

# The Role of Cultural Identity in Spatial Dynamics

## A Comparative Study of the Tengger and Bali Aga Traditional House

Syafine Charistalizaa Junaidi Hasan Basri <sup>1</sup>, Tri Anggraini Prajnawrdhi <sup>2</sup>, I Wayan Wiryawan <sup>3</sup>

<sup>1, 2), 3)</sup> Department of Architecture, Udayana University, Bali, Indonesia

*Manuscript received:*  
November 20, 2024

*Manuscript revised:*  
February 23, 2025.

*Manuscript accepted:*  
February 28, 2025.

*Date of publication:*  
March 01, 2025.

*Corresponding author:*  
Syafine Charistalizaa Junaidi  
Hasan Basri  
[charistalizaa017@unud.ac.id](mailto:charistalizaa017@unud.ac.id)

**Abstract** – This study aims to analyze how cultural identity influences the spatial dynamics of traditional houses. In Indonesia, diverse local traditions are passed down through generations, shaping the identity of a region. These traditions affect the functions of living spaces, which evolve due to various factors, including social, economic, and environmental changes. If not addressed, this phenomenon could lead to the loss of cultural identity. The study focuses on the Tengger and Bali Aga tribes, using a qualitative comparative approach to analyze and compare their traditional spatial dynamics. The findings suggest that local customs, social activities, and the specific functions of these spaces significantly shape their transformation. The comparison reveals that while Tengger houses adapt to modern influences, Bali Aga houses adhere strongly to traditional spatial configurations. The study highlights the importance of preserving traditional elements and spatial configurations to maintain the cultural identity of these tribes. Furthermore, this study contributes to a deeper understanding of the relationship between spatial dynamics and cultural heritage.

**Keywords:** *cultural identity, preservation, spatial dynamics, traditional houses.*



### I. INTRODUCTION

Changes in the spaces of traditional houses have been influenced by various factors (Radja et al., 2024). These include modernization, activity pattern shifts, and social and economic structure changes. As traditional communities adapt to these transformations, examining how cultural identity shapes community occupancy patterns and spatial arrangements. This study aims to analyze the role of cultural identity in influencing spatial organization within the Tengger and Bali Aga communities. Additionally, it explores how modernization and cultural influences impact the spatial dynamics of traditional houses, emphasizing the importance of maintaining cultural identity amid these changes.

Several studies have examined the transformation of space functions in traditional architecture. Research on the transformation of function and form of Bugis-Makassar architecture on the coast of Buti Merauke (Nurhuzna, 2017) highlights the influence of modernization on traditional houses.

Similarly, Prajnawrdhi and Pebriyanti (2016) investigate changes in space function in traditional Balinese Aga village houses, specifically in Pedawa Village, Buleleng, Bali. The study reveals that spatial changes are driven by evolving daily activity needs, lifestyle shifts, and livelihood changes. Wagiswari et al. (2019) explore the spatial function dynamics in Bale Banjar Titih, Denpasar, Bali, emphasizing the role of cultural adaptation in shaping space utilization.

Through space and form, modernization brings changes to traditional houses that successfully apply modern living standards alongside traditional elements that are still maintained (Putra, 2017). Traditional architecture needs to transform so traditional buildings can adapt and adjust to the times and the ever-changing climate (Ardi & Aminuza, 2017). Changes such as the reduction and addition of elements in traditional architecture are triggered by dynamics in the local community and supported by interactions with other cultural supporters (Nadjmi & Talaohu, 2019). Preserving the values contained in the space of traditional houses is important in preserving traditional architecture (Kiswari, 2019). The increasing number of people in the house leads to changes in activity patterns, which results in higher space requirements (Sosiawan, 2020). Kinship in the community is one of the non-physical aspects that influence the spatial conditions of a dwelling, shaping social interactions and cultural expressions within the space (Susanti & Sukowiyono, 2020). This cultural continuity is also reflected in the collaboration with local artisans, which preserves traditional craftsmanship while integrating modern expertise into spatial planning (Wijjatmaja et al., 2024). Furthermore, ritual functions maintain cultural characteristics that remain relevant in shaping space and settlements in modern times (Prajnawrdhi & Pebriyanti, 2016).

This research analyzes how cultural identity shapes community occupancy patterns and spatial dynamics in traditional houses. Additionally, it seeks to identify the key factors driving spatial transformations due to modernization while maintaining cultural significance. This study employs a comparative qualitative approach, analyzing four villages. Gubugklakah and Ngadas (Tengger Tribes) in Malang Regency and Pedawa and Tigawasa (Bali Aga Tribes) in Buleleng Regency.

Poncokusumo Sub-district in Malang Regency is home to the Tengger people who live in Gubugklakah and Ngadas Villages (Bashith et al., 2022), while Buleleng Regency, precisely Banjar Sub-district, is inhabited by the Bali Aga who live in Pedawa and Tigawasa Villages (Narosaputra et al., 2022). These villages were selected due to their strong representation of Tengger and Bali Aga traditions and their distinct yet comparable responses to modernization.

Understanding these spatial transformations is crucial in preserving traditional values amid contemporary changes. This study is significant in both practical and academic contexts. Practically, it provides insights into heritage conservation strategies, helping communities balance modernization with cultural preservation. Academically, it enriches discussions on spatial transformations in Indigenous settlements, contributing to broader research on vernacular architecture and cultural sustainability. By examining these aspects, this study offers a comprehensive perspective on maintaining cultural identity in the face of evolving spatial needs.

## **II. METHODOLOGY**

This study uses a qualitative research approach, following the strategy outlined by Groat and Wang (2013) in architectural research. In qualitative research, data is obtained through direct field observations, ensuring that the findings accurately represent real-world conditions rather than artificially constructed scenarios (Fadli, 2021). The qualitative approach is chosen for its ability to provide an in-depth understanding of spatial dynamics within traditional houses, emphasizing natural settings and subjective interpretations of the research subjects. This research examines four traditional houses as case studies, with one house selected from each village: Gubugklakah and Ngadas Villages representing the Tengger community and Tigawasa and Pedawa Villages representing the Bali Aga community. This selection allows for a direct comparison between the two cultural groups, highlighting spatial changes influenced by modernization, economic factors, and functional needs.

This research will gather primary data through field observations and documentation, while secondary data will be drawn from related literature. The study uses variables derived from theoretical frameworks on spatial patterns to analyze the dynamics of spatial functions, as identified through literature reviews. According to Ashadi (2022), Broadbent (1980) identifies four functions that can be used to assess the necessary functions in a building: 1) Environment Filter: the building's role in regulating the climate between the exterior environment and interior activities to support comfort; 2)

Container of Activities: the building as a space that accommodates various activities; 3) Capital Investment: buildings supporting the economy and serving as valuable sources of investment; 4) Symbolic Function: buildings providing symbolic meaning for religious and ritual activities. Table 1 shows the spatial dynamics parameters used to analyze the transformation of space functions within traditional houses (see Table 1).

**Table 1.** Parameters of spatial dynamics

Parameters	Variables	Indicator	Object	Expected Outcomes
Spatial dynamics in traditional houses	Spatial function	Container of activities	Traditional House in Gubugklakah Village (House A);	Space functions are expected to change with evolving activities.
		Capital investment	Traditional House in Ngadas Village (House B);	To transform traditional houses into commercial spaces.
		Symbolic function	Traditional House in Tigawasa Village (House C);	How symbolic meaning and cultural values are integrated into spatial design.
		Environmental filter	Traditional House in Pedawa Village (House D);	Space functions are expected to adapt to environmental conditions.

Source: Authors (2025)

Table 1 outlines the parameters, variables, and indicators used to assess spatial dynamics in the traditional houses of the Tengger and Bali Aga tribes. The variable under spatial dynamics is the spatial function, which is further explored through four specific indicators. The first indicator, Container of Activities, focuses on how various spaces within the house accommodate daily activities and how these functions may change over time. The second indicator, Capital Investment, looks at the potential transformation of traditional houses into commercial spaces driven by modern economic needs. The third indicator, Symbolic Function, explores how the spatial design of the house reflects cultural and spiritual values, maintaining connections to ancestral beliefs and traditions. The fourth indicator, Environmental Filter, assesses how the spatial arrangement of the house adapts to the local climate and environment, ensuring comfort and sustainability. These indicators provide a comprehensive understanding of the evolving spatial dynamics within these traditional houses as they balance traditional functions with modern influences.

### III. RESULTS AND DISCUSSION

#### A. Dynamics of Space Functions in Traditional Tengger Houses

Based on the observations conducted in Gubugklakah Village and Ngadas Village, data was collected regarding the functions and spatial arrangements within the residents' homes. Two houses were selected as research samples: House A in Gubugklakah Village and House B in Ngadas Village. Both houses continue to incorporate elements of the seven po' concept. According to Ayuninggar et al. (2012), the seven po' concept is a traditional residential space structure in Tengger community houses. It consists of two types of rooms: main rooms (patamon, paturon, pagenen, and pakiwan), and supporting rooms (padmasari, pedaringan, pekayon, and sigiran) (see Figure 1).

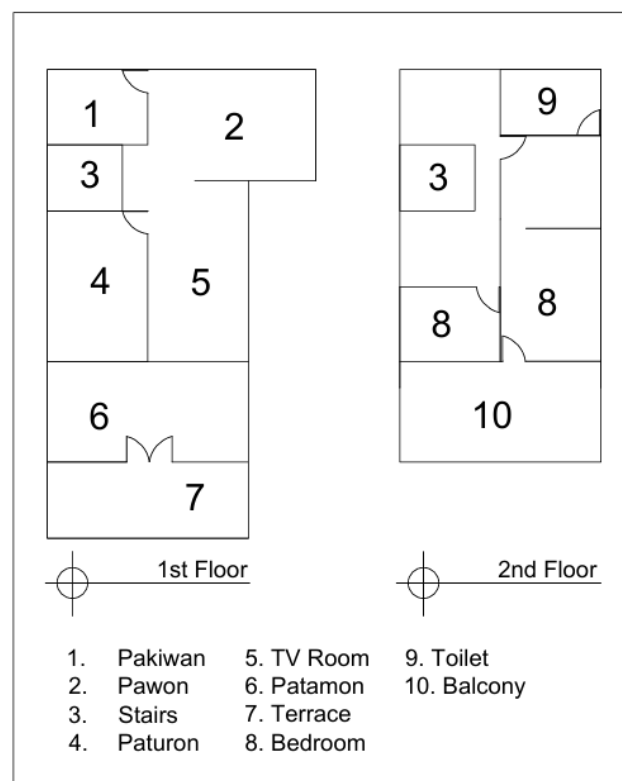
Table 2 presents various components' spatial organization and functions in traditional Tengger houses, reflecting practical needs and cultural values. Each space serves a specific purpose, such as Patamon, which functions as a guest reception and ritual area, and Paturon, designated as a sleeping space. Pawon serves as a kitchen, dining, and family gathering area, with the prapen (fireplace) used for cooking and religious offerings. The Pakiwan (bathroom) is always placed separately from the main house due to cultural beliefs regarding hygiene. Storage areas include Pedaringan for crops and tools, Pekayon for firewood, and Sigiran for drying corn. Religious practices occur at Padmasari, a worship shrine in the courtyard. This spatial arrangement highlights the integration of daily life, agriculture, and spiritual beliefs in Tengger traditional houses.

**Table 2.** Spatial Arrangement and Functions of Rooms in Tengger Traditional Houses

Space or component unit in the house	Function
<i>Patamon</i>	This room is located at the front of the house after passing through the terrace. <i>Patamon</i> serves as a place to receive guests as well as a ritual and formal activity room.
<i>Paturon</i>	This room is located on the right side of the main view. <i>Paturon</i> serves as a place to rest. Generally, each house has two or more <i>paturons</i> .
<i>Pawon</i>	Located behind the <i>patamon</i> , it serves as a place for cooking activities, a dining room, and a family room. There is a fireplace ( <i>prapen</i> ) used for cooking and preparing offerings.
<i>Pakiwan</i>	The location of the <i>pakiwan</i> must be separate from the house and behind the house. According to the beliefs of the Tengger people, it is unethical for the residence to be mixed with sewage.
<i>Pedaringan</i>	Serves as a place to store crops and equipment
<i>Pekayon</i>	Serves to store firewood, located behind the house or in the kitchen.
<i>Padmasari</i>	<i>Padmasari</i> serves as a means of worship located in the courtyard of the house. When used for worship, it must face east or south.
<i>Sigiran</i>	Serves as a place to store and hang unshelled corn, located next to or in front of the house.

Source: Ayuninggar et al. (2012)

The hierarchy and function of space in traditional Tengger houses can change due to shifts in activity patterns and evolving household needs over time (Azmi et al., 2022). For example, House A, which belongs to a farmer, has experienced several modifications in its spatial functions to accommodate both traditional practices and contemporary daily activities (see Figure 1).

**Fig. 1.** Spatial Layout of Tengger Traditional House (House A)

Source: Authors (2025)

The *paturon* which was originally used by family members is now used as a homestay for tourists. Additionally, the *patamon* now serves as a family room. The *pakiwan*, once separate from the main building, has been moved indoors for improved hygiene and easier access for the residents. Along with adding new functions, certain spaces have been reduced or are no longer in use. The *sigiran*, once used

for drying corn, is no longer functional as the community's primary food commodity has shifted from corn to rice. Similarly, the *pekayon*, originally a wood storage space, is no longer necessary since residents now use gas stoves instead of firewood. Another notable absence is the *padmasari*, a religious space typically used for Hindu worship. The owner of House A does not practice Hinduism and, therefore, does not use the *padmasari* for religious purposes.

A similar reduction in components is also observed in House B. An additional function has been added to the *paturon*, which now serves as a tourist homestay, just like in House A. The *pawon*, originally used for cooking, has been repurposed as a storage room due to limited space. Since the *pedaringan* no longer provides sufficient storage, kitchen furniture such as storage cabinets, wall shelves, and a refrigerator were added to make the *pawon* more functional and organized. The *pawon* now also serves as a gathering space for family and neighbors, with a small wooden chair (*dingklik*) provided for seating.

**Table 3.** Comparison of Spatial Function Dynamics in Tengger Tribe Houses

Spatial Function	The dynamics of spatial function in the house of the Tengger Tribe	
	House A	House B
Container of activities	<i>Paturon</i> is not only used as a resting place for the family but also guests. The additional function of space is also found in the <i>pakiwan</i> , which guests use to accommodate self-cleaning activities. Besides being used to receive guests, the <i>patamon</i> is also used for family gatherings and as a room to watch TV.	<i>Paturon</i> is not only used as a resting place for the family but also for guests. The additional function of space is also found in the <i>pakiwan</i> , which guests use to accommodate self-cleaning activities.
Capital Investment	<i>Paturon</i> serves to accommodate the function of tourist accommodation in the form of lodging for visiting guests. In addition to the <i>paturon</i> , there is also a special <i>pakiwan</i> (bathroom) for overnight guests.	<i>Paturon</i> serves to accommodate the function of tourist accommodation in the form of lodging for visiting tourists. In addition to the <i>paturon</i> , there is also a special <i>pakiwan</i> (bathroom) for overnight guests.
Symbolic Function	The furnace in the <i>pawon</i> is still maintained, but the function for cooking is no longer used. In addition, the taboo on passing through the front of the stove has begun to fade.	The furnace in the <i>pawon</i> is still maintained, but the function for cooking is no longer used. Abstinence from passing through the stove still applies because the Tengger tribe in Ngadas Village still believes in <i>Nini Thuwuk</i> as the entity guarding the kitchen.
Environmental Filter	Originally only used for cooking, the kitchen is now also used as a place to keep warm due to the relatively cold temperatures in the highlands.	Originally only used for cooking, the kitchen is now also used as a place to keep warm due to the relatively cold temperatures in the highlands.

Source: Authors (2025)

#### B. Dynamics of Space Functions in Traditional Houses of the Bali Aga Tribe

Based on research conducted through observation in Pedawa Village and Tigawasa Village, data were collected regarding the functions and spatial arrangements of residents' houses. House C is a sample house used as a research object in Tigawasa Village, and House D is a research object in Pedawa Village. Traditional houses in Tigawasa Village are categorized into three types, namely *sakaroras*, *sakanem*, and *sakapat* (Prajnawrdhi & Yudiantini, 2017). The *sakaroras* traditional house comes from the word *saka*, which means pole, and *roras*, which means twelve. Similarly, in the *sakanem* and *sakapat* traditional houses, *nem* means six, and *pat* means four.

These three traditional houses have a basic rectangular shape with a number of wood supporting the building structure according to its name. The *sakaroras* type has 12 wooden poles, the *sakanem* type has six wooden poles, and the *sakapat* type has four wooden poles. The three types of traditional houses in Tigawasa Village are diverse in their architectural forms. Meanwhile, there are two types of traditional houses in Pedawa Village: Bandung Rangki and Sri Dandan. The difference between these two houses is that the Bandung Rangki house has 18 poles, while Sri Dandan has 16 poles. The functions of space in traditional houses of the Bali Aga community in Tigawasa and Pedawa villages are shown in Table 4.

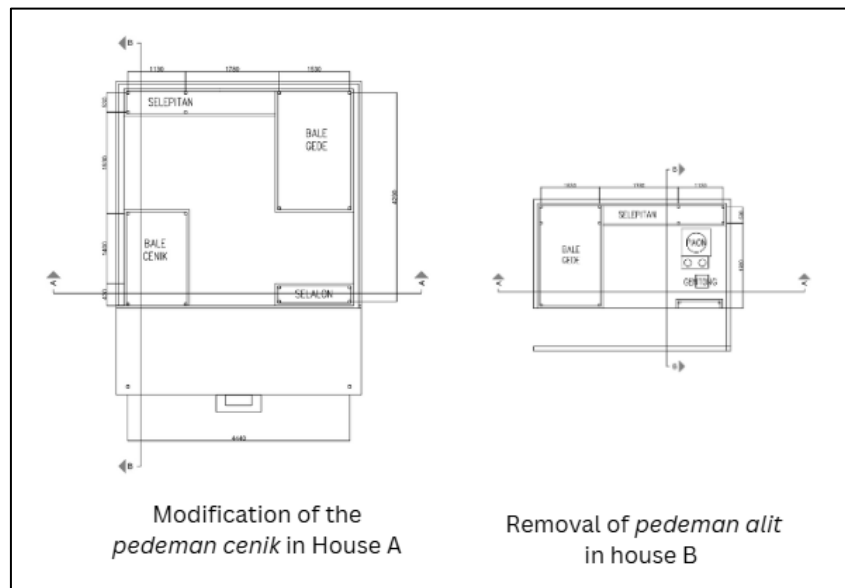
**Table 4.** Spatial Arrangement and Functions of Rooms in Bali Aga Traditional Houses

Space or component unit in the house	Function	
	Tigawasa Village	Pedawa Village
Pedeman	In sakaroras and sakanem houses, there are two bale (beds). One bale is located to the right of the entrance, close to the paon, and serves as the parents' bed. The other bale is to the left of the entrance and serves as the child's bed. In sakapat-type houses, the bed is called a bale because it can be moved and the bed is not integrated into the main structure of the building.	In this traditional house, the bed is divided into two parts, namely pedeman gede, the parents' bed, and pedeman alit, the children's bed. In the Bandung Rangki house, the size of the pedeman gede is larger than the pedeman alit. Whereas in Sri Dandan's house, both beds are the same size.
Paon	In sakaroras and sakanem houses, Paon (kitchen) is a room for cooking located on the right side of the entrance. The area for storing food ingredients and kitchen utensils is called Gentong. In sakapat type houses, the paon is in a separate building in front of the building.	Paon accommodates the activities of cooking and making palm sugar. Palm sugar is one of the products of the Pedawa community's industry that is in great demand by the community. There are three components to the paon: paon tuak (the largest), paon jakan (medium-sized) and irun (smaller than paon jakan). There are lancat and penapi which are wooden shelves. There is also a penukub which is a place to store cooked food, located on the
Bale	In the sakaroras and sakanem houses, there is a space opposite the paon and next to the bale where the children sleep.	There is a space in the center of the traditional room and a circulation area. This area also serves as a place to chat.
Ampik/Terempang	A place to receive guests in sakaroras and sakanem houses (ampik).	An area for receiving guests (terempang)
Sepen	-	Sepen is an additional area for storing prayer tools located next to the front porch. There is also a jineng, which is used to store crops.
Religious rituals room	In a sakaroras-type house, a table made of polpolan soil is used. It is located between two bales in a sakaroras-type house. In addition, a pelangkiran (shrine) made of bamboo is also located above the bale where the parents sleep. Another shrine, which is also made of bamboo, is located at the back of the house.	Pedeman gede also functions as a bale banten that is used during religious ceremonies or to put the dead to sleep. The pelangkiran, which serves to worship the ancestors, is also located on top of the pedeman gede. Religious activities outside the home are conducted in a small merajan made of bamboo called sanggah kemulan nganten.

Source: Authors (2025)

In house C in Tigawasa Village, additional space was added due to activity demands. The homeowner needs a larger area to store and make bamboo crafts. In addition, there is an additional stall located in front of the house, which is one of the livelihoods to support the family economy. In House C in Tigawasa Village, modifications were made to the pedeman cenik to accommodate the homeowner's changing needs (See Figure 2).

In House D in Pedawa Village, a significant transformation involves the removal of the Pedeman Alit, which was originally a small designated space within the house. This area has been integrated into other parts of the house, resulting in a more open interior layout (See Figure 2). House D in Pedawa Village connects closely located buildings by modifying parts of the traditional house structure. In Paon, there is a loss of paon function, which has now turned into a TV room, a place to put household furniture, and a wardrobe. In addition to paon, changes in the function of space are also found in terempang, which was originally used to receive guests, now used as a room to watch TV and study. The layout and function of spaces like the kitchen, bedroom, and prayer room remain unchanged, but modern appliances such as gas stoves and water dispensers are now commonly used. The use of modern kitchen furniture is due to changes in people's livelihoods that demand faster time. Using gas stoves is considered more efficient than using traditional stoves that need to prepare firewood and wait for the fire to ignite.



**Fig. 2.** Space changes in the traditional house of the Bali Aga community

Source: Prajnowrdhi and Pebriyanti (2016)

**Table 5.** Comparison of Spatial Function Dynamics in Bali Aga Tribe Houses

Spatial Function	The dynamics of spatial function in the house of the Tengger Community	
	House C	House D
Container of activities	Additional space for storing and making bamboo crafts.	The terempang room has now become a TV room and study room
Capital Investment	Additional space for a stall at the front of the house and additional space for making bamboo crafts to support the family economy.	Paon tuak in the paon used to cook palm sugar is now rarely found because people rarely cook palm sugar because they have switched professions.
Symbolic Function	The community still maintains the function of pademan gede and pelangkiran as a form of worship to the ancestors.	Pelangkiran in the pedeman gede still exists even though the space has been transformed. In addition, the sangah kemulan nganten is still maintained even though the head of the family has died.
Environmental Filter	Cooking activities in the paon have now shifted to modern kitchens, so the kitchen is rarely used. Now,, the kitchen is used only to maintain room temperature. In addition, the smoke from burning wood in the stove also protects the wood in traditional houses from pests such as termites.	Cooking activities in the paon have now shifted to modern kitchens, so the kitchen is rarely used. Now,, the kitchen is used only to maintain room temperature. In addition, the smoke from burning wood in the stove also protects the wood in traditional houses from pests such as termites.

Source: Authors (2023)

### C. The Influence of Tradition on the Dynamics of Space Functions in Traditional Houses

The results of observations of the Tengger and Bali Aga houses show that there are spaces that are still maintained based on traditions that are still carried out today. The Tengger people still maintain the paon, a space for cooking and preparing offerings. The stove in the paon is still maintained even though the cooking function has switched to using a gas stove. There is a taboo on the *pawon*, which is not allowed to walk past the front of the furnace. If you want to pass through the furnace, you must walk through the right, left, or back side of the furnace. The reason for the taboo to pass through the front of the stove is that the community still believes in Nini Thuwuk, the guardian entity of the *pawon*. People think that bad things will happen if they violate this taboo. This belief in spiritual entities is also reflected in other traditions, such as the Tengger people's practice of making offerings on their birthdays and every Jumat Legi, a sacred day in the Javanese calendar (Salamah & Sukmawan, 2023). In the traditional house of the Bali Aga tribe, the space that still survives because of tradition is the *pedeman gede* room. Although there is a change in space or the room is no longer used, the *pelangkiran* above the *pedeman*

gede still survives because of its sacred function. In *paon* there is also a sacred function, namely the presence of fire in the furnace as a representation of Lord Brahma, who can melt negative elements in the house so as not to cause disturbances to the residents of the house (Prajnawrdhi & Pebriyanti, 2016). The form and function of the *pelangkiran* has survived from the past until now.

Pedawa and Tigawasa villages are inhabited by the Bali Aga community, who maintain traditional practices and beliefs rooted in their Hindu heritage. These communities, less influenced by the Majapahit Hindu-Javanese culture, continue to uphold rituals deeply tied to their ancestral beliefs (Putra & Hartaka, 2022). The religious practices in these villages remain closely connected to the worship of ancestral spirits and local deities, as reflected in their rituals and sacred spaces. In addition to the pedeman gede and *pelangkiran*, the *sanggah kemulan nganten*, located outside the house, has retained its original location and function. Its existence is preserved even after the head of the family has passed away. The pedeman gede, *pelangkiran*, and *kemulan nganten* are closely associated with the beliefs and rituals of the Bali Aga people (Prajnawrdhi & Pebriyanti, 2016)

#### IV. CONCLUSION

The comparison reveals that while Tengger houses adapt more flexibly to modern influences, Bali Aga houses adhere more strongly to traditional spatial configurations. The factors influencing functional dynamics in the spatial layout of the Tengger and Bali Aga tribes include modernization, economic factors, and functional needs. These elements drive spatial modifications in traditional houses, adapting them to contemporary demands while retaining certain cultural aspects. In the Tengger community, tourism has led to adapting traditional homes into homestays, prompting spatial adjustments such as additional rooms and modernized kitchens. Storage solutions have evolved, with cabinets and shelves in the *pawon* serving as alternatives to the traditional *pedhayoan* space for food storage.

Meanwhile, the Bali Aga community in Pedawa Village maintains traditional spatial arrangements more rigidly due to strong religious beliefs. Sacred spaces continue to be preserved and actively used today, reflecting the enduring influence of spiritual practices in spatial organization. Nevertheless, modern elements, such as gas stoves, have been introduced alongside traditional *paon* kitchens, gradually adapting to contemporary needs while maintaining cultural heritage. This coexistence of tradition and modernization highlights the ongoing challenge of preserving indigenous spatial configurations in the face of external influences. Given these dynamics, . To accommodate spatial changes without compromising cultural identity, the government and local communities should collaborate on preservation efforts, such as implementing architectural regulations that retain traditional elements. Furthermore, future research should explore integrative approaches that allow modernization to coexist with the protection of traditional spaces, ensuring the long-term sustainability of cultural heritage.

#### REFERENCES

- Afriadi, D., Dharsono, & Guntur. (2020). Transformation of Ornaments in Aceh Traditional House. *IICACS: International and Interdisciplinary Conference on Arts Creation and Studies*, 3, 200–209. <https://doi.org/10.33153/iicacs.v3i1.33>
- Ardi, M. C., & Aminuza, C. B. (2017). Transformasi Arsitektur Sasak pada Bangunan Resort. *Jurnal Mahasiswa Jurusan Arsitektur*, 5(4), 1–8.
- Ashadi, A. (2022). Meaning of Function in Architecture: Interpret Insider and Outsider Function. *International Conference on Engineering, Construction, Renewable Energy, and Advanced Materials*, 1, 1-6.
- Ayuninggar, D. P., Antariksa, A., & Wardhani, D. K. (2012). The Dwelling Pattern of Tengger Community at Wonokitri Village of Pasuruan District. *Tesa Arsitektur*, 10(1), Article 1. <https://doi.org/10.24167/tesa.v10i1.12>
- Azmi, S. S., Wulandari, L. D., & Yusran, Y. A. (2022). Spatial Hierarchy In The Tengger House, Ranu Pani Village. *International Journal of Built Environment and Scientific Research*, 6(2), 139. <https://doi.org/10.24853/ijbesr.6.2.139-152>
- Bashith, A., Amin, S., & Mkumbachi, R. L. (2022). Development of a Field Laboratory to Social Science Education Pre-Service Teacher. *Jurnal Pendidikan Ilmu Pengetahuan Sosial*, 8(2), 146-161. <https://doi.org/10.18860/jpips.v8i2.15735>



- Broadbent, G. (1980). *The Deep Structures of Architecture*. New York: John Wiley & Sons.
- Damayanthi, N. K. T., & Suarsana, I. N. (2020). Rumah Adat Bandung Rangki di Desa Pedawa. *Humanis: Journal of Arts and Humanities*, 24(1), 92–99. <https://doi.org/10.24843/JH.2020.v24.i01.p12>
- Fadli, M. R. (2021). Memahami Desain Metode Penelitian Kualitatif. *HUMANIKA: Kajian Ilmiah Mata Kuliah Umum*, 21(1), 33-54. <https://doi.org/10.21831/hum.v21i1.38075>
- Groat, L. N., & Wang, D. (2013). *Architectural Research Methods* (2nd ed.). John Wiley & Sons.
- Hermawan, H. (2014). Karakteristik Rumah Tinggal Tradisional di Daerah Pegunungan Jawa Tengah. *Jurnal Penelitian dan Pengabdian Kepada Masyarakat UNSIQ*, 1(3), 212-219. <https://doi.org/10.32699/ppkm.v1i3.267>
- Kiswari, M. D. N. (2019). Identifikasi Perubahan Fungsi Ruang Pada Rumah Tinggal Joglo Studi Kasus: Rumah Joglo Di Desa Keji, Kecamatan Muntilan, Kabupaten Magelang, Jawa Tengah. *Praxis: Jurnal Sains, Teknologi, Masyarakat dan Jejaring*, 2(1), 49-65. <https://doi.org/10.24167/praxis.v2i1.2250>
- Nadjmi, N., & Talaohu, I. M. (2019). Transformasi Bentuk dan Material Rumah di Permukiman Pesisir Suku Bajoe di Bone. *Jurnal Lingkungan Binaan Indonesia*, 8(1), 35-41. <https://doi.org/10.32315/jlbi.8.1.29>
- Narosaputra, D. A. N., Kaunang, S. E. J., & Wantah, M. E. (2022). The Big Five Personality Dan Kebahagiaan Suku Bali. *Jurnal Ilmu Sosial dan Pendidikan (JISIP)*, 6(2). <http://dx.doi.org/10.58258/jisip.v6i2.3145>
- Nurhuzna, A. (2017). Transformasi Fungsi dan Bentuk Arsitektur Bugis-Makassar di Pesisir Pantai Buti Merauke. *Mustek Anim Ha*, 6(2), 193-203. <https://doi.org/10.35724/mustek.v6i2.682>
- Pergitawati, R. P., Antariksa, & Abraham, M. R. (2014). Perubahan Pola Ruang dalam Rumah Lamin Adat Dayak Kenyah Akibat Pengaruh Modernisasi di Desa Pampang, Samarinda. *Arsitektur E-Journal*, 7(2), 90–101. <https://repository.ub.ac.id/id/eprint/143705/>
- Prajnawrdhi, T. A., & Pebriyanti, N. L. P. (2016). Sanggah Kemulan Nganten dan Pelangkiran: Obyek Penentu Keberlangsungan Rumah Tinggal Tradisional Desa Pedawa, Bali. *RUAS*, 14(2), 58-68. <https://doi.org/10.21776/ub.ruas.2016.014.02.6>
- Prajnawrdhi, T. A., & Yudiantini, N.M. (2017). Tipologi Rumah Adat Pada Desa Bali Aga: Studi Kasus pada Desa Tigawasa, Kecamatan Banjar, Kabupaten Buleleng. *National Seminar on Architecture and Spatial Planning (SAMARTA)*, 1-7.
- Pratama, H. Y., & Sardjono, A. B. (2023). Kajian Budaya pada Arsitektur Rumah Tradisional Joglo Bucu di Kabupaten Ponorogo. *Nature: National Academic Journal of Architecture*, 10(1), 1-14. <https://doi.org/10.24252/nature.v10i1a1>
- Putra, I. D. G. A. D. (2017). The Conception and Meaning of Traditional Architecture in Contemporary Buildings, an Interpretation of the Local Community of Central Bali on the Transformation of Traditional Houses. *National Seminar on Architecture and Spatial Planning (SAMARTA)*, 21-30.
- Putra, I. D. G. A. P., & Hartaka, I. M. (2022). Sinergitas Agama Hindu dan Budaya Bali: Perspektif Sosiologi. *Jnanasiddhanta: Jurnal Teologi Hindu*, 3(2), 133-143. <https://doi.org/10.55115/jnana.v3i2.2246>
- Radja, A. M., Harisah, A., Sir, M. M., & Baharuddin, F. (2024). The Meaning and Change in the Function of Communal Space in Lamin House. *ARTEKS: Jurnal Teknik Arsitektur*, 9(1), 37-46. <https://doi.org/10.30822/arteks.v9i1.2569>
- Rukiah, Y., Saptodewo, F., & Alam, B. P. (2021). Makna Ornamen Pada Arsitektur Rumah Kebaya Tradisional Betawi. *Deskomvis*, 2(1), 33-42. <https://dx.doi.org/10.38010/dkv.v2i1.32>
- Salamah, S., & Sukmawan, S. (2023). Bale Desa and Pawonan Tengger: Reflections on Managerial Order, Sociocultural Integration, and Language Defense Practices. *Proceedings of the 3rd International Conference Entitled Language, Literary, And Cultural Studies, ICON LATERALS*, . <https://doi.org/10.4108/cai.5-11-2022.2329463>
- Sardjono, A. B. and Nugroho, S. (2015). Keragaman Perubahan pada Rumah Tradisional Jawa di Pedesaan. *MODUL*, 15(2), 141-156. <https://doi.org/10.14710/mdl.15.2.2015.141-156>
- Sari, F. M., & Mutiari, D. (2014). Perbandingan Rumah Tinggal Tradisional Jawa dan Rumah Tinggal Modern di Surakarta. *Sinektika: Jurnal Arsitektur*, 14(2), 217-224. <https://journals.ums.ac.id/index.php/sinektika/article/view/1441>
- Sosiawan, I. K. (2020). Perubahan Spasial Rumah Tinggal Tradisional Bali di Banjar Adat Selat Peken Bangli. *Mudra Journal of Cultural Arts*, 35(2), 218-224. <https://doi.org/10.31091/mudra.v35i2.1065>

- Sudarwanto, B., & Murtomo, B. A. (2013). Studi Struktur dan Konstruksi Bangunan Tradisional Rumah 'Pencu' di Kudus. *Jurnal Lingkungan Binaan Indonesia*, 2(1), 35-42.
- Susanti, D. B., & Sukowiyono, G. (2020). Makna Aspek Fisik dan Non Fisik dalam Tatahan Ruang Hunian Masyarakat di Dataran Tinggi Kec. Poncokusumo, Kab. Malang. *Pawon: Jurnal Arsitektur*, 4(1), 13-20. <https://doi.org/10.36040/pawon.v4i01.2343>
- Wagiswari, P. A. H., Paramadhyaksa, N. W., & Suartika, G. A. M. (2019). Dinamika Fungsi Ruang di Bale Banjar Titih Denpasar, Bali. *Jurnal Reka Seni*, 6(2), 1-10. <https://doi.org/10.24843/JRS.2019.v06.i02.p04>
- Wijjatmaja, A. B. M., Wiriantari, F., & Suardana, P. G. E. (2024). Revitalizing traditional architecture for contemporary housing in Bali. *Proceedings of the International Conference on Strengthening Capacities of Multi-Sectors Toward Sustainable Development*, 365-373.
- Zulkarnain, A. S., & Hildayanti, A. (2018). Integrasi Konsep Arsitektur Islam pada Rumah Adat Saoraja Lapinceng Kabupaten Barru. *Nature: National Academic Journal of Architecture*, 5(1), 1-12. <https://doi.org/10.24252/nature.v5i1a1>