

“ Game Design on Indian Temples ”

Project III Report

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Approval Sheet

The project III titled “ Game Design on Indian Temples” by Aditi Babel/
05625806 is approved by a partial fulfillment to requirements for M.Des.
degree in Visual Communication.

Signature of the Guide:

Signature of the Co-Guide:

Signature of the External Examiner:

Signature of the Internal Examiner:

Signature of the Chairman:

Introduction

My project focuses on designing a game based on the elements of Indian temples. The motivation to take up this project was to study an aspect of Indian tradition and culture, a very significant part of which are the Indian Temples. This project gave me a chance to understand important and different elements related to Indian culture. My initial objective was to create interest in the subject that encourages self involvement and motivation to learn more on the subject.

The structural and strategical approach of game designing was ideal to create awareness on the subject with a lot of interest i.e. the rituals, beliefs, myths, significances attached to them, which are being forgotten with time.

Games have been an intimate part of Indian tradition and culture. Some of the most famous and interesting games were developed and played here and became a part of the tradition e.g. Pachisi.

Literature Survey

Indian Temples

Temple is a building devoted to the worship, or regarded as the dwelling place, of a god or gods or other objects of religious reverence. The structure is specifically reserved for religious and spiritual activities. They are usually dedicated to one primary deity.

According to Hindu philosophy, life as a pilgrimage from birth to death has many stations, death being one of them and in itself does not bring final release, moksha. Final release from all conditions is gained through knowledge. The second way to find immense joy i.e. bhukti and release i.e. moksha is of Pilgrimage. Tirtha is the name of a place of pilgrimage on the bank of a river, the sea-shore or a lake. The meaning of the word is a ford, a passage.

Hindu philosophy views the cosmos to be holomonic and self-similar in nature. According to ancient architectural tradition, Hindu temples are symbols of models of the cosmos and their form represents the cosmos symbolically.

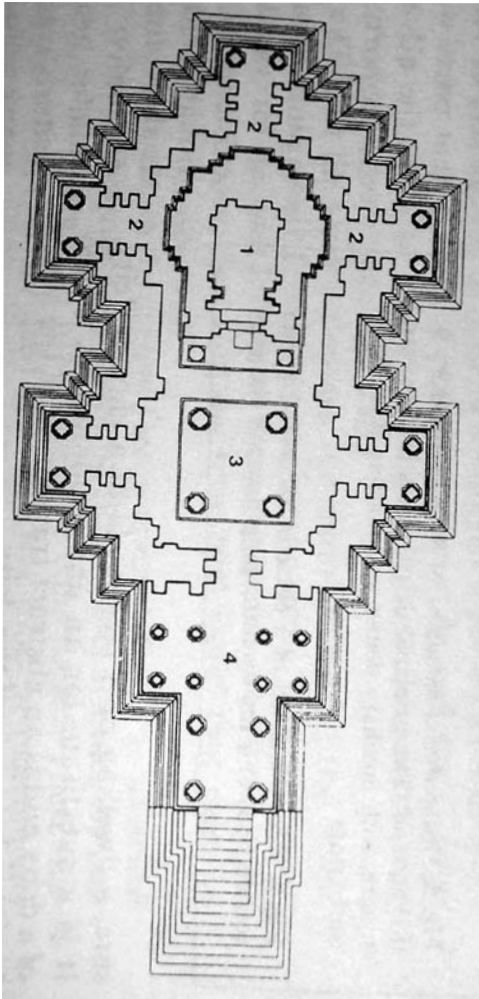
Indian temples are very significant monuments with the structure being created with great amount of detail making the entire place of worship ideal for people to celebrate the tradition.



Virupaksha Temple



Ranakpur Temple



All Hindu temples are built on the scheme of the ritual diagrams: Yantras and Mandala. The science of temple architecture is laid down in the ancient texts that are called “Vaastu Shastra”, the system of measurement followed by vaastu Shastra is called “Tala” system.

According to Vastu Shastra tradition, the ground plan of every Hindu temple must conform to a mandala called the “Vaastu-purusha Mandala”. Great importance is attached to it as it functions as a geometrical diagram of essential structure of the universe, an imprint of ordered cosmos.

The instructions given in Vastu Shastras work like general programmes to generate various types of temples. A basic Hindu temple consists of an inner sanctum, the garbha griha or womb-chamber, in which the image is housed. The sanctum is crowned by a tower-like shikara.

At the turn of the first millennium, two major types of

Temples existed:

The northern or Nagara style and

The southern or Dravida type of temple.

They are distinguishable by the shape and decoration of their shikharas.

Nagara style: The tower is beehive shaped.

Dravida: The tower consists of progressively smaller storeys of pavilions.

(Source: “HINDU TEMPLES: MODELS OF A FRACTAL UNIVERSE”

By Prof. Kirti Trivedi;

The Hindu Temple (part 1 & 2) by Stella Kramrisch)

Features of Indian Temples:

Iconography: the use or study of images or symbols in visual arts. Its one of the most important features of Indian temples and signifies the uniqueness about the Indian culture.

Basic geometrical figures such as point, circle, triangle, square etc. were assigned special symbolic meaning in Indian sacred art to represent the basic energies of the cosmos.

Point - i.e. Bindu is considered as a source of all creation.

It represents concentrated energy and from this centre emanate the various lines, triangles & circles culminating in different shapes.

Circle - represents the principle that has no beginning, no ending and which is perfectly symmetrical. It indicates the realm of radiations from the one centre (i.e. circle of all universe).

Triangle - is the basic linear figure of enclosure. Since space can not be bounded by less than 3 lines, the triangle is conceived as the first symbolic form to emerge from the chaos preceding creation. The downward pointing triangle is representative of a female principle, while the upward denotes the male principle. The interaction of these two represent the concept of fusion of polarity. Male/female: matter/spirit, the static and kinetic in the perfect state of unity.

Square: denotes the manifest world, the stable linear form representing the earth. It is fundamental of most of the sacred constructions, denoting the terrestrial world that must be transcended.

- Deities : Gods / goddess , Divine status, Supreme being.

In Hinduism, God is thought of as the supreme all-powerful person. The Trimurti are three aspects of God in His forms as Brahma, Vishnu and Shiva.

Brahma - the creator

Vishnu - the preserver

Shiva - the destroyer

The Hindu religion speaks of many individual deities, called Devas. Goddesses are called devi's. The various devas and devi's are personifications of various aspects of one and the same God (Ishvara). For instance, when a Hindu thinks of Ishvara as the giver of knowledge and learning, that aspect of Ishvara is personified as the deity Saraswati. In the same manner, the deity Lakshmi personifies Ishvara as the giver of wealth and prosperity.

The most ancient Vedic devas included Indra, Agni, Soma, Varuna, Mitra, Savitri, Rudra, Prajapati, Vishnu, Aryaman and the Ashvins; important devi's were Saraswati, Usha and Prithvi.

Vishnu and Shiva are not regarded as ordinary devas but as Mahadevas ("Great Gods") because of their central positions in worship and mythology. The Puranas also laud other devas, such as Ganesha and Hanuman, and avataras such as Rama and Krishna.

Goddesses are worshiped when God is thought of as the Universal Mother. Particular forms of the Universal Mother include Lakshmi, Sarasvati and Parvati, Durga, and Kali.



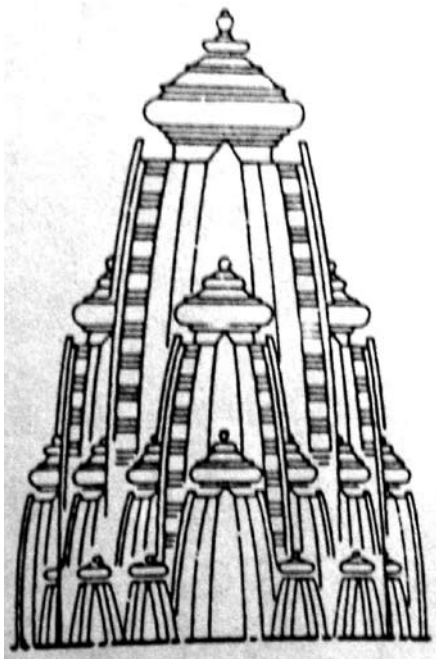
Goddess Durga

- Myths: a traditional story esp. one concerning the early history of people. The tradition of telling stories about the deities has been an important part of Indian culture and is one of the most used ways for passing on the knowledge and belief about the deities. For e.g.

There are various versions about the incarnation of Goddess Durga. The most common one goes like this: Once upon a time, a demon by the name of Mahishashur became very powerful because of a boon conferred upon him by God Shiva. As a result he invaded the Heavens and drove out all the gods residing there including their king, Lord Indra. All the resident gods and goddesses of Heaven visited the three main Powers of this Universe; Brahma, Vishnu and Maheshwar (another name for God Shiva) and lamented on their state of sorrow and the amount of torment put upon them by Mahishashura. Listening to this, Brahma, Vishnu and Shiva were so enraged that the grief of the gods also transformed into immense anger over the deeds of Mahishashura. Out of this combined rage and anger of the 3 main gods and all other gods and goddesses present there, developed an immense power and out came Goddess Durga as an incarnation of Shakti, the power behind everything in this Universe.



- **Beliefs** : it is an acceptance that a statement is true or that something exists. The belief system in India is really strong and has a deep impact on the psychology and mind set of people who believe in them. for e.g. Karni Mata temple is a 600 year old temple at Deshnok, Rajasthan. Karni Mata is believed to be the incarnation of Hindu goddess Durga, the goddess of power of good. The peculiarity of this temple is that thousands of rats are worshipped here. The temple was built in the early 20th century in late Mughal style by Maharaja Ganga Singh. This temple is dedicated to Karni Mata. There is a legend that she prophesied the victory of Rao Bika. The rats are seen as holy, owing to the belief that the souls of the followers of Karni Mata are in these rats and thus they must be looked after.



- **Structure** : the arrangements of & relation between parts of elements of something. Indian temples are known for their beautiful and magnificent and most importantly meaningful structures. It is one of the most very important features of Indian temples not only because of the uniqueness of the structures but also because of the intricate details which offer great significance in defining Indian temples.

Hindu philosophy views the cosmos to be holonomic and self-similar in nature. According to ancient architecture tradition, Hindu temples are symbols of models of the cosmos and their form represents the cosmos symbolically. The instructions given in Vastu Shastras (the ancient text on architecture) work like general programmes to generate various types of temples. A basic Hindu temple consists of an inner sanctum, the garbha griha or womb-chamber, in which the image is housed. The sanctum is crowned by a tower-like shikara.

Some famous Indian Temples



Keshava temple (1268 C.E.),
Somanathapura



golden temple



meenakshi temple



shore temple



great stupa



Games:

Games, known to have been played as far back as prehistoric times, are a universal part of the human experience for all cultures, genders and ages.

: a form of play or sport, especially, a competitive one played according to rules and is usually decided by skill, strength or luck which typically ends in a definite result.

: a structured or semi-structured activity usually undertaken for enjoyment and sometimes also used as educational tools.

The term 'game' is also used to describe simulation of various activities for the purpose of training, analyzing or prediction etc.

Game Designing

: is the process of designing the content and rules of a game.

The purpose of game designing is to create a play, given a set of constraints. It is mainly to entertain and create interest, it also serves the purpose of education, awareness, training, analyzing and predicting.

It helps develop practical skills, serves as a form of exercise as it involves mental or physical stimulation and sometimes both. Some constraints could be technical, ethical, production based or political.

Components Of Game

The components are very important part of the game as they determine the player's moves, actions, methods and strategies based on which is the achievement of the goal a player has to establish.

- The key components of a game are its

Goals : determine course of game and the strategy to be used (if any).

Rules : in a game determine each player's goals, turn order, the responsibilities of the players which result in skill (mental/physical), strategy(a plan), chance(luck) or a combination of them.

Tools : determine the positions, strategy and course of action to be taken by the player.

Challenges : which determine the competition and strategy planning of one player against the others & Interactivity and the kind of game it is.

Types of Games:

- Role-playing games e.g. dungeons & dragons

- Single player games e.g. yo-yo

- Family games e.g. snakes & ladders

- Narrative games (which narrate a story)

- Ludology games (game is understood by its rules,

Interface and concept of play) e.g ludo

- Abstract games e.g ticks & crosses

Classification Of Games

Games could be broadly divided into these categories

1. Outdoor games

- Field games i.e. sports
- Family games e.g. lawn tennis
- Narrative games (which narrate a story) e.g. treasure hunting
- Ludology games (game is understood by its rules, interface and concept of play) e.g. kho-kho
- Role-playing games.

2. Indoor games

- Board games e.g. Checkers
- Card games e.g. Bridge
- Video games & Computer games e.g. Pac-Man
- Role-playing games e.g. dungeons & dragons
- Single player games e.g. yo-yo
- Family games e.g. snakes & ladders
- Narrative games (which narrate a story)
- Ludology games (game is understood by its rules, interface and concept of play) e.g. ludo
- Abstract games e.g. ticks & crosses

Game Overviews:

For understanding how a game works and how are its different elements important for a game to make it interesting I reviewed some board games.

A board game is a game played with counters or pieces that are placed on, removed from, or moved across a board which is a pre marked surface, usually specific to that game. Simple board games often make ideal “family entertainment” since they are often appropriate for all ages. Some board games, such as chess, have intense strategic value and have been classics for centuries. The board games could be also analyzed based on features like: learning, information, play factor, surprise elements, involvement levels etc.

There are many different types of board games. Many games simulate aspects of real life



CHESS is a game for two players, played on a game board made up of 64 squares, alternately dark and light in color. Each player starts with sixteen chessmen, either white or black. Pieces are set down in a particular starting formation. Each different type of piece is moved according to specific rules and is removed from the board when it is captured by the opponent. The object is to “checkmate” the opponent’s king and win over their kingdom.

Chess is a game based on planning strategies and it keeps the player deeply involved in the opponents actions which can determine his course of action during the play.



CHECKERS is a two-player game played on a board made up of 64 alternately-colored squares, eight to a side. All gameplay occurs on squares of a single color usually the darker one. Each player starts with 12 pieces. The object is to capture all of your opponents pieces before he captures yours. Pieces are moved one at a time, and are always made on the diagonals. In the first part of the game, pieces are always moved forward (away from the player). Once a piece reaches the opponent’s home row, it is “kinged”, and may then move freely in either direction. Opponents pieces are captured by jumping over them. If an opponent’s piece is adjacent to yours, and there is an empty space beyond it, then you must jump over his piece and remove it from the board. The player must continue jumping his opponents as long as there are moves to be made.

The first player to capture all of his opponent’s pieces is the winner.



SCRABBLE is a board game for two, three, or four players, played on a game board made up of 225 squares (15 x 15). 164 of the squares are normal, while the remainder have special attributes such as double letter, triple letter, double word, and triple word. Each player draws seven lettered tiles at random, and attempts to make a word on the board. The only real rules are that the word must use at least one previously-played letter, must form a word horizontally or vertically, and that the word must be a dictionary word (no people or place names). The resulting game ends up looking something like a crossword puzzle. Thus, Scrabble is sometimes known as the “crossword” game.

It has great opportunity for learning new words and improving your vocabulary skills with lot of interest and fun and challenge.



MONOPOLY is now one of the world’s best-known and best-loved board games.

Elements of the game, such as the go To Jail, go Directly to Jail, do not pass go, do not collect \$200, get out of jail, free, and properties such as Boardwalk and Baltic Avenue have become touchstones of popular culture.

Monopoly is one of the most well known and played game among all other board games. Its features and elements keep the players involved for a long span of time and also never reducing the interest levels. It involves elements like cards, dice and incentives like money which make the game very interesting.



PACHISI is a board game that originated in ancient India; it is described as the national game of India. It is played on a board shaped like a symmetrical cross. A player's pieces move around the board based upon a throw of six or seven cowries (the number of shells landing aperture upwards indicating the number of places to move). The name of the game comes from the Hindi word pachis, meaning twenty-five, the largest score that can be thrown with the cowrie shells. Thus the game is also known by the name Twenty-five. It is a descendant of the game of Ashte kashte.

Pachisi was one of the favorite games in India though it has lots its charm as it was in the earlier times it remains to be one of the most fun filled board games.



LUDO is a simplified version of the Ancient Indian game of Pachisi, in which you race around a track on the game board, attempting to block your opponents while moving your markers to the goal. The game was introduced into Britain in the late 1800's, and remains popular there. The game may be played by two to four players, each using four game pieces. Each piece enters from one of the four corners of the board, and proceeds around the board based on the roll of a die. A player may only enter the board when they roll a one or six. Any roll of a six yields a bonus roll. Pieces are captured when another player lands on a space occupied by another piece, and the previous occupant is sent back to the starting point. The object to be the first to move all your pieces from the starting corner to your home base.

User Studies

My literature survey helped me define my target audience as the objectives of the game are also determined by the people who would be playing the game. I focused on having a target audience of age 15 & above as normally at this age one develops analytical skills and has a basic knowledge of all subjects. This helps to determine the level of challenges in the game also the rules, tools and goals.

I was keen on designing a family game as this leads to a healthy interaction among the players and learning takes place directly & indirectly over the subject of concern, this helps creating interest in the subject without reducing the level of enjoyment.

I interviewed some families and following were the key points that were noted after the user studies :

- Maximum number of family members should be able to play at the same time.
- There should be a way of interaction with the other players where one could use an advise and move forward.
- There should be more elements to keep the game interesting.
- It should be a board or a card game where players can form teams and play as a group.
- A game where they can change the play each time and can have different ends each time or could change the ends during the game.
- A way where the weaker player could win some bonus points so the chance of loosing the game falls same for all players.
- Elements or incentives that can be transferred from one player to another under a condition.
- A game where elders could pass on some knowledge to children and help them to take deep interest in the subject.

Key Elements of Game:

After the user studies I listed the key elements of the content i.e. Indian temples, based on which the basic game plan would revolve. These elements could be used individually to create a game or clubbed together if required. These were

Iconography & Symbols



Shiva as a lord of cosmic dance.



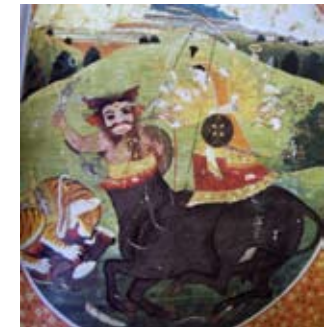
Symbols of Vishnu: sun disk, tilak, his conch.

Deities



Jain image of released spirit.
Detachment from the illusion of earthly life and the individual search for the absolute truth.

Structure



Myths

Function/ Key word mapping

Mental Stimulation	Information & learning	Interest level	Involvement	Surprise	Challenges	Strategy of planning	Fun factor	Functions
								Key words
●	●	●	●		●	●	●	Structure
	●	●	●	●				Rituals
	●	●	●	●				Beliefs
●	●	●	●			●	●	Myths
●	●	●	●	●	●	●	●	Iconography
●	●	●	●	●	●	●	●	Symbols
●	●	●			●			Deities

This map was based on the idea of the relation between the key elements and functions of the game after a person has understood the rules and pattern of the game. For e.g a person might lose the surprise element after he has learned about a myth in the game, similarly, A game where each time a strategy would be required could be based on forming structures or identifying an icon or matching its parts within time limit or a game where the challenge would not diminish with the number of times you have played the game for e.g.. A card game where you need to locate deities first and then match or place them at the correct positions when you could always shuffle and get new stack of cards.

Motives & Strategies

My objectives for the game are to

- Create interest in the subject of Indian temples.
- Provides information about Indian temples through entertainment &
- Encourages learning through interaction.

I wanted to focus my design on developing a board or a card game essentially for an age group of 15 & above as at this age one develops analytical skills and has a basic knowledge of all subjects, making it a social/family game which supports mental stimulation.

My motivation of making a board/card game is because:

- In a board or a card game more than one person could play at the same time. Simple board games often make ideal “family entertainment” since they are often appropriate for all ages.
- Group activity leads to a healthier interaction and competition which helps in mental stimulation.
- Structure of the game can be made complex which would keep the players always interested and hence a challenge for the designer.
- a board or a card game is also easily available.

My design would be based on content about any one feature or a combination of them of Indian temples.

- based on the physicalities (which will become mainly a general knowledge game)
- the iconography
- the myths, beliefs or rituals
- the structure
- the deities worshiped
- a game as a journey to all

Concepts

Structural Game

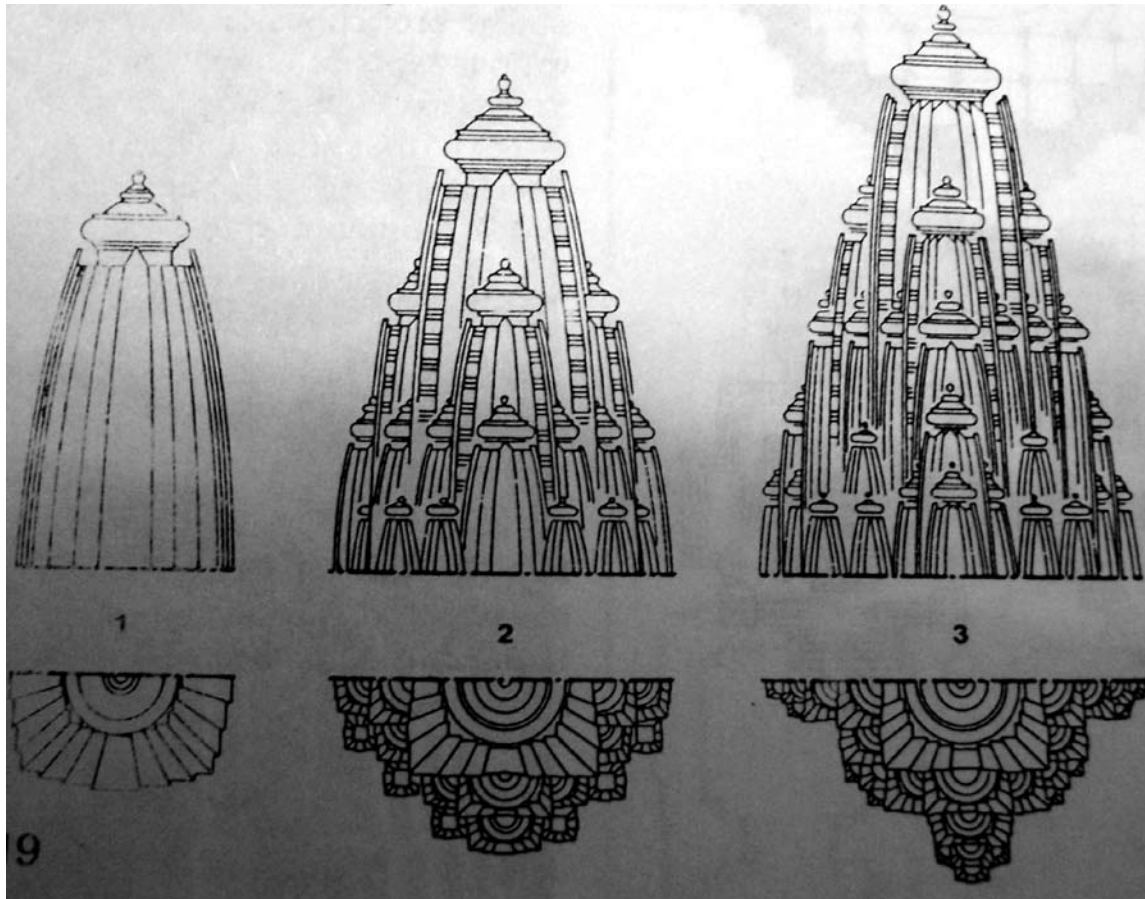
- Understanding and being fascinated how complex and perfect the structure of Indian temples are established, my first inclination was towards creating a game which could inform everybody of these rare and beautiful architectural monuments.

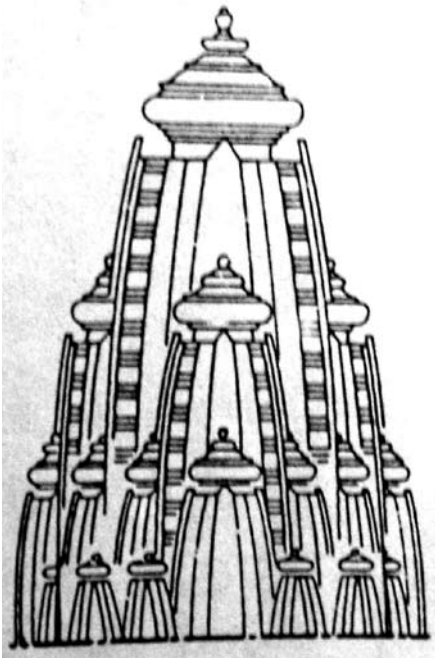
Elements of game:

- it would inform about the basic construction which can be broken down in simple geometric patterns.

- it would also inform about the cosmos patten of universe on which the temples are constructed.

- it would be challenging to create a temple and to understand its grid and follow on the same rules.





- the interest and involvement levels would be high.

- it would require mental and physical stimulation.

- it would require strategy to plan the construction.

Negative points

- once the player knows how to construct the temple, it won't be as challenging as the first time.



- its would only provide one time information and surprise factor would be gone after the first attempt of completion.

- Not many people can be involved at the same time.

Tour Of Temples

This concept developed with the structural approach

i.e. With the understanding of the structure the challenge would be to travel through or on the map of India and also create the structure on the right places.

Elements

- More then one person would be involved and hence the challenge increases with the increase of information and mental stimulation about the places where the important temples are located and the structure.

- it would create a lot of interest and fun factor would also be high.

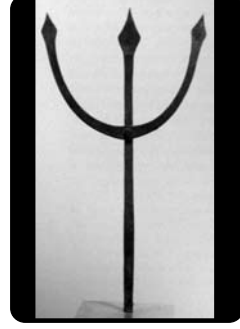
- it would require and develop high amount of strategy and planning.

Negative points:

- the game would take a long time to finish and people involved might loose patience.

- Once the path is known the challenge reduces and in might result in lack of interest.





Iconology , symbols, Deities & Mythologies

This concept was based on creating a card game where two or more people can play. The cards would have the icons, symbols printed on them and on the rare side of the cards there would be the details of the icons printed. The person sitting opposite you must answer correctly about the icons or they loose points which are the tokens to win the game

also after which one could start to draw the icons and ask questions on the same.

Elements

- More then one person would be involved and hence the challenge increases. Its a game of mental stimulation and knowledge.

- it would create a lot of fun factor.

Negative points:

- Once the cards are known the challenge reduces and in might result in lack of interest.

Grid Game

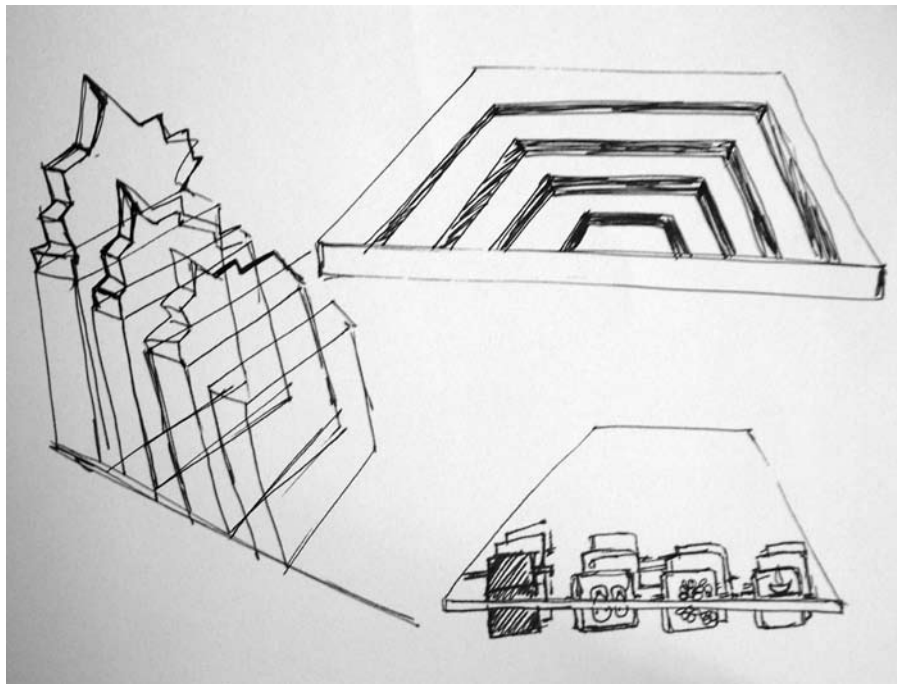
The Concept was evolved with the combination of all the above ideas and is a board-card-dice game.

The game is based on the Char-Dham, journey which is regarded as the ultimate source of knowledge and purity of a person's soul who respects and practises Hinduism.

The player has to start from one Dham and pass through the other three to complete his journey. During his journey he builds the Dham he started from so when he would finish the visit to the three Dham's his Dham would be a complete and that's the end of his journey. During the journey the steps taken have some surprises, challenges and elements based on Hindu iconography, mythology,

Deities etc. that makes the journey more interesting and challenging.

The Char Dham's are: Badrinath, Kedarnath, Gangotri & Yamnotri.



Elements

- it would involve icons/symbols, deities, myths, beliefs, rituals in the form of cards printed which need to be answered by the player to move forward.
- It would involve the player with great challenge and strategical approach. It would have luck factor involved as the steps are decided by the dice thrown.
- it would contain a lot of testing over a players knowledge and give new information each time you play the game.
- The element of surprise would always be there. It would create mental and physical stimulation.
- the path that takes you through to complete your journey can be reconstructed each time you start a new game. It would create interest and every time you would have a new game.
- Maximum Four players could play at a time.

Final Concept

After all these ideations I reviewed them and after getting feedback on the same my final concept is as follows:

Octagon Game

Type: Board game using Dice and Cards.

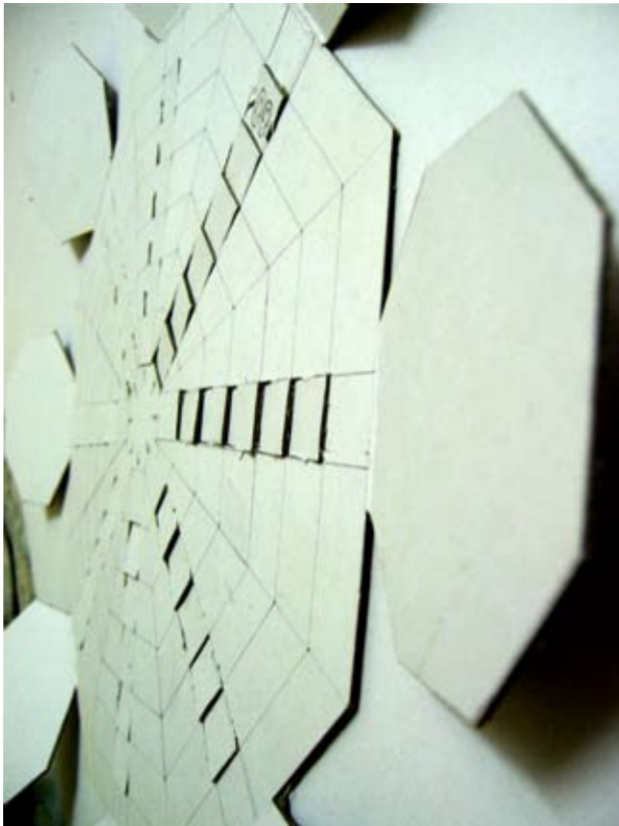
Max. No. of players: - 8

Description:-

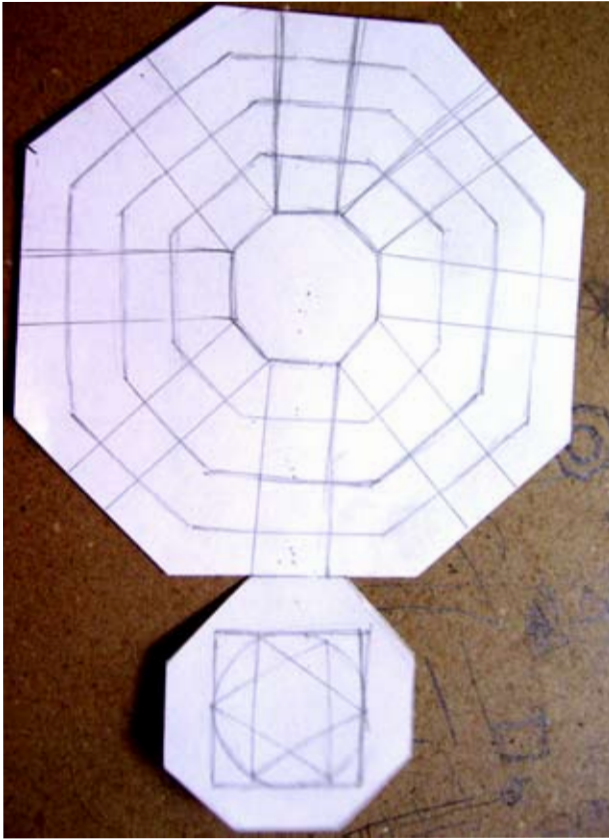
This concept is an extension of the grid game where a player had to visit the Char Dham's. The strategy in this game is that a player has to cross seven levels which could be understood as the seven births, to reach his temple and attain moksha. The journey towards the destination would change each time as the steps of the board are rotatable and redefine the path and challenges of the journey.

At each step, according to the icon on the step, the player has to answer a set of question written on cards with similar icon. The player earns points along the way by the roll of dice at each step. At the end of the path the player reaches a smaller personal octagon where the player has to construct a temple out of the 3d puzzle kept there, in a clocked amount of time.

The player to finish the puzzle first wins the game. If the game ends without a complete temple, then the number of steps advanced and the points earned decide the winner.



Elements:

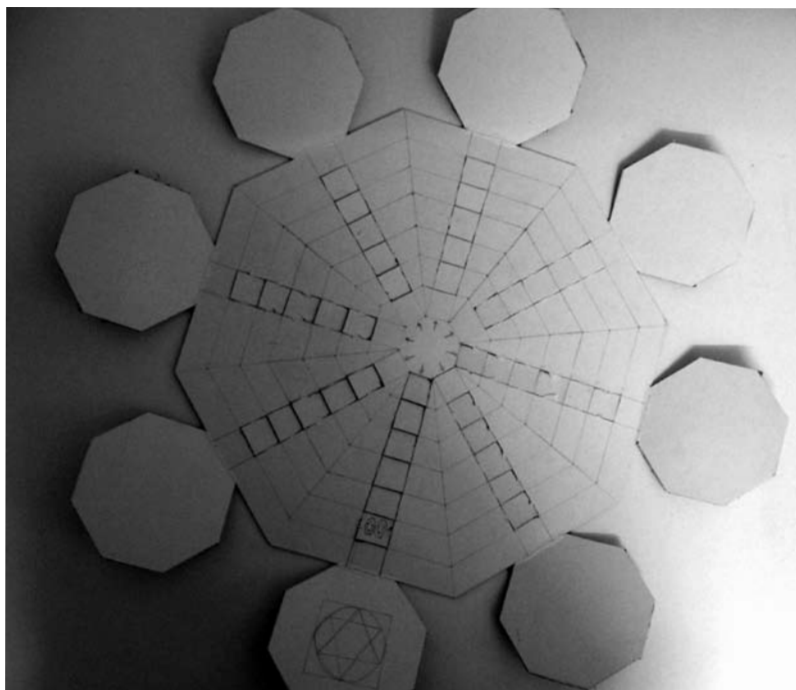


- an octagonal board with seven layers or steps to reach small octagon or home so maximum of 8 people can play at a time.
- Steps towards reaching home are rotatable which make it a different game everytime one starts to play it, where the steps signify the seven lives that complete a person's life as in to attain moksha in Hindu mythology.
- It could have cards which create interest in the game by introducing new elements at different levels.
- Number of questions each player would have to answer would be 21 to reach the final stage
- A person has to start a game with getting a specified number on the dice and that time he gets to select his player or choice of path.
- A player has to get through a level of difficulties that he could face because of his path and also if he plays the cards in a wrong way.
- He has to reach the seventh level to be ahead of everyone else and that's where he can also decide if he wants to solve a complex puzzle with different pieces forming a shape which could be related to temples in one way or other.

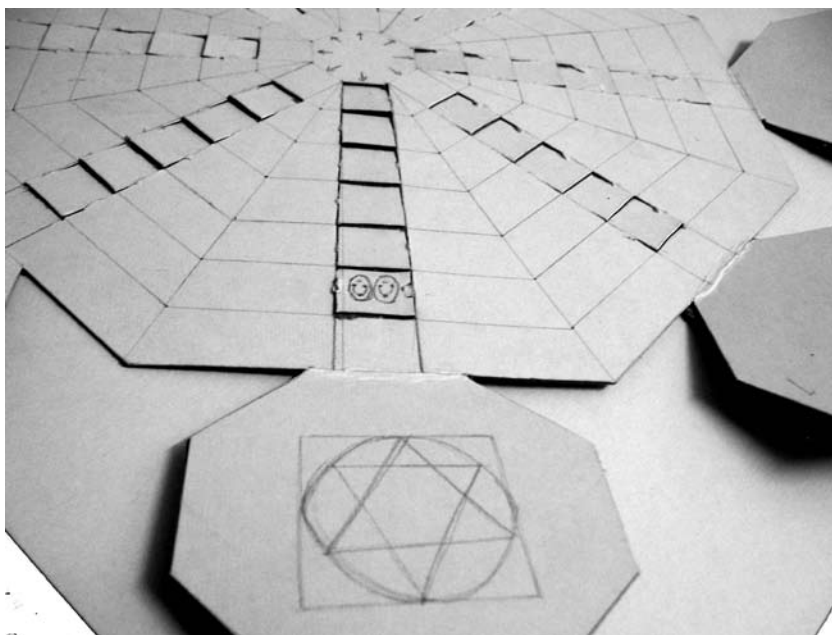
Social spatial points:

Overall game:

- A wooden board game with 8 sides and descriptions written on hand made cards.
- Its goal is to create interest on the subject of Indian Temples through entertainment.
- It will have a fixed beginning and an end but the path from the beginning towards the end is different each time you play the game.
- There will be twists during the play based because of the dice moves, points gained and the rotatable steps set before the play.
- The game would be rich with different pictures of Icons/ Deities/ Mythological pictures/ Symbols etc.
- The information provided would be fact and fiction based on the nature of the topic and information gained on the same.
- It would encourage interaction and sharing within the players and would help in mental & physical stimulation.



The top view of the board where each side has an octagon made in its end which would be the players home playing or travelling on that path



One side of the board where the steps would be rotatable and will have icons made on the path which would be different with each time one starts to play a new game.

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Prof. Kirti Trivedi

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Mrs. Chanda Babel

Mr. Apoorv Babel

Friends:

Rahul

Mandar

Fatema

Hemant

Vaibhav

Vineeth

Shweta

Hari

Rishabh

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