Research paper

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Integration of Local Wisdom Values into the Adaptive Reuse Strategy in the Jalan Roda Area of Manado

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Abstract

Jalan Roda (Jarod) in Manado is a historic urban area characterized by strong architectural, social, economic, and collective memory values. Changes in building functions and development pressures may gradually diminish its historical character and cultural identity. This study aims to formulate an adaptive reuse strategy that integrates local wisdom, particularly the Sitou Timou Tumou Tou philosophy, to maintain the identity of the area while responding to contemporary community needs. The study employed a qualitative descriptive-analytical approach using architectural ethnography through observation, interviews, architectural documentation, spatial mapping, and literature review. The analysis was conducted thematically, architecturally, spatially, and interpretatively to identify the relationships between cultural values, spatial characteristics, community activities, memory elements, and local economic activities. The findings indicate that the Sitou Timou Tumou Tou philosophy can be translated into three design principles: Inclusive & Connected, Memory & Identity, and Local Empowerment. The Inclusive & Connected principle is implemented through improved accessibility, pedestrian connectivity, communal nodes, and inclusive public spaces; Memory & Identity through the conservation of authentic elements, rehabilitation of deteriorated elements, and contextual functional adaptation; while Local Empowerment is achieved through improving the quality, flexibility, and supporting facilities of business spaces without displacing local economic actors. These findings demonstrate that adaptive reuse in Jalan Roda is not merely a strategy for the reuse of buildings, but also an approach to sustaining the area's social life, historical identity, and local economy. The proposed strategy provides a basis for developing a historic urban area that is adaptive, inclusive, and rooted in local cultural values.

Keywords: Adaptive reuse, historic urban area, Jalan Roda, local wisdom, Manado, Sitou Timou Tumou Tou

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Introduction

Historic areas are essential components of a city's identity because they preserve not only physical remnants of the past but also layers of history, social activities, cultural practices, economic development, and collective memories that have evolved over time. In the context of urban conservation, historic areas should not be understood merely as collections of old buildings but as systems shaped by the relationships among the built environment, open spaces, community activities, cultural values, and ongoing processes of change. Through its Recommendation on the Historic Urban Landscape, UNESCO emphasizes that urban heritage encompasses both tangible and intangible dimensions and should be managed by considering the relationships among physical form, spatial organization, sociocultural activities, economic processes, and community identity.

From an urban architectural perspective, historic buildings and spaces play an important role in establishing the continuity of a place's identity. Rossi (1982) views the city as an artifact formed through the accumulation of history and the persistence of urban elements that demonstrate resilience in the face of change. This perspective suggests that changes in a city's functions and physical form do not necessarily result in the loss of its identity, provided that historically significant elements and their connections to community life can be preserved and interpreted within their contexts. Meanwhile, Norberg-Schulz (1980), through the concept of genius loci, emphasizes the importance of a place's character, or spirit of place, which emerges from the relationships among the physical environment, human experience, and the meanings associated with a particular place.

Manado, the capital of North Sulawesi Province, contains several areas that represent the historical, social, cultural, and economic development of its communities. One such area is Jalan Roda, commonly known as Jarod, located along Walanda Maramis Street in Pinaesaan Village, Wenang District, near the Pasar 45 area, one of Manado's long-established commercial centers. Jalan Roda is known not only for its culinary businesses and coffee shops but also as a public space that forms an integral part of Manado's social life. According to research reports, the area's history is associated with traditional trade and transportation activities, when horse-drawn carts or wheeled carts were used to transport agricultural produce from inland areas to the city's commercial center. This historical development subsequently shaped the area's character as a place for transit, trade, residential use, and social interaction.

The changes in function that have occurred in Jalan Roda demonstrate the area's capacity to adapt to evolving community needs. Buildings and spaces previously used as warehouses, transit facilities, lodging establishments, and residences have gradually developed into culinary venues, coffee shops, gathering places, and spaces for social interaction.

This transformation represents a key characteristic of the adaptive reuse approach, which involves repurposing existing buildings or spaces by adjusting their functions to accommodate new needs while continuing to consider the values, character, and context of the buildings and the surrounding area. Plevoets and Van Cleempoel (2019) position adaptive reuse as part of the development of the built heritage conservation discipline, enabling historic buildings to remain in use and relevant to contemporary needs. Douglas (2006) likewise conceptualizes building adaptation as a process of modifying existing structures to accommodate new uses and changing user requirements.

Nevertheless, adaptive reuse in historic areas should not focus exclusively on the physical sustainability of buildings. Functional changes and physical interventions that disregard historical values, identity, and social life may disrupt the relationship between communities and the places they inhabit. Bullen and Love (2010) emphasize the importance of critically examining adaptive reuse in the context of heritage conservation so that adaptation extends beyond the mere repurposing of buildings and continues to account for the values that make a building or area significant. Mısırlısoy and Günçe (2016) also stress the need for a holistic approach to determining adaptation strategies for historic buildings, taking into consideration the buildings themselves, their functions, their contexts, and sustainability values.

In Jalan Roda, these physical dimensions coexist with enduring social and cultural values. Activities known locally as bacirita (storytelling and conversation), kongko-kongko (casual socializing), and bakusedu (informal interaction and conversation) shape the character of the area as an open and inclusive public space. The area serves as a meeting place for diverse social groups, including university students, artists, journalists, business owners, and the general public. These patterns of interaction demonstrate that Jalan Roda's significance lies not only in its buildings and architectural elements but also in the activities and social relationships that take place within it. Hasrin, Umaternate, and Sidik (2020) similarly identify Jalan Roda as a culinary tourism destination and a space for Manado residents' leisure activities, while Ginano, Kusen, and Marawa (2018) document life in Jalan Roda as part of the social dynamics of Manado's community.

These conditions are closely connected to the local philosophy of Sitou Timou Tumou Tou, which conceptually positions human beings within a network of social relationships characterized by mutual support and empowerment. Pangalila (2024) examines the meaning of Sitou Timou Tumou Tou as a model of social harmony in North Sulawesi. In this study, the philosophy serves as a value-based foundation for understanding the relationships among people, space, culture, and the sustainability of the area. These values are subsequently translated into three principal orientations: Egalitarian Space, Mnemonic Architecture, and Local Economic Empowerment.

Methods

This study employed a qualitative research design with a descriptive-analytical approach using architectural ethnography. This approach was adopted to understand the relationships among the physical characteristics of spaces, social activities, user behavior, historical values, collective memory, and local wisdom values that have developed in the Jalan Roda (Jarod) area of Manado.

The qualitative approach was selected because the research object concerns not only the physical conditions of buildings but also the meanings, experiences, perceptions, and social practices of the community within the area. The study sought to capture the area's spirit of place, which emerges from the relationships among people, space, activities, history, and cultural identity. This approach aligns with the research proposal, which positions Jalan Roda as a historic urban space characterized by strong social and mnemonic values.

Architectural ethnography was employed to examine how the community uses and interprets space in everyday life. Observations focused not only on building forms but also on movement patterns, social interactions, the use of communal spaces, commercial activities, relationships among buildings, and the activities that contribute to the area's identity.

Conceptually, the study translated the Sitou Timou Tumou Tou philosophy into three principal dimensions that served as the focus of the architectural analysis:

1. Egalitarian Space (Social Connectivity): The capacity of space to foster open, inclusive, and accessible social interactions among diverse groups within the community.
2. Mnemonic Architecture: The capacity of architectural elements and spaces within the area to preserve historical traces, identity, and the community's collective memory.
3. Local Economic Empowerment: The capacity of adaptive reuse strategies to improve spatial quality and support local economic activities without displacing existing economic actors or eroding the economic character that has developed within the area.

These three dimensions were subsequently used as the foundation for formulating spatial and architectural parameters for the adaptive reuse strategy.
Accordingly, the research approach can be represented as follows:

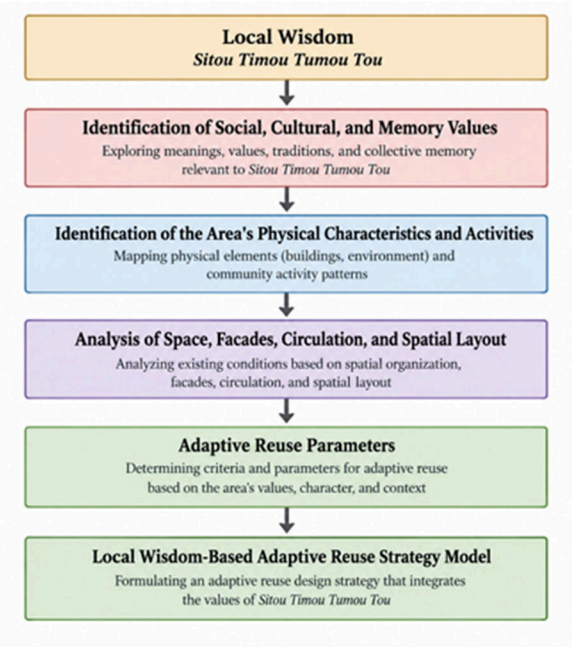


Figure 1
Research approach framework

Research location and units of observation

The study was conducted in the Jalan Roda (Jarod) area of Manado, North Sulawesi Province, along the Walanda Maramis Street corridor near the Pasar 45 area. Jalan Roda was selected as the research site because it is a historic urban space characterized by strong social, cultural, architectural, and mnemonic values. The area has developed into a setting for commercial activities, culinary businesses, coffee shops, social interaction, and communal activities, demonstrating the close relationship between changes in building functions and the continuity of community life.

The research area was not treated as a collection of independent buildings but as a spatial system comprising buildings, open spaces, circulation routes, communal spaces, economic activities, and the social relationships occurring within them. The units of observation included building and architectural elements, spatial elements at the area scale, user activities and behavior, sociocultural aspects, and mnemonic elements. This approach to defining the units of observation was used to establish connections between physical characteristics and the ways in which the community uses and interprets space.

From an architectural perspective, the observed features included facades, openings, proportions, materials, ornamentation, building conditions, functional changes, relationships between interior and exterior spaces, and circulation systems. At the area scale, observations focused on corridors, open spaces, communal spaces, activity nodes, pedestrian routes, and relationships among buildings. Meanwhile, the and manifestations of the Sitou Timou Tumou Tou philosophy in the everyday life of the area.

Results and discussion

The relationship between local wisdom values in Jalan Roda, particularly the Sitou Timou Tumou Tou philosophy, and the adaptive reuse strategy is expressed through three principal directions. The value of "enlivening others" is translated into improved accessibility, connectivity, and communal spaces that support social interaction under the Inclusive & Connected principle. The value of "respecting people and their history" is implemented through the conservation, rehabilitation, and adaptation of building elements that possess historical significance and mnemonic value under the Memory & Identity principle. Meanwhile, the value of "empowering community life" is implemented by improving the quality, flexibility, and facilities of commercial spaces without displacing local economic actors under the Local Empowerment principle. These three values form the foundation for developing an adaptive reuse strategy that integrates the social, historical, and economic dimensions of the Jalan Roda area.

Table 1
Analytical Matrix of *Sitou Timou Tumou Tou* values

Timou Tou Values	Manifestations in the Roda Street Area	Architectural/Spatial Parameters	Adaptive Reuse Strategies	Design Principles
Bringing People to Life	Intergenerational interaction, culinary activities, and gathering spaces	Accessibility, permeability, connectivity, and communal spaces	Opening up and connecting public spaces to strengthen social interaction and community activities	***Inclusive & Connected***
Respecting Humanity and Its History	Historic buildings, façades, traditional ornaments, and heritage	Authenticity, integrity, visual character, and monumental elements	Conservation, rehabilitation, and adaptive reuse tailored to preserve the characteristics and historical value of the site	***Memory & Identity***
Empowering Community Life	Vendors, micro, small, and medium enterprises (MSMEs), and local culinary businesses	Spatial suitability, flexibility, sanitation, ventilation, and supporting infrastructure	Improving the quality of commercial spaces without compromising the existence and local economic characteristics of the area	***Local Empowerment***

Identification of the inclusive & connected design principle

Based on the identification of local wisdom values embodied in Sitou Timou Tumou Tou and the mapping of existing conditions in the Jalan Roda area, the Inclusive & Connected design principle was adopted as a primary strategy for creating an area that connects people, activities, spaces, and the surrounding environment more inclusively. This principle translates the value of "enlivening others" into the spatial context through the creation of public spaces that are open, accessible, interconnected, and capable of encouraging social interaction. The mapping indicates that communal activities in Jalan Roda are not distributed evenly throughout the area but instead form activity nodes with varying levels of intensity. Red-colored areas indicate high-density activity zones, particularly in the central section and around several major activity nodes. These locations experience high levels of interaction and communal activity, including culinary activities, social gatherings, and local economic activities. Meanwhile, orange-colored areas indicate moderately dense zones that function as transitional spaces between activity centers and areas with lower levels of intensity. Green-colored areas represent less densely used spaces that have the potential to be developed as open spaces, transitional spaces, or areas supporting communal activities.

Mapping communal activity nodes

The mapping of communal activity nodes reveals several activity concentrations along the main corridor. These concentrations indicate a relationship between commercial and culinary functions and the formation of social spaces within the community. High-density activity points can therefore be understood as social nodes, or spaces with a particularly strong capacity to bring together different groups of users. Within the adaptive reuse strategy, these nodes should not merely be preserved but strengthened through spatial arrangements that promote greater openness and connectivity. The mapping also identifies three potential entrance points that could provide access to the area from different directions. These multiple access points provide a foundation for developing a spatial system that is not enclosed or dependent on a single primary entrance. Consequently, users can enter the area from different directions and connect directly with the network of activities within it.



Figure 2
Communal space nodes in the Jalan Roda Area, Manado

Mapping pedestrian routes and open spaces

The second mapping exercise identifies pedestrian routes that follow the area's existing spatial structure and connect several entrances to the principal activity areas. These routes form an elongated circulation pattern with branches extending through the central part of the area.

Under the Inclusive & Connected principle, pedestrian routes are understood not merely as movement corridors but as social infrastructure that enables encounters, interactions, and informal activities. Accordingly, pedestrian routes should be directly connected to communal spaces, culinary areas, and open spaces. The areas designated for dining tables indicate activities with the potential to strengthen the relationship between pedestrian routes and communal spaces. These activities can create active edges, referring to spatial boundaries that remain active through their direct relationship with community activities. Therefore, the resulting strategy goes beyond simply providing walkways. It seeks to establish a pedestrian network that connects entrances, economic functions, communal nodes, and open spaces.

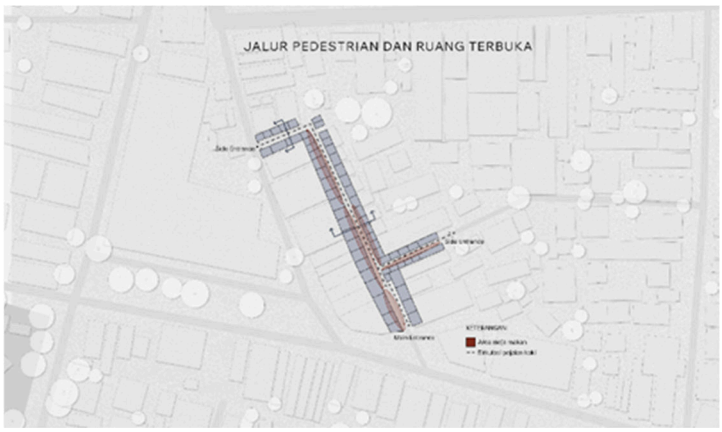


Figure 3
Pedestrian circulation routes and open spaces

Identification of the memory & identity design principle

Based on the mapping of heritage building clusters, documentation of existing conditions, and the analytical matrix of Sitou Timou Tumou Tou values, the Memory & Identity design principle is grounded in the value of "respecting people and their history." These principal positions older buildings, architectural elements, visual characteristics, and the memories associated with the Jalan Roda area as important components that should be preserved and reinterpreted through adaptive reuse strategies. In the context of Jalan Roda, the area's identity is shaped not only by the age of its buildings but also by its historical layers, economic activities, spatial uses, and the experiences of the community that have continued over time. Consequently, the Memory & Identity approach does not seek to restore the entire area completely to its historical condition. Instead, it aims to preserve elements with mnemonic value while introducing new capabilities that enable buildings to remain relevant to contemporary community needs.

Mapping heritage building clusters

The mapping identifies groups of buildings classified according to their conditions and historical characteristics: older buildings, infill buildings, and new buildings. This classification is important for determining the appropriate level of adaptive reuse intervention for each building. Older buildings are the principal elements shaping the area's identity. Their visual characteristics and materials represent the historical layers of Jalan Roda. Accordingly, these buildings are designated for retention and conservation, particularly those components that possess strong architectural character, such as facades, openings, proportions, ornamentation, and material elements.

Infill buildings occupy an intermediate position between older and newer buildings. They serve as connecting elements between the area's historical character and its evolving development needs. Interventions in infill buildings may involve rehabilitation and adaptation while maintaining compatibility in scale, facade rhythm, materials, and visual relationships with heritage buildings. New buildings allow greater flexibility in terms of

intervention. They do not necessarily need to imitate the forms of older buildings; however, they should be designed to respond sensitively to the area's character so that the historical identity of Jalan Roda remains legible.

Accordingly, the mapping establishes a graduated intervention approach:

- Older Buildings: Conservation
- Infill Buildings: Rehabilitation and Adaptation
- New Buildings: Contextual Integration

This approach allows the area to develop without losing the historical layers that have shaped its identity.



Figure 4
Building cluster locations in the Jalan Roda Area, Manado

Identification of the local empowerment design principle

Based on the mapping of economic activities, the condition of commercial spaces, architectural details, and user activities in the Jalan Roda area, the Local Empowerment design principle translates the value of “empowering community life” into the adaptive reuse concept. These principal positions local residents, vendors, micro, small, and medium-sized enterprises (MSMEs), and culinary business operators as central participants in the area's development process rather than merely as users of its spaces. In Jalan Roda, local economic activities have become an integral part of the area's identity. The presence of coffee shops, restaurants, street vendors, and shared dining spaces demonstrates that existing buildings and spaces serve both economic and social functions. Accordingly, the adaptive reuse strategy is directed toward improving the quality of commercial spaces without displacing local economic actors or undermining their established characteristics and activity patterns.

Mapping local economic activities

The documentation reveals active commercial and culinary activities taking place in existing buildings. These activities occur not only inside buildings but also extend into the areas immediately in front of buildings and along circulation corridors. This condition demonstrates a strong relationship among commercial spaces, dining areas, pedestrian routes, and communal spaces. People visit the area not only to purchase goods or enjoy meals but

also to sit, converse, meet others, and participate in social activities. Local economic activities can therefore be understood as a primary driving force behind the area's vitality. The more active the commercial spaces, the greater the opportunities for social interaction and public-space use.



Figure 5
Documentation of economic activity elements in the Jalan Roda Area, Manado

Commercial spaces as social spaces

The activity documentation demonstrates that commercial spaces in Jalan Roda differ in character from formal commercial environments. Coffee shops and eateries simultaneously function as economic spaces and social spaces. Dining areas provide the clearest example of this dual function. Tables and chairs are used not only by customers but also form informal gathering spaces that facilitate interaction among users. Drinking coffee, eating, conversing, and gathering have become integral parts of everyday life in the area. These conditions represent an important opportunity for implementing the Local Empowerment principle. Rather than separating economic activities from public spaces, the design strategy seeks to integrate the two. This concept can be formulated as follows: Commercial Space + Seating Area + Pedestrian/User Circulation + Communal Space = A Space That Supports Both Economic Activities and Social Interaction. This spatial configuration is intended to create an environment that accommodates commercial activities while simultaneously encouraging social interaction.

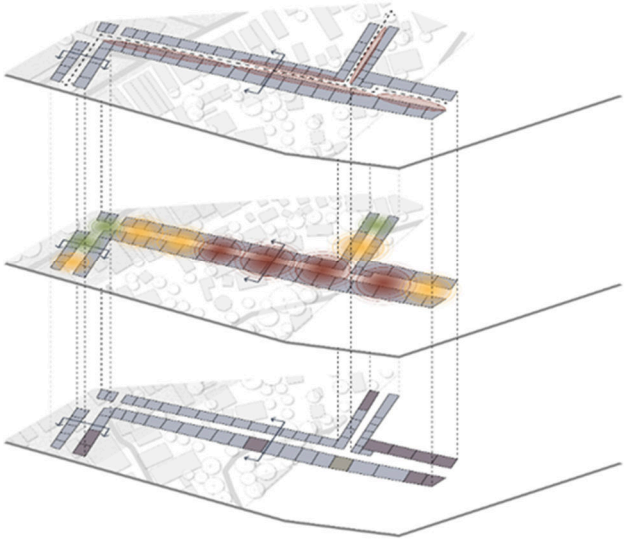


Figure 6
Overlay mapping of commercial spaces as social spaces

Mapping architectural details to support local activities

The mapping of architectural details indicates the need to improve the quality of commercial spaces through simple architectural elements that can directly enhance user comfort. In sections A–A and B–B, commercial spaces demonstrate direct relationships with circulation areas and seating areas. These conditions can be improved through several architectural and infrastructural elements, including roofs, openings, ventilation, seating areas, lighting, pedestrian routes, service spaces, and evenly distributed utility infrastructure. These improvements are important because local economic empowerment involves not only maintaining the presence of vendors but also ensuring that the spaces they occupy are suitable for sustaining their businesses.

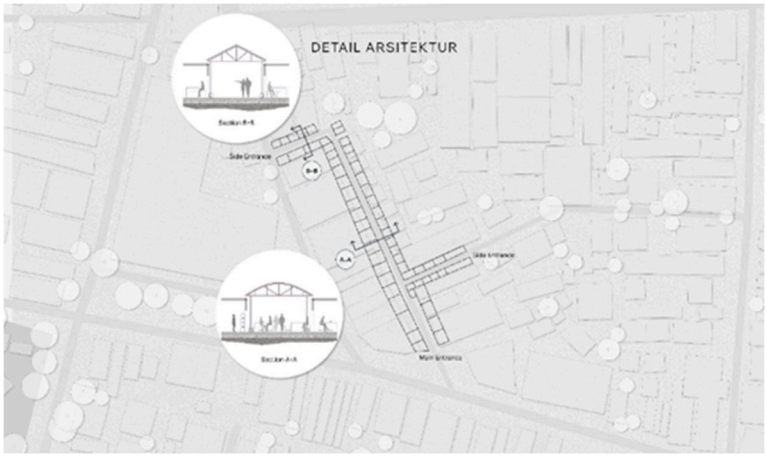


Figure 7
Infrastructure in the Jalan Roda Area, Manado

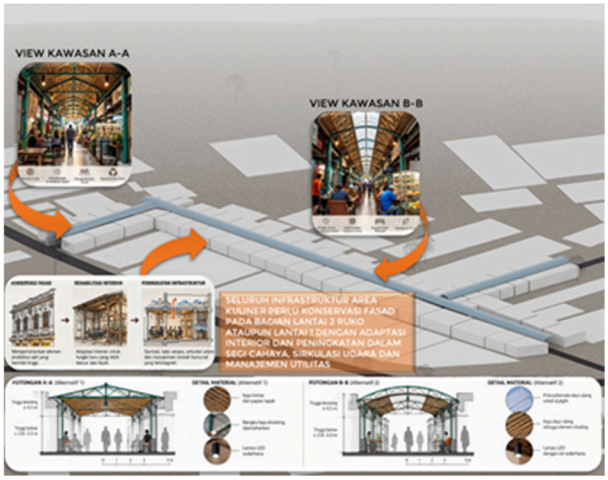


Figure 8
Recommended adaptive reuse strategy for the Jalan Roda Area, Manado

Conclusion

The adaptive reuse strategy for the Jalan Roda area can be understood as an effort to revitalize the area through adaptation while preserving its identity. Older buildings retain their historical legibility, public spaces become better connected, and local economic activities gain a more suitable environment in which to develop. These three strategies form an integrated approach to implementing the values of Sitou Timou Tumou Tou: creating architecture that enriches the lives of others, respects people and their history, and empowers community life. Adaptive reuse in Jalan Roda is not conceived as a process of replacing an old area with a new one but as a process of transformation that preserves the continuity of the area's life while improving its spatial quality. The intended outcome is an area that is better connected, possesses a strong identity, provides a comfortable environment for its users, and continues to give local communities the opportunity to remain the principal actors in shaping the area's everyday life.

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