ritual architecture:
5 weeks. 7 states. 11 cities. 1 village.

by

Kanchan Quinlan

A thesis submitted to the Faculty of Graduate and Postdoctoral Affairs in partial fulfillment of the requirements for the degree of

Master

in

Architecture

Carleton University
Ottawa, Ontario

©2013
Kanchan Quinlan
ritual architecture:
5 weeks. 7 states. 11 cities. 1 village.

by Kanchan Quinlan
Abstract

As a symbol of spirituality and culture, the temple plays a central role in the Hindu tradition. Clearly every temple’s form, function, and ritual practices have evolved in accordance to the needs and desires of the local community. This thesis sets out to explore the relationship between ritual architecture and the role of its users as active participants in the design process. For this project, the role of agency (as architect) shifts to one that involves social engagement with the community. Rather than focussing on translating non-physical factors into building form, the emphasis is on the framework through which this translation takes place. How could a community’s participation in the design process impact how the built environment is perceived? In other words, how will the community of Barapind in Punjab, India interact with and utilize the temple as a spiritual and cultural building after having contributed to its design?
situating the project

1. LOCATING THE PROJECT, WWW.MAPSOFINDIA.COM, SEPT 2012.
2. SHIV BOLE NATH TEMPLE IN VILLAGE OF BARAPIND, K. QUINLAN. FEB 2013.
Acknowledgements

This thesis is dedicated to the community of Barapind for without their participation and willingness to openly express themselves, it would not have been possible.

Thank you to the love of my life, Peter William Quinlan, for travelling with me to India, capturing the spirits of the locals, and for believing in me.

I am grateful to my dad, Tirath Sharma, for introducing me to the project.

Thank you to my family and friends for their support and continued interest.

A sincere thank you to my supervisor, Roger Connah, for his critical eye and encouragement throughout.
ritual is...
an act
a celebration
a movement in space
a ceremony
worship
tradition
contents

abstract
acknowledgements
prologue
a note on methodology
introduction

situating ritual architecture
1. architecture of belief: hinduism - gods - mythology
2. the meaning of the hindu temple: form ~ function ~ rituals
3. northern hindu temple evolution: 3 case studies

engaging community in ritual architecture
4. agency and community participation
5. the story of barapind: climate ~ history ~ culture
6. channels of communication

ritual and response
7. constructing hope
8. architectural intervention

postscript
appendices
glossary
list of figures
bibliography
Chintpurni, meaning 'a remover of troubles and worries' is a temple which devotees go to visit if they are hoping for a wish to come true. The sacred banyan tree is like a wishing well, where the hundreds of chunis tied around it represent peoples' wishes! Only when the wishes come true are the chunis removed.
Prologue

experiencing ritual architecture

My earliest memory of visiting a Hindu temple goes back to my childhood days. At the age of seven, I remember walking up endless flights of steps to pay my respects to *Devi Mata* at Chintpurni Mandir in Himachal Pradesh, India. At the very top of the hill there is an altar that is guarded by two golden lions and a *banyan* tree. I distinctly recall the sheer size of the old tree hovering over the altar. Why are natural elements like trees and water so often found in the vicinity of Hindu temples?

At this temple, the ritual practices of worship and *circumambulation* around the sanctum inside have been extended to the outside. The banyan tree that hovers nearby is also circumambulated. This experience at the temple not only emphasizes the significance of ritual but also stresses its relationship to architecture. From an architectural lens, I wonder how ritual could potentially connect built space to its surroundings, particularly nature. How does ritual transform the built environment and its users?

It was brought to my attention that the community of Barapind in Punjab, India were interested in building a Hindu temple in their village. The site for the temple had been predetermined by the locals. Located five minutes outside the urban centre, the abandoned ruin became the initial architectural driver for this project. In the past, locals used to gather at this *talaab or stepped pond*, to bathe and to collect drinking water. Today, the rainwater has been dried out and the lack of upkeep has led to widespread vegetation and garbage.

The primary source of information regarding the site’s context available prior to the trip to India was a drawing with some dimensions

*note on language*

This thesis contains Hindi and Punjabi words and names. The words that have been spelled as found in the Hindi language are used as they are part of the Hindu tradition. Certain English words that are important concepts for this project have also been defined for clarification purposes. These italicized terms may be found alongside text throughout the paper as well as in the glossary.
and a few photos that were sent by Amit Randev from Barapind. Randev, the son of the City Councillor of Barapind, was the only contact (via email) during the first three months of the project. These limited sources and the inaccessible site required going abroad to conduct fieldwork. The research in India was an essential aspect of the methodology for this project. It entailed site surveying, interviewing, visiting and documenting Hindu temples, and most importantly engaging the community of Barapind in the design process for the temple project.

As an emerging Canadian-Indian architect, given the opportunity to design a temple in Barapind, how could I approach designing such a sacred space that reflects the spirit of its community? What channels of communication are available to empower a community that is not familiar with architecture? There are several challenges in designing across borders within one's own culture. As a designer, I am approaching the project with a westernized and certainly subjective perspective. I am also aware that my knowledge of the Indian context is somewhat underdeveloped. As a female architect, who is introducing something unfamiliar to the villagers, it may require breaking down the traditional mindset. The culture's ability to re-act and accept change is a crucial transformation in the process of design. This active and social approach to architecture will no doubt be a challenging opportunity for me and a curiosity for the Barapind community. Perhaps the task at hand is to learn from each other during the design process and apply that knowledge to make the built environment suitable to its users.
1. Temple and shrine on the north side.
2. Ruin in the talaab: women's bathing area.
3. Private haveli towering over the talaab on the east side.


a note on methodology

Although preliminary research and conceptual design work were carried out during the first three months in Canada, the methodology for the project was tested abroad in India during fieldwork. For five weeks, I travelled across parts of Northwestern India to investigate Hindu ritual architecture and its users. I partook in temple rituals such as praying, cleansing, providing offerings of flowers to the gods, and circumambulating the spaces; I made observations of how people interact and behave in a temple setting; I also documented all types of temples ranging from objects to landscapes. After two weeks of surveying temples and their surroundings, I spent the following three weeks in the small village of Barapind, where I lived amongst the locals; conducted workshops, interviews, and visited the site with members of the community. Prior to returning to Canada, a flexible temple design was proposed to Barapind's City Councillor Sarpunch Gevin. The proposal was based on the information collected from the community's engagement in the design process. It is important to note that the design proposal is not the final product rather it will continue to evolve in accordance to the community's input in the next phase of the project.
During my fieldwork in Barapind, I stayed at the Sharma Niwas (my grandparents' haveli) located in the Lallu Patti neighbourhood. The lack of heat and hot water made it even more difficult to adjust to the crisp cold days. Every Tuesday, the power went out so this meant modeling and sketching in the dark using candlelight. Often times I utilized the rooftop as my studio space for maximum lighting and to stay warm.
11. MAPPING OUT THE FIELDWORK IN INDIA FROM JAN 2013-FEB 2013, K. QUINLAN, MAR 2013
5 weeks. 7 states. 11 cities. 1 village.

India is a land of extremes where both the poor and rich reside; beauty and pollution lurk; mansions and slums are built next to each other; smells of incense and spices meld with sewage and garbage odours; and the chaos of traffic accompanied by the non-stop honking is reduced by the calming and peaceful prayers echoing from afar. The everyday hustle and bustle of the cities is matched with the relaxing retreats in the hill stations. Amongst these extremes, what binds all the different peoples in India is their faith in and dedication to the divine. Hindu temples appear to be the main architectural attractions of India. These sacred places are found everywhere, standing as a testament to Hindus' devotion to their religious tradition. For twenty days I travelled across Northwestern India to observe, document, and participate in ritual architecture. During my travels, I witnessed devotees prayering, chanting, and meditating in various types of temples, some as simple as banyan trees with images of gods placed in front of them. The trees were often tied with red vermilion and decorated with garlands and divas. Other temples were more grandiose, built around the water’s edge, on hilltops, or in the middle of a city square. Despite the diversity in the architectural expression of these temples, the ritual of movement around sacred spaces and worship characteristic of Hinduism were consistent.
places, people, and culture of India

HILLSTATION IN DHARAMSHALA: THE HOME OF DALAI LAMA

ADALAJ VAVS (STEPWELLS) IN GUJARAT

A WORLD WONDER AS THE BACKDROP OF AGRA

DETAIL SCULPTURES ON JAGDISH TEMPLE, UDAIPUR

BUDDA SHRINE IN DHARAMSHALA

A PUNDIT OFFERING BLESSINGS AT A TEMPLE IN AHMEDABAD

DELHI’S STALLS OF GARLANDS, INCENSE, OFFERINGS FOR THE GODS

BUSTLING MARKET IN JODHPUR

WASHING CLOTHES IN MUMBAI’S DHOBIGHATS

ELEPHANT BEING PREPARED FOR A WEDDING IN JAIPUR; A COW WANDERING THE STREETS OF AHMEDABAD

12. EVERYDAY LIFE ACROSS NORTHWESTERN INDIA, K. QUINLAN, JAN/FEB 2013
expressions of ritual architecture across Northwestern India
Introduction

The rituals and ceremonies that lie at the very heart of the religious life of Hinduism, as well as the more elusive ideas and beliefs that accompany divine personages, have fundamentally influenced the forms of temple architecture.


Ritual Architecture inherently refers to religious space. The word ritual, as defined in the Oxford dictionary, is a series of actions or type of behaviour regularly and invariably followed by someone.1 As a series of actions, ritual has a rich layered meaning within its religious context. In the Hindu religious tradition, as noted by writer Gillian McCann, the very act of consecrating a temple is a ritual.2 The movement through temple spaces and their functions, the element of worship, and the act of cleansing prior to entering the sacred space are all rituals. Celebrations and ceremonies held in the premise of temples are rituals as well. Such acts, as an extension of seeing, experiencing, and engagement, may lead to a spiritual and/or cultural transformation. Is it then possible for such a transformation to evolve into a ritual architecture?

In The Hindu Temple, George Michell notes that as the house of god, the temple is not only a place for worship, but also a place of worship.3 Over time however, the role of the temple has shifted from solely a religious place to that of a cultural centre. In other words, the temple has become a communal space where its local community gathers for religious and socio-cultural events.4 Thus, every temple regardless of its time period, location, or cultural context has evolved to reflect its form, function and ritual practices in accordance to the needs of the local community it serves. If the Hindu temple is a cultural building that provides both a

The divinity that is revealed within the sanctuary may also be revealed in the very fabric of the temple itself. From this point of view the architectural and sculptural components of the temple are considered to be an evocation of the presence of the divine...all of Hindu art aims at recreating the celestial environment of the world of the gods.

spiritual and social setting, is it not important for the architect to empower its users through the act of participation in the designing of the temple? This thesis explores the role of agency (as architect) and the channels of communication that were implemented for engaging the community in the designing of a Hindu temple, to be built in the small village of Barapind in Punjab, India. The framework for the project entailed five weeks of field research in India, which included visiting sacred sites, observing and documenting temple rituals, and ultimately engaging the community of Barapind in the design process.

The thesis project is divided into three parts. Part I entitled situating ritual architecture provides a brief overview of the Hindu religious tradition in order to ‘set the stage’ for the design framework. In Part I, Chapter 1: the architecture of belief outlines the ideology of Hinduism and its link to mythology. What is the role of the gods in relation to the religion, culture, and humanity? Chapter 2: the meaning of the Hindu temple describes the historical and critical research on the Hindu temple. Since the temple site for the thesis project is in Northern India, this section describes the Northern ‘nagara’ temple style and its six key architectural characteristics: the shikhara, garbhagriha, mandapa, walkway, front porch, and reservoir. Moreover, the ideology of ritual and its significance in Hinduism is further explained in detail. Chapter 3: northern hindu temple evolution: 3 case studies analyzes three Northern style temples including the Kandariya in Maha Pradesh, India; Hindu Sabha in Ontario, Canada; and the Shiv Mandir in Punjab, India in order to trace the evolution of temple form, function, and ritual practices. These examples are specifically chosen not only since they range in time periods, location, and cultural context, but
also because they have been personally visited and experienced.

Part II called *engaging community in ritual architecture* entails the basis of the design methodology being implemented for this project. This involved five weeks of fieldwork in India starting in mid-January 2013. In Part II, Chapter 4: *agency and community participation* offers insight into the role of agency, community, and what potential influence the people may have on their built environment. Such a collaborative approach was explored within the given parameters of time, location, communication barriers, and cross-cultural differences. Chapter 5: *the story of barapind*, describes the context in which the temple is to be built. This section addresses the climate, architecture, culture, and the people of Barapind. Chapter 6: *channels of communication* maps out effective modes of communication that encouraged community participation in the design process of the temple project. These included a walking tour of the village, a site visit and survey with members of the community, and group workshops that focussed on generating ideas for the site. Architectural tools including a graphic questionnaire, a 3D site model and 2D drawings of pertinent information were used to initiate dialogue in the form of personal opinions, ideas, stories, and/or experiences. These methods tested the influence of social participation in the design process. Finally Part III entitled *ritual and response* provides a detailed portfolio of drawings of the site, architectural invention, and a flexible proposal for the temple. In Part III, Chapter 7: *constructing hope* seeks to shed light on the results of the community's input in the design process. What was learned from the collaborative approach to designing the temple? How is it beneficial as a tool for designing? Did it work, if so how? If not, why?
What can be learned by comparing the design ideas that were generated by the community versus the proposal that was pre-prepared by the architect? Chapter 8: entitled architectural intervention zooms in on the site and its surroundings, providing useful architectural information that is necessary for the design process stage. This chapter takes a position on how the site and the temple may be potentially envisioned. Since this project is only the first phase of the design process, the proposed idea is one that is purposefully flexible and is open to change in accordance with its users. This design was only meant to be presented as a suggestion to what could be rather than what must be. Ultimately this project seeks to propose a ritual architecture that is suitable for its local climate and context in accordance with the needs of its users.

notes

Part I: Situating Ritual Architecture
The ledge above the pool has been widened into a pathway around the well on both sides to lead devotees to darshan in the well cylinder. Here worshippers see the goddess from the opening between the well and the pool. Only the priests cross the circular rainbow-coloured grill in the cylinder to care for the goddess. While devotees watch, they open the shrine, entertain her, wrap her in silk, and pray.

The flaming circle in which he dances is the circle of creation and destruction called samsara (the earthly round of birth and death) or maya (the illusory world). The Lord who dances in the circle of this changing world holds in two of his hands the drum of creation and the fire of destruction. He displays his strength by crushing the bewildered demon underfoot. Simultaneously, he shows his mercy by raising his palm to the worshipper in the "fear-not" gesture, and with another hand, by pointing to his upraised foot, where the worshipper may take refuge. It is a wild dance, for the coils of his ascetic's hair are flying in both directions, and yet the facial countenance of the Lord is utterly peaceful and his limbs in complete balance. Around one arm twines the naga, the ancient serpent which he has incorporated into his sphere of power and wears now as an ornament. In his hair sits the mermaid River Ganga, who landed first on Siva's hair when she fell from heaven to earth.

-Diana Eck, Darsan: Seeing The Divine Image In India, 41.
The architecture of belief: Hinduism* Gods * Mythology


The literature on the Hindu religious tradition is extensive and has been studied and interpreted by several scholars. For our purposes however, a brief survey of Hinduism has been described in order to provide a basic understanding of the religion. According to Michell, Hinduism is a synthesis of various beliefs and practices, modes of living, and thinking. Together these concepts of religion, philosophy, and mythology characterize Indian culture and civilization. The temple is a reflection of these ideologies of Hinduism, providing society with a social, cultural, and spiritual nexus. In order to fully understand the meaning of the temple, it is necessary first to explore the basis of Hinduism—the world of the gods.

Diana Eck, Professor of religion and Indian studies notes that while Hinduism has one reality (one God), the names (nama) and forms (rupa) by which it is known are different. For instance, in the Hindu Trinity, Brahma, Siva, and Vishnu are three different gods, who vary in their representation and powers. Brahma, the four faced god looking onto the four directions, is the Creator; Siva posed in the meditative stance is the Destroyer; and Vishnu, who is often portrayed reclining, is the Preserver. Eck notes that

17. BRAHMA, SIVA, AND VISHNU RESPECTIVELY, WWW.HINDUGALLERY.COM, NOV 2012.

The temple reflects the ideals and way of life of those who built it and for whom it was intended to operate as a link between the world of man and that of the gods.


The very images of the gods portray in visual form the multiplicity and the oneness of the divine, and they display the tensions and the seeming contradictions that are resolved in a single mythic image.

- D. Eck, Darsan: Seeing the divine image in India, 28.

In the symbolism of trimurti, the gods Brahma, Vishu, and Siva coalesce into one form with three faces.

these gods amongst others have specific imagery or objects that belong to them. For instance, gods like Brahma and Vishnu have multiple arms. Every hand has an emblem or a weapon or is posed in a gesture, indicating the various powers that are associated with them. The multiplicity of the gods and their symbolic representations is limitless. Hinduism's rich collection of myths, legends, and narratives describe the nature of the gods; religious rituals; and their connection to humankind. Practicing Hindus all around the world are dedicated to preserving these stories.

So, how are the roles of these gods determined? Eck notes that myths are 'stories' that humans presuppose about the nature of the world and its structures of meaning. Is myth then an otherness that Hindus desire to relate to? Could it be possible for this otherness to allow humanity to explain the magical nature of things? For Hindus, their cultural lifeline is interconnected to myth and thus to their religious traditions.

Myths can be traced back to the ancient texts called the Puranas and the Epics. Michell writes that amongst the epics of the Ramayana and Mahabharata countless stories of the pantheon of gods, goddesses, semi-divine beings, avatars, and smaller deities are referenced, revealing the nature of the gods and their powers. According to writer Vasudha Narayanan, the Ramayana is a source of inspiration for many devotees and in places of Hindu cultural influence. It has been recited, sung, re-enacted, and experienced spiritually and intelectually. Narayanan explains that Ram, the hero of the Ramayana and an incarnation of Vishnu, is a paragon of human virtue; temples dedicated to Ram and his consort Sita are found all over India.

The myths of Hinduism reveal the ultimate reality of the universe by giving symbolic expression to that which cannot be discursively expressed.


 puranas
 one of the eighteen collections of "ancient stories" which preserve traditions of myth, legends, and ritual

 Ramayana
 epic of Lord Ram and his consort Sita

 Mahabharata
 the story of the great struggle among the descendants of a king called Bharata. The main part of the story deals with a war between the Pandavas and the Kauravas

 Bhagvita Gita
 the holy book in which Krishna delivers a sermon dedicated to loving devotion to the lord and the importance of selfless action

 Avatar
 the "descent" of a deity upon earth; an incarnation, especially of Vishnu
Rama is the hero of the great epic, the Ramayana, and frequently appears with his beloved wife Sita and other characters from the story. Thus are introduced his brother Lakshmana, the monkey-accomplice hero Hanuman, and Ravana, the wicked seducer of Sita.

Michell notes that the most celebrated portion of the Mahabharata epic is the Bhagvita Gita. In this holy book, Krishna (an avatar of Vishnu) delivers the celebrated sermon of the Bhagvita Gita. Krishna instructs Arjuna (one of the five Pandavas brothers) on the nature of the human soul, God, and how one can reach liberation. Such teachings inform the Hindu way of living and practicing religion.

Other myths aim at revealing the sacredness of temple sites, elements of nature, or objects. According to Eck, India’s myths are living in its land and conversely the geography is alive with mythology. For instance, the Ganges River, is considered to be a holy river in India. The sacredness of the river comes from the myth that explains its creation. The myth draws a connection to ritual practices and sacred spaces. For instance water is used for ritual bathing and many Hindu temples are located in its vicinity. This legend is re-enacted in temples by giving a bath to the siva linga during worship. Finally, during festivals like Shivratri devotees bathe in the Ganges river in honour of Siva. It is apparent that the idea of ritual as an act involving celebrating and worshipping of the gods stems out of such narratives. This concept is further expressed in sacred architecture through the notion of movement around the gods’ home. In order to see how ritual is connected to the home of the gods, let us now turn to the meaning of the Hindu temple.

All water used in ritual is symbolically transformed into sacred water by invoking the presence of the Ganga and the other sacred rivers.

-D. Eck, Darsan: Seeing the Divine Image in India, 67.

Ganga (the sacred river) was said to have flowed in heaven alone before she agreed to come to earth. Siva caught her in his tangled ascetic’s hair to break the force of her fall, and from his head she flowed down through the Himalaya.

-D. Eck, Darsan: Seeing The Divine Image In India, 65.

notes

3ibid 28.
4ibid,22.
5Michell, 48.
7ibid, 37.
8ibid, 38.
9Eck, 68.
The Ganges Myth

King Sagar - the ruler of Ayodhya and an ancestor of Lord Rama successfully performed the Ashwamedha Yagya for 99 times. Each time, he sent the horse around the earth it returned to the kingdom unchallenged. However, Indra - the King of Gods became jealous of King Sagar’s success. So when King Sagar performed the sacrifice of the 100th time, Indra kidnapped and hid the Yagya horse in the hermitage of Kapila Muni.

In search of the horse, sixty thousand princes from Ayodhya reached Kapil Muni’s hermitage. They mistook the sage to be the abductor and attacked him. An enraged Kapila Muni burnt the 60,000 princes to ashes. On hearing about the plight of his father and uncles, King Bhagiratha - one of the grandchildren of King Sagar requested Kapila Muni to grant a solution to the problem. Kapila Muni advised that the waters of the river Ganga would miraculously bring back the dead princes to life.

King Bhagirath left his kingdom and began to meditate for the salvation of the souls of his ancestors. It is said that Bhagrat observed a penance to Brahma for a thousand years, requesting Ganga to come down to earth from heaven and wash over his ancestor’s ashes to release them from a curse and allow them to go to heaven. Pleased with the devotion, Brahma granted Bhagrat’s wish but told him to pray to lord Shiva, as he alone could sustain the weight of her descent.

Accordingly, Lord Shiva held out his thick matted hair to catch the river as she descended. The meandering through Shiva’s lock softened Ganga’s journey to the earth and the holy waters of river Ganga thus washed away the ashes of Bhagirath’s ancestors.

The cave is the most enduring image in Hinduism, functioning both as a place of retreat and as the occasional habitation of the gods.

-G. Michell, The Hindu Temple, 69
the meaning of the Hindu temple: Form* Function* Rituals

The temple is a vibrant religious and cultural expression in the ancient tradition of Hinduism. George Michell explains that for Hindus, the temple is a sacred building not only because it is the place for worship, but since it is the home of God. What then defines a house of god? Together the temple form, function, and rituals all promote the manifestation of the divine. Michell notes that the form of the temple often resembles natural geographical features like mountains and caves, symbolizing and evoking the presence of the gods. Besides the symbolic features, temples throughout India and other parts of the world where Hinduism is practiced, range in size and style. Apart from the regional differences between the northern and southern temple styles, why is there such a variety in temple architecture? While some are static and grandiose, others are minimal and temporary. In some parts of India, as Diana Eck suggests, even natural elements like stones and trees and symbolic objects like the Siva Linga are worshipped as temples. It appears that mobile temples have become a trend, where temporary structures are decorated and paraded in the streets during festivals. Do these various forms of temple representation suggest a flexibility that is slowly adapting to the community, which it serves? There is a vast array of existing literature on Hindu temple styles. This thesis, however, specifically focusses on the origins of the Northern 'nagara' style temple. Let us now turn to its key features.
6 key characteristics of northern temple forms

KHAJURAHO

22. SECTION DRAWING OF KANDARIYA MAHADEV TEMPLE IN KHAJURAHO, S. GROVER, MASTERPIECES OF TRADITIONAL INDIAN ARCHITECTURE, 47.
**SHIKHARA OR THE SUPERSTRUCTURE**
the highest point of the temple, symbolic of a mountain peak. As the summit it is directly above the sanctum along an axis.

**GARBHAGRIHA OR 'WOMB-CHAMBER'**
this sanctuary is strongly reminiscent of a cave; it is usually small, dark, and elevated; the walls are unadorned and massive.

**WALKWAY**
around the walls of the inner chamber for circumambulation. Devotees move around the deity as a mark of respect to the temple’s god or goddess.

**MANDAPA OR TEMPLE HALL**
a multifunctional large open space which may be used for sitting, meditating, praying, chanting or for watching the pundits perform the rituals. This space could also be used for performances during festivals.

**FRONT PORCH**
a threshold space which leads one into the temple. It usually has a bell that hangs from the ceiling. Devotees entering and leaving the porch ring the bell to declare their arrival and departure.

**RESERVOIR**
is a part of the site of the temple. If the temple is not in the vicinity of a natural water body, a reservoir of fresh water is built on the temple premises. The water is used for ritual and cleansing.

Both the form (the siva linga) and its natural setting defines the sacredness of the temple.

Such temples are ideal for annual festivals and celebrations like Shivratri or Kumba Mela that are carried out in the streets in honour of the gods.

Every community in Hindu Asia, even the smallest village, has its place of worship, the temporary habitation of the gods. Differences in prosperity and in political and cultural importance between towns and villages account for much of the variety in the scale of temple architecture, the techniques of building and the particular deities that are worshipped there.

G. Michell, The Hindu Temple, 50.
How might the form of the temple influence its function? While most temples (in India) fulfill the religious function, other temples (abroad) appear to play a larger role in the lives of Hindus. Perhaps those living abroad have designed their temples as a place of community gatherings for festivals, activities, and events. It may also serve as an educational institution that promotes and maintains the Hindu way of living. It appears that the most important role of the temple in matters of charity is providing free food daily throughout the year, especially on sacred occasions to Hindus and non-Hindus. The Hindu Sabha in Brampton, Ontario, Canada is an example of a Hindu temple that fulfills both spiritual and cultural functions for the community it serves.

Given no clear distinction between Hindu religious and secular life, beyond provision of worship, the temple is the centre of intellectual and artistic endeavours, promoting the development of painting, sculpture, architecture and the performing arts as well as philosophy and theology. As the nucleus of the community, as hostel, hospice and hospital, sanctuary and school, its expansion over the centuries provided the facilities needed to feed and shelter priests, pupils and the poor.


According to Michell, rituals and ceremonies carried out in the Hindu religious tradition have fundamentally influenced the form of temple architecture. Temple site, construction, worship, and movement are key aspects that provide an insight into the layers of symbolic and architectural meaning embedded in Hindu ritual.

The ancient Hindu texts called the Tantrasamuccaya and Brihatsamhita describe the location of the potent sites as natural settings, where gods dwell or reveal themselves. This seems to suggest that since the gods reside amongst natural elements like trees and water, nature must then be sacred. In fact, almost all temple sites in India have a legend attached to them explaining the holiness of their location.

The construction and consecration of a temple is based on the ancient scientific doctrine of Vaastu Shastra. Michael Meister, author of De- and Re-Constructing of Indian Temples notes that such shastras were written to provide ritual validation for the construction of a temple; and to offer geometric rules and instructions for architects to follow. The temple plan is meant to function as a sacred geometric diagram known as the mandala. It is a square divided into 81 (9x9) smaller squares, each of which represent the seat of a particular deity. The central square is occupied by Brahma, the Creator. The mandala is also referred to as the vastupu-rusha-mandala, containing an image of the cosmic man.

From stretching of the cord, or the drawing of the lines of the mandala, every one of the movements is a rite and sustains, in its own sphere of effectiveness, the sacred building, to the same extent as the actual foundation supports its weight.

Purusa is the Universal Essence, the Principal of all things, the Prime Person whence all originates. Vastu is the Site; in Vastu, bodily existence, abides; from it Vastu derives its name.

“The location of these sites are attractively described in many ancient texts: the gods always play where groves are, near rivers, mountains and springs and in towns with pleasure-gardens'; states the Brihatsamhita

G. Michell, The Hindu Temple, 68.
The most significant aspect of devotional dynamism in Hinduism is the circumambulation (pradakshina) which proceeds in a clockwise direction around a sacred person, image or object and even around the temple itself.

G. Michell, The Hindu Temple, 66.

Ambulatory passageways are used to express the architectural form of circumambulation. While moving clockwise around the main deity, numerous edifices and iconographical representations in this 'interspace' are displayed for worship as well.


Aarti and bhakti are other forms of worship that are performed by the pundit. The devotees gather in the temple hall to sing, chant, and pray along with the pundit.

K. Quinlan, Jan 2013.

Movement or the physical path a devotee takes entering the temple from the outside is critical to Hindu ritual. Michell explains that movement is carefully orchestrated. For instance, moving towards the murti of the deity is done through a progression from light to darkness; from open and large spaces to a confined and small space. The interior spaces are arranged to promote the movement of the devotee from the outside towards the sanctuary through a series of enclosures. The slow progression inward, reaching the sanctum unveils the temple in its totality. The rituals of worship including puja, bhakti, and aarti form the focal point of the religious activities that are embraced by the temple. All these types of rituals have a profound influence on the form of temple architecture, but how has it evolved, if at all, in accordance with its users? The following chapter examines three case studies on temple evolution.

notes
2 ibid 69.
4 Michell, 61.
5 ibid, 68.
6 ibid, 68.
8 Michell, 72.
9 Michell, 70.
North Hindu Temple Evolution: 3 case studies

These specific Northern 'nagara' temples were chosen as case studies since they were personally visited and experienced spatially and spiritually.

Kandariya
10th Century
Khajuraho, MahaPradesh, India.

Shiv Mandir
1913
Barapind, Punjab India.

Hindu Sabha
1975
Brampton, Ontario, Canada.

- multilevel porches leading up to the sanctum
- a vertical spiritual core upon entrance
- repeating similar geometry at varying heights
3 temple evolution: 3 case studies

For our purposes, the focus of temple evolution is based on the Northern nagara temple style since the project is based in the Northern state of Punjab. The Kandariya Mahadev, the Hindu Sabha, and the Shiv Mandir, three temples which range in time-and-place specific contexts serve as a worthy point of departure.

Kandariya Mahadev: to god, to love

The Khajuraho Temples located in Khajuraho, in the state of Madhya Pradesh, India date back to the tenth century. Built by the Chandella Rajput rulers of Bundelkhand, the monumental temples are today known for their intricately carved ornamentation and bas relief figures. In 1838, the group of sixteen temples were discovered by chance by a British Captain. Amongst the Khajuraho temples, the Kandariya Mahadev or the temple “of the cave” successfully orchestrates ritual. Diana Eck describes, "...having seen all there is to see on the intricate exterior, one journeys to the interior, to the very centre of the world... circumambulating around the garbhagriha, one receives the darsan of the deity at the centre." Eck continues to describe the monumental temple as covered with all forms of vegetative, animal, human and divine life. Detailed stone carvings including women applying cosmetics; warriors preparing for battle; gods and goddesses; lions and elephants amongst others together express a narrative. The display of erotic love on the temple facades has been left open to interpretation.

During a recent visit to the Kandariya Mahadev, I recall a tour guide mentioning that the walls were meant to be read as a visual aid (for young men) on various tantric methods of eroticism. Scholar Satish Grover suggests that perhaps for devout Hindus, ‘this evil erotica’ is purposefully
portrayed to ward off the 'evil eye', highlighting the contrast between the evil outside and the purity of the inner sanctum. Nonetheless, today the temple's image has become a tourist attraction. The facades of the temple not only illustrate the everyday lives of humans, but they also depict the stories of the gods. Not all temples like the Kandariya are grandiose and carved with narratives. Rather, they are simple sacred spaces that provide devotees a place for individual worship.

**Shiv Mandir: local spirituality**

Located in the small village of Barapind in Punjab, India, the Shiv Mandir is an excellent example of a temple that will shed light on local ritual and architectural practices for the proposed project. According to Barapind local Amit Randev, the Shiv Mandir was built in 1912 by Brahmins using local materials including stone and plaster. Lights are used to decorate the facades of the modest temple. The small place of worship only has enough space inside for individual devotion. The devotees offer prayers and alms and carry on with their daily activities. From my observations, there is no local pundit for maintaining the temple nor is there a kitchen for serving food. There is a rectangular outdoor space that extends from the sanctum. This is a multipurpose space where the locals gather for praying and children use for playing sports. It appears to be the communal space equivalent to the front porch. So what do these observations suggest about the manner in which a local temple in Barapind may run? Who is responsible for cleaning and upkeeping it? Temples abroad usually have an administrative body to organize and fulfill the religious and cultural services for the local community.
Hindu Sabha: towards a community

How have temple form, function, and rituals transformed abroad, if at all? The Hindu Sabha is a non-profit religious organization located in Brampton, Ontario, Canada. Of all the Hindu temples in Ontario, Canada, the Hindu Sabha was chosen as a case study since it is the temple that I personally visit throughout the year. This personal connection has provided insight into how Hinduism is practiced in Canada. The temple was founded by five members in 1975. In A Case Study of Five Hindu Temples, Gillan McCann recalls,

“It was rather an other worldly scene: in the middle of corn fields an awning had been set up with chairs and in front a small altar with pictures of deities. On a platform was the fire and Sanskrit chants were being broadcast over loud speakers and drummers were playing. To the right of the onlookers were seats set up for visiting holy men from India... a young boy came around with bowls of fruit... the ceremony culminated with the raising of a red flag.”

This description of witnessing the consecration of the temple corner stone seems to suggest that despite its location, a temple's rituals including its consecration are still practiced and regarded with importance.

It appears the Hindu Sabha functions as both a religious place and a cultural centre for the local community. There are three pundits, who are responsible for performing all the rituals in the temple on a daily basis. Various forms of worship including puja, aarti, bhakti, and havan are practiced in accordance with tradition. Around the deities, there is an ambulatory passageway for circumambulation. Besides praying, devotees gather at the Hindu Sabha to socialize and to celebrate festivals including Shivaratri, Holi, Navaratri, and Diwali. The pundits at the temple also perform rites of passage such as engagements and marriages. The temple is also a center for intellectual and artistic life. Education taught
at the temple includes Hindi classes and history lessons on Hindu Punjabi culture for youth and elders. Children are encouraged to partake in music, dance, and performances during festivals. Clearly the role of the temple is to preserve Hindu culture and religion for future generations.

Since the temple runs solely on donations, it has a dedicated administrative body to organize and allot the remittance payments. McCann describes that there is an annually elected Board of Trustees of fourteen members, which has a Chairman and Vice Chairman. The Executive committee is comprised of twelve members with a President and Vice-President. She further notes that there is a caucus committee of twelve members including a legal advisor. Together these three groups carry out the roles of building committee, fundraising, treasurer, general secretary and programmer. Patrons and community donors are involved and made aware of the temple's upcoming meetings and budget reports. For further community involvement, a local newsletter is published, containing information about events, workshops, Hindi classes, and excerpts on religion. Could such an administrative body be useful in organizing and maintaining the temple to be built in Barapind? Perhaps such a committee can provide the community of Barapind a way of participating in the everyday concerns of the temple while ultimately being responsible for their building.

Having compared the three temples, it appears the form of the Northern Hindu temple has remained consistent. It appears, however, to have become less grandiose over time. Unlike the traditional monumental Kandariya Mahadev, both the contemporary Hindu Sabha and the Shiv Mandir lack the lavishness in both materiality and intricate detailing of the

42. THE FORM OF THE THREE TEMPLES IS CONSISTENT, G. MICHELL, THE HINDU TEMPLE, 70.

Relation of the symbolic images of cave, mountain, and cosmic axis in the temple section: the summit of the temple is directly above the sacred centre

-G. Michell, The Hindu Temple, 70.
stone carvings on the temple facades.

The key spaces typical of Northern temples have been maintained more or less for symbolic and ritual purposes. Even though the Vaastu Shastra may be an accurate and reliable source for temple construction, it seems to have slowly become a lost tradition. Meister's studies indicate that Architects over centuries have adjusted their use of the Vastu Shastra system in order to provide subtly to proportions and even more complexity to the plans and elevations of temples. With the exception of the Kandariya Mahadev, this tradition of temple plan construction appears to be discontinued in the other two temples. For instance, what is experientially absent in the Hindu Sahba is the mystery in the movement between key spaces of the temple. Upon entrance, the ritual is unveiled at once. There is no movement from light to darkness; outside to inside spaces. The sanctum is not characteristic of a dark space where the murtis of gods are gradually revealed. Unlike in the Kandariya Mahadev and the Hindu Sabha, the walkway for circumambulation and the temple hall are absent in the Shiv Mandir. This is perhaps suggesting the importance of individual rather than communal worship.

From observations, while aspects of ritual including worship have been maintained, the site has been compromised by all three temples. They have overlooked the essential presence of water nearby. Personal experience at these temples did not involve any form of ritual cleansing prior to entering them. Every village and town in India has its own sacred tree and yet there is no sign of one in the vicinity of the Shiv Mandir in Barapind. There is also no research to further suggest that these temples are located in a sacred location.
This short comparative analysis of the three temples seems to support that every temple is unique within its context and yet convey striking similarities and differences in the form, function and ritual practices. Does this observation then imply that the evolution of the Northern temple is in large part influenced by the specific community for which these individual temples serve? In other words, is it the sociological detailing of the specific temples that differentiate them?

The Hindu Sabha in Canada promotes the value of community and participation in temple activities beyond its religious function. Why? Perhaps the Hindu diaspora in Canada need to hold on to their religion and culture so that it may be passed down through generations. The temple, then is designed to reflect this idea of preservation and community. The Kandariya Mahdeva and Shiv Mandir in India appear to place emphasis on religion, maintaining the mythic and ritual narrative in both their architecture and spiritual experience.

As a Canadian emerging architect, how do I approach designing a temple in India? Should I be following the rules set out by the ancient Vastu Shastra texts? Or, is it plausible to design a temple in contemporary times using its techniques? Perhaps it may be interesting to see what happens when traditional religious ideologies are fused with fresh contemporary ways of designing. Regardless of the method of design, the emphasis should be on engaging the local community or the users of the temple in the design process. For, it is the spirit of the specific community and their needs that are inherently reflected in the temple. Only then might the temple become the quintessential cultural artefact. In order to design a temple, how might the local community engage in ritual architecture?

diaspora
people who have spread or been dispersed from their homeland

tables

3 ibid 62.
4 Grover 49.
5 Amit Randev, Email Interview. Web. 3 December 2012.
7 ibid 32.
8 ibid 32.
Part II: Engaging Community in Ritual Architecture
During the design process of the Uluru Kata-Tjuta Cultural Centre, Australian Architect Gregory Burgess worked in collaboration with the Anangu community in order to design and reflect a meaningful and connected space for the Anangu.

In a way our buildings are ourselves. Their gestures to the world reflect our human responsiveness and our capacity to dwell and transform ourselves.

agency and community participation

Other ways of doing architecture

The role of agency (as architect) as scholar Nabeel Hamdi notes, entails acting in order to induce others to act, offering guidance rather than instructions to the community for generating design ideas in a social setting. Agency is about social behaviour as much as it is about designing. Architect and activist Samuel Mockbee believes that the practice of architecture requires active civic engagement. He emphasizes that architects have an ethical responsibility of shaping the environment and energizing one's community. Perhaps architects could take on this ethical responsibility as social artists, who work outside their comfort zone by engaging directly with communities through dialogue and building. This form of social agency invites community participation in the design process.

In light of being responsive to the long-term desires and needs of those who will use and experience the temple space, it is crucial for agency to engage the local community in the design process. As the primary users of the temple, the locals' input on the design is invaluable. In fact, by participating in the designing of the temple, the locals share their inherent knowledge and expertise of their village, architecture, and culture. Simultaneously the architect provides necessary information using architectural tools and techniques to the locals regarding the temple project. This method of collaboration, where exchange of information is involved, is an important way in which agency empowers the community. Nishat Awan et al in Spatial Agency: Other Ways of Doing Architecture note that by providing a community with an opportunity to engage in

Agency is...

- the ability to act on behalf of others
- uncertainty
- a network of activism
- transformative
- pro-active
- engaged
- out-ward looking
- implies change
- bringing responsibility
- no hierarchy
- to intervene
- to sustain
- to mediate
- negotiation
- empowerment
- risk of not-knowing
- opportunity
- learning-by-doing
- community service
- social responsiveness
- participatory approaches
- open is change
- collaboration

46. LIST OF WORDS DESCRIBING AGENTY, KOSSAK ET AL, AGENTY WORKING WITH UNCERTAIN ARCHITECTURES, 2-17
their spatial environment in ways previously unknown or unavailable to them, agency is exposing them to new ways of thinking and approaching built space. Ultimately the level to which the architect can engage the community will determine the effectiveness of the design.

According to Henry Sanoff, author of *Community Participation Methods in Design and Planning*, the concept of 'community building' is a holistic approach that focusses its efforts on the people. This approach, Sanoff suggests, grows from a vision of where a community helps to create public institutions in order to achieve their aspirations. This act of participation strengthens the community fabric. How might working in collaboration and participating in the design process bond the community of Barapind? Sanoff notes that this collaborative involvement builds social capital, allowing friendships and mutual trust to develop, sharing, and strengthening common values. How might the architect as a social artist influence or impact community participation?

Australian architect Gregory Burgess evolved his approach to architecture by placing social interaction central to the design process. He believes that Architects have a responsibility to work with the community and beyond the confines of the individual. The Uluru-Kata Tjuṯa Cultural Centre in Australia is a fine example where Burgess worked with the community during the design process. For Burgess, a fundamental step was to familiarize himself with the Anangu and their land. This was done by becoming part of the daily scene of the community and gradually being respected and trusted to work closely with them. The indigenous people were encouraged to express themselves and their knowledge of the sacred rock called Uluru through stories and dance. Burgess alludes
to the design process as a dance of constant negotiations. He says, at
the end of the process, the trace of the dance is seen in the building as a
residue of communion. This ‘dance’ that Burgess speaks of is perhaps a
performance of the journey that the architect and the community must
socially engage in together. As a result of working with the community,
the Cultural Centre is a reflection of the Anangu people. By taking into
consideration the community’s needs and desires while designing the
building, the architect accomplished fostering a personal connection
between the community and the building.

The role of the architect in a community based project is culturally
sensitive. Every culture responds differently to the practice and process
of architecture. Also, within every culture, individual communities react
independently to the specific situation they find themselves in. So,
regardless of the countless discourse available on participation and agency
catered to a particular culture, the reality of the response can never truly
be predicted without real interaction with the specific community. This
then raises the question: what is ‘community architecture’? how might
the architect as social artist influence or impact community participation?
Architects Paul Jenkins and Leslie Forsyth reference this term as one
that places a greater emphasis on the process of development rather
than the end product. The architects point out that this approach to
agency, however, does not allow for any difficulties which may arise from
emphasizing process over end-product. The following two pages outline
the differences between conventional and community architecture and
how the latter may be applied to the Barapind community.
## Community Participation Is...

<table>
<thead>
<tr>
<th></th>
<th>Conventional architecture</th>
<th>Community architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status of user</strong></td>
<td>Users are passive recipients of an environment conceived, executed, managed and evaluated by others: corporate, public or private sector landowners and developers with professional 'experts'.</td>
<td>Users are - or are treated as - the clients. They are offered (or take) control of commissioning, designing, developing, managing and evaluating their environment, and may sometimes be physically involved in construction.</td>
</tr>
<tr>
<td></td>
<td><strong>Remote, arm’s length. Little if any direct contact.</strong></td>
<td><strong>Creative alliance and working partnership.</strong></td>
</tr>
<tr>
<td><strong>User/expert relationship</strong></td>
<td>Experts - commissioned by landowners and developers - occasionally make superficial attempts to define and consult end-users, but their attitudes are mostly paternalistic and patronising.</td>
<td>Experts are commissioned by, and accountable to, users, or behave as if they are.</td>
</tr>
<tr>
<td><strong>Expert’s role</strong></td>
<td>Provider, neutral bureaucrat, elitist, 'one of them', manipulator of people to fit the system, a professional in the institutional sense. Remote and inaccessible.</td>
<td>Enabling, facilitator and 'social entrepreneur', educator, 'one of us', manipulator of the system to fit the people and challenger of the status quo: a professional as a competent and efficient adviser. Locally based and accessible.</td>
</tr>
<tr>
<td><strong>Scale of project</strong></td>
<td>Generally large and often cumbersome. Determined by pattern of land ownership and the need for efficient mass production and simple management.</td>
<td>Generally small, responsive and determined by the nature of the project, the local building industry and the participants. Large sites generally broken down into manageable packages.</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Fashionable and wealthy existing residential, commercial and industrial areas preferred. Otherwise a greenfield site with infrastructure (roads, power, water supply and drainage): i.e. no constraints.</td>
<td>Anywhere, but most likely to be urban, or periphery of urban areas; area of single or multiple deprivation; derelict or decaying environment.</td>
</tr>
</tbody>
</table>

Barapind community are the users and clients. Working in collaboration with the local community and municipality. Emerging architect from the same culture, who is taking on the role of educator and/or translator of the built environment using the community's mother tongue (Punjabi).

Project is flexible, open to change in accordance with the users; simple design that is manageable for local engineers to build. The site for the project is an abandoned ruin.

<table>
<thead>
<tr>
<th></th>
<th>Conventional architecture</th>
<th>Community architecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of project</td>
<td>Likely to be a single function or two or three complementary activities (e.g. commercial, housing or industrial)</td>
<td>Likely to be multifunctional.</td>
</tr>
<tr>
<td>Design style</td>
<td>Self-conscious about style; most likely 'international' or 'modern movement'. Increasingly one of the other fashionable and identifiable styles: postmodern, hi-tech, neo-vernacular or classical revival. Restrained and sometimes frigid; utilitarian.</td>
<td>Unselfconscious about style. Any 'style' may be adopted as appropriate. Most likely to be 'contextual', 'regional' (place-specific) with concern for identity. Loose and sometimes exuberant; often highly decorative, using local artists.</td>
</tr>
<tr>
<td>End-product</td>
<td>Static, slowly deteriorates, hard to manage and maintain, high-energy consumption.</td>
<td>Flexible, slowly improving, easy to manage and maintain, low-energy consumption.</td>
</tr>
</tbody>
</table>

The temple will function in accordance to the needs and desires of the Barapind community.

The project will aim to reflect the climate, area, and concepts of the Hindu religious tradition.

The talaab or stepwell will be reused into the design as is and elements will be added to it. No parts of the site will be destroyed.

Design will continuously evolve; low maintenance.

The project is an opportunity for a communal venue for social gatherings.
Other architects like Jeremy Till also suggest that with agency comes uncertainty. For Till, architecture has to work both socially and spatially, coping with flux and vagaries of everyday life.\textsuperscript{11} The architect situates him/herself in a fragile situation. What if things don’t go according to plan? How will that unexpected opportunity be utilized? In order to understand its strengths and flaws, agency must be tested.

Having discussed the role of agency and the community as participants in the design process, let us now turn to the context from which members of the Barapind community come from and map out their way of living. Getting a better understanding of the village, will set the stage for where the design process will take place.

notes

\textsuperscript{1}Nabeel Hamdi, Small Change, (London & Washington, DC: Earthscan Ltd, 2004), introduction, xx.
\textsuperscript{4}Henry Sanoff, Community participation Methods in design and Planning, 7.
\textsuperscript{5}ibid 7.
\textsuperscript{8}Burgess, Forum Lecture Series.
\textsuperscript{9}N. Wates and C. Knevitt, Community Architecture: How People are Creating their Own Environment in Paul Jenkins, Leslie Forsyth, Architecture, Participation and Society, (London: Routledge, Taylor & Francis Group, 2010), 27.
\textsuperscript{10}Paul Jenkins and Leslie Forsyth, Architecture, Participation and Society, (London: Routledge, Taylor & Francis Group, 2010), 27.
\textsuperscript{11}Jeremy Till, Architecture Depends, (Cambridge, Massachusetts: The MIT Press, 2009), inside cover.
49. MAPPING THE VILLAGE, SITE, AND CIRCULATION, K. QUINLAN, OCT 2012.
5 the story of barapind: climate* history* culture

climate
The climatic conditions in Punjab range from extreme hot and extreme cold conditions. There are three seasons: summer, monsoon (rain), and winter. The summer months span from mid-April to the end of June. The rainy season is present from early July to end of September. Winter season is experienced during the months of early December to the end of February. The transitional seasons in Punjab are the post monsoon season and the post winter season. During post monsoon season it is dry. In the post winter season, hail storms and brief showers occur which causes damage to the crops. The end of March brings about dry wind. Punjab's climate has been a great factor in contributing to the economy of the state. The range in weather allows for crops to grow and agriculture to flourish.

history
The forefathers of Barapind came from middle Asia Russia. After crossing the Himalayan mountains, their settlement camps began to flourish along the Indu-Kush formally known as the Sindhu. Over time these nomads shifted to the state of Uttar Pradesh in Bharatpur. The ancestral lineage of Hindu Brahmins who eventually settled in Barapind be-

*The compiled factual information on the history of Barapind and the origins of its people were collected via a two hour interview with Dr. Naresh Chander Sharma. Mr. Sharma is a prominent member of the Barapind community, whose ancestors had preserved and passed down the knowledge of Barapind to him.
gan from a family of rishis called Trigulait. The Trigulait family was very educated and knowledgeable of all priestly deeds. When they arrived in Barapind in 1600 it was a forest that had agricultural potential. The Trigulaits had no understanding or desire to learn about the field of agriculture. So in order to settle in Barapind, the Trigulaits sent for members of the Sahota family from Bharatpur to cultivate the land and to prepare their meals. Over time, the land of Barapind was divided and boundaries were determined for the various groups of people living there.

The name “Barapind” comes from a story of two brothers named Kaul and Dhaul. The area (present day Girls Secondary School) in which Kaul had settled came to be known as Kuleta. So before Barapind came to being, it was called Kuleta. Dhaul, the younger brother, settled in the modern town of Dhuleta, located only five minutes away from the Girls Secondary School. At some point in history, Dhaul and Kaul got into a fight (whether it was over land, money, or women it is hard to say) so much so that they became sworn enemies. The brothers took an oath never to say one another’s name. And so, Kaul, the older brother was often referred to as the bara meaning the elder one while Dhaul was called the younger. Kaul, the bara, had twelve children, whose families began to settle around Kuleta. The word twelve is pronounced as bara in Punjabi. Thus, the village came to be known as Barapind—the village of twelve.

Today, Barapind has a population of ten thousand people of which three thousand are Hindus. The small village is divided into fifteen districts, each of which are named after a person of significance from that area. Moreover, these neighbourhoods are divided in accordance to one’s status, caste, and religion.
For the purposes of this project, the district of Lallu Paddi was documented, observed, and its community members were engaged in conversations and stories about their ways of living, working, and socializing in Barapind. The following chapter focuses on the types of channels of communication that were used to further develop the design process for the temple project.

52. A COMMUNITY MEMBER FROM THE LALLU PADDI DISTRICT ENGAGING IN PRAYER, K. QUINLAN, FEB 2013.
In order to gain their trust and respect, the first few days were spent getting to know the Barapind community in the Lallu Patti district and their way of living.
2. collective site visit and survey

- Measuring, Documenting, and Drawing
- Observing the site for activity/interaction
- Engaging in Conversation with the locals on site

3. group workshops

- Engaging the community by generating ideas through learning, listening, doing, and discussing

4. Present flexible design to local municipality

- Collaborating feedback generated from the community for the proposal

1. walking tour of village

- Locating Hindu temples and their relationship to each other
- Mapping community buildings
- Documenting the people, culture, and architecture

---

54. CHANNELS OF COMMUNICATION MODEL FOR BARAPIND, K. QUINLAN, DEC 2012.
6 channels of communication
social participation in architecture

What tools are available for the architect to set the initial spark of acting in order to induce others (a community) to act? An idea, regardless of its scale encourages discussion while generating more ideas. Where do these ideas come from? The community's input generates ideas and helps develop a different point of view. As the designer, my goal is to make the community feel empowered in determining how their temple is going to function and be maintained. If the temple is a reflection of the community it serves as Michell suggests, its users then should have an input on its design.1

It is important to note that this approach to designing a temple, which involves agency and community participation, is a new way of thinking about and doing architecture for the Barapind community. A majority of the people from Barapind have never left their village and therefore have not been exposed to such architectural tools and techniques. So, what effective channels of communication or strategies then could the architect create or utilize that may be easily understood by the locals? Various modes of communication and techniques were tested for their effectiveness, accounting for the community's level of comfort and knowledge of how to read, interpret, and respond to architectural tools. The channels of communication model (on the previous page) outlines the types of methods that were used to work in collaboration with the community. The first task at hand however, involved a walking tour of the village in order to get a better understanding of the people, their culture, and the built environment.

---

community
a social group of any size whose members reside in a specific locality, share government, and often have a common cultural and historical heritage.

participation
'taking part in'; the participants who participate in the architecture process are the users of the building and those who are exposed to it in some way or another.

The temple is the most characteristic artistic expression of Hinduism, providing a focus for both the social and spiritual life of the community it serves.

According to architect Henry Sanoff, ‘awareness walks’ add potential significance to a specific place, encouraging the observer to get the most from the surrounding environment. A walking tour of the village provided an opportunity to listen, respond, and learn from the locals about the history of Barapind and its current state. Sanoff believes that this approach encourages a critical evaluation of the urban setting that allows for discovering the processes that shape it. The walking tour of Barapind, for instance, shed light into the types of community places that exist in the village and how they were used. All the essential services like the tailor, vegetable stalls, laundry services, and pharmacy were in the vicinity of one another. What was even more interesting was finding out what sorts of communal events were celebrated and where. While visiting Barapind, there was a kite festival, a kabaddi tournament, and a mela. The kite festival was popular amongst younger children, who would go up to the rooftops of their homes to fly the kites. The kabaddi tournament was strictly for men athletes and spectators, lasting three days in the community arenas. Finally the mela festivities (which take place every winter) were a celebration of Punjabi culture. The streets were decorated with lights and streamers, fresh food was served, and the people gathered in the streets to socialize and participate in various events. These types of public events appeared to bring the community of Barapind together in times of celebration. Is it then possible for the temple to be built in Barapind to play a communal role, where the community may gather to celebrate their religious and socio-cultural events?

a walk may indicate planning problems or social issues, as well as offer aesthetic appreciation and enjoyment of what has been preserved.

This map illustrates the different types of buildings that were visited during the walking tour. It gave the impression that all the building were in close proximity to each other.
As the map illustrates, the Hindu temples and shrines in Barapind are grouped nearby. Although they are dedicated to different gods, the worshippers are especially devoted to Siva. There is a 3m high statue honouring him and many other small shrines were found throughout the village displaying Siva's image.

**Religious buildings**

- site
- Hindu temples
- Sikh gurdwaras
- Village centre

57. Locating the Sacred Spaces of Barapind, K. Quinlan, Feb 2013.
Narrative or storytelling was a communicative strategy that was utilized in Barapind. During site visits, I collaborated with diverse members of the community. By engaging in conversations with the locals, experiential knowledge of the site was generated. How do the locals connect to the site? How will building a temple on this site bring the community together? One conversation on the site that particularly engaged my interest was with a pundit. The religious man spoke of morals, philosophy, and human behaviour in Hindi and Sanskrit. He was excited about a potential temple being built on the site so that the community may come together. Another local named Naresh Chander Sharma spoke of the site as a sacred ground since a saint named Ragho Ram used to meditate and pray nearby. Although no official records were kept of when the talaab was built nor by whom, Sharma did convey some information that has been verbally passed down through generations. According to Sharma, around 1600, a man named Dasaundhi was advised to build either a bridge (for crossing), a well (for water), a talaab (for bathing) or a temple (for praying). With the aid of a saint, Dasaundhi collected donations from kitrans in order to build a talaab. Once the tank filled with rainwater, it functioned as a tank for bathing and provided drinking water. Apparently a plate with Dasaundhi’s name was embossed into one of the eight steps surrounding the talaab. Unfortunately, today there is no trace of that plate. Sharma continued to explain that after the advent of water pipes in homes, the talaab was abandoned. Its function shifted to a place for garbage disposal and for collecting the dirty water from the homes.
Between 1965 and 1970, sixty year old Sant Atma Ram Das came to Barapind and had a vision of building a temple in the talaab. He organized the removal of the waste and tried to refill the tank with clean water. Unfortunately the sandy ground kept absorbing into the water. Then the sand was dried, removed, and replaced in the talaab base. This however, did not stop the water from being absorbed into the sand. Slowly people who were supporting the cause began to show less interest and eventually left feeling the task was impossible. Since then, the talaab has remained a disposal site. Dasaundi's Talaab does not have a defined district and therefore it is public property. Today, forty three years later, the community is interested in re-visiting the idea of a temple on the site. Its location suggests that the site is a place of retreat and peace, where elements of nature come together to create a spiritual experience, rendering it a perfect space for a temple.

The uniqueness of the site lies in its pre-existing condition as a stepped pond. American scholar and photographer, Morna Livingstone describes a stepped pond as usually built near or surrounding a temple since it is a place for ritual bathing and cleansing. The structure accommodates more people due to its less enclosing experience than the stepwell. Why was such a form invented? Livingstone explains that the compactness of the stepped pond design reduces the amount of surface water that is exposed to evaporation by the sun. Water, being a sacred element in the Hindu tradition fills these structures, making them a social place for engaging in daily activities including bathing, worshipping, and collecting water. What is the connection between a site and its surrounding built environment?

Like the stepwell, the stepped pond is a place for bathing and rituals. Unlike the stepwell, it was always built near a temple... The myriad paths from the rim allow for separate rhythms of people bathing, worshipping, and carrying water to occur simultaneously without intersecting in. M. Livingstone, Steps to Water, 5.
A temple site is a significant aspect of ritual in Hinduism. Many temple sites in India are built on sacred ground, where a divine act or ritual has been carried out. According to local Naresh Sharma, before Barapind was a city, four sages came there to meditate and pray amidst nature. One of the holy men took up the very spot of the temple site for his devotion to god.

The temple site also has a sacred connection with its surrounding built environment. For instance, on the North side, a small temple called the Kutia Ragho Ram and a shrine face the talaab. Inside the Kutia Ragho Ram is placed a statue of a saint from Barapind, who used to be a devoted follower of Hanuman, the monkey God. His dedication to god inspired the locals and rendered him a saint to be worshipped. There is no room inside for sitting or movement around the idol. An even smaller circular shrine sits almost parallel to the Kutia Ragho Ram. This pavilion-scale structure is about 2m x 2m on the inside, which barely accommodates the idol. Devotees come here to pray to the idol of Siva, the Destroyer. Siva faces south looking beyond the farmland that surrounds the site. In the distance a white gurdawara emerges as the backdrop in the Southern direction. The presence of these religious buildings suggests that the site is considered to be holy.

A crucial step in preparation for the design workshops in Barapind required a thorough understanding of the site and its context. The site survey was a five hour process which involved photographing, measuring, and drawing. Following the collective site analysis, communication tools including a graphic questionnaire and a 3D Physical Model were implemented to guide the participants in the design process.
The site documentation filled in the missing pieces from the drawing and photos that were initially sent abroad (to Canada) for the project.
Today the site is an abandoned ruin that is rarely visited by the locals. Herdsmen bring their goats to the talaab for exercising and for grazing on the overgrown weeds. The west side of the site has a volleyball net set up, suggesting it is a recreational area. There appears to be no other direct interaction with the site.
This original graphic questionnaire is a visual tool that specifically focusses on initiating discussion about temple form, functions, and rituals. The images chosen portray archetypal or universal symbols, which are meant to spark ideas for the temple design. Below each image is the Punjabi word(s), which describes it for clarification purposes. For each question, participants were asked to pick one option from the choices presented. After collecting the results, the chosen images would be implemented in the temple design. In this way, the community’s input would be reflected in the design. This communicative tool seeks to not only test the participants’ knowledge of ritual architecture, but also to see if there is a general consensus of the envisioned design. Were the participants able to further develop or expand on the ideas provided to them? How important was it for them to get involved in the design process?
The site model is also a communicative design tool that allows participants to visualize and interpret the space and its context in a 3-dimensional environment. Such a tool also provides the participants an opportunity to interact with the spaces by creating a dialogue or discussion about the temple's location on the site, the height, and its relationship to the surrounding environment. This tangible tool was designed to be lightweight and flexible for moving or carrying around.
The remaining two chapters are responses and results that are based on the community workshops conducted in Barapind followed by a portfolio of drawings illustrating a flexible proposal.

notes

3ibid 96.
4Pundit at Hanuman Temple and Kutia Ragho Ram, Narrative. 11 February 2012.
5Naresh Chander Sharma, Personal Interview, 16 February 2013, Barapind, India.
6ibid
7ibid
8ibid
9ibid
11ibid 5.
12ibid 5.
13Michell 68.
14Naresh Chander Sharma, Personal Interview, 16 February 2013, Barapind, India.
Part III: Ritual and Response
The more people feel themselves involved in architecture, the more likely we are to get the buildings we think we deserve. An enlarged architectural conscience brought about by the greatly increased participation of more people as partial clients is more likely to lead to good architecture than the most scrupulously applied aesthetic controls. If architecture is to flourish and progress in an age when change is constant and development rapid and relentless, it must, with renewed vigor, use society as a partner in the creative process. Only then can the primary unchanging function of architecture be achieved: to provide decent surroundings for people and to help them to a wider vision of life.

people will join if change can and will occur. Participation can function if it is active, directed and if those who become involved experience a sense of achievement.

7 constructing hope

In Barapind, the goal was to work in collaboration with the community by guiding them to generate ideas for the temple project without any prejudice. This is why the pre-India design ideas for the temple were not described or shown to the community. After the interviews and workshops were completed and the data from them was extracted, it became obvious that the results of the community’s input during the design process matched very closely to the pre-fieldwork design that was generated back in Canada. What do these results suggest? Perhaps, it may have to do with my understanding of the culture and upbringing as a Hindu. Or perhaps (more likely), the similar outcomes in the temple form, practices and rituals that were expressed both by the community and my initial design suggests that the Hindu tradition is practiced on a daily basis as it is described in literature. If this is true then the idea of Hindus’ daily lives being tied to their religious beliefs are not only apt, but more importantly the temple’s form, function, and rituals reflect the community it serves.

This thesis sought to explore the relationship between ritual architecture and its users. By connecting with the community of Barapind and socially engaging them in the design process revealed that the users of the built environment play a large role in how it is perceived and utilized.

Let us now turn our attention to how the design process in Barapind was implemented, how the participants responded, and what the results conveyed about community engagement.
Women's Workshop

Feb 14th, 2013 at 3pm
Local House in Living Room
20 female participants
ages 35-60
duration: 2 hours
Youth Workshop

Feb 14th, 2013 at 1pm
Girls Secondary School in Library
24 participants, (boys and girls), 1 Teacher, Principal
ages 9-18, grades 6-12
duration: 2 hours

Only members of the Lallu Paddi district partook in the workshops, interviews, and village tours. While the community of Lallu Paddi is comprised of roughly one hundred people, about 46 were participants in the design process. The workshops took place at the neighbourhood level so that the input collected was consistent. More importantly, this specific district was engaged in the design process since its members have the right (in accordance to the municipal authorities) to build on the site. The workshops were conducted in Punjabi, the local language of the participants. The ranges in age, occupation, gender were selected to ensure that a variety of opinions amongst community members was collected.
The women's workshop was held at a home around a dining table. Although no incentives were provided to the women for participating in the workshop, they were provided with snacks and tea after its completion. It turned out that an incentive was not necessary since it appeared natural for the women to voice their opinions. Unlike the children, the women did not hesitate to explain their choices. The women decided to choose the images for each question based on majority rule. No individual woman made a separate choice. This was not a problem since most of the women were in agreement for the graphic questionnaire options. They would openly discuss every decision amongst each other and then present their final choice. For the women this was an interesting and a new way of thinking or doing anything outside of their known territory. The discipline of architecture let alone participating in the design process related to a built space was a novelty.
Discussion Questions

What is the role of a temple?
Why do you go to a temple?
Could a temple be a multifunctional space?
What kind of environment should a temple be surrounded by?
How important is it for a temple to reflect local identity?

These questions initiated a discussion, which lead to brainstorming ideas. Before turning to the 3D site model, I asked if any of them knew where the site might be located in Barapind. To my surprise, only a hand full of the youth knew the location of the talaab, considering it is only a five minute walk from their school. One student answered, “it is the place with all the grass... no one really goes there.”

- PARTICIPANT, YOUTH WORKSHOP IN BARAPIND AT THE GIRLS SECONDARY SCHOOL, 14 FEB 2013.
Building a responsive architecture requires that its users to be a part of the designing process. Since the temple is a public space, its users range from youth, women, men and elders. As a way of heightening community spirit, the workshops were intended to provide the participants a sense of empowerment and responsibility to their future building.
Gathering in close proximity, whether it was around the living room table or the in the school library, made the workshop a casual event. The participants appeared to be relaxed, curious, and attentive. The women stood around the table for the majority of the workshop while the children sat at a table facing the presenter. The two groups took separate approaches to responding to the graphic questionnaire and the discussions. The women had a tendency to express themselves simultaneously while the students answered the questions on an individual basis. For instance, once the majority of the students voted for the temple’s location, they were asked to discuss why that choice was made. One student answered, “by placing the temple in the center of the sarovar, it can be reflected in the water.” The point of this type of interaction was to encourage thinking about design implications. Every time a student answered a question or voluntarily made a suggestion, they received a reward. The incentives appeared to boost the energy in the room and the children responded well to the challenges.
generating ideas from a site model

Following the graphic questionnaire, a discussion was initiated around the site context. The participants gathered around a 3D site model to discuss the existing spaces and their possible connection to the temple. This approach provided an opportunity for the participants to voice their personal opinions on the site layout and the temple design. Visual aid including physical models, 2D and 3D drawings, and photographs guided the participants in generating ideas in order to verbally express themselves.

Q: Why should the temple be located in the center of the talaab?

A: “By placing the temple in the center, it can be reflected in the water on all sides and It can be viewed from all directions.” (student explaining using his hands).

Q: How many pathways for circulation are needed?

A: “You need a separate entry and exit for the temple in order to avoid congestion….stairs are okay but a ramp is good for old people!” (woman pointing at the site model)
Overall, the questionnaire was an effective tool for initiating discussion about the temple project. Although I had intended to present the graphic questionnaire to every individual separately, it turned out to be more effective to present and discuss it as a group. Together every question was thoroughly discussed and the participants were asked to present reasons for why they had chosen specific images. The information gathered from the workshops with the youth and women generated both points of consensus as well as points of conflict. In general, however, both groups agreed on the form and function of the temple. The community's interests matched closely to the initial proposed design of the temple. This confirms that the acts of ritual directly influence the form of Hindu temples. This methodology also shed light on the participants' ability to equate temple architecture with symbolic forms. Both groups chose archetypal images that have symbolic meaning in Hinduism. The symbolism also is an extension of key ritual practices in the religion. Perhaps the differences in the choices reflect how ritual informs architectural form in accordance to the ways it is practiced by various members of the community. Both the women and youth preferred a multi-functional space that is surrounded by nature.

The chart above indicates all the images that were selected by both groups for their preferences relating to temple architecture, rituals, and functions.
This graphic questionnaire illustrates the preferences of the women and youth. Sixteen out of the twenty-three questions were the same choices made by all the participants.
The hands-on exercises aimed at generating new ideas or developing existing ones. The students were provided with supplies for drawing to showcase what they value and how the temple should be expressed. The goal of this exercise was to understand the types of spaces the community is interested in having in or near the temple. By engaging in such architectural techniques, the locals got a better understanding of the scope of programming involved in designing a temple.
This drawing appears to be influenced by the graphic questionnaire archetypal images that were discussed prior to this exercise. This illustrates the notion that someone who has no prior knowledge of designing is able to express themselves architecturally given the appropriate tools of communication to guide them.

Temple is dedicated to the god Brahma

Temple activities include praying and other socio-cultural activities like yoga and playing

The architectural features include columns, circular and triangular shapes

Temple placed in the middle of the stepped pond, that is half filled with water

Stairs and a ramp connecting from the existing steps provide access to the temple

To sit

A slide also

This drawing appears to be influenced by the graphic questionnaire archetypal images that were discussed prior to this exercise. This illustrates the notion that someone who has no prior knowledge of designing is able to express themselves architecturally given the appropriate tools of communication to guide them.
Students in the workshop expressed their desires for the temple in the form of illustrations and notes written in Punjabi. Some of the ideas expressed by the youth included social spaces for studying, playing, and gathering; and outdoor spaces for gardens and yoga. The children also utilized the graphic questionnaire as a tool to guide their design strategies. Most of the drawings illustrate a combination of the images that were collectively chosen from the questionnaire. For instance, the idea of having the temple in the middle of the sarovar with windy passages and multi-levels was a popular strategy. Some of the children also expressed interest in the form of the temple, rendering it a circular space with a triangular façade.
This drawing conveys interest in the inclusion of the socio-cultural spaces around the central and circular spiritual space. The student has combined a plan, a section, and an elevation of her idea in one drawing. Does this imply children can understand architectural language and simplify how they interpret the built environment?

The idea of ritual as movement around the temple
This design alludes to the power of communicating through writing and drawing. The student has sketched circulation pathways and defined a circle as the form of the temple. The programmatic functions have been expressed through writing. In this way, the student has recognized and identified a sense of hierarchy in the drawing.
Youth Drawings from Workshop

1. A drawing of a building with the text "Yoga Hall." The drawing includes a staircase and windows.
2. A drawing labeled "Rooftop Garden." The drawing shows trees and a roof.
3. A drawing labeled "Library." The drawing includes shelves and a desk.
4. A drawing labeled "Play Ground." The drawing includes a playground equipment.
5. A drawing labeled "Temple." The drawing includes a temple with a roof and a window.
6. A drawing labeled "Meeting Hall." The drawing includes a meeting hall with a roof and a window.
7. A drawing labeled "Park." The drawing includes a park with a tree and a bench.
8. A drawing labeled "Road." The drawing includes a road with a car and a tree.

Additional notes:
- Circle shapes of buildings.
- Long lines for the driveway.
- Green lines for water levels in a wooden structure.
- Some buildings are not covered.
- Water level in the building is shown.
- Efficient use of land.
- Green spaces are visible.
- Green areas are marked.
- Religion figured in some of the drawings.
- Cycles and walls in the design.
This drawing is an example of how the site model as a tool of communication helped to guide the student’s design. The student not only thought of the temple’s location in the talaab (stepped pond), but as well he incorporated the site context.

Incorporating nature as the backdrop for the site

Utilizing the element of water to add to the sacredness of the temple

Utilizing the talaab or stepped pond to locate the temple within its context
The tools such as the graphic questionnaire, 3d model, and photos were designed to promote participation by the community in the design process. The sketches clearly show that the community was not just participating, but they were also learning and materializing the architectural concepts. This implies a cooperative feedback loop between the agent and the community.
Rather than conducting a workshop with the men, a small group of them were interviewed. The conversations tended to lean more toward the financial and housekeeping issues rather than the design itself. Their two main concerns involved the funding required to build the temple and its maintenance post-construction. Two individuals, both of whom are wealthy and well known around Barapind were key speakers amongst the group of men. What was interesting was that both these men had different viewpoints in approaching the subject matter. While one argued that in order to get the temple built, it was mandatory for me (as the architect) to go through the proper administrative channels. For instance, he suggested, it was crucial to get documents from officials stating to whom the land of the site belongs to and to determine the boundary of the land. The other participant insisted that it all came down to money. He insisted that with money comes power and with authority anything is possible. For him, the funding was the main issue. The reality however, is that without the community being onboard with the project, it is not possible to build in Barapind. So what is the role of the architect in such a discussion? As an agent, I socially engaged the community by educating, involving, and encouraging them to participate in the design process.

For the locals, this was a first time experience for them. They had appreciated that their voices were being heard. The women especially expressed gratitude for being able to participate in the design process. One woman claimed that they were never involved in such affairs. The excitement of the women spread across the village so quickly that while walking down the street, I could hear the women whispering, "nothing like this has been ever done in Barapind." On a separate occasion,
a woman from the workshop approached me to ask about updates on the temple design. The children also seemed to be impacted by the workshop. After the workshop was over, the students asked about what it takes to become an Architect and how many years of schooling is required. One girl asked which schools in India were the best for architecture studies. Another young man volunteered to carry the site model to the women's workshop and continued to inquire about the role of Architects on the way. The point of these anecdotes is that engaging the community did have a positive and useful outcome. The design process not only made the community feel a part of the project, but it also made them open to new possibilities. Let us now turn to the final chapter on the architectural intervention that was carried out as a result of working in collaboration with the Barapind community.
The 1:150 scale model is a reflection of the community input that was gathered from the workshops and interviews on the type of temple architectural forms, functions, and rituals that were important to them. At this stage, the temple design is flexible and open to change and will continue to evolve in accordance to the community's feedback. It was presented to Sarpunch Gevin, the City Councillor of Barapind. Gevin seemed to be pleased with the design and encouraged me to continue the design process with the community. The last chapter is dedicated to describing and illustrating this proposal in detail. The project highlights how the design grew from the community's input from the workshops, interviews, and stories of the locals.
architectural intervention

After gathering and analyzing the results from the workshop sessions and interviews in Barapind, the goal was to incorporate the community’s ideas in parallel with my own initial pre-fieldwork proposal. What was learned by comparing the ideas that were generated separately? Is it possible to fuse the ideas to create a temple from the perspectives of its users in collaboration with the emerging architect? The resulting architectural intervention, illustrated in this chapter, is an accumulation of an initial response from both the community’s input and pre-fieldwork research, exploring how the surrounding spaces of the site and the temple may be designed. It is important to note that the design proposed is purposefully flexible and open to change since it will continue to evolve with feedback from the community.

Having studied the discourse on the Hindu Temple, the design concept emerged from my fascination with ritual and its relationship to the form of the temple. How is the journey or passage to the sanctum unveiled? Besides the symbolic gesture of moving up towards God, how does temple form dictate ritual? As discussed in part I, movement toward, in and around the temple is a key aspect of ritual. This notion of circumambulation is central to experiencing the temple as a sacred space. In fact, movement from light to darkness, outside to inside, hidden to revealed spaces, are all elements of ritual that transform the architecture of the temple. The idea of ritual is portrayed in the proposed temple design, connecting it to the site. The notion of circumambulation, movement around the sanctum is captured both inside the temple and on the exterior. The pathways surrounding the temple are an extension
of the ritual involving movement, which is further expressed around the ruin. The design attempts to incorporate the essential aspects of Hinduism such as the importance of nature (mountains, forest, river), East-West facing axis, and the ritual of movement through the temple spaces using symbolic forms like the circle. Rather than using the talaab as a place to bathe in, this stepped pond offers a unique opportunity to build a floating temple up on it. The water will surround the temple to reflect the edifice. In a sense the water is nature's element that connects humanity to the divine. The eight concrete steps that surround the site on three sides of the sarovar were extended to all four sides, becoming the social gathering space. The challenge was how to express all these elements in a manner that creates multi-functional spaces.

At this stage, the temple design has unfinished qualities including the lack of materiality and interior design. Such details will be discussed in collaboration with the Barapind community in the next phase of the project.
existing conditions: south section and elevation

Kutia Ragho Ram temple for individual worship

small brick wall  shrine  large brick wall

steps inside ruin  talaab or stepped pond

ground level  -3.8m
A banyan tree on a temple site for ritual practices.

Ritual of movement involves circumambulation.

Presence of a talaab for ritual cleansing prior to entering a temple.

These diagrams illustrate how the temple design evolved from key concepts of Hinduism. Over time these drawings were fused together in order to create a conceptual idea for the temple design.
architectural intervention

1 converting a ruin into a ritual space
   use it as a space for ritual movement

2 art walls
   a public art gallery that showcases local talent; get the youth involved in social events

3 public squares
   courtyard-like spaces where locals gather to engage in community activities and children can study

4 floating temple
   as the main attraction on the site, the temple provides both collective and individual worship

5 engaging the steps
   an amphitheatre-like space used as seating for social gatherings

6 extension of existing pathways
   link the surrounding site to temple via interconnected pathways, emphasizing the idea of ritual movement.

7 stepped pond
   fill with water to maintain ritual connection with temple

8 gardens
   a green space on the west side of the temple that provides a quiet setting for relaxation and yoga

This drawing illustrates the combined ideas of the Barapind community and my own conceptual ideas. Some of the ideas that came from the discussions included spaces for studying, yoga, and gathering spots for relaxing. Over time this design evolved into the proposal.
engaging the steps

maintain the existing 8 steps and use the upper 4 as a social space. Implement the idea of an amphitheatre where people gather to watch a performance; meet up with friends to talk and relax.

converting ruin into a ritual space

plant a banyan tree which is sacred to Hindus and extend the pathways around it for circumambulation. The steps lead back to ground level pathways.
The talaab is partially filled with water

stepped pond
Water is an essential aspect of ritual in Hinduism. Most temples in India have a nearby reservoir for cleansing and its sacredness.

paths get wider as one approaches the temple

entrance into temple from ritual tree base

entrance to meditation level located below ground level

extension of existing pathways
The interconnected pathways allow access to the spiritual core of the temple from separate levels.
spiritual core of temple
a sanctum is present on the upper level, and cave-like meditation space below. Both spaces are aligned, stretching vertically like a tree.

garbhagriha or sanctum
dark cave-like space where the deity images will be housed.

entrance to meditation space
east facing entrance with water basin for cleansing prior to entering temple.

walkway for the temple floor
clockwise circumambulation from light to dark and wide to narrow spaces.

mandapa or temple hall
both an interior and exterior space for religious and/or social events.

forest-like columns used to separate key spaces of the temple.

Meditation level: -1.8m
Temple level: 1.5m
Sanctum level: 3m

floating temple core ideas
The sacred building emerges out of the talaab as a circular platform. The temple sits on a series of structural columns that blend in with the forest of columns that extend vertically. The traditional mountain shape is still maintained in elevation. The spiritual core of the temple may be accessed on two levels from the south steps for meditating or from the pathways extending from the ruin for praying.
A water tank at the Northern entrance for cleansing purposes prior to going to the temple.

Platforms/courtyards have been added in the North and South corners for circulation purposes.

The ruin steps are covered and filled with soil excavated from the site. A banyan tree is planted in the soil and grows out of the ruin.

Extension of steps on the West side of talaab to make a completed stepped pond and to offer different viewing spots of the temple.
The temple design is mostly an exterior space. Over time the forest-like columns are meant to be covered with and interconnected by plants, creating a trellis-like effect for shading in the summer months.
Sanctum Base Level 4m

Temple Base Level 1.5m

Ground Level 0m

Meditation Level -1.8m

Base of Talaab Level -3.5m

This exploded drawing of the floor plans is illustrating the location of the forest of columns on the various levels.
main entrance into the shrine dedicated to the god Siva facing east from where the sun rises
The sanctum perched at the top of the temple is dedicated to lord Siva. The temple allows for collective and individual worship. The ritual of movement is expressed by emphasizing the concept of circumambulation and movement upward toward the deity.
This view provides a glimpse into the meditative space located directly below the temple shrine along the spiritual core. This space is for contemplation and meditation. The water surrounding the space is there to keep it cool. The outer ring is a circular pathway for walking and resting.
The two drawings above illustrate the location of the banyan tree in relation to the temple. The sacred tree is placed on the ruin for circumambulation purposes.

Entrance toward the temple from the North side.
the temple is like a revolving building that provides a different view from every angle. The view from the back side of the temple frames the stepped pond with the sacred space floating above.
The brick wall protruding beside the banyan tree has been architecturally expressed in a similar manner to the existing brick wall of the ruin. This gesture celebrates and revives the existing architecture of the site, adding a layer to the ritual.
THE VIEW AT NIGHT WITH LIGHTS ILLUMINATING THE FLOATING TEMPLE FROM BELOW.
Contingencies that come one's way are thus seen not as competing fragments but as a field of opportunities to be gathered to a greater or lesser extent, and then filtered by the intent of the project.

Postscript

The process during which the architect engages with the users of the built environment is a story that is rarely told. This design phase was a crucial stepping stone that determined the relationship between the architect and the community of Barapind.

My interest in pursuing a community-engaged design project in Barapind, Punjab India developed out of my awareness of the importance of the processes involved in creating a built environment. I am also aware of the fact that with the proper training and creative imagination, an architect may design a temple. However, the challenges that an architect must face are the contingencies or uncertainties that the designer becomes exposed to when working directly with the users of the building. When I went to India to conduct my fieldwork research, I did not know what to expect nor was I aware of the types of contingencies I would be facing. For instance, there is strong political and administrative struggle that needs to be overcome before building in small villages like Barapind.

In Architecture Depends, Architect Jeremy Till proposes, architecture is dependent on people, time, politics, ethics, mess: the real world at every stage of its journey from initial sketch to inhabitation. This statement implies that there is no perfect world in which an architect's vision of a building is going to be built without uncertainty.

Working with the community in Barapind provided a reality check that cannot be learned in a classroom setting. Before the stage of design could even be conceived of, it appears to be important in Barapind to provide proof from government authorities of who owns the land; who
is entitled to build on it; what the boundary are for the site; to publicly announce what is being built there; and finally tackle the issue for funding the project. Only after diligently following this tedious administrative procedure, is it possible for the architect to start the design phase. This hierarchy in the process of design is an essential component of architecture, which involves a certain level of contingency. How then could architects embrace this uncertainty as an opportunity during the design process? What can architects learn from 'letting go' as opposed to being in total control?21 Perhaps by allowing themselves to engage with the realities of the world, architects may be able to create architecture that is ultimately defined by and reflects the community it serves. By educating members of the Barapind community about what contributions architects can make in efforts to create a built environment, not only lifted their spirits but also inspired them to be open to other ways of doing architecture.

This project was phase 1 of the community's involvement in the temple project. Engaging the community of Barapind in the design process created positive and negative reactions in the village. Many were trying to make sense of this approach to architecture. Despite such controversy, however, the act of inducing others to act definitely promoted a possibility of a design build. I hope to continue exploring the relationship between ritual architecture and the role of its users as active participants in the design process in the near future.

notes

appendices

The attached set of drawings are ideas that were done in the early stages of the thesis, prior to the trip to India.

site

barapind rd

theing rd

- site
- public roads
- buildings on site
existing site: south section

- shrine
- steps inside ruin
- small brick wall
- west side covered in sand
- Kutia Ragho Ram temple for individual worship
- large brick wall
- sunken pond or sarovar

ground level -3.8m
existing site: west section

- ruin previously used by women for bathing
- small shrine for individual worship
- stepped pond or sarovar with concrete steps on three sides covered with vegetation
- private haveli

ground level

3.8 m
architectural intervention

1 converting a ruin into a ritual space
   use it as a space for ritual movement

2 art walls
   a public art gallery that showcases local talent

3 public squares
   courtyard-like spaces where locals gather to engage in community activities

4 floating temple
   as the main attraction on the site, the temple provides both collective and individual worship

5 engaging the steps
   an amphitheatre-like space used as seating for social gatherings

6 extension of existing pathways
   link the surrounding site to temple via interconnected pathways, emphasizing the idea of ritual movement.

7 stepped pond
   fill with water to maintain ritual connection with temple

8 gardens
   a green space on the west side of the temple that provides a quiet setting for relaxation and meditation
engaging the steps
maintain the existing steps and use the first 5 steps as a social space. Implement the idea of an amphitheatre where people gather to watch a performance; meet up with friends to talk and relax.

converting ruin into a ritual space
plant a banyan tree which is sacred to Hindus and extend the pathways around it for circumambulation. The steps lead back to ground level pathways.
The sarovar is partially filled with water

**stepped pond**
Water is an essential aspect of ritual in Hinduism. Most temples in India have a nearby reservoir for cleansing and its sacredness.

**extension of existing pathways**
The interconnected pathways allow access to the spiritual core of the temple from separate levels.
floating temple
The sacred building emerges out of the sarovar as a circular platform. The temple sits on a series of structural columns that blend in with the forest of columns that extend vertically. The traditional mountain shape is still maintained in elevation. The spiritual core of the temple may be accessed on two levels from the south steps or from the pathways extending from the ruin.
Glossary

*all terms are from sources listed in the bibliography

aarti
the circling of oil lamps
lights before the image of the deity (D. Eck)

agency
acting in order to induce
others to act (N. Hamdi)

archetypal
the original pattern or
model of which all things of the same type are repre-
sentations or copies

www.oxforddictionaries.
com

avatar
the "descent" of a deity
upon earth; an incarn­
ation, especially of Vishnu

(V. Narayanan)

bhakti
"devotion; honour; love";
From bhaj, meaning to
share, to be devoted, to
love. The heart's attitude of devotion towards god.

(D. Eck)

bhagvita gita
the holy book in which
Krishna delivers a sermon
dedicated to loving devotion to the lord and
the importance of selfless
action

(V. Narayanan)

brahma
personified god of cre-
ation; the Creator (A. Volwahsen)

circumambulation
a ritual involving circling
the sanctum

(G. Michell)

chunis
long scarves that some
South Asian women wear
around their head and
shoulders

(http://dictionary.cambridge.org/)

community
a social group of any size
whose members reside in
a specific locality, share
government, and often
have a common cultural
and historical heritage

(N. Hamdi)

circumambulation
"Circling is, quite sim-
ply, the fact that things
could be otherwise than
they are."-William Rasch,
(J. Till)

darsan
the contemplative act of
seeing

(D. Eck)

devi mata
goddess (P. Kollar)

diaspora
people who have spread or
been dispersed from their
homeland

(www.oxforddictionaries.com)

flexibility
characterized by a ready
capability to adapt to new,
different, or changing re-
quirements

(www.oxforddictionaries.com)

gara
"womb chamber"; inner
chamber or sanctum

where the deities are
housed (G. Michell)

ghanta
a bell; usually hung at the
entrance of the front porch of
a temple (D. Eck)

garbagriha
a sanctum sanctorum; the
inner chamber or sanctum
where the deities are housed

(G. Michell)

gharana
place of worship for Sikh
religious tradition

(www.oxforddictionaries.com)

haran
monk god from Rama-
yana (G. Michell)

havan
a Hindu ritual burning of
offerings held to mark rites
of passage

(www.oxforddictionaries.com)

jali
carved lattice work
screen or perforat-
ed wall

(S. Grover)

krishna
the ancient cowherd god
and hero of India; the advisor
of Arjuna on the battle-
field of the Mahabharata
war; the playful lover of the milkmaids; an avatar of
Vishnu.

(D. Eck)

mahabharata
the story of the great struggle among the descendants of a king called Bharata. The main part of the story deals with a war between the Pandavas and the Kauravas.

(V. Narayanan)

mandala
the geometrical image of
the sacred diagram or
sacred knowledge: revela-
tion; Hindu scripture

(K. Klostermaier)

mandir
a Hindu temple building that has an important role in temple ritual

(A. Volwahsen)

mandapa
pilled assembly porch in
a temple

(A. Volwahsen)

mela
a fair, especially a religious
festival to which people
often come some distance
on pilgrimage

(D. Eck)

murti
"Form, likeness." The image
of the deity, as a focus for
worship and darsan

(D. Eck)

navara style
"city-dwellers' style: archi-
tectural style in northern
India" (A. Volwahsen)

participation
"taking part in"; the participat-
ents who participate in
the architecture process
are the users of the build-
ing and those who are ex-
posed to it in some way or
another (P. Jenkins and L.
Forsyth)

prasad
"Favour, grace." In worship,
the food which is offered
to the deities and they re-
turned; consecrated, as the
"grace" of the Lord to the
devotee

(D. Eck)

parvati
consort of Siva; goddess;
symbol of universal sub-
estantiality

(D. Eck)

puja
ritual offering performed
by Brahmin priests

(D. Eck)

peepal
a fig tree also known as the
Buddha tree; sacred in
Hinduism

(www.oxforddictionaries.com)

pandit or pujari
the Brahmin priest respon-
sible for the worship of the
gods

(D. Eck)

puranas
one of the eighteen col-
cctions of "ancient stories"
which preserve traditions
of myth, legends, and ritual

(D. Eck)

ramayana
epic of Lord Rama, Sita, and
their devotee Hanuman

(V. Narayanan)

ritual
a series of actions or type of
behaviour regularly and invariably followed by someone

(www.oxforddictionaries.com)

ruin
an abandoned space that was once functional

(www.oxforddictionaries.com)

sadhana
holi men; usually ascetics

(D. Eck)

samsara
"passage"; the term used to
describe the ceaseless
round of birth and death and
rebirth; the changing
world

(D. Eck)

saraswati
consort of Siva; goddess;
symbol of universal sub-
estantiality

(D. Eck)

shikhar
a manmade shallow basin
or pond with steps leading
down to it; collects rainwater
and is often used for
bathing (N. Sharma)

shiva
god, the Preserver

(A. Volwahsen)

step well
a more elaborate version of
the stepped pond; a water
building that has an impor-
tant role in temple ritual

(M. Livingstone)

talaab or stepped pond
a manmade shallow basin
or pond with steps leading
down to it; collects rainwa-
ter and is often used for
bathing (N. Sharma)

temple
A seat or platform of god, a
house of god, a residence of
god or a waiting and
abiding place

(G. Michell)

vastupurusha mandala
the sacred diagram or
the geometrical image of
the residing Divine Per-
sonality or cosmic man

(A. Volwahsen)

vastu shastra
traditional text dealing
with science of architecture
as sacred art

(A. Volwahsen)

vedas
sacred knowledge: revela-
tion; Hindu scripture

(K. Klostermaier)

vishnu
the many-faced deity who is
both the creator and de-
stroyer

(D. Eck)

viswakarma
supreme symbol of siva;
representing the female
and male anatomy

(G. Michell)
25. Devotees participating in ritual of movement around the tree and ascending towards the sanctum, K. Quinlan.

24. The chariot bearing the processionional image is pulled by villagers at a festival near Badami, G. Michell.

23. A Siva Linga sheltered by sticks and leaves, overlooking a river, G. Michell.

22. Section drawing of Kandariya Mahadev temple in Khajuraho, S. Grover, Masterpieces of Traditional Indian Architecture, 47.


3. Ritual is a movement in space, K. Quinlan, Oct 2012.


Bibliography

Ritual Architecture


Agency & Community Participation


Websites


Barapind Contacts

Karimi, Golnaz, Site Survey Assistant, 11 February 2013.
Kumar, Vinod, Village Tour Guide and Site Survey Assistant, February 2013.
Quinlan, Peter, Photography & Video Assistant, February 2013.
Sarpunch, Gevin, Barapind City Councillor, Personal Meeting, 20 Feb, 2013.
Sharma, Chander Niresh, Barapind Community Member, Personal Interview, 16 February 2013.
Sharma, Tirath, Project Liaison, in Canada and India, September 2012-March 2013.