

SENSORY EXPERIENCE IN RELIGIOUS SPACES AND THEIR HEALING CHARACTERS

Therapeutic Environment

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Abstract

Religious place are not just considered as medium of God, but also to connect with our self, by stimulating the human senses. Many body healing ashrams, church used as a healing center, we consider religious temple as healing element .people visit to religious spaces to soothe the soul and to attain the tranquility, here comes the question: Does healing element are there in religious space, do they really contribute in terms of healing? What are all the healing elements in the religious space?

This study aims to describe the sensory receptor and the sensory stimuli role in a space and Roger Ulrich healing elements and figuring out those elements character in the religious spaces. Through this study relating the elements of the Ulrich and stating the presence of the healing character into the religious space in the space.

Keywords-Therapeutic, healing, sensory perception sensory stimuli, the sensory receptors, religious spaces introduction.

I. INTRODUCTION

Architectural space communicate with the spatial tool which are associated with the user at three levels -sensorial, experiential and associational. To remember emotional happening – one’s mind i.e. relating oneself with space and time, supported by the sense to perceive information from the surroundings. Sight, hearing, smell and touch are the sensory elements that play a dominating role in spatial Perception. Touch, smell and taste provides information on the so called ‘near space’ (termed also haptic space), whereas vision and hearing (sociable senses) are Capable of yielding percept, representing objects or events in the so called ‘far space’. The religious Spaces are the best examples with a multi-sensory approach, which can potentially nourish the spirituals and healing environment, but it has to be experienced with proper perception.

Every sensory spaces has a potential element to heal the occupant in a sequence.

A. Sensory perception of the spaces

Jorge Luis Borges (Renowned Writer) mentioned,

“The taste of the apple... lies in the contact of the fruit with the palate, not in the fruit itself; in a similar way...” [2]

“Experience/feel of the users only starts when the senses get its contact with the space” [2]

Juhani plama, in his book ‘the eyes of the skin’ describes, “instead of creating mere objects of visual seduction, architecture like every meaningful art, relates, mediates and projects meanings that directs our consciousness back to the world and towards our own sense of self and being”[1] But current architectural spaces are mere a visual seduction ocular-centric paradigm So, I have chosen religious structure in earlier times and renowned Architects whose vision is to stimulate sensory experience have studied.

B. Sense and Stimuli

Sensation is the physical stimulation of a sensory receptor, which is then interpreted by the mind to understand the information.

The following sensory receptors are as follows: Visual, Auditory, Olfactory, Gustatory, Tactile, Vestibular, Proprioception, Interceptions.

II. SENSORY PERCEPTION OF THE SPACES -SENSORY RECEPTORS AND SENSORY STIMULI

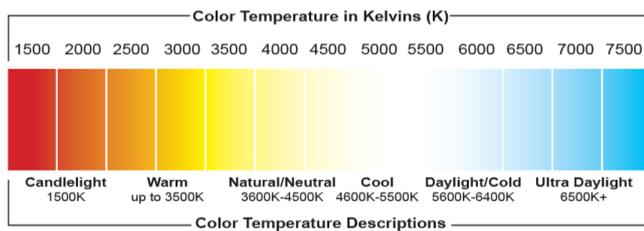
A. The Sensory Receptors: Sight (Visual) Receptor and Response

The Eye is a Sensory Receptor and its sensory stimuli include Light and Shadow, Colour Pattern and Texture. It is the organ of distance and separation and surveys, controls and investigates that which it perceives. It tries to touch the shapes, contours, profiles, textures and colors, the depth, the smoothness, softness of nearby and far away objects, to communicate the quality of the surrounding to the brain. Vision reveals what touch already knows, eyes strokes faces, contours and edge. Unconscious tactile sensation determination. The unpleasant of the experience are merge into coherent experience.

B. Sensory Stimuli: Light and the Visual Perception

- Sensory Receptor: Eye
- Sensory Stimuli: Light

Light contributes to the character and ambience of a space and can affect mood and performance. Light intensity and colour can change the mood of a space and create significant reactions from users. Warm, cool, and neutral light can make a



space feel cozy and warm, while cold lights can induce an active working environment.

Fig. 1. Image explains the colour temperature and categorization based on colour.

Source: <https://www.ledlights.com/blogs/articles/a-quick-guide-to-lighting-related-color-temperatures>.

C. Sensory Stimuli: Shadow and the Visual Perception

- Sensory Receptor: Eye
- Sensory Stimuli: Shadow.

Light plays along with shadows perceived by sight. Deep shadows and darkness are essential along with light. This is because they dim vision sharpness, make depth and distance ambiguous, and invite unconscious peripheral vision and tactile fantasy. Shadow is not just the mere opposite of light, but it can create a mystical and mythological sense [2] and also Solidarity. The shadow adds volume and depth to the space. It is a path of transition or refining the sense towards the more archaic, from vision down to hearing, touching and smell. It is also a path from light to shadow.

The efficient mental torture is the use of constantly high levels of illumination [2] that leaves no space for mental withdrawal and privacy. However, darkness gives a sense of withdrawal, privacy, rest.

D. Sensory Stimuli: Colour and the Visual Perception

- Sensory Receptor: Eye
- Sensory Stimuli: Color

Colour is an important factor in the perception of natural materials, as they are highly recognizable by human receptors. In architecture, colour is used to emphasize the character of a building, to accentuate its form and material, and to elucidate its divisions. Every hue has a strong individual character of inducing human receptors, but the response to the particular outcome will be assessed differently in the brain.

E. Sensory stimuli: texture and the visual perception

- Sensory Receptor: Eye
- Sensory Stimuli: Texture.

Textural perception is the process of texture being perceived through touch, which is done through the eyes. Sensitive eye can perceive the difference between the texture,

even when there is no surface pattern and the materials are of the same kind. Visual perception of texture might be processed or evaluated wrong if there is no record of the experience with the material. Texture carries characters, such as roughness, smoothness, and stochasticity, and it dictates the character of the material.

F. The Sensory Receptors: (Hear) Auditory Perception - Intimacy and Tranquility

- Sensory Receptor: Ear
- Sensory Stimuli: sound

Ears's hearing structure articulate the experience and understanding of the space, the sound reflected in the spaces, we are not normally aware of the significance of hearing in spatial experience, Yet sound are often provides the temporal continuum in which visual impression are embedded. The reflection of sounds give us an impression of form and material. The differential reverberation felt with the differently shaped rooms and different materials

G. Sensory Stimuli: Sound And The Auditory Perception

- Sensory Receptor: Ear
- Sensory Stimuli: sound

Reverberation is an important concept in architecture, as it creates an experience of interiority and tranquility. Sound is Omni-directional and creates an experience of interiority [2] and tries to receive and incorporate objects, while spaces always respond to gaze. Architecture uses sound to construct an understanding of forms, objects, and distances, and the interplay between aural and visual architecture creates captivating spatial experiences. Examples of this include the Music Hall at the Ali Qapu Palace in Iran and Tvsöngur in Iceland, which have vaulted ceilings and amplify resonance distant from each other to produce a five-tone traditional harmony. The sound is the median which explains the space in its own form (reverberation).

H. The Sensory Receptors: Olfactory Perception Through Smell Create Memory & Imagination

- Sensory Receptor: nose
- Sensory Stimuli: smell

“Memory and imagination remain associated” [2] with the smell Nose receptors are responsible for collecting impulses of smell through nerve endings and converting them into images, creating a stronger sense of memory and imagination. This is different from retinal memory, which is processed through the brain and captures the hint of place. An example of this is opening an empty cookie box, where the smell from the box brings in the desired cookie.

I. Sensory Stimuli: Smell- Olfactory Perception

- Sensory Receptor: nose
- Sensory Stimuli: smell.

The most important details of the phrases retinal memory, retinal images, smell, persistent memory are that the smell of a space remains the remembering character of it and the perceiver tries to imagine the space from the memory. Retinal images of contemporary Architecture may appear sterile and lifeless when compared to the emotional and associative power of olfactory imagery. Smell could be the natural result of chance and purpose, or intentional with the use of materials. It can stimulate emotions, guide or distract the perceiver, and can emphasize any emotion. Churches and restaurants have their authentic order that reminds the person, and many restaurants use scent as their image and identity.

J. The Sensory Receptors: Colour, Smell, Vision Detailing Gustatory Perception

- Sensory Receptor: Tongue
- Sensory Stimuli: smell, edible things

Vision, smell and taste are all sensory experiences that can be evoked through the use of materials, colors and skillfully drafted details. These details can set memories and change moods, similar to how smell can also evoke oral experiences. Though the tongue does not usually play a role in these experiences, they can be triggered by vision and smell when approaching or within a space.

L. The Sensory Receptors: Haptic Perception Through Profiles And Textures

- Sensory Receptor: skin (Touch) hand or feet
- Sensory stimuli: profiles, textures

Architecture is a multi-sensory experience, with qualities of matter, space, scale, and texture measured by eye, ear, nose, skin, tongue, skeleton and muscle. Touching the floor of a temple with forehead creates a tactile sense of connection with time and tradition, while the density and texture of found objects are traced through the bottom of the foot. Running hands over a statue, through touch, we can sense the shape and character of the object.

III. ROGER ULRICH THEORY OF HEALING ELEMENTS

From the Ulrich roger theory and the evidence based design certain parameters and element are considered as healing elements and healing isn't just for hospital, but they need to be considered in designing any kind of space "This Is How Nature Work and Space Should Work"

- Light
- Connection with the Nature and Sense
- Framing the View
- Water
- Material & Texture
- Sound
- Color

A. Healing Properites Of Light

Light has a significant effect on human health, including pain, stress, depression, mood, and orientation. It can regulate

the body and mind, influence the release of chemicals associated with mood and health, and influence the circadian cycle. Variation in lighting can affect performance and mood, as well as the intensity, colour, and natural and artificial light.

B. Light In Religious Space:

The most important details in this text are that light is considered a divine element and is prioritized in religious structures. Light wells and clearstory windows in churches encourage natural light, which is balanced with light and shadow. Views of nature in buildings are connected to the subject of windows, and access to windows and views helps people develop a perceptual and cognitive link with the external environment. The mandapas and kula karai act as spots to get a visual connection with the nature and stare with serenity

C. Healing Properites Of Therapeutic Gardens

- Temple - Nandavanam is a sacred place where people can collect flowers to worship the gods and get relaxed. The scented flowers and colour in the flowers induce a sense of pleasure and serenity.
- Mosque - Islamic gardens use a variety of devices to stimulate the senses and mind, such as the manipulation of water and the use of aromatic plants. Scent is described as "the food of the spirit" and enhances perceptions, stirs memories, and makes the experience of visiting the garden more personal and intimate.
- Church - Churches use their gardens as a community space to help people cope with mental illness, offering openness and serenity to help them reach their desired mental state.

D. Healing Properites Of Smell (Aroma)

Aromatherapy is the practice of applying compounds to improve psychological or physical wellbeing through inhalation. It involves the use of warm amber-based scents of incense sticks to create an atmosphere that helps users relax, unwind, increase focus, reduce stress and anxiety, and purify the air. The smell also stimulates memory, which further absorbs the space and reciprocates the ambience subconsciously.

E. Healing Properites Of Natural Colours

Colour therapy is a concept that states that colors have the ability to influence our emotions, mental state, mood, and energy level. It is based on the concept that our physiological behavior responds and functions in a predictable defined manner to colors. Natural colour palettes, particularly green, have an impact on cognitive performance and can relax, stimulate, or invigorate the body and mind with the external environment.

F. Healing Properites Of Material & Texture

Materials have a direct influence on the environment, such as sound, movement, and comfort. Natural materials have healing and ecological benefits, and if a building is harmonious and close to nature, it has a positive effect on the environment. Handcrafted materials are unique and appealing, and they allow for the community to play a role in the construction process.

G. Material Connection With Nature

Material and elements from nature that reflect the local ecology or geology create a sense of place. Natural materials can be decorative or functional, and are typically processed or altered from their original 'natural' state. They are only analogous to the items in their 'natural' state.

H. Healing Properties Of Water

The Presence of Water pattern has evolved visual preference and positive emotional responses to environments containing water elements. It reduces stress, increases feelings of tranquility, lowers heart rate and blood pressure, and recovers skin conductance. It also improves concentration and memory restoration induced by complex, naturally fluctuating visual stimuli. Taking advantage of the sounds created by small-scale running water and our capacity to touch it will amplify the desired health response.

I. Water In The Religious Place

- Temple-Pond is the waterbody act as point of interaction and engage with the temple activity the cool water in the pond, reduce the stress and relieve the tension prior to approaching into the temple
- Masjid -The ablutions pond in contact with person create the cool and clean feel and relive the state of pressure.

IV. CONSIDERATIONS FOR CASE STUDIES

Religious spaces were shaping the pilgrim's experience through multisensory techniques also promote the healing characters of the space, the considered case studies hold their own historical characters.

A. Methodologies for Case Study

- Observed healing elements and their characters from the case study and supporting my study with the help of Ulrich proven theory And explain the sequential healing of the spaces.

B. Case Studies

- Case 1 – Brihadeeswara Temple At Thanjavur
- Case 2 –St Peter's church at Thanjavur
- Case 3–Triplicane Big Mosque (also called Wallajah Mosque) Chennai.

Case study 1 -Brihadeeswara temple, Thanjavur, Tamilnadu.

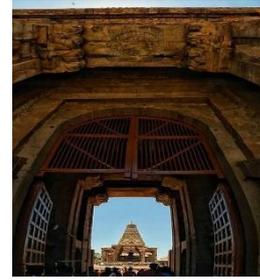
Location: Thanjavur, Tamil Nadu.

Architectural Style: Dravidian Architecture

The temple has 4 divisions followed as enclosure with gopuram, Open courts, attached and detached mandapas, Sanctum with shikhara. An axial and symmetrical geometry rules the temple layout, with exceptions in the subsidiary shrines.

1. Entrance axis

Array of petty shop arranged with the vibrant ambience which hold flower garland, doll shop and materials related to worship.



- Sensory involved in the experiences
The most important idea is that the sense of sight, smell, and touch are all influenced by the approach to a landmark or entrance profile. The smell of burning lamp and incense stick gives an image of light deepam and stick, while the smell of flower and sandal wood sets a record in the memory.
- Healing character of the sensory stimuli
Archana plates are composed of three elements which link with the receptor to create memories and images. The vibrant colors induce visual sense and enthusiasm, while the olfactory stimulation of garland and spices triggers a sense of activeness and energy. The visual sight and texture of the plate create a sense of time and connection, leading to tranquility.



Fig. 2. Image explains the entrance axis of big temple ..

2. The boundary of sacredness and profane

The gopuram is the landmark that demarcate the divine environment from the mundane surrounding, it is the gateway to the divine.

- Sensory involved in the experiences
The entrance to the gopuram is ocular centric until the foot comes contact with the stone flooring or pavement. The profile of the gopuram creates a solid void play, balance in the opening and darkness and light create a sense of transition. The haptic sense is induced when the eye sees the texture prior to the contact of the wall or flooring.
- Healing character of the sensory stimuli
The most important details are that statues and paintings, pattern in the wall, and natural materials like stone, brick, and wood create a sense of connection towards nature and its raw character. Material also

depicts time and spatial quality, making it more durable and engaging.

Fig. 3. Image explains the entrance axis to gopuram .

3. Abhingamana (way to the interior)

This place hold lot of pavilion mandapas and pond for various activities, like dance music, relax, meditate and eat .Prior to reaching the main mandapas, water tank will be placed inside many temple for the abluition. Mandapas are the transition space lead towards the sanctum. Mandapas leads towards the main deity space.

- Sensory involved in the experiences
Mandapas are enclosed spaces that create temperature difference and visual pleasure. The movement of the Madaba's creates a sense of outside and inside, with the darkness balanced with the deepam creating a visual pleasure. Olfactory and haptic receptors are mostly involved.
- Healing character of the sensory stimuli
The statue of deity, imagery of god, and boldness of the stone create a sense of serenity and focus. The water in a pond and its stagnant state bring in the serenity. The rough material with mild lighting induces brain activities and creates solitude and a sense of lost in mandapas.



Fig. 4. Image explains nandi mandapa of big temple.

4. Sanctum sanctorum

From the mandapas, towards the small and conceived space. The ultimate destination to be worshipped, hold various sensory stimuli, the exterior of the temple sanctum is designed in a way , where the gaze moves upwards, but the interior spaces decreases in the sanctum. The sanctum approaches have only the gaze focused on the deity.

- Sensory involved in the experiences
This space carries various experiences auditory, olfactory, visual, and tactile. It is characterized by the ringing of temple bells, floral patterns on walls and pillars, and the use of Teertha (holy water) to induce gustatory senses. Additionally, oil lamps give faint illumination and multiple oil lamps capture the olfactory sense.

- Healing character of the sensory stimuli
Vibration of bells is a scientific phenomenon that can create unity in the brain. In a sanctum, darkness with stone imagery and no particular place to focus helps to increase concentration and induce brain cell activity.

5. Pradakshana. (Circumambulation)

From the divine mind to the mundaneness, while coming out of the sanctum circumambulatory spaces run right from the sanctum, the walls of this pathway are sculpted with the image of celestial beings, touching of the deity statue in the wall and touching the wall and deity in the circumambulation .after the circumambulation, the people walk out the nanda vanam (temple garden) which act as a buffer space between the temple and mere environment.

- Sensory involved in the experiences
The movement of body with the eye and mind laid on the images in the path, the visuals of the deity around circumambulation space, engages the eyes and record the surrounding .The vibration of the space absorbed with the bare foot.
- Healing character of the sensory stimuli
Kinesthetic movement, transition from closed to open space, and meditation to coordinate mind and soul for serenity. Nanda vanam act as the therapeutic garden, which engage all the sense.



Fig. 5. Image explains the circumambulatory space

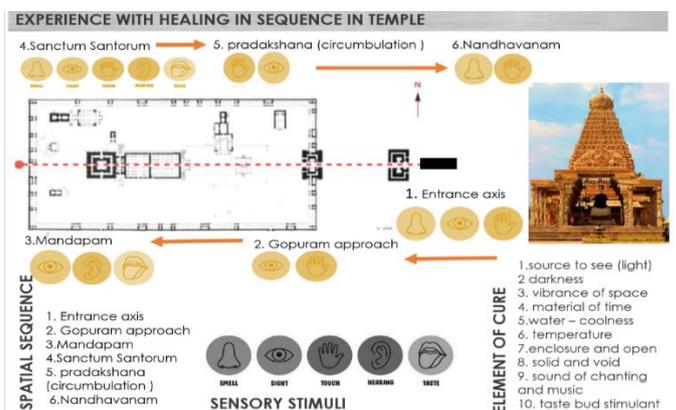


Fig. 6. Image explains the sequential healing in the temple space through the healing elements

Case study 2- St Peter's church in Thanjavur.

Location: Thanjavur, Tamil Nadu.

Architectural Style: colonial architecture

St Peter's church in Manumbuchavadi (Mahamonbu Chavadi or M. Chavadi), F.C Schwartz, an Angelo-Saxon missionary was instrumental in getting a suitable land in Chavadi

1. Entrance axis

The entrance arches indicate the point of entrance and leading the space in axis to the actual entrance to body of god.

- Sensory involved in the experiences
The ocular centrisism emphasizes the sight from the entrance, while the white colour of the building draws in the serenity and positive look. Eyes and touch are involved in the gradual movement of sight from the base to the pinnacle.
- Healing character of the sensory stimuli
White colors induce purity, sacredness and divine spaces, while symmetrical spaces induce intellectual characteristic and activeness. Approach via pavement or garden records profile and sense of memory.



Fig. 7. Image explains the entrance path of the st.peter's church.

2. Nave (The Axis Path)

A linear axis towards the main focal gaze of god, this particular space very the circulation spaces and segregate the aisles and brings the balance in the seating and framing in the vision. The lighting in the space with the fenestration balance make the space divine.

- Sensory involved in the experiences
The sense of vision leads to the recognition of the material of the space, such as the smoothness of the wall and the lightness of the space.
- Healing character of the Sensory Stimuli
The most important details of the phrases space, anxiety historic, mild change, intricate painting are the arched or plain ceiling with intricate painting of anxiety historic, the mild change of warmth in colors, light, changes with increased darkness and shadow, transition of temperature, repetition and balance create a formal ambience, and aisles were located parallel to the nave.



Fig. 8. Image explains the Nave of the st. peter's church

3. Crossing and tower

This space is the heart spot of the whole church plan, this is where the crossing tower located over the top, based on the designed it could be anything.

- Sensory involved in the experiences
The majestic cover was raised high up to allow pilgrims to catch a glimpse of the shrine, acting as a mnemonic device. Smelling was understood as a form of internal 'tasting' and Incense was seen as symbolic of prayer and paradise.
- Healing character of the sensory stimuli
Sense involves eyes, smell, light and shadows, while vision evokes oral sensations. Colors, texture and finishing of details present themselves to the appreciation of the tongue. Sensuous materials, colors and skillfully drafted details evoke oral experiences in the perceiver, expressing belonging or separation, tension or lightness, friction, solidity, fragility etc. The light from the tower shows the importance of the chase, separating the movement in opposite directions.



Fig. 9. Image explains the crossing and exterior of the st. peter's church

4. Choir

Area which is placed in prior to the ambulatory space. This where a group of people sung song and read the bible.

- Sensory involved in the experiences
Ampulla and pilgrim badges are used to touch shrines, relics, and sacred objects in the church to enhance their intercessory nature. Acoustical vibrations in the chapel increase brain auditory stimuli and nerve stimulation. Colorful paintings on the wall demarcate the seater space and the location of the god.

- Healing character of the sensory stimuli**
 Kissing columns and graves, genuflections, touching reliquaries and shrines, and making the sign of the cross are all examples of devotional gestures. Cross were believed to have amuletic powers. Giant windows with colorful stained glass brought in the vibrancy and admiration of sunlight, while the entrance of balanced amount of sunlight through the clerestory window made a lot of temperature difference. These gestures were considered to invoke the saint's powers and create a positive ambience and happiness.



Fig. 10. Image explains the choir of the st. peter's church

5. Ambulatory

The location were the deity places, an area where the ornamentation will be high.

- Sensory involved in the experiences**
 The most important details of the phrases wall paintings, vivid hues, Gustary, eye, and windows are that Shrines were vibrantly colored, with vibrant wall paintings, polychrome and gilded sculptures, bright stained glass windows, painted and carved ceilings, and more. Painted and carved ceilings, and enameled walls. The sense of eye, acoustical, and holy water all contributed to the sensory experience of the shrine. The lightness of the material was also felt, making the user maintain silence indirectly.
- Healing character of the sensory stimuli**
 The image was designed to notify pilgrims and impress the sacredness of the site on their minds. The highly ornamented area separated it from the mundane environment. The light over the arch of ambulatory space segregated and emphasized the light. The ornamental detail and colors pattern created the impact, and artificial lighting also matters into the healing. Symmetrical fenestration large stained glass windows and balanced path way aisle smoothing colors play of material to emphasize the worth.

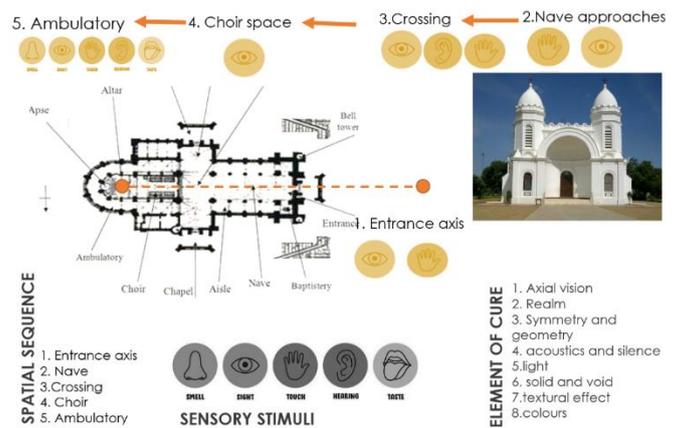


Fig. 11. Image explains the sequential healing elements of the st. peter's church.

Case study 3- wallajah mosque@chennai

Location: Chennai, Tamil Nadu.

Triplicane big mosque (also called wallajah mosque) is a mosque located in Triplicane in Chennai. Constructed in the Mughal architectural style, the mosque was built in 1795 by the family of Muhammad ail khan wallajah, the nawab of arcot during 1765. It has a large prayer hall, a tank and a large ground in front. The entire structure is constructed with granite without the use of iron or wood.

Sequential spaces in the mosque

1. Entrance towards the mosque

Similar to the other religious structure, the axis is mostly, Straight, might tilted to west in some cases

- Sensory involved in the experiences**
 The most important details of the phrases visual, visual pleasure, visual perception, solid sense, and relaxed movement are that visual perception is higher when approaching the entrance of the mosque, the main entrance gate frames a view and covered by the liwan or cloister, which creates a solid sense with one fenestration towards the almighty, the asymmetrical balanced profile captured until entering the mosque induces visual pleasure of balance, and the pavement via the garden induces relaxed movement.
- Healing character of the sensory stimuli**

Minimalistic patterns, solid and void forms, and subtle colors create visual pleasure. When the foot comes in contact with the flower, a sense of oneness is felt. The tactile surface plays of recognition and memory when the sight and massive profile are seen.

Fig. 12. *Image explains the entrance axis of wallajah mosque*

2. Sahn courtyard

The central space of a courtyard is an ablution tank, separated from the main entrance, which is used for festival gatherings and prayer. It may also have a garden with flowering or non-flowering plants in the symmetrical profile.

- Sensory involved in the experiences

The solid plane of Liwan leads to a vast openness, where the haptic sense and visual recognition determine the character of the material. This is demonstrated by the vision of flowers in the garden.

- Healing character of the sensory stimuli

The presence of water patterns in environments containing water elements has evolved visual preference and positive emotional responses, reducing stress, increasing feelings of tranquility, lower heart rate and blood pressure, and recovering skin conductance. Garden devices such as the manipulation of water and the use of aromatic plants can make the experience of visiting the garden more personal and intimate through the use of scent. Scent is described as "the food of the spirit" and enhances perceptions and memories.

3. Ablution tank for wudu

The water body in the center, for the ablution called wudu process done in this space

- Sensory involved in the experiences

The most important details of the phrases visual, haptic receptor, visual appearance, movement proceeds, and water are that the coolness of the water is felt through the eye prior to contact with the skin, the temperature of the water is determined, and the humidity leaves varies while the movement proceeds.

- Healing character of the sensory stimuli

Water, visual stimuli, and arches are all important elements in the entrance of a deity hall. Water helps reduce pressure and stress, visual stimuli improve concentration and memory, and multiple senses are stimulated simultaneously. Arches indicate the movement to the next level in the transition

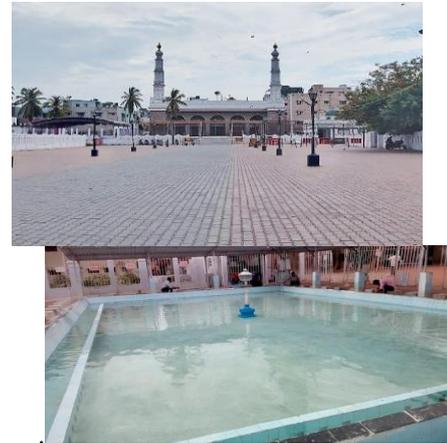


Fig. 13. *Image explains the ablution pond in the mosque*

4. Entrance to actual deity hall

Array of arches lead the main hall each arches indicate the movement to the next level in the transition.

- Sensory involved in the experiences

The arches in a sequence play with the light and shadow gives the movement into the space, and strongly represent the time and emphasize the fenestration gets the attention and more of ocular Centrism.

- Healing character of the sensory stimuli

The opaque surface and the openness in a sequence and the diffused lighting, Shadow create a mystical and



mythological sense.

Fig. 14. *Image explains the entrance of the deity hall*

5. The Mihrab

The hall of prayer and the wall of god (mihrab) is the placed.

- Sensory involved in the experiences

The mihrab is a warm illuminated space with the golden Arabic font on the wall. Movement kinetics and bodily action for the rituals activate the haptic sense, touch the flooring, and close the vision to activate the other

senses. Haptic, auditory, and olfactory senses are predominantly evoked during prayer.

- Healing character of the sensory stimuli Prayer and lighting bring serenity. Mihrab ornamentation induces brain cell activity and cognitive activity in the brain.



Fig. 15. Image explains the mihrab space of the mosque

Fig. 16. Image explains the healing sequence in the walljah mosque

V. OVERALL SENSORY EXPERIENCING IN THE RELIGIOUS SPACE.

Based up the above observation from the case study, cumulative results were described below.

1. Visual -The vibrancy of colour and material is highly dominating throughout the journey of the temple. Subtle colors yet the form of the structure articulate the movement of eye from downwards, the raised plinth create the sense of realm. The large stained glass make the space lit during the day, the fenestration play important part of The symmetry in the façade, vibrant material and colors, and massiveness of the entrance, texture felt through vision, the intensity of light amplified with the jalli and fenestrations.

2. Auditory-the chanting of mantras and sound of bells, music and vibration, and particularly the reverberation of ohm sound impact the autonomous brain activity. The acoustics of the church have a character of vibration, which heard, during the prayer, and the silence maintained in the hall. The call for prayer from the minaret and word of Quran reverberates the sound, stimulate the brain cell and activates the brain.

3. Olfactory -The smells of incense stick, kumkumam, sandal, and various flowers and faint smell of oil lamp, burned wood, these smell is unusual for mundane environment and it create an aromatic therapy. The scent of church is unique because burning scented candles and incense stick, transition of mundane to aromatic environment switches the instant changes in the mind and the silence already existing create the sense of focus, Scent of burned wood and scented sticks in the space induce the serenity into the space.

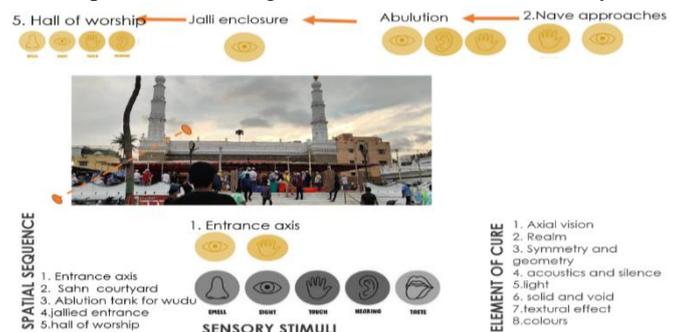
4. Haptic -The touch of fruits, flower, touching of the deity in pradakshana, is complete experience to absorption of the vibration and the recognition of space. The contact of holy water, and holding the warm candle, and switching of temperature, the church have the warmth due to the lamps and sticks & by the fenestration. Pacify the people within the space,

Switching of flooring to the fabric matt in the mosque, induce the comfy and warmth in the space, the darkness were felt with the temperature difference and the mihrab grabs the eyes.

5. Gustary - The holy water from the copper vessel, and tulsi stimulate the taste bud. The holy water is the only sensory stimuli involved in the church. Gustary stimuli only during the festival time

VI. CONCLUSION

The study tried to analyses and perceive religious spaces through various senses, understand the emotions, meanings and healing character of the space. Through the study, we could relate that all the religious spaces hold the healing elements which are proved as healing element, which also indirectly state



that all religious structure are evidently healing spaces. The spaces should not just experience as a segregated retinal pictures but integral material and spiritual essence. This aspect is highlighted through the study, and also the involvement of all senses in space perception for healing was hence purposeful, and an important aspect in religious spaces.

The study concludes with how senses help in connecting spaces directly between the individual and the surrounding making subconscious self-healing

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