town's civic precinct, against public toilets and within the Botanical Gardens. More prominently and problematically for the local council, a make-shift camp was set up under the 'Welcome to Castlemaine' sign along the main highway. Authorities issued a notice to move on its 43-year-old occupant, Adam "Angel" Nieto who had been sleeping rough since he was 13 (Dalton 2023). But before Nieto had time to move, his belongings, the encampment, and entire site was locked off with a 2-metre-high fence. Following the sites 'cleanup', made with a small bulldozer, a metal wall was then erected around the site with a small sign with text 'private land keep out' (Dalton 2023).

Across Castlemaine housing services are in crisis and made worse over the last 5 years as prices continued to escalate following the Covid pandemic. With all its apparent attractions, Castlemaine has received a steady flow of people relocating from the city. This influx had a profound impact on housing affordability and availability. And for those on the margins, unemployed or simply on an average wage, the town is increasingly unaffordable.

Recent estimates say there are at least

36 people sleeping rough, and at least 250 experiencing homelessness across the Shire of Mt Alexander (Jungwirth 2024). Michael McMahon, the senior homelessness services worker at Dhelkaya Health Castlemaine said, 'It's unrealistic to think they will get into private rental, they need to wait for public or social housing which can take up to five years for the most vulnerable clients to be offered a house' (Jungwirth 2024). According to Carolyn Neilson, from Castlemaine's My Home Network (MHN) and the towns advocate for social equity and housing as a basic human right, there are 'no stereotypes of homelessness - it can happen to anyone suddenly, or over time,

because of family violence, mental illness or people suffering as a result systemic disadvantage' (Neilson, 2024). She points out that women over the age of 55 are also an increasing demographic among the homeless.

Our research aims to surface these issues and work with these already existing and arguably inventive networks and support systems—what we see as informal 'practices' in their own right, as we will show. These reciprocal collaborations are part of our design process. We have observed powerful bottom-up strategies that form a service network for the community. One example
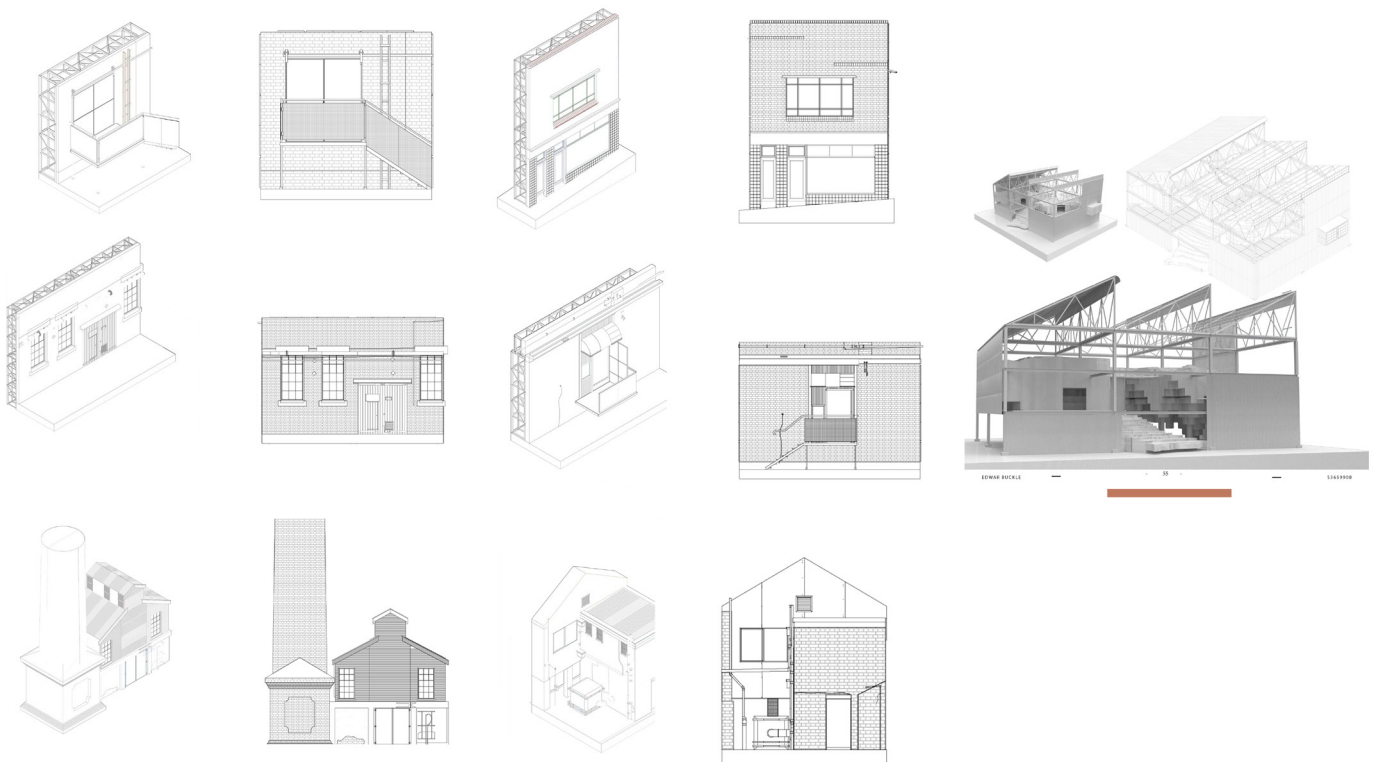


**Figure 4: Vibrant Vernacular, created by Edward Buckle, Johnson Black Design Studio**

designed by MHN and set in place with the collaboration of local businesses, is a network of care embedded into the towns existing fabric and borrowing from existing infrastructures within local business, including the bathrooms at the Castlemaine Fitness centre, free soup at Sprout Bakery on Mondays, Community Lunch held every Tuesday at the Town Hall along with other places for personal care, food and clothes assistance.

Other forms of intervention are constructed through a network of agencies with overlapping areas of focus across housing, health, community, social services and the Shire Council. Our

conversations with Neilsen made visible a range of inventive approaches to the complexities of homelessness. Key to this, Neilson explains is 'keeping the systemic disadvantage lens across everything we do and making use of great expertise across the working group' (Neilson, 2024). MHN interfaces with other sectors within the community to seek alternative housing options through advocacy, incremental short and long-term strategies and opportunities to make change for 'a right to safe, affordable, secure and sustainable housing' in the community. (Neilson, 2024)



**Figure 5: New modes of occupancy, created by Alice Stewart, Johnson Black Design Studio**

Aligned to our ethos rather than necessarily building more these groups work with what is already available. This has involved projects led by MHN's Vacant Dwellings Working Group and Tiny Homes on Wheels Groups, that involved collectively mapping existing vacant buildings, advocating for regulation changes and connecting people to knowledge networks. From available water and electrical meter usage data, it was revealed there are currently just over 1,000 vacant homes in Castlemaine – about a fifth of the total homes in town. We speculate many are investment properties but unoccupied. Some of these could be places for temporary or crises accommodation or even something more long term. This thinking led MHN to speculate that the recent introduction of the vacant residential land tax could be leveraged to release some of this accommodation. Through a recent coordinated action, building trust and negotiating between real estate agents, property owners and developers, MHN secured nine vacant buildings for use as affordable transitional housing. Similarly, they explored large and underutilised owner-occupied homes where a single owner could host or lease out a room with MHN liaising between homeowners and suitable tenants.

MHN provides a voice for the radically varying backgrounds of Castlemaine's homeless people. One example is Kathryn McGoldrick, who has been homeless for many years and moved 16 times over several years. She said, 'The uncertainty of living out of bags, moving around in the car to different places, and the weight of transient uncertainty was becoming quite difficult' (Schultz 2024). With her limited superannuation, McGoldrick explored the option of Tiny Homes on Wheels. However, regulations prevented them from being parked on private property, even with the owner's permission.

Aware of MHN, McGoldrick joined them to become a public face of homelessness for their campaign to change the Mt Alexander Shire Local Law 13, and its specifications about camping on private property. A coordinated approach led by MHN, with a team including McGoldrick, a Tiny Homes expert, social justice advocacy by MHN, and building upon lessons learnt from the previous attempt to change that law, they began a process of engaging with the Shire Council. At one of those meetings, presenting the reality of the situation, as Neilson said, 'blew them away…the local data and stories were crucial in raising awareness.' This collective and strategic approach was the catalyst to get council onside. On 21st of June 2023 the change was approved by Council. With more than 5,000 dwellings, many of which are on large 700sqm lots, the Tiny Home on Wheels option has potential to impact the housing crisis. This inventive and sustainable option provided incentive to share land and reduce sprawl.

## Living networks

Our design-led research practice has evolved a mode of working where projects emerge from this process of investigating context. By engaging with community and place, we prepare the ground for what we have called Drawings for Collaboration where mark making, linework, notation, figuration and abstraction—the tools of translating fieldwork—make visible our critical and analytical thinking. Drawings are one of our means to form active modes of collaboration with place, revealing opportunities for intervention and modes of acting. They become a space to make visible participants within the expanded site; the hidden systems, ecologies and narratives of place. Making visible onsite and offsite research is where we conclude this paper with the Living Networks Drawing where we begin to speculate upon the hidden infrastructures for the homeless and Dja Dja Wurrung Country found through this research, where the typical spatial hierarchies of inside and outside, Country and town, and transient occupancy are reworked and spatialised into a network—sites for sharing resources, doing more with less, valuing what is already there, as a strategy for a regenerative future for rural communities.

Having undertaken this research, we acknowledge and value those organisations working within the community and reveal ways the urban environment and its residents are assisted by these groups—these active networks —that include altering a local law and working with strategies for sharing and social inclusion within the community. One of our findings is that understanding and acknowledging the existing systems and support networks operating in a community is critical to understand the town and its

community's concerns. The research reveals an interconnected strategy operating within the fabric of a town can have as much if not more impact, than top-down bureaucratic solutions. Rather than impose expensive new-build architectural and programmatic solutions, a successful way to grow a community is to rethink what constitutes design processes and its representation and therefore what constitutes an architectural solution. The first part of this paper, discussing Castlemaine's indigenous history is a critical process for reconciliation and for building the strength and agency of those communities. Housing a community with equity and working with all its inhabitants, is an essential part of healing Country and engaging Indigenous communities. We bring our design sensibility and scholarship of site knowledge to bear on this and through this research bring into relationship an awareness and respectful recognition of the events brought by settler colonial structures. Our Living Network project begins to spatialise these intangible voices and places, revealing a more sustainable future for Castlemaine.

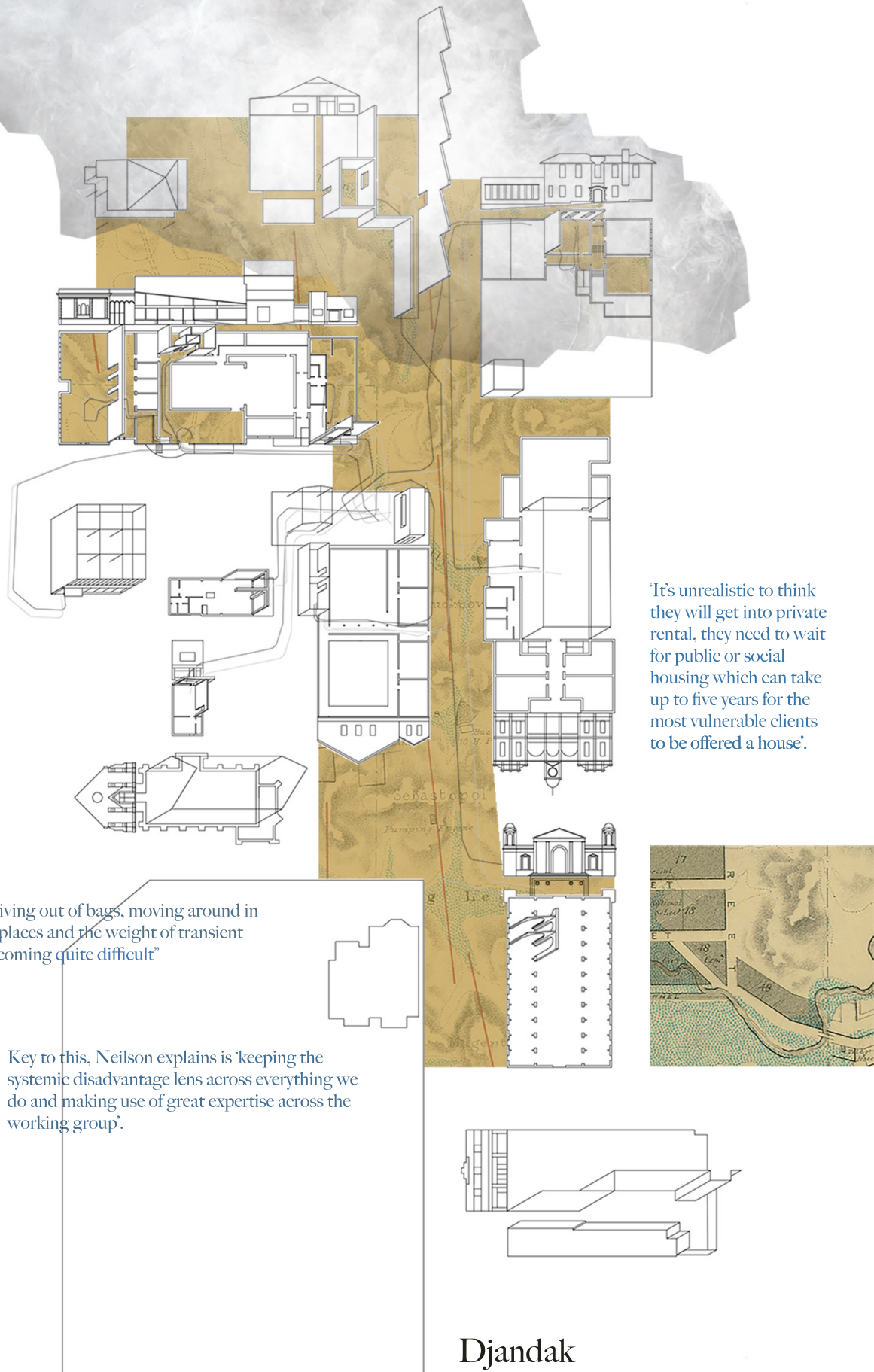'It's unrealistic to think they will get into private rental, they need to wait for public or social housing which can take up to five years for the most vulnerable clients to be offered a house'.

"the uncertainty of living out of bags, moving around in the car to different places and the weight of transient uncertainty was becoming quite difficult"

Key to this, Neilson explains is 'keeping the systemic disadvantage lens across everything we do and making use of great expertise across the working group'.

Djandak

**Figure 6: Living Networks 2, created by authors Anna Johnson and Richard Black**

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# De-constructing the Sense of Inside and Outside in a Chawl

## Abstract

The chawl is a housing typology from western India, known especially for its overwhelming population density and strong sense of community living, comprised of several small, tightly spaced units connected by a common veranda. Built predominantly in the early 1900s, chawls were commonly adopted in cities like Mumbai and Ahmedabad, which rapidly absorbed working-class populations migrating from villages to work in the booming textile industries. The Cotton Chawl, built in 1935 in Ahmedabad, is one such three-story chawl, housing 87 units. Comprised of only one room and a small kitchenette, generally used by 4-5 family members, the household units in the chawl often spill out onto the 3-foot-wide veranda. Activities such as sitting, conversing, performing everyday domestic tasks, celebrating religious ceremonies, and even sleeping take place on the veranda, which becomes a complex site at the intersection of personal and collective life. The close-knit architecture of the chawl gives people the sense of an extended home, outside the individual house unit, where language, behaviors, movement, and interactions are all shaped by people's perceptions of privacy, gender norms, and shared understandings of social and cultural codes. Understanding the spatio-temporal rhythms of these activities, I use oral history and ethnography to understand how terms like inside and outside, private and public, and the home and the world have deeply specific and relational meanings. I illustrate how physical demarcations of inside and outside are highly inadequate to understand how space is truly used. My central argument is that, in community settlements like the chawl, spatial demarcations of architecture don't necessarily correspond with the metaphorical, embodied, and ideological conceptions of place. Here, common spaces like the balcony are not merely containers of activities, but they are produced from the very activities and relationalities of time and people's acts, constantly imbuing new meaning within them.

Figure 1: The Cotton Chawl, photograph by Aishwarya Morwal (author), 2018.

## Introduction to the Cotton Chawl

At a glance, from one end of the Cotton Chawl, one can see a long line of house units extending along a 3-foot-wide veranda, which is dotted with a hustle of domestic activities. A three-storey concrete structure, the chawl comprises rows of sixty-eight house units, connected by common verandas on every floor, which lead to the staircase and the common toilets. Built in 1935 by one of the most influential trade guilds in Ahmedabad, locally called the Maskati Mahajan Sangh, the Cotton Chawl was one of the many tenement housing projects built as a response to the surging tide of working-class migrants in the thriving industrial hub (Bharat, 2019, p. 113). The Cotton Chawl is located in a Jain neighbourhood, Panjrapol, reflective of the settlement patterns in the old city where neighbourhoods were spatially segregated into homogeneous ethnic groups. Bharat (2019), in her study on the Panjrapol neighbourhood, notes that this concentration of families along lines of caste and religion was an accretive process that continued well into the twentieth century (109). Drawn by the employment opportunities in the expanding industries, migrants relied on their caste or religious networks to find housing in places like the Cotton Chawl.

In the Cotton Chawl, the house units, each comprising a room (3.6 x 4.5 m) and a small kitchenette (3.6 x 3 m), face each other with a courtyard in the centre. The only mode of ventilation is the two windows provided on either side of the main door of each unit, which provides clear views into the home to passers-by. Each unit houses about three to five members, and due to small, ill-ventilated rooms, many household activities spill out. Acts like sitting, reading, performing everyday domestic tasks and sometimes even sleeping take place on the veranda, which, as the threshold of the home, becomes a complex site set at the intersection of the public and the private.

According to Rosselin (1999), anthropologists in the west have defined the threshold of the front door as the border between the private and the public space- a liminal zone that separates and links two distinct territories: that of the inside, the personal, and the sacred home, from the outside, the collective and the risky space of the world (53-54). However, in community housing in India, the space of the threshold is not always a pre-defined transition zone, and it transcends the simplistic definition of being a boundary between the public and the private space. In the chawl, the veranda as the threshold simultaneously embodies two purposes: demarcating the public from the private and at the same time being the extension of the private into the public, blurring the lines between the two.

In the context of urban thresholds, most architectural analyses are directed towards developing design typologies that effectively negotiate the transition between the public and the private. The focus on analyzing the threshold space leans heavily on its physicality rather than its symbolic or ideological conceptions as a boundary. Determining the stages of entering a private property, Dovey

and Wood's (2015) typological analysis of urban interfaces, discusses how the spatial interactions between the public and private zones are negotiated by the materiality of the edge along legal cadastral boundaries. Kamalipour (2016) extends Dovey and Wood's typology analysis to explore the public to private transition in terms of proximity and connectivity. These frameworks are useful in understanding the architecture of the threshold as a public/private interface, but they assume the space is a fixed, unchanging entity that influences social relationships as a consequence of its physical form.

Studying the threshold in the context of their socio-cultural significance, Sadanand and Nagarajan (2020) analyse the thinnai, an extended verandah in traditional Agraham houses in South India, shedding light on ways in which culturally symbolic acts and social norms mediate the relationship between the inside and outside. Similarly, Marnane (2023) examines the architecture of the otla, a veranda-style transition space in the traditional Gujarati settlements called pols in the context of their socio-cultural role, identity formation, and the transition from private to public space. While this body of research recognises that the threshold has blurred boundaries that can only be understood with the specificity of acts and uses, they conceptualise space as a container within which activities simply occur, and the user's perception of the place is imagined as unchanging, or static in time. In built environment discourses, framing the threshold in its spatial configuration tends to blur the complexity and fluidity of gendered domains, perceptions of privacy and territoriality and more widely its patterns of inhabitation. In this paper, I explore the veranda as a site whose boundaries as a threshold are not fixed and bounded to the space, but which keep evolving in time based on use, access and habits through which the residents produce a sense of place within the chawl. This allows the illustration of how, based on gender, time of the day, occasion, and user, the rules of negotiating the publicness and privateness of this threshold keep shifting.

To understand this threshold, I use Setha Low's conceptualisation of analysing places as socially constructed, culturally relative and historically specific, theorised in a way that is process-oriented, person-based, and allows for agency. Low (2009) states that all places are embodied-i.e. a result of the ideology, language, behaviours, habits, practices and material acts. Conceptualising places as embodied enables us to understand them as sites of everyday life where attachment, emotion, and morality come into play grounded in a specific location yet derived from global discourses (Low 2009, 22). Further, drawing upon Anthony King's (1976) linguistic analysis on urban and spatial terms in the colonial third culture[1], I look at language as a mode of tracing the shifting perceptions of the veranda in the chawl. King (1976) suggests "how people talk about their own world of experience

[1] Anthony King defined the "colonial third culture" as a hybrid cultural formation in colonial cities, blending European and indigenous influences in urban forms, social practices, and power dynamics.

and what names they give to it gives us some indication of how they construe it," (73). This is where oral history and ethnography is an important method to study the threshold in the chawl, where I trace how everyday lived experiences disrupt the architectural understanding of the threshold, to create metaphorical and ideological boundaries of place. I also show how, over the past 89 years of the chawl's life, distinct shifts in the socio-cultural realm, impacts of modernity or events like the Covid-19 pandemic altered and re-negotiated these meanings.

## Mapping the gender territories of inside and outside

In the highly patriarchal milieu of the early days of the chawl, in the 1940s, household chores were considered the responsibilities of the young women of the home. Young women doing chores inside the home during morning hours was associated with the performance of a distinctly moral and ideal behaviour, as opposed to being outside on the veranda, among the men, who were seen reading newspapers, having tea, or socialising over local news. As the hustle of mornings quieted, men left for work and children for school, women informants recount stories of taking over the space of the veranda. They sifted grains, chopped vegetables, sewed, or pounded masalas in the natural light filtering through the courtyard. It is interesting to note that even today, while colloquially referring to the act of doing these things, inhabitants dropped the words "outside" or "in the veranda".

For instance, saying that one was 'sewing', was synonymous with 'was sewing out on the veranda'. The understanding that certain domestic activities occurred on the veranda was so obvious in the chawl that it did not need to be mentioned. The extension of the household activities into the public zone did not always have to be distinctly defined in the form of actions but was conceptually always present.

In the afternoons, the veranda also became a distinct space of gossip, togetherness and friendship for women. Women share stories of hosting kitty parties[2] at this time, as they would be done with chores, and they had some free time before their husbands came back for lunch. Krupa ben[3], a resident of the chawl in her mid-fifties, recounts that this time of the day was quite freeing for women as rules of conduct slightly relaxed. They even held their sarees in a more comfortable and relaxed fashion around the waist instead of over the head (which was done out of respect for men or elders). The access to the veranda was rooted in an understanding of when it was culturally appropriate for women to be seen outside. Women informants also

[2] A kitty party, particularly used in the South Asian context, is a social gathering where women contribute a fixed amount of money to a common pool, with one member receiving the total amount each month, combining financial saving with socializing.

[3] In Gujarati, the term "Ben" (બેન) is used as a respectful way to address or refer to a woman, meaning "sister." Having addressed them as such in my field work, the names of all women informants are suffixed with this term in this paper.

98

recall that when they were menstruating, they were to keep away from ritually significant spaces like the kitchen or the room where the gods were kept. In the first three to four days of their period, women would be made to stay outside in the veranda, which also meant that everyone else in the chawl would suspect that she was menstruating- something that caused much embarrassment to the woman (Bharat 2019, 115). The use and access of the veranda was distinctly spatio-temporal in nature, determined by the time of the day and the occasion. The gender territories, following the thin line of inside and outside, were associated with the metaphorical value of morality and purity with regard to women's access.

It was understood that if someone, especially men, outside the chawl visited women would largely stay inside, coming out only to serve them water or food. Krupa ben shares that this inequality of access that was seen in earlier times, is not existent anymore. Today, women come out on the veranda in the mornings, meet for tea, and most even wear western or modern clothes, rather than the traditional saree. It is only when they come out in their nightgowns that they prefer to keep their dupatta (scarf) on. They ensure that



**Figure 2: Space of the Veranda in the Cotton Chawl, photograph by Aishwarya Morwal (author), 2018.**

99

their hair is appropriately tied up, and they have a bindi on.[4] This production of a disciplined form extends from the women's body to the physical site of the veranda, thus producing the latter as a space that, by extension, expects a 'moral' form. Instead of being a neutral site within which acts occur, the power relations and social constructs of gender and the space of the veranda are not mutually exclusive; they are continuously in a dialectic relationship (Ranade, 2007).

The restriction or disciplining of women's movement was never explicitly stated but was part of the social code within the chawl. However, people within the chawl also recognize the shifting orders of this code. Over time, not conforming to the conventional gendered codes of conduct, like wearing western clothes or being in the veranda in the mornings, women in the chawl have been resisting the cultural understanding of morality in the chawl- slowly transforming what it means to be moral in the first place. Thus, accessing spaces like the veranda not only complicates the notion of the threshold as simply separating the indoor and outdoor space, but it also reorganizes the meanings associated with being inside and outside giving rise to an interconnected, relational understanding of these binaries.

[4] A bindi is a forehead mark worn by Hindu women, symbolizing marital status, cultural identity, and respect for tradition.

## The affective boundaries of a home

In the 1950s, the Panjrapol neighbourhood was a significant Jain center in the city known for being the residence of elite mercantile families and housing numerous Jain religious institutions such as derasar (Jain temples), upashray (sermon halls and residences for Jain ascetics) with their affiliated kitchens and food halls. Even today, these places are often visited by the residents of the Cotton Chawl especially during festivals or auspicious days. The residents have a common social position in the city enabled by similar traditions, places of worship, and eating habits, which foster a common worldview, reinforcing the fact that the chawl is one big family and the house unit in the chawl is a home within a home. Informants recount that in times of emergencies, neighbours rushed to one another's aid without a second thought. The sense of belonging to the chawl is then not only forged by people's identifications and emotional attachment to the collective, but also by the ethical and political value systems with which they judge their own and others belonging (Yuval-Davis 2011, 5).

This idea of caregiving is also deeply enmeshed with the idea of ceding one's privacy in the chawl, as is clear from Sanjay Bhai's[5] account, "It is very common for inhabitants to be 'in and out' of the veranda," or as he puts it, 'aate jaate rehna (in Hindi),' suggesting one's constant presence, or activity between the veranda

[5] Similar to the term "Ben" mentioned earlier, "Bhai" is used as a respectful way to address a man in Gujarati, meaning "brother."

and the home. "If I don't come out for a long time, our neighbours tend to ask, 'Is everything okay? Why did you not come out?' In case someone's door is closed for the whole day, we check in and see if everything is okay with them or if they are ill. This is how much we care for one another!" Here, 'aate jaate rehna' is not simply a matter of stepping out onto the veranda, but also signals that daily life is running smoothly, the lack of which is often regarded as unusual.

From Sanjay bhai's narrative, what might be considered 'overstepping the bounds of privacy' in western sociology, is subsumed within a sense of caregiving in the chawl. Kaviraj (1997) states that the concept of public in local Indian settings was a historically specific configuration of the common that did not neatly fit into the idea of public in the Western sense (Kaviraj 1997, 86). Here, we understand the relationality of engaging with the space, where its access is not just moulded to time and place, but also to cultural subjectivities.

Inhabitants particularly recall the community bond being stronger in the early days of the chawl when there was a higher number of people residing here. The radio or the TV, which were rare commodities, would gather large crowds at the time of international cricket matches or beloved music shows. These crowds, often flocking the space of the veranda, would settle there for hours making it a site of relaxed conversation and togetherness.



**Figure 3: Visualisation imagining what the Cotton Chawl must have looked like in 1950s, image by Aishwarya Morwal (author), 2018.**

The spatial arrangement of the chawl, which fostered this familial relationship among inhabitants also made it impossible to keep personal life private. Knowing details from neighbouring homes of upcoming marriages, pregnancy, and even family problems was a naturalised part of being in the chawl. Krupa ben recounts, "When someone gets married, the bahu (daughter-in-law) is not only the 'bahu' of that family, but she is the bahu of the entire chawl!".[6] Before the wedding day, the family's relatives from outside the chawl would be accommodated as guests in neighbours' homes due to lack of space. Neighbours served food and attended to guests as if they were their own extended families. When sleeping out on the veranda, she notes, "We generally sleep in front of our doors, in our own verandas. If there's more of us, our neighbours don't object if we use some of their space. They say, you can sleep here, of course, consider it your space only! Just ensure you leave some room for passersby." The language here suggests a distinct connotation of usage of the veranda as a privatised space where, conceptually, people have a sense of ownership of the veranda space in front of their homes.

Based on the relationships shared between inhabitants, spaces could not be reduced to the arena of the veranda as 'public' and the arena of the home as 'private' simply based on the spatial demarcations of inside and outside. Chakrabarty (1992) suggests that rather than understanding how space is used, it is necessary to locate the metaphorical understanding of space for the purpose of making boundaries (543). Here, metaphorically, house units in

the chawl were a home within a larger home.

[6] In his article on the paras, a neighbourhood unit in Kolkata, Sengupta gives a similar account of familial bonds and collective sense of security and belonging of inhabitants due to their similar social and spatial location within the city (Sengupta 2018).

## Negotiating privacy and territories within the chawl

Amid this deep-rooted sense of community in the chawl, notions of privacy and territory were continually negotiated through everyday acts. The veranda, at the intersection of public and private space, became a stage where the gaze played an important role in terms of seeing and being seen. The inhabitants' access here was always aligned with a shared understanding of what was considered appropriate with a view to conform to the social fabric of the community.

Jagruti ben tells me it is considered rude if inhabitants keep the main door of their house closed frequently for extended periods of the day. In the early days of the chawl, during afternoon naps or going out for groceries, people kept their doors lightly closed instead of locking them. It was often that in a game of hide-n-seek, children would come to hide inside the homes of neighbours without any specific permissions. The openness of the door symbolised the family's relationship with other inhabitants, reflective of their sense of being transparent with others.

**Figure 4: View of the veranda from a house in the chawl, photograph by Aishwarya Morwal (author), 2018.**

It is also interesting to ask who an outsider in the chawl is, and who is given access without scrutinizing their purpose of being in the chawl. Sanjay bhai tells me, "If an outsider is in the chawl, and they're on our floor, we check from our veranda. Often, we ask them, 'Whose house do you wish to go to?' It's often the case that we know the visitors as the guests of our neighbours, and we offer them a beverage or invite them in. If there is a doctor called at someone's house, then we see what the matter is, and check if they need our help." According to Rosselin (1999), the threshold is a place whose site of access is ritually controlled, involving a standard code of greeting, inquiring, and then deciding whether to allow or deny entrance within the home. In this way, with the threshold as a transitory space, the behaviours in it align with the expectations of that space (57). In the chawl however, rather than the architecture of the veranda determining

it as a threshold space that separates the public and the private, it was the social conventions that negotiated what the meanings of public and private would be. From Sanjay bhai's narrative, it is also clear that he felt obliged to enquire about an outsider's whereabouts when they particularly accessed his floor, rather than the entire chawl. This also illustrates that the space outside the house is not one homogenous public space but is located within hierarchical nesting of territories where the term public and private is relative (Habraken 2004, 10). This conceptualization was not explicitly mentioned or stated but was produced through everyday acts such as sitting or resting in the veranda or keeping a watch on who enters or leaves.

Over the years, this idea of privacy in the chawl evolved with cultural and economic developments in the city. During the 1980s, as the technology of textile mills became obsolete, most mills shut down, and almost 67000 workers were rendered jobless (Bhatt 2003, as cited in Mahadevia 2014, 10). During this time, informants recall that the search for new job opportunities led a number of old families to leave the chawl. Consequently, new inhabitants took their place looking for opportunities in the heart of the city. In the past, housing in the chawl was reserved exclusively for mill workers, but over time the occupational backgrounds of residents became more diverse. Protecting tenants against the high rental inflation in Ahmedabad, the Rent Control Act of 1947 froze all rents and later its amendment (1963) allowed tenants protection from eviction, such that they could stake stronger claims to

their house units (Barua 2018, 178). Over the next decade, due to the significant reduction in rents vis-à-vis the land prices, chawl owners and trusts left the upkeep and maintenance of the chawl to the tenants. This was also a time when there was expansion of the western part of Ahmedabad, and the rise of modern apartment systems gave rise to the idea of insular homes. Simultaneously, privacy for every family and individual was recognised as a privilege. Although the infrastructure in the chawl deteriorated, inhabitants began to make architectural transformations within their unit, like the construction of toilets, retiling the floors, or installing modern kitchen counters. Having toilets within the home and making civil changes essentially meant that the house could now function as a self-sufficient unit, perceived to be comparable to the idealized self-sufficiency of the apartment systems popular in the western part of Ahmedabad.

One of the key changes made by the inhabitants in this context was the building of small, permanent seating blocks along one's home in the veranda, a site which inhabitants refer to as the otla. In Gujarati, an otla is a term used in the context of an elevated open step-up, that also functions as a seating and resting space, that overlooks the street. While the site of the seating block initiated the use of the term 'otla' for the veranda, most inhabitants now use the terms interchangeably.

This type of transformation of space was more evident on the ground floor, where partition walls were raised on the veranda giving rise to independent porch-

type house fronts. As we sit in front of her home, Meeta ben recounts, "It was a long running veranda before, and no one had a problem with this: we were like a family. We are one of the oldest residents of the chawl. Once these new renters entered, they started constructing these walls. Since everyone was building the partition wall, we too did it to have our own aangan (Hindi term for porch)." The use of the word 'aangan', a term that typically defines the front yard of a private home, became more commonly used for the houses on ground floors after the construction of partition walls. The interiority of the homes, sense of control and privatisation increased over the years and went hand in hand with changing social and economic shifts in the chawl.
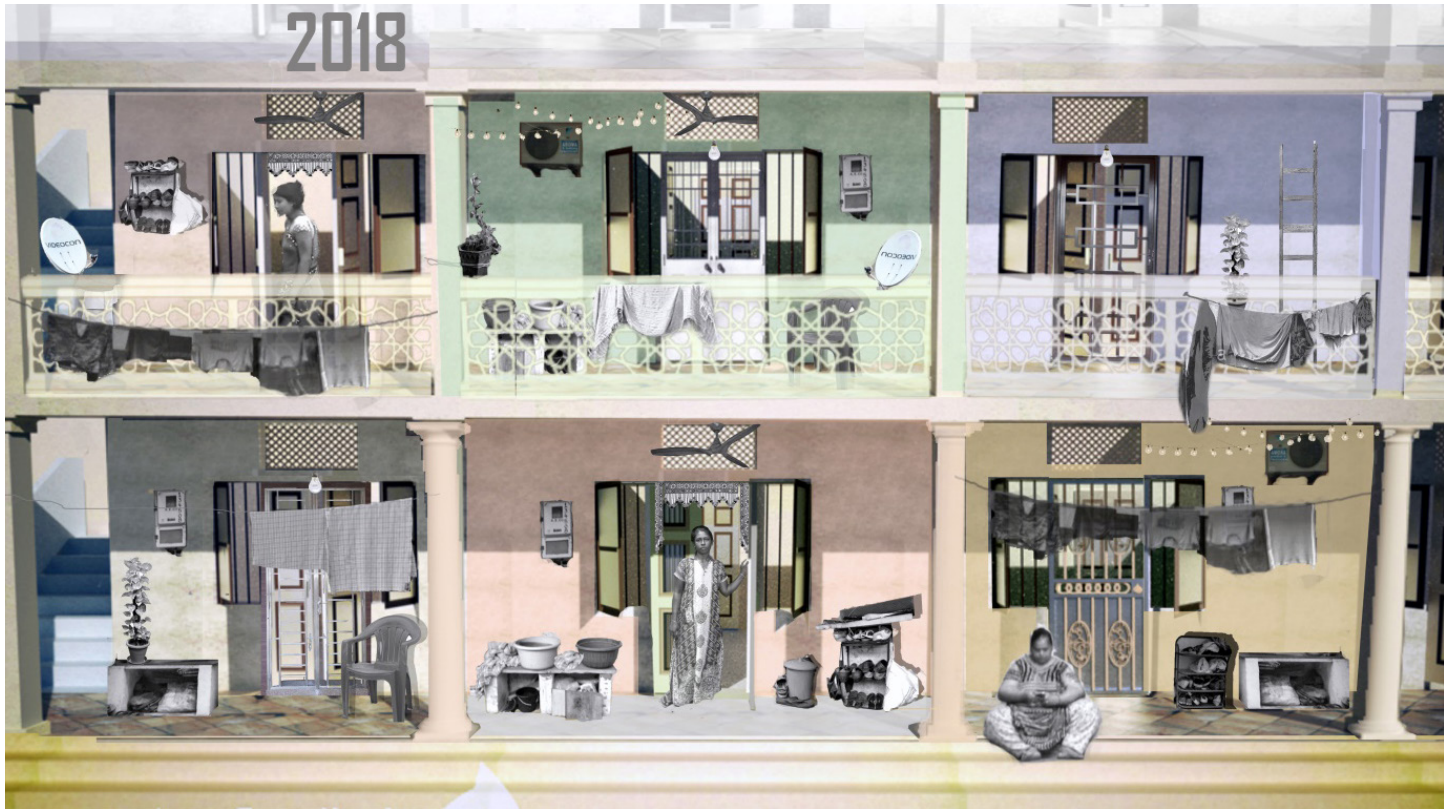


**Figure 5: Visualisation representing the Cotton Chawl, image by Aishwarya Morwal (author), 2018.**

After the 1990s, another one of the most common transformations in the chawl that residents pointed to, was the installation of the security doors outside the house doors. While inhabitants tout the sense of familial bonds in the chawl, it is clear that they also sought to guard their privacy. Although today it is still expected that inhabitants keep their wooden doors open, the security doors strengthened and redefined the bounds between the indoor and outdoor space simultaneously showing agency of people to gain a better sense of control over their environment.

Today, one can see that individual home exteriors are painted in vibrant colours, the tiling on exterior surfaces is renewed, or there are cabinets or storage spaces installed in front of some houses. In this way, residents create substitute thresholds or transitionary zones that denote the space in front of their homes as their own, which also happens to be a public place. Instead of flattening the notions of public, semi-public and private just in their spatial sense, we see that these meanings are reorganized over the course of time due to people's continually acting within them.

The coronavirus pandemic dramatically reordered the everyday rhythms in the chawl. Outsiders were strictly not allowed inside, and family life, which had been intimately tied within the space of the veranda, was absolutely relegated inside. Every home object on the veranda was taken back inside. Social interactions took place just by way of shouting a greeting across the veranda and nothing more. "The news media was a big influence in the early months of the pandemic.

We were scared. We wore masks, but eventually couldn't not come out in the veranda," says Jagruti ben. According to her, inhabitants avoided touching and sat away from each other. During the two cases reported in the chawl, doors were shut, and quarantine boards were put up. The characterization of space as infected or dangerous not only affected how space was used, but dramatically hardened the threshold between inside and outside thus reconfiguring the meanings of public and private. Informants note that although this was the case in the first and second waves of the pandemic, most people's access to the balcony eventually returned back to the way it was before.

## Conclusion

In the Indian context, Kaviraj (1997) suggests that rather than the simple binaries of public and private, an apt categorisation of spaces stems from the differentiation between 'the home' and 'the world', closely linked to 'apna' and 'paraya' or mine and not-mine (93). In the chawl, in connecting families together, it is the architecture that gives the sense of an extended home outside the house unit. The veranda as a threshold is an interesting space to study because it destabilises our expectation of how a space must function. Rather than architecture presupposing or predefining the purpose a space serves, we see how place and people together co-construct the meanings and utility of space. Access in the veranda is not just rooted in being in one place at one time, but it is defined by specific conceptions of morality, purity, privacy, and social and cultural codes. Conceptualising the space of the veranda as embodied puts focus on inconspicuous things like people's mannerisms, language, everyday practices, behaviours, and ways of conducting themselves, as shaping the place in a community settlement. It also helps us understand how cultural subjectivities create alternate boundaries of space. Oral history as a method is crucial to understand the deeply specific and relational meanings of public and private in the chawl, continually shaped and configured due to people's acts and interactions. The threshold is not merely a container of activities, but is produced as either public or private, or as the men's domain or the women's domain, or as the home within the home from the very activities and relationalities of time and people's acts. These acts constantly imbue new meanings within them that penetrated into the terminology used for the veranda, and it, along with the conceptual association of the place, evolved with the access in this place over the chawl's 89 years.

The veranda as the threshold is a space of social liminality as much as it is a space of physical liminality. Physically, it is a balancing act of managing a household in the paucity of space and living in the gaze of the chawl's sixty-eight families. Socially, it is balancing the sense of caregiving with guarding the integrity of one's privacy. It is a space that straddles the aspirations of a privatised self-sufficient unit while fostering a sense of belonging within a common spatial and social location in the city. These tensions reveal the fault lines in our understanding of the threshold as merely being a separating border between the public and the private, the personal and the collective, and the home and the world. We see how language, perception of space, and its consequent usage is mutually co-evolving and shapes the way one informs the other.

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# Dematerializing Riegl's Modern Cult of Monuments

## Abstract

This paper delves into the transformation of memory and heritage in the digital age, interpreting Alois Riegl's pivotal 1903 work, "The Modern Cult of Monuments," through the lens of today's digital technologies. Riegl's axiological examination, foundational in the field of heritage preservation, is reevaluated to explore how digital documentation reinterprets historical and age values of monuments, aligning with his philosophy of 'touchless' preservation. This research proposes a novel paradigm for representing and engaging with monuments within the digital sphere that I term "Cult Beyond the Digital."

Furthermore, the paper argues for the contemporary relevance of Riegl's methodologies in architecture, particularly those linked to non-contact recording methods that result in the creation of intangible heritage. The paper speculates on future preservation strategies, especially as emerging AI technologies promise the potential to reconstruct missing historical data and enhance monument preservation efforts.

By examining the interaction between technological advancements and monument preservation, the study revisits and expands Riegl's theory, offering a forward-looking perspective on the discipline in the digital and beyond the digital era, aligning with the theme "Beyond the Visible" by exploring how architectural processes such as aging are documented by contemporary digital tools to protect our heritage and memory. This invisible force of time leaves architecture with traces that can be seen as a continuous "unmaking" or dematerializing of its physical forms. The age value of monuments was considered the monument's most essential value of the twentieth century, according to Riegl. Extending his theory to our time, the age value is surpassed by what I call a "timeless" value that represents digitally documented monuments over time. They, as digital data, shift their properties from the material world to the digital realm. By doing so, the main protagonist of this architectural "unmaking" is not an architect but the environment itself.

### Funding

## Introduction: The Modern Cult

The term 'cult' refers to a multiplicity of meanings. One of them points toward its religious characteristic as a 'particular system of religious belief'.[1] Beyond this aspect, it can also refer to something that receives immense popularity among certain individuals as a cultural phenomenon, or it can denote a specific set of beliefs or behaviors in a society. Concerning monuments, the cult can also be interpreted as a spiritual phenomenon present in the monument but which is kept invisible in its form, lasting beyond a particular generation; as an American historian Lewis Mumford writes: "Ordinary men must be content to fix their image in their children: retrospectively they may seek to ensure immortality by imposing the cult of the ancestor" (Mumford, 1937, 263). Austrian art historian and preservationist Alois Riegl used this term in the title of his seminal preservation essay 'The Modern Cult of Monuments: Its Character and Its Origin' (Der Moderne Denkmalkultus: Sein Wesen Und Seine Entstehung), published in 1903. It served as a preface to a legislative proposal to reorganize monument protection in Austria in the early twentieth century.[2] Riegl specifically used the term Denkmalkultus, which consists of two words – Denkmal (monument) and Kultus (cult). In order to reflect on the term Kultus in Riegl's context of fin de siècle Vienna, it is necessary to review early Christian art.[3] Its protagonists recognized fine arts as a valuable medium for celebrating their cult. Riegl used the word [Denkmal] Kultus to refer to his perception of monuments

beyond their preservation, focusing on their cultural relevance and meaning as cult objects (Riegl,1982, 51). Similar to early Christian artists, Riegl articulated the notion of the monument as a medium to celebrate the cult of a modern monument, an object of veneration and, particularly in this essay, Riegl seems to be taking a modernist rather than historicist approach. In his essay, he invented the notion of unintentional monuments as a visionary concept as opposed to the notion of intentional monuments that were already part of the historical discourse.

### Monument Values

Riegl defined a variety of monument values, most importantly the historical value of the nineteenth century and the age value (Alterswert) of the twentieth century. Both of these values represent the cult of modern monuments as Riegl categorized them. Reflecting on Riegl's age value, I would note that age affects all monuments equally, as it affects all living organisms. One is not allowed to interfere with the aging process, which would be considered an act against nature or God's

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[1] For more details, see: Cult | english meaning - cambridge dictionary. Accessed January 8, 2024. https://dictionary.cambridge.org/dictionary/english/cult.

[2] Riegl's efforts for new legislation for monument protections were denied.

[3] The dating of early Christian art begins from the 3rd century, following the legalisation of Christianity in the Roman Empire by Emperor Constantine in 313 CE, and ends in the early 6th century.

will. Therefore, monuments with age value are continually 'dematerializing' and can be interpreted as living organisms between birth and death. Only by caring for them (offering them protection) can they achieve a longer life span than humans. Age value is also closely related to the temporality of perception, which Riegl studied within his art historical scholarship and was later applied in his preservation theory as well. Furthermore, age value appreciates the traces of the past on the object in question and manifests the most modern value for the twentieth century. The photograph of the decay of the building's façade, namely Oxford's Queens College by William Henry Fox Talbot from 1843, serves as an example of Riegl's concept of the age value of monuments. For this reason, the photograph became the frontispiece of the English translation of the essay published in the Oppositions journal in 1982 (Figure 1).



**Figure 1: William Henry Fox Talbot.** *Part of Queens College, Oxford.* **Photography, 1843.**

One of the essential aspects of monuments is that their values change over time. In his essay regarding monuments and memory, architectural historian Kurt Forster elaborated on this notion by stating that "the very idea of the monument proved to be at once historically determined and relative to the values of every time" (Forster, 1982, 22). Therefore, from the twenty-first-century perspective, a number of monuments of the past have transformed their values since Riegl's time, and so it is a task of every society to redefine them.

Due to Riegl's very innovative, forward-looking approach to monument protection, he is oftentimes seen in connection to an English writer and critic, John Ruskin. Even though both appreciated the age value, Riegl categorized it for the first time as a monument's value. Art historian Margaret Olin emphasized Riegl's and Ruskin's connection in more detail:

> Riegl explicitly Christianized the cult of monuments. His conception of the age value far surpassed Ruskin's piety. He felt that he stood before a time of religious renewal comparable to the dawn of the Christian era. "Stimmung" (roughly "mood" or "atmosphere"), the current artistic goal to which he ascribed the cult of age, itself characterized eras of religious upheaval (1985, 195).

The religious aspect of Riegl's 'Modern Cult' ties into Austria's history of a predominantly Catholic society, a tradition that visibly shaped his writing. Even though the conception of the age value representing the 'Modern Cult' was highly

original, it stood against the principles of the rising modernism celebrating beauty and completeness at the turn of the century in Vienna. The contradictions of Riegl's value theory and his appreciation of the monument's decay resulting in ruins did not allow him to implement his preservation methodology at the time and had to wait to be rediscovered again.

## The Cult of Ruins

A close examination of the 'Modern Cult' and its reception reveals that the value of age was not accepted in the way Riegl envisioned. This value, defined by Riegl at the beginning of the twentieth century as a modern monument value, stands in opposition to the historical value representing the 'newness' of the monument typical for the nineteenth century. It might appear paradoxical to call a modern monument one that shows its 'age' and a historical one as one that represents 'the new' characteristic of the emerging modern movement. Also, Margaret Olin described Riegl's effort as 'utopian' when he thought of Alterswert as the primary concern of historic preservation in the future (1985, 197). The contradictions within Riegl's value theory and his appreciation of the monument's decay made it impossible to implement his concept into practice, whether in architecture or preservation, at his time. The modern quest for newness, completeness, and total beauty opposed his definition of the 'new' represented by the age value, which exhibited precisely

the opposite – traces, incompleteness, and deterioration.

The 'Modern Cult' had been dormant for decades, waiting to prove its relevance only after the devastation of both world wars. Social changes and the presence of architectural ruins in the urban fabric prompted a reevaluation of Riegl's views in the 1970s and 1980s. Architectural historian Alan Colquhoun emphasized the importance of the age of the monument in a postmodern context in the following words:

> Although evidence of decay is no longer, as it was in Riegl's day, the most crucial element in our sense of age-value, it would seem that it is still the "age" of historical buildings that constitutes their value today, rather than their qualities either as intentional or unintentional monuments. The past is valued for its "pastness" and not because it provided models for a normative architecture or represents timeless architectural values (as it did from 1450 to roughly 1800), nor because it can be accurately reconstructed as evidence of the organic relationship between monuments and the societies that produced them (as was the case in the nineteenth century) (1991, 218).

The author discussed how the value of historical monuments has evolved over time. He notes that, even 80 years after Riegl's writing, age value remains central to monuments' value. Thus, it is more significant than whether the monument is intentional or unintentional. While the concept of age value remains relevant even in the 1980s, the specific issues it raised have changed since Riegl's time.

Here, Colquhoun claimed, it was precisely in the 1980s that age value came to be appreciated, albeit from a different perspective.

The period of postmodernism when Riegl's work was rediscovered saw a shift toward exploring memory and historical narratives with an emphasis on the subjectivity of interpretation, challenging modernist notions of objective truth. The shift saw an increased focus on the role of individual and collective memory, offering diverse perspectives on experiences and histories. Cities were bombed to the ground, and architects were faced with the difficult questions of how to rebuild what was left and how to approach ruins of cultural, social, or religious significance. As such, they sought new strategies for repositioning themselves and redefining historical narratives and identities, leading some of them to turn to Riegl's work and thereby give his theory new meaning and prominence. Societal changes and remaining architectural ruins prompted a reevaluation of Riegl's ideas, with a strong focus on his concept of age value as well as the application of his preservation theory, especially during the 1980s. This happened in relation to the postmodernist emphasis on the multiplicity of meanings and interpretations that aligned with Riegl's recognition of diverse values assigned to monuments. Furthermore, Riegl claimed that these values change over time, manifesting their varying character. Societal values are equally in constant flux, which relates to the postmodern focus on the subjectivity of interpretations and the importance of context. Another important aspect that contributed to the

spreading of Riegl's ideas since the 1980s was the publication of translations of the 'Modern Cult' into a number of languages for the first time, which made it available to a much wider audience worldwide.

In his preservation theory, Riegl discussed the 'cult of ruins' and the values associated with these objects as part of the natural development of monuments. This approach thus points towards Riegl's concept of touchless preservation. Dealing with ruins became important during the post-war period, which required new approaches, two of which stood out particularly. In the first one, ruins were demolished, and new buildings were erected in their place. This approach assumed that the past and all traces of war had to disappear in order to build a better future. The second approach, however, argued for ruins to be incorporated into the urban fabric for various purposes, such as memorials. This process of transformation connected ruins with new buildings to resume their old function or assume a new function. The second approach was clearly inspired by Riegl, as it sought not to erase the past but to offer new narratives of history that go beyond its previous meaning or form and so show traces of the past that would otherwise not be visible. This approach also manifests Riegl's touchless preservation approach when working with architectural ruins within urban fabric.

**Touchless Preservation**

To oppose the first approach to the reconstruction of damaged monuments, architectural historian Kurt Forster mentioned the Kaiser Wilhelm Gedächtniskirche (Kaiser Wilhelm Memorial Church) in Berlin as a key example of coexistence, or what he calls 'the juxtaposition' of ruins and modern structure (Figure 2). The church was built in the last decade of the nineteenth century. The building, bombed in 1943 during the Second World War, was deliberately not reconstructed to stand as a reminder of the effects of the war. The old building currently functions as a memorial hall on the ground floor. However, in order to maintain the previous function of the church on the site, a new and modern church was designed next to the old one by German architect Egon Eiermann in the 1950s and constructed in 1963.

The project brought a discussion of ruins to the foreground, as it was "a bone of contention and attempted solution in the controversy over ruins in the German post-war period" (Forster, 2012, 201). The church structure from the Second World War demonstrates the Rieglian approach of touchless preservation, promoting the authenticity of the decaying structure with an age value. The church was mainly affected by human violence and the brutality of the war; therefore, its values and its role in society changed accordingly. The church transformed its previously ascribed values from an unintentional type of monument to an intentional one to commemorate past events while losing its former use value (as a church). But one might wonder if the site needed a new, side-by-side structure at all. In a Rieglian sense, the older structure has a higher value than the newer one. In this way, we juxtapose not only the ruined and new objects on the site but also their values

Figure 2: Erich Andres. *Berlin. Gedächtnis-Kirche. 1965/1975*. Ruined tower next to the new tower.

– the age value in opposition to the newness value[4], which certainly brings a new dialectical tension to the historic site.[5]

## Cult Beyond Visible

The development of modern techniques of reproduction promises that in the near future (especially since the invention of photography and facsimile reproduction) new and perfect means compensating for the loss of originals will be found. In this way, scholarly research, which remains a source of conflict for age-value, can continue without interfering with the original.

Alois Riegl

Building upon Riegl's previously introduced preservation theory, the following text delves into how his concepts have evolved with the advent of digital technologies, highlighting the shift from physical to digital preservation methods.

Riegl claimed that a human should not interfere with a building's natural decay by modifying or restoring it to its original state. This concept aligns with Ruskin's idea that: "We have no right whatever to touch them. They are not ours. They belong partly to those who built them and partly to all the generations of mankind who are to follow us" (1884, 182). Both Riegl's and Ruskin's approach to preservation opposes the traditional method of restoration that has been employed since the eighteenth century by architects and restorers such as French Emmanuel Viollet-le-Duc or Austrian Friedrich Schmidt. It is important to acknowledge that preservation and restoration methods stand in juxtaposition when treating historic monuments.

[4] Newness value is one of the monument's values defined by Riegl in the 'Modern Cult'. This value seeks the monument's beauty in its completeness, whereas age value prefers a natural decay of its structure. Its primary goal is to preserve the monument in the best condition and to deviate from the original state only in minor ways.

[5] Riegl's preservation theory is represented by a dialectic tension at large. This can be mainly seen through his preference for preservation over restoration.

Riegl's above-mentioned quote goes beyond mere touchless preservation by letting the building age naturally. It addresses the profound implications of reproduction techniques that allow the preservation of cultural heritage by creating monument copies. By stating that, Riegl acknowledged the rapid advancements in technology development in the early twentieth century that consequently impacted preservation techniques and research of objects. Production of monument copies, for example, through photography, thus marks the significant shift toward the touchless preservation approach. This methodology also offers greater access to monuments to preservationists and scholars who are able to conduct research on these copies without altering the original. As a result, a new relationship between an original and its copy is introduced. Oftentimes, copies can completely substitute the originals, especially in the case of the original's loss or massive damage, and these objects act as if they were originals themselves.

Since the 1990s, during the first digital turn, a number of disciplines, including preservation, have started employing digital tools in their processes. However, at the time, the use of these tools and their importance for preservation was less clear than in the present day. The creation of digital records depended on technological developments, and so the process of digitization provided an opportunity to replace the original work with the copy (Viñas, 2004, 23-24). At the same time, touchless preservation tools gained the power to 'democratize' access to cultural objects that become available

in the digital realm to viewers worldwide. These digital replicas can be presented outside of their physical location on the viewer's interface. Also, the reproductions can be augmented (using AR) onto their original site and juxtaposed with the current state of the original object.

**Resurrecting Monument**

As we shift from historical perspectives to contemporary applications, it becomes clear how digital tools have begun to mirror and extend Riegl's preservation approach in innovative ways. Transforming Riegl's theory into the digital realm, digital documentation tools offer the possibility of preserving a monument without altering it while storing information about its form, material properties, and appearance for future generations. Digital reproduction techniques, varying from digital photography to photogrammetry or LiDAR scanning, allow researchers to study and reconstruct artifacts in great detail while zooming into their digital image or 3D model, which was not possible when working only with physical objects. One of the first cases of reconstruction using digital tools is considered to be the Frauenkirche (Figure 3) in Dresden, Germany, which was heavily bombed during World War II and left in ruins for decades due to the socialist politics of the DDR and subsequently reconstructed in the twentieth century.

[6] The Frauenkirche, commonly translated as 'Church of Our Lady,' was built in the eighteenth century in Baroque style by the German architect George Bähr.

**Figure 3: Walter Möbius.** *Dresden-Altstadt. Ruins of Frauenkirche.* **View from the West, 1946.**

It is important to differentiate between the method of digital reconstruction used in the case of the Frauenkirche and the concept of digital preservation, which extends Riegl's theory from the physical to the digital realm. While the digital reconstruction of the Frauenkirche restored the monument to its Baroque form, digital preservation, following Riegl's principles, aims to preserve the monument in its current state without reverting it to any previous form.

Frauenkirche was reconstructed between 1997 and 2005 using 45% of old building material (stones) within the newly erected structure (Figure 4). Architectural historian Mark Jarzomberk marked the church's resurrection as a result of "the euphoria of German reunification" (2005, 55) while using computer-aided technology,[7] sometimes called 'archeological reconstruction'.

[7] The computer modeling software, CATIA, originally invented to design military aircrafts whose mission was to bomb, was now ironically used to reconstruct the church.

Figure 4: View of the Dresden Frauenkirche showing old (blackened) and new (light-colored) stone, 2006.

The reconstruction period coincides with the rise of computer modeling, which appeared in the 1990s and marked the beginning of the use of digital technologies in the treatment of historic structures. The Frauenkirche resurrection can thus be seen as the first step towards digitizing monuments, which started at the turn of the millennium. As German media theorist Wolfgang Ernst notes:

> The impression of reversal against the essential characteristic of historical time, which is material entropy, manifest in this case as architectural ruins. The archeological reconstruction of the Frauenkirche was in fact a media-archeological one; supported by algorithmic calculation, the remaining bricks and stones of the cathedral were reconfigured into the core of the reconstruction (2017, 68).

The architects of the reconstruction, Thomas Bauer and Jorg Lauterbach, identified the lack of information in the archaeological ruins as an absence of data. However, because of the digital simulations that were performed, the computer was able to interpolate the gaps in historical knowledge and complete the model of the digital reconstruction in order to build the church again.



**Figure 5: Siegfried Bregulla. *Frauenkirche*, 2007. Quartier I, Frauenkirche and Quartier III (Construction Site).**

Although the reconstruction was considered successful (Figure 5), it was criticized for the methods used. In particular, Jarzombek criticized the reconstruction of the church because of the random displacement of ruins in the reconstruction. The misplaced stones (in a darker shade) that made up the original church were "separated, measured, analyzed, and then placed into the fabric of the new walls of the church, hopefully at the very spot where they once belonged. Preservationists call this a 'critical restoration'" (Jarzombek, 2005, 56). In terms of the computer model of the reconstruction, the repositioning of the former building blocks was somewhat arbitrary, leaving us with the question of the relevance and authenticity of the old material for the reconstruction. This attempt at reconstruction is what Jarzomberk calls an "aesthetic governed by the positivistic conceits of the restorers" (2005, 56). The reconstruction of the Frauenkirche is thus considered a hybrid – composed of old building blocks and new stones representing the fragile relationship between the church's past and present and its historical and age values. Due to the complexity of the reconstruction from ruins, the use of digital documentation tools largely contributed to the project's completion by combining original plans and old building blocks with modern technology and advances in structural engineering.

**Digital Touchless Preservation**

Historically, the recordings of monuments have evolved through various analog and digital formats. Before the advent of digital techniques such as 3D scanning, there was a long tradition of monument documentation through methods like drawing and (analog) photography. These two-dimensional representations thus laid the groundwork for more modern techniques, which now include the development of three-dimensional digital copies and even four-dimensional models that depict the passage of time.

Due to technological advancement, contemporary digital tools allow for the snapshot of the age value of an original object that can be digitally stored and compared to other snapshots from a different time. In this way, the changes that happened to the object between various moments in time are directly comparable. The viewer can, therefore, gain knowledge about the object's transformation over time that is not visible when reviewed physically. One such attempt to document the transformation of a singular built structure is shown in the Bartlett Transformation 2013-2018 project by ScanLAB Projects. Although the project shows only two stages of the building, it manifests the concept of digital touchless preservation by mapping its evolution over time using 3D scans. The primary goal of the project is to show the transformation of the University College London (UCL) building in London scanned at different times, years apart, to represent the state before and after the building's reconstruction through a series of point cloud animations. On its homepage, ScanLAB Projects elaborates on the project's aim: "The resulting data set was assembled and overlaid to create two digital point cloud models.

The dual phases of the film vividly reveal the substantial change in space and scale brought about by the refurbishment" (ScanLAB Projects, 2018).

Furthermore, digital technologies allow us to document the condition of a monument and reconstruct its historical value by restoring it to its original or any other desired state using available sources such as drawings, plans, sections, sketches, or photographs to fill in the missing information when preserving the monument retroactively. Reconstruction tools, such as three-dimensional modeling software, make it possible to reconstruct missing data, allowing contemporary audiences to experience the past in a new way through the monument's collected historical layers. These layers are in constant flux as they also represent the age value of the monument, which changes in the physical world over time due to the monument's aging or other forces.

The director of the Spanish organization Factum Arte and the founder of Factum Foundation for Digital Technology in Conservation, Adam Lowe, calls the above-mentioned digital techniques also 'non-contact recording methods'.[8] His approach can be seen as a continuation of Riegl's touchless preservation approach positioned in the digital environment of the twenty-first century and shifted from theory to practice. Furthermore, artist and preservation architect Jorge Otero-Pailos[9] defines Lowe's methodology as 'experimental' due to the nature of the deployed processes, such as the digitalization of artworks, which changes

their material properties (Otero-Pailos, Langdalen, Arrhenius, 2016, 15). Lowe and his team applied the non-contact methodology in many projects, combining mainly two complementary methods, 3D scanning and panoramic photography, which allows the capturing of surfaces and volumes in great detail.[10]

Digital preservation, building on Riegl's idea of a touchless method, introduces a new way of engaging with historical objects by transforming them into digital images or spatial models. Riegl argued that all monuments are equal in their aging; they exist between life and death, inevitably subject to the passage of time. However, this situation changes when monuments are reproduced digitally. In the digital realm, they are no longer affected by aging in the same way as their physical references because they exist outside of physical time. This shift assigns them what I call a 'timeless value' in the twenty-first century, replacing Riegl's 'age value' of the twentieth century. In the current post-digital historiographical context—sometimes referred to as

[8] This approach is defined on Factum Foundation website, https://factumfoundation.org/the-foundation/.

[9] Jorge Otero-Pailos is associated with the 'experimental preservation' movement.

[10] See one of the case studies discussing the use of these techniques in detail: Carlos Bayod Lucini, "The Raphael Cartoons at the V&A: Close-Range Digitisation at a Monumental Scale," in The Aura in the Age of Digital Materiality: Rethinking Preservation in the Shadow of an Uncertain Future (Cinisello Balsamo, Milano: Silvana Editoriale S.p.A., 2020), 169–71.

the 'digital end of history'—the depth of historical time is compressed into a perpetual 'now', where digital data can be accessed at any moment. This results in a flattened, non-chronological view of history, where digitized monuments can be retrieved and reviewed in reverse, existing outside time constraints. Although time affects the physical hardware that stores digitized monuments, it does not alter the monuments when displayed on the interface. Composed of mere digital data—zeros and ones—these monuments exist solely in the digital space, independent of material decay and the passage of time. This novel process in preservation can be interpreted as an experimental method contrasting traditional approaches in the field. Experimental preservationists often work with unintentional monuments, a concept first introduced by Riegl. They engage with found objects, more accurately 'quasi-objects', while giving them new meanings. In doing so, they reinterpret them while placing them in a new context of today.

## Conclusion

The transition of Riegl's touchless approach to preservation bears the potential to evolve from a physical context into a digital one due to the inherently visionary and forward-thinking nature of Riegl's theoretical framework. Continuous digital documentation of a physical monument leads to the creation of a digital database over time. These digital records can exist beyond the monuments' lifespan as digital files, hence extending their existence and

availability through a digital medium. This database can be seen as a dematerialized structure that keeps the monuments alive in the form of two- or three-dimensional digital records.

As we look forward, emerging technologies such as generative AI can offer new possibilities for preserving architectural heritage in ways that Riegl could have scarcely imagined. Generative AI could help a digitally documented monument function as a spatial database in efficient and novel ways to predict and optimize its future use or fill in missing information. Thus, the database is not seen as a mere architectural representation of a monument in a digital space but rather as a tool for preserving monuments in the future. It combines collected data concerning the monument's physical changes that humans and nature have made to its form over time and the imagination of a machine to fill in the missing information or predict the monument's transformation in the years to come.

Using AI and machine learning for data sets is not necessarily a new development. It can now analyze large volumes of digital content and automatically generate metadata, which makes it easier to categorize, search, and retrieve information. This is especially useful for large archives where manual cataloging is impractical. Working with 3D datasets adds complexity and offers new solutions for the creation of spatial outputs, which will be helpful to various disciplines, such as architecture and preservation. This technique can be particularly

beneficial in reconstructing missing data or creating new data on decayed physical monuments. By interpolating collected data sets of digitally documented historical layers of monuments, machine learning can suggest a new scenario of their preservation within a digital environment. This characteristic of generative AI is also called 'autocomplete', commonly used in software such as ChatGPT, and can also be applied when working with digitized monuments. While the original (physical) monument is always missing something, the digitized monument can be completed to any of its previous states by generative AI tools. The process can also be seen as an imitation – the filling in of missing data, i.e. memory, by a machine instead of a human to produce a complete image of the past. This methodology aligns with those applied in history when restoring monuments by restorers such as Viollet-le-Duc or Schmidt, as opposed to Riegl's approach. Also, these tools might be able to predict a monument's further decay in the built environment and propose its preservation in order to extend its lifespan in a physical form. It is important to point out that preservation methodology utilizing generative AI is only emerging, and its effects have not yet been well documented. However, it is clear that this new approach might bring some innovation into the preservation field.

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## List of Figures:

Fig. 1.1  William Henry Fox Talbot. *Part of Queens College, Oxford*. Photograph, 1843. Public Domain. https://www.metmuseum.org/art/collection/search/289166

Fig. 1.2 Erich Andres. Berlin. *Gedächtnis-Kirche*. 1965/1975. Ruined tower next to the new tower. © Deutsche Fotothek / Andres, Erich. License: Free access - rights reserved. http://www.deutschefotothek.de/documents/obj/71560438

Fig. 1.3 Walter Möbius. *Dresden-Altstadt. Ruine der Frauenkirche. Ansicht von Westen*, 1946.09 © Deutsche Fotothek / Möbius, Walter. https://www.deutschefotothek.de/documents/obj/89009725

Fig. 1.4 View of the Dresden Frauenkirche showing old (blackened) and new (light-colored) stone, 2006. Public Domain. https://commons.wikimedia.org/wiki/File:FraunkircheSouth.jpg

Fig. 1.5 Siegfried Bregulla. *Frauenkirche*, 2007. Quartier I, Frauenkirche und Quartier III (Construction Site) © Bregulla, Siegfried. License: Free access - rights reserved. https://www.deutschefotothek.de/documents/obj/81741711

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# Unravelling the Invisible Spatial Logic: Spatial Production of the Clothing Wholesale Service Area in the Liuhua District in Guangzhou, China

## Abstract

This article focuses on an unplanned clothing wholesale district in Guangzhou City, China. Dramatic Chinese Economic Transition and the district's advantageous location next to the Guangzhou Railway Station have led to its commercial success. Smaller clusters of clothing wholesale buildings, clothes processing shops, shop design companies, tag shops, mannequin shops and logistics companies constitute this district. This research aims to understand how these smaller clusters choose their locations in the district without holistic urban planning in advance. By following the Actor-Network-Theory, this research regards spaces as actors among other human and non-human actors and adopts a bottom-up perspective to investigate the spatial structures of the district. Qualitative methods including observation, semi-structured interviews and mapping are used. This research has found that invisible spatial logics behind the physical structures have induced the formation of the district by influencing businesspeoples' location choices and their spatial appropriations. This research goes beyond the visible forms and shapes to investigate the urban dynamics and complexities. It offers new perspectives to understand the spatial structures of urban spaces from the perspectives of space end-users.

## Introduction and justification

The Liuhua Clothing Wholesale District was not planned by the Chinese authorities but was formed through the choices of businesspeople and it turned out to be a well-organised commercial district with multiple functions. All the functions in the district seem connected to each other and form networks to instruct the district's organization and everyday operations. Thus, this article aims to visualize hidden networks among various functions in order to understand the spatial logic of an unplanned commercial district. The visualization of hidden spatial logic will contribute to the understanding of the self-organized urban district and provide new insight to consider the commercial district design from spatial end-users' perspective.

Urban researchers attempt to understand the logic of spatial use by actively mapping how the hidden relations shape urban space (Smaniotto Costa et al. 2020; Buhr 2017; Özkul 2015). These studies inspire research to consider cities not as clusters of physical structures but as clusters of human activities (Boano and Martén 2017; Neal 2012). Cities contain various kinds of human actors and non-human actors which are visible such as trees, cars and people, and also invisible actors such as sound, light, memories and social relations. The actors and relations form networks which might be invisible but induce visible phenomena. 'Network' as a concept has long been adopted to understand spatial practices, urban development, self-organisation and social-spatial dynamics (Cano-Ciborro and

Medina, n.d.; Lee and Lee 2018; Rau and Schönherr 2014; Neal 2012). Responding to the call for understanding cities through the lens of networks, this research aims to explore the relations between hidden social networks with the spatial use of a clothing wholesale district in the south-China city of Guangzhou. As this research regards the reality as a state of affairs which is constructed by human and non-human actors (Latour 2005), it is assumed that behind the visible phenomena there are actor-network accounts that relate component elements and help us to understand the visible phenomena. The purpose of this research is to unravel the hidden logic that has produced the clothing wholesale service area in the Liuhua District.

Liuhua Clothing Wholesale District in Guangzhou was formed in the 1990s after the implementation of Reform and Opening Up policies which brought about fundamental changes to various aspects of the country. However, the Chinese Economic Transition is considered experimental (Schoon and Altrock 2014) because of the absence of an existing legal tradition and the difficulties of the state power to suddenly and effectively function in all the fields which result in informal phenomena to occur. Urban development is one such field; after the start of Chinese Economic Transition, incomplete urban governance induced spontaneous and informal urban developments which were tolerated at the beginning of the changing time. The Liuhua Clothing Wholesale District emerged during this period thanks to its advantageous location near the Guangzhou Railway

Station and the Canton Fair Exhibition Hall which attracted large numbers of businesspeople. As a result, many clothing wholesale traders have chosen to cluster in this area. It is convenient for customers from other cities to purchase clothes around the railway station and return home by train immediately after purchase. In addition, the nearby Canton Fair Exhibition Hall has attracted foreign customers further increasing the business opportunities. What makes the Liuhua District particularly interesting is that it was not holistically planned as a wholesale district by the authorities but was chosen and developed by wholesale traders themselves. As a result, the agencies of these wholesale traders who are the end-users of the space played an important role in shaping the district and keeping the wholesale district functioning every day.
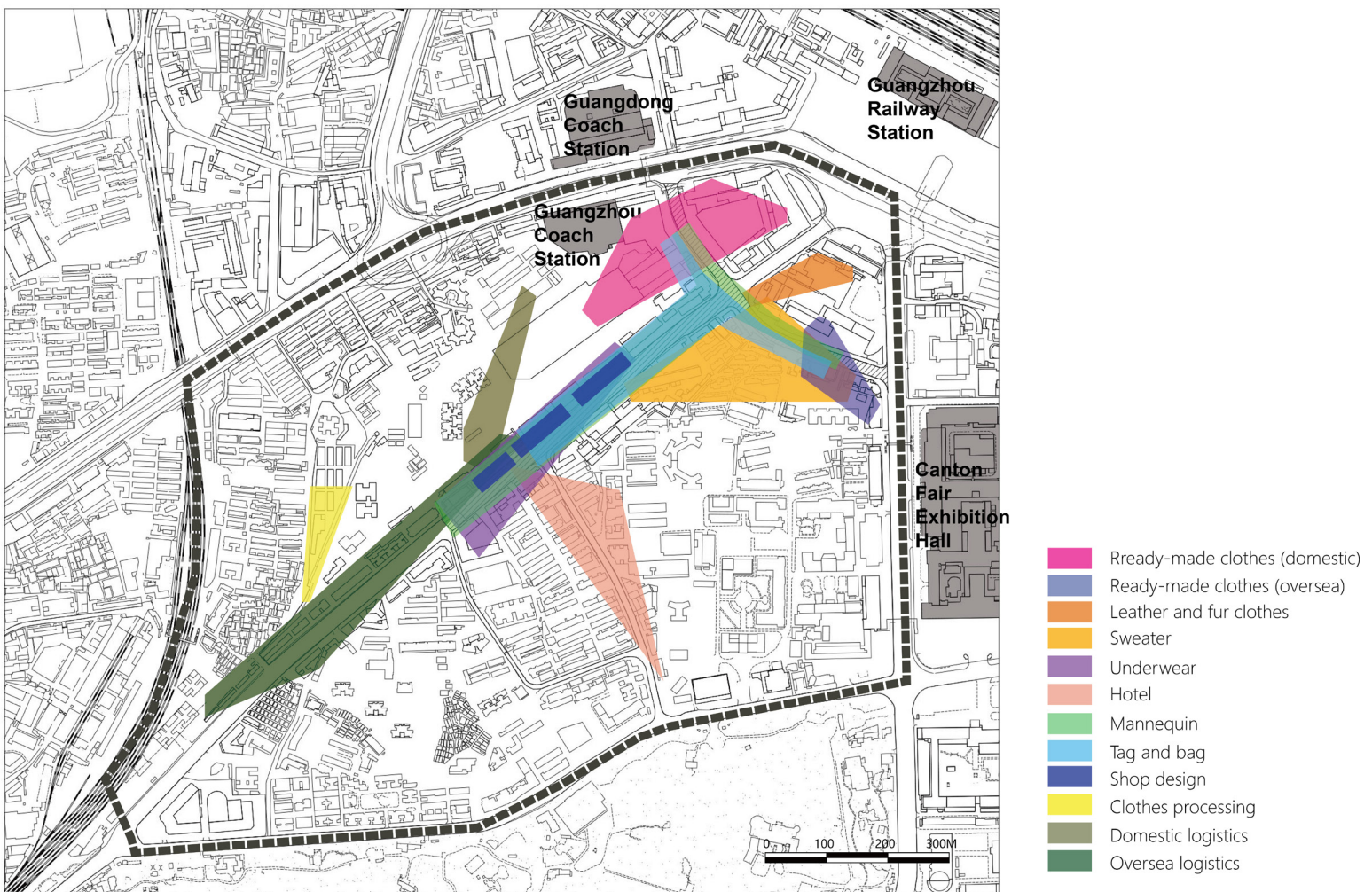


**Figure 1: The Liuhua District and business clusters (Source: drawn by author)**

Wholesale service refers to commercial activities that offer support, particularly for wholesale. In the Liuhua District (Figure 1), the wholesale service units include mannequin shops, tag and bag shops, shop design companies, clothes processing shops, domestic logistics companies, and overseas logistics companies. These service shops and companies are important components of clothes wholesale, as they provide various kinds of physical and social support for the wholesale process.

This article aims to understand this question: how did the clothing wholesale service commercial units choose their locations? The next section explains the research methods and theorisation to explain the chosen problem-solving process including data collection and analysis. The empirical result section is developed around four types of clothing wholesale service businesses to present the function of hidden spatial logic in spatial production. The article represents the role of actor networks in influencing the spatial use of the clothing wholesale service area. The discussion and conclusion section reviews the research findings and summarises the contributions and implications.

## Material and methods

The qualitative data were collected in 2020 from November to January and in 2021 from July to August during the Covid-19 pandemic. Ethnographic methods including observation, semi-

structured interviews and mapping are adopted. Observation was used to gain initial impressions into people's activities and spatial appropriation in the Liuhua District, establish assumptions about the hidden reasons behind the phenomena and identify potential interviewees. Semi-structured interviews were used to understand people's usage of space, such as how people choose locations and how they appropriate space, and the underlying reasons behind their behaviours. This research recruited forty-three participants who worked in the clothing wholesale industry in the Liuhua District and were willing to talk about their everyday spatial practices and business experience. All the interviews were recorded with consent from interviewees and coded with the software Nvivo.

Mapping was adopted to visualise the hidden relations behind the observed phenomena to understand how space was produced. Two types of maps are employed in this research. The first type of mapping aimed to record reality in terms of what could be seen to represent the phenomena in the clothing wholesale district. The second type was used to represent the hidden networks behind the phenomena in the Liuhua District, and go beyond the physical to offer explanations (Corner 1999). These maps are formed by actors represented as dots and relations represented as lines. By linking the actors together through their relations, these maps topologically present a reality of these actors.

According to Lefebvre (1991), space is a social product. Therefore, space is not a

static field, but is produced through social relationships. Although physical structures of space can be observed, social relationships seem difficult to observe directly. To investigate the mechanism of spatial production, Actor-Network-Theory (ANT) offers a tool to visualize the social relations that produce space. ANT suggests that material objects and people are formed through relations to other entities (Law 2009; Vicsek, Király, and Kónya 2016; Ritzer 2010), and ANT regards actors not as stable elements but as relational and dynamic elements (Hillier 2021). Furthermore, ANT is anti-foundational (Vicsek, Király, and Kónya 2016; Ritzer 2010): there is no foundational structure underlying everything. Therefore, ANT opposes the idea that there are origins that can explain everything and be discovered by analysts. ANT ontology is a flat ontology which has been formulated by G. Deleuze and Guattari (1987); they believe that an assemblage does not have a base nor structure, but all the elements are flattened onto the same plane. Entities are not defined by their essences, but by what they can do (Deleuze 2005; Hillier 2021). Additionally, the flat ontology ignores the prior differences between human and non-human actors because it regards actors not as stable elements but as relational and dynamic elements (Hillier 2021). Consequently, ANT addresses relations rather than actors themselves; all the actors are defined through relations so they can all be included in the same discussion, regardless of whether they are human or non-human actors.

Traditionally, ANT has been used to examine social relations of actors; spaces are regarded as the results of the social relations (Sharif 2021; Kim 2019). The shortcoming of the traditional application is that spaces are regarded as passive outcomes and spaces are not actually put in the centre of discussion on spatial production. This research takes spaces as active actors among other human and non-human actors to see the dynamic interactions of spaces with other actors and to analyse urban space appropriation. This is in line with the argument that space is a social product (Lefebvre 1991; Hansmann 2021).

## Results

### (a) Mannequin shop and tag shop

Mannequin shops and tag shops are usually located nearer to clothing wholesale shops in comparison to other types of wholesale services. They cluster at the intersection of the roads and are located at the entrances of the underground shopping street (Figure 2). Both the road intersections and entrances of the underground shopping street are places that are easy to catch customers' attention, which indicates that the business of mannequin shops (Figure 3) and tag shops (Figure 4) heavily depend on customers in need of mannequins and tags.

Mannequin shops and tag shops tend to have two types of customers: clothes wholesale shop owners and clothes wholesale customers (Figure 5). However, as purchasing mannequins and tags is

usually not the most important purpose of customers who come to the Liuhua District, the number of customers attracted merely by mannequin shops and tag shops is limited. As a result, these two shop types are located around clothes wholesale shops in order to increase their chance to approach more customers. According to sellers in mannequin shops, they usually locate their shops near clothes wholesale buildings where they can attract customers who spontaneously come into the shops. To draw customers' attention to their products, they arrange the mannequins outside the shop's entrance and dedicate one room inside the shop as a small exhibition hall. In comparison, tag shops also make considerable efforts to attract customers, such as presenting their products outside the door. However, they sometimes tend to adopt a more active approach where the sellers go to clothes wholesale buildings to advertise their products and network with clothes wholesale shop owners. Therefore, if mannequin shops and tag shops are located too far from clothes wholesale shops, it becomes difficult for them to attract customers.

Considering their heavy reliance on clothes wholesale shops, the proximity to clothes wholesale shops is the first thing that mannequin shops and tag shops take into account when choosing their locations. The network diagram below (Figure 5) shows the relationships: mannequin shops and tag shops need customers including clothes wholesale shop owners and customers who are brought by clothes wholesale shops.
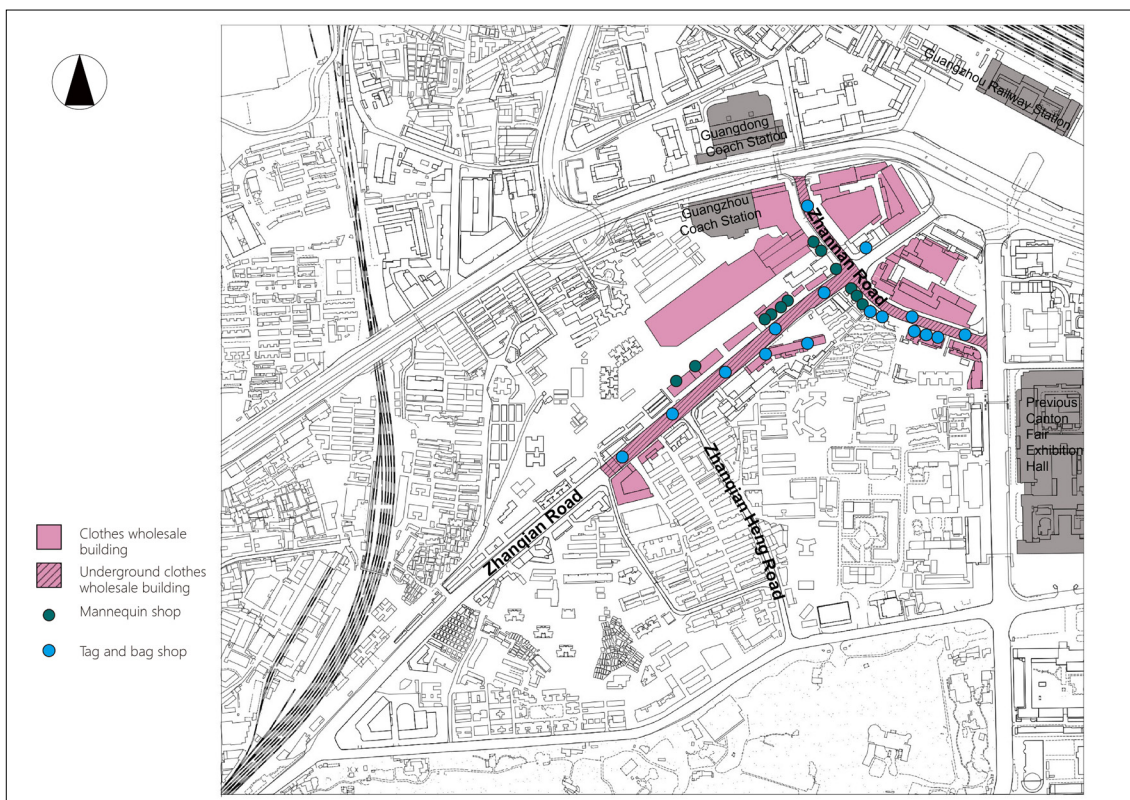


Figure 2: Locations of mannequin shops and tag and bag shops (Source: drawn by author)

**Figure 3: Mannequin shop (Source: photo taken by author)**



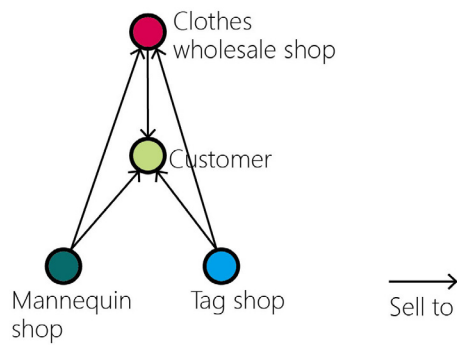**Figure 4: Tag and bag shop (Source: photo taken by author)**



**Figure 5: The actor network of mannequin shops and tag shops (Source: drawn by author)**

## (b) Shop design company

Shop design companies are typically located along the roadsides (Figure 6). They offer design service to clothes wholesale shops. However, not all wholesale shops would consider hiring a designer, as the most important thing to them is having sufficient space to accommodate more products. Some shop owners may choose to decorate their shops themselves in order to reduce the cost and invest in more products instead. As a result, there are only a few shop design companies in Liuhua District. Despite this, shop design is an important aspect for shop owners, as it determines the shop's style. This not only presents the shop owner's appreciation of beauty, more importantly, the shop's style determines if it can attract the correct group of customers who will buy the products inside. Thus, considering the importance of shop design, shop owners tend to choose shop designers introduced by their friends. Trust is more important than the location of the shop design companies to shop owners. According to a shop owner:

> The shop design company of my shop was introduced by a friend. His company was not located in the Liuhua District at that time. After the design of my shop, he moved his company into the district. Many shop owners didn't design their shops, but when they found my shop had become more attractive with the design, they employed the same design company. In this way, the shop design company receives more and more orders." (Shop owner A, personal interview with the author in Guangzhou, January 3, 2021)

Thus, trust from shop owners is the most important factor for the business of shop design companies. Without the interpersonal connections, even nearby shop design companies can be ignored by shop owners. One shop design company moved from the main road to a small path where the rent was lower at a much less noticeable location. A designer in the company explained that the location change was because they found it unnecessary to locate the company on the main road as the wholesale shop owners usually found them through introductions by friends rather than noticing their company on the road. Also, they tried to reduce their costs by paying lower rent by changing the location during the Covid-19 pandemic. Thereby in the actor network, the shop owner is a necessary path from a shop design company to a clothes wholesale shop (Figure 7). With trust from the shop owners, even a shop design company outside the Liuhua District, rather than the ones inside the district, can be chosen. It can be observed that shop design companies are not located as close to wholesale shops as mannequin shops and tag shops.
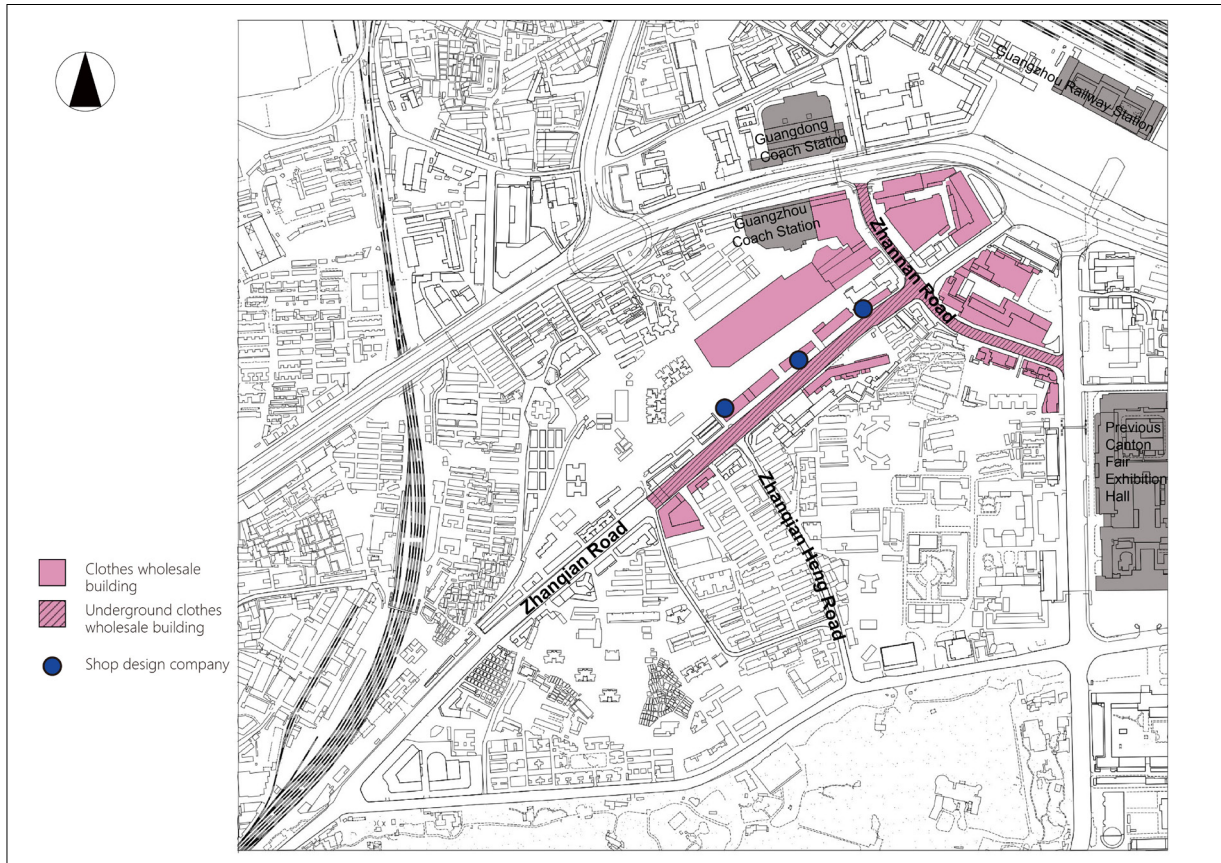
**Figure 6: Locations of shop design companies (Source: drawn by author)**



**Figure 7: The actor network of shop design companies (Source: drawn by author)**

## (c) Clothes processing shop

Clothes processing shops are located relatively far from the wholesale buildings (Figure 8 and 9), providing services such as altering clothes and installing tags, zips and buttons. According to a processing shop owner, their customers are usually businesspeople from Russia and Korea who require the installation and alteration of tags. As clothes processing services cannot make a high profit, such shops cannot afford the high-rent space near the wholesale buildings. Moreover, the locations of processing shops are flexible. As the customers are usually acquaintances, the shops don't need to be near the wholesale buildings to attract customers. The processing shops do not need storage space because they usually store the products in the working places and the clothes that need to be processed are usually delivered by delivery workers hired by wholesale shop owners (Figure 10), so the processing shops do not need to be around the wholesale shops. Thus, with these conditions of flexibility and low profit, processing shops tend to choose places far from the wholesale buildings with low rent. Therefore, the location choices of processing shops are based on considerations including rent, attraction to customers, and connection to customers.
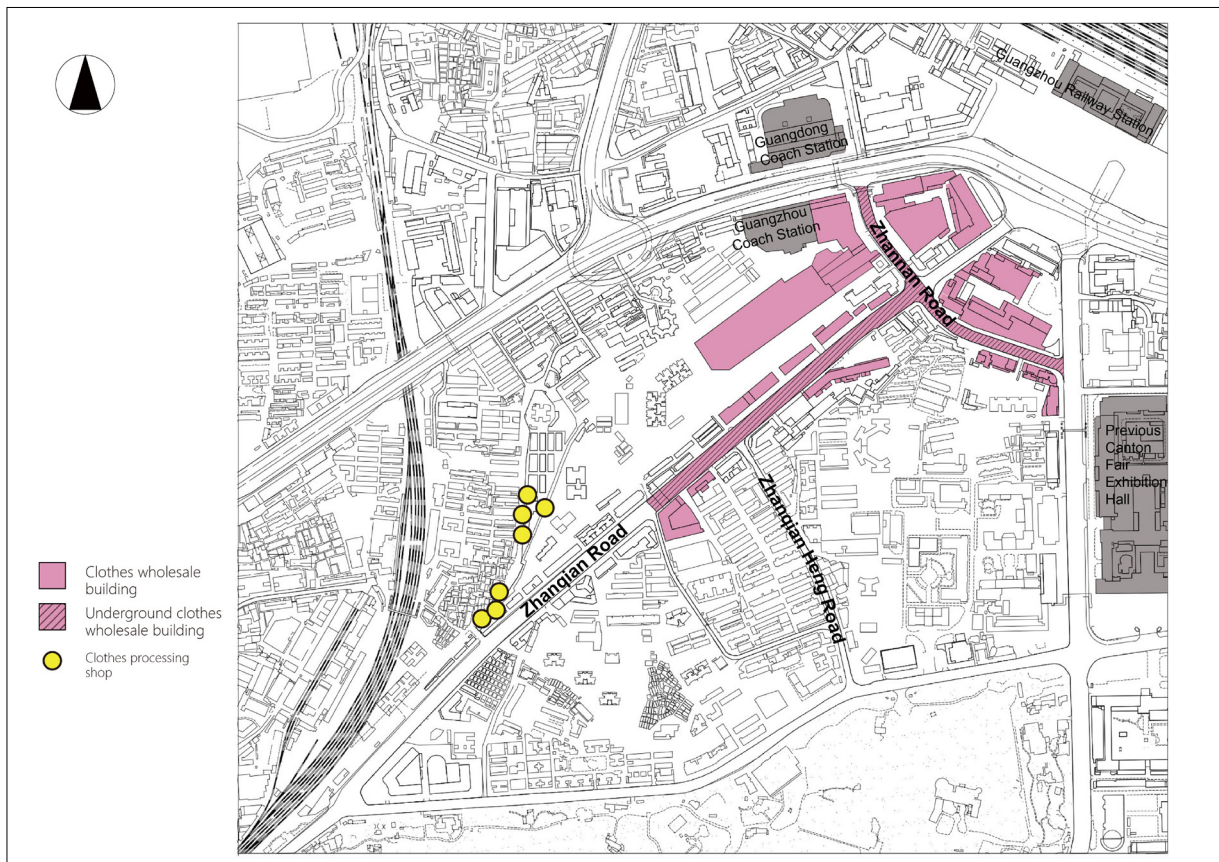


**Figure 8: Locations of clothes processing shops (Source: drawn by author)**

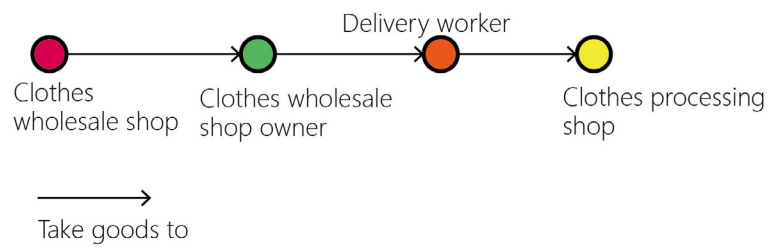**Figure 9: Clothes processing shops in the Liuhua District (Source: photo taken by author)**



**Figure 10: The actor network of clothes processing shops (Source: drawn by author)**

## (d) Logistics company

Similarly, logistics companies are located relatively far from clothes wholesale buildings (Figure 11). However, this long distance does not influence the business of logistics companies (Figure 12 and 13) because these companies hire delivery workers to move goods to and from every single clothes wholesale shop in the district. They are located far from clothes wholesale buildings because of the low rent and large space for parking trucks.

Also, the business of logistics companies is not based on attraction, which leads to a great deal of freedom in the choice of location.

Delivery workers are essential to keep the district connected to a broader national and global network and provide the important materials for the operation of the clothes wholesale system. Wholesale shops and logistics companies are

connected by the product flows which are enabled by delivery workers known as 'people as infrastructure' (Simone 2004). This is a concept developed from Simone's (2004) observation in Johannesburg: the connected informal activities of steers, hawkers, drivers and baggage loaders around a transport depot functioned as infrastructure to provide services for customers and support the depot area's daily operation. In the Liuhua district, the support of delivery workers lifts the spatial restriction between the logistics companies and the wholesale shops. By drawing networks of the operation of logistics companies, it can be seen that delivery workers are central in the 'goods transportation network' (Figure 14) as they have the most connections to other actors. It seems delivery workers are more important than can sometimes be imagined, since without them, the flow of goods would immediately stop and, consequently, the clothes wholesale system would cease operation.
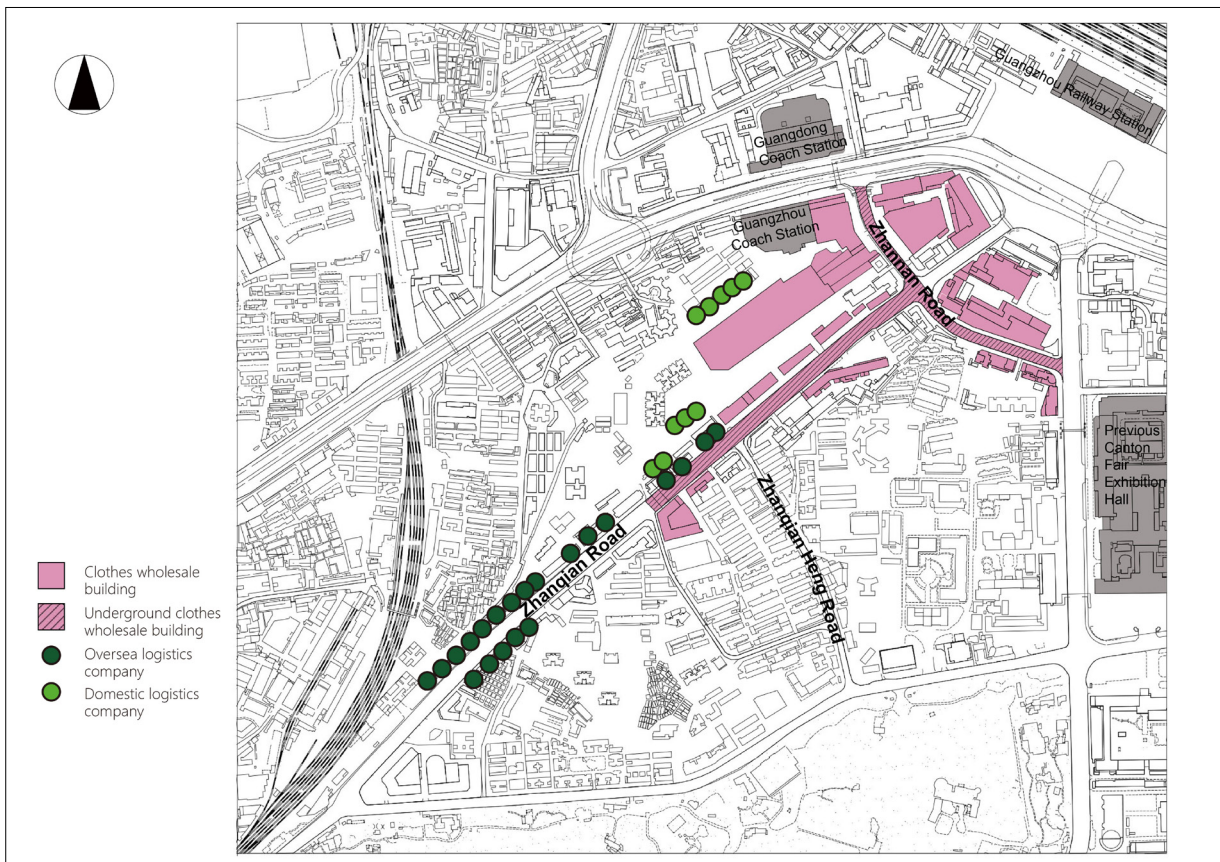


**Figure 11: Locations of logistics companies (Source: drawn by author)**

**Figure 12: Domestic logistics companies (Source: photo taken by author)**





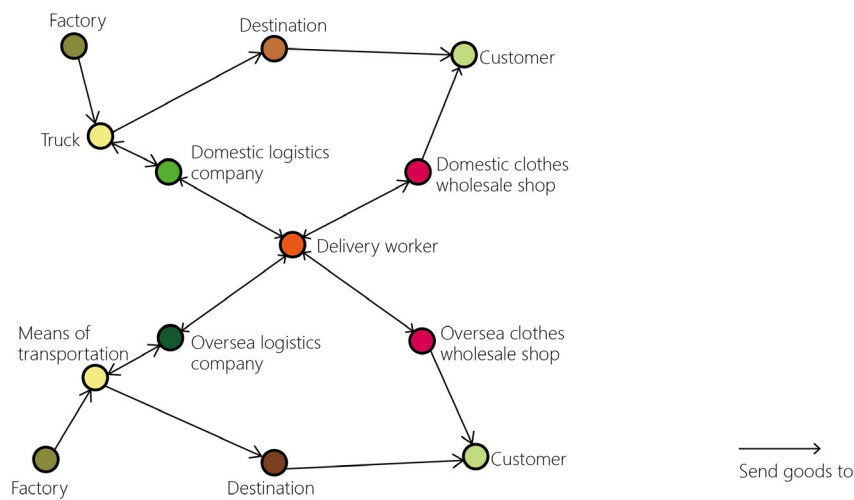**Figure 13: Overseas logistics companies (Source: photo taken by author)**

**Figure 14: The actor network of logistics companies
(Source: drawn by author)**

Both domestic and overseas logistics companies cluster, though in different places (Figure 11). Overseas logistics companies tend to cluster along the road with workers packing goods and trucks loading and unloading goods on the pavement (Figure 13). Conversely, domestic logistics companies tend to cluster along internal roads behind residential buildings that are accessed through narrow passages. (Figure 12). Compared to overseas logistics clusters, domestic logistics clusters are less obvious. According to an interview with a delivery worker (Delivery worker A, personal interview with the author in Guangzhou, January 22, 2021), the overseas logistics companies are located in obvious places to make it easier for non-Chinese nationals who might not speak Chinese to find them as it requires more efforts to access less obvious places. Spaces are actors and the capacity of spaces to attract customers is not only determined by their locations but can be increased through adding information to the spaces, such as advertisements.

Another reason for the location of the logistics companies is the previous existence of a logistics company Bo Ling Dun. It was the first logistics company previously located in the same place as the current logistics company cluster. Many logistics company staff still remember it. Although the Bo Ling Dun company no longer exists in the district anymore, its influence continues through the current logistics company clusters in operation every day. Mowla (2004) points out that memory functions in creating the sense of a place. In the case of Bo Ling Dun, memory not only influences the sense of a place, but also plays an important role in shaping the space and function as the vertical linkage from the past to the present. The memory of Bo Ling Dun provides a 'mode' that indicates that the place was chosen for doing logistics business. The memory and traces left by Bo Ling Dun are involved in the characterisation of the space and produce a space similar to the original company.
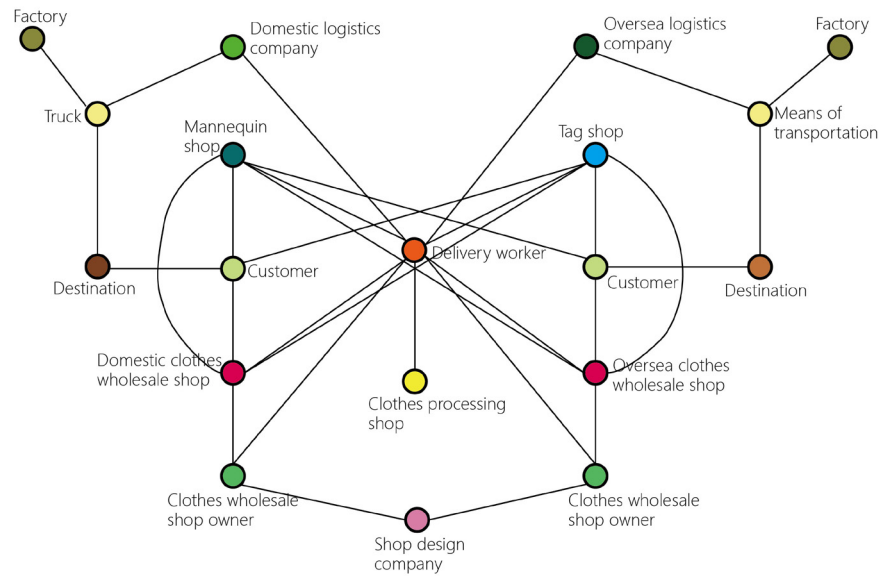
141

**Figure 15: The actor network of various types of businesses in the Liuhua District (Source: drawn by author)**

By analysing the relationship among various types of businesses in the Liuhua District (Figure 15), the hidden logic of the organization of the unplanned wholesale district can be understood. Although some actors seem unrelated to each other from direct observation, the invisible social relations among them might impact the location choices and performance of the actors from a distance (Murdoch 1998). According to Figure 15, the actor delivery worker presents many connections. It indicates the important role of delivery workers in the network: they provide essential connections among businesses and hence function as a central actor in the daily operation of the Liuhua District. Based on the network typology provided by ANT, Murdoch (1998) suggests that spaces are socio-material relations embedded in orders,

which summarizes the characteristics of spaces in the Liuhua District: every type of business unit is connected and supported by multiple relations. The Liuhua District is not an isolated entity but is related to actors outside the district, such as goods transport destinations and factories in other cities.

## Discussion and conclusion

Focusing on the location choices of clothing wholesale service units in the Liuhua District in Guangzhou, this research has used ethnographic methods to explore how the invisible social networks of four types of clothing wholesale service units influenced their location choices. Through imagining urban space as networks, this research has found that wholesale traders choose locations that enable the everyday function of the clothing wholesale service units. This research offers a concrete example to explain how the hidden spatial logic constructs space. In addition, it provides new insights to understand how self-organised areas are shaped through individual end-users' considerations.

In the context of dramatic Chinese urban transformations, insufficient urban planning left gaps in space regulation and design (Yeh 2004). This phenomenon offers an opportunity to observe and understand the needs and spatial use of end-users who are wholesale traders. For wholesale clothing service units, the most important consideration for location choice is to satisfy their everyday function. This research has found that the ways wholesale service units access customers and the daily practices of the businesses are crucial for shops when choosing locations.

According to Neal (2012), the network concept used to understand urban phenomena can be more advantageous than traditional ways to see cities through attributes, such as cities' areas, populations and people's opinions. His reason is that the network approach avoids the prior classification of the data used to examine urban phenomena and actors can be connected through networks. The findings are in accordance with his argument. Through Actor Network-Theory (Latour 2005), this research did not categorise the ethnographic data according to traditional methods, but included all the relations of human and non-human actors into networks to understand the hidden logic of the spatial organization. The flexibility brought by Actor Network-Theory enables the possibility for us to visualise unexpected relations that have influenced the urban space. For example, it might be assumed that the location choices of wholesale traders are mainly based on the rent of shops. However, with the flexibility to include any relevant actors into networks, this research has found that business patterns and personal relations actually play an important role in shaping the wholesale area.

The strength of ANT is to provide explanations from within and to understand phenomena from the bottom-up (Cvetinovic, Nedovic-Budic, and Bolay 2017). This research provides an example to understand an urban assemblage through its inner structures. The unplanned but well-organized commercial district presents the real everyday needs of space end-users: businesspeople attempt to find the places that can enable their businesses but with the lowest cost. According to Harvey (1996), space in nature is a structure of relations; space is defined through 'the mutual relatedness and connectedness of its parts'. The research findings are in line

143

with Harvey's argument, but what this research adds on to the argument is that space is not only defined by its internal relations, but also defined by external relations. This research inspires us to see space and spatial design from a relational perspective: a good spatial design is one that can fit the necessary relations.

Empirically, these research findings also contribute to the practices of urban and architectural design. The networks can be drawn based on qualitative and quantitative data to understand the potential spatial organisation before the actual design of space. In this case, spaces are not treated merely as physical structures for aesthetics but are actors with prior detailed social-relation design.

Although adopting the network concept in urban space research is a critical first step to unravel how social relations affects urban spatial use, additional work such as comparison between places of the same type needs to be done. Other social relations might be found to be important to other types of urban spaces. This research opens up more discussions to go beyond the visible and explore how spaces are shaped through dynamic, subtle and invisible relations of human and non-human actors.

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