

The Complexity of Orientation in Traditional Village Architecture in Bali, Indonesia

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ABSTRACT

The uniqueness of Balinese architecture has enabled Balinese culture to assert itself amidst the strong influence of modernization and globalization. The Balinese people still adhere to the principles of Balinese architecture, cosmology, topography, and orientation. Recent studies have uncovered how different natural topographies inform the philosophical understanding of the layout of rural villages. Bali's famous settlement layout specifically draws upon the imaginary line of the Mountain-Sea axis, locally named *kaja-kelod*. This term is widely used by the native Balinese, translated *kaja* for north and *kelod* for south. When the first settlements developed, the secondary axis was naturally created, the so-called *kangin-kauh*, which refers to the direction of the sun: *kangin* (east) is where the sun rises and *kauh* (west) is where the sun sets. These two imaginary axes have been implemented in today's modern designs and have become the most fundamental concept in town planning and rural and architectural design in Bali. In addition to exploring the influence of this popular understanding of traditional Balinese architecture, this research discovered that the philosophical use of these imaginary axes is more complicated as these not only refer to the Mountain-Sea axis (*kaja-kelod*) or sun direction (*kangin-kauh*). More than 30 layouts of Bali villages categorized as "traditional" were studied utilizing the hermeneutic approach, framed by cosmology and morphology. The findings are as follows: (1) the direction of *kaja* does not necessarily indicate orientation towards the mountain nor always mean north. For some villages, this term refers to the orientation towards sacred structures or sites, or main roads; (2) while *kelod* commonly means south and the direction towards lower sea level, the findings show that few villages referred to the term to identify the nearest lake's orientation; (3) the direction of *kangin-kauh* (east-west) does not always refer to the linear direction of sunrise-sunset because some villages replaced the use of the east-west axis with the interchangeable "right-left orientation" of the *kaja*; and (4) the *kaja* direction is the most critical direction for most villages in the study.

Keywords: spatial orientation, traditional village, Bali architecture

INTRODUCTION

In much of traditional Balinese architectural knowledge, there is a conception regarding the orientation of settlements with sacred and profane values as a basic guideline for spatial and building layout in Bali (Covarrubias, *Pulau Bali* 97; Bagus 36; Bryant 26; Alit 44; Dwijendra and Suyoga, "Analysis of Symbolic Violence" 11581). This conception explicitly states that the position of the mountain (*kaja*) and the direction of sunrise (*kangin*) are of sacred value, while the position of the sea (*kelod*) and the direction of sunset (*kauh*) are of profane value. In Balinese tradition, the sacred is regarded as a social experience emblematic of transcendent unity, which often manifests in communal practices such as the performance of Hindu ritual ceremonies in many villages and cities in Bali, while the profane, in contrast, is an individual experience which is considered lower than sacred experiences (Gelebet 101; Kagami 17; Howe 27; Parwata 29). Examples of the latter are community art activities which have nothing to do with ritual ceremonies and are usually carried out professionally and generally without being followed by a religious ceremony process (Dwijendra et al. 353; Sifatu et al. 729; Sulistyawati 53). These four directions towards the mountain, sea, sunset, and sunrise are said to have a standard equivalent with four main rules that are universally known, namely north, east, south, and west (Budihardjo 23; Hobart et al. 37; Dwijendra et al. 56).

The island of Bali is geographically divided by mountain ranges stretching from the east to west in the middle of the island. The culture in this area also seems to be divided into two regions, namely North Bali for the northern mountainous region and South Bali for the southern highlands (Shils 112; Kaler 27; Koentjaraningrat 55; Kagami 34). The perspective of the North Balinese community as is usually seen in many writings refers to the south or the mountain range's location as the *kaja* direction. As for the north, the direction of the sea's area is referred to in local terms as *kelod*. This fact inversely applies in the South Bali region (Parimin 88; Pitana 37; Widiastuti et al. 37). The north is the mountain range's direction, called *kaja*, while the *kelod* is paired with the south as the sea's location. In both parts of Bali, the direction of *kangin-kauh* tends to be identified with the east-west directions. This view of the direction of *kangin-kauh* is declared to be the same in all regions of Bali. Both are paired with the direction of the rising sun and the direction of the sunset which applies universally (Swellengrebel 97; Gelebet 132; Eiseman 39; Wiryasa and Dwijendra 23).

The people of Bali Aga live in the mountainous area (hinterland) of Bali Island. They are often referred to as *Wong Bali Mula* or the original Balinese (*Balinese Mula*) who inhabited the island of Bali, predating the Balinese Pedataran population. The people who belong to the Bali Aga group have a unique culture valued in Bali. Their culture whose legacy can still be found today shows characteristics

that distinguish it from the later culture or that brought by the Balinese Pedataran people. The main characteristics which stand out in the Balinese Aga community include their way of life and other social practices such as the worshipping of ancestors. Another prominent characteristic is the Bali Aga people's communal culture which emphasizes their "togetherness": "The togetherness style appears in doing a job done in mutual cooperation, either in joyful situations or in sad situations" (Dwijendra et al. 355; Primadewi et al. 272; Nuryanto et al. 535).

Balinese tradition was predominantly defined in the 1950s and 1960s as static, with little innovation based on the traditional rules of the elite in society. Today, however, tradition is not always a static phenomenon, but a gradual process of transformation (Eiseman 33; Bernbaum 53; Dwijendra et al. 350). The interactions of Balinese community members with external cultures and the development of social and cultural movements influence the character of family life, social structures and beliefs, and religious practices (Brubaker and Cooper 19; Jones 43; Paramadhyaksa et al. 26). The idea of "tradition" is very flexible and could be transformed in a process of transmission from one generation to another. This process of transmission refers to ideas from human responses to old traditions with little or no change (Yogantari and Dwijendra 37; Nurjani and Dwijendra 23; Sifatu et al. 726). Shils states that a traditional transmission focuses on the interaction between generations which is a "chain" and "bridge" of communication to transfer traditions within a particular social structure (Muller 28; Shils 97; Sanyal 47). In line with this, the transformation can refer to a thing or state that changes or shifts from one state to another (Munandar 27; Primayatna et al. 28; Rahayu 59). There are several factors that affect change (Arsana 27), which as explained, is a pattern of transmission from one stable state to another. There are several factors that inform such change: (1) technology; (2) demographics and social structures such as variations in occupational classification, age, and status level effects; (3) politics, which is closely related to the policies of those in power; and (4) the economy in view of the conditions and developments in the community business sector.

This uniform view of Bali's four traditional directions has become widely accepted by the general public. Various books, research papers, study reports, theses, and dissertations have supported this view, suggesting that the four traditional directions are consistent and at the same time undeniably true (see table 1). The following list of book publications which contain the traditional orientation direction concept does not include the number of seminar activities and lectures at home and abroad, which also mention and refer to the conception of this orientation direction (Anh 63; Arief and Ufford 39; Artadi 27; Dwijendra, *Arsitektur Kebudayaan Bali Kuno* 21).

No	Title
1.	Gelebet, I Nyoman et al. <i>Arsitektur Tradisional Daerah Bali (Traditional Balinese Architecture)</i> . Departemen Pendidikan dan Kebudayaan, 1986.
2.	Budihardjo, Eko. <i>Architectural Conservation in Bali</i> . Gadjah Mada University Press, 1986.
3.	Sulistiyawati. <i>Pengaruh Prinsip ATB terhadap Arsitektur Non Tradisional (Effect of ATB Principles on Non-Traditional Architecture)</i> . PT Trio Mitra, 1996.
4.	Davison, Julian et al. <i>Introduction Balinese Architecture</i> . Periplus Editions, 2003.
5.	Howe, Leo. <i>The Changing World of Bali, Religion, Society, and Tourism</i> . Routledge, 2005.
6.	Parwata, I Wayan. <i>Humanisasi: Kearifan dan Harmoni Ruang Masyarakat Bali (Humanization: Wisdom and Harmony of Balinese Society Spatial)</i> . Yayasan Tri Hita Karana Bali, 2009.
7.	Barth, Fredrik. <i>Balinese Worlds</i> . The University of Chicago Press, 1993.
8.	Covarrubias, Miguel. <i>Island of Bali, terjemahan (Ind): Pulau Bali, Temuan yang menakjubkan (The Island of Bali, An Amazing Discovery)</i> . Udayana University Press, 2013.

In 2009, however, the belief about the truth and validity of this concept was questioned when several grand tours were conducted. It was discovered that three villages—namely, Sidetapa in Buleleng, Datah in Karangasem, and Pinggan in Bangli—which were thought to have adhered to the traditional orientation of the sacred-profane directions, had different principles which deviated from this dominant view (Barth 33; Nurjani and Dwijendra 27; Yogantari and Dwijendra 33; Davison 17). The findings increasingly multiplied when further searches were carried out in other Tabanan and Kintamani regions, accompanied by a literature study on the system of orientation of various traditional villages in Bali. The absoluteness of the conception of the four sacred-profane directions weakens in light of the new findings presented by this study.

Research Methods

This paper summarizes the preliminary results from an exploratory study informed by a phenomenological paradigm conducted from 2018 to 2019. Around May 2016 to June 2017, a grand tour to various parts of the island of Bali was carried out to identify the initial picture of villages with a specific sacred-profane orientation. All field obstacles related to the locations that are difficult to reach, climate, culture, and resource persons are inventoried so that everything can be anticipated at the time of further observation.

After the tour activity, a more in depth data collection was carried out through field exploration to at least thirty traditional villages throughout Bali (see fig. 1). The results of the observation show that there are indeed unique villages in terms of the direction of the sacred-profane direction. To date, data have been obtained from

26 of these villages. The data collected include the village history, village spatial planning, village orientation, and building layout in the houses. Data collection through observation, literature, institutional studies, and interviews are incorporated as points of comparison. All information obtained is classified, reconstructed, and translated in graphic and narrative form for further discussion.

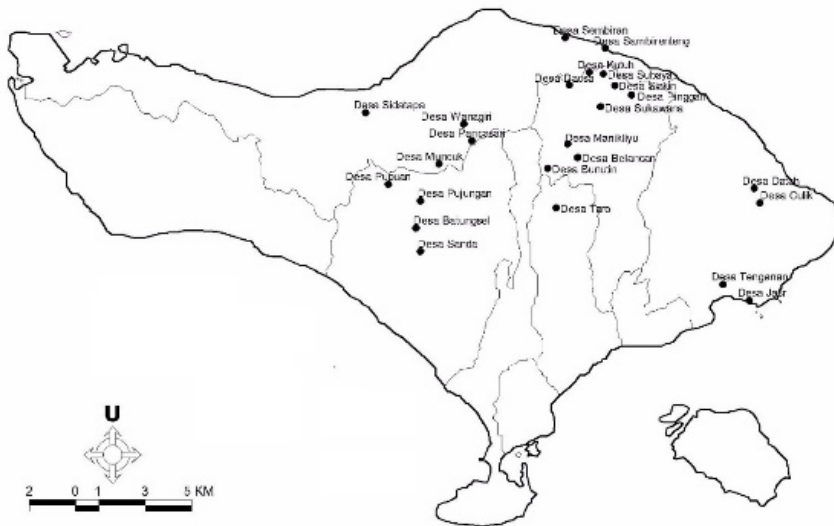


Fig. 1. Map of case distribution.

In the discussion, two methods are applied: 1) villages with locations that are close to each other and tend to determine the orientation of the same direction or refer to the same benchmark object are compared to one another to uncover their common thread or relations, and 2) villages adhering to the concept of setting a specific orientation direction are examined separately to understand the underlying conceptual background. In this stage, the ideas obtained are negotiated with the form of implementation in the spatial and building layout in the village concerned.

The provisional field's findings as emic knowledge are then once again analyzed with theories and spatial concepts resulting from the study of literature. The summary of the results on emic findings and ethnic knowledge are then synthesized through inductive reasoning.

Overview of Field Exploration Results

In the following section, the findings of the field observations are presented in the form of five patterns in determining the orientation of villages in Bali.

Orientation towards the Mountain-Sea and Sunrise-Sunset Direction

The first type of village adheres to the concept of the sacred-profane orientation informed by cosmology, specifically, by the position of the mountain and sea and the direction of the sunrise and sunset. The direction of the mountain known as *kaja* is of sacred value, while the direction of the sea known as *kelod* is of profane value. The direction towards these cardinal points—the mountain and the sea—are opposite. Sunrise and sunset, known as *kangin* and *kauh* respectively, are also identified as sacred-profane directions which are opposite each other. In graphic terms, as in a compass, the *kaja-kelod* axis and *kangin-kauh* axis are represented as north-south and east-west respectively (see fig. 2). The *kaja-kelod* axis and *kangin-kauh* axis intersect forming 90° angles. This pattern of determining the direction of *kaja*, *kangin*, *kelod*, and *kauh* is observed in many villages in Bali, such as in Singapadu Village, Gianyar; Kesiman Village, Denpasar; Jimbaran Village, Badung; Kediri Village, Tabanan; and Gelgel Village, Klungkung.

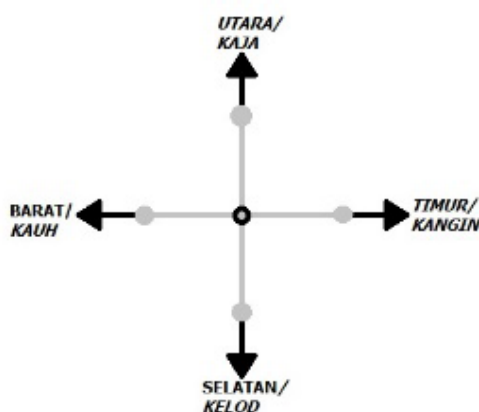


Fig. 2. Graphic representation of *kaja-kelod* and *kangin-kauh* axes.

The Four Rotating Orientations

This study also found villages with a *kaja-kelod* axis oriented towards the location of a particular object. Villages which adhere to the concept of direction such as this identify the direction of *kaja* even with respect to certain items that are not precisely located north. Neither does the order of *kangin* and *kauh* point towards east and west, respectively. Both directions are rotated with reference to the north-south axis and tail. A village which adopts such a concept is Pinggan in Kintamani,

Bangli (Primayatna et al. 37). The whole direction in the town seems to be rotating to the right at 135° because it is determined to be oriented towards the Writing Peak Temple's location in the southwest of the village (Swellengrebel 23) (see fig. 3 and fig. 4).

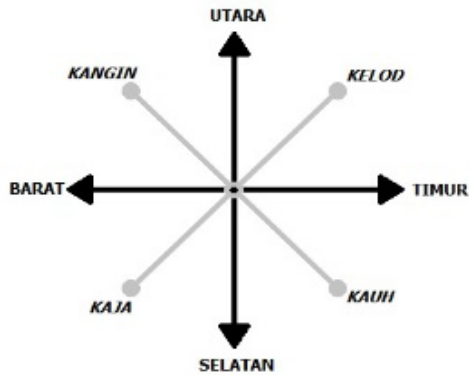


Fig. 3. Four directions rotated.

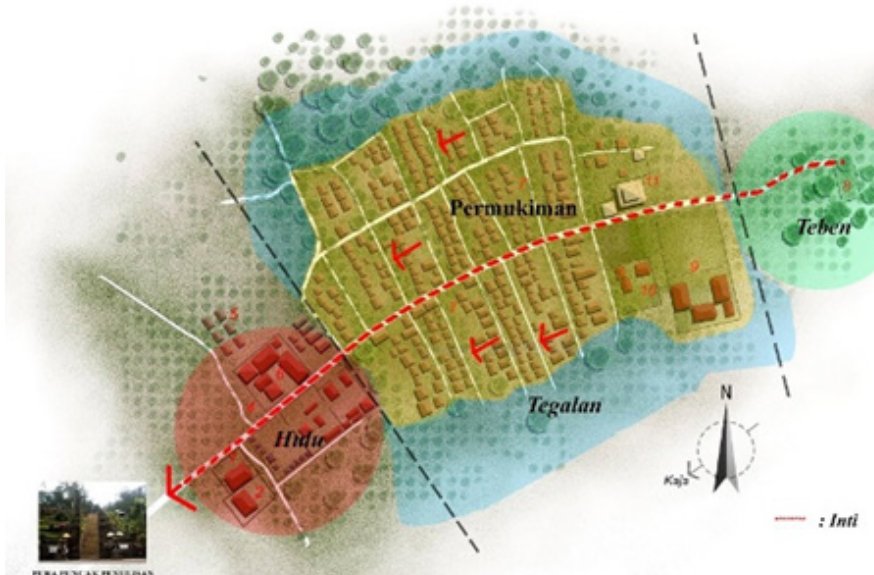


Fig. 4. Map and orientation of Pinggan Village.

The Four Orientation Directions which do not Form 90° Angles

The results of the field observations reveal a pattern of determining the direction of kaja in such a way that its position does not precisely form an angle of 90° with the guidance of kangin. This direction setting pattern is found to be true in villages that have a sacred benchmark direction to a particular object that is glorified by the village. The determination of the kaja like this turns out to only impact the conclusion of the direction of the kelod only. Other directions such as kangin and kauh, apparently, did not automatically move following the kaja-kelod axis (Dwijendra et al. 356). This provision results in angles between the four traditional directions that are not precisely 90° (see fig. 5). This orientation pattern applies to Serai Village and Awan Village, Bangli Regency.

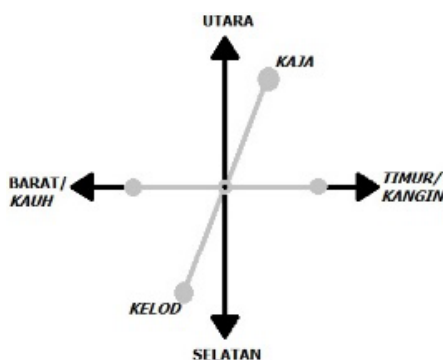


Fig. 5. The orientation of the four directions which do not form 90° angles.

Unique Orientations for the Four Traditional Directions

The fourth direction is set in universal directions with unusual guidelines. There is a concept of direction confusing for laypeople who are not from this village in the area. The direction is fixed to the west. The direction kangin is positioned towards the south while the direction of the kelod is equated with the east. The final direction is paired with the north (Parimin 57). It is truly a rare but real phenomenon. The village that was seen to adhere to this concept of setting direction was the Datah Village, Karangasem Regency.

“Sacred” Orientation towards the Road

Another field finding is the existence of several villages that set a “sacred” direction specifically for settlements in their area. This sacred direction refers to the position of the main village road, complementing the direction of the kaja-kelod and kangin-kauh orientations that also apply in these villages. As an effect, *sangah* or sacred

family temples which are a feature of village houses are placed near the position of the village road. This area is interpreted as the *ulu* or “high stratified area” of the yard (see fig. 6). The rooms considered profane are placed in the *teben* area far from the edge of the road. Villages included in this category are the Sidetapa Village, Bulelang and Angsri Village, Penebel Village, and Buahan Village located at Mount Batukaru, Tabanan Regency.

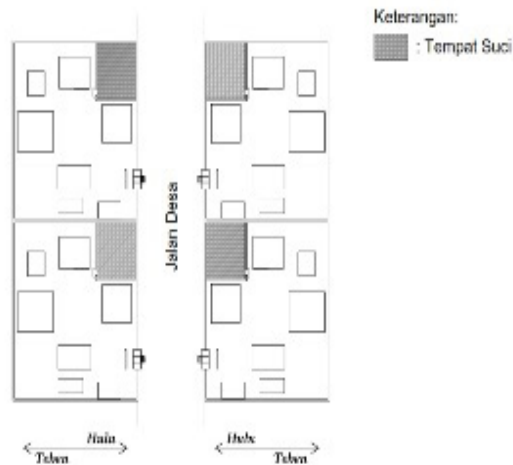


Fig. 6. The road as a sacred orientation.

RESULTS AND DISCUSSION

The five patterns of the sacred-profane direction delineated above are examined in this section to unpack their philosophical foundations.

Conceptual Basis of Sacred-Profane Direction

Based on the study’s results, it can be stated that there are at least five foundations for determining the direction of the sacred-profane orientation in Bali.

a. Position direction of benchmark plateaus

Without a doubt, the highlands are the most distinct landscape feature positioned as a benchmark of religious orientation for Bali’s traditional villages. In this context, the highlands refer to mountains, hills, or elevated plateaus commonly used as a benchmark for Bali’s community in general. This view is in line with understanding the word *kaja* itself, which is etymologically derived from the phrase *kadia*, which means “towards the mountain.”

This view also applies to many places in the archipelago, even to many other Asian countries. A mountain or plateau is revered as a sacred site where the gods, holy spirits, and guardians of the region's sanctity are housed. Such views have an impact on the development of a mountain cultivating traditions, various rituals, and taboos, as well as efforts to preserve the surrounding environment (Kagami 59).

The physical form of the mountain as an elevated plateau that increasingly slopes to the foot also indirectly forms a pattern of various cycles of natural elements, such as wind, clouds, and water. Mountains are also commonly interpreted as "reservoirs" of natural clean water channeled to residential areas consumed and used for washing materials and various daily necessities. This view also led to the birth of the concept of the purity of mountain water and the impurity of river estuary water in bare residential areas. Mountains and hills are more firmly positioned as purified elements and serve as a benchmark for the religious orientation's direction for the spatial layout and layout of residential buildings around its feet. In this regard, Bali also developed an ideal sleep position for humans whose heads are positioned towards *kaja* or the mountain's location and the foot towards the opposite direction. This sleep pattern is called *mêgalêng kaja* (padded in the direction of the mountain) (Artadi 29).

In the villages around the edges of Lake Batur, Kintamani, the *kaja* direction is usually set towards the high hill location closest to the village area. The direction of *kelod* is set towards Lake Batur, which residents call *segara* or sea (see fig. 7). Two of the villages adopting the same concept are Trunyan and Abang Songan, which determine the *kaja* direction of their respective territories towards Trunyan Hill and Mount Abang (Kaler 27; Kagami 47).

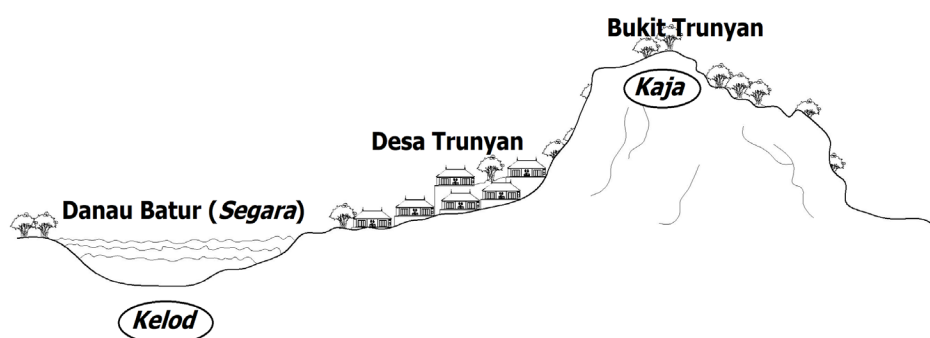


Fig. 7. Direction of *kaja* and *kelod* in Trunyan Village.

b. The direction of sacred temples

Other field findings also show a tendency to determine directions oriented by religious structures such as a temple or historical sacred building maintained for generations in the village.

During the field observation phase, there were at least twenty traditional villages in the Kintamani and surrounding areas that set the village's sacred direction towards the location of the Puncak Penulisan Temple complex. These twenty villages are part of the entire *desa penyungsung* (village of refugees, the village of core service members) of the Puncak Penulisan Temple since ancient times. The existence of historical links and beliefs caused its formation the twenty villages in the Kintamani region. The temple location's direction, which was estimated to be erected during the Megalithic era, is identified as the kaja direction for the village. This pattern of setting direction makes the location of the Puncak Penulisan Temple as the direction of the sacred for the villages and its refugee residents.

c. Position direction of the nearest sea

The results of the field observations reveal the tendency to determine the location of the sea as a benchmark for the order of the direction of kelod. In traditional communities around the Lake Batur region, the location of the lake serves as a substitute for the sea which is not situated in this region. The direction of the lake is also referred to in local terms as *kelod*, a term etymologically derived from the word *kelor*, which means towards the sea and in the traditional Balinese cultural order, is usually paired with *teben* or low stratified area.

d. The special meaning of the road

Field findings also show evidence that the road's position towards the house is sometimes identified as the direction for sacred orientation in addition to the orientation direction to the location of the highlands and lowlands in the area of several villages. In the Sidetapa Village area, Buleleng, the village road is in the middle zone of the village and is higher than the area of the residents' yard. The village road is considered the *ulu* area which serves as a benchmark for the placement of sacred spaces in the home area. Profane spaces are placed in the *teben* area of the house yard which is in sloping areas on the edge of the village (Dwijendra 47; Rahayu 19).

In the foothill area of Batukaru Mount, Tabanan, the main road of the village also serves as a benchmark for the sacred orientation of people's homes. The main street of the village is a path that is passed by the ritual accompaniment of *Ida Bhatara tedun memargi* (The God goes down walking) from the foot of Batukaru Mount and

through the area of the surrounding villages. The interrelation between the function and the level of sacrality results in the *sanggah* or the family sacred building in the house yard to be built and oriented towards the main road of the village.

Dialogue Between Field Findings and Literature Review

At least four basic thought patterns guide the profane sacred setting in the settlement of the villages surveyed in this study. The four patterns of thought are explained in this section.

a. The analogy between the movement of water and the purity and impurity of the soul

The concept of establishing the direction of the village's religious orientation towards mountains or highland areas is connected to the movement of water in nature. Water moves naturally from high to low regions due to its gravitational force which is the case for river water flowing from upstream to downstream areas, then reaching vast oceans. Rainwater absorbed by mountain soil that subsequently emerges in mountain springs is believed to be of purer quality compared to water directly from downstream areas and river mouths, which may contain various impurities from the areas it flows through. In this context, the purity of mountain water and rainwater is often analogous to the purity of the soul (*Sansk: ātman*) which subsequently becomes increasingly contaminated by worldly ties after being reincarnated into the world (lower strata nature) (Sanyal 23; Dwijendra et al. 355).

In Bali, the concept of water movement in nature is very much in line with the associations between the highlands as sacred and the sea as profane. Spaces, residential buildings, and even temples will normally take the position of the mountain and sea as a benchmark in determining the direction of the sacred and profane. Extending this thinking further to sleeping positions or the orientation of one's body, traditional Balinese people who are sleeping on their backs will also always consider the direction of the nearest mountain/hill and sea in relation to their head and legs.

b. Sun directions and the beginning and ending of the sacred and profane

In addition to the dichotomous view of the sacred mountains and the profane sea, there are still other similar perspectives that are known to be a benchmark for sacred-profane directions in Bali. This view places the east or the direction of the rising sun as the direction for the beginning of the day like the birth of a sacred sun. The west where the sun sets is interpreted as the end of the day, marking the "death" of the sun which is considered profane. Moreover, the direction of the east in Hindu mythology is also interpreted as the direction of the birth of Brahma for the first time (Muller 39). Brahma in Hinduism and Buddhism is known as the creator of the universe.

Many areas in Bali recognize these two directions as *kangin* and *kauh*. Balinese sleeping on their backs will tend to place their head in the direction of the *kangin*, while the feet's position will be towards *kauh*. This sleeping position pattern is known as *mégalêng kangin* (padded eastward) (Artadi 28).

c. History and beliefs associated with historical structures and sites

Observation results also show that there are sacred building complexes that are used as a benchmark for some traditional villages in Bali. Factors related to history and beliefs about the importance and the deep meaning of sacred buildings have led to this view. The *kaja* axis for settlements that adhere to this concept point towards the location of a particular sacred building. Related to field findings such as this, in the Serai and Awan Villages in Kintamani, the sacred direction of *kaja* is not based on the direction of north nor south. Different concepts apply to the direction of *kangin* and *kauh* which are precisely "fixed" positions equivalent to the east and west directions in these villages.

In other village areas, such as the Pinggan Village, Kintamani, it turns out that the direction of *kaja* is considered the "most powerful." This direction is a role model for other three-way rotations simultaneously. If the direction of the *kaja* is set referring to the southwest direction according to the direction of the sacred benchmark object, then the other three directions will also rotate at the angle of rotation that applies to the direction of the *kaja*. As a result, the direction of *kangin* becomes in the direction of the northwest, the direction of the *kelod* shifts towards the northeast, and the direction of the *kauh* finally becomes one axis with the southeast. This pattern of direction setting is in line with that prevailing in the Majapahit-style Hindu capital city site, Trowulan, which according to Munandar (Hunt 92-101) is thought to adhere to a wind direction rotation pattern of 90° in a clockwise direction.

d. Analogy between kaja and the human body

The existence of the *kaja* direction in the field is very easily recognized because it is always positioned as the first benchmark direction in all-villages that are part of this research. If analogous to the human body, the *kaja* direction is just like the head in that it can regulate the position of the other limbs. The *kaja* axis becomes a benchmark that can determine and adjust the rotation of other directions according to its position. It follows that the sacred *kangin* axis and the profane *kauh* axis are interpreted as the right side and left side of the human body, respectively. Also, *kangin* as the right side of the human body is viewed more positively than *kauh*, the left side. This kind of valuation of the right side of the body over the left is apparent in the way the Balinese in general distinguish between the roles of the right hand and the left hand in their daily activities.

Complications arise from this thinking, however, as the position of the right and left sides of the body and by extension the kangin and kauh axes, are interchangeable. The direction of kaja as previously established represents the head of the body while its opposition, the direction of kelod, the feet. The position of the direction of the sacred kangin and the profane kauh on the right and left side axis in this context cannot be ascertained. These two directions may be interchanged since the right and left sides of a body or an object may be reversed, depending on the position of the body or object itself or the point of the view of the observer. It makes sense then for the Pinggan Village to position the direction of kangin on the right side with respect to the direction kaja (see fig. 8). There are also villages that place kangin on the left side of the direction of kaja, while the direction of kauh is on the right side, as practiced by the Datah village (see fig. 9). The pattern of determining the orientation of this turns out to be very much in line with supine sleeping positions (i.e., either looking up or facing down) of traditional Balinese people.

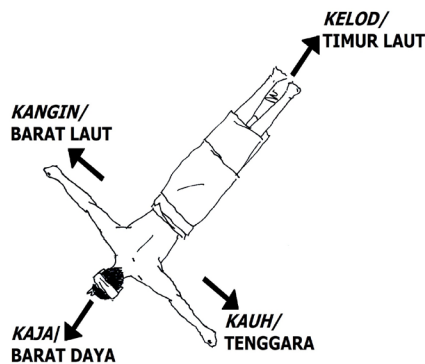


Fig. 8. Direction of orientation of Pinggan Village.

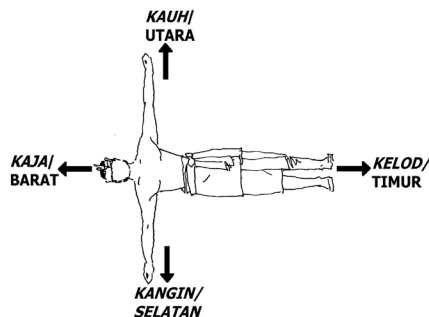


Fig. 9. Direction of orientation of Datah Village.

The principle of drawing analogies between the embodiment of Balinese spatial layout and body positions does not apply to the concept of settlement orientation only. In Hindu architecture, it has also long been recognized that there are concepts that analogize sites and buildings with the human body, such as the conception of *Vastupuruṣa Maṇḍala* (Jones 246) (i.e., the metaphysical plan for a building derived from the ideas “prusha” or energy and “mandala” or any plan symbolically representing the cosmos) and *Tri Angga* (Arsana 41) or the Balinese architectural idea related to their view of the universe, which is manifested in building structures showing harmony between humans and nature.

CONCLUSION

The discussion highlights several unique and complex features of Balinese orientation. It questions and contradicts the widely held belief that all traditional villages in Bali use topological features, specifically the mountain and the sea, as a benchmark for the sacred-profane orientation of the region. On the contrary, some villages make the position of roads a benchmark for the sacred orientation of people’s homes. The field findings also show evidence that the directions of kaja, kangin, kelod, and kauh are not always positioned to cross each other to form a right angle at 90°. Moreover, the directions of kangin and kauh, which have been written in many books as equivalent to the east and west directions in Bali, apparently do not apply to some villages. Sometimes kangin and kauh are determined by sticking to the left and right sides of the kaja direction which is positioned as the “elder” direction.

These findings regarding the determination of the sacred-profane direction of the traditional Balinese village, moreover, tend to only apply in mountain villages and/or Bali Aga-style villages. Even so, these findings are more than sufficient evidence to call into question the supposed uniformity of the traditional four-way foundation of Balinese orientation reliant on the sacred-profane positions of the mountain and sea and direction of the sun. These suggest that local studies conducted on the matter should be corrected, revised, or reviewed holistically.

Regarding traditional Balinese spatial research, one area that has not yet been explored by many researchers is the Nusa Penida Islands, Klungkung. The region is extraordinarily rich—one of the biggest islands in Bali which deserves to be the location of exploratory research activities on spatial planning, orientation, and architecture. Because the region’s geographical and cultural conditions are different from those of the people in Bali, further research on the island will enrich the people’s understanding of the concept of orientation in Bali.

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