

Sacred Visions for the Himalayan Region : Manang & Mustang Valley

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Abstract

The Manang and Mustang Valley in the Himalayan region has been a space on this planet, where purity of the landscape and the Mountains is connected to spiritual quest of its inhabitants. Where snow-peaked mountains melt into lakes and small tributaries and sacred rivers begin their journey to meet oceans. This landscape has given rise to breathtaking beauty where play of cosmic energy along with simple awareness of human habitat has given rise to unique culture and architecture that is humble, strong yet devoid of monumental or iconic architecture that we witness in urban cities. For centuries this region remained isolated to the outside world due to its challenging terrain, yet evolved unique identity and character that resonated with its beautiful natural landscape.

The paper explores a vision for the Manang and Mustang valley, which presently is at the threshold of massive change after the motorable road reaching these remote spaces. Jomsom and Chame are no longer villages but resemble an urban chaos. But smaller villages higher up such as Brakka still resonate 500-year-old Monasteries merging with the Community and landscape.

This presentation would explore and delve into a visual reflection reminding all about the Sacred Visions necessary for the Himalayan Region.

Background

The Manang and Mustang Valley in the Himalayan region has been a space on this planet, where purity of the landscape and the Mountains is connected to spiritual quest of its inhabitants. Where snow-peaked mountains melt into lakes and small tributaries and sacred rivers begin their journey to meet oceans. This landscape has given rise to breathtaking beauty where play of cosmic energy along with simple awareness of human habitat has given rise to unique culture and architecture that is humble, strong yet devoid of monumental or iconic architecture that we witness in urban cities.

Being one of the few places in the Himalayan region that has been able to retain its traditional culture and environment, it is significant to shift the main focus in the importance of maintaining the authenticity of its divine culture for further expanding its potentiality of making positive contribution in today's world.

The traditions and culture of Manang and Mustang have survived well in its past years, but the potential problems of modernization grow together with the need for connectivity and ease of accessibility with the newly built road linkages. This presentation and paper strives to explore broad range of potentials and considerations necessary for the long-term vision for the Manang and Mustang region to retain the sacredness and beauty, while injecting carefully the authentic cultural and nature-based tourism experiences.



Figure 1. The Brakka Monastery and hill , source Author

SACREDNESS

The geomorphology of this terrain is unique. Touching the rim of the Tibetan plateau to the North and folding into the Kali Gandaki Gorge as it slopes south, Mustang bears witness to enormous forces that formed this landscape 65 million years ago when India was separated by the Tethysian Sea from Eurasia. Along the southern edge of Eurasia as the two continents conversed as the thinner ocean boundary of the Indian Land mass was forced under the thicker Eurasian crust. Thrusting along this line, the Himalayas were formed. The continual elevation of the Himalayas started to show substantial variations on the climatic conditions. The Northern stretches were initially as warm as the Southern ones but when the peaks started to rise above twenty thousand feet, the humid air from the plains was no longer able to penetrate the plateau, thus fashioning a vast barren desert landscape.

Survival in this harsh environment is difficult at its best - even for the rugged people of the Himalayas. For centuries this region remained isolated to the outside world due to its challenging terrain and political reasons, but despite these challenge Mustang evolved unique identity and character that resonated with its beautiful natural landscape.

The relevance of Frank Lloyd Wright's quote is echoed coherently when he says '*No house should ever be on a hill or on anything. It should be of the hill. Belonging to it. Hill and house should live together each the happier for the other*'. [1] The landscape of this valley fuse imperceptibly almost unnoticed in all the villages and embraces the mountains. Rammed Earth Architecture has been used to create architecture that is a deep reflection of the local context.

Kag Chode Thupten Samphel Ling, a monastery established in 1429, was built on a wall of earth that leans inward as it rises and consists of horizontally laid wooden beams at intervals across the wall, visible from the outside, which could have been used to improve the seismic resistance of the structure and thermal capabilities. It shows the viability of earthen architecture that has stood the tests of time. [2]

LANDSCAPE & TRADITIONAL ARCHITECTURE :

A Source of Inspiration

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Survival in this harsh environment is difficult at its best - even for the rugged people of the Himalayas. For centuries this region remained isolated to the outside world due to its challenging terrain and political reasons, but despite these challenge Mustang evolved unique identity and character that resonated with its beautiful natural landscape. The relevance of Frank Lloyd Wright's quote is echoed coherently when he says "No house should ever be on a hill or on anything. It should be of the hill. Belonging to it. Hill and house should live together each the happier for the other". The landscape of this valley fuse imperceptibly almost unnoticed in all the villages and embraces the mountains. Rammed Earth Architecture has been used to create an endogenous architecture that is a deep reflection of the local context.

MANAGEMENT of RESOURCES

The management of precious resources should be at the heart of the vision and planning principles. Considering the fact that the uniqueness and purity of a place such as Manang and Mustang is derived largely from the existence and balance of its resources and utilization so as to sustain and retain its originality.



Figure 2. Manang Valley. Source. Tashi R.Ghale

Life of the people living in this region revolves with trade, tourism and animal rearing with the rain shadow of Dhaulagiri. Presently also the house of Mustang is built in the Tibetan style which shows the example of the survival of Tibetan culture in Nepal. Materials used in roofing are the symbols and synonymous of prosperity in Nepali society. In Mustang district many rural houses are constructed by using mud. Even few are the houses that are slate roofed. A traditional house is made from stone and brick walls, roofs made with poplar wooden beams and willow twigs covered with straw, grass, mud and clay; sometimes even with the dung of cows, donkeys or horses to increase its solidness.

Three-fourths of people here migrate down to Pokhara and Kathmandu in the harsh winter months. Integration of the buildings and its construction materials into the natural environment is a must to achieve good resource management. Understanding the natural environment is the first step towards achieving a nature integral design. As the basic principles that outline a nature-positive design are all innate in the vernacular design concept; vernacular building design ideas should be encouraged and improved in order to achieve



Figure 3. Simplicity and Colours. Source. Author



Figure 4. Chortens and Mountains. Source. Author

sustainable and healthy nature integrated designs, making use of the local landscape, local materials, orientation, sustainable techniques of recycling and permaculture, local climate and the conscious idea of balance with nature.

HOLISTIC approach towards ENVIRONMENT, BUILDING AND PEOPLE

The arid and rugged landscape of this region has shaped the people for centuries, and the people have respected the landscape even though with the hardships endured. This perfect blend has defined the trans-Himalayan typical and unique way of life. Its buildings make best use of sun, wind and rainfall to supply energy and water needs of occupants. The use of vernacular material reflects the climatic, geographical and social aspect of the region.

With greater development comes greater expectation and exploitation of natural resources. Local people also want comfort and want the ease and benefit of development, yet the haphazard use of concrete and foreign materials over-riding the natural materials that exist needs a stronger understanding and standard that needs to be addressed at a policy level of management. This remains a challenging factor to initiate a long-term vision planning and implementation to maintain the balance between environment, building and people. Engaging the communities in natural resource management is equally important for the sustainability of the spirit of the place. It is a matter of priority to find a mutual alignment between public aspirations of development and the need for conservation. This is possible by generating awareness and understanding with the local Community instead of imposing laws to make them accept changes in a desired way.

APPROPRIATE BUILDING TECHNOLOGIES based on EARTH Compressed Stabilized Earth Block

There is a growing interest in stabilized earth building materials development with respect to an energy conscious and ecological design. These materials integrate strength and serviceability requirements for thermal transmittance – relevant to the Himalayan region.

The compressed earth block, more commonly known as the adobe block, can be deemed as a modern descendant of the molded earth block. However, the idea of compacting earth to improve the quality and performance of molded earth blocks is far from new and the first compressed earth blocks have been produced with wooden molds.

In present, the earth, raw or stabilized, is sporadically moistened, poured into a steel press and then compressed manually or by a motor press - can be compressed in many different shapes and sizes. The compressive strength of compressed stabilized earth building blocks depends on the type of soil, the type and volume of stabilizer, and the compaction force used to shape the block. Compressed stabilized earth blocks are typically more compact than a variety of concrete masonry items, such as aerated and lightweight concrete blocks. Low density compressed earth blocks have the advantage of acting as better thermal insulators over high density ones.

Case Study

The examples of **Auroville, Ladakh** and the **Sky-caves** form an important inspiration to understand earthy materials and its relationship to the built environment in sync with the spirit of a place, and to use this distilled knowledge into developing places in the Himalayan region.

Auroville

The term Auroville comes from the French *Aurora* meaning Dawn, and *Ville* meaning City. In the 1960s, India's fascination and need to consciously promote sustainable development led a small band of people from different countries to unite in a shared vision for the degraded region. From the early days of Auroville, in the 1970's, different experiments have been made with earth building, with mixed results. The creation of the former Auroville Building Centre/ Earth Unit in 1989, and the construction of the Visitors' center, started a new era in Earthen Architecture. [3]

Sustainable design requires the integration and use of the natural environment in planning and design. Within Auroville, architects, planners and product designers have



Figure 5. Kagbeni Valley. Source. Author

focused their innovations on sustainable principles. Auroville at present displays a wide range of earthen projects: public buildings, schools, apartments and households. Most of the facilities were built with compressed stabilized earth blocks, as this technology benefits from half a century of research and development around the world. Three other earth methods are also being used in Auroville. Such techniques are utilized very slightly since only eight buildings have been constructed with them.

1. Raw rammed earth, for only two buildings.
2. Adobe blocks the traditional sun-dried mud brick, for two buildings.
3. Wattle and daub, which is mud plastered on a wattle made of split bamboo or palmyra tree, for 4 buildings.

Auroville tries to restore the traditional knowledge through Auroville Earth Institute by demonstrating that earth still remains a noble building material that can be used for the manifestation of modern, harmonious and progressive architecture.

Ladakh

Ladakh landscape is filled with varied colored barren mountains and strong solar radiation. Ladakhi lifestyle in ancient times consisted of sustainable methods of building and living practices. We can see remnants of ancient earth building, and passive solar techniques employed to combat the cold winters of this region. Both earth and timber are natural materials and offer climatic comfort in wide diurnal range of Ladakh. It is due to their high thermal insulating properties that they have ideally been used for centuries not to just construct houses but also the monasteries and places in this region.

Rammed earth along with adobe has traditionally been one of the most popular construction techniques in Ladakh. Ladakh's soil type is primarily sandy clay making it perfect for rammed earth construction. (Wangchuck 2012) [4]. Traditionally, rammed earth walls have been constructed using a basic frame. Since the earth is not stable, it crumbles over time in places and has to be either whitewashed regularly or plastered with clayey soil. Earth building presents huge opportunities

in Ladakh's resource-scarce area. It could give the region's design and building industry a way of self-reliance.

SKY CAVES

The Sky Caves of Nepal are cliff dwellings dug into the sides of valleys and is a fascinating feature of the Mustang region. The findings of partially mummified human bodies, skeletons, discovery of valuable Buddhist paintings, sculptures, artifacts, manuscripts together create a story to unravel.

As per the sources, scientists have divided cave use in Upper Mustang into three periods. As early as 1,000 BC, the caves were used as burial chambers. During the 10th century, the region was battled over, and consequently, placing safety over convenience. Families moved into the caves, turning them into living quarters. By the 1400s, the caves functioned as meditation chambers, military lookouts or storage units as people moved into villages. [5]

Building on a mountainous terrain is challenging in many ways of manpower, technology, finance, ecology but at the same time the flat fertile lands beside the river are better utilized for farming.

CHANGE & VISION

Manang and Mustang valley, which presently is at the threshold of major change after the motorable road reaching these remote spaces, needs a long-term vision. Jomsom and Chame are no longer villages but resemble an urban chaos. But smaller villages higher up such as Brakka still resonate 500-year-old Monasteries merging with the Community and landscape.

As Planners, Architects, Policy makers, Visionaries and leaders - we need to remind ourselves about the Sacred Visions necessary for the Himalayan Region. In the days to come, when the urban jungle expands its boundaries and every city in the world would appear similar - places such as Mustang and Manang if preserved, maintained and allowed to be shaped by spiritual ideals along with the local context of nature, climate and materials. Perhaps we will have a special sacred place in in the mountains that connect us to our spiritual thirst in our life's journey.

Endnotes

1. Frank Lloyd Wright: An Autobiography Page 168
2. Paul Jaquin. A history of rammed earth in asia. International Symposium on Innovation & Sustainability of Structures in Civil Engineering, 2011.
3. Auroville Example of a conference proceedings paper in a book: [Author Name(s), first then last], “[Paper Title],” in [Proceedings Book Name], ed. [Editor Name] ([Publisher City: Publisher Name, Year Published]), [Page Number(s)].
4. Vernacular Heritage and Earthen Architecture, edited by Mariana Correia, Gilberto Carlos, Sandra Rocha Page 612
5. Mr.Devotor, “ The Mysterious Caves of Mustang, Nepal],” www.charismaticplanet.com/mysterious-caves-mustang-nepal/