

## Architectural settings as ritual spaces in Bayan: Harmony of cultural traditions and spatial experience

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ARTICLE INFO	ABSTRACT
<p><i>Article history:</i> Received June 03, 2025 Received in revised form Sept. 16, 2025 Accepted October 03, 2025 Available online March 01, 2026</p> <p><i>Keywords:</i> Architectural settings Architectural symbolism Sacred ritual spaces Traditional cultural preservation Transformation of traditional spaces</p> <p>*Corresponding author: Vincentia Reni Vitasurya Departement of Architecture, Faculty of Engineering, Universitas Atma Jaya Yogyakarta, Indonesia Email: <a href="mailto:reni.vitasurya@uajy.ac.id">reni.vitasurya@uajy.ac.id</a> ORCID: <a href="https://orcid.org/0000-0002-7801-183X">https://orcid.org/0000-0002-7801-183X</a></p>	<p><i>This study highlights the role of architectural settings as sacred spaces in the ritual practices of the Bayan community in Lombok, Indonesia. The research focuses on three key rituals: Menggawe Menyunat, which signifies human relationships through the coming-of-age ceremony for Bayan boys; Ngaji Makem Ngaturang Ula Kayang, representing human connection with nature as an expression of gratitude for agricultural bounty; and Maulid Adat, symbolizing human bonds with God during the commemoration of Prophet Muhammad's birth. Using a qualitative case study approach, the research integrates field observations, in-depth interviews, and literature analysis to reveal the function, hierarchy, and transformation of ritual spaces such as Masjid Kuno Bayan Beleg, traditional houses, and the sacred pathway Rurung Agung. The findings demonstrate that these architectural settings are not merely venues for rituals but embody the spiritual, cultural, and ecological symbolism of the Bayan community. This article contributes to the discourse on sacred architecture and the preservation of traditional culture amidst modern challenges.</i></p>

### Introduction

Bayan village is located in North Lombok Regency, West Nusa Tenggara, and is renowned as one of the cultural centers of the Sasak ethnic group, rich in cultural and spiritual values (figure 1). Bayan exhibits unique characteristics through its landscape, encompassing the Masjid Kuno Bayan Beleg, the traditional houses of East and West Bayan, and the sacred pathway Rurung Agung, all of which serve as spaces for the implementation of customary rituals.

Customary rituals in Bayan represent the spiritual, social, and ecological expressions of its community. The main rituals can be categorized into three groups (I Wayan et al. 2012). First, individual transition rituals, such as *Menggawe Menyunat*, a ceremony marking significant life transitions. As part of *Gawe Urip*, this circumcision ritual involves the use of traditional spaces that reflect sacred values and community bonds. Second, ancestral and cosmic reverence rituals, exemplified by *Ngaji Makem Ngaturang Ula Kayang*, an annual occasion expressing gratitude for the harvest through pilgrimages to



ancestral graves. This ritual strengthens the community's spiritual connections with ancestors while maintaining cosmic harmony. Third, religious rituals, including *Maulid Adat*, one of the largest, commemorating the birth of Prophet Muhammad. This ritual affirms faith while integrating local traditions with religious practices. In all these categories, architectural settings like Old Mosque *Bayan Beleq* and the sacred pathway *Rurung Agung* play essential roles as venues for rituals and as mediums for cultural preservation. These rituals reflect the relationships between humans and God, nature, and the social community. These traditions not only sustain customary practices but also reinforce the Bayan community's identity as part of Indonesia's cultural heritage. Bayan Village holds significant historical and cultural value, with Old Mosque Bayan Beleq as a key site. The mosque serves not only as a place of worship but also as a central venue for customary rituals, reflecting the integration of religious and local cultural values (Sucitra 2024).

Currently, the implementation of rituals continues to utilize natural physical settings and is carried out as part of the daily customs of the Bayan community. The integration of traditional rituals and architectural settings is a significant study to explore, particularly within the context of cultural heritage preservation. The unification of religious values and local traditions serves as an essential example in cross-cultural architectural studies. In the context of globalization, cross-cultural architecture has become increasingly relevant, enabling the fusion of traditional elements with modern innovations to create spatial and social harmony (Bonenberg 2016). The cross-cultural approach in architectural design can strengthen local cultural identities while promoting sustainability (Chen 2022).

Furthermore, the concept of cultural hybridization in architecture has opened opportunities to establish new connections that enrich cultural values. Thus, the exploration of architectural settings within the tradition of Bayan rituals not only provides insights into local cultural preservation but also contributes to global discussions on cross-cultural architecture. This study focuses on integrating architectural elements such as Masjid Kuno Bayan Beleq and Kampu (traditional house complexes in Bayan) within ritual processes. The importance of this study lies in understanding how social and cultural values are reflected in the physical settings of space, which is a crucial aspect of cultural preservation.

Most studies in Indonesia today primarily focus on either the aspects of tradition or architecture separately, without delving into the interaction between the two as an enriching unity. This creates a gap in understanding how traditional architecture supports the sustainability of rituals, despite the inseparable relationship between traditional house structures and ritual behavior patterns (Waterson 2009; Widodo 2012). To address this gap, this study aims to comprehend the function and architectural settings in Bayan's customary rituals, as well as their contribution to sacred architectural spaces and the preservation of traditional culture. By employing a qualitative case study approach, the research integrates direct observations of customary ritual route mapping and their physical settings, interviews with traditional leaders, and the examination of various historical documents. The result reveals the knowledge on maintaining the traditional influences in the middle of modern domination while improving the congruence of architecture and tradition.



Figure 1. Location of Bayan village, North Lombok Regency, West Nusa Tenggara

#### Architectural settings in customary rituals

The actualization and the importance of the cultural rituals are encouraged by the settings of the architecture. First, ritual practices like processions, community meeting, and worshipping are incorporated in the function of architectural settings. For example, tradition of Maulid Adat located in Masjid Kuno Bayan functions not only as a place for praying but also for religious activities (Roosandriantini and Meilan 2020). Second, the meaning of the ritual symbols is maintained by architectural settings (Hernanda 2024). Third, the cultural identity is upheld by the architectural shapes. The traditional architecture represents the cultural and social values (Yuuwono 2015). Forth, cultural identity is preserved by architectural settings.

Theoretical framework in comprehending the correlation between modern and traditional architecture is identified by understanding cross-cultural architecture. Cross-cultural architecture is crucial in modern era in fusing the traditional aspects of architecture into the current modern invention. Previous studies argue that cross-cultural architectural approach uphold the tradition identity for the sustainable design and spaces (Bonenberg 2016; Chen 2022). For instance, Maulid Adat located in Masjid Kuno Bayan and kampu promotes the cultural identity through religious design. The architectural elements in the building provides function not only as a spatial design but also as an identity representing the existence of the rituals (Memmott and Davidson 2008; Krstić, Filipović, and Ristić Trajković 2024).

Bayan building manifests the fusion of rituals within architecture, in which the architectural design expresses the processions of the rituals (Deapati 2009; Trisno, Antariksa, and Salura 2016). The relationship between architecture and rituals in Bayan Maulid Adat ritual can be observed Nunang Pare and Slamet Gerantung as the processions. *Umbul-umbul* or the ceremonial banners and *gendang gerantung* corroborates the cultural identity and interactions of the community.

#### Traditional architecture and sacred spaces

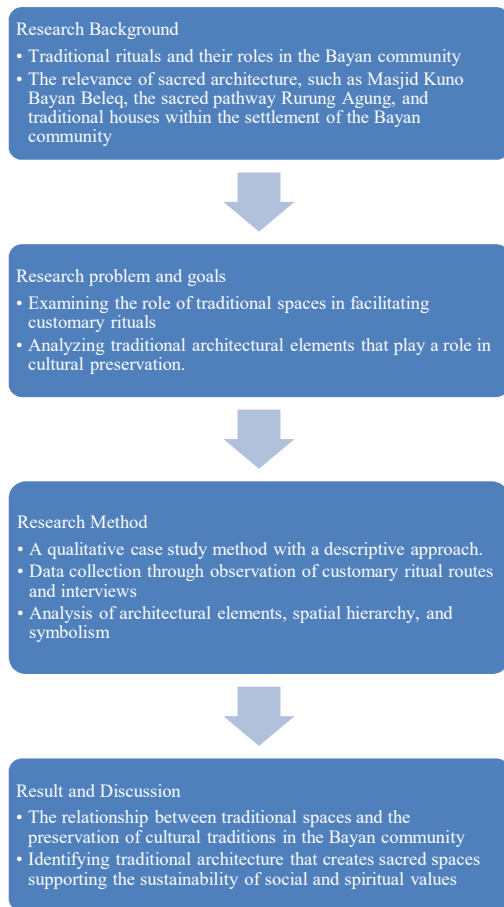
The expression of spirituality and culture is revealed by the customary and ritual spaces relationship, in traditional architecture and sacred spaces context. The existence of sacred spaces upholds the expression of ritual practices (Deibl 2020), meanwhile traditional architecture

provides experiences through dimension of time for the ritual spaces (Ro 2015). *Menggawe menyunat, maulid adat, and ngaji makem ngaturang ula kayang* are main rituals conducted in Bayan Beleq, an old mosque as one of sacred spaces. The traditions are not merely performed as the memorization of ancestors and God, but also as a symbol of harmonious human connection through rituals, and so with the natural connection (de Wildt et al. 2019).

The frameworks in comprehending sacred spaces functions are performed through theoretical approaches including spatial temporality (Lefebvre 1991), architectural symbolism (Eliade 1959), and social hierarchy in architectural design (Nas 1993). The elements of traditional architecture corroborate this framework that represent the spiritual and social identity (Susanti, Kusbiantoro, and Halim 2023). The customary spaces provide not only as a destination or as a mere building but also as a medium on maintaining the traditional influences in the middle of modern domination. Thus, Bayan community sustainability can be acquired through traditional architecture role by combining the approaches of spatial temporality and symbolism.

## Methods

Qualitative approach of descriptive method in the form of case study is utilized in this research to unveil the relationship between Bayan traditional architecture and the community rituals. An in-depth analysis of sacred spaces phenomenon as the setting of rituals like *Menggawe Menyunat, Ngaji Makem Ngaturang Ula Kayang, and Maulid Adat* is performed by this approach. The data are collected through reports, observation and in-depth interviews. The reports are about the customary rituals. The observation is performed directly in Masjid Kuno Bayan Beleq and Rurung Agung sacred pathway. Meanwhile, the in-depth interviews are performed with the local leaders in revealing the functions and symbolism of these settings. The comprehensive interaction overview of the tradition execution and the customary spaces is provided by the data collection process (figure 2).



**Figure 2.** Schematic diagram of the study phases

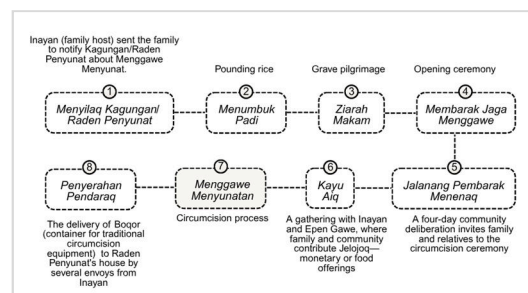
The collected data is evaluated using a thematic approach, focusing on three main elements: architectural elements, spatial hierarchy, and symbolism. The analysis of architectural elements involves observing forms, layouts, and physical features that support the sacred atmosphere of the rituals. Spatial hierarchy is analyzed to understand the division of space functions based on their social and spiritual values. Symbolism is interpreted through visual and ritual elements that reflect the community's connection with ancestors and the cosmos. This approach not only maps the functions of customary spaces but also clarifies their role in preserving cultural values amidst modern social changes.

## Customary rituals and cultural traditions of Bayan Village

The customary rituals of the Bayan community play a vital role in sustaining cultural, spiritual, and social values that have been passed down through generations. Each ritual possesses unique characteristics, objectives, and symbolic meanings, representing the relationships between humans, ancestors, and the cosmos within the context of local traditions. This paper outlines the rituals of *Menggawe Menyunat*, *Ngaji Makem Ngaturang Ula Kayang*, and *Maulid Adat*, to understand the need for sacred spaces as the mediums for these rituals. The analysis of these ritual elements provides an in-depth perspective on the architectural settings' role in supporting the traditions of the Bayan indigenous community. The following sections detail each of the rituals conducted:

### 1. *Menggawe Menyunat* ritual

The *Menggawe Menyunat* ritual is a customary ceremony marking an individual's life transition, specifically the journey of boys into adulthood. The procession sequence is illustrated in Figure 3a. This ritual begins with preparations involving families and the surrounding community, such as preparing offerings and inviting traditional leaders. The main locations of this ritual are the traditional house, where initial preparations are conducted, and Masjid Kuno Bayan Beleq, which serves as the venue for prayers and symbolic processions. The sacred pathway Rurung Agung is used for the participants' procession to the mosque, symbolizing the spiritual journey from childhood to the responsibilities of adulthood (figure 3b). Symbolic elements in this ritual, such as the use of offerings and the rhythms of traditional music, reinforce its spiritual and social significance.



(a)

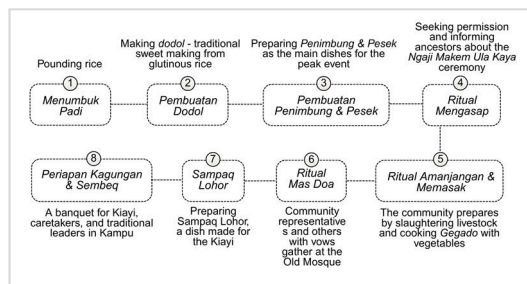


(b)

Figure 3. a. Sequence of the Menggawe Menyunat procession, b. Procession through Rurung Agung

### 2. Ngaji Makem Ngaturang Ula Kayang ritual

The Ngaji Makem Ngaturang Ula Kayang ritual is a form of ancestral veneration performed through prayers and special offerings. The procession stages are depicted in figure 4a. Bayan Beleq old mosque and Ruru Agung sacred pathways as the sacred places connecting significant destinations are included in the rituals (figure 4b). In the rituals, the citizens assemble to provide offerings and prayers recital as the respect to the ancestors. The offerings and preparation are as the proof of architectural symbolism expressing the social harmony and spiritual values. The transformation of customary spaces through the placement of offerings and temporary ornaments creates a profound sacred atmosphere throughout the ritual.



(a)

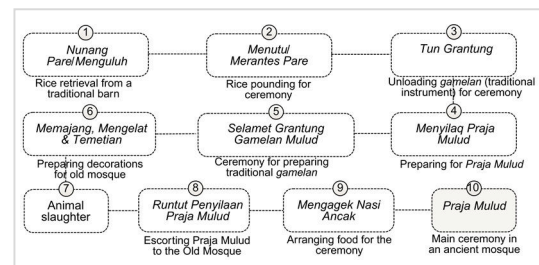


(b)

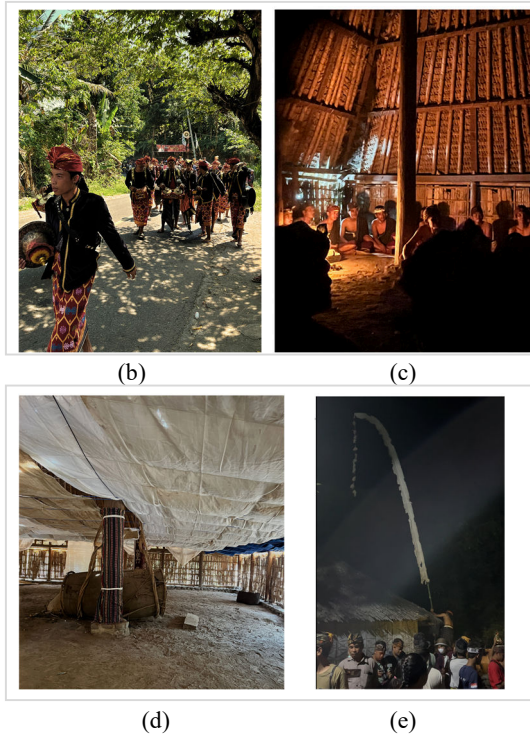
Figure 4. a. Sequence of the Ngaji Makem Ngaturang Ula Kayang procession, b. Procession to Masjid Kuno Bayan Beleq

### 3. Maulid Adat ritual

The Maulid Adat ritual is a celebration commemorating the birth of Prophet Muhammad SAW in a manner unique to the Bayan community's traditional customs. The stages of the procession are depicted in Figure 5a. This ritual is conducted at Old Mosque Bayan Beleq, which serves as the central venue for activities, beginning with communal prayers and followed by cultural processions such as communal feasting (*kenduri*) and traditional art performances. The sacred pathway *Rurung Agung* functions as the main route for the procession of offerings and other ritual symbols, involving the participation of the entire community (figure 5b). Temporary elements such as decorating the mosque with white cloth (*kain sinjang*), *penjor* installation, (figure 5d and 5e) and preparing spaces for *kenduri* emphasize the festive atmosphere, while the mosque's interior itself becomes a primary symbol of the integration of religious and traditional cultural values (figure 5c)



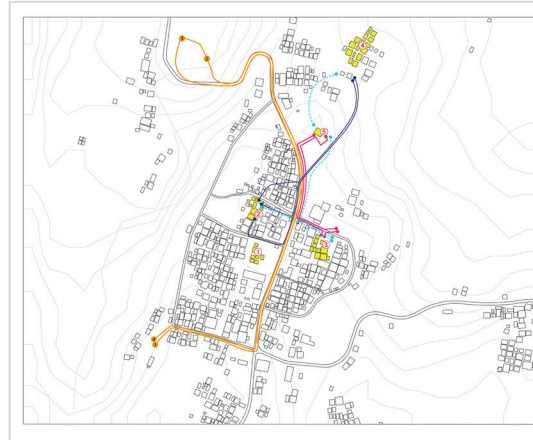
(a)



**Figure 5.** a. Sequence of the Maulid Adat procession, b. Procession with gamelan music and Praja Mulud, c. Ceremony inside Masjid Kuno Bayan Beleq, d. Sinjang Fabric inside Old Mosque Bayan Beleg, e. *Penjor*, temporary decoration at Old Mosque Bayan Beleg

The ritual routes of the Bayan community encompass a sacred pathway known as Rurung Agung, which connects various key locations involved in traditional practices, such as traditional houses, Masjid Kuno Bayan Beleq, and other transit points. This pathway serves not only as a physical connector but also holds symbolic significance, representing the spiritual journey from the profane to the sacred (figure 6). The journey begins at traditional houses, such as Bayan Timur and Bayan Barat, where ritual preparations take place, including gathering participants and arranging offerings. The procession then passes through Karang Salah and Karang Bajo, functioning as transitional points and temporary stops before reaching the main ritual site. *Masjid Kuno Bayan Beleq*, located at the end of Rurung Agung, serves as the spiritual center of activity. Its strategic location and architectural design reflect its status as the most sacred space in the ritual. Along the journey through Rurung Agung, temporary decorations such as bamboo ornaments, lanterns, and offerings are placed along the route to enhance the

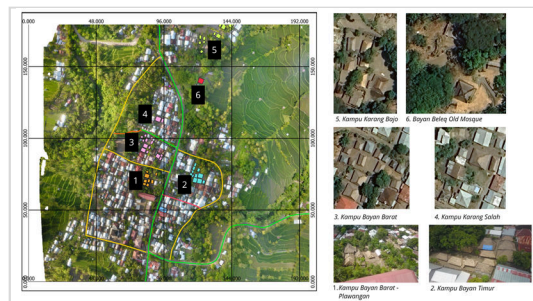
spiritual atmosphere. The transformation of this pathway during the ritual not only creates an aesthetic experience but also symbolizes the continuity of traditional values within the spiritual and cultural context of the Bayan community.



**Figure 6.** Mapping of ritual routes for *Menggawe Menyunat*, *Ngaji Makem Ngaturang Ula Kayang*, and *Maulid Adat Bayan*

#### Architectural settings in Bayan's customary ritual traditions

The architectural settings in the Bayan community's customary rituals include key spaces such as the traditional houses of Bayan Timur and Bayan Barat, Karang Salah, Karang Bajo, and Masjid Kuno Bayan Beleq. The traditional houses serve as initial preparation sites, where offerings are arranged, and ritual participants gather (figure 7).



**Figure 7.** Distribution of *Kampu* (traditional houses in Bayan) and Masjid Kuno Bayan Beleq

Masjid Kuno Bayan Beleq serves as the central site for ritual ceremonies, embodying the integration of religious values with local traditions. The sacred pathway Rurung Agung connects ritual locations, creating continuity between customary spaces and spiritual activities.

The concept of Sasak traditional house architecture demonstrates that spatial orientation and sacred elements in traditional design reflect the relationship between humans and the cosmos (Wirata and Sueca 2014). This underscores the importance of traditional architecture as a physical representation of human culture with dimensions of function and meaning (Wardiningsih 2015). The transformation of spaces during the customary rituals involves decorative and temporary elements, such as offerings, ornaments, and temporary circulation systems, which elevate the atmosphere to a more sacred one. These elements not only enhance spiritual significance but also create transcendent experiences for ritual participants.

Functions and hierarchy of spaces in Bayan's customary rituals

The spatial functions in the Bayan community's traditional architecture reflect the specific roles of each space in supporting the execution of customary rituals. Traditional houses, such as Bayan Timur and Bayan Barat, serve as initial preparation venues where offerings are arranged and ritual participants gather. Masjid Kuno Bayan Beleq, as the spiritual center, becomes the primary site for prayers and ritual processions. These spaces are connected by Ruru Agung sacred pathway as the continuity of sacred activities and profane. The factors determining the spatial hierarchy are relative placement in the spatial organization, size, and shape.

The sacredness level and each space role in the rituals determine the spatial hierarchy of Bayan's traditional architecture. Masjid Kuno Bayan Beleq is known as the traditional architecture that possesses the highest level of sacredness compared to the traditional houses. It is due to the location of the mosque in Rurung Agung end, that the significant building is situated in the most important location. Spatial hierarchy manifests social functions and symbolic values (Kustianingrum, Sonjaya, and Ginanjar 2013). It demonstrates the significance of hierarchy in corroborating the cultural traditions sustainability (Riany et al. 2014).

Spatial transformation and architectural symbolism

Temporary modifications in architectural concepts in providing sacred atmosphere and upholding ritual practices are incorporated in spatial transformation in the process of executing

the customary rituals of Bayan community. In reflecting the spatial symbolic meaning, decorative concepts as traditional fabrics, offerings, ornaments, and bamboo are frequently provided. Moreover, in guiding the participants through Rurung Agung sacred route of the prominent locations as Masjid Kuno Bayan Beleq, temporary circulation systems like ritual processions pathways are constructed.

The adaptation of customary architecture is also represented by the spatial transformation for the ritual dynamic needs. For example, *sinjang* cloth (the mosque inner roof covered by white fabric), a temporary ornament utilized in the rituals for increasing the aesthetic appeal and providing enormous symbolic meaning like human's relationship, cosmos and ancestors. Creating meaningful and flexible spaces are performed by using architectural elements reconstruction and fragmentation (Erdiono 2015). The harmony of the environment and customary spaces can be created by employing temporary elements in Bayan's customary rituals. This situation is crucial in incorporating the cultural elements of spatial transformations in enhancing the tradition sustainability.

An enormous relationship between cosmos, humans, and ancestors is represented by the architectural symbolism of Bayan community. Masjid Kuno Bayan Beleq, as the spiritual center, integrates symbolic elements such as spatial orientation facing the qibla, traditional ornaments, and the use of local materials that symbolize harmony with nature. Kampu, such as Bayan Timur and Bayan Barat, also carry strong symbolism, with designs reflecting the community's social and spiritual hierarchy. The symbolism in traditional architecture often originates from cosmology and local cultural values (Riany et al. 2014). Symbolic architecture in mosque buildings can represent both religious and aesthetic values.

Rurung Agung pathway as a connector of sacred architectural settings in Bayan

The sacred pathway Rurung Agung, which connects ritual sites, also holds symbolic significance. This pathway serves not only as a physical connector (figure 6) for various Bayan customary rituals but also as a symbol of the spiritual journey from the profane to the sacred realm. Temporary elements placed along the pathway enhance its symbolic meaning. Symbolism in architecture serves as a medium for

communicating cultural values (Adiyanto 2022). The interaction between tradition and modernization in the architecture of indigenous communities reflects efforts to preserve local cultural values. For the Bayan indigenous community, traditional elements such as spatial layout, distinctive ornaments, and the use of local materials are preserved. Ritual spaces within the Maulid Adat Bayan are designed to guide collective human movements in symbolic processions aligned with the concepts of ritual and spatial hierarchy (Jones 2016), simultaneously reflecting and reinforcing social hierarchy and spiritual harmony, which are central to the community's traditions.

## Conclusions

The spatial settings in the architectural context of Bayan's customary rituals can be identified as follows: (1) The spatial settings of traditional houses (Bayan Timur, Bayan Barat, Karang Salah, Karang Bajo), Masjid Kuno Bayan Beleq, and the sacred pathway Rurung Agung serve as the venues for various stages of rituals; (2) The stages of ritual activities like meal and offering preparation with the fellow community and leaders are the function of kampu traditional houses. While, the centralized setting of the sacred rituals like *ngaji makem* ritual for the procession of *mas doa* and *maulid adat ritual* for the procession of *praja mulud*; (3) Rurung agung sacred patchway functions as the intercorrelating element, reflecting the enormous spiritual voyage.

However, further research on instilling the elements of traditional architecture into the modern design is required in maintaining the cultural existence. The possible strategies applied can be performing more effective conservational resources, traditional architecture education, and collaborative movements of the community and the current architectural authority.

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## References

- Adiyanto, Johannes. 2022. "Arsitektur Sebagai Manifestasi Identitas Indonesia." *NALARs* 21 (2): 139. <https://doi.org/10.24853/nalars.21.2.139-150>.
- Bonenberg, Wojciech. 2016. "Cross-Cultural Design and Its Application in Architecture." In , 105–14. [https://doi.org/10.1007/978-3-319-41941-1\\_10](https://doi.org/10.1007/978-3-319-41941-1_10).
- Chen, Wenjie. 2022. "Cross-Border Architecture: Cultural Hybridization and Innovation under Globalization." *BCP Social Sciences & Humanities* 18 (June):526–31. <https://doi.org/10.54691/bcpssh.v18i.1157>.
- Deapati, Andi Karina. 2009. "Ruang Dan Ritual Kematian Hubungan Upacara Dan Arsitektur Kelompok Etnis Toraja." Universitas Indonesia. <https://lib.ui.ac.id/detail?id=20249524&lokasi=lokal>.
- Deibl, Jakob Helmut. 2020. "Sacred Architecture and Public Space under the Conditions of a New Visibility of Religion." *Religions* 11 (8): 379. <https://doi.org/10.3390/rel11080379>.
- Eliade, Mircea. 1959. *The Sacred and the Profane: The Nature of Religion*. 1st ed. New Jersey: Houghton Mifflin Harcourt.
- Erdiono, Deddy. 2015. "Pendekonstruksian Bentuk Dan Ruang Dalam Arsitektur." *MEDIA MATRASAIN* 12 (1): 54–61. <https://ejournal.unsrat.ac.id/v3/index.php/jmm/article/view/7700>.
- Hernanda, Angelica Elsa Rose. 2024. "Makna Sakral Arsitektur Pada Bangunan Masjid Al-Imtizaj Melalui Pendekatan Interaksi Simbolik." Universitas Katolik Parahyangan. <http://hdl.handle.net/123456789/19718>.
- I Wayan, Cika, Ngurah Jayanti I Gusti, Istri Suryawati Cok, Sugianto Ida Bagus, Arjani Ni Luh, Gede Suwitha I Putu, and Sumiasih Ni Made. 2012. *Ritual Maulid Adat Masyarakat Bayan Lombok Utara, Nusa Tenggara Barat*. Edited by I Wayan Rupa. 1st ed. Denpasar: Kementerian Pendidikan dan Kebudayaan Republik Indonesia Direktorat Jenderal Kebudayaan Balai Pelestarian Nilai Budaya Badung.

- [https://repositori.kemendikdasmen.go.id/29767/2/Ritual Maulid Adat Masyarakat Bayan Lombok Utara.pdf](https://repositori.kemendikdasmen.go.id/29767/2/Ritual%20Maulid%20Adat%20Masyarakat%20Bayan%20Lombok%20Utara.pdf).
- Jones, Peter Blundell. 2016. *Architecture And Ritual: How Building Shape Society*. 1st ed. London: Bloomsbury. [http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484\\_SISTEM\\_PEMBETUNGAN\\_TERPUSAT\\_STRATEGI\\_MELESTAR\\_I](http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTAR_I).
- Krstić, Verica, Ivan Filipović, and Jelena Ristić Trajković. 2024. "Cultural Sensitivity and Social Well-Being in Embassy Architecture: Educational Approaches and Design Strategies." *Sustainability* 16 (20): 8880. <https://doi.org/10.3390/su16208880>.
- Kustianingrum, Dwi, Okdytia Sonjaya, and Yogi Ginanjar. 2013. "Kajian Pola Penataan Massa Dan Tipologi Bentuk Bangunan Kampung Adat Dukuh Di Garut , Jawa Barat." *Reka Karsa : Jurnal Arsitektur* 1 (3): 1–13.
- Lefebvre, Henri. 1991. *The Production of Space*. Blackwell. <https://iberian-connections.yale.edu/wp-content/uploads/2020/04/The-production-of-space-by-Henri-Lefebvre-translated-by-Donald-Nicholson-Smith.pdf>.
- Memcott, Paul, and James Davidson. 2008. "Exploring a Cross-Cultural Theory of Architecture." *Traditional Dwellings and Settlements Review* 19 (2): 51–68. <https://www.jstor.org/stable/41758527>.
- Nas, P.J.M. 1993. *The Indonesian Town Revisited*. Royal Institute of Linguistics and Anthropology.
- Riany, Meta, Yovi Rachmadi, Indra Yunus Sambira, Acep Tomi Muharam, and Rizky Muhammad Taufik. 2014. "Kajian Aspek Kosmologi-Symbolisme Pada Arsitektur Rumah Tinggal Vernakular Di Kampung Naga." *Jurnal Reka Karsa* 2 (4): 1–12.
- Ro, Brandon. 2015. "Round: Understanding the Chiastic Pattern of Temple, Cosmos, History." *Architecture, Culture, and Spirituality Symposium (ACS7)*, 2015. <https://acsforum.org/sacred-time-as-one-eternal-round-understanding-the-chiastic-pattern-of-temple-cosmos-history/>.
- Roosandriantini, Josephine, and Fernanda Yosefi Meilan. 2020. "Penerapan Konsep Sosial dan Behavior Setting pada Rumah Adat Bali." *ATRIUM: Jurnal Arsitektur* 6 (1): 23–31. <https://doi.org/10.21460/atrium.v6i1.84>.
- Sucitra, Riri Ismi. 2024. "Perubahan Sosial Masyarakat Dalam Tradisi Maulid Adat Bayan Di Era Modernisasi (Studi Kasus Di Desa Bayan Kecamatan Bayan Kabupaten Lombok Utara)." Universitas Islam Negeri Mataram.
- Susanti, Elizabeth, Krismanto Kusbiantoro, and Erwin Ardianto Halim. 2023. "Diverse Cultural Expressions of Vernacular Architecture of Eclectic Style: The Case of Dharma Rakhita Temple in Jombang, Indonesia." *ISVS E-Journal* 10 (7): 195–210.
- Trisno, Rudy, Antariksa Antariksa, and Purnama Salura. 2016. "Pengaruh Fungsi Ritual pada Bentuk Arsitektur Kasus Studi: Gereja Katedral, Gereja Theresia, Gereja Salib Suci, Gereja Santo Matias Rasul Dan Gereja Stella Maris." *NALARs* 15 (1): 25. <https://doi.org/10.24853/nalars.15.1.25-34>.
- Wardingsih, Sitti. 2015. "Arsitektur Nusantara Mempengaruhi Bentuk Bangunan Yang Berkembang Di Indonesia." *SCALE* 2 (2): 274–83.
- Waterson, Roxana. 2009. *The Living House: An Anthropology of Architecture in South-East Asia*. 14th ed. Singapore: Tuttle Publishing.
- Widodo, Johannes. 2012. "Urban Environment and Human Behaviour: Learning from History and Local Wisdom." *Procedia - Social and Behavioral Sciences* 42:6–11. <https://doi.org/10.1016/j.sbspro.2012.04.161>.
- Wildt, Kim de, Martin Radermacher, Volkhard Krech, Beate Löffler, and Wolfgang Sonne. 2019. "Transformations of 'Sacredness in Stone': Religious Architecture in Urban Space in 21st Century Germany—New Perspectives in the Study of Religious Architecture." *Religions* 10 (11): 602. <https://doi.org/10.3390/rel10110602>.
- Wirata, I Made, and Ngakan Putu Sueca. 2014. "Konsep Arsitektur Rumah Adat Suku Sasak Di Dusun Segenter, Kecamatan Bayan, Lombok Utara-NTB." *Ruang-Space: Jurnal Lingkungan Binaan* 1 (1): 51–64.
- Yuuwono, Abito Baman. 2015. "Peran, Fungsi dan Makna Arsitektur Rumah Lamin dalam Budaya Adat Suku Dayak di Kutai Barat Kalimantan Timur." *Jurnal Teknik Sipil dan Arsitektu* 16 (20): 50–57.

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