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EDITOR'S NOTE

We are excited to announce that the focus of the April issue is on the winning entries for the JK Awards. The JK Awards are known for celebrating and recognising exceptional architecture and design in India.

Our focus on award-winning entries provides an opportunity for architects to showcase their unique and innovative designs to a wider audience. The publication acknowledges the dedication and hard work put in by the JK Team, led by Mr. Rana Pratap Singh, for inspiring fellow Architects to push the boundaries of design by participating in the Awards.

As Architects, we know that great buildings are more than the sum of their parts. They reflect a vision and tell a story that is specific to the place, people, and culture they serve. We believe the award-winning projects featured in this edition reflect just that.

We continue with our regular features in this edition as well.

Our aim is to inspire, educate, and ignite your passion for architecture and design.

Enjoy reading JIIA.

Keep responding with your suggestions, comments, and materials for publication.

Warm Regards
Ar. Lalichan Zacharias
Editor

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PRESIDENT'S MESSAGE

Dear Members,

Greetings!

It has been a long-cherished association with JK Cements. We appreciate their sustained support for the Indian Institute of Architects through various initiatives and our journal. The focus of this issue of the journal is publishing the works of the winning entries in the JK Annual Awards. I appreciate the publication team, which has been very consistent in bringing out the issues every month with a focus on relevant subjects.

The focus of this term has been a very progressive and inclusive effort to encourage the participation of our members through programmes, initiatives, and events organised by our chapters, centres, and sub-centres across the country. This has brought a new energy to our Institute with the participation of many young Architects, not only by being present but also by taking a key role in the organisation of all these programmes. They are definitely an asset to our organisation and its future.

The recently held IIAPL in Indore, hosted by the IIA MP Chapter, was an excellently organised event with the participation of 18 teams. Apart from the outdoor and indoor sports events, the evening programmes like the quiz and cultural show drew much applause. Congratulations to the organising committee.

Members can actively involve themselves in whichever area they deem fit and have an interest in. They can participate, discuss, articulate their ideas and concerns, and imbibe various aspects to moderate their vision, aspirations, and skills to contribute to the healthy growth of our Institute. IIA offers ample opportunities through the chapters, centres, and sub-centres to connect with fellow Architects, allied professionals and be socially conscious of issues concerning the built environment.

The election schedule for the forthcoming term of 2023–'25 has been announced. Request all members to participate in the voting process and ensure a friendly, free, and fair election.

Best Wishes,

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COMMENTS

We have gone through the interview on **"Dialogue with Ar. Gurjit Singh Matharoo"** in JIIA's latest edition. It is very informative and impressive. Kindly accept our heartfelt congratulations. Keep it up.

With best wishes.

Kind regards,

Ar. Surinder Bahga
Saakaar Foundation
Chandigarh

The JIIA has become quite a well-done journal and deserves kudos as usual. It's upped its level so well in the past few years.

Vijay Narnapatti
Partner, MayaPraxis,
Bengaluru.

Congratulations for your commitment, dedication, and hard work to make the IIA journal most qualitative and rich in both intent, contents, outlook, and design. You have made the journal multiple-dimensional, providing a new theme and vocabulary to architectural journalism and making it totally professional. The architectural fraternity remains indebted to you for your valuable contributions.

Ar Jit Gupta
Chandigarh

We welcome your comments and suggestions.

Please write to us at **jiiaeditorial@gmail.com**

RESEARCH

Vernacular Inspirations for Contemporary Built Forms: A Study of Kath-kuni and Spitian Style

Ar. Kirti Verma Gupta & Ar. Kamini Singh

VERNACULAR INSPIRATIONS FOR CONTEMPORARY BUILT FORMS: A STUDY OF KATH-KUNI AND SPITIAN STYLE

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ABSTRACT

This paper is based on the vernacular cultural heritage and architectural practices of Himachal Pradesh. The state is known for its beautifully carved wooden details, stone combining wood and mud in architecture that survived for several centuries while maintaining functionality, cost-effectiveness, aesthetics, and structural strength. The symbiotic relationship of traditional vernacular structures with the natural environment is not by coincidence but rather a conscious effort by the natives. However, the understanding of such sustainable built environments is limited where the regional ecological systems and use of locally available materials are the foundation of this style. This research paper documents the vernacular architecture and contemporary vernacular-built environments of the region. The study infers that integrating vernacular practices and techniques in contemporary buildings helps in achieving sustainability and maintaining the cultural identity of a region.

Keywords: *Vernacular Architecture, Contemporary vernacular architecture, local materials, construction techniques*

INTRODUCTION

India has unique traditional architectural construction styles in each of its varied geographical regions. "Vernacular architecture is the traditional and natural process by which communities house themselves. It is a process that includes constant adaptation to meet the changing needs of every generation, society, and environment." (Tipnis, 2012).

The theory of Critical Regionalism (Bourassa, 1991), describes a creative 'place' that addresses local culture, social institutions, political issues, ecology, construction techniques, climate, topography and many other elements of the regional context. Himachal Pradesh is a state located in the northern part of India and shares its borders with Kashmir, Ladakh, Punjab, Uttrakhand, and China. The entire region's physiography constitutes mesmerizing, lush green valleys with snow-capped mountains, rivers, and dense forests. "The landscape of a region helps define the image of a place and often becomes central to its identity." (Shankar, 2014). The state is divided into two zones because of its distinct geomorphic environment, and both zones reflect their distinctive identity through their local architecture, dialects, traditions, customs, rituals, and beliefs. With the influence of rapid urbanization, these zones are on the verge of losing this inheritance.

Vernacular structures in this region are built with locally available construction materials like wood, mud, stones, slates etc. The design and built form of the structures are closely knitted with their local climatic conditions, belief systems, and customs that support their way of living. These built structure possess strong ability to sustain seismic forces and maintain the interior comfort in the extreme climate (Thakkar & Morrison, 2008).

In the Spiti valley, the structures foundation is usually made up of stones, the walls from mud and the ceilings from wood, branches, scrubs & mud. "Sustainable and feasible construction techniques that blend ancient wisdom with modern features need to be adopted for the region." (Pragya, 2000). This paper documents the case studies of contemporary architect's projects with contextual response of cultural character of the place and indigenous construction techniques approaches.

The term *kathkuni* is a derived from the Sanskrit word *kasth* meaning wood, and *kona* meaning angle or corner. (Handa, 2009). The wooden rectilinear structures are constructed according to regional climate and are based on their ancestor's belief system, everyday need and are a way of life for the natives. (Refer Figure 3).

Settlements: Due to subtropical highland climatic conditions, the orientation of the hamlets in this region is mainly located along the river valleys and sun-facing contoured slopes with the backdrop of lush green snow-capped mountains. The focal point of each settlement is temple.

Kathkuni Architecture

Clusters: Buildings cluster around the open spaces, which are used by all the locals for different activities and social interaction. The size of open spaces and the height of buildings are designed in proper proportions so that one building should not cast a shadow over others.

Design: Buildings in this region are always kept compact, owing to the harsh cold climate during the winters. The structures are 2 to 3 stories high, with the lower floor for cattle's and the upper floors for residential and storage purposes (Figure 1). The heat generated in the lower floors heats up the upper floors and it capture sunlight during the daytime. "Traditional dwelling are influenced by these factors: Climatic response, cultural practices of the inhabitants, adaptability to the social lifestyle, and locally available construction materials" (Thakkar M. , 2018).

Spatial Use

Ground floor level:

- Animal shelter for cows, goats, sheep.
- To collect honey during the summer season.
- A soak pit is constructed for the collection of human excreta.

First Floor (Summer House):

Open balconies for storage of firewood, laundry drying, sun-drying of seasonal fruits and vegetables

- Core has a room for private family activities and rest
- Common toilet just above the soak pit.

Second Floor (Winter House):

- Kitchen area where they cook, eat, and sleep during the winter.
- The stove is an essential component during winter and is mostly placed in the centre of the room to produce heat, cooking, etc. (Figure 2).
- Small craft (wool knitting) is also done in this room for economic generation.

The Ridge:

- Topmost part of the house is sacred (Puja Ghar).
- Outsiders are not allowed to enter this area.

Figure 1: Kathkunni structure with their components *(Source: Author)*

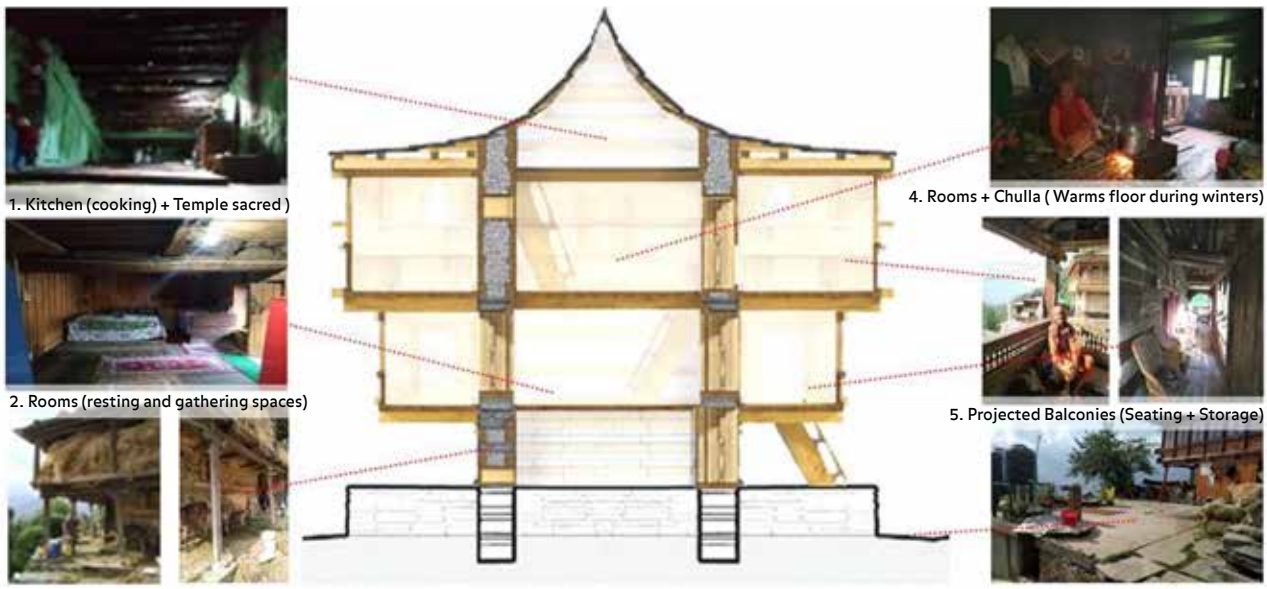

Figure 2: Interior Spaces in the Kathkunni structure *(Source: Author)*

Open Spaces (within and outside of the house):

- Semi-covered verandas and open courtyards in front used for grain drying, knitting, and social gathering and sunbathing.
- Locals spend their maximum time in these spaces for all everyday necessary activities and these are very dynamic spaces.

Construction Details

Foundation: The raised podium in the base made from loose stone blocks ensure a stable foundation and prevents the entry of rain, ground water and snow to the building.

Wall: The wall is constructed with two parallel wooden beams, one at the top of ground floor wall and other supporting the cantilevered structure and first floor wall. The wall is constructed with thick wooden logs of approx. 6' thickness with alternate course of stone masonry of equal thickness. The pattern thus obtained comprise of horizontal wooden bands. This technique provides strength, aesthetics, and ability to deal with thermal expansion and seismic loads.

Projected Balconies: These are integral spaces, projecting either on one or all sides of the structure, they are supported by the beams on which the cantilever is resting, which tis then plugged into the wooden beams.

Structural Design

The structure rest on the wall constructed of alternating layers of wood and stone.

The slate roof is supported with wooden beams, purlins and rafters. Loose in-fill material is packed as filler and the external and internal skins of the walls are held together by cross braces or dovetails called *maanvi.* (Thakkar M. , 2018)

Figure 3: Maanvi and Kadil nail
(Source: Author)

Wooden members that overlap each other at the corner junction in the wall construction are held together with the *kadil* nail. (Figure 3).

Aesthetics

The mixed texture of stone and wood creates interesting patterns and carvings in the structures, reflecting the local traditions and culture of the state. And skilled native craftsman helped to make structures more functional and site responsive.

Spitian Architecture

The traditional structures in the Spiti region are constructed with locally available natural materials like wood, mud, scrub, stones, etc. It is referred to as Spitian architecture. Every village has an old gompa and a monastery, which serve as Buddhist cultural centres and are used for teaching, learning, and religious practice. (Refer figure 2)

Settlements: The hamlets in this region are located near river basins, steep banks, and highlands due to the harsh cold and dry climate as well as the rugged terrain topographical conditions. All the settlements are situated on the sun-facing slopes of mountains and highlands nearby glacier-fed steams or basins.

Clusters: These settlements are usually built-in small cluster or as individual entities. The housed have flat roof, although this region receives heavy snowfall. These rooftops are multi-functional and used for daily activities like weaving, storage, food drying etc. (Figure 4).

Design: The planning of a unit is almost homogenous in size and shape; the white-painted mud houses of the region. The walls are about a foot thick and act as a good insulation against the severe winters. Due to the extremely low precipitation level, all the traditional houses have flat roof system. Each house has more than 8 to 10 rooms, which include living space, storage, and cattle shelter (Figure 5). The space for fodder and a family room are placed in close proximity because the animal's body heat provides warmth during winters. Each house has a dry toilet system as the drainage is not available.

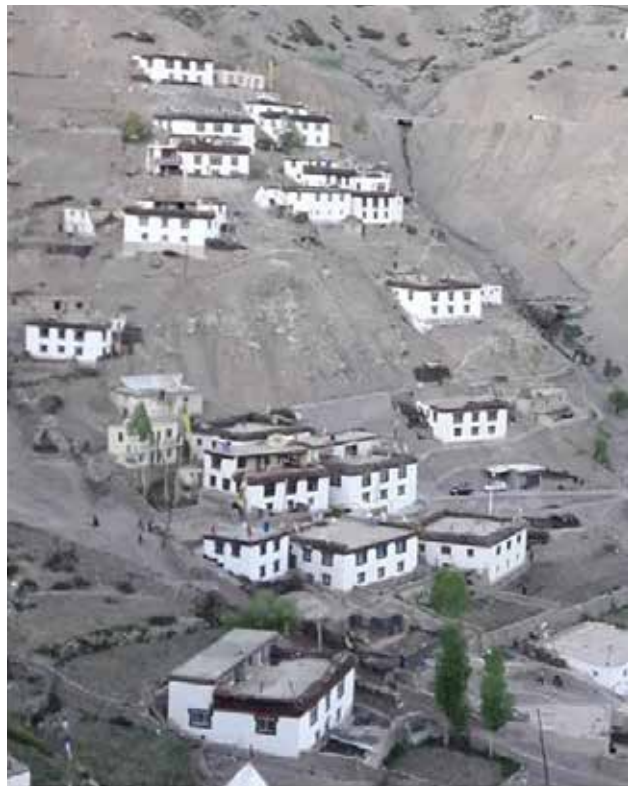

Figure 4: Cluster of houses, Dhankar village
(Source: Author)

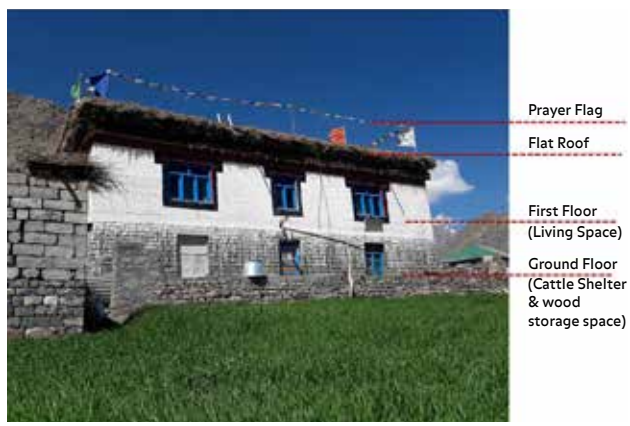

Figure 5: Mud structures showing Spitian style and their components
(Source: Author)

Spatial Use

Ground Floor:

- Wooden logs for the winter season, storage, and livestock farming space on the ground floor.
- Living room is in ground floor near the fodder space that provides warmth during the harsh winters.
- Dry toilets with soak pits and kitchens with the *chakthap* traditional *chulla* (stove) are constructed at this level.
- The smokeless *chullas* have health benefits, and the stream outlet pipes connected to them radiate the heat into the rooms on the above floors, thus increasing the room temperature.

First Floor: Family member and guest rooms for homestay purpose.

Second Floor (Summer House):

- A large open space to dry clothes, grains, cow dung for cooking, etc.

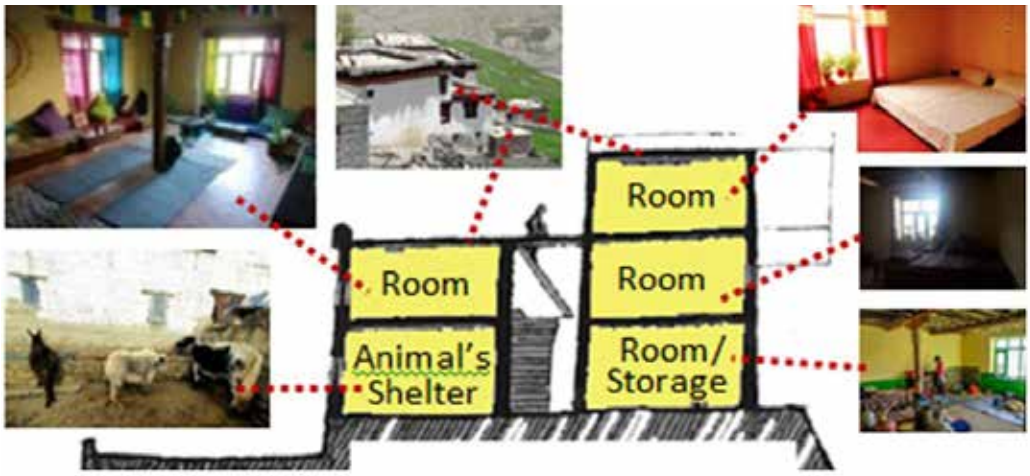

Figure 6: Showing Interior spaces in the Spitian structure
(Source: Author)

- Most of the time is spent on this floor during summers due to the south-west sun's heat

Open Spaces:

- The only open spaces within the house are the balconies and roof top; Used for knitting, drying cow dung and grains, and so on
- Otta and stairs outside the house are used for the interaction and social gathering purposes of the villagers. (Figure 6).

Construction Details

Foundation: Filled with stone and mud to raise the structure for about 2 feet from the ground.

Wall: Made of rectangular planks locally called *'Gheychhing'* that are placed on either side of the plinth and filled with moist earth mixed with small stones and then pressed with a flat wooden plank. This process continues until the walls are raised to the desired height.

Roofing: The ceilings are made of wood, branches, scrub, and mud.

Structural Design

"The *makhdung* is placed horizontally on the raised wall to support the ceiling. The *phurdung* is placed in a net like pattern over which the *thilu, thapp* and *dhambuk* is spread. To make the ceiling strong and water resistant, it is plastered with mud called *tooah* which is available near the riverside. The roof of the house is covered on all its edges *with penzuil penma* (scrub) to protect the walls against the snow" (Pragya, 2000)

Aesthetics

The entire building is whitewashed with *kirsi* (limestone), painted red with *chak* (red soil) in a strip like pattern and the borders of the window are painted black with *sheljor* (black mud).

Contemporary Vernacular architecture of Himachal Pradesh

The knowledge of vernacular techniques can be integrated into contemporary architecture and lead the way towards a sustainable built environment. The House of Didi contractor in Kangra valley, Dolma ling nunnery at Dharamshala, Neeralaya resort in Kullu valley, and Kaza eco-community centre in Spiti valley

Figure 7: Internal view of Didi contractor's house
(Source: Pragya, 2022)

Figure 8: View of Dolma Ling Nunnery and Institute: Labor managed by the user community
(Source: M.N. Ashish Ganju, 2007)

are a few examples of the integration of vernacular architecture practices with modern requirements. Designers like Didi Contractor, Prof. Ashish Ganju, and the Auroville Earth Institute have incorporated the basic principles of vernacular traditions into their contemporary buildings and fulfil the needs of the users' way of life, as well as social and cultural values.

Didi Contractor House

The building is situated at the foothills of the Dhauladhar Mountains, Himachal Pradesh state. The primary intent was to design environment friendly architecture, hence, effective utilization of natural light, use of locally sourced materials including clay,

Figure 9: Kaza Eco-Community Centre *(Source: Auroville Earth Institute, 2015)*

bamboo, mud, and river stones. Didi's profound knowledge of the native building materials enabled a built structure integrated with natural surroundings flawlessly. (Figure 7).

Didi elaborated her intent as, "I would like to emphasize playfulness, imagination, and celebration. By celebrating materials, by noticing their qualities, and celebrating them as you put them into building, celebrating the quality or the plasticity of the mud, celebrating the inherent, innate, and unavoidable qualities of each material. What the slate does to light, how the materials play within nature. What works, should just look natural, as if meant to be" (Bagha, 2018).

Dolma Ling Nunnery at Kangra District, Himachal Pradesh

Located in Sidhpur village, beneath Dharamshala, the current residence of the Dalai Lama, Prof. Ashish Ganju, the architect, collaborated closely with the users to rehabilitate 250 Tibetan refugee nuns. The geography of the site, the climate, the organisation of the open and built spaces, and the unified integration of Tibetan culture resulted in a unique experience. This project contains guest rooms, a health centre, academic facilities, and residential housing. The building was planned as a composite construction with a reinforced concrete frame and load-bearing stone and brick masonry walls because the location is in a seismically active area (zone 4). Materials used for the construction of the building are locally quarried stone and slate tiles. To protect the building from flash floods during the monsoon season, all the spaces were designed to be centred around open spaces (Figure 8). Participation of the Nuns in entire construction process enabled a sense of ownership.

Prof. Ashish Ganju said "My architectural practice provided the ground for the exploration of architecture as a manifestation of ancient sacred principles, so much a part of our everyday existence.' (Ganju, 2007). His professional endeavours aimed to integrated, architecture, interior, landscape, or urban design as a unified process. He explained that "The message from our cultural roots was very clear; our existence on Mother Earth was an interdependent process with all five elements of earth, water, fire, wind, and space manifest in the dynamic equilibrium of human activity and the physical environment, as found and as built. However, the contemporary reality of the very large numbers of people in this country, and the facts of economic and social marginalisation of the majority, became issues of overriding concern which were reflected in the project work of the practice" (Ganju, 2007).

Kaza Eco-Community Centre

The building, which sits in the Spiti valley of Himachal Pradesh, is made of raw rammed earth, CSEB components, and stone masonry to increase its seismic resilience, energy efficiency, and thermal comfort during the region's harsh winters (Figure 9). The building's methods and supplies were inspired by both contemporary earthen building methods and traditional Tibetan building systems. To lessen the significant use of firewood for household heating in this high-altitude, remote rural valley location, the centre has implemented "Trombe" walls with a specific ventilation system for passive solar heating in winter. The valley's traditional roofing techniques use logs of wood for the framework, which are then covered with a mat of branches and a layer of unprocessed rammed earth to provide insulation and thermal mass. For lateral stability, buttress walls have been built, and horizontal reinforcement has been heavily utilised.

Inferences

Table 1 below describes the integration of vernacular practices in contemporary architecture in above examples.

Aspects	Observations
1. Architectural Design	● Respect for natural context and local climatic conditions ● Response to socio-cultural identity of the place. ● The multi-use of spaces within the building is a very effective way of thinking to create meaningful spaces. ● Passive ventilation systems and the use of locally available materials provide higher degree of thermal comfort in extreme temperatures. The ornamentation of buildings done by local craftsmen using traditional techniques is closely associated with Himachal's *pahadi* culture.
2. Cost Effectiveness	● Judicial use of appropriate locally available materials ● Recycling of construction materials ● Community participation in the construction process
3. Structural Strength	● Because of the region's high altitude, structures are designed for seismic resistance. ● Native materials are compatible with the natural terrain, soil conditions, live loads. ● Additional strength required during climatic extremes- rain, snow, and wind.
4. Aesthetics	● Materials like mud, stones, slate tiles, wood, clay, bamboo, etc. are closely interwoven with Kathkunni and Spitian architecture. These regional traditional building techniques are used by the local masons to construct contemporary buildings; they are afterward visually enriched by artworks like paintings and wooden carvings.

Conclusions and Recommendations

With rapid urbanization and connected global influences, the locally available construction materials are rapidly replaced by new materials like R.C.C and steel. The rich vernacular architecture practices and techniques are under a threat of extinction. In order to protect and conserve the old architectural heritage of the region, the elements of vernacular practices should be adapted in the planning and designing of the contemporary building projects in the region. This will not only result in a resilient system of growth and development but will also protect and promote the socio-cultural identity and regional diversity. The ideals of Building in context are much needed, and Architects like Ashish Ganju and Didi Contractor are the torch bearer to show this path of sustainable built from through vernacular practices. The provisions should be considered by policymakers, planners, and architects for the and improved development pattern of the region. The papers recommend the following principles to be adapted:

1. Context appropriate designing and planning of contemporary buildings: To establish a balance between traditional aesthetics and vernacular traditions.
2. Use of regionally relevant materials: They are sustainable and eco-friendly, in perfect harmony with the local environment of the region. Additionally, they have the advantage of keeping the structures cool in summers and warm in winters.
3. Preserve the diversity of local culture in the modern structure: It is important to modify and change the vernacular form of architecture as per the needs of the contemporary lifestyle.
4. Protect ecological balance: To foster sustainable development and maintain the regions ecological balance, modern structures must be sustainable in social, economic, and cultural contexts.

A comprehensive and holistic approach is required for the regional future growth to preserve both the natural balance and the cultural uniqueness of the area.

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Ar. Kirti Verma Gupta is an urban designer. She studied architecture at the Apeejay School of Architecture and Planning in Greater Noida. She has completed her post-graduation in the Urban Design Department at SPA Bhopal. She has worked as an architect and research associate at *M.N. Ashish Ganju Architects* and *GREHA,* where she was professionally involved with large urban-scale architectural and city-level research projects. Currently, she is an Assistant Professor at the Apeejay School of Architecture and Planning in Greater Noida.

Ar. Kamini Singh gained her master's in urban design from the School of Planning and Architecture, Delhi, where she is also pursuing her Doctoral Research on Thermal Comfort in Public Spaces. She has over 12 years of experience in teaching, research, and practise. Presently, she is working as an urban designer at P2E Mayaa-verse.

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3. 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.
4. JIIA does not charge any fees for publication of any professional or academic work unless specifically mentioned by the Editorial Committee.

Category 1

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 given below).

- 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.
- Further, it is important that along with the manuscript, we receive an undertaking from you that the stated architect/ architectural firm is the author of the architectural projects mentioned in the article, and that IIA and JIIA is in no way responsible for any matter or dispute arising out of the publication of the same.

Category 2

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 given below).

Category 3

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

Note for Authors:

As per the UGC Draft Regulations for Minimum Standards and Procedures for Award of Ph.D. Degree 2022 (Clause 9.3) research papers published in 'refereed / peer-reviewed' journals are acceptable. JIIA being a refereed / peer-reviewed journal, it will now be able to stand acceptable and recognised for publishing by researchers for their research papers in JIIA and may use the same for the relevant purpose.

Category 4

Contributions from Chapter Correspondents

(a) *Chapter News:* This includes various interesting activities from the Centres of your Chapters (maxm. 500 words for the news from the *entire* Chapter). All material sent should be sent in the following two components :

1. MS Word document file with text only. Please do not format it in anyway. No pdfs will be accepted. The numbered captions for all the images will also be in this document. This should NOT contain any images.
2. Folder with all images (minimum 300 dpi), numbered according to the captions given in your text file. (b)Projects: Identify outstanding architectural projects of members and send them to JIIA Team to consider for publication. (Please follow the design project requirements as given in Category 1)

© *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.

Note

1. Please email all papers and articles through the Chapter / Centre or directly to jiiaeditorial@gmail.com.
2. Format is available on the JIIA website.

JKCement

32nd Architect of the Year Awards

JK AYA

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NOTE FROM THE DESK OF MD
DR. RAGHAVPAT SINGHANIA

32nd Architect of the Year Awards
JK AYA

Dear Architects,

As we embark on the new fiscal year with a renewed sense of determination to achieve even greater heights, we are filled with optimism and hope, that we will continue to conquer many milestones. There is still a long road ahead but we are united in this journey and I Wish you all the best for the year ahead!

I am delighted to extend my warmest congratulations to all the winners and participants of the 32nd JK Architect of the Year Awards. It was an honour to see such a high level of excellence and creativity displayed in the entries submitted. JK Architect of the Year Awards has always been dedicated to highlighting the best in the industry, and it is an excellent opportunity to recognize and celebrate the talent and hard work of the architects who have made significant contributions to the architectural landscape.

I would like to take this opportunity to thank our Jury Members for their invaluable input and expertise in assessing the entries. My deepest respect to our esteemed members for taking time out and helping us with the evaluation. Your dedication and commitment to this process are greatly appreciated.

To all the winners, I offer my heartfelt congratulations. Your achievements are a testament to your dedication, vision, and commitment to excellence. I'm happy to see that your work is being featured in the Journal of the Indian Institute of Architects. I'm sure that your contributions will continue to shape the future of architecture to build a better and more sustainable world.

To all the participants, I would like to express my sincere appreciation for your participation and contribution to the awards. Your efforts have not gone unnoticed, and I encourage you to continue to push the boundaries of architecture and design.

Once again, congratulations to all the winners and participants of the 32nd JK Architect of the Year Awards. I look forward to seeing your work and I urge each one of you to continue to innovate as we envisage a brighter future.

With these remarks, I'm requesting you to participate in the 33rd JK AYA. The closing date for participation is June 30, 2023.

Please consider nominating your seniors and mentors for the Great Master's Award as we are also accepting applications for it this year.

Thanking you all.

Dr. Raghavpat Singhania
Managing Director - JK Cement Ltd.
& Chairman - JK AYA

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COMPANY PROFILE

JKCement

JK Cement Ltd is one of India's leading manufacturers of Grey Cement and the third largest White Cement manufacturer in the World. Over four decades, the Company has partnered India's multi-sectoral infrastructure needs on the strength of its product excellence, customer orientation and technology leadership. JK Cement's operations commenced with commercial production at its flagship grey cement unit at Nimbahera, Rajasthan in 1975.

The Company has an installed Grey Cement capacity of 14.7 MnTPA as on date, making it one of the top cement manufacturers in the Country. JK Cement Ltd. is the No. 1 manufacturer of Wall Putty in the World and the third largest manufacturer of White Cement, globally, with a total white cement capacity of 1.20 MnTPA and wall putty capacity of 1.2MnTPA. JK White Cement is sold across 43 countries around the globe and the Company has a strong international presence with two subsidiaries, JK Cement Works Fujairah FZC and JK White Cement (Africa) Ltd.

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The Company's laboratory is also accredited by National Accreditation Board for Testing and calibration Laboratories (NABL) - the first for any Indian Cement Plant. JK Cement Ltd. is also a Member of Indian Green Building Council (IGBC).
JK Cement is a pioneer in felicitating outstanding contributions of architects. The brainchild of Late Mr. Yadupati Singhania, Former Managing Director, JK Cement Ltd., Architect of the Year Awards (AYA) was instituted in 1990 to inspire the professionals to strive towards further raising the bar in architecture standards of the Country. JK AYA since then has lived up to its legacy of awarding excellence every year & has helped pave the way for a better tomorrow in design which is continuing under leadership of Dr. Raghavpat Singhania, Managing Director, Mr. Madhavkrishna Singhania, Deputy MD and CEO, JK Cement Ltd.

JURY PROFILES

Ar. Malay Kumar Ghosh is from Eastern part of India i.e Kolkata. Currently he is Partner and Principal of Espace, Kolkata. He completed is graduation in the year 1986. He serves as Visiting Faculty to Architecture Department at Indian Institute Of Engineering, Science & Technology (IIEST) and acts as External Jury to final semester U.G.Thesis work in IIEST, Jadavpur University and IIT-KHARAGPUR. He also won JK State Architect of the Year Awards in the year 2001.

Ar. Pratyush Shankar is an academic and Dean of SEDA, Navrachana University. Prof. Pratyush was the Acting Dean of Architecture and head of the Undergraduate Program at CEPT University and has been teaching Urban History and Design for many years now. He has authored the book titled "Himalayan Cities: Settlement Pattern, Public Places and Architecture" published by Niyogi Publishers, New Delhi, 2014. He is presently also a Guest Professor at the Mundus Urbano Program at Architecture Faculty, TU Darmstadt, Germany. He was awarded the Alexander Von Humboldt Fellowship in 2015 and was hosted at at University of Bonn, Germany. His forthcoming publication is with Oxford university Press is titled "History of Urban Form: India". Pratyush runs a design practice along with his academic interest. He was awarded the 22nd J K Cement Architect of the Year award 2013in Residence Design Category.

Ar. Lalichan Zacharias is from Kerala, India. He has completed his graduation in Architecture from College of Engineering, Trivandrum. He is Chief Architect of Lalichan Zacharias atelier, Architects and Associates. Ar Lalich Zacharias has almost 38 years of experience in Architecture Consultancy Field. Currently he is also serving as the IIA National Council Member, member in Council of Architecture and Chief Editor JIIA, the National Journal of the Indian Institute of Architects.

Ar. Anuya Killedar-Moharil is a highly accomplished architect and educator currently pursuing a Doctor of Philosophy degree at Visvesvaraya National Institute of Technology. She has over a decade of experience as an Associate Professor and Dean Design at Priyadarshini Institute of Architecture and Design Studies. She is passionate about teaching and is dedicated to constantly updating and upgrading herself and her teaching methods to keep up with the changing scenarios in education.

Ar. Prof. Alfred Omenya is from Kenya and practicing architect and sustainable human settlements expert. He is the Principal Researcher and CEO at Eco-Build Africa. He is Adjunct Prof. University of Canberra in Australia and Kenyatta University in Kenya. He is the Chairman of the Education Committee of the College of Fellows of the Architectural Association of Kenya. He published two research reports on the State of Housing in Kenya. He is currently the lead consultant in development of Building Regulations incorporating Sustainability, Climate Change and Disaster Risk Management for the Republic of Malawi, the Islamic Republic of Afghanistan and Republic of Uganda.

Ar. Dorji Yangki is one of the first female architects from Bhutan. She was a Fellow at the Graduate School of Design at Harvard University in 2009, & has completed her Masters from Australia. She was Chief Architect at the Ministry of Home and Cultural Affairs for 16 years. She was President of the Bhutan Institute of Architects and was the first female Chair of SAARCH (South Asian Architects). At present, she works as Principal Architect in her own firm in Bhutan.

Ar. Mahmudul Anwar Riyaad is from Bangladesh. He is currently associate professor at BUET, Bangladesh. He has completed his masters in year 1998. He is member of The board of Architectural Education of IAB & served as Education secretary of IAB consecutively. He is also editor of the book "50 years of Architecture in Bangladesh". He is also winner of many awards like JK Cement Award, Berger Award, IAB Award etc.

Ar. Divya Kush is a Fellow member of the Indian Institute of Architects & Life member of Indian Arbitration Council & retired as the President of the Indian Institute of Architects (IIA) in the year 2020. He has graduated from Unversity of Roorkee (now IIT Roorkee) During his more than four & half decades in the profession, he has been associated with a vast mosaic of professional involvement and started practising at Delhi since 1982. He has also served as Jury for numerous Thesis Projects & Design Competitions. He has been passionately involved in academic affairs and has been a full time teacher at Chandigarh College of Architecture in 1984 and finally retired as Professor & Director, School of Architecture, Noida International University, Greater Noida.

Ar. Rajiv Khanna is the Founder Principal at StudioKIA Gurgaon(with a representation in the UAE).His Expertise and excellence are in Master planning, high rise Residential, Luxury villas, Hospitality, Institutional & Educational and Mixed-use developments has seen projects stamped across the globe. He has done lot of National and International prestigious projects. He is winner of Realty + 2021 Icon award & Global ReConnect International award in year 2022.

Professional Advisor

Ar. Rhidul Sharma is from Raipur & graduated in architecture in year 2005 from Baroda. Ar. Sharma is owner of firm name Raipur Ink. Apart from Architectural practice, he is currently holding a position of hon. Secretary in Raipur center of Indian Insisitute of Architects and also played a vital role in establishing the Raipur center for IIID, Raipur Centre. He is actively involved in teaching and take regular lectures in architecture and interior designs colleges. He has also served as visiting faculty in NIT, Raipur.

A REPORT ON JURY MEETING AND WINNERS ANNOUNEMENT FUNCTION OF 32ND JK AYA

The "Jury Meeting & Winners Announce Function" for 32nd JK Architect of the Year Awards was held for two days in Nashik, on 2nd and 3rd March 2023, with several eminent Architects and Jury members in attendance. The meeting was organized to evaluate approx. 300 entries received from India and foreign countries. The jury members, who were all experienced professionals in the field of architecture, examined each project thoroughly and discussed each other. The competition was organized to recognize the best architectural designs, sustainable and eco-friendly buildings.

On the first day, the jury members gathered at the venue and began evaluating the entries. Each member of the jury carefully examined every entry and provided their individual feedback. The jury members were impressed with the quality and diversity of the designs submitted, and they spent the entire day reviewing and discussing the entries.

After a long day of evaluation, the jury members gathered in the evening for a dinner and they discussed their perspectives on the latest trends in architecture and design. During this time, they discussed their thoughts on the entries and shared their experiences in the field of architecture.

On the second day, the jury members reconvened early in the morning to finalize their evaluations and make a final decision on the winning design. After much discussion and deliberation, they finally arrived at a consensus and selected the winning design in different categories.

In the evening, "Winners Announcement Function" was organized to declare the name of winners of the 32nd JK AYA Awards in every category. The name of all the winners along with the project details were professed by one of the senior Jury member and the awardees of the winning entry will be awarded during 32nd JK AYA award function. The function was attended by Architects, Builders, and other professionals of the building industry.

A presentation was also given by few jury members of India and foreign countries during winner's announcement function. In the presentation they showcased the key features of their projects design and description to all the architect participants.

During Jury meeting display of all the participant entries was also opened for two days for the final year Architect Students of all architectural colleges in Nashik was a great success. This exhibition provided a platform for the students to learn and understand Creativity and Innovation, Conceptualization and Design, Technical Detailing and Presentation of the projects, which will help in their profession.

Overall, the jury meeting was a successful event that brought together some of the brightest minds in the field of architecture and design. It provided an excellent platform for architects to showcase their creativity and innovation and share their knowledge and expertise.

We thank you all jury members and professional advisor for their support and contribution for 32nd JK AYA.

Rana Pratap Singh
Administrator JK – AYA

GLIMPSES OF 32ND JK AYA JURY MEETING AND WINNERS ANNOUNCEMENT FUNCTION

GREEN ARCHITECTURE AWARD
AR. SHAON SIKTA SENGUPTA (MUMBAI)

32nd Architect of the Year Awards
JK AYA

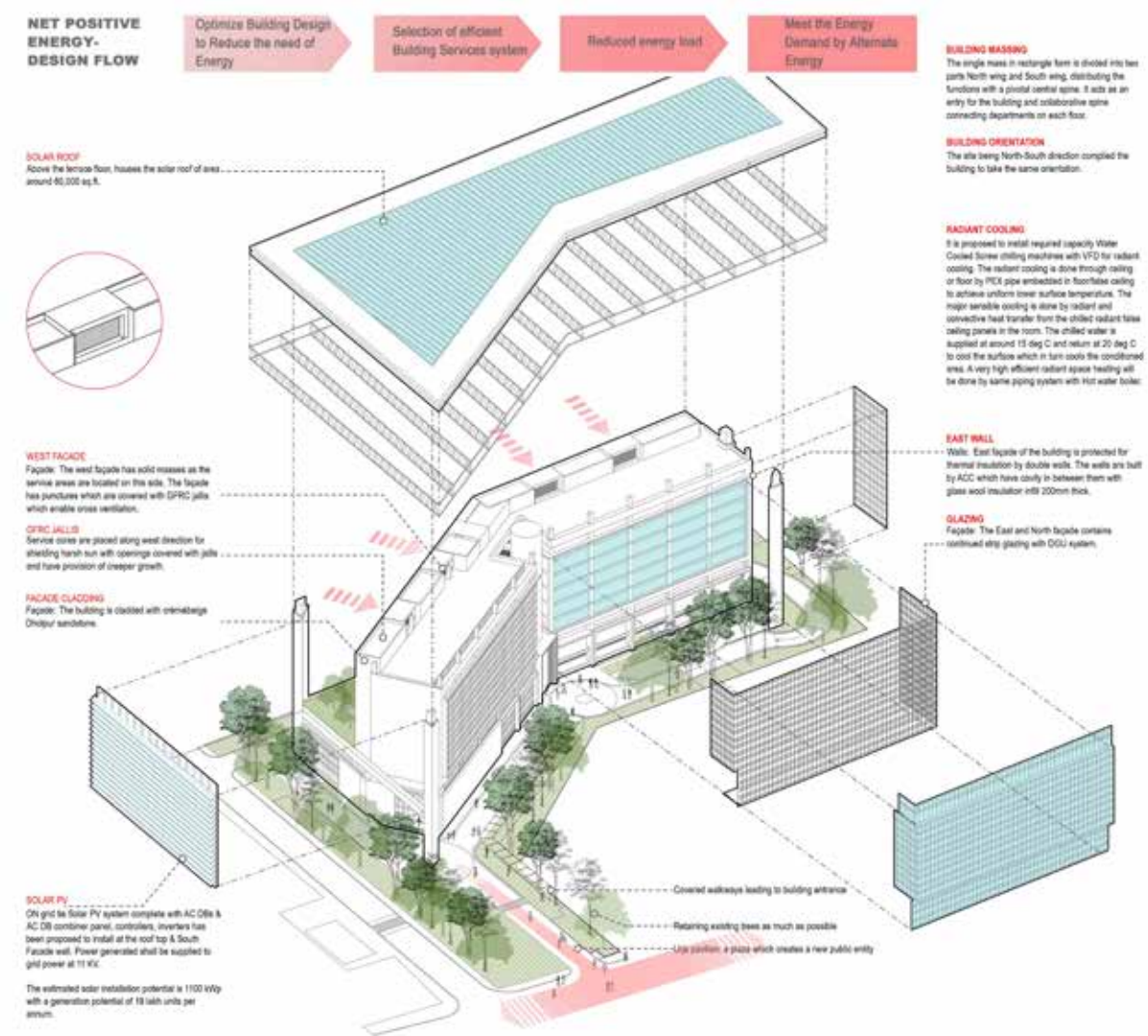
Atal Akshay Urja Bhawan
New Delhi

Cost of Project: 266 Crores INR
Built-up area: 359317 Sq. ft

Description of the project:
Serving as the Ministry of New and Renewable Energy (MNRE) headquarters, Atal Akshay Urja Bhawan is a net–positive energy campus that creates a new paradigm for energy-conscious development in the country. The building expresses MNRE's pioneering vision of integrating renewable energy systems and passive strategies, and making them accessible and educative to the general public. The design of the Atal Akshay Urja Bhawan complex demonstrates the Ministry's mission, thereby encouraging future developments to incorporate such sustainable principles in their design, while creating a prototype for iconic, net-zero energy buildings.

Located on a 2.7-acre site in the CGO complex area along Lodhi Road, New Delhi, the complex shares its eminence with significant landmarks such as the India Habitat Centre, Lodhi Gardens, Jawaharlal Nehru Stadium etc. Several aspects of these contemporary and iconic architectural structures have significantly influenced the building's design response — the cultural magnetism of India Habitat Centre, the green oasis of Lodhi Gardens, and the ambitious symbolism of the Jawaharlal Nehru Stadium. These contextual influences have further defined the vision for the project: of creating a landmark building that symbolises the country's sustainable aspirations and has an active public interface.

Master Planning: To accommodate the functional requirements of the campus and foster an engaging public realm, the building follows the same orientation as the site, aligning along the north-south axis, while significantly maximising the rooftop area for solar panels. A permeable public edge is created alongside the building's footprint on the eastern edge to celebrate the site's frontage. The open court extends towards the south-eastern corner of the site, creating a seamless link between the adjacent road and the forecourt of the building. This extension is where the Urja Pavilion is located, an interactive zone designed to subvert the conventional image of a government building as opaque and impenetrable. Conceived as an urban plaza with solar sculptures and installations, the Urja Pavilion is placed across the JLN metro station with a shaded walkway linking the



pavilion to the entry forecourt for a streamlined pedestrian experience.

Designing the Monolithic Mass: Atal Akshay Urja Bhawan's architecture is centred on a holistic approach to sustainability in line with the vision for the campus, conflating energy efficiency with passive design strategies and low-impact materials. The monolithic mass is divided into north and south sections, with a central atrium acting as the main entrance and establishing a pivotal connection between them. Following the site geometry, the south wing has been angled to create an enhanced arrival experience and maximise daylight ingress from the north. A circulation spine extending from the central atrium splits the building's plan into two, with functional spaces located on the eastern half. Service and circulation cores are placed on the other half to shield occupied zones from the harsh western sun — an inspired strategy that counters the challenge posed by the north-south alignment of the site.

The ground floor of the building blends seamlessly with the surrounding landscape, housing the communal spaces and civic functions for both daily users and the general public. Visitors enter into the three-storeyed central atrium, towards the main reception marked by a striking stone backdrop. To one side of the atrium, the North Wing houses a creche, Kendriya Bhandar, bank and ATM – all of which are also directly accessible from the forecourt. On the other side lies the South Wing comprising a 250-seater auditorium, exhibition centre, and visitors' room, accessed by a secondary entrance on the southern edge. The first and second floors consist of collective building amenities like the library, exhibition areas, seating spaces, canteen, recreation and exercise zones, and guest rooms, creating a transitional zone between the public ground floor and the private office floors. Workspaces are located on the upper floors, where they receive optimum daylight, expansive views and privacy from the public zone. The Cabinet minister's office and the Minister of State are located on the eighth floor, an exclusive level with panoramic views of the surrounding landscape.

Materials of Construction details:

To duly respect the rich architectural heritage character of the city with keeping in the language of modernism is the primary purpose. To adhere to the purpose, the built mass is being wrapped by a portal (an envelope) to attain a strong character as similar to that of Fort architecture. The structure is then cladded with local sandstone. It continues in the tradition of institutional and public architecture of New Delhi, using beige Dholpur sandstone as the primary façade material. The soffit of the solar roof also consists of jaalis, providing an aesthetic cover to roof projections and tying the building with the architectural lexicon of the Lutyens' cityscape. On the southern edge, a solar wall shields the building and its

southern seating court from incident radiation apart from contributing to its energy sources.

Walls: East façade of the building is protected for thermal insulation by double walls. The walls are built by Autoclaved aerated concrete which have cavity in between them with glass wool insulation infill 200mm thick.

Façade: The building is cladded with crème\beige Dholpur sandstone. The East and North façade contains continued strip glazing with Double Glazing Units system. The west façade has solid masses as the service areas are located on this side. The façade has punctures which are covered with GFRC jallis which enable cross ventilation.

Special Features: 10 Green Strategies for a Net-positive campus- - A multitude of strategic interventions are combined with alternate sources of energy.

- Building orientation, fenestrations, jaalis, energy-conscious building envelopes and shading devices work in tandem to decrease passive heat gain.

- A large-span roof perches atop the terrace floor with 60,000 square feet of solar panels, extending beyond the building's footprint to create overhangs shading its walls.

- Photovoltaic panels on the roof and southern wall produce electricity to the tune of 1100 kWp with a generation potential of 19 lakh energy units per annum.

- Water-cooled screw-chilling machines have been used to create a radiant cooling system — running through PEX pipes embedded in the ceiling, they uniformly lower the surface temperature.

- Additionally, the reduction of the building's air condition footprint and energy-efficient fixtures have further brought down the building's power consumption.

- The project also aims to conserve water by harvesting its rainwater and treating its wastewater, reusing it in the cooling tower and flushing and horticulture.

- The site's landscaping has been done with local and indigenous flora, with all lighting fixtures powered through individual solar panels.

- The east face has a continuous double-glass unit (DGU) glazed façade to allow daylight into interior spaces while insulating them from heat.

- The eastern façade is thermally insulated with double walls built using ACC masonry with a glass wool infill of 200 mm thickness.

- The western façade covers the service cores and features solid walls and GFRC jaalis that allow creepers to grow on them and bring cooling breezes into the building for cross-ventilation.

INDIAN ARCHITECTURE AWARDS (IAA)
ARCHITECT OF THE YEAR
AR. P. N. MEDAPPA (BANGALORE)

32nd Architect of the Year Awards
JK AYA

K.I.P.C.E.R
Bangalore

The Board of Trustees who were managing the 25-year old hospice decided to expand their patient-care reach and extend their services into training and research.

As palliative care is still at an early stage of development, the approach to improve it in the future had to include education, training and research. The KIPCER Centre which was born out of this earnestness had to accommodate an Outpatient Department to aid the Hospice care. This is a social project envisioned and implemented by a group of highly dedicated and committed people with funds raised through donors.

A 100-seater auditorium, 3 classrooms, Guest room accommodations, Canteen and a Charity shop were part of the requirements in addition to the office spaces.

The project located in the existing Hospice campus, occupies around 2 acres of the 5 acre property. This land upon which quite a few trees existed was surrounded by internal roads on all 4 sides. The design intent was to preserve all the existing trees. As a result the built envelope weaves around the existing trees.

FLOOR PLANS

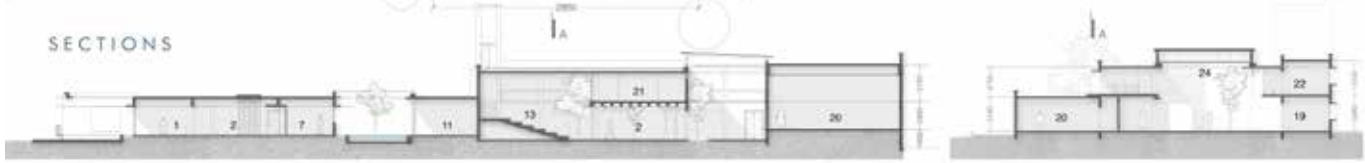
GROUND FLOOR PLAN

1. RECEPTION AND REGISTRATION
2. WAITING AREA
3. DAYCARE
4. PHYSIOTHERAPY
5. DRESSING/PROCEDURE ROOM
6. HOME CARE OFFICE
7. CONSULTATION ROOM
8. TOILET (HERS)
9. TOILET (HIS)
10. KITCHEN
11. CANTEEN
12. CHARITY SHOP
13. AMPHITHEATRE STEPS
14. STAIRCASE
15. TOILET
16. OFFICE
17. OFFICE
18. OFFICE (4PAX)
19. BREAK OUT (20PAX)
20. AUDITORIUM (100PAX)

FIRST FLOOR PLAN

14. STAIRCASE
21. LIBRARY/COMPUTER RM
22. ROOM
23. STORE
24. SKYLIGHT

SECTIONS



SECTION A

SECTION B

The training centre facilities are grouped around a central area which has the open spaces, amphitheater and the waiting lobbies. These transition spaces seamlessly flow from one to another function.

The amphitheater works as an informal classroom, the double height sky-lit lobby is used as pre-function area for the Auditorium as well as a breakout area for the classrooms.
A large painting on the wall of this lobby becomes a focal point of this entire voluminous area.

PLAN SHOWING COMMUNAL NODE

The openess of the central area facilitates a multi-functional and interactive usage for all of the centre's users.

CLASSROOMS
AUDITORIUM
LIBRARY
OFFICES
CANTEEN

SECTION THROUGH COMMUNAL NODE

The buildings are arranged in a north-south direction and are accessed from the west. The treatment rooms and service areas are located on the eastern side. Based on the existing arrangement of trees, the largest open area has been allotted to the Institute and Auditorium.

The OPD which has an entry from the Hospice side is designed as a compact one-floor block around a small pool. The central waiting area opening onto the water body and the greenery on the other side linked all the facilities of the OPD. The Canteen is built as an open pavilion adjacent to a reflective pool.

The training centre facilities are grouped around a central area which has the open spaces, amphitheater and the waiting lobbies. These transition spaces seamlessly flow from one to another function. The spaces double up as multifunctional and informal spaces for interaction, catering to the needs of the classrooms and Auditorium. While the amphitheater works as an informal classroom, the double height sky-lit lobby is used as a pre-function area for the Auditorium as well as a breakout area for the classrooms. A large painting on the wall of this lobby becomes a focal point of this entire voluminous area.

Light as an element enhances the spaces in different forms. The play of shadows in the double height atrium and the diffused light in the mango/neem tree courts bring in variations of light enhancing the quality of the spaces.

Locally available Grey granite stone is used on the walls in a rough form. Entire colour palette in the common areas is grey and white tone. Inside the auditorium a bit of beige and light brown shades are introduced to bring in a warm feel.

Transition spaces flowing from one to another, modulation allowing free flow of air, numerous interaction spaces, porosity woven into the built structure, effectively connecting the indoor and the outdoor are the main features of the project.

COMMENDATION AWARDS
PRIVATE RESIDENCE
AR. SMIT VYAS AND AR. KHUSHBOO VYAS (AHMEDABAD)

32nd Architect of the Year Awards JK AYA

Weekend House
Aalloa, Gandhinagar

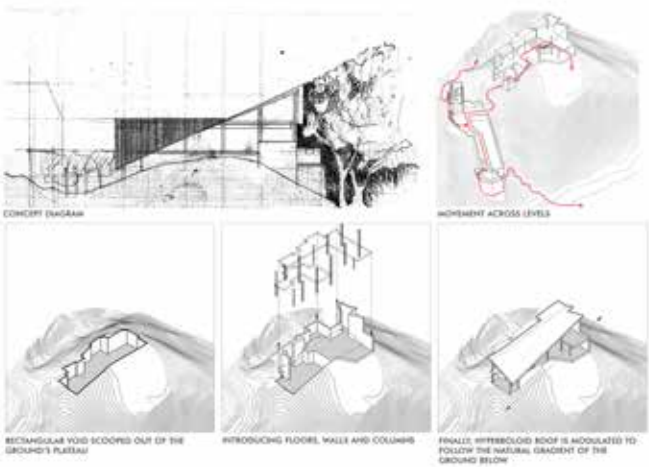
Gross Built Area: 3500 m2

Context:
Project was an opportunity to engage with a pristine, forested site, located on the banks of Sabarmati river near Ahmedabad. Shaped by the region's riverine landscape, the undulating site is approached from the north and included a plateau- 15M from the water level- towards its western edge. From here, the site sloped down eastwards as one approached the river's edge. All constructional decisions were made to preserve the original land form and ecology of the site with limited interference.

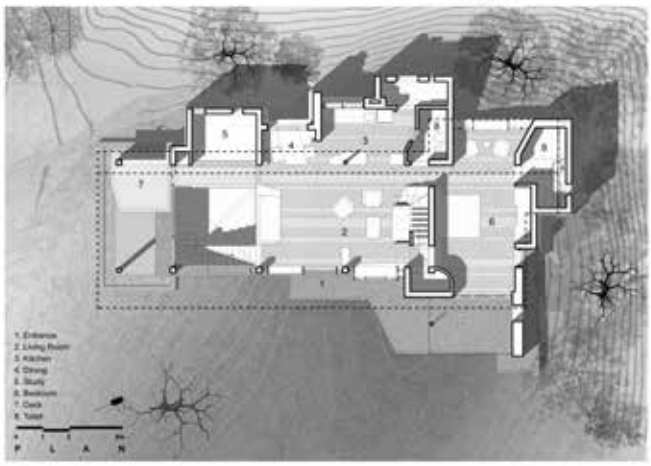
Siting:
Principal built masses – the house, swimming pool and water tower – are located around the highest plateau. Leaving it free for outdoor activity, the house's rectangular mass is pushed back and placed horizontally, with its longer side facing the river. Across the valley, the swimming pool is carved into the adjoining earth-mound along its slope. Further south, the masonry water tower rises from the highest point of the opposite hill.

Organization & Spatial relationships:
A thick retaining wall courses zigzag along the plateau's edge to stabilize the building on its slope. It forms compact, room-like spaces which accommodate services- kitchen, dining, wash-yard, toilets, storage, etc. In contrast, a large columned hall, covered from top by a hyperbolic paraboloid, exposed RCC roof, is developed towards the river facing edge. This continuous, loggia like space across different levels supports living, sleeping, etc. The work's key organizational move involves developing these entities- the room and pavilion- through a dialectic play between opposing conditions of hillside v/s riverside view, sunset v/s moonrise, service v/s served space, etc.

Section develops by scooping out a rectangular void at the plateau's edge. The dialogue with landform commences through this inceptive act of the imminent built-form making an imprint into the topography. Into this, floors, walls & columns are introduced to form the core of the house. Finally, the hyperbolic paraboloid roof is modulated to follow the natural gradient of the ground below.


CONCEPT DIAGRAM
MOVEMENT ACROSS LEVELS
RECTANGULAR VOID SCOOPED OUT OF THE GROUND'S PLATEAU
INTRODUCING FLOORS, WALLS AND COLUMNS
FINALLY, HYPERBOLOID ROOF IS MODULATED TO FOLLOW THE NATURAL GRADIENT OF THE GROUND BELOW


SECTION A
SECTION B


1. Entrance
2. Living Room
3. Kitchen
4. Dining
5. Study
6. Bedroom
7. Deck
8. Toilet
PLAN


SITE PLAN

Materials of Construction Details

The project uses a composite structural system. The RCC roof is cast manually, using pinewood shuttering. Teakwood and glass panels are used to make door and windows. In places, they are carefully thickened to integrate furniture into them and become inhabitable zones. Elsewhere, they are made much thinner to wrap around the structure and maximize the view.

Exterior stone cladding extends till the basement, eliminating the need for visible plinth protection. It expresses limits of building's intervention into the landscape, allowing it to be perceived as literally growing out of the ground.

Special features

As linear building blocks, the house, pool and water tower are oriented along different coordinate axes to engage three-dimensionally with the site. In each, different floors and landings are worked out to be accessible from varying levels of the landscape. Collectively, the built form belongs to the natural setting by such a three dimensional, sculptural engagement- opening through disposition and movement new ways of experiencing the exterior space and unravelling its majesty.

The hyperbolic paraboloid roof mirrors the topography and reintroduces the original shape of the hill that was lost to construction. Enveloping the entire house from above, it allows the project's spatial experience to retain the memory of the original landscape and be characterized by it.

COMMENDATION AWARDS
PUBLIC BUILDING
AR. VIKRAM HUNDEKAR (PUNE)

32nd Architect of the Year Awards JK AYA

Central Arcade
IIT, Gandhinagar

BRIEF INTRODUCTION

Since the construction works for phase 1 [@ 1500 students + @250 faculty and staff] for academic block, student and faculty housing completed and functioning smoothly at IITGN, an institute to function as a truly residential campus some additional functions were necessary to be inserted in present space planning. These functions shall take care of extracurricular activities, leisure activities, basic day to day needs, some emergency facilities, and healthcare. This present phase will be followed by similar future development phases, where a need will be to have a seamless connection between core functional requirement and all supporting facilities to grow as integral and self-sustainable residential campus.

As per master plan, Parcel demarcated for the central arcade development is part parcel no 11 - amenity no 4 [6922 sq.mts land area, 1.5 FAR and 75 % ground coverage]. this parcel has been planned in the centre of the southern campus with built to edge design conditions this facility termed as arcade on central vista shall house basic day to day need in terms of essential shopping, food court zone, student activity centre, common community facilities for students as well as faculty, staff, students' art centre, informal students lounge and alumni offices, bank, restaurant, health centre and recreational multipurpose hall. This facility has been conceived as one of the most important buildings of the entire campus attributed to vibrancy of student campus life. Though the activities planned will work throughout the daytime and many activities spill over the night-time, it is expected to be full of student life in the evening sessions and weekend. This building will be always a point of reference in student education life and likely carry in the memories of the students.

Overall building form as per master plan is rectangular in shape admeasuring 187 m x 33 meters, which is further broken in 2 blocks namely phase 1 and 2 block. With a continuous covered corridor connecting all the blocks. All terraces and intermediate open spaces have been planned to be developed as outdoor student activity spaces.

- This building has been conceived as ground + 2 storey as per master plan guidelines
- The arcade being placed between the 2 campus greens, is an extension of the green space in its true sense. The greens flow through the building
- "The building is different from any other building on campus as it is meant for "unwinding" "undoing" "unlearning
- We always say that while designing any institutional campus we should always remember that learning happens outside the classrooms
- The personality is shaped knowingly and unknowingly in these areas where the students "happen to be present" without any specific agenda
- This is "the space" where a student doesn't "have to" go and would "want to" be

The conceptual sketch section beautifully summaries the spirit of the design of this building. The street, spaces overlooking the street, the spirit of market depicted in the "street like" hallways on upper floor, curious semi-open spaces watching over the street and lots of "life" happening across the. street and somewhere midway
The sketch of movement and life/ activities woven around the movement axis subtly guides the student across the arcade and sports Centre towards. activity zone


SECTION 1-1


SECTION 2-2


ELEVATION A


ELEVATION B







It surely ignites the curiosity in the minds of a passer-by and makes him / her step into the arcade / activity zone making the arcade more active at any point of the day
Being an unwinding space, it has tried to capture the impression of a typical urban unwinding space which is market or mall in modern cities, though in institutional architectural vocabulary

SALIENT FEATURES

1. Use of GGBS in RCC construction
2. No vibration for compaction of concrete
3. Use of fly ash bricks in construction
4. Wall Insulation inside cavity wall construction on west and south faces
5. Low u value DGU windows externally for reduction of heat / glare transfer inside
6. Sunscreen lovers on south and west side to reduce glare entering inside habitable spaces
7. Deep recesses, buffer terraces and mutual shading devices
8. Multiple inlet outlets for overall breeze movement inside overall building
9. Use of natural light in deep inside buildings and public places
10. LED light fittings
11. Low flow plumbing fittings, duel flush valves
12. Water free urinals
13. Use of Low maintenance materials such as stone grit, bare concrete surface, natural stone Kota / granite 30 mm thick
14. Application of Solar PV cell on roof
15. roof top rainwater harvesting in storage tank of 10 lac litre capacity 100% surface rainwater harvesting to recharge existing lakes at site 100%
16. Water recycles for flushing system and gardening
17. Segregation of wet / dry / electronic / plastic / paper waste and its process at campus such as biogas generation, land fill with construction debris
18. Heat reflective China mosaic coat on India waterproofing with roof insulation for all roof terraces
19. BRIEF SPECIFICATION
20. M: 35 grade self-compacting concrete with GGBS added for form finish exposed concrete
21. Fly ash masonry work
22. Natural stone - Kota, river finish granite flooring
23. DGU aluminium windows with toughened glass as required
24. [Stone grit plaster with grooves externally [marble chip 85% + mandana stone 15% - 8 - 10 mm size
25. Internal gypsum plaster with plastic paint
26. Teak wood frame doors, flush shutter with veneer cladding
27. Water repellent transparent matt coat externally to plaster and exposed concrete all surface
28. Heat reflective China mosaic coat on India waterproofing for all roof terraces
29. SS railing
30. HVAC - VRV system
31. LED lighting internally as well as externally
32. CP fitting - Jaguar, sanitary fittings - parry ware
33. Teak wood fingers flooring for dance / drama hall

COMMENDATION AWARDS
GROUP HOUSING
AR. SANJAY PURI (MUMBAI)

32nd Architect of the Year Awards
JK AYA

Shree Town
Raipur

Taking cues from the organic housing layouts of old Indian cities & villages, this housing project has an informal layout. Part of a masterplan of a 36-acre self-sufficient housing project being developed for the personnel of a cement plant, this project is located 3 km from the closest small city amidst open land all around with no other development in the vicinity.

A large open landscaped park punctuates the overall masterplan with studio apartments, smaller & larger apartments, a school & a club along the perimeter of the site. Within an area of 6 acres (24281sq.m.), a mid-rise buildings housing 72 studio apartments, 48 nos. of 2-bedroom apartments and 48 nos. of 3 bedroom apartments are planned in an organic layout.

Each building is designed with sheltered open courtyards naturally ventilated circulation spaces & garden spaces between them.

All the apartments are designed with recessed windows, sheltered balconies & cross ventilation to mitigate heat gain in response to the hot climate of the location where

SECTION

BLOCK PLAN

LEGENDS :

1. STUDIO BLOCK
2. HOSTEL BLOCK
3. RAIN WATER HARVESTING POND
4. RESIDENTIAL BLOCK - 01
5. RESIDENTIAL BLOCK - 02
6. CENTRAL LANDSCAPED AREA

LAYOUT

temperatures remain in excess of 35°C for 8 months annually. Color plays an important role in the project. Different color combinations identify the different building typologies within the housing. Vibrant colors are an integral part of traditional festivals, clothing, ornaments, housing & food in India.

This project is 3km away from a very small city and 90 km away from the closest large city. To invoke a sense of vibrancy as a response to its isolation & simultaneously imbibe traditional Indian culture. Colourful hues accentuate the buildings & their circulation spaces. The internal spaces of each home is in neutral colors allowing the occupants to have their own choices.

Since the overall layout is planned with a large 36,000 sq.m. garden, the apartment buildings are designed to create intimate sheltered spaces between them. These spaces are varied in each part of the layout by the organic nature of the building placement, creating multiple spaces with varying degrees of enclosure & shape. All the water is recycled and reused within the project with its own sewage treatment plant. Extensive rain water harvesting is integrated with the planning. The design ensures & facilitates natural light and ventilation to all the spaces within.

Designed in response to the climate, imbibing traditional planning principles& cultural responses. Shree Town is a contextual housing project designed sustainably.

COMMENDATION AWARDS
HEALTHCARE AND MEDICAL BUILDINGS
AR. SHIMUL JAVERI KADRI (MUMBAI)

32nd Architect of the Year Awards
JK AYA

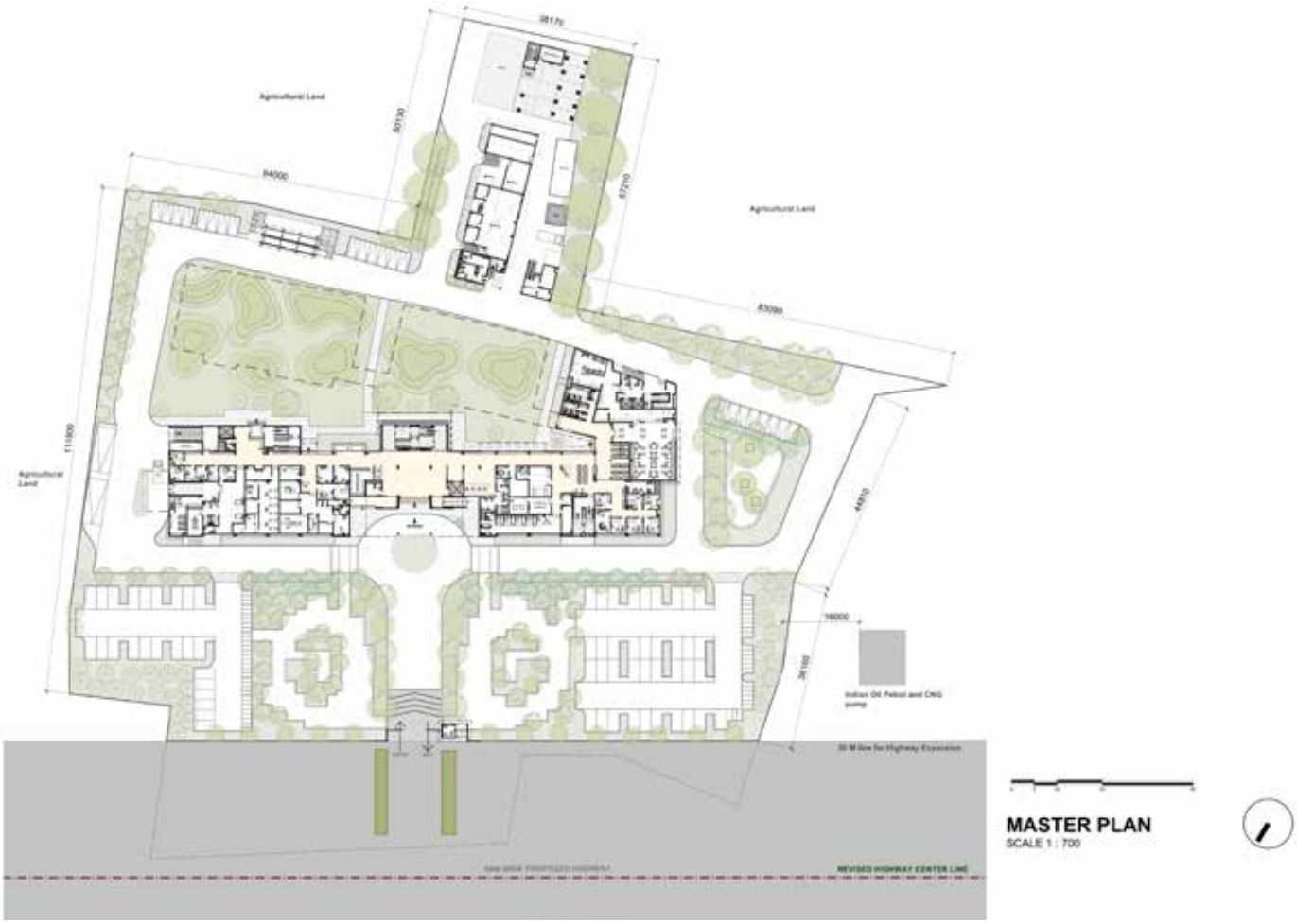
JSW Sanjeevani Multispeciality Hospital
Dolvi Village, Raigad District, Maharashtra, India

Cost of Project (INR): INR 65 Cr
Built-up area: 8194 sqm

In the context of Alibaug & Dolvi village, where large overhangs & sloping roofs protect against the intense monsoon, where outdoor spaces like courtyards, verandahs & balconies are widely used in this sea-side climate; using natural Light & ventilation, expressing compassion, wellness & beauty, is a 73 bedded Rural Community hospital (expandable to 125 beds) built for the people of this region, over phases on a 5 acre land, off the Mumbai-Goa highway.

The design of this G+2 hospital is planned around 3 lush courtyards that act as a relief or "point of pause" both architecturally & to allow Patient waiting, interaction & wellness. The main North entrance overlooks the Central Court that is punctuated with a central staircase, suffused with light and is adequately sized with wide passages on either side, allowing a lot of waiting areas that in-turn overlook the West Café Court and the East Diagnostics court. The Main entrance lobby is completely free and calm of any actions expected in a hospital, with only an information kiosk and the registration & waiting is all tucked inwards overlooking the West court, this in a way allows an inviting & welcoming entrance area that guides patients and family through various signages to help orient oneself & access various departments. Waiting areas for all critical & non-critical zones are most often, skirted around the corridors that run along the courtyard and at times these bubble into the courtyard like jharokhas/balconies.

A continuous balcony runs along the 2nd floor North and South faces & intermittently at 1st floor level, to in-turn act as deep overhangs for lower floors in this intense sea side climate that receives a lot of rain. Deep overhangs & sloping roofs respond well in this seaside climate, as well as bringing in warmth and a humane scale to a rural multi-speciality hospital that is earthy & rooted.



MASTER PLAN
SCALE 1 : 700

NORTH ELEVATION
SCALE 1 : 400

SOUTH ELEVATION
SCALE 1 : 400

The connections that we make with the outdoors govern our paths navigated through a building. Clear direction and distinct adjacencies in zoning and circulation for staff, patients and their family have been key in ensuring that even through times of distress, the hospital and its created bio-diverse micro-climate enables a calm and healing environment that allows for clarity of thought and actions to negotiate through space, and establish a recognizable personal setting that is fundamental in patient recovery.

Unlike urban hospitals, our attempt has been to naturally ventilate most of the clinical spaces such as In Patient rooms, wards & wide corridors to avoid patients and healthcare providers being subjected to the high risk of contracting airborne diseases in closed door spaces. Air conditioning has been strictly limited to critical clinical spaces keeping in mind least possibility of infection transfer. Smooth and calm recuperation has been at the heart of designing spaces such as balconies along patient rooms and wards thus enabling their path to recovery through safe engagements with movements like walking and sitting along these balconies. These also create possibilities for interactions and communications amongst patients thus speeding their path to recovery. Over & above patient friendly spaces, the planning focuses on the hospital staff being able to avail ample break out spaces such as balconies, terraces and courtyard to de-stress with a birdsong or watch the sun set!

Details of Construction Materials :

RCC framed structure with a piled foundation & aerated concrete block masonry as external and internal walls. Pitched roof in M.S structural steel sections with mangalore tile- profiled metal roof. Cantilevered balcony slabs have been structurally counter balanced by suspending them from the pitched metal roofing framework.

Special Features :

Ita Gold limestone as flooring across all circulation (non clinical) areas tie into a visually strong, warm and clearly perceivable connections to smoothly navigate through the building with utmost clarity. Nature/Vegetation/Greenery are synonymous with healing and that has been the main motto of this building: to create connections with people and nature. This thought has been extended into the art program integrated within the building using the tribal Gond & Kalamkari art that depicts nature at its best! Rain water incident on the hardscaped areas and terraces have been augmented into a storage tanks connected back into the water supply loop for flushing and irrigation. Slag as a by product and waste generated through the process of steel production has been used in plinth filling thus saving soil!

COMMENDATION AWARDS
YOUNG ARCHITECT'S AWARD
AR. PRABHUL MATHEW (KOTTAYAM)

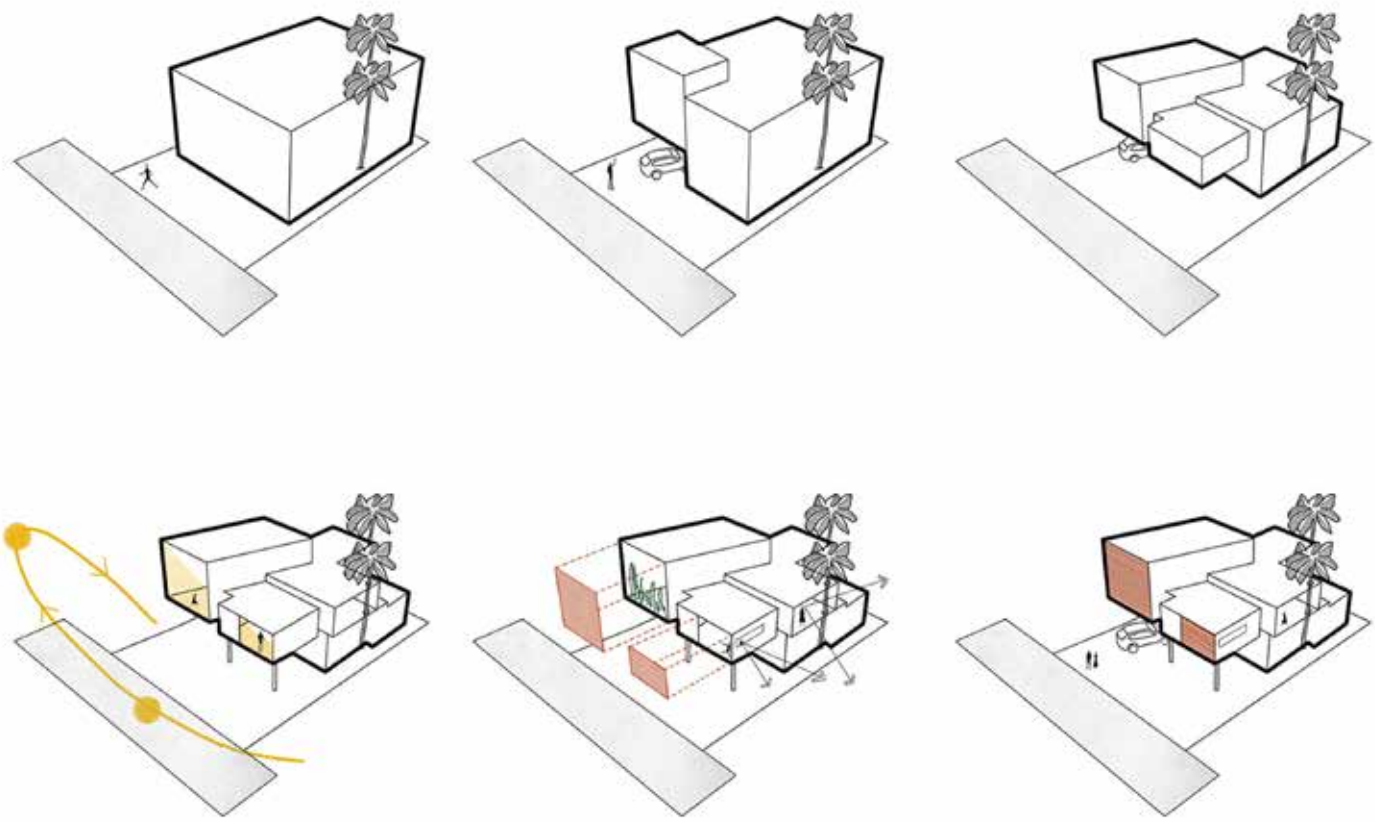
32nd Architect of the Year Awards
JK AYA

BUOYANT HUE
Kottayam

This house which is set adjacent to the lush green paddy field, grab one's attention from very far itself with hued jali screens ornamenting its front facade. These perforated screens function as a barrier against the harsh south sun and also aids in capturing the wind from the nearby fields thus maintaining a cooler microclimate inside. The client brief called for a simple yet modern house that could accommodate a family of 6 and required ample green spaces. The proposed site measuring (16 mx 24m) had its south side abutting the road and nests in between two residential buildings to the east and west.

The design was a primary response to the context and kept in mind to retain the two existing coconut trees that added a charm to the site. Open planning played a key role to ensure a seamless flow between the spaces along with natural lighting and ventilation that accentuates the overall experience to the users. Both the axes of the house were aligned in such a manner that they opened towards green space. The large doors and partitions complemented the openness and framed views towards these axes. The ground floor houses the living, dining, and kitchen areas along with the parent's bedroom toward the west and the guest bedroom towards the north. The toilets were designed with a courtyard in it thus ensuring a well-lit and green space. The formal living could easily be separated from the other spaces by a movable door that ensures optimum privacy to the family. Also, the lower ceiling heights increased the sense of intimacy and comfort within the house. The courtyards adjoining every space in the house provides a special sense of serenity with a panorama of picturesque plants that allows us to bring a little piece of the outdoors inside thus making nature a part of it. The exterior courtyard in the parent's bedroom blurs the boundary between the outdoors and indoors and act as personalized nature retreat to the elderly couple.

Natural light penetrates through the skylights that have been strategically placed to improve the spatial quality and casts dynamic shadows on the illuminated walls thus unfolding a unique experience to the user. These skylights also function as stacks for the hot air to escape and ensure proper ventilation within the house.

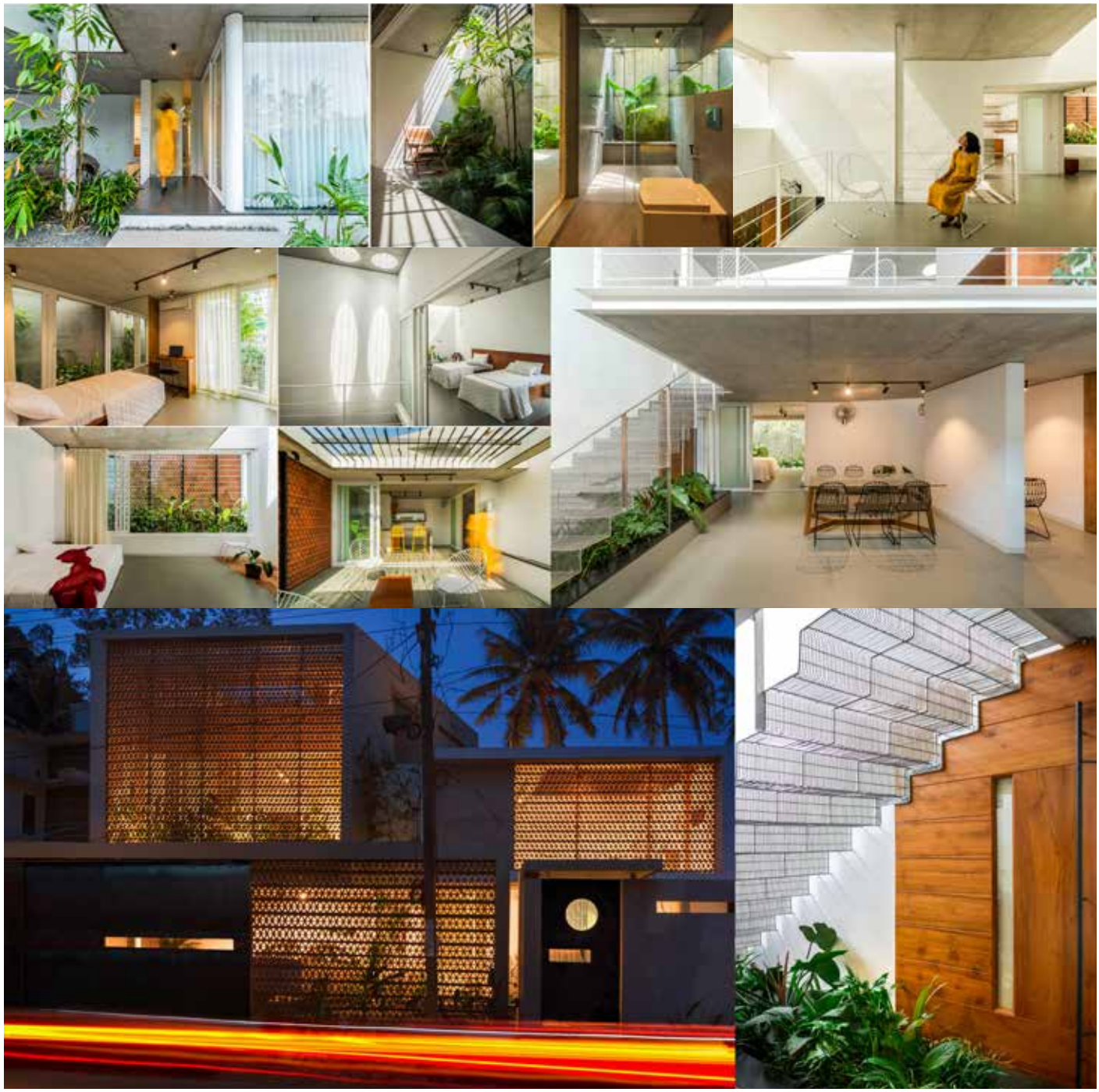


section *aa*

section *bb*

GROUND FLOOR PLAN

1. Main Entry **2.** Pedestrian entry **3.** Porch **4.** Sit out **5.** Foyer **6.** Formal Living
7. Dining **8.**Family Living **9.** Breakfast Counter **10.** Kitchen **11.** Work area
12. Parent's Bedroom **13.** Guest Bedroom



The entire charm of the house lies around its stairs which had to be something transparent to let light enter through them for the courtyard beneath it. Hence stairs designed of customized steel became an aesthetically pleasing solution to the functional issue posed by the situation. Another striking feature is the hanging slab that appears to hover from a single support in the family living ensuring an uninterrupted flow between the spaces on the ground floor. The design of both the stairs and the hanging slab provided us an opportunity to explore the unknown. The first floor houses an upper family living, a bar counter, and a utility room along with the master bedroom and the kid's bedroom. The bar counter which acts as a recreational area frames beautiful vistas of the nearby paddy fields.

We truly believe architecture lies in its smallest detail. The entire material palette is kept minimal with kota stone flooring, teak wood and exposed concrete ceilings that add a raw and expansive feel to the interiors. The building provides residents with a sense of space and it interacts with the ever-changing environment through light and shadow. The dwelling is nothing more than a nice structure, born of the site's potential barriers and the amazing people who live there. It is an attempt to harness both via good design and is regarded as a place where people can live and work. It allows residents to be free, flourish, and leave. Nonetheless, it provides them with sufficient motivation to return.

COMMENDATION AWARDS
ARCHITECTURE STUDENT OF THE YEAR
AR. HARSHIT V. SHASTRI (BANGALORE)

32nd Architect of the Year Awards
JK AYA

Belaku- The Hampi Interpretation Center
Hampi, Karnataka

The image presented here is an Ai generated image of Hampi created with the accounts of historian Abdur Razzaq, the intention of which is to try and understand the ambience and psychology that is intended to be developed in the minds of the visitors through Architectural Design.

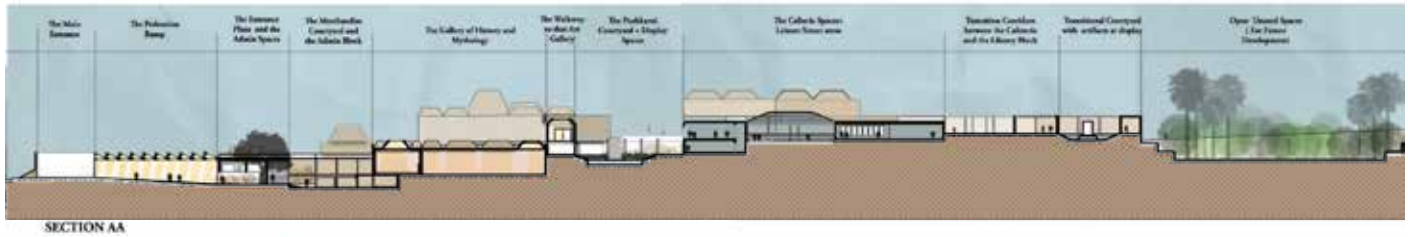
Hampi, a UNESCO World Heritage site aka the City of Ruins, is the epicenter of Rich Heritage and Culture. But in recent times, Hampi has been subjected to illegal land encroachments and demolitions that has lead to desecration of heritage property. The reason for this is the lack of relatability between people , place/context and acknowledgment of heritage, rather a lack of awareness amidst people.

In the wake of all these events, GOK, ASI & HWHAMA have proposed for the development of an Interpretation Centre. The intent of the research, thus, is to Create an Architecture that interprets the Heritage and Culture of Hampi in a way that relates with its Visitors, through basic instinctive aspects of Light, Psychology and Architecture.

Belaku- A kannada word that means “Light” which is the main theme of the research i.e to shed light on the glorious empire that Hampi once was. An Interpretation centre is an institute for disseminating knowledge of Cultural heritage closely associated with visitor centres within or around Sites of Natural or Historic Importance. In order to develop a Vision for the INTERPRETATION CENTER, it is of key importance to understand the Layers of Inherent Cultural Practices, Cultural Fabric and Mythological Significance of the Heritage Site which upon assimilation will play a crucial role in developing a meaningful concept.

The sketches presented here are crucial in understanding the vision of the project, where the project envisions , typology of spaces derived from the study of the aforementioned layers, interpreted in a Modern Dialect that majorly comprises of developing multiple Spatial Scales and Ambiences. The sketches also represent the Various experiments performed with Light and Form of the spaces, and how their treatment affects the psyche of the viewers. Case Studies were crucial for the point of view of Developing a concept, circulation and play of mass and voids. Two case studies were conducted, with projects possessing a common underlying theme: Representation of Culture and History through Architecture. The first one is Bharat Bhavan, designed by Ar,Charles Correa. Here, Charles Correa has developed the concept of Ritualistic Pathway, a pathway that has a Universal Impulse which basically can be interpreted as the Psychology of the Viewers as they transition from closed spaces, to semi open to open spaces at various scales.

He believed that it is essential to have an Effective Transition between functional spaces, through the play of Scalar



SECTION AA

Gallery Spaces | Cafeteria Spaces | Water Bodies

SECTION BB

Gallery Spaces | Water Bodies

SECTION CC'

Library Block | Merchandise Stores and Green Rooms for the OAT | Open Air Theatre | Cafeteria | Water Bodies

Multiplicity, right from human scale to monumental scales and also stressed upon the flow of function from built to un-built (courtyards) , how functionality and leisure activity within spaces merge seamlessly.

The Holocaust Museum designed by Ar. Moshe Safdie. Moshe Safdie developed the concept of Creating a Visitors Path that was dictated by an Evolving Narrative. The Concept is based on the Philosophy of Symbolism, where a particular element such as Light, or a parameter such as the Emotions attached with the Holocaust were manipulated and Interpreted through Architecture.

His design revolves around developing an Emotive Circulation Pattern, Natural Light Psychology and Transitioning Scales.

The design takeaways from the case studies are :

1) Development of a Strong Narrative that is the backbone of the project.
2) Emphasis on the Emotional Experience through Spaces
3) Developing an Emotive Circulation based on a strong Narrative, Nodal Way finding , thus interlinking spaces to create free flow of pedestrian traffic.
4) Manipulating Scalar and Spatial Transformations

Through these case studies , it is evident that it is required to develop a very strong narrative to determine the Character of Spaces.

The Site for the Interpretation Center has been proposed by ASI and GOK and is situated 1.5 km from the Heritage zone of Hampi. The Site lies along SH39 that connects Bellary,Hosapete and Hampi and the site is located at the Junction leading to the Hampi Heritage Zone.

The Site has a gentle slope of 8m downwards from the North East to South west that has been utilized strategically to not only Implement the concept of evolving narrative but also to develop the scenic views of Anegundi Hills throughout the Western Side of the Site.

Climatic Analysis

Hampi has Hot and Dry Climate, characterized by Intense solar radiation and dry winds. In order to tackle these conditions, the following strategies have been used:

1. Utilisinig Courtyards and Waterbodies throughout the complex where open spaces facilitatewind movement and waterbodies humidify the incoming wind thus creating a cooler microclimate
2. Mutual Shading where one building mutually shades the open spaces and other buildings as well.
3. Vegetative shading
4. Implementing Passive Cooling Strategies such as :
   a) Earth Air Tunnel Systems
   b) Vertical Shading Devices
   c) Earth Berming Techniques

Activity Mapping and User Analysis

The Junction along which the site is located is majorly frequented by Tourists and School Students. The localites spend most of their time in leisure activities Under trees on Jagli Kattes. The Design development further takes place by determining the Users and their Requirements.

The four User Categories are:

1. Tourists
2. Research Enthusisasts
3. School Students
4. Localites

Narrative

The Crux of the design lies in the Narrative Developed for it. The Concept is to base the Design on a Progressive Narrative of Hampi showcasing the Journey of Hampi as a Civilisation right from its genesis to its mass desecration. The Progressive Narrative creates an ambience of Cultural Aesthetic Spaces depicted through Light and Architectural Elements. The progressive narrative has been incorporated in the massing of the project where the mass and void are determined based on the emotion that the particular space is supposed to depict , thus adhering to the concept of the Emotive Circulation. The functions are divided into multiple levels such that every level has something new to offer to its viewers. The form development is synonymous to the existing hardscape of hampi and the structure of the gopuras.

The axonometric view here depicts the micro-level spatial development within the project. It begins with phase1 where the any space within the design has been developed based on area statements. Grids divide the space into equal or modular parts based on the function that is to be associated with them in phase 2. The Phase 3 involves levelling the spaces up or down by the incorporation of Emotive Circulation and progressive narrative. Phase 4 introduces the Architectural, landscape and waterscape elements into the design.

PROGRAM OF THE PROJECT:

The Interpretation Centre comprises of following typologies of spaces:

1) Administrative Block
2) Galleries:
   a) Gallery of History and Mtyhology
   b) Gallery of Kings and Dynasties
   c) Gallery of Art and Literature
   d) Gallery of Loot and Destruction
3) Recreational/Relaxing spaces:
   a) Cafeteria
   b) Open Air Theatre
   c) Katte Spaces- Courtyard sitouts
4) Educational-
   a) Digital and Manual Library of Etymology and Anthropology

The functions and spaces have been derived upon detailed user study as discussed earlier. The tables depict the architectural elements utilized in the design such as the Skylights, Jali walls and Louvres. The table further depicts the cultural elements such as the Pushkarani, Statue Courtyards, Nodal Obelisks and Landscaping Elements.

The Masterplan follows the concept of the ritualistic pathway where alternating mass and void have been implemented , where in , after every built structure , there is a provision made for stepped courtyards which are functional. Every courtyard space facilitates an increase in level based on the narrative. Following this circulation , the highest point reached will be on the North Western part of the site, the library symbolizing the epitome of knowledge.

INDIAN STATES ARCHITECTURE AWARDS

ARCHITECT OF THE YEAR

AR. SIDHARTHA TALWAR (NEW DELHI)

32nd Architect of the Year Awards JK AYA

Max House
New Delhi

Cost: INR 54,00,00,000
Built-up area: 1,40,000 sqft

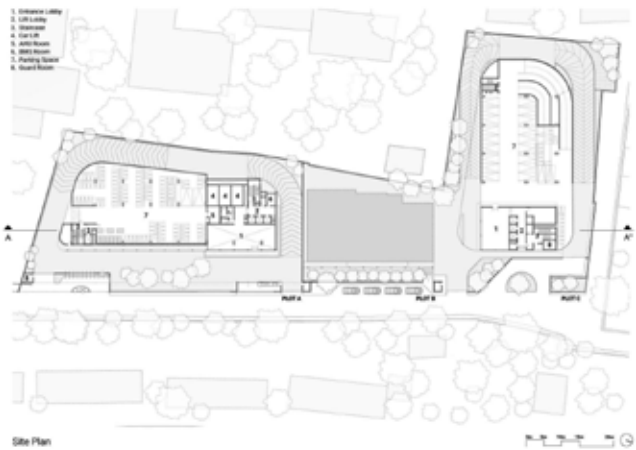
Max House is a corporate campus for Max Estates in Delhi's Okhla, comprising two multi-tenant buildings designed to accommodate a myriad of workspaces and an existing building to be adapted into a community hub. The site adjoins a bustling thoroughfare, sitting across from an east-west metro corridor, the Modi Flour Mills and the Baha'i House of Worship. This presented an opportunity for the studio to determine the development's overall design vocabulary. The new building nods to the legacy of nearby industrial structures, such as the Modi Flour Mills Building. It is designed to reflect the brand's underlying design philosophy rooted in sustainability, resilience, and environmental harmony. The building's forecourt is bound by low-height walls, maintaining sightlines with the adjacent road. To account for vehicular parking on this site close to the Yamuna floodplain, where deep excavations are unfavourable, a parking podium was devised that simultaneously opened up the volume to create a spacious tripleheight lobby. The façade, in local brick, is punctuated with recessed balconies and community terraces that also aid daylighting and natural ventilation, significantly lowering the building's operating costs. Through the integration of passive design principles, low-impact materials and technology, the building has earned LEED Gold certification. Through its design, it attempts to create an alternative benchmark for commercial architecture in the Indian context.

Materials of Construction Details:
Max House uses locally available hollow brick masonry for its design, significantly reducing its environmental footprint. The building envelope is designed using a two-pronged strategy to regulate the ingress of heat. The façade, composed of hollow brick masonry, insulated spandrel

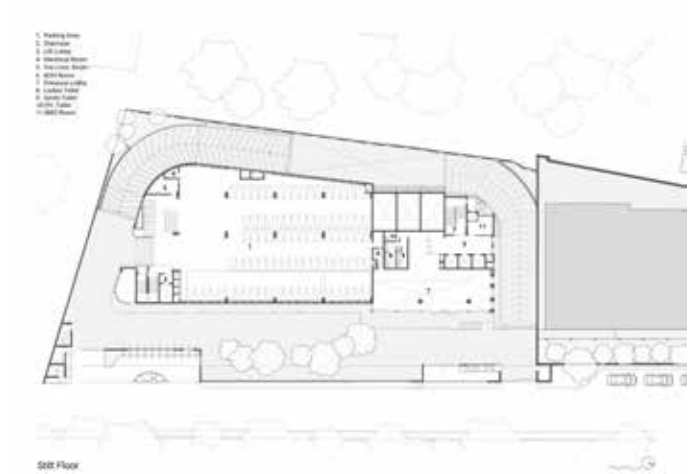
panels, and Double Glazed Units (DGU)s, is engineered to cut out glare and create a thermal buffer, lowering operating costs. As many as 82 high solar reflective index (SRI) tiles will be installed on the roof to minimize the impact on the micro-climate and reduce heat transfer through the built volume. The design scheme extends the expression of exposed brickwork into the interiors, injecting spaces with a natural, 'handcrafted' appeal. While brickwork and glass blocks create the retro-chic approach to the interiors of the triple-height lobby, neutral tones of stone and veneer imbue the surfaces with understated elegance.

Special Features:

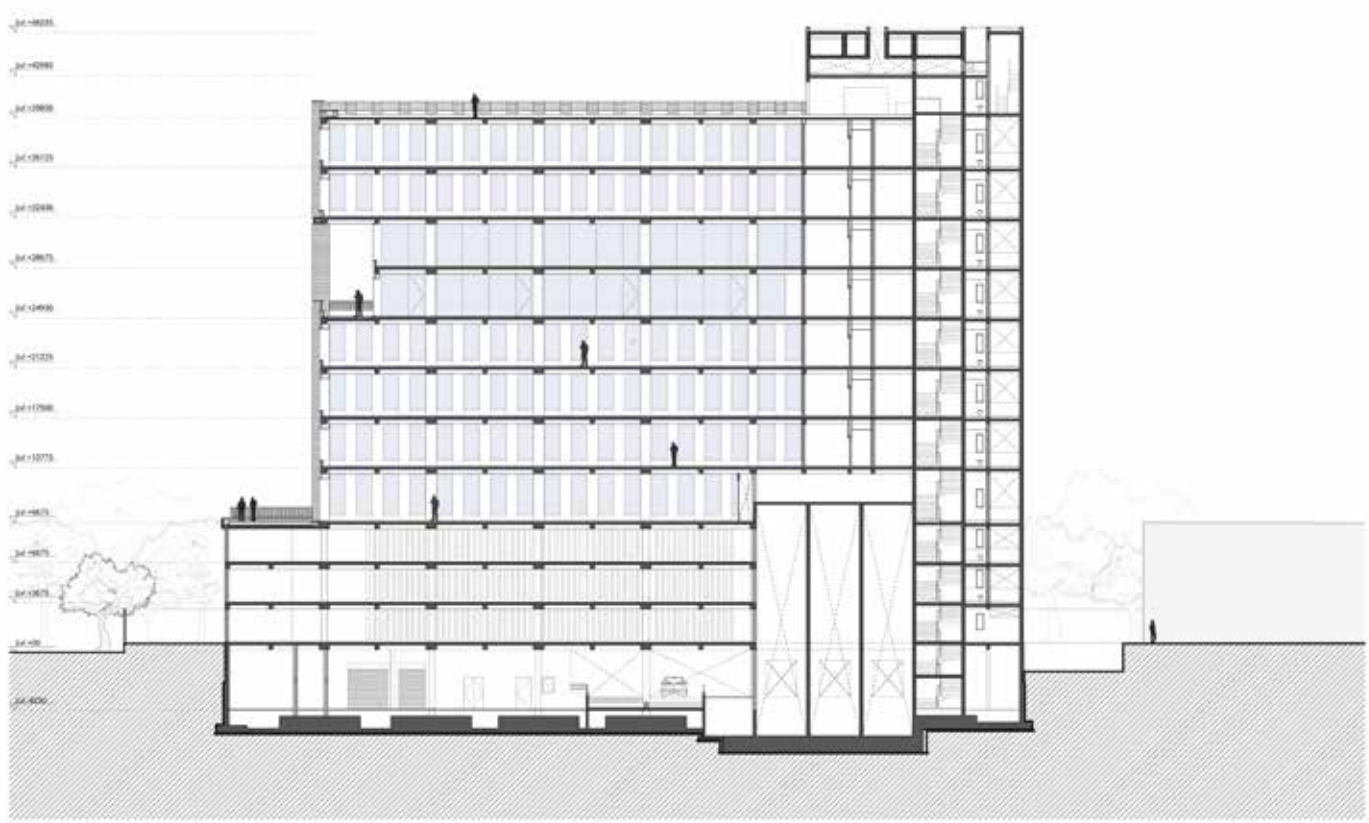
Max House's architecture and interior expression unite responsible sourcing and material used with state-of-the-art workspaces and high-performance building systems. The tower's façade references the Flour Mills building through its distinctive bands of alternating brick and glass, punctuated by spandrel panels, deep-set balconies and community terraces. The floor plates and the façade ensure optimal daylight penetration without glare, almost eliminating the dependence on artificial means of lighting during the day. The floor plate configuration, in conjunction with the facade's significantly low wall-to-window ratio of 60:40 and shading spandrels, significantly elevates the passive design parameters of the building, a unique proposition in new-age office building design. A collaboration with ROHA Landscape for the precinct's landscape design aimed to harness existing resources. The interventions include an efficient stormwater management network and on-site water



Site Plan



Still Floor



Section AA'







rainwater management treatments such as the integration of bioswales, infiltration trenches, rain gardens, bio-retention areas, and open grid pavers in hardscaped areas. Calculations indicate that turf grass is irrigated with a drip irrigation system, reducing water use by 61%.

Green Architecture : 10 pointers

• The design incorporates several features to reduce its environmental impact. The building envelope is designed using a two-pronged strategy to regulate the ingress of heat.
• The façade is composed of hollow brick masonry, insulated spandrel panels, and double-glazed glass units are engineered to cut out glare and create a thermal buffer, significantly lowering operating costs.
• Passive design strategies significantly aid heat regulation, improving thermal comfort. Further, the narrow floor plates ensure that over 75 per cent of the occupied floor area receives optimal daylight across all building floors.
• The floor plate configuration, in conjunction with the facade's significantly low wall-to-window ratio of 60:40 and shading spandrels, significantly elevates the passive design parameters of the building.
• Spill-out areas facilitate fresh air circulation to occupied spaces by at least thirty per cent above the minimum rates required by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 62.1-2010.
• The floor plates and the façade ensure optimal daylight penetration without glare, almost eliminating the dependence on artificial means of lighting during the day.
• The building's focus on environmental sustainability and aspects of employee health & well-being has earned it an IGBC Health and Well-Being Gold rating.
• 82 high solar reflective index (SRI) tiles were installed on the roof to minimise the impact on the micro-climate and reduce heat transfer.
• The precinct's landscape design aimed to harness existing resources, i.e. native vegetation and water, and mitigate the heat island effect. The interventions include an efficient stormwater management network and on-site water rainwater management treatments such as the integration of bioswales, infiltration trenches, rain gardens, bioretention areas, and open grid pavers in hardscaped areas.
• Other interventions included, podium parking to account for vehicular parking on this site close to the Yamuna floodplain, where deep excavations are unfavourable.

INDIAN STATES ARCHITECTURE AWARDS

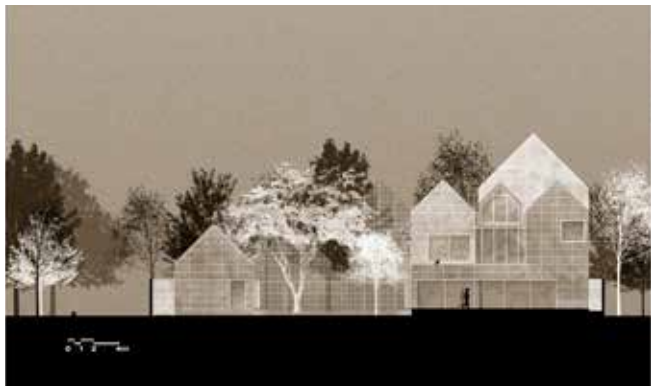
COMMENDATION AWARD

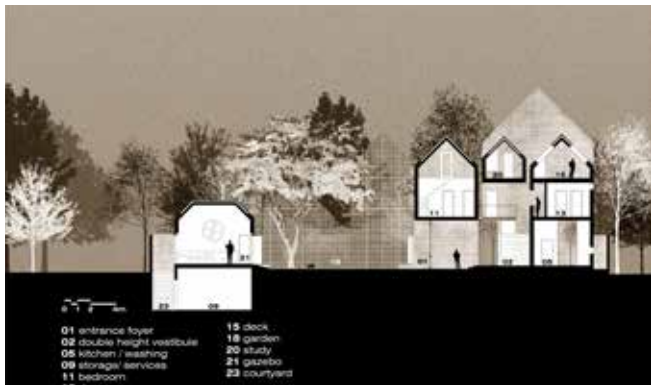
AR. VERENDRA WAKHLOO (NEW DELHI)

32nd Architect of the Year Awards JK AYA

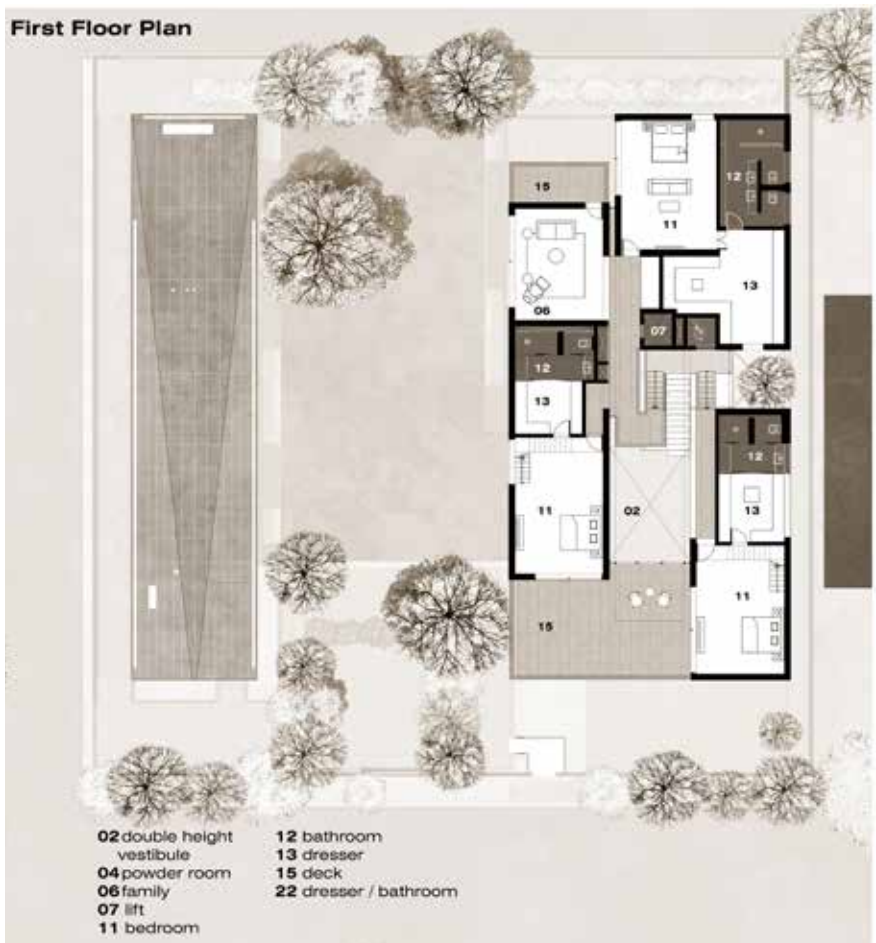
aerial view from front lane of main house

Today many of the notable architectural projects, be it of residential or of public nature, focus on innovating structural systems and majorly styling façades or the appearance, probably driven by a strong urge for developing iconic landmarks within the urban fabric. This narrative often misses out on acknowledging the vast creative process, hidden in the dialogue between the client and the architect. "There will never be great architects or architecture without great patrons" - Sir Edwin Lutyens. Designing successfully bespoke residential architecture is an intense engagement with the clients, their values, their stories and their idiosyncrasies and it may turn out to be an opportunity to explore unknown archetypes. "I describe the design process as like the tip of the iceberg. What you don't see is the long haul: all the endless auditing and things like that" - Sir Norman Foster. "Pyramids", a residence built on two amalgamated plots, each of 668 sqmts in south part of Delhi, attempts to dwell on experiential qualities and spatial nuances of living in a "house". Spaces within the six-bedroom house, mindful of ecology, climate and Vaastu, defer to requirements of three generations of the family. The large double height entertainment & guest block (gazebo), with building related services, located in the basement, has been planned thoughtfully along the north part of the central garden. It faces the central garden and the main house, equipped with formal-informal living areas on the ground floor, bedrooms on the first floor and second floor. Terraces, study, gym with personalised private courts on the mezzanine/attic floor, create a complete and complex living experience.




01 entrance foyer
02 double height vestibule
05 kitchen / washing
09 storage/ services
11 bedroom
15 deck
18 garden
20 study
21 gazebo
23 courtyard


Ground Floor Plan
a
a'
01 entrance foyer
02 double height vestibule
03 living room
04 powder room
05 kitchen / washing
06 family / dining
07 lift
08 pooja room
09 storage
10 maid's room
11 bedroom
12 bathroom
13 dresser
14 pebble court
15 deck
16 guard's room
17 site entry/ parking
18 garden
19 gazebo entrance
20 study
21 gazebo
22 dresser / bathroom
23 courtyard
24 sculpture


First Floor Plan
02 double height vestibule
04 powder room
06 family
07 lift
11 bedroom
12 bathroom
13 dresser
15 deck
22 dresser / bathroom


Second Floor Plan
02 double height
07 lift
09 storage
10 maid's room
11 bedroom
12 bathroom
13 dresser
14 pebble court
15 deck
20 study
22 dresser / bathroom


main house entrance


view of gazebo, parking, main house


main house staircase


double height vestibule


detail second floor deck


view of main house from the garden

Details of Construction Material:

"I don't design nice buildings - I don't like them. I like architecture to have some raw, vital, earthy quality" - Zaha Hadid. The extensive use of light grey exposed concrete walls continued uncompromisingly with precast and insulated concrete sloping roofs, dare to set off against the exuberant interiors and the landscape, akin to the shell of a fruit that has to endure the test of time only to protect the main fruit.

1. Exposed RCC walls/ roofs/ staircase using plywood shuttering.
2. Precast RCC panels as roof cover.
3. Anodized aluminium sliding doors/ windows.
4. PU coated double wall aluminium "chajja".
5. Kota stone flooring.

Special Features:

The plot where the building as per Vaastu directions had to be located, is shaded during the winter months by the neighbouring building. The key idea was to find a design strategy that would harness the favourable southern sun from the roof. This was realized by not only providing skylights that generally are higher on maintenance on top of the roof, but by placing small and large courts directly under the roof cut outs. These then feed light through all seasons into the adjacent spaces, i.e. the attic and the bedrooms in the lower floors. Thus the section of the building became very pivotal to the entire project and resulted in a very distinct roof landscape. These sloping roofs reduce the perspectival height of the building, enhance the plasticity of the monolithic concrete blocks and provide spectacular views of the roof landscape, the neighbourhood and the sky, without compromising on privacy. The design ensures that the external experience of the imposing and rhythmic saddle roofs continue into the interiors of the main house, subtly organised around a well-lit double height central vestibule with a sculptural staircase that serves as a dramatic and dynamic connection for the family's activities.

FOREIGN COUNTRIES' ARCHITECTURE AWARDS (FCAA)

COMMENDATION AWARD

AR. PALINDA KANNANGARA (SRI LANKA)

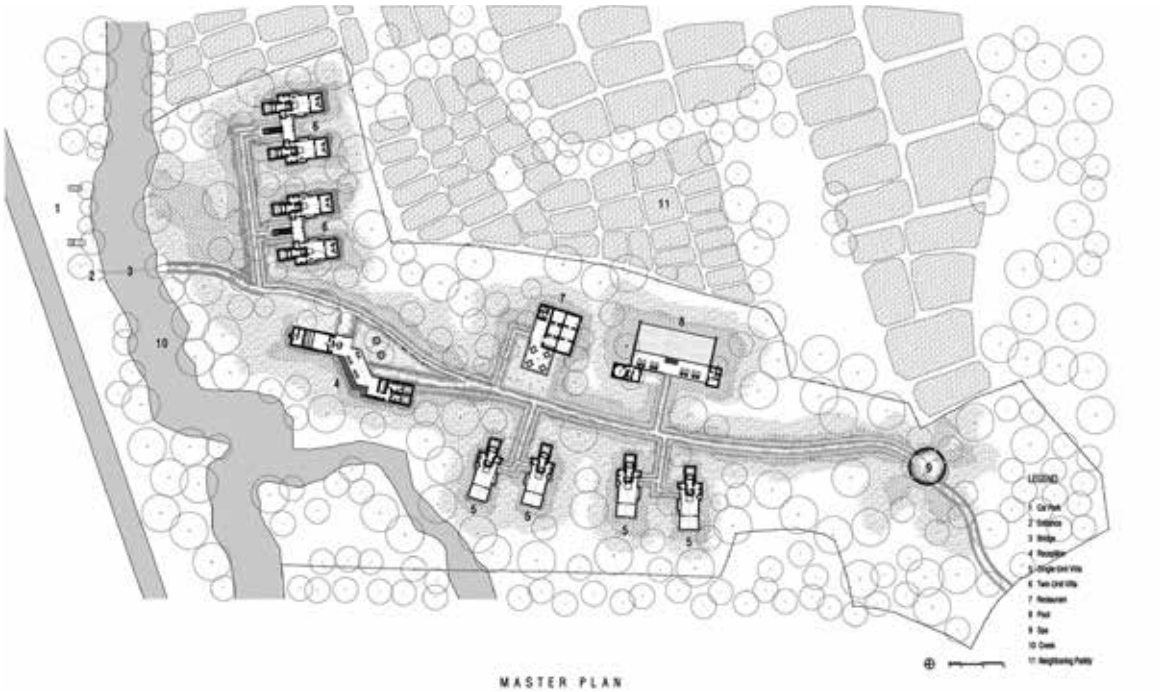
32nd Architect of the Year Awards
JK AYA

Wellness Retreat
Habarana, Sri Lanka

Cost of Project: 646,430 USD
Built- up Area: 1500 sqm

The project , a wellness retreat, comprising of 8 rooms and an additional 2 villas with a public component of a reception, restaurant, spa, meditation areas and a swimming pool. A small built footprint on 4.6 acre site in the hot dry zone of central Sri Lanka in Habarana. Near scenic Habarana tank , a biodiversity hot spot and proximal to cultural triangle of ancient cities and landscape monuments including Sigiriya. The place was envisaged as retreat where agrarian landscape, culture and biodiversity intersect. A space for contemplation, psychological wellness, a meditative and relaxing retreat for rejuvenation of the mind body and soul. The site is edged by a paddy fields and a stream, had several large scrub jungle trees therefore preserving the existing trees, conserving and holding rain water at site and creating a culturally and regionally appropriate language for the design was the vision.

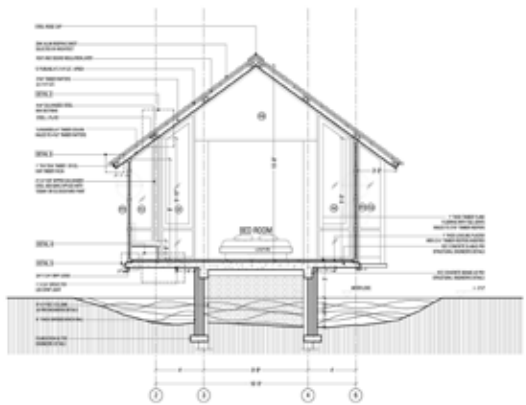
Connected to the context: The project is rooted to the Buddhist monastic history of ruins and gardens of the region. Sunyata / Nothingness or a reductive minimalism so part of the monasteries and associated gardens intrinsic to Theravada Buddhism inspired the minimalism of the spaces. Reflected in the architecture, interior design and landscape. The built are simple structure inspired by the vernacular rest pavilions / ambalamas , that appear to float over the grasscape. Spine of Movement/Mediation pathway: A central raised pathway, a key feature of the design weaves through the existing trees (saving all of them), acts as a connecting spine for the built spaces (reception /lounge, the fine dining restaurant, spa) but also as a path of walking mediation. This spine negotiates the landscape in a fluid way, lifted from the ground to avoid reptiles and detailed with carefully with brick. The sinuous brick spine of movement has a pervious sand surface are inspired by the walking pathways of Buddhist gardens. Detailed to appear to float over the natural grassland landscape, and weave around the trees. Pathway / Journey starts at a specially designed timber bridge over a gurgling stream and ending with the still mediation circle beneath the trees canopies.



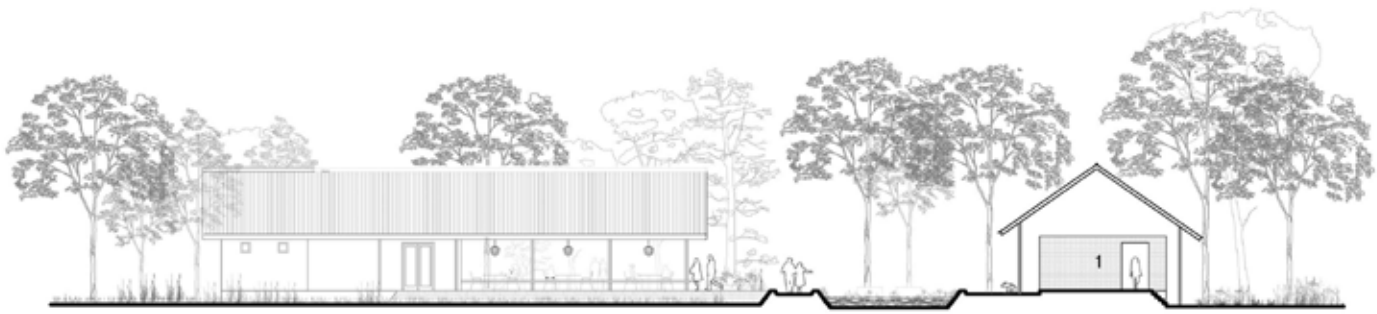
MASTER PLAN

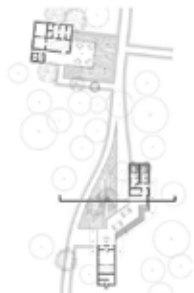
SINGLE UNIT VILLA
SECTION XX

32ND ARCHITECT OF THE YEAR AWARD 2022



SINGLE VILLA
DETAIL SECTION





RESTATURENT AND TRCEPTION
SECTION XX

32ND ARCHITECT OF THE YEAR AWARD 2022






A series of water harvesting ponds have built around the existing vegetation creating a fluid reflective edge to the public spaces. The fine dining restaurant appears like a floating lantern, the gable roof extends beyond the grid into the water, and the grid melds with the water. There wide eaves have been provided against the monsoonal rains. The public building includes a reception, fine dining which have been conceptualized as light pavilions, passively ventilated connecting the guest with the views of water, paddy and experience of the biodiversity on site. The project has two single room clusters with 4 units each, 2 individual villas that more private surrounded by constructed rain water wetlands. Each offer panoramic paddy/wilderness views.

Details of Construction Materials:

1. Material palette of brick & timber are of great simplicity and are derived from the language of the ruins of the region. The flooring in the public areas comprise of a dark stone and in the rooms timber flooring.
2. The language of the roofs especially of the reception and fine dinin areas to provide deep shade yet totally open to the surrounding
3. Detailing of the bridge ponds,and raised pathway to enable an experience of the seasonal qualities of the landscape. (dry and water filled, that moss covered seasonally)
4. The rooms too deeply shaded have balconies, decks, benches as handrails and specially designed and crafted timber windows that enable connections with the outdooers9. Custom designed and built furniture

Special features:

1. The architecture aims to be simple pavilions within the landscape.
2. The meditative pathway is built around the existing trees and thus saving all the site trees.
3. Rain water harvesting structures and monsoonal ponds have been built and are a part of this pathway experience, harvesting water and as overflow zones during floods but also providing a tranquil experience ,augmenting biodiversity, apart from cooling the breezes that enter the built spaces .
4. All public buildings are only passively ventilated

FOREIGN COUNTRIES' ARCHITECTURE AWARDS (FCAA)
YOUNG ARCHITECT'S AWARD
AR. KASUN C PERERA (SRI LANKA)

32nd Architect of the Year Awards
JK AYA

Wild Glamping Gal Oya
Rathugala, Sri Lanka

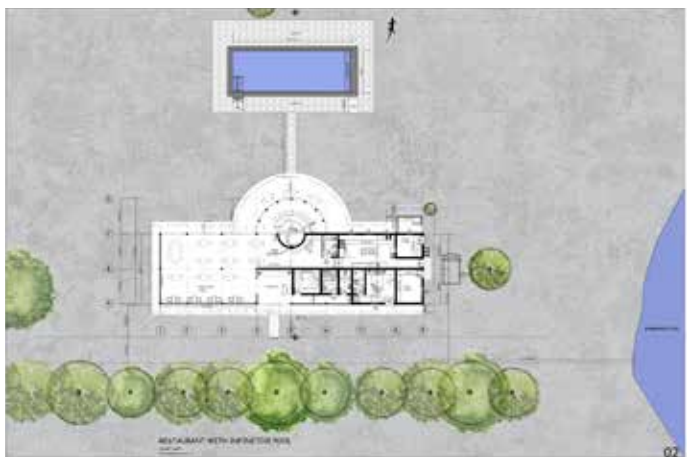
Cost of the project: (INR) 10.5 Million
Built-up area: 1726 Sq.m

Wild Glamping Gal Oya is a semi-permanent luxury camping site that includes 03 spacious wooden tented camps for families with attached bathrooms, 07 double tented camps with attached bathrooms, an authentic linear restaurant with a curve-shaped bar and an infinity swimming pool. It is located in a 30-acre good practice agricultural farm in the Galoya Valley at Rathugala, in the Monaragala District of the Uva Province, Sri Lanka. The primary aim of the project is to improve & enhance the quality of *agriculture based eco-tourism and eco-cultural tourism in Sri Lanka* through a sustainable architectural approach and the property has focused on the triple bottom lines of people, plant and profits through each of these. The campsite significantly provides a unique and an out of the ordinary wild camping experience in Sri Lanka.

Materials of Construction Details:

Locally available building materials such as earth brick for walls, mud & clay for walls and floor, illuk grass and cadjan for roof were used in innovative ways for the entire building complex that inspires sustainable construction. In an effort to minimize the negative effects of illicit deforestation in the area, all timber required for columns and roof of the project were sourced from State Timber Corporation of Si Lanka.


LOCATION & LAYOUT PLAN WITH CONCEPT
WILD GLAMPING GALOYA @ RATHUGALA
Proposed Land
(Containing Extent - 30 acres)
Sri Lanka
LAYOUT PLAN
SCALE : NTS
Concept : Glamping through a sustainable architectural approach
CONCEPTUAL SKETCHES
SECTION THROUGH SITE
SCALE : NTS
01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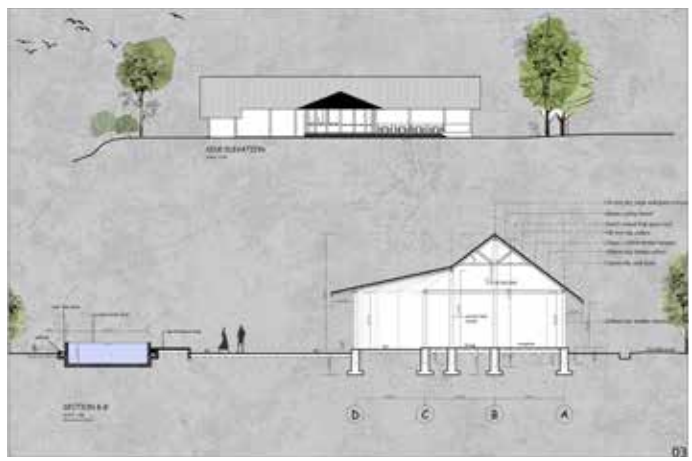
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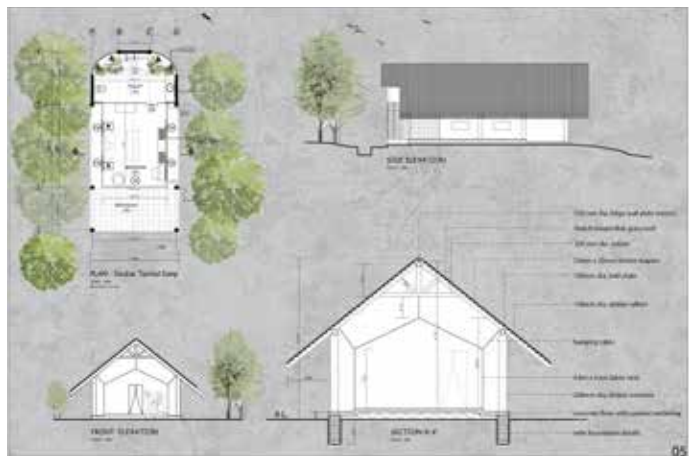
05






Special features:

Environmental approach - The entire campsite was designed to make maximum use of the views of the surrounding there by offering Guests spectacular sceneries of mountains and savanna forests that merge with the nature. In addition to being one with nature in its esthetics, the resort also actively contributes towards the planetary goals of sustainability through its various actions.

The resort contributes to energy saving through the usage of natural light and ventilation for its tented camps and the open restaurant throughout the day. Solar panels placed on each of the tents produce a large amount of electricity for lighting and hot water, is one of the most significant features of the property as well as it reduces pollution emissions. The organic cultivations surrounding the property utilize a drip irrigation system that provides a 60% saving on water usage. Grey water generated at the property is systematically recycled to reuse for sanitary purposes (for water closets). The resort promotes 'green and blue concepts' and have created manmade lakes/ irrigation water bodies and observation huts for travelers to enjoy the tranquility of nature. Furthermore, *Good agricultural Practices* (GAP) is used that helps promote sustainable agriculture and contributes to meeting national and international environmental and social developmental objectives as well its social dimension would be to protect the agricultural workers' health from improper use of chemicals and pesticides.

Economic Approach - Wild Glamping Gal Oya is nestled in a rural, under privileged area home to Sri Lanka's indigenous people. One of the main aims of the project is to uplift the living standards of the indigenous (Vedda) community through the promotion of agro based eco-tourism. They are given the opportunity to join the project during its construction stages and in the agricultural land development, which leads to the boosting of the local economy.

The management also intends to build a 'harvest collection center', that allows local dwellers, who are daily wage earners and merchandisers to sell their own products (vegetables, fruits, honey etc.) for a reasonable price.

Social Approach - Wild Glamping Gal Oya is a community-based project that acts as a knowledge sharing center and gives guests visiting the property to get a glimpse of Sri Lankan cultural beliefs and customs, eco systems and other related areas. Traditional labor craftsmanship, which creates a strong social bond within the area, was used for construction with our experts and new technology. Additionally, the property has employed 95 percent of the required staff from the neighboring indigenous community. They have been given the opportunity to get involved in the project's construction stages then thereafter in agricultural land development (social and economic inclusion).

This region is very popular for its wildlife famous boat ride on Senanayake Reservoir, a prominent place to spot elephants. Some of the other experiences include jeep safaris to Nilgala or Hathpotha, treks into the jungle of Rathugala and Nilgala and visiting archaeological sites like Rajagala temple, river bathing and bush walks. In conclusion, the campsite significantly provides a unique and an out of the ordinary wild camping experience in Sri Lanka.


LUCE
Translucent slab transforms into natural looking Onyx design when Illuminated.
R TILE: LUCE ONYX GREEN JADE
TILE: COPPERFIELD BEIGE
RAKCERAMICS.COM


SUT
SUPER UTILITY TILES
RAK
CERAMICS

RETHINKING THE INDIAN MEDICAL ECOSYSTEM

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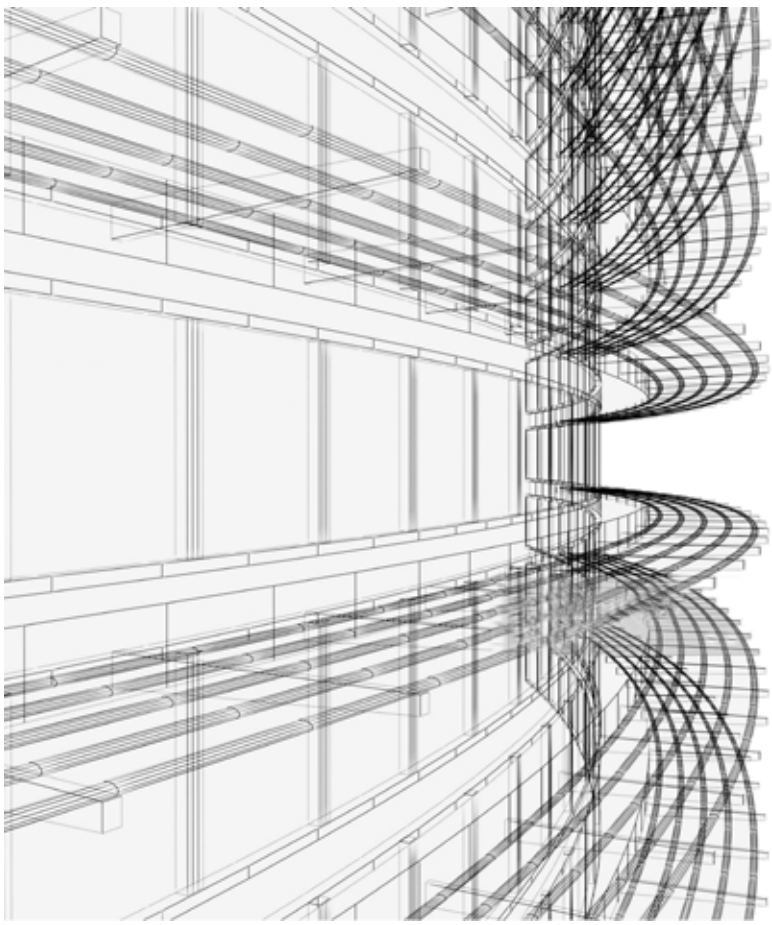

ABSTRACT

The need for medical education and infrastructure is ever increasing; hence, it is necessary to prepare for medical education and clinical practice for the coming future. There is a dearth of medical education in India, which is already very expensive.

Policies framed by the National Medical Commission (NMC) dealing with the infrastructure required for medical education were studied and reviewed. Implementation of modern technology in medical education and its economic implications were studied by referring to seminal documents. Institutions like Harvard and Oxford have already started using these technologies in their medical curriculum. Analysis of all the data led to an understanding of how there can be reduction in cost of infrastructure and maintenance. Interviews with experts suggested that using the latest technology in the medical curriculum would also help in this. It has also been found that by adopting the latest technology like AR and VR and allowing for flexibility of spaces, the infrastructure requirements of medical institutes can contribute towards the reduction. After comparing the areas with the existing spaces, it has been found that their restructuring can result in a 35-40% reduction in the overall infrastructure of the medical institute. This will eventually result in more medical colleges in India and in reducing fees per student for MBBS students as well as medical expenses for common people.

Keywords: *affordable; medical education; infrastructure; technology*

Introduction

At the pace by which medical education is evolving, the need for medical infrastructure with aging population is increasing. In Maharashtra there are 11 deemed universities, 18 private universities and 27 government medical colleges offering MBBS course. (Shingare, 2021). Number of students who appear for NEET are 14,10,755 from which 2,06,745 are from Maharashtra and the students getting qualified for counselling process are 81,171. (More, 2020).

By looking at above statistics, it highlights that out of 2lakh students only 80 thousand students get qualified for the counselling process. This shows lack of number of seats available which points towards need of medical educational infrastructure.

If we look at the economics to pursue MBBS course is the average MBBS fee per year for government medical colleges in India ranges from INR 20,000 to 100,000 whereas the MBBS fee for private colleges can range from INR 7 lakh to 14 lakh and deemed university ranges from 20 to 26 lakhs. (Shingare, 2021).

By looking at the student fees mentioned above, students who have talent but stay in rural areas cannot afford that education. This results in lack of opportunity and exposure in medical education for students. So cost of infrastructure and medical education becomes a major issue affecting the number of colleges and opportunity for the students.

Issue:

India has the 2nd largest population in the world with a growth rate of 0.99%. However, in terms of health infrastructure it is lagging a bit and the pandemic has shown that the system is lacking in multiple aspects. Which has even affected the medical and the other education systems. The pandemic made us think about the financial aspects, where medical education and health infrastructure cost comes into picture.

a) Deficiency in number of medical colleges.

The number of students who appeared for the NEET exam in 2022 is 18,72,329. Out of these, 2,56,126 students were from Maharashtra. The students who eventually qualified for the counselling process were 1,13,812. As shown in Table 1 existing infrastructure of the medical institute which clearly shows that Maharashtra could do with a drastic increase in the number of seats available for the MBBS course.

b) Expensive Medical Education.

A newspaper article by Rao (2020), says that Maharashtra is among the five states of India that has the most expensive medical education. There has been an increase of nearly 50 percent in the fees of Maharashtra's government medical colleges within the last five years.

Currently to pursue the MBBS course, the average fees per annum at government medical colleges in India range from Rs. 20,000 to 100,000, whereas the MBBS fee for private colleges can range from Rs 700,000 to 14,000,00 and deemed university ranges from Rs. 20,000,00 to 26,000,00.

As per World Health Organization (WHO) report of 2020 which states that "India needs at least 1.8 million doctors, nurses and midwives to achieve the minimum threshold of 44.5 professional health workers per 10,000 population." Considering the quantum of the fees required for medical education, students from rural areas cannot afford this course which results in loss of talent and number of doctors.

c) Effects of covid-19

Due to this pandemic, most hospitals could not manage general patients since Covid patients occupied all beds. O.T.'s were not functioning, which caused many issues for general patients. There was no flexibility in planning and opportunity for expansion of infrastructure.

Aim To understand how new medical education and a hospital will come into picture on the basis of the pandemic and to provide its infrastructure at the semi-urban level.

Rationale:

It costs about Rs 450 crore and five years to build a government medical college, and after that costs about Rs 150 crore for annual maintenance. Many state governments cannot afford to spend that amount. (Shetty, 2019)

So new planning strategies for Hospital and the medical college infrastructure requirements and their cost becomes a significant concern to maintain public health infrastructure. Due to this pandemic, most hospitals could not manage general patients since Covid patients occupied all beds, O.T.'s were not functioning, which caused many issues for general patients.

Casualty rooms have a road touch access which caters to patients in emergency. Since OPD caters to the general patients they could have road touch access with isolation from interior spaces and still be a part of the hospital. A waiting area with adequate seating arrangement should be provided. The main entrance, general waiting and subsidiary waiting spaces are required adjacent to each consultation and treatment room in all the clinics. (IPHS, 2012, p. 28)

Interviews with several experts in the field of medical education have confirmed its high expense and low number of seats available. The number of seats subsidized by the government are too few compared to the number of people who aspire to them. The cost required for private medical education in India makes it prohibitive for even those who qualify NEET.

The reason for such expensive medical education is the quantum of infrastructure provided in these colleges, as required by the medical and education infrastructure guidelines, which may need a second look. The advantages of VR in the clinical environment which may aids in reducing the cost is to be looked at in framing the new guidelines. Currently, foreign universities like Harvard and Oxford have started adopting these new techniques as has been studied from their websites. A comparison between the cost of in-person training and AR, VR training is understood during the initial study. By looking at these measures, it has been possible to suggest several methods of achieving flexibility in planning of hospital and cost reduction in medical education infrastructure through this thesis project

Site

Since there is no medical Institute in Satara city, it was chosen. Satara is a city located in the Satara District of Maharashtra state of India, near the confluence of the river Krishna and its tributary, the Venna.

The government has already proposed a medical institute in Satara city. Site is in Krishna Nagar, Satara. "The state government has allotted 64 Acre of land in Krishna Nagar area, Satara, giving way to the starting of a medical college at Satara." (TNN, 2020) The proposed land area is 64 acres in which there will be an Institute with an attached 500 bedded hospital.

This site was not considered because, (as seen in fig. 1) this site is located in the outskirts of Satara city and not Easily accessible to the Local crowd of Satara. So, by choosing a site of the existing 200 bedded civil hospital of Satara, situated in the main city and accessible to all. There is a Vacant space adjacent to the structure on the same premise. By choosing this as a site gave us an advantage of using existing infrastructure and augmenting its spaces resulting in the cost and time saving.

Architectural Model

The architecture model would be a 500 bedded hospital with attached medical institute for Satara Taluka. Due to the current situation of covid-19, it is not going to be a short-term issue, so exploration in terms of new design parameters and new policies will be studied. Overlap of medical education programme and new hospital planning will be done.

Design Objectives and considerations

The design program aims towards providing medical education with minimal infrastructure with an attached hospital. The areas in the medical institute are augmented by following considerations:

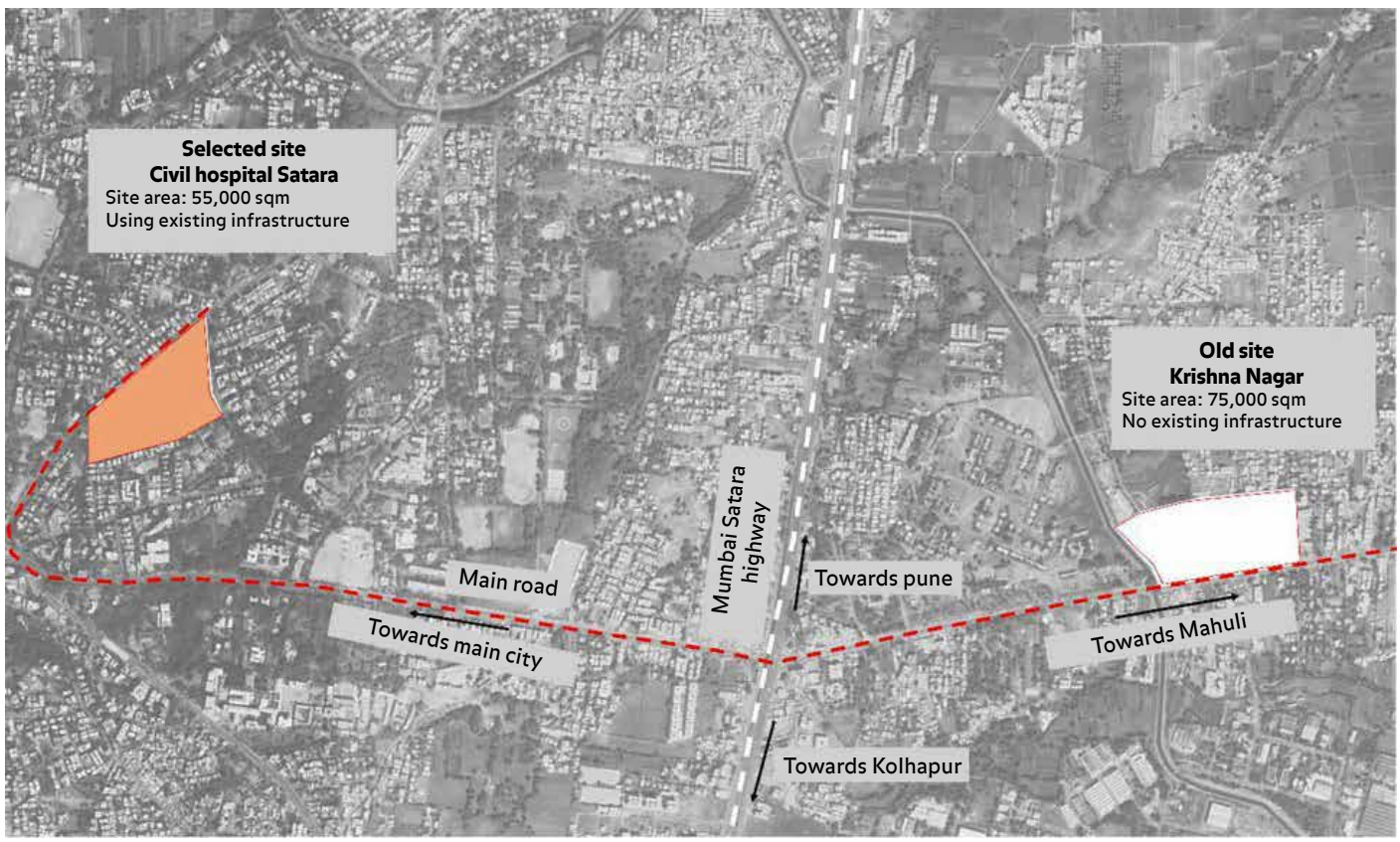

Figure 1: Map Showing old and new site and its connectivity in Satara
(Source: Author)

i. By combining lecture theaters and small teaching rooms and giving one lecture room per year, which can be divided into two parts for separate lectures.
ii. The provision of VR rooms that will be used to gain virtual practical experience will reduce the space requirements of clinical skills and the anatomy department.
iii. Since all students don't come to the library simultaneously, provision for 100 students, i.e., one batch capacity, is given. Students could be given online book subscriptions and could also read in different spaces as time permits.
iv. Instead of giving separate museums, using Augmented reality as a tool, provision a common area for the museum.
v. Since classrooms are going to have interconnectivity, they would get combined to serve as seminar halls.

The hospital would be designed by taking into consideration the impact of covid-19, treating virally infected diseases separately, and providing safety requirements in terms of planning. So, during any emergency, the hospital can function smoothly in its staff, patient circulation, and planning flexibility.

As seen in Figure 2, design objectives for hospital design include:

a) Minimum ground coverage of building footprint by providing majority structure on stilts.
b) Encouraging inside and outside connect by Incorporating glass façade.
c) Introduction of Biophilic architecture in design.
d) Reducing travel time for a doctor to travel by optimized planning.

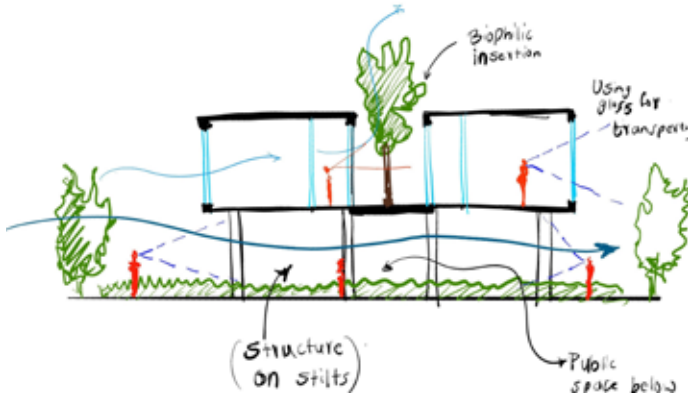

Figure 2: Various Design strategies observed in design evolution *(Source: Author)*

Architectural Exploration

The aim of this design dissertation is to understand how new medical education and hospitals will come into picture on the basis of this pandemic and to provide infrastructure of medical education and hospital at semi-urban level. Since Hospital is a public space and can be visited by anyone, it should be approachable. By using the structure of the existing hospital and revamping the existing capacity by adding a new structure to the old building, not only reduces the carbon foot print but also the cost of infrastructure.

5. Conclusion & Recommendations

Table 2 compares the areas with the case studies and the proposed Area derived from case studies. After comparing the with the actual proposal, you can observe that there is almost 25.45% reduction in total comprising hospital and the medical institute. There is a 30% decrease in the area of medical college, reducing maintenance and construction costs.

Figure 3: Site Plan indicating different entrances and access to the structure *(Source: Author)*

Legend

1. Main entrance
2. Emergency entrance
3. Service entrance
4. Staff
5. Isolated ward entry
6. Viral ward entrance
7. College admin entrance
8. College entrance

Admin
OPD
Emergency
College
HDU
Viral care

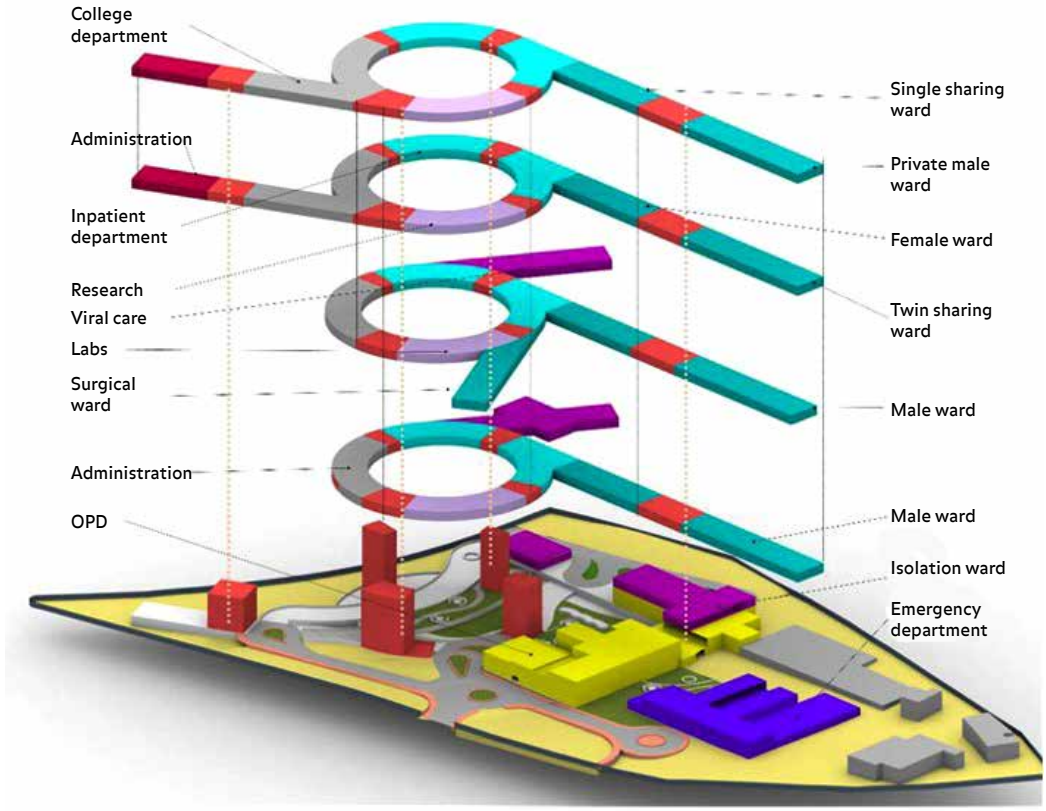

Figure 4: Exploded Isometric showing massing
(Source: Author)

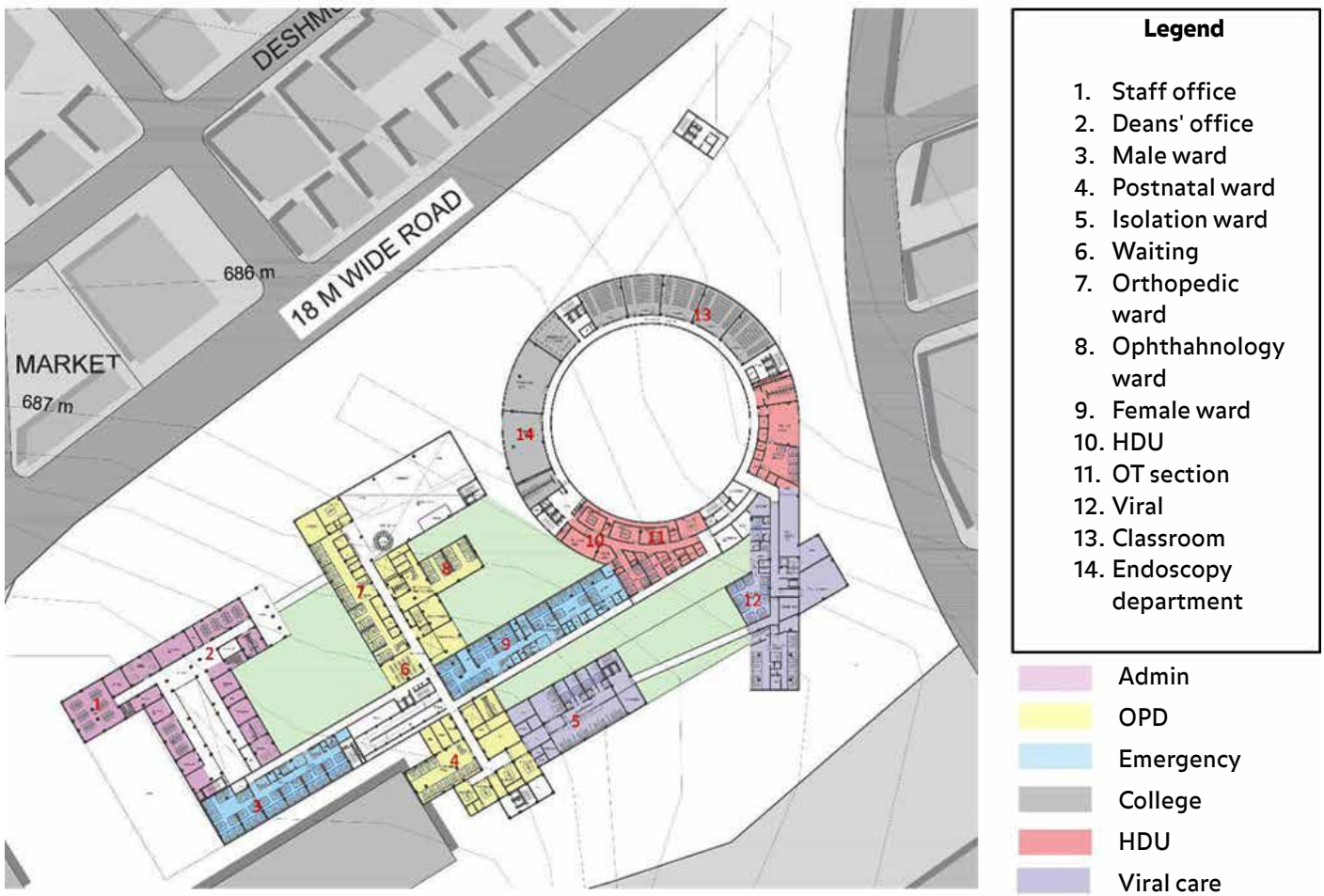

Figure 5: First floor plan
(Source: Author)

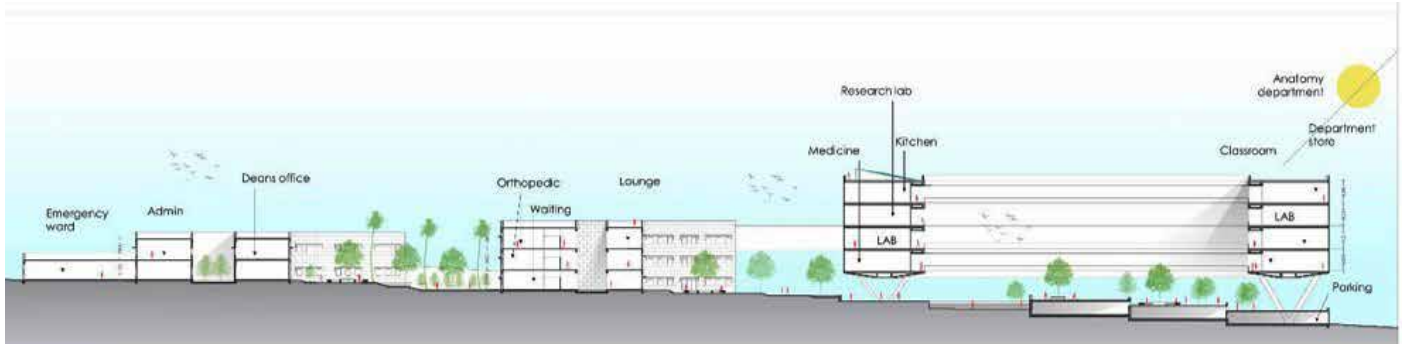

Figure 6: Section AA' *(Source: Author)*

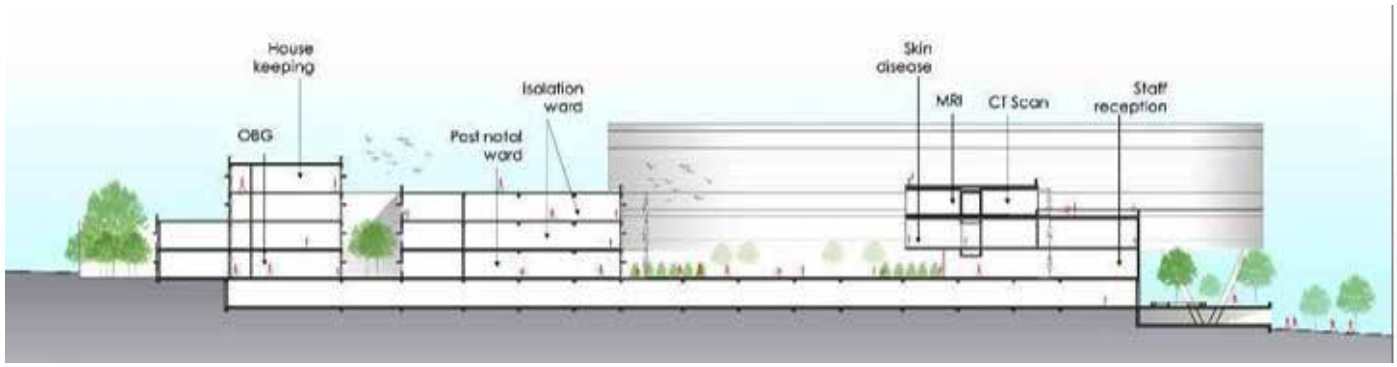

Figure 7: Section BB' *(Source: Author)*

Figure 8: View showing central Courtyard *(Source: Author)*

Figure 9: View showing overall structure *(Source: Author)*

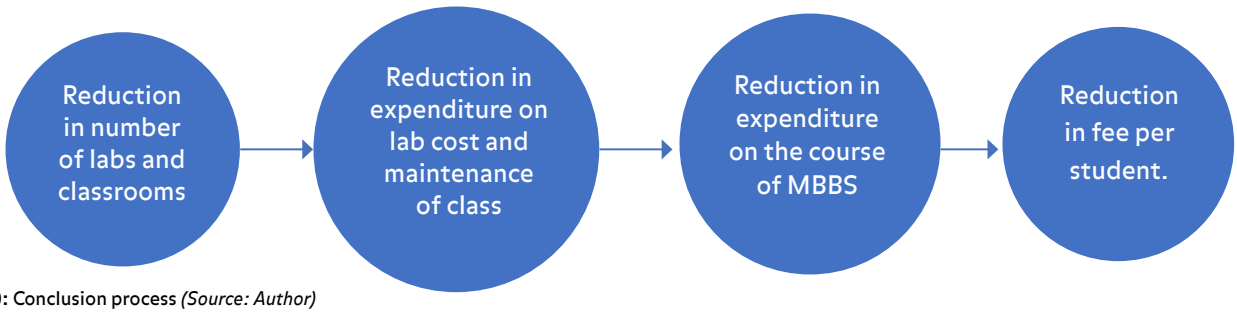

Figure 10: Conclusion process *(Source: Author)*

The cost element of the course of MBBS has two categories- the direct cost and indirect cost. The direct cost comprises the Salary and Allowances to the teachers and the running cost of the MBBS course. The indirect cost is the expenditure incurred by the institution for running the hospital. It is inevitable to consider the hospital running cost because the different streams of medical education can be provided only through a hospital. The total cost of providing the MBBS course is the total of the hospital running cost, the salary of teachers, and the MBBS course running cost. (Prasad, 2016)

Table 3 shows various expenditures on the course of MBBS. This table can be used as a reference to show all costs considered while calculating per unit capita expenditure on one medical student. Lab maintenance is more as compared to the other costs.

Since we are reducing the number of classrooms and the number of Labs by approximately 30%, we are reducing the expenditure cost of the respective entities, which will eventually reduce the expenditure cost to run the MBBS course. Hence, it will reduce the fee per student who will be pursuing the MBBS course.

Table 1: **Number of colleges in Maharashtra**
(Source: Author)

Location	Population	Number of medical colleges		Number of seats
		Government	***Private***	***Total***
Mumbai	1.82 cr	5	10	1350
Pune	1 cr	2	7	990
Nagpur	49 lakhs	2	3	800
Kolhapur	41 lakhs	2	1	500
Satara	32.2 lakhs	1	1	300

Table 2: **Showing comparison of total Area**
(Source: Author)

Infrastructure	Case study 1	Case study 2	Proposal to government	Proposed area requirement
1. Medical college	30,000	4,300	18,625	8,200
2. Hospital	70,000	40,000	43,355	40,000

Table 3: **Various expenditures on the course of MBBS**
(Source: Expenditure statement submitted to CAG,2011-12)

Expenditure Head	2010-11 (in thousands)	2011-2012 (in thousands)
Examination cost	1052	1068
Lab cost	22500	28652
Maintenance of class	1012	985
Scholarships/allowances	2585	2650
Hostel maintenance	20560	21320
Expenditure on student welfare	865	1025
Arts and Sports	5625	6202
Field studies	6852	6525
Other cost	1023	1055
Total	**62074**	**69482**

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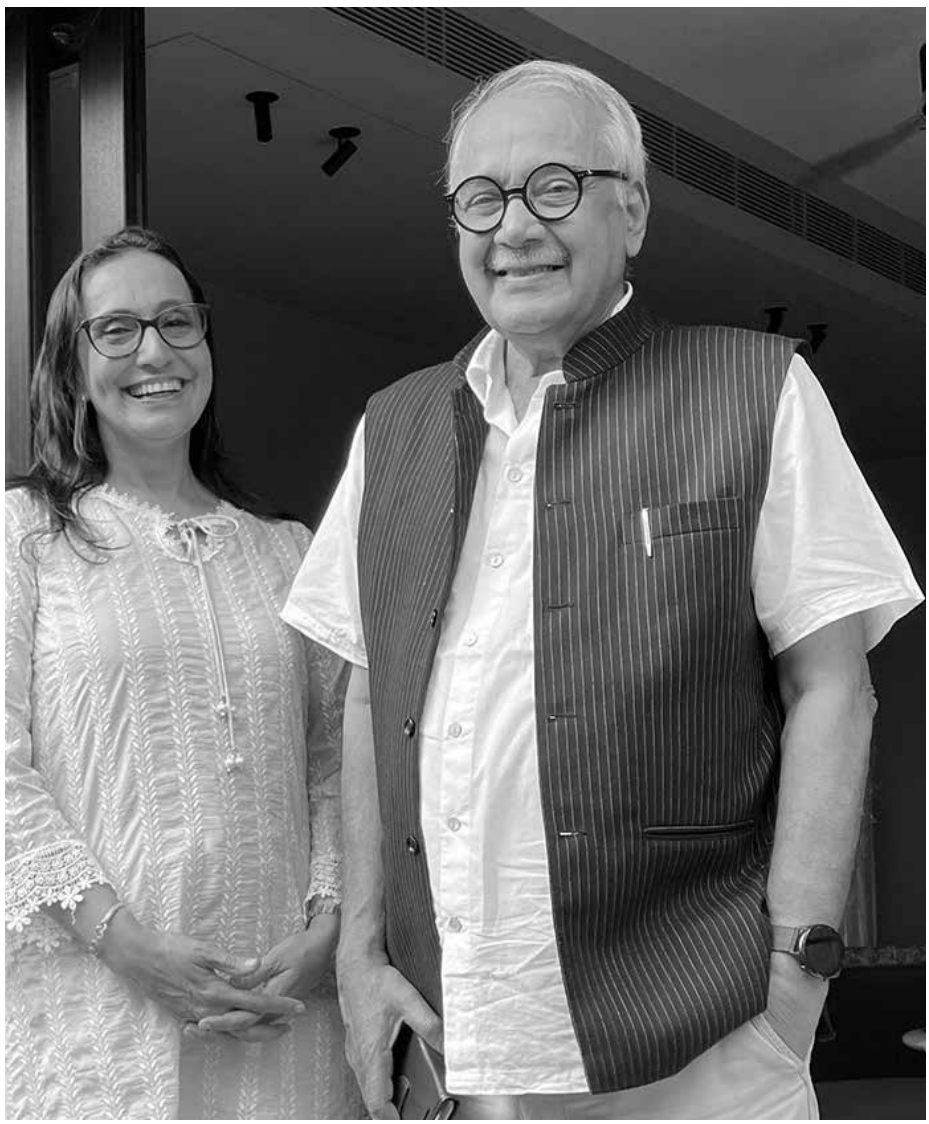
Pratik Malpure graduated from IES College of Architecture, Mumbai in 2022. He is also an artist and has a penchant for product designing. He loves to travel. As a resident of Satara, the lack of a medical institute motivated him to address the issue for his Final Year Dissertation. Due to rising issues COVID 19, he decided to work on a teaching hospital project for good healthcare and education. The project has been recognized and applauded by governmental healthcare authorities. He plans to work further in this sector in his near future.

Prof. Vinit Mirkar is the Principal of IES College of Architecture, Mumbai and a member of the Board of Studies of at the MGM University, Aurangabad,Dr. BAMU, Aurangabad, and Dr. BATU, Lonere.Fellow of IIA, he is an Executive Committee Member, Brihan Mumbai Centre of IIA. He is also a member of the Board of Examination and Education, IIA and of the Board of Reviewers of the Journal of IIA.

DIALOGUE WITH KT RAVINDRAN

Monica Khosla Bhargava



K. T. Ravindran is an urban designer who is a member of the Governing Council of INTACH, a trustee of the Madhavan Nair Foundation, and a former member of the Advisory Board for the United Nations Capital Master Plan, New York. He was also dean and senior academic advisor at the RICS School of Built Environment. Member of the International Jury for the A.P. Capital Complex and subsequently Member of the Expert Committee for Balanced Regional Growth of AP State, including the Capital. He was formerly Vice Chairman of the Environmental Impact Assessment Committee, Government of India. His most recent work was the preparation of a resilient urban design framework for low-income state housing in Tamil Nadu.

He taught urban design for three decades at SPA Delhi, of which he was Head of Department for 21 years. The faculty team he built up from senior practising professionals in the city has shaped the department for over four decades. The Indian Institute of Architects awarded him the Madhav Achwal Gold Medal in 2022. He was the founding president of the Institute of Urban Designers of India, Member of the Governing Council of NID, Vijayawada, Member of the National Advisory Committee on HRIDAY Cities, Mentor for the Smart City Mission on Public Open Spaces, and former Chairman of the Delhi Urban Art Commission. He has travelled extensively across the world, and his current practise includes the design of green-field cities, cultural buildings, memorials, adaptive reuse, and urban conservation. His works and research are published in journals and books internationally. He has consistently pursued sustainable Architecture and urban design, championing the cause in multiple international forums and in academia.

The Dialogue
(Source: Author)

Q1. Designing a chair was the beginning of your urban design journey. Considering the disparate scales of the two, it would be intriguing to know your urban design approach.

I am glad you started with this question! Urban design changed the way I understood design. What was taught in B.Arch. was an intuitive process that leads to rational thinking. After my urban design education, the fundamental idea of a city consisting of multiple elements organised into an urban structure became apparent. The urban design process assigns every element a role and every link a meaning. The final design output changes if you reorganise the elements or structure.

It was a revelation for me that every building is an entity in the urban fabric, just as every component of the building contributes to its character and meaning. Take, for instance, the window, which consists of several elements. The shutters, colour, manner of hinging, and number of divisions (or lack thereof) change the meaning and role they play in the overall design. The solid void ratio, the relational nature of the window with other windows, the treatment and colour in the walls, sill heights, and every aspect of the design of the window have an urban presence and alter the role the building plays in the visuality of the fabric.

The analogy is also extendable to a chair, which consists of a number of elements, both specific to itself and relational. How they are organised changes the design nature of the chair. The designer will use all these same components to create any number of variations based on the relational structure of the chair itself and its role in the interior. The interior of a building is a continuation of the city, and the design intent expresses itself differently in each case!

Urban design changed the way I designed even a chair or a lamp as much as it changed how I perceived and designed a city. The design intent is the glue that ties together and structures all experiential elements in the built environment. Urban design is ultimately the design of the lived experience of a user as a continuum!

Q2. While most textbooks, like 'The Image of the City' by Kevin Lynch or 'A Pattern Language' by Christopher Alexander, presented urban design theories from a Western point of view, your lectures always brought forward the multicultural spatial dynamics in the Indian context. How did you converge contextualism and universal modernism in the academic curriculum when you took over as Head of the Department?

Over time, I have come to understand that the binary we draw between Western and Eastern thinking is often a convenient invention. In reality, the world shares a universal knowledge pool. This is a more inclusive view, in which humanity benefits from everyone's inheritance.

This is not to argue that Indian urbanism has no specificities. Perhaps these have been ignored as recorded knowledge, and in a reactionary mode, we reject the other knowledge systems. Take, for instance, the great Indian street. We often perceive it as chaotic in nature, bereft of any order. Under closer and more empathetic scrutiny, this is not

My Basho Moment. The actual image of the pond at the Rajiv Gandhi Ninaivakam site on my first visit. Rajiv Gandhi Ninaivakam, Sriperumbudur, Tamil Nadu. *(Source: K.T.Ravindran)*

the case. What we read as chaos is a more complex order where many contesting uses of the street find a relational, interdependent, yet complex convergence. This complex network allows everything to function in a mutually generative mode. City systems and architectural expressions belonging to many differing chronologies live together in a multidimensional way, serving an intense level of mixed-use, turning the streets into highly inclusive entities, expressive of the plural nature of our social formations and urban systems. Vehicular movement is an active component of the street while permitting multiple other uses to coexist. One can say the longing for "order" has different value thresholds in different cultures. One committed to high efficiency will look for an "efficient" and "orderly" street. Indian cities exist as far more complex networks, along with even more variations of transactional modes.

Very little literature, case studies, or academic materials have been produced on this. The Urban Design Studio in Delhi, as you have experienced it, explored this ambiguous area of chaos from an immersive mode of learning, mixing at once experience and theoretical discourse around those experiences, leading to more embedded learning. Multiple exposures, irrespective of their Western or Eastern origins, were made available to the students. The traditional-modern binary is diluted here. Heritage, contextualism, and the so-called Universal Modernism converge to provide a seamless understanding of Indian urbanity. The syllabus was carefully devised to achieve this convergence of student learning objectives. However, it is a continually interrogative process, leading to learning that never stops.

Q3. One of the things that distinguished education at the Urban Design Department at the School of Planning and Architecture from other institutes was friendship. Addressing each other by their first names, debating, chatting, drinking, and dancing together were some things that defined the teacher-student relationship. You went a step ahead to extend your social network with your students, like in my case, by introducing me to Kapila Vatsyayan and your vaidya at Kottakal Arya Vaidyashala. How important is friendship as a networking tool to you, both in education and the practise of urban design?

The learning environment is best nurtured in an atmosphere of fearlessness, without hierarchy but with mutual respect.

For that matter, in any relationship, whether in the working environment or domestical, mutual respect is the key. We have ordered our society with an excessive amount of hierarchy and hegemony. This destroys self-confidence and stymies free and fearless discourse. This is counterproductive to the development of critical thinking and open self-expression. This excessively ordered social structure has crept into the education system, which is one of the primary afflictions of universities in India.

An atmosphere of openness and friendliness is important for both faculty and students. A teacher must earn the student's respect, and the teacher must respect the student's intelligence. Without this, learning takes a back seat. Fear and an eagerness to please take over, which can only be defined as suffocating, both for the teacher and the student. Without mutually generated friendship between the student and the faculty, rote learning sets in, and neither grows. It is vitally essential for the teacher to be open to continuous learning. A stagnant, egoistic mind is incapable of either learning or communicating.

Plurality of views in an environment of mutual trust is the best stimulant for transformative learning. This is the foundation of an excellent co-working group. The teacher is a perennial student, learning from everywhere—from students, other teachers, and every experience of professional expression. This is also fundamental to team building. A collective ideological commitment will best define a collective learning group without hierarchy or distinctions between permanent and visiting faculty. If there are no differences of opinion, the classroom becomes a site of indoctrination, leading to opinionated, arrogant professionals who can never be thought leaders.

Friendship is much more than a networking tool. It is the binding force for creative human interaction. Without understanding the human environment, we can only learn to love the materiality of a city. Affection for life and all living beings is a vital attribute of a designer. Empathy for the user, whether for a town or a chair, is central to the quality of interaction, and that extends laterally without boundaries.

Q4. 'Lathmaar Holi of Barsana and the traditional conservancy system of waste disposal in Indian cities...' - Gender, social class, and caste systems were always a part of our classroom discussions. How do you look at these with equanimity in your projects?

One of the significant departures we made from the syllabi we inherited from the 1960s and 1970s was that we shifted the reference point from the physical and material dimensions of urban design to a more human-centric worldview. Our gaze shifted from form and its interplay with space to human habitations. Over the years, perhaps more as a habit than a conscious choice, we have perpetuated many forms of injustice in the built environment. Those whom we think contribute less to capital production, including a large section of women, the infirm, the old, the children, and the physically challenged, have been consistently ignored in our approach to design, blatantly privileging the motor car above all. The introduction of the subject,

The luminous landscape, roofless structures, between soil and the sky. Rajiv Gandhi Ninaivakam, Sriperumbudur, Tamil Nadu. *(Source: Debjoy Mitra)*

Humanising Cities, in consultation with Prof. KB Jain of CEPT was a significant milestone in improving urban design thinking. In collaboration with Dr. Ravi Sundaram, a social anthropologist, social dimensions found focus in urban design. Along with it, openness and curiosity, collaboration and coproduction, and awareness of the fact that a just city is a beautiful city took root as fundamental values or the ethical foundation of urban design thinking. The incredible directions in which our former students have moved in their careers are the primary evidence for the efficacy of this shift towards humanised cities. Empathy and belief in participatory design work, respect for the public as a client, ease of teamwork and collaboration, and increased public-mindedness are also a result of this shift. Today's urban designers are not merely technically proficient professionals but also more responsible citizens.

Q5. 'Breaking the silence of an ancient pond, a frog jumped into the water—a deep resonance'. I remember you sharing these words by Matsuo Basho while describing your design for Rajiv Gandhi Ninaivakam, Sriperumbudur. What was this deep resonance that you experienced while designing the spatial tribute to the former Prime Minister?

Great question! On my first visit to the site where Rajiv Gandhi was brutally assassinated, I confronted a vast rural landscape with rows of palm trees, ponds, and wild grass. A few pedestrian tracks were cutting across this placid landscape. Three ponds were part of the site's extensive ancient surface drainage system, edged by overgrown grass moving gently with the breeze. In the middle of this magical landscape was a small temporary structure where Rajiv Gandhi's separated head was found. The sadness engulfing the land had a pervasive presence.

I walked up to the large pond with a sprinkling of pink lotus plants and overgrown blades of grass, seeking the sky. As I stood and took in the glistening reflection of the midday sun, a frog leapt into the pond from the edge, creating ripples on the placid surface. In a flash, Basho appeared to me from the 17th-century classic "The Narrow Road To The Deep North", which I had read as an urban design student a good two decades ago. The glistening visuality, depth, and transparency of that timeless moment resonated inside me in a profound and inexplicable way.

This was a transporting experience of direct connection with the land, water, and sky. A moment of transparent light and deep communion without analysis or thought. A very pure moment where the soil opens up its secrets in complete communion.

This extraordinary experience can only happen at the first encounter with land. On the second visit, one is already analysing, dissecting, reasoning, and calculating. All the

Excavating embedded talent of the Tamil artisans on contemporary themes. Rajiv Gandhi Ninaivakam, Sriperumbudur, Tamil Nadu. *(Source: K.T.Ravindran)*

Open land, open approaches, without roads and saving every tree. Jawaharlal Nehru Junior College, Kadmat Island, Lakshadweep. *(Source: K.T.Ravindran)*

In land scarce island a TB sanatorium was restored, added to create a modern residential Junior College. Jawaharlal Nehru Junior College, Kadmat Island, Lakshadweep. *(Source: Akshaya K)*

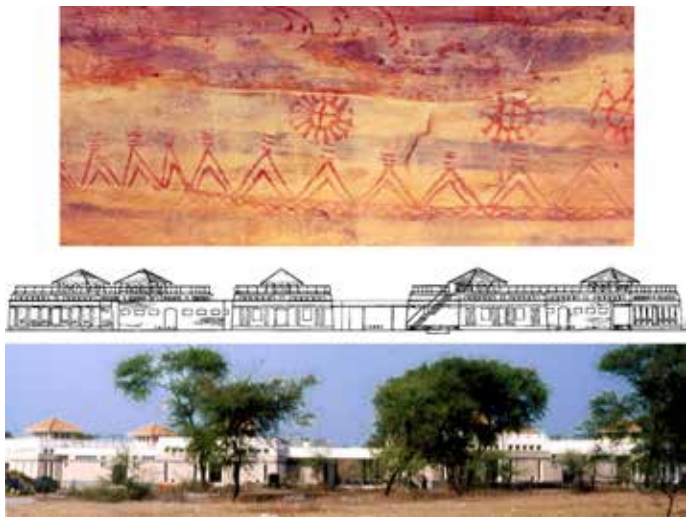
while high on that transparent light that helps you decide the nature of the expressions of the project. It is an oxymoron to think of celebrating such a cruel event in a place of death. The answer was to seek out and excavate from the fields of memories, experiences, and time. Then you don't stand aside but enter the experience. Layers of context unfold here from under the earth, transforming nature into roofless structures, primordial materials, and space. An architecture of space first evolves in the presence of materials and the minds of users, which will resonate with time in the new context created by design itself. Open landscapes and flowing spaces that don't inhibit the flow of the mind of the user. Resonance that evokes not joy but reflection.

Q6. There are so many accolades for the practise of architecture but barely any recognition for the development of architectural theory and education. Your contribution as the torchbearer of urban design has inspired the way the subject is taught in the various institutes of the country. The Indian Institute of Architects has honoured you with the Award for Education in 2022. I would call you a "guru" of urban design who opens a student's mind rather than a teacher who teaches a subject. Do you feel there is also a great deal of learning from teaching'?

A dynamic, fast-changing world does need equally dynamic, changing disciplines to manage that change. Our cities are a complex network of social formations, technology, and fast-changing modes of transactions. Urban design also has to match this dynamism. Flexible thinking, open dialogue, collaborative productions, and an acute awareness of changing technologies are required. In such a scenario, there are no roles for gurus. The roles of teachers are also undergoing swift changes. As a catalyst and trigger for critical thinking and the ability to connect knowledge systems and information, an atmosphere of co-learning is a more valid space that the teacher can claim. In an environment where information is easy to access, analyse, and even summarise with the help of AI, the teacher needs to shift gears. True learning—the most sustainable learning—is self-learning. We are lucky that teaching has changed gears towards wisdom, ethics, and insight, where the learning environment begins its discourse on a higher plane. Everyone is a guru, or there are no gurus at all! A teacher is a perennial student; the students are all gurus to some degree.

Q7. Like the many layers of an onion, your incisive design analysis has seen you as an integral part of national committees, lectures, and juries for design competitions. Do you find that the urban design element in projects is becoming irrelevant as the focus shifts towards sustainability, climate change, environmental planning, and conservation?

Building grows out of the land in dancing forms and space. Banbhatta Antarbharati Sanskriti Kendra, Rewa, MP. *(Source: K.T.Ravindran)*



Ancient cave painting depicts the village roofline that transforms into a School for Performing Arts. Banbhatta Antarbharati Sanskriti Kendra, Rewa, MP. *(Source: K.T.Ravindran)*

I have been fortunate enough to teach urban design for 30 years, which means I have been a student of urban design for 30 continuous years! You learn, learn, and learn from cities, life around you, and the hundreds of students you interact with. That, indeed, is a privilege! IIA was kind enough to confer the award, and I am honoured to have received it; however, my teaching went on its own steam as an end to itself. True awards are many and are not linked to accolades. Every submission, good submission, and even a bright, happy face in the studio is an award—soul-filling and providing the impetus to continue on track with renewed vigour. Another reward of a rigorous academic life is that you are given the opportunity to extend the work outside to many government bodies, juries, and commissions. They are also great sites to learn from and contribute to public life. That's a privilege as well.

Your question has a sub-question embedded in it. About the erosion of relevance of urban design, you suggest it is happening. Urban design is not mutually exclusive with conservation, solutions to the climate crisis, sustainability, etc. On the contrary, that is the natural direction in which urban design in SPA has grown, with active introductions of environment, economics, sustainable design, etc., in the urban design syllabus. The site planning studio introduced as the second studio course addressed sustainability directly and, in today's terms, climate crisis issues. The studio attempted to look at the need to respect natural systems as the primary layer and the built environment as the secondary layer. Professor Ravindra Bhan, a direct disciple of Ian McHarg, taught this studio, moving away from the idea that the landscape architect's job is to 'beautify' the landscape. Instead, a holistic view was adopted, integrating nature, movement, vegetation, and land profile. This helped the students think integrally about land, water, and habitation. This is how resilience is built to negotiate the climate crisis. Urban design has gathered far more substance from these current concerns because it accommodates, reconnects, and integrates multiple disciplines. If anything, the relevance of the subject is now clear, as are the here-and-now solutions to the humanitarian crisis surfacing in our cities.

Q8. You have served as a member of the Delhi Urban Art Commission for a long stint of 8 years, of which you were Chairperson for the last 3 after Charles Correa's term as Chairperson. Given a chance, what is the one thing you would like to implement to change the urban scenario in Delhi or other Indian cities?

The Delhi Urban Art Commission was set up by an Act of Parliament to advise the city on environment, development, and heritage. DUAC's clearance is mandatory for all large projects, and Correa's chairmanship elevated its status considerably. His methods set an effective departure point, and they became the base from which I began. "Urban art" here means "Urban design".

The most consequential document for any metropolitan city's development is the master plan, which in Delhi is also discussed and approved in the DUAC. If you ask me what the one thing I would like to see improved is, it is the Delhi Master Plan, the most important regulator of urban development. The Master Plan has to become more participatory in its formulation and content to address the issues of economically fragile communities, and its implementation has to be driven by urban design.

Q9. As students, whenever we presented concepts to you in points, you would ask us to write these in sentences to help us provide the 'links in the chain'. I'm asking you to do the reverse. Could you describe in seven keywords your life in design?

The role reversal that you have attempted is interesting. Read between these lines to discover the new ethical discourses in urban design!

1. Compassion
2. Critical thinking
3. Positivity and universal respect
4. Sustained commitment to co-production.
5. Seeing and learning together
6. Honesty of purpose
7. Zest for life

Monica Khosla Bhargava is an architect and urban designer based in Kolkata. She founded her design practise, Kham Consultants, in 1992. Monica has been visiting faculty at IIM Calcutta and INIFD Jaipur and is a thesis juror at various universities in India. She is also chairperson of the Indian Institute of Urban Designers, Kolkata Chapter.
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ROGER ANGER, AUROVILLE'S CHIEF ARCHITECT

Commemorating the visionary architect on his 100th birth anniversary

Prof. Dr. Anupama Kundoo

Roger Anger presenting Auroville at UNESCO in 1966
(Source: Dominique Darr)

Working on Auroville City Center, Anupama Kundoo with Roger Anger, at his home in Le Crestet, France, 2007
(Source: Dominique Darr)

Before he accepted the project of Auroville at the age of 42, Roger Anger (1923–2008) was one of the most prolific architects in post-war Paris. During the 1950s and 1960s, he realised over a hundred buildings, including several distinct high-rise residential ones, with a team of around one hundred architects and assistants at its peak, several of which are cited in the Paris Guide to Modern Architecture.

Known for his success at individualising collective housing and its rhythmic human-scaled facades, his unique architectural language was characterised by sculptural plasticity and timeless modernity. He had recognised very early on the key concerns of high-density high-rise housing and the emerging urban landscape, where the over-repetition of standard elements would lead to an oppressive monotony as well as the loss of human scale in an increasingly industrial scale environment, where technologies and so-called efficiency came at the cost of various other qualities that architects recognised as indispensable until now. In his own words, he resisted "the dictatorship of the curtain-wall technology" that enabled in one simple gesture to wipe out the individual scale of rooms and floor heights, leaving us with oversimplified building 'skins' replacing the complex three-dimensional building facades, which would have otherwise served as transition spaces mediating between the architecture and the city, the individual and the collective, the inside and the outside, the climate, etc., through elements such as balconies, overhangs, and compositions of a range of doors and windows. He was also celebrated for his innovative and experimental approach to form, space, and material across architecture's various scales, from the urban to the interior, from surface finishes and construction details to the design of the landscape and territory.

Housing projects like 283 Rue des Pyrénées, 15-21 rue Erard, and the three twenty-eight-storey housing towers in Grenoble, the highest residential buildings in Europe at the time, are among his heritage buildings in France.

Appointment as Chief Architect of Auroville

It was Mirra Alfassa (the Mother), Sri Aurobindo's collaborator, who invited the acclaimed Parisian architect to be the Chief Architect of Auroville in 1965, an ideal city project that she was initiating as 'the city the earth needs'. Upon his acceptance, she wrote him a personal letter, saying that it was a real joy and no surprise to hear from him, as she had always felt him to be *'L'homme de ce Project'* meaning 'the man of this project'. Already in 1938, the Mother had ushered in India's modern architecture period by inviting Antonin Raymond, a former disciple of Frank Lloyd Wright, from Japan to design 'Golconde, a state-of-the-art dormitory for the members of their rapidly expanding ashram. The exemplary building that resulted, in India's first reinforced concrete building, was realised long before Le Corbusier and Louis Kahn arrived in the country.

Neither the founder nor the architect was satisfied with Chandigarh's urban vision as an example of a city of the future, although Roger Anger admired Le Corbusier's genius as expressed in his architectural projects.

Roger Anger's visions for urbanism, now relevant around the world.

Instead of celebrating the new-found individualism of emerging post-industrial lifestyles enabled by contemporary technologies, Roger Anger included the necessary course correction to reposition architecture and city-making as essentially social endeavours that were human-centric, steering the progress and evolution of human society beyond short-term thinking and prevalent trends.

For Auroville, he began by raising the question, "Shall we allow the presence of cars?!" and warned, "Probably in just a few years, India will know, like Europe and the US, what the major urban problem is. The reign of cars has conditioned the urbanism of the 20th century and continues to tyrannise it. Although it is outdated and everybody knows it, the

Auroville's City plan popularly known as the Galaxy Plan, 1968 *(Source: Dominique Darr)*

automobile still strives, at its best, to create hell inside the cities and kill the outskirts. Therefore, the option to follow is to forbid and suppress the usage of this means of transportation within the town—and replace it with another, more hygienic, less cumbersome and noisy, more aesthetic, and maybe newer if possible. To which the Mother had responded, "Small vehicles, electrically powered, carrying about 200 kg, at a 15 km/h speed". Anger suggested "regulated, slow, silent, energy efficient, collectively owned vehicles".

Other radical grounding principles laid down by the founder, such as land being a common resource that cannot be individually owned, and an economy where the money would no longer be 'the sovereign lord', set the context where Roger Anger's team could radically rethink the city as a holistic new organism that could propel human society's advancements and accelerate human evolution.

UNESCO and the city's mission

His three-yearlong design process and regular interactions with the Mother resulted in a pedestrian-centric galaxy plan that she approved, and on that basis, she inaugurated Auroville on February 28, 1968, in a UNESCO-supported ceremony with the participation of 5000 people from

Facade of Housing at Rue de Pyrénées Paris, 1959 *(Source: Roger Anger achives)*

122 countries who brought handfuls of earth from their homelands to an urn that stands in Auroville's central amphitheatre, also designed by the architect. In November 1966, long before its inauguration, Roger Anger presented Auroville at the UNESCO conference in Paris thus: "It will be experimental in its urbanism and architecture; this is what interests us the most and concerns us the most directly. The task of giving concrete form to the vision of Sri Aurobindo has been given to the Mother: the creation of a new world, of a new society, expressing and incorporating a new consciousness into the work she has initiated… Auroville, then, appears like an attempt to realise, through work and actions in this material world, the vision of Sri Aurobindo."

It is serendipitous, or perhaps timely, that Roger Anger's own birth centenary falls within the 150th year of Sri Aurobindo's anniversary being celebrated across India, coinciding with India's 75th year of independence, during which the bold urban steps that Auroville was poised to take have been initiated.

Auroville's City Plan and architectural highlights

The city is proposed for 50,000 inhabitants, considering the critical mass necessary to radically rethink all aspects of collective living, from economy to education, art and culture, environment, organisation, and governance, holistically through research and experimentation. While exploring various arrangements, from grid plans to hexagonal and concentric geometries, the 'galaxy concept' was finally selected for implementation. Here, four principal areas—residential, industrial, cultural, and international—radiate in a dynamic spirally rotated movement around the city centre, thus achieving a mixed-use plan where the zones were separated "only in theory" and their gradual integration and communication were facilitated by a rotated circular plan. The rotation allows the zones to be less segregated and interwoven to completely merge at the city centre as a unified whole around an oval island with a central building called 'Matrimandir' which represents the soul of this city. A congestion-free city centre is planned like a 'garden city' and the rest of the city is kept compact within a 2.5 km diameter, achieving the concentration required for easy mobility. A concentric main street surrounding the city centre, the spine of public facilities called the 'Crown' cuts through all zones while containing public buildings to service each zone, "a bustling life" of the city, its "centripetal focus". A green belt surrounds the city and absorbs its impact.

Roger Anger's concept for the planned city of Auroville, the culmination of his ideas for future cities during the peak of his career as an architect and urbanist, addressed all the anticipated problems in contemporary and future cities and anticipated such as congested city-centres where automobiles have led to divided pedestrian spaces, greatly compromising the quality of life of residents, public space and the characters of neighbourhoods; loss of human scale and intimacy in vertical high-density housing; monotonous curtain wall facades that were oppressive and inhuman; increasing loneliness and isolation among residents; and loss of contact with nature.

New housing typologies for experimental collective living became an important aspect of his research; his team produced extensive housing studies and cluster concepts with many shared facilities for Auroville to remain social and humane, centred in the sense of community.

Lignes de Force: A Strategy for Harmonising Towers into the Surrounding Urban Fabric

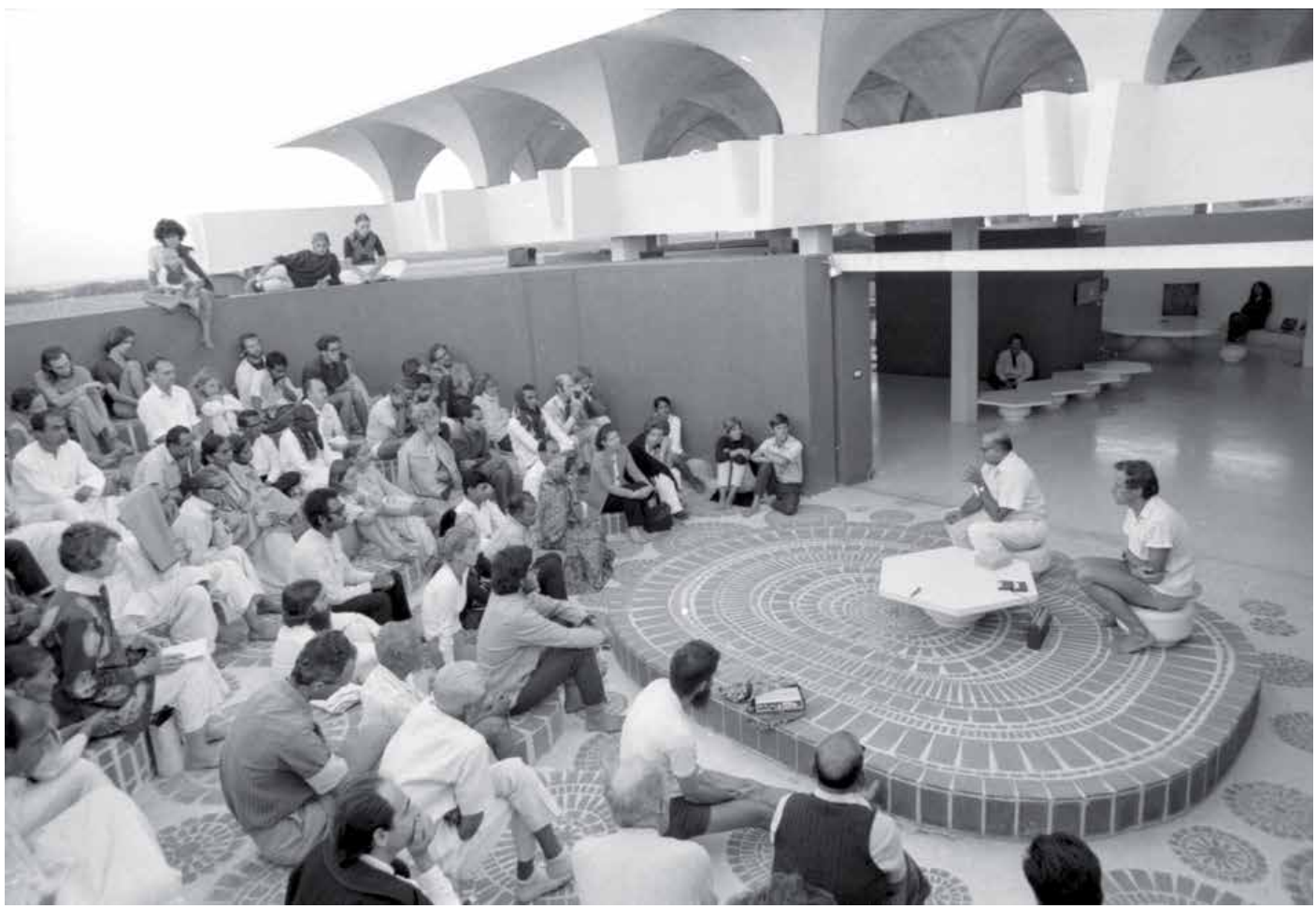
To compensate for the low-rise housing in the green city of Auroville and still provide the required compactness and density, Anger introduced urban structures that he called "Ligne de Force" meaning lines of strength, the most distinct elements of the city concept. These long, porous structures rise tall above the rest of the city at one end and gradually slope down over their entire length to reach the ground at the other end. In the residential zone, the towering heights are located towards the periphery of the city, their terraces facing the city centre, and in the industrial zone, the reverse occurs, allowing a high-density of office spaces to be accommodated in the city centre and low-rise production areas towards the periphery. These structures enhance the dynamic spiralling movement of the town plan, absorb density with a minimum of circulation on the ground through vertical development, and provide vistas and views of the city itself from various viewpoints that would otherwise not be visible in this relatively flat land. Except for a few of these urban structures, like the "Ligne de Force", which Anger said "were essential for the silhouette of the city," all areas allowed a great deal of flexibility. These lines of concentrated infrastructure liberated the land and remaining buildings to be low-rise and low-tech while still being in direct proximity to the city centre.

Roger Anger envisioned Auroville as a totally unprecedented psychological, social, educational, and architectural experiment. He kick-started the experimental spirit of architecture in Auroville through his earliest projects on barren, eroded land, where he sowed the seeds of architectural experiments and research for years to come. His early houses in Auromodèle and his several school buildings demonstrated exemplary innovations at various levels, from programme to forms to building technologies, creating the precedent and inspiration for extensive applied research in architecture. The Matrimandir, the soul of the city, was completed in 2008, just before he passed away, and demonstrates his architectural capacity and approach, where simple geometric forms are composed in a way that they are easily legible from a distance, where then the various complexities of rich compositions, unexpected use of materials, colours, and textures unfold as one approach, providing a world of experiences in the different scales one experiences as one comes closer and inhabits the interiors and exterior adjacencies. His particular use of pattern that continues across planes unifies floors, walls, and ceilings as complete sculptural experiences.

Renewed international recognition of Roger Anger's visions

While Roger Anger's contribution to architecture is globally acknowledged, his inspiring visions for urbanism are beginning to be rediscovered. When visionaries think big, their lifespans fall short, and their visions often remain unrealised. In the case of Roger Anger, the seeds he has sown have taken a long time to germinate, but the urban challenges he had the foresight to identify are unanimously acknowledged. So also, his visions and proposals will continue to inspire future urbanism, beginning with rethinking mobility and ending with restoring human scale and intimacy in the built environment.

Last year, his original Auroville model was flown into New York and displayed at the Museum of Modern Art (MoMA) as part of a first-of-its-kind exhibition, 'The Project of Independence: Architectures of Decolonization in South Asia, 1947–1985'. It was the only architectural model presented in the exhibition's opening section, "New Cities". Curator Martino Stierli described this work as "a stunning artefact representing and embodying an equally stunning urban and societal vision." MoMA performs conservation work for objects it deems to be of the highest historical and artistic value, an honour usually reserved for objects in MoMA's permanent collection. The Auroville model was a rare instance in which an object on loan was assessed as worthy of reconditioning treatment by their world-class team of conservators with the hope of including it in MoMA's permanent collection.



Last School, Auroville, 1971
The amphitheater is a playful mosaic pattern that enhances the stepped disc-form seating arrangement. *(Source: Dominique Darr)*

Last School, Auroville, 1971
Translucent polyester roofing elements harvest rain-water and provide natural diffused lighting in the interiors. The beams double up as gutters and allow thick walls to organically enclose the separate rooms while freeing them from the structural grid *(Source: Dominique Darr)*

Matrimandir, Auroville, 1971-2008
The rising mounds of earth surround the suspended sphere, to create the illusion that the golden ball is rising out of the earth, symbolizing the birth of a new consciousness seeking to manifest, by breaking forth from matter.
(Source: Georgio Molinari)

Meanwhile, the Lisbon Architecture Triennale 2022, themed Terra or Earth, also included Roger Anger as a key figure in their Visionaries section. The Triennale explored new paradigms that have the potential of changing our ways of place-making on a globalised planet, shifting from a linear growth model of "cities as machines" to a circular evolutionary model of "cities as organisms". Curator Anastassia Smirnova focused on realisable visions by architects and those who aim to systematically change the world. Through featuring his proposal for Auroville City, she urged, "Let us not lose this important work that lasted for decades; let us use his lab results smartly and activate this visionary and at the same time practical, down-to-earth knowledge to substantiate our conceptual thinking about the planet."

A personal note from the author about her 17-year-long collaboration with him

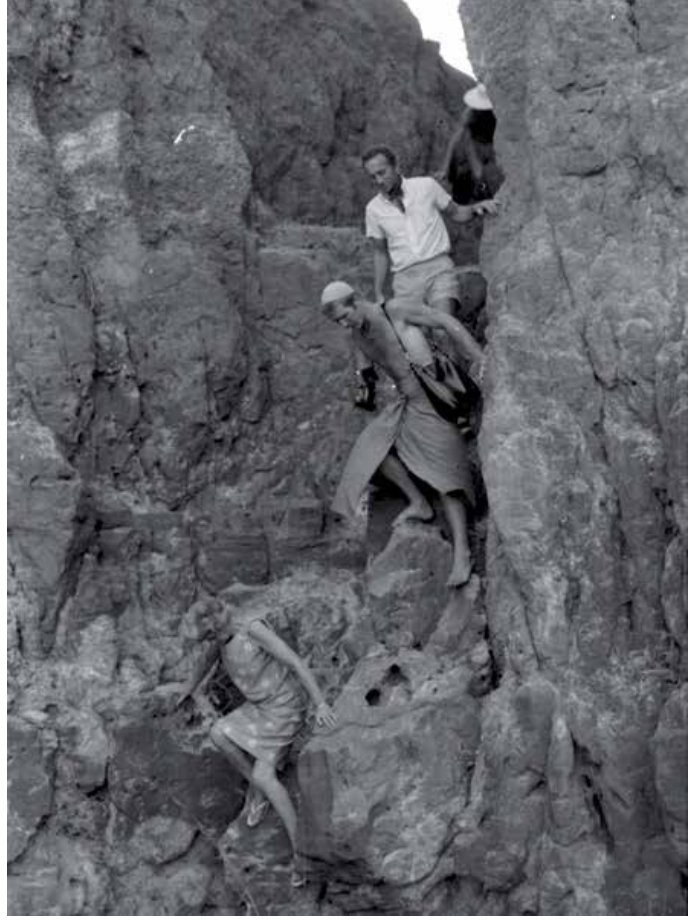
(including excerpts from the author's piece on Roger Anger as published by the Hindu newspaper)

I first met Roger Anger in 1990, when I interacted with him as a young architect who had moved to Auroville and sought his feedback on my projects there. I became more closely associated with him since around 1996, when he asked me to progressively develop urban designs and detailed parameters for Auroville's administrative area, the habitat in the city centre, and eventually for the whole city centre. I had ample opportunity to observe him at work, to discuss with him his design approach, and to observe how he dealt with the invisible as well as the material aspects of the architectural process and production. For Auroville's planning, I worked under his close supervision, and in 1999, he guided us in the production of Auroville's master plan document, the Perspective Plan 2025, which went on to be approved and gazetted. By 2002, I had started writing a book on his architecture, 'Research on Beauty, that he contributed to more actively from 2005 onward.

Matrimandir, Auroville, 1971-2008
Considered the 'soul of the city', the Matrimandir is surrounded by 12 gardens in an oval arrangement with an artificial lake around its circumference. The lake is part of Auroville's sustainable water management infrastructure.
(Source: Auroville Media Interface)

During those 17 years, we met frequently, and later perhaps daily, whenever he was in Auroville. He would often visit my building sites and comment on my experiments. I was grateful for his critical comments and suggestions, and I often went to him when I was stuck or if I felt dissatisfied with some of the details in my work. I requested him to detail the handrails in the planning office at the Townhall complex, for example, and he obliged. So, there was a growing contact that stretched beyond the professional. During those busy years of regular, close communication on Auroville's planning work as well as the 'book interview sessions', I had not had the time to realise the education and grooming I was receiving, nor that the words he had planted in me would sprout throughout the years after his passing and continue to guide me at the various crossroads yet to come in my professional as well as personal journey. These last 3 years with him were the ones where we had conversations of deeper reflection, about architecture as well as about everything else, at his home in Auroville as well as in France, where I had the great privilege of staying occasionally. I remember that if we wanted to work beyond 5 pm, he would insist we stop for the day and ask us to either play chess or ping-pong and join for aperitifs instead. He promoted a disciplined life and maintained a routine of work-life balance.

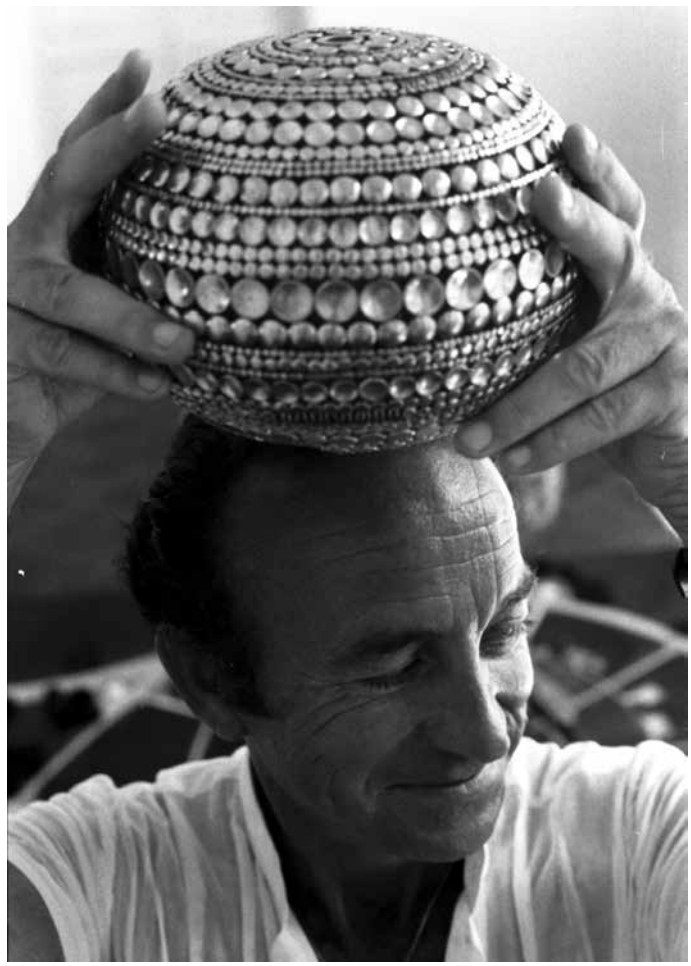
I remember Roger Anger as one of those sophisticated persons who, by their very existence, raise standards. He set a very high benchmark. An intriguingly rare personality who could maintain the widest of vision and simultaneously



Roger Anger inspecting the eroded land along the storm-water run-off routes *(Source: Dominique Darr)*

Roger Anger with Indira Gandhi visiting the project in 1970 *(Source: Auroville Archives)*

Roger Anger at Auroville's inauguration ceremony on 28 February 1968 attended by 5000 people from 12 *(Source: Dominique Darr)*



Roger Anger with the flattened sphere of the Matrimandir model *(Source: Dominique Darr)*

Roger Anger working on the Matrimandir model *(Source:Dominique Darr)*

Housing scheme in Rue Erard, Paris, 1962 *(Source:Javier Callejas)*

pay attention to the smallest of details. What distinguished him from his contemporaries, I noticed, was this sense of unhurriedness, calm, and peace that comes with clarity, focus, and conviction but without an iota of stress and hectic that typically accompany large projects. Like most visionaries, Roger Anger faced all the expected struggles of resistance. Ever since his client, 'the Mother, passed away, Auroville has plunged into a struggle regarding its collective organisation and decision-making, and Anger's role and authority were endlessly questioned by those who were settling into an organically growing settlement, originally intended and inaugurated as a planned city. He served as a member of Auroville's governing board for many years until his passing and refrained from using his position to push the project but instead hoped for a collective aspiration and necessary goodwill that could cradle such a city. Yet he remained loyal to the original intent, never losing perspective while remaining flexible, and insisted on the urban dimension of Auroville, which is synonymous with the project of Auroville. Observing him navigate through such resistances while remaining centred is perhaps my biggest takeaway from him. For each great difficulty he faced, he revealed more about who he was and why it was he who was chosen by the Mother and called by her 'the man of this project'.

A man of few words and a sense of humour, Roger was always straightforward. Our most meaningful conversations were through drawings, yet we covered topics from practical to philosophical, punctuated by his pearls of wisdom. When I was stuck in a design process, he mostly told me 'be more simple'. He said that architecture's aim was to transcend problem-solving and manifest a high standard of beauty as something deep and far from frivolous. "Beauty has the power of uplifting the consciousness spontaneously". I recall also that on one of the few occasions where we played chess, he had commented in appreciation of the game, "It is one game where nothing can occur by chance; you create everything." These are his most empowering words I carry, the realisation that you create everything.

Author photo courtesy: Andreas Deffner

Prof. Dr. Anupama Kundoo is an architect who has practised in Auroville since 1990 and is the current Head of Urban Design at the Auroville Town Development Council. She is the author of 'Research on Beauty' on Roger Anger's architecture and the recipient of the RIBA Charles Jencks Award 2021, the Auguste Perret Prize 2021, and the Global Award for Sustainable Architecture 2022 under UNESCO's patronage. She is currently a Professor at the Potsdam School of Architecture in Germany.
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ARANYAM VILLA
MALAVLI

Ar. Rushabh Bhurat & Ar.Vinita Bhandari

Fact File

Name of the bungalow	▶ Aranyam Villa, Malavli
Year of completion	▶ 2022
Area of plot	▶ 13000 sq ft.
Built-up area	▶ 5000 sq ft
Architectural, Interior, and Landscape Design	▶ Grapholic
Design Team	▶ Rushabh Bhurat and Vinita Bhandari
Photo Credits	▶ Vista Rooms

Riverside elevation, which showcases waterfalls from the pool deck area and the bunglow with a tall roof and almost invisible glass gable

Our recent work 'amplifies' the beauty of this heritage villa situated on the backwaters of the Indrayani River. It was an honour to work on this existing villa, which already had so much to offer in terms of planning and aesthetics. It's always so challenging to add something of value and need to the existing structure and thus enhance its authentic charm. This villa was originally elevated and well rested on columns to avoid seepage of water during the monsoons.

'Biophilia'! We would like to call the transformation such because it seeks to connect the building occupants more closely to nature.

The existing structure is mostly symmetrical in plan, with a tall, sloping roof with Mangalore tiles. The gable has glass, which sucks in enough daylight to light up any corner supported strongly on the sleeper wood truss.

The living room needed some fun, colour, and some furniture additions. The already tall roof and glass gables made it so much easier for us to experiment freely, as they made the whole space look lighter.

The dining area is supposed to be the heart of the house. A lot of conversations happen here, and it ought to be a multifunctional area. We really strived to make it cosy and interactive. This dining space opens up onto a wide deck with a raised swimming pool. The hand painted walls certainly add life and character to the space.

This bungalow demanded a makeover, and we as designers tried our level best to cater to it.

The bedrooms are well furnished, with huge windows showcasing the nature outside, which itself behaves like art on the walls. To add contrast, the walls are painted with beautiful art depicting flora and fauna.

The vintage furniture is refurbished in colourful linen to make it more lively and attractive. A lot of it is unique and fulfils the requirements very smoothly. A chest of drawers, daybed, dressing mirror—all of it is intricately designed, which adds to the charm.

As you scroll across the pictures, you will see how the raised pool, barbecue area, and other landscape elements seem to have merged with the villa. Also, how much life has been put into the bedrooms and the other living areas through thoughtful choice of colours and just a mere change in the placement of furniture.

Concluding 'Biophilia' with this visual treat.

Barbecue area overlooking the bungalow, which showcases very different aesthetics when lit at night

Living room overlooking a floating TV unit and entrance lobby

Dining area flooded with natural night. The sleeper wood beam adds a striking contrast to the otherwise light roofing structure

The raised pool and deck seemingly merge with the existing bungalow structure, blending well with the surroundings

Handpainted bedroom wall mimicking the nature outside

The twin sloping roofs are a sight to behold from the deck area

Refurbished bedroom with colourful upholstery and large windows framing beautiful trees outside

With over nine years of experience and 30 years of architectural practise in the family, designing spaces comes from within. We, a brother-sister duo, are obsessed with neat and clean spaces and delivering quality and detailed projects to the client, where their satisfaction is of utmost importance to us.

Grapholic's design approach is to reconnect architecture with nature and make optimum use of space, natural materials, lighting, and landscape to reinvent and transform the living environment and surrounding spaces.

The firm strives to create design that inspires, approaching each project regardless of size and scale with the understanding that architecture has a unique power to constantly evolve. We try to achieve maximum balance between functionality and aesthetics, thus fulfilling the design demand and aesthetics.

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ARTICLE

ROLE OF TANGIBLE & INTANGIBLE HERITAGE OF INDIA FOR SUSTAINABLE DEVELOPMENT

Ar. Monica Sharma, Ar. Piyush Pant

India is a diverse country and carries a deep history which has a great influence on Indian society and directly on developmental activities. If we look at Indian diversity, which can be seen in multiple areas like climate, geographical differences, spiritual beliefs and religion, cultures, traditions and also human anthropomorphism. The concept of sustainable development growth is based on three main parameters: 1. social 2. economic 3. ecology & environment, which are usually considered separated from each other but are originally not. The tangible and intangible culture of a country is a medley of personification created during various junctures of history. The original identity of Indian cities is diminishing because of unrestrained globalization and modernization. All Indian heritage core cities have their own historical, traditional, devout, social practices, cultural, non-secular and empirical or aesthetic significance. The article discusses sustainable development along with objectives of the intangible and tangible heritage of India. It is a broad discussion of the authors' ideology on relationships and Indian heritage and sustainable development. The conclusion sets forward the link between the intangible and tangible resources of the heritage of India.

1. Introduction

Heritage is what we have rooted from the past, to appreciate and relish the present, and to maintain and hand over to future generations. In a broader perspective, we can look at heritage as a combination of both tangible and intangible parts. The tangible part of heritage refers to something which can be touched physically like materials: visual arts, architecture, monuments, painting, sculpture, literary work, etc. and intangible heritage broadly refers to culture, religion, expressions, knowledge and skills that the populace, groups and sometimes individuals recognize as a part of their cultural heritage. The ideology of the Indian heritage both tangible and intangible, was driven by a sustainable living approach. Practically, sustainable development refers to the overall development of our needs for the present time without unsettling the capability of the coming generation to meet their own needs- transferred from generation to generation. Living heritage is a prime source for information and research about the sustainable practices from our past and becomes a source for community-based resilience which drives sustainable development in many different ways for example food, culture & tradition, living hood, built spaces, and human relation with built space, etc.

India has major six physical divisions : 1. The Himalayas, 2. The northern Indian plains, 3. The great Indian Desert, 4. The peninsular plateau, 5. The coastal plain, 6. Islands

The development and architecture of these regions also vary according to local diversity. Heritage buildings, from any particular division, carry the kind of sustainable development required as per the regional, geographical, climatic condition and cultural practices. These heritage buildings become the reflection of the society where they are built and showcase the sustainable practices of their time. Generally, the culture and tradition part of any city has been left in the field of sustainable development but the developmental part of the city cannot be done without an understanding of the culture and tradition because whatever happens in any place is aligned with the human behavior and belief which is directly linked with the sustainability.

2. Methodology:

The article aims to establish the relationship between the tangible and intangible heritage of India. The study started with the identification of the most dominant buildings from several heritage cities. These included :

- Mehrangarh Fort, City Palace, Jaisalmer Fort, Jaigarh Fort located in Rajasthan
- Agra fort, Fatehpur Sikri, Ayodhya, Allahabad Public Library, Chhatris of Goverdhan, Krishna Janambhumi located in Uttar Pradesh
- Gwalior Fort, Sanchi Stupa, Lalbagh Palace, Rajwada Palace, Kandriya Mahadev Temple located in Madhya Pradesh

These heritage buildings were studied with respect to local culture, plan of the building, orientation, morphology, architectural characters and elements, in order to understand and analyze the key aspect of sustainable development goals in relation to tangible and intangible heritage.

3. Tangible heritage of India for sustainable development:

India achieved an advanced state of architecture in ancient, medieval and modern times. Various monuments of the ancient and mediaeval eras are spread throughout the country. Prominent among them are Sanchi Stupa, caves, rock-cut temples such as the Kailash temple of Ellora, palaces, temples, mosques, tombs, etc. Much of this cultural heritage is recognized by UNESCO. Heritage was earlier least considered in mainstream sustainable development, regardless of its essential importance to societies and the wide-ranging acceptance of its outstanding ability to provide social, economic and environmental goals (World Heritage Convention, 2022).

The heritage of India has a significant impact on shaping society through the built environment. Heritage buildings are built not only for private applications but also majorly focus on social gatherings which add economic value. The environment is one of the goals which focuses on the architecture along with the materials and architectural elements for climate response. Most of the Indian heritage buildings are designed considering context and climate. For example, Patwon ki Haveli located in the desert climate of Jaisalmer, Rajasthan is one of the examples of tangible heritage for sustainable infrastructure. Havelis are also known for this aspect, such as the Palace of Brocade Merchants, because of their occupation. This is not a single haveli but a cluster of five, forming the biggest haveli in Jaisalmer. It rests in a narrow lane because of the climatic consideration and maintains levels of thermal comfort within. There are many paintings and mirror work on the wall. Other key features are its traditional gateways and arches which reduce penetration of the harsh sun. Each arch has unique interpretations and themes. Although the main building is made of yellow sandstone, the main entrance of the Patwon ki Haveli is brown in colour. Jalis and carvings brighten the palace. There are sixty balconies decorated with traditional motifs and patterns.

Since earlier culture determined that females stay largely indoors, there was very less interaction between men and women. This influenced openings of the facades.

Similarly, it is seen that cultural and traditional features in designing of buildings like Fatehpur Sikri, Hawa Mahal, Taj Mahal, Agra Fort and others showcase contemporaneous social, economic, ecological and environmental considerations, as well as the art, craft, culture and climatic parameters of the region. Elements are designed and oriented to protect the building from extreme climatic conditions and to maintain human comfort within its space. Application of local materials is energy efficient. The use of local materials intensively adds a heritage identity to the city, such as Jaipur, the Pink City, Jaisalmer, the Yellow City and Jodhpur, the Blue City. Tangible heritage does not only incorporate the built environment but also considers environmental quality, education, economic development, etc.

The Archaeological Survey of India (ASI) looks after the archaeological remains and excavations, maintenance of the site, conservation of monuments, conducting various expeditions abroad and imparting training in archaeology.

4. Intangible heritage of India for sustainable development:

Intangible heritage refers to the non-physical parameters, such as oral tradition, traditional agriculture, local knowledge and skills. These cultural practices have been generated keeping in mind local availability of resources and existing natural conditions. Rajasthan has a desert climate in most parts of the state where the temperature is very high. The flora and fauna is dependent on the type of soil, as are the techniques of construction. The built spaces strive for thermal comfort. Since days are warm, cultural activities and social gatherings take place after sunset, in the open. Climatic conditions also affect food and crops which are found in the region.

The significance of intangible culture is not a symptom, but it is a multitude of knowledge and skills that is spread through it from one generation to the next and drives the development of new sustainable technologies with the understanding of local techniques.

4.1 Traditional Knowledge & Skills:

The application of traditional knowledge contributes to equity, opportunity, safety, and encouragement of local communities as well as to the sustainability of natural resources. Some of the techniques which have been generated from the past with continuous efforts on modification and better performance become the symbol of practice today in our daily life or professional work. Local knowledge systems have been found to contribute to sustainability in varied fields such as biodiversity conservation and upkeep of ecosystem services, tropical ecological and biocultural refurbishment, sustainable water management, genetic resource conservation, and organization of other natural resources. Local knowledge has also been found valuable for ecosystem rebuilding and often has components of adaptive management (Kaur, 2015).

There are 15 types of resource management practices that result in biodiversity conservation and contribution to landscape heterogeneity in the arid ecosystem of Rajasthan. Environmental ethics of the Bishnoi community suggest empathy for wildlife and preventing the felling of Prosopis cineraria trees of the region. Their teachings proclaim, 'If one has to lose his head (life) for saving a tree, know that the bargain is inexpensive.' (Pandey, 2022).

4.2: Traditional agricultural systems:
Diverse crops were traditionally cultivated in India which is beneficial for sustainable development and helps in preserving the nutrition required for better health. Cultivation of foreign crop species also changes the fertility rate of the soil and helps in water demands as per the climatic condition.

Agriculture is one of the foremost contributors to global warming with about 10-12 per cent rise in total anthropogenic GHG emissions (Lynch, 2021). Conventional knowledge is universal in nature due to its multiple applications in disparate fields such as agriculture, climate, soil, hydrology, plants, animals, forest and human health. Husbandry and agriculture are long-forgotten practices through which human beings have interacted with nature and managed ecosystem services.

4.3: Heritage for storing the social values and culture:
The term 'heritage value' implies the senses and values that entities or factions of people impart to heritage. This includes collections, buildings, archaeological sites, landscapes and intangible expressions of culture, such as traditions (Diaz-Andreu, 2017). These principles have been a significant factor in the legalization of heritage to safeguard and sustainable development growth, although the insight of what they are has changed over time and there are distinctions between one city and another.

Culture has the capacity to convert all-inclusive societies, reinforce local neighborhood's and establish a sense of character and belongings for people of all ages. Conservation of architectural heritage becomes important because of the values offered by architectural heritage resources for numerous individuals, groups, associations and governments.

4.4: Use of sustainable and local materials:
Heritage buildings are mostly designed with locally available materials which creates a story to tell about its past, culture and people. The use of extensive materials was never recommended as a part of the sustainability rule but of use of locally available materials which help in reducing carbon emission from the environment which is beneficial for a healthy lifestyle. The life-cycle consists of material fabrication, construction planning, design, operation and the upkeep process (Patil, 2017). Most heritage buildings are constructed with locally available material, such as Fatehpur Sikri at Fatehpur, Uttar Pradesh and Daulatabad Fort at Aurangabad, Maharashtra. The use of sustainable materials and technology not only reduces cost of transport and production and carbon emission, but also provides avenues for employment and skill development for community members (ibid.)

4.5: Heritage for Art and craft:
Art plays an important role in sustainable development. Regional arts and crafts are derived from human practices, culture, festivals and occupations. The basic value of art and craft is to communicate a meaningful experience that resonates over time. Sourcing the raw materials for historical art and craft have a low impact on the environment because of using naturally available resources instead of those that produce harmful chemicals.

5. Conclusion:

The concept of sustainable development is established on three major pillars : social, economic, ecology and environment. The balance between these three pillars is required to establish sustainable development growth. Sustainable development for different regions varies and depends on the geographical and climatic conditions in which it lies, along with locally available materials and culture and tradition of the community or individuals. According to this, the kind of sustainable practices which need to be followed will be different. A few observations which have been noticed for sustainable growth are:

1. Government policies for conservation.
2. Social motivation and awareness for people for heritage conservation.
3. Economic support and subsidies.
4. Management of natural resources and conservation techniques.
5. Promotion of tourism and developing an ideal model for sustainable development growth.
6. Designing of the natural environment instead of promoting a more artificial environment.

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PRESENCE OF ABSENCE FROM TERRESTRIAL TO CELESTIAL

Ishika Jain and Prof. Leena Aphale

The idea of death often instills fear in people, causing them to avoid talking about it and avoiding spaces that are associated with it. As children, we always kept a distance from death ceremonies or places for the dead. Even after reaching adulthood, we are always told it is a taboo and a morbid area to visit. Why do we fear it so intensely when every single living entity has to face it? This is what sparked my eagerness to comprehend such places and write about them. The spatial character of the structures that cater to this sector neither seems to pay respect to the final journey of the human body nor comfort the family of the deceased in such times. The structures are dilapidated, with very basic and ill-maintained facilities. The act of cremation is reduced to a mere formality, a set of tasks to be performed in a specific manner.

Can a crematorium be a place that mitigates fear by facilitating the celebration of life over death? Can it help the mourner overcome the grief cycle by being engulfed by the oneness of nature?

As an architecture student and with my ability to perceive the importance of quality of space, seeing a person's final physical memory in such an ill environment compounded the grief.

Can architecture honour the deceased for a final time? Can it help a person overcome grief and provide him solace instead of making him wallow in it?

Introduction

Benjamin Franklin once famously said, "In this world, nothing can be certain, except death and taxes."

As humans, we are constantly plagued by the thought of our mortality. Yet we avoid addressing it in any way and attempt to physically escape the spaces that signify death.

Throughout our lives, we have a home where we get warmth and a sense of secureness; we tend to celebrate special occasions by going somewhere special; and we visit religious places and similar places of worship to find solace. But when it comes to saying a final goodbye to our beloved ones, we settle for mediocrity.

Why do we fear it so intensely when it is the reality we all have to face?

An upbringing like this is typical and problematic, causing a default and taboo impression among the members of society.

Objective

1. To explore how architecture can be designed to accommodate death in a way that is respectful, meaningful, and comforting for both the dying and the bereaved.
2. To investigate how the physical and aesthetic qualities of architectural spaces can affect the experience of mourning and grief and how architects can use design to create environments that support healing and closure.
3. To examine the role of architecture in shaping cultural attitudes towards death and dying and to consider how architects can contribute to broader conversations about death and mortality.
4. To analyse the historical and cultural contexts that have influenced the design of death-related architecture and to identify patterns and trends that can inform contemporary design practises.
5. To evaluate the sustainability and ethical implications of designing an architecture for death and to consider how architects can create spaces that are both environmentally responsible and socially just.

Fig 1: Inside the Pyramids of Egypt
(Source: https://www.reddit.com/r/ThingsCutInHalfPorn/comments/k1j6sg/the_architecture_of_ancient_pyramids_1134x1771/)

Literature study

Historical and cultural perspectives on death and mourning

Death and architecture may seem like an unlikely pair, but throughout history, death has played a significant role in shaping the design of our built environment.

From ancient burial tombs to modern-day funeral homes, the way we honour and memorialise the dead has influenced the way we build and design spaces. It could be interesting to explore how different cultures and periods have approached death and mourning, and how that has influenced the architecture of burial sites and crematoriums.

In ancient times, burial tombs were often grandiose structures that served as a final resting place for rulers and royalty. These tombs were often adorned with intricate carvings and decorations and were designed to impress and awe those who visited them. Arguably some of the most famous examples of these tombs include the pyramids in Egypt and the mausoleum in Halicarnassus, which are the world's largest funerary edifices.

During the mediaeval period, the church played a dominant role in shaping architecture, and death was a central part of religious life. Churches were built with elaborate tombs and memorials, and the crypts beneath the churches often served as burial grounds for royalty and other prominent figures.

Cenotaphs, known for their tomb-shaped structures, were created to commemorate deceased kings and queens, such as the chattris at Bada Bagh, Jaisalmer.

Some cultures emphasise elaborate funerals and ornate tombs, while others prefer more simple and naturalistic

Fig 2: The Pyramids of Egypt
(Source: https://en.wikipedia.org/wiki/Giza_pyramid_complex)

Fig 3: Bada Bagh, Jaisalmer
(Source: https://www.colourbox.com/image/bada-bagh-cenotaphs-hindu-tomb-mausoleum-jaisalmer-rajasthan-india-image-47034891https://en.wikipedia.org/wiki/Giza_pyramid_complex)

approaches. These are all forms of refrained architecture or spaces that signify death, but we do not tend to be terrified of going to these structures and travel from around the world to visit these great monuments. Do we need to borrow some tips from our own ancient history of such spaces?

Context

Much has been written about the way emotions have been driven through architecture. It takes a lot of courage to open our hearts and express how we feel at any given time, especially when the emotions that invade us are negative. But there are those too who display emotion through creative expression (sometimes even unconsciously), and it is we architects who do that. As architects, it is our social responsibility to work on projects like these and inspire others to do the same. The main aim should be to enrich such places with spirituality and increase the positivity of the people concerning such places. Though architecture has been widely involved in spiritual and religious typologies, the architecture of death-oriented structures is a less-travelled path.

The crematorium is the only building in the world of architecture to gain so much negativity. The spatial character of these structures seems neither to pay respect to the final journey of the human body nor to comfort the family of the deceased in such times. The structures are dilapidated, with very basic and ill-maintained facilities. The act of cremation is reduced to a mere formality, a set of tasks to be performed in a specific manner.

Can a crematorium be a place that mitigates fear by facilitating the celebration of life over death? Can it help the mourner overcome the grief cycle by being engulfed by the oneness of nature?

Immortality by design—the architecture of the afterlife

"Life is pleasant. Death is peaceful. It's the transition between both that's troublesome," said writer Isaac Asimov. The 'troublesome transition' is exactly where architecture lies. Architecture has the power to bridge the gap between the living and the dead and, to some extent, blur the boundaries."

A crematorium is a key part of designing a systematic yet approachable space that aims to soothe the living while they mourn the dead. The space should evolve from sensitivity towards the psychology of the users. Design that helps one mourn the loss of the beloved is becoming more related to architecture with each passing day. Designing a space that has empathy and emotions, a space that is peaceful and calm. By further evolving the relationship between architecture and death, we may be able to find new ways to allow people to leave the earth in a more dignified manner without any long-term negative impact.

It can be a place where architecture can act as a medium to allow function and emotions to seamlessly merge, evoke intimate feelings, help mourners during difficult times in their lives, and provide an unobtrusive and organised environment.

From the site, surrounding people, and their movement to the play of light, colours, and materials, every single factor is dependent on how a person is supposed to feel with the utmost sensitivity. It is a place where proper cremation of the body must be organised, keeping in mind hygiene and the environment, as well as creating a space that marries personal spaces for mourning with public spaces for a shared feeling of loss.

1. The site and its surroundings

The location of the site plays an important role in determining whether the structure needs to be closely knit amongst itself or open to its surroundings, depending on factors like the culture of the locality and its role in dignifying the loss. Therefore, the context of the surroundings plays a crucial role in responding to factors like security, ease of accessibility, and visual permeability.

2. Relationship with nature

Nature has a symbolic significance that can comprehend human emotions and depths of attachment and can play a significant role in the expression of the form of the building as well as the internal spaces. Designing the landscape according to the existing one can give the place an identity. It can provide an open space for contemplation and consolation by keeping in mind environmental aesthetics.

3. Feeling and Healing

Space should have the power to dignify the feeling of losing a loved one and give him the strength to heal from within. A crematorium is a place that encounters death and its effect on the living, where there is a two-way conversation between the physical environment and the mental well-being of the person. It is a place where a myriad of emotions overlap, from anger and grief to love and finally healing. This myriad lays the foundation of the complex.

The overlapping nature of these emotions could have been the prime reason for the abandonment of crematoriums from the scope of architectural design, as they demand to be physically as well as emotionally impressive.

4. Movement

Easing the people moving within the building can convert a presumably non-place into a meaningful place, where non-place is often defined as a place of transition where people pass through but do not hold any personal significance to them.

Approaching the building through the abundance of landscape, one may perceive it as a threshold to the space,

which has taken on the shape of the earth. As one walks through the space, it should depict one following the milestones of the deceased's journey.

5. Spatial components
A wake for the deceased brings people who might not know each other momentarily together through the feeling of grief. This is an essential connection for a funeral, and architecture can enhance this unity where people help each other heal.
Three types of primary spaces are considered: space for cremation, space for relatives and their gathering, and space for staff, where the orientation of the spaces should consider religious beliefs.

To bring these spaces and the people into harmony, centralised spaces as well as waiting areas can provide privacy and allow the people to assemble for a shared sense of loss.

6. Light
Natural light has historically been said to speed the healing of people and has been widely utilised and recommended in stressful surroundings. Light has allowed architecture to experiment with the visual and emotional capabilities of a human being. It has the power to empower people's senses against all the negative emotions surrounding them and can help them accept the rule of nature, where every life process comes to an end. It creates relationships and allows a seamless transformation that continuously shapes the world.

7. Water
Water has been the most important element in cremations. Traditionally, several religions around the world believe in immersing the ashes in rivers, and therefore, this has been one of the main reasons behind the location of crematoriums in the vicinity of a water body, like the crematoriums near the River Ganga.

However, water can also be used as a design element to provide a sense of tranquilly and stillness and as an outdoor congregational space to remind you of the oneness of nature and suggest life.

8. Materials
In terms of texture, materials act as the strongest link between the public buildings of an era. The coarse and fine textures have been used to explore the emotional aspects of a physical space through touch.

The importance of sustainability in crematorium design

As with all types of architecture, sustainability should be a key consideration when designing crematoriums. This could include features like energy-efficient heating and cooling systems, renewable energy sources, and the use of eco-friendly building materials. Additionally, some crematoriums are exploring alternative cremation methods that are more environmentally friendly than traditional cremation.

Conclusion

Whenever we talk about architecture that improves the quality of life, we always imagine an office, a café, a school, and so on. It is very rare to imagine a crematorium or places of death.
Why is that?
It is because we always view them as thoroughly practical and functional spaces that don't need to be aesthetically sound. But even these spaces, unlike every other space, deserve good architecture with good ventilation, light, and spatial quality. The sensitivity of this issue is a real mandate. Ultimately, death and architecture are intertwined in ways that go beyond the physical design of buildings. Our relationship with death and our desire to honour and memorialise the dead shape the way we build and design spaces and reflect the values and beliefs of our society as a whole.

Now is the time we start looking at and reanalyzing these spaces, as they have the potential to impact an individual's perspective towards death and the dying. Architecture won't help deceased people, but it helps to keep their memories alive among the living. It also narrates the story of their last journey together and a place of emotional discharge and a quiet transformation subordinate to the eternal time and the experience of eternity. The quality and symbolism of buildings like crematoriums and spaces are getting better every day, and it is time we start making death practises more humane, expressive, thoughtful, and practical.

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KEYNOTE SPEECH AT IIA CONVENTION HYDERABAD

Ranjit Sabikhi

I would like to thank the Indian Institute of Architects and the Telangana Chapter for inviting me to give the keynote address at this convention. Let me begin by congratulating the Institute for having pulled itself out of its long period of hibernation. Over the last couple of years, the Institute's Journal has become something to look forward to. It is now a magazine with limited advertisements, showing interesting research studies, architectural designs produced by young architects from different parts of the country, a variety of articles, and the Institute's newsletter. It also establishes the presence of IIA Chapters in different states. I look forward to this publication continuing to grow and becoming more influential and meaningful over time. This journal, along with a couple of online architecture sites featuring a variety of built projects, are heartening indications of important change.

As urban development continues across the country and as villages change and small towns get larger and, in some cases, grow into cities, we need the active involvement of more architects, town planners, urban designers, landscape architects, engineers, demographers, traffic planners, etc. in this process of change. This is a need that is going to continue to grow.

What must be recognised is that all settlement areas follow an organic pattern of continuous change and growth. In this context, the current pattern of rigid planning with fixed land use for every pocket of land has become meaningless, as it renders all master plans obsolete in short periods of time.

This pattern of change is not confined only to urban areas; rural areas also continue to change. The current approach of providing a toilet in every rural home and hailing the building of millions of toilets as a major achievement is also conveying a false message. The provision of toilets needs to be linked to a process of overall health and cleanliness, along with adequate water supply, garbage removal, etc., for all sections of society. Rural areas also need proper connectivity, both physical and online, through cellphones and artificial intelligence to bring about real change. Rural areas across the country call for comprehensive planning and development.

In the early 1950s, when I started practise, there were very few architects in the country. As a newly independent country, available resources were limited. Building materials were scarce, and it was expensive to build. As cities began to grow, there was demand for more space, and more structures were needed. There were few building contractors, and there was a shortage of skilled craftsmen. This shortage got further exaggerated when large numbers of building contractors and workers migrated to the Middle East.

Huge oil reserves were discovered in the Eastern Arabia region in the 1930s, with large-scale commercial extraction beginning in the early 1950s. Soon, these countries became major world oil exporting countries, amassing huge riches in a short time. These countries had large desert areas and a small population, which was inadequate to meet the labour demand. To meet this challenge, immigration of labour and skilled craftsmen was increased to provide for the massive demand for both skilled and unskilled labour across the entire area from 1945 to 1995.

In addition, several Indian architects picked up design projects in the Middle East, and many qualified young architects moved to offices in the area as they were being offered much higher salaries than what they could get in India. The incentive for architects and other qualified professionals to take jobs in the Middle East was given another massive push as the Indian government introduced a law granting tax exemption for incomes earned abroad and brought in as foreign exchange into the country. The only important requirement for this tax exemption was that such income be earned by private limited companies. To take advantage of this, several professionals set up private limited companies for their practise. This exemption was later withdrawn.

The Indian Institute of Architects (IIA) was established in 1917. In earlier years, the practise of architecture was guided by the Institute, which also printed a booklet defining the principles of practise and the scale of professional charges. In 1972, for the protection of the title of Architect and the creation of an architect's registration body to regulate the standard of education and the profession, the Architect's Registration Act was passed by Parliament. The Council of Architecture came into being and was entrusted with the responsibility of approving courses in all schools of architecture. The Council also defined the scope of comprehensive architectural services along with the prescribed scale of professional charges. In 2022, the Council published the Manual of Architectural Practise, consisting of five volumes.

As more and more schools of architecture were established in different states across the country, the total number of architects steadily grew. The Council approved the establishment of each new school of architecture but did not set up a framework for the periodic checking of teaching standards or the upgrading of teaching facilities. As a result, many schools made no attempt to maintain minimum standards, both in terms of the quality of teaching and the provision of the necessary infrastructure of space and proper teaching facilities. The Council had no system in place to check and ensure the maintenance of minimum standards and still has no such provision.

Some schools have, however, steadily improved over time and are producing well-trained young architects, producing good designs, and doing excellent research studies. It would be good if the Institute were to set up a process to recognise and honour such schools and, at the same time, organise a system for downgrading schools that fail to maintain the Council's minimum education standards. Along with the steady increase in the number of schools, there was a massive decline in the general state of the architectural profession. The decline in the quality of the profession is closely related to the flooding of the market with poorly trained graduates, who, to survive, began to ignore the rules and regulations for practise laid down by the Council. The Council took no action in relation to this blatant flouting of rules and regulations.

One of the clear signs of the steady decline is the flooding of the market, with many architects providing poor service and charging professional fees on an arbitrary basis. Included in the Council's charter is a prescribed scale of professional charges.

In relation to Clause 1.4.1. Architects (Professional Conduct) Regulations, sub-clause B xii clearly states: "Observe and uphold the Council's conditions of engagement and scale of charges."

This clause clearly restricts government authorities from calling for bids and negotiating fees for projects of all sizes. Master Plan guidelines and local regulations have also been ignored. The Council has been unable to resist pressures imposed by politicians and administrators through government agencies and has taken no steps to correct the situation.

This process of deterioration began a few decades ago with government agencies inviting architects to submit bids for projects that they should not have accepted. They should have insisted that the Council of Architecture norms be followed both in letter and spirit, and the Council should have acted by cancelling the membership of architects who flouted COA guidelines. Because of the silence of the Council, government agencies have persisted with even more blatantly aggressive action.

From the mid-sixties onward until 2010, for almost all our projects, we were paid a reasonable professional fee. During this period, we were commissioned to do several large projects for government agencies, including District Centres and educational complexes, at a professional fee of 5% of the total cost. This was never questioned, and there was no bargaining involved. Suddenly, around 2005, some developers and government agencies like the Delhi Development Authority (DDA) and the National Building Construction Corporation (NBCC) started inviting bids for projects. They also started including conditions like the firm must have done work worth so many crores in the last 3 years, or one year, to be eligible to bid for projects. Professionals were now being treated like construction contractors, and some clients asked for the submission of a fee for the purchase of bid documents.

Surprisingly, when all this was happening, architects across the country remained silent. Neither the Indian Institute of Architects nor the Council of Architecture protested or took up the matter, and they have allowed government representatives to insist on a series of actions that have degraded the quality of schools of architecture approved by them and destroyed professional credibility. The teaching of architecture calls for a close connection between professional practise and construction work at the site. Without an understanding of this, young graduates face a shock when they join a professional office, as they have no idea what real design for implementation is all about.

In recent years, the number of young, qualified architects has multiplied, and 463 approved schools add around 20,000 graduates every year that enter a profession that has lost its value and has been steadily downgraded. Many of the new schools are nothing more than moneymaking machines, admitting a large number of students without adequate experienced staff to provide proper training. It is only when these students graduate and go out into the market seeking jobs that the wide gap between their abilities and their actual professional needs becomes apparent.

The Council of Architecture admits these graduates as members after they produce a B.Arch. degree certificate showing that they have completed a 5-year course of study at one of the approved Schools of Architecture. No experience working in a professional office is required. Many poorly trained graduates set up boards and started practises, flooding the market with poor professional service. They are the ones who flout all rules and regulations. COA needs to change the system to put a stop to this kind of degradation. They should change the rules and ask fresh graduates to work for a minimum period of two to three years under the guidance of an architect with a minimum of ten years of professional experience. Following this, the COA should conduct a professional practise examination to check their basic competence before admitting them as members of the Council.

Many Schools of Architecture are charging unreasonably high fees from students without considering the current state of the profession or the kind of financial situation young graduates are faced with after completing the course. Most professional firms pay young graduates a maximum of Rs 20,000 to 25,000 per month, which is a pittance after they have paid exorbitant tuition fees for a five-year course. It is time that COA took note of this, and drafted a reasonable maximum scale of tuition fees that may be charged by architecture schools that are approved by them.

The COA has also, to date, not taken any notice of the increasing difficulties faced by architectural firms. Finding new work and sustaining an income is a common problem, as there is no fair system followed by government agencies for the distribution of professional contracts.

In addition, there is no framework in place to ensure the active involvement of an architect in a particular project other than the signing of drawings to get approval from the sanctioning authorities. Several architects registered with the local authorities merely charge a fee and sign drawings that are being submitted for approval.

At present, building byelaws vary from state to state, and an architect based in a particular location is forced to adapt his designs in accordance with local or state building byelaws. It would be much better if, like the National Building Code, there was a set of National Building Bye-laws applicable all over the country, with specific exceptions defined for locations like hilly areas, river valleys, forest areas, etc.

Architects are also currently overburdened by legal liabilities, the added cost of obtaining insurance like professional indemnity insurance, and the need to give legal undertakings for the execution of professional works. They are also often subjected to considerable pressure from certain clients to oversimplify the design to reduce cost, in addition to putting a fixed cost of construction prior to design. In some cases, they even dictate that architects follow a particular form of design because of the client's perceptions related to salability, marketing, etc. All such pressures often result in serious compromises in the quality of architectural design.
Serious issues relating to the cost of professional services are often not understood and are overlooked by most clients. One of them is the cost of the constantly changing hardware and software related to practise, along with the expense of annual renewal. New hardware includes updated computers, plotters, scanners, etc., and software that constitutes CAD, presentation, estimation tools, etc.

Along with these items, there is the problem of retaining architectural talent after having trained young graduates over the years. With ever-increasing demand, skilled professionals tend to move on. While large numbers of graduates enter the market every year, only a small number work to acquire the necessary professional skills and experience. In addition, many join out sourcing offices that provide facilities for drafting, presentation, etc. but are not involved in architectural design work. Computer software and graphic interface firms also employ architecture graduates.

Despite the availability of many alternative choices, a large part of the market for professional architectural services, particularly in small towns and rural areas, is taken over by civil engineers, draughtsmen, and builders offering poor-quality of professional service. There is no system in place to put a stop to this, because of which the steady deterioration of building structures, including collapses, are common, as can be seen in regular news publications.

Another issue that the Council needs to address is the increasing number of large projects being designed and implemented by foreign consultants. Although it is important to be fully aware of local conditions and controls, developers and even some government agencies believe that having foreign consultants improves marketability and leave it to the local associates to get the necessary building sanctions and clearances. Because we have a large number of qualified professionals within the country, the Council and government agencies need to put a stop to this kind of exploitation by foreign consultants. The only exceptions that should be made are for winners of properly organised architectural design competitions, in which case the winner must associate with a local professional for the detailed design and implementation of that project.

In a much-publicised statement on March 1, 2023, the Prime Minister declared that well-planned cities will decide the fate of the country. He asked stakeholders 'to focus on three questions: how to improve the state's urban planning ecosystem, how to use the expertise available in the private sector, and how to develop centres of excellence for urban planning. Urban planning will determine the fate of our cities, which will determine the fate of India.' This is something that he has repeatedly said in different ways over the last six years. Unfortunately, none of the executed projects, including the Gift City in Ahmedabad or the various city projects executed under the Smart City mission, have really been particularly successful. Why is it that, despite extensive political support, not one of these projects can be held up as an example for replication? It would be good to know what went wrong.

In the long-term interest of the profession, architects across the country need to be aware of the steady decline in the state of the architecture profession and help the Institute (IIA) and the Council come together to bring about real change.

3rd March 2023

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FROM STRUGGLING ARCHITECT TO RISING STAR: RAJAT'S JOURNEY TO SUCCESS

Babika Goel

Rajat had always dreamed of becoming a renowned architect, and he had worked tirelessly to make it a reality. After graduating from the prestigious architectural college in UP, he started his own practise, pouring his heart and soul into every project he took on.

Although Rajat put in his best efforts, he found it difficult to find clients who valued his vision and paid for his services. He was growing increasingly frustrated and disheartened, wondering if all his hard work was for nothing.

Months passed, and the situation seemed bleak. Rajat was on the verge of giving up his dreams when, one day, he stumbled upon a magazine that focused on architecture and design. Flipping through the pages of the magazine, the quality of the featured projects and the creativity of the architects struck Rajat. He realised that this magazine could be the platform he had been searching for—a way to showcase his own work and gain recognition in the industry.

Rajat dedicated weeks to compiling his top projects and perfecting his application for the magazine. Each time he worked on it, he felt a mix of anxiety and hope. Finally, when he hit "submit," his heart raced with anticipation.

Days turned into weeks as Rajat anxiously waited for a response from the magazine. He checked his email obsessively, hoping for any news. Finally, when he received the acceptance email, he felt a surge of joy and relief. All his hard work had paid off.

As he read further, he found out that the magazine was hosting a mega-event to which architects whose projects had been featured in the publication were invited. Rajat's project had caught the eye of the editors, and they wanted him to showcase it at the event. He felt a surge of pride and gratitude.

On the day of the cocktail event, Rajat drove to the venue with a mix of excitement and nerves. He had never been to an event like this before, and he wasn't sure what to expect. When he walked into the room, he was struck by the energy and buzz—there were architects and designers mingling everywhere, exchanging ideas and business cards.

Rajat's heart raced as he walked into the room, not knowing what to expect from his first major networking event. But as he introduced himself and showcased his portfolio, he found a welcoming community of fellow architects eager to collaborate and connect.

He found himself getting lost in conversations, discussing everything from design philosophy to the challenges of running a small business. Throughout the evening, Rajat felt himself growing more and more inspired. He could connect with other architects, share ideas, and even gain some valuable referrals. By the end of the night, he knew he had found the platform he had been searching for—a way to showcase his work and gain recognition in the industry.

As he drove home that night, he took some time to reflect on a powerful verse from the Bhagavad Gita that had always inspired him. The words echoed in his mind: *You have the right to perform your prescribed duties, but you are not entitled to the fruits of your actions.* (2.47)

He realised that this verse perfectly encapsulated his philosophy on life and work.

The recognition he had received was simply a byproduct of his dedication and hard work, and he was grateful for it, but he shouldn't cling to it or allow it to define his sense of self-worth.

In that moment, he felt a sense of clarity and purpose that filled him with a deep sense of peace and contentment.

Rajat woke up the next morning feeling energised and ready to tackle the day. As he scrolled through his emails, one subject line caught his eye: "Notification of Selection to Speak at Our Next Event!".

Upon opening the email, he was delighted that he had been personally selected after a secret vote to deliver an engaging talk at the magazine's forthcoming event. The news left him feeling overjoyed and humbled, knowing that his dedication and hard work had not gone unnoticed.

However, as he continued reading, his excitement soon gave way to a wave of nervousness. The email informed him that he had a mere 20 minutes to deliver his presentation and that he would be addressing a room full of esteemed dignitaries and prominent figures.

Rajat's mind was suddenly flooded with questions and doubts. How could he possibly condense all of his thoughts and ideas into such a short timeframe? What if he stumbled over his words or failed to impress such an important audience?

Despite his nerves, Rajat reminded himself of the difficulties he had faced while trying to get his work noticed. Now, he had a unique opportunity to showcase his ideas to some of the most influential people in the industry.

As he read on, Rajat couldn't help but wonder if he had somehow manifested this opportunity for himself. The email provided Rajat with specific guidelines for his presentation, including the need to refine his ideas, construct a compelling narrative, and perfect his delivery. A team of coaches from the magazine would assist him in preparing for the talk.

Taking a moment to collect his thoughts, Rajat reclined in his chair and exhaled deeply. "This is it," he thought to himself. "This is my chance to show my capabilities to the world."

The famous Bhagavad Gita verse, *Yoga-sthah kuru karmani* (2.48) meaning: *Be steadfast in performing your duty,* motivated Rajat to stay focused and present during his speech preparation. Although he had never spoken to such a massive audience, he felt a renewed sense of purpose, recalling the connection he made with other architects at the cocktail event. Rajat believed he had valuable insights to share and was willing to step out of his comfort zone to deliver an inspiring speech.

He also remembered the extension of the verse from the Bhagavad Gita that advised him to perform his duty. *Be steadfast in performing your duty, O Arjun, abandoning attachment to success and failure. Such equanimity is called Yog* (2.48). With this realisation, he threw himself into his work, refining his ideas and creating a compelling narrative.

Rajat collaborated with coaches from the magazine to refine his ideas and delivery over several weeks. He meticulously selected projects from his portfolio that best represented his philosophy and style, rehearsing his talk in front of family and friends to perfect his pacing and tone. On the day of the event, Rajat felt a mix of nerves and excitement as he stepped onto the stage. He took a deep breath, began to speak with a clear and confident voice, and delivered an inspiring talk.

As Rajat talked about his projects and his passion for architecture, he felt a deep sense of satisfaction. He knew that he was making a difference and that his work was being recognised and appreciated by people who understood its value. And as he looked out over the audience, he saw nodding heads and approving smiles, a clear sign his message was resonating.

As Rajat walked off the stage, feeling proud and accomplished, people approached him to learn more about his work. He exchanged business cards and felt a sense of connection with those he had impacted. Remembering a verse from the Bhagavad Gita that guided him, *You should thus perform your prescribed duties, since action is superior to inaction. By ceasing activity, even your bodily maintenance will not be possible.* (3.8), he knew taking a risk and stepping out of his comfort zone was worth it. There would be more projects to design, more connections to make, and more lives to impact.

Written and edited by BABIKA G.

Disclaimer: Please note that the following story is a work of fiction. However, it serves to highlight the crucial role of networking in architecture.

Babika Goel, an architect with 29 years of experience, is a prolific writer and an enthusiastic reader. She is an alumna and the editor of the GCA Lucknow Alumni Newsletter. She has written a novella, several short stories, and founded a blogging platform to aid aspiring authors in producing and selling their publications. She also created a separate platform for architects to access information on the latest materials and innovations.
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URBAN SKETCHING - A STREET ACT

Avanish Pendharkar

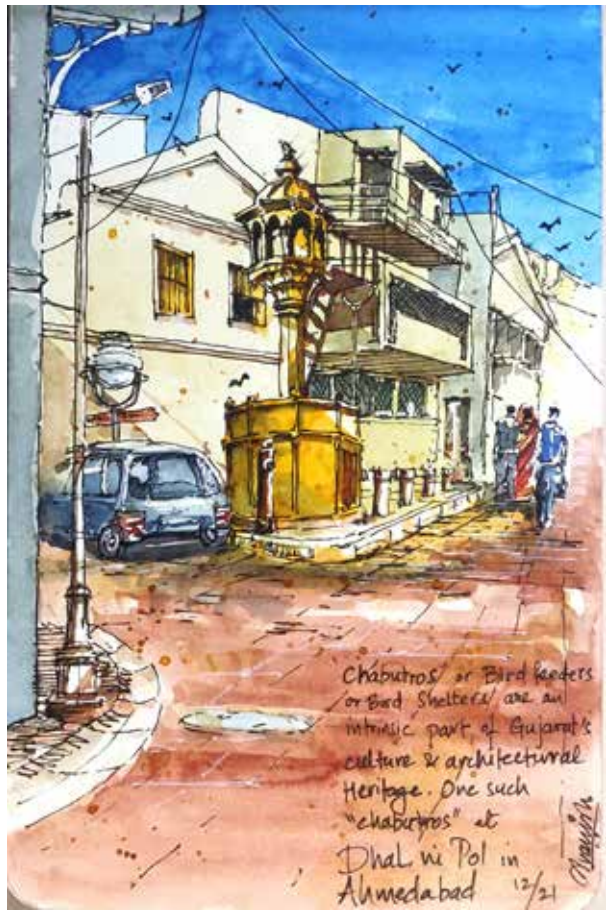
Urban sketching, the art of capturing everyday life in our surroundings, is like a street act, but a little less dramatic. You scout the location, take a few pictures, look for shade, and hope you are not in the way of a vehicle that could knock you over. Then you pull out your sketchbook to draw, occasionally making small talk with the street vendor, who at first tries to look over your shoulder and then graciously allows you to set up the full drawing kit the moment he realises that you are about to draw, paint, and depict his view of the world around him!

My sketches, as you see here, are pen and ink sketches finished with watercolours. It allows me to have black and white sketches, like an all-white architectural study model, that I can look at to see the story that the sketch could represent for a place. The colours then add layers to help enhance the drama—not only as a finished sketch as you see here, but in the very act of using watercolours as a medium that flows and blends into one another as I paint through the black lines.

Hopefully, you would see every sketch or painting telling a story—your own story and imagination from that sketch or painting. Although for me, it represents memories like the fun ride I had on a site visit with a client on a push trolley along a rail corridor or the amazement I experienced in seeing an operating windmill at Oia, Santorini. As an architect and urban designer/planner, I am naturally drawn to street life—people, shop fronts, vehicles, street trees, and signboards. It can all appear like a lot to capture in a sketch, but over time, sketching improves our ability to observe keenly and choose what to draw and leave out for the viewer to interpret what they see in the finished painting.

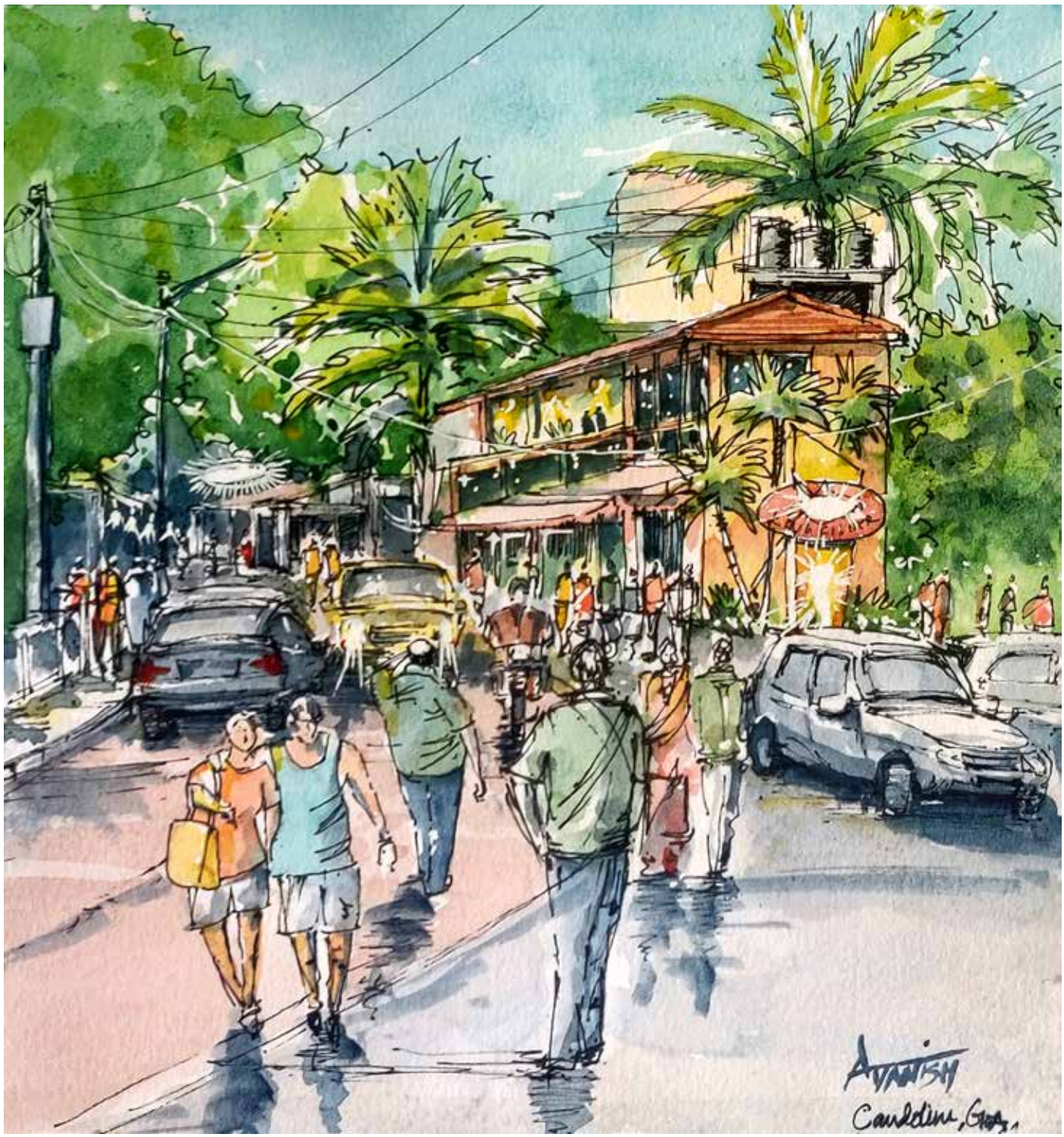
Push Trolley on Rails

Windmill at Oia Santorini

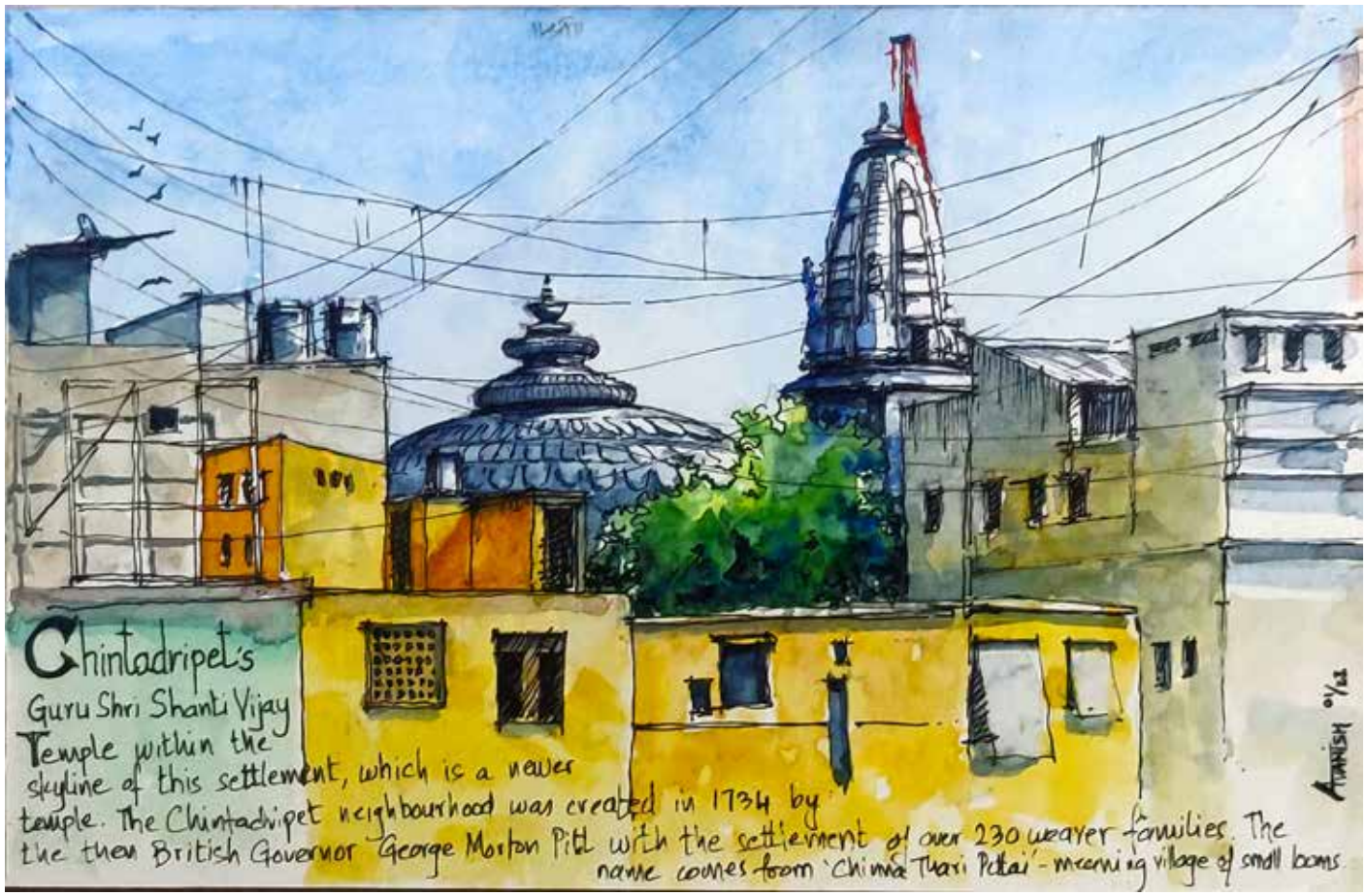


Chabutro - Bird Feeder Ahmedabad

Boats at Belapur harbour



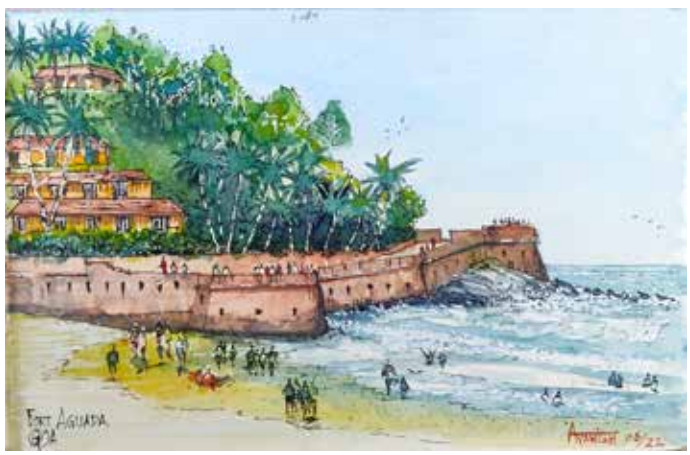
Candolim Street Goa



Chintadripet Chennai

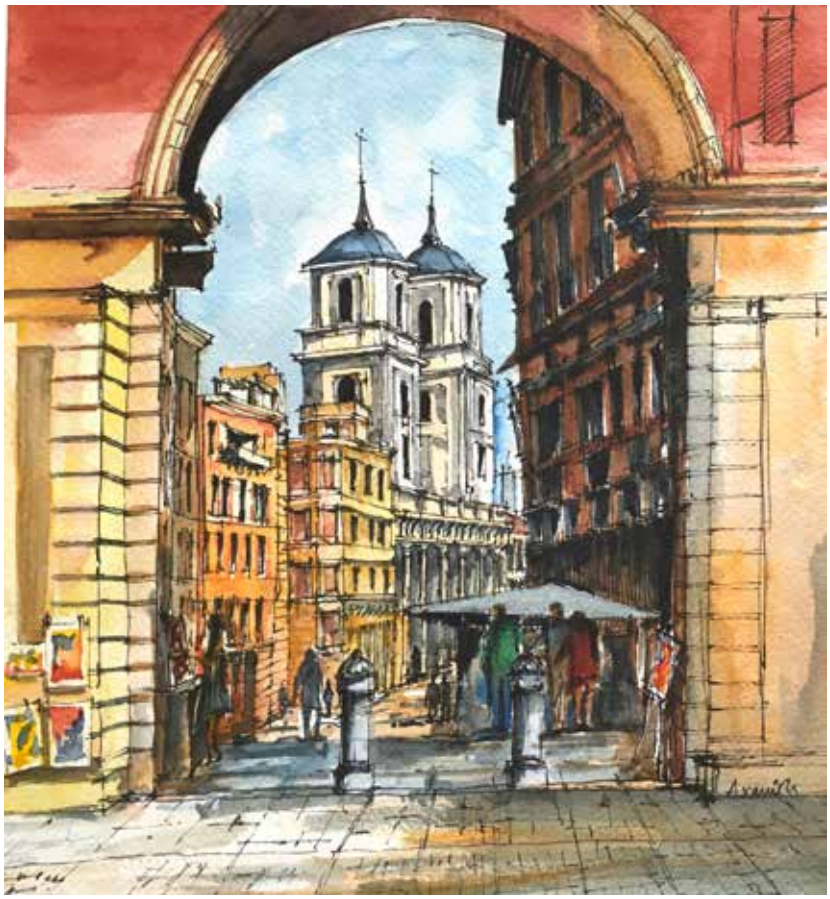
Club house on the Waterfront Lavasa

Fontainhas Goa



For Aguada and Beach Goa

Manek Chowk Ahmedabad 16 x 11



Plaza Mayor Madrid

Pompidou Center

Avanish Pendharkar is an urban designer, urban planner, and architect with over two decades of professional experience. He studied at Pillais' College of Architecture, SPA New Delhi, and Georgia Tech, Atlanta. He has primarily worked on large-scale master planning projects and policy studies for government and private clients worldwide. He is currently the Centre Head for the Centre for Urban Planning and Policy at CRDF, CEPT University. He leads a team of urban designers and planners that help development agencies and the government with research studies, urban planning, design, and the implementation of development policies and projects.
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PRADHANMANTRI SANGRAHALAYA, DELHI

Ar. Savar Suri

Pradhanmantri Sangrahalaya, or the Prime Minister's Museum, in Delhi, opened its doors to the public in April–May 2022, after being in the making for many years. According to the official website, "The Pradhanmantri Sangrahalaya has employed technology-based interfaces to encompass heterogeneity in content and frequent rotation of the display. Holograms, virtual reality, augmented reality, multi-touch, multi-media, interactive kiosks, computerised kinetic sculptures, smartphone applications, interactive screens, experiential installations, etc. enable the exhibition content to become highly interactive. Because this is a tale of continuity, the Teen Murti Estate, where India's first prime minister, Shri Jawaharlal Nehru, lived for 16 years, served as the ideal setting for Pradhanmantri Sangrahalaya."

Beginning with the newly upgraded and technologically cutting-edge Nehru Museum building, where exhibits on the life and contributions of Shri Jawaharlal Nehru are now fully on display, the Sangrahalaya is a seamless fusion. A segment of the new panorama features a variety of his uncommon gifts from throughout the world that were never displayed before. Every Indian prime minister since independence is honoured in the Pradhanmantri Sangrahalaya, which also serves as a narrative account of how each one has helped the country advance over the past 75 years. It is a narrative of teamwork and compelling evidence of the democratic triumph of India. Our honourable prime ministers have represented every social group and status, indicating equal access to democracy and showing diversity. Each person made a significant contribution to the processes of growth, social cohesion, and economic empowerment that allowed India to truly define independence. The museum features 7.5 hours of interactive information that takes visitors on a thorough tour of each Prime Minister's vision for the nation. Peeking into the future and understanding how the nation has been influenced by former leaders of the country are two big benefits of revisiting the past.

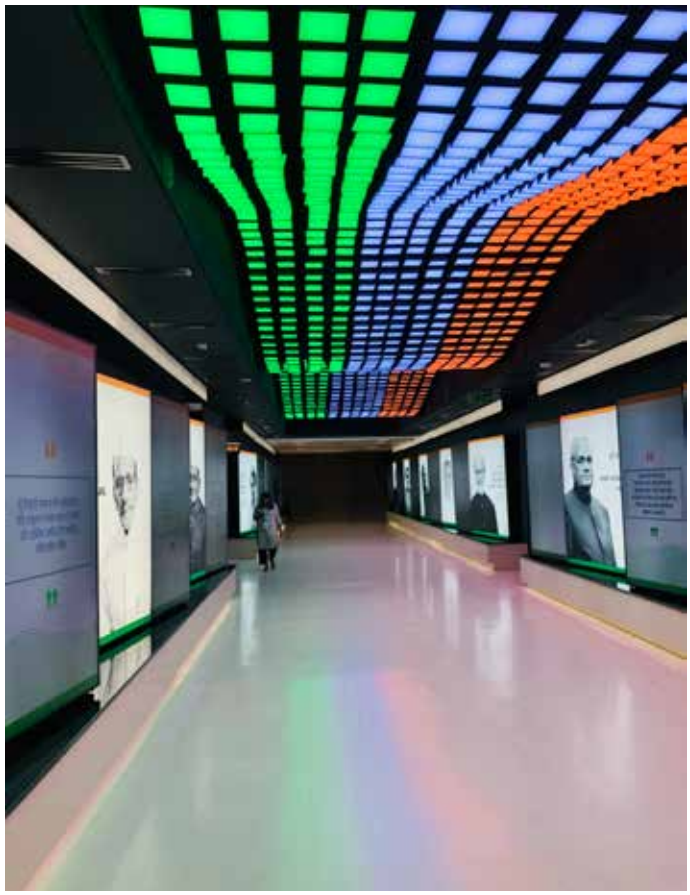
The entire museum is a sight to behold, starting with the 3D-printed national emblem that rotates over the entryway. An attractive mobile installation of many kinetic LED lights that hang from the ceiling adds to the charm. It envelops the viewer in a kaleidoscope of patterns from the magnificent Tiranga, sets the tone for the remainder of the tour, and directs visitors to the exhibits.

It consists of two buildings: Building I and II. Building I is the older building or PM Jawaharlal Nehru's erstwhile residence, and Building II is the newly constructed state-of-the-art museum, a truly world-class technological experience.

PM Nehru's study, preserved in its original state in Building I

View of Building II as seen from Building I Court

View of Building I and the open lawn from the cafe in between Building I and II.



Entry to building II

The Ashoka Chakra in Building II

A view of the corridor connecting the rooms in Building I also housing PM Nehru's private book collection and personal photographs.

The main staircase lobby of Building I embellished in marble and topped with a chandelier.

PM Shastri's Portrait in Building II

Building I

On the ground floor, it consists of various galleries in the form of rooms related to the Indian constitution and India during and after independence in 1947, as well as the reception. The building has been upgraded with washrooms and lifts with two lift lobbies (one at the front end, the other at the rear end) for easy access to the first floor. The first floor of the building is a historical treat as it is divided into two parts: the Pandit Nehru gallery and the Toshkhana. The Pandit Nehru Gallery is a collection of the personal rooms of the Nehru-Gandhi family, perfectly preserved. This includes their bedrooms as well as the study, which includes a long corridor with a part of PM Nehru's personal collection of books, a part of which also finds its place at the Nehru Library next door, accessible only to members. This long corridor also has photographs of the Nehru-Gandhi family with various dignitaries who visited India during the time. The Toshkhana is a very interesting collection of memorabilia and gifts presented to the Prime Ministers of India, starting from PM Nehru to PM Modi.

Building II

The second building, a state-of-the-art museum, features various technological experiences on the lower ground floor. The Bhavishya Ki Jhalkiya is a VR-based ride where you can sit in a metallic structure made like a helicopter and go through various upcoming projects of the government, which are displayed on a 360-degree screen around you. There are also other experiences available, such as taking a picture with your favourite prime minister or receiving a handwritten note from them. The ground and first floors have galleries dedicated to various prime ministers and their achievements, as well as important political events of their tenure.

Open on all days except Monday and gazetted holidays from 10 am to 6 pm, this museum is a must-visit for those residing in the capital as well as those travelling as tourists. Ramp access is available in both Buildings I and II. Wheelchairs are available free of charge at the museum entrance, and all lifts in the building can accommodate manual as well as motorised wheelchairs. The staff is warm and helpful. In between both buildings, there is also a cafeteria serving snacks as well as water, milk-based drinks, and aerated drinks.

All images courtesy: **Author**

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Ar. Savar Suri, with more than eight of experience across varied residential and commercial projects, has worked in a corporate setting as well as at one of the most highly regarded architectural firms in India. Savar has also previously worked at a high-end residential architecture and interior design firm in Delhi, where he worked on bespoke residences and office spaces for a niche clientele. He has recently completed his Master's Degree in Built Heritage (Architectural Conservation).
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BEYOND LATITUDES

The Quest for Diversity in Architecture Education

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Latitude, is defined as:
The angular distance of a place North or South of the Earth's equator, of a celestial object, usually expressed in degrees and minutes.
OR
Scope for freedom of action or thought.

In its simplest understanding, Latitude is an imaginary line connecting all points that lie parallel to the equator at the same angle or distance. Yet, cities on the same latitude, but on different continents have a character quite distinct and unique from one another. For e.g. Milan in Italy and Montreal in Canada, or Chicago and Rome or Beijing and San Francisco. The reasons for this are many; ocean currents, seas, mountain mass, tilt of the Earth, longitude and sun angles. In terms of its architecture too, no two cities or towns on the same Latitude have similar character as this evolves from its history, climate, geology, topography and culture.

Vernacular architecture, which mainly focusses on rural, domestic and agrarian architecture has a unique identity, clearly defined by the latitude and longitude. It is truly indigenous to its geographical location and regional context and is never found replicated in a different location. Construction techniques and building materials may be common in locations at the same latitude; being mud, sun dried bricks or burnt bricks for the walls, timber or bamboo for roofing, stone or laterite for foundations. However, the unique identity really comes from the culture, inherent skills, traditions and occupational character. Ornamentation and carvings of the window and door frames, murals on walls, treatment given to entrances and transition spaces reflect this difference. Seen in the Indian context, this regional diversity in vernacular architecture can be interpreted through the Lipan kaam in Kutch region, Gondh art in Madhya Pradesh, Warli in Maharashtra, Kalamkaari in Andhra Pradesh, tanjore art of Tamilnadu and many such local examples where by its architecture is taken beyond the ordinary to a sublime experience of aesthetics and timelessness Here, the second definition for Latitude stated above, meaning a certain flexibility and open to interpretation rings true.

Fig 1: Mural, Bukkasagara, 2019
(Source: Author)

Fig 2: Mural, New Delhi, Crafts Museum, 2018
(Source: Author)

Why Global when we can go Local?

Analysing the history of architecture as a formalized profession, or as a discipline of study is debatable like the veritable chicken or egg story. Does practice dictate education or does education dictate a mass produced style that then consumes all built form?

In the first case, Walter Gropius and the pioneering team believed in Modernism and practised it. The team then went on to establish Bauhaus as a school of thought for education in art and architecture. Gropius then trained many other architects who spread the language of Modernism across the Globe. Another example is Wright's training school at Taliesin West that was modelled on the atelier approach of "learn while you build", where the office and site become the learning ground.

In the second case, thousands of students went through the motions of being trained as draftspersons who could recreate classicism or "cookie cutter" architecture after graduating from the L'ecole des Beaux Arts. Either way, it cannot be disputed that education and pedagogical experiences shape the thinking and design language of the unbuilt.

If we scrutinize the timeline of architecture education in India, the earliest schools at JJ School, Mumbai, Baroda and Calcutta were modelled on the Beaux arts philosophy, with much emphasis on drafting and technical knowledge. This suited the eco system at the time, as there were no independent architectural practices. Rather, those trained were simply used to execute the design and drawings received from England. In Post Independent India, when Pandit Jawaharlal Nehru needed local architects to provide solutions for the various new typologies that emerged in Independent India, it was Achyut Kanvinde, Habib Rahman, Nari Gandhi and others trained amongst the Master architects of the West who hailed the advent of Modernism in India. Post Independent Indian architecture however did break away from the typical glass and steel modernism of the West and tailored itself to the local Climate and material availability to announce a new hybrid modernism.

In the realm of design education, the team of Charles and Ray Eames in India heralded a new thinking, much like the Arts and Crafts movement in Europe in the 1880's. The India Report (1958), prepared by them resulted in the creation of the National Institute of Design (NID) with the main motive to preserve and uplift local crafts and traditions. The pedagogy of architecture also borrowed heavily from the methods suggested by the Eames partners and this can be considered a major shift in thinking from the Beaux arts methods.

The irony was that it took an American couple to make us realise the wisdom in going local, while all the while we were content in following the Global West.

A few decades later, the Global West embraced Post Modernism and rejected the uninspiring anonymity of Modernism by reaching back to elements of classicism, celebrating local materials and rejecting functionalistic forms. Indian architecture responded with an architectural grammar quite distinct from the Western norm. The same architects who trained under the early Masters, like Charles Correa, B V Doshi, Nari Gandhi and Laurie Baker created a new architecture that responded to climate, context and materials. This was heralded as the phenomenon referred to by Kenneth Frampton as "Critical Regionalism".

We witness here, the way these architects succeeded in reading between the two meanings of the term latitude – confirm, yet find ways to be different. Trained in the same philosophy of the early Masters, yet shaped by the environment around them.

Diversity in institutions offering architecture education

The institutions offering architecture education today need to embrace the diversity and the regional context that they function in. The pedagogy and course choices in a University in Australia or Singapore cannot work in Europe or North America. What works in the Delhi capital region (DCR) cannot find acceptance in Chennai or Bangalore. For students to stay engaged and interested in the program, one needs to first understand local needs, regional demands and cultural ethos of the location. The credit heavy and theory based approach of the past cannot make our graduates employable nor foster an environment of creativity. The National Education policy (NEP 2020) has many recommendations to address regional diversity and create optimal student learning environments in Higher education institutions in India.

Language

Bringing in teaching in local language is one such, which will go a long way in bringing equitability. This is especially true for architecture, which has worn the elitist label for far too long. Communicating to the workers on site requires a certain command over the local language. Terms used by masons, skills and indigenous knowledge passed on from generation to generation is always in the local language. Is it then not important for a student studying in Karnataka to possess a working knowledge of Kannada? Why not curate a foundation level course – "communicating skills for on-site execution"?

History

Local to Global is a better way to understand architectural history. Instead of starting with Greek and Roman, Egyptian or Mesopotamian architecture, can we not commence with Indian architecture that the average Indian student is already familiar with? We devote several semesters of History of architecture teaching about Basilicas and cathedrals that local students have never set their eyes on. How then will they grasp the differences in styles; or rather is it even relevant? The reverse is the norm in Universities in Europe and America where Indian, Buddhist or Islamic architecture are only offered as module based electives in the later years of the program for students keen to widen their knowledge base. In a similar way, world architecture can be delved into in the later years of the program. This will have a long term impact on the students as they will have to first possess complete knowledge on the history and culture of their region before dealing with what lies beyond.

Building Construction

Indigenous knowledge systems (IKS) in the context of architecture means knowing about construction techniques and skills passed on from generation to generation. For instance, there is so much regional diversity in the vernacular architecture in Karnataka according to different climate zones. Coastal regions of Udupi to the hot dry regions of Hampi - steep pitched roofs with richly decorated timber trusses, laterite walls and courtyard planning as opposed to stone and brick bat composite walls, thick flat mud roofs, skylights with clerestory and compact plans. Skilfully done split bamboo and woven mat false ceiling on the underside by craftsmen can find no replication now.

Meanwhile, our BCM studios still focus on teaching construction methods used in the European continent, with Barry, McKay and Ching featuring proudly in the library shelves. Instead, let us strive to make our students aware that we have different construction techniques and skills that work in different geographical locations. When in practice, this will make them sensitive to the context, choose wisely and help in carrying the craft further.

Students should devote a semester to documenting local construction techniques and skills often found in rural settlements, not very far from any Metropolitan city. Housing as a course introduced in the rural context will also be much more relevant as every student would have memories of visiting the homes of their ancestors and imbibing the traditions and culture of the settlement.

Fig 3: Stone slab roofing in Bukkasagara, Hospet, Karnataka 2019 *(Source: Author)*

Fig 4: Timber truss with split bamboo battens, tied with rope, Aretipur, Mandya, Karnataka 2018 *(Source: Author)*

Of pronouns and Gender

Architecture as a professional course has always had a fair representation of both biological sexes in the classrooms. However, with changing times, we have failed to even acknowledge the blurring gender lines. Architects shoulder an immense responsibility to design spaces that are used by all genders. Why then do we not address these issues while giving out the design problem? Why not discuss non-binary washrooms when giving out a public space design like Museums, Cinema halls, community centres or even schools? Can good urban design prevent all gender based crime instead of just asking students to look into safety for women? Can we take the trouble of asking the preferred pronoun while addressing our students?

Unless we show acceptance and create a non-judgemental environment, how can we expect creativity and confidence in all that they design? The responsibility clearly lies with Institutions located in major metropolitan cities in embracing and celebrating gender diversity.

Architecture education in the next decade

If the discipline of architecture must survive, it is important for institutions to create regional and contextual vision statements. One needs to start by curating locally relevant curriculum development plans by understanding the demography and the local economy. Architecture has no takers today owing to the low salary that graduates are offered in offices. There is a need to bring inter disciplinarity into the curriculum with subject choices that equip them to achieve the desired graduate outcomes. Learning a little of Python for coding, AI, IPR, financial management, UI/UX design, 3D printing and fabrication will be the way forward, for them to become job seekers or job providers. Diversity in pedagogy, syllabus, socio-cultural profile, gender and economic structure amongst the student population is the need of the hour if we want to aspire for a holistic learning environment.

It's not possible to design always the same. How to be different in each place - that is the most important work and duty of an architect to find out.
French architect, Jean Nouvel

To come back to where we started… the two definitions of the word Latitude. To confirm within certain boundaries, yet find one's distinct identity. The built environment will see this reflected only when architecture education truly embraces its regional diversity.

We are all the same; cry points joined together on the same Latitude. Yet, some points are smooth, others rough, some shiny, some weathered, some embellished, some plain. We are the same, yet different claim the wise.

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Ar. Vidya Srikanth is an and urban planner and is currently associated with REVA University as Professor, and Director at School of Architecture. With a zeal for integrating campus with community, she spearheaded the government school adoption program *Abhivirudhi,* a CSR initiative of REVA University. Medhavee, an eco-classroom, constructed using sustainable principles of design was completed by the students of architecture and handed over in August 2022 to Jalige Government School, in Devanahalli taluk. Medhavee aspires to become a learning space where diversity and creativity thrives, blurring all boundaries.

She is passionate about Vernacular Architecture and is involved with documenting and researching the Vernacular architecture in Karnataka across different Climatic zones. She was awarded Best Teacher in the year 2020 by the A3 foundation, Chandigarh. Vidya's research areas are the Bhakti movement, Dravidian Hindu temple architecture, vernacular architecture, Gender and Space and architecture Pedagogy. She has curated several Faculty development programs and webinars on the theme of history, heritage and teaching methods within the domain of architecture.
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NEWSLETTER APRIL

IIA ELECTIONS ANNOUNCED

(Approved in the IIA National Council Meeting held on 27th April 2023)

S. No.	ACTIVITY	NATIONAL COUNCIL	CHAPTER	CENTRE & SUB-CENTRE
1.	Uploading the draft list of eligible Voters	2nd May 2023 Tuesday by 5.00 pm	2nd May 2023 Tuesday by 5.00 pm	2nd May 2023 Tuesday by 5.00 pm
2.	Receipt of corrections if any	8th May 2023 Monday by 5.00 pm	8th May 2023 Monday, by 5.00 pm	8th May 2023 Monday, by 5.00 pm
3.	Uploading of final voters list	12th May 2023 Friday by 5.00 pm	12th May 2023 Friday by 5.00 pm	12th May 2023 Friday by 5.00 pm
4.	Invitation of Nomination	15th May 2023 Monday by 5.00 pm	15th May 2023 Monday by 5.00 pm	15th May 2023 Monday by 5.00 pm
5.	Last date for receipt of Nomination	22nd May 2023 Monday by 5.00 pm	22nd May 2023 Monday, by 5.00 pm	22nd May 2023 Monday, by 5.00 pm
6.	Scrutiny of Nominations	23th – 29th May 2023 Tuesday-Monday	23th – 29th May 2023 Tuesday-Monday	23th – 29th May 2023 Tuesday-Monday
7.	Mailing of eligible list of nominations	29th May 2023 Monday by 5.00 pm	29th May, 2023 Monday, by 5.00 pm	29th May, 2023 Monday, by 5.00 pm
8.	Last date of receiving objections if any	2nd June 2023 Friday by 5.00 pm	2nd June, 2023 Friday, by 5.00 pm	2nd June, 2023 Friday, by 5.00 pm
9.	Display of List of Eligible candidates after consideration of objections	7th June,2023 Wednesday by 5.00 pm	7th June,2023 Wednesday, by 5.00 pm	7th June,2023 Wednesday, by 5.00 pm
10.	Last date of withdrawal of nominations	9th June,2023 Friday by 5.00 pm	9th June,2023 Friday, by 5.00 pm	9th June,2023 Friday, by 5.00 pm
11.	Scrutiny of withdrawals	10th – 12th June, 2023 Saturday - Monday	10th – 12th June, 2023 Saturday - Monday	10th – 12th June, 2023 Saturday - Monday
12.	Publication and mailing final list of eligible candidates	13th June, 2023 Tuesday, by 5.00 pm	13th June, 2023 Tuesday by 5.00 pm	13th June, 2023 Tuesday by 5.00 pm
13.	E-Voting Opens	27th June, 2023 6.00 AM Tuesday	27th June, 2023 6.00 AM Tuesday	27th June, 2023 6.00 AM Tuesday
14.	E-Voting closes	29th June,2023 11.00 PM Thursday	29th June,2023 11.00 PM Thursday	29th June,2023 11.00 PM Thursday
15.	Counting of E-Votes	30th June, 2023 10.30 AM Friday	30th June, 2023 10.30 AM Friday	30th June, 2023 10.30 AM Friday
16.	First General Body Meeting	1st July, 2023 3.00 PM Saturday	On or Before 15th July 2023	On or Before 15th July 2023

P.N: 1. National/Chapters/Centers & Sub-Centers Elections will be conducted from IIA Head Office
2. Final list of eligible voters shall include members whose subscription has been paid one time or up to the year 2023-24 and received by IIA HO on or before 8th May 2023.
3. An eligible voter can be a candidate, proposer or seconder only if his/her subscription has been paid one time or upto the years 2024-25 and received by IIA HO before the last date and time of receipt of nomination subject to fulfilling other qualifications of eligibility.

GENERAL NEWS

Research in the Built Environment

Ph.D. Cells of two esteemed institutes, WES's Smt. Manoramabai Mundle College of Architecture, Nagpur, and MIT School of Architecture, MIT-ADTU, Pune, organised a five-day online workshop on Research in the Built Environment from April 24–28, 2023.

It aimed to educate aspiring and early-career researchers and students on the approach to research from conception to execution and to increase research proficiency. Its purpose was to understand and explore the interdisciplinarity of architectural research and to find creative approaches to the methods involved in carrying out organised and new research.

Experts from premium institutes like IIT-R, SPA-V, VNIT Nagpur, MRSAC, IISER Pune, the Academy of Architecture, Mumbai, SNDT-WU Mumbai, MIT Pune, RTMNU, LAD, and SMMCA Nagpur contributed as resource persons. The workshop had participants from all over the country and Dubai.

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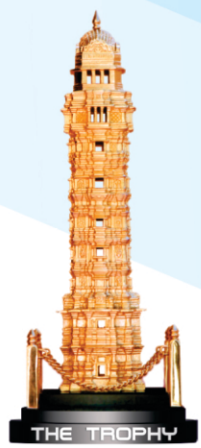

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