

Original Article

An Exploration of Local Architectural Elements in the Design of the Sacred Heart of Jesus Catholic Church, Laktutus

Novenrius Kornelius Sera¹, Pilipus Jeraman^{1*}, Reginaldo Christophori Lake¹, Irwan Muji Hartanto²

¹Department of Architecture, Faculty of Engineering, Universitas Katolik Widya Mandira, Indonesia.

²Gio Architect: Building, Interior, and Landscape Design, Indonesia.

¹Corresponding Author : pilipusjeraman@unwira.ac.id

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Abstract - Utilizing the Theory of Architectural Vernacularism by Amos Rapoport (1982), this research aims to analyze the architectural local elements of Jesus Catholic Church's Sacred Heart in the village of Fohoeka, Regencu of Belu, East Nusa Tenggara. The objective of the study is to explore church architecture's local elements (structure, symbol, form, orientation, material) that manifest the local community's spiritual and cultural values. The methodology of the research applies a qualitative-descriptive method encompassing document analysis, documentation, observation, and interviews. The findings uncover four cultural values major elements of Tetun or Belu community in accordance with Vernacular Architecture Theory by Amos Rapoport (1982): (1) local natural stone used in the wall structure symbolizing nature sacredness and faith strength manifested in the ritual construction tradition; (2) symbolizing communal and divine protection, roof shape that is semicircular adopted from lopo traditional house inverted roof; (3) local wood application for the interior respecting Tetun cosmology sacred materials; (4) six pillars in ornaments Tais woven fabric incorporating church structural strength with communal responsibility. In general, these findings are in line with Bhabha's (1994) concept of cultural hybridity, in which cultural identity is not understood as a static and exclusive entity, but rather as the result of a process of negotiation and dialogue between cultures that produces new forms that do not lose their authenticity.

Keywords - Belu culture, Catholic church architecture, Laktutus, Local elements.

1. Introduction

The exploration of local elements in religious architecture is a crucial field of study for understanding how universal religious values intersect with the local wisdom, cultural identity, and socio-spatial practices of particular communities. In the Indonesian context, characterized by extraordinary cultural diversity, religious buildings frequently serve as arenas of dialogue between global theological doctrines and local vernacular traditions. Catholic church architecture in Indonesia, in particular, demonstrates this interaction through the adoption and reinterpretation of indigenous forms, materials, symbols, and spatial concepts. This process should not be understood merely as aesthetic adaptation, but rather as a cultural-theological negotiation that generates new architectural meanings and contextual religious expressions [1, 2].

This dialogue is especially evident in border regions, where cultural identity, historical experience, and religious life are closely intertwined. One such context is the Belu Regency, East Nusa Tenggara, located at the border between

Indonesia and Timor-Leste. Belu is recognized as the region with the highest proportion of Catholic adherents in Indonesia, and Catholic churches play a central role not only as places of worship but also as socio-cultural anchors for the local Tetun community.

Within this unique geographical and cultural setting, the Sacred Heart of Jesus Catholic Church in Laktutus Village, Fohoeka, Nanaet Duabesi District, presents a compelling case of how religious identity is articulated through architectural language rooted in local culture.

Constructed between 2015 and 2023, the church replaced the former building from 1968, which could no longer accommodate the growing congregation (Figure 1), while simultaneously introducing a new architectural form that integrates Middle Eastern church inspirations with vernacular elements of the Belu/Tetun community. This integration produces a spatial and visual representation of Catholic spirituality framed within local cultural values [3].





Fig. 1 The Old Laktutus Church, 1968

Source: YouTube Christus Medium, 2023 (accessed May 20, 2025)

The design of the Sacred Heart of Jesus Catholic Church was conceived by Brother Agus Dewantoro, OFM, whose architectural inspiration emerged from a spiritual pilgrimage to Jerusalem and encounters with stone-built medieval churches of the Holy Land. However, instead of replicating foreign architectural models, the design underwent a process of localization through active community participation involving four surrounding villages. The church was constructed through a collaborative, community-based approach that allowed local cultural expressions, building traditions, and collective values to shape the final architectural form. This participatory negotiation between universal Catholic architectural references and local Tetun expressions reflects what Bhabha (1994) conceptualizes as cultural hybridity, where new meanings emerge from the interaction of global and local cultures rather than from the dominance of one over the other [4].

Such an architectural approach aligns with the Second Vatican Council's *Ad Gentes Decree* (1965), which emphasizes that the mission of the Church should respect, preserve, and elevate the cultural and spiritual values of every nation. From an architectural perspective, this principle encourages contextualization and reinterpretation of local identity within religious buildings, resulting in expressions that are both authentic and culturally grounded while remaining faithful to universal theological principles [5, 6].

Despite the growing number of studies on local cultural integration in Catholic church architecture in Indonesia, scholarly research focusing on the Tetun community in Belu Regency remains extremely limited. Existing studies predominantly address other regional contexts, such as the incorporation of Javanese cultural symbols in the altar area of St. Paulus Sendangguwo Catholic Church in Semarang examined, cultural acculturation in the interior of Gemma Galgani Church in Ketapang, West Kalimantan by Oscarina et al. (2019) [8], the assimilation of Toba Gorga ornaments in Pangurusan Church studied by Simanjuntak et al. (2019) [9], and Javanese cultural integration in Ganjuran Church analyzed by Apriansyah and Nadrrroh (2024) [10].

While these studies contribute valuable insights into cultural adaptation in church architecture, they primarily focus on ornamentation, interior symbolism, or stylistic assimilation and are situated outside the socio-cultural context of Eastern Indonesia.

In contrast, Belu Regency possesses distinctive vernacular characteristics, including *lasi* (a communal work system), strong collective values, and a complex spatial cosmology embedded in Tetun culture. These cultural dimensions have not been sufficiently examined in relation to church architecture, particularly in terms of how they influence architectural structure, spatial organization, symbolism, materiality, and orientation. This absence constitutes a clear research gap, indicating the need for an in-depth investigation of how local cultural values of the Belu/Tetun community are embedded within the architectural elements of a Catholic church [11, 12].

Addressing this gap, the present study raises two main research questions:

- (1) What local architectural elements can be identified in the Sacred Heart of Jesus Catholic Church in Laktutus Village?
- (2) How do these local elements represent the cultural and spiritual values of the Belu/Tetun community when examined through the framework of vernacularism theory proposed by Amos Rapoport?

Rapoport's theoretical approach is particularly relevant, as it emphasizes architecture as a cultural product shaped not only by function and form, but also by social systems, values, beliefs, and environmental contexts [1].

Accordingly, this study aims to analyze and interpret the local architectural elements of the Sacred Heart of Jesus Catholic Church, including structure, form, symbols, orientation, and materials, in relation to the cultural and spiritual values of the Belu/Tetun community. Through Rapoport's architectural principles, the research seeks to reveal not only the church's physical characteristics but also the deeper cultural and spiritual meanings embedded within its architectural expression [4].

The novelty of this research lies in its focus on the Tetun cultural context in Eastern Indonesia, combined with a comprehensive analysis of church architecture that integrates structural, symbolic, spatial, and material dimensions within a vernacularism framework. Unlike previous studies that emphasize stylistic or ornamental acculturation, this research positions local culture as a determinant of architectural meaning and spatial logic.

Theoretically, this study contributes to the discourse on religious architecture and vernacular identity in Eastern

Indonesia, an area that remains underrepresented in architectural scholarship.

Practically, the findings offer insights for architects, planners, and religious institutions on the importance of incorporating local cultural values into church design, while simultaneously documenting and preserving the local wisdom of the Belu community as part of sustainable, context-sensitive architectural development [13, 14].

2. Literature Review

2.1. Amos Rapoport's Theory of Architectural Vernacularism (1982)

The Vernacularism Theory in Architecture in *The Meaning of the Built Environment: A Nonverbal Communication Approach* (1982), written by Amos Rapoport, functions as the major theoretical concept of this research. Rapoport emphasizes that vernacular architecture's meaning and form are not defined merely by practical functions or technological elements but also by complex cultural determinants encompassing cultural factors as systems, beliefs, social values, and climate. In Rapoport's perspective, architecture is perceived as a cultural physical manifestation that every element of architecture possesses cultural meaning that can be interpreted.

The fundamental principle "culture, not only function, should be followed by the form" emphasizes that the form of architecture represents the divine and social structure relationship, and the community worldwide of the architecture. For instance, the natural stone used in the local buildings do not merely reflect the conditions of the geology but also indicates the human-nature relationship, permanence, and solidity values [1].

Rapoport's theory highlights nonverbal communication as the essential factor in his approach, in which ornaments and symbols convey complex traditional messages. The organizational structure, spatial layout, and building orientation also represent the community's social structure and cosmology. Hence, the vernacular architecture plays a pivotal role as a medium of cultural communication through generations [1, 15, 16].

Concerning the Belu/Tenun community's robust vernacular culture, Rapoport's theory is proven to be significant. It encompasses the traditional house called Uma Kbbubu as a sacred central building applying ritual spaces and foundations of natural stones, the construction practice known as lasi, which means mutual cooperation that reflects the robust relationship between humans and nature, and highlights collective responsibility and togetherness [11, 17].

The theory of Rapoport eases the recent study to identify Laktutus Church not only in terms of physical form description but also the spiritual and cultural meanings. The

analyzed aspects of the church incorporate the *Tais*, traditional timber, and natural stone, reflecting the Belu community's fundamental values in the religious architectural context. This method is in accordance with the vernacularism approach underlying adaptive and dynamic cultural practice of the architecture [18, 19].

2.2. Inculturation in the Catholic Church

The inculturation concept of the Catholic Church defines the integration of local culture and faith experience as the model directing, inspiring, and renewing the culture (Sinaga, 1984). The theory received a crucial moment right after the 1962-1965 Second Vatican Council that explicitly provides religious and liturgical expression in adapting the local culture elements, as asserted in the Decree of *Ad Gentes* that concerns the mission of the Church in preserving and respecting every nation's cultural and spiritual values [2].

Aspects generating church architecture meaning and form are introduced by Laurens (2013) in his research on Indonesian Catholic church architecture. The primary foundation is a theological aspect that reflects liturgical mission and identity of the church, a spiritual essence for worshipping sacred space [5, 7]. Another factor is the contextual aspect, which incorporates socio-cultural, technological, geographical, and economic dimensions that instill architecture authentically with the local wisdom. These two architectural aspects are crucial in creating balance in cultural expression, particularly in the universal theological meaning.

The inculturation process in church architecture generates more than visual elements. It incorporates the revelation of cultural and spiritual meaning, representing the sacred place, and demonstrating the community's spiritual and cultural experiences. The transformation of the Indonesian Catholic church, as mentioned, was influenced by the Western modern movement that is more contextual. It is reflected by local materials integration, adaptive symbolism, and simple geometric forms. This evolution represents the cultural and theological maturity in comprehending that the universality of the Catholic faith can be evolved by distinctive contexts of diverse cultural development [20].

2.3. Traditional Architecture of the Belu/Tetun Community

Residing indigenously in Timor Island, precisely in the Belu and Malaka regions of Indonesia, the Tetun ethnic group, widely known as the Belu Community, becomes the Timor Leste majority. The systems of traditional housing are frequently performed in tanean or cluster, in which the primary symbolic and structural unit is known as Uma, encompassing varied types: sacred or forbidden house recognized as Uma Kakaluk, the largest settlement of customary affairs center as Uma Bot, and daily residential settlement as Uma Laran. This spatial layout and division do not simply reflect the functional needs but more the

cosmological and social meanings that generate the community's ritual, use, and access practices [11, 12].

In terms of the building morphology, Belu traditional houses are frequently built with rectangular or square plans, formed utilizing traditional materials like a roof made of lontar leaves or alang-alang grass, bamboo, and wood. The most vivid element is the roof in the form of an inverted boat pyramid, different in the Rote, Sabu, and Belu sub-regions. Tetun traditional settlements are built structurally with nearly-to-the-ground extending with large roofs, standing on two major central pillars. The pillars reflect the sacredness instilled in the installation and selection process, where the highest-quality wood without the axe touch is applied [21, 22].

For the construction of altars or ritual sites and foundations, Belu architecture uses natural stone. Due to not only the structural strengths, but also the stone is selected for the place's sacredness, nature connection, and sturdiness symbol. The spiritual world, nature, and humans' relationship in Tetun cosmology are represented in the cardinal points orientation, the performed construction process rituals, and the settlements' spatial hierarchy. The value of *lasi* or mutual cooperation is crucial in building the settlement that reflects the community's active cooperative practices as the unity of social structure [17, 23].

Local ikat weaving craft known as *Tais* is also renowned in the Belu community despite the residential architecture. It is generated through the *futus* or ikat technique on a local gedogan loom, and additional weft patterns. *Tais* is crucially worn in traditional rituals like weddings or funerals. The fabric value of *Tais* is decided by spiritual and customary meaning rather than the price of the market, as it functions as the cultural communication medium of Bely society [24, 25].

2.4. Previous Studies on Catholic Church Architecture in Indonesia

Studies on Indonesian architecture of the catholic church and the cultural inculturation process have grown over the last two decades. Examined the Javanese church architecture of St. Paulus Sendangguwo Catholic, Semarang, for the customary elements of the roof forms and symbols of the ornaments of the altar that churches are able to incorporate local expression due to the Gospel mission.

Moreover, a study conducted by Oscarina et al. (2019) revealed inculturation between the local culture of Dayak and Catholic values in Gemma Galgani Church, precisely in Ketapang, West Kalimantan, as uncovered non-physical evidence in the spatial components' ornamentation, color usage, and organization patterns [8]. Another study by Simanjuntak et al. (2019) observed the assimilation and acculturation of the architectural ornamentation of Batak Toba Gorga in St. Mikael Catholic Church, Pangururan,

which demonstrates the symbolic meaning [9]. Meanwhile, another cultural assimilation was presented in Apriansyah and Nadroh's (2025) study by identifying the inculturation of Javanese culture in Jesus Catholic Church Sacred Heart in Ganjuran, Bantul, Special Region of Yogyakarta, illustrated in its cultural spatial philosophy, carved ornament, and pendopo producing universal-particular sacred spaces [10].

Adapting European Gothic styles in Indonesia's architecture, the modernist development of the Catholic church, Rihadani and Ikaputra (2023) performed the study emphasizing the maturity of architectural contextual expression on Indonesian architectural inculturation [20]. Similarly, highlighting the function, symbolic ornamentation, meaning, and form of the Catholic Church of St. Ignatius Loyola in Sikka, Lake et al. (2025) illustrated its effect on the architectural spiritual interpretation of the Church. Moreover, Widyawati et al. (2025) emphasize that numerous inculturation practices by the Indonesian Catholic church have been performed in the form of local culture and language, encompassing the architectural transliteration by providing meaning and functional spatial design [2].

Despite the previous studies' contributions towards architectural inculturation of the Indonesian Catholic church, a significant gap emerges concerning the lack of research attention on the Belu Community's Church, East Nusa Tenggara. With its indigenous Tenun culture, this region owns numerous special characteristics worth being examined, particularly at Laktutus Church, encompassing Indonesia's largest Catholic believers, cultural dynamics of complex cross-border, and distinctive vernacular traditions.

3. Materials and Methods

In accordance with the architectural study, a qualitative-descriptive method is performed in this research, completed with architectural documentation and visual observation. As asserted by Creswell (2015), a qualitative approach was selected because of the capability of revealing and comprehending meanings of architectural phenomena in the design research context [26]. Meanwhile, the descriptive approach is able to identify the church architecture's local elements and characteristics and to interpret the Belu community's cultural values and physical elements relationship.

The primary data was collected through field observations encompassing visual documentation of the church's architectural design, interior and exterior, ornamentation, and construction materials, which specifically includes specific elements, photography like *Tais* pillars, roof forms, liturgical spatial arrangements, structures of stone walls, and wooden ceilings. The interview was performed with Pastor Yohannes Kristo Tara from OFM and Agustinus Berek as Head of Fohoeoka Village to acquire

pastoral and theological perspectives, and the local community representative’s insights on the significance of architectural elements.

Meanwhile, the secondary data were collected through both printed and conventional and digital data due to the scarcity of references in relation to the Belu community, Tetun traditional architecture, and Laktutus Catholic Church that encompass pastoral reports, academic journals, media documentation, books, online news articles, and YouTube videos.

Document analysis method is employed in data analysis in this study, in which, as Bowen (2009), documents are admitted not merely as the information references but also as the research object to identify the cultural contexts and symbolic meanings [27]. Meanwhile, emphasizing the

identification of the architecture’s cultural determinants, Rapoport’s Theory of Vernacular Architecture (1982) is applied [1]. The process of analysis encompasses observing physical aspects, including ornamentation, materials, and form, interpreting Belu cultural symbolic meaning, and comprehending local community socio-spiritual values and architectural elements.

Data triangulation was conducted by comparing findings from literature studies, field observations, and interviews to ensure the validity. In maintaining objectivity of the church architecture’s local elements meanings under the cultural hybridity concept (Bhabha, 1994), triangulation also incorporates cross-checking theoretical perspectives through academic literature, local cultural views from the Fohoeka Village Leader, and from the parish pastor for the theological perspectives.

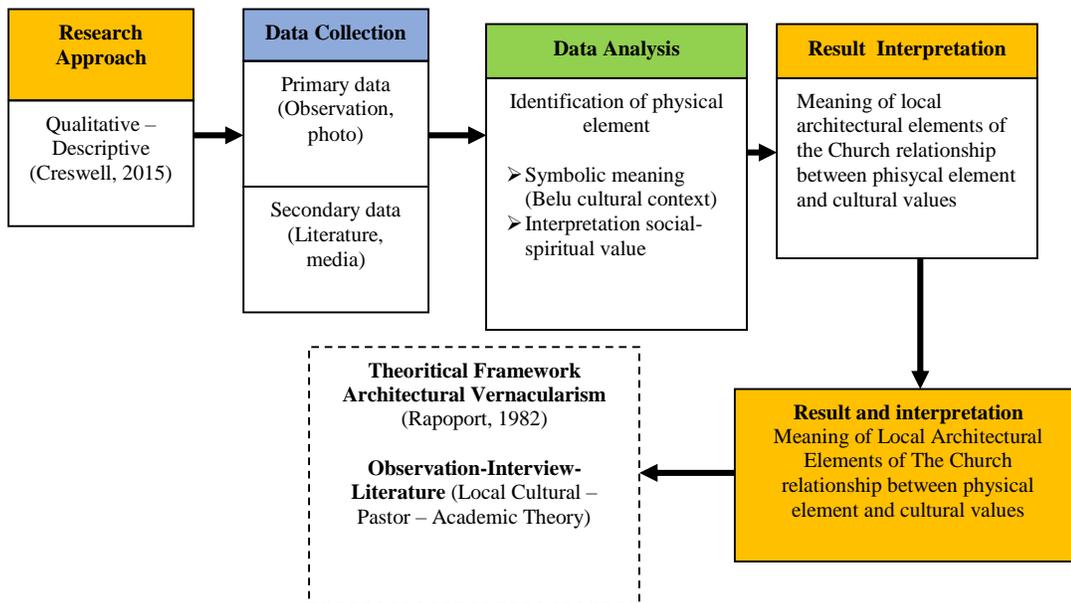


Fig. 2 Research methodology flow

4. Results and Discussion

4.1. Profile of the Sacred Heart of Jesus Church, Laktutus

The Jesus Church Sacred Heart in Laktutus stands in a strategic location of Fohoeka Village, District of Nanaet Duabesi. This building was inaugurated in 2023 on a 1,200-square-meter plot.

Despite the previous use of livestock grazing, the architect selected it for the church due to the strategic and high elevation location that becomes the center of spiritual and tourism symbol of the border region of Timor Leste, Indonesia.



Fig. 3 Jesus Catholic Church Sacred Heart, Laktutus Village

The robust communal values are vividly presented in the construction process of the church, where community participation from the villages (Nanaet, Nanaenoe, Fohoeka, and Dubesi) is involved. It indicates that the church establishment not only acts as the spiritual performance but also as the economic solidarity and capacity building of the local community, as stated by Yohanes Kristo Tara OFM, Parish Pastor.



Fig. 4 Traditional House (Uma) Laktutus
 Source: Araujo, 2023 Modification; 2025 Google Earth
 (accessed on 20 May 2025)

The interior design characteristics of the church are unique, as it resembles a stadium where the congregational seating is located above the altar, positioned in the lower part. This concept reflects the Catholic theological concept of incarnation that presents the humility exemplified by God for elevating humans, as asserted by Agus Dewantoro OFM, an architect brother. He adds that it symbolizes that being humble is a significant personality trait humans should possess. During the church construction process, traditional practices demonstrate cultural values integration, Belu community wisdom, Catholic theology, and architectural vision.

4.2. Identification and Meaning of Local Elements

4.2.1. Wall Structure utilizing Local Natural Stone

The interior and exterior walls of Jesus Church Sacred Heart in Laktutus primarily use orange tones and deep red local natural stone taken from the hills surrounding Fohoeka village. Because of the lack of plaster in installing the stones, the walls remain natural with the real stone textures that reflect the geological characteristics of the lateritic soil of Timor. Functionally, this stone's natural application is able to regulate the building interior temperature because of thermal mass properties.



Fig. 5 Natural Stone Around Laktutus Area, Altar, and Laktutus Church Walls

The natural stone used is based on the Belu cultural belief, functions as a significant symbol of sacred construction traditions, and local ritual. Natural stone in Belu architecture is generally used specifically as ritual sites (Mesbah) and customary large houses (*Uma Bot*) foundations, representing place sanctity, nature connection, and durability. Moreover, based on the cosmology of Tetun, natural stone use reflects strength and permanence, connecting human dimensions with nature and ancestors' spiritual power. Hence, it functions not only as the material but also as the sacred values of the community cultural context [11, 17].

In terms of theological perspective, the stone used represents the spiritual value as stated in the bible, Matthew 16:18, which states that Jesus built the church on the rock. Hence, the use of stone reflects the faith belief in Catholic tradition as universal meaning, while the local stone application connects the building with the community of Belu as a contextual dimension. The painting color of the church, which is red-hue dominance, symbolizes sacrifice and love based on the Catholic iconography of Jesus' Sacred Heart, the church's patron. Thus, local natural stone use here links local cultural meaning and theological symbolism, which is in accordance with Rapoport's (1982) perspective on materials functioning as cultural expression [1].

4.2.2. Roof Form, Adaptation of Inverted Boat or Lopo Roofs

The Jesus Church Sacred Heart roof in Laktutus is shaped in a dome-like or semicircular structure, adapted to the construction site terrain counters and church architecture of European-style Middle Eastern. The village head of Fohoeka asserted in the interview that the roof shape was adapted from half of the tribal traditional houses, which indicates the vernacular architectural traditions. Meanwhile, in the Tetun/Belu traditional perspective on architecture, this shape is considered as *ume kbubu* or *lopo*, which means

inverted-boat shape. It is believed to be the representations of ancestors' spiritual connections and communal protection. Moreover, it provides a sacred dimension of belief in Tetun cosmology, as a mediator of humans (lower world), nature (middle world), and spiritual (upper world) [11, 12].

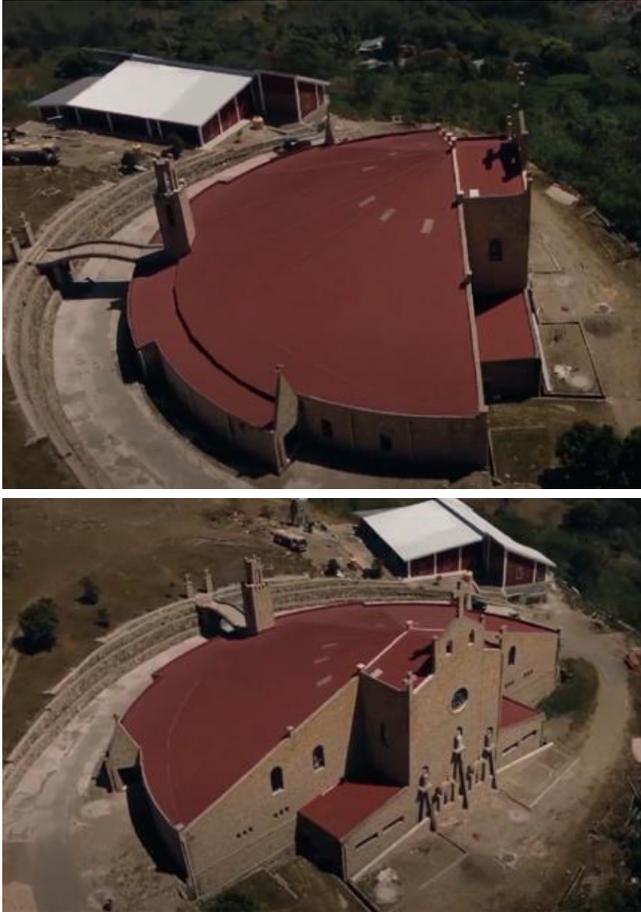


Fig. 6 Jesus Church Sacred Heart's Roof Form in Laktutus

The semicircular shape in the church roof functions as a suitable worshipping spatial area and community local symbolism and aesthetic preservation. Based on Christian Catholic architectural tradition, theologically, the church's roof shape symbolizes divine protection or "heavenly dome" as God's faithful safeguarding representation. The symbol of the heavenly dome or universal Catholic and local Tetun's belief on the inverted boat roof combination provides ideas of communal protection along with divine protection.

Adopting the semicircular form from the European-style dome in Laktutus Church, this method illustrates a significant inculturation strategy combining local culture. It is in accordance with principles by Rapoport that church roof shape does not merely concern the functions but the Belu community cultural identity presentation conveyed in the architectural symbols understood by both external visitors and local communities [1, 15].

4.2.3. Local Wood Materials for Church Interior

The local wood used in the Jesus Church Sacred Heart interior in Laktutus is a crucial element applied in the window, ceiling, door, main altar, and other liturgical furniture. Maintaining the material tactile character and authentic visual, the wood is treated with minimal finishing. In terms of the functional benefit, local wood use is able to absorb humidity in the tropical climate area surrounding the church, providing thermal convenience in the worship location.



Fig. 7 Jesus Church Sacred Heart Alter Interior and Ceiling in Laktutus

Understood as the fundamental pillar of traditional houses, Tetun/Belu architectural traditions believe wood possesses a sacred and vital role known as "house spiritual axis." The criteria for the quality wood encompass straight in form, premium-quality wood, and never being cut by any tool to respect the spirit inhabiting the wood, which are selected based on ritual practices by the Tetun community. Thus, the local wood use in the church functions not only materially but also culturally and spiritually in the context of architecture [21, 22].

Church architecture ceilings are correlated with the concept of heaven, understood as a divine symbol for faithful protection. In the Laktutus Church context, the local wood use is represented as the connection of heaven understanding in Catholic theology and Tetun local values concerning harmonious relations among ancestors, nature, and humans.

4.2.4. Tais on Pillar Structures

Tais is known as one of the most appealing cultural elements in Jesus Church Sacred Heart, wrapping six major pillars enhancing the roof. While preserving the concrete masculine impression despite the vivid texture and color providing masculine sensibilities, *Tais* produces a meaningful cultural identity assembled with the sacred church. In the culture of Belu, *Tais* is not a mere fabric or dress, but it functions as a cultural communication medium with profound traditional value. It is utilized in various essential rituals like welcoming ceremonies, funerals, and weddings. Hence, its use in church produces crucial spiritual

memory as one of the most important aspects of community life. This cloth, moreover, in motifs of vertical stripes, is worn by men who represent strength and responsibility in sustaining community and family life. Thus, it implies that *Tai's* presence provides perspectives of Catholic faithful communal responsibility in nurturing and maintaining the church's spiritual life as a faith community [24, 25].



Fig. 8 Tais on Pillar Structures, Interior of the Sacred Heart of Jesus Catholic Church, Laktutus

In terms of the theological point of view of Catholic church architecture, pillars are frequently identified as symbols of the Church's firmness and strength as the faith institution. Meanwhile, in terms of the contexts of liturgical perspective, pillars are admitted as structural aspects enhancing the sacred place where the Eucharist is performed. *Tais*, as the pillars' wrap, similarly, is symbolized as the collective responsibility, communal strength, Catholic values, and ancestral reference. Hence, it enriches the worship space, meaning not only as a liturgical ornament.

The green, blue, and red colors in *Tais* present the Catholic liturgical identity that represent the significant calendars of the church: Ordinary Time for green, Virgin Mary devotion for blue, and Holy Spirit and martyrdom for red. In accordance with Rapoport (1982) regarding ornament as a symbol of culture [1], *Tais* represents the nonverbal communication of Tetun/Belu local cultural values, provided intercultural meaning with a Catholic liturgical framework. This strategy in instilling the traditional element like *Tais* in the Catholic church is crucial in accommodating local values while preserving continuity with the Catholic University's universal symbolism [28].

4.3. Synthesis: "Architecture as Cultural Expression."

The Jesus Church Sacred Heart in Laktutus, based on four local elements observed, illustrates hybrid architecture characteristics that combine successfully local cultural values with universal inspiration. This inculturation provides tremendous transformation in expressing and understanding sacred space responsive to the local residents' spiritual experiences.

The cultural hybridity concept proposed by Bhabha (1994) is related to this architectural phenomenon, understanding cultural identity as a dialogue and negotiation outcome between cultures, while maintaining its authenticity [4]. In Laktutus Church context, cultural hybridity forms through architectural elements transformation: (1) local natural stone demonstrating both symbol of Catholic theology and traditional sacred meaning, (2) with lopo roof or local inverted-boat's reference, church domes adapted by semicircular roof, (3) local wood use representing understanding of Catholic theology of local values of ancestors, nature, and humans harmonious relationships, and heaven, (4) enriching congregation spiritual experience, contextual liturgical ornamentation as *Tais'* function.

This study's contribution to understanding the Indonesian architectural context is significant, particularly in Timor Leste's dynamic strategic position, located in a cross-cultural border, and the Belu community's rich vernacular traditions. The study of Laktutus Church can provide a model of religious architecture development as an inculturation alternative, sensitive to geographical and cultural context. Furthermore, in accordance with the Second Vatican Council, the successful integration of local elements in the church illustrates the development potential of sacred architecture, strengthening the cultural identity of the community by preserving universal theological meaning.

5. Conclusion

The research on Jesus Catholic Church Sacred Heart in Laktutus local elements demonstrates four major components reflecting the Belu/Tetun community's cultural values based on the framework of Vernacular Architecture Theory by Amos Rapoport (1982). The elements encompass: (1) local natural stone demonstrating both symbol of Catholic theology and traditional sacred meaning, (2) with lopo roof or local inverted-boat's reference, church domes adapted by semicircular roof, (3) local wood use representing understanding of Catholic theology of local values of ancestors, nature, and humans' harmonious relationships, and heaven, (4) enriching congregation spiritual experience, contextual liturgical ornamentation as *Tais'* function. This research contributes theoretically to enriching the architecture of religious vernacular in Eastern Indonesia by illustrating how the Belu community's cultural determinants are shifted into architectural communication that is particular and universal. Spiritually, this study also extends the inculturation understanding in the architecture of the Catholic church by demonstrating the border region's concrete examples with geographical and cultural characteristics. Practically, this research provides a design for a worship building model as a response to local values without ignoring the universal theological belief that is applicable in the religious architectural development in Eastern Indonesia. Recommendations for further research include exploring congregants' perceptions of church interiors resembling

stadium-like spaces and their influence on liturgical experience, which may provide phenomenological insights into how architectural inculturation affects community spirituality. Studies documenting and preserving participatory church-building processes could also contribute to the development of sustainable, community-based construction methodologies in Eastern Indonesia. Additionally, comparative studies with other churches in border regions may develop a typology of religious architectural inculturation specific to the geographical and cultural contexts of Eastern Indonesia.

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