

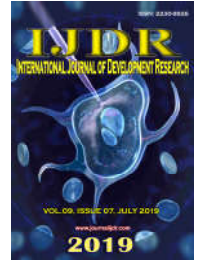


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CASE REPORT

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TRANSITIONING FROM THE MUNDANE TO SACRED

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ABSTRACT

In a sacred space like an ashram one of the most crucial stages is the movement and transitioning of the visitor from the outside world to the interiors of the space. In the olden days the movement from outside to inside was given huge importance, in places like churches, temples, palaces, the pathway enhances the user's experience and prepares him for what is inside. In the modern world many a times the significance of this transitioning is ignored hence, this research paper shows the effect of various features like colours, light, sound and strong bondage between the five elements of nature that is earth, water, fire, wind and space and how they can be architecturally utilized to benefit the user whilst transitioning through the space.

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INTRODUCTION

Research Statement: To enhance the visitors experience while transitioning from the outside world to the inside of the ashram.

Introducing the Topic

Aim: The aim of this study is to understand the architectural factors that are responsible creating a calm and serene space while walking through the ashram.

Objectives

- Study the various elements a transitioning path depends on and how they affect the user's emotions
- Find the connectivity between natural elements and architecture
- Studying the circulation patterns and redirecting the visitors movement.

Focus of the study

The psychology of the users and their reactions to various elements as they circulate inside the ashram.

Scope of the study

Utilizing architectural features in connectivity to the natural elements like air, water, fire, etc and studying how they help in calming the visitors whilst transitioning through the space.

Relevance

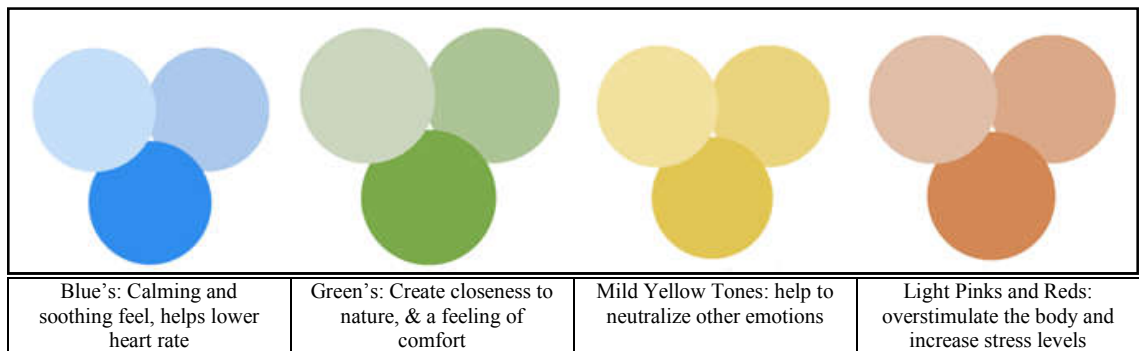
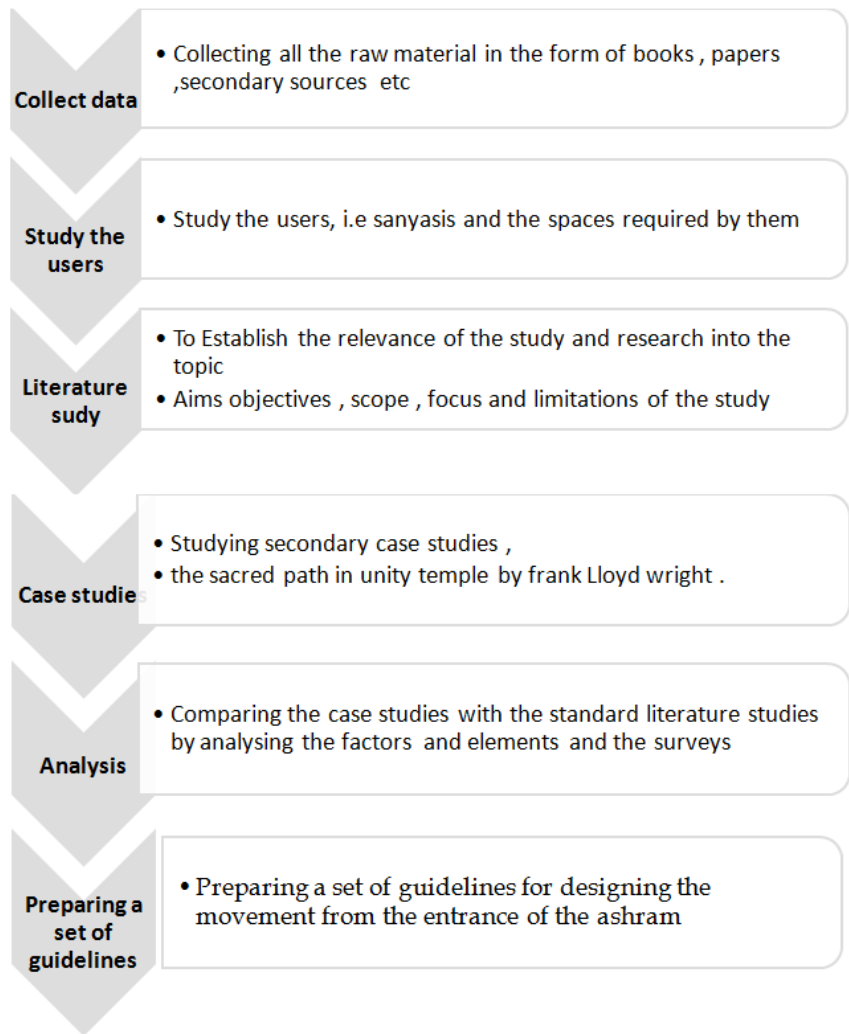
This research topic is relevant when it comes to providing a set of guidelines to enhance the transition from the outside world to the ashram as it is the main challenge of the design.

Limitations

- The research paper is limited from the entry to the existing site and movement through it
- And the various features influencing this movement up until the effect of the exterior structure

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METHODOLOGY



Literature Review

What role do colour, light and sound play on the psychology of a human being?

In most religions light is the symbol of the divine wisdom and the element of all goodness and purity, and going from darkness to brightness have been the main target. (Philips, 2004).

Colours

They play a role on the emotions and concentration and even health of human beings. Studies performed in office spaces and industrial spaces have proven that the usage of specific

colours have improved working efficiency by calming the workers by reducing their stress levels Thus speaking, the influence that various colours have on individual may not be specific for a particular individual but there does exist a general psychology of each colour.

Light

Plummer (1987) claims that every nocturnal light offers a hopeful sanctuary, a safe haven and a friendly harbor in the cosmic sea: Limited daylighting or rather a lack of it can lead to various health issues and disorders of the nervous system, fatigue and many a times a tendency towards self isolation, intensive light therapy is also used as a healing

process. Many books have denoted that daylighting has indicated a sacred power in almost every culture, this phenomenon has formed shape in the lighting scenario of the interiors of every religious building. In these religious spaces the design of space and lighting has been added and multiplied according on the worship and liturgy usage of bright colours capturing light can associated with fire which encompasses a spectrum of colours.

Ex – skylight colores glass of first christianchurch, Arizona
red and gold glass-minor chapel Florida



Fig. 1.

The overall spiritual and mystical effect of a sacred space is there by changed as per religions and each space has a varying illuminating factor combined with the shadow effects caused by it.

Sound

Light and sound are special aspects of the sacred ambience. Scholars considered “holy” light and the “divine” sound, silence as an integral part of the axis mundi, this sacred verticality enhances link between the visitor and his emotions. Light and darkness add to the holy experience in a sacred place, and so sound and silence are thought to be contributing to that experience.

“It is found that sound can elevate individual and communal spirits to new height – creating a separation from the mundane” (cirillo and martellota 2006)

Design elements the path depends on

- The main significance provided to the entry of the house of peace
- The arrangement of designated spaces
- The hierarchy of each space
- The point of focus
- Geometric proportionality
- Consistent palette of materials
- Interplay of light and shadow

Thomas barrie (1996) claims that “these design elements determine a paths dynamic and a persons experience walking it” these features together create a spiritual passage system

Redirecting the visitors movement

“Redirected the worshipers movement to slow their pace and prepare them for a climax (laseau and tice 1992) “

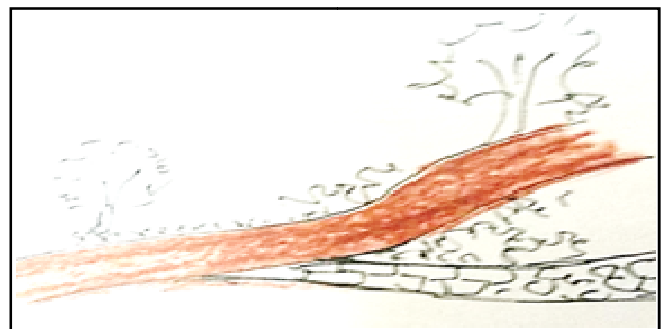
- The indirect configuration creates an illusion of the path being longer in distance than its actual size.
- An element of repetition helps with the directionality aspect, an imaginary plane with consistently perforated visual features, perceptually and spatially taking on directive qualities and guide the eye and movement along the line of repetition.
- The direction is imparted by adding linear rows or columns or various elements like plants etc

Effect of pathways

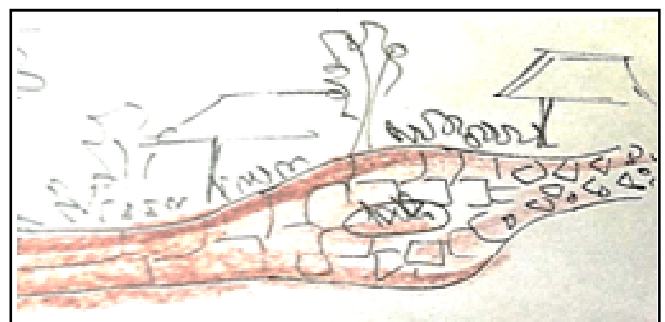
Flooring for movement: The floor being the datum upon which all movement of both persons and goods takes place, it can be effectively used to accentuate movement patterns, this can be achieved by creation of guidelines through articulations in shapes, levels or surface differentiation by exploration in different materials, colours or even textures. Floor patterns are often used to punctuate paused, emphasize movement directions or simply generate a particular space through continuous texture.

Flooring for communication

As horizontal base planes floors are walked over and this makes them pragmatic. The basic functional needs demand constant visual reference to this plane. Underfoot hence providing the floor with high potential for superimposing motifs, signs and symbols. The treatment of the floors reflect continuity between inside and outside by dissolving the strong boundaries of these two realms.



Scenario 1. Same material forming continuity

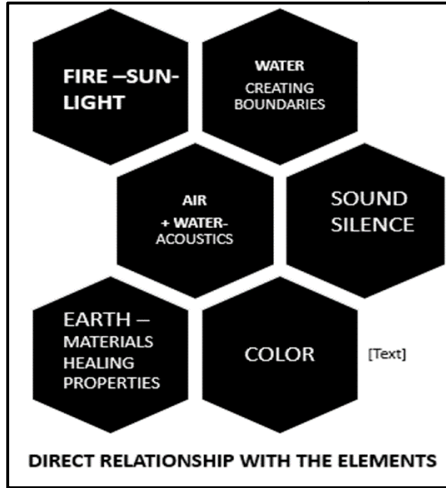


Scenario 2. Gradual change in space

Fig. 2.

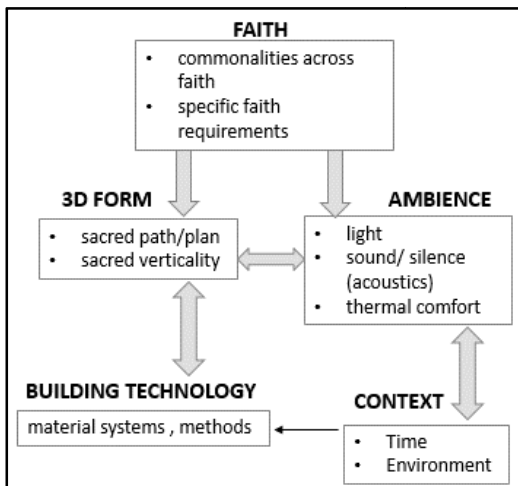
SECONDARY CASE STUDY

Frank Lloyd wright, the sacred path: Sacred architecture can be considered in all faith as the rite passage from the profane to the sacred and as a place for spiritual transformation. The sacred path invites the worshiper to take a pilgrimage or journey to reunite with his or her bodily peace. Thomas barrie (1996) claims that the act of separation is perhaps one of the most significant components of the journey by physical boundaries and symbols which create a threshold space.



Architectural features of the sacred path

- The sacred sculptures decorating the path set the mind of the worshiper to prepare for the sacred sanctuary, leaving behind the worldly world.
- Gardens and water can serve as a natural element that creates these thresholds, man made bridges serve as a clear link between separated places, these bridges are of a deeper significance and are usually found in zenbuddhist temples and is called “gen kan“
- Air is often associated with the sky and thus with heaven. Air is also associated with the latin word spiraire meaning to breathe
- The four elements acting as a theme of design are fire, water, air and earth, Aristotle added A fifth element in the centre of the four, which they called “space” and void”
- Fire – representator of sun – light
- Air – sky hence heaven –illuminating force of the sacred space



The methodology used by Frank Lloyd Wright

Water creating boundaries between secular and sacred

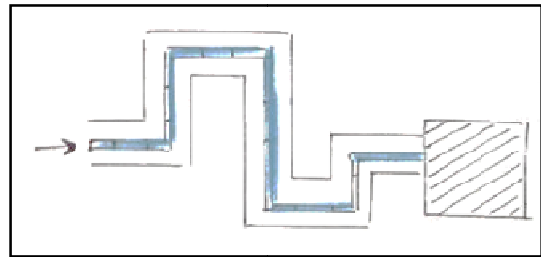


Fig. 3. Longitudinal pool

- First is a narrow longitudinal pool along the walk towards the entrance, this configuration would prolong to the sacred path towards the entrance
 - Reflecting pool is at the back along a walk that separates the building from the rest of the secular world
 - A pool set as an exterior protruding terrace in the earth berms surrounding the chapel
 - Separating the interior space from the outside world,
 - Utilizing the reflection of light on the pool to create a background for the choir
 - The two pools carried a deep significance in terms of transitioning
- create boundaries between the secular and sacred
-carry rays of sound from other sources

Combining spiritualisim with light

- Usage of bright colours capturing light can associated with fire which encompasses a spectrum of colours

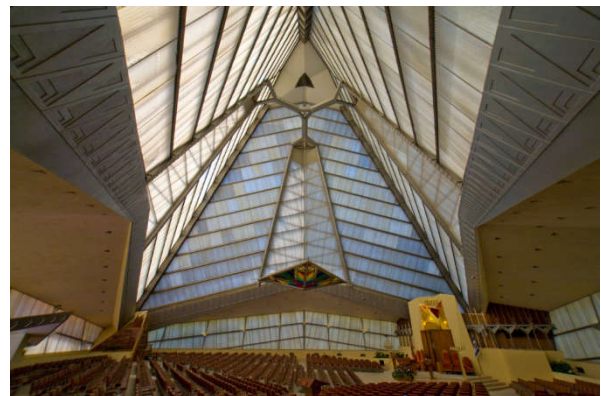


Fig. 4. Pyrimidal roof showing the psychological connectivity to heaven

Ex2: Minor chapel, Florida

- Skylight colours glass of first christian church, Arizona
- Red and gold glass-minor chapel Florida
- Earth water fire in terms of material such materials such as brick

Ex 3: Unity temple

- Overhang above entrance serves as a threshold
- Outdoor plaza and interior entrance foyer create a pause between path and plan
- Set of stairs to guide visitor to the sanctuary
- Entrance covered porch with stairs creates drama of light and shadows
- Visitor doesn't see entrance while climbing stairs
- Indirect path creates illusion of longer passage and allows transition between mundane and sacred.
- Stairs bring them forward but not directly to the entrance
- Exterior pebbled walls, pleasant to touch, inviting rather than constraining the visitor
- Walls and their texture create a very intricate play of light and shadows on the path enhancing the spiritual journey
- Visitor cannot find entrance until he reaches an open space

The Art of Living Internaional Centre, Bangalore

The Art of living Centre is one of the main ashrams of the Art of Living franchise and is located on the outskirts of the Bangalore city. It is one of the biggest ashrams and caters to the devotees and provides space for various activities and services done by the ashram. Upon entering the ashram campus there is a sudden change in the atmosphere as compared to the industrial and bleak surrounding of the ashram, the temperature within the centre is much cooler compared to its neighboring areas. This temperature and atmosphere difference is due to the presence of various kinds of plants and landscaping mechanisms that helps reduce the heat throughout the campus.



Fig. 5. Dense trees acting as noise diffuser

The central amphitheatre is one of the main highlights of the entire campus. It has a water body in the middle which has an elevated stage which is unique to such a bleak environment. It

draws the attention of the users towards it due is reflective nature. The judicious use of landscape throughout the site changes the entire atmosphere of the place giving it a very peaceful feeling.



Fig. 6. Segregation of spaces into sacred, commercial and residential

Main Entry 1- reception –security room—café—childrens park—gurupaduka vanam—mantap—serive complex—meditation center—outdoor meditation—amphitheatre – main ashram

Entry 2 – kund—Krishna hall—gurukul--Lakshmi garden—halls – main ashram (residential sector)

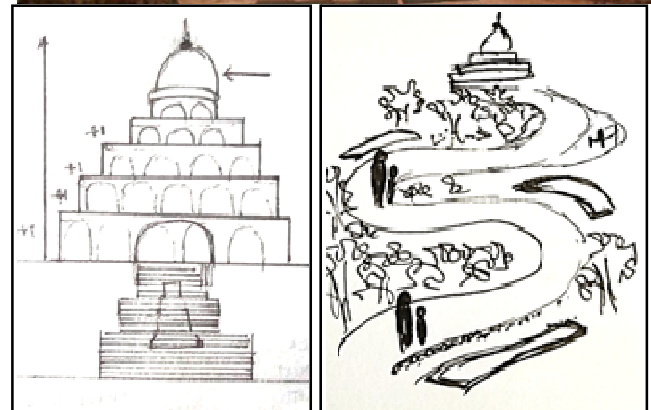
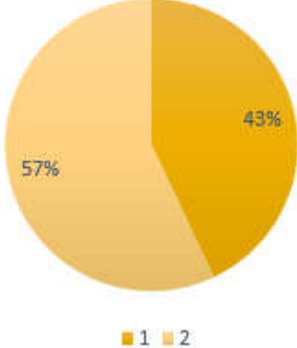
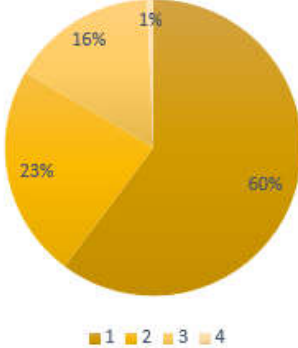
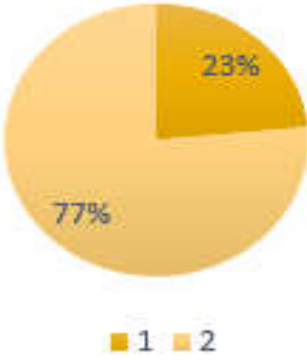
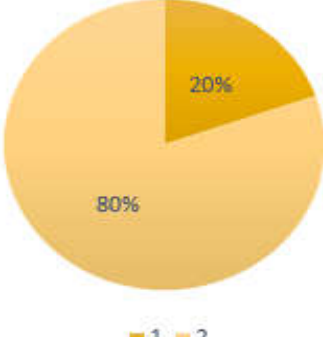


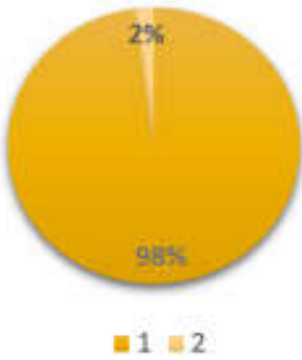
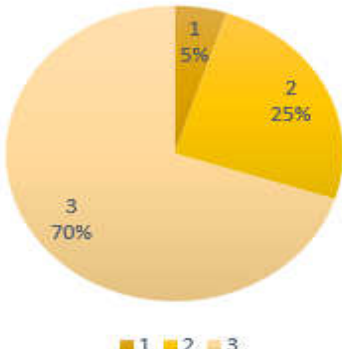
Fig. 8. Having a visible focal point, creating curiosity among visitors

The glass dome on top acts as the point of focus from the main entry till you enter the ashram. The plants being repetitive in nature provide a sense of direction. The narrow pathways and tall trees generate curiosity among visitors, only from open spaces in between can you see where the path is leading.

Primary Survey: A survey was conducted to a sample of 50 people targeting no specific age group or gender. The survey attempts to take this study to a more personal level with one on one interaction with people and trying understand their perception of spaces through a series of questions.

Table 1. Survey proving the psychological co relation between nature and man

| Objective | Results | Inference |
|---|--|--|
| <p>To establish to sex ratio of the survey to eliminate bias. Option 1 : female Option 2: male</p> |  <p>A pie chart with two segments. The larger segment, representing 57%, is a light tan color and corresponds to Option 1 (female). The smaller segment, representing 43%, is a darker tan color and corresponds to Option 2 (male). A legend below the chart shows a light tan square for '1' and a darker tan square for '2'.</p> | <p>The relevance of the study focus on a specific gender so there is no bias.</p> |
| <p>To determine the target audience that should be focused on during the study Option 1 : 40-60years Option 2: 30-40years Option 3:20-30years Option 4: 20 yearsand below</p> |  <p>A pie chart with four segments. The largest segment is 60% (Option 1, 40-60 years) in a dark tan color. Other segments are 23% (Option 2, 30-40 years) in a medium tan color, 16% (Option 3, 20-30 years) in a light tan color, and 1% (Option 4, 20 years and below) in a very light tan color. A legend below the chart shows four colored squares corresponding to options 1, 2, 3, and 4.</p> | <p>The focused target audience was varied across various age groups and the results from the survey are as intended.</p> |
| <p>To determine what type of wall would the public prefer in a quiet place. Option 1: stone walls and pebbled walls Option 2 : green walls</p> | <p>What type of walling system do you prefer in a tranquil place?</p>  <p>A pie chart with two segments. The large segment is 77% (Option 1, stone walls and pebbled walls) in a light tan color. The smaller segment is 23% (Option 2, green walls) in a darker tan color. A legend below the chart shows a light tan square for '1' and a darker tan square for '2'.</p> | <p>The results conclude that majority of the public prefers the green wall.</p> |
| <p>To establish whether the users would prefer the sound running water within a quiet place. Option 1: no it disturbs The peace Option 2 : yes it can enhance the effect</p> |  <p>A pie chart with two segments. The large segment is 80% (Option 1, no it disturbs the peace) in a light tan color. The smaller segment is 20% (Option 2, yes it can enhance the effect) in a darker tan color. A legend below the chart shows a light tan square for '1' and a darker tan square for '2'.</p> | <p>Majority of the public likes the sound of running water as it provides a calming effect</p> |

| | | |
|---|--|--|
| <p>To determine what type Of flooring is Preferred by the general public for a calming impact</p> <p>Option 1 : soft grass Option2 : flat stone</p> |  | <p>Just as the previous results have displayed, majority of the public prefers the green option.</p> |
| <p>What temperature of Groundcover is Preferred while trying To calm oneself</p> <p>Option 1: cool surface Option 2:contradicting to the weather Option 3: warm surfaces</p> |  | <p>70% of the public prefers A cool surface To walk on While trying to calm themselves.</p> |

The results from this survey conclude that there is a relationship that exists between users and their perception of spaces considering scenarios.

Data Analysis

Hence based on the data collected an analysis can be drawn to create guidelines necessary to create a smooth transition from outside to the interiors of the structures.

Usage of natural elements

Providing Water Bodies

Why is it really used ?

Incorporating water bodies within the design psychologically benefits the users the sound of water acts as a barrier from distracting sounds negative ions in salt water increase flow of oxygen to the brain improving alertness and mental energy rhythm of ocean waves coming in and out affect the neuronal waves of the brain encouraging a more peaceful pace of out thought the feeling of awe its vastness and beauty in turn leads to prosocial behavior like kindness and loving and life satisfaction.

Table 2. Pros and cons of water bodies on site

| PROS | CONS |
|-------------------------------|-------------------------|
| Calms and relaxes the visitor | Difficult to maintain |
| Aesthetically appealing | increases humidity |
| Provides health benefits | Special care for safety |

Natural Lighting

Natural lights helps various patients recover and also helps in increasing performance levels.

Visible light helps stimulate the body’s production of neurotransmitter serotonin which reduces symptoms of depression.

Light-Shadow interplay

Table 3. Pros and cons of Light –shadow interplay

| PROS | CONS |
|---|---|
| Provides a sense of direction | Can be distracting for certain users |
| Aesthetically pleasing | Can create confusion if not designed well |
| Can be used to provide hierarchy and focus for elements | |
| Can be used to act as divisions between spaces | |

Natural Materials

Using materials that prove to reduce the man-made impact provides a certain sense of comfort and subconsciously alters our mind into a state of passive relief.

For example : wood is known to be highly regarded as one of the most aesthetically pleasing materials but very few know that its not just the aesthetic value that’s appreciated its also because of the temperature and feel of the material which creates a closeness to nature and in turn reduces the stress level of the person. Some of the most highly regarded materials in terms of stress reduction are stone and wood.

Structural Elements

Walls – heights: Areas that do not accept extreme heights the same feelings can be created by substituting the extreme heights and instead playing with the heights to create a sense of curiosity of the visitor.

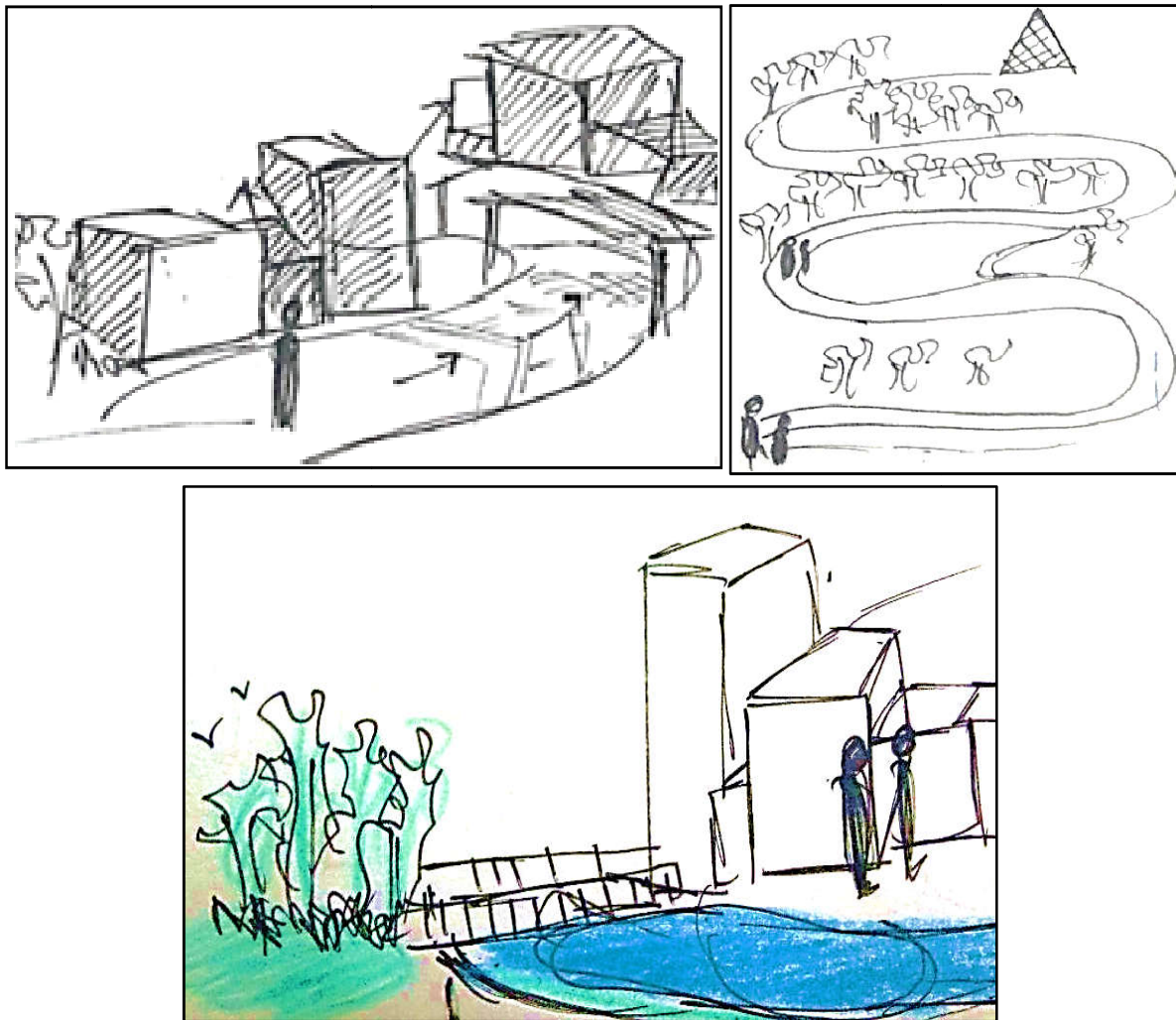


Fig. 8. Various guidelines a) visibility creating curiosity, b) Focal point from anywhere onsite c) Natural elements as buffers

Walls – Exterior Façade

- The more the usage of elements like stone and green walls the closer one feels to nature and hence less stressed.
- As per the survey most users prefer green walls as elements to calm them due to the cool temperature and the sense of fresh air and fragrance that one psychologically assumes it to provide, making the user feel closer to nature.

Flooring – Ground Cover

The flooring material plays a huge role in terms of calming the visitor. Can be used as a tool to separate various spaces, providing a sense of direction.

Differences between usage of grass and stone

Table 4. Pros and cons of grass as a groundcover

| PROS OF GRASS | CONS OF GRASS |
|---------------------------------|----------------------|
| Cool color , reduces stress | Insects , etc |
| Many types of grasses available | Maintenance required |
| Maintains temperature | |

Table 5. Pros and cons of stone as a groundcover

| PROS OF FLAT STONE | CONS OF FLAT STONE |
|--|--|
| Prefered by maximum due to Its ease to walk on | Not as appealing as grass |
| Minimal maintenance | Does not have same health and environmental benefits |
| Doesn't decompose | |

Using shading techniques

Various pergolas and gazebos can be placed at regular intervals within the site. Shaded elements especially can be features that seem to be protruding from the main building itself to provide a feeling of continuity and oneness. It also provides a sense of direction and can also be utilized as an interplay of light and shade features.

FINDINGS

All the collected and analyzed data can now be converted into design guidelines

- Light shadow interplay – using it to create direction
- Functional and aesthetic
- Using water bodies to segregate spaces and calm the visitors

- Incorporating the combination of grass and stone. Playing with the textures to show start and end point of a space
- Providing a point of focus from start to destination
- Making it visible from every point on site
- Using plants as buffers and noise diffusers
- Using a balanced tone of colours that help calm the visitors

Conclusion

From the research conducted it is indicated that architectural features that are linked to the natural elements like air, water, sound, and light play a huge role in calming a person down or toying with his or her emotions, to help the visitor achieve a certain level of calmness and peace. The path taken by the visitor from the entrance to the main central point prepares the visitor mentally and hence, this path proves to be very significant. A strong bondage or linkage between the three main sensory stimuli of the human body being: sight, smell and touch, and architectural elements through color, sound, texture, light and material can be formed and utilized to enhance the experience of the visitor while transitioning through the space. Each of these factors has a psychological and physiological impact on human behavior in any environment but is preferably used to relax the mind and body and need to be designed coherently to augment these spaces.

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