

Article

Symbolic Meaning of Cultural Space in Nggela Indigenous Settlement: A Case Study from Flores Island, Indonesia

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Abstract - Cultural space refers to the entirety of cultural values and their concretization, encompassing user activities and the physical forms of settlements and architecture. This study aims to uncover the meaning of cultural space in the oldest indigenous settlement in Flores, East Nusa Tenggara: the Nggela indigenous settlement of the Lio ethnic group. This qualitative-inductive research began with data collection through field observation, interviews, and visual documentation. Analysis was conducted through in-depth description to identify the spatial elements and activities within the settlement and the traditional house (*Sa'o Nggua*). Based on this description, the underlying meanings of cultural space were interpreted. Findings show that the ceremonial activities are primarily centered on the center of customary settlement (*Puse Nua*), a sacred courtyard located at the heart of the village that serves as the ritual center (*Kanga*), and traditional houses (*Sa'o Nggua*). These elements serve as a medium through which elders communicate with the Creator, the ancestors, and nature. The meaning of this triadic connection, human, divine, and natural world, is what compels the community to preserve the spatial configuration and its embedded values, despite the physical degradation or material transformations due to time and natural disasters.

Keywords - Ceremonial activities, Culture, Lio ethnic group, Meaning, Traditional architecture.

1. Introduction

Traditional architecture is a cultural product that serves not only as a place of dwelling but also as a symbol and manifestation of a community's social structure and belief systems. The diversity of traditional architecture in Indonesia reflects a broad cultural spectrum, with distinct characteristics across regions. One such example is the traditional architecture of Flores, located on Flores Island in East Nusa Tenggara Province, which embodies a strong connection between cultural identity and natural context. The existence of Flores' traditional architecture is closely tied to the presence of indigenous settlements found throughout the island.

Flores is one of the three main islands in the East Nusa Tenggara Province (NTT) and is divided into 8 regencies, namely West Manggarai, Manggarai, East Manggarai, Ngada, Nagekeo, Ende, Sikka, and East Flores [1, 2]. Within these 8 regencies on Flores, there are 25 indigenous settlements, each with its own unique characteristics [3]. Among these indigenous settlements, the

village of Nggela in Ende Regency is home to the Lio people, whose architectural heritage reflects a particularly rich and enduring cultural legacy [4].

Central to this heritage are the customary traditional houses that not only function as dwellings but also embody the social and ritual life of the community. In 2018, a fire devastated 21 units of large traditional houses that served both as residences for tribal leaders (*Mosalaki*) and as the center for customary activities. These traditional buildings are known as *Sa'o Nggua* (lit: *Sa'o* meaning house, *Nggua* meaning main, central, or primary) [5]. As a form of traditional architecture, the reconstruction of *Sa'o Nggua* after the fire did not require a formal blueprint; instead, the rebuilding process was guided by shared cultural values and collectively agreed-upon customary norms. As an indigenous and customary settlement, the community rebuilt the structures according to their original form and preserved the accompanying rituals. This reflects a collective effort to maintain the cultural meaning of inherited spatial traditions. However, environmental conditions, societal structures, and



the availability of building materials have evolved over time and no longer mirror those of the past. In light of these changes, interpreting the cultural values embedded in architectural forms and community practices becomes critical to sustaining traditional settlements. These cultural meanings, social activities, and architectural forms are encapsulated in the concept of cultural space.

Research on cultural space becomes increasingly important, particularly in light of two prevailing tendencies in contemporary architectural studies. The first tendency emerges amidst the rapid development of modern architecture and design innovation, wherein traditional architecture is often marginalized and insufficiently acknowledged. Conversely, the second tendency excessively idealizes traditional architecture, treating it merely as an aesthetic object, a visual landscape for tourism or a representation of cultural identity while neglecting its inhabitants' social context and daily life. This second tendency is also marked by a fixation on traditional forms rather than processes. Such misguided "romanticism" risks hindering innovative adaptations to contemporary challenges, including climate, emerging technologies, and changing lifestyles [6]. Traditional architecture, by nature evolutionary and contextual, risks becoming a frozen relic when approached dogmatically or through unreflective preservation logic.

Experts in traditional architecture argue that the primary issue of sustainability lies in how traditional cultural values can be preserved without falling into narrow romanticism [7-9]. This necessitates architectural research that transcends the two prevailing tendencies. Unfortunately, such studies remain scarce within architecture and the broader built environment disciplines.

This study aims to reveal the meaning of cultural space that underlies the spatial configuration of the Nggela settlement and the Sa'o Nggua traditional architecture. It explores how the Nggela settlement and the Sa'o Nggua are inhabited and lived in by the community, along with the cultural values that underlie the entirety of the customary settlement. It can be argued that this research is positioned to respond to both prevailing tendencies. If an overemphasis on documenting form leads to aesthetic conservatism, a study that deeply understands the cultural meanings underpinning architectural form instead reinterprets tradition as a continuously evolving process.

Up to the present, research on the vernacular community of Nggela has been limited to describing the zoning patterns of traditional settlements [10], the organization of spatial patterns [11], and the construction processes of traditional houses [12]. Previous studies on Nggela settlements have thus remained confined to spatial and technical descriptions, without addressing the symbolic

meaning of cultural space in any depth. Yet, this issue is crucial for supporting the development of transformative architecture grounded in the community's actual needs and the living traditions they sustain. Accordingly, the novelty of this research lies in its effort to uncover and analyze the symbolic meaning of cultural space in the Nggela indigenous settlement, positioning it as a conceptual foundation for sustainable architecture that is oriented toward local values.

Based on this objective, the study is expected to make the following contributions: First, to the field of architectural theory, by providing a deeper understanding of traditional architectural concepts, particularly those rooted in the cultural context of the Lio tribe in Indonesia. Second, to stakeholders and decision-makers, by providing a solid foundation for the development of revitalization guidelines aimed at preserving the traditional architecture and settlements of the Lio community as a strategy for cultural and spatial sustainability. Third, to architectural practitioners in response to the rapid pace of new developments, by offering critical insights into the meaning of cultural space that may serve as inspiration for creating new architectural works that preserve the essence of local traditions. Thus, the value of this research goes beyond mere documentation or the study of nearly extinct historical architecture—it contributes meaningfully to the ongoing sustainability and relevance of traditional architecture.

2. Literature Review

Etymologically, the word 'culture' originates from the Sanskrit term *buddhayah*, the plural form of *buddhi*, which means intellect or reason [13]. In Latin, the equivalent term is *cultura*, meaning cultivating, preserving, and developing [14]. In general, culture can be understood as the entire way of life that evolves and is collectively shared by a group of people, transmitted socially from one generation to the next through learning, symbolization, and adaptation to the environment [12-17]. It can be said that culture is a fundamental concept in understanding the dynamics of society. However, the notion of cultural space itself has not been frequently discussed by architectural theorists. Hence, further elaboration is required to position it appropriately within architectural discourse.

The significance of culture in architecture has been widely discussed. Paul Oliver emphasized the embeddedness of cultural values in vernacular traditions, highlighting how architecture without architects reflects localized adaptations of collective identity [18]. Christian Norberg-Schulz, in contrast, argues through his notion of *genius loci* that architecture is not only shaped by culture but also by the human experience of place [19]. While Oliver underscores continuity with tradition, Norberg-Schulz foregrounds lived experience and symbolic dwelling. These perspectives reveal a critical tension in architectural

engagement with culture: whether culture is best understood as an abstract determinant, a traditional repository, or a lived and embodied experience of space.

This critical tension is particularly addressed by theorist Amos Rapoport. Rapoport emphasizes that the form of houses and the built environment is not primarily determined by climate, technology, or economics, but rather predominantly shaped by culture—that is, by the values, norms, lifestyles, and belief systems of the people who build them [15, 20]. For Rapoport, culture provides the symbolic and normative framework for architectural decisions, thereby shaping the physical environment in ways that embody collective identity. This perspective shifted attention from purely functionalist or environmental explanations of architecture to the deeper socio-cultural dimensions of the built environment. Although he strongly advocates for the influence of culture on human preferences in architectural design, Rapoport later revised this view. He argued that the terms "culture" and "society" are too abstract and broad to be directly used in research or design. Without dismantling those terms, the relationship between culture and the built environment (including housing and human settlement) becomes overly general, empirically unmeasurable, and irrelevant for specific analysis across groups or locations [16-25]. Rapoport thus proposed the importance of "dismantling" culture, that is, breaking down the concept of "culture" into concrete, specific, and observable elements. This dismantling aims to make culture usable as a research variable or design basis. At this point, he argued that the abstract notion of culture is not the most influential factor in how humans design their dwellings. Rather, the specific expressions of culture, such as values, norms, and activities, shape architectural outcomes. In short, culture is concretized through activities grounded in the values upheld by the community.

This research is inspired by Rapoport's concept of cultural dismantling and further refines cultural understanding through Salura's theory of architectural function - form - meaning [21, 22, 26, 29]. This theory posits that architectural form is not an autonomous artifact but a vessel that accommodates human activities (function) and simultaneously conveys symbolic significance (meaning). In line with the premise that human beings are *animal symbolicum*, architectural form is not understood merely as a material entity, but as a sign that represents something else on the basis of convention, agreement, or cultural meaning ascribed to it. Symbols embedded in architectural form transform buildings and spaces from physical markers into collective memory, identity, and worldview carriers. Architectural form is no longer a mere physical marker; it carries broader and deeper meanings that transcend its outward appearance. Architecture is thus understood as a dynamic symbolic system, where built forms arise from cultural practices and, in turn, shape and

sustain the meanings attached to those practices. Thus, the function, form, and meaning triad constitutes an interrelated and inseparable framework.

In the context of traditional settlements and architecture, the lived cultural meaning is continuously enacted through symbolic activities, which generate both communal practices and architectural forms [23, 28]. Symbols function as mediators between cultural spaces' tangible and intangible dimensions, allowing rituals, traditions, and spatial arrangements to be translated into enduring architectural expressions. Complementing and elaborating the previous concept of cultural space, the triad of function, form, and meaning together constitutes a distinctive symbolic framework that integrates structure, material, and spatial layout with community traditions and rituals. Therefore, the sustainability of cultural space depends not only on the preservation of physical forms but also on the ongoing vitality of the symbolic meanings that animate them. Through this lens, the function–form–meaning theory offers a critical perspective for systematically analyzing the symbolic dimension of cultural space, bridging empirical observation with cultural interpretation and ensuring the continuity of architectural identity over time.

3. Materials and Methods

3.1. The Nggela Indigenous Settlement and the Traditional House (Sa'o Nggua)

This study focuses on the indigenous settlement of the Lio tribe, specifically located in the Nggela Traditional Village, Wolojita District, Ende Regency, East Nusa Tenggara Province. Geographically, Nggela Village is situated within the Wolojita sub-district and is bordered by Pora Village to the north, the Sawu Sea to the south, Wologawi to the east, and Nuamulu Village to the west (Figure 1) [24].



Fig. 1 The position of Nggela Indigenous Village

The Nggela indigenous settlement of the Lio ethnic group is situated on a gently sloping hill ridge (*Igir*). The settlement is bordered by cliffs or ravines to the west and east, known in the Lio language as *Mbiri*. The western ravine is *Koja Batu*, while the eastern side is *Rate Aru*. To the north lies a stone believed to be the initial entry point or gateway (*ulu*) to the traditional village, called *Gai Gajo*. In the landscape, this northern boundary marker is referred to as *Ulu Gai Gajo*. At the southern end of the village, regarded as the tail (*eko*'), there is another stone locus marking the final boundary of the settlement, known as *Watu Lako* (Dog Stone). The term *watu* means 'stone,' while *lako* refers to the shape of a dog.

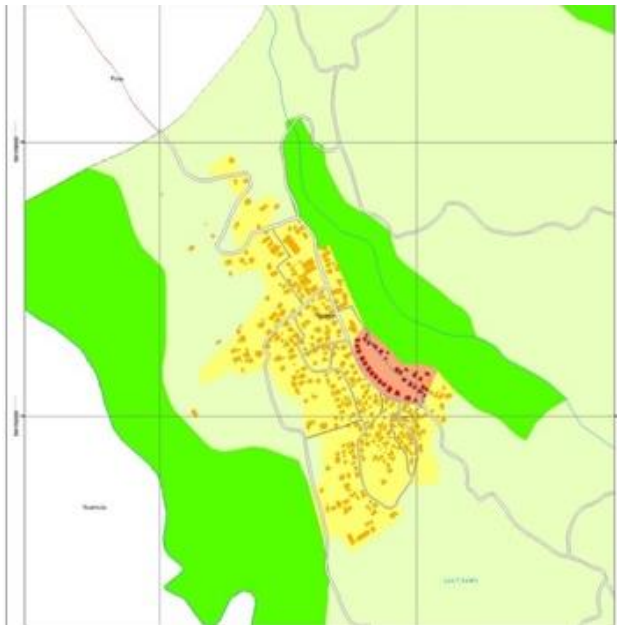
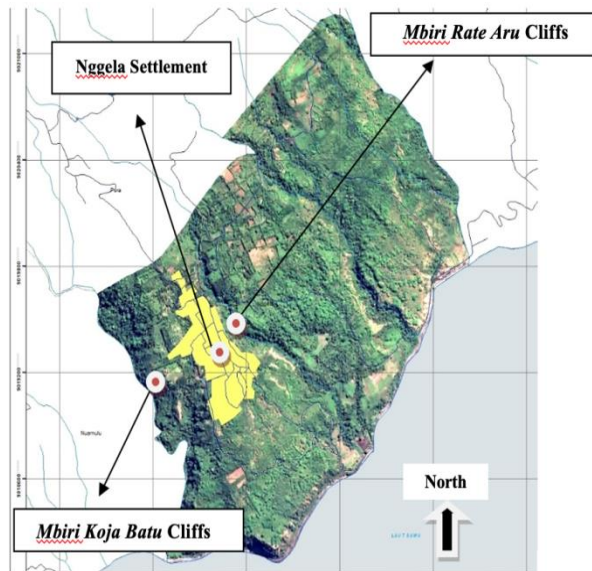


Fig. 2 Customary zone inside Nggela Indigenous settlement

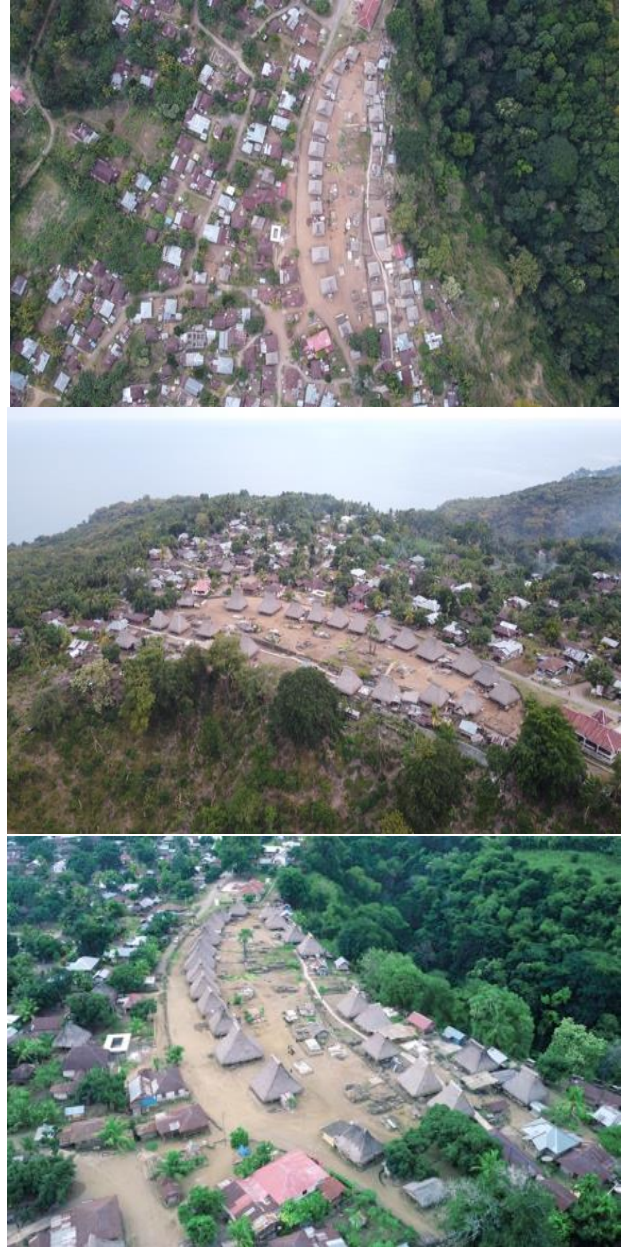


Fig. 3 Aerial view of Nggela Indigenous settlement, with emphasis on the customary zone

Traditional houses in Nggela also constitute a distinct social language, wherein each house carries its own roles and functions, as mandated by the ancestors who founded the village. The settlement has two types of houses: the *Sa'o Nggua* (customary traditional house) and the supporting houses (*Sa'o*). Among these two, the *Sa'o Nggua* holds a higher hierarchical status, as it is inhabited by customary leaders and inherently possesses greater symbolic significance than the supporting houses. Therefore, the *Sa'o Nggua*, as the main traditional house along with all the elements constituting the customary settlement, is designated as the primary object of this research.

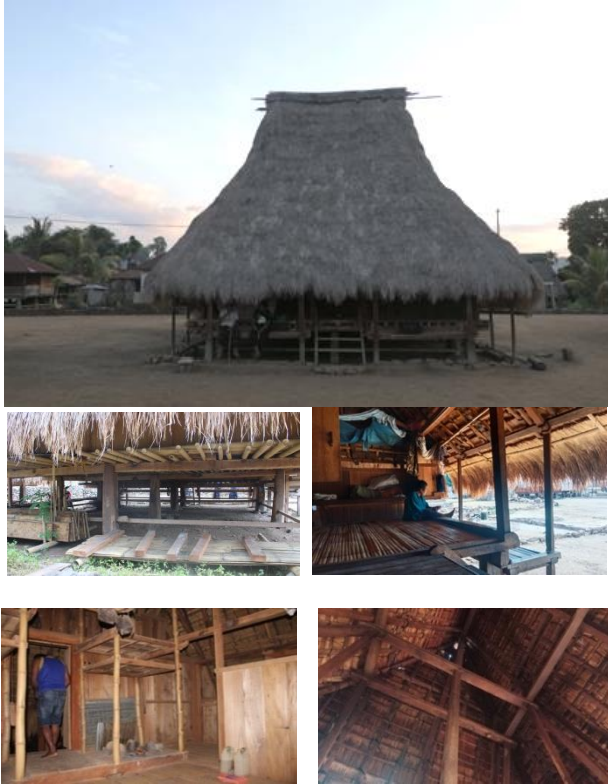


Fig. 4 Sa'o Nggua, the customary-traditional house

3.2. Research Methods

This study adopts an ethnographic-qualitative approach [25, 26, 29, 30] aimed at uncovering the cultural meanings of the relationship between the elements of Ngella Indigenous settlement and the architecture of *Sa'o Nggua*. Given the scarcity of available literature, the analysis is conducted inductively, beginning with field data collection and followed by data reduction to identify the main concept underlying its cultural meaning. The research steps consist of the following:

- (1) First, a grand tour was conducted to understand the field conditions and ethnographic data.

The grand tour consisted of an initial field observation conducted in three stages: 1) The first stage aimed to gain a preliminary overview of the research site, including the socio-cultural conditions of the community; 2) The second stage involved documenting the settlement and architectural elements, based on their functions and visual forms, the settlement patterns, the varieties of ornamentation, and other architectural elements that characterize the traditional architecture found at the research site; 3) The third stage focused on identifying the key informants who would be involved throughout the research process.

In addition to field observation, data were collected through in-depth interviews with informants, namely the customary leaders (*Mosalaki*) in each traditional settlement

within the study area and respected elders in the respective indigenous villages.

- (2) Second, the study identified and described the primary physical elements of the Nggela indigenous settlement and the traditional architecture of *Sa'o Nggua*, along with the ceremonial activities that occur within these spatial settings.

At this stage, the description is focused on ceremonial activities. For each aspect, the observed sub-aspects include space as a setting and the spatial activities and behaviors that occur within that space.

- (3) Third, the research explicates the symbolic meaning of cultural space that underlies the spatial configuration of Nggela settlement and *Sa'o Nggua* traditional architecture.

This process was carried out in stages, beginning with data reduction to filter relevant information; followed by categorization based on thematic aspects of meaning, function, and spatial form; and culminating in the interpretation of symbolic meanings of architectural elements, activities, and the traditional values underlying both. Based on these steps, it becomes possible to interpret the core values underpinning the case study's cultural space.

4. Results and Discussion

4.1. The Social Hierarchy of the Indigenous Settlement of Nggela

The entire community of Nggela Settlement, which belongs to the Lio ethnic group, primarily rely on agriculture as its main source of livelihood. The majority of residents work as farmers, cultivating rice fields and gardens, while a significant portion is also engaged in fishing. In addition, some individuals are employed as teachers, civil servants, or construction workers. Many women, from young adults to the elderly, depend on traditional weaving as a principal means of income.

The community believes the Nggela indigenous settlement was established by migrants from various regions, such as India and Malacca, Wewaria, and Java (Figure 6). The formation of the Nggela society is estimated to have begun in the late 17th century. From these waves of migration, nineteen (19) genealogical lines (clans) were established within the Nggela customary territory.

Over time, these nineteen clans were consolidated into two principal ancestral lineages that are regarded as the founding forebears of the Nggela customary community: *Kunu Mbuja* (*Kunu*: 'to utter', *Mbuja*: 'prayer') and *Kunu Wio* (*Wio*: 'ancestral history'). Their names suggest that these two figures are regarded as the carriers of ancestral invocations and oral histories.

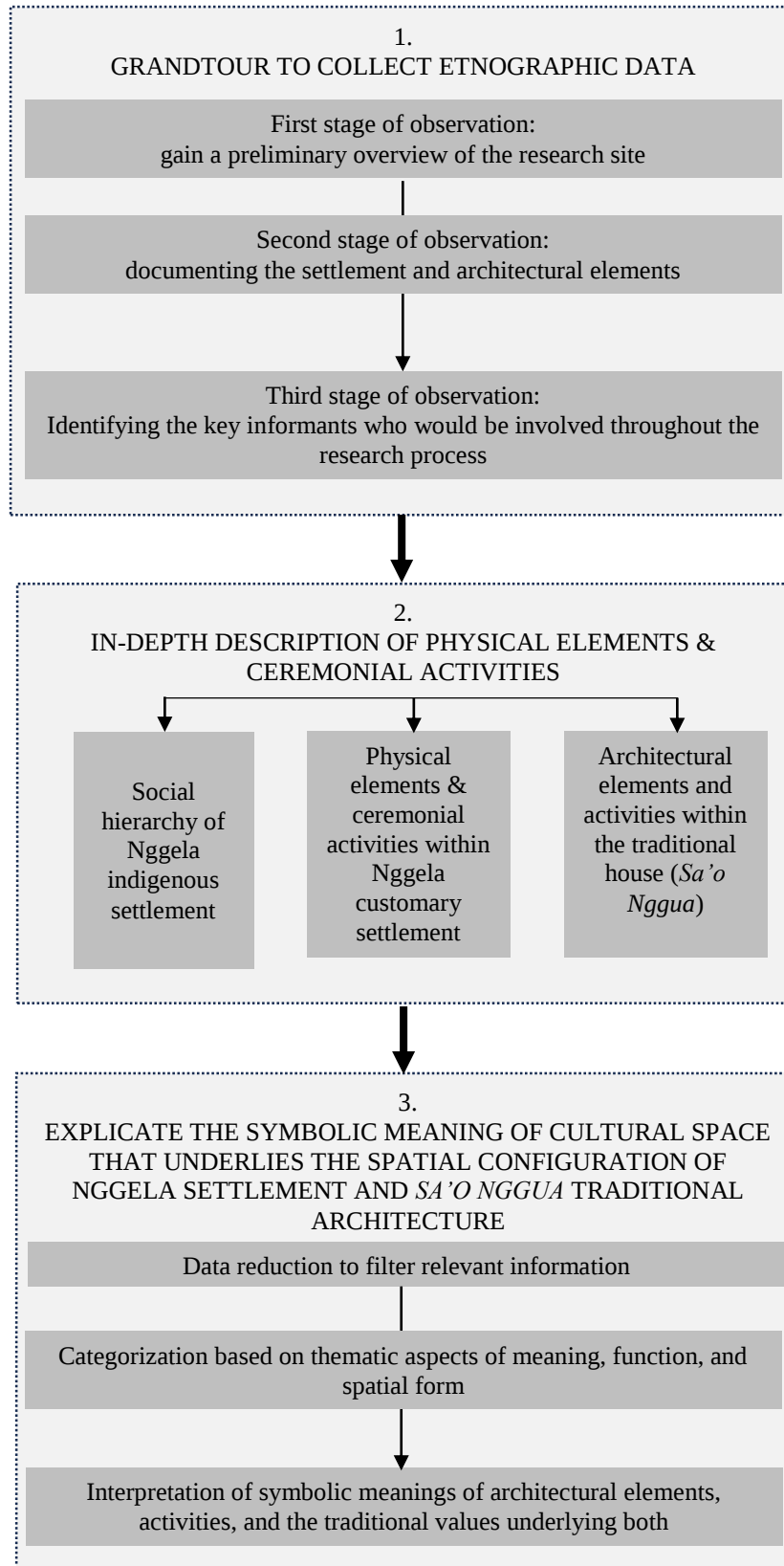


Fig. 5 Research methods

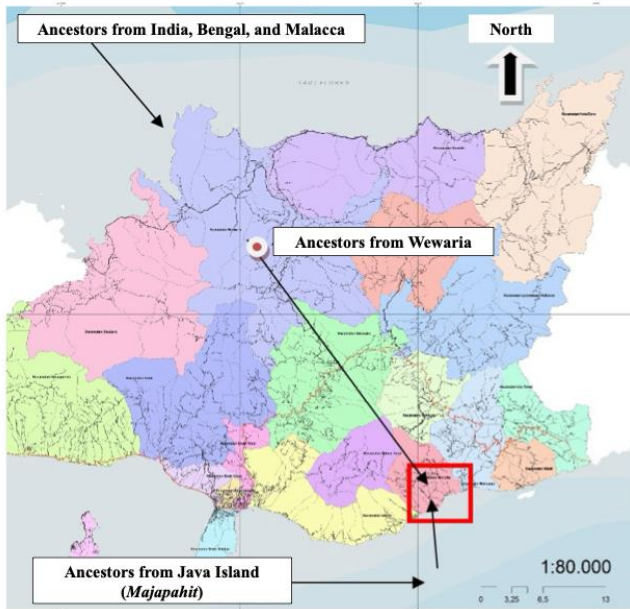


Fig. 6 The ancestral origins of the Lio people in Nggela

These two ancestral clans gave rise to direct descendants who later assumed the role of customary leaders, known as *Mosalaki*. To this day, the *Mosalaki* occupy the highest level in the social hierarchy within the customary system of the Nggela community. The traditional governance structure of Nggela reflects a monarchical lineage system, in which the appointment of a *Mosalaki* is determined by direct patrilineal descent. Each *Mosalaki* inherits the responsibilities of their predecessor - typically the father. In cases where a *Mosalaki* has no offspring, the role is transferred to a sibling or a close male relative.

Within the spatial scope of the traditional house (*Sa'o*), family members include children who are direct descendants of the house's ancestral founder. The Nggela customary settlement has 17 customary leaders (*Mosalaki*), each with specific duties. The *Mosalaki Pu'u* ('Pu'u' means 'origin') holds the highest rank among them. As the supreme customary leader descended from the founding village (*nua pu'u*), the *Mosalaki Pu'u* serves as the primary guardian of ancestral law, ritual, and cultural continuity within the community.

In addition to the *Mosalaki*, there is also the traditional architect or master-builder, *Wunukoli*. The *Wunukoli* is a customary figure endowed with an extensive understanding of the architectural structure, cultural symbolism, and indigenous building practices associated with traditional houses (*Sa'o Nggua*). Alongside the *Mosalaki*, the *Wunukoli* is responsible for designing the traditional house structure, maintaining the symbolic order of the design, performing technical rituals, and passing down architectural knowledge through generations. The *Wunukoli* must have a kinship

affiliation with one of the main clans. In the construction of the *Sa'o Nggua*, the *Wunukoli* holds equal authority with the *Mosalaki Pu'u* in matters of technical-ritual decision-making, symbolizing the integration of sacred knowledge and architectural practice within the traditional leadership system.

At the next level of the hierarchy are the firstborn sons of customary leaders, known as *Ana Dari Nia*, followed by other space users such as commoners (*Ana Angga*), and external visitors, including philanthropists, researchers, tourists, and missionaries. In terms of spatial rights and access, commoners and visitors are referred to as passive space users, meaning they do not reside permanently within the boundaries of the customary settlement. Over time, as the traditional settlement has gradually been adapted and recognized as a heritage tourism destination, the presence of outsiders has become increasingly regulated. External visitors are now permitted to access the settlement strictly as guests, under customary oversight, and are not granted the same spatial or symbolic rights as indigenous members of the community. When customary rituals are conducted, access to the customary settlement is restricted to exclude commoners and external visitors.

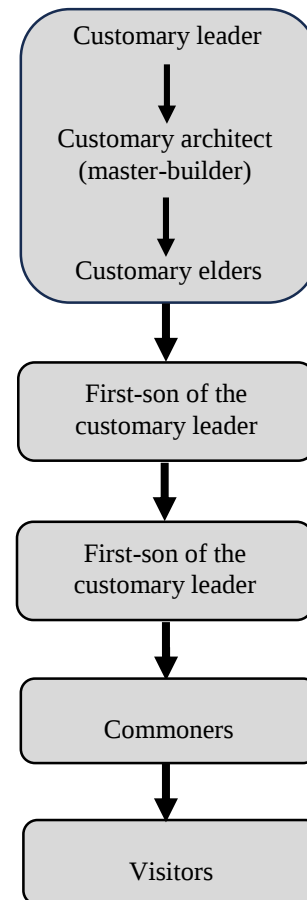


Fig. 7 Social hierarchy of Lio people in Nggela Indigenous Village

4.2. Physical Elements and Ceremonial Activities of Nggela Indigenous Settlement

The development of the Nggela settlement begins with the establishment of a space resembling an altar or mazbah, used for ancestral worship and homage to the Almighty Creator. This sacred element is known as *Kanga* and is considered profoundly sanctified. The placement of the *Kanga* signifies the division of the macro-level organization of cultural space (Figure 8), namely:

4.2.1. Customary Settlement Zone (Mystic/Sacred Zone)

This zone constitutes the primary area of activity for the indigenous or customary community. It encompasses the traditional settlement core, including traditional houses (*Sa'o Nggua*), sacred ritual sites, and culturally revered spatial elements. The zone is considered spiritually significant and is reserved for customary practices, rituals, and residence by hereditary community members.

4.2.2. Conventional Settlement Zone

This refers to the residential area inhabited by non-customary members who live outside the customary zone. It consists of standard dwellings owned by villagers residing within the administrative boundaries of Nggela Village but who are not formally recognized as part of the customary lineage system.

4.2.3. Customary Forest Zone

This zone functions as a support area for logistical needs and the construction of traditional houses. It includes customary forests (*hutan adat*) and other utilitarian spaces that serve non-ritual, day-to-day functions.

4.2.4. Agricultural Zone

Encompassing gardens, rice fields, and dry fields (*ladang*), this zone serves as the primary source of livelihood for the community. It is also frequently used as a site for rituals related to agricultural cycles and fertility rites.

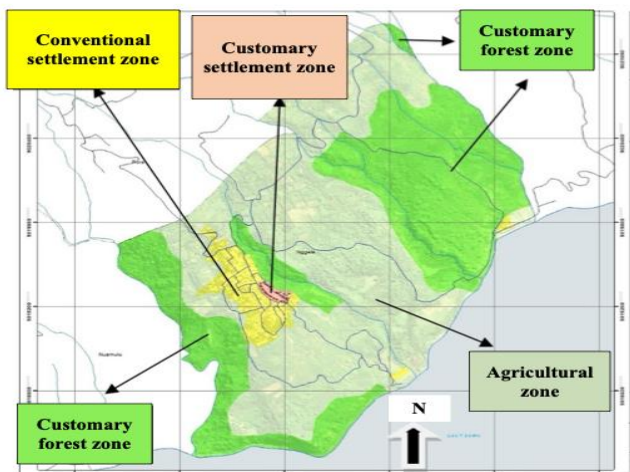


Fig.8 Spatial zonation of the Nggela Indigenous Settlement

The customary settlement zone consists of several primary elements: a stone arrangement marking the central area of the settlement (*Puse Nua*), a sacred courtyard as a center of ceremonial activities (*Kanga*), and ancestral graves (*Rate*). These three elements function collectively as the spiritual and spatial center of the customary zone. In addition to these, there are fifteen (15) primary *Sa'o Nggua* (traditional houses) and twenty supporting *Sa'o* structures. Surrounding the settlement is a physical boundary known as *Kopo Kasa*, which serves as a territorial boundary. Several pedestrian paths connect one *Sa'o* to another, forming paths between houses, along with a number of residential dwellings occupied by villagers.



Fig. 9 The physical elements of the customary zone in Nggela Indigenous settlement

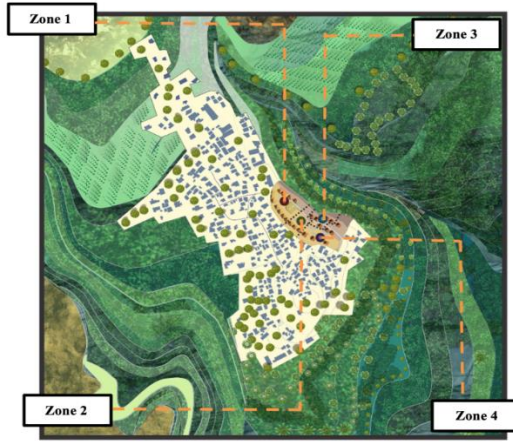


Fig. 10 The four divisions of the customary settlement zone based on the community's social functions

The fifteen *Sa'o Nggua* houses are further divided into four zones based on lineage and their respective roles within

the settlement (Figure 9). Zone 1: *Deko Ghale* Area, recognized as the earliest zone settled by the ancestors of the Nggela community in the past. This zone is inhabited by a customary group known as the “socialist group”, regarded as the heroes of the community. Zone 2: *Bhisu One* Area. In the Lio language, *one* means “center,” indicating that this is the central zone, which serves as the core area of the customary settlement. It is believed to be the residence of ancestors originating from Java. This zone is inhabited by a group identified as visionary, energetic, and innovative in meeting customary needs; Zone 3: *Mbiri* Area, home to the advisory group, whose members are known for their careful adherence to and prioritization of prevailing customary norms and regulations; Zone 4: *Atamangu Lau Laja* Area, inhabited by members of the Nggela customary community whose ancestors are known to have originated from Malacca and Portugal. This group functions as guardians or custodians, responsible for safeguarding Lio Nggela's customary artifacts and inscriptions.

Table 1. Ceremonial activities and their primary designated area

Categories of ceremonial activity		Purpose of ceremonies	Primary area for ceremonial practices
Planting preparation	Wula dero bebo: Ritual of field preparation	Determining the appropriate planting sites within the field based on traditional knowledge	The entire customary territory of Nggela Settlement
	Wula dero Mbe'o: Observing the signs of the rainy season.		The site of the traditional house (tana Sa'o)
	Wula Mapa Moni: Identifying the site for cultivation.		Sacred courtyard (Kanga)
	Wula Nduru: Forecasting through natural omens		Sacred courtyard (Kanga)
Planting season	Wula More: The division of tasks in rice planting	To divide the tasks of planting and tending crops	The agricultural fields and shoreline of Nggela
	Wula Beke Ria: Tending the crops		Dry fields and cultivated gardens
Harvest period	Wula beke Lo'o: marks the beginning of the harvest period.	Harvesting agricultural produce	Dry fields and traditional house (Sa'o Nggua)
	Wula Balu Re'e: harvesting ceremony		Main traditional house (Sa'o Nggua)
Reconciliation and closure of the harvest season	Wula Balu Ji'e: The act of sowing sorghum that serves as a symbolic gesture of erasing the past and marking the transition toward the future.	Fostering a sense of togetherness among community members and offering gratitude to the Divine and the natural world.	Center of the settlement (One nua)
	Wula Fowo: The act of scattering rice that symbolizes the mental and emotional weight borne by members of the Nggela customary community during the harvest.		Center of the settlement (One nua)
	Wula Base: Repairing building ornaments and storing the harvest in the granary.		Dry fields and center of the settlement (One nua)
	Wula Mala: Ceremonial expression of gratitude		Center of the settlement (One nua)

Ceremonial activities conducted within the Nggela customary settlement are entirely rooted in agricultural practices, a reflection of the fact that the majority of the population continues to rely on farming as their primary livelihood. In accordance with the social hierarchy of the Nggela customary settlement, all ceremonial activities are initiated and led by *Mosalaki*, the head of the customary settlement. In total, there are twelve distinct ceremonies traditionally performed within the community. However, these twelve ceremonies can be classified into four major categories (Table 1): First, ceremonies that mark the beginning of the planting preparation period. These consist of *Wula dero bebo*, *Wula dero Mbe'o*, *Wula Mapa Moni*, *Wula Nduru*. Second, ceremonies are performed at the beginning of the planting season (*Wula More*, *Wula Beke Ria*). Third, ceremonies that mark the harvest period (*Wula beke Lo'o*, *Wula Balu Re'e*). Fourth, ceremonies that mark the reconciliation and closure of the harvest season (*Wula Balu Ji'e*, *Wula Fowo*, *Wula Base*, *Wula Mala*).

Based on the description of ceremonial activities, it can be identified that ritual practices encompass the relationships between humans and nature as part of productive activities; between humans and their fellow community members as a unified social entity; and between humans and God as the Creator of the universe. In addition to being conducted in agricultural fields, which serve as the center of production, ceremonial activities are also centered around the traditional house (*Sa'o Nggua*), the sacred courtyard (*Kanga*), and the village center (*One Nua*). These three locations hold significant positions in the entire cycle of rituals conducted within the Nggela customary settlement.

4.3. Architectural Elements and Activities within the Traditional House (*Sa'o Nggua*)

The construction stages of all traditional houses (*Sa'o Nggua*) tend to follow a similar pattern, beginning with the installation of the *leke* (base column), which is traditionally made from elongated stones. Typically, a ceremonial ritual is held only after the house is completed, marking the placement of sacred objects such as gongs, heirloom plates, and ancestral emblems. The following discussion focuses on the description of the architectural elements as well as the activity spaces within the *Sa'o Nggua*, specifically in the *Sa'o Ria* that represents Zone 2 (the *Bhisu One* area). As previously explained, *Bhisu One* area is inhabited by the customary elders who are most responsive to change. Therefore, this house's cultural activities and architectural form represent a fusion between long-held traditions and the Lio community's creative efforts to adapt to evolving contexts. *Sa'o Ria* occupies the highest position within the hierarchical structure of traditional houses in Nggela. Similar to other *Sa'o Nggua* structures, *Sa'o Ria* functions as a meeting place for the customary elders and serves as a

reception space for guests visiting the customary settlement of Nggela.

When viewed in its entirety, the roof element of *Sa'o Ria* is the most dominant among all other architectural elements. This dominance is attributed to its grand proportion. The roof structure of the *Sa'o Nggua* house, which soars upward, is not without symbolic meaning. The local community perceives this form as a visual imagination embodied in architecture, representing the sail of a vessel in full flight (*Laja Rabha*) arriving from the northern coast (Wewaria Beach) in the shape of a trapezoid. Based on the data gathered from interviews, this narrative stems from traditional thought patterns that associate the roof form with the ancestral boats of the past.

Another important aspect to note is that there are several changes or differences between the condition of the house before and after the fire. A past fire incident caused these stones to become brittle and prone to cracking, and they have since been replaced with *kelapam* wood, which is considered more effective and efficient. The structural elements of the *Sa'o Nggua* houses can be seen in the following image.

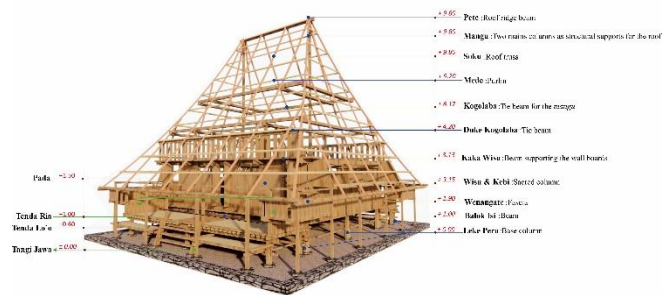


Fig. 11 Isometric illustration of the structural elements of *Sa'o Ria* (one of the *Sa'o Nggua* houses)

The spatial configuration within the *Sa'o Ria* consists of the following areas (Figure 12): (1) Front Veranda: This area includes the *Tangi Jawa*, a set of steps that serves as the initial gateway into the house. The *Tangi Jawa* functions as the first point of access for space users entering the house. Following this is a pair of small pavilions called *Tenda Lo'o* or *bale-bale kecil* (small platforms), which serve as spaces for hosting guests or members of the customary community. After passing through the *Tenda Lo'o*, inhabitants enter the *Tenda Ria* (main front pavilion), composed of two spaces, followed by the *Pada*, or storage area, comprising two rooms. The *Pada* is used to store various customary necessities and household items. Proceeding further is the *Lore* area, which functions as a spatial divider between the two sections of the *Tenda Ria* and also serves as a circulation corridor leading into the *Lata*; (2) Central Space: This section includes the *Lata*, which functions as the main circulation corridor, and the

Koja Ndawa, the central space within the house. The *Koja Ndawa* is considered the house's main area, where customary rituals and ceremonial activities are held. This central zone also contains the *Waja* (hearth or kitchen), where both daily domestic and ritual activities take place, and the *Rimba*, the primary bedroom reserved for rest and private use by the customary leader (*Mosalaki*) and his wife (*Mosalaki Ine*); (3) Rear space: The rear section includes additional *Rimba* (secondary bedrooms) and several storage areas. It also features another *Tangi Jawa* that leads to the back veranda, providing an alternative access point for users entering the house. In addition, this area contains a rear *Tenda Lo'o*, used as an optional space for hosting guests or customary community members, as well as a rear *Tenda Ria*.

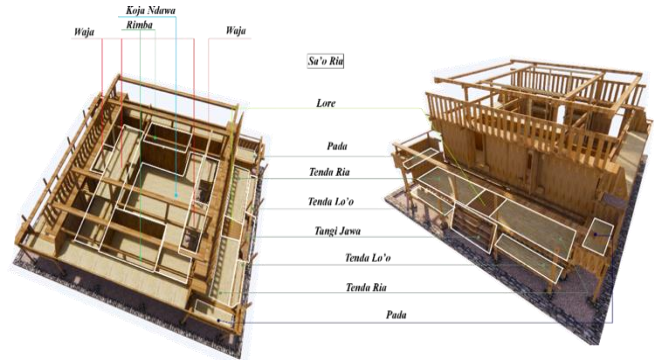
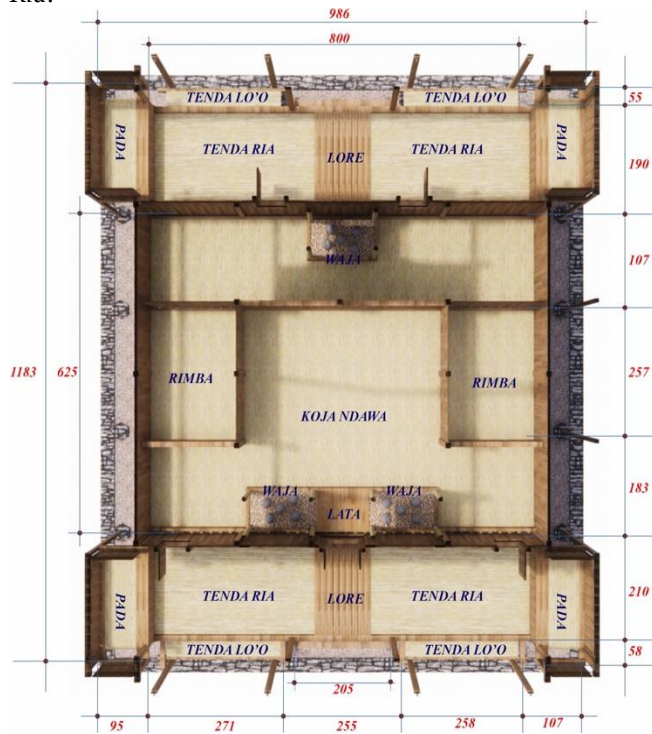


Fig. 12 Spatial configuration of Sa'o Nggua Traditional House

4.4. The Symbolic meaning of the Cultural Space of Nggela Settlements and Sa'o Nggua Traditional House

All elements involved in the ritual activities of the Lio people in the Nggela settlement are spatially oriented toward three central components: the settlement centre marked by stone arrangement (*Puse Nua*), the sacred courtyard (*Kanga*) with the *Tubu Musu* positioned upon it, and the traditional house (*Sa'o Nggua*). These three elements serve as ritual instruments through which the *Mosalaki* (customary leader) communicates with the Almighty Creator, the ancestors, and subsequently, the natural world.

This veneration of the ancestors places the customary elders, who are direct descendants of these forebears, at the community's highest level of social hierarchy. The patterns of interaction among users of the cultural space in the customary settlement consistently refer to the decisions made by the *Mosalaki Pu'u*. This relationship pattern reflects a monarchical hierarchy, in which the *Mosalaki Pu'u* is entrusted with the authority to make decisions and assume responsibility for all activities taking place within the customary settlement.

The manifestation of strong ancestral reverence is reflected in the classification of spatial users. The traditional settlement area is exclusively inhabited by the customary leaders, the firstborn son of the customary leader, and other supporting customary leaders. In contrast, outsiders, including ordinary villagers (*Ana Angga*), and visitors such as tourists, researchers, missionaries, and philanthropists are not permitted to reside within the customary settlement. Their access is restricted to temporary visitation only. (Figure 13) The social hierarchy of the Nggela Indigenous Settlement is also reflected in the spatial hierarchy of its layout. When further abstracted, this hierarchy forms a concentric pattern in which the village center (*Puse*) and the sacred courtyard (*Kanga*) occupy the innermost circle, followed by the main ancestral house (*Sa'o Nggua*), supporting houses, and the settlement boundary fence (*Kopo Kasa*). The ordinary dwellings (*Sa'o Ana Angga*) are positioned at the lowest level of the hierarchy, farthest from the center.

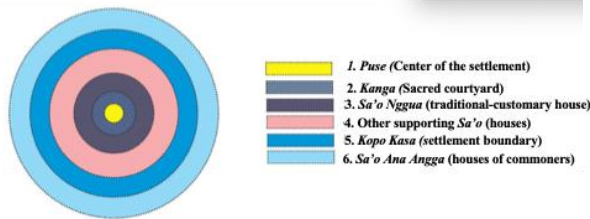


Fig. 13 The hierarchy of spatial arrangement based on its social hierarchy

All *Sa'o Nggua* houses in the customary settlement are oriented toward a single main axis: the center of customary settlement (*Puse Nua*), the *Kanga* as the sacred courtyard where ceremonial rituals are performed, and the *Tubu Mbusu*, positioned atop the *Kanga*. This spatial configuration demonstrates the influence of sacred external elements on the architectural layout of the *Sa'o Nggua* house. With such an arrangement, the *Koja Ndawa*, the main interior space of the *Sa'o Nggua*, where customary rituals and various ceremonies are conducted, is inherently oriented toward the *Kanga* and aligned with the ancestral graves (*Rate*).

The *Koja Ndawa*, used as a communal space for deliberation and ritual activities, reflects the function of *Kanga* as a social space. Meanwhile, the veranda and entrance area symbolize the profane and transitional zones. The outer spatial configuration corresponds to the *Kopo Kasa* (settlement boundary), which marks the boundary between the sanctified customary settlement and the profane zones of conventional residential areas, forests, and agricultural fields.

Thus, it can be concluded that the *Sa'o Nggua* functions as a miniature representation of the customary settlement. It serves as a microcosm of the village's spiritual and social structure, in which each architectural element within the house symbolically corresponds to spatial components of the broader external environment. Unlike previous studies that primarily described the spatial arrangement of settlements in a descriptive manner [10-12], this research provides a deeper analysis by systematically linking architectural elements of the *Sa'o Nggua* with the symbolic and cosmological order of the community. In doing so, it advances beyond state-of-the-art approaches by demonstrating not only the functional and spatial

correspondences but also the symbolic logic that underpins them. This perspective allows for a more comprehensive understanding of how cultural meaning sustains architectural form, thereby offering a conceptual contribution to the study of vernacular settlements that has not been adequately addressed in the existing literature.

5. Conclusion

The analysis yields the following conclusions: First, the primary physical elements of the Nggela customary settlement consist of the *Puse Nua*, a stone arrangement that marks the central area of the settlement; the *Kanga*, a sacred courtyard located at the heart of the village that serves as the ritual center, along with the *Tubu Musu* (a stone monument) placed upon it; the *Rate*, which serves as the ancestral graveyard; the *Sa'o Nggua*, traditional houses inhabited by the customary leaders (*Mosalaki*) and used as spaces for deliberation; and the *Kopo Kasa*, a physical boundary that separates the customary settlement from the surrounding conventional residential areas. Among all these elements, ceremonial activities are primarily centered on the *Puse Nua*, *Kanga*, and *Sa'o Nggua*. Therefore, these three components can be regarded as the primary elements of the Nggela customary settlement.

Second, the presence of these primary physical elements results in the spatial zoning of the settlement into a mystical zone, which may only be inhabited by customary elders (*Mosalaki*), indigenous architects (*Wunukoli*), and the firstborn sons of customary elders (*Ana Dari Nia*). In contrast, the profane zone is accessible to ordinary community members (*Ana Angga*) and visitors such as tourists, researchers, philanthropists, and missionaries. This hierarchical concept in spatial zoning reflects the social structure of the Lio community, in which the *Mosalaki*, believed to be direct descendants of the founding ancestors of the Nggela customary settlement, hold the highest rank. The *Kanga-Tubu Musu* axis serves as a medium through which the *Mosalaki*, representatives of the entire customary society, communicate with the Almighty Creator and the natural world. It is this symbolical meaning of this axis—as a bridge connecting the human world, the Creator, and nature that compels the community to preserve the spatial configuration and the values embedded within it, even as the physical structures undergo deterioration or material changes due to the passage of time and natural disasters.

Third, the design of the Nggela customary settlement is predominantly shaped by the symbolic meaning of ceremonial concepts that take place in its exterior spaces. The spatial arrangement of the outer environment (the customary settlement) is reflected and repeated within the internal spatial configuration of the *Sa'o Nggua*, reinforcing the house's role as a microcosm of the customary settlement. In contrast to earlier studies that focused primarily on spatial description, this research highlights the

symbolic logic that sustains architectural form, thus filling a critical gap in the literature on vernacular settlements.

Fourth, the findings of this study affirm that the conservation of traditional architecture must not be limited to material and visual aspects. Rather, it must embrace the cultural dimension of meaning embedded within spatial practices.

The Nggela indigenous settlement and the Sa'o Nggua architecture are a tangible example of how an indigenous-customary community sustains spatial identity through symbolic and collective mechanisms. Heritage conservation should adopt a meaning-centered approach, rather than a form-centered one.

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