

The Impact of Maritime Culture Assimilation on the Architecture of Gili Iyang Communities

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Abstract

Keywords:

Assimilation;

Architecture concepts;

Gili Iyang Island;

Traditional culture.

Indonesia's cultural diversity provides a unique backdrop for understanding the dynamics of cultural assimilation, especially on Gili Iyang Island in Sumenep, Madura, where migration has shaped social and architectural aspects. This study explored the influence of cultural adaptation on architecture among the Bugis-Makassar, Buton-Binongko, and Sumenep-Madura communities on Gili Iyang Island. Utilizing a case study method, this research focuses on how these maritime-oriented communities adjust and modify architectural aspects in response to cultural interactions. The findings indicate that the assimilation affecting the architecture of Gili Iyang Island includes (1) spatial organization and division from east to west and north to south, reflecting a balance between gender aspects and spiritual symbolism; (2) color concepts based on natural elements such as brown (earth), green (sea), blue (sky), and red-orange (fire); (3) ornaments inspired by the surrounding environment including plants, animals, and repetitive geometric patterns; (4) courtyards serving as the focal points for orientation and transition between buildings; (5) buildings that are closely spaced.

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1. Introduction

Indonesia is a country rich in cultural diversity, including its regional languages, races, tribes, religions, and beliefs, which provide a unique background for shaping the characteristics of its people. Sumenep Regency on Madura Island, East Java, stands out as a region that preserves its cultural diversity, which stems not only from heritage passed down through generations but also from the mixing and blending of cultures over time. This can be seen in the region's traditional practices, architectural styles, and social structures that reflect a harmonious coexistence of various cultural influences, such as the Bugis-Makassar, Buton-Binongko, and Madura communities. The region's commitment to maintaining cultural traditions through rituals, language, and community gatherings further highlights its unique position in preserving a rich, multicultural heritage. This phenomenon is primarily influenced by migration processes, which encourage interaction

and adaptation between different cultural groups, both in socio-cultural and architectural aspects.

Afandi (2016) stated that differences in the cultural background of individuals affect their expectations, norms, and values, which further influence how they think, act, and behave. The concept of geographical determinants described by Briney (2011) emphasizes that physical environments such as topography and climate influence human behavior and culture. In Sumenep, the region's unique architectural styles reflect these cultural and environmental influences.

Previous research by Dwi et al (2020), Husain et al (2020), Ismail (2018), Octavia & Hematang (2017) has explored the ability of the Bugis-Makassar tribe to adapt to new territories in terms of culture and architecture. The research showed a strong desire to preserve cultural heritage and traditions, despite facing more modern social demands. Meanwhile, studies on the Madura tribe by Asikin et al (2019, 2020) and Yonefendi et al (2018) revealed different dynamics of adaptation, that is, some Madura cultural values are not in harmony with the local culture the place of the new migration, but some cultural aspects such as the rituals of Maulid have been strengthened.

In particular, the island of Gili Iyang in Sumenep Regency is an interesting case study because it is a place of intense intercultural encounters. The island, with its long history as a place of intersection of merchants and seafarers and residence for communities from various backgrounds such as Makassar and Buton, shows concrete examples of cultural interaction in a specific geographical and historical context. Although there has been a lot of research on tourism and the environment on the island, there is no in-depth research on how the process of cultural assimilation between maritime-mental communities such as Bugis-Makassar, Buton-Binongko, and Sumenep-Madura affects their concepts of space and architecture. Therefore, this study aims to identify and analyze the roles and processes of cultural adaptation that influence the architectural aspects of Gili Iyang Island, focusing on how the various tribes adapt to each other by modifying their buildings and architectonic elements.

2. Literature Review

Adaptation

Adaptation refers to how humans adjust to their physical and socio-cultural environment by seeking balance through behavioral, functional, and structural aspects. According to various scholars (Berry, 2005; Kusliansyah, 2015; Reyes-García et al., n.d.; Reynoso et al., 2016; Scannell & Gifford, 2010; Schulz, 1985), adaptation involves changes in social, political, and spatial structures, often reflected in modifications of living spaces to meet new social and physical needs. Gudykunst & Kim (2003) identified two main types of adaptation: cultural adaptation and cross-cultural adaptation. Cultural adaptation involves enculturation, where individuals encode and decode messages between locals and immigrants, learning local norms and values through socialization. On the other hand, cross-cultural adaptation refers to acculturation and assimilation. Acculturation is immigrants' understanding and partial adoption of new cultural norms while maintaining elements of their original culture. Assimilation occurs when immigrants reduce or abandon their original cultural practices and adopt local norms to the extent that they resemble the local population. While these processes aim to facilitate integration, adaptation is often imperfect. Misalignments or resistance during cultural adaptation can result in tensions,

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resistance, or even isolation between immigrants and local populations (Gudykunst & Kim, 2003).

Traditional architecture

Traditional architecture is a reflection of cultural values that have been inherited from time to time and are strongly linked to the traditions and practices of the community. Traditional Bugis-Makassar architecture emphasizes the concept of "*Sulapa Appa*", which reflects a totalitarian philosophy of living with houses that are structured in three vertical parts: *Rakkeang*, *Alo-bola*, and *Awa-Bola*, each of which has specific functions that support the social and spiritual life of communities (Abidah, 2010). The traditional Madura house, known as the *Tanean Lanjhang* settlement, highlights the use of space by the social hierarchy and functions of everyday life regulated by the concept of dualism of men and women, with each room having a unique function that reflects the structure of the Madura society (Tulistyantoro, 2005).

Meanwhile, the traditional architecture of Buton-Binongko features theater houses with complex roofs and poles that symbolize the social status of the inhabitants. The house is divided into three main zones: *Sasambiri*, *Bamba/Tanga*, and *Suo*, each of which serves distinct social and personal functions in the life of the Buton community. These zones reflect the cultural values and traditions deeply rooted in their way of life, with each area designated for specific activities or purposes. *Sasambiri* typically symbolizes one aspect of communal interaction, while *Bamba/Tanga* and *Suo* fulfill complementary roles, creating a harmonious balance between personal and collective spaces within the household (Syarif, 2016). All these architectures are not only functional but also rich in symbolism and philosophy, depicting how traditional Bugis-Makassar, Buton-Binongko, and Madura communities understand and interact with their worlds.

Cultural Mentality

The cultural mentality of the Bugis-Makassar, Buton-Binongko, and Madura communities is heavily influenced by their cultural values and philosophy of life. For Bugis-Makassar society, values like "*Siri' Na Pacce*" and "*Kualleangi Tallanga Na Toalia*" are decisive in shaping individual character and behavior. The "*Siri' Na Pacce*" philosophy contains the principles of empathy and solidarity, urging people to have social sensitivity and a willingness to help others. Meanwhile, "*Kualleangi Tallanga Na Toalia*" teaches courage and perseverance, even when sacrificing lives to defend the honor (Abidin, 1999; Mustafa et al., 2003). Madura communities have a cosmological view that integrates macrocosmic and microcosmic aspects, showing their relationship with nature and surrounding societies (Peursen, 1985). Characteristics such as perseverance, independence, and deep spirituality shape how they interact with the world. The Buton-Binongko society is influenced by the "*Kahedupa Gau Satot philosophy*," emphasizing harmony between speech and action. This philosophy is further characterized by stubbornness, patience, commitment, courage, and honesty. The community also embodies a strong spirit of independence and high egalitarianism, where individuals are regarded as equal and supportive of one another in the social fabric (Hadara, 2006).

Meanwhile, Bugis-Makassar society strongly emphasizes the concept of '*Siri*' (self-respect) and '*Pacce*' (compassion). '*Siri*' drives individuals to uphold their dignity and honor at all costs, while '*Pacce*' promotes empathy and solidarity within the community. These values are central in shaping their interpersonal relationships and responses to challenges. Meanwhile, the Madura community is well-known for its adherence to '*Carok*,' a cultural

concept that signifies a deep sense of pride and defense of honor, even to the point of confrontation. Alongside this, Madura society values 'Buppa' Babbu' Guru Rato' (parents, teachers, and leaders), highlighting respect for authority figures and traditional hierarchies. Overall, while these three societies share overarching values of resilience and communal support, their distinct philosophies, such as the egalitarianism of Buton-Binongko, the honor-driven principles of Bugis-Makassar, and the hierarchical respect of Madura shape their social interactions, community-building efforts, and approaches to life's challenges. These unique cultural frameworks influence individual behavior and extend into architecture, governance, and other societal structures.

Social-cultural interaction

Socio-cultural interaction describes how individuals and groups interact based on cultural values that have been integrated into their characteristics and lifestyles. According to Rapoport (1977), a society's cultural and social context influences human activities, shaping the creation of physical spaces designed to support those activities. This concept evolved further in vernacular architecture, which integrates architecture with the environment while preserving the local community's cultural values, social, and cultural conditions (Anselm, 2006). However, the emerging challenge lies in the dynamic interaction between traditional and modern cultural concepts, which can influence how cultural identities are expressed and maintained. Without deliberate efforts to celebrate and adapt cultural symbols, there is a risk that some aspects of traditional identities may become less prominent in society (Yonefendi et al., 2018).

3. Methods

This research uses a case study method (Yin, 2018). This approach was chosen to examine the unique cultural interactions on the island of Gili Iyang, focusing on how the migration of Bugis-Makassar, Buton-Binongko, and Madura cultures affected their architecture. The research was conducted on Gili Iyang Island, Sumenep Regency, located in the Sapudi Strait east of Madura Island. The island is part of the Dungkek District and is divided into two villages: Bancamara and Banra'as. The observation units in this study included communities from Sumenep-Madura, Bugis-Makassar, and Buton-Binongko in the towns of Bancamara and Banra'as.

The observation units in this study included communities from Sumenep-Madura, Bugis-Makassar, and Buton-Binongko in the villages of Bancamara and Banra'as. The analysis unit is the cultural event or tradition on the island of Gili Iyang, which influences how local communities are in terms of architecture. The tradition analyzed is the *Andherenat*, whose implications are observed in eight housing cases. The selection of these eight cases is based on the following criteria: 1. Based on how close the descendants of the homeowner are with the chroniclers of Gili Iyang, who are Sumenep-Madura of Keraton Sumenep, Bugis-Makassar of Daeng Karaeng Masalle, and Buton-Binongko descendants of relatives believed by Andang Taruna as the preservers of the heritage of science and *asta* (graveyard); 2. Based on how old and minimal transformation occurred in the housing; 3. The house owner is a maritime mental community; 4. This research is limited to the cultural study of maritime-mental societies.

In short, the research process involves the following steps: (i) planning research after the preliminary study, (ii) designing the research components, which include case determination, research question(s), problem limitation, bottom-up research design model

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(iii) preparing theoretical frameworks, repository units, analytical unit, research tools, and interview questions, (iv) collecting data through documentation, archive records, live observations, physical artifacts, and interviews, (v) analyzing data collected using classification-encoding techniques, narrative explanation, time-line analysis, modeling, and cross-case synthesis, and (vi) sharing findings. The study used an embedded multi-case approach to study the influence of maritime culture on architecture by analyzing cultural events in the context of three different communities.

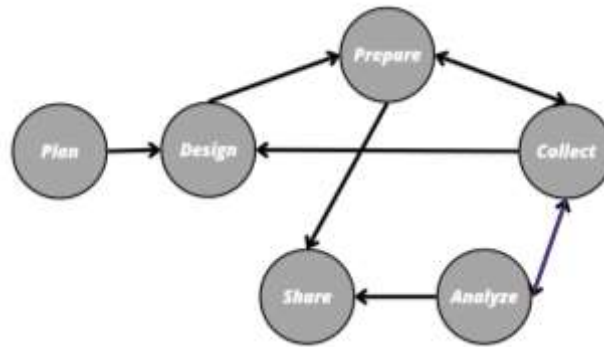


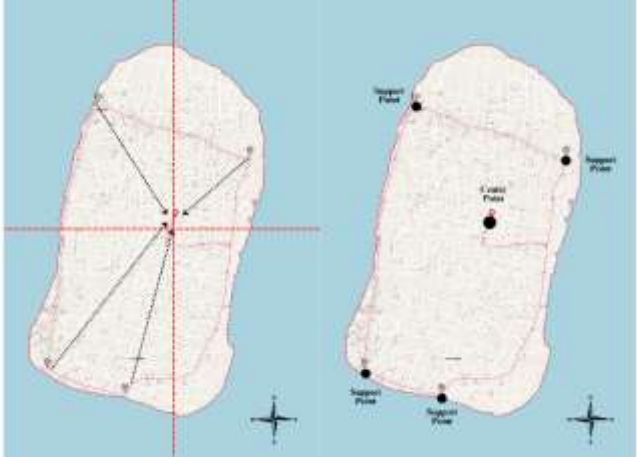
Figure 1. Research Method Flow Diagram

4. Result and Discussion

Andherenat is a cultural heritage from the migrant community of the Buton-Binongko tribe, specifically from Andang Taruna. This tradition will be analyzed based on the categories of activity, time, participants, and spatial form, as outlined in Table 1.

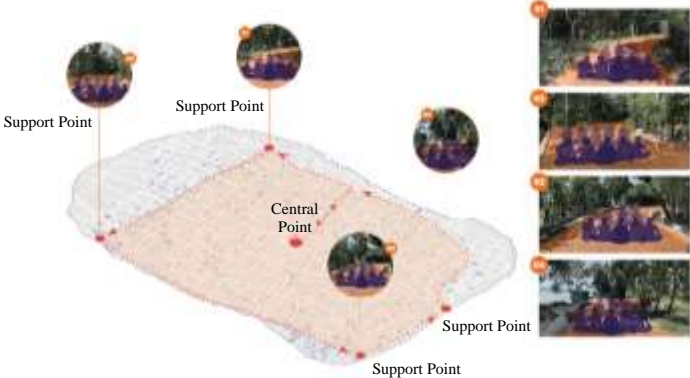
Table 1. Analysis of the *Andherenat* traditions

Information	Analysis
<p>The <i>andherenat</i> tradition serves as an expression of gratitude for how the soil is kept fertile and plants alive so that they satisfy human needs. This tradition lasted for seven days. The first day is on Friday and ends on Friday as well. Days 1–6 are carried out after <i>isya</i> (Muslim’s evening prayer) with the agenda of events comprising recitations, such as <i>tawassul</i>, <i>yasin</i>, <i>tahlil</i>, and last <i>pojjan andheranat</i> at <i>asta</i> Andang Taruna. Participants in this tradition are all of the Gili Iyang island communities belonging to the families of Sumenep-Madura, Bugis-Makassar, and Buton-Binongko.</p>	<p>Activity Categories</p> <ol style="list-style-type: none"> 1. An expression of gratitude for the fertility of the soil, which allows plants to grow and fulfill human needs → symbolization of nature's grace → ornament. 2. The order of people circling around the island is arranged with the children in the front, followed by the women, and then men → symbolizing the cycle of birth and death → arrangement and distribution of space. 3. The poetry is divided into four sections → representing the relationship between the elements of life in the universe: God, man, heaven, and earth, with references to the four natural elements: earth, water, air, and fire → the arrangement of space and the concept of color.
<div data-bbox="228 1635 534 1848" data-label="Image"> <p data-bbox="271 1803 486 1848">Asta Andang Taruna</p> </div> <p data-bbox="550 1635 941 2004">On the last day, Friday afternoon, there is an agenda called <i>topak lober</i> at the yard of the <i>asta</i> Andang Taruna. <i>Topak lober</i> is a procession symbolizing that desire will be achieved with the permission of God. As for the <i>topak lober</i>, this consists of pulling out <i>ketupat</i> (a traditional Indonesian packed rice cake) until the contents are removed. After the <i>topak lober</i>, in the evening, there is an agenda of events comprising <i>tawassul</i>, <i>yasin</i>,</p>	

Information	Analysis
<p>tahlil, and communal meal that is either brought by the community themselves or contributed by the community nearby. Lastly, the participants make a journey around the island of Gili Iyang while also chanting <i>andherenat dzikr</i> and prayers. As they circle the island, the praise poem is led by one male elder, and the others follow in a row as they circle around the island, where the children are in the front, followed by the women, and finally, the men.</p> <p>The prayer is divided into four parts: (1) A prayer called <i>Patakonan</i>, containing Islamic acts, prophecy, <i>tauhid</i> teachings, and devotion to the parents. (2) Prayer and heartfelt thinking, which contains the guidance, advice, and message of the religion of <i>Tasawwuf</i>, (3) Prayer asking for rain (<i>masre gunung</i>), (4) Prayer to stop rain and storms. The direction of the journey around the island is north-east-north-west-south-eastern-northeast, where the participants will return to the starting point. In the process of circling the island of Gili Iyang, there are stops at each of the four corners of the island where they will sit and present <i>adzan</i> (the call to Muslim prayer five times a day), chants, prayers, and stand again to continue the journey around the island. The length of time at each of the four corners of the island is about an hour.</p> <p>The process surrounding the island of Gili Iyang forms a macro space with the orientation of Andang Taruna as the central orientation point. The process around the island occurs intermittently, with a temporary stop as a support point.</p>	<p>4. The direction of the journey around the island follows a path from the northeast to the northwest to the south and back to the starting point → aligning with the four cardinal directions: north, south, east, and west → orientation.</p> <p>Time Category</p> <ol style="list-style-type: none"> 1. The tradition of <i>andherenat</i> is carried out over seven days → corresponding to the seven colors of the rainbow: red, orange, yellow, green, blue, indigo, and violet → the concept of color. 2. During the journey around Gili Iyang, there are stops at each of the four corners of the island → these are transition spaces → division and arrangement of space. 3. At each stop, they sit, present the <i>adzan</i>, offer prayers, and then continue their journey → the time spent at each corner is about an hour → the pattern of repetition at each point → the arrangement of space and ornaments.
	<p>Participants Categories</p> <ol style="list-style-type: none"> 1. All the communities of Gili Iyang, which include families from Sumenep-Madura, Bugis-Makassar, and Buton-Binongko → Community → Gathering → arrangement and distribution of space. 2. The praise poem is led by one male → the male is the lead figure, while the female plays a central role in binding the community together → arrangement and distribution of space. <p>Spatial Form Categories</p> <ol style="list-style-type: none"> 1. The process of moving around Gili Iyang forms a macro space, with the Andang Taruna as the


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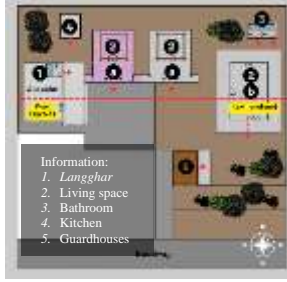
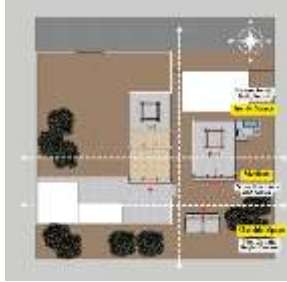





Information	Analysis
	<p>centerline → circling inward → orientation.</p> <p>2. The journey around the island occurs intermittently, with temporary stops as support points →, stops →, transition space, → division, and space arrangement.</p>

Based on the activities of the three distinct communities during the *Andherenat* ritual process, the researchers propose that these activities could have implications for residential housing development. Specifically, they suggest that: (1) Spatial Organization and Division - Spatial arrangements are structured according to a sequence from death to birth, similar to the *mandala* concept, where the west signifies death, and the east signifies birth. The space encompasses the upper world, which refers to the divine; the middle world, representing earth and sky; and the lower world, about humanity itself. There is a central binding space among buildings, the concept of external and internal spaces, and transition areas where these transition spaces close yet connect buildings. (2) Ornaments - There are two motifs: floral or plant motifs and repetitive patterns. (3) Color - The spaces feature natural colors such as teal, brown, light blue, and red. Additionally, rainbow colors comprise red, orange, yellow, green, blue, indigo, and violet. (4) Orientation - Spatial orientation aligns with the four cardinal directions, north, south, east, and west, and includes an inward orientation toward a central point. To substantiate these proposals, the researchers analyzed eight cases of residential architecture from the Sumenep-Madura, Bugis-Makassar, and Buton-Binongko communities, as detailed in Table 2.

Table 2. Analysis of eight residential cases

Implication	Sumenep-Madura Community		
	Residence 1	Residence 2	Residence 2
Spatial Organization and Division			

The organization and division of space are deeply connected to gender roles and spiritual symbolism. The northern part of the house is considered a special area for women, characterized by its enclosed, dark environment with minimal openings, and typically positioned at a higher elevation. This space symbolizes women as the source of life and the origin of existence, embodying celestial or spiritual meanings. The functions of buildings in the northern area, such as the kitchen, bathroom, and living space, reflect this designation. Conversely, the southern part of the house is designated for men's activities, marked by openness, brightness, freedom, and floors that are nearly level with the ground. Depending on the homeowner's occupation, this area contains structures like guardhouses, *Langghars*, and animal pens. The *Langghar*, often located at the western end of the

Implication	Sumenep-Madura Community			
	Residence 1	Residence 2		
	settlement, holds the highest position in the hierarchy of spiritual values due to its orientation towards the west, the direction of Qibla in prayer, acting as an intermediary closer to the Creator. The central part of the house, or tanean, serves as the core area and a transition space between buildings. Although the orientation of some Madura houses may not face the street, the internal room configuration and distribution of building functions remain consistent with the cultural values and traditions held by the Madura community.			
Ornaments		The ornaments on the coffins and door leaves include a swastika motif, a geometric motif with clear and repetitive lines, and a flora motif in the form of plants. In addition, a dragon tail motif is also found on the roof cover.		
Color		The dominant colors include teal green, blue-green, brick-orange, golden yellow, salem, pink, brown, and white.		
Orientation	 Information: 1. Langghar 2. Living space 3. Bathroom 4. Kitchen 5. Guardhouses		The orientation of living space, kitchens, and bathrooms generally faces south, while guardhouses face east. However, the orientation of all buildings towards the inside of the <i>Tanean</i> , serves as the central space between buildings.	
Implication	Bugis-Makassar Community			
	Residence 1	Residence 2	Residence 3	
Spatial Organization and Division				In the residential complexes of Mr. Samsul, Mr. Bati, and Mrs. Hanifah, the spatial arrangement is divided into three zones: outer, middle, and inner. (1) The outer space, colored yellow and semi-private, consists of the front yard and front terrace. In some homes, this also includes a guest bathroom or side terrace. (2) The middle space, colored orange and private, includes the kitchen, bathroom, and backyard. Some houses also feature elements such as a prayer room, storage area, well, or side corridor. (3) The inner space, which is highly private, generally includes the bedrooms in each dwelling, such as the oldest family bedroom and the animal pens in Mr. Samsul's house. Additionally, the corridors and courtyards serve as transitional spaces and connectors within the complex.
Ornament		Ornaments with geometric motifs that have a firm and repetitive line shape were found on the door coffins, as well as the upper ventilation of doors and windows.		
Color		The dominant colors used include shades ranging from light to dark blue, bluish-green, green, brick-orange, dark red, pink, pastel red, brown, golden yellow, white, and antique white.		

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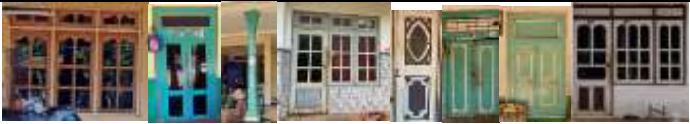

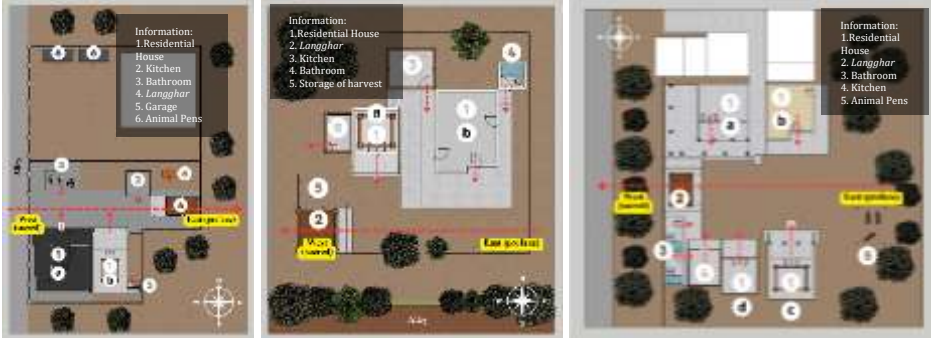
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Implication	Sumenep-Madura Community	
	Residence 1	Residence 2
Orientation		

The orientation of the living space is mostly north-south orientation; the kitchen orientation is mostly west orientation and the bathroom orientation is south and east orientation. Generally, all buildings are directed inward towards the courtyard, which serves as a binding space between buildings.

Implication	Buton-Binongko Community		
	Residence 1	Residence 2	Residence 3
Spatial Organization and Division			

In the residential complex of the Buton tribe, the *langgar* (small-scale family mosque) located at the western end of the settlement occupies the highest position in the hierarchy of values, possessing greater spiritual and sacred dimensions compared to other more worldly buildings. The west-east orientation of the *Langghar* makes it a closer intermediary to the Creator. Other buildings face east and have more worldly functions such as living quarters, kitchens, bathrooms, and animal pens. The arrangement of living spaces follows a family hierarchy from oldest to youngest, with the oldest house located in the west and progressively younger generations towards the east, symbolizing the life cycle from birth to death. The northern part of the house is designated for women and is considered a closed, dark, and sacred space, while the southern part is more open and serves as an area for male activities. All buildings are connected

Implication	Sumenep-Madura Community	
	Residence 1	Residence 2
	through a courtyard that serves as a central space and transition between buildings.	
Ornament	 <p>Ornaments on door frames and leaves generally display geometric patterns characterized by bold, repetitive lines. Additionally, there are floral motifs featuring vine-like plants on columns and door leaves, appearing in shades of green, pink, and brown.</p>	
Color	 <p>salmon, antique</p>	<p>The dominant colors used range from dark to light green, bluish-green to light blue, brick-orange, shades of red from light to dark, brown, white, golden yellow, and white.</p>
Orientation	 <p>The orientation of the living space is generally north, while in the kitchen, the animal pens is generally positioned to face south, and the bathroom can face the north/east. The storage area is facing the west. All buildings are directed inward towards the courtyard, which serves as a central and transitional space between buildings.</p>	

The Sumenep-Madura community housing concept on the island of Gili has some similarities with the traditional *Tanean Lanjhang* settlements, as noted by Tulistyantoro (2005): (1) the spatial arrangement and division along east-west and north-south axes imply a balance between gender aspects and spiritual symbolism; (2) the color scheme is based on natural elements such as brown (earth), green (sea), blue (sky), and red-orange (fire); (3) ornaments inspired by the surrounding environment namely plants and animals with repetitive patterns; (4) *Tanean* (yard) as the central space concept of orientation direction and transition between buildings. The difference with the old standards is the use of materials that are increasingly modern adapting to the demands of modernity.

The concept of the housing of the Bugis-Makassar community in Gili Island differs from that of the traditional architectural concept of Bugis in South Sulawesi. On Gili Iyang, the current residential concept leans towards a mixture of *Tanean Lanjhang* with Bugis settlements, characterized by: (1) spatial organization and division along east-west and north-south axes reflecting a balance between gender aspects and spiritual symbolism; (2) the patterns or arrangements of buildings based on the upper world, the middle world, and the lower world as well as the outer and inner space concepts; (3) closely situated buildings; (4) courtyards and corridors serving as transitional and connecting spaces; (5) the stage structure has been abandoned but the conception of the elevation of the floor of the building with the land is higher than the idea of the house role of the Sumenep-Madura society and

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the society as the role of Buton-Binongko; (6) the color scheme reflects natural elements such as brown (earth), green (sea), blue (sky), and red-orange (fire); (7) ornaments feature geometric patterns with bold, repetitive lines.



Figure 2. Elevating the floor levels of the residential houses of the Bugis-Makassar community

The concept of the Buton-Binongko community housing in Gili Island is very different from the traditional architectural concept of Buton in Southeast Sulawesi. On Gili Islands, the concept of their housing is more similar to the Sumenep-Madura society housing concept, which is that (1) a spatial organization and division along east-west and north-south axes, reflecting a balance between gender aspects and spiritual symbolism; (2) the color concept is based on natural elements such as brown (land), green (sea), blue (heaven), and orange-red (fire); (3) ornaments inspired by the surrounding environment, namely plants and geometric motifs with strict and repetitive lines; (4) *Tanean* serving as the central concept for orientation and transition between buildings.

Overall, the communities of Sumenep-Madura, Bugis-Makassar, and Buton-Binongko on Gili Iyang Island have formed an assimilated society. The current residential architecture concept among the Bugis-Makassar and Buton-Binongko minority communities now largely follows the Sumenep-Madura design, incorporating adjustments for cultural assimilation and the local climatic conditions.

5. Conclusion

Maritime-minded communities play a crucial role in passing down cultural traditions that ultimately influence the architecture of Gili Iyang Island, such as the *Andherenat* cultural tradition. The assimilation observed is driven by intermarriages between members of the minority groups, such as the Bugis-Makassar and Buton-Binongko communities, and members of the majority group, the Sumenep-Madura community. Beyond marriage, assimilation is also supported by the identity needs of individuals from minority groups, leading to a desire to adopt the identity of the majority group as a means to gain acceptance or avoid discrimination.

The assimilation among these three community groups has influenced the architecture of Gili Iyang Island in several ways: (1) spatial organization and division from east to west and north to south, reflecting a balance between gender aspects and spiritual symbolism; (2) color concepts based on natural elements such as brown (earth), green (sea), blue (sky), and red-orange (fire); (3) ornaments inspired by the surrounding environment including plants, animals, and repetitive geometric patterns; (4) courtyards serving as the focal points for orientation and transition between buildings; (5) buildings that are closely spaced.

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