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## Designing for and with communities. An exploration of the meaning of Asian forms

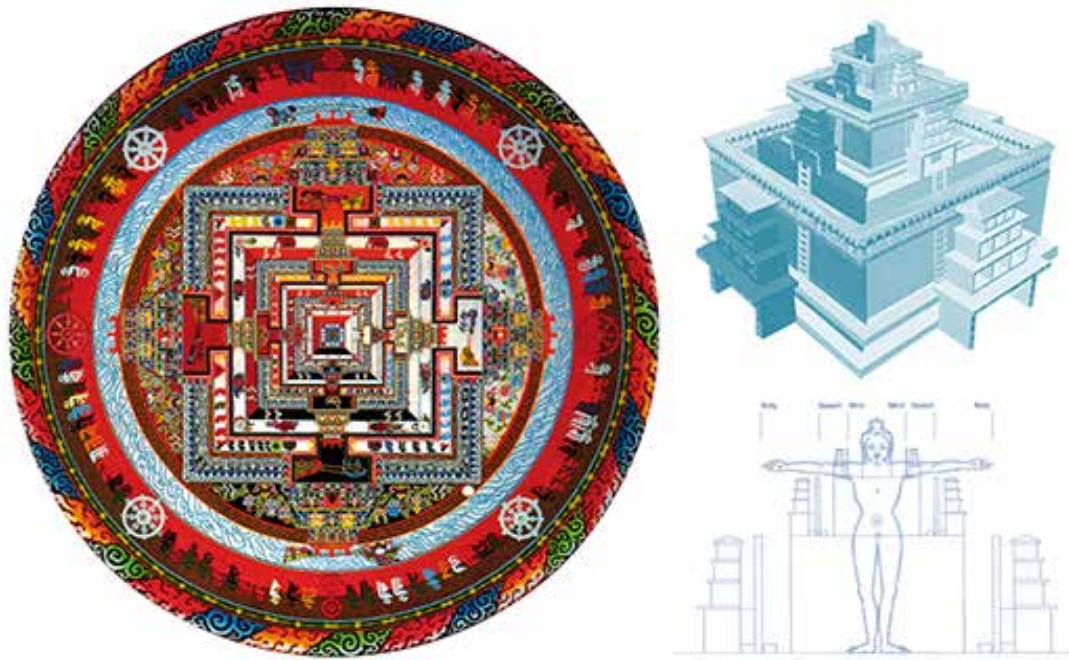


Figure 01. Kalachakra Mandala of Tibet, three dimensional rendering and relations with human body

### Introduction

The Kalachakra mandala of Tibet is a classic example of a visual scripture of the Kalachakra Tantra and the teachings are revealed in the form of a rich symbolic visual language. Through meditation and visualisations, this two-dimensional blueprint is used as a meditational tool that is generated in the practitioner's mind. The mandala is then perceived as a three-dimensional palace, the living abode of the gods. The word Kala translates as time, while chakra signifies wheel. Therefore, this mandala is a diagram, a visual guide to liberating oneself from the wheel of time. In Buddhist terms, this liberation leads the way to timeless eternity or, in other words, enlightenment. In Asia such models of spirituality express a philosophical understanding of the cosmos and are translated into visual language that is still partially

understood by many and found as visual repertoire in material culture even today.



Figure 02. Scene of Churning of the Milky Ocean

In India we find the Churning of the Milky Ocean narrative from the classic Indian epic Mahabharata. In this tale, the great rishi Durvasas curses Indra and, as a result, Indra begins to lose his power. The gods are concerned that if Indra becomes weak, they will be defeated by their enemies and demons. Vishnu instructs them to make an alliance with the demons to churn the Ocean of Milk to create amrita. Demons and gods bring Mount Mandara to the ocean's edge to stir the waters. They balance the Mount on the back of the turtle king Kuma, and the gods grab the tail, while the demons take hold of the head of the serpent deity, Naga Vasuka, to stir the waters. This motion tears the trees on Mount Mandara from their roots, and the entire mountain is soon ablaze, destroying all plant life. Juices from the trees flow into the ocean and over the gods, making them immortal. Dhanwantari rises from the ocean, holding a cup filled with soma, the elixir of immortality. In Southeast Asia, this is a common visual narrative, and symbolic elements from this passage are evident from ceremonial palanquins in Indonesia to the reliefs of Angkor Wat in Cambodia.

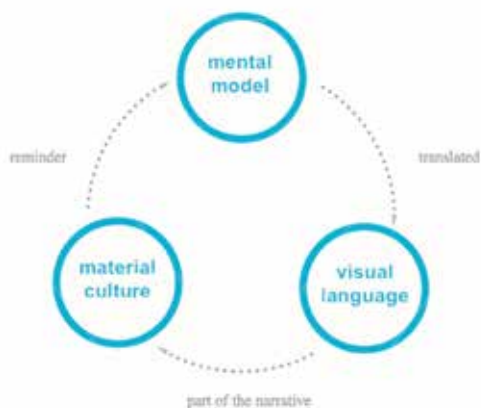


Figure 03. Relationship between mental model, visual language and material culture

## Approach

In traditional Asian iconography, such mental models or narratives were translated into visual language, and parts of these narratives were represented in material culture. However, as contemporary societies have become increasingly focused on technological advancement, the ability to understand such visual models has diminished, including the visual language, which are merely understood as meaningless superficial ornaments.

It is only in the last couple of decades, with the

exchange of information between different fields of expertise that scholars have begun to re-examine these ornaments in Asia. Researchers agree that these ornaments have significance and are part of a visual narrative. The primary purpose of the study described in this paper is to explore methods to re-connect the understanding between the mental model, visual language, and material culture, where research feeds into design inspirations and the knowledge is shared with all members of the community.



Figure 04. Flower Basket, Shono Shounsai

The research is inspired by the sense of cultural identity in Japan, which is reflected in the material culture. In Japan, the links between craft and design are still strong, and craft itself is not considered as a lower form of art.

An example of Japanese craft is a flower basket made in 1969 by Shono Shounsai, a world-renowned artisan who was the first bamboo craftsman in Japan to be named Living National Treasure in 1967.

This is a popular term for those individuals certified as Preservers of Important Intangible Cultural Properties in Japan.

The continuum between craft and design may be observed in the work of Japanese architect Shigeru Ban. Ban was the winner of the international design competition for the Centre Pompidou Metz, which opened in France in 2010. A Chinese bamboo hat inspired the structure of the winning project. As we witness a shift from local to global cultures, this type of unique re-interpretation of traditional form becomes an innovation in design.



Figure 05. Centre Pompidou Metz, Shigeru Ban



Figure 06. Relationship between research, design and community

### Research model

For this study, a research model was developed to connect the values of research, design and the community. The research was conducted from an ethnographic point of view, enabling an understanding of the cultural context of a particular group of people, as well as their material culture, in order to comprehend the meanings of visual forms and symbols relevant to this worldview. The knowledge uncovered through this model is used to inspire the design process to create meaningful and culturally-respectful designs that will remain relevant in today's world.

In the design segment of this research model, in order to develop an understanding of the methods and materials of traditional craft making, learning by making is the key. The aim is to design with respect to the cultural and material context. The results of the research and design sections culminate in the final segment of the model, the community. Designs are shared in order to give back something to the community where the research took place. The

project described in detail which follows, aims to align itself with the values of ethical consumerism and to work with NGOs in Southeast Asia to ensure fair trade for the artisans. Importance is placed on the well-being of communities and maintenance of their cultural heritage in a sustainable way.

This multi-layered project, entitled 'design for', is a lifetime framework. Each section, -- research, design, and community -- is related to the other. However, a module may also work independently, producing its own results. The dialogue between the segments of the model is where innovation can take place. The uniqueness of this project is the attempt to re-connect these parts that were once united in traditional philosophy but became separated due to the contemporary world's fragmented worldview.



Figure 07. 'design for' team participants dyeing silk threads with mud

### Project overview

A group of researchers from The School of Art Design and Media at Nanyang Technological University created 'design for' as an open platform for collaborations on social design ventures. In creating a network of partners, the team aspires to create design solutions for the good of the individual, a better society and, ultimately, a sustainable world in a holistic way. By visiting craft villages and learning from the original artisans themselves, project members aim to understand the artisans' philosophy of life and learn from their techniques in order to obtain a body of knowledge for future safekeeping. These actions translate from a model of research into meaning, design by making, and embracing human relationships through sharing.

The study that took place in the Lao People's Democratic Republic is part of the 'From

Anthropology To Design, A Heritage Management Project In The New Silk Road', funded by Nanyang Technological University's New Silk Road initiative. The Lao People's Democratic Republic or Laos' population consists of 6.6 million people with 49 officially recognised ethnic groups. Its citizens have experienced various upheavals, but instability was the most severe during the twentieth century, especially during the Second French Indochina War (1954 – 1975). After the communist revolution that occurred in December 1975, the country was subjected to embargos, further isolating the population until the mid-1980s when the Lao government adopted a market economy, opening borders to commerce and aid.

The research team selected Laos as the site for the pilot project because of its tradition of handwoven textiles. Presently, over 80 per cent of Laos' population resides in rural areas where handwoven textile production and the use of natural dyes persists. Although Laos is considered to be one of the poorest countries in Southeast Asia, the country has some of the most intricate silk and cotton textiles in the region, decorated with a variety of techniques.



Figure 08. Lao artisan weaving using ikat technique

## Fieldwork

The research in Laos began with documentation of the country's material culture in order to understand and re-interpret the living culture. The project team spent its first fieldwork trip living in villages in order to learn the techniques needed to produce various craft items. In one village, bamboo artisans taught team members how to weave tiny baskets. The team also visited a weaving village where natural rather than chemical ingredients - animal, plant and mineral - are used as dyes. This village's specialty is to use mud to colour silk threads. The result is a beautiful charcoal colour.

Because the production of textiles is an important part of Lao culture, many weavers still retain knowledge about harvesting materials from nature, dyeing cotton and silk threads and weaving cloth. Until a few decades ago, the country was self sufficient meeting the needs of its citizens' everyday and special-occasion textiles. Textile producers both dyed and hand-spun thread, as well as weaving cloth by hand for their own house wares, including bed sheets, curtains, blankets, and mosquito nets. The weavers also produced fabric for their own and for relatives' clothing.

## Cosmic serpent



Figure 09 A cosmic serpent adorning a temple balustrade

The team chose to investigate the various meanings and symbols of the cosmic serpent (depending on the context, nak or ngeak in Laos; naga in Pali), together with present-day communities. Believed to be an animistic deity that predates Buddhism, the cosmic serpent has been an icon that has been used in many animist textiles, such as skirts worn by shamans during rites. Today it continues to be significant to the cultural identity of the Lao and, according to our research findings, numerous forms of the cosmic serpent exist in Laos.



Figure 10. Interview scenes regarding the cosmic serpent in field trip

During the field research, the team interviewed artisans about the symbolism of the various cosmic serpent patterns and found that their understanding was limited. Some of the interviewees included weavers who formulate comic serpent motifs in their textiles. However, the reply to questions revealed that they had little knowledge of the patterns' symbolism. The weavers simply copy the designs from previously-woven textiles. The 75-year-old master weaver of the village stated that textiles are supposed to tell a story, but she only knew some of the narrative.

In Vientiane, the national capital of Laos, the team interviewed scholars and researchers who only understood the meaning of isolated symbols and were unable to connect them to a wider narrative. This lack of information, therefore, confirmed to us that this is an important topic for continued research. 'design for' is continuing to partner with researchers to investigate further the cosmic serpent symbolism.

Research questions:

How can the team, as designers, help to bridge the knowledge between academics and the artisan community?

How can 'design for' help bring artisans and their products to international markets and help them earn better wages in order to perpetuate their craft traditions?



Figure 11. Visual mind map on the meaning of cosmic serpent

### Process

A review of literature on the symbolism of the cosmic serpent was conducted from both a universal and a Lao perspective. Team members presented their literature reviews during weekly meetings set aside for discussion and the exchange of ideas. As an interface to the fieldwork findings and academic research, the team conducted thematic visual explorations. The aim of the exercise was to encourage visual thinking and expression in order to deepen the understanding of the cosmic serpent as a symbol. These visual explorations were also the catalyst for generating ideas and inspiration for new product and craft opportunities.

The primary challenge faced during this project was the lack of literary reference materials and this led to a consultation with Tai textiles expert, Patricia Cheesman, based in Chiang Mai, Thailand. A combined inquiry into Cheesman's decades of investigation in the field, directed us to a paper by Dr. Amphay Doré, entitled, 'Introduction to Lao Traditional Weaving Patterns: History and Meaning', which was presented at the 10th International Conference on Thai Studies held in 2008. In his paper Doré unveiled the origins and meanings of some of the most important patterns of the cosmic serpent, and this article led us to confirm our own prior understanding of the cosmic serpent motifs and their symbolism. Later, the team was able to select the three most important motifs and correlate their meanings in consultation with Cheesman. These are:

Nak taun tao – fertility;  
 Nak phanh hang- duality;  
 Kong nak – transcendence.

A link was created between the academic research and design decisions and the results highlighted the meanings of these patterns. As this knowledge had been lost among some weavers in Laos, 'design for' also aimed to name the collections based on the motifs, linking the pattern's name and meaning, in order to reinforce the information to both artisans and the general audience.

The research became the source of inspiration for developing these meanings visually and the patterns' symbolism were further emphasised using shape, materials, colours, and textures. These elements are the building blocks of visual communication. The design process included iterative rounds of sketching, mock-ups and critiques, which were carried out over a period of several months.

The 'design for' team took on the challenge to create products featuring researched Lao cosmic serpent motifs. The team took part in a sewing workshop in order to better understand the potential of fabric as a material since no one had any experience of using cloth in product design. 'design for' enlisted 'A Craft Initiative', a group of artists and artisans who are dedicated to creating and promoting hand-sewn goods in Singapore.

The first collections feature products using the three meanings and patterns described above. As the team has learnt that artisans take on innovative elements incrementally, the designs were created taking into consideration the materials and skills available to the

artisans at the present moment. The outcome may be used as a tool for educating both weavers and consumers about the symbolism behind these textiles.



Figure 12. Relationship between pattern, meaning and visual traits

#### Nak taun tao collection

“Pattern of two serpents lined horizontally, heads apart but bodies intermingled: it means Ngoek intercourse.” (Doré 2008: 2) Colour signifies abundance and fertility in the nak taun tao collection. Some items in this collection consist of a double-layered cloth. On one side, the cosmic serpent is depicted while water and sea elements adorn the other side.

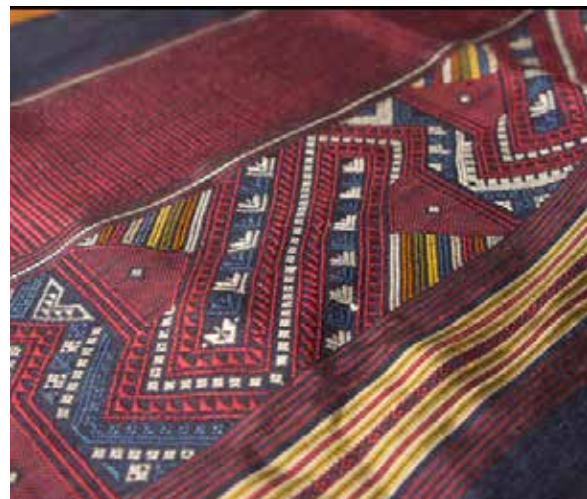


Figure 13. Nak taun tao motif, textile specially woven for this project



Figure 14. Relationship between pattern, meaning and visual traits

Nak phanh hang collection

“Pattern of a two-headed serpent standing vertically in ‘V’ shape: in fact it is two serpents with tails enlaced. This figure would be the illustration of the Fuxi and Nüwa myth.” (Doré 2000: 1) Monochrome and symmetry accentuate the idea of duality in the nak phanh hang collection.



Figure 15. Nak phanh hang motif, textile specially woven for this project



Figure 16. Relationship between pattern, meaning and visual traits

Kong nak collection

“Succession of serpents means travelling of Ngoeks, mainly between heaven and earth.” (Doré 2008: 2) The kong nak collection incorporates two types of weaves on bamboo and silk, demonstrating that transcendence is the passage from one stage to another.



Figure 16. The kong nak motif on a textile specially woven for this project

‘A Craft Initiative of Singapore’ will produce the final prototypes, using materials dyed and woven in Laos. This group was selected since it understands international consumer taste and quality requirements. The project aims to enlighten the Lao partners as to these tastes and standards. The project will exhibit its outcomes at the Asian Civilisations Museum, Singapore. The collaborative design outcomes are featured in this exhibit, which is entitled “Handmade in Asia: Weaving the cosmic serpent” in Laos from February until April 2014.

The project will seek future collaborations with business partners and investors, so that these designs can be produced in collaboration with the weaving groups on a non-profit basis and the returns from the sales will benefit the development of the villages.

After the completion of this phase, ‘design for’ intends to continue the research on the cosmic serpent to produce an educational textbook for weaving groups in Laos. The primary aim of this textbook is to share the lost stories and symbolism of the cosmic serpent motifs (previously passed on orally, from mother to daughter) to the weaving communities.

## Conclusion

The overall aim of this project was to re-discover the cosmic serpent's connections to the lives of the Lao people through fieldwork, scholarly research, community collaborations, and collaborative design. The fabrication of products that are culturally respectful yet still relevant in today's world reconnect this mystical symbol to its cultural context. Living with the artisans gave team members an insight into another way of life, which is based on using handmade objects that are harmless to the environment, as well as home-grown and home-cooked foods. The research team gained knowledge about social values, mutual support of community members and more harmonious relationships with nature.

In the world we live in today, the value of hand made versus machine made is overlooked by most people, as their choices are based on cost. As a result, important intangible cultures such as this are slowing vanishing. The results of this project reinforced the idea that these hand-made practices are not just important to the particular cultures concerned, but as part of humanity's heritage, they serve as lessons to live a holistic life in harmony with material culture and the environment.

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