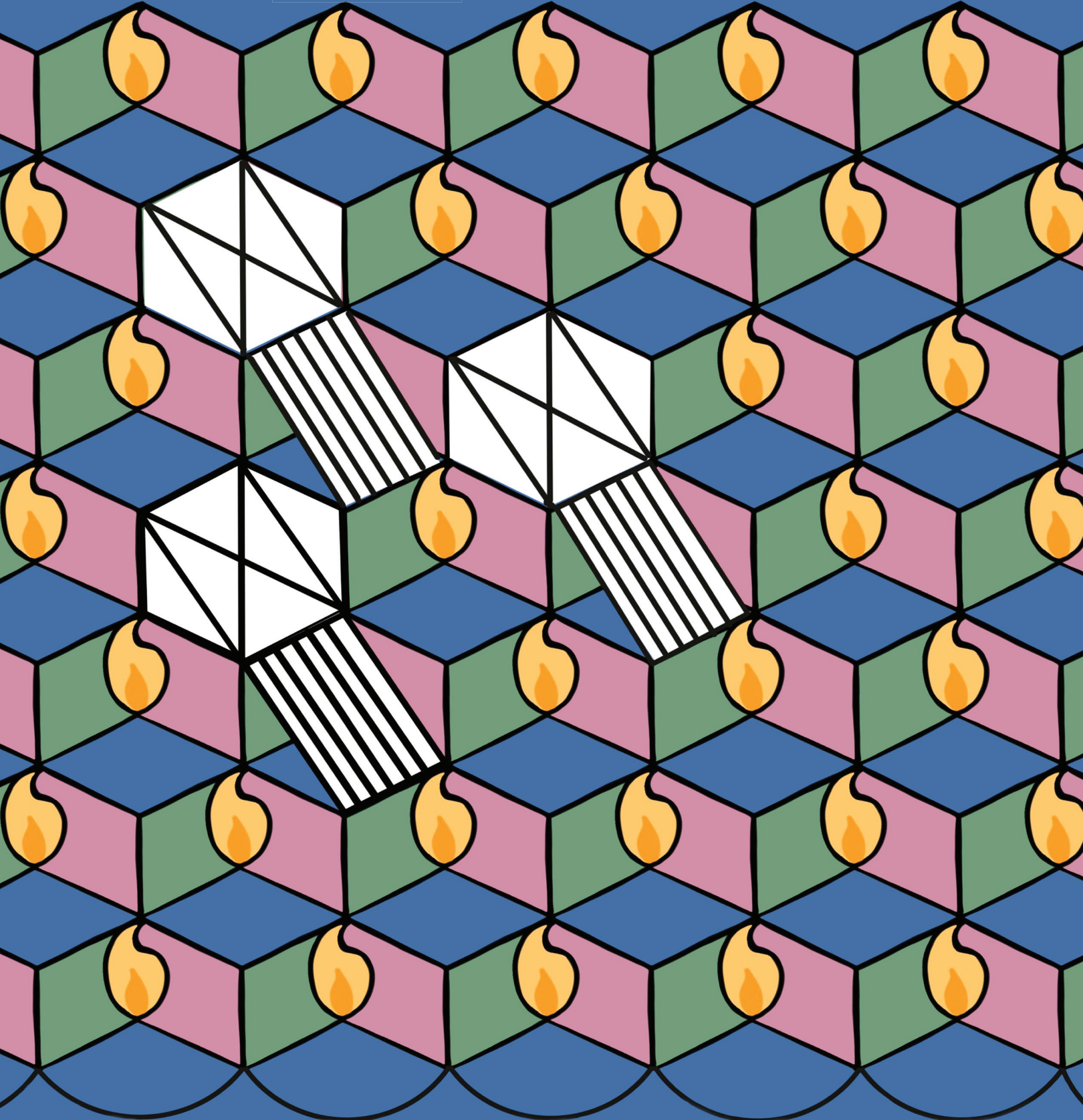




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Viega.
Elegance and
Functionality.

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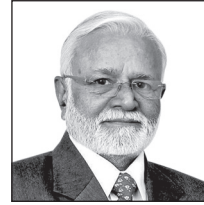
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+91 22 22046972 / 22818491 / 22884805
iiapublication@gmail.com
www.indianinstituteofarchitects.com

Editor Ar. Lalichan Zacharias
R.N.I. No.9469/57
lalichanz@gmail.com

Advisors : **Ar. Mukul Goyal**

Printer's Email
arihantdigiprint.offset@gmail.com
krish.graph2021@gmail.com

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Dear Fellow Members of the Indian Institute of Architects,

Wishing you all Shubha Deepavali!

The Festival of Lights that brings in us the spark of enlightenment and respects nature and its resourcefulness.

दुरिताचें तिमिर जावो।

विश्व स्वधर्म सूर्ये पाहो।।

जो जे वांछील तो ते लाहो। प्राणिजात।।

May the darkness of ignorance of the sinful disappear,

The whole universe should see its self in the light of the sun.

May the auspicious wishes of souls be fulfilled.

In pursuit of the abundance of knowledge, JIA has made sure that the content reaches the fraternity more easily and has become gesture towards environmental consciousness. We decided to go into an E-journal from the October 2023 issue. This has well appreciated throughout the architectural fraternity. For those who seek the conventional hard copy, are also given that option. This will also make this Journal more relevant by making it accessible to academic writers around the world and

for their research to inform practicing architects to take up academic inferences into their practice. On the other hand, we also encourage students to take up research seriously which will prove beneficial for the future global journey of their practice.

It's our appeal to all practicing architects to engage with current issues faced by society around and vocalize them through our Journal. It's time for all of us to participate in writing for a global reach and engage the public in general- an investment required by our fraternity to get our due recognition as professionals working for the betterment of society.

The season of celebration which has started with Deepavali, will continue till the season of spring.

Let us make a conscious effort to conserve our resources, be empathetic to all living beings and for the better future of mankind.

ॐ सर्वे भवन्तु सुखिनः सर्वे सन्तु निरामयाः।
सर्वे भद्राणि पश्यन्तु मा कश्चिद्दुःखभागभवेत।

May everyone be happy, may everyone be free from diseases, may everyone's life be blessed and no one become sorrowful.

Prof. Vinit Mirkar
Editor



Ar. Vinit Mirkar

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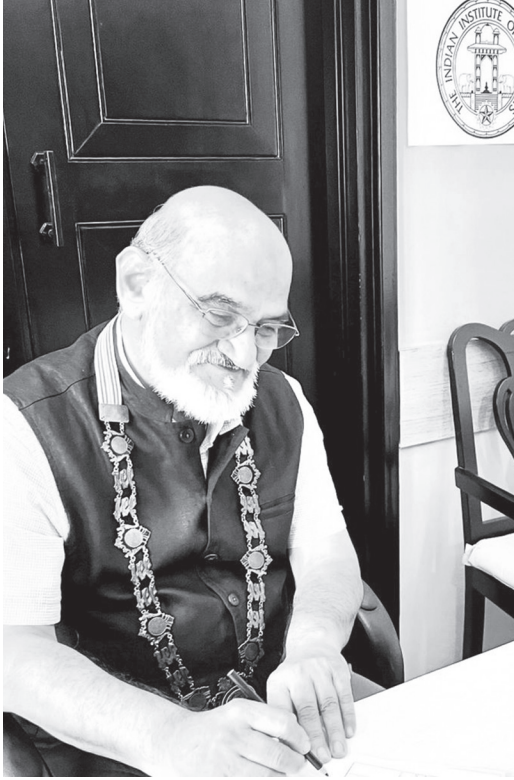


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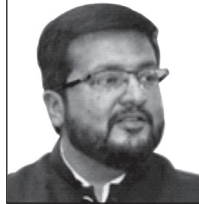


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Imm. Past President, IIA

Dear Fellow Members,

Seasons Greetings

It's really good to see that many young Architects are taking an active part in all the events of IIA.

Their participation and organizing skills have a lot of positive energy. We all observed and experienced outstanding examples of this energy at the Rajasthan Architectural Festival (RAF), at the Salem Centre event organised at Yercaud, Tamil Nadu, Vishakhapatnam Centre of and Kakinada Centre of Andhra Pradesh Chapter- all superlatively energetic events.

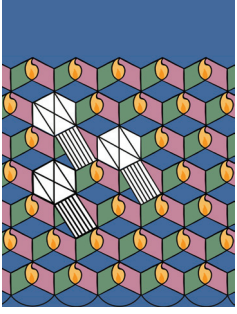
We all appreciate the upcoming practices of young architects of Tier II and Tier III cities of India, where innovative, brilliant ideas are designed and executed. We do see a definite upward curve in the graph in the membership of fresh new graduates. We need to involve more young architects into our IIA Organization and also increase the membership of IIA. This would be possible by organising more events which include young architects as well as involve more general public into our events.

We welcome all the efforts toward this by all the IIA Chapters and Centres all over the country.

We look forward to the forthcoming events of NatCon, IIAPL, YAF and the National Awards lined up for 2024-2025.

Warm Regards
Ar. Vilas Avachat
President, IIA

COVER THEME



दिपावली

ROW OF LIGHTS

Ar. Mugdha Deshpande, Ar. Rohit Deshpande

The stories from Hindu mythology tell of Deepavali as the day Lord Ram, his wife Sita and his brother Lakshman returned to their homeland after 14 years of exile. The villagers of Ayodhya lit the path for them with दीप (oil lamps) arranged in rows (आवली), in celebration of Lord Ram's victory over the demon king Raavan. This was the genesis of the name of the festival : दीप (lamps) + आवली (rows) = दिपावली or *Deepavali* (row of lights).

दीपज्योति परब्रह्म दीपज्योतिजनार्दनः।
दीपो हरतु मे पापं दीपज्योतिर्नमोऽस्तुते॥

*The brilliant radiance is a divine guidance to the whole Universe
The Sun invokes the fire of cognisance and effulgence in all of us.
Let's pay Him obeisance!*

The tradition of lighting oil lamps on Deepavali not only symbolises the victory of Good over Evil but it also represents the victory of Knowledge over Ignorance, of Hope over Despair. The celebration is not just about lighting lamps outside our homes, but enlightening and guiding the soul from within. The celebration can also be about Clarity over Confusion, Purity over Pollution, Harmony over Dysfunction or Energy over Exhaustion.

रंगोळी/रंगावली

Rangoli, which literally means 'row of colours' are geometric patterns drawn in front of every household during this festival. It represents happiness, positivity and liveliness of a household intended to welcome Lakshmi, the goddess of wealth and good luck. This beautiful artwork, made of repetitive geometric patterns, manifests into positive vibrations in the observer.

आकाश कंदील/आकाशदीप

During Deepavali the आकाश कंदील/आकाशदीप or sky lantern is hung outside the main door or in the window (in urban areas). It is not only for the purpose of decoration, but a cultural and spiritual symbol to welcome prosperity, good luck and positive energy into our homes. Since Deepavali is celebrated on अमावस्या (*Amavasya*, the new moon day), a time of darkness, lighting lanterns and oil lamps are a means to get rid of darkness.

The graphic for the cover for this issue is inspired from these three forms of the Deepavali celebration. It represents these forms cohesively on the canvas, based on following design principles:

- *Repetition* – an array of oil lamps is depicted by the flame of the lamp in the colour yellow.
- *Pattern* – the *rangoli* design creates a beautiful pattern out of the basic definitive geometric shape of the hexagon. The representation of *rangoli* also can be seen through the use of colours. Blue depicts calmness, wisdom, stability, pink represents compassion, tenderness and kindness while green stands for freshness, harmony and growth.
- *Emphasis* – the traditional hexagonal shape of the *kandil* or sky lantern is perfectly embedded in the *rangoli* pattern.



Ar. Mugdha Deshpande (A-19013) holds a post graduate degree in General (Advanced) Architecture. Her core competencies are architectural design, interior design, pre-design, team management, consultants and site coordination.
Email: mugjosh@gmail.com



Ar. Rohit Deshpande (A-19012) holds a post graduate degree in Construction Management. His core competencies are architectural design, team leadership and management, project planning, consultants and site co-ordination.
Email: rohit83d@gmail.com

Both are co-founders of Dymaxion Architects, a multidisciplinary design-based firm founded in 2011 in Mumbai.



JIIA Call for Papers, Articles, Projects

The Journal of the Indian Institute of Architects invites original and unpublished contributions from members **ONLY** (academicians, practitioners and students) under the following FOUR categories. Submission in each category is strictly only through the respective google forms.

In order to be accepted for publication, all material sent in these categories should have the following components:

1. MS Word document file with text only. Please do not format it in anyway. The numbered captions for all the images will also be in this document.
2. Folder with all images (minimum 300 dpi), numbered according to the captions given in your text file
3. Photograph of the author/s (minimum 300 dpi).
4. Author biodata – Maximum 50 words.
5. PDF (optional)– showing the intended layout. This pdf should include text and all images, with numbered captions.

Category 1 : Articles

google form link: <https://forms.gle/7pDFva1HDH4hfUyj8>

Essays, interviews, articles (1500- 2500 words), book reviews (600 and 750 words), travelogues, sketches and photo-essays in the areas of architecture, planning, urbanism, pedagogy, heritage, technology, ecology, theory and criticism, visual design, practice or any other relevant subject pertaining to the built environment. (Details of the format will be available on the JIIA website).

- For a design project, please include the 'Fact File' with the following details : Project Name, Location, Plot area, Total built up, Structural consultants, Project completion. Also please give the photo captions and credits. Please ensure that the image is referred to within the text. For eg, "As seen in Figure 1..." This is essential for the layout.
- For design projects, plans and sections of the project are desirable along with the photographs.
- Book reviews should be only of books by Indian authors. please include the "Fact File" with the following details: book title, author name, publisher, year of publication, ISBN, language the book is written in, genre (technical/ fiction/ etc.), no of pages, dimensions (in cm), type (Kindle/ paperback/ hardback), available at (amazon.in/ flipkart.com/ others).
- Please send a write-up of about 200-300 words along with sketches and photo-essays.

Category 2 : Student Work

google form link: <https://forms.gle/hyhsCoK6QPe6qDJu8>

Summaries of dissertations (2000-3000 words) at the level of B.Arch. & M.Arch., and theses at the Ph.D. level. The Guide for that work will be mentioned as the Co-author. (Format will be available on the JIIA website).

Category 3 : Contributions from Chapter Correspondents

google form link: <https://forms.gle/Ru4JBLSHwaYEBTcg7>

(a) *Chapter News*: This includes various interesting activities from the Centres of your Chapters (maxm. 500 words for the news from the *entire* Chapter).

(b) News of conferences by the academic institutes in your respective Chapters.

(c) *Obituaries* : Obituaries of IIA members should consist of the photograph of the departed soul, the dates of birth and death and a short 50-word note.

Category 4 : Research Papers

google form link: <https://forms.gle/Z9YWQQMaw843N1eT6>

Research papers (2000-5000 words) in the prescribed format. The research may be based on their ongoing or completed research. (Format is available on the JIIA website). All contributions in this category will be double blind peer-reviewed before being accepted for publication by academic experts of repute.

Category 5 : Cover Design

google form link: <https://forms.gle/BSkuE5cApXdy7dX1A>

Students from affiliated colleges are invited to design the cover page theme. This should be a graphic based on some aspect of Indian Knowledge Systems. The submission will include the graphic file (jpeg or corel draw); a theme note (with a title) of about 500 words explaining the concept of the graphic.

Please note that the image you send will be adjusted as per the layout requirements of the JIIA Cover.

Please note:

1. All submissions will be accepted only through google forms.
2. Submissions will **NOT** be accepted through email.
3. Any queries to be addressed to : jiiateditorial@gmail.com.
4. When you correspond with us, please give your email id (that you regularly use) and your cell no. (preferably with WhatsApp).
5. It is compulsory to mention your IIA regn. No. Submissions will **NOT** be accepted from non-members.
6. The review process takes anywhere between 4-6 weeks. Since it may not be possible to respond to all authors who send in their work, we will definitely revert if and when your work is accepted.
7. JIIA does not charge any fees for publication of any
8. professional or academic work.
9. It is understood that submission from an author is an original work, unpublished anywhere else, and that IIA and JIIA are in no way responsible for any matter or dispute arising out of the publication of the same.
10. All authors are requested to refer to further detailed information available on the JIIA website.

Youth and Urban Nature: Connections and Engagement – A Case of Pune

Isha Sandeep Chiplunkar

Fourth year B. Arch.
B.K.P.S College of Architecture,
Savitribai Phule Pune University
Email: cisha253@gmail.com

Dr. Abhijit Natu

Principal
B.K.P.S College of Architecture,
Savitribai Phule Pune University
Email: asnatu@bkps.edu

Abstract

One of the most significant components of human life has always been the innate urge for connecting with nature. Understanding how people, especially the youth, create and sustain ties with nature in urban settings is crucial in a society that is becoming more and more urbanized and digitized. This paper investigates what nature means to the youth of Pune, what are the landscape elements that constitute their perception of nature and where, how often and effortlessly they get a chance to interact with their natural environment on a day-to-day basis. The data was collected by an online survey tool using a Google form among 63 young adults, chosen randomly, and living in various parts of Pune city. The study revealed that the youth perceive nature in the form of 'natural elements', 'environmental elements' as well as a 'location/ space'. Subsequently, they visit hills, urban and neighborhood parks, terrace gardens on a daily basis and water features and landscaped campuses to experience nature. About 50% of the respondents get a chance to visit nature occasionally but each of them has mentioned their urge to connect and reconnect with nature either by visual or physical engagement. Physical aspects of urban areas like traffic, distance and overcrowding pose a challenge to the youth while approaching and interacting with nature on a day-to-day basis. In order to enhance human-nature relationships while removing these obstacles, the study's conclusion emphasizes the necessity of integrating natural settings in residential

areas for creating opportunities for connections with nature.

Keywords: urban youth, perception, meaning, nature connectedness, landscape elements.

Introduction

The complex web of daily contacts and exchanges between humans and their environment develops against a variegated backdrop of nature. As stated in the *Biophilia Hypothesis*, 'humans possess an innate tendency to seek connections with nature' (Wilson, 1984). It is commonly known that being in or around natural settings makes people feel calm and content. But as cities grow rampantly in the process of urbanization and digitalization, urban residents are getting divorced from nature. The youth especially, is spending more and more time indoors and on their digital screens. As a result, their connection with the natural environment has reduced even further. But by the very composition of human beings, there remains an urge to engage and connect with nature. Even though interactions with nature are instinctive, some of them go through 'nature-deficiency disorder' (Louv, 2005). In this light, it becomes important to ask whether or not the youth are really connected to their natural environment, and if yes, it is interesting to find out how?

Aim: To investigate Pune's urban youths' idea of nature and identifying their places of interaction with nature.

Objectives:

- To investigate urban youths' idea/ perception of the term 'nature'
- To identify landscape elements constituting the youths' idea of nature in their day-to-day life
- To identify the places of human nature interface in day-to-day life

Scope and Limitations of the study:

This research is restricted to the urban residential settlement in Pune city only, using only young adults for the sample studies. This study is restricted to the formal urban residences and has been carried out at a single instance i.e., a cross sectional study and has limitation of sample size.

Literature Review

In its most basic form, nature-deficiency disorder (Louv, 2005) emphasizes how important it is for children as well as adults to regularly interact with nature. Lack of such a connection can result in a variety of physical and emotional disorders which serve as a constant reminder of how important nature is to humans.

In the paper *Land and Nature as Sources of Health and Resilience among Indigenous Youth in an Urban Canadian Context: A Photovoice Exploration* (Hatala, et al, 2020), the researchers have explored a theme of connections to nature as a calming place, building metaphors of resilience and providing a sense of hope. This investigation adds, to and can guide activities based on strengths in the area of resilience and well-being for urban youth. They further state that 'Nature could be a key component of the urban health infrastructure by addressing and providing for the various health needs of indigenous youths and other subgroups.' Ties to the natural environment has been proven to positively impact the physical, mental and social wellbeing of humans. It would undoubtedly be beneficial for the youth to connect with nature throughout their developing years. Therefore, the question arises of how connected to nature urban youth in modern India are.

A similar study done in California, USA mentioned a significant finding that participants showed a 'desire to put down their screens and escape via the outdoors.' (Mackenzie, et al., 2017). To comprehend the reality of the human-nature interface in urban areas and the impact of urbanization and digitalization on the connection between urban youth and nature, a pertinent study must be conducted in the Indian setting.

A study by the name *Finding Connections to the Outdoors for Youth and Families in Larimer County, Colorado* by Shaw and Gagne (2014) carried out in Colorado; America focuses on the entire population of the county. The majority of people expressed a desire to interact with nature, yet some have reservations due to factors including expense, access, time and safety. The study emphasized that close proximity and convenient locations of parks and open space are also vital factors for increasing frequency of use. The widely held perception that digital media has kept people from connecting with nature was not specifically mentioned as a significant obstacle to nature-based experiences.

In addition to the existing nature connectedness measures, the Inclusion of Nature in Self Scale (INS) and Nature Relatedness Scale (NR6), a 7-point scale, the Nature Connectedness Index (NCI) was validated for use Internationally in English-speaking populations for both children and adults in the study *A Measure of Nature Connectedness for Children and Adults: Validation, Performance, and Insights* (Richardson, Hunt, Hinds, Bragg, & Fido, 2019). Hence similar questions could be included while studying the youth of Pune city, in the present study.

The statement by Hatala, et al (2020), 'Person engagements with and connections to nature, either by way of being present in nature or by connecting with land in their local urban context, and how such connections fostered resilience and well-being in various ways' directed the interest of study towards the characteristics of engagement of youth with the nature as well.

The Nature Connectedness Index (NCI) or the NR 6 scale attempts to quantify our connection with nature. On the other hand, finding elements considered as 'nature' by urban youth becomes important. Further, finding out how frequently and effortlessly they get a chance to interact with nature may be helpful in bringing nature into day to day designed urban settings. These are more tangible elements which indirectly indicate the connectedness.

Therefore, the central idea of this paper is to investigate the idea of nature in Pune's urban youth and to identify their places of interaction with nature. The investigation will also focus on learning what 'nature' means to them, what landscape features make up their perception of nature, where they find this nature in their daily lives and how frequently and easily they can interact with nature. The research questions that follow are:

- What is the meaning of 'nature' for the urban youth?
- What are the landscape elements that constitute to youths' perception of nature?
- Where do they find this nature in their day-to-day lives?
- How often do they get a chance to experience nature in their everyday lives?
- What are the challenges faced by the urban youth while connecting with nature on a day-to-day basis?

Methodology

• *Setting for the study:* The study is conducted in city of Pune. It is city surrounded by foothills of the Sahyadri mountain range, basin-shaped, situated in the flood plains of the Rivers Mula-Mutha. Therefore, rivers and hills are the two dominant landscape elements in the area of study. Pune has active citizen groups striving to conserve nature and protect the hills and the rivers.

Sample: For this research young adults aged between 18 to 25 years, living in different parts of the Pune city were identified and a random sample of 63 was chosen to ensure diversity of sample in terms of social profile and geographic locations in the city. The respondents were categorized based on their home locations in three broad zones of the city:

(a) Core zone - old city (b) Middle zone - newer city (c) Fringe areas

• *Method and tools:* A set of 32 questions was circulated through a Google form. The questionnaire was divided into four sections seeking information about: (a) demographic data age, gender, occupation area of residence (b) idea of nature (c) characteristics of their visits to urban nature (d) means of their engagement with nature.

The survey questionnaire is seen in Table 1. The questions are categorized as follows:

Section A: demographic data

Section B: ideas of nature

Section C: characteristics of the visit (close-ended questions)

Section D: means of engagement with nature (open-ended questions). The answers to these were inductively coded and categorized. Since they were non-directed questions, the responses sought were spontaneous. The questions seeking benefits of engagement with nature were closed ended to be answered on a 5-point Likert scale.

The coded data was entered in Statistical Package for Social Scientists (SPSS) and then analysed using descriptive as well as inferential statistics.

Data analysis and findings

1. *Perception of Nature in the urban context of Pune* (See Fig. 1)

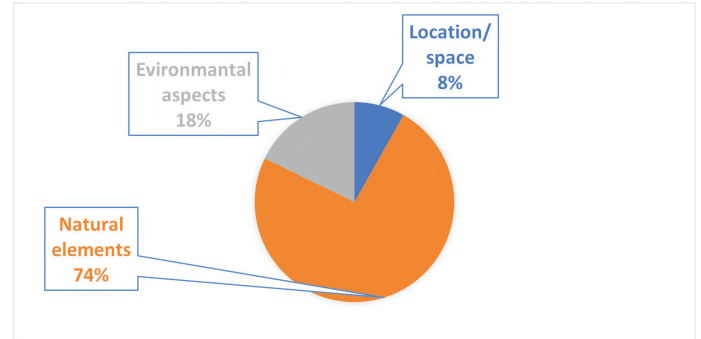


Figure 1: percentages showing meaning of nature to respondents (n=63)
Source: Survey by Authors

The respondents identified various aspects or elements which constituted their idea of nature. The responses could be broadly categorized into three categories: natural elements, environmental aspects and locations or spaces. It was seen that the majority (74%) of the responses mentioned natural elements like trees, flora, fauna, mountain, river, ocean, stars, waterfall, and a natural view outside the window. This was followed by mention of Environmental aspects (18%) such as sky, fresh air, soil, sunlight and the maintained season cycle in their perception of nature. As the sight of natural elements is becoming scarce in the cities, some responses (8%) perceived locations or spaces, specifically man-made, like balconies, outdoor spaces in houses as nature amidst the bustling cities.

2. *Areas of visit to experience nature in urban context* (See Fig. 2)

The respondents mentioned various places they visited in the city of Pune to experience being in nature. The question being an open-ended one, led to the mention of 40 locations. 69% of the respondents mentioned hills, which are an important natural element of Pune, along with Rivers Mula and Mutha. People visited hills to experience nature. Respondents mentioned water-bodies like waterfalls and lakes, but rivers did not find any mention in the responses. It was probably that Pune-ites do not find enough 'nature' in the rivers as they are channelized and generally ill-maintained and have become carriers of the city's drainage.

Table 1 : Exploring meaning of nature and its connectedness in urban residents- case of Pune
Source: Authors

Section A: Demographic Data

1. Name
2. Age
3. Gender
4. Occupation
5. Address/ Area of residence in Pune
6. Number Of years you have lived in Pune
7. Number if years you have lived in present house

Section B: Idea of Nature

8. What comes to your mind when you think of 'nature' in day to day living environment?
9. How would you define 'nature' in the context of an urban environment like Pune?

Section C: Characteristics of a Visit to Urban Nature

10. What areas in Pune have you visited to experience nature or 'to be in nature' ?
11. How often do you visit these places?
(a) Occasionally (b) Once a fortnight (c) Once a week (d) More than once a week (e) Daily
12. How do you go to these places?
(a) Walk (b) Cycle (c) Vehicle (d) Other
13. How far is that place from your house?
(a) up to 0.5 km (b) 0.5 km to 1 km (c) 1 km to 2 km (d) more than 2 km
14. With whom do you go to these places?
(a) Alone (b) With family (c) With friend/ friends (d) With spouse
15. How much time you spend there?

Section D: Means of Engagement with Nature

16. What are the activities that you engage into while you are there?
17. Do you feel connected to nature in your day to day life?
18. If yes, please elaborate on 'How' do you feel connected to nature in your day to day life?
19. Being with nature (To be answered on 5-point scale: 1- not at all to 5- very much)
(a) I feel cheerful/ joyful (b) I feel peaceful (c) I feel contented (d) I feel contemplative/ meditative (e) I feel energetic (f) I feel spiritual (g) I feel healthy (h) I feel romantic (i) I feel sad (j) I feel lonely
20. Please indicate your level of agreement or disagreement with the following statements:
(a) Strongly disagree (b) Disagree (c) Neutral (d) Agree (e) Strongly agree (f) Visiting nature my mental health has improved (1) Visiting nature my mental health has improved (2) Visiting nature I have become a social person (3) Visiting nature my physical health has improved
21. Are there any barriers or challenges that prevent you from accessing or enjoying nature in Pune on a day to day basis?

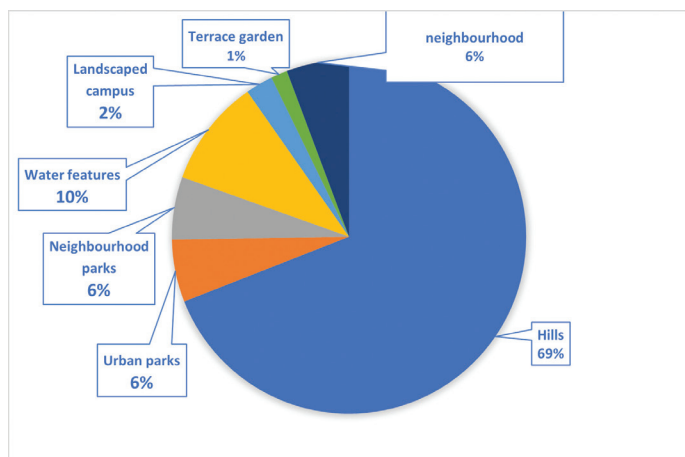


Figure 2: percentages showing places of visit to nature (n=63)
Source: Survey by Authors

3. Relationship between various aspects of visit to urban nature (See Table 2)

A correlation test was conducted between the frequency of each respondent’s visit to nature with the distance of place from their residence and time spent in that particular place. It was found that the frequency of visit and the distance of place from respondents’ residence has a negative correlation. Further the place, less frequent were the visits, while closer the space, frequency of visits was higher. Similarly, the distance of place from their residences and time spent by them in that particular place has a positive correlation implying that more time was spent there when the place was far away from their residence.

4. Means of engagement with nature

The respondents were asked how they felt connected to nature. The responses included various activities

from which their engagement could be categorized into ‘physical’ and ‘visual’. Physical engagement is through various activities such as walking in parks or on hills, gardening or experiencing gentle breeze or rains. About 66.6% of people’s engagement with nature was found to be through physical means. 33.3% of the engagement was through visual experiences such as watching trees, greenery, birds, rains or looking at pretty skies or sunsets (See Figs. 3 and 4).

5. Challenges in accessing nature in everyday life

The respondents were asked about the challenges they faced in accessing urban nature on a day-to-day basis. Though some mentioned the barriers to be personal, like lack of time due to schedule or safety concerns, 60% of the responses highlighted the challenges to be physical aspects of cities like traffic, distance, crowding and urbanization.

The findings of this study can be summarized as follows :

- Natural elements like trees, flora, fauna, mountain, river, ocean, stars, waterfall and the natural view outside window contributed to the idea of nature in urban context for 74% of the respondents.
- Hills were given significantly more preference (69%) than rivers in spite of rivers and hills both being dominant landscape elements in the context of Pune city.
- From the correlation test, it was found that visits had a negative correlation with distance, meaning closer places were visited more frequently. However, the time spent had a

Table 2 : Correlation Matrix
Source: survey by author

		Frequency of visit	How far is that place from the house	How much time you spend there
1) Frequency of visit	Pearson Correlation	1	-0.347**	-0.221
	Sig. (2-tailed)	-	0.009	0.101
	N	56	56	56
2) How far is that place from the house	Pearson Correlation	-0.347**	1	0.297*
	Sig. (2-tailed)	0.009	-	0.026
	N	56	56	56
3) How much time you spend there	Pearson Correlation	-0.221	0.297*	1
	Sig. (2-tailed)	0.101	0.026	-
	N	56	56	56

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).



Fig. 3. Visual Engagement with Nature

Source: Authors

Figure 3a : Watching sunsets



Figure 3b : Watching pretty skies

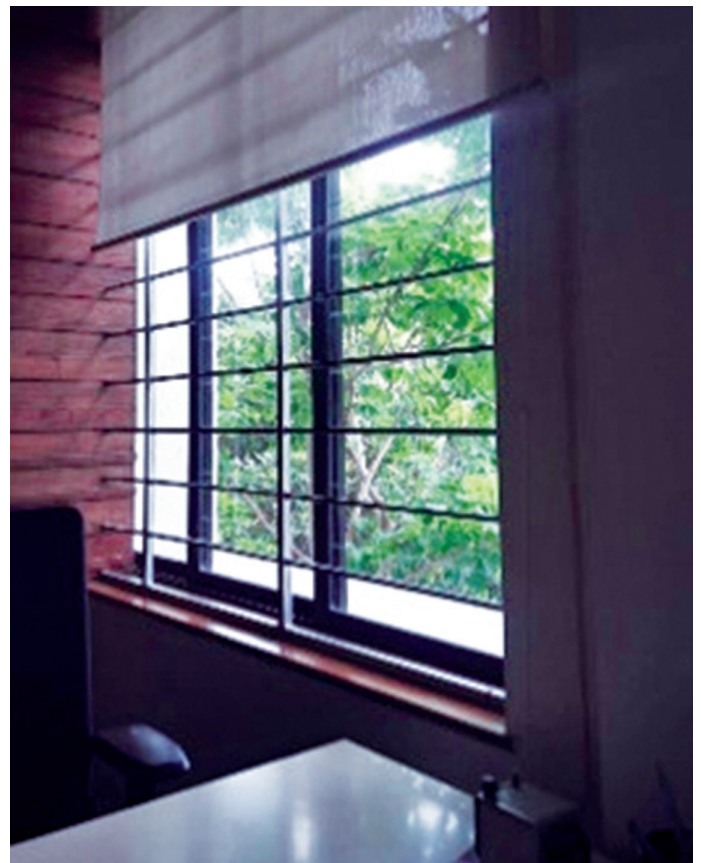


Figure 3c : Natural view outside window

positive correlation with distance, implying that people spent more time at places farther from their residence.

- From the ANOVA test it was found that irrespective of one's location in the city, there is no significant difference in the frequency of visit or the time spent in urban nature.
- Respondents' engagement with nature was categorized into 'physical' and 'visual' experiences. About two-third of respondents engaged with nature through physical activities like walking, gardening, and experiencing natural elements like gentle breezes or rain. Additionally, respondents mentioned that they engage with nature through visual experiences, such as observing trees, greenery, birds, and natural phenomena like rain or sunsets.

Discussion

The research aimed to investigate the connections of the urban youth with nature and their engagement with it. The tool of the study effectively could answer the aim by identifying the meaning of nature, connections of the youth with nature and also their engagement. In light of previous literature one finds that though there is 'nature deficiency disorder' (Louv, 2005), the urban youth in Pune have the urge

to be with nature which is evident from the visit characteristics. The original contribution of the study is that with the qualitative inquiry it could bring forth 'what constitutes nature for urban youth'. This kind of approach becomes useful to understand these meanings and also engagements which can help in introducing and integrating nature in day to day living environments. Though not a physical engagement, visual connections for engagement with nature are also highlighted. The benefits of nature have been largely researched but the aspect of 'meaning of nature' is an original contribution.

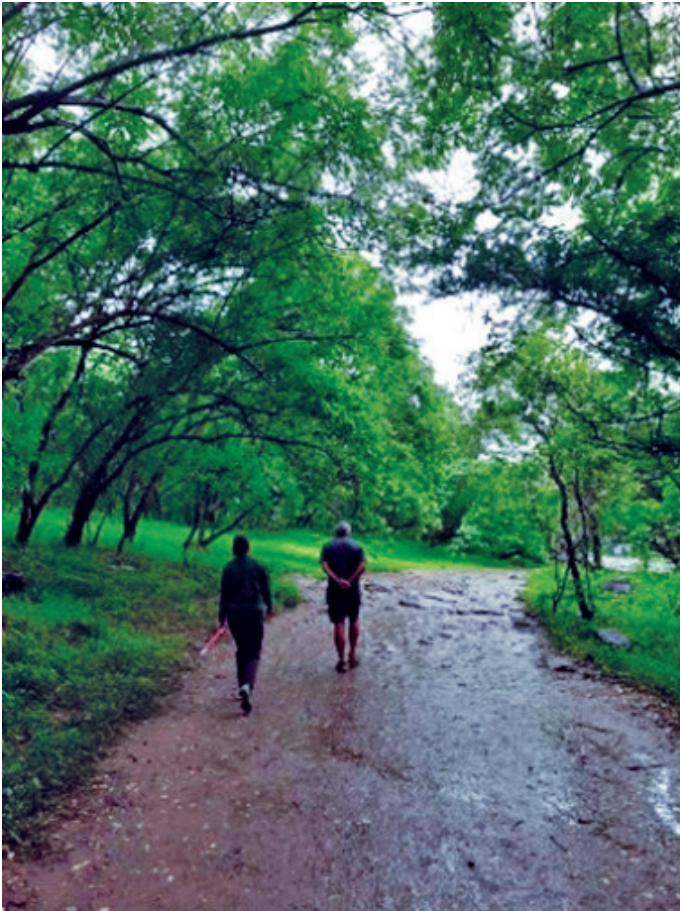


Fig. 4. Physical Engagement with nature

Source: Authors

Figure 4a : Visiting Hills



Figure 4b : Walking on street with trees

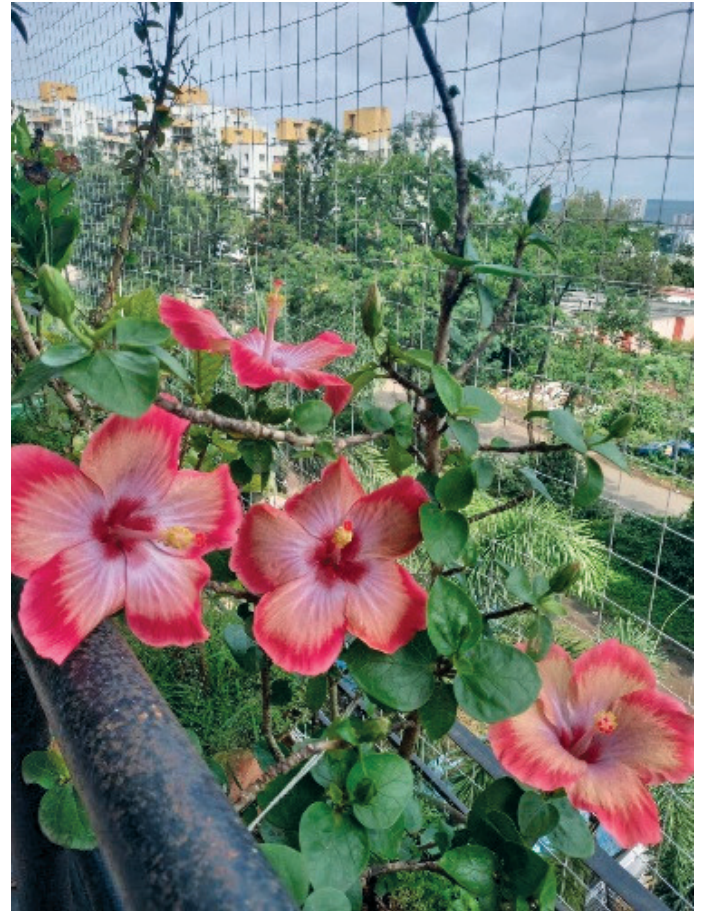


Figure 4c : Gardening

While riverfronts are more accessible in Pune, the city has turned its back on them and their pollution has led to a preference for hills, where greenery, fresh air, and uninterrupted views are valued, even if it requires additional physical effort. This highlights that preserving the hills of Pune is the need of the hour as they are the key place of the human-nature interface in the context of Pune, while we rejuvenate the riverfronts. This finding is particularly important for the city development authorities to take up initiatives for conserving the natural resources of the city.

Conclusion and Recommendations

The study has underscored and reinforced the importance of proximity to natural spaces. Closer locations were visited more frequently, highlighting the need for urban planners and designers to incorporate natural settings near residential areas to cater to the urban youth's desire to interact with nature on a daily basis.

Even though the research shows that the majority of youth engage with nature through physical activities, one-third of respondents also connect with nature through visual engagement, emphasizing that simply looking at nature, even if not visiting,

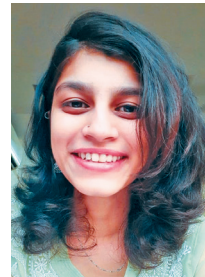
fosters a connection. Furthermore, it is evident that urbanization brings challenges, with physical aspects like traffic, distance, overcrowding, and urbanization being significant obstacles to accessing nature. As cities continue to grow, it is both a challenge and an opportunity for designers to integrate nature into urban environments without compromising their overall functionality. This research highlights the strong desire of urban youth to connect with nature and the need for sustainable urban planning to make this connection readily available in our ever-expanding cities.

The study was limited to the city of Pune as a case and could identify the places of engagement in the city. However similar research studies in different cities can bring forth the concerns of the urbanites regarding their perception of urban nature and can help give directions for the city authorities for urban improvement.

The study has a limitation of sample size. A study with larger sample sizes can help to lead to a generalization of the study and can guide city authorities to take appropriate actions to conserve the city nature. The findings of the study reiterate the need to integrate nature and green areas in day-to-day living environments reported by earlier scholars.

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Isha Sandeep Chiplunkar is a Fourth Year student at B.K.P.S College of Architecture, Pune. She enjoys reading and writing about architecture and has a keen interest in landscape design. She is always eager to explore new ideas and is passionate about creating functional and beautiful spaces.



Dr. Abhijit Natu (A-12879) is the Principal at BKPS College of Architecture, Pune. He has a teaching experience of more than 25 years. He is the former Chairman, Board of Studies in Architecture and Academic Council of Savitribai Phule Pune University. He has more than 40 papers published. He has received the 'Best Teacher Award' from University of Pune in 2011. He has guided nine PhD students to PhD and has a few more currently working under him.

Documentation of Indigenous Expression of Christian Architecture in Tamil Nadu A Case Study in Vellore

Dr. Sharmila Jagadisan

Professor
School of Architecture
Vellore Institute of Technology, VIT,
Vellore, Tamil Nadu, India
Email: sharmila.jagadisan@vit.ac.in
ORCID ID - 0000-0001-6511-8673

Aashika S.B.

Fourth Year Student
School of Architecture
Vellore Institute of Technology, VIT, Vellore,
Tamil Nadu, India
Email: aashika.2020@vitstudent.ac.in

Selva Ziona B.

Assistant Professor
School of Architecture
Vellore Institute of Technology,
VIT, Vellore, Tamil Nadu, India
Email: selvazona.b@vit.ac.in

Sakthilaya H.

Fourth Year Student
School of Architecture
Vellore Institute of Technology, VIT, Vellore,
Tamil Nadu, India
Email: sakthilaya.h2020@vitstudent.ac.in

Abstract

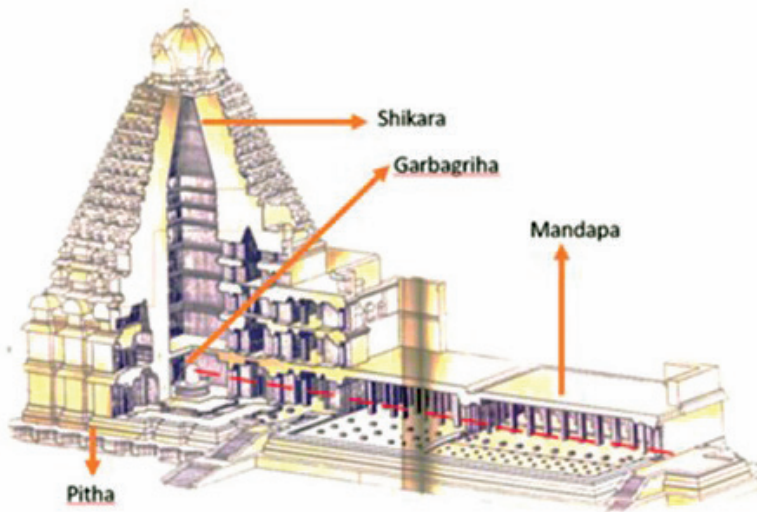
Church architecture has undergone varying degrees of development in terms of forms and characteristics due to various conditions across the globe. Over the centuries of Indian colonization, there were several distinct opinions and ideas regarding the inculturation of Christianity in India. Indians were encouraged to be wary of missionaries and western Christian teachings and to try to indigenize them by liberal Western theologians and Indian Christian leaders, which showed the underlying spirit behind Indian cultural nationalism. During this period, numerous Christian religious buildings were constructed to adapt and appreciate native architectural forms. After careful investigation from various sources, it is found that the early nineteenth century church architecture in Tamil Nadu exhibits a Dravidian architectural character with native architectural expression. Given that the author's background is in architecture, they are interested in preserving this 'living heritage of

Vellore,' which only existed for a brief period and had little or limited documentation. This study also investigates how the conservation study of these monuments provides a new perspective and value addition to Tamil Nadu's architecture, social and cultural matrix.

Keywords: Christianity, Dravidian architecture, inculturation, Indigenous, Vellore

Introduction

Christianity drastically evolved and spread in South India during the British Colonial period. During the late nineteenth century, there was a large group of Indian Christian converts who felt the need to relate the religion to their motherland. This was also the time of the growing urge of patriotism and struggle for Independence from the British throughout the country. Along with these few, there were also a few liberal Christian theologians around the world who believed that Christianity should be indigenous



DRAVIDIAN STYLE :LAYOUT

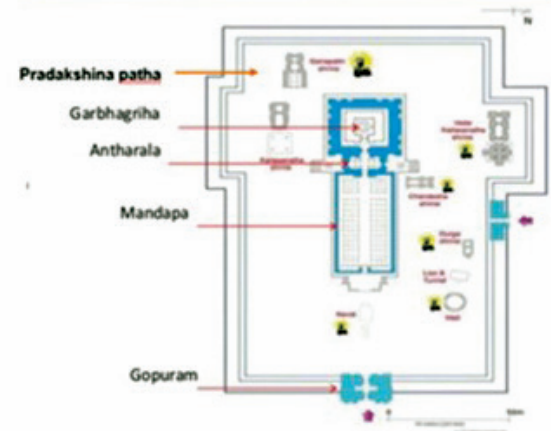


Fig. 1 : Elements of a Dravidian temple
Source: Jagadisan and Ziona, 2023

despite resistance from existing ecclesiastical authorities. This helped in reviving their identity as Indian Christians and through these movements, it prevented the dilution of the vernacular traditions and culture of Indian Christians. In India, the modern missionary movement brought in various missions from Europe and America. The evangelical revival in western countries also changed the outlook of the Indian churches, especially churches of South India. Protestant theologies and movements dominated during this time period, though Catholic churches also played their part in evangelical missions (Collins, 2007). Many Indian Christian leaders from different parts of India started movements in support of indigenization of the Christian worship in favour of the National Movement (Jones, 1910).

The Christian Ashram's movement is one of the important concrete steps towards this process. The Ashram movement began as a movement that integrated the Christian faith with the local culture in India. It also helped in training the young Christians in three distinct areas: Firstly providing evangelistic opportunities in an indigenous context. Secondly, the search and spread of knowledge of medicine for treating common diseases, and thirdly, training artisan occupations (Theunuo, 2018). The Ashram Movement in India is also closely associated with the Gandhi Ashram Movement (Ashram, 2023).

Research problem

There are numerous examples of churches that showcase regional architectural expression and

styles dispersed throughout Tamil Nadu. Preliminary studies show that the spatial organization of these indigenous churches differs from that of Tamil Nadu's churches which have a western influence. The Dravidian-style church architecture especially in Vellore eventually were forgotten as western influences on Churches took over. As result there is no real thorough documentation in terms of built spaces or understanding of such a beautiful fusion of architectural forms. Due to various factors, including changes in administration and trust, proximity concerns, etc., most of these structures are currently in neglected conditions.

Motivation and significance of the research

Two of the authors are primarily from the Indian state of Tamil Nadu, have been working as faculty members in the school of architecture at Vellore Institute of Technology (VIT) for a few years. They instruct history and humanities courses as part of the architectural education curriculum. Fostering critical thinking, making their lectures more topical and promoting global thinking are their main objectives for them while teaching architectural history. In addition, they also want to instil a passion for the subject among students through readings and real-world observations (Jagadisan and Ziona, 2023). This research is also a part of the SEED GRANT, VIT Vellore, which was granted to document these built heritage structures to prevent them from being destroyed or forgotten. It also serves to communicate, not only to conservation professionals but to the public at large, especially Christian society, the character,

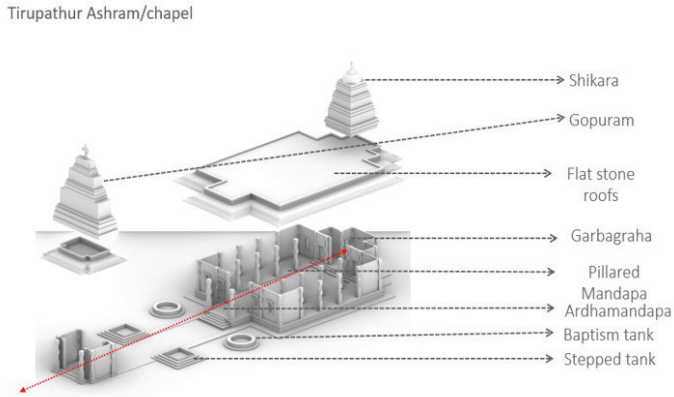


Fig. 2 : Isometric view of Tirupathur Ashram/ Chapel
 Source: Aashika and Sakthilaya., 2022

value and significance of the indigenous church architecture in Vellore and its surrounding environs (ibid.). This project also showed a stronger interest in documenting the historical and cultural structures in and around Vellore.

Research Objective

- To identify the cultural and heritage structures with respect to church architecture in Vellore and its surrounding environs.
- To understand and analyze the influence of regional cultural value towards these built forms.
- To document these Dravidian Church architecture which are unique in distinctive characteristics such as form, shape and style, that reflects people's beliefs and aspirations.
- To create awareness of how conservation of these monuments will provide a new perspective and value addition for architecture and society.

Research Methodology

Data collection methods

Before framing a methodology, both faculty members referred to published papers using keywords and phrases such as 'indigenous church architecture in Tamil Nadu', 'Dravidian church architecture' and 'church architecture in Vellore', which showed certain theological research papers like *Christianity and the Indigenous Thought of India* (Jones, 1910) and a few papers from a sociological perspective. There was no proper documentation from an architectural perspective. The author's documentation process includes mapping these structures as a contribution to their architectural educational pedagogy. The intent is to help students understand and interpret these religious spaces, which will give them different insights and perspectives on church architecture, especially in South India. From an academic

perspective, this short-term research will help authors understand the cross-cultural study and examine the impact of the evolution of religious traditions, beliefs and behaviors of indigenous people on church architecture. As mentioned above, as there was no architectural documentation. The authors had to depend solely on primary data with respect to field surveys and observation. The influences of these regional cultural forms are obtained from the secondary sources mentioned above.

Literature Review

Need for Christian Ashrams


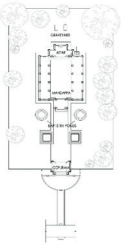

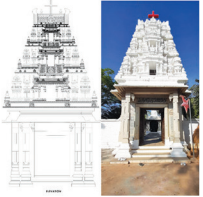



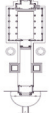


Christian ashrams have a more modern history, from 1921 until 1970. Some Christians started to believe that the teachings of Christ were exclusively Western ideas. Christians often convert people to their faith through missionary work, which alienates their converts from their pre-Christian beliefs and traditions (Barbato, 2021). This act of losing their old religious identity has been observed by several Hindus as a direct act of aggression against their religion and traditional way of life (Banerjee, 1982). Many Hindus struggled with existential questions and identity crises. Indian traditions do not, first and foremost, share the western conception of religion as an individual faith. The fact that Indians thought of Christianity as 'foreign' was a significant barrier to the people's ability to comprehend the messages of Christ.

A significant socio-religious reformation was started across India by liberal Western theologians, charismatic Indian national religious leaders and Indian Christian leaders in the East India Company provinces like Bengal and Madras (Firth, 1961). They attempted to emphasize the need for indigenous dissemination of Christian faith that made sense to people within their local cultural context and encouraged people to be critical of the missionaries and western Christian doctrine (Barbato, 2021). The pioneers of the Christian ashram movement in Tamil Nadu were Dr. Earnest Forrester Paton from Scotland and Dr. S. Yesudasan from India. They became friends during their study of medicine in Ireland. Both were followers of Gandhian Principles and had visited Gandhi's ashram when they arrived in India and thus formed a strong affinity with the Indian freedom struggle. Dr. Earnest Forrester in one of his writings explains his reason for choosing the word 'ashram' (Jones, 1910):

We chose that word, not because we wished to transplant bodily this ideal and all the ways in which it found expression in old India into modern life and its changes requirements, but because we felt it

Table 1 Comparison of architectural elements of a Dravidian temple with a Christu Kula Ashram

Source: Authors

Elements of Dravidian Temple Architecture	Elements of Tirupathur (Christu Kula Ashram)	
<p>1. Mandapa</p>	<p>The mandapa is one of the distinguishing features in this chapel and is similar to Dravidian temple architecture. In addition to having a trabeated construction system resembling Dravidian temples, Tirupathur features a detailed colonnaded porch on both sides to create a curated sensation of a south Indian temple.</p> <p>This ashram contains an ardha mandapa, the front porch or main entrance of the temple.</p>	 
<p>2. Garbagriha (Sanctuary)</p>	<p>The garbhagriha, which is rectangular or square in shape, serves as the sanctuary. This is similar to the altar used in protestant churches. In contrast to Dravidian temples, the altars here are accessible to the entire community and are mostly used during preaching.</p>	
<p>3. Shikhar</p>	<p>Similar to Dravidian architectural style, there is a vimana with a rectangular base in a barrel-vaulted form consisting of stepped stories. The most intricate carvings with temple-like Tamil cultural motifs may be found, particularly in Tirupathur. The vimana is a structure similar to towers is found here in this built form.</p>	
<p>4. Finial (Kalasam)</p>	<p>Here the vimana was made in gold. Here again, similar to typical Dravidian temple Tirupathur temple also has a vimana ending with a pot and finial.</p>	
<p>5. Dravidian Pillars/ Columns</p>	<p>The columns, pillars, that support the beams in the Hindu temple are tall, slender, free-standing structures.</p> <p>In Indian architecture, columns are categorized according to their cross section. According to Hardy (2007), the cross-sections span from circular to polygonal (faceted), square to scalloped (fluted), lobed, staggered, and stellate. The beam (uttara), or structural beam of the temple, is the top-most part of the column. The bracket (potikas) supporting the beams may be seen in the photo of Tirupathur. The brackets provide bearings for the beam and shorten the space between the columns.</p>	
<p>6. Gopuram (Entry)</p>	<p>The gopuram in Tirupathur is beautifully ornate and is an epic symbol of the Dravidian architectural style. In Tirupathur, the gopuram also hosts the bell tower and a cross on top.</p>	 
<p>7. Detailing</p>	<p>Most of the detailing resembles the characteristics of Dravidian temple architecture.</p>	
<p>8. Materials</p>	<p>Stones, materials were locally sourced, intricate, and ornate carving were done with workers who have designed Dravidian style temples in Chidambaram.</p>	

expressed in a language understood by the people, our oneness with them and our belief that whatever was beautiful and true in the past heritage of India should find its fulfilment and enrichment in the Kingdom of God.

They made sure this belief system was also physically manifest in the architecture of the chapel by incorporating Dravidian elements into its form without changing the basic formation of the church. This style slowly started spreading in and around the current Vellore district. It allowed people to follow Christ while maintaining the traces of local Hindu culture, which indicated the presence of the spirit of nationalism (Jaykumar, 2013). In search of religious identity and autonomy, they expressed their dissatisfaction over the missionaries which emphasized institutions like 'church' and started to wear the clothing of Indian *sanyasins* as adopted by Robert de Nobili and expressing their anguish towards Western ideologies.

All these ashrams (or chapels) were either part of a hospital complex, school or orphanages. In some cases, they were started before the complex was built and in a few cases, schools, etc. came later. Thus, the function and usage of spaces are similar and are open to the community. The spaces serve as an extension of the hospital or spaces, for meditation and prayer. It is also closely related to the community. For instance, they celebrate local community festivals like Pongal. In general, both the chapels and the attached institution are open to the surrounding, where people irrespective of religion or class pray at the chapel according to their affinities and traditional community beliefs about the power of worship in the chapel.

Introduction to indigenous Church ecclesiastical architecture in Tamil Nadu

Various examples of churches exhibiting native architectural expressions and styles are found to be scattered in different parts of Tamil Nadu. As part of our research work there were eight indigenous churches constructed in different time spans between 1921 to 1970 within Vellore and its environs. This is an ongoing research and for this article we have discussed one of the first Protestant ashrams popularly called as Christu-kula Ashram (see Fig.2) which was built in 1921 at Tirupathur in North Arcot, Tamil Nadu in South India. This ashram's aim is to promote equality between Europeans and Indians, and also to present Christian life and worship to Indians, aiming to align the Christian community with the presumed ancient Hindu idea of the 'ashram'. Gandhi was invited to this ashram and he seems to

have appreciated its remarkable endorsement of another religious ethos.

Elements of Dravidian Architecture

Figures 1 and 2 explain the elements of Dravidian temple architecture.

- *Gopuram*: This is the entrance of Hindu temples prevalent in South India. It is the most prominent and elaborate tower that stands at the entrance to a temple. It is topped by the kalasam, a round stone or finial made of metal (Vardia, 2008).
- *Garbhagriha or sannidhi*: It refers to 'the womb chamber' which is the sanctum or nucleus of the temple. The image or idol of the deity is kept in this core and innermost room of the temple normally facing east so that it is welcomed by the rising sun.
- *Shikara*: Also called the vimana, it is shaped like a pyramidal or tapering tower representing the highest mountain peak called 'Meru'.
- *Mandapa*: This is a pillared hall in front of the garbhagriha, is utilised by devotees as a gathering place where they sit, pray, chant, meditate and watch the priests carry out religious dances and other ceremonies.
- *Pradakshina patha*: It refers to the circumambulatory walking route around the garbhagriha. It consists of a corridor which may be enclosed or sometimes open. Devotees honour the temple god or goddess by circumambulating it in a clockwise manner as part of a devotion ritual.
- *Antarala*: It refers to the intermediate chamber or vestibule. It connects the temple's pillared hall and main sanctuary.
- *Kalasam*: This is a finial placed at the top of the towers of the Hindu temple.
- *Ardhamandapa*: This is the front porch or main temple entrance that leads to the mandapa.
- *Pitha*: It is the platform or plinth of the temple.
- Table 1 shows the Comparison of architectural elements of a Dravidian temple with a Christu Kula Ashram.

Conclusion

The Christu kula Ashram introduced new strategies like re-thinking everything in the light of theology through mysticism to suit the Indian context and to dissolve the alienation of western influence and create connect with the people (Jagadisan and Ziona, 2023). It was obvious that there was a strong sense of nationalism in India because Western theologians and Indian Christian leaders pushed people to criticize

the missionaries and western Christian doctrine while also attempting to indigenize it (Banerjee, 1982). The local artisans and craftsmen, who were skilled in the native techniques and building customs, assisted in the construction of these built forms of Dravidian Church architecture. The final result was an outstanding fusion of architectural styles and cultural variety that was the architectural representation of concepts taken from Dravidian architecture. As architects we tried to understand the syncretism in architecture with respect to Christian architecture in context of Tamil Nadu that needs to preserve, conserve and protect.

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Dr. Sharmila Jagadisan (A24813) has graduated from the University of Madras (1999), MCP (IIT Kharagpur, 2001), PhD (University of Auckland, 2009), MBA (2018). She is currently Professor at the School of Architecture, Vellore Institute of Technology (VIT), Vellore. Having 17 years of work experience as an architect and planner, she has focused on achieving positive outcomes for communities through inter-disciplinary thinking. She has been involved in teaching and research in the areas of urban planning, community development and Environment Behaviour Studies (EBS).

Email: sharmila.jagadisan@vit.ac.in



Ar. Selva Ziona B. is an architect and an urban researcher with over five years of experience in academia and inter-disciplinary research. She is currently Assistant professor at the School of Architecture, Vellore Institute of Technology (VIT), Vellore (IIA-Affiliated). With a Masters in Urban Management from CEPT University, she is involved in research of urban development. Her core interest includes housing and resettlement studies, Inclusive urban environments and urban cultural narratives.

Email: selvaziona.b@vit.ac.in



Aashika S.B. is in Fourth Year B.Arch. at VSPARC, Vellore Institute of Technology (IIA-Affiliated). Her interests lie in design and art, and in architecture through graphics, documentation, and management which are very evident in her projects. She explores how people and their interactions can shape and change the design of every space.

Email: aashika.2020@vitstudent.ac.in



Sakthilaya H. is in Fourth Year B.Arch. at VSPARC, Vellore Institute of Technology (IIA-Affiliated). Her academic interests lie in documentation and analysis. She hopes to understand the interplay between micro and macro factors, such as site-specific elements, cultural influences, and human behavior in shaping design and how design, in turn, influences these factors.

Email: sakthilaya.h2020@vitstudent.ac.in

Placemaking of Heritage Spaces: Case Study of Assi Ghat, Varanasi

By Ar. Ramneet Kaur

1. Introduction (Culture and Placemaking)

"Benares is older than history, older than tradition, older even than legend, and looks twice as old as all of them put together."

Mark Twain

There is a two-way relationship between culture and spaces. The cultural identity of communities is manifested in spaces in the form of traditions and histories. These spaces in turn define the culture (Morrison, 2018). The cultural identity of a community is inextricably linked to an individual's sense of engagement, belonging and appreciation of a 'place' (Association, 2017). Placemaking centres around the human-space association (Samir, 2019). The intention of placemaking is to inspire people to halt, appreciate and stay rather than rush through an area (Jelenski, 2017). Placemaking capitalizes on a community's unique assets, inspiration and potential with the intention of creating public spaces, places, events and activities that promote people's health, happiness and well-being (Project for Public Spaces, 2007). The goal of any place-making activity is to create a sense of security, safety, pride and ownership, all of which are important for community well-being (Tiwari, 2009). The concept of placemaking gained momentum with masters like Jane Jacobs and William H. Whyte focusing on the social and cultural prominence of lively neighbourhoods and inviting public spaces, thereby designing for people (Project for Public Spaces, 2007).

Ancient settlements have been observed to have a distinctive traditional settlement system that complies with the natural and cultural context of the period. In fact, the architecture of built spaces also took inspiration from nature and culture (Singh, 2020). One such settlement is Varanasi.

2. Parameters for understanding placemaking of Historic settlements in general and riverfront development in specific.

Placemaking in historic riverfront settlements is a complex process that involves balancing multiple parameters to create a vibrant and culturally rich environment. When prioritizing parameters for such projects, several factors should be given the highest priority due to their critical importance in preserving the historical significance of the site while enhancing its usability and appeal.

The following questionnaire framework provides architects with a structured approach to assess and understand the complexities of placemaking in historic places, with a specific focus on riverfront development. It allows for a comprehensive analysis that considers historical, cultural, functional and experiential aspects while respecting the site's unique context and significance. The framework has been developed following a detailed methodology involving rigorous literature reviews, discussions with stakeholders of the aforementioned case study, fieldwork and data analysis.

2.1 Context:

- What is the historical and cultural context of the site?
- How has the site evolved over time and what are its key historical milestones?
- Are there any significant cultural traditions or narratives associated with the site?

2.2 Access and Linkage Attributes:

- How accessible is the historic place from different parts of the city or region?
- Are there well-defined linkages and pathways that connect the site to its surroundings?



Fig. 1: Varanasi Development Plan 2011-31 (Singh, n.d.)

- c. How do these access and linkage attributes contribute to the site's integration with the broader urban fabric?

2.3 Multi-Utility of Space:

- What are the current and potential uses of the site?
- How can the design accommodate diverse functions and activities while respecting its historical significance?
- Are there spaces within the site that can be repurposed for different uses?

2.4 Informality:

- Are there informal or spontaneous activities and interactions that naturally occur within the site?
- How can the design embrace and enhance these informal aspects while maintaining order and safety?
- Are there opportunities for pop-ups or temporary installations that add to the site's vibrancy?

2.5 Security:

- What security measures are in place to protect the site and its visitors, particularly in the context of historical and cultural significance?
- How can security be balanced with the need for openness and accessibility?

2.6 Transition Spaces:

- Are there physical transitions within the site, such as from land to water or from one historical period to another?
- How do these transitions contribute to the overall experience and cultural setting of the site?
- Are there opportunities to enhance these transitional spaces?

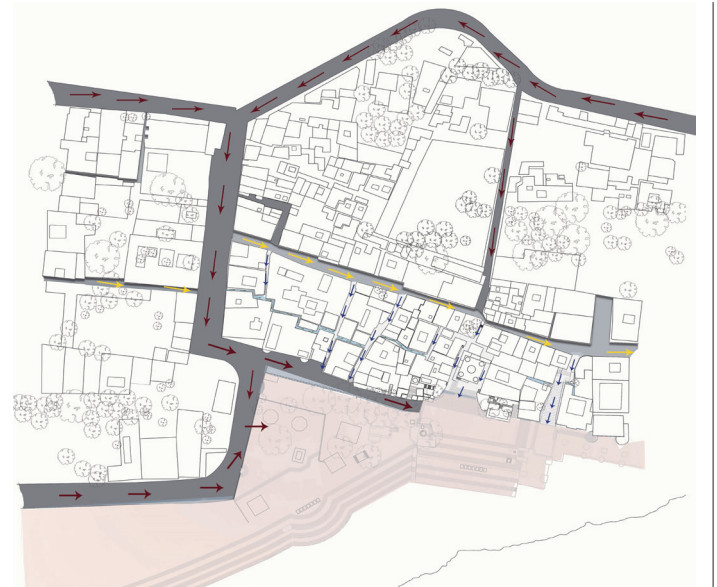


Fig. 2: Plan showing the alignment of streets to Assi Ghat at Varanasi (2B, 2018-19)

2.7 Kinetic Spaces:

- Are there temporary or kinetic spaces within the site that constantly evolve and reinvent themselves?
- How do these dynamic spaces engage visitors and add to the site's cultural richness?
- Can the design accommodate and encourage these kinetic elements?

2.8 Organic Form:

- How does the layout and form of the site respond to natural elements, historical layers and cultural influences?
- In what ways does the organic form of the site contribute to its timelessness and sense of place?

2.9 Legibility:

- Is the site's layout and design clear and easily navigable for visitors?
- How does the design help users understand the site's historical and cultural significance?
- Can the legibility of the site be improved to enhance the visitor experience?

2.10 Imageability:

- What distinctive visual elements, landmarks or features make the site easily recognizable and memorable?
- How does the site's imageability contribute to its identity and cultural setting?

2.11 Timelessness:

- How has the site adapted and endured over time while retaining its historical character?
- Are there architectural or design features that reflect both traditional and contemporary aspects, ensuring the site remains relevant and timeless?

2.12 Diversity:

- Are there permanent and temporary structures or activities that create a diverse urban fabric within the site?
- How does the interplay between permanent and temporary elements contribute to the site's diversity and cultural richness?

2.13 Celebratory:

- Are there cultural celebrations, events or rituals that regularly take place at the site?
- How can the design of the site accommodate and enhance these celebratory activities, fostering a sense of community and cultural pride?

3. Varanasi

Varanasi or Benaras, also called Kashi or Shiv Nagri (city of lord Shiva), is the oldest known living city in the world. What makes it exceptional in this regard is that despite layers of superimposition, alteration, and absorption, the peoples' culture has remained virtually untouched, with a strong thread of continuity over the eras (Rana, n.d.). The existence of Varanasi is directly connected to the river Ganga. Varanasi lies on the crescent side of the river Ganga. The Panoramic view of the city is defined majorly by ghats and the transitional activities being performed there at that point in time. Ghats themselves denote an eternal draw to the city. The portion of the city within 200 m from the riverbank east of the city, including ghats and temples, covering a length of 6.8 km, is earmarked as a heritage zone in the Master Plan of Varanasi 2011-31 (Singh, n.d.) (Fig. 1).

4. Riverfront Ghats

Ghats are transitional spaces between land and water. They have stepped edges to rivers that

prevent land flooding. Each ghat represents a unique associated historical, mythical, religious, traditional and spiritual significance.

The ghats of Varanasi symbolize the heritage of India due to intangible cultural implications. Ghats have deep-rooted religious implications whereby all rituals are initiated by a sacred bath on ghats and are concluded by a thanksgiving donation to riverfront priests (Singh, n.d.). Each ghat represents a unique associated historical, mythical, religious, traditional and spiritual significance.

Assi Ghat is the southernmost ghat of Varanasi, located on the confluence of river Assi and Ganga. The significance of Assi Ghat lies in the fact that here pilgrims take a bath before worshipping Lord Shiva (Editor, 2016).

5. Placemaking and Assi Ghat

Placemaking originated from the philosophy that a place is inherently tied to its culture and that diversity is to be appreciated (Jelenski, 2017). The focus of placemaking is on experience and the sense of living in the city.

Among the various ghats, a deeper investigation of Assi Ghat is carried out to comprehend the distinctive characteristics that describe the placemaking of the place.

5.1 Context: Culture connects stories by individuals into joint chronicles, resulting in connecting people to places. Narratives, historical references and connotations are salient features of heritage sites that give them a unique characteristic. These references are livable in Varanasi ghats where the physical setting ensures pilgrims and tourists



Fig. 3: Sketch of Assi Ghat drawn by a student depicting the occupancy and informality of space



Fig. 4: Plan depicting the alignment of commercial spaces along the route leading to Assi Ghat.

experience the cultural setting, thereby making the place significant.

5.2 Access and linkage attribute: Easily reachable public spaces have high placemaking value. Besides meeting the functional requirement of connecting places and ensuring mobility, streets also play a vital role in facilitating social interaction among users and thus providing prospects for cultural expression (Samir, 2019). The street network of Varanasi is such that all primary and secondary streets are oriented towards ghats. The road section is such that the transition from streets to ghats, overlooking the openness generated by the ghats and river Ganga, followed by unconstructed flood plains, creates a sense of relief and grandness at the same time. This instantaneously results in forming a connection of visitors with their surroundings.

5.3 Multi-utility of spaces: The steps not only act as a transition from city to river, but they also act as a

place for tourists to relax, devotees to pray, children to play and vendors to sell eateries. Transportation, economic activities, religious accomplishments and recreational performances, resulting in a heightened sense of safety for the users (Fig. 2).

5.4 Informality: Informality in space planning has been an essential feature in the Indian context. The connection between spatial and temporal dimensions brought about by the varied usability of ghats over different times of the day adds to the vibrancy. Functions on ghats change from economic to tourist to religious purposes; sometimes all being performed together make these ghats a vital organization of city fabric. Spontaneous situations and diverse activities result in the optimization of space utility (Fig. 3).

5.5 Security: The dark bylanes of Varanasi open towards the vastness of the river. The ghats act as a podium to the dramatic effect created by the

splendid river as a backdrop. The diurnal spatial practices ensure the ghats are interactive spaces throughout the day. The locals are early risers and set up the shops by 6 - 7 am. The vendors align their shops along major streets leading to the ghat and sell famous street food and chaat till midnight (Fig. 4). The streets, though crowded, are believed to be safe. The ghats are also observed to become more active post-sunset wherein the tourists gather in numbers for boat rides or for watching the aarti. Construction materials used for building ghats and surrounding spaces are large stone boulders or concrete that can withstand severe weathering caused by river flow, making it long-lasting and easy to access.

5.6 Transition spaces: The ghats as a typology are essentially a transition space between water and land. While walking down the ghats, there is a physical and spiritual transition experienced by a person before interacting with the river. Ghats are therefore transitional spaces between the Holy River and sacred land where the merger of sacred in the worldly atmosphere creates meaningful pauses in life (Fig. 5).

5.7 Kinetic spaces: Kinetic spaces are temporary in nature and constantly modify and reinvent themselves. These spaces are characterized by the establishment of strong human perception. The temporal spaces are created using materials such as bamboo frames erected over alcoves on the ghat edges, wooden platforms supported by bricks and shaded by jute cloth stretched over bamboo poles during daylight (Fig. 6). One may also want to draw attention to the morning and evening aarti at Assi Ghat. Besides the aarti procession, the material usage, informal layout and the resultant intangible

activities that evolve over the entire duration of the day intertwine to create impactful placemaking of ghats. There is always a newness to the ghats due to functional variations.

5.8 Organic form: The ghats in Varanasi run along the entire stretch of the city abutting the river. The interface of ghats has tangible forms such as temples, pavilions, kundis (tanks), streets, plazas and other public buildings on one hand and various layered and kinetic cultural interfaces on the other. Both these tangible and intangible interfaces are responsive to the river's flow. (Department of Landscape Architecture, 2014) Seasonal implications on rivers also modify the available spaces on ghats. This makes the entire environment very livable and an attraction to visit because the spaces constantly change. Ghats bring forth an evocative imagery of Varanasi.

5.9 Legibility: Kevin Lynch, in 'Image of The City', describes 'Legibility' as 'the ease with which city parts can be recognized and can be organized into a coherent pattern'. The ghats are engaging not only from land but also from the river where the panoramic skyline of temples and palaces with bastions and spirals at the upper level, balconies and fenestrations at mid-levels and steps and platforms at lower levels form a sense of rhythm and harmony in the built environment. The varying typologies are tied together by the layering of the built environment and the repetition of forms. The details of arched doorways, openings and jharokhas, resulting from the repetitive colour palettes, textures, and patterns, are tied together in such complex visual threads that it creates an iconic imagery of the city (Fig. 7).

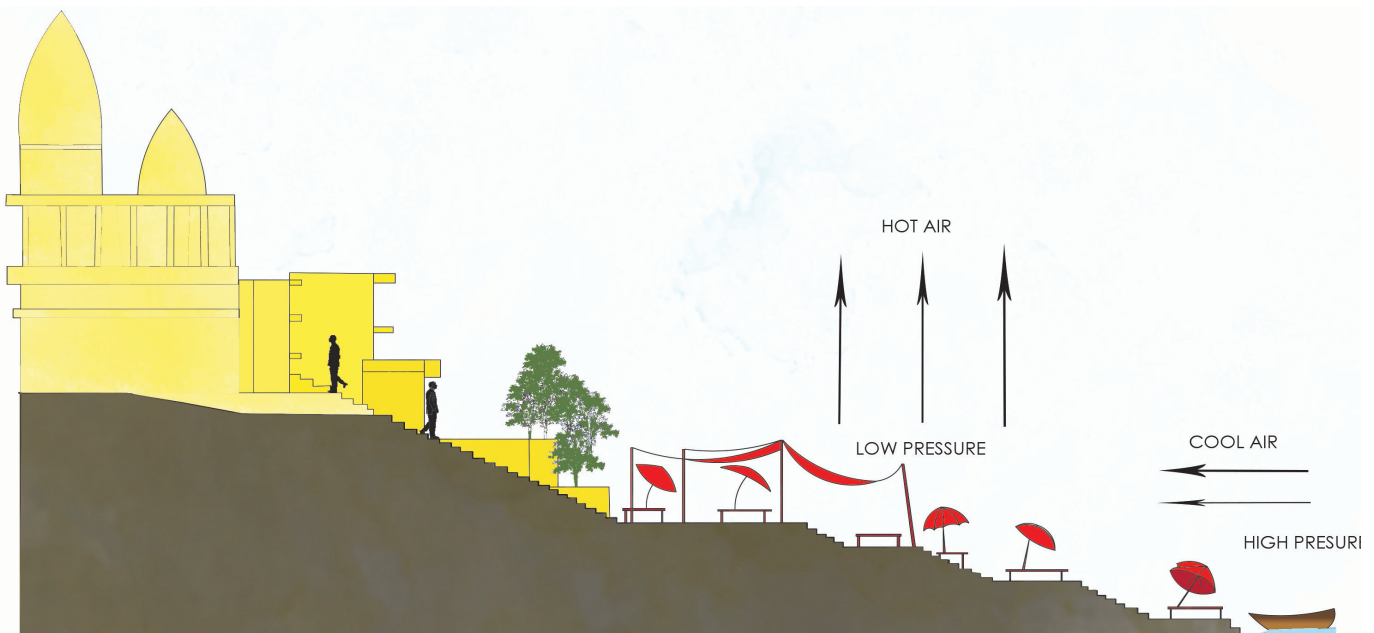


Fig. 5: Section depicting the transition of physical space between land and water (2B, 2018-19)



Fig. 6: Temporary material usage for providing shelter at Assi Ghat (2B, 2018-19)

5.10 Imageability: The interface of ghats has tangible spaces such as temples, pavilions, kunds (tanks), streets, plazas and other public buildings on one hand and various layered and kinetic cultural interfaces on the other. Both these tangible and intangible interfaces are responsive to the river's flow. Ghats are functional connectors at the edge of the river where the residents, tourists and pilgrims, arriving from narrow lanes of old Varanasi, perform rituals. They hold high imageability due to their visibility in entirety from the Ganga River.

5.11 Timelessness: The merger of traditional functions and spaces with contemporary commercial spaces on ghats creates an eclectic expression. The palace at Assi Ghat, constructed by Prabhunarayan Singh in the 18th century and popularly known as Ganga Mahal, is inspired by Rajputana architecture. The palace has the adapted function of a designer textile showroom on one floor and an Indo-Swedish study centre on top floors. Similarly, the existence of fast food joints overlooking the river Ganga at Assi Ghat (popularly known by the name Pizzeria) are visited by tourists for long hours.

5.12 Diversity: The permanent structures such as the fort and temple form a backdrop to temporary structures such as shops and site furniture. The volumetric comparison of these permanent structures, defining the skyline of ghats from river Ganga, is a stark contrast to the human scale volumes of the temporary structures, thus creating an interesting visual balance to the overall imagery of ghats (Fig. 8). Although the entire stretch of ghats is not continuous, their urban skyline, defined by palaces and temples, gives an illusion of continuity of the entire stretch, thereby creating a very strong sense of proximity of spaces.

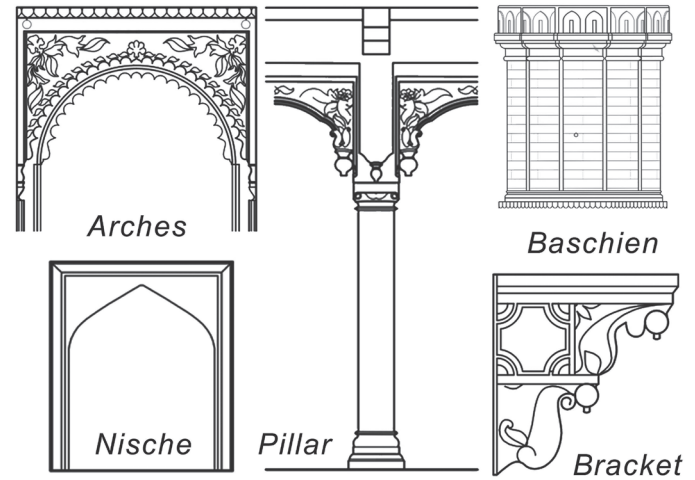


Fig. 7: Details of built spaces around Assi Ghat (Ganga Mahal)

5.13 Celebratory: Varanasi is popularly known as the city of festivals. With almost every day being a celebration, ghats provide a fully functional space to disciples for offerings and recreations. The rituals being performed on ghats involve all sensory perceptions - Visual, auricular, olfactory and tactile. The Ganga Aarti performed on Assi ghat is a major attraction for pilgrims and tourists during sunrise or sunset. Subah-e-Benaras is a socio-cultural program organized every day at the ghat in which artists sing, dance, and chant Vedic mantras, followed by yoga that reminds one of the rich cultural and traditional heritage of the city. Human activities and social interaction on ghats articulate the language of the built environment. Ghats act as an interaction space between visitors, local vendors, pilgrims and residents. The rich and vibrant public life is shaped by spatial practices that keep ancient traditional practices alive giving way to contemporary tourism and a source of employment to many.

6. Conclusion

The key findings of the paper are aligned towards understanding the placemaking values in the context of heritage places. These values inspire people to revisit the places. Public spaces called ghats that seem to have time-wrapped the culture and tradition of the place narrate a story that visitors and pilgrims interpret according to their own comprehension. These spaces have the potential to revive urban old practices. These identities can be interpreted to motivate contemporary settlements to intentionally absorb certain design principles.

By studying and applying the principles embodied by Assi Ghat, architects can contribute to the creation of spaces that not only serve functional purposes but also enrich the cultural fabric of a community.



Fig. 8: The volumetric comparison of built space in correlation to open spaces and ghats (2B, 2018-19)

Effective placemaking, as demonstrated by Assi Ghat, has the power to enhance the well-being and quality of life for residents and visitors alike, making it a vital consideration for architects and urban planners in their quest to shape meaningful and enduring environments.

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All the images and drawings in the paper, until and otherwise specified, are produced by students of Second year Section B (2017-18), School of Planning and Architecture, New Delhi in the Design Studio as part of the vernacular settlement study.



Ar. Ramneet Kaur (A18541) is an Associate Partner at ASP Associates. She currently provides BIM/Revit Consultancy to various architectural firms. She has previously taught at the School of Planning and Architecture, New Delhi in the capacity of Assistant Professor (Contractual). Her papers have been published at various International and National conferences and peer-reviewed Journals.
Email: ar.ramneetkaur@gmail.com

Whispers of Tradition

Komagal Anupama K

Tamil Nadu, a land steeped in cultural heritage, unfolds a fascinating tapestry of tradition, history, and community through its traditional spaces. This article embarks on a journey to unravel the psychodynamic influences that shape individuals' perceptions and experiences through the intimate realms of verandas, courtyards, and backyards in Tamil Nadu. These spaces, often overlooked amidst the bustling pace of modern life, carry the echoes of time, weaving together the threads of familial bonds, cultural practices, and personal memories.

The Veranda: Where Stories Unfold

In Tamil Nadu, the veranda is not merely an architectural feature; it is a space where stories unfold and generations come together. This study investigates the psychodynamic influences that shape the emotional landscape of verandas, exploring the interplay between architectural design, cultural practices, and personal connections.

Verandas, with their intricately carved wooden pillars and cool stone floors, serve as witnesses to countless familial narratives. Psychodynamic forces come alive in the memories etched in these physical structures, influencing the emotions individuals associate with the verandas of their homes.

Courtyards: A Canvas of Community Life

Courtyards in Tamil Nadu are more than open spaces; they are canvases where community life unfolds. This article highlights the psychodynamic influences that shape the communal spirit within courtyards, exploring how architecture, traditions, and interpersonal dynamics converge to create a unique psychological experience.

Courtyards act as hubs for social interactions, cultural celebrations, and rituals. The study ascertains how these socio-cultural dynamics influence individuals' psychological responses, fostering a sense of community, belonging, and shared identity within the confined boundaries of a courtyard.

Backyards: Nurturing Roots, Growing Memories

In the embrace of Tamil Nadu's traditional homes, backyards emerge as personal sanctuaries where nature intertwines with daily life. This section of the study brings to light the subtle, subconscious influences that contribute to the emotional resonance individuals experience in their backyards, from childhood play to quiet moments of contemplation.

Backyards, often adorned with vibrant plant life and sacred tulsi pots, become spaces where nature's influence intertwines with psychodynamic well-being. Understanding the impact of natural elements on individuals' psychological states sheds light on the importance of these spaces in fostering mental health and connection to the environment.



Figure 1: Aerial image of Chettinad
Source: Author



Figure 2: The Veranda
Source: Author



Figure 3: Courtyard
Source: Author



Figure 4: Backyard
Source: Author

Unravelling the Psychological Tapestry

The study involved a diverse sample, ensuring representation from different age groups, socio-economic backgrounds, and geographical locations within Tamil Nadu. This diversity is crucial for capturing the nuances of psychodynamic influences across various segments of the population.

Utilising qualitative research methods such as in-depth interviews, storytelling sessions, and participant observation, the study uncovers the intricate details of individuals' experiences in verandas, courtyards, and backyards. Participants were encouraged to share personal anecdotes, emotional associations, and cultural practices related to these spaces.

A Glimpse into the Emotional Landscape

Preliminary findings suggest that verandas serve as emotional anchors, connecting individuals to their cultural roots and familial histories. The carved pillars

and open spaces evoke a sense of nostalgia, fostering a deep emotional connection that transcends the physical structure.

Courtyards emerge as the heartbeat of community life, where psychodynamic forces shape interpersonal relationships and cultural practices. The communal spirit within courtyards contributes to a heightened sense of belonging and shared identity among individuals.

The study indicates that backyards, with their connection to nature, play a significant role in influencing individuals' psychological well-being. Participants reported a sense of calmness, connection to the environment, and opportunities for reflection within the confines of their backyard spaces.

Nurturing Tradition in Modern Spaces

The findings of this study offer implications for urban planning and architectural design. Recognising the psychodynamic influences of traditional spaces on individuals can inform the creation of modern environments that appreciate cultural heritage and foster a sense of connection and well-being.

Understanding the positive impact of natural elements in backyards on psychological well-being, calls for a reevaluation of urban spaces. Incorporating greenery, open spaces, and elements of nature in urban planning can contribute to mental health and a sense of harmony in the midst of bustling city life.

Weaving the Threads of Tradition into the Future

In unravelling the psychodynamic influences on people's perceptions of traditional spaces like verandas, courtyards, and backyards in Tamil Nadu, this study illuminates the intricate relationship between culture, architecture, and personal

experiences. These spaces, often overlooked in the pursuit of modernity, carry the whispers of tradition, providing individuals with a sense of identity, belonging, and well-being. As we navigate the evolving landscape of urban living, the lessons drawn from the psychological tapestry of these traditional spaces in Tamil Nadu serve as a guide to creating environments that honour the past while nurturing the well-being of future generations.



Komagal Anupama K (F22836) is doing her research in vernacular architecture and currently working as a professor at the Gopalan School of Architecture and Planning, Bengaluru. She did her M.A. in psychology. She is an Associate professional in the Indian Green Building Council. Her articles about alternative construction were published in various newspapers and magazines.

Email: anup_shots@yahoo.com

Harmonising Nature and Architecture

PYHT - BioArchitects

Ar. Areen Attari and Ar. Ayushi Motiwalla

In the bustling urban landscape of Mumbai, a silent revolution in architecture began in 2011 with the establishment of Put Your Hands Together BioArchitects (PYHT), an independent design studio founded by the visionary minds of ShivShera (Azeer Attari), Areen Attari, Shahveer Irani, Wasim Noori, and Mukund Iyer. Since its inception, PYHT

has embarked on a journey that transcends the boundaries of conventional design, becoming a testament to sustainable, community-centric, and collaborative architecture.

The narrative of PYHT's evolution is a tapestry woven with threads of innovation, commitment, and a deep understanding of the symbiotic relationship between



All the primary building material at Someplace, Manali, was harvested from the site itself. Here you can see some of the boulders in their nascent state juxtaposed with the common dining area made of stone.



One of the rooms at Someplace, Manali, showcasing larger windows towards the south for maximum heat gain.

architecture and nature. Architect Areen Attari, who shapes the studio's ideologies, has steered PYHT to emerge not merely as a design practice but as a philosophy—a commitment to redefining architecture's role in shaping communities and fostering sustainable living.

In its initial years, PYHT grappled with questions that many budding design studios face—how to carve a niche in a diverse and ever-evolving field and how to leave a lasting impact on the architectural landscape. The answer lay in a profound commitment to sustainability. The studio's early projects served as experimental grounds, where cob structures in Kamshet and traditional influences in Saguna Baug laid the foundation for what would become PYHT's distinctive signature.

The journey commenced in Kamshet, a modest second home for a family. Situated on a hillock adjacent to Uksan Lake, this endeavour embodied a commitment to an in-situ approach. The private spaces of the house were equally divided by the central common space to accommodate the two families collectively developing the house. To be true to the approach, the existing security cabin at

the site was adapted as one of the bedrooms. Using cob as the primary material, known for its natural breathability, PYHT conscientiously designed a space that would seamlessly dissolve back into the earth if ever demolished. Large overhangs were provided to combat the strong horizontal winds, and the spaces created were designed as decks and verandas to accommodate gatherings for the families. The slope of the site was utilised to position the underground water tank below the rear party deck. This project became the foundation, both metaphorically and literally, for PYHT's ethos of sustainability.

As the studio matured, so did its architectural language. The projects became not just structures but narratives that unfolded stories of connection, community, and deep reverence for the environment.

Saguna Baug, inspired by the traditional building styles of the region, showcased a refined approach to design—one that spoke to the land and its inhabitants. The cottage takes you through a series of transition spaces leading to the edge of a man-made pond. The front verandah welcomes you into the entrance porch, with inbuilt seating on either side. A brick jaali beyond the entrance door gives

a glimpse of the pond. The exterior walls of the utilities are made from stone, as it is the corner that faces the predominant direction of the monsoons. The sleeping space adjacent to the entrance lobby features 18-inch-thick adobe walls, which are load-bearing and regulate the atmosphere in the space. The door, windows, and roofing tiles are all recycled.

The seamless relationship between nature and structures by PYHT continued with the 3000 sq. ft. farmhouse located on a two-acre farmland in Khadavali, Maharashtra. The main living spaces were designed along a central axis that connects to the landscape and frames the view of the farm. All other private spaces—bedrooms, toilets, and the kitchen—were built around it. Entering through an enclosed courtyard, which serves as a transition space between the inside and outside, leads to the living room. This semi-open space frames the view, and both bedrooms and the living room open up completely to a swimming pool oriented towards the views of the farmland. The load-bearing walls, made of CSEB blocks manufactured on-site, keep the interior spaces cooler. The roof structure is fabricated with mild steel sections and finished with terracotta tiles on top.

As the studio embraced projects in estranged contexts like the mountains of Nashik, the narrative expanded beyond physical structures. It became a celebration of a lifestyle—a lifestyle defined by community, sustainability, and a belief that architecture is not just about creating spaces; it's about shaping a way of life. The quote from the PYHT book encapsulates this spirit: "It won't make an immediate difference, but it will start a conversation."

The site at Nashik, located deep within the mountains with no road for the last kilometer, is reached by a short trek. The walk leads to the highest point on the site, where you can view the valley beyond. This vantage point planted the first seed of the design concept. Stepped in a form one behind the other, the three guest cottages all view the valley over the green roof of the cottage in front of it. The flat green bamboo roof merges with the landscape of the mountains beyond. The client's house, placed between two large trees, is also set into the contour and is stepped on two levels, creating a terrace for the upper level. The rear and two side walls are made from stone and are the retaining walls. The stone sourced from a demolished house in Deolali—a quarry 0.5 km away from the site—formed the corners for the cottages. The front wall, facing the



The two linear bamboo and timber structures at GoodKarma Farms, Alibaug. The larger unit is a common processing area, and the smaller unit is an ensuite room.



The smaller unit of GoodKarma Farms, Alibaug.

valley and housing all the openings, is made from earth in a technique known as cob. The earth used for this was procured from the excavation of the contours. The doors and windows are all recycled.

PYHT's foray into regions like Manali and Alibaug was a testament to its adaptability and sensitivity to diverse terrains. The projects, conceived amidst diverse contexts like snow-clad peaks and among monsoon-rich organic farms, reflected an understanding that architecture is not a one-size-fits-all endeavour.

The first visit to Manali was during the winter, with three feet of snow. It was the studio's first project in this climate. After spending months preparing the designs and understanding the challenges of designing in the extreme climate, PYHT knew they had to use the boulders on-site to create the building blocks for the design. Intuition, fine-tuned with past experiences, guided them to use stone. Intuition, followed by reason, led to the design. The site is situated in a valley surrounded by snowy peaks on a one-acre plot of an apple orchard. From the first moment on, the decision was made to build small buildings dispersed in the small clearings on the site. This preserved the mature apple trees and provided a greater sense of privacy.

Keeping the visit aside, all that could be thought about was the warm bed back in the hotel. This exact feeling of longing for warmth became the concept of the design. The aim was to connect the guest with the landscape while providing a warm interior for a peaceful and cosy experience. There was no mud on this site that could be used for construction. The site

was filled with huge boulders and a generous apple orchard. The proposal was to break the boulders and use the stone for construction. Originally, the plan was to explore Manali's traditional construction style, called Kath Kuni. The walls are made of dry stone masonry and timber beams that alternate without the use of mortar. Traditionally, these structures sit on high stone plinths and have been withstanding tectonic tremors for decades. Since timber is one of the primary materials in this style, and over time the extent of Kath kuni is diminishing in Himachal Pradesh, PYHT shifted to a more recent native practice of using the stone from boulders found in the area.

While in Alibaug, internal socio-political issues necessitated a rethink of conventional construction timelines. PYHT responded with innovation, proposing a bamboo structure designed for prefabrication—a symbol of the studio's adaptability and commitment to finding solutions that align with its principles.

Nestled in the interiors of Alibaug, the project site remains secluded, surrounded by farmlands and mountains. The architectural language of both structures is subtle, coherent, and designed to respond to the climatic and topographical conditions. Two-way sloping roofs with large overhangs, raised floors, and six-foot-deep verandahs on all four sides ensure minimum heat gain while offering maximum protection against torrential rain. The wattle and daub wall panels, made of split bamboo and timber frames, are mud plastered to keep the interior atmosphere cool, while ventilators in the roof allow hot air to escape freely, making the structures breathable in the hot and humid climate of Alibaug. The farmhouse was built to accommodate a habitable facility for the organic farm, and a bamboo structure was suggested. Due to internal socio-political issues at the Alibaug site, the farmhouse had to be built in a minimal amount of time. A system to prefabricate this farmhouse was developed, with the structure deliberately kept simple and modular to concentrate on perfecting the prefabricated system.

The home in Titwala is placed on top of a small hill overlooking the client's farm. The view of the farm was key to the planning of the home. Framing this view are two blocks that hold the enclosed space: kitchen dining in one, office in another; two bedrooms on the first level. These blocks are connected with a passage perforated with a terracotta jaali and also house the main entrance and the staircase to the first level. Attached to this passage is an open dining space designed like a large verandah that



The pondhouses at Saguna Baug Agro Tourism Centre, Neral, Maharashtra. The structures are made using CSEBs (Compressed Stabilised Earth Blocks).



Interior view of the pond houses showing the Rohtak Brick Domes as mezzanines.

overlooks the farm. When it comes to designing homes, a three-dimensional play of masses and voids is appreciated. This 2 BHK layout was expanded by including the landscape within the circulation of the house. The house was divided into two masses separated by the entrance verandah, allowing for an open circulation. Since rammed earth was used, the structure naturally seemed heavy. Breakout points in the planning added porosity to the otherwise compact volume of the space. From the bottom up, the house is supported by stone foundations with mud mortar, rammed earth walls, terracotta jaalis, concrete filler slabs, and a Mangalore tiled roof. The filler slabs and mud mortar in the foundations allowed for keeping the cement composition at its minimum. With the abundance of earth on-site and the feasibility of working with rammed earth after cob and adobe, it became the primary material for the home. The terracotta jaalis were introduced to balance the monolithic mass of the rammed earth panels and complement the porosity included in the planning of the house, allowing soft diffused light and wind into the larger spaces.

Beyond these architectural compositions, PYHT's journey extended to Nepal, a chapter in their novella of impact. Post-disaster rehabilitation wasn't just a project; it was a collaborative venture, constructing bamboo homes and empowering communities with construction knowledge. In Gujarat, PYHT penned another chapter, contributing to community research projects that shaped policies like PMAY (then IAY).



The Nirvana Peace farmhouse, on the banks of the river Bhadsa in Khadavli, Maharashtra. The project was done using CSEBs.



The Nirvana Joy farmhouse, which is an annexe of the former, is on the banks of the river Bhadsa in Khadavli, Maharashtra. The project is done using CSEBs



External view of the Jalmanjar Farmhouse on the outskirts of Ahmedabad. The jaali wall is meant to cool the house down as it acts as an external skin.

This wasn't just research; it was engagement, an active participation in shaping the narrative of community living.

Today, as you delve into the rich narratives of PYHT, the engagement extends beyond appreciation for architecture. It's an invitation to celebrate sustainable design and to connect with a community that resonates with the principles of natural materials, community engagement, and hands-on work. In the vibrant tapestry of architecture, PYHT stands as a unique thread, weaving together sustainability, innovation, and community. PYHT's legacy is a living story, an ongoing melody that resonates in the structures they craft—a testament to the transformative power of architecture, where each project isn't just a creation but a lyrical journey, a narrative in the continuous essay of Indian architecture. As PYHT navigated the intricate dance between innovation and tradition, each project became a verse, contributing to a narrative that extends beyond architectural blueprints. It became an exploration of how structures can weave into the fabric of the environment and the communities they serve. The journey wasn't a linear progression from one location to another; it was a dynamic interplay of ideas, materials, and contexts.



Internal view of the Jalmanjar Farmhouse on the outskirts of Ahmedabad

All images courtesy: Authors



Ar. Areen Attari (Applied for IIA membership) is a co-founder of Put Your Hands Together Bio-Architects. Since 2011, he has been teaching at various colleges in Mumbai. He has been involved in a lot of community projects with his team. He has conducted various natural building workshops in the past and continues doing so. Areen brings all the optimism to PYHT; his jovial personality, positive spirit, humility, and love for art translate directly into his designs. Areen enjoys building and working with his hands, especially when it comes to bamboo.
Email: areenattari@gmail.com



Ar. Ayushi Motiwalla, also a writer, is a budding talent in the field of community architecture with a flair for words. She is the co-founder of GrassrootED, a development practice blending the verticals of design, education, and rural infrastructure. Using humane and empathetic processes, her works in the sphere are spread across Karnataka, Maharashtra, and more. Along with her practice, she is also conducting project development for campus expansion at Anant National University.
Email: ayushimotiwalla@gmail.com

Regularisation of Unauthorised Constructions

A Debatable Issue

M. Pratap Rao

In recent times, building regularisation has become rampant in urban areas in India. This article tries to discuss various issues involved and pertinent issues to be resolved.

Building bye-laws are meant to regulate growth within urban areas. Building construction can be broadly classified into:

1. Buildings approved by competent authorities.
2. Buildings not approved by competent authorities.

There is a general understanding among the people that there are a large number of unauthorised constructions, which include not only unapproved buildings but also deviations from the sanctioned plan. This led to the idea of building regularisation.

1. Purpose of Building Bye-Laws

- 1.1. Allow privacy between neighbours and reduce property disputes.
- 1.2. Give adequate room for emergency vehicles between and around the properties.
- 1.3. Helps in the proper utilisation of space.
- 1.4. Prevent haphazard growth and facilitate the planned development of urban areas.
- 1.5. Protect people from fire, noise, health hazards, and structural failures.
- 1.6. Provide access for workers to deal with power, water, and communication lines.
- 1.7. Provide guidelines to architects and engineers

for the proper design of not only buildings but the built environment as well.

- 1.8. Provide health, safety, and comfort to people living within the buildings.
- 1.9. Provide open space for recreational activities and landscape design.
- 1.10. Provide space for regular maintenance work on the buildings.

2. Unauthorised Construction

There may be several legal interpretations of “unauthorised construction,” but in India it means the erection or re-erection, addition or alternation that is not approved or sanctioned by the competent authority. The concerned competent authority can take suitable action against any unauthorised construction, which may include demolition of unauthorised works, sealing of premises, prosecution, and criminal proceedings against the offender in pursuance of relevant laws in force. The following are examples of unauthorised constructions:

1. Buildings deviating from the sanctioned plan issued by the competent authority.
2. Poor people occupy vacant land, which develops into colonies known as ‘slums’.
3. People purchase plots with unapproved layouts and construct buildings.
4. People construct buildings on lands whose title may be in dispute.
5. People encroach on and construct buildings in open spaces like parks and playgrounds.

3. Need for Building Regularisation

Land being a state subject in the constitution, several states like Delhi, Karnataka, Andhra Pradesh, Telangana, and Gujarat came up with building regularisation schemes. The general rationale extended by all these state governments for the regularisation of unauthorised construction is

“A large number of unauthorised layouts and buildings are cropping up in all urban areas in contravention of building regulations, and demolition was not the solution to this problem, so it is proposed to regularise the unauthorised constructions.”

3.1 Measures that can be taken for building regularisation

- a. Bring all the unauthorised construction into the planning fold to regulate the development in urban areas.
- b. Penalty on each and every unauthorised building or building deviations from the sanctioned plan to intimidate against any such practice in the future.
- c. Provide an opportunity to the owners of the buildings to regularise their unauthorised constructions and deviations from the sanctioned plan within a stipulated time period.
- d. Provide relief to people who purchased buildings without any knowledge about the building regulations.
- e. In cases of non-compliance, all unauthorised constructions that are not regularised within the cut-off date are liable for demolition; the supply of water or electricity is likely to be disconnected without notice, and persons who made such constructions can be evicted in accordance with the relevant law.

3.2 Constructions that cannot be regularised

The designated authority should not regularise the construction of the following types:

1. Which come in the way of existing or proposed roads and railway lines, communications, and other civic facilities or public utilities
2. Which are on forest land or on tank beds.
3. Which are in restricted zones.
4. Which are on the land occupied by the graveyards, burial grounds, and crematoria.
5. Which are not in conformity with the relevant prevailing acts in the area.
6. Which are not permitted in obnoxious and hazardous industrial zones.
7. Which are on any land reserved for parks, play

grounds, open places, or for providing any civic amenities.

8. Which are on land belonging to or controlled by the state or central governments.
9. Which are on land belonging to another person over which the former has no title.
10. Which are on the land belonging to or vested in any competent authority.
11. Which are hazardous.
12. Which violate parking regulations.

4. Case of Telangana State

It would be interesting to know how Telangana State addressed the problem of unauthorised construction through the online self-certification process. The state passed the ‘Telangana State Building Permission Approval and Self-Certification System (TS-bPass) Act 2020’ to provide speedy approval of layouts and building permissions in a transparent and time-bound manner and strict enforcement against unauthorised developments and constructions in the state of Telangana. Some major features in this context are:

- 4.1 Occupancy Certificate: The Occupancy Certificate is mandatory for all buildings. The owner shall submit a notice of completion through the registered architect and licenced builder/developer, along with prescribed documents and plans, to the sanctioning authority (*online*). No person shall occupy or allow any other person to occupy any building or part of a building for any purpose unless such building has been granted an ‘Occupancy Certificate’ by the sanctioning authority.
- 4.2 In the case of non-high-rise buildings constructed in plots above 200 square metres and less than 500 square metres, the ‘Occupancy Certificate’ will be issued online based on the self-certification submitted by the owner or builder in the prescribed proforma duly attested by the Licenced Technical Personnel (LTP), stating that the building has been constructed as per the sanctioned plan and as per rules and regulations in force.
- 4.3 The onus to ensure the authenticity of the self-declaration and compliance with the self-certification lies with the owner, applicant, and Licenced Technical Personnel. They shall all be held personally responsible and accountable. In the event of a false declaration, the owner, applicant, and the Licenced Technical Personnel will be liable for punishment as provided in Section 9. (The *onus to ensure the authenticity*

of the self-declaration and compliance with the self-certification lies with the owner, applicant, and Licensed Technical Personnel. He or she will be held personally responsible and accountable in case of false declaration. The applicant and the Licensed Technical Personnel will be liable for punishment, which includes imprisonment up to three years, levy of penalty, demolition, or taking over or sealing of the property without any notice, besides cancelling the licences of License Technical Personnel (LTP) and forfeiting the mortgaged plots in case of layout or the mortgaged built-up area flats in case of buildings.)

- 4.4 In the case of high-rise buildings and buildings constructed in plots of 500 square metres and above, the applicant shall submit online self-certification in the prescribed proforma duly attested by the Licensed Technical Personnel, that the building has been constructed as per the sanctioned plan and as per the rules and regulations in force. Based on the self-certification, the 'Occupancy Certificate' and mortgage shall be issued within 15 days from the date of receipt of the application.
- 4.5 The onus to ensure the authenticity of the self-declaration and compliance with the self-certification lies with the owner, applicant, and Licensed Technical Personnel. He or she will be held personally responsible and accountable. In case of a false declaration, the applicant and the Licensed Technical Personnel will be liable for punishment, which includes imprisonment up to three years, levy of penalty, demolition, or taking over or sealing of the property without any notice, besides cancelling the licences of License Technical Personnel (LTP) and forfeiting the mortgaged plots in case of layout or the mortgaged built-up area flats in case of building.
- 4.6 The government may constitute a special task force at the district level or Greater Hyderabad Municipal Corporation (GHMC) level to detect and monitor unauthorised constructions and take timely enforcement action in the prescribed manner.
- 4.7 Upon detection of construction or reconstruction of any building which has been commenced without obtaining the permission of the Commissioner or carried out or completed otherwise than in accordance with the sanctioned Master Plan, Detailed Town Planning Scheme, or Local Area Plan, or in breach of any of the provisions of this Act or any rule, regulation, or bye-laws made under this Act, the

Commissioner or the Agency authorised by him shall take up the demolition of the unlawfully executed work and recover the cost incurred from the owner.

- 4.8 The Registration Authority shall not register any building, structure, or part of a building without the production of a sanctioned plan approved by the municipality.
- 4.9 The electricity and water supply connection shall be given to buildings that have obtained the necessary authorization in the manner as prescribed.
- 4.10 During the construction of the building, the owner or builder shall upload photographs at different stages of the construction as prescribed.
- 4.11 Whenever a complaint or case is brought by any citizen regarding the unauthorised construction or constructions in deviation from the sanctioned plan, it shall be examined within a week of its receipt and necessary action initiated.

5. Pertinent issues to be resolved

Legalisation of illegal construction sets a wrong precedent. The government may announce cut-off dates to legalise construction, but in reality, the deadline is always extended. Sincere implementation of building bye-laws is the only way to plan and organise the development of urban areas. Periodic revision of building bye-laws and plugging the loopholes help for better implementation to improve the built environment. The local municipalities and corporations can collect 'Development fees' to improve the basic services in slums and low-income housing colonies because unhygienic conditions may spread contagious diseases. If the political parties in power persist with building regularisation periodically for any reason, building bye-laws will become redundant over time. State governments should not encourage building regularisation under the guise of mobilising funds to improve physical and social infrastructure. The threat of dismantling unauthorised constructions will not work for a long time because people will become immune to such notices. It is also considered that the dismantling of buildings is a waste of precious natural resources. Building bye-laws and building regularisation are not complementary but contradictory in nature. In the name of ground reality, if the state governments adopt building regularisation, then the following three pertinent questions need to be addressed:

1. Once a last and final date is given by the state government for building regularisation, is it legally appropriate for the same state

government to enforce another new last and final date (*after a new government is formed*) for building regularisation?

2. What is the relevance of building bye-laws when violators are enjoying more floor space and better facilities by paying a prescribed compounding fee?
3. Why should the common person follow building bye-laws when buildings can be regularly regularised by the ruling governments for their convenience?

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M. Pratap Rao (A06174) is a well-qualified practicing architect-planner working in Hyderabad, Telangana State, with thirty years of experience in the field of architecture and urban planning. He obtained a bachelor's degree in architecture from Jawaharlal Nehru Technological University, Hyderabad, in 1977, and a master's degree in urban and regional planning with a first rank and gold medal from the University of Mysore, Mysore, in 1981. He was given the Research Award for Excellence in Architecture by the Indian Institute of Architects in 1991; the Vastu Shilpa Foundation Fellowship, Ahmedabad, in 1995; and the Sir M Viswesvarayya Prize of HUDCO for disaster-resistant housing in 1999. He is an Associate Member of the Indian Institute of Architects and the Institute of Town Planners, India. *Email id: mprataprao@gmail.com*

Need for a Continuing Education Programme

By Ar. Keshav Chikodi and Ar. Uday Satavalekar

Continuous learning is the minimum requirement for success in any field.

Brian Tracy

An architect in Bharat goes through five years of formal learning in architectural school and gets registered with the 'Council of Architecture'. An internship is an integral part of architectural education that allows architectural students to gain relevant skills and experience. Young architects continue their learning experience and gain valuable practical knowledge while working with practising architects. For the majority of architects, this graph of learning peaks at a point, and learning or updating one's knowledge starts taking a backseat. Practising architects get so engrossed in their routine professional lives that they forget to update their knowledge and skillsets.

In the USA, Licensed Architects must earn continuing education credits each year to fulfil American Institute of Architects (AIA) membership requirements and may also need to complete continuing education requirements to renew their state license(s). AIA measures continuing education in Learning Units (LUs). One hour of continuing education earns one LU. Continuing education credits can be gained by attending virtual courses, in-person conferences and events or peer-to-peer learning through knowledge communities that offer webinars and in-person meetings throughout the year. AIA Architect and International Associate members are required to complete 18 LUs from registered AIA/CES providers each year. Of the 18 LUs, 12 must be in the topic areas of Health, Safety and Welfare (HSW). Architect Emeritus members are required to complete one LU annually. Associate members are not required to meet a minimum number of hours but are

encouraged to take continuing education courses to advance in their careers and professions.

Members of the Royal Institution of Chartered Surveyors (RICS), London, have to complete a Continuing Professional Development (CPD) activity of 20 hours every year in the form of formal and informal CPD. Formal CPD can be any form of structured learning that has clear learning objectives and outcomes. Learning that includes an assessment measure and informal CPD is any self-managed learning that is relevant or related to a member's professional role.

In Bharat, the Continuing Education Programme (CEP) is already being implemented by some professional organisations, like the Practising Valuers Association of India (PVAI). PVAI organises the annual Continuing Education Programme (CEP) / Continuing Professional Education (CPE) for its members. In August 2023, the association hosted its 23rd annual CEP in Bhubaneswar. Completing CEP is mandatory for PVAI members.

With effect from February 1, 2019, only registered valuers with the Insolvency and Bankruptcy Board of India (IBBI) can undertake valuation under (i) the Companies Act, 2013 and (ii) the Insolvency and Bankruptcy Code, 2016. For the continuous professional development of its members, the Registered Valuer Organisation (RVO) organises Continuing Professional Education (CPE) as a planned and systematic attempt to introduce, review, or alter the competencies and thereby improve the performance of valuation professionals. This meets the post-registration professional development needs of a practising valuer. A registered valuer is



Lunch and Learn session 1: Ar. Vijay Pandey explaining the project Durga Imperial, Kalyan



Lunch and Learn session 2: Ar. P.S. Gokhale giving information about the project Yash Gymkhana, Dombivli



Lunch and Learn session 1: STP Plant visit along with STP Consultant Mr. Keshav Myakala



Lunch and Learn session 1: STP Plant visit along with STP Consultant Mr. Keshav Myakala

required to complete 16 credit hours annually and update his or her skills and knowledge continuously by undertaking CPE to remain relevant to the needs of the market. The IBBI and RVOs, in their regulatory roles, ensure that the valuers continuously unlearn, learn, and relearn and provide opportunities for such learning.

Continuing education in Bharat for registered architects is not mandatory for renewing registration with the Council of Architecture, or renewing or keeping membership active with the Indian Institute of Architects. Architects do attend seminars, workshops, conventions, etc. to update their knowledge and skillsets, but there is no formal continuing education programme. Also, many times these programmes are organised at the chapter and national level, and it may not be feasible for every member to attend such programmes. So, the IIA Kalyan Dombivli Centre decided to offer continuing education opportunities by organising learning sessions coined 'Lunch and Learn' every month for its members.

The first lunch and learn session involved a visit to a sewage treatment plant in Durga Imperial residential cum commercial project designed by our member, Ar. Vijay Pandey. This session also included an interactive session with the STP consultant for the project, Mr. Keshav Myakala from Samruddhi Waterworks Pvt. Ltd. This session gave members information about different types of STP plants, design guidelines, space requirements, the percentage of STP plants that have to be kept open-to-the-sky, noiseless and energy-efficient STP, new National Green Tribunal (NGT) norms and regulations, etc.

This session was followed by another lunch and learn session, which included a visit to 'Yash

Gymkhana' in Dombivli, designed by our member Ar. P. S. Gokhale regarding design considerations for a hospital and recreational facility. The client had given a challenging and contradictory design brief for clubbing recreational and healthcare facilities in one structure. So, Ar. Gokhale explained to everyone how he managed the client's requirements by creating zones in the building and separate entry and exits. The ground floor has recreational activities like a swimming pool, badminton court, indoor games, etc., and healthcare facilities have been planned on the upper floors of the building.

The centre has set a goal for all members to achieve at least 12 learning units in a calendar year. The sites chosen for these lunch and learn sessions are in close proximity to the Kalyan Dombivli area, where the majority of the member Architects have their offices. So it is very convenient for members to attend these lunch and learn sessions. Also, the projects chosen for these sessions are designed by members who can take pride in showcasing their projects. IIA KD Centre is giving continuing education certificates to all participating members. The basic idea behind these lunch and learn sessions is to give convenient opportunities to all members of the centre to update their knowledge and skillsets, as that is the key to success.

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Ar. Keshav Chikodi (A-13515) is the Chairman of IIA Kalyan-Dombivali Centre (2023-2025). He graduated from the Academy of Architecture, Mumbai, and did his M.Arch. from the University of New Mexico (2001). He is empaneled with banks and financial institutions as an architect valuer and has won several design competitions, including ARCI, Hyderabad (GOI), and the Science and Innovation Activity Centre at Amravati, Maharashtra. He has also been invited to speak as a guest speaker by various colleges and professional organisations. He has been the secretary of the IIA KD Centre (2020–2023).

Email: chairman.iiakdc@gmail.com



Ar. Uday Satavalekar (A-20417) is the Secretary of the IIA Kalyan-Dombivali Centre (2023-2025). He graduated from Pune University and has over 25 years of experience in the construction industry. He practices, especially in KDMC and surrounding areas. He has been an Executive Committee Member of the IIA KD Centre (2020–2023).

Email: jhs.iiakdc@gmail.com

सबका खून एक समान है!!

डॉ. के. के. अस्थाना

उन्होंने तीन परख नलियां दिखाई।।
सब में,
इन्सान का खून होने की बात बताई।।
उन तीनों में
कौन सा खून राम का था,
कौन सा रहमान का, और कौन सा जार्ज का था,
कोई बता न पाया।
तब उन्होंने समझाया।।
कि न तो कोई हिन्दू है,
न मुसलमान है।
सबका खून एक समान है।।

यह प्रतीक,
आम आदमी के लिए
तो ठीक था।
मोटे तौर पर,
कविता हेतु सटीक था।।
पर यह बात
एक डॉक्टर को भा गई।
ठीक से समझ में आ गई।।

अगले ही दिन उसने,
अपने ब्लड बैंक से
ब्लड ग्रुप के टेस्ट की सुविधा
हटा दी।
अपनी फीस भी घटा दी।।
अब वह
एक इन्सान का खून लेता।
दूसरे को चढ़ा देता।।

बिना मैच किये दो खून,
एक दूसरे को सह न पाते।
गुत्थमगुत्था हो- क्लॉटिंग करते,
थक्के बनाते,
और उस इन्सान को,
स्वर्गलोक पहुंचाते।।

यह देख कर,
खून ने खुद
डॉक्टर को पास बुलाया।
धीरे से समझाया।।
हम खून हैं, इन्सान नहीं हैं।
सिर्फ रंग और रूप,
हमारी पहचान नहीं हैं।।
हमारे खानदान में,
बी, एबी, ओ और ए नाम के
चार परिवार हैं।
इनके पॉजिटिव
और निगेटिव को मिलाकर
हमारे आठ प्रकार हैं।
इन आठों के अपने गुण हैं,
तो अपने विकार हैं।।
ए भले ही बी से
घुलमिल नहीं पाता है।
एबी सिवाय एबी के,
किसी के काम नहीं आता है।।
ओ निगेटिव,
कुछ ज्यादा ही दानवीर है,
इसका सब कुछ

दूसरों को अर्पित है।
पूर्णतया भलाई को समर्पित है।।

इतने भारी अंतर के बाद भी,
खून के आठों प्रकार,
एक साथ आराम से रहते हैं।
इतना जरूर है,
कि सब अपनी अपनी हृद में,
और अपनी अपनी
धमनियों में ही बहते हैं।।

तुमने बिना तथ्य पर ध्यान दिए,
नारा उछाला है।
कितना सतही भ्रम पाला है।।
कि न कोई हिन्दू है,
न मुसलमान है।
सबका खून एक समान है।।

वास्तव में,
सबका एक अलग वजूद है,
एक अलग पहचान है।
हालाँकि हीमोग्लोबिन की तरह,
सब मे मानवता एक समान है।।
पर हरेक के विश्वास

और पूजा पद्धति का
आरएच फैक्टर जुदा है।
किसी का आरएच फैक्टर
भगवान् है,
तो किसी का क्राइस्ट,
और किसी का खुदा है।।

खून के यह आठ प्रकार,
हमें सिखाते हैं।
जीवन का
बड़ा गूढ़ रहस्य बताते हैं।।
कि चाहे दो व्यक्ति हों,
या दो समाज,
जिन दोनो को भी साथ रहना है।
उन्हें, एक दूसरे को सहना है।।

इसलिए, खून की तरह,
एक दूसरे के
आरएच फैक्टर को जानें।
उनके मूलभूत भेद को पहचानें।।
साथ साथ तो रहें,
पर थोड़ी दूरी भी बनाएं।
बिना मतलब,
एक दूसरे की रगों में न समायें।।



Dr. K.K. Asthana (F08121), graduated in 1982 from the University of Roorkee (now IIT Roorkee) holds a doctorate from Dr. APJ Abdul Kalam Technical University, Lucknow. He is the former Chief Architect of PSU of the Uttar Pradesh government. Besides having numerous important buildings of UP and Uttarakhand, including the High Court of Judicature Allahabad, Lucknow Bench to his credit, he has also authored three books. He is the recipient of the prestigious Harishankar Parsai Award for his last book. He is a well-known name in contemporary Hindi literature. He is at present a Member of the National Council of IIA.

Email: kkasthana@hotmail.com

Repurposing Abandoned Mines for Tourism Experience

Eco-mine Tourist Centre at Chandrapur, Maharashtra

By Shradhha Waikar and Dr. Vasudha A. Gokhale

Abstract

Coal is one of the most essential resources of a country, widely used for power generation and as an industry raw material. India ranks third in coal production, however, coal production is declining and several underground mines are closed every year. There are more than 290 abandoned or closed coal mines in India. In the closure of the mines, many people lost their livelihood. Mining does not mean permanent loss of land for other uses; on the other hand, it holds the potential for altered and improved use. The government of India and the Maharashtra State government are promoting the reuse of abandoned mines for tourism. This B.Arch. dissertation proposes an eco-mine tourism centre on an abandoned mine at Chandrapur, a mining site in Maharashtra. The proposed project has three pronged functionalities; first is to repurpose an abandoned mine, provide opportunities for visitors to experience and learn about mining heritage and activity and third is to provide a source of income for locals with tourism and allied activities. The project aims to be an exciting tourism destination portraying the glorious history of the Indian mining industry, providing a unique experience of coalmines for tourists looking for new sensations.

Keywords: mines, abandonment, opencast, eco-mine tourism, sustainability.

1. Introduction

Mining minerals is one of the economic sectors in many countries, employing large numbers of people, leading to a specific mining culture. However, the modern form of industrialization is rapidly transforming mining areas, with mines closing at short notice. The mining industry is considered a significant contributor to a nation's economy, but the material remains from the mining activities were seen as unattractive features of the landscape for a long time. Efforts to remove any traces of mining are more common than preserving and reusing them (Ballesteros & Ramirez, 2007). Mining sites often exhibit historical and cultural values linked to society's past technological achievements, abilities and mining communities' lives, traditions, habits, or religions. The remains of mining and the processing of mineral resources and mineworkers are recognised as part of mining heritage, having specific cultural, historical and social values and meanings. These include tangible aspects like pits, buildings, equipment and miners' uniforms and intangible aspects such as procedures, habits and traditions (Jelen, 2018). The adaptive reuse of mining sites is an effort to preserve their heritage values. However, economic and environmental risks in their use are a matter of concern. There is a need to realise the role of mining heritage in tourism as

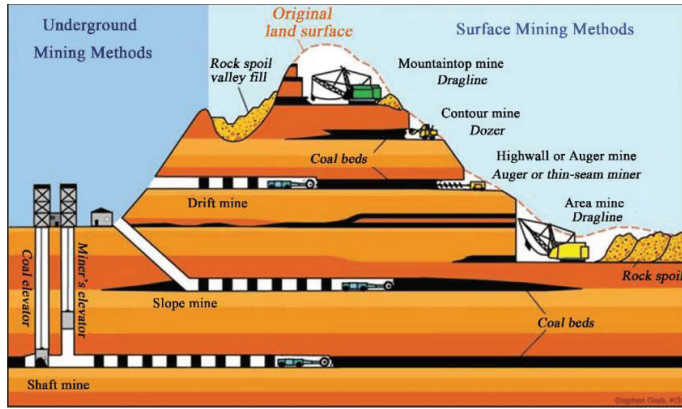


Figure 1: Types of mines

Source: Kentucky Geological Survey, <https://www.uky.edu/KGS/coal/coal-mining.php>

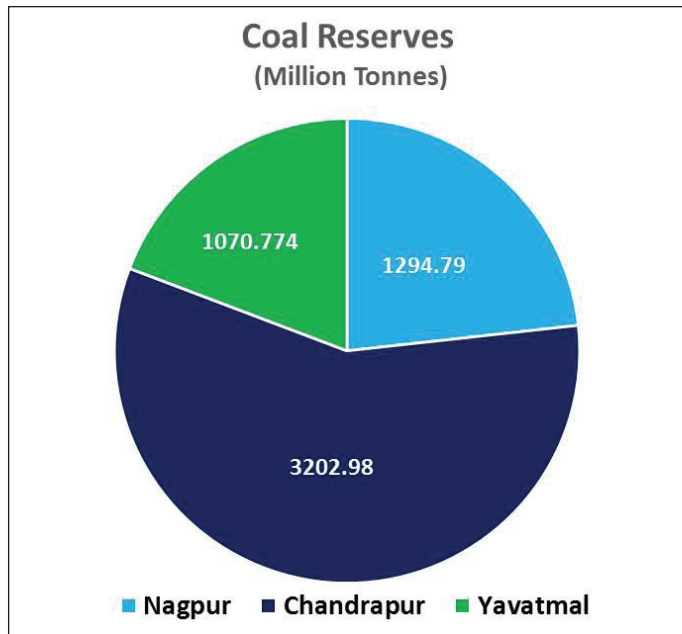


Figure 2: Coal reserves in Maharashtra

Source: Ministry of Coal, Government of India, <https://coal.gov.in/en/major-statistics/coal-reserves>

part of our cultural heritage with an effort toward its protection, interpretation and preservation. This project proposes a tourist activity centre on an abandoned mine to tap the potential of mines for tourism, which is currently unknown and obscure in India in spite of having a rich mining history.

1.1. Mining: There are several types of mining methods used to extract minerals and ores from the Earth's crust, including:

- **Open-pit Mining:** This method involves the excavation of minerals or ores from an open pit or surface. It is used when the mineral deposits are close to the surface and extend over a large area. Open-pit mining utilises large equipment, such as excavators, trucks and bulldozers, to remove the overlying soil and rock, exposing the mineral deposit.

- **Underground Mining:** Underground mining is employed when mineral deposits are deep below the surface. In India, coal mining is conducted using underground and opencast methods. The types of mines are presented in Fig. 1.

1.2. Abandoned mines: An abandoned mine refers to a mine that is no longer in operation and has been permanently closed or left unattended. Every year, many people are killed or hurt at abandoned mine sites. From 2000–2013 alone, 381 people were killed drowning in water-filled pits. Quarries are the leading cause of death at abandoned mines as the steep, slippery walls make it difficult to get out of the water. Old machinery and other hazards beneath the water can injure or trap a person. Abandoned mines pose several potential risks and challenges, such as:

- **Safety hazards:** Abandoned mines often contain unstable structures, open pits, deep shafts and other physical hazards.
- **Environmental impact:** Abandoned mines can have adverse environmental effects. They may contribute to water pollution due to mine tailings and drainage from exposed minerals. Releasing toxic substances or heavy metals can harm local ecosystems, including nearby rivers, streams and vegetation.
- **Land instability:** Without proper maintenance, abandoned mines can cause land subsidence, sinkholes and land erosion. This can lead to the destabilisation of the surrounding area and cause potential damage to infrastructure, roads and nearby properties.

1.3. Abandoned mine sites in India: Indian Bureau of Mines (IBM) had identified abandoned/orphaned mines that had been left un-reclaimed prior to promulgating rules about the Mine Closure Plan in April 2003. Through a particular study at the national level, 297 abandoned mine sites were identified. Out of the 297 abandoned mine sites, IBM identified 106 abandoned mine sites belonging to Public Sector Undertakings and other private sector companies requiring reclamation/rehabilitation. Across the country, abandoned mines exist in every state, although they are numerous in Maharashtra.

2. Mining heritage and adaptive reuse of mines

Adaptive reuse of a mine refers to repurposing a former mine site for a different use or function rather than abandoning or simply closing the site. This approach involves transforming the physical space and infrastructure of the former mine site into a new, functional space while preserving the historical and cultural significance of the site. The adaptive reuse of abandoned mines is an essential

CHANDRAPUR

Chandrapur is a city located in the state of Maharashtra India. It is situated in the eastern part of the state and is known for its large coal reserves, which have made it an important industrial center. The city has a rich history dating back to the 13th century when it was ruled by the Gond dynasty. It was ruled by the Marathas and the British before becoming a part of independent India in 1947. Chandrapur is home to many temples and natural attractions, including the Tadoba Andhari Tiger Reserve, which is one of the largest and oldest national parks in India.



Jatpuragate of Chandrapur Fort

Anchaleshwar Mandir

Bir Shahas Tomb

MAHAKALI UNDERGROUND MINE, CHANDRAPUR.

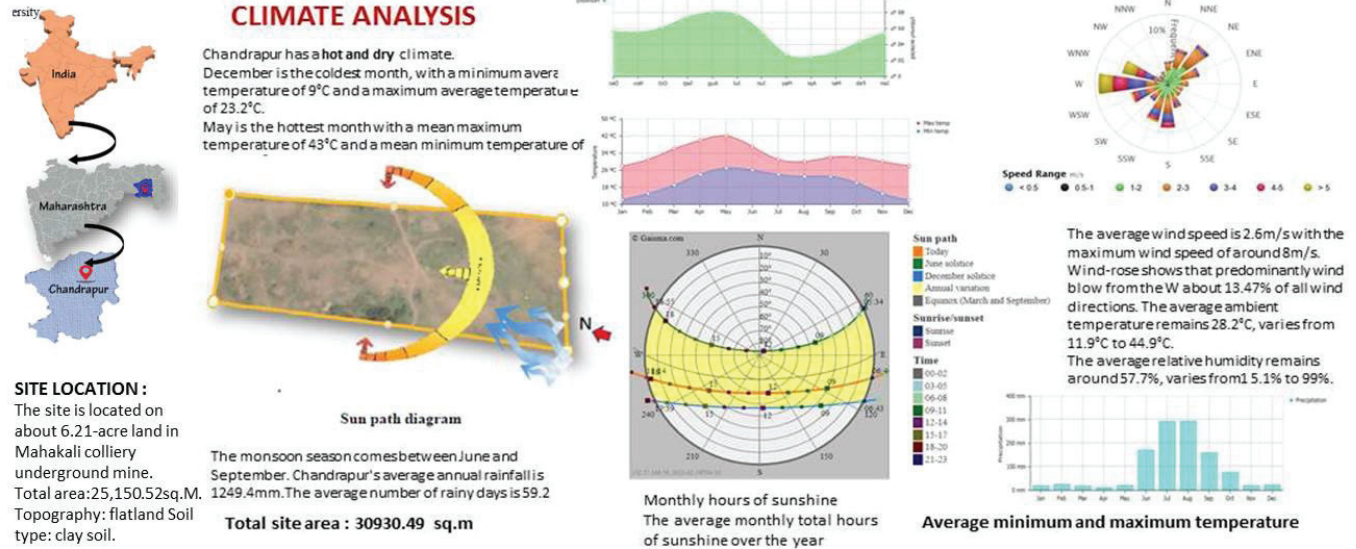


Figure 3: Site analysis
Source: Author, 2023

factor that boosts the economic value of a particular land. The main benefits of the reuse of abandoned mines include improved stability of the cavities and the surface, creating a source of gain for the owners and workers and reducing the threat of a potential disaster (Huan & Manteghi, 2022).

United Nations Educational, Scientific and Cultural Organisation (UNESCO) defines *Industrial Heritage* as all social and material culture directly or indirectly related to the people engaged in creating infrastructure and producing and distributing raw materials, objects and energy. Mining is part of the community's history and cultural development, impacting the material culture of the buildings on the site (Cole, 2004). The heritage of ideas, customs and traditions are transmitted through mining tourism and communicate the culture behind the mining project, creating a bridge between past, present and future without losing the site's cultural importance (Rocheleau, 2021). Mining heritage sites are places where valuable minerals have been mined, sometime affecting the entire landscapes, which may

have heritage significance (Pearson & McGowan, 2000). An old limestone mine in Pennsylvania USA is converted as an underground park. Another in Kentucky has been turned into an underground bike park. A sunken botanical garden built in an old limestone quarry on Vancouver Island is now a National Historic Site in Canada. Two 200-year-old slate-mines in Wales in the UK, are now adventure-tourism destinations.

3. Mining as a tourist attraction

Mines in different parts of the world are becoming tourist attractions, constantly striving for new sensations and extraordinary experiences. Their uniqueness lies in that relatively few mines are located in various parts of countries and continents. The mining tourism phenomenon is supported by the theory of escape, which places antique mines as the place where visitors get away from routine life. As per the recreation theory in mining tourism, tourists are in unusual conditions that relax, regenerate physical and mental strength and improve health and fitness (Różycki & Dryglas, 2017).

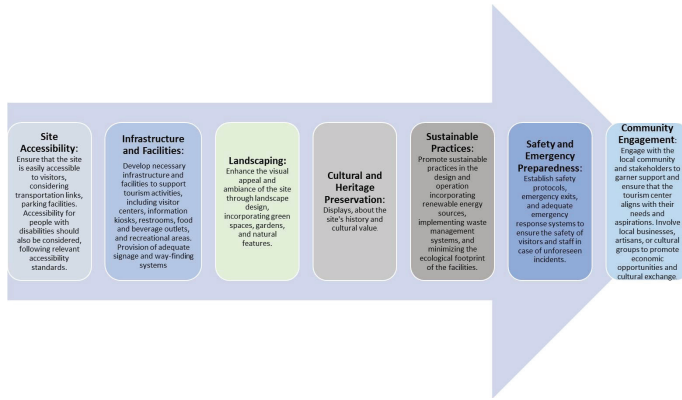


Figure 4: Design considerations

Source: Author, 2023

Mining tourism is the representation, protection and interpretation of mine's values and meanings for visitors more focused on the remains of mining activities and mining heritage. It often includes guided tours through the underground workings of former or still functioning mines, their technical equipment and buildings. It not only preserves mining heritage but also serves as a subsequent source of employment for local participants and communities following the closure of mining (Rybár & Štrba, 2016). There is a need to study abandoned mining spaces, remains of mining activity and mining heritage aimed at the preservation of cultural-historical values and their use in tourism. Well-planned facility for mining tourism brings several benefits to the community, including economic and cultural impacts, bringing distinctive elements to the tourism experience (Flecha & Knupp, 2010).

3.1. Eco-mine tourism: Eco-mine tourism involves visitors traveling to sites where mining has taken place in the past or present to learn about the mining history, culture and techniques of the region and the environmental impact of mining activities. Visitors can explore mines, tunnels, other mining structures and the surrounding natural environment, flora and fauna. It aims to promote preservation of mining heritage and culture while generating economic benefits for local communities by developing sustainable tourism activities.

4. Need for eco-mine tourism in Maharashtra

There are more than 290 abandoned or closed coal mines in India. In closure of mine many people lose their livelihood. Mining does not mean permanent loss of land for other uses. On the other hand, it holds potential for altered and improved use. Maharashtra state has a diverse range of natural attractions, including forests, hills, rivers, coastlines and coal reserves present in three districts (Fig.2). Several abandoned and active mining sites in the state have

the potential for tourism development. MTDC and Western Coalfields Limited agreed to promote Mine Tourism to create awareness about the significance of mining. The government of Maharashtra has been taking several initiatives to promote eco-mine tourism in the state by introducing Mine Tourism in Wani in the Yavatmal district to showcase mining operations. Besides, the tourists have been provided with an opportunity to visit deep inside the coal mines in Bhandewada and Ukani to understand the intricacies of mining activities.

5. The project

The Eco-Mine Tourism Centre is proposed in the Chandrapur district of Maharashtra, which is often referred to as the "Black Gold City" due to its association with coal, as "black gold" represents the economic value and significance of coal to the local economy. Coal mining has been a significant industry in Chandrapur, attracting investments and generating employment opportunities. The presence of extensive coal deposits in Chandrapur has significantly impacted the region's economy. The extraction and utilisation of coal have contributed to the growth of industries such as power generation, steel production and cement manufacturing.

5.1. Aims and objectives: The project aims to create an eco-mine tourism centre, transforming an abandoned mine site into a vibrant and sustainable destination that celebrates the region's mining heritage, promotes environmental stewardship and contributes to local economic development. The site is located in Chandrapur, Maharashtra; the detailed site analysis is presented in Fig. 3.

5.2. Design considerations: When considering the reuse of an abandoned coal mine site for a tourism center in Chandrapur, several norms and considerations are taken into account to ensure the safety, sustainability and viability of the project. These considerations are shown in Fig. 4.

6. Methodology

The project began with in-depth research where the research methodology consisted of collecting data through interviews with safety officers of mines, workers and members, information from guidelines, norms and through documents, books and World Wide Web to get knowledge about the project, defining the aim and objectives. The case studies helped form the project's requirements and site selection for the design proposal. The research finally culminated in the final design proposal. The case studies included:



Figure 5: Project detail
Source: Author, 2023

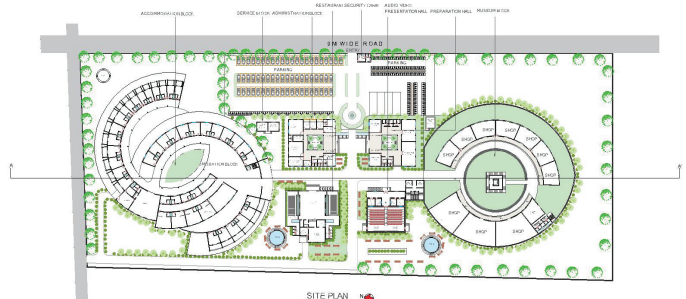


Figure 6: Layout plan
Source: Author, 2023

- Eco-Tourism and Rangers Academy Ajloun, Jordan.
- Nanyang Technological University School of Art, Design and Media, Singapore
- The WCL Eco- park in Saoner, Nagpur.
- The Britannia Mine Museum, Britannia Beach, British Columbia, Canada.

7. The concept development

7.1. Spatial experience: The proposed building has a curvilinear plan inspired by the configuration of an opencast mine, which, with its unusual, curved green roof, imparts appeal and transparency to the building, adding richness and sensory appeal to the architectural form. The swirling green roof is the most recognisable sustainable feature. It continues from the ground, extending the field up on the roof of the building, reinforcing the concept of “Green Continuum” (Fig.5). On the mining tour, tourists kitted out with hard hats and battery lamps and then stepped into the ‘cage’ to descend underground and discover the harsh realities of coal mining through the centuries. Partly sunken accommodation block has a courtyard providing natural lighting into interior spaces. Cooling properties have been added through water attributes exuding a serene environment and a refreshing breeze that cools the indoor environment in harsh climatic conditions in Chandrapur. The Fig. 6 presents the layout plan of the project. It has the following facilities:

- **Administrative facilities:** Space for administrative activities, booking and promotional activities.
- **Presentation unit:** Space for multimedia presentation, a well-equipped theatre offering a comprehensive mining industry overview before proceeding to a mine tour.
- **Mining museum:** A facility designed for a tour on a mine train which rumbles inside a haulage tunnel through a descending route depicting an underground mine. It also has galleries with exhibits and a mining elevator ride. The space is designed to experience the fascinating world of coal mining, the galleries showcases the evolution of the mines and their communities and investigate the mechanical workings of the pit through interactive models and the giant machinery. Inside there are various engaging displays that narrate the story of the mine and its impact on the local community. From informative panels and artifacts to multimedia presentations, the museum offers a comprehensive mining industry overview. One of the main attractions at the museum is the mining tour that depicts an underground mine where visitors can descend into the mine tunnel with an immersive experience, allowing them to witness firsthand the conditions that miners faced and gain a deeper understanding of the mining process. The details of the museum are shown in Fig. 7 and 8.
- **Learning block:** An educational hub to raise awareness about mining environmental issues, equipped with a lecture hall, reading material and information. It offers educational programmes for school groups, focusing on geology, mining technology and environmental stewardship. It has space to host special events, workshops and temporary exhibitions throughout the year to engage visitors of all ages.
- **Accommodation facilities:** The accommodation block caters to a diverse group of users, including tourists and visitors in small, medium and large groups, with well-equipped single and double occupancy rooms and dormitories.
- **Restaurant:** A centrally located restaurant serving local delicacies and national and international cuisine catering to tourists with different choices and preferences.
- **Shopping arcade:** Shopping facilities selling local artifacts and souvenirs supporting the livelihood of people suffering from mine closure.

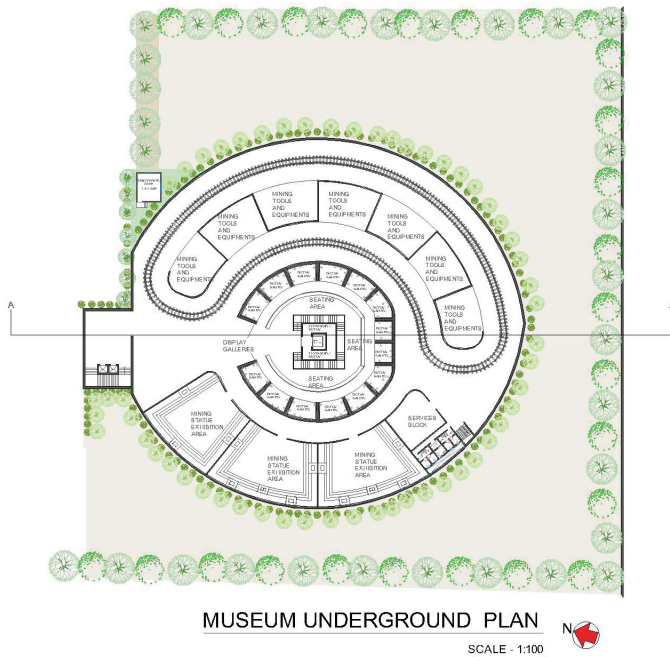


Figure 7: Mining museum plan
Source: Author, 2023

8. Design strategies

In Chandrapur, which experiences a hot and dry climate, implementing strategies to cope with the climatic conditions is essential for maintaining comfort and promoting sustainability. The inward-looking plan and building form are designed to minimise direct exposure to spaces with harsh outdoors. The central courtyards facilitate wind flow, thus, maximising natural ventilation to take advantage of prevailing winds aiding in natural cooling. Buildings incorporate shading devices such as overhangs, louvers, or sunscreens to prevent direct sunlight from entering the building (Fig.9).

- **Green roof:** Used to lessen the rate of heat energy transfer through the roof and a lesser amount of energy for cooling means more significant cost savings (Fig. 10)
- **Heat-resistant landscaping:** Use of drought-tolerant and native plant species for landscaping that require less water and can thrive in the local climate conditions. Incorporate shading elements like trees and pergolas to reduce heat radiation
- **Cool pavements:** Use of lighter-coloured or permeable pavements that reflect heat instead of absorbing it, reducing the urban heat island effect
- **Thermal mass:** Stone masonry has high thermal mass to absorb and store heat during the day and release it during cooler nights, providing a more stable indoor temperature.



Figure 8: Museum block view
Source: Author, 2023

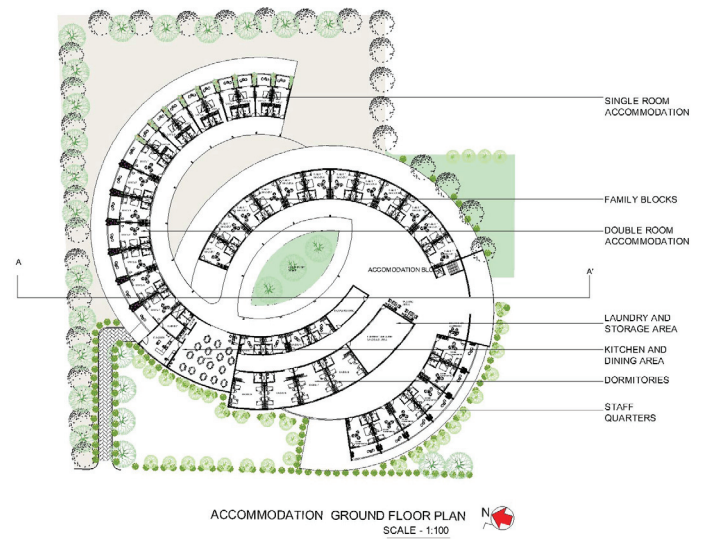


Figure 9: Accommodation unit plan
Source: Author, 2023

9. Conclusion

Mining tourism is a form of tourism for both specialists and the general public, allowing visitors to observe mining activity and the life of miners. It includes site visits of museums with mining expositions situated and developed over centuries to bond with one of the oldest human activities, raw material extraction, connecting the visitor with their ancestors. Such an underground visit provides a sense of mysticism and adventure and offers adrenaline activities in an unusual environment. The facilities are provided for mining tourists to see historical mining maps and documents, study technical inventions and follow the development of technologies in the mining industry. The proposed project offers a captivating journey through time, providing visitors with an immersive and educational experience. It provides a unique and eco-friendly destination, promoting sustainable tourism practices. The infrastructure is designed to minimise its environmental impact while providing visitors with various recreational and educational activities. It stimulates local economic development by creating job opportunities for people affected



Figure 10: Green roof on accommodation unit

Source: Author, 2023

by mine closures, supporting local businesses and promoting tourism-related enterprises. This center represents adaptive reuse of an abandoned mine into a must-visit destination in Maharashtra for tourists across the country and abroad celebrating mining heritage for posterity.

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Shradhha Waikar graduated from Dr. Bhanuben Nanavati College of Architecture (BNCA), Savitri Bai Phule University, Pune, with Distinction in 2023. Her interest and research-oriented approach have motivated her to explore a new area of concern, demonstrating her respect towards heritage and environmental stewardship through the adaptive reuse of resources.

Email: shradhawaikar69@gmail.com



Dr. Vasudha A Gokhale (A11084) has done her B.Arch. from MANIT, Bhopal and M.Arch and PhD from IIT Roorkee. She is a Professor and the Head of the Research Centre at BNCA, Pune. She has been affiliated academically with several universities in India and abroad. She has over 145 publications in international national journals and conference proceedings. She is a recognised PhD guide, with 14 candidates awarded with PhD degrees under her supervision.

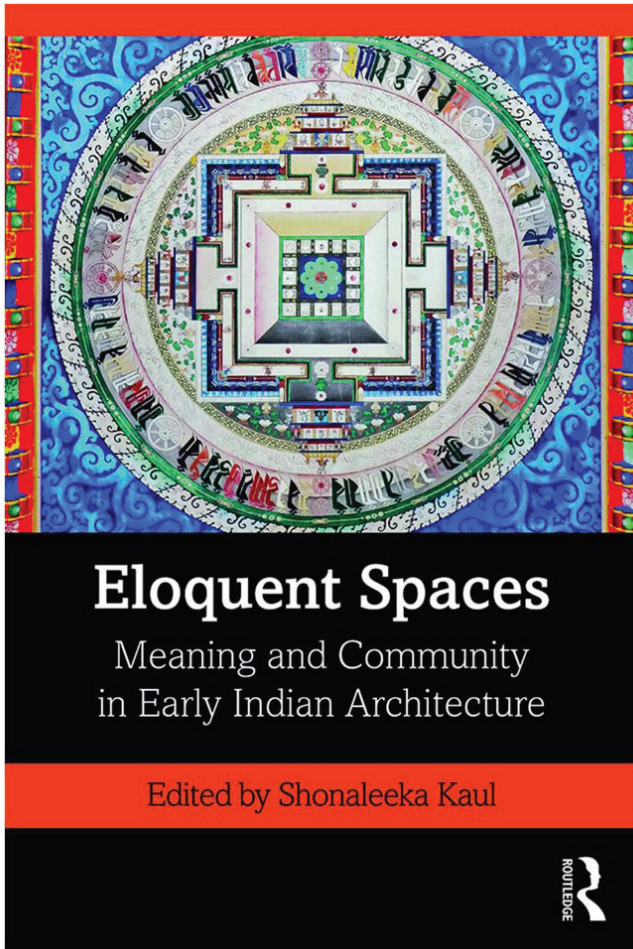
Email: gokhale.va@gmail.com

Eloquent Spaces

Meaning and Community in Early Indian Architecture

Edited by: Shonaleeka Kaul

Reviewer: Dr. Vidhu Bansal



Eloquent Spaces: book cover

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The book titled 'Eloquent Spaces: Meaning and Community in Early Indian Architecture' edited by Shonaleeka Kaul, is a collection of ten chapters exploring the myriad dimensions of ancient Indian architectural forms through the lens of meaning and community. The book is the need of the hour as it brings a new outlook to understanding principles and practices of early Indian architecture to the forefront and makes the readers conscious of the lost geniuses embedded into India's ancient architectural marvels. The sites studied in the book include Sanchi, Moodabidri, Srinagar, Chidambaram, Patan, Konark, Basgo and Puri, which gives a holistic understanding of the ritualistic and socio-political aspects associated with the cultural production of the architectural development. The collection of articles is special, with a brilliant lineup including eminent personalities like Bettina Sharada Baumer, M.N. Ashish Ganju, Julia Shaw, Rabindra Vasavda and others. In its own way, the book attempts to respond to the dis-embeddedness and confusion of the run-of-the-mill architecture or built environment that is being conceptualized in the current times. The aim is to bring forth the culturally rooted ancient architecture as an alternative concept, which may lead to better architectural response in the current times.

The book starts with a basic introduction to 'semantics in architecture' and then explores 'form, space and the consciousness' of architectural principles in the ancient architectural treatise of Vastushastras. Through a cognitive approach, the socio-ecological landscape of Buddhist architecture and the tantric Buddhist mandalas are also explored. The Temple of Basgo in Ladakh is taken as one of the cases to understand the phenomenon of superimposition of 'celestial assembly' on sculpture. The temple of Jagannath, Puri, is taken as one of the cases to understand the architectural and socio-cultural

context. Architectural understanding of step wells of western India is undertaken with an emphasis on the case of Rani ki Vav at Patan, Gujarat. Temple transformation as an act of royal power is reflected in the Temple of Nataraja at Chidambaram and studied through the architectural changes it underwent. The last two chapters focus more on the urban scale rather than the building. One of the chapters discusses the interpretation of the meaning of public spaces in Moodabidri and another explores the urban form of Old Srinagar with an emphasis on the water edge and the quality of timelessness.

The introduction explores the built environment's impact on humankind's psycho-social life. It reconnoitres the ideas of the ancient times and of the modern thinkers like Van Eyck and Christopher Alexander. It was posited that the architecture of current times breeds monotony and confusion with a detrimental impact on the psycho-social life of humans. They also believed in the power of architecture to transform and overcome the contradictions of modern life by exploring the concepts and forms of the ancient past—the idea of not understanding things in just binaries or parts but as wholes. Many Indian philosophies have the underpinning of a strong inter-relationship between the macrocosm and the microcosm, the world outside and the world within, and the need for them to act in tandem to create the balance that a person seeks. The chapter also talks about understanding these concepts, not just as the word's literal meaning, which might be mundane, but as the idea embedded within, and conveys its transcendence. The chapter asks a very important question that may cause a reader to ponder:

"If one is allowed a bit of mysticism, does this convergence not suggest a trans-temporal or timeless purpose of architecture as old as civilization itself?"

The book's intention is hinted at the end of the chapter, that is, to reclaim the constant human values translated into architectural space in early India, which is somehow discontinued as the civilisation progressed. Bettina Sharada Bäumer's treatise on form, space and consciousness, explores the architectural principle in the Vastushastra and the Indian Aesthetic or, more appropriately, the theory of arts in the Indian context. Here, the idea of beauty is not superficial but encompasses the dimensions of the sacred ritual, the technical understanding and the conceptual or symbolical and artistic imagination of architecture and sculpture. It is important to note that many ancient texts emphasized a

deep collaboration of architectural knowledge's theoretical and practical aspects to achieve this unity of aesthetics. The temple in *purusha* form has been detailed and outlined to understand the aesthetics, concepts and symbology used in the image-making. The differentiation of male and female symbology in the temple typology is also defined and backed by many illustrations. The chapter concludes that aesthetics is not an isolated entity but emerge from an entirety of ritual, traditions, symbology and the community that invokes the divinity within the structures.

The next three chapters explore the evolution of Buddhist architectural forms and how the meaning, symbology, ritual and culture evolved. The third chapter explores the funerary architectural form of Buddhism and its cultural representation and meaning in the community's general lives. It becomes important to understand the funerary monument because, according to Buddhist ideology, death is central to the ontologies of life. The chapter focused on the gradual monumentalizing of this architecture of death and explored the entanglement between monastic life and their socio-natural environment. The typology explored here is Stupa—when translated literally, the stupas meant heaps or piles. The Buddhist tradition modeled Stupas on existing royal funerary customs. Only the Buddha and a *Cakravartin* king would be cremated in these structures. It then explores the concept of transcendence of the life and death cycle.

The chapter puts forth arguments of detachment, which are core beliefs of the Buddhist ideology and relic worship, as a deviation from the monastic ways of life. It then explores the meaning behind this symbolism. It is understood that Stupas should not be seen as just funerary monuments and relic repositories but as the image of the Buddha itself and hence of high significance to the monastic and the general community. The chapter explores the idea of *duhkha* or suffering of humankind and how monastic landlords helped build the resources for the community not just at the spiritual level but also at a physical, social and economic level to alleviate the sufferings of the community to some extent, an idea which was later appropriated by the brahminical institutions like the Hindu temple. The fourth chapter explores the spatial and architectural constructs of tantric Buddhist mandalas. Here, the mandala is explored as a liturgical instrument and spatial concepts in functional form. The concept of Kalachakra as a spatial entity is also explored in the chapter. It is one of the most elaborate mandalas in the Buddhist tantra tradition, with 644 deities

in total. In their three-dimensional form, mandalas are expressed as temples or stupas. Interestingly, this kind of mandala planning is restricted to sacred architecture, while the profane architecture does not exhibit any of its properties. Such architecture can be interpreted as spatial entities aiding in achieving higher meditative states due to their transcendental nature. The concept of *duhkha* is explained here as 'contracted spaces' which emerge from our self-centeredness. Mandala planning can be perceived as an application to alter our surrounding space and achieve higher consciousness, which alleviates the *dukkha*.

The fifth chapter explores the old temple of Basgo situated in Ladakh. It is interesting to note that the Buddhist scholars believe the Basgo temple as an important monument, yet it had been ignored and left to perish. However, as illustrated in the chapter, few medallions still exist that narrate the sculptural assembly layout in mandala form. It also suggests that Basgo temple may be the only example of a mandala used in sculptural assembly. The chapter explores various architectural nuances by exploring various ratios found in forms that represent the temple's physical form. The chapter puts forth Basgo as an efficient architectural design of Buddhist tradition that served the community and the Buddhist path holistically.

The next chapters diverge from the Buddhist tradition to monuments with Hindu architectural influence, including temple traditions from Odisha and Chidambaram and a stepwell in Gujarat. The sixth chapter explores the temple territory of Jagannath at Puri. The emphasis of the chapter is to unveil the meaning of the temple at Puri. An architectural understanding of the layout (form of a *ratha* or chariot) of the temple housing the brother-sister deity trio has been explored. It is also relevant to note that the construction of the Jagannath temple is considered poor, as compared to its contemporary temples in the region. Yet, it has withstood the test of time and harsh climate over 900 years and is now appreciated as an architectural miracle. The chapter concludes with an understanding that the political undercurrents were one of the major reasons for constructing this temple. The exploration of the Jagannath Temple is followed by the study of a more public monument in the next chapter. Rani ki Vav – the stepwell in Patan, Gujarat is taken as a case for observation. It is noted that many wealthy people constructed such structures to help the people of their community to overcome the scarcity of water in the region. These structures also acted as places of rest for the travellers in ancient times. Architecturally,

these are very interesting typologies, including a long passageway of stairs tapering down to a well that acts as a natural water source and a pavilion on the sides that may have acted as places of rest and community interaction. The explorations and interviews with old masons and craftsmen suggest these structures require a high level of skills and an efficient solution to problems of the community. The next chapter focuses on the Nataraja temple of Chidambaram. It emphasizes the ideological and political changes and cultural development of the thoughts and practices of those times. During the reign of Cholas, religion, art and politics acted in tandem with each other, which led to almost merging of sacred and secular spheres of life. As a result, the transformation of the Nataraja temple in those times evoked a sense of royal power that existed. The Nataraja temple acted as a stage to showcase Chola's aesthetic politics, amalgamating religious and political notions. Here, the 'rule of sight' is entwined with the religious ideology that instructs and manipulates the observer's emotional response and legitimizes the political authority through aesthetics.

The last two chapters explore the public spaces but with different characters. The ninth chapter explores the nature of public places around sacred spaces - Jain Temples, or *Basadis* of Moodabidri. The emphasis is on understanding these spaces' position and relationship with the community's overall morphological context. Moodabidri is a small town but an active center of Jainism. The emerging urban patterns are unique to this place as the built form provides a backdrop where both sacred and profane could thrive. The chapter concludes by remarking on Jain temples as places that provide more democratic access to the community and also as a facilitator of life. Unlike a typical temple typology where surrender to the divine is the central idea, the relationship of the temple, the public realm and the settlement is unique to Moodabidri. The tenth chapter attempts to understand the very special quality of the built environment encountered by the author in the Kashmir Valley. The quality is 'a quality without a name' as coined by Christopher Alexander in the 1970s. Here, Jhelum's riverfront is taken as an interface where the settlements engage with water, including riverine housing, spatial configurations, house form, building craft and culture all entwined. The natural beauty augments the whole narrative in the valley. Yet, the violence and trauma strips the landscape from its inherent qualities. The author urges to understand the interdependence of all life forms and why it is essential for everyone to coexist peacefully in this new era of knowledge. If an

understanding and appreciation can be generated, it will provide hope to heal the broken reality of the present.

Each of the writers, an expert in their field, comes with a powerful narration that blends the architectural prowess of the past, the governing socio-political order and the cultural threads that bind the story of truth. Each of the studies comes with a background of grounded studies, including the field and the theoretical positions. The tone of the writing can be expressed as powerful yet sensitive in its way, such that the collection has some common threads of understanding. The book brings together a wholesome work that takes up and digs further into the fragments of history to knit a story that can be helpful for readers to understand the reasons of different architectural evolutions and transformations in the ancient Indian context. Apart from the eminent community of historians and Indologists, the book is extremely useful for the architecture community, be it architects, academicians, students and others interested in knowing more about the philosophical nuances inherent to the ancient architectural phenomenon.

Editor



Dr. Shonaleeka Kaul is a cultural and intellectual historian of early South Asia. She is a Professor at the Centre for Historical Studies, Jawaharlal Nehru University. She has also been the Malathy Singh Distinguished Lecturer in South Asian Studies at Yale University, USA; the Jan Gonda Fellow in Indology at Leiden University, The Netherlands; and the DAAD Visiting Professor at the South Asia Institute, Heidelberg University, Germany.

Email: shonaleeka@mail.jnu.ac.in, shonaleeka@gmail.com

Reviewer



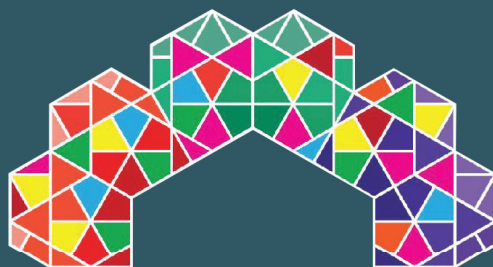
Dr. Vidhu Bansal (A24816) is an architect-planner with 9 years of experience and currently working at AnantU. She focuses on understanding cities through the lens of urban ecology, livability and design. She firmly believes in organic smartness embedded in historic cities that can be utilized for sustainable development and urban design.

Email: ar.vidhupandey@gmail.com

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NEWSLETTER NOVEMBER

IIA ANDHRA PRADESH CHAPTER

IIA Andhra Pradesh Chapter, Visakhapatnam Centre and Kakinada Sub-Centre organized *SAMVAD in Architecture: Architecture and Design Symposium* on 4 November, 2023 at Taj Gateway, Vizag, Andhra Pradesh. 'Samvad' in Sanskrit means 'dialogue' or 'conversation'. Here, this referred to the communication and interaction between a building and its surroundings, as well as the conversation it has with its users and the broader community. This concept emphasizes the role of architecture in conveying the meaning, creating a sense of place, and fostering connections between people and the built environment.



The Honourable Chief Guest of the programme was Ar. Vilas Vasant Avachat, President, IIA. He shared his views on IIA and the activities undertaken so far and in the future. *Samvad* was also enlightened by the distinguished speakers: Ar. V.V.L.N. Murthy, Chairman-IIA, Kakinada Sub-Centre; Ar. Vivek Bhole, Neo Modern Architects, Mumbai; Dr. Srinivas Daketi, Assistant Professor, SPAV; Ar. Latha Raman, Inspiration Collective, Cochin; Ar. Gopinath, Land T, Chennai; Ar. P.R.B Rao, Prof. Design Chair of Dept. of Architecture, Andhra University. They shared their views on various projects, experiences, technical and design aspects.

An interesting panel discussion including eminent architects and academicians was also another important knowledge-sharing session which included Ar. Sastry Somayajulu, TRIO-S, Vizag, Ar. V. Venu Gopal, Venu Gopal and Associates, Udaipur, Ar. Aditya Kambabatl, Project Inc. Vizag, Ar. Latha Raman, Inspiration Collective, Cochin, Ar. Radha Krishna, Vijayawada and Ar. Gopinath,

LandT, Chennai. The success of *Samvad* was possible with the imitative and effort of Ar. E.Vijay Bhaskar, Chairman, IIA AP Chapter, Ar. Rajesh Nagula, Chairman, IIA Visakhapatnam Centre, Ar. V.V.L.N Murthy, Chairman, Kakinada Sub-Centre. Besides the knowledge sharing sessions, drawing competition was organized for children of different age groups, with different themes. The *Samvad* magazine, edited by Ar. Sivaram Achanta, was also released with more than 60 articles related various topics related to architecture, urban design, urban planning, landscape, conservation along with the projects by eminent architects and students works. Architects from different parts of the country, most of the architects from Andhra Pradesh and Telangana, students from various universities, academicians participated and made *Samvad* a grand success.

IIA KARNATAKA CHAPTER

Signing of the MOU between IIA Karnataka and CF-DAMH, Govt. of Karnataka

The Department of Tourism, Karnataka, launched the *Adopt-a-Monument Scheme*, an endeavour aimed at developing heritage sites through NGO-involvement in a Public-Private Partnership. The scheme, unveiled on 25 September 2023, at Vidhana Soudha, received significant attention, with the IIA Karnataka Chapter offering its design expertise to ensure well-planned infrastructure enhancements. The *Namma Smaraka* digital platform, vital to this initiative, was developed by the Culkey Foundation. This scheme represents a significant step towards conserving and promoting the rich heritage of Karnataka's monuments.



New Team of IIA Mysuru Centre 2023-2025 at the Installation Ceremony on 10 November 2023.

Taking this engagement further, the IIA Karnataka Chapter signed an MoU with Culkey Foundation and the Department of Archaeology, Museums and Heritage, Government of Karnataka on 7 November 2023 at Kalaburagi in the august presence of Sri H.K Patil, the Minister of Tourism and Sri Priyank Kharge, Cabinet Minister for Rural Development, Panchayati Raj and IT and BT.

Ar. Mueen Haris, the Vice Chairman of IIA-KC signed the MoU on behalf of IIA-KC. Ar. Anand Pandurangi, Joint Hon. Secretary of IIA-KC and Ar. Vaibhav Navani, Chairman of the IIA Kalaburagi Centre were also part of the event.

Installation of IIA Mysuru Centre

The Installation Ceremony for IIA EC 2023-25, Mysuru took place on 10 November 2023 and was graced by the presence of the OB and EC members of Karnataka Chapter along with all Centre Heads of IIA Karnataka. The distinguished speaker for the *Spot Light Series* was Ar. Sanjay Mohe, the founder of *Mindspace*, Bangalore. The event witnessed a significant turnout with approximately 110 architects in attendance. Prior to the Installation Ceremony, the first outstation meeting of the IIA Karnataka Chapter was convened in Mysore on the same day, marking a momentous occasion for the architectural community.

IIA PUNJAB CHAPTER

IIA Punjab's Annual Architectural Sports Extravaganza

IIA Punjab Chapter annually hosts a range of outdoor and indoor sports events including the *Architect Premier Cricket League* (APCL) for cricket and SMASH for badminton, table tennis and chess. Tailored exclusively for architects affiliated with the IIA Punjab Chapter, these events create a dynamic platform for sportsmanship and camaraderie.

On 5 November 2023, in collaboration with Chitkara School of Planning and Architecture at Chitkara University, Punjab, IIA Punjab Chapter successfully presented *SMASH-II*, a one-day indoor sports tournament featuring badminton, table tennis and chess. Approximately fifty architects from Punjab participated, showcasing their dedication throughout the day.

Ar. Pritpal Singh Ahluwalia, Chairman of IIA Punjab Chapter, graced the event as the Chief Guest. Distinguished guests included Office Bearers of IIA

Punjab Chapter, Ar. Dinesh Bhagat (Vice Chairman), Ar. Rajan Tangri (Jt. Hon. Sec), Ar. Niranjn Kumar (Convener, Sports Committee), Ar. Rajnish Walia (Convener, Architect Welfare Committee), Ar. Sanjay Kumar (Convener, Event and Finance Committee), Ar. Rajinder Sandhu (Chairman, IIA Patiala), Ar. Balbir Bagga (Chairman, IIA Ludhiana), and Ar. Nagender Narayan (Chairman, IIA Hoshiarpur-Kapurthala).



Chairman, Ar. Pritpal Singh Ahluwalia, along with other distinguished members of IIA Punjab Chapter, presenting trophies to the winners.

The winners of the event were as follows:

<ul style="list-style-type: none"> ● <i>Badminton Singles - Male (45+ category):</i> 1st : Ar. Rajnish Walia 2nd : Ar. Ashwani Sharma 3rd : Ar. Sanjay Sharma 	<ul style="list-style-type: none"> ● <i>Table Tennis - Male:</i> 1st : Ar. Atul 2nd : Ar. Ashwani 3rd : Ar. Inder Gulati
<ul style="list-style-type: none"> ● <i>Badminton Singles – Male (35+ category):</i> 1st : Ar. Preetpaul 2nd : Ar. Pardeep 3rd : Ar. Abhinav 	<ul style="list-style-type: none"> ● <i>Table Tennis - Female:</i> 1st : Ar. Raminder 2nd : Ar. Jasmeet
<ul style="list-style-type: none"> ● <i>Badminton Singles – Male (Below 35 category):</i> 1st : Ar. Anant 2nd : Ar. Shiv Gupta 3rd : Ar. Jagdeep 	<ul style="list-style-type: none"> ● <i>Chess :</i> 1st : Ar. Manav 2nd : Ar. Nagender Narayan 3rd : Ar. Preetpaul
<ul style="list-style-type: none"> ● <i>Badminton Doubles - Male (40+ category):</i> Ar. Rajnish Walia and Ar. Niranjn Kumar ● <i>Badminton Doubles - Male (Below 40 category):</i> Ar. Anant and Ar. Shiv Gupta 	<ul style="list-style-type: none"> ● <i>Badminton Singles - Female (40+ category):</i> Ar. Raminder ● <i>Badminton Singles - Female (Below 40 category):</i> Ar. Neelam

Celebration of United Nations World Habitat Day by IIA Ludhiana Centre

IIA Ludhiana Centre, led by Chairman, Ar. Balbir Bagga and Vice-Chairman, Ar. Dinesh Bhagat, collaborated with IIA Punjab Chapter and Jt. Hon. Secretary Ar.

Rajan Tangri to organize two impactful activities. These included a sketching competition for college students illustrating historic buildings and an architects' group exploring Ludhiana's heritage at the *Museum of Social History and Rural Life of Punjab* at Punjab Agriculture University. During the celebration, Ar. Surinder Singh Sekhon emphasized the importance of visiting heritage sites, not only to preserve physical structures but also the stories they embodied.

The event featured a cake ceremony followed by high-tea. Architects from Ludhiana and other cities, including Ar. Aanchal Gupta, Ar. Varunesh Kumar, Ar. Niranjana Janagal and others contributed to the success of this celebration.

IIA WEST BENGAL CHAPTER

IIA West Bengal Chapter organized an interactive session with Ar. Abhay Vinayak Purohit, President of the Council of Architecture, India on 18 November 2023 in the IIA premises of Kolkata. The topic of lecture and discussion was *Practice of Architecture: Present Scenario and Challenges in the Profession and Amendments of the Architect's Act 1972*, followed by a sponsorship session and Fellowship Dinner. Many members of the IIA West Bengal Chapter participated in the programme. Mr. Sandip Kumar Deb, member of the Institute of Engineers was also invited to the programme and was felicitated alongside Ar. Purohit.



Interactive session with Architect Shri Abhay Vinayak Purohit, President of the Council of Architecture, India

The President, CoA started with the broad perspective that all stakeholders need to be taken into account and discussions need to happen: 'Anything in a democratic process cannot happen in isolation.' There is a need for architecture as a practice to be acknowledged by the country and its benefit. Hence, he stressed on the importance of the amendments to the Act. Provisions under consideration are inclusive and in the long run which would help the practice of architecture stabilize and with a good quality of deliverables. This would also ensure that society at large reaped benefits and take the nation ahead. Ar. Purohit touched upon all the emerging aspects circumscribing the architectural profession

such the National Education Policy (NEP), Artificial Intelligence (AI), the inter- and multi-disciplinary nature of the profession, with no fixed boundaries, etc. Pertinently explained by him was that architectural services were among those that could be exported. Hence international standards should be effectively envisaged. It has been proved that we are capable of adapting to international standards and providing good services such as in the IT sector. Access to architectural services by the masses is desirable in India. There is a persistent projected need and gap, but unfortunately this is not meeting up. The President repeatedly emphasized issues with internship, professionalism, integrity, discipline, misuse reduction or prohibition and cohesion, the resolution of which could help uplift the architectural profession as a whole. According to him society needs architects and hence they exist, and needless to say that comes with great responsibility. Quality should be primary and not mere tendering and quotation dynamics at the cost of quality. Defining services is necessary for the beneficiaries too, enabling them to be clear about the deliverables from an architect and adjudging the quality of work. Permission of multidisciplinary practices and collaborative practices were mentioned too, with an announcement that there is a good exchange of architectural practice at a global level including India. The clear message was delivered to support, mentor and harness young generation architects, which would have long and deep impacts including ripple effects on commercial structure and quality consciousness. The audience participated actively through the question-answer session, which was enriching and beneficial for the fraternity. The programme ended with a vote of thanks.

The third Executive Committee Meeting was held on 4 November 2023 where various important agenda were discussed.



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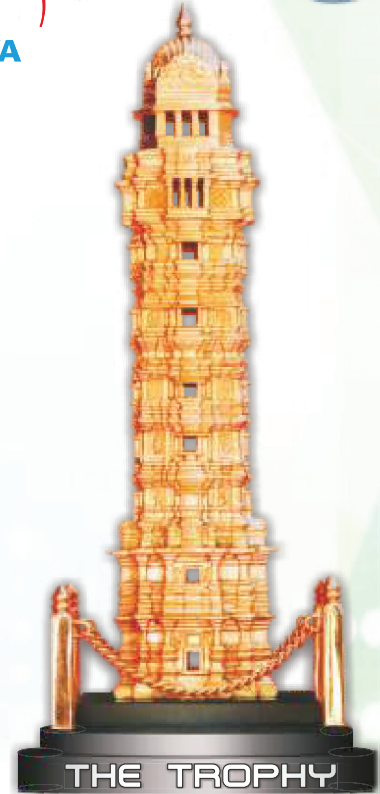
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