

An Evaluation of the Implementation of Chinese Temple Layout Principles in Bali, Indonesia.

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Abstract

According to archaeological research, there has long been a strong cultural relationship between China and Bali. As part of this history, the Chinese brought their indigenous cultural values with them, particularly their practice of worshipping ancestors and their syncretic belief in three major religious doctrines. The Chinese temple is the primary physical manifestation of this belief and has become identified with their community. The Chinese community in Bali has also lived side-by-side with Balinese culture and through a process of adaptation there has emerged a transformation of the Chinese temple spatial layout in Bali. This paper will identify the influence of Balinese culture on the layout of Chinese temples in Bali and evaluate this influence, by analysing the five basic principles in Chinese temple layout, and how these symbolic meanings have been altered due to being in Bali.

Keywords: adaptation process, Bali, Chinese temple, five basic principles, layout planning

Introduction

The long history of Chinese immigrants to the Indonesian archipelago, particularly to Bali, has not been clearly recorded due to lack of written resource, though it has been identified through limited archaeological evidence. For instance, during the excavation of Blanjong archaeological site, there were found nine trenches with potsherds, Chinese ceramics, bones of animals, and the remains of human burial (Ardika in Hermann, Klenke, Dickhardt, & Hauser-Schäublin, 2009). In addition, Groeneveldt (2009) also provides an evidence that Bali has been known to the Chinese since the Tang period (618-906), citing an ancient note by a Chinese geography expert that explains about the geographical background of Bali and their tradition of treating the human body after death. The migration of the Chinese to Bali has generated a cultural relationship that has long been established, either because of trading or because of their introduction of the Buddhist religion, literature or artwork knowledge. One example of the relationship between the Chinese and Bali also could be traced through the history of the Great Palace of Karangasem. During the two generations of the Karangasem Kingdom in 1894-1908 and 1908-1941, the King was interested in the local Chinese community and desired to involved them in his local trading system to provide new knowledge to the locals as well as to support the construction process of Karangasem Palace (Sulistyawati, 2008).

Basically, the concurrent Chinese belief in three religion doctrines; of Confucianism that teaches to give respect to humanity; Taoism with its principle of harmony with nature; and Buddhism that gives knowledge about enlightenment after death (Lip, 2009). As a long syncretic tradition, this belief system followed Chinese migrations and in practice has been accommodated by building temples that provide altars for worshipping deities and ancestors. As Lip (2009) states, generally, the Chinese temple layout has the same concept of a palace or housing, differentiated by building scale and the importance level of the temple. The more important the temple, the more courtyards and the greater elaboration of the roof into

two- or three-tiered forms. Moreover, the geographical difference between the north and south also gives an influence in building orientation, type of materials, and roof design (Lip, 2009; Sha, Shi, & Chu, 1999).

These Chinese traditional concepts have long been considered in the planning of Chinese temple layouts, also influenced by the ancient practice of geomancy that conveys folk beliefs regarding the bad and good luck of a site. These factors, related with the function of Chinese temple as a community and worship building, have led to five basic principles of Chinese temple layout that combine philosophical meanings and associated practical advantages; wall enclosure, axiality, north-south orientation, courtyard planning, and geomancy. This combination emerged due to China's geographical background, along with Chinese beliefs about the harmony of the cosmic breath, *yin* and *yang*, so implementation of these elements sought to obtain the balance of connections between humans, the environment, and God, as well as having practical advantages for user comfort and safety. In contrast, the Balinese people believe in the sacred mountain of *Gunung Agung* and the less sacred orientation towards the sea as elemental directions for settlement, housing and spiritual activities (Eiseman Jr, 1990). The availability of particular materials in Bali's natural landscape also has led to local architectural characteristics. Because of this, since the Chinese minority in Bali has had to express their traditional belief through a Chinese temple while living side-by-side with the local culture, the process of adaptation to Balinese traditional culture has emerged. It can often be seen through the first impression of physical elements of architecture that a Chinese temple in Bali has adopted Balinese building traditions. For example, some of the Chinese temples' façades in Bali have adopted the Balinese traditional gates; *candi bentar*, *kori agung*, *angkul-angkul* as a main gate as well as elements of ornament and decoration in the worship building. The presence of these elements raises a question. How and why has this cross-cultural phenomenon of the Chinese temple in Bali become established? This paper will identify the influence of Balinese traditional culture on the Chinese temple layout in Bali through on-site observations and then evaluate it descriptively by analysing the five basic principles in Chinese temple layout, and how these symbolic meanings have been altered due to being in Bali. The expected result of this study is a significant new information and knowledge regarding the cross-cultural phenomenon of Chinese temple architecture in Bali.

Five Basic Principles of Chinese Temple Layout

Generally, the basic elements of Chinese layout planning were applied widely, to houses, temples, palaces or city ensembles. As noted above, these elements were: (1) wall enclosure; (2) axiality; (3) north-south orientation; (4) courtyard planning; and (5) geomancy (Boyd, 1962; Lip, 1983).

1. Wall enclosure

The characteristic form of Chinese layout planning is a rectangular form, orientated from north to south and surrounded by a walled enclosure. According to Cody, Steinhardt, and Atkin (2011), the enclosure of space in Chinese layout planning has been applied to a quadrilateral shape, though sometimes only three sides of buildings are walled, and small structures such as gates, screen walls, or pillars can have the same type of psychological experience as a fully enclosing wall. Moreover, the highest hierarchical value of the sacred space is that located in the centre, distanced from the profane or public space outside the wall. The four-sided nature of the enclosure also conveys a symbolic meaning associated with particular directions, elements, seasons, colours, as well as the centre as the fifth position (Cody et al., 2011; Lip, 1994).

Table 1. The Relationship Symbol of Element, Direction, Season, and Colour

Element	Wood	Fire	Earth	Metal	Water
Direction	East	South	Centre	West	North
Season	Spring	Summer		Autumn	Winter
Colour	Green	Red	Yellow	White	Black

Source: Lip, 1994

2. Axiality

The main north-south direction in Chinese culture created an axis as an imaginary line that divided space and territory in symmetrical balance. This principle was applied widely in city planning, spatial layout of houses, and large or small buildings, separating the left and right of buildings, as well as creating a spatial hierarchy from the most powerful, the most sacred, and the most private (Jiang, 2014; Yan, Shan, Wu, & Zhou, 2018). Lip (1983) adds that since a temple was occupied by a God that represented by the three religion doctrines, it has to be respected and expressed a sense of monumentality that was obtained from the axial planning. Thus, the basic principle of axial Chinese layout planning provides a practical guideline for arranging building units and conveying a symbolic meaning based on this hierarchy.

3. North-south orientation

There is a belief about the Chinese built environment that almost all buildings, from the city-scale downwards, from the palace and the temple to the house, have to be constructed in rectilinear complexes and oriented to the south to take advantage of cosmo-geographical aspects where blessings are carried from the mountain or hills in the north and there is a lake view in the south to protect the site against evil forces (Lip, 1994, 2009). In practice, a good building in the northern hemisphere and temperate climate of China faced away from the mountain or hills in the north to give protection from the cold and dusty wind, whereas the south provided warmth from the sun as well as the lake giving cool summer breezes.

4. Courtyard planning

Another important component in the Chinese layout planning are courtyards as open spaces within the building complex. This concept has been applied since the Tang dynasty as it provides a guide to arrange the building complex based on the hierarchy level of building type, the sacred or profane zone, and the user privacy, and also bring the natural light and air practically into the buildings (Boyd, 1962; Lip, 1983, 2009). There are also different types of courtyard based on the shape, size, scale, and wall enclosed type, and all of these variations depend on the building complex type; palace, house for nobles, temple, or other. According to Lip (2009) the classification of courtyard planning consist of three types: (1) *si heyuan*, where there is symmetry, axiality, north-south orientation, and walled enclosure; (2) *san heyuan*, where there is symmetry, axial line, but there is no north-south orientation or walled enclosure; and (3) “L” or “T” formation with a front courtyard.

5. Geomancy

According to Lip (1983), the rules in the Chinese temple of site and layout planning should apply the fundamental principles of geomancy. The building location must be higher than ground around it to bring good luck, the location of the temple must not be at the end of narrow road to avoid misfortune and bad luck, the main road must be located on the west or south of the temple, and the temple orientation must not be oriented to the north-east or south-west as these orientations are considered “doors of devils”. Since the best orientation of north-south has been applied in Chinese layout planning and building, all roads should be laid out to run north-south and east-west (Guanhua, 1982). In broader terms, this geomancy applies beliefs about an interconnection between macrocosm and microcosm, and thus explains a logical way to unify the surroundings in order to create a balance between built and natural environment. And, as it has been recorded in comprehensive guidelines to *feng shui*, *yin-yang*, and other Chinese ancient practice of geomancy these beliefs provide a logical way of addressing natural phenomena and socio-cultural issues.

Result and Discussion

The estimated total number of Chinese temples in Bali is around 18 Chinese temples that can be classified into two categories; Chinese temple complexes and Chinese temple buildings inside Hindu worship complexes. This paper will take case studies of 15 Chinese temples that are spread across 7 regions in Bali, as follows: (1) Denpasar (Khongcu Bio, Oong Tay Jen, Kwan Kong Bio, Cao Fuk Miao, Satya Dharma); (2) Tabanan (Kongco Bio, Batu Meringgit); (3) Jembrana (Cung Ling Bio); (4) Buleleng (Ling Gwan Kiong, Seng Hong Bio); (5) Gianyar (Amurva Bhumi, Ong Ya Kong); (6) Badung (Caow Eng Bio,

Leeng Gwan Bio); and (7) Klungkung (Zhong Yi Miao). Based on-site observation through measuring and drawing method as well as taking photographs, this research has identified Chinese temple layouts planning in Bali and then analysed them using the five basic principles of Chinese temple layout planning in a comparison table below to investigate how these principles applied.

Table 2: The Implementation of Five Basic Principles of Chinese Temple Layout in Bali

Chinese Temple in Bali	Five Basic Principles of Chinese Temple Layout							
	Wall Enclosure	Axiality	North-South Orientation	Courtyard Planning	Geomancy			
					Higher position	Not at the end of narrow road	The main road on the west or south	Not oriented along north-east/south-west
Denpasar								
1. Khongcu Bio	√	√	X	√	√	√	X	√
2. Oong Tay Jen	√	√	X	√	√	√	√	√
3. Kwan Kong Bio	√	√	X	√	√	√	√	√
4. Cao Fuk Miao	√	√	X	√	√	√	X	√
5. Satya Dharma	√	√	X	√	√	√	X	√
Tabanan								
1. Kongco Bio	√	√	X	√	√	√	X	√
2. Batu Meringgit	√	X	√	√	√	√	√	√
Jembrana								
1. Cung Ling Bio	√	√	X	√	√	√	X	√
Buleleng								
1. Ling Gwan Kiong	√	√	X	√	√	√	X	√
2. Seng Hong Bio	√	√	X	√	X	√	X	√
Gianyar								
1. Amurva Bhumi	√	√	X	√	√	√	√	√
2. Ong Ya Kong	√	√	√	√	√	√	X	√
Badung								

1. Caow Eng Bio	√	√	X	√	√	√	√	√
2. Leeng Gwan Bio	√	√	X	√	√	√	X	√
Klungkung								
3. Zhong Yi Miao	√	X	X	√	√	X	X	√

Legend: √: Meet the requirement X: Not meet the requirement

Source: Author, 2018

The table above illustrates the comparison of Chinese temple layout planning requirements to the actual layouts of the Chinese temples in Bali. The implementation of the wall enclosure principle has been seen clearly in all Chinese temple layout in Bali though with some variations of form, material, colour, ornament, and decoration. Nevertheless, there are some deities' altars in Oong Tay Jen temple and the Hindu worship building in Amurva Bhumi temple that are positioned outside the enclosure wall and these complexes extended with additional fences. Or, instead of using four-sided walls as a barrier, some of the altars are placed on a high podium (Figure 1). Additionally, the form of the Balinese traditional gate as one of the enclosure features has been adopted as a site entrance in Oong Tay Jen, Kwan Kong Bio, Kongco Bio, Batu Meringgit, Amurva Bhumi, Ong Ya Kong, and Caow Eng Bio temples (Figure 2). In spite of the function of wall enclosure as a territorial border, these examples indicate that the philosophical meaning of the wall enclosure in Chinese temple layouts in Bali has been maintained effectively, particularly in distinguishing the sacred space using fences, gates, as well as higher podia. As Kustedja, Sudikno, and Salura (2015) state, the wall enclosure is a territorial symbol, demarcating the user or owner's space as a microcosm and protecting them from any interferences from the outside.



Figure 1: Deities Altar and Hindu Worship Building Outside the Wall Enclosure

Source: Author, 2018



Figure 2: Balinese Traditional Gate in Amurva Bhumi, Kwan Kong Bio, and Kongcu Bio Temple

Source: Author, 2018

Among all of the Chinese temples in Bali, the axuality of Kongcu Bio, Cao Fuk Miao, Leeng Gwan Bio, Ling Gwan Kiong, Seng Hong Bio, Satya Dharma, and Caow Eng Bio temple have clear symmetrical balance. This is because the position of the main gate and main altar in one axial line and balanced with the prayer furnace or pavilion to the right and left sides in these examples (Figure 3). In contrast, the main gate and main altar in the Chinese temple located inside Batu Meringgit Hindu temple complex and the Zhong Yi Miao temple have not been placed in one axial line. Meanwhile, the other Chinese temples have been maintained axuality between the main gate and main altar, but without creating a symmetrical balance between the left and right sides of the building (Figure 3). Although the hierarchy of the sacred zone has been implemented due to the main altar being placed in alignment with the main gate, the concept of monumentality in Chinese temple layout in these examples cannot be expressed effectively because of their asymmetrical formation, due to the shape of the existing sites.

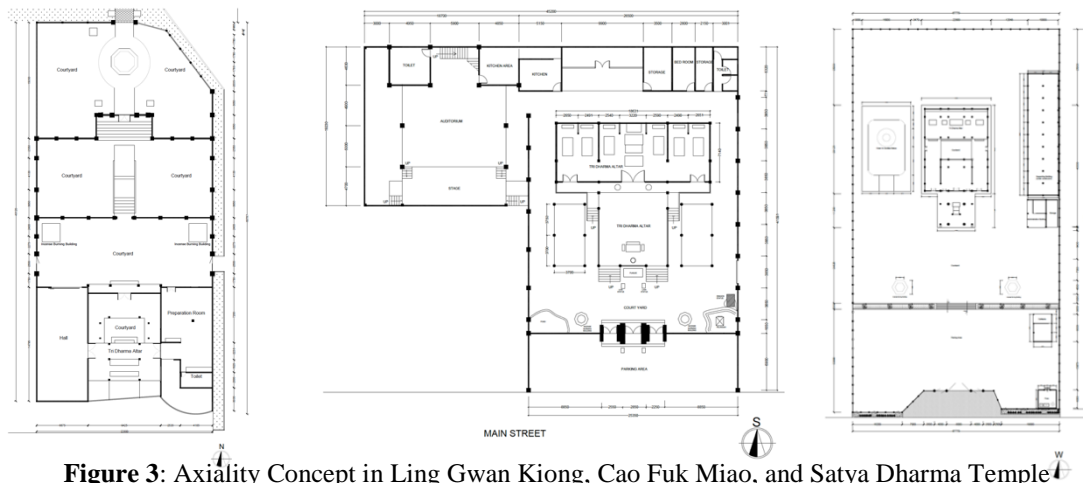


Figure 3: Axiality Concept in Ling Gwan Kiong, Cao Fuk Miao, and Satya Dharma Temple

Source: Author, 2018

The most conspicuously contrasting principle in the Chinese temple layouts that has been identified are the orientations of the buildings. Amongst all of the Chinese temples in Bali, only Batu Meringgit and Ong Ya Kong temple follow the north-south orientation, while Caow Eng Bio, Leeng Gwan Kiong, and Seng Hong Bio face mostly to the north, and the others are oriented to the east and west (Figure 4). Mostly, the Chinese temples in Bali are orientated towards a nearby lake or river rather than to the north-south, suggesting that this orientation maintains protection against the evil forces within the local context, as well as providing cool air circulation in the warm climate of Bali. In addition, building orientation can be understood based on the historical backgrounds of particular Chinese temples. For instance, Leeng Gwan Kiong and Seng Hong Bio temple that are located in North Bali coast were built by sailor-traders from China and faced the sea in the north in order to worship and give respect to the sea god or goddess for helping them arrive safely and have wealthy lives. Consequently, these histories have affected the variations between main deities who are worshiped in different Chinese temples in Bali.

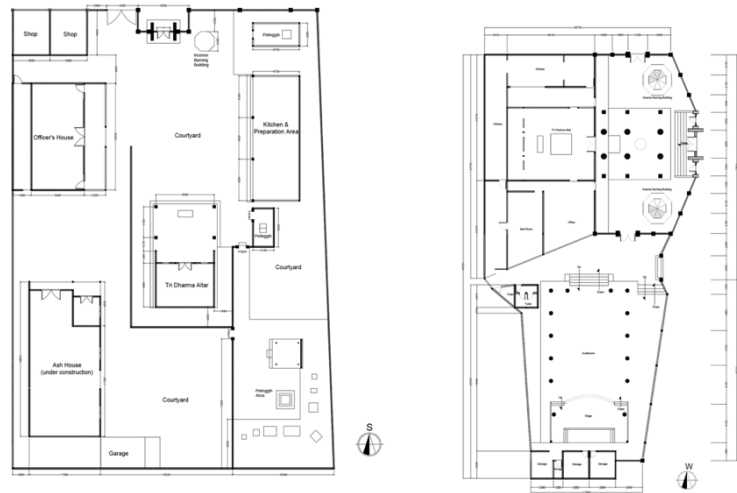


Figure 4: Building Orientation at Ong Ya Kong and Seng Hong Bio Chinese Temple
Source: Author, 2018

The courtyard as a fundamental element in the Chinese layout has been implemented in all Chinese temples in Bali, whether as a single or multiple courtyards. However, since the shape of some Chinese temples' wall enclosures are not rectangular and their axially cannot form perfect symmetrical balance, siting characteristics have led to variations of courtyard shape. Some of the Chinese temples in Bali with almost symmetrical formation of layout have adopted *si heyuan* and *san heyuan* courtyard types. However, in others the courtyard is not in the centre of the site or enclosed by buildings (Figure 5).

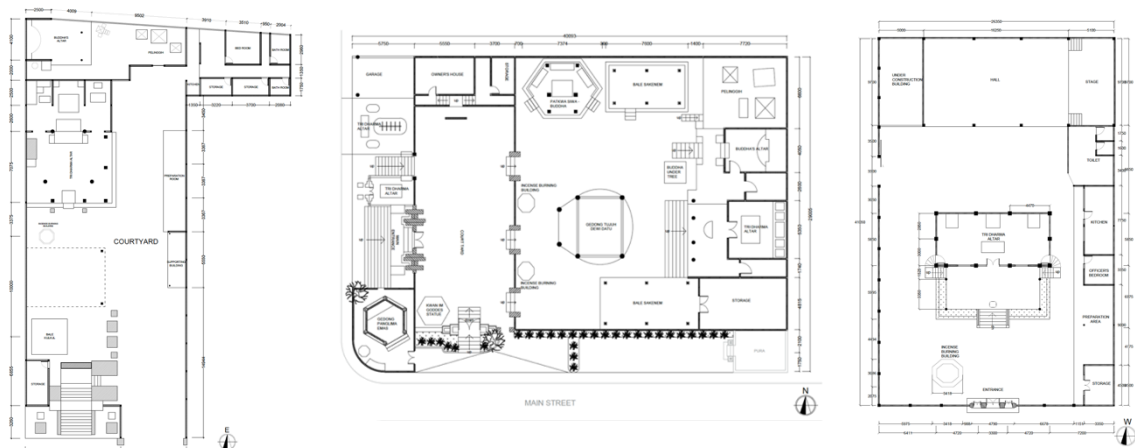


Figure 5: Courtyard Planning of Kwan Kong Bio, Oong Tay Jen, and Cung Ling Bio Chinese Temple
Source: Author, 2018

The surroundings of Chinese temples in Bali have also affected geomancy implementation, particularly in relation to the position of the main road. Mostly, the location of Chinese temples in Bali are within an urban landscape with the main road in the north or east, while others have fulfilled the requirement to have the main road in the west or south of the temple. None of these temples are located at the end of a road, except for Zhong Yi Miao temple that must be accessed from the main street by a narrow road. Furthermore, it has been identified that all of the Chinese temples in Bali have avoided the “doors of devil” orientation to along east-west and north-south. Also, only the Seng Hong Bio building temple has been built in the location lower than the main street amongst all of the Chinese temples in Bali (Fig. 6).



Fig. 6: The Location of Seng Hong Bio Chinese Temple is Lower Than the Main Street
Source: Author, 2018

Conclusion

The characteristics of Chinese temples in Bali are indicative of a cross-cultural phenomenon that can provide new architectural knowledge into the relationship between belief systems, geography and cross-cultural relations. As a long tradition, Chinese belief in the interconnection between macrocosm and microcosm has been preserved and implemented in Chinese temple layout planning in Bali. The effect of seclusion to emphasize the sacred zone has been reinforced through the implementation of wall enclosure, axiality, courtyard, and geomancy in each example. Although some of the Chinese temples in Bali face the building to the south, the fact that others are orientated more towards lakes or waterways indicate adaptation of philosophical meaning and practice to local conditions. It is also has been identified that some of variations in the position of main road are not fulfilled the requirement of the geomancy, suggesting pragmatic adaptations. Overall, the essential value of Chinese temple in Bali as a both a building of worship and a place for social activity has been maintained in appropriate ways, but the research has shown that the Chinese have adapted their temple layouts to the Balinese environment, while maintaining the identity of their community and preserving the most important elements of their traditional principles.

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