

# The Role of Traditional Balinese Frontage Elements on Creating Active Street Frontage Identity in Ubud-Bali

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**Abstract** The role of Active Street Frontage (ASF) identity is crucial in Ubud as a world-renowned tourist destination. The traditional Balinese street-frontage (TBF) elements provide a sense of place and identity in Ubud that has economic, social, and environmental impacts. This study seeks to examine the influence of TBF components on creating ASF identity in Ubud. The TBF elements under examination comprise such as fence walls (*penyengker*), green areas (*telajakan*), foyers (*lebu*), roadways (*marga*), gates (*kori*), walkways (*rurung*), and crossroads of primary highways as a civic center (*catuspatha*). This study employs a descriptive qualitative methodology that incorporates field observations and comprehensive interviews. TBF's elements are not merely architectural features but encoded cosmological and spiritual narratives. The findings indicate that "TBF's activeness" brings the existence of sensory complexity and dynamic socio-cultural moments that encourages tourists to walk. The emergence of traditional space adaptability defines the unique identity of Ubud's ASF. For tourists, TBF elements encourage walkability, due to the physical uniqueness and cultural activities involvement. For residents, the TBF not only has a physical role but also promoting collective identity, community bonds, and a sense of belonging to the area. Cognitively, TBF fostered place attachment through daily rituals and communal practices, embedding collective memory of ASF identity.

**Keywords** Balinese, Active, Street-Frontage, Identity, Traditional, Ubud

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## 1. Introduction

Ubud became Bali's inaugural worldwide tourist attraction due to its renowned scenery, artistry, culture, and its hospitality. Ubud is a top five of the best tourist destinations in the world that presents a distinctive blend of stunning scenery and local culture [1]. Ubud with the expansion of intensive global economy and tourism, the imperative to conserve the culture identity and environment becomes ever critical.

In the midst of the growth of international tourism, Ubud is distinctive because it incorporates traditional features into tourism and every facet of daily life. Ubud's tourism developed from a traditional residential area, with a social system and customary laws that maintain Balinese culture and architectural elements. The Balinese recognize the necessity of cultural adaptation and transformation to maintain the traditional architectural features of Bali. Heritage architecture elements, serve as an intercultural medium that fosters dialogue among individuals from diverse generations and cultures [2]. For locals, cultural knowledge and identity have emerged as a significant economic resource due to the commodification of culture within the island's advanced tourist industry [3].

Tourism effect brings an adoptive transformation, characterized by a blend of local architectural forms and trans-local influences, demonstrating the significant

potential for a creative and future-oriented identity process. One risk inherent in the identity-formation process is the tendency to prioritize distinction, focusing on being different and unique, rather than fostering a sense of collective belonging that strengthens social bonds. The primary factor influencing the potential for creative identity formation in Bali is the extent to which local architecture is consciously perceived as a valuable element for self-expression and identity [4].

Active street frontage (ASF) plays an important role in street space quality for both leisure and tourism. ASF notably influences tourists' experiences and perceptions, as well as the overall vitality of the tourist destination by shaping the character and identity of the area [5]. Street frontage quality either enhances place authenticity or public feelings of segregation and disorientation in the community [6][7]. ASF serves as an attractive communal space as a key indicator of sustainable development because of its relation to economic, social, and environmental benefits, ultimately contributing to the quality of life in that area [8].

Street frontage represents a communal area adjacent to the roadway, functioning as a public-private transitional zone that facilitates social-culture interaction between local residents and visitors. Frontages serve as the bridge between public space users and activities within its surrounding buildings [9]. Seeing Figure 1, street frontage can either enhance or diminish cultural experiences, contingent upon the distinctiveness and imageability it produces. The street frontage embodies values and unwritten stories, manifested through physical forms, activities, and meanings that are integral to its culture's historical development [10].

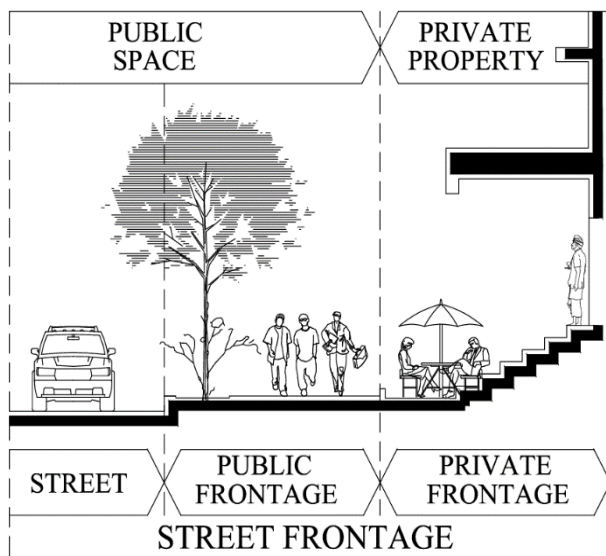


Figure 1. Street frontage areas in an urban context

economy, socio-cultural dynamics, and the environment. This exerts strain on the sustainability of Ubud's street frontage identity, which is characterized by traditional elements. As a cultural tourism destination, understanding the role and significance of traditional Balinese frontage elements in preserving the unique identity of Ubud's ASF is crucial. This study seeks to demonstrate the role of traditional Balinese street-frontage (TBF) elements in the development of ASF identity in Ubud. The initial phase focuses on recognizing the components of TBF in Ubud. The elements consist of fence-wall (*penyengker*), green areas setback (*telajakan*), foyers (*lebu*), roadways (*marga*), gates (*kori*), walkways (*rurung*), and primary crossroad and civic center (*catuspatha*). Thus, this research serves as a basis for formulating TBF elements regulations to boost Ubud's ASF identity aiming for both cultural sustainability and tourism growth.

However, no study has ever been conducted on the identification of TBF holistically as a street frontage element, and its role in Ubud's ASF identity. Prior studies have only focused on the street frontage partially as a traditional house feature, rather than considering it as an integral urban component [11][12]. Some studies in Ubud revealed about transformation of the traditional Balinese house and the way to maintain an architectural identity [13][14]. The relationship between the TBF element and its contribution to Ubud's ASF identity has not been studied yet. The study explains novel results about how significance of these TBF's elements' role in Ubud's ASF identity in the tourism area.

ASF with its identity fosters walkability, which can enhance social interactions, economic activities, environmental and local culture preservation along with global tourism development. Walkability is a term to describe the extent to which the built environment is friendly to people who walk and increases the livability of cities [15]. TBF has a distinctive characteristic that represents its physical form, activities and meanings that are important parts of Balinese people's lives. TBF has not only a physical role but also a profound socio-cultural role, therefore it has been maintained for centuries. Current research employs the sense of place and place identity theory framework and its relation to traditional Balinese spatial concept on street frontage area in Ubud.

Preserving local culture enables the community to engage more actively in sustaining the distinctive TBF attributes of Ubud to achieve a sustainable cultural tourist destination. This research is essential for establishing a foundational understanding of TBF elements' role in ASF identity and increasing walkability which is crucial for tourism planning in Ubud. It's also important to understand the role of each TBF element to ensure comprehensive development strategies and policies that align with conservation efforts of Bali's traditional built environment especially in the tourism area.

Global tourism exerts a substantial influence on the

## 2. Literature Review

Jacobs' seminal critique in *The Death and Life of Great American Cities* [16] identified fatal flaws in modernist, car-oriented street planning, cascading urban crises that impact not only economic and environmental degradation but also social fragmentation. Planners adopted a functionalist approach that designed streets as traffic conduits rather than social spaces and place-making tools; streetscapes lost their identity and emotional bonds that formed through sustained interaction with layered environments.

Emerging from Jacobs' critiques, the active street frontage (ASF) concept redefined street frontage elements as social ecosystems requiring deliberate design interventions including both private and public frontage. The idea of ASF argued that comprehensively-designed ground floor street frontages can stimulate social interaction and elevate the quality of life [17]. ASF plays a crucial role in the urban development by creating attractive communal areas, and vibrant and lively streets that encourage economic vitality [18][19]. The quality of the street and its frontages are essential to sustainable development concept to enhance urban livability that is concerned with environmental, economic, and social balance [20]. In other words, active street spaces influence not only mobility but also the attractiveness of areas for pedestrians, which impacts sustainability aspects and urban livability.

Certain theories indicate pedestrian-oriented planning is influenced by walkability factors that significantly shape ASF as an attractive walkable neighborhood. The quality of ASF is classified by four levels of perceived walkability key-factors from basic to advanced namely feasibility, accessibility, safety, comfort, and *pleasurability*. *Pleasurability* refers to street ability to encourage pedestrian enjoyment and aesthetic appeal [32][33]. *Pleasurability* of streetscape design related to walkability includes human-scaled design, a range of design complexity, activities diversity, wall transparency, and a sense of enclosure that fosters interaction opportunities around the frontage area [34]. Thus, ASF becomes a model of an attractive pedestrian area by creating street frontage features that support walkability and leisure walking experiences through a sense of place quality. Place identity and sense of place are concepts that explain the quality of a person's relationships with a place. The concept of sense of place is utilized in the analysis of human-place bonding, attachment, and the meaning of place. Sense of place is typically defined as a comprehensive impression that includes the general feelings people have towards locations, their sensory experiences, and the concepts and values they attribute to those places [35].

Street frontage elements play a critical role in enhancing the quality of walkable environments, especially in tourism areas. A walkable neighborhood enhances a sense of

community for residents and also places attachment for visitors from its interaction and emotional ties to surrounding street areas such as architectural elements, streetscape and local cultures. ASF involves the realization of a high-quality sense of places characterized by their physical forms, activities, and meanings with a strong emphasis on establishing a distinctive value [36][37]. Distinctive ASF identity creates a unique walkable environment fostering a sense of place attachment for both residents and tourists.

Tourist areas with a concern to ASF planning offer avenues for sustainable development that enhances economic opportunities, fostering socio-cultural interactions, and promoting environmental sustainability. Street frontage elements ought to be crafted with a focus on aesthetic appeal while simultaneously embodying significance of self-expression to create a sense of identity for the local community. The culture of local inhabitants, rooted in historical narratives and their continuity, gives rise to the presence of spatial significance that embossed place identity [38]. The physical significance and emotional connections of street places contribute to place attachment for individuals, including tourists [36]. Seeing Figure 2, *Puri Agung Ubud* and its frontage become as physical and cultural landmark for Ubud.



Figure 2. Street frontage of *Puri Agung Ubud*

The establishment of ASF identity consistently correlates with the development of a distinct sense of place and identity. The characteristics of the street frontage contribute to the significance and connections associated with the constructed street space as a shared space. The concept of the sense of place shapes a sense of place attachment among tourists and strengthens collective memory connections for residents. Presenting attributes of identity and local wisdom values in the street frontage elements hold significant importance in strengthening the emotional experience. The locality fosters a cohesive environment, promoting unity and togetherness among residents, while also cultivating a shared sense of belonging and collective memory, even in the face of

pervasive global cultural influences [39].

The experience of identity is derived from elements such as distinctiveness, continuity, self-esteem, and self-efficacy. The theory posits that place identity arises not solely from specific physical characteristics but also from the influence of emotional belonging and the contributions that individuals make to their environment [40][41]. This kind of emotional bonding and experience involvement in the ASF area creates the sense of attachment to the place, which sustains both local community and tourism growth.

At tourist destinations, place attachment is established through the interplay of two main aspects: place dependency and place identity. The strength of the dependency bond is connected to a thorough evaluation of the advantages and drawbacks of a location in relation to other comparable locations. Place dependence pertains to the relationship between environmental resources and the facilitation of enjoyable activities for tourists, as well as the fulfillment of service support values [42][43]. Place identity is expressed through emotional, symbolic, or identity-related connections to a particular location [44].

ASF contributes to tourists' intentions to revisit, as their memories become intertwined with that place. Place attachment includes not just its physical characteristics but also its social and psychological dimensions; this complex concept involves the interplay of emotions, knowledge, and behaviors associated with a particular place. ASF identity elicits emotional and sensory responses in pedestrians, resulting in place attachment to that area.

Attachment to a location serves as an emotional connection that meets personal needs and provides a secure, comfortable, and attractive setting of place. ASF identity, shaped by the quality of individual and community activities, manifests physically that fosters a relationship of symbolic significance with a location. ASF introduced transformative principles which are concerned with pedestrian-oriented experiences that are critical to not only the urban environment but also tourism destinations. The author elaborates on planning principles that relate to ASF in Table 1.

Location itself is not a sufficient condition to create a sense of place. In order to create a sense and place attachment to a place, there is a need for a long and deep experience and identity of a place, and preferably involvement in the place and deeper ties to the surrounding environment. Rituals, myths, and symbols help in strengthening the attachment to place. Place attachment refers to the connection established through the interaction between individuals and a specific location and its characteristics. This emphasizes the importance of the experience, which is not only a physical but also an emotional experience [45]. The role of TBF elements in Ubud is intricately linked to the values of local wisdom and the active participation of local residents and communal activities. The elements of TBF are essential for maintaining the identity of Ubud's ASF by promoting physical uniqueness, local activities and symbolic meaning that engage local residents and visitors in the street frontage of the tourism area.

**Table 1.** Active Street Frontage principles (elaborated)

Factors		Principles
Pleasurability	Land-use & attraction diversity	Mixed activities on the ground floor, public and commercial domination (street café live performance, etc.). Mixed land-use and attraction that covered on walking distance. Public space with mixed art performance. Block length, node, and sense of regional center (civic center) and landmark. Destination scale, aesthetic quality and visual / design complexity. [17][21][22]
	Ambient and environment contextual	Contextual and thematic ambient that emphasized place identity (local architecture and materials) and social-culture identity exposure. Sensory comfort (thermal, cleanliness, hearing, smell, and terrain). Sense of human scale & enclosures. Local environment and climate responsive design. Demographic scale, resident and total population density. [22][23][24][25]
Comfort	Interactive, social support & networking	Collaboration and engagement (visitor, community, industry, & stakeholders) that is also supported by technology. Social acceptance. Involvement of local community and products that encourage community surveillance. [23][24][26][27]
Safety	Safety and security	Traffic safety, slow-speed traffic, and crime security planning. [28][29][22][30]
Accessibility	Connectivity and accessibility	All transport modes possible non- vehicular priority and privilege for public transport. Visually & physically accessible. Connected & legibility of pathway. Encourage off-street parking with limited on-street parking. [21][22][24][30]
Feasibility	Infrastructure convenience	Functional, user-friendly, and reliable for all ages or genders. Legible facilities and leisure amenities. [24][30][31]

### 3. Methods

This study employs a descriptive qualitative methodology utilizing a case study technique in Ubud, Bali (*Kelurahan Ubud* administration). The qualitative technique was used due to the research's emphasis on a comprehensive examination of the components of TBF, aiming to elucidate the function and role of these features in the formation of ASF. The case study method was employed due to Ubud Village's unique attributes that exemplify the traditional Balinese spatial configuration and the impact of global tourism, rendering it pertinent to investigate the issue in a contextual and thorough manner [46]. The descriptive qualitative research method offers the potential to examine a wider viewpoint; however, it is limited by the subjectivity of the informants involved. In this study, a varied group of informants was chosen, comprising stakeholders (Ubud's village planning board leader), residents, and tourists/visitors.

There are some stages conducted in this research as follows (Figure 3): 1) literature review, finding the academic foundation related to the analysis variables, is related to the theory of active street frontage, sense of place attachment theory, place identity theory, and traditional Balinese spatial configuration. 2) Data collection, is conducted through participatory field observation, questionnaire, in-depth interviews, and document analysis. 3) SWOT analysis of TBF elements in Ubud. 4) Interpretation and synthesis are carried out by linking the themes found with the theoretical framework used. A triangulation matrix is conducted by comparing the results of interviews, observations, and documents to ensure data validity. This ensures that the conclusions can provide in-depth analysis from a richer perspective [47].

### 4. Results and Discussion

#### 4.1. Traditional Balinese Street Frontage Elements Identification

Architecture and spatial organization of traditional Balinese residential areas exemplify a distinctive equilibrium among Hindu beliefs, humanity, the surrounding environment, and the intricate framework of Balinese cosmology [48]. The notion of natural equilibrium is grounded in the Balinese philosophical tenets of *Rwa Bhinneda*, *Sekala-Niskala*, and *Bhuana Agung-Bhuana Alit*. Those dualistic philosophies emphasize the equality and balance of the universe. Those concepts integrate the principles of *Tri Loka*, *Tri Mandala*, and *Tri Angga* to articulate the concept of spatial value hierarchy of all aspects from the universe to the human body [49]. The concept categorizes values and functions according to their level of spiritual appropriateness: profane, neutral, and sacred. This principle serves as a fundamental guideline for Balinese in organizing their spaces and stratification [50].

Balinese culture especially in spatial planning evidently encompasses both physical dimensions (*sekala*) and non-physical (*niskala*) considerations at the same time. Structures and buildings are not merely physical embodiments, but are personified as if they possess a soul like a human. The soul animates the energy of the building as its symbolic meaning, while its physical form is its manifestation. All those considerations aim at implementing a harmonious concept called *Tri Hita Karana* to achieve life happiness, with mutual benefit relationships between humanity, ecology, and spirituality (God) [51]. Balinese beliefs are that happiness is influenced not solely by material possessions only but also significantly by psychological and spiritual dimensions.

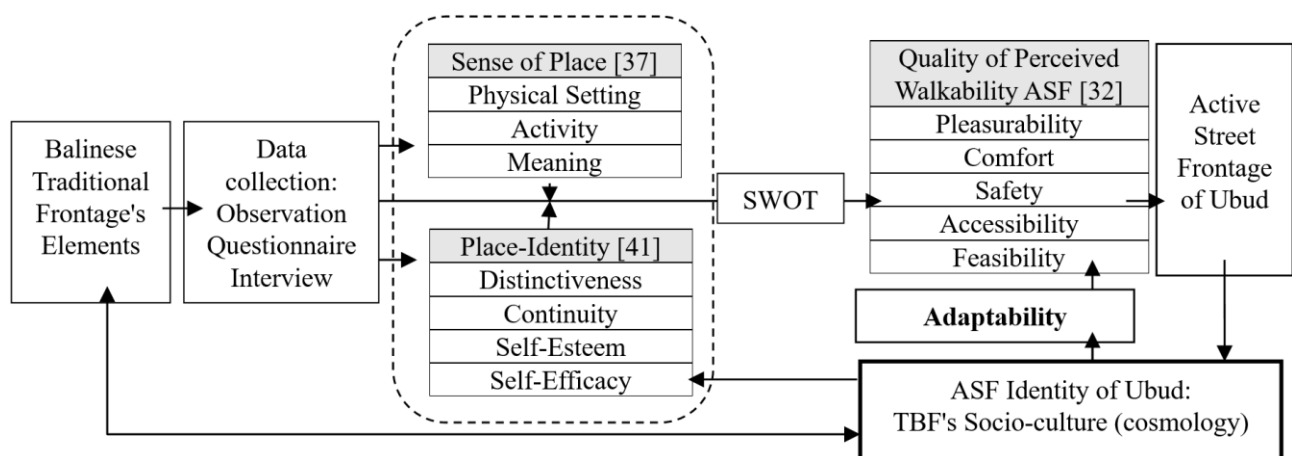


Figure 3. Research Framework

The traditional Balinese street-frontage (TBF) historically served as a physical and spiritual mediator between private dwellings and public realms, rooted in the Tri Mandala (profane-communal-sacred) spatial hierarchy and Tri Hita Karana philosophy. TBF is composed of several private components and parts from public spaces. The private components originate from the facade of the private dwelling unit, whereas the public components derive from the public circulation space (Table 2). TBF was formed along this civic center (*catuspatha*) and residential area. The TBF elements include the fence walls (*penyengker*), setback for green space (*telajakan*), gate (*kori*), empty space in front of the gate (*leboh*), main access/road (*marga*), and pathway (*rurung*). TBF elements become a standard in the arrangement of Balinese street frontage based on the traditional spatial planning reference called *asta kosala-kosali* [52]; that's why TBF maintained for centuries. Figure 4 shows TBF's physical setting, and photos were taken in 1920's [53], which also indicates socio-cultural activities that are performed in the frontage area.



Figure 4. Socio-cultural activities Balinese frontage in 1920's [53]

Table 2. Traditional Balinese street-frontage elements

Elements		Definition
Public space	<i>Catuspatha</i>	The cross-road intersection of four directions as a regional civic center
	<i>Marga Agung/Alit</i>	Primary access road ( <i>marga agung</i> ); secondary access / alley ( <i>marga alit</i> )
	<i>Rurung</i>	Pathway linking the dwelling/house
Private Property	<i>Penyengker</i>	Walls of traditional house fences
	<i>Telajakan</i>	Setback area for green space, located between the pathway and fence
	<i>Kori</i>	The main entrance gate provides access to the house
	<i>Leboh</i>	The empty space, foyer area in front of the gate that faces the road

The configuration of traditional Balinese street frontage is intricately connected to the spatial organization of traditional Balinese villages. The traditional street frontage serves as fundamental components that shape the spatial arrangement of traditional villages in Bali (Figure 6). The spatial layout and characteristics of Ubud are based on the traditional Balinese spatial configuration concept called *Catuspatha* [52]. TBF is a part of the house facade that serves as a fence and access gate that protects and filters physical and non-physical dimensions before entering the house. The presence of Balinese sacred elements, ensuring TBF, becomes the manifestation of a guardian of the house's courtyard from external forces. Shrines, sacred offerings and rituals that occurred in the TBF area were believed to prevent evil energy from entering the house.

*Catuspatha* Ubud represents a traditional concept of a crossroad that serves as a civic center that incorporates elements such as the kingdom's palace (*Puri Agung*), community building and public facility (*wantilan*), green open space and plaza (*alun-alun*), and traditional market (*peken*), seeing Figure 5. The form and spatial significance of the *catuspatha* concept exhibit both static and dynamic characteristics. The concept is viewed as static due to the presence of various elements, types, and values, while it is also regarded as dynamic because the *catuspatha* concept adapts to global demands and changes [54][55].

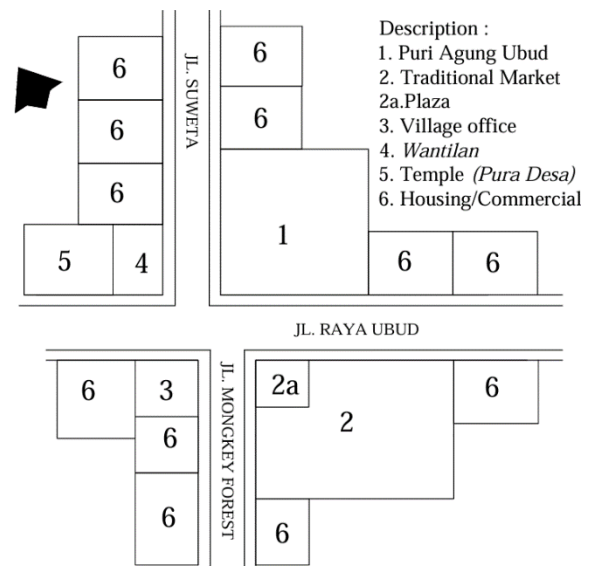


Figure 5. General situation on Catuspatha of Puri Agung Ubud

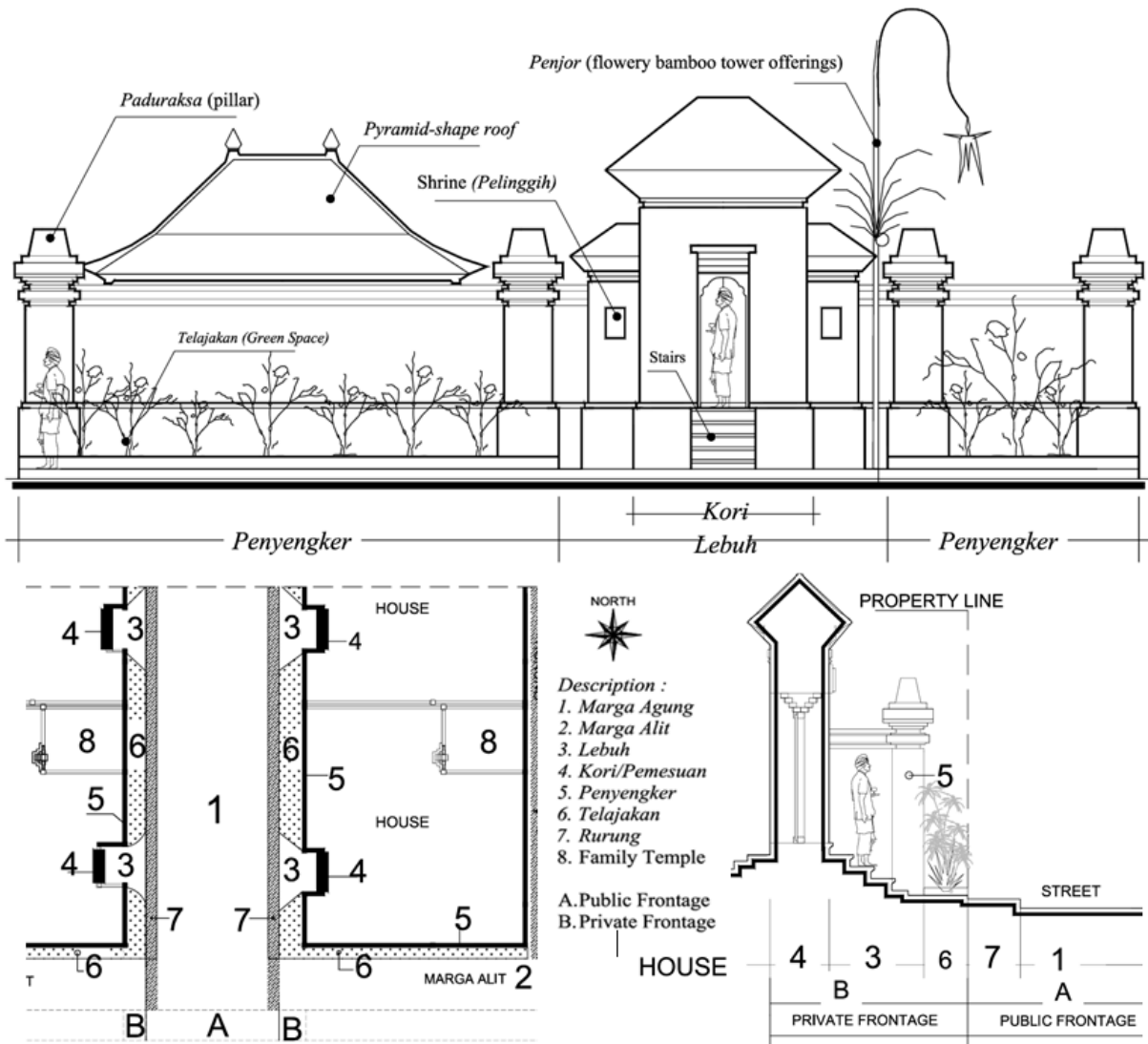


Figure 6. TBF spatial configuration (elevation, layout, and section)

*Catuspatha* serves as a pivotal intersection of the four cardinal directions, acting as the primary circulation route that links different areas of the village. *Catuspatha* embodies a holistic approach to sustainable development, intertwining integrated social-cultural community functions, economic considerations, and natural environmental elements within a single framework.

*Puri Agung* Ubud or royal palace is the most important aspect, both physically and socio-culturally in Ubud. *Puri Agung* Ubud and its descendants are the highest strata in the Ubud society and are highly respected. *Puri Agung* Ubud is the anchor that binds and unites the traditional community (*banjar* and *desa adat*). In TBF, the *Puri* becomes a living historical landmark that is capable of exerting physical, social, and economic influence over the entire Ubud community. The social significance of *catuspatha* is tied to its position as the focal point of a community, particularly as the civic center site, which is the location of the regional palace. The *catuspatha* holds a symbolic significance that embodies cosmic harmony,

reflecting the principle of *Tri Hita Karana*, which intertwines the elements of humanity, nature, and spirituality. In Balinese culture, *Catuspatha* is understood as a microcosmic element that acts as a miniature representation of the universe (macrocosmic) [55].

*Penyengker* in traditional Balinese house is a must. *Penyengker* is a physical structure that distinguishes between the house and the public frontage. This wall functions to safeguard the home's perimeter from unauthorized access, while simultaneously providing privacy and noise buffer for the occupants [56]. The *penyengker* serves both a physical role and a symbolic function, acting as a protector against physical and negative energy while also representing the homeowner's social status. The placement and dimension of *penyengker* exemplify the principles of Balinese architecture, highlighting the territorial area, space zoning and spatial hierarchy in the arrangement of traditional houses.

*Telajakan* refers to the private setback space situated between the house fence (*penyengker*) and the public

sidewalk. The *telajakan* area functions as a green space that acts as a buffer between road and residential uses. *Telajakan* serves as a traditional method for enhancing plant areas and water absorption, which is crucial for mitigating environmental disasters at the residential level [57]. This element also creates a microclimate and thermal comfort along public pathway. Besides its ecological function, *telajakan* contributes to social and economic activities, including neighborly interactions and small-scale economic and trading endeavors [58]. *Telajakan* symbolically represents the community's commitment to environmental care and solidarity. This concept is consistent with the theory of prosocial behavior, highlighting the significance of public spaces in fostering solidarity. These spaces enhance social cohesion and function as a transitional zone between public and private domains.

*Kori* symbolizes mount, as the highest structure and most sacred structure on private TBF's elements. As the primary entrance gate to a house or residential complex, the structural element acts as the gateway to the secluded area. *Kori* possesses a sacred structure for conducting holy offerings on the *Kori* shrine. The spiritual dimension of *kori* acts as a guardian, regulating the energy that flows into the home, as a threshold that separates the mundane outer world from the more sacred space of the home. Moreover, its physical appearance represents the social strata of its owner.

*Lebuh* as the vacant space in front of the gate (*kori*) functions as a transitional zone from the public pathway leading up to the entrance gate. *Lebuh* holds a significant meaning and serves as a site for performing ritual ceremonies and offerings to the spiritual energy beyond the home, ensuring that it does not adversely affect the residents. The Balinese people hold the belief that negative energy exists outside the home, making it essential to neutralize this energy prior to entering the house [59]. This empty area serves as a space for community interactions, allowing individuals to engage with neighbors without the need to enter their homes, like a foyer.

The main access road in the Balinese spatial configuration is called *marga*. The primary access road is *marga agung*, and the *secondary road* is *marga alit*, which are essential in facilitating circulation activities within the area. This functions as a vital transportation corridor for goods, facilitating economic and socio-cultural endeavors, including commercial activities in traditional markets and small stalls. Beside their main role as circulation routes, these roads transform into communal spaces that embody both sacred ceremonies. The area of *marga agung* hosts a variety of cultural

activities, such as art performances, rituals, and a sequence of cremation ceremonies. *Marga* mainly facilitates social-cultural community activities in Ubud and fosters the interconnectedness cooperation and social collaboration.

*Rurung*, a narrow passage situated in front of and nestled between residences within a residential complex, serves as a compact mobility route, facilitating physical connectivity. *Rurung* as a pedestrian-only pathway, free from vehicles, fosters interaction and social connections among neighbors. In a symbolic context, *rurung* represents social interconnectedness and enhances robust community solidarity bonds, embodying the idea of informal interaction spaces in enhancing community relationships.

Field observation was conducted to identify the existence of TBF's elements in the street frontage area of Ubud. The survey attempted to identify the intensity of TBF's element by conducting a checklist on 251 block frontage samples spread across 10 streets in Ubud (Figure 8). The survey was conducted on TBF's elements that are located within the private property zone, specifically *penyengker*, *telajakan*, *kori*, and *lebuh*. See Table 3. The findings indicated that the *lebuh* (75%) and *kori* (73%) elements are the most prevalent, followed by the *penyengker* (68%) and *telajakan* (56%) components. These results demonstrate that TBF's dominant presence considerably affects physical ambiance on the ground level for visitors and pedestrians. Seeing Figure 7, the physical presence significantly impacts Ubud's place identity, in terms of its continuity and distinctiveness.

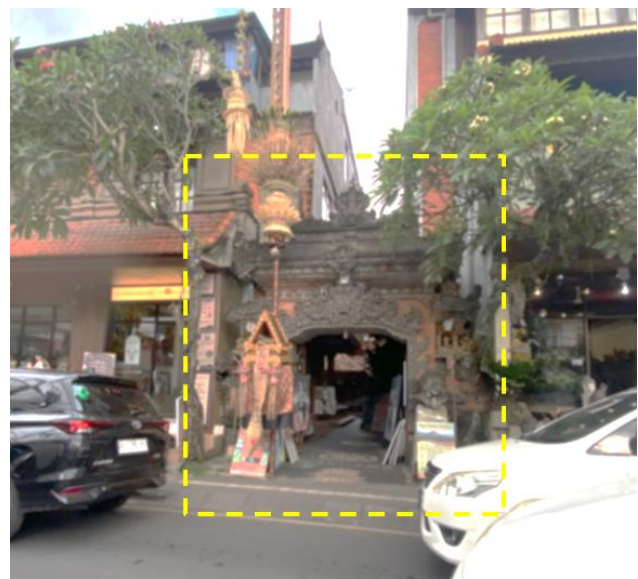


Figure 7. *Kori* preserved amidst commercial development pressures

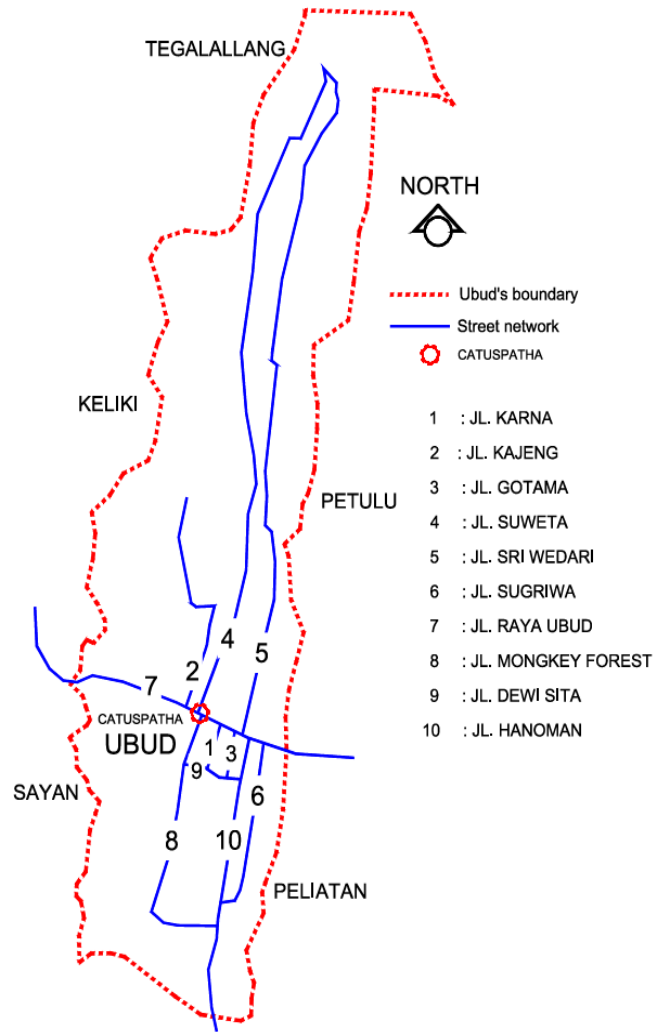


Figure 8. Street location in Ubud's map (Street name in Table 3).

Table 3. TBF element's density in Ubud's streets

St. No.	Street Name	Sample	Telajakan		Penyengker		Kori		Lebuh		Car Gate		Pyramid roof	
			Unit	%	Unit	%	Unit	%	Unit	%	Unit	%	Unit	%
1	Jalan Karna	11	4	36%	9	82%	10	91%	11	100%	1	9%	11	100%
2	Jalan Kajeng	19	6	32%	16	84%	16	84%	12	63%	2	11%	18	95%
3	Jalan Gotama	21	21	100%	16	76%	19	90%	10	48%	2	10%	21	100%
4	Jalan Suweta	30	16	53%	23	77%	25	83%	30	100%	4	13%	24	80%
5	Jalan Sri Wedari	30	20	67%	26	87%	26	87%	18	60%	10	33%	30	100%
6	Jalan Sugriwa	30	0	0%	18	60%	28	93%	17	57%	7	23%	30	100%
7	Jalan Raya Ubud	30	18	60%	19	63%	19	63%	23	77%	7	23%	22	73%
8	Jalan Mongkey Forest	30	18	60%	12	40%	12	40%	29	97%	5	17%	23	77%
9	Jalan Dewi Sita	20	8	40%	2	10%	1	5%	17	85%	3	15%	17	85%
10	Jalan Hanoman	30	29	97%	30	100%	26	87%	20	67%	3	10%	30	100%
Total/Percentage		251	140	56%	171	68%	182	73%	187	75%	44	18%	226	90%

To enrich the field data in Table 3, in-depth interview results from 20 local residents' family heads (age 40 - 65 years old) find daily function of TBF and its significance. TBF's not only seen as cultural heritage, but also as an important dwelling element that facilitates daily cultural, sacred practices, and functional space. For them, *lebuh* and *kori* supported daily ritual activities to put holy offerings. *Lebuh* and *kori* hold significance for the residents, serving as sacred areas in the public space to put religious ceremonial apparatus such as *penjor* (flowery bamboo tower), *sangah asagan* (temporal shrine), *pelinggih* and *canang sari* (flowery holy offerings) for family cultural practices that believe to protect the house spiritually. *Telajakan* and *penyengker* come as a physical buffer that is more preferably modified for functional or contemporary spaces such as car gates, commercial, and parking spaces. Field survey results indicate the correlation between spatial hierarchy (sacred-profane) and TBF modification's determinant.

Residents choose to avoid the use of car gate access on their frontage area, although the car ownership demands rise. Table 3 shows that only 44 out of 251 blocks (18%) added car park and car gate access to their house frontage. They prefer to optimize the space for commercial or household functions rather than a car garage. Furthermore, there are 226 units or about 90% using pyramid-shaped roofs that are clearly visible from the ground floor frontage. The interview indicates that residents are aware of traditional architecture identity, by its pyramid-shaped roof utilization alongside TBF. They argue that the pyramid-shaped roof, besides being tropical weather resilient, also carries an identity impression that they have inherited through generations, also as part of the cultural heritage. Meanwhile, minimum private car access supports the modern ASF's experience, when the type of roof influences not only the ASF atmosphere but also enclosures by its distinctive shape and clay material.

TBF's elements are crucial as they pertain to holy functions and sacred rites, serving as expressions of self-esteem and self-efficacy within the local community, which contributes to shaping its identity. Local residents consider the presence of TBF's elements to be a part of their cultural and religious practices that have been passed down from generation to generation, which fosters a sense of belonging and preserving its identity sustainability. It is important for them to preserve these cultural practices, which are supported by the presence of TBF elements. In fact, the physical aspects, activities, and meanings contained in TBF also shape the identity of the place of Ubud. TBF's elements are not merely architectural features but coded cosmological narratives, protecting and guiding residents and visitors through spiritually charged transitions before entering the house.

Cognitively, TBF fostered place attachment through daily rituals (*canang sari* offerings) and communal practices (*gotong royong* mutual aid), embedding collective memory into the street frontage. The community pavilion (*wantilan*) positioned at the *catuspatha*, served as a social nucleus where Ubud's community (*banjar*) meeting and ceremonial preparations occurred, reinforcing the frontage's role as a stage for *desa adat* (traditional customary law) performances. Unlike modern ASF's focus on economic and social exchange, TBF prioritized the indigenous concept of *desa-kala-patra* (place-time-context) adaptation to temporal and contextual needs while maintaining cosmological continuity. Thus, TBF's elements play a role in shaping the sense of place and at the same time also provide the place identity of Ubud itself. The author formulates Table 4 to map how TBF's elements play a role in the sense of place and place identity in Ubud; this summarized the TBF's place theory in Ubud's context with field survey data (observation, checklist, and tourist questionnaire (Subsection 4.2).

**Table 4.** The role of TBF on Ubud's sense of place and place identity

	Physical Form	Activity	Symbolic meaning
Distinctiveness	TBF has distinctive physical forms, based on the Bali's cosmology and the philosophy of Hinduism.	TBF accommodates functional, symbolic, communal ( <i>banjar</i> ), and spiritual activities related to the culture, art, and rituals of the Ubud community based on <i>Tri Hita Karana</i> .	The TBF signifies the dichotomy of <i>sekala-niskala</i> and profane-sacred, linking the Tri Loka: the bottom realm (Evil/ <i>Bhuta</i> ), the middle realm (Human), and heaven (Gods).
Continuity	TBF planning and design are guided by the functional and ritual stages written in Balinese traditional construction methods called <i>asta kosali</i> and <i>asta bumi</i> .	In TBF, functional activities occur in harmonious tandem with rituals/sacred activities that take place periodically and continuously using the Balinese calendar.	TBF provides sacred symbolic energy and functional sustainability to maintain the balance of the physical dimension ( <i>sekala</i> ) and spiritual dimension. ( <i>niskala</i> )
Self-Esteem	The structure, physical complexity, and design indicate the social status, social hierarchy, and also social responsibility status of its owner.	Cultural activities and rituals in TBF not only relation to God, but also reflect the social status and economic capabilities of its inhabitants.	The resilience and originality of TBF contribute to a sense of identity and underscore the significance of sustaining ancestral heritage.
Self-Efficacy	Distinctive physical forms possess cultural significance and tourism attraction, contributing to economic development for residents.	The quality of the public frontage and commercial space especially at TBF affects the visitor's engagement and economic activities.	Interactions between residents and tourists enhance relationships through a sense of involvement and belonging.

#### 4.2. Traditional Balinese Frontage in Ubud: Analyzing Its Strategies for Sustainability

The components of TBF play a significant role in shaping and showcasing the distinctive ASF identity of the area, offering a daily Balinese activity for visitors, while also fostering a sense of belonging among the local residents. Nonetheless, TBF encounters a challenge concerning the living conditions and tourism in Ubud. The findings from the SWOT analysis regarding the TBF in Ubud are outlined below.

A structured questionnaire was administered to 100 tourists in Ubud, when asked about the reasons that would motivate them to re-visit Ubud; the respondents emphasized the value of sustained cultural richness and authentic local experiences. The survey result indicates that 36% of visitors would come back for the unique cultural offerings and traditions; 25% valued the scenic beauty and natural ambiance; 22% appreciated the warm hospitality and local community engagement; 13% mentioned the appeal of seasonal festivals and art events; and 4% for other various reasons. This result also confirmed that TBF's elements with its distinctive traditional form and daily cultural activities play a significant role attracting tourists to revisit Ubud.

Conversely, when asked about the walking experience in Ubud, 65% raised concerns about in-adequate pedestrian infrastructure, citing issues such as lighting (60%), narrow sidewalks, particularly on busy streets like Jalan Raya Ubud and Jalan Hanoman, and insufficient signage for wayfinding, and public bench for rest. The concern was also raised about traffic congestion and inefficient parking. While the cultural elements were strong, the lack of coordinated urban planning and traffic management in certain areas decreased the overall experience.

##### Strength

The traditional Balinese frontage, particularly *catuspatha*, embodies not only cultural importance but also carries substantial historical significance. The significance of cultural and historical values plays a crucial role in the context of ASF on cultural tourism in Ubud. *Catuspatha* serves as the focal point for social, cultural, and economic activities in Ubud, reinforcing the character of the traditional street frontage that upholds the identity and sense of place. This fosters a beneficial relationship between conventional aesthetics and eco-friendly cultural tourism initiatives. The conventional facade features in residential neighborhoods can be strategically leveraged to stimulate the tourism economy.

The official document for tourism development strategic plan in Bali 2015-2029 designates Ubud as a premier tourism destination that is concerned with sustainable and community-based development. Field data analysis in Table 3 indicates that culture and daily rituals are determinant factors that influence the community to

maintain TBF's elements such as *kori* and *lebu* (Figure 9). Besides its aesthetic beauty, those factors are essential in Ubud competitiveness as a cultural tourism destination, since TBF acts as a showcase of Ubud's cultural activities, emphasizing the cultural value of the Ubud community. TBF Ubud represents a diverse array of creativity and flexibility in development while maintaining its identity as a traditional frontage. This adaptability offers a benefit in commodification while preserving the symbolic significance of ASF identity in facilitating both culture and tourism in Ubud.



**Figure 9.** *Kori* stand-out and *lebu* decorated with holy offerings and *penjor*

##### Weakness

Ubud as a traditional village faces challenges related to constrained space and the dilemma of tourism growth. Ubud attracts a significant population of both residents and tourists inevitably increasing the economic value of the space. The configuration of TBF elements takes up a lot of space in the house frontage. It is not surprising that the presence of TBF is under pressure and replaced by commercial functions that are considered more profitable. Numerous alterations or eliminations of traditional frontage components take place for practical or business-related reasons. This diminishes the TBF attributes of the area and lowers the quality of ASF. Furthermore, the TBF is viewed as less effective for contemporary requirements and is regarded as inadequate for optimally supporting economic activities.

Field survey indicates only 56% of *telajakan* left on Ubud's TBF; the other 44% has been transformed (Table 3). *Telajakan*, as a profane function, is considerably transformed into a tourism-related supporting space due to its direct contact with public space. This condition threatens the sustainability of the *telajakan* as a green area that serves as an environmental factor, especially thermal, pollution, and noise buffer for pedestrians. Pedestrian infrastructure has emerged as a significant concern requiring more comprehensive attention since it influences the public perception of safety and comfort walking.

### Opportunity

The distinctiveness of traditional frontage has the potential to serve as the brand and identity of ASF in the Ubud area. By implementing strategies rooted in cultural sustainability and conservation, the visual appeal and character of TBF will significantly enhance the tourism sector with its ASF identity. Collaboration among stakeholders aims to enhance awareness regarding the preservation of local cultural values in today's global context, while simultaneously promoting adaptability of TBF while optimizing economic and cultural tourism opportunities.

### Threat

The growth of tourists and the extensive development of tourism infrastructure pose a risk to the sustainability of traditional attributes in Ubud street frontage. The massive transformation of TBF is in the name of fulfilling requirements of tourism spaces. In other situations, the rise of new tourist destinations and attractions presents a potential challenge to the Ubud's tourism sector, necessitating that Ubud enhances its tourism attributes with unique and distinctive identities that were represented on ASF.

Optimal development of ASF identity in Ubud can be attained by implementing various roles of TBF in the sense of place identity to formulate strategies that enhance its benefit and identity sustainability (Table 4). This can be achieved through the advancement of sustainable cultural tourism, emphasizing cultural characteristics inherent in the elements of traditional Balinese frontage. The components of traditional frontage have established ASF in Ubud because of a distinct physical image of the area and create place attachment by its psychological attributes. Those conditions play a crucial role in generating comprehensive walkability emotions and feelings for tourists enjoying street frontage spaces by walking.

In order to preserve TBF function in contemporary changes, the strategy should focus on implementing ASF's frameworks in profane function. TBF commodification should ensure to maintain the authentic cultural and spiritual function of TBF. Commodification in TBF Ubud has transpired and proven adaptable for contemporary

purposes. The Balinese indigenous concept of *desa-kala-patra* (place-time-context) offers flexibility and adaptability in TBF utilization for contemporary uses. In the *Catuspatha*, apart from being community center and rituals, it also possesses a dynamic role as an art performance venue that yields economic advantages. Additionally, certain spaces of *telajakan* and *penyengker* are utilized for commercial purposes. *Kori* as its welcoming and eye-catching form is utilized as a commercial focal point to attract visitors. See Figure 10.



**Figure 10.** Adaptability of *telajakan* dan *penyengker* as profane space utilized for commercial function and supporting ASF

The undertaken commercialization demonstrates TBF's adaptability in catalyzing the establishment of ASF framework in Ubud, not only in social and environmental but also in economic value. The modifications pertain solely to the profane elements, without compromising on the spiritual functions that are preserved and prioritized in TBF Ubud. This commodification is also the manifestation of Tri Hita Karana, to achieve a harmonious balance in terms of economic prosperity for locals under the pressure of global tourism.

Formulating incentive regulations for cultural preservers is essential, particularly in the TBF zone within residential areas of Ubud. The proposed incentives may manifest as collaborative efforts or tax reductions. Furthermore, collaborative efforts with the industrial sector can be pursued to arrange ASF conditions in alignment with established TBF standards, highlighting Balinese frontage elements in Ubud.

Identifying vulnerabilities and risks involves the coordinated planning of ASF alongside road infrastructure planning and TBF design. Guidelines and spatial regulation that integrate innovation and contemporary requirements, while maintaining the cultural significance

of TBF, can facilitate the creation of an ASF that embodies Ubud's identity. Improving the quality of basic infrastructure for pedestrians is essential to enhance comfort in TBF. Investment in fundamental infrastructure, including pedestrian accessibility pathways, street lighting, shading, and mitigation, alongside design innovations in traditional Balinese Frontage, is essential. Collaboration and participation of the local community and tourism industry in the TBF planning process are needed to stimulate the quality of ASF Ubud. Simultaneously, it is essential to educate on the significance of preserving and recognizing cultural and historical heritage within TBF elements. This serves as a representation of the pride of the Balinese people and the foundation of the culture within the Balinese and Ubud communities.

#### 4.3. Traditional Balinese Frontage Elements on Ubud's Active Street Frontage Identity

Ubud has emerged as a global tourist destination, celebrated for its vibrant local cultural heritage. The allure of Ubud is expressed through tangible items, various activities, and deeper symbolic interpretations. The Traditional Balinese Frontage (TBF) serves as a crucial structural urban element within the Ubud area, significantly influencing the image and identity of ASF and Ubud itself.

The physical representation of the Traditional Balinese Frontage (TBF) significantly shapes the initial perception of the Ubud area for visitors and tourists. This initial observation invites visitors to immerse themselves in the ambiance of the region through leisurely strolls. This walking activity allows individuals to experience the various characteristics of the location, including significance.

The physical setting in TBF exhibits a consistent pattern, while simultaneously showcasing a significant degree of intricate detail. The spatial layout of residential areas exhibits a repetitive spatial pattern. The difference factors in spatial setting on TBF are shaped by spatial hierarchy, sacred orientation, and spatial cosmology. The architectural intricacy in TBF serves as an indirect indicator of social status, as evidenced by the degree of design complexity, ornamentation, and the variety of materials employed in TBF. The physical intricacies of TBF illustrate the social and economic capacities of the homeowners, conveyed to outsiders via the tangible characteristics of TBF.

ASF serves as a shared space that effectively establishes a walkable neighborhood, offering both physical and emotional sensory experiences for both visitors and locals. The emotional dimension established is what shaped the identity of the ASF of Ubud. This emotional dimension offers a vibrant experience for travelers. This engaging and dynamic experience emerges from the diverse sacred ceremonies, cultural art activities and symbolic values showcased in the TBF area (Figure 11). The existence of

unforgettable emotions and unexpected cultural moments in this public frontage space fosters a longing to revisit Ubud, by exploring its ASF by walking. The surprises created by the physical complexity, diverse activities, and rich values within the TBF elements foster a continual sense of engagement, ultimately nurturing a strong inclination to revisit Ubud. The emergence of dynamic feelings and surprises while exploring public frontage space, which is shaped by the TBF elements, defines the identity of ASF in Ubud.



Figure 11. Various cultural activities performed on Ubud's frontage

The interview findings indicate that local inhabitants regard TBF as a significant component of their social life and customs. This explains the rationale for retaining such TBF parts till the present day. The rising number of households and constrained space have emerged as the primary catalysts for the modern optimization of space usage in the TBF region. The findings from observations and interviews indicate that the *kori* is irreplaceable for TBF element for family, despite alterations in its shape and appearance. Meanwhile, *catuspatha* is the most significant meaning for the entire community. For tourists, the physical environment and the variety of activities within the TBF aspect are the primary motivators for walking on street frontage in Ubud. Experiences and place attachments are established via activities and interactions with the physical environment. Their major focus is not on symbolic meaning; yet, they ultimately comprehend it via their participation in cultural events.

Modern ASF, derived from Western urban design paradigms, conceptualizes frontages as economic and social-interaction catalysts prioritizing pedestrian

visibility and commercial vibrancy. Its metrics transparency ratios, ground-floor activation, and rhythmic façades aim to maximize foot traffic and retail activity. In contrast, TBF's "activeness" was ritually defined as frontages activated through public interaction on religious ceremonies, temple festivals (*piodalan*), community service practices (*gotong royong / ngayah*), Balinese new year rituals (*tawur agung* and *ogoh-ogoh*) or *ngaben* cremation processions, where street frontage was transformed into ephemeral ceremonial theaters. Visual complexity in TBF is not only for aesthetic purposes but also for God's offering and resident's self-esteem. (Figure 12.) Transparency in Ubud's TBF was formed along *telajakan* then modified to achieve contemporary commercial function.



**Figure 12.** Balinese-style carving enhances sensory complexity

Several points highlighted from TBF's activeness that creates identity at Ubud's related modern ASF principles (Table 1), include:

- Attraction diversity on its traditional space adaptability, the versatility space (sacred-communal-profane) fosters dynamic function as multifaceted attraction including the diverse of community's socio-culture-ritual activities in the same space. *Catuspatha*, the nucleus that neighboring surrounding temples, settlements, commercials, and public spaces has the adaptability that facilitates not only sacred but also communal and profane touristy performance. The adaptability grounded from the *desa-kala-patra* concept. TBF integrates spiritual, symbolic, and functional role within unified frontages, facilitating continuous activity cycles that merge ritual and contemporary uses.
- Ambient, spiritual connection shapes the ASF identity. The richness of the "Balinese style" in architecture, ornamentation, and materials imparts TBF a dynamic sensory ambiance. Balinese-style originated as a sacred offering to God, not artificial, conducted regularly at TBF, which provides a rich sensory experience, encompassing vibrant colorful

flowers *canang sari* and sacred cloth (visual), the rhythmic sounds of holy bells and *gamelan* (auditory), the fragrance aromas of incense and sacred flowers (olfactory), and the textures of carvings on wood and stone in temples and wall (tactile).

- Security and social support, involvement of local residents in routine outdoor activities in the TBF space through personal and community daily rituals foster connection, interaction and engagement not only with inter-community but also with outsiders. The activities create a passive-active conversation between host- visitor bounding ties and reducing the social gap. TBF's *gotong-royong / ngayah* practices as interactive and social support convert frontages into participatory venues within community.
- Accessibility and infrastructure employ a hierarchical axis that links major functions via a main network (*marga agung*) and subsidiary functions through a secondary network (*marga alit*), establishing a psychological reference to the site. The infrastructure's scale and quality are hierarchically structured according to the scale of spiritual processions and communal activities held on the street.

While ASF quantifies vitality via pedestrian counts, TBF measured success through *sekala-niskala* balance, and harmony between tangible (built form) and intangible (spiritual) dimensions. This distinction manifests in spatial cognition. TBF's fractal geometries repetitive TBF pattern, *kori*, stone carvings and green belt (*telajakan*) mirrored the *Bhuana Agung-Bhuana Alit* cosmology (macrocosm-microcosm unity), creating subconscious affinity through naturalistic patterns. Modern ASF, lacking such symbolic meaning depth, often employs superficial "Balinese-style" motifs (stone carving, *candi bentar* and *kori*-inspired gateways) that divorced from ritual context, reducing the cultural symbolic meaning to aesthetic commodification that attached Balinese cultural identity.

Cognitively, tourists experience TBF, derived ASF as an exotic spectacle rather than lived tradition or its spiritual meaning. While *kori* replicas may evoke aesthetic admiration, their detachment from rituals limits emotional engagement to superficial photo objects. Conversely, hybrid projects in Puri Agung Ubud retain bale pavilions and *lebuh* for nightly traditional dances, merging ASF's commercial logic with TBF's performative depth as a rare synthesis of identity and utility. TBF's play a specific role in Ubud's ASF identity in the 'activeness' that exposures cultural experience and involvement not only to residents but also visitors (Table 5).

**Table 5.** The role of Balinese street-frontage elements on ASF identity in Ubud

	Pleasurability	Comfort	Safety	Accessibility	Feasibility
<i>Catuspatha</i>	This location serves as a pivotal hub for cultural, commercial, public areas and housing, while also stands as a significant historical landmark in the region.	Reinforcing the impression of legibility, sense of regional center, serving as a node and landmark of the area.	A main sacred area of Ubud that attracts significant community attention. Provide a sense of security and safety from public attention.	The main crossroad and circulation meeting from all four directions provides access and connectedness.	The primary area that acts as a quality benchmark for the physical and non-physical of the area.
<i>Marga Agung/Alit</i>	The complexity of the ground floor architecture. A communal ritual-cultural space, encouraging tourist involvement in cultural activities.	A street designed with a human-scale space enhances the feeling of enclosure.	Distinct categorization and classification of circulation for pedestrian and vehicle transportation modes.	Appropriate for both public and private transportation sectors.	Flexibility and appropriation function not only for functional vehicle transportation but also for cultural and ritual movements.
<i>Rurung</i>	Pedestrians' contact and engagement that foster cultural exchange among locals and visitors.	Ensuring the continuity of pedestrian zones.	The connections among residents and communities enhance collective surveillance.	Dedicated pathways for pedestrian-only movement throughout the area.	Connectivity accomplishment and physical- emotional links among locals and visitors.
<i>Penyengker</i>	Structures featuring diverse traditional forms and indigenous materials evoke an organic aesthetic.	Strengthening the territoriality impression, delineating private and public area.	A robust perimeter that ensures a feeling of safety for the inhabitants.	Blocking, directing and emphasizing public zone and circulation pathway.	Ensuring a secure and protective environment for both residents and pedestrians.
<i>Telajakan</i>	Diverse vegetation types in green spaces enhance the quintessential essence of a Balinese tropical garden.	The extent and characteristics of green spaces affect both macro and micro thermal comfort level	Act as filters and buffers against traffic and pollution. Also area for placing public lighting and surveillance.	Engaging physical and visual accessibility. Promote interaction space and parking.	Active and passive ecological functions represent the environmentally friendly feature
<i>Kori</i>	The architectural style of Kori introduces a layer of complexity and serves as a recurring accent.	Defining the legible entry zone into the house area with unique traditional gate design.	Strengthening the perception of a singular entry point that directs visitors into the home's interior.	Human-scaled gate proportion, but there is also modification for vehicle access.	Serving both practical uses of access for pedestrians and vehicles.
<i>Lebuh</i>	Offering area and family ritual ceremony that creates a distinctive visual impression	A transitional area preceding the entrance to the private, serving as a temporary resting area	Spiritually, believed to neutralizing and filtering negative energy towards the house.	A void area as a foyer give the sense of direction towards the residential zone.	A versatile area designed for movement and engagement activities.

## 5. Conclusions

The traditional Balinese frontage (TBF) significantly contributes to the active street frontage (ASF) identity in the tourism area of Ubud. Distinctiveness and continuity of TBF foster a strong connection for both residents and visitors that encourages place attachment to Ubud and identity. The interplay of physical, social, and cultural involvement in TBF creates a sense of place and place attachment as compelling motivation for tourists to explore Ubud by walking. TBF promotes the achievement of ASF by emphasizing its visually appealing physical aspects, as well as the qualities of Balinese socio-cultural

practices and the philosophical significance rooted in local wisdom of Ubud. These combinations create a diverse experience for visitors that brings a feeling of connection to the place.

Ubud's TBF serves as a culturally grounded alternative to modern active street frontage identity, reinterpreting urban vitality via cosmological integration and spatial hierarchy and function's adaptability (sacred – communal - profane). TBF incorporates *Tri Mandala* hierarchies to align functional diversity with spiritual values, creating a streetscape that accommodates daily offerings alongside tourist amenities. The TBF's roles are characterized by a harmonious balance between spiritual, symbolic, and

contemporary functions integrated hierarchically through Balinese cosmology. (Figure 13). These roles are manifestations of the mutual relationship to God, nature, and peoples (Tri Hita Karana). Tri Hita Karana concept creates sacred relation, participatory involvement, and functional uses of TBF's element, fostering spiritual, and social bonds while adaptive to global tourism needs. Its identity represents the sense of community and belonging. This stands in contrast to what modern ASF can offer, which frequently lacks symbolic significance and spiritual bonds.

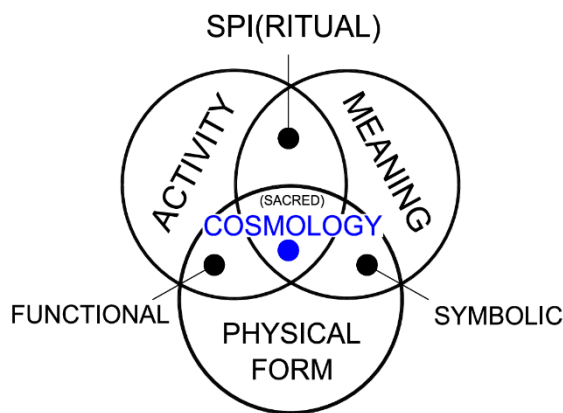


Figure 13. TBF's role in Ubud's ASF identity

For local residents, the physical structure of TBF supports various functional, economic, and ritual-cultural activities carrying profound associations of meaning. TBF area compromised modifications that allow commercial functions (Figure 10), directed by Balinese cosmology. This adaptability and versatility of TBF create mutual benefits for the local economy and interactive space for tourists. Sense of place dependence emerges from the functional, social, and economic advantages offered by Ubud's TBF.

TBF in Ubud offers tourists a sense of identity and uniqueness through its structure and cultural activities, resulting in a vibrant and distinctive atmosphere. For the local residents of Ubud, TBF embodies a tangible presence that functions as a vessel for both practical engagements and ritualistic-cultural practices, which are profoundly meaningful within Balinese life traditions. Consequently, TBF fosters a sense of place identity for tourists and cultivates place dependence for locals, both of which play a significant role in influencing place attachment in ASF identity of Ubud.

TBF contributes to ASF identity that gives a place-connected feeling for tourists and residents. This fosters a strong desire among tourists to return, while simultaneously strengthening local residents' sense of belonging, ultimately discouraging them from relocating. The engagement of tourists and local community participation in activities at TBF fosters a strong sense of place for visitors in Ubud. This leads to a sense of ease,

stemming from the deep engagement with the physical environment and significance of TBF Ubud.

TBF has both a functional and symbolic role in tangible (built form) and intangible (spiritual) dimensions, influencing ASF with various opportunities in a sustainable development context. TBF is regarded as a contributing element in the context of sustainable development. TBF contributes significantly to the economic, social, and environmental dimensions of the Ubud community. TBF elements are designed for place attachment with the possibility for commercial activities, ritual-cultural practices, traditional green spaces, and mitigation efforts.

The TBF functioned as a socio-spiritual interface, harmonizing cosmological order, communal rituals, and ecological stewardship. Its conceptual framework, anchored in Tri Hita Karana and fractal symbolism, created multi-sensory (socio-spiritual) place attachment unachievable through modern ASF's socio-econometric models (Table 1). Contemporary ASF enhances walkability and economic vitality, but it risks reducing TBF's cultural depth to decorative simulacra unless it integrates *desa-kala-patra* adaptability and *sekala-niskala* balance. For Ubud's streetscapes to retain identity amid tourism pressures, planners must reorient ASF metrics to value ritual permeability and material authenticity as highly as pedestrian throughput, a paradigm where "activeness" encompasses both market vibrancy and cosmological resonance.

This study focuses on the qualitative perspectives of tourists and residents regarding ASF identity. Additional investigation is required to enhance statistical data concerning the tourism-industry perspective to measure the TBF's adaptability and transformation to balancing cultural sustainability and tourism growth in Ubud.

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