The Mandala Cultural Model can play a significant role in sustainable tourism: Interweaving Tibetan Buddhist landscape with architecture, nature, religious meanings and man's movements

El Modelo Cultural de Mandala puede desempeñar un papel significativo en turismo sostenible: Interrelacionando el paisaje Budista Tibetano con arquitectura, naturaleza, significados religiosos y movimientos del hombre.

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**ABSTRACT:** The Mandala is the Buddhist cosmic model, showing the universe as centered around the Buddha's dwelling place. Emphasizing the integrative relationship between architecture and landscape, and based on field investigations of Tibetan temples throughout China, this paper discusses how the Mandala Model was utilized to structure Tibetan architecture and landscape at various scales. Unifying spatial organizations, the Mandala Model serves to interweave Tibetan Buddhist landscapes with architecture, nature, religious meanings and man's movements. It is this integrative system that is the key concept to understand why and how Tibet has sustained itself as one of the most fascinating destinations in the world.

Keywords: Modelo Mandala, Buddha, architecture, landscape, environment.

**RESUMEN:** El Mándala es el modelo cósmico budista, mostrando que el universo esta lo centrado alrededor del lugar de la vivienda del Buda. Acentuando la relación integrativa entre la arquitectura y el paisaje, y basado en investigaciones de campo de templos tibetanos a través de China, este trabajo discute cómo el modelo de Mándala fue utilizado para estructurar arquitectura y paisaje tibetanos en varias escalas. Unificando las organizaciones espaciales, el modelo de Mándala sirve para interrelacionar paisajes budistas tibetanos con arquitectura, la naturaleza, significados religiosos y los movimientos del hombre. Es este sistema integrativo que es el concepto dominante para entender porqué y cómo el Tíbet se ha sostenido como una de las destinaciones más fascinadoras del mundo.

Palabras claves: Modelo Mándala, Buda, arquitectura, paisaje, ambiente.

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Ping Xu Págs. 60 a 75

### 1. INTRODUCTION

As a professor of architecture and landscape design, having a long time interest in the quality of tourism and its impacts on natural environment and society, I would like to congratulate the birth of *Interamerican Journal of Environment and Tourism!* Among its missions, two points particularly attract my attention: identifying, exhibiting and protecting natural environment and cultural heritages as a whole, and enhancing the integration of scholar research and business management, in order to develop the sustainable tourism from vision to reality (Arias and Cerda, 2005).

Scholars have suggested that ideal cultural models structured traditional houses (Rapoport, 1969) and built landscapes. A typical example is feng-shui models shaped traditional Chinese courtyard houses and built landscape (Xu, 1990 and 1998). Professor Carl Steinitz, Harvard University Graduate School of Design, has taught a long-time section in his lecture course — Theory and Method, that I have co-lectured for 15 years, emphasizing the significant role of cultural models in built environment. However, due to the isolation between the academic world and the tourism business, cultural models have not yet received enough attention in tourism interpretations and exhibitions. The local history, architecture, landscape, and customs are often presented as isolated pieces without integration, thus the experiences tourists gain are also fragmented. Now, I am glad to see that this situation will be improved, since tourism journals, such as Interamerican Journal of Environment and Tourism, are enhancing the communication between the academic research and the business management for sustaining natural and cultural resources and tourism as well.

With the viewpoint of a scholar as well as a tourist, I would like to present my experience in traveling Tibet and its surrounding areas as a case study to explain the significance of understanding, exhibiting and protecting the traditional cultural model to enhance the sustainable tourism. Tibet is one of the few places where tourists can join in the current of pilgrimage without the feeling of being "cultural outsiders." Equal with the locals, tourists raise the great respect of the land, culture and people. Tibet is also one of the few places where the local culture greatly impacts tourists, rather than tourists changing the local culture. In the Tibetan cultural landscape, the mandala as a cosmos

model represents a system that integrates nature, architecture, religious meanings, and man's movements. This integrative system is the key concept to understand why and how Tibet has sustained itself as one of the most fascinating cultural and ecological destinations, and a dream place for tourists from around world.

The mandala as a Buddhist cosmic model of organizing the spiritual world has received great attention worldwide, especially for its role in Tibetan Buddhist practices and its symbolism in religious architecture. Surprisingly, among the volumes written about the mandala, few stress the integration of temple architecture with its surrounding landscape. Yet, such integration provides a sustainability example of great cross-cultural value as to how sensitive tourism infrastructure development should and can be integrated with its natural context where it is placed.

Tibet's geographically and ecologically unique high plain nurtures a place of religious worship even today. The landscape and architecture, and their integration within the rich Tibetan culture, greatly intrigued me during my visit of 1998 and beckoned me to return in 2002. I also extensively investigated Tibetan temples and villages outside Tibet in China's Gansu, Qinghai, Yunnan, Inner Mongolia, and Sichuan Provinces. These field investigations enhanced my understanding that Tibetan architecture, landscape, and religious beliefs are woven together with their natural settings, forming a sacred realm. Particularly, the theme of the mandala as an integrative model was present everywhere I went, inspiring me to speculate that it, as a spiritual vehicle and a general model, shaped Tibetan Buddhist architecture and landscape on which it is found. Therefore in this article I would like to share this experience in the hope that it can provide a better understanding of the value of integrating ecological and cultural tourism. To this end the article introduces Tibe and its culture, the mandala and its relationships with various built forms: the temple, the tower as city center, vernacular architecture as transition, landscape settings, and the notion of circumambulation. The article closes with some conclusions on built-form observations which can be credited to the mandala, and which can be of value in the planning and design of tourism infrastructure whose success could be found in cultural antecedents which have successfully integrated ecology and culture in a successful and sustainable form.

# 2. TIBETANS AND THEIR CULTURE ABOVE 3000 METERS

I traveled to Tibetan villages throughout the west of China, going from lowlands to high plains by bus, car or hiking. Once, as my face started to get pale and I started to feel dizzy, I looked at my watch, which showed an altitude of 3000 meters, and noticed a road sign showing the boundary of a Tibetan county. I suddenly wondered whether all Tibetan villages were located above 3000 meters. When I overlaid the 3000 meter altitude contour map on the administrative division map of China, I was excited to discover that the contour line for 3000 meter altitude did indeed coincide with the boundary line for ethnically Tibetan villages. That is, the Tibetan people naturally inhabit lands at altitudes of over 3000 meters (Figure 1).

The altitude of the Qingzhang Plateau provides a natural defense for Tibetan villages. It also protects the identity of Tibetan culture, which is acclimated to the land. The thin air and the high geographic conditions make survival difficult. Mountains are full of snow and appear rough and rugged. The growing season is short and temperatures are low even in summer. It is not easy to reproduce, and the population in Tibet is always low. The high plains flood easily and are in danger of mudslides. The weather is unpredictable. Tibetan people sense their land is dangerous; they believe that before Buddhism came to Tibet, the land was full of demons (Nebesky-Wojokowitz, 1996). Fear and respect for nature's power have developed a strong identification with nature, which is reflected in the indigenous Ben religion, a primitive form of Shamanism.

On the other hand, the high altitude areas of the Qingzhang Plateau are among the most beautiful places in the world. The land is green, the sky is deep blue, and the mountains are covered with white snow. Golden roofed temples are shrouded in incense smoke. Devout Tibetan Buddhists circumambulate around the temples and stupas. Tibet is believed as "the last purely Buddhist land."

Tibetan Buddhism is a branch of Tantric Buddhism, originally from India, which has been infused with the Ben religion. This branch emphasizes the path and practices of the Buddha of enlightenment, and also follows a common Buddhist theme: humanity is suffering the torments of being caught up in the cycle of death and rebirth; and only the Buddha, with his great wisdom and compassion, has the ability to help humans transcend and be liberated from this cycle,

in order to reach ultimate enlightenment (Powers, 1995). The *mandala* is the Buddhist cosmic model, showing the universe as centered around the Buddha's dwelling place. To achieve Buddha's land, Mount Meru, is the goal of life. As a living religion, Tibetan Buddhism is practiced in Tibet and its surrounding regions on the Qingzhang Plateau, and in Inner Mongolia in China. Also, there are increasing numbers of believers in North America and Western Europe (Powers, 1995).

In Tibet, every city, town, village, and even every home has its own temple, which provides a focus for the social and spiritual life of the Tibetan community. Tibet once had over 6000 temples. Every important historical event, often linked to a religious revolution, left behind a great temple as an historical mark. Famous temples were concentrated in Tibet, but many were also located in the surrounding regions: Gansu, Qinghai, Sichuan, and Yongnan Provinces. Farther off, many famous temples were located in Inner Mongolia, Beijing, and Chengde (Wuligibayuer, 2001 and Pu, 1990).

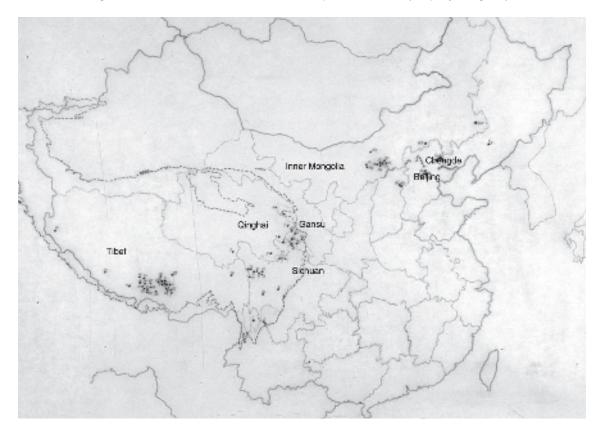
#### 3. The MANDALA

The mandala is the Buddhist cosmic model, showing the universe as centered around the Buddha's dwelling place. The contents of the Buddhist cosmic model were explained in the Abhidharmakosa, an ancient text written by Vasubanhu (fourth or fifth century AD). During primeval times, it was believed that the power of collective actions brought about the universe with winds from the four cardinal directions. The winds filled the empty space and helped to form the clouds, from which water poured. From the water, hurricanes shaped the golden earth. In the center of the golden earth rose a mountain called Mount Meru. In the middle of the square summit-region of Mount Meru lay the palace of the leader of the thirty-three chief Buddhas. At half the height of Mount Meru, the sun and moon traveled their orbits borne by the wind. Around Mount Meru were seven golden mountain walls, each lower than the one inside it. Between the mountains, the rain created the "inner sea" of fresh water. Outside the lowest golden mountain wall stretched the "great outer ocean" of saltwater. In the ocean, the twelve continents floated, the southern most of which was inhabited by human beings. The great outer ocean, with its twelve continents, was in turn encompassed by an iron mountain wall (Brauen, 1997, P18).

This cosmic model is represented both in three-

Ping Xu Págs. 60 a 75

Figure 1. The distribution of Tibetan temples in China. (Map by Ping Xu)



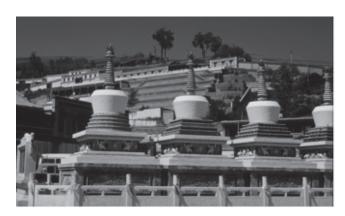
dimensional and two-dimensional mandalas. The three-dimensional *mandala*, in various sizes, represents a geographic model of the Buddhist cosmos, Mount Meru (Figure2); two-dimensional *mandalas* are painted on cloth or leather, or sprinkled on a flat surface with colored powder, demonstrating Mount Meru in the plan-view. A painting of a *mandala*, "Tan Cheng" or literally "the altar city" is a symmetrical diagram built up of nesting squares around with concentric circles, presenting the cosmic model in the plan-view (Figure 3). Mandalas are often aids to meditation, visualization, and liberation in ritual ceremonies, as well as in the Tibetan daily life.

Figure 2. A bronze sculpture of Mount Meru in the eighteenth-century Yonghe Palace, an important imperial Tibetan Buddhist temple in Beijing. (Photograph by Ping Xu, 2002)



Figure 2.

Figure 3. A painting of the mandala. (Source: Brauen1997, Plates 45) (Diagram by Ping Xu)







## 4. THE TEMPLE IS A MANDALA

Just as the universe is organized around Mount Meru, a Tibetan temple complex is organized around the Buddha tower and the great chant hall. Surrounding these main structures are monastery courtyards which take the shape of flat-roofed vernacular houses.

Following the *mandala* model, stupas, built up with nesting squares and the vertical structure in the center, are commonly placed at the entrance of the temple or a village, symbolically to guard the gate (Figure 4); and stone landmarks, called "Mani Dui", indicate the important turning points along the path toward the temple (Figure 5).

Figure 4. The stupas at the entrance, Tare temple, Qinghai Province. (Photograph and diagram by Ping Xu, 1998)





Ping Xu Págs. 60 a 75

Figure 5. The "Mani Dui", a stone mount, was built as a landmark aside the road between two Tibetan temples in Gansu Province. (Photograph and diagram by Ping Xu, 2002)







The Buddha towers and the great chant halls are painted red or yellow, with gilded roofs, surmounted by two deer on either side of a golden wheel. Other buildings are often painted white, an auspicious color believed to have the power to ward off evil and to

attract luck. On the surrounding hills colorful prayer flags are often placed, inscribed with Buddhist sutras, chanting with the winds and praying for the world (Figure 6).

Figure 6. The prayer flags around the Tagong temple in Sichuan Province. (Photograph by Ping Xu, 2002)

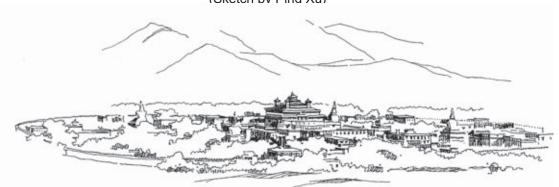


A Tibetan Buddhist place of worship has three essential ingredients: a statue of the Buddha, an open floor space in front of it, (in which worshippers may pray individually and/or groups of monks may chant), and a perimeter enclosed by thick walls with paintings of the *mandala*. Around the perimeter, visiting worshippers circumambulate in a clockwise direction. Large temple complexes have square, multistory Buddha towers, and great chant halls with single-story structures and Buddha chambers in the rear section. Buddha towers and great chant halls often face south, which symbolizes the Buddha's compassion for the human inhabitants of the southern continent. The main axis of these structures often aligns with landscape features, such as mountain peaks or the

center of a forest, where deities are believed to dwell.

Historically, many famous Tibetan Buddhist temples throughout China were established under the advice of leading Buddhist masters. They followed the *mandala* model, not only in selecting the temple sites, but also in directing the plan's layout and architectural design. The Samye Temple was built in 779 AD under the advice of the Buddhist Master Jihu. The *mandala* plan later became a model for other Tibetan Buddhist temples. The Samye Temple is located in the center of a valley at the northern bank of the Yaluzangbu River, a high mountain in the north, with mountain peaks in the southern distance, and a sacred mount in the east (Figure 7).

Figure 7. The Samye Temple in Tsedang, Tibet. (Sketch by Pina Xu)



The Samye Temple outer wall takes the shape of a circle, symbolizing the iron mountain. In the four cardinal directions are halls that represent the four main continents. Four stupas are set in each corner, symbolizing the four divinities who guard the Buddha's

lands. The small buildings on the north-south axis symbolize the sun and moon. The central Buddha tower takes the shape of a square, with a courtyard surrounding it. The main entrance is in the east (Figure 8 and 9).

Figure 8. The central Buddha tower of the Samye Temple. (Photograph by Ping Xu, 1998)

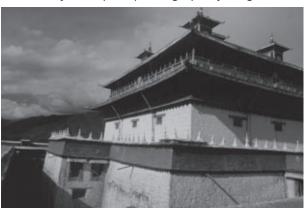
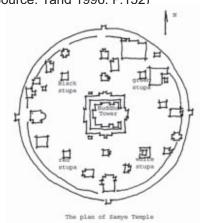


Figure 9. The plan of Samye. (Source: Yang 1996. P.152)



Ping Xu Págs. 60 a 75

# 5. CENTER: THE BUDDHA TOWER BUILT UP WITHIN NESTING SPACES

The center is the most sacred space in the *mandala*. In the temple, as a spiritual core, the Buddha tower built up within nesting spaces is in the center. The

Buddha statue is placed in the center of the Buddha tower, surrounded by an ambulatory passageway for circumambulation by man. The 'central-statue-plus-colonnade' pattern may be repeated on each floor, or the center of the tower may be an open atrium containing a single very large statue, with multistory colonnades on all four walls (Figure 10).

Figure 10. The plan and section of a Buddha tower. (By Ping Xu)



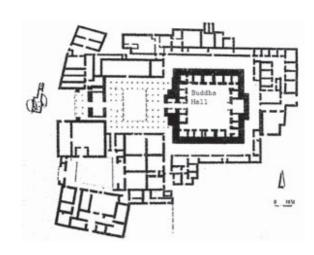


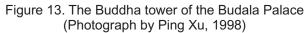
The seventh-century Budala Palace in Lhasa, Tibet, (Figure 11 and 13) and the seventh-century Dazhao temple in Lhasa, Tibet (Figure 12), with their spatial patterns of a box-in-a-box, creates an ordering sequence which encourages one to seek the center.

Figure 11, Colonnades are around The Buddha tower of the Budala Palace. (Photograph by Ping Xu, 1998)



Figure 12. The plan of the Dazhao Temple, (Source: Yang,1996, P 149)







Corresponding to the vertical axis of Mount Meru, in Tibetan temples the vertical axis is emphasized in the center of the Buddha's tower. At the Budala Palace in Lhasa, the red palace takes the shape of a square enclosure within a square enclosure. The closer to the center, the smaller the room is, the higher the floor is set, and the greater the worship is achieved, until one reaches the top center, a flat roof providing open

views to the vast horizon where mountains rim the deep blue sky. The sequential experience of the building creates both a physical and mental climax. This hierarchal system in the design of the temple's architectural space, symbolizing the vertical axis of Mount Meru, forms a vehicle for obtaining ultimate liberation, emptiness, and subsequent enlightenment (Figure 14).

(Figure 14). The center at the top of the Budala Palace, Tibet. (Photograph by Ping Xu, 1998)



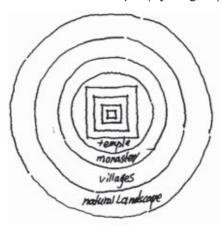
## 6. VERNACULAR ARCHITECTURE AS A TRANSITION

In the mandala model, the spiritual center radiates from the Buddha's dwellings to mountains and water. Similarly, in the Tibetan temple, farther from the center there are less architectural structures and more natural landscape, the more secular is the place. Set on the

temple rim, monastery courtyards, taking the shape of a vernacular house, are usually clustered randomly on the slope of the land, thus creating a transition between the central architecture and the surrounding landscape (Figure 15).

Ping Xu Págs. 60 a 75

Figure 15. Vernacular architecture forms a transition between temple architecture and natural landscape. (By Ping Xu)



The architectural design of the Joshlonbu Temple and the Labuleng Temple have a homelike feeling because they imitate the architectural vocabulary of Tibetan villages with flat roofs, thick clay or stone walls, often painted white, tapered up two or three floors high with trapezoidal windows (Figure 16). The random organization of monastery courtyards forms a twisted access to different sections of the temple. As one walks between the yards, the angled path provides rich images that change at every turning point (Figure 17). The contrast with this simple vernacular architectural matrix makes the Buddha halls stand out,

even while it mixes the secular with the sacred.

Temple complexes were created to help people visualize the temple as a symbol of the sacred lands of the Buddha. On the other hand, in Tibetan temples particularly, the monastery courtyards often provide an atmosphere of «home." Inheriting the knowledge of the Tibetan vernacular village, Tibetan temple complexes have developed a duality intended to aid people in the understanding that the sacred Buddha land is a place where everyone can arrive, if they follow Buddhist practices.

Figure 16. A Tibetan vernacular house, in Sichuan Province. (Photograph by Ping Xu, 2002)

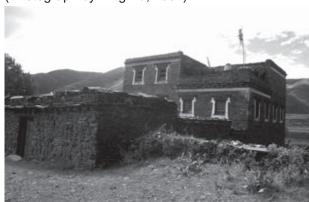
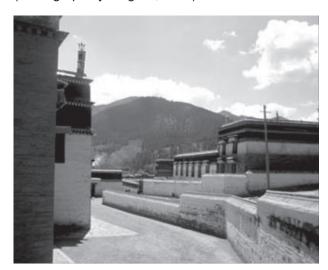


Figure 17. The Labuleng temple in Gansu Province. (Photograph by Ping Xu, 2002)

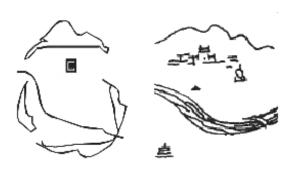


## 7. LANDSCAPE SETTINGS DEFINE A LARGE-SCALED MANDALA SPACE

In Tibet, the vast plateau, deep blue skies, snow-covered mountains, unpredictable weather, simultaneous beauty and danger, richness and emptiness, all form a complex matrix which affects the design of temples. In turn, the Buddhist temples are believed by Tibetans to provide the power to suppress and subdue the demons and evil energy in the land, making the land itself holy.

Corresponding to Mount Meru, as a reference point for concentrically arranged continents and oceans, the temple embodies the sacred places of the Buddha, providing merit for the worshipper. Tibetan temples are often located in a central spot; instead of constructing the temple itself as an architectural mountain, Tibetans place the temple with the summit of a mountain behind it. Borrowing the view of the mountain summit, along with the southern slope of the hill, and having a river in the front, the temple integrates with its surrounding landscape as an unseparated spatial unit, a mandala place (Figure 18).

Figure 18. Landscape settings define a large-scaled mandala space framed by mountains and water. (By Ping Xu)



Water is very important, not just to the temple community's survival, but for its religious significance. In correspondence with the *mandala*, the temple represents the Buddhists' sacred land beyond the salty ocean separating the human continent from the Buddha. This salty ocean also symbolizes human suffering from the torments of being caught up in the cycle of death and rebirth. For an ideal temple site, a river flows in front of the temple, with a road opposite. When walking on the road, people look at the temple across the river. The scene of the temple with mountains behind it forms a mandala image in their

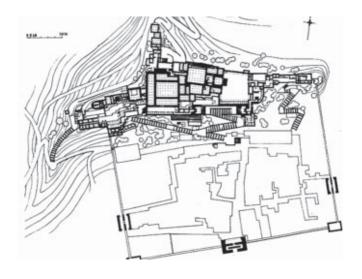
minds, thus evoking their worship and attracting them to enter.

The seventh-century Budala Palace in Lhasa, Tibet, is located on the south slope of the hill, with mountain ranges behind, and mountain peaks to the south in the distance. The Lahsa River flows to its south. Integrated within the surrounding landscape, the Budala Palace is viewed as Mount Meru in the Tibetans' hearts (Figure 19 and 20).

Figure 19. The Budala Palace, Lhasa. (Photograph by Ping Xu, 1998)



Figure 20. The plan of the Budala Palace, Lhasa. (Source: Liu, 1984, P.382)



The fifteenth-century Jashlunbu Temple in Shigatse (Figure 21) was built on the south side of a hill with a gentle, wide-open slope, the summits of the mountain behind it resembling the embracing form of a lotus flower, and a river meandering in front of the temple. Such landscape setting has become a typical model for Tibetan temple site selection.

Ping Xu Págs. 60 a 75

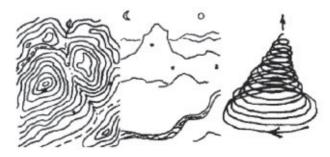
Figure 21. The Jashlunbu temple in Shigatse, Tibet. (Photograph by Ping Xu, 1998)



# 8. CIRCUMAMBULATION AROUND ARCHITECTURE AND LANDSCAPE

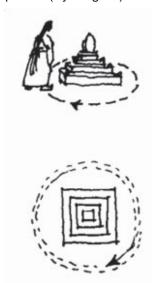
The most significant ritual of spiritual perfection in Tibetan Buddhism is circumambulation, which proceeds in a clockwise direction around a stone landmark, stupa, temple complex, Buddha tower, or inside the hall of a temple. A pilgrimage circumambulating the holy mountains, a symbol of the Mount Meru, may take several weeks (Figure 22).

Figure 22. The holy mountains and the path of a pilgrimage up the mountains. (By Ping Xu)



The summit of the mountains and the center of lakes are considered to be the positions of deities. Tibetans believe that circumambulations can purify their lives and lead to liberation, and they will then be able to go to the continent of the Buddha (Karmay, 1988. P75). When people circumambulate around these structures, the *mandala* model, a symmetrical diagram built up of nesting squares around with concentric circles, is completed (Figure 23).

Figure 23. Taking into account the tracks of circumambulations around structures, the mandala model is completed. (By Ping Xu)



As a vehicle for transmitting people's hopes to the Buddha, circumambulation is translated into the temple architecture which is furnished with ambulatory passageways at various scales. People start at the outer colonnade, with its rows of prayer wheels, turning each wheel in turn (Figure 24). In some temples, such as the Dazhao Temple in Lhasa, the circumambulation starts in the street around the temple. Then people circumambulate inside the great hall, then climb up to circumambulate the colonnades, until they reach the top of the temple.

Figure 24. The circumambulation at the outer colonnade of the Labuleng Temple, Gansu Province. (Photograph by Ping Xu, 2002)



The Baiju Temple built in 1414 AD in Jiangzi, Tibet, is located on a south-facing slope surrounded by hills with a river (Yang 1996, P.426). The base of the building has four layers, symbolizing the four elements of air, fire, water, and earth. Every layer is a floor of Buddha halls and niches. The temple has 77 Buddha halls and niches, and over 3000 Buddha statues (Figure 25). This temple is circumambulated spirally on several stories, up to the most important Buddha

hall. Moving through the temple is like walking through a *mandala* palace. Walking through the stepped path to the top Buddha niche is visualized as climbing the stair to reach the top level of Buddha's realm, a formless emptiness of eternal liberation and enlightenment. This temple's form manifests the path along which the circumambulation in the physical place, as well as in the human mind, progresses and spirals up to the spiritual climax.

Figure 25. The Baiju Temple was built in 1414 AD in Jiangzi, Tibet. (Photograph and diagram by Ping Xu, 1998)



#### 9. CONCLUSIONS

Presenting a case study of the cultural model shaping traditional built environment, this paper demonstrates and analyzes essential concepts and characteristics of the *Mandala* model and how this model integrates architecture, belief system and man's movement within the cultural landscape. It could be helpful to inspire the further study of cultural models in other

cultures within the areas of ecological and cultural tourism. Figure 26 presents the *mandala* pattern of architecture, landscape, and man's movement, and the integrative relationship between them. It also provides a summary of this paper and can hopefully contribute toward sensitive and sustainable tourism infrastructure planning and design.

Ping Xu Págs. 60 a 75

Figure 26. Mandala as a cosmic model structured the Tibetan Buddhist landscape. (By Ping Xu)

	Mandala as a Cosmos Model	Painting "Tan Cheng"	Landmark "Mani Dui"	Stupa	Buddha hall	Temple complex	Landscape setting	Holy mountains
Organization in plan					D			
Patterns of Spatial Organization in elevation in plan	3		4	<u>‡</u>	<b>LÍA</b>			500
Man Moving in Madala Space				) }				

#### From macro to micro scales

As a common ancient belief, the cosmic model works in the macro world as well as in the micro world. The mandala model presenting an ancient concept of the universe in a macro scale was transferred to architecture and its surrounding landscape in a relatively micro space. In Figure 26, the small-scaled mandala structures include stone landmarks and stupas. The center of a temple is a Buddha tower built up within nesting spaces. Landscape settings define a large-scaled mandala space framed by mountain and water. A pilgrimage in the holy mountains was often organized within a geographic region. At every level of various scales, the spatial organization follows the mandala as its model, which serves the religious purpose that Buddha is with you everywhere.

## Architecture set up in the center

As in the mandala model the universe is centered around the Buddha's dwelling place, in the temple the Buddha tower as a spiritual core is built in the center

and is the highest point of the hierarchical space. The pattern of nesting spaces of a Buddha tower represents an order of encouraging people to seek the center. Closer to the center, more decorations appear, and more valuable architectural material is used; the higher the elevation, the more sacred the space becomes.

# Integrating architecture with its surrounding landscape

In the *mandala* model, the outer rim symbolizes the secular world. In Tibetan temples, main structures are surrounded by monastery courtyards. These monasteries, taking the shape of a vernacular courtyard, are usually clustered randomly on the slope of the land, creating a transition between the central architecture and the surrounding landscape, and also symbolizing a transition between the secular world and the sacred world. Farther apart from the temple's center, stupas placed at the entrance of the temple or village symbolically guard the gate, and stone landmarks indicate important turning points along the path toward the temple. Expanding into the natural

landscape, these stupas and stone landmarks blur the boundary between architecture and landscape.

# Emphasizing the horizontal and spatial relationship

Landscape setting plays an important role in integrating the temple's architecture with landscape, emphasizing the horizontal, spatial relationship between a temple site and its surrounding landscape. Borrowing and incorporating the view of the mountain summit, along with the southern slope of the hill, and having a river in the front, the temple is viewed not in isolation, but as a whole: a Mount Meru in the Tibetan landscape.

### Man's activity is taken into account

Man's activity is taken into account in the religious function of architecture and landscape. Circumambulation around a landmark, stupa, or temple progresses towards the center, as if walking through a *mandala*. The more times the circumambulation is completed, the more purification is achieved. When people circumambulate around these structures, the *mandala* model is eventually completed. As a result, man's activity, including tourist participations, becomes an important component enhancing the spiritual atmosphere in the cultural landscape.

### Symbolism instills culture in built environment

Tibetan Buddhist landscapes are shaped by using a symbolic system at multiple levels, from static constructional design to dynamic ritual movements, and from the vastness of nature to the singularity of man. In this symbolic system the mandala model was utilized as a spiritual vehicle to ensure that the architecture reaches its original aim: the temple intended to be a place to translate, transmit, and transcend from the secular world to ultimate spiritual enlightenment. Architectural design and symbolism instill religious attributes in the landscape, and in turn, the landscape, serving as a matrix, imbues architecture with meanings of time and space. Insight into this integrative relationship between temple architecture and the cultural landscape would serve to protect the unique and sacred realm of Tibet, and enhance our understanding of the un-separated nature of architecture and landscape in general.

## Sustaining cultural heritage and tourism.

Being on the highest point of the earth, Tibet is called the third pole where the sun, moon and stars shine in the deep blue sky. The Buddhist temples scattered over the high plains are shrouded by incense smoke. Just as the smoke permeates the atmosphere, the worship of Buddha permeates the Tibetan world. Rising out of the Asian continent and surrounded by the Indian and Pacific Oceans, Tibet is the Mount Meru of the earth. Rooted in nature, growing in nature, and back to nature, the mandala model weaves nature, religious beliefs and human activities into a system — the mandala world. This system is so strong and remains so complete that every tourist automatically joins in it. When visitors circumambulate around temples and holy mountains, they became a part of the sacred landscape, in turn, their experience in Tibet will be never forgotten. This cultural model, rooted deeply in geographic and social conditions, has sustained cultural heritages and natural resources. As a result, this sacred place has been viewed as a dreamland for people to purify the mind, introspect and escape from the real world. Tibet, the highest spot on earth, is believed to be the closest realm to the heavens.

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