

Industrial Design Project II

Redesigning the Chukun chomey stand (Chukun Chomey = Butter Lamp)

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1. Introduction

In this Covid-19 situation, where we all are back in hometown. Being back home for a while i had an opportunity to observed my culture and traditions (i.e. Indo-Tibetan Buddhist). The mesmerizing colors, patterns and detailing in the culture, (like, it may the attire of religious dance or the art work in the monasteries) made me admire and explore. Things that caught my eyes and I would like to explain are

- The attire and the traditional Buddhist dance known as 'Cham dance'.
- The colorful butter sculpture known as 'Torma'.
- the Tibetan Buddhist painting known as 'Thangka'.

1.1 The attire and the Traditional Buddhist dance (Cham dance)

Costumes are worn over the usual dress of the monk. They are heavily decorated with jewellery which are generally gold and silver plated, having beautiful detailing.



fig 1.1 - The Beautiful attire during the Cham Dance

The cham dance is a lively masked and costumed dance associated with some sects of Tibetan Buddhism and Buddhist festivals. The dance is accompanied by music played by monks using traditional Tibetan musical instruments. The dances often offer moral instruction relating to karunā (compassion) for sentient beings and are held to bring merit to all who perceive them.

1.2 The colorful butter Sculpture (Torma)

Monks make this stunning, ephemeral art from yak butter and mineral pigments.



fig 1.2 - The colourful butter sculpture made by the monks

Butter might seem like an unlikely artistic medium. But in some Tibetan Buddhist traditions, sculptors shape yak butter that's been colored with mineral pigments into flowers, animals, and meaningful symbols such as the dharma wheel. The sculptures, known as torma, are often made by Buddhist monks, nuns, and laity for prayer festivals and the Tibetan New Year, also known as Losar.

It's possible to see butter sculptures year-round, but one of the best times to see them is during the Butter Lamp Festival, which coincides with the Tibetan New Year. Typically held in February or March, the New Year's exact date is determined by the Tibetan lunar calendar.

1.3 Tibetan Buddhist Painting (Thangka)

The Thangka painting has been a popular art form made on cotton in the Buddhist community. It usually depicting a Buddhist deity, scene, or mandala. Silk is introduced as a side attraction and for preservation purposes for the painting. The Thangka paintings stay free of a frame and get rolled when not being displayed. This painting gets stored in dry surroundings due to the material used for canvas. The sizes of the magnificent paintings differ as they range from extremely big to relatively small.



fig 1.3 Thangka Painting

Thangka perform several different functions. Images of deities can be used as teaching tools when depicting the life (or lives) of the Buddha, describing historical events concerning important Lamas, or retelling myths associated with other deities.

There are whole lot more designs which i am surrounded to. While going through the traditional designs and detailing, found a space where I felt there is a design gap and could be worked on. It's the chukun chomey (butter lamp) stand.

Objective

The objective was to understand the traditional patterns, elements and feature that can to be imparted while redesigning the chukun chomey stand.

Reason behind the Problem

Firstly, the chukun chomey stand at present is just a wooden block with the glasses on each side with the only feature of keeping the chukun chomey. It felt like it's the only element/part which feels like left apart.

Secondly, the soot released from the chukun chomey at the top of the chukun chomey stand when placed inside. This Spoil the paint on the wall, due to which the wall is to be painted frequently. Lastly, to preserve and promote the culture and tradition.

2. Study

2.1 Culture Study

In order to understand the culture of Indo-Tibetan Buddhism, we would have to understand

- Their classification in Buddhism
- Their geographical location
- The Buddhist Monasteries
- The Lamp House
- Typical puja space 'Chosham'

And Chosham is place where you will generally find the butter lamp stand.

Indo-Tibetan Buddhism

Tibetan Buddhism (also Indo-Tibetan Buddhism and Sino-Indian Buddhism) is the form of Buddhism practiced in Tibet, where it is the dominant religion. It also has adherents in the regions surrounding the Himalayas (such as Bhutan, Ladakh, and Sikkim), in much of Central Asia, in the Southern Siberian regions such as Tuva, and in Mongolia.

Tibetan Buddhism evolved as a form of Mahayana Buddhism stemming from the latest stages of Indian Buddhism (which also included many Vajrayana elements). It thus preserves many Indian Buddhist tantric practices of the post-Gupta Early Medieval period (500 to 1200 CE), along with numerous native Tibetan developments.[1][2] In the pre-modern era, Tibetan Buddhism spread outside of Tibet primarily due to the influence of the Mongol Yuan dynasty (1271–1368), founded by Kublai Khan, which ruled China, Mongolia and parts of Siberia. In the Modern era, it has spread outside of Asia due to the efforts of the Tibetan diaspora (1959 onwards).

Apart from classical Mahayana Buddhist practices like the six perfections, Tibetan Buddhism also includes tantric practices, such as deity

yoga and the Six Dharmas of Naropa as well as methods which are seen as transcending tantra, like Dzogchen. Its main goal is Buddhahood. The main language of scriptural study in this tradition is classical Tibetan.

Indo-Tibetan Buddhism's classification in Buddhism

Buddhism is divided into three division

- Vajrayana
- Mahayana
- Theravada

where the Indo-Tibetan Buddhism comes under Vajrayana with the other two namely

- Shingon Buddhism
- Newar Buddhism

Geographical location of the three main division of Buddhism

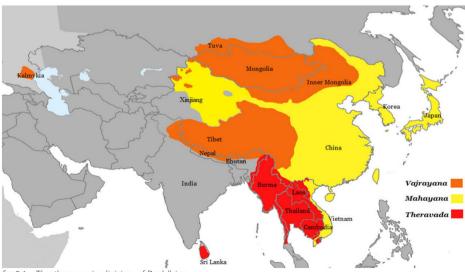


fig 2.1 - The three main division of Buddhism

An Indo-tibetan Buddhist Monasteries (Gompa)



fig 2.2 - Gompa in Manali

Monasteries are also know as 'Gompa' in Buddhist. Monasteries are Buddhist ecclesiastical fortifications of learning, lineage and sadhana that may be understood as a conflation of a fortification, a vihara and a university associated with Tibetan Buddhism and thus common in historical Tibetan regions including parts of China, India, Nepal, Ladakh and Bhutan. Bhutanese dzong architecture is a subset of traditional gompa design. A gompa is a meditation room where practitioners meditate and listen to teachings.

One of the monasteries in my home town is the one in the picture above fig4.2

thus,

This Indo-Tibetan Buddhist monasteries in Manali includes

- 1. The main Building which includes assembly hall and the sanctum of Gautama Buddha flanked by Padmasambhava (Guru Rinpoche) to the right and Tara (Dolma) to the left.
- 2. The semi open chanting space.
- 3. The lamp house.
- 4. Chorten.
- 5. Prayer wheel house.
- 6. A pathway around all the above
- 7. Residential space for the monks
- 8. Function hall



fig 2.3 - Site Plan of Gompa in Manali

Butter Lamp house

The Butter Lamp house is towards the south-western part of the temple complex. Butter lamps are offered as a part of holy tradition. Initially, the lamps were burnt directly under the Bodhi Tree, but were moved owing to the damage being caused to the sacred tree from their heat. They now stand alone as there is a high risk of catching fire.

Here visitors can donate money in various denominations, and correspondingly light lamps in the houses. The money is used to maintain and clean the place, while the light of prayers keeps burning.



fig 2.4 - Butter Lamp House



fig 2.5 -interior of the butter lamp house

Typical puja space in an indo-tibetan buddhist house(chosham)



fig 2.6 - Layout of a typical Indo-tibetan Buddhist's puja space in a house

The picture shown above shows the layout of Puja space in a typical Indo-Tibetan Buddhist house. A regular routine for praying and offering starts in the morning before or at the time of sunrise. The water and black tea are offered. A butter lamp and the incense stick are lighted up and kept at their respective stand after the offering is done. Then,

before the sunset, the offered water and tea is poured to back to a container which is then given to the plants. And again, a butter lamp and the incense stick are lighted up and kept at their respective stand.

So, I'll list down as to what all are there in the picture above Fig4.6 and also, briefly explain it.

- At the top, we have the picture frames of 'His Holiness the Dalia Lama' and various gods.
- The middle-framed box is for keeping the Idols of gods
- At the right side of the box is the Butter lamp inside the butter lamp stand also known as 'chukun chomey stand'.



fig 2.7 - Butter lamp Stand



fig 2.8 - Rotating sacred script (Maane)

Infront of the chukun chomey stand is a small colored circular stand containing sacred script rolled to a thin metal rod which is exposed at the top for rotating it in the clockwise direction. Thus, this known as 'Maane'.



fig 2.9 - different view of the Incense Stick (poey) holder

- Just below the butter lamp stand is the Incense stick holder
- Below the Butter lamp stand, at the corner is the Container to offer tea (Chabi)

Tea is offered at the part of the container. These are in the single set with two parts the top portion in which the tea is offered. The tray in which the top portion is rested. The offering is done in the same manner as dhunzer(water offering). The manufacturing material is also the same.



fig 2.10 - for tea (Chabi) offering



fig 2.11 - for water offering (Dhunzer)

- Just the left to it is the set of seven bowls of water known as 'Dhunzer'. Water is offered in these bowls. They are made of either Silver, Copper, Steel or Brass
- Separating the set of seven bowls with the other set of seven bowl is done by chukun chomey.

These are a conspicuous feature of Tibetan Buddhist monasteries and houses throughout the Himalayas. The lamps traditionally burn clarified yak butter, but now often use vegetable oil (Dalda) or vanaspati ghee.
The butter lamps help to focus the mind and aid meditation



fig 2.12 - Butter Lamp (Chukun Chomey)

Eight Auspicious Symbols

In Buddhism, the Eight Auspicious Symbols are a set of objects that represent qualities of enlightenment and serve as teaching tools. They began as symbols used in India at the coronation of kings. In Buddhist traditions, the eight symbols are a white parasol, a conch shell, a treasure vase, a victory banner, a dharma wheel, a pair of golden fish, an endless knot, and a lotus flower. These symbols can be found and are used throughout the religion. They may be found on furniture, metalwork, carpets, and ceramics.

Parasol



fig 4.13 The Parasol

The parasol has its roots serving as an Indian symbol of royalty and protection. The Parasol symbolizes the wholesome activity of preserving beings from illness, harmful forces and obstacles in life. It also represents the enjoyment of a feast of benefit under its cool shade.

Conch Shell



fig 4.14 The Conch Shell

The conch shell began as an Indian attribute of heroic gods, where shells represented victories in battle. As a Buddhist symbol, it represents the Buddha's teachings and the fearlessness of sharing these ideas to others.

Treasure Vase



fig 2.15 The Treasure Vase

The Buddhist style treasure vase is modeled after traditional Indian clay water pots. The vase is mostly used as a symbol of certain wealth deities, but also **represents the endless quality of the Buddha's teachings.** In the typical Tibetan representation, the vase is highly ornate with a gold color and lotus petal designs along various points. It is also usually studded with a number of precious gems and a sacred silk scarf around its' neck.

Victory Banner



fig 2.16 The Victory banner

The victory banner originated as a military standard in ancient Indian Warfare. The banners would be adorned differently depending on the deity that it was meant to convey and lead. In Buddhism, the banner represents the triumphs of the Buddha over the four

hindrances on the path to enlightenment.

Dharma Wheel

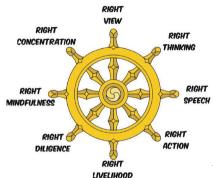


fig 2.17 The Dharma wheel

The wheel began as Indian symbol for sovereignty, power, and protection. The wheel is made up of three key parts, the hub, the spokes, and the rim. Respectively, they represent ethics, wisdom, and concentration. The eight-spoked wheel is meant to represent the aspects of the Noble Eightfold Path, the practices said to lead one out of the cycle of rebirth. In some early Buddhist sites, the wheel served as a symbol of the Buddha himself.

Golden Fish



fig 2.18 The pair of Golden fish

The pair of golden fish began as a representation of the two great rivers of India, the Ganges and the Yamuna. When they were adopted into Buddhism, they came to symbolize happiness and spontaneity due to their freedom moving through water. The freedom represented by the fish symbolizes freedom from the cycle of rebirth.

Endless Knot



The endless knot is a piece of imagery present throughout many ancient cultures and beliefs. In Buddhism the knot serves as a symbol of the Buddha's endless wisdom and compassion in addition to eternal harmony. When applied to the Buddha's teachings it represents the endless cycle of rebirth.

Lotus Flower

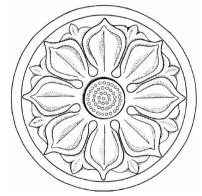


fig 2.20 The Lotus flower

fia 2.19 The Endless knot

The lotus flower is a plant prevalent throughout South and Southeast Asia that is known for its ability to grow unstained in murky waters. This quality of its remaining pure when surrounded by dirt and filth led to it becoming a Buddhist symbol of purity and renunciation. In addition, the lotus serves as a symbol of birth and represents the divine origin of deities when seen in artwork. In architecture the shape of the lotus is used to denote the purity of a space and the presence of the Buddha.

Tibetan Prayer Flags

Prayer flags are set up in various places and are said to spread prayer around when the wind blows through them. Preferably, the flags are hung on sunny, windy days to prevent them from being damaged. The prayer flags come in a set of five colors with the colors rotating as it goes on. The colors used are blue, white, red, green, and yellow in that specific order.

- 1. Blues is said to symbolize sky and space
- 2. White for air and wind
- 3. Red for fire
- 4. Green for water and
- 5. yellow for earth.

The writing on the flag are typically mantras dedicated to various gods. In addition to the mantras, there are also prayers of good fortune meant for the person who mounts the flags.



fig 2.21 The Prayer Flag

2.2 User study

2.2.1 Why butter lamps are offered?

In the Vajrayana Buddhist tradition, we accumulate merit in order to create positive short - term circumstances such as health, wealth, longevity and more deeply, to reveal our wisdom to nature. Of all the methods for accumulating merit through generosity, offering Butter Lamps is one of the best, second only to the practice of feast offering.



fig 2.22 The lighted butter lamp

Traditional way of lighting butter lamps

Regarded as a spiritual practice, the traditional way of lighting butter lamps starts with washing one's hands. A mask is worn to prevent one's breath from 'contaminating' the purity of the butter lamp. Next, old butter is removed from the chalice using a clean piece of cloth and a new wick of pure cotton is placed within. The entire process is carried out in a very meditative manner, meant to draw one in both physically and spiritually.



fig 2.23 The offering of the butter lamp

2.2.2 Symbolism of lighting butter lamps:

1. Dispelling darkness and ignorance

First and foremost, teachings in Buddhism consider the lack of wisdom and ignorance as the source of many problems in the mundane world and this is metaphorically presented as darkness.

On the other hand, light stands for the liberation of all sentient beings from the darkness of ignorance. Therefore, the act of lighting butter lamps acts as a symbolic way of eliminating darkness and ignorance from this world.

Looking back into the past where there was no electricity, lighting butter lamps, as opposed to lighting firewood or coal which emit smoke and pollutants, was deemed a better way to illuminate any place.

2. Impermanence of all things

The flickering of a butter lamp flame holds great significance for it is an embodiment of the fluid nature of any situations in life and that all things, good or bad, will come to pass.

3. Inter-dependency of everything

The precept of inter-dependency in Buddhism is also exemplified by the lighting of butter lamps.

Without a chalice, there would be no place to hold the butter, and without butter, there would be no place to hold the wick, hence there will be no flame.

This series of steps reminds one of the theory of inter-dependence and by applying it to how we treat Mother Nature for instance, we know that we reap what we sow and therefore, we must respect and protect our environment.

And by extension, if we continue to light the second lamp using the first one, we can repeat our actions until the third, fourth, fifth and more butter lamps are illuminated. This is again representative of how all things in this world are inter-dependent.

4. Prayers for goodwill

Offerings of prayers after the lighting of butter lamps is an integral

part of Buddhist tradition.

2.2.3 Benefits of Butter-lamps

In the Tune of Brahma, Shakyamuni Buddha mentioned the ten benefits of offering lights:

- 1. One becomes like the light of the world
- 2. One achieves clairvoyance of the pure eye as a human
- 3. One achieves the Deva's eye
- 4. One receives the wisdom to discriminate virtue from non-virtue
- 5. One is able to eliminate the concept of inherent existence
- 6. One receives the illumination of wisdom
- 7. One is reborn as a human or deva
- 8. One receives great enjoyment wealth
- 9. One quickly becomes liberated
- 10. One quickly attains enlightenment

2.2.4 Dimension of Chukun chomey in Indo-Tibetan Buddhist houses

The smallest size of a chukun chomey has a height of 9cm with the diameter of 7cm.

whereas, the largest size of a chukun chomey has a height of 15cm with the diameter of 11cm.



fig 2.24 The smallest size of chukun chomey (butter lamp) in a typical Indo-tibetan buddhist house



fig 2.25 The Largest size of chukun chomey (butter lamp) in a typical Indo-tibetan buddhist house

2.2.5 Dimension of the present Chukun chomey stand

The height of the present chukun chomey stand is 45cm and each side are equal of width 20cm each.



fig 2.26 The chukun chomey stand (butter lamp stand) in a typical Indo-tibetan buddhist house

2.3 Material and Process study

2.3.3. Different Types of Wood & Their Uses

Understanding the many different types of wood and their uses can be very helpful for choosing the best wood for your next project. Whether you are building something out of wood or simply choosing wood furniture for your home, this list of the many wood types will help make sure you choose wood you can be happy with. Wood is available in many different shapes and sizes. Since wood comes from trees and there are many different species of trees it is not surprising we have such a large variety of different woods to use for building.

The Three Main Types of Wood

- 1. Softwood
- 2. Hardwood
- 3. Engineered wood

1. Softwoods

Softwoods are the wood and lumber which are milled from conifer trees. Scientifically known as Gymnosperms, Conifer trees are any trees which have needles and produce cones. Examples of popular softwood trees used in woodworking, construction, and furniture are Pine, Cedar, Fir, Spruce, and Redwood.

Are Softwoods Softer Than Hardwoods?

Contrary to popular belief, softwoods are not named softwoods because they are "soft". While it is true that some varieties of hardwoods are very hard and therefore more challenging to work with, the distinction between hardwood and softwood has little to do with the actual softness or whether one wood is harder to work with. There are many hardwoods which are softer than softwoods.

How Are Softwoods Like Pine, Cedar, Spruce, Fir and Redwood Used?

Most softwoods are strong and commonly used in many different building applications. Spruce, Pine, and Fir (SPF) are commonly sold under as dimensional SPF lumber at home improvement centers. These woods are often used in framing new construction, as well as building utility style structures.

Many of these woods, particularly softwoods from the cypress family are renowned for their ability to resist rot and insects. This makes trees such as cedar and redwood ideal for exterior projects, such as decking and outdoor furniture.

2. Hardwoods

Hardwoods come from any trees which do not produce needles or cones. These trees are most commonly are known as deciduous trees, more scientifically known as angiosperms. Hardwoods are trees which produces leaves and seeds.

Common hardwood species include oak, maple, cherry, mahogany, and walnut. Hardwood species are not always necessarily stronger than softwoods, but many species are well known for their beautiful and distinct wood grain patterns. There are also some woods which are considered to be hardwoods that are not deciduous trees, such as Bamboo and Palm. These plants are scientifically known as monocotyledons, but have many of the same characteristics of hardwoods and so are often classified as such. Bamboo and Palm can sometimes fall under the next classification of engineered wood.

3. Engineered Wood: Manufactured Wood Products

The third type of wood you may encounter are engineered woods. Engineered wood does not occur naturally in the environment but instead are manufactured.

These boards are generally made with wood which is manipulated to have certain qualities or features. Also known as composite wood, these products are often made from the waste wood of sawmills. Engineered wood is often treated through chemical or a heat process to produce a wood product which can meet certain sizes that would be difficult to achieve from nature.

Popular examples of engineered woods include Plywood, Oriented Strand Board, Medium Density Fiber Board, and Composite Board. Wood veneers can also sometimes be classified as engineered wood, since it often needs to be manipulated either through specialized cutting techniques or joining pieces together to achieve a specific size or wood grain patterning.

2.3.1 Types of wooden joints (Basic)

1. Butt Joint.

A simple joining of two pieces of wood, either at a corner or edge to edge.

Make it stronger with glue blocks or screws.



fig 2.27 Butt joint

5. Miter Joint.

Create this corner joint by sawing one end of each piece to 450. It demands accurate cutting.



fig 2.31 Miter joint

2. Dado Joint.

You'll see this joint on bookcase shelves. A dado cut in one piece receives the end of the other.



fig 2.28 Dado joint

6. Mortise and Tenon Joint.

A strong, traditional joint that can be made even tougher by adding a peg. Not all mortises go all the way through.



fig 2.32 Mortise and Tenon joint

3. Dowel Joint.

Drill aligning holes in each piece of wood, then glue dowels in place for a tight joint. Perfection requires a centering tool.



fig 2.29 Dowel joint

7. Through-Dovetail Joint.

There's not a better-looking joint, nor one that requires more patience and accuracy to cut. The interlocking feature makes it really strong, but adds visual interest.



fig 2.33 Through-Dovetail joint

4. Lap Joint.

Add gluing surface and strength to a butt joint by cutting a rabbet in the overlapping piece.



fig 2.30 Lap joint

8. Tongue-and-Groove Joint.

This joint allows for wood shrinkage. Cut a groove in the edge of one piece and a tongue on the other to fit into the groove



fig 2.34 Tongue and Groove joint

2.3.2 Wood carving

Wood carving is a form of woodworking by means of a cutting tool (knife) in one hand or a chisel by two hands or with one hand on a chisel and one hand on a mallet, resulting in a wooden figure or in the sculptural ornamentation of a wooden object. The phrase may also refer to the finished product, from individual sculptures to handworked mouldings composing part of a tracery.

The making of sculpture in wood has been extremely widely practised, but doesn't survive undamaged as well as the other main materials like stone and bronze, as it is vulnerable to decay, insect damage, and fire. It therefore forms an important hidden element in the art history of many cultures. Outdoor wood sculptures do not last long in most parts of the world, so it is still unknown how the totem pole tradition developed. Many of the most important sculptures of China and Japan, in particular, are in wood, and so are the great majority of African sculpture and that of Oceania and other regions. Wood is light and can take very fine detail so it is highly suitable for masks and other sculpture intended to be worn or carried. It is also much easier to work on than stone

Methods and styles

Chip carving

Chip carving is a style of carving in which knives or chisels are used to remove small chips of the material from a flat surface in a single piece.



fig 2.35 Chip Carving using Knife tool

Relief carving

Relief carving is a type of wood carving in which figures are carved in a flat panel of wood. The figures project only slightly from the background rather than standing freely. Depending on the degree of projection, reliefs may also be classified as high or medium relief. Relief carving can be described as "carving pictures in wood". The process of relief carving involves removing wood from a flat wood panel in such a way that an object appears to rise out of the wood. Relief carving begins with a design idea, usually put to paper in the form of a master pattern which is then transferred to the wood surface. Most relief carving is done with hand tools - chisels and gouges - which often require a mallet to drive them through the wood. As wood is removed from the panel around the objects traced onto it from the pattern, the objects themselves stand up from the background wood. Modeling of the objects can take place as soon as enough background has been removed and the object edges are trimmed to the pattern lines.



fig 2.36 Relief Carving on a flatpanel of wood.

Treen

Treen (literally "of a tree") is a generic name for small handmade functional household objects made of wood. Treen is distinct from furniture, such as chairs, and cabinetry, as well as clocks and cupboards. Before the late 17th century, when silver, pewter, and ceramics were introduced for tableware, most small household items, boxes and tableware were carved from wood. Today, treen is highly collectable for its beautiful patina and tactile appeal.

Anything from wooden plates and bowls, snuff boxes and needle cases, spoons and stay busks to shoehorns and chopping boards can be classed as treen. Domestic and agricultural wooden tools are also usually classed with treen.



fig 2.37 Shoe shaped wooden box.

Whittling

Whittling may refer either to the art of carving shapes out of raw wood using a knife or a time-occupying, non-artistic (contrast wood carving for artistic process) process of repeatedly shaving slivers from a piece of wood. It is used by many as a pastime, or as a way to make artistic creations.



fig 2.38 Whittling



fig 2.39 Shaving Slivers of a wood

Chainsaw carving

The art of chainsaw carving is a fast-growing form of art that combines the modern technology of the chainsaw with the ancient art of woodcarving.



fig 2.40 Creating a bear through chain carving

2.4 Market study / Existing Product

Butter lamp stand which is available in market

A Man Named 'Russell Collins' runs the company named 'Himalayan rocketstove'. He basically designs and develop stoves which are ecological and economical.

There at his outlet I found the chukun chomey (butter) stand. The chukun chomey stand at this outlet is made of mainly sheet metal.













fig 2.41 Chukun Chomey stand made up of steel sheet

Few of the chukun chomey stand were available online

The fig 2.42 has a different sizes of butter lamp stand made of steel sheet by a company named 'Karma Group' which is placed in Thimphu, Bhutan.



fig 2.42 Chukun Chomey stand made up of steel sheet

The fig 2.43 can be found in Tradeindia.com which is offered by the Federation of Tibetan co-operatives in India ltd. in Delhi.



fig 2.43 Wooden Chukun Chomey stand

3. Key insight

The chukun chomey stand which are available in the market or on online platform are mostly

- made up of metal sheet or wood.
- · with minimum Detailing
- have hardly any reflection towards the traditional and cultural aspects.

The top surface of the wooden chukun chomey stand generally tear down after with time due to the direct heat of the chukun chomey.



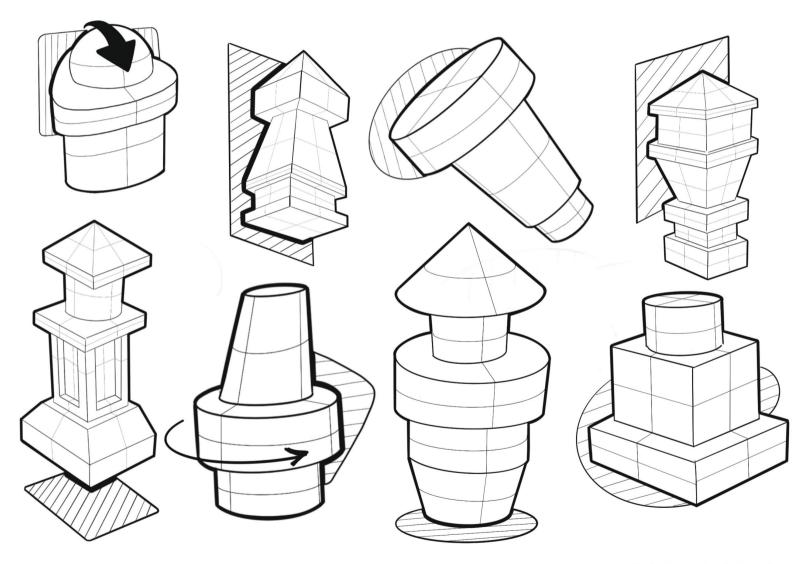
fig 2.44 Condition of the present Chukun Chomey stand after after using it for years

4. Mood Board



5. Design Phase

5.1. Ideation



5.2. Design Brief

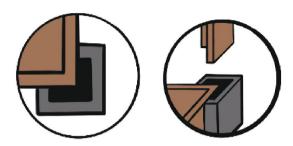
To redesign the chukun chomey stand for a Chosham (the prayer space in house) of the middle-class group with

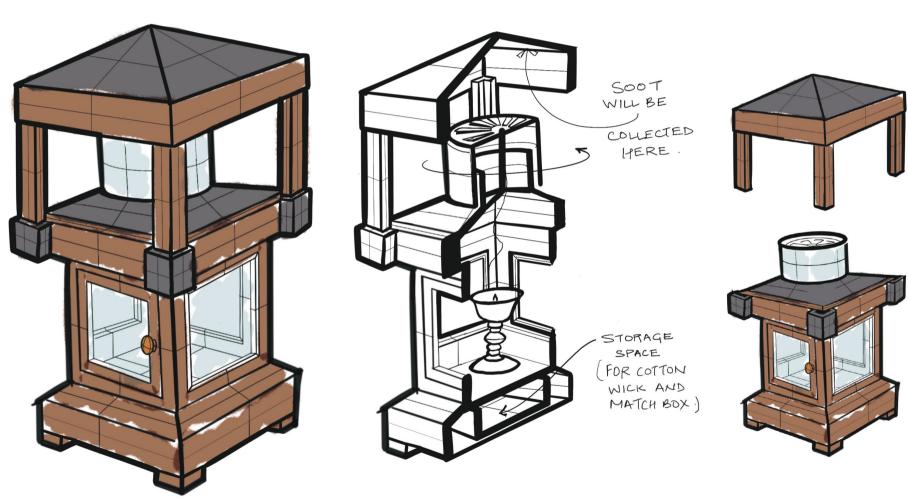
- Traditional Authenticity in design and detailing
- Long lasting life
- Easy Maintenance
- Safety Measures
- Space for Maane (sacred script) to rotate by the heat of chukun
- Utilization of local available materials.

5.3. Concept Generation

Concept - 1

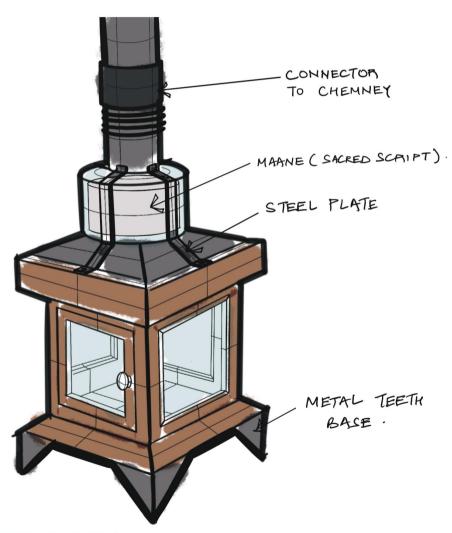
Chukun chomey with a roof which act as a soot collector





Concept - 2

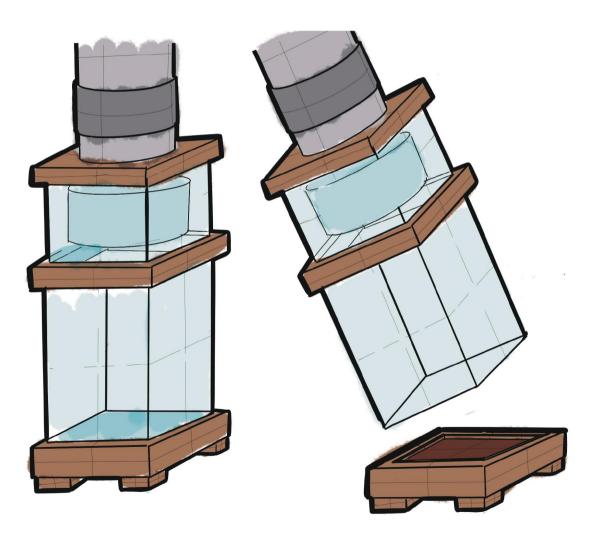
Chukun Chomey stand with a connector to chimney





Concept - 3

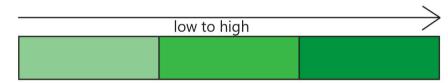
low cost chukun chomey



6. Concept Evaluation

Evaluation will be based on 9 elements

- 1. Performance
- 2. Features
- 3. Reliability
- 4. Conformance
- 5. Durability
- 6. Serviceability
- 7. Aesthetics
- 8. Perceived quality
- 9. Affordability



concept	Performance	Features	Reliability	Conformance	Durability	Serviceability	Perceived Quality	Affordability
1. Chukun chomey with a roof which act as a soot collector								
2. Chukun Chomey stand with a connector to chimney								
3. low cost chukun chomey								

Concept 1

The chukun chomey stand with a roof which act as a soot collector has been the most efficient according to the design principle.

7. Final Design Brief

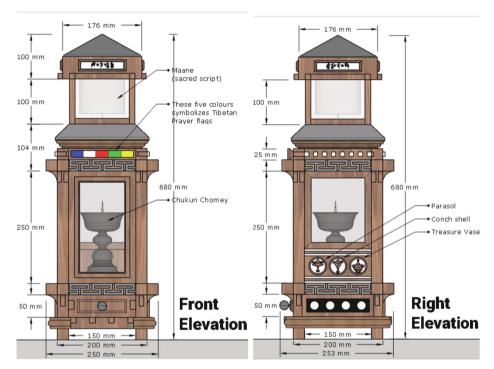
To redesign the chukun chomey stand for a Chosham (the prayer space in house) of the middle class group of Indo-Tibetan Buddhist with

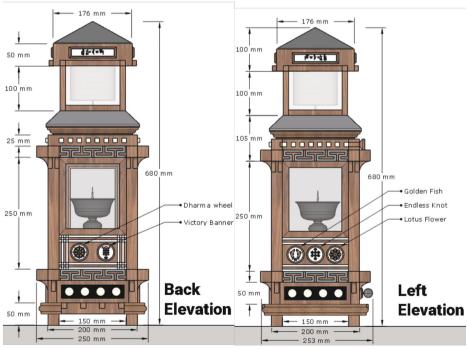
- Traditional Authenticity in design and detailing
- Long lasting life
- Safety Measures
- Easy Maintenance
- Parts assembling feature for transporting to far of places
- Space for Maane (sacred script) to rotate by the heat of chukun chomey
- utilization of mainly wood, glass, sheet metal and minimum use of nails.

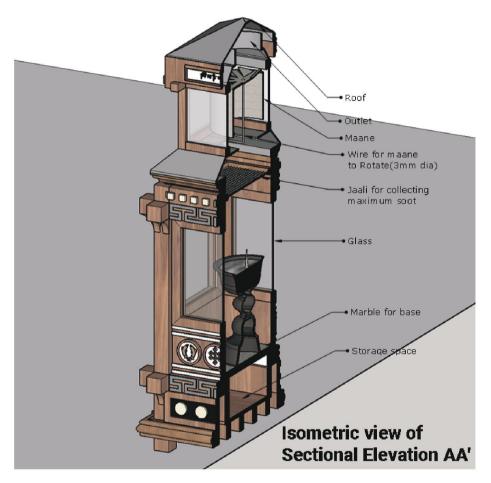
8. Final Design

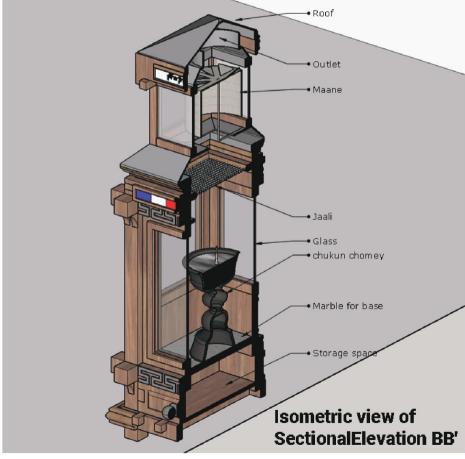


8.1 Elevations, Details and Dimensions

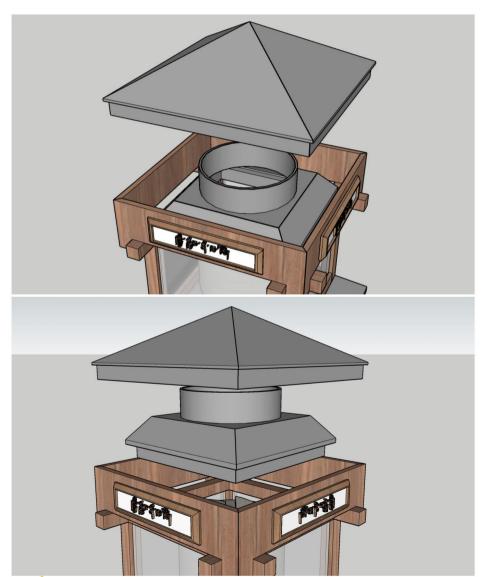




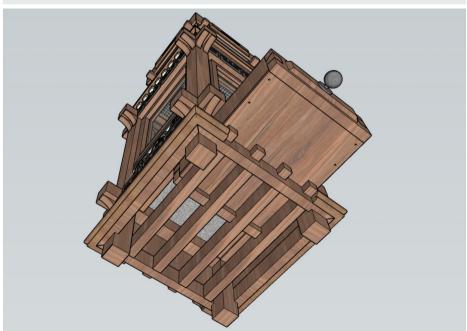




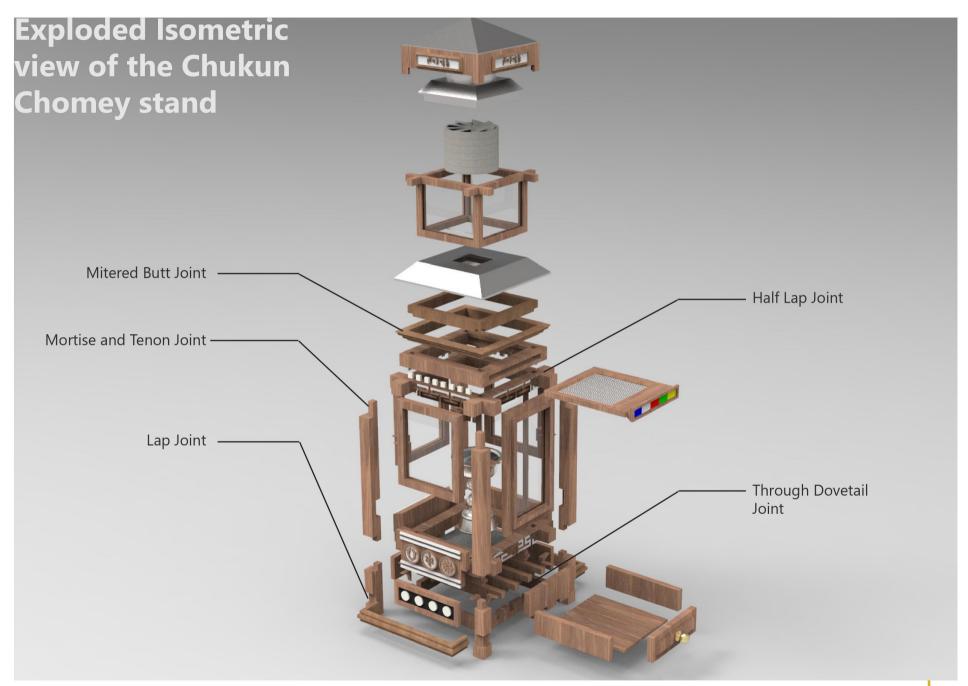
The fixing detail of the roof and the outlet of the chukun chomey stand. The roof and the outlet are made of steel sheet.







The wooden joinery details and the movement of the drawer. The drawer is for storing wick of the chukun chomey.



Form Evolution









The detailings

Om mani padme hum

The first word Om is a sacred syllable in various Indian religions. The word Mani means 'jewel' or 'bead', Padme is the 'lotus flower' and Hum represents the spirit of enlightenment.



Auspicious symbols

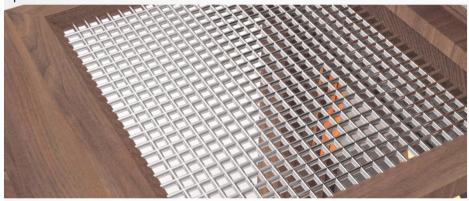
Three of the Eight symbols are shown in the picture below which are (from left) the Parasol, the Conch shell and the Treasure Vase. Others are on the side and back of the chukun chomey stand.





Jaali (filter)

Jaali is placed with a purpose of collecting the soot from chukun chomey. The soot collected in jaali can easily be cleaned as it is openable.



The five color symbolizes the prayer flag

These five colors of the prayer flag are in order with a meaning. Blue is said to symbolize sky and space, white for air and wind, red for fire, green for water, and yellow for earth.







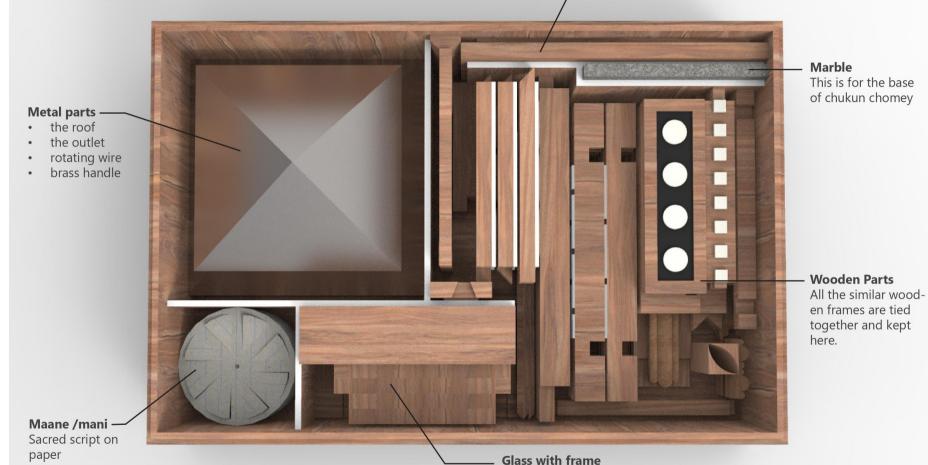


The packaging box is to be organise into 5 parts which are

- 1. The steel sheet parts
- 2. The maane/mani

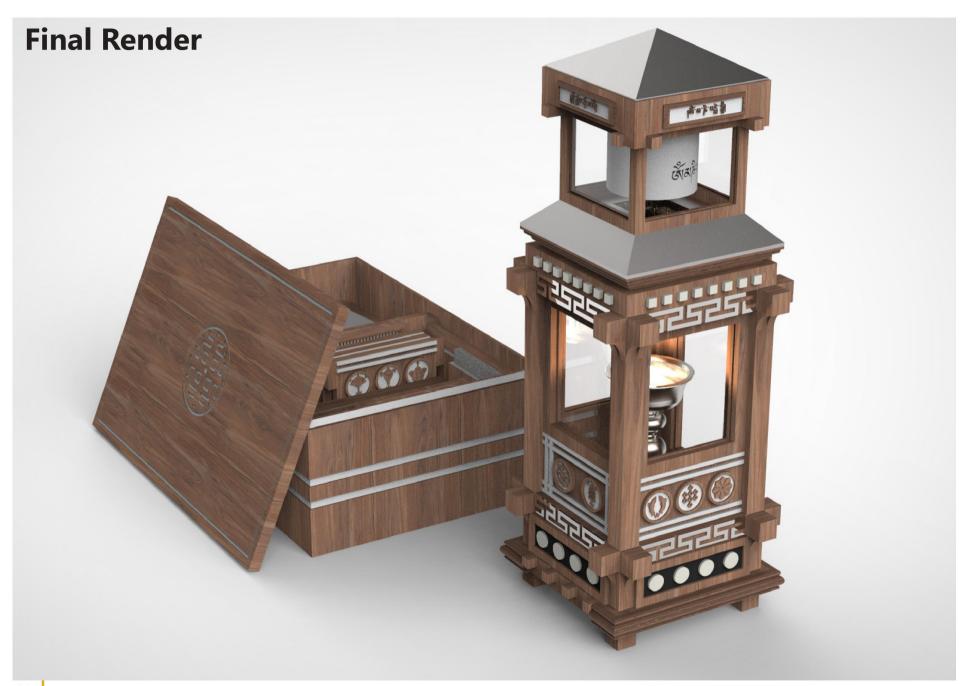
- 3. Glasses (door window)
- 4. Marble (base)
- 5. The wooden parts

Glass with frame Door frames



window frames

47.





Thank you Thuji chey

9. Bibliography

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