

**THE ARCHITECTURAL MANIFESTATION OF TIBETAN
BUDDHIST RELIGIOUS PRINCIPLES
A case study of the monastery complex at
Dharamshala, INDIA.**

by

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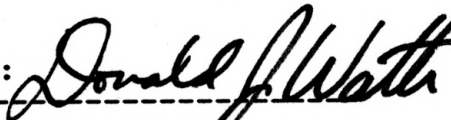
A THESIS

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There is no hierarchical order to the names to follow, each one has had a significant contribution towards the research of this thesis. I wish to thank the staff at the Departments of Architecture and Planning, Kansas State University, and University of Colorado at Denver, my Thesis committee members (Prof. Vladimir Krstic, Prof. Bernd Foerster and Prof. Donald Watts) Graduate committee members, friends and other individuals at Manhattan, Kansas, who participated in numerous discussions, and finally for the patience of the thesis committee.

This thesis is presented in the hope that perhaps those who read this will learn and understand a little more about Tibetan Buddhists, and their monasteries.

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Sanjeev Malhotra.

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Chapter 1: INTRODUCTION

As a child the author was fascinated with the Tibetan settlements around Simla, in the northern regions of India. It was not until the author began his graduate work in architecture at the University of Colorado at Denver in 1989, that the author formally started researching the development and later transformation of their architectural heritage. The following research is an attempt towards identifying certain principles that have governed the designs of monasteries in Tibet and continue to do so, although with a fine blend of local adaptations in northern India.

In the past, very little information has been shared by the Tibetan Buddhists regarding their culture and various aspects of living. This has resulted in a general lack of such information. During the past three decades various sociologists and anthropologists have written and made available information focusing on the social hierarchies and aspects of Tibetan Buddhism, but nothing has been written about the principles governing the design of the monasteries. The only sources of published information related to the built form of the Tibetan Buddhist monastery are two articles¹. Corlin describes the principle of

centrality, and describes a social order present within the Buddhist house, whereas O.C. Handa gives a diagrammatic plan of layout of a monastery complex and speaks about the spatial order of the monastery complex.

This research will deal with the study of Tibetan inspired built forms of the monastery and the chorten² in the northern Indian region of Himachal Pradesh. Tibetan Buddhism (or Lamaism³ as now defined by today's historians and anthropologists), is the religion primarily of the Tibetans, being an exponent of Buddhism which in the 7th century collaborated with a ritualistic form of worship (the BON religion) of the then Tibetan region. Lamaism can be traced into the following regions of South Central Asia:

1. Tibet and the western provinces of China.
2. Northern India covering the areas of Ladakh, and Himachal Pradesh.
3. Bhutan, the north eastern regions of India, and certain parts of Nepal.

The purposes of this thesis are two fold:

1. To identify the religious principles governing the spatial ordering and the social ordering in specific built forms of Tibetan monastery complexes at Dharamshala in northern India.

2. To trace the development of the physical built forms of the monastery complex at Dharamshala.

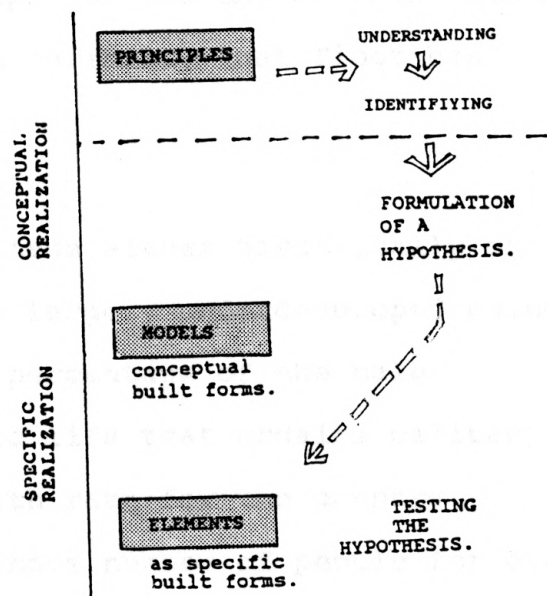
The process to be used is evolutionary in nature and starts with :

1. Understanding the religious principles associated with the built forms.

2. Identifying their conceptual realization in built forms as models.

3. Formulating a hypothesis linking the conceptual realizations to built forms.

4. Testing the hypothesis in specific built forms, the outcome of which will be the specific realization of the principles.



Before advancing further, a brief introduction of Tibet, Tibetans, their academic hierarchies, traditions and values underlying their monastic architecture will simplify the contents of this research.

A. Tibet:

No land captures man's imagination with its remote particularity and mystical aura more than Tibet. People have for centuries thought of Tibet as a land mysterious and remote, as a wilderness perpetually covered with ice and snow. There have been countless descriptions of Tibet, some genuine and others purely imaginary and the useful though by no means exhaustive bibliography at the end of this research will provide some idea of the curiosity that Tibet has aroused.

The Tibetans are not Chinese either historically or ethnologically. The region is largely underdeveloped owing to want of manpower. A large percentage of the male population takes to a monastic life that ordains celibacy and thus results in a low birth rate for the country. Practiced in Tibet by an enormous number of people for over a thousand years, with countless monasteries and a vast accumulation of sacred scriptures, Buddhism has penetrated into every aspect of Tibetan culture. Inspiring temples, and the relatively imposing scale of monasteries bear witness to the importance of this form of religious expression.

B. The Lamaist Hierarchies

Tibetans, not only humanize their gods but also deify human beings. For Tibetans, the world is full of visitors from other worlds and they do not find the possibility of daily contacts with incarnations of Buddhas and lesser deities as a strange phenomenon. They consider this world as merely one step up and down the ladder which all forms of mind-possessors from Buddhas to the dwellers in hell are voluntarily or involuntarily climbing. Thus Tibetans do worship equally gods who have come down to save men and men who are going up to the kingdom of the gods. Because of such beliefs, the Lamaist hierarchy consists of two branches that are convenient to call the hierarchy by birth and the hierarchy by acquirement.

As for the hierarchy by acquirement, when an average Lama⁴ Ge-Shi⁵ enters the esoteric academies, he is entering an unlimited term of apprenticeship with no prospect of a higher degree. Most Ge-shis, therefore, leave after a certain number of years to continue studies by themselves or to become respected members in some monastery. For the holders of the first class Ge-shis degree, however, there is the chance of promotion, in the order of seniority in enrollment, to the faculty of the academies. Whenever vacancies occur, the senior among the first-class Ge-shis

may be promoted. He may thus be promoted up to the position of principal of the monastery (Khen-Po). After he has served the full term as a Khen-Po he retires, and his name is included in a special list.

The Buddhist Outlook on Life and Salvation

In Tibet everything begins and ends with religion. A purer form of Buddhism may still be found in Tibet than anywhere else today. To Buddhists, and of course to Tibetans, Buddhism is not merely another of the world's many religions which seek to save mankind. Mankind is too limited a concept for Buddhists, who think in terms of a much broader kingdom of animate beings, stretching, so to speak, from an amoeba to Buddha. All beings within this domain are in possession of a mind, or soul. Buddhism is the law of salvation for each of these mind-possessors. The law is simply there: it can neither be made nor unmade even by Buddha. He only knows it. The most basic teaching of the Buddha is the "law of cause and effect". According to the Christian equivalent of this law, "Whatsoever a man soweth, thus shall he also reap". But Buddhism does not stop at that. It goes on to tell us that every being or every form of mental and physical activity represents the total effect of countless causes in the past, and is itself the cause of

an unlimited number of future effects. Every cause is an effect and every effect is a cause, in an endless chain.

According to Buddhist belief, all trouble arises from our lack of foresight. It is our folly that gives birth to our avarice, hate, and ignorance, the three propelling forces that cause us to go on and on in the current of transmigration⁶. In order to remove our folly, Buddhism expounds the three truths (Nirvana); of non-permanency (Anityata), non-existence of ego (Anatmata), and the perfect peace (Shanti). A Buddhist looks on everything in the cosmos (both physical beings and actions) as in a state of perpetual flux, hurrying through ceaseless and countless changes, that may be summarized as birth and death or beginning and end. Neither a man nor an amoeba, a house, a government, a social movement, a sea, nor a mountain can escape this process. Now to be permanent, according to Buddhist definition, is to be both perpetual and unchangeable, without beginning or end. Since nothing is like that, everything is impermanent.

Then to say that a given thing exists is to affirm that the thing has an ego (Sanskrit = Atman), that is to say, a thing that possesses certain distinct and unchangeable attributes and is capable of coming into being by itself

without relying on other factors. Evidently such a thing is non-existent. Everything is constituted of something else; hence there is no ego. What we take for the ego of a thing is but a void into which extraneous factors stream to make something. It is the aim of Buddhism to deliver all mind-possessors, including mankind, from misery of transmigration by showing us that nothing is permanent, and nothing really exists as such. Only when we have come to see this shall we have plucked out avarice, hatred and ignorance, the propelling forces that drive us on in eternal transmigrations, and only then shall we attain the perfect peace and bliss of Nirvana.

Buddha and his disciples have laid down a full course of the science for gaining Nirvana. For the Mahayanists⁷, however, two choices are open. One is Sutra, the exoteric course, which is shared by the Hinayanists; and the other Tantra, the esoteric course, which is reserved for "the proper vessels of law" among the Mahayanists. Both courses are contained in the "Tripitaka". These three collections of Buddhist Scriptures are, first, Buddha's own utterances revealing the truth; second, Buddhist disciplinary rules laid down by Buddha and his disciples; and third, commentaries and expositions on both by his important followers. In Tibet, the Tripitaka is classified into only

two collections, the words of Buddha and the words of others.

As Tibetans are Mahayanists, they seem to show more enthusiasm for the esoteric than for the exoteric course. Regarding the relative merits of the two courses, one tradition relates that a practical-minded disciple of Buddha once asked him how long it would take to attain Buddhahood through the exoteric course and how long through the esoteric. The reply was for the exoteric a figure for which we can yet find no approximate expression; it is said to be the fifty-ninth power of 10. He said that by the esoteric course, however one could achieve Buddhahood in one lifetime.⁸

Lamaism cannot therefore be seen as a single religious current: it is divided into many sects, although they are all set out from the same premises and have sprung from the same concern with salvation. Although the Tibetans recognize the plurality of schools, they rightly insist on the fundamental unity of inspiration and aims: different methods are used to reach the same end-salvation by rebirth in some paradise, or final escape from rebirth with the attainment of Nirvana.⁹

C. The Institution of the Dalai Lama

The Dalai Lama is regarded by the Tibetans as a Bodhisatwa, ie one who has attained the right to Nirvana, but consents to be reborn for the spiritual benefit of his fellow creatures.¹⁰ The Dalai Lama is the spiritual and the political leader of the Tibetans.

Regarding his spiritual supremacy, the Dalai Lama is discovered (due to the fact that the Dalai Lama is a reincarnated soul) by the council of monks, rather than elected by the people. A council of twenty learned Lamas undertake the education of the Dalai Lama, until he is enthroned at the age of eighteen, whereupon the Dalai Lama assumes the sole responsibility befitting a spiritual and political guide.

A council of ministers and an assembly assist the Dalai Lama in exercising his functions. The council is the executive power whereas the assembly is mainly a consultative body. As to the religious hierarchies of the Tibetan Buddhists, there are primarily six sects, all of whom respect the institution of the Dalai Lama.

D. Monasteries

An easy introduction to the lamaseries and lama communities of contemporary Tibet is by comparing the three leading lamaseries of Dre-Pung, Se-Ra, and Gan-Dan with the Western institutions of learning. The basis of each of these lamaseries is a three layer organization of the university board (La-Chi), the college (Dra-Tshang), and the boarding quarters (Kham-tshen). The college or the (Dra-Tshang) forms the backbone of the institution, It forms a compact, self-contained administrative unit, financially and academically. Besides keeping its own property, real estate, and revenues, a Dra-Tshang retains a high degree of autonomy in its curriculum, textbooks, and rule of discipline. Both of the esoteric academics, (Gyu-me and Gyu-to),¹¹ are independent colleges.

Forming the center of all activities in a college is the prayer hall, which is also the location of an administrative committee under the chairmanship of a Khen-Po, who in our analogy is the college president. A Khen-Po is elected from among the graduates with the Ge-Shi degree of the college concerned and is then chosen by the Dalai Lama or the regent from several such candidates, for a term of six to seven years. He then appoints committee members to assist him in the internal administration. In a lamasery

the teaching staff, as such, does not exist. Aside from certain hints the Khen-Po gives during the class hour, a lama student is left to himself to find a tutor or any number of tutors he can afford. Study is not obligatory. There is even a name for those who study, "the Book Man" (Bai-Ch'a-Wa) as distinct from the ordinary monks, who constitute perhaps three-fourths of the total congregation. To such student lamas the Khen-Po gives his regular lessons in sort of a garden, often under a small grove of trees. This open-air classroom is the center for group studies. Besides the Khen-Po's short lecture, the students practice their theological debates here with much noise and dramatic display.

E. Enrollment in a Monastery

Monks of all description flock to the lamaseries, some for education, some for social standing, some for vocational training, and some because they have nowhere else to go. A lamasery is a society in itself, that permits all individual pursuits, provided that certain basic concepts of Buddhism are not transgressed. Each is a humming, growing town with a mass of many-storied buildings and a maze of narrow lanes.

Theoretically, the door of a lamasery is open to all. No age limit and no academic qualifications are set for

admittance. Candidates from the age of five or six to fifty or sixty, scholars and illiterates, are all admitted on an equal footing, at least in theory. As a member of the lamasery, a lama not only pays nothing to the lamasery but is entitled to a share of the allowance, in kind and in cash, from the three levels of the lamasery. In return, he owes to all of the three levels a service called "Khrai" (conscript labour or service). It summarizes all the obligations a Tibetan owes to his superior, whether that superior is a person or a legal body. A lama's khari to a lamasery may be serving tea to the congregation in assembly time, doing manual labour, or serving in unrenumerative posts on various committees. To get exemption from khrai one must subscribe to a privileged status. To an incarnation lama, that is, a lama who is supposed to be the incarnation of a god in this world, such a status is an obvious necessity. In fact nobody can become an incarnation lama until, by a prescribed process, he gains recognition by the congregation. The process consists first of a formal application to the Dalai Lama. The secretariat of the Dalai Lama keeps a list of such incarnation lamas and grants to each the rank which belongs to him. Generally speaking, there are two chief ranks, namely Tsho-Chen incarnations and Dra-Tshang incarnations. Once the application is approved, the incarnate must be host once to the congregation of the

whole lamasery or Dra-Tshang, according to his rank, serving tea and cooked rice to all, besides giving alms or making donations. The occasion also is celebrated with gift giving and feasting. After that, the incarnation lama is immediately promoted to a seat of honour in keeping with his rank in the great assembly hall, as well as in the halls of his Dra-Tshang and Kham-Tshen. Then he is officially recognized as an incarnation lama. To gain official recognition in one of the triumvirate of Drepung, Se-Ra, and Gan-Dan is to gain official recognition all over Tibet. This is the first aim of an incarnation lama, the exemption from Kharai being a matter of course. Once recognized as an incarnation, he will be respected and honoured in strict accordance with his rank wherever he goes. All the greatest incarnation lamas of the Ge-Lu-Pa sect, including those qualified to be the Dalai Lama's regent, belong to the rank of Tsho-Chen.

However everyone cannot be an incarnation. Therefore, by a somewhat similar process, any ordinary monk with enough resources may apply for another privileged status called Ch'on-Dse. The holder of a privileged status is entitled to various advantages, one of which is the shortening of the academic term by four or five years. Thus, even financially speaking this status pays. The reason given for granting

such an advantage is that, since a privileged monk is exempted from all services and has more time to devote to his studies, he should be allowed to complete his courses earlier.

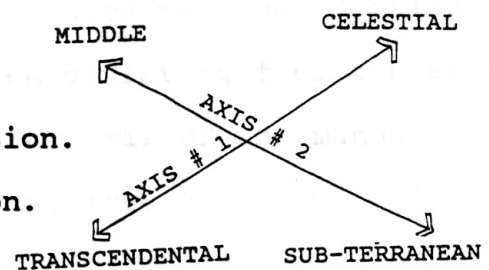
Chapter 2:RELIGIOUS PRINCIPLES OF MONASTERY DESIGN

This chapter deals with the religious significance of monastery buildings and to some extent their physical representation. The religious thoughts or the philosophical meanings are so finely interwoven with their physical representation, that it becomes quite difficult to categorically differentiate them, in fact it would be quite demeaning if these are isolated and listed in some order. The general thought behind this research is not to use quantative methods of analysis, comparing the translation of religious thoughts to built form as seen at monastery complexes. Rather, this thesis explores specific elements at monasteries and seek's to identify their correlation with the religious thoughts and functional aspects of different activities within the monasteries. It is not possible to always find a direct correlation among the religious thoughts and their physical interpretations being studied in this research. However a study of the "Models" as conceptual realizations of principles and "Elements" as specific realizations of principles, explore the spatial and social dimensions of a monastery.

A. Primary Principle: Centrality

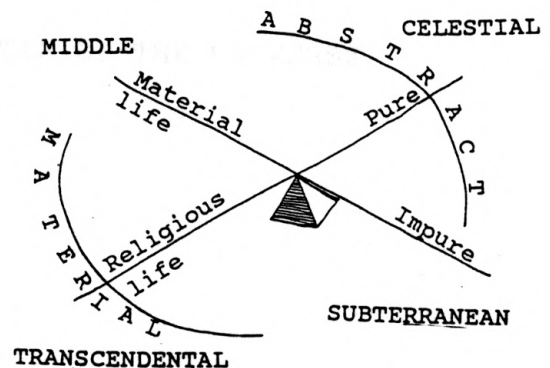
Conceptually the center is an area where all the vectors constituting a visual pattern are in equilibrium. According to the Buddhists the world is conceived to have four dimensions which are structured as two oppositional pairs of two axes¹². The meeting point of these axes is of religious significance as being the center of the physical world. The four dimensions are abstractions supporting the physical entities of the world. The four dimensions of the world are:

1. The Celestial world dimension .
2. The Middle world dimension.
3. The Transcendental world dimension.
4. The Subterranean world dimension.

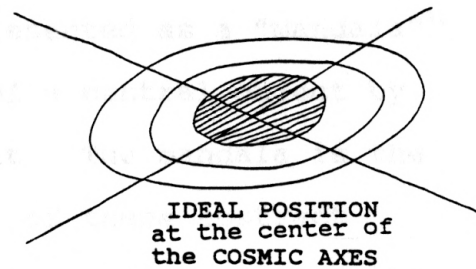


a. The Center of the World Axes

These four dimensions are connected to each other by means of two world axes. The celestial and the transcendental dimensions form one axis representing the purity of life and the other two form the other axis, which represents the impurities of



life. The center of these axes represents the ideal position of a living being which lies balanced at the center of the world axes.



b. Mandala as a Cosmogram

In Buddhist belief the physical universe is conceived as a series of concentric circle of mountains which divide it from the non-material world and beyond. In the center is placed the main deity which is encircled by minor deities according to an order of precedence differing from one sect of Buddhism to another. The central axis of the mandala coincides with the zenith of the universe.¹³

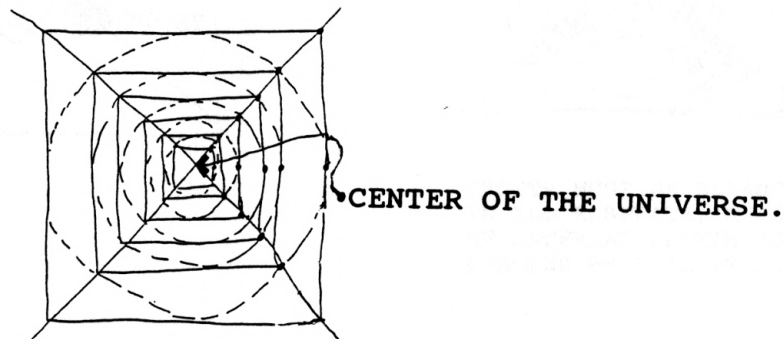
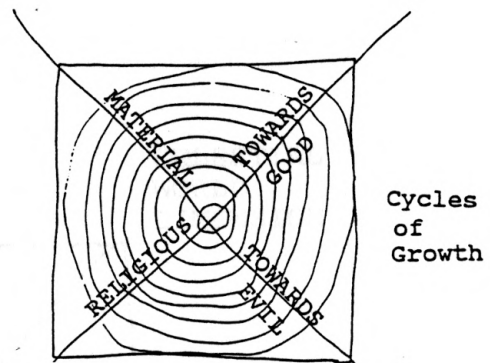
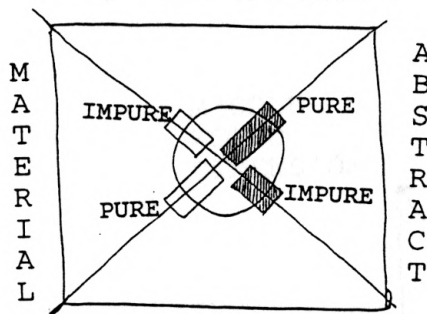


Fig 1: Mandala

The four world dimensions, the axes connecting them and the center of the world are represented as a "mandala"¹⁴ that captures the significance of a central object by grouping other objects around it. The mandala is the foremost physical representation of these abstract principles. The physical parameters of almost all the activities whether related to a building or a ritual or a religious dance or any social activity are determined by the abstraction of a mandala. To the Buddhists, the mandala determines the physical representation of the critical balance between the good and the evil and a balance between the pure and impure.



GROWTH MUST BE BALANCED
IN ALL RESPECTS, EXCESS
OF MATERIAL GROWTH IS
CHECKED BY EVIL INCLINATIONS.

B. "Symbolism of Centrality in the House/ Monastery"¹⁵

The foremost principle guiding layouts of monasteries is the existence of parallels between the house and

monastery, which are conceived not only as built forms, but also as symbolic systems, specifically a microcosm. There exists a correlation between their spatial organization and ritualistic use.

The house and the monastery both relate to four symbolic dimensions (see figure 2), which are based around the center of the world axes. The four dimensions constitute the mandala and the center of the axis from the four dimensions represents the position for a pillar. As such there are two main components associated with this symbolism:

A. The Pillar

B. The Mandala

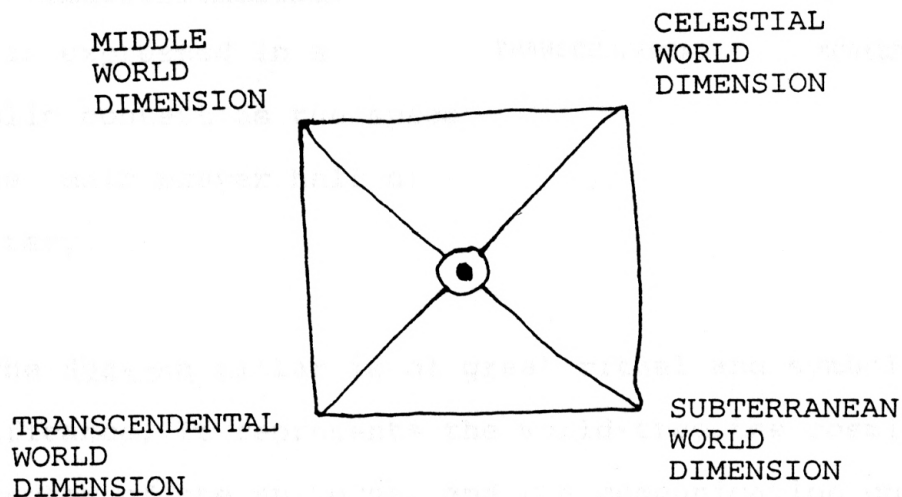
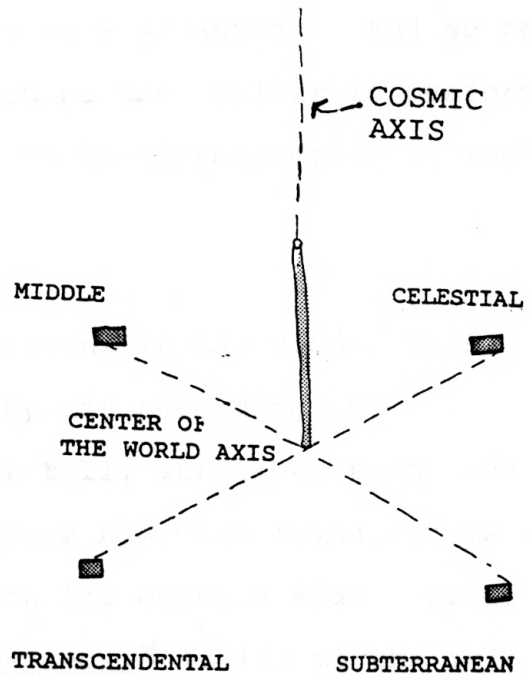


Fig 2: The Four Symbolic Dimensions

i. The Pillar

The house is primarily a single room structure, with various divisions for different activities, whereas in a monastery there are separate structures or separate areas serving purposes for different activities. The most conspicuous feature of the room of the house is a central pillar, (called Sbas-ka). The same is expressed in a symbolic context as the space of the main prayer hall of a monastery.



The Sbas-ka pillar is of great ritual and symbolic significance. It represents the world-tree, the cosmic axis, the center of the universe, and the communication channel between the middle world of men, the upper world of gods and beings, and the subterranean world of the serpent.

spirits¹⁶. The strong basis for centrality in the house and the monastery can be seen from the following ritual that governs the construction of a house or the monastery. The pillar plays a dominant part in the ceremonies performed to increase the luck and prosperity of the residents, in a house or the community, in case of a monastery. And so the choice, making, and inauguration of the pillar is performed with elaborate ritual, similar to the construction of Ise¹⁷ shrines in Japan.

First a suitable tree is sought in the woods. This search should be made on a lucky day according to divination. The tree should be tall, straight, round and without defects. When such a tree has been found, it is marked by a stroke of the axe on its eastern side. Prior to felling, a ceremonial fire (b-Sangs)¹⁸ is lit to the Yul-lha, or god of the locality. When the tree is ready to be transported, the neighbors of the family (as would be the case for construction of a house), or the lamas of a neighboring commune come to assist. Two strong crossbreeds (Mdzo)¹⁹ are especially selected for the task of transporting the tree to the building site: scarves (Kha-btags)²⁰ are wrapped around the horns of the beasts and are also worn by the men. Another ceremonial fire is lit as the beasts start to pull and when they approach the building

site, a third fire is lit. The crossbreeds are fed with wheat, the ceremonial food, and are then led to the best pastures. The workers are invited to a feast and receive food gifts for their assistance.

As the ground floor of the house or the prayer hall in a monastery is finished, the pillar is erected in the middle of the central room on the first floor. This event is accompanied by another ceremonial fire and a feast for the workers. When the house or the monastery is finished a great feast is sponsored by the family or the lamas who will move in on an auspicious date. After this feast, a ritual expert (Tshangs-pa) is invited to perform the following gyang-len ritual. A length of silk is wrapped around the pillar and close to its top, a Mdos thread-cross and several triangular paper flags are attached to a multi-coloured bamboo ribbon tied around the pillar. The gyang-len ritual is performed not only in connection with the building of a house or a monastery but also once a year to renew the luck and prosperity of their house or the monastery and its inhabitants.

ii. The Mandala

The mandala forms the basis of spatial and social order in the case of a house and a monastery. The cosmologically important points of a room space are arranged symmetrically

in the shape of a simple mandala. In the center of the square space is the pillar, representing the center of the world. From this focal point beams lead to the four corners of the room with each corner having its special ritual function.

There exists the following two kinds of mandalas related to the symbolism of centrality in the house and the monastery:

1. Spatial Mandala.
2. Social Mandala.

The spatial mandala governs the symbolic spatial ordering of the principal room of a house or the prayer hall of a monastery and the social mandala governs the symbolic social ordering within the principal room of a house or the prayer hall of the monastery.

C. The Spatial Mandala.

There exists a parallel between the symbolism of spatial ordering of the principal room in a house and that of a prayer hall in case of a monastery. This can be seen from the following descriptions of the spatial divisions of the principle room in the house and the principal room in the monastery.

i. The Principal Room of the House

The principal room of the house has the following two components:

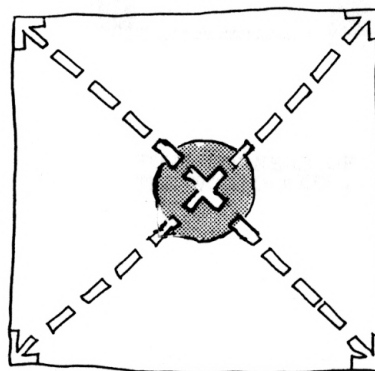
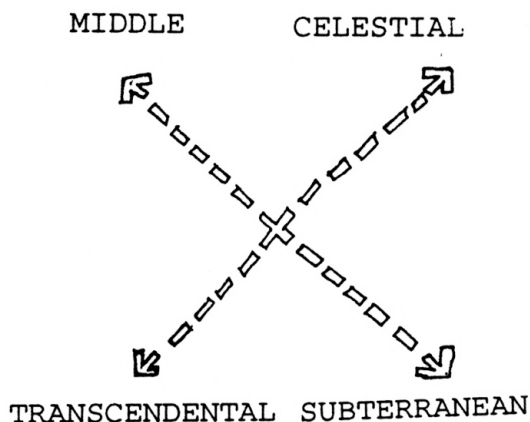
1. The four corners.
2. The Center.

The Four Corners

The four corners of the principal room of house represent the four dimensions of the world mainly the celestial, middle, transcendental and the subterranean. The celestial world dimension is connected to the transcendental world dimension through an axis. The middle and the subterranean dimensions form the other axis.

The Center

The intersection of the above two axes determines the centrality of the principal



room of the house, which indicates the position of the central pillar.

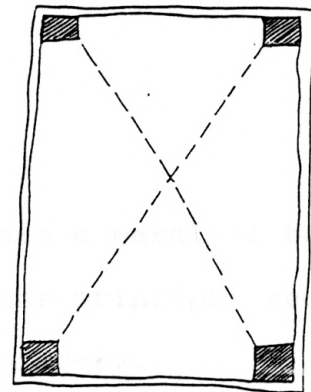
ii. The Principal Room of a One Room Monastery.

The principal room of a monastery is the main prayer hall which has the following two components of spatial ordering:

1. The Four corners.
2. The Center.

The Four Corners

The four corners of the prayer hall represent the four dimensions of the world mainly the celestial, middle, transcendental and the subterranean. The celestial world dimension is connected to the transcendental dimension, the middle and the

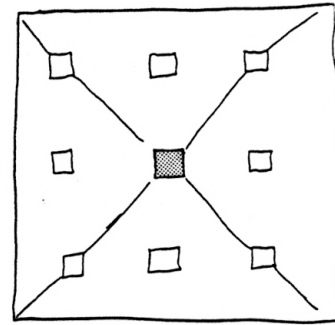


FOUR CORNERS OF
THE WORLD AXES.

subterranean dimension form
the other axis.

The Center

The intersection of the above two axes determines the centrality of the principal room (prayer hall) of the monastery, determining the position of the central pillar²¹, or symbolic representation of the center of world axes.



THE CENTRAL PILLAR

D. The Social Mandala

The social mandala also establishes a parallel between the symbolism of social ordering in the principal room of a house and the principal room of a monastery.

i. The Principal Room of the House.

The principal room of the house has the following three components: (see figure 3)

1. The social identity and social position of the participants.
2. The hearth.
3. Participants spatial location within the room.

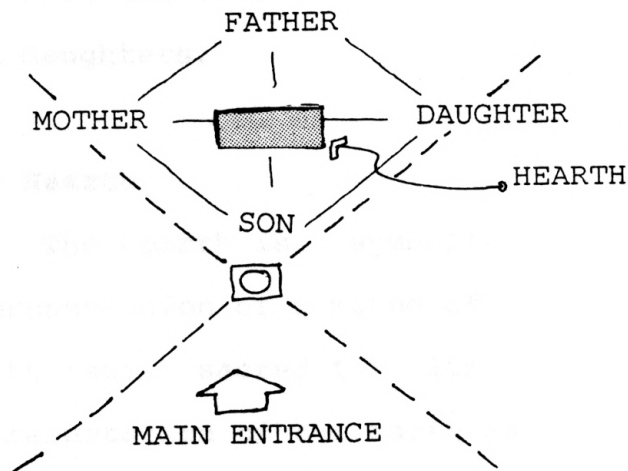
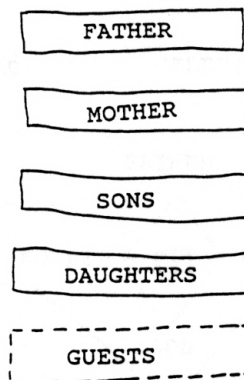


Fig 3: The social mandala in a house

The Participants

The participants in the social mandala are the members of the house consisting of the father (as a source of knowledge), the mother (as a donor of life and also as a contributor of knowledge), the sons and the daughters (as recipients of knowledge), and in some cases the participation of a guest



combines the role of the sons
and daughters.

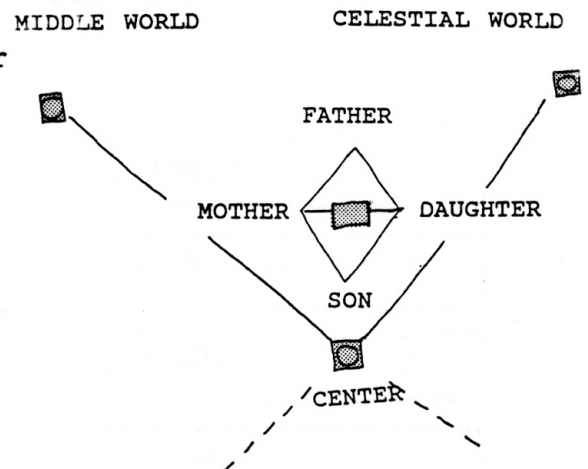
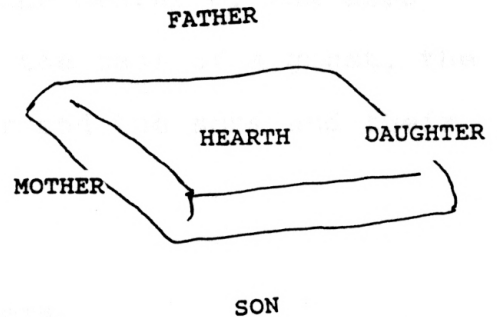
The Hearth

The hearth is a symbolic
representation of a mound of
earth (soil) sacred for its
representation of the earth as
the symbolic matrix for the
origin of life and subsequent
support of the same. The
representation of the hearth
can be in the form of a low
table, or in certain
households, a mound of clay.

The hearth acts as a focus for
directing all conversations
and a means of achieving order
in dialogues.

The Spatial Location of the Participants.

The participants gather
around the hearth which is



located in the triangle formed by the celestial world, the middle world and the center of world axes. Around the hearth the father sits in between the middle and celestial world; the sons are opposite him (closer to the center of the world axes); the mother is to the father's right (in between the middle world axes and the center of the axes) and the daughters opposite her. In the case of a guest, the daughters sit in between the mother and the sons and their space is occupied by the guest.

ii. The Principal Room of a Monastery

The principal room of the prayer hall has the following three components (see fig 4)

1. The social identity and social position of the participants.
2. The hearth.
3. Participant's spatial location within the room.

The Participants

The participants in the social organization of the monastery are the Abbot (as a source of knowledge), the "Guest of Honour" (as a contributor of knowledge),

ABBOT

GUEST OF HONOUR

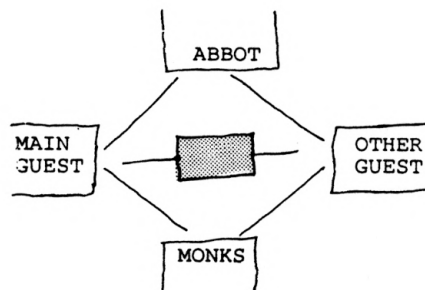
MONKS

GUESTS

monks and other guests (as recipients of the knowledge).

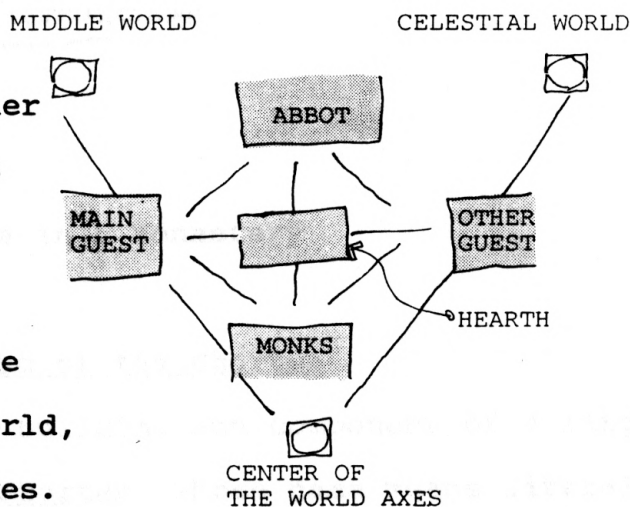
The Hearth

The hearth does not undergo any changes in a one room monastery from that of a house and its representation varies from a low table to a mound of clay.



The Spatial Location.

The participants gather around the hearth which is located in the triangle formed by the celestial dimension of the world, the middle dimension of the world, and the center of world axes.



Around the hearth, the abbot sits in between the middle and celestial world; the monks opposite him (closer to the center of the world axes); the guest of honour to the abbot's right (in between the middle world axes and the

center of the axes); and other guests opposite to the main guest of honour.

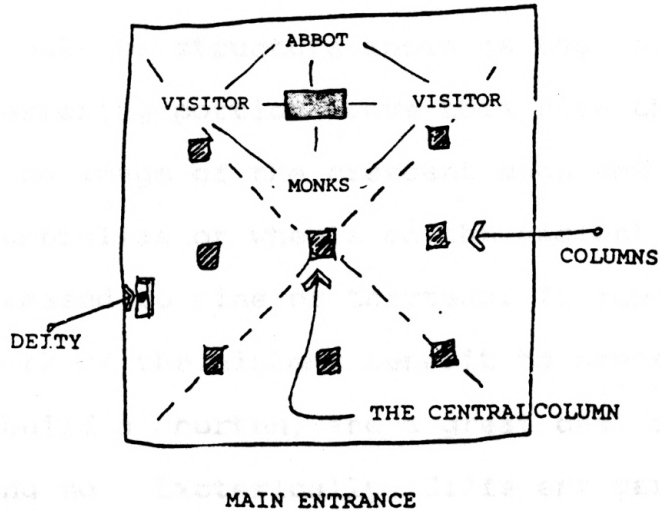


Fig: 4 The Social Mandala in a Monastery

E. Symbolic Formal Ordering of the Chorten

An important type of building and component of a large monastery complex is the Chorten, whose name means literally "receptacle of worship". The original function of these buildings, which were to contain the relics of the Buddha or the great teachers, was combined with a ritual significance, and these became linked, in the course of time, with a symbolism making the monument a means of salvation.

Principles

Certain architectural features apply to chortens in general. Chortens rest upon steps leading up to a square-shaped base, technically known as the "throne", above which are four more steps of decreasing breadth. These support the bulbous structure known as the "pot", and from an intervening portion above this rise the "Wheels" culminating in the image of the crescent moon and sun. The small number of umbrellas or wheels on the ancient prototype has increased to nine or thirteen. It rapidly became, in Tibet, a work of the highest benefit to one's spiritual well being to build a chorten, and a great deal of money was spent on doing so. Exoterically, different parts of a chorten collectively represent a combination of the worlds five elements. The square base represents the element of Earth; the stylized dome represents the element of Water; the tapering shaft represent the element of Fire: the crescent symbolizing the element of Air and the acuminate circle representing the element of Ether (see figure 5). The distribution of these elements in a chorten should conform to the canons of perfect proportion as prescribed under the Nav-tal system for a perfect human body so that there is no essential difference between a perfect representation of the Buddha's body and the structural form of a chorten as shown in figure 6. The chortens are believed to possess mystic

protective qualities which can keep the evil spirits at bay, and as such they generally mark the boundaries of monasteries representing the four worldly dimensions.

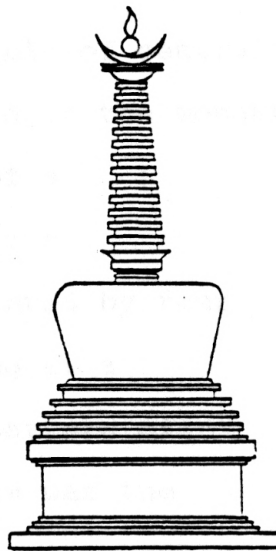


Fig 5. A Typical Chorten. (source: O.C. Handa,1987)

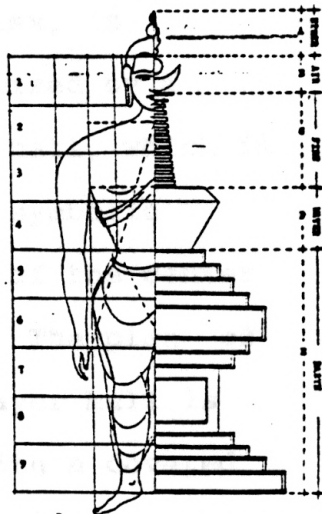
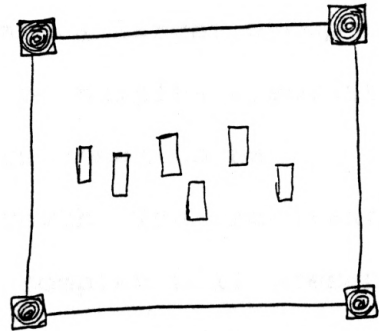


Fig 6. Canons of Chorten Design. (source:O.C.Handa 1987¹⁸)

F. Principles underlying the Chortens and the Monastery Complex

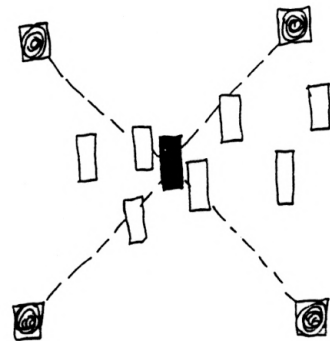
Monastery complexes are groupings of more than one kind of built forms, placed in adherence to a spatial mandala. The primary principle of centrality is reflected by the spatial order noted in the monastery complex.

The four corners of a monastery complex are physically represented by four chortens, repeating at a larger scale the pattern of the four corners as was the case in a one room monastery.



CHORTENS REPRESENTING
THE FOUR WORLD
DIMENSIONS

The centrality of the monastery complex, is physically realized by a central prayer hall, which is located at the symbolic representation of the center of world axes. The plan of the central prayer hall is rectangular, with a covered verandah in front. The main entrance of those temples and



THE MAIN PRAYER HALL

halls is generally towards the east as in the ancient Indian tradition²². At places, where the local geophysical conditions do not permit such a layout, deviations from this rule are made.

There exists a change in the scale of the physical parameters from a monastery to a monastery complex with the addition of chortens and other prayer halls. This change of scale is primarily to accommodate a larger group of monks and students, and as such the principles associated with their physical and social orders need to be reconceptualized to accommodate growth. The realization of these principles in a monastery complex will present the basis for formulation of a hypothesis, that will occur in chapter 4.

CHAPTER 3: MODELS OF MONASTIC SPATIAL AND SOCIAL ORDER.

A. Models as intermediate grounds of translations between abstract principles and specific applications.

In the previous chapter there were numerous aspects of Tibetan Buddhist philosophy which were discussed and illustrated in the context of principles of monastery design. Significant among those were the spatial mandala and the social mandala. This chapter will examine the conceptual realization of these principles, as "models", related to the spatial and the social mandala. The information about the "Spatial Organization" is interpreted from the monastery at Tabo (fig 7) in the northern Indian region of Himachal Pradesh. This utilizes the only known source of published information reflecting the principles of "centrality" as realized thru a mandala.

The information about the "Social Organization" is interpreted from the Potala Palace at Lhasa, Tibet, which is one of the few monastery complexes with published information about their social order.

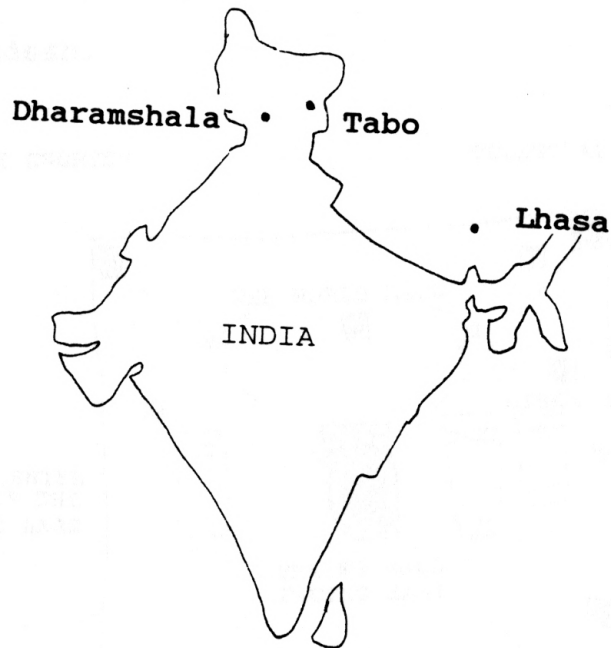


Fig 7: Map of Western Himalayan Region

B. Symbolic Spatial Ordering of the Monastery Complex at Tabo.

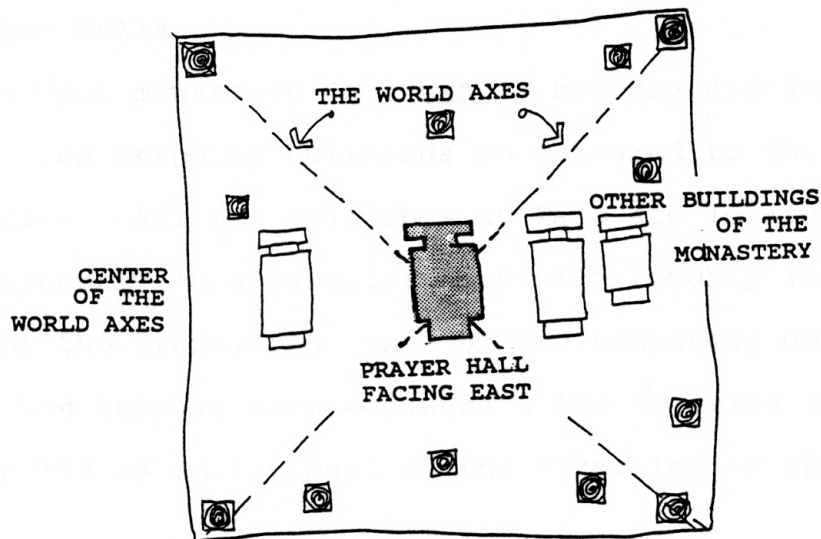
i. Location of Tabo.

Tabo is the name of the place, in the northern Indian region of Himachal Pradesh where the monastery complex is situated. The monastery complex at Tabo was one of the larger monastery complexes founded mainly for philosophical pursuits and religious studies. Such monasteries are identified as Chos-hkhor which means a "Doctrinal Enclave"²³ The monastery at Tabo (see figure 8) is the

largest monastery complex in the northern Indian region of Himachal Pradesh.

MIDDLE CHORTEN

CELESTIAL CHORTEN



TRANSCENDENTAL CHORTEN

SUBTERRANEAN CHORTEN

Fig 8: The Monastery Complex at Tabo.

ii. Significant components of the monastery complex.

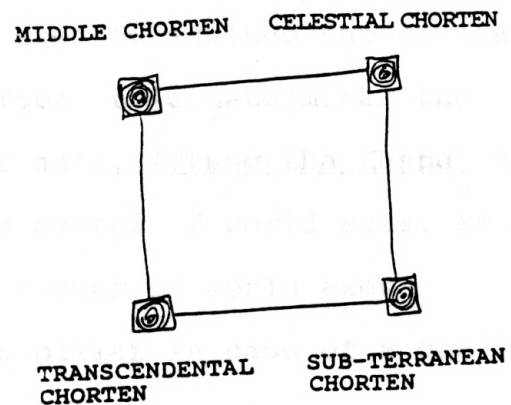
The monastery complex at Tabo consists of the following buildings:

1. The Chortens.

2. The Prayer Halls.

Chortens at The Four Corners

The four corners of the monastery complex at Tabo



contain four chortens which, the author would assume represent the four dimensions of the world mainly the celestial, middle, transcendental and the subterranean.

The Prayer Halls

The Tabo monastery Chos-hkhor, has the distinction of having free standing buildings as compared to the later monasteries. All the buildings at Tabo are located in a linear symmetry in a parallel formation roughly in the center of the transverse axis of the monastery enclosure. Most of the temples face eastward²⁴. The entrance of these prayer halls is on the east or the direction of the morning sun.

iii. The Spatial Ordering Strategy

The relative scale of a mandala increases as the monastery becomes a monastery complex. At Tabo the chortens represent the four dimensions of the world, which are interconnected to each other by means of axes. The intersection of the above two axes determines the centrality of the monastery complex at Tabo, this determines the position of the central prayer hall, (Gtsug Lha Khang) or symbolic representation of the center of world axes. As per the religious principles, the center of world axes determines the position of the pillar in case of a one room

monastery and a prayer hall in case of a monastery complex. The Buddhist principle of centrality is represented in this model of a monastery complex whereby a central prayer hall lies at the intersection of the two world axes.

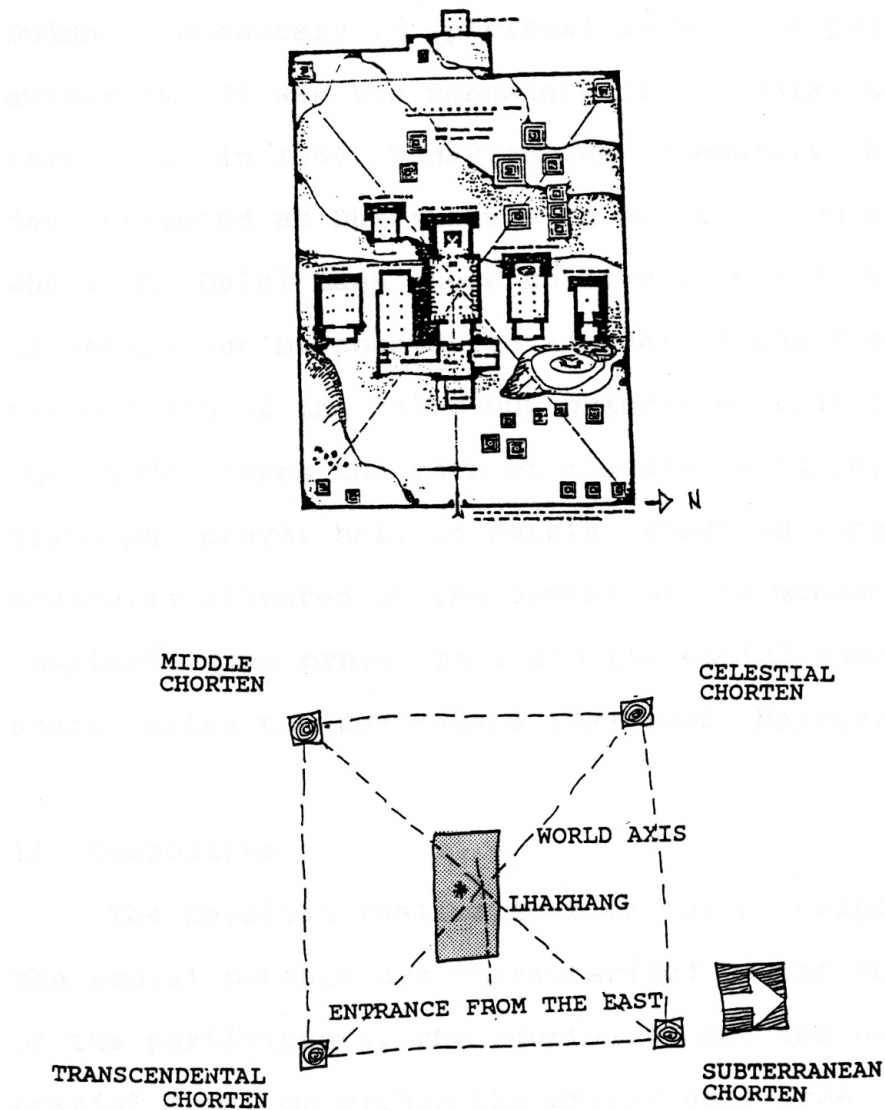


Fig 9: The Spatial Ordering Strategy at Tabo.

C. The Symbolic Social Ordering of the Principal Prayer Hall at Potala Palace, Lhasa, Tibet.

i. Location of the Potala Palace

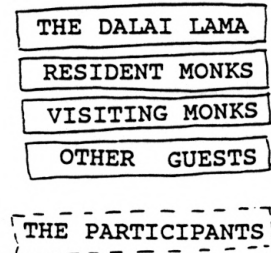
The Potala Palace is the highest order of a Tibetan Buddhist monastery in spiritual as well as political authority. It was the monastery of the Dalai Lama until he left Tibet in 1959. Today another monastery has been reconstructed at Dharamshala in northern India, which is where the Dalai Lama chose to live in exile. The prayer hall of Potala can be considered a model of the formal translation of the religious principles that governs it. This model takes the form of a social mandala. The principal prayer hall in Potala, known as (Dev Nagara Square) is situated at the center of the monastery complex²⁵. The prayer hall and the social mandala define a space called the Dev nagara (Dev= God; Nagra=Town) square.

ii. Components

The physical realizations of the principles governing the social mandala are characterized by the social identity of the participants, the courtyard, and the participants spatial location within the prayer hall area.

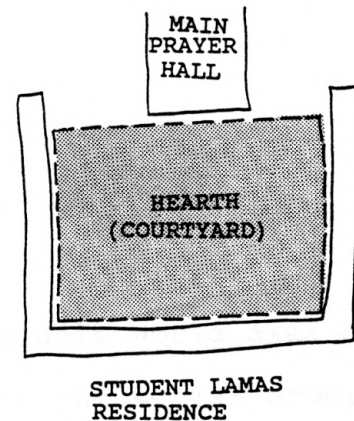
a. The Participants

The participant's in the social mandala are the members of the monastery consisting of the Dalai Lama who sits in the prayer hall, resident monks in their enclosed space, visiting monks and other visitors in their enclosure. The scale of the social mandala here is realized at a larger scale which accounts for separate buildings.



b. The Central Courtyard

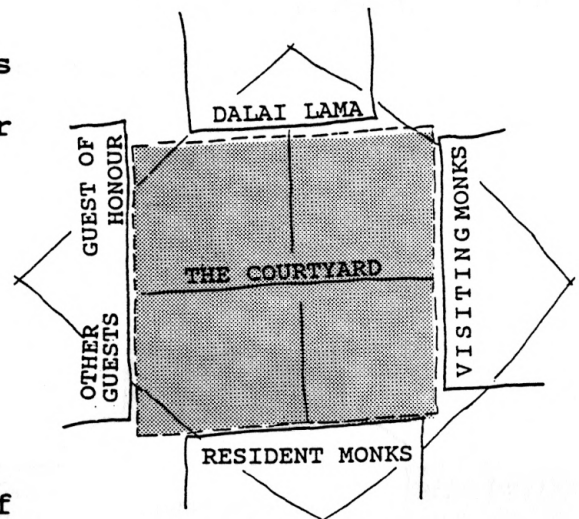
The central courtyard is the symbolic representation of the hearth. The courtyard lies in front of the prayer hall, and is enclosed on the either sides by the monk's and the visitors area. It acts as a focus and center for directing all conversations and a means of achieving order in



dialogues and discourses by the Dalai Lama. The observation here is that despite change of scale the realization of the principle is maintained.

iii. The Spatial Location.

The participants gather around the courtyard, which is fronted by the Devnagra prayer hall on one side. This is where the Dalai Lama sits during social gatherings. Opposite to him is the enclosure for the resident monks (closer to the center of the world axes as indicated in the principle governing the social order). On his right side is the enclosure for "Guest of Honour" (between the middle world axes and the center of the axes in accordance with the social ordering principle) and on his left is the enclosure for visiting monks.



iv. Relationship between the Social Order at Potala and the Social Order from the Principles.

The relative scale of the social mandala increases here, this being the part of a monastery complex rather than a one room monastery (see fig 10). Significant translations are observed in the case of the hearth which changes from a mound of earth to a court yard. The spaces for the head and other participants also become separate buildings, however their orientations remain the same in accordance with the social mandala of a single room monastery.

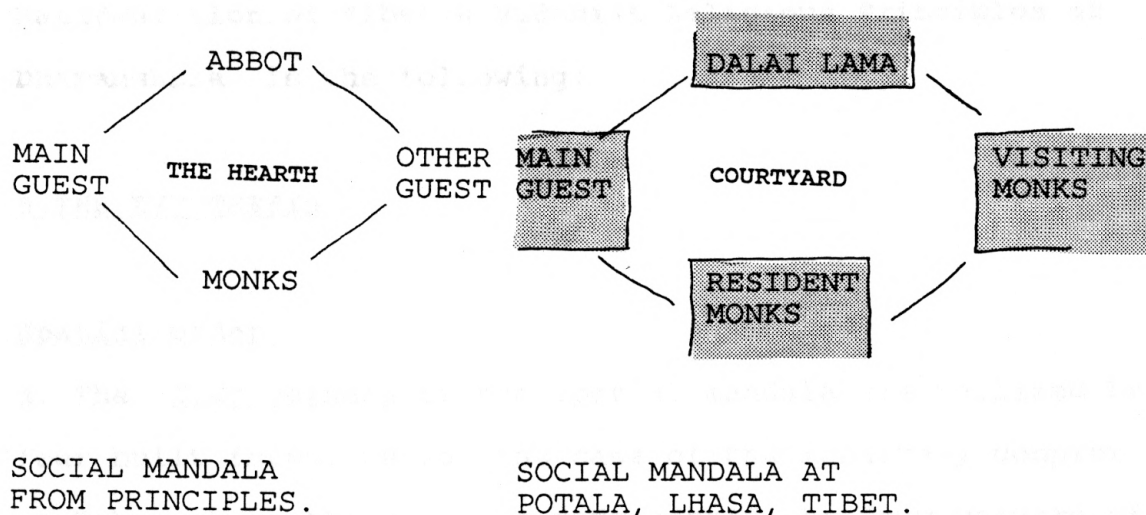


Figure 10: Social Order at Potala and the Principles.

Chapter 4: Elements of the Monastic Built Forms at Dharamshala.

A."Elements" as Specific Realizations of the Religious Principles

This chapter deals with those elements of built form which are the most specific realizations of abstract religious principles. The focus is on the monastery complex at Dharamshala which is one of the most recently built monasteries in the last three decades. The ideas from the previous chapter which relate to the formal translation of principles into models now proceeds to formulating a hypothesis. The author's hypothesis concerning the **Manifestation of Tibetan Buddhist Religious Principles at Dharamshala** is the following:

B.THE HYPOTHESIS

Spatial Order:

a. The **four corners** of the spatial mandala are realized by four built forms, as was the case of the monastery complex at Tabo, where the chortens represented the four corners of the spatial mandala.

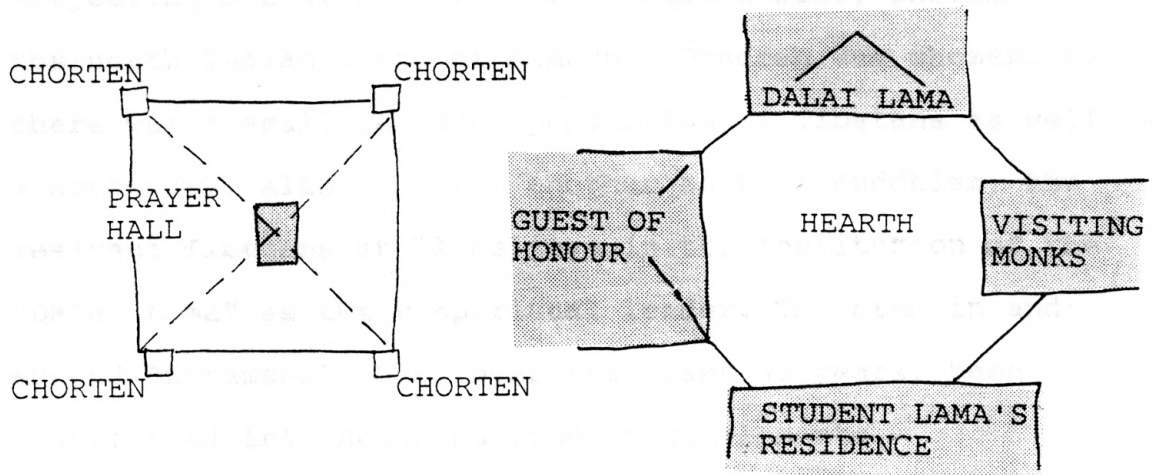
b. The center of the world axes marks the location of a central prayer hall in the geometric center of the spatial mandala.

Social Order:

a. The participants are expected to be similar to those at Potala since the monastery complex at Dharamshala is in principle built as a functional replica of the monastery complex at the Potala in Lhasa, and, as such, the participants should be the Dalai Lama as the abbot, student monks, visiting student monks and other guest monks.

b. The hearth is realized as a courtyard as was the case of the social ordering at the Potala, that physically represents the symbolic hearth as a mound of clay (as in the principles).

c. The spatial location of the participants of the social mandala would be expected to lie in the triangle formed by the center of the axis, middle dimension of the world and the celestial dimension of the world. The Dalai Lama, or his representative, would be across the center of the world axes, with student monks sitting close to the world axes. To the right of the Dalai Lama would be the visiting monks, (facing whom would be other guests).



SPATIAL ORDER HYPOTHESIS

SOCIAL ORDER HYPOTHESIS

C.i. Dharamshala

Dharamshala, a popular north Indian hill station, has come into prominence after settlements were made to house the Dalai Lama and other Tibetans who chose to come and stay in India since 1959. A majority of the Tibetan population came from regions around Lhasa, which was the capital of Tibet prior to 195. At that time, the Chinese annexed Tibet as their north west province, and the Tibetan population was forced to take asylum in neighbouring India.

At first the Dalai Lama was given a choice of settling in the eastern Indian city of Darjeeling. But for Darjeeling's proximity to the Chinese border, Dharamshala in the north Indian state of Himachal Pradesh was chosen. Here there was a small resident population of Tibetans as well as a monastery. Although from another sect of Buddhism, the resident Tibetans still believe in the institution of the "Dalai Lama" as their spiritual leader. The area in and around Dharamshala has, over the past 30 years, been transformed into numerous Tibetan settlements.

The similarities of Dharamshala and Lhasa lie primarily in their aspect of being mountainous areas with healthy climates. The altitude of Lhasa is 11,800 ft. above sea level, whereas Dharamshala is only 6,000 ft. above sea level. Dharamshala clearly demonstrates the remarkable relationship which still exists between the Dalai Lama, the Buddhist religion and the Tibetan people. This relationship goes a long way towards justifying the frequent assertion that the Tibetans, in defiance of recent circumstances are the most devout people in the world. The meaning of the word "Dharamshala" (Dharma= Faith or religion, Shala= Shelter) has been truly realized although purely by coincidence; it now represents a shelter for faith, which it is.



Fig. 11: Map showing Northern India and Location of Dharamshala.

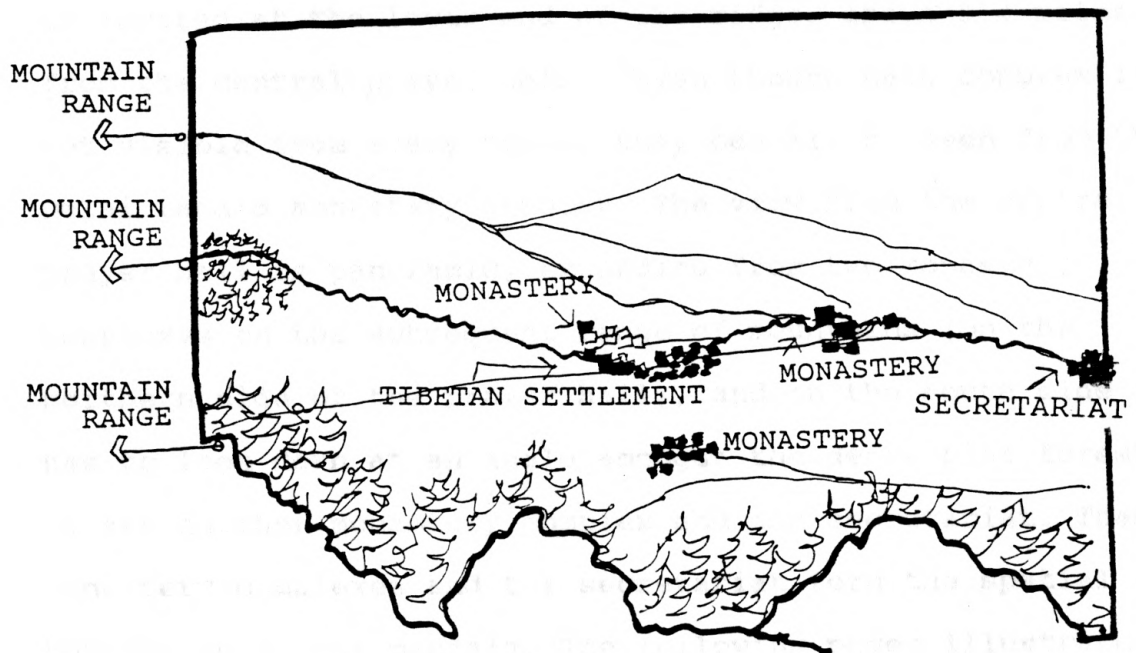
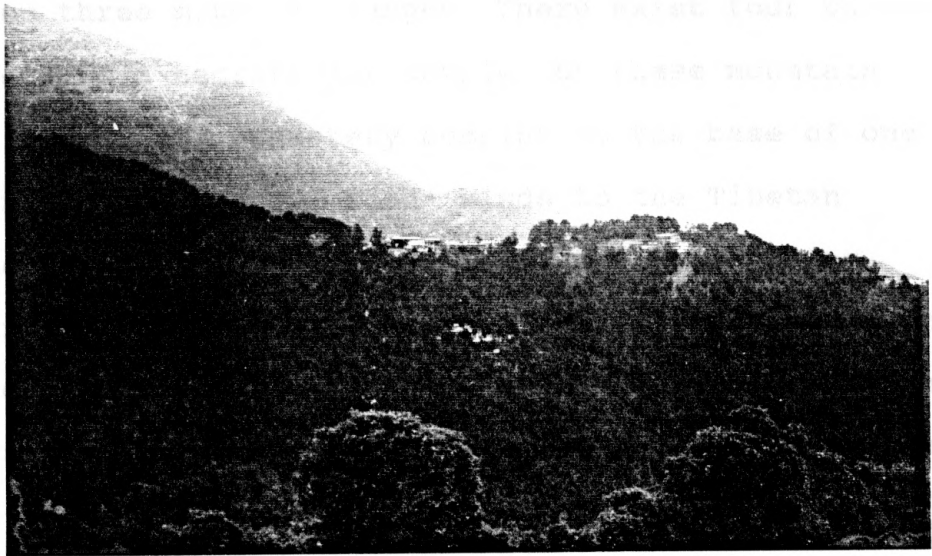


Fig. 12: View of the monastery complex at Dharamshala.

C.ii. The Environs of Dharamshala (fig 13-16)

As seen in fig 12 the monastery complexes are spread out over three mountain ranges. There exist four monastery complexes and a secretariat complex on these mountain ranges. There is a monastery complex at the base of one mountain where a narrow road winds to the Tibetan settlement at the top of the ridge. The Dalai Lamas monastery is walking distance from the Tibetan settlement. The road continues beyond the settlement towards the other two monastery complexes, one of which is faintly visible on the range preceding the range which houses the settlement. The last monastery complex is obscured from view by the Dalai Lama's monastery complex. The secretariat is located at the lower end of the ridge, about 3-4 miles from the central prayer hall. Even though each complex is not visible from every other, they can all be seen from the Dalai Lama's monastery complex. The view from the central prayer hall is panoramic, extending from two monastery complexes on the subsequent range of mountains (on the northern side of the prayer hall), and on the south side one has to look down at an angle amongst the dense pine forests to see another monastery complex and the secretariat. These monastery complexes and the secretariat form the spatial boundaries of the mandala. The following pages illustrate

how these monastery complexes and the secretariat can be seen to form a symbolic spatial mandala.

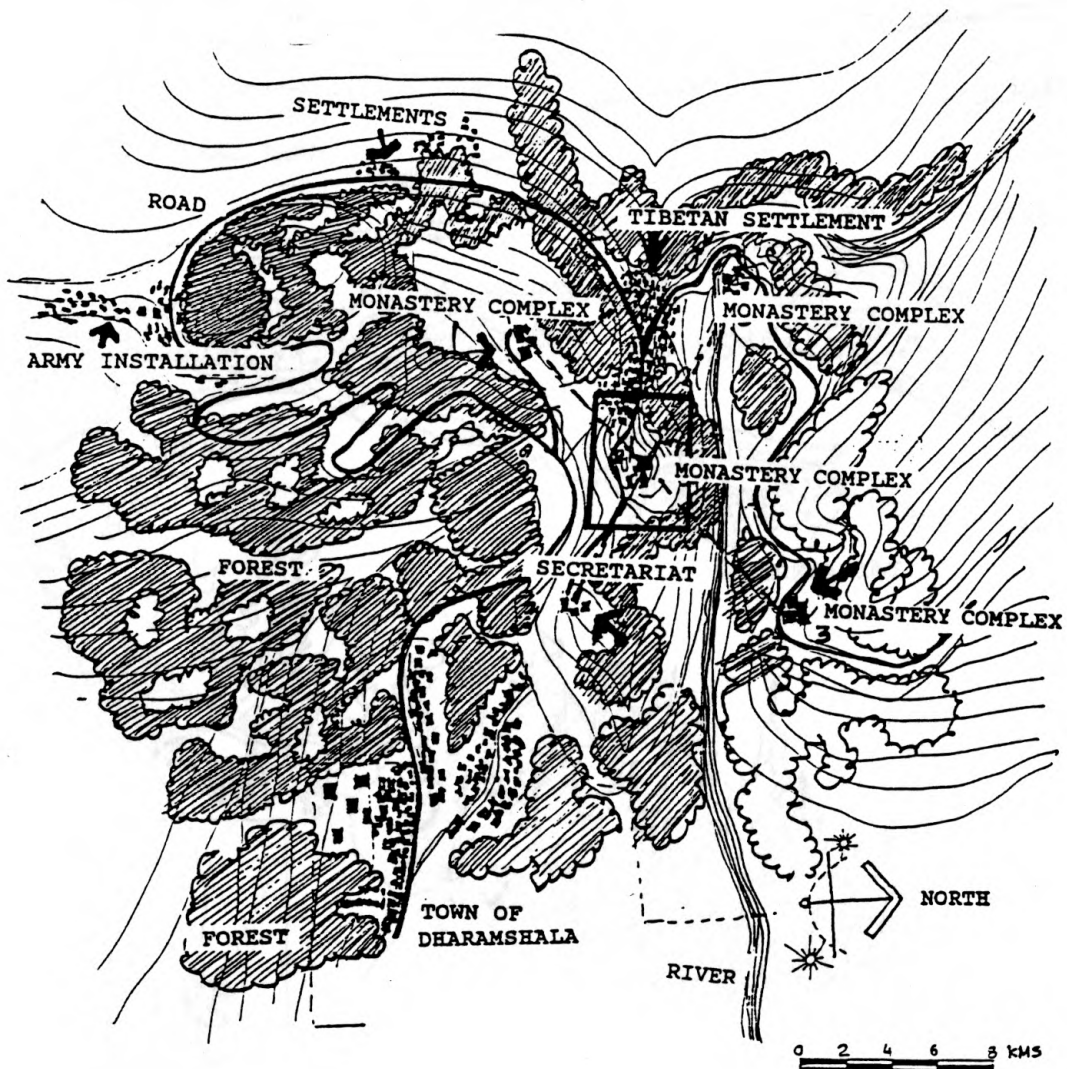


Fig.13: Map of the Monastery Complexes at Dharamshala.

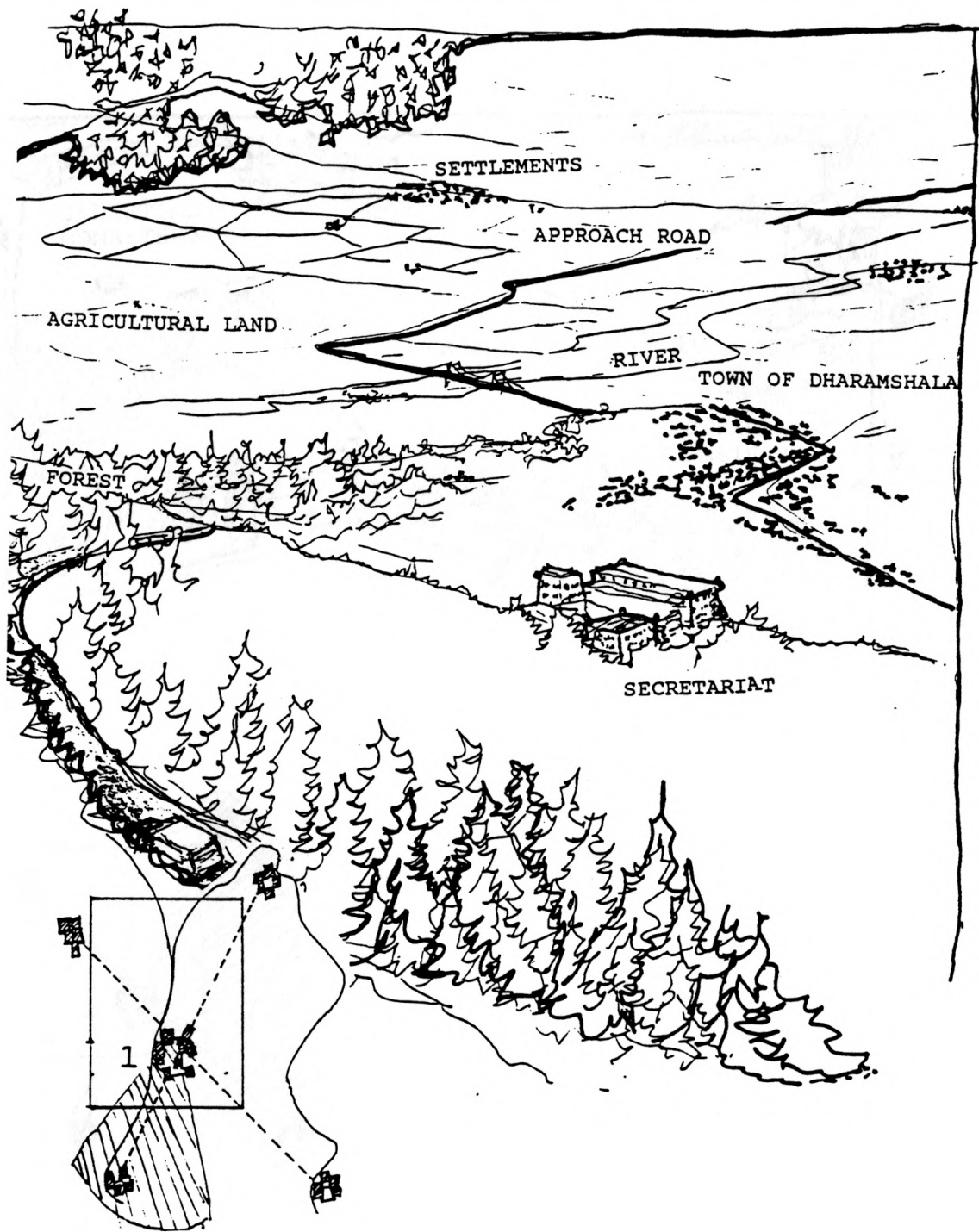


Fig. 14: View of the Secretariat.

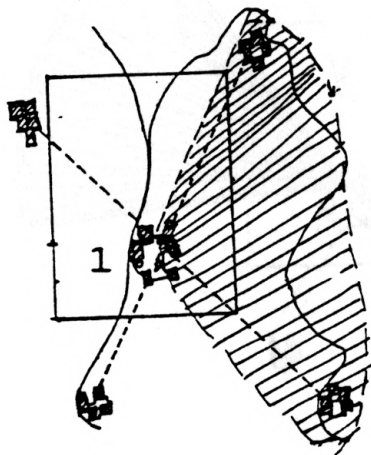
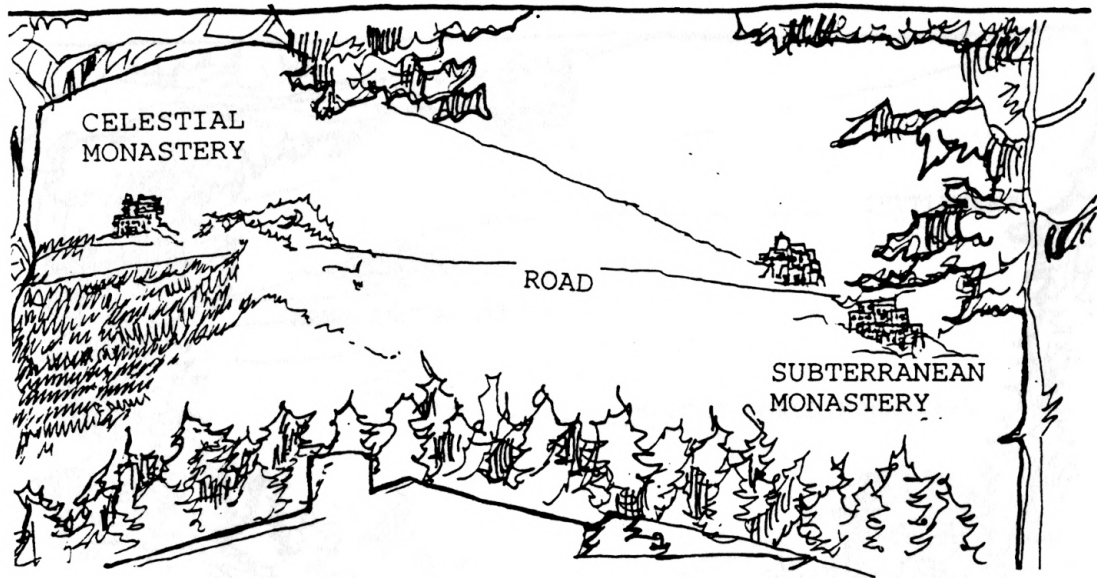


Fig.15: View of the Monasteries from the Central Prayer Hall.

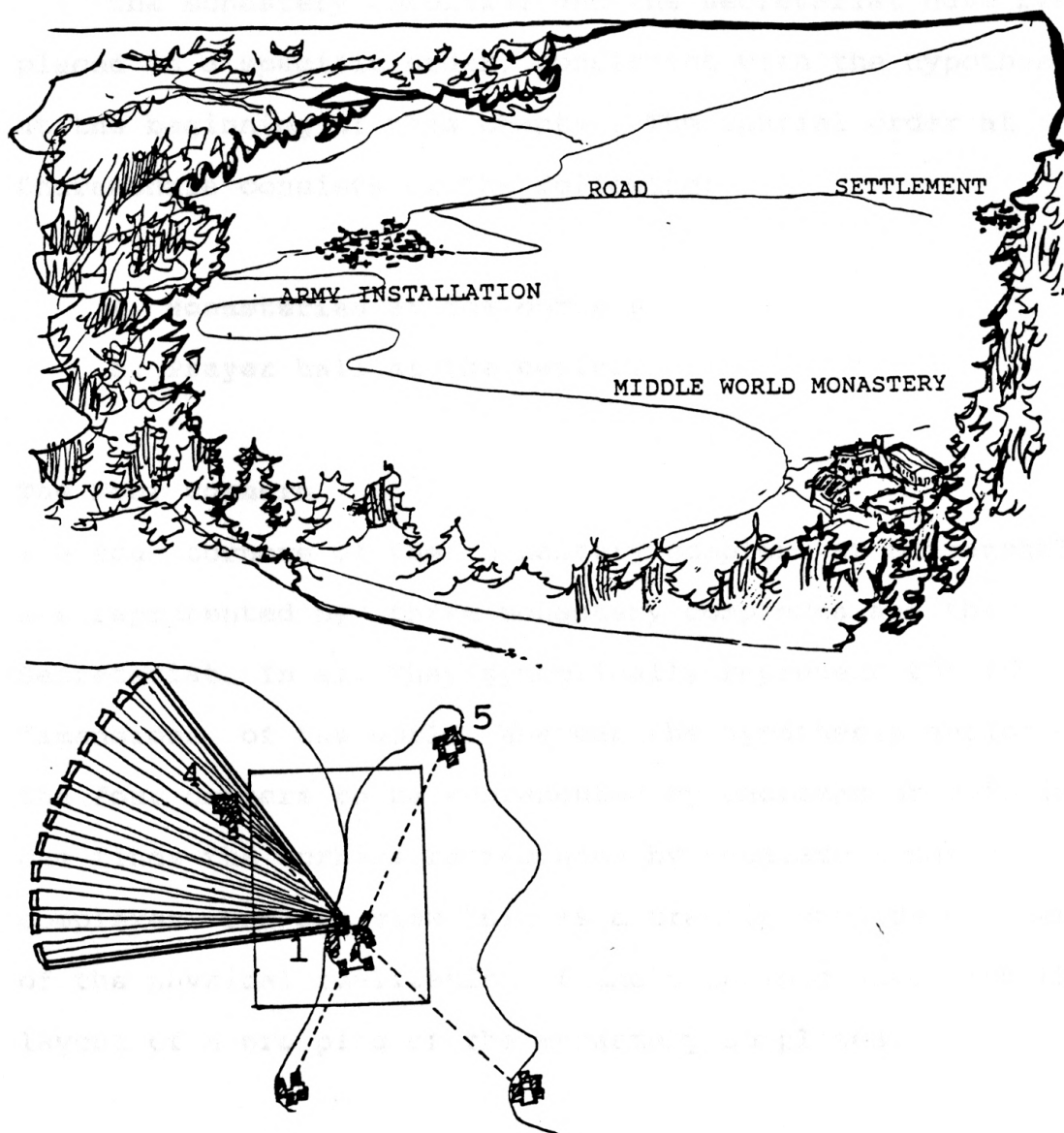


Fig.16. View of the Middle World Monastery.

D. The Symbolic Spatial Ordering of the Group of Monastery Complexes

The monastery complexes and the secretariat have been placed in a specific order, consistent with the hypothesis at the beginning of this chapter. The spatial order at Dharamshala consists of the following:

- a. Monasteries at the corners.**
- b. Prayer hall at the center.**

The Four Corners

The four corners of the monastery complex at Dharamshala are represented by three monastery complexes and the Secretariat. In all they symbolically represent the four dimensions of the world. Whereas the hypothesis anticipated the four corners to be represented by chortens or buildings, one finds the corners represented by separate monastery complexes. One can view this as a transitional development of the physical realization of the principle governing the layout of a grouping of the monastery complexes.

Prayer Hall Complex at the Center

The intersection of the (above) two axes determines the centrality of the main prayer hall complex, a symbolic representation of the center of the world axes, and also in

accordance with the proposed hypothesis regarding the prayer hall being at the intersection of the world axes.

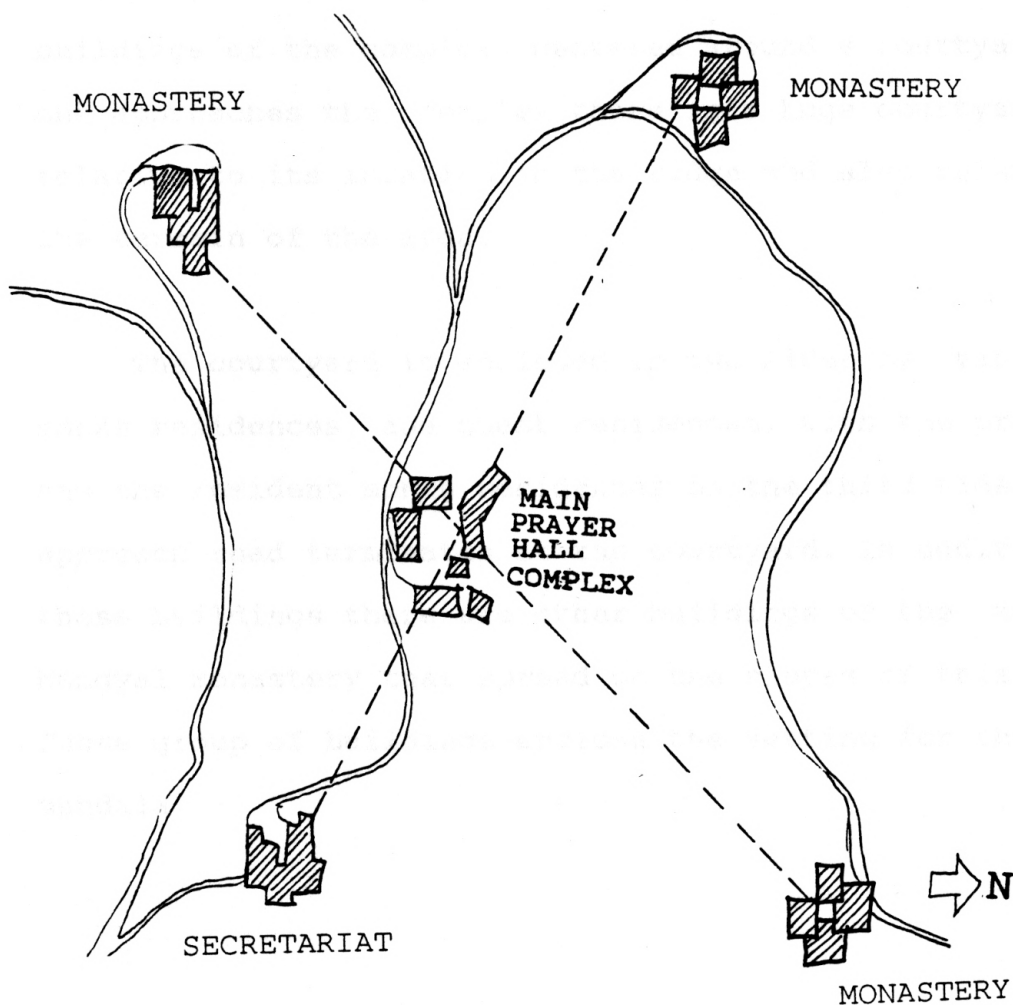
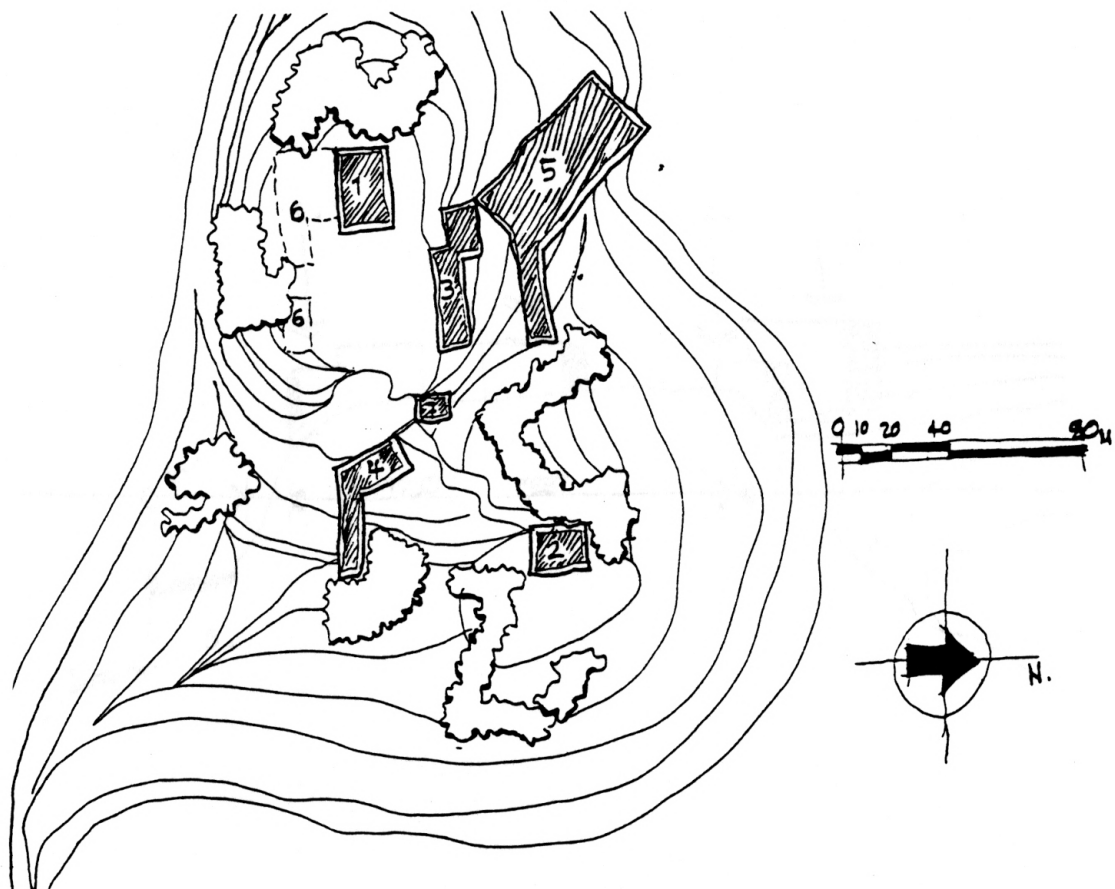


Fig. 17: The Spatial Ordering Strategy at Dharamshala.

E.i. The Main Prayer Hall and Courtyard at Dharamshala.

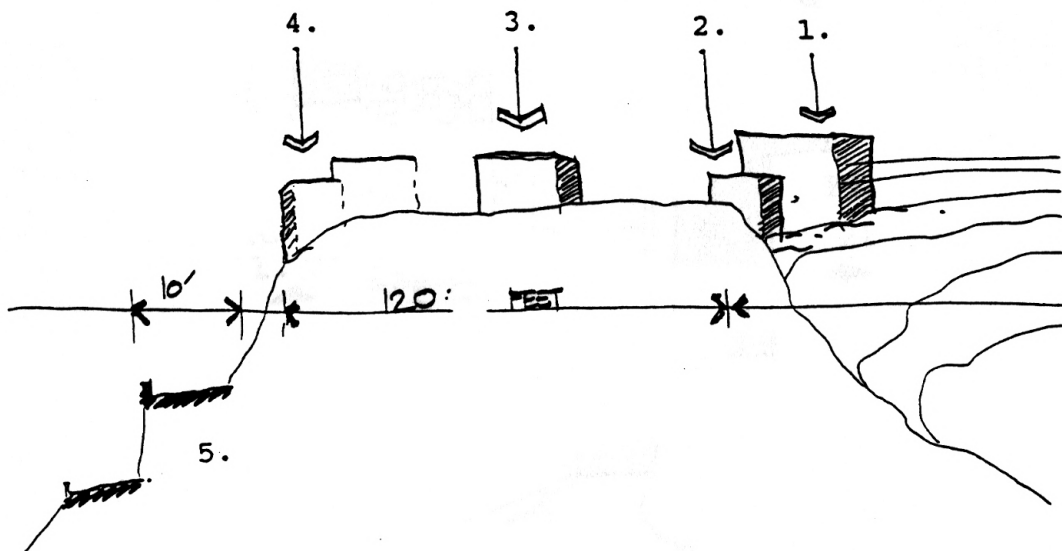
The main prayer hall is part of a courtyard complex located a few hundred yards from the Tibetan settlement at Dharamshala. It is the central monastery complex. The monastery complex is located on a smaller hillock along the same ridge as the settlement. The prayer hall is one of the buildings of the complex centered around a courtyard. As one approaches the complex there is a huge courtyard relative to its location on the ridge and also relative to the terrain of the area.

The courtyard is enclosed on two sides by visiting monks residences, and guest residences, with the prayer hall and the resident monks residences on the third side. The approach road terminates at the courtyard. In addition to these buildings there are other buildings of the adjacent Namgyal monastery that spread on the slopes of this hillock. These group of buildings enclose the setting for the social mandala.



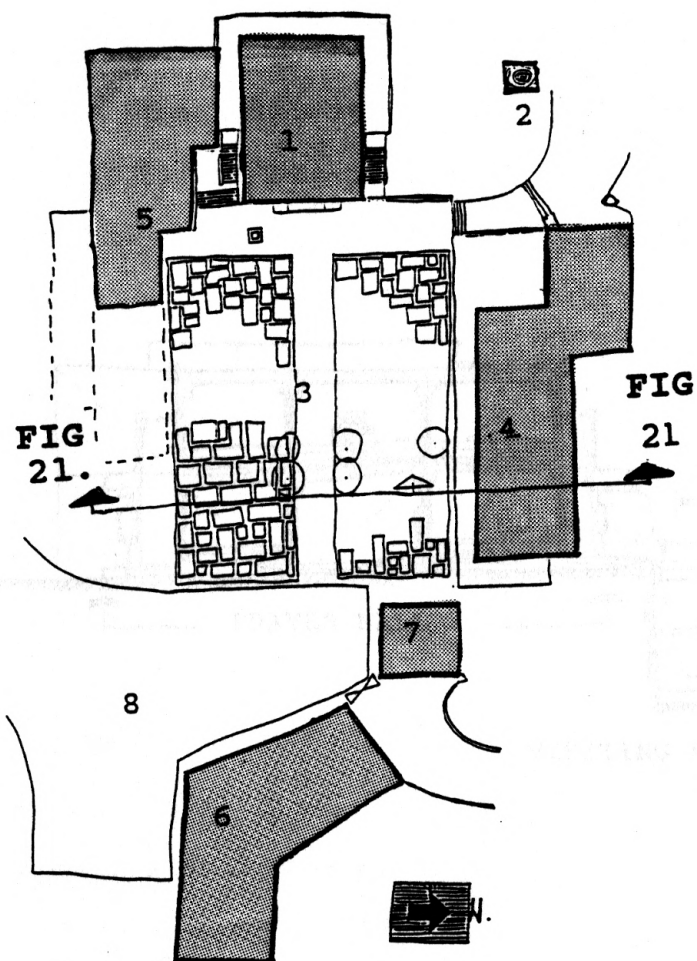
1. MAIN PRAYER HALL
2. DALAI LAMA'S PALACE
3. VISITING MONKS PRAYER HALL
4. RESIDENT MONKS PRAYER HALL
5. MAIN PRAYER HALL COMPLEX
6. GUEST HOUSE
7. INFORMATION

Fig.18: Site Plan of the Main Prayer Hall Complex .



1. NAMGYAL MONASTERY
2. VISITING MONKS PRAYER HALLS
3. CENTRAL PRAYER HALL
4. PROPOSED GUEST HOUSE
5. APPROACH ROAD

Fig.19: Section thru the Central Monastery Complex.



1. PRAYER HALL
2. CHORTEN
3. COURT YARD
4. VISITING MONKS
5. GUESTS
6. RESIDENT MONKS
7. INFORMATION
8. ROAD

Fig. 20: Plan of the Courtyard and the Surrounding Buildings.

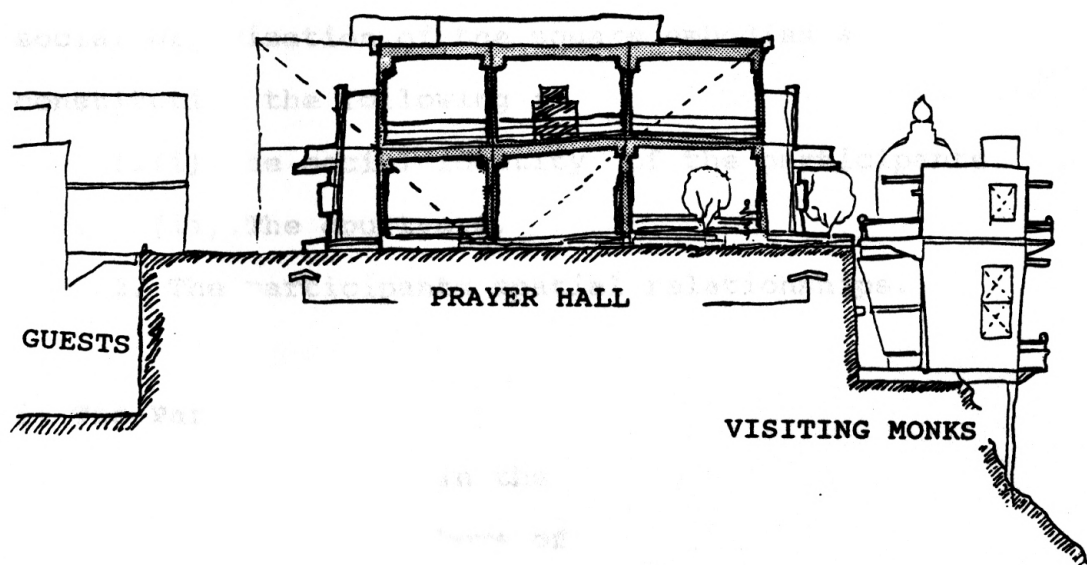


Fig. 21: Section thru the Courtyard.

F. The Symbolic Social Ordering of the Main Prayer Hall
Courtyard at Dharamshala.

The main prayer hall is situated in the center of the main Monastery Complex. The prayer hall and adjoining monk's residences enclose a space called the Namgyal Square (only for its close proximity to Namgyal Monastery complex). The social organization of the square embodies a social mandala constituting the following :

1. (i). The social identity of the participants.
(ii). The courtyard.
2. The participants spatial relationships.

i. The Participants

The participants in the social mandala are members of the monastery constituting the Dalai Lama who sits in the prayer hall, resident monks in their enclosed space, the visiting monks and other visitors in their enclosure.

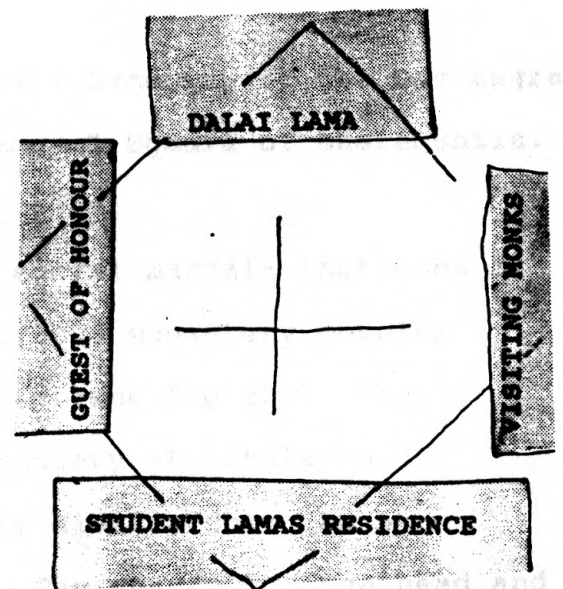
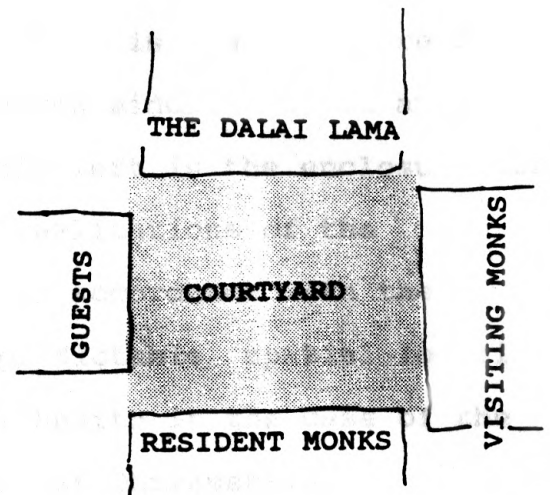
The scale of the social mandala here is relatively large which accounts for separate enclosures, which are

THE DALAI LAMA
RESIDENT MONKS
VISITORS (MONKS)
GUESTS (OTHERS)

in accordance with the proposed hypothesis.

ii. The Courtyard

The courtyard is a symbolic representation of a mound of earth which is sacred. The representation here at Namgyal Square is in the form of a courtyard which lies in front of the prayer hall, and enclosed on other sides by the monks and the visitors area. The courtyard acts as a focus for directing all conversations and a means of achieving order in dialogues and discourses by the Dalai Lama. The courtyard at Dharamshala is also in accordance with the hypothesis.



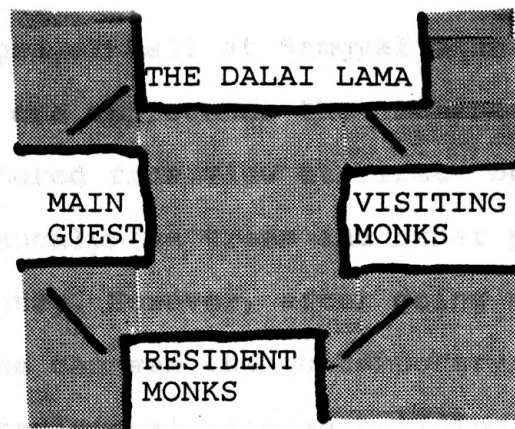
iii. The Participant's Spatial Relationships.

The participants gather in the courtyard. The Dalai Lama occupies the podium constructed on the steps of the

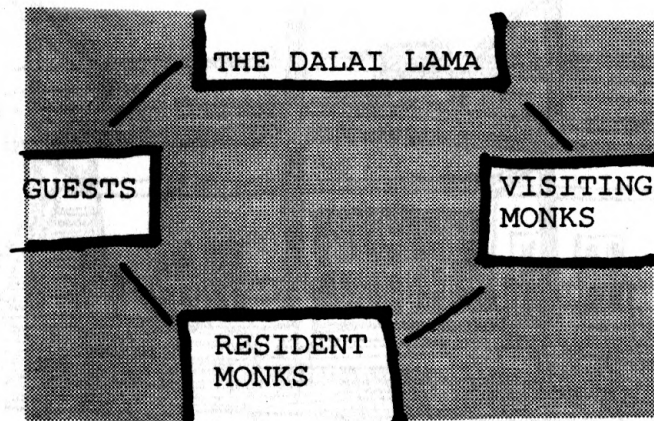
main prayer hall during social gatherings. Opposite him is the enclosure for the resident monks (closer to the center of the world axes). On his right side is the enclosure for the guest of honour (in between the middle world axes and the center of the axes) and on his left is the enclosure for visiting monks. As the physical realizations of the participants and the hearth are in accordance with the hypothesis, there also exist a predictable spatial location between the participants and the hearth in the case of the social mandala at Namgyal square at Dharamshala.

G. Correlations between the Social Ordering of the Dev Nagra Square of the Potala and the Namgyal Square of Dharamshala.

The relative scale of the social mandala increases at Dharamshala, since this is part of a monastery complex rather than a one room monastery (see fig 22). The courtyard (hearth) from the monastery at Potala is translated at Dharamshala in the similar form (as a courtyard) rather than a mound. The spaces for the head and other participants are separate buildings with similar orientations in accordance with the social mandala of a single room monastery.



POTALA



DHARAMSHALA

Fig 22: Relationship between the Social Order at Dharamshala and The Potala.

H. The Central Prayer Hall at Dharamshala.

The central prayer hall at Namgyal square is the focus of attention as one approaches the monastery complex, although slightly obscured from view at first because of a new planting of eucalyptus trees and other perennials amongst the pine country. However, after going a few yards into the courtyard, one can see the contemporary prayer hall with the absence of traditional Tibetan building details. (fig 23)

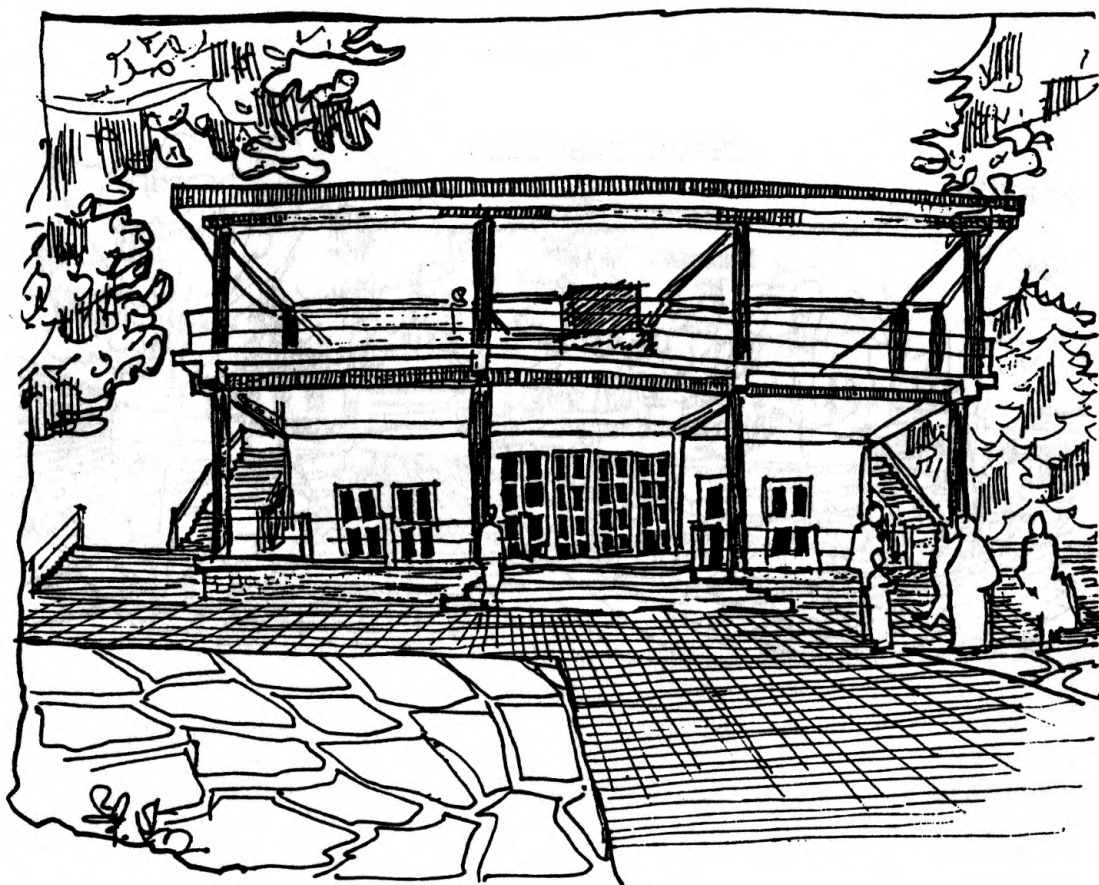


Fig 23: View of the Central Prayer Hall facing East.

As one passes through the planted courtyard, turning back provides a partially hidden view of the resident monks residences along with the visiting lamas and guest residences. (fig 24)

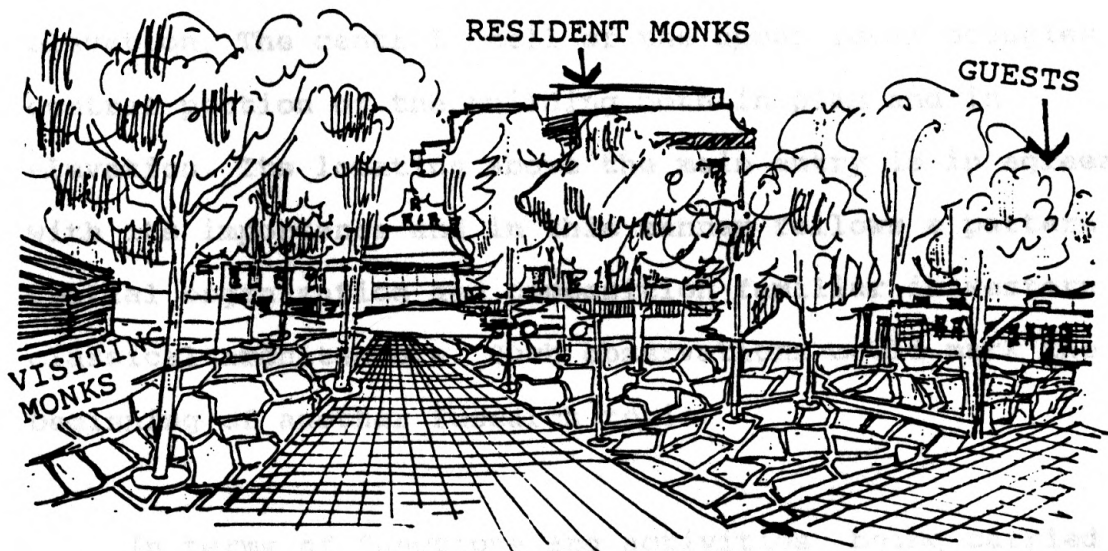


Fig.24: View of the Central Courtyard Facing East.

The plan of the prayer hall (fig 25) is a nine square grid that orders two levels. The ground level is enclosed while the upper level is left open. The nine square grid possesses a geometry such that the eight squares surround the central ninth square. This central cell is celebrated formally not only by its central position but by the use of both a changing floor plane on the second level that surrounds one half of the floor of the central cell and by a raised clerestory roof that focuses additional light upon this central cell and also emphasizes this cell's most central portion within the composition of the front elevation. The central cell of the upper level occupies the central portion of the building both in plan and in elevation. Its location above the main entry is in agreement with its importance and in this manner follows a pattern of spatial organization and composition familiar in western classical architecture. Such observations could mark the beginning of another research topic.

In terms of functions and activities being carried out, the prayer hall has been realized as a one room monastery within a large monastery complex. The lower floor of the prayer hall has the main entrance from the east which is in accordance with the religious principles. The students

enter from the north. Towards the west corner lies the statue of the deity.

1. BUDDHAS IDOL
2. BOOK STORE
3. PRAYER HALL
4. ENTRANCE FOR MONKS
5. VERANDAH
6. MAIN ENTRANCE

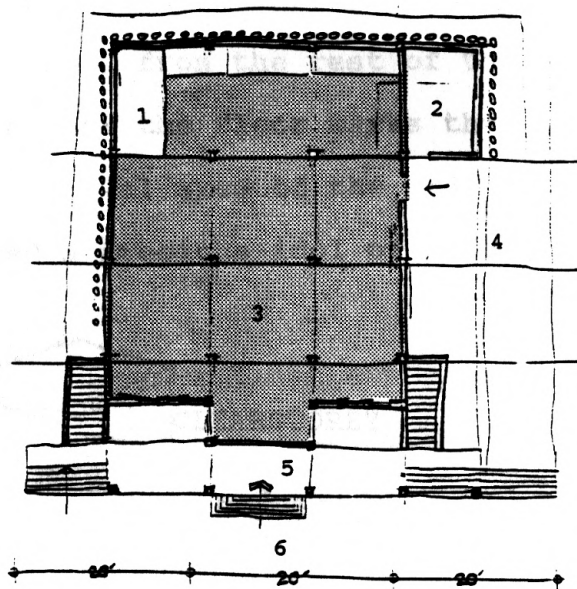


Fig. 25: Plan of the Prayer Hall.

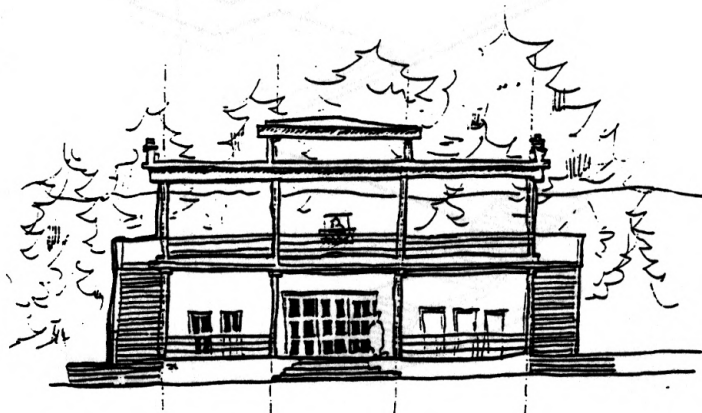


Fig.26: Elevation of the Prayer Hall.

An interesting physical representation is made of the pillar (or the space representing the pillar). On the second level the central area is enclosed on three sides by a slightly raised part of the floor from the rest of the floor level. The elevated part of the floor marks the boundary of a geometrically central area of the prayer hall, within whose center is placed a precious idol of Buddha in an enclosed glass chamber.

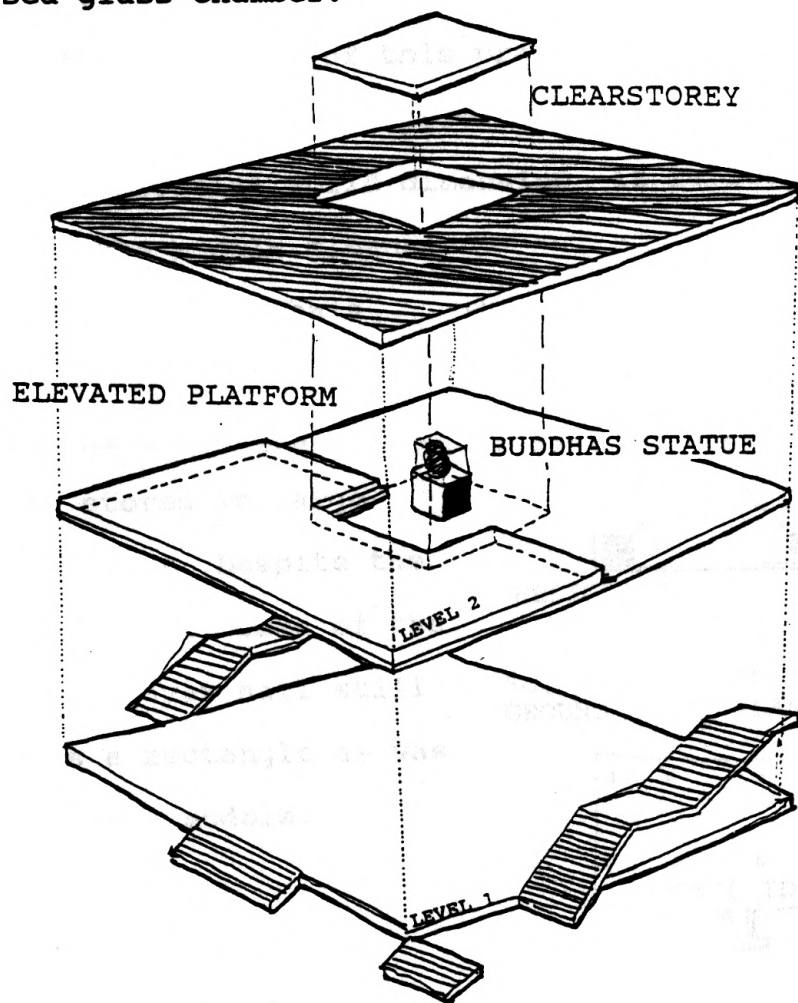


Fig. 27: Axonometric view of the Central Prayer Hall.

I. Spatial and Social Mandala at Main Prayer Hall.

There is a recurring pattern of the spatial and social mandala within the prayer hall. The main prayer hall has the following two components of spatial ordering:

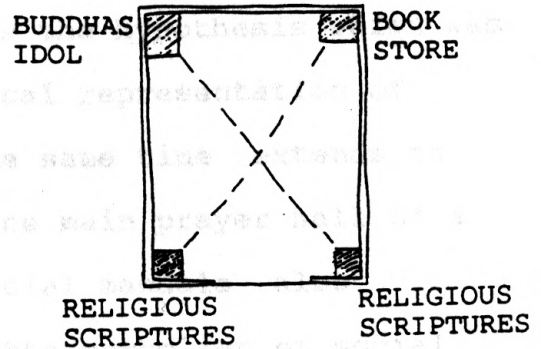
1. The four corners.

2. The center.

The Four Corners

The four corners of this prayer hall represent specific built form and specific functional use of the corner. The celestial world dimension is represented by a book store, the middle dimension

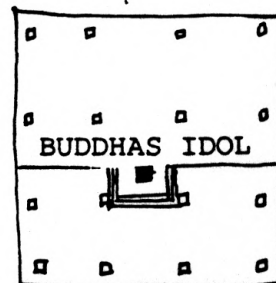
is represented by Buddha's idol, and the other two dimensions have the religious scriptures stored in large wooden cabinets. Despite the changed functional uses of the corners the prayer hall still encompasses a rectangle as was the case in the models.



FOUR CORNERS OF THE WORLD AXIS
GROUND LEVEL PLAN

The Center

The intersection of the above two axes determines the



SECOND LEVEL PLAN

centrality of the prayer hall. This determines the position of the symbolic representation of the center of world axes, which is seen on the second floor at spatially centered location.

J. THE SOCIAL MANDALA

Even though this prayer hall participates in the social mandala by representing the position of the abbot, however looking inside the prayer hall one finds similar social organization to that of a one room monastery. The hearth is represented by a table, and there exists marked areas to seat the Dalai lama, student monks, visiting monks and guest of honour. This reinforces the hypothesis which was formulated to examine the physical representation of religious principles, and at the same time extends to explore the principles within the main prayer hall of a large monastery complex. The social mandala also establishes a parallel between the symbolism of social ordering in case of the principal room of a house and the principal room of a monastery.

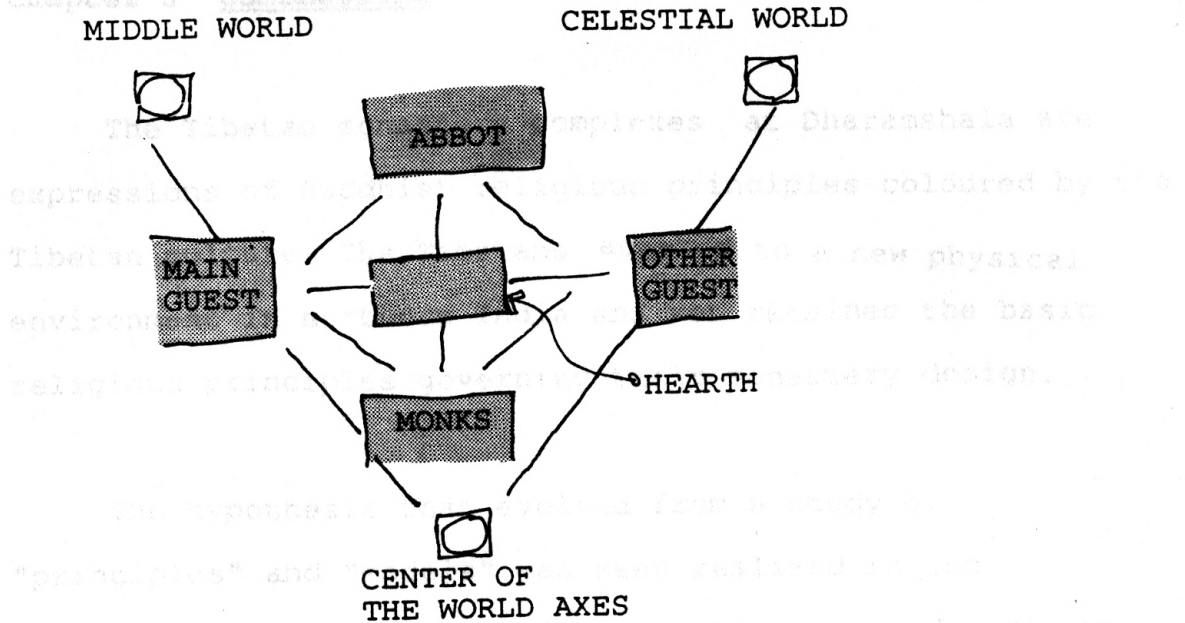


Fig: 28: The Social Mandala in a Monastery

architect, to study the religious principles. The concept of "pouse" appears to transcend that of monastery and to show primary spiritual, social, spatial and formal expressions of a unified world view.

In comparative use of the principle of totality through the mandala and its symbolic expression in built form and ritual activity is also an expression of a unified view of the world. The social order of totality appears in all scales of built form. It can be seen to portray the social hierarchies observed within numerous cultures of this part of the world, thereby symbolizing a more regional

Chapter 5 CONCLUSIONS

The Tibetan monastery complexes at Dharamshala are expressions of Buddhist religious principles coloured by the Tibetan culture. The Tibetans adapted to a new physical environment in northern India and yet retained the basic religious principles governing their monastery design.

The hypothesis that evolved from a study of "principles" and "models" was seen realized in the "elements" at Dharamshala. The one room common denominator happened to be the clearest way for the author, as an architect, to study the religious principles. The concept of "house" appears to transcend that of monastery and to have primary spiritual, social, spatial and formal expressions of a unified world view.

The repetitive use of the principle of centrality through the mandala and its symbolic expression in built form and ritual activity is also an expression of a unified view of the world. The social order of centrality appears in all scales of built forms. It can be seen to portray the social hierarchies observed within numerous cultures of this part of the world, thereby symbolizing a more regional

interpretation of social organisation rather than being solely confined to Tibetan Buddhists.

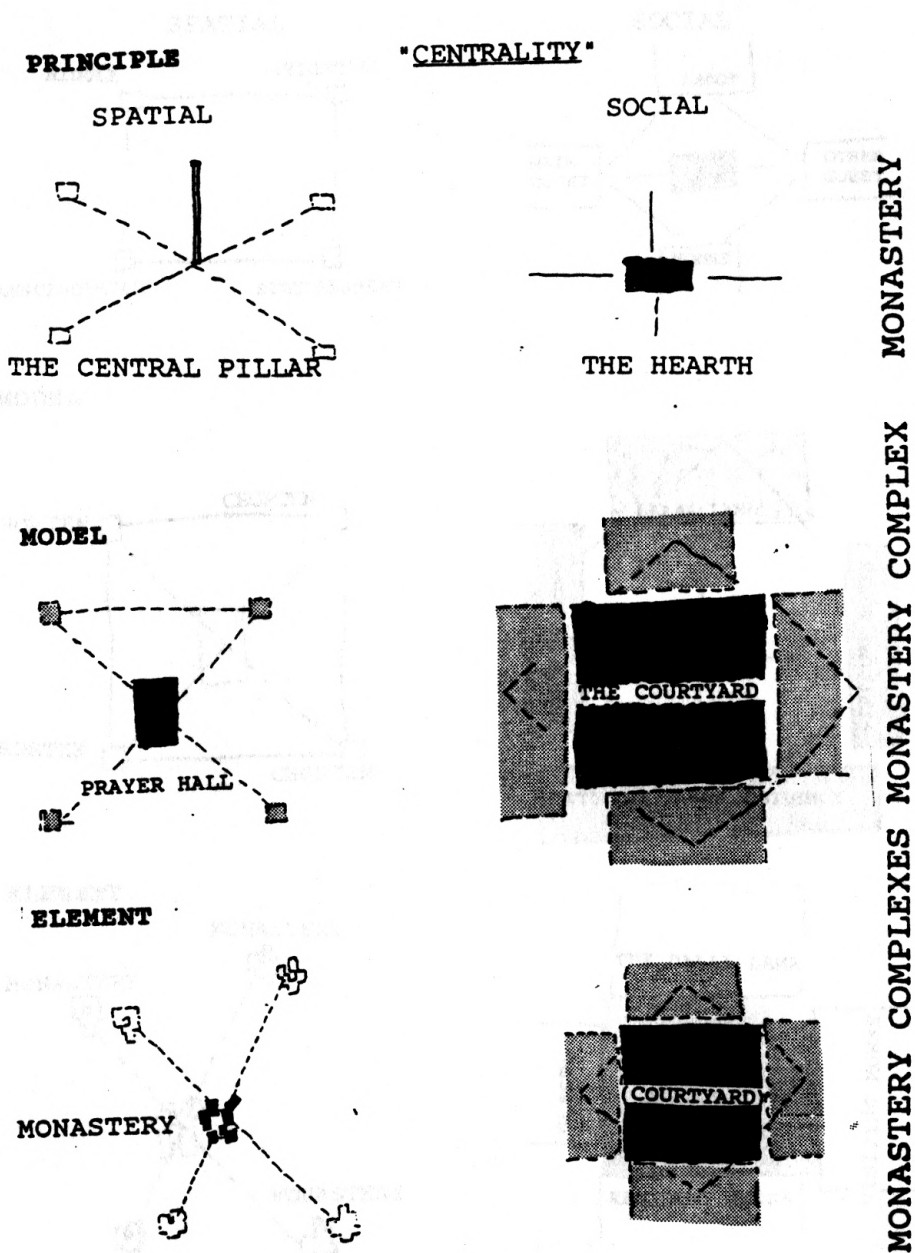
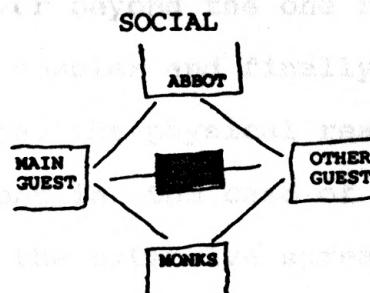
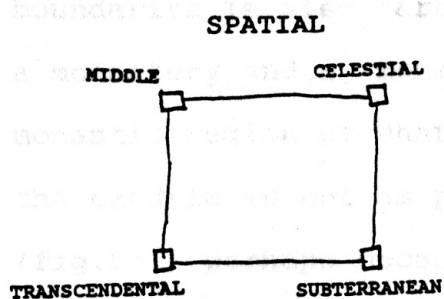


Fig.29: Realization of Principle of "Centrality".

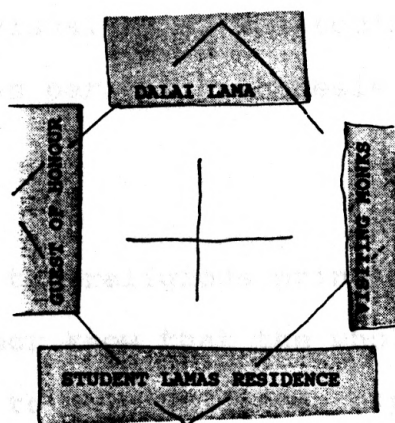
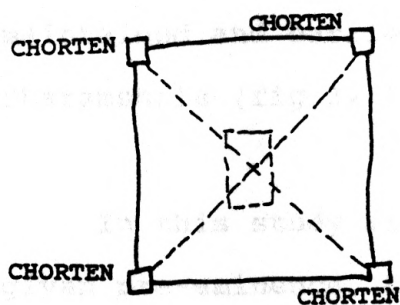
PRINCIPLE

"MANDALA" AS A COSMOGRAM



MONASTERY

MODEL



MONASTERY COMPLEXES

ELEMENT

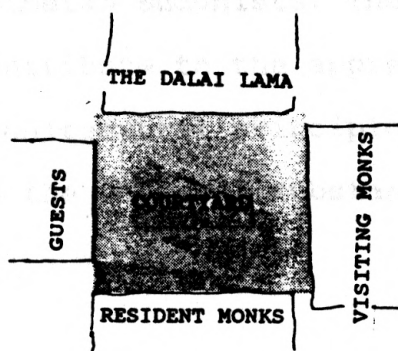
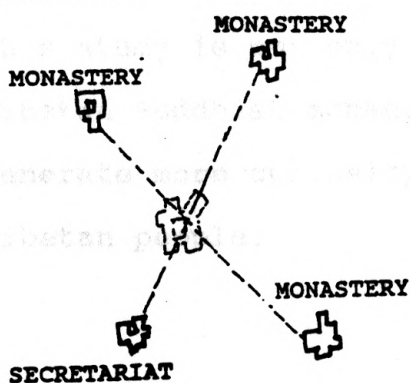


Fig.30: Realization of Principle of "Mandala" as Cosmogram.

The other principle of the mandala as a guiding principle for establishing the physical as well as social boundaries is also carried over beyond the one room house to a monastery and a monastery complex and finally to the monastic region of Dharamshala. The physical realization of the mandala is not as prominent in the case of Dharamshala (fig.31) perhaps because of the extensive spread and topographical constraints of the monastery complexes. However, the complexes at Dharamshala do align with each other in pairs by way of a visual axis. The social order is maintained and carried out as per the hypothesis at Dharamshala (fig 32).

In this study although the religious principles were given pre-eminence, the author know that the whole spectrum of religion and culture has to be considered especially for the esoteric nature of the Tibetan Buddhists. The aim of this study is not only to contribute to the appreciation of Tibetan Buddhist monastic architectural principles, but to generate more curiosity into the cultural substance of the Tibetan people.

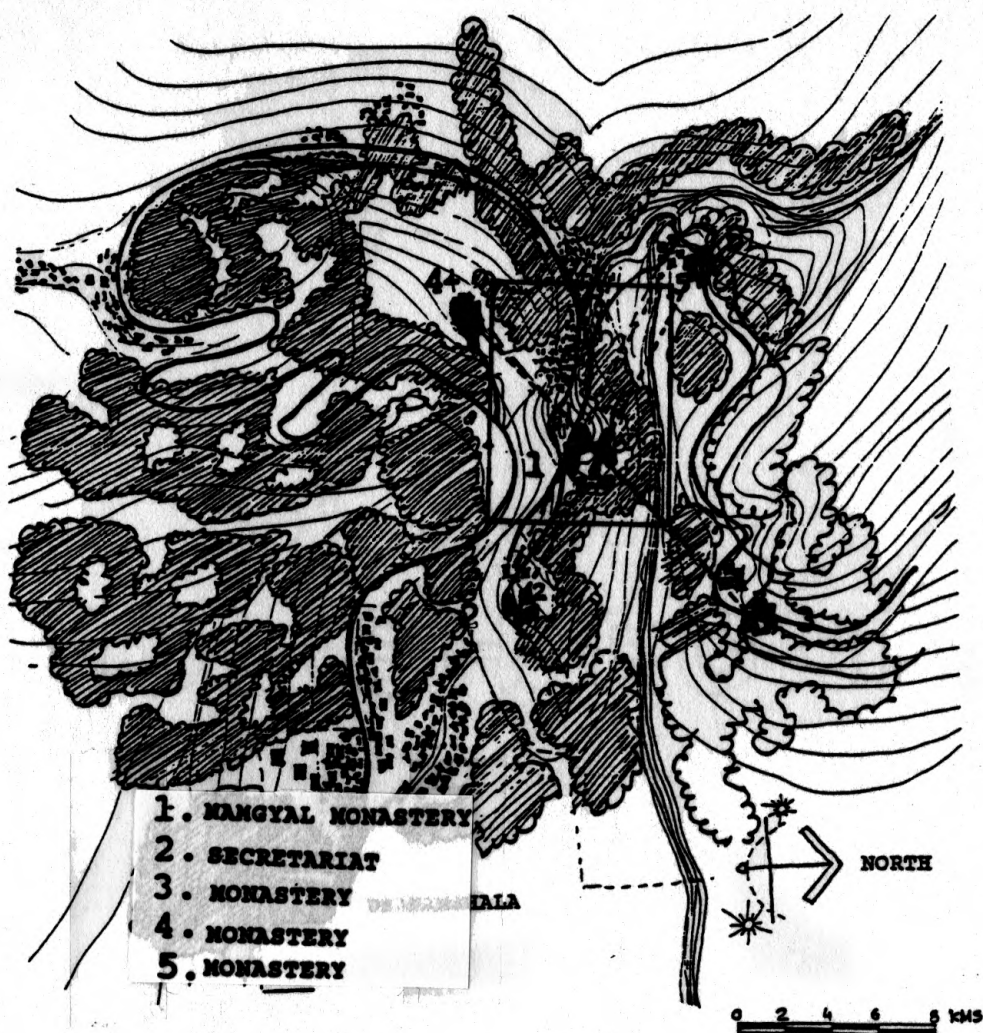


Fig.32: Spatial Mandala at Dharamshala.

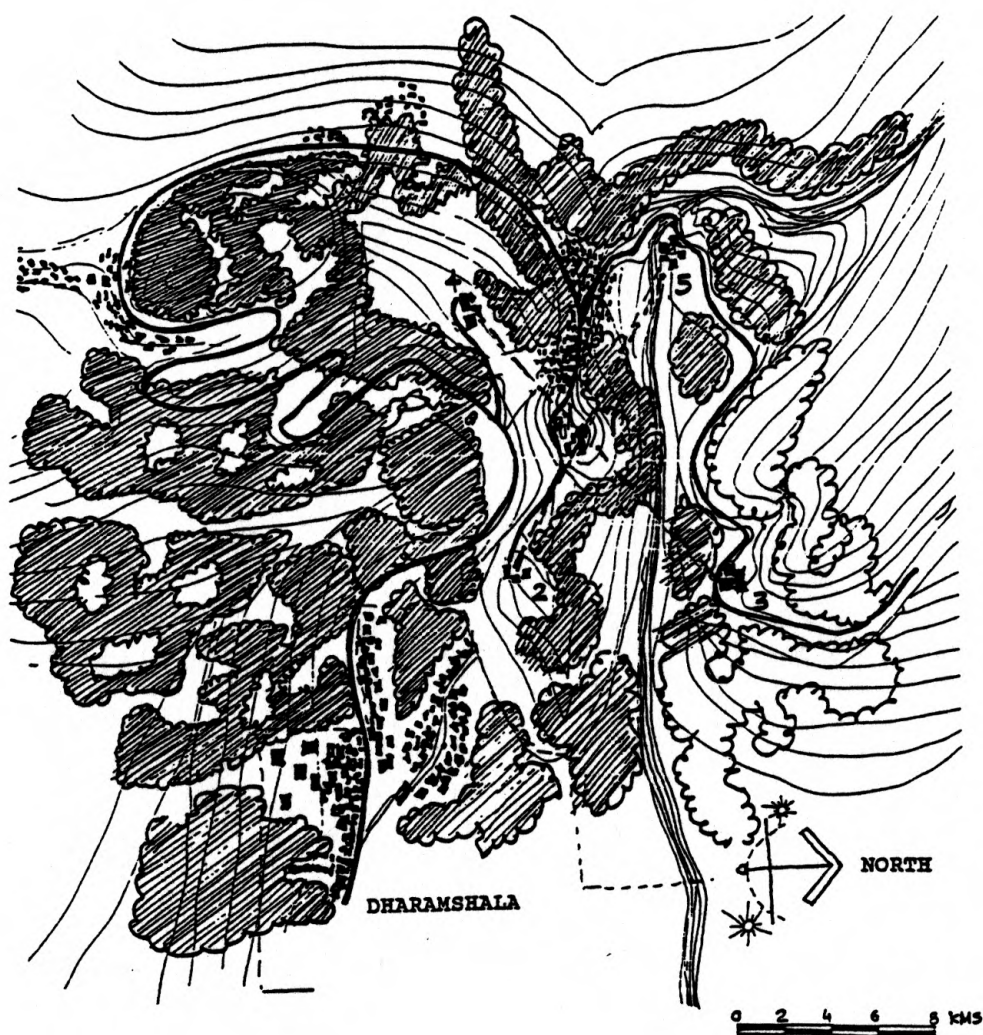
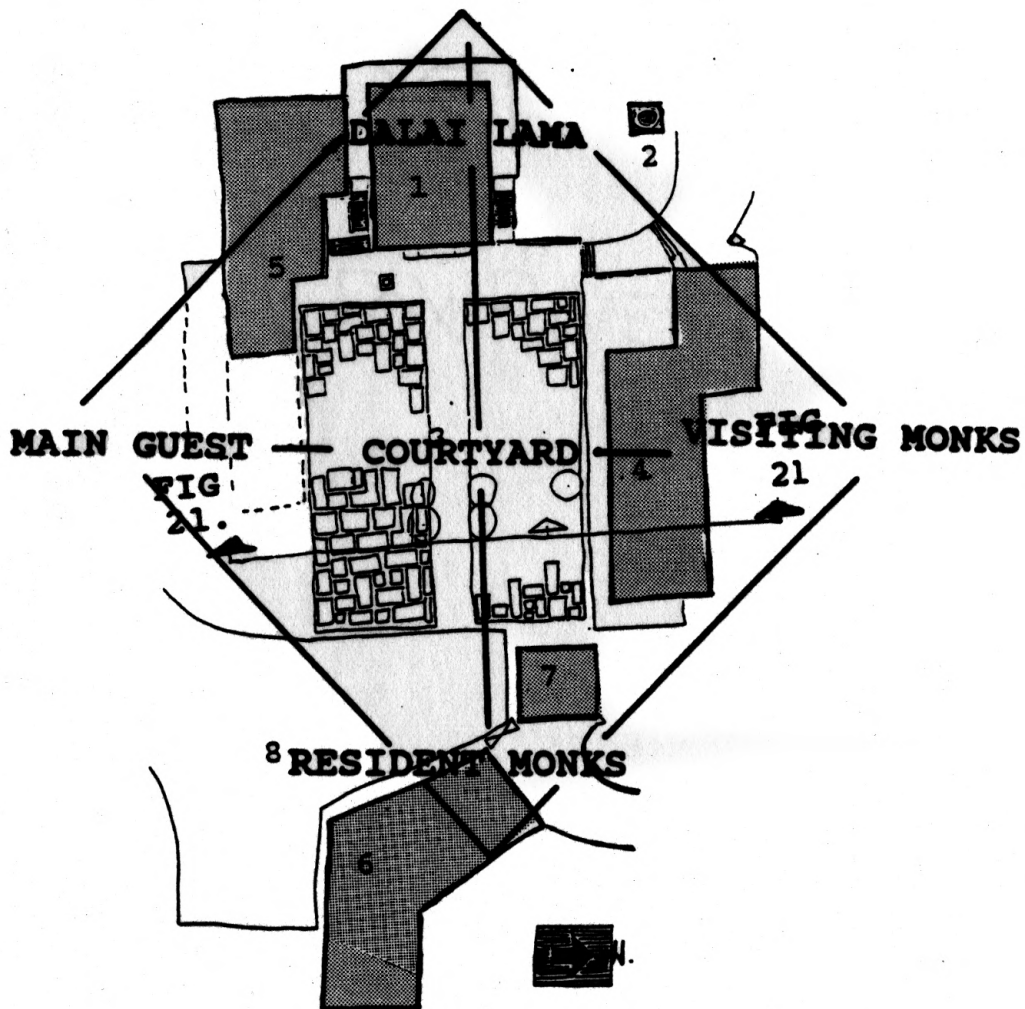
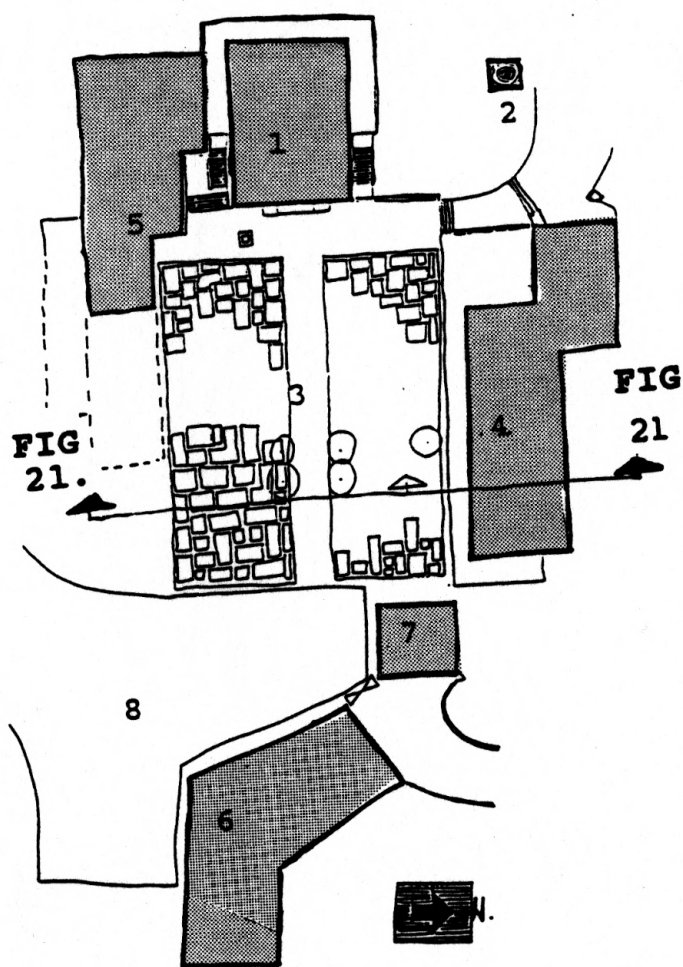


Fig.32: Spatial Mandala at Dharamshala.



1. PRAYER HALL
2. CHORTEN
3. COURT YARD
4. VISITING MONKS
5. GUESTS
6. RESIDENT MONKS
7. INFORMATION
8. ROAD

Fig. 33: Social Mandala at Dharamshala.



1. PRAYER HALL
2. CHORTEN
3. COURT YARD
4. VISITING MONKS
5. GUESTS
6. RESIDENT MONKS
7. INFORMATION
8. ROAD

Fig. 33: Social Mandala at Dharamshala.

This study begins the creation of a representative source of information on the transformation of religious beliefs and principles into the design elements of Tibetan Buddhist monastery complexes in Northern India. This will encourage additional research of the meaning and symbolism associated with the following design issues:

1. Tracing the development of the spatial mandala from a Tibetan Buddhist house to a monastery complex.
2. Researching the spatial organization at Dharamshala, within the monasteries and prayer halls.
3. Tracing the symbolic development of the pillar from the center of the axes within a house to a monastery complex.
4. The relation of light to the orientation of a prayer hall.
5. Significance and development of the clearstory in a prayer hall.

The list can be as endless as the inquisitiveness of the researchers.

END NOTES

1. The two articles are:

Corlin, 1978, A Tibetan Enclave in Yunan: Land, Kinship and Inheritance. Tibetan Studies, Zurich. This article addresses issues related to the Tibetan built form of a house and its religious significance. It by no means provides statements of religious principles used in the house, but does narrate the explanation from a ritual song which speaks about the various parts of the house, and their religious significance. The principle of centrality has been illustrated within the ritual of blessing a dwelling house.

Handa O.C, 1987, "Buddhist Monasteries in Himachal Pradesh", pg34. This book contains a chapter on a monastery complex at Tabo in northern India, and discusses the spatial principle of a mandala in the layout of the complex.

2. A Chorten is a contemporary of a mausoleum in Tibetan Buddhism.

3. Lamaism is an offshoot of Buddhism.

4. Giuseppe Tucci, 1973, Tibet Land of snows, Paul Elk, London, p34. Lama (bla-ma): In classical Tibetan language the word is bla-ma which is equivalent to 'the venerable master'. The Sanskrit equivalent for it is 'Guru'. In Tibet and in Mongolia the Buddhist monks and Tantrik priests go by this name. The lamas undergo a (sort of) consecration ceremony that confers on them a priestly career. When a monk is in a position to impart religious instructions to others he is entitled to call himself a Lama.

5. Sir. Charles Bell, 1924, Tibet Past and Present, Oxford at the Clarendon press, p 45. Ge Shi is a very basic degree a lama has to earn before entering advanced studies, which could be in either occultist studies or medicine or sciences in the Tibetan system of education. Ge Shi translates to (friends of virtue). A Ge-Shi is supposed to have mastered all the exoteric studies, and is, in accordance with certain Buddhist theorists, qualified to take up the esoteric course.

6. Ibid,p54. Transmigration, in Buddhist parlance, means the change of abode of a mind from one tabernacle to another, as based on the total merits and demerits earned by the mind in all its previous transmigrations. Whenever the tabernacle has outgrown its usefulness and reached the stage commonly called death, the mind leaves it and enters into another tabernacle, an act which is commonly called birth. In order to be delivered from the misery of being born and reborn in this current of transmigration, one must, by accumulation of appropriate merits, be raised above the sixth form and hence, beyond the current. This is to attain Nirvana.

7. Ibid,p 69 Mahayana: A religious offshoot of Buddhism which represents the 'golden mean'. Severe ascetism and total atheism proclaimed by Buddha Shakyamuni would have brought salvation within the reach of only a few highly disciplined individuals. But mahayana, the great vehicle, was intended to bring Nirvana within the reach of virtually everybody. The Mahayana doctrine is so called exactly because it is meant for all.

8. Tsung-Lien Shen and Shen-Chi Liu ,1952, "Tibet and the Tibetans", pg 99-106.

9. Ibid,p.68-72, Nirvana implies an ecstatic condition in which the spirit feels pure joy in the absence of so called reality. In Buddhism, Nirvana can more appropriately be equated with a bliss that excludes every sensation and consequently produce a total absence of pain or suffering. It is a Sanskrit word meaning 'extinction'. In Indian philosophies and religions as well as in Buddhism, Nirvana signifies the supreme condition of 'liberation' from the cycle of transmigrations or reincarnations.

Since life is suffering, Buddhism aims at breaking the vicious circle of life and death by the extinction of all desire and lust through the renunciation of all ties that bind us to the world. This renunciation can result in Nirvana- a condition in which all suffering ends along with its causes and effects including reincarnation. 'Karma' which strikes a balance between good and bad acts, between individual and collective virtue and evil, is responsible for reincarnation. Different Buddhist sects offer different interpretations of the theory of Nirvana and its attainment.

10. Chand Attar,1982, Tibet Past and Present,p36.

11. Gyu-me and Gyu-to are esoteric studies in Tibetan Buddhism quite equivalent to Graduate studies, and are considered to be a parallel school of thought. The educational patterns vary from a normal college education. Within the

esoteric studies there are two types of schools which in themselves show a marked difference.

12. Dumoulin, Heinrich and John C Maraldo, 1973, Buddhism in the Modern World, p47-49.

13. 1990, "CHOYANG" The voice of Tibetan Religion and Culture # 3, The Council of Cultural affairs of H.H.The Dalai lama, Dharamshala India, p 56.

14. The Mandala is the foremost guiding principle in the eastern cultures primarily Buddhism, Hinduism and Jainism. The buddhist explanation of the mandala is a rite of initiation that always entails creating a balance of forces in the universe so that the specific rite or activity is blessed by the opposite forces, thereby creating a state of perfect balance, which is the residence of the deities conferring the initiation, along with all other deities abiding within it. It is the actual place where the initiation takes place. The mandala has however been interpreted differently by various researchers as to the extent of its influence in different religions and cultures. A description of mandala as a rite is given by G. Tucci and Burckhardt as the following:

The drawing of a mandala is not a simple matter. It is a rite which concerns a palingenesis of the individual and in whose details this individual must participate with all the attention demanded by the importance of the result to be obtained. An error, an oversight, an omission renders the whole operation useless. And this not because (as in all magical and ritual acts) precision in word and deed guarantees success, but because any defect is a sign of inattention on the part of the consecrator and indicates that he is not working with due concentration and absorption. So, there would be lacking the psychological conditions by which, in his spirit, the process of redemption is produced. (this description seems to be connected to Tantric rituals).

15. Corlin, 1978, "A Tibetan Enclave in Yunan: Land, Kinship and Inheritance in rgyal-thang." Tibetan Studies, Zurich.

16. Ibid, p13.

17. Tange Kenzo, pg 54-89, ISE: Prototype of Japanese Architecture. 1984. By the banks of the limpid Isuzu river, amid dense forests at the foot of Mount Kamiiji and Mount Shimaji stands the Ise shrine, its appearance only a little changed since remote antiquity. The Naiku (Inner shrine), dedicated to the worship of Amaterasu-Omikami ("Heaven-illuminating Goddess"), Sun-Goddess and legendary ancestress

of the Imperial House, is on the east bank of the river. About four miles away, across the river, against the background of the (hill) Takakura, lies the Geku (Outer Shrine), in which Toyouke-Omikami, Goddess of Cereals, is venerated. There is much significance attributed to the central pillar in these shrines which is replaced every ten years, and that process is more elaborate than selection and erection of the central column in a Tibetan household or a monastery.

18. b-Sang is a Tibetan name for a symbolic torch, used in various rituals connected with the offering to local deities.

19. Mdzo is a cross-breed of yak and a cow. The mdzo is strong as the yak, and at the same time produces milk in large quantities.

20. Khabtags: In Buddhist monasteries, offering to the deity is made silk or cotton scarves which are either white or saffron or burgundy in colour. It is quite customary and normal to make an offering if one visits a religious site, or a temple or any other form of religious representation.

21. Handa.O.C,1987 "Buddhist Monasteries in Himachal Pradesh" pg36-38.

22. Ibid, pg 68.

23. Ibid, pg47-48.

24. ibid, p34.

25. Li Huaizhi,1981, Tibet, Mc Graw Hill, NY pg56-78.

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**THE ARCHITECTURAL MANIFESTATION OF TIBETAN
BUDDHIST RELIGIOUS PRINCIPLES
A case study of the monastery complex at
Dharamshala, INDIA.**

by

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**B.Arch, Sir.J.J.College of Architecture
UNIVERSITY OF BOMBAY, INDIA. 1988**

AN ABSTRACT OF A THESIS

**submitted in partial fulfillment of the
requirements for the degree**

**MASTER OF ARCHITECTURE
School of Architecture and Design**

**KANSAS STATE UNIVERSITY
Manhattan, Kansas
1992**

AES-OEAM

TS-AD

ABSTRACT

The purpose of this research is to investigate Tibetan Buddhist monasteries in the northern Indian region of Himachal Pradesh as manifestations of Buddhist religious principles.

This research seeks to first understand the religious principles associated with the built forms, and subsequently identify their conceptual realizations in built forms as models. An outcome of the above realization is a hypothesis attempting to link the principles with models. In conclusion, the hypothesis is tested on a specific case study of a monastery complex at Dharamshala.

This research demonstrates that formal and social expressions of centrality are seen to reoccur at progressively larger scales of built forms. The concept of "house" appears to transcend that of monastery and to have primary spiritual, social, spatial and formal expression of a unified world view.