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23rd ARCASIA
FORUM

DELHI | AGRA | JAIPUR

SAVE THE DATE
8th-12th Sept 2026

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Imm. Past President, IIA

Dear Members,

Warm greetings.

The coming years present remarkable opportunities for The Indian Institute of Architects to strengthen its national and global engagement. I am pleased to highlight a few important initiatives and events that will shape our collective journey.

In September 2026, the IIA will host the **23rd ARCASIA Forum** across the historic cities of Delhi, Agra, and Jaipur. This prestigious forum will bring together architects from across Asia, creating a valuable platform for dialogue, collaboration, and exchange of ideas while showcasing India's rich architectural heritage and contemporary practices.

Looking ahead, Mumbai will host the **UIA International Forum 2027** in September 2027. This global event will place India at the center of international architectural discourse and provide an opportunity to present the strength and diversity of Indian architecture to the world.

We are also strengthening professional collaborations**.** A **Strategic Partnership between IIA and the Institute of Indian Interior Designers (IIID)** at the National, Chapter, and Centre levels will promote interdisciplinary cooperation and knowledge sharing between architects and interior designers. In addition, the **Memorandum of Understanding between the Indonesian Institute of Architects (IAI) and IIA** will encourage collaboration in heritage architecture, conservation practices, and professional exchange.

I would also like to encourage strong participation from our members at the **UIA World Congress of Architects 2026 in Barcelona,** scheduled from 28 June to 2 July 2026. The IIA will have an exhibition stall during the congress, providing a platform to showcase the work and vision of Indian architects to the global community.

At the national level, the **Architectural Design Competition for the redevelopment of the IIA Belapur Building** has been launched. I invite architects, especially young professionals, to participate and contribute innovative ideas for reimagining this important institutional space.

I encourage you all to engage with these initiatives and continue contributing to the growth and excellence of our profession.

Ar. Vilas Avachat
President
The Indian Institute of Architects.

EDITOR'S NOTE

Greetings to all my IIA Fellow Members,

The February issue of JIIA continues the conversation on the evolving role of architects in a rapidly-transforming nation. India today stands at the threshold of unprecedented growth across multiple sectors, urban infrastructure, transportation networks, housing, healthcare, education, tourism and technology-driven industries. This remarkable expansion presents not only challenges but also extraordinary opportunities for the architectural profession.

Architecture, by its very nature, is deeply intertwined with development. Architects are inherent participants in this national transformation, shaping the environments in which economic, social and cultural progress unfolds. As cities expand and new urban centres emerge, the profession must respond with innovative thinking, contextual sensitivity, and a renewed commitment to sustainability and inclusivity. The emerging paradigms of design increasingly demand interdisciplinary collaboration, technological integration, and a deeper understanding of environmental stewardship.

At such a pivotal moment, professional institutions play an important role in fostering dialogue and strengthening the global presence of the profession. The IIA continues to serve as a vital platform for knowledge exchange, professional development, and international engagement. In the coming years, this global outreach will gain significant momentum with India hosting major international architectural forums. The ARCASIA Forum in 2026 and the UIA Forum in 2027 present unique opportunities for Indian architects to engage with the international community, share insights from our diverse practices, and contribute meaningfully to global architectural discourse.

These events will not only bring global attention to India's architectural landscape but will also enable practitioners, educators, and students to participate in a wider exchange of ideas, innovations, and professional experiences. They represent an important milestone in positioning India as a significant contributor to the global architectural narrative.

As we look ahead, it becomes essential for the architectural fraternity to embrace these new opportunities with confidence and collective purpose. The growth of the nation calls for architects who are not only designers of buildings but also thoughtful contributors to sustainable development, cultural continuity, and human well-being.

Through its initiatives, publications and forums, the JIIA will continue to document and encourage this evolving discourse. Together, let us move forward with a shared vision to shape environments that respond to the aspirations of a dynamic nation while engaging meaningfully with the global architectural community.

Ar. Vinit Mirkar
Editor
JIIA

Ar. Vinit Mirkar

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The Symphony of Architecture
Music Set in Stone
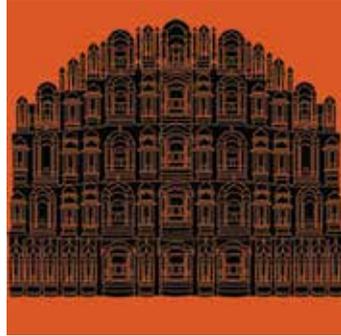
Envisioned at the Jaipur Exhibition & Convention Centre in the culturally resonant landscape of Jaipur and aligned with the material discourse surrounding India Stonemart, this thematic vision articulates a powerful resurgence of contextual architecture in an age dominated by glass, steel and increasingly homogenized global design languages.

At its core, the theme advances an intellectual and ethical inquiry into how architecture can remain deeply rooted in place responsive to climate, culture, craftsmanship and local material heritage while confidently embracing technological innovation and contemporary construction practices. It positions vernacular architecture not as nostalgia, but as a repository of time-tested strategies for sustainability, passive environmental control, structural logic and community-oriented spatial planning.

The emphasis on the timeless use of local stone becomes both symbolic and pragmatic: symbolic of permanence, identity and cultural continuity; pragmatic in its durability, low embodied energy, and tactile connection to landscape.

By framing 'Stone in the Age of Glass and Steel' as a critical provocation, the theme challenges prevailing material hierarchies and questions whether progress must imply detachment from locality. Instead, it advocates synthesis where traditional materials and modern technologies coexist reimagining stone to meet contemporary structural, urban and aesthetic aspirations.

Ultimately, it calls for reclaiming contextual intelligence as the foundation of future practice, affirming that meaningful innovation emerges from integrating ecological sensitivity, cultural continuity, and technological advancement.

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JIIA Call
for Papers, Articles, Projects

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

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

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

Category 1 : Articles

google form link: https://forms.gle/pJ2d4MVYqyPzWiVc9
Essays, interviews, articles (1500- 2500 words), book reviews (600 and 750 words), travelogues, sketches and photo-essays in the areas of architecture, planning, urbanism, pedagogy, heritage, technology, ecology, theory and criticism, visual design, practice or any other relevant subject pertaining to the built environment. (Details of the format will be available on the JIIA website).

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

Category 2 : Student Work

google form link: https://forms.gle/8wDCYFusLb7hWcpa6
Summaries of dissertations (2000-3000 words) at the level of B.Arch. & M.Arch., and theses at the Ph.D. level. The Guide for that work will be mentioned as the Co-author. (Format will be available on the JIIA website).

Category 3 : Contributions from Chapter Correspondents

google form link: https://forms.gle/kdVvqQUmWDmRhjGi8

(a) Chapter News: This includes various interesting activities from the Centres of your Chapters (maxm. 500 words for the news from the entire Chapter).
(b) News of conferences by the academic institutes in your respective Chapters.
(c) Obituaries : Obituaries of IIA members should consist of the photograph of the departed soul, the dates of birth and death and a short 50-word note.

Category 4 : Research Papers

google form link: https://forms.gle/4CmCsXQJdrBiSrSD8
Research papers (2000-5000 words) in the prescribed format. The research may be based on their ongoing or completed research. (Format is available on the JIIA website). All contributions in this category will be double blind peer-reviewed before being accepted for publication by academic experts of repute.

Category 5 : JIIA Cover + Theme Note

google form link: https://forms.gle/En69gXSps2j72Hrf7
Students from affiliated colleges are invited to design the cover page theme. This should be a graphic based on some aspect of Indian Knowledge Systems. The submission will include the graphic file (jpeg or corel draw); a theme note (with a title) of about 500 words explaining the concept of the graphic. Please note that the image you send should be within a SQUARE of 15 x 15 cm. It will be adjusted as per the layout requirements of the JIIA Cover. It should NOT contain any text / slogan/ etc.

Please note:

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

Wayfinding Without Sight

A Study of Spatial Navigation and Orientation Challenges in Blind School Campus

By Ar. Tanya Kumari, Dr. Ravish Kumar and Ar. Rakesh Kumar

INTRODUCTION

The visually impaired population in India is significant and continues to present challenges for accessible education. As of 2021, the World Health Organization reported over 21 million individuals with visual impairments in India, highlighting a urgent need for architecture that accommodates their needs. The current educational infrastructure often fails to create an inclusive environment, especially for students with visual impairments. Traditional school designs usually focus on visual information, leaving blind and low-vision students without adequate support in their education*(Huff Jr, 2022).* Navigating without visual cues presents significant challenges, especially for visually impaired individuals in educational settings. As campuses grow more complex with diverse layouts, understanding the wayfinding and orientation issues faced by blind students becomes crucial. Many visually impaired individuals depend on non-visual strategies for spatial navigation, using auditory and tactile information to interpret their surroundings. Given the importance of autonomy and independence, it is vital to explore innovative technologies and methods that can improve navigation for these students.at can facilitate better navigation for these students *(Duignan, 2020).*

The literature shows that visual impairment greatly affects a person's mobility and independence. For example, Bougheloum et al. highlight the urgent need to create advanced navigation tools that improve the safety and independence of visually impaired people (Bougheloum et al., 2023). Similarly, Arditi and Tian study user interface preferences for camera-based navigation aids, emphasizing the importance of technology that offers visually impaired users a full orientation and navigation experience (Arditi & Tian, 2013). Additionally, Paratore and Leporini explain the distinct roles of orientation and mobility in navigation, pointing out that these elements are essential for understanding spatial decision-making among the visually impaired (Prandi et al., 2023).

Recent advancements in mobile applications and digital tools are beginning to address navigational needs. Innovative systems that utilize RFID technology provide real-time indoor navigation assistance(Al-Ghamdi, 2013). This intersection of technology and accessibility highlights a promising avenue for enhancing wayfinding capabilities in blind students on school campuses. For example, mobile phone applications capable of delivering auditory cues or tactile feedback can significantly improve navigation accuracy and confidence for visually impaired users, as reviewed by Isazade (Isazade et al., 2023).

Despite these advancements, obstacles remain in the effective implementation of such technology across educational institutions. Research indicates that the lack of universally accessible information limits the full integration of assistive technologies in educational settings for visually impaired learners ((Hussain & Omar, 2020)). Moreover, usability concerns in the design of applications suggest that efficiency and user satisfaction are paramount in the development of these tools. In regions like Bihar, where socio-economic factors further exacerbate the limitations of institutional structures, the necessity for inclusive educational environments is even more critical (Husain et al., 2024),. The significance of integrating universally accessible design principles into school planning cannot be overstated, as these principles play a vital role in mitigating the challenges

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these learners face (Akintayo et al., 2024).

Architectural Inadequacies in Current Education Spaces

Many conventional school environments lack the requisite features to support the unique navigation and learning needs of blind and low-vision students (Zimmerman & Zebehazy, 2011). This inadequacy is manifested in disorienting layouts that do not consider spatial orientation or mobility aids, leading to unsafe movement through educational spaces ((Abubakar, 2019)). Additionally, minimal sensory engagement in the built environment further isolates visually impaired students from their peers and learning opportunities (Chidiac et al., 2024). Low awareness of inclusive practices, particularly in under-resourced states such as Bihar, exacerbates these issues (Kumar, n.d.). In these contexts, students with visual impairments are often marginalized, facing not only physical barriers but also attitudinal resistance to inclusion (Yasmin et al., 2020)

This paper highlights the importance of sensory-based and universally accessible architectural design in developing educational environments that empower visually impaired learners. Sensory cues—such as tactile surfaces, acoustic design, olfactory stimuli and consistent spatial organization—play a pivotal role in crafting spaces that facilitate navigation and learning for those who are visually impaired (Dischinger, 2000)Tactile Surfaces: The integration of varied textures on floors, walls and other surfaces can guide students through their environments, providing feedback that promotes safe movement and orientation (Altaee & Al-kazzaz, 2024). Acoustic Design: Sound plays a crucial role for visually impaired individuals in environmental navigation (Yunda & Sletto, 2020). Designing spaces that enhance sound clarity and reduce echoes can help students identify their locations and navigate effectively (Dodsworth et al., 2020). Olfactory Cues: Utilizing scents in different zones of the school can serve as a navigational tool for students, helping them to identify areas of the school and fostering a sense of spatial awareness (Joshi et al., 1999). Spatial Consistency: Maintaining uniformity in spatial design allows for the predictability of the environment, making it easier for visually impaired students to orient themselves and build confidence in their movements (Dischinger, 2000).

Model School Proposal
To address the challenges outlined, this paper proposes a model school tailored to the needs of visually impaired learners. The design focuses on incorporating the aforementioned sensory-based elements, providing an environment that not only promotes safety but also encourages social interaction and independent learning (Nyakoe, 2024). This prototype school would include features like tactile guiding pathways, sound-enhanced classrooms and distinct sensory zones, thereby transforming the educational infrastructure in rural and underserved regions of India.

The inclusion of architecturally sound, sensory-based and universally accessible designs in educational spaces plays a pivotal role in fostering equitable learning opportunities for visually impaired individuals in India. The necessity for such interventions is amplified in states like Bihar, where infrastructure deficits and low awareness contribute to the marginalization of visually impaired learners. By focusing on the creation of inclusive educational environments, architecture can serve as a critical tool in championing equal opportunities and dignified learning experiences.

AIM

To design an educational campus that enables independent movement, supports sensory learning and fosters holistic development of blind and visually impaired students through architecture.

OBJECTIVES
The primary objectives are: To explore architectural elements that respond to non-visual sensory inputs such as touch, sound and smell; to analyse the challenges faced by the visually impaired in educational spaces; to propose architectural strategies that promote accessibility, safety, comfort and emotional well-being; and to design a fully integrated campus that includes residential, academic and recreational zones.

LITERATURE REVIEW

DESIGN STRATEGIES AND REQUIREMENTS
Designing for visually impaired users requires facilitating intuitive wayfinding and safe mobility through multi-sensory cues. Key features include: Tactile paving with standardized patterns to delineate movement routes and highlight hazards. Auditory signals such as spoken announcements and directional cues to enhance spatial orientation. Changes in material texture on walls and floors to serve as tactile landmarks, indicating different zones or functions. Minimization of protruding objects, or ensuring they are within detectable zones—either below 100 mm or above 2030 mm to prevent injuries. Sufficient, diffused lighting to assist users with low

vision while reducing glare. High-contrast colour schemes for key architectural elements to enhance visibility for partially sighted users.

SENSORY PERCEPTION IN ARCHITECTURE

Touch

The sense of touch plays a foundational role in how blind individuals understand and navigate space. Through carefully designed tactile cues—such as textured floor surfaces, embossed signage, tactile paving and material changes—users can detect pathways, transitions and important spatial features. These tactile elements provide continuous feedback that helps users form a mental map of the building over time (Levy, 2020).

Hearing

Sound becomes a primary tool for spatial perception in the absence of vision. Architectural acoustics should be thoughtfully controlled to avoid disorienting echoes and enhance clarity (Donnelly, 2025). Sounds like footsteps, voices, or environmental audio cues help users gauge the size, shape and use of spaces. Integrating sound sources—such as fountains, audio beacons, or consistent ambient sounds—can support orientation and provide reliable directional guidance (Jacobson, 1996).

Smell

Olfactory cues can serve as subtle but powerful spatial markers. By incorporating distinct scents in specific areas—such as fragrant plants at entrances or calming herbs near resting areas—designers can reinforce memory and spatial association (Rossier & Schenk, 2003). These smells help users identify where they are and where they're going, enriching their mental mapping of the environment.

Vestibular Sense and Proprioception

Balance and body awareness are essential for comfortable and confident movement through space. Architectural designs that prioritize level consistency, gradual transitions and logical spatial flow help users maintain orientation and avoid disorientation (Michailidou, 2017). Elements such as continuous handrails, uniform corridor widths and gently sloped surfaces support the body's natural ability to sense movement and position without relying on sight (Skiba & Züger, 2009).

INTEGRATED SENSORY DESIGN

Successful environments for blind users result from the deliberate integration of all sensory inputs into the architectural experience. Materiality, form, acoustics, scents and spatial organization must work together to create a legible, navigable and enriching environment. Designing through sensory perception is not just an accessibility requirement—it is a fundamental design philosophy that enables blind individuals to fully experience and thrive within the built environment.

OBSERVATIONS FROM CASE STUDIES

1. Rajkiya Netraheen Uchch Vidyalaya, Patna (Bihar)

- Location: Near Budh Murti, Kadamkuan, Patna

- Climate type: Humid Subtropical Climate

- Material used: Brick, Mortar, & Plaster

- Managed by: Tribal/ Social Welfare Department, Government of Bihar.

- Year of completion: 1922

- Total area: 2276 SQ.M.

- Number of Students: 68

- Curriculum: Bihar Govt. Syllabus & Music

Rajkiya Netraheen Uchch Vidyalaya in Kadamkuan,(Bihar Netraheen Parisad, 2025) , is a government school dedicated to educating and empowering visually impaired students. Managed under Bihar's education system, it offers classes from primary to higher secondary levels, equipped with Braille books, tactile aids and trained special education faculty. The school fosters an inclusive environment that supports formal education and essential life skills. Beyond academics, it emphasizes holistic growth through music, physical education and vocational training. Residential facilities accommodate students from distant areas, ensuring barrier-free access. Centrally located, the school plays a vital role in promoting independence and dignity among visually impaired learners in the region. Refer Figure 1.

Figure 1: Rajkiya Netraheen Uchch Vidyalaya, Patna (Bihar)
Source: Author

Key Features:
- Central urban location with good connectivity.
- Functional zoning includes academic block, residential block and staff housing.
- Playground and open spaces allow interaction, but lack defined sensory boundaries.
- Vehicular access is limited, especially near the hostel zone.
- Minimal vertical movement; single-storey structures aid ease of navigation.

Drawbacks:
- Outdated infrastructure lacking modern accessibility features.
- Circulation is not into Pradhan, Sudipta and Mahadev Samantaitive for blind users- no perceptible zoning transitions or acoustic guides.
- Poor maintenance, especially in hostel areas.
- Absence of tactile, auditory, or sensory cues.

2. Calcutta Blind School, Kolkata (West Bengal)
- Location: Diamond Harbour Road, Behala, Simultala, Kolkata, WB
- Climate Type: Tropical Savanna Climate
- Year of Completion: 1894
- Total Area: 21970 SQ.M.
- Type of School: Residential Co-Ed Blind School
- Number of Students: 110 (98 Boarding)
- Curriculum: Kolkata Govt. Syllabus, Music and Handicraft

Calcutta Blind School in Behala, Kolkata, (Pradhan & Samanta, 2018) is a leading institution for visually impaired students, offering inclusive education through specialised teaching and thoughtful architecture. The campus features tactile pathways, Braille signage, wide corridors and handrails for safe navigation, with natural light, ventilation and good acoustics enhancing sensory learning. Its accessible urban location supports holistic development and social integration. Refer Figure 2.

Key Features:
- Zoning for academic, residential and recreational functions.
- Wide corridors and ramps provide basic accessibility.
- Use of Braille signage at key points.
- Integration of vocational training spaces and an auditorium supports holistic development.

Drawbacks:
- Some design elements feel retrofitted, not purpose-built.
- Pedestrian and vehicular circulation near hostels is uncoordinated.
- Limited integration of olfactory or acoustic landmarks.
- Maintenance challenges compromise the effectiveness of inclusive features.

3. Gandhinagar Blind School, Gujarat
- Location: Sector16, Gandhinagar, Gujarat
- Climate Type: Hot Semi- arid Climate
- Material Used: Kota Stone
- Designed by: Sealabs, Chief Architect Anand Sonecha
- Year of Completion: 2021
- Built-up Area: 9660 Sq.
- Number of Students: 56
- Curriculum: Academic Subjects, Arts, Physical Education
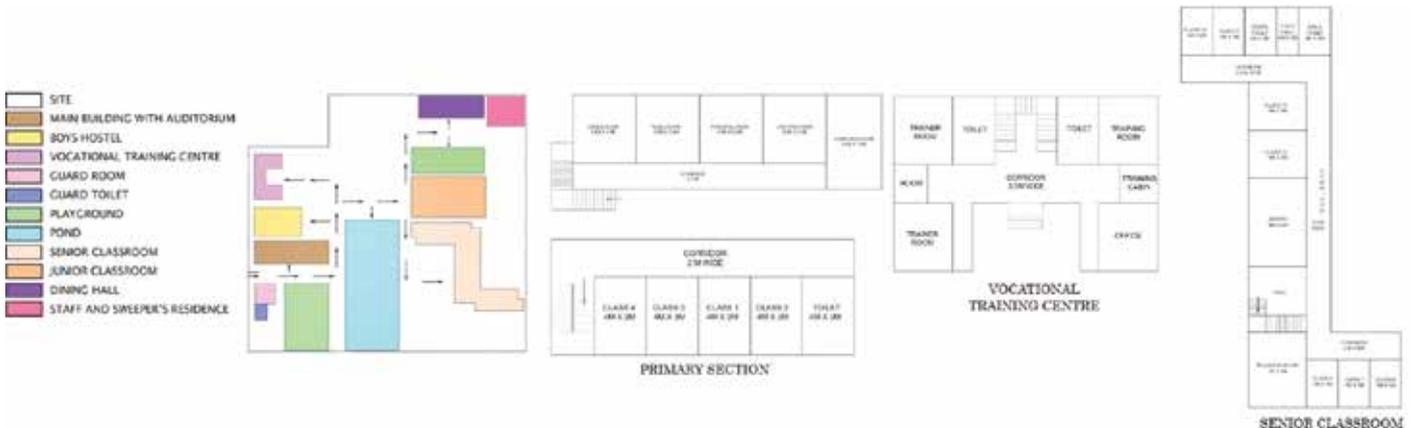
Figure 2: Calcutta Blind School, Kolkata (West Bengal)
Source: Author

Established in 1995 in Gandhinagar, Gujarat, this school for the visually impaired, redesigned by architect Anand Sonecha of SEALAB, uses a multisensory approach with textured walls, aromatic plants and soundscapes for navigation. Cantered around a courtyard, it includes specialised classrooms, Braille signage and holistic facilities, promoting independence, dignity and inclusive education for visually challenged children. Refer Figure 3.

Figure 3: Gandhinagar Blind School, Gujarat
Source: archdaily.com

Key Features:

- Purpose-built sensory school with a courtyard-centric plan encouraging intuitive navigation. Tactile, auditory and olfactory cues for orientation.

- Tactile wall textures, changes in floor material and scented landscape planting provide layered sensory inputs.

- Specialised rooms for music, mobility, physiotherapy.

- Seamless integration of vocational, academic and residential zones through predictable, barrier-free paths.

- Barrier-free design with minimal vehicular intrusion.

Drawbacks:

- Designed for a small user group; spatial strategies may need adaptation for larger populations.

- Plant-based sensory features may deteriorate without proper maintenance—risking the consistency of olfactory guidance.

- Rural setting may limit real-world urban navigation preparation.

SITE AND CLIMATIC CONSIDERATIONS

The selected site in Deedarganj, Patna spans 8.5 acres with excellent connectivity and a quiet neighbourhood ideal for sensory learning. The topography is flat, aiding easy movement and infrastructure deployment. The region's humid subtropical climate necessitates thoughtful planning for ventilation, solar control and monsoon resilience. A passive architectural approach is adopted: buildings are oriented along the north-south axis to minimise heat gain and channel prevailing winds. Courtyards enhance cross ventilation and social interaction. Use of local materials and vegetation improves environmental responsiveness and maintains sensory continuity.

DESIGN CONCEPT

Sensory Architecture

Sensory architecture for the blind and visually impaired enhances spatial awareness through touch, sound and smell. Tactile surfaces, acoustic guidance and scent cues support safe navigation, independence and enriched experiences beyond sight, promoting inclusive and accessible design for all users. Refer Figure 4.

Figure 4: Design Concept
Source: Author

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Passive Architecture

The design incorporates passive architectural strategies to enhance environmental comfort and sustainability, with particular attention to the needs of visually impaired users:

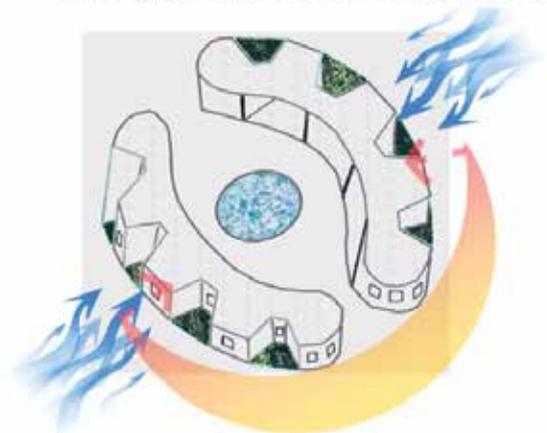- Orientation for Natural Ventilation: The building is aligned along the north-south axis to minimise direct solar gain, maintaining cooler indoor temperatures and reducing dependence on artificial cooling.

- Venturi Effect: Narrow openings accelerate airflow by creating pressure differences, improving natural ventilation through classrooms and corridors.

- Central Water Feature: A water body at the building's core lowers surrounding air temperature via evaporative cooling, enhancing thermal comfort.

- Biophilic and Sensory Landscaping: Fragrant and textured plants near openings aid orientation for visually impaired users while enriching spatial experience through touch and smell.

- Heat Gain Reduction: Shading and optimised orientation minimise direct sunlight exposure during peak summer, increasing energy efficiency and comfort.

- Cross Ventilation: Opposing openings promote continuous airflow, ensuring a well-ventilated, cooler indoor environment.

Materiality and Construction

The selection of materials should consider their tactile qualities, acoustic properties and safety aspects. Non-slip flooring is essential throughout the school. Materials with varying textures can be used to provide tactile information. Sound-absorbing materials, such as acoustic panels and soft floor coverings, can help to create a more conducive learning environment. Durability and ease of maintenance are also important considerations. Given the local climate of Patna, materials that offer thermal insulation and are resistant to heat and humidity should be prioritised. The north-south orientation already suggests an awareness of passive cooling strategies, which should be further supported by material choices. Adherence to local building codes (Singh & Raghubanshi, 2020) and national standards (NBC 2016) is paramount, particularly regarding accessibility.

ZONING AND SPATIAL PLANNING

The campus is divided into functional zones: academic, residential, recreational and administrative. The academic block is centrally placed to ensure accessibility from all other zones. Hostels are separated by age and gender but remain integrated with common areas. Sensory gardens and walking tracks interconnect all spaces, ensuring navigability. Central green spaces and courtyards act as orientation hubs, surrounded by buildings designed with consistent spatial language. Visual and auditory cues embedded into the layout reinforce intuitive movement and reduce dependence on assistance. Refer Site Plan in Figure 5.

Figure 5: Site Plan
Source: Author

FLOOR PLANS & RENDERS

ADMINISTRATIVE BLOCK

Figure 6: Administrative Block
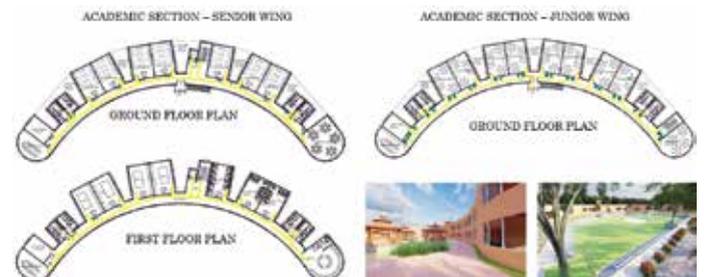*Source: Author*

ACADEMIC SECTION: SENIOR AND JUNIOR WINGS

Figure 7: Academic Section: Senior and Junior Wings
Source: Author

RECREATIONAL BLOCK
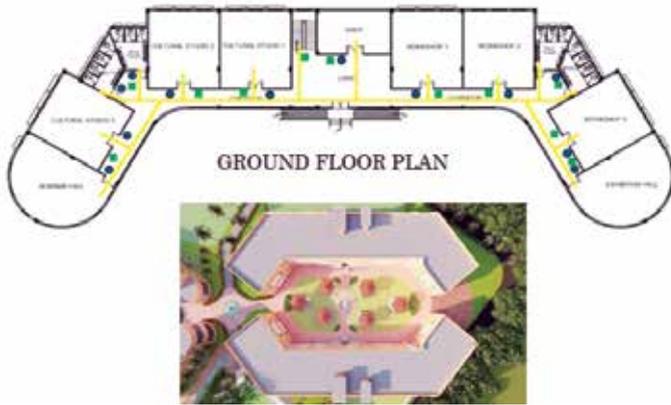
Figure 8: Recreational Block
Source: Author

HOSTEL BLOCK AND STAFF QUARTERS
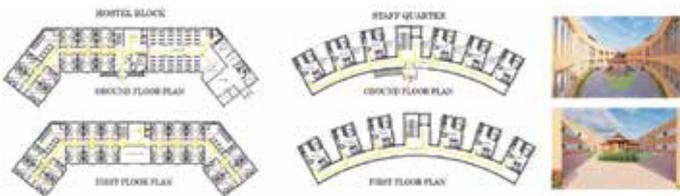
Figure 9: Hostel Block and Staff Quarters
Source: Author

MEDICAL BLOCK

Figure 10: Medical Block
Source: Author

FINDINGS

The study of existing blind schools in Patna, Kolkata and Gandhinagar identified several common issues that directly affect mobility, spatial comfort and independence among visually impaired students. The key findings are:

1. Limited Sensory Guidance:
Most campuses lack tactile paths, acoustic markers, distinct textures, or olfactory cues, resulting in frequent disorientation, especially in circulation spaces and transition zones.

2. Unclear Zoning & Spatial Legibility:
Academic, residential and recreational areas are often poorly segregated, with no perceptible change in material, sound, or spatial form. This confuses students who depend on predictable spatial cues rather than visual navigation.

3. Poor Infrastructure Maintenance:
Broken flooring, inconsistent handrails, cluttered corridors and non-standard ramps were observed, increasing risks of slips, trips and collisions.

4. One-Dimensional Design Approach:
Existing schools rely heavily on visual or conventional architectural elements and do not prioritise multi-sensory design as a core principle.

5. Lack of Climate-Responsive Planning:
Most school buildings lack passive strategies such as cross-ventilation, shaded courtyards, or optimal orientation, leading to heat stress and discomfort.

INFERENCES

From the above findings, the following inferences were drawn to inform the new design:

1. Sensory Integration Must Be Foundational, Not Add-On:
Tactile cues, textured walls, sound-guiding elements and fragrant planting must be embedded in the architecture—not retrofitted—to support intuitive navigation.

2. Predictable Zoning Helps Mental Mapping:
Dividing the campus into clear sensory zones (academic, hostel, admin, recreation) improves legibility. Each zone requires a unique tactile, acoustic, or olfactory signature to help students create a reliable cognitive map.

3. Central Orientation Hubs Provide Reference Points:
The introduction of courtyards and nodes acts as "reset points," allowing students to recalibrate orientation.

4. Barrier-Free Access Must Be Continuous:
Safe movement requires uninterrupted tactile paths, uniform handrails, non-slip materials and slopes in place of stairs.

5. Passive & Sustainable Design Supports Sensory Comfort:
North-south orientation, cross-ventilation, shading and water bodies significantly improve environmental comfort, especially for students who rely more on thermal and auditory cues than visual input.

RECOMMENDATIONS FOR DESIGN GUIDELINES FOR BLIND SCHOOLS

These guidelines summarise how the issues were addressed:

1. Wayfinding & Navigation

Continuous tactile flooring with standardised patterns, Differentiated textures at all transition points. Acoustic markers at nodes, entrances and long corridors, Braille and embossed signages at uniform height.

2. Spatial Planning

Campus divided into predictable sensory zones, short, obstruction-free circulation loops, orientation courtyards every 30–40 m, avoid intersecting corridors that create confusion.

3. Safety & Accessibility

Non-slip flooring across all blocks, handrails on both sides of corridors and ramps, no protruding objects within 300–2000 mm, wide, well-lit corridors with balanced diffused lighting and gentle ramp slopes (<1:12) replacing staircases wherever possible.

4. Sensory Landscape

Use fragrant plants (jasmine, basil, lemongrass) for olfactory zoning, textured bark trees near pathways for tactile reference, water features for calm sound cues, soft ground surfaces near play areas.

5. Climatic Responsiveness

Cross-ventilation corridors, shaded verandahs, courtyard cooling, north–south orientation, materials with acoustic and thermal comfort.

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RESEARCH PAPER

Water, Culture and Ecology in Telangana
A Case Study of the Asthamukhi Stepwell at Janakampet

By Afreen Fatima, Ajay Khare and Manirmai V.

Abstract

This study explores the cultural, spiritual and ecological significance of India's traditional water systems (TWS), emphasising their role as holistic manifestations of indigenous knowledge and environmental stewardship. Moving beyond the functional utility of water infrastructure, the research investigates how stepwells, tanks and rainwater harvesting structures are intricately woven into the cultural landscapes of India, particularly in Telangana, through field documentation, textual interpretation and oral narratives. Employing a qualitative methodology grounded in textual analysis, archival research and a case study of the Asthamukhi Stepwell at Janakampet, the study draws insights from classical treatises, historical records and ethnographic accounts. The findings reveal that TWS are not only technological artefacts but also cultural expressions of cosmological principles, social cohesion and ecological balance. By revisiting these embedded knowledge systems, the research reveals how ritual calendars and architectural design reflect ecological intelligence embedded in local traditions and advocates for their integration into contemporary water governance frameworks. Such an approach underscores the enduring relevance of indigenous wisdom in addressing modern challenges of water scarcity, ecological degradation and cultural disconnection.

Keywords: Traditional Water Systems, Cultural Landscapes, Indigenous Knowledge, Stepwells, Sustainability

Introduction

Water, as both a tangible resource and a cultural symbol, has played an indispensable role in shaping human settlements and civilisational narratives. Across the Indian subcontinent, traditional water systems (TWS) such as stepwells, tanks and rainwater harvesting structures have historically served as more than mere technological interventions for water management; they have embodied an intricate convergence of ecological knowledge, cultural values and spiritual beliefs (Strang, 2004; Mosse, 2003). These systems reflect a deep understanding of hydro-geological conditions, social organisation and metaphysical principles, functioning as cultural artefacts within the broader framework of India's settlement landscapes.

However, in contemporary discourse on water governance and sustainability, these traditional systems often remain underrepresented. The prevailing technocratic approaches to water management tend to marginalise indigenous knowledge systems and overlook the cultural and ecological intelligence embedded in historical water infrastructures (Mehta, 2014; Orlove & Caton, 2010). Scholarly engagement with these systems has largely focused on their architectural typology or functional aspects, leaving a gap in understanding their relational significance within cultural landscapes.

This research addresses this gap by critically examining the reciprocal relationship between traditional water systems and the cultural landscapes they inhabit, with a particular focus on semi-arid Telangana. Drawing inspiration from the environmental design

philosophy articulated in the Vaastu Shastras (Sinha, 1998) and other classical treatises such as the *Arthashastra* (Rangarajan, 1992), *Mayamatam* (Dagens, 1994) and *Samarangana Sutradhara* (IGNCA, 2021), the study aims to reinterpret TWS not merely as functional infrastructure but as holistic manifestations of socio-cultural, ecological and spiritual wisdom.

The objectives of this study are threefold: first, to investigate the cultural, spiritual and ecological significance of TWS within India's settlement landscapes; second, to analyse the design principles articulated in ancient texts and their application in water architecture; and third, to assess the contemporary relevance of these systems as sustainable models of water governance. The research employs a qualitative, interdisciplinary methodology that combines archival research, textual analysis and a case study of the Asthamukhi Stepwell at Janakampet, Telangana, supported by field visits and oral narratives.

By foregrounding the relational and cultural dimensions of traditional water systems, this study seeks to contribute to the discourse on sustainable and culturally sensitive water governance. It argues that the embedded intelligence of TWS offers valuable lessons for contemporary challenges related to water scarcity, ecological degradation and community disengagement. In doing so, the research emphasises the need to bridge the epistemic divide between tradition and modernity, advocating for the integration of indigenous wisdom into future water management strategies.

Aim
The aim is premised on the recognition that traditional water systems were not merely technological artefacts but holistic manifestations of socio-cultural values, spiritual beliefs and environmental consciousness.

Scope
This study focuses on identifying the significance of traditional water systems as cultural artefacts and ecological infrastructures across select regions in India, with specific case studies in semi-arid Telangana.

Hypothesis
It is hypothesised that the reciprocal relationship between India's traditional water systems (TWS) and cultural landscapes, embedded in indigenous knowledge systems, offers sustainable and resilient models that can inform contemporary water governance frameworks.

Research Objectives:
1. To study the cultural, spiritual and ecological importance of traditional water systems in India and their connection with cultural landscapes (Sinha, 1998; Mukherjee, 2018; Boelens, 2013).
2. To examine the design and purpose of these systems as explained in ancient texts like the *Manasara* (Acharya, 1927), *Mayamatam* (Dagens, 1994) and *Samarangana Sutradhara* (IGNCA, 2021).
3. To understand how these systems can help address today's problems like water scarcity and environmental decline (Mehta, 2014; Prasad & Singh, 2017).
4. To use archival records and secondary sources to document case studies, especially the Asthamukhi Stepwell in Telangana.
5. To highlight how traditional water systems can support sustainable and culturally respectful water management today (Sinha, 1998; Orlove & Caton, 2010; Strang, 2004).

Methodology
This research adopts a qualitative, interdisciplinary methodology, primarily grounded in textual analysis, archival research and cultural interpretation, to examine the reciprocal relationship between traditional water systems (TWS) and cultural landscapes in India.

The study focuses on an archival and interpretive reading of cultural texts, historical documents and ethnographic sources, drawing inspiration from the environmental design philosophy articulated in the Vaastu Shastras (Sinha, 1998) and other classical treatises such as the Arthashastra (Rangarajan, 1992), Mayamatam (Dagens, 1994) and Samarangana Sutradhara (IGNCA, 2021). The first stage of the methodology involved an extensive literature review of historical texts, scholarly articles, ethnographic accounts and policy reports that discuss the design, use and cultural significance of stepwells, tanks and rainwater harvesting systems in the Indian context (Mosse, 2003; Boelens, 2013; Mehta, 2014). See Figure 1 for the archival and textual sources guiding this study. This textual analysis was further supported by archival records from the Rashtrakuta, Chalukya and Kakatiya periods, which provided insights into the architectural planning and spiritual symbolism embedded in these water structures. Particular emphasis was placed on the philosophical principles of the Vaastu Purusha Mandala and cosmological alignments in the design of water systems, as discussed by Sinha (1998) and Kramrisch (1946).
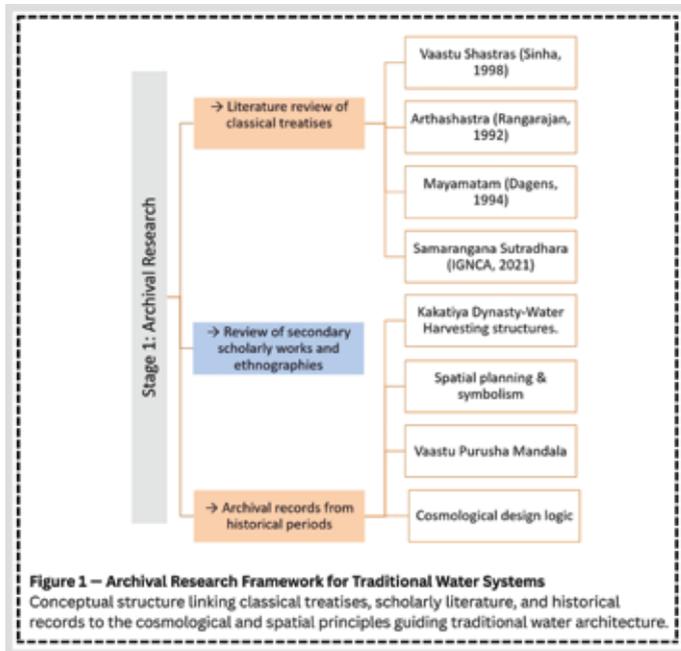
Figure 1: Archival Research Framework for Traditional Water Systems. Conceptual structure linking classical treatises, scholarly literature and historical records to the cosmological and spatial principles guiding traditional water architecture.
Source: Created by Author, 2025.

Figure 2: Case Study Workflow for the Asthamukhi Stepwell (Koneru), Janakampet. Framework linking site documentation, oral histories and analytical interpretation to the spatial, ritual and ecological dimensions of the Asthamukhi Stepwell.
Source: Created by Author, 2025.

In the second stage, the study adopted a case-study approach focusing on the Asthamukhi Stepwell (Koneru) located adjacent to the Sri Lakshmi Narasimha Swamy Temple at Janakampet, Telangana. Primary data for this case study were gathered through site visits, photographic documentation and consultation of the Sthala Puranam (local temple legends) and oral histories from community members. See Figure 2 for the fieldwork and analytical workflow of the Asthamukhi Stepwell case study. The architectural features, spatial orientation and ritualistic functions of the stepwell were analysed to understand its ecological, spiritual and cultural embeddedness within the broader temple precinct and the associated cultural landscape.

Storytelling as Epistemic Bridge
This research pioneers a visual-tale methodology, wherein outline sketches (Figures 1–9) serve not merely as illustrations but as co-created cultural artefacts. Community elders and women collaboratively traced water routes on the red loamy soil of Telangana's semi-arid, rain-shadow terrain— marking ephemeral channels, seasonal rivulets and aquifer seepages that define the region's hydrological identity. Children, in turn, re-envisioned the stepwell as a cosmic womb, layering these soil-drawn maps with oral narratives, lunar calendars and medicinal plant lore. These participatory drawings transform abstract principles (e.g., Vaastu Mandala,

hydrological cycles) into embodied myths grounded in the land's ferruginous earth and drought-prone ecology. Unlike conventional ethnography, this approach re-enchants qualitative data, repositioning the stepwell's octagonal geometry as a communal story circle etched into Telangana's rain-shadow landscape. Such illustrative hermeneutics distinctively foregrounds gendered water memory, intergenerational knowledge transmission and ecological intimacy, rendering latent hydro-social relationships visible and actionable for context-specific policy in semi-arid governance.

The interpretive findings presented below are derived from a cross-reading of field data, archival records and classical treatises to establish how ritual, spatial form and ecological context interrelate at Janakampet. This methodological framework grounds the subsequent analysis of the Asthamukhi Stepwell, demonstrating how its architectural, ritual and ecological features reveal a lived synthesis of water wisdom — a dynamic cultural-ecological narrative rooted in Telangana's Deccani identity.

Results & Findings
The study's findings reveal a deeply interwoven relationship between traditional water systems and the cultural landscapes in India. Through an extensive analysis of cultural texts, historical records and ethnographic accounts, it becomes evident that

water, within Indian civilisation, transcended its utilitarian function to become a medium of spiritual, cultural and ecological significance. Water was perceived not only as a physical necessity but as a metaphysical force—embedded in the cosmological imagination and societal fabric.

Across religious traditions, water emerges as a sacred entity. In Hindu cosmology, rivers such as the Ganga, Yamuna and Sarasvati are venerated as life-giving and purifying forces. The Bhagavata Purana (5.17.1) refers to the Ganga as a purifier of the soul, while the Vishnu Purana (5.13) associates the Yamuna with Lord Krishna. The Matsya Purana (106.24) extols the Sarasvati as the embodiment of wisdom. Similarly, Islamic traditions view water as a divine mercy and a test of human responsibility. The Quran (25:48) proclaims water as a blessing, while cautioning against its misuse (23:18–19). In the poetic vision of Kabir Das, the universality of water is emphasised through the metaphor of the well, the pot and the water, stressing unity despite perceived divisions.

Beyond its ritualistic significance, water was also perceived as a source of healing and rejuvenation. Traditional Indian practices in Ayurveda and Yoga recognised the life-sustaining flow of prana within water. Sacred baths in rivers and stepwells were integrally linked to the purification of both body and soul (Mukherjee, 2018).

A central finding of this research is the case study of the Asthamukhi Stepwell (Koneru) in Janakampet, Nizamabad District, Telangana. The site is geographically situated at approximately 18.624° N, 78.186° E, roughly 186 km north of Hyderabad. The stepwell is integrally connected to the Sri Lakshmi Narasimha Swamy Temple, a shrine dating back to the 17th century CE, with architectural influences from the Rashtrakuta, Chalukya and Kakatiya dynasties.

The overall dimension of the structure is approximately 28 m × 30 m, including the basin, steps and surrounding niches, while the central basin measures 4 m × 4 m with a depth of about 8.5 m. The structure has an estimated water-holding capacity of around 7,74,610 litres, indicating its significant role in water storage and ritual use. The spatial plan of the Asthamukhi Stepwell exhibits a distinct octagonal (eight-faced) geometry. This design adheres to the cosmological principles articulated in the Vaastu Purusha Mandala, reflecting the alignment of water structures with cardinal directions and cosmic forces (Sinha, 1998). See Figure 3 for the location and spatial context of the Asthamukhi Koneru at Janakampet. The stepwell's configuration parallels the Paramashayika Mandala depicted in the Manasara Vastushastra

Figure 3: Location, Architectural Layout and Cultural Context of the Asthamukhi Koneru, Janakampet, Telangana. Geographic setting, spatial configuration and hydrological role of the Asthamukhi Stepwell within its rural landscape.
Source: Created by the authors using Google Earth and field photographs, 2025.

and the Mayamatam, where water elements occupy key positions in relation to deities, planets and metaphysical forces. The octagonal form symbolises the eight cardinal directions, visually manifesting the cosmic order within the temple precinct and reinforcing the metaphysical dimension of water architecture.

Scope of Location-Specific Finding

The scope of the case study extended to mapping the physical setting, analysing the stepwell's hydrological function and recording oral traditions associated with its ritual usage. Figures 4–6 as a composite panel showing how water is structured across city planning (Arthaśāstra), spatial mandala (Mānasāra) and bodily cosmology (Māyāmata) in classical Indian architectural thought.

Archival records, temple legends (Sthala Puranam) and field documentation were utilised to reconstruct the spatial and cultural significance. Its location on elevated terrain enabled natural rainwater harvesting and aquifer recharge, reflecting the ecological intelligence inherent in traditional water planning. Oral narratives affirm that the waters of the stepwell are imbued with medicinal properties, attributed to surrounding flora and local hydrogeological conditions.

The ritual economy of the stepwell is integrally tied to the lunar calendar. Devotees gather for Theertha Snanam (ritual baths) during auspicious lunar phases such as Astami and Amavasya, particularly on Shani Amavasya, believing in the water's ability to mitigate planetary afflictions. The Brahmotsavam festival held annually on Magha Pournima exemplifies how ritual and cosmic cycles converge at the site.
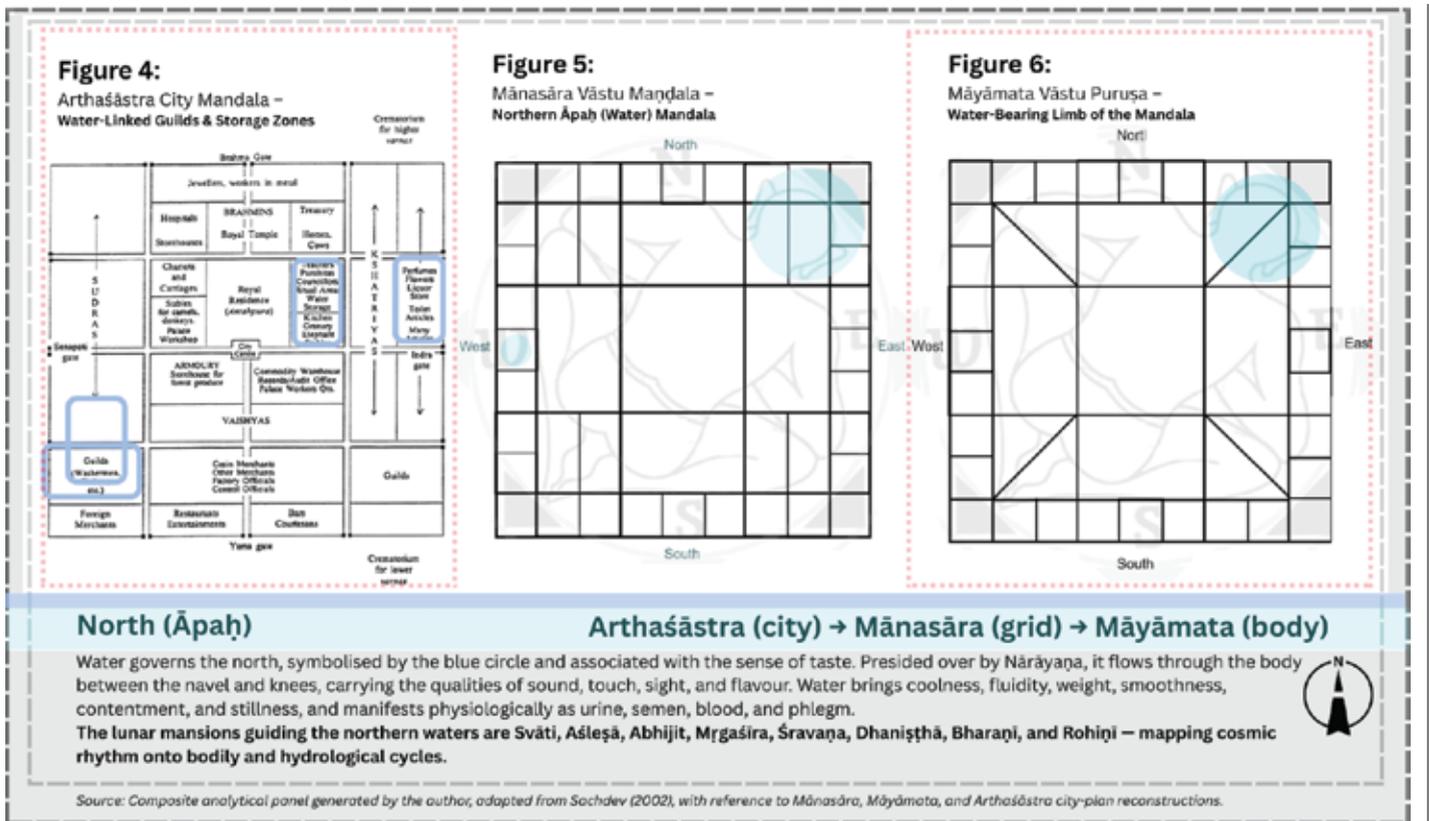
Figure 4: Arthaśāstra City Maṇḍala showing the spatial distribution of water-dependent guilds, storage zones and ritual–economic functions.
Source: Rangarajan, 1992

Figure 5: Paramasāyika Vāstu Puruṣa Maṇḍala according to the Mānasāra, showing the northern Āpaḥ (Water) zone within the 81-pada grid.
Source: Sachdev, 2002

Figure 6: Paramasāyika Vāstu Puruṣa Maṇḍala, according to the Māyāmata, mapping the water-bearing limb and bodily cosmology onto sacred space.
Source: Sachdev, 2002

These spatial and cultural dimensions echo the ancient principles of settlement planning articulated in classical texts. The Manasara Vastushastra emphasises the location of settlements in proximity to abundant water bodies, green vegetation and sacred spaces (Acharya, 1927). The Mānasāra locates water as a regulated cosmic zone within the Vāstu grid (Figure 5). Similarly, the Mayamatam prescribes the incorporation of water structures such as tanks, channels and ponds within sacred and secular architecture, asserting their significance in both functional and ritual contexts (Dagens, 1994). The Māyāmata embeds water within the living anatomy of the Vāstu Puruṣa (Figure 6). The Samarangana Sutradhara elaborates on the technical aspects of constructing reservoirs and aqueducts, recognising water as both an architectural element and a medium of social and ecological regulation (IGNCA, 2021).

Additionally, the Arthashastra by Kautilya (Rangarajan, 1992) presents a codified system of water governance, mandating community participation in the construction and maintenance of irrigation channels, penalising misuse and providing incentives for restoration. The spatial regulation of water-dependent guilds and storage zones in early Indian urbanism is visible in the Arthaśāstra city mandala (Figure 4). This framework reflects a decentralised and participatory model of water stewardship, aligning with the embedded principles identified in this study.

The results of this research are synthesised through a cultural-ecological lens, highlighting four interconnected dimensions that constitute the traditional water systems of India:

1.   Architectural Dimension:
Encompasses typologies such as stepwells, tanks and rain catchments, characterised by spatial planning, aesthetic considerations, structural adaptation to hydro-geology and integration with settlements and public spaces.

2.   Ritualistic and Spiritual Associations:
Involves water-related festivals, agricultural calendars synchronised with monsoon cycles, association with local deities and cosmic principles,

Table 1: Cultural Landscape Perspective: Holistic Dimensions of Traditional Water Systems
Source: Created by Author, 2025

Dimension	Key Features
Architectural Dimension	Typology of stepwells, tanks, spatial planning, sacred geometry and adaptation to hydro-geology
Ritualistic and Spiritual Associations	Water-related festivals; lunar-solar calendars; association with deities; water purification rituals
Community Participation	Community-led construction and maintenance; informal water-sharing norms; women's role
Ecological and Relational Intelligence	Synchronisation with climate, aquifer recharge, habitat creation and decentralised hydrological cycles

Table 2: Embedded Principles in Traditional Water Systems
Source: Created by Author, 2025

Principle	Description
Decentralisation	Distributed, community-led governance of water resources
Community Stewardship	Collective ownership and responsibility in construction and upkeep
Ecological Balance	Integration with local ecosystems and hydrological cycles
Sacred and Ethical Values	Spiritual and moral foundations governing water use and sharing

purification rites and storytelling traditions centered on water bodies.

3. Community Participation and Stewardship:
Reflects collective ownership, community-led construction and maintenance, informal rules for equitable water sharing and the active role of women and local leadership in sustaining water systems (Mosse, 2003).

4. Ecological and Relational Intelligence:
Demonstrates synchronisation with local climate and rainfall, aquifer recharge, habitat creation for flora and fauna and decentralised hydrological cycles (Boelens, 2013; Mehta, 2014).

The integrated analysis of textual, spatial and ethnographic data affirms that traditional water systems in India were shaped by a highly sophisticated understanding of water's material, metaphysical and cultural dimensions. See Figure 7 for the cultural-landscape dimensions of traditional water systems. These systems reflect not only an awareness of ecological processes but also the embeddedness of water in the social, ritualistic and cosmic frameworks of society. See Figure 8 for the embedded cultural-ecological principles governing water use. Water was not merely a utilitarian resource; rather, it was seen as a sacred element that sustained the community's physical, spiritual and socio-cultural well-being. See Figure 9 for the integration of community stewardship, water heritage and participatory knowledge.

Figure 7: Participatory Ethnography of Water Rituals Participatory ethnography framework showing how women's narratives, ritual calendars, lunar timing and everyday water practices co-produce living knowledge around sacred water bodies.
Source: Created by Author, 2025.

The architectural configuration of these water systems reflects deep engagement with cosmic and metaphysical principles. For instance, the spatial layout of the Paramashayika Mandalas illustrated in the Manasara and Mayamatam texts demonstrates that water bodies were not arbitrarily located but

Figure 8: Hydrosocial Cycle in Traditional Water Systems. Illustration of the hydrosocial cycle linking rainfall, surface water, groundwater recharge, agriculture and community water use within a single integrated cultural–ecological system.
Source: Created by Author, 2025.

Figure 9: Integrated Cultural–Ecological Practices of Traditional Water Systems. Collective stewardship, water heritage and participatory knowledge sustaining traditional water systems.
Source: Created by Author, 2025.

strategically integrated within the urban fabric and sacred precincts. In these mandalas, cardinal directions, deities and cosmological entities are spatially aligned to ensure harmony between the built environment and the cosmic order. Water bodies such as tanks, stepwells and reservoirs are placed at key nodal points, symbolising the flow of life energy within the spatial grid. This metaphysical parallel reinforces the understanding that water, as a life-giving force, was central to the order of the cosmos and the well-being of human settlements.

Similarly, the urban grid prescribed in Kautilya's Arthashastra reflects a practical and governance-oriented approach to water planning. The city plan detailed in the Arthashastra positions water storage tanks, irrigation systems and drainage networks as integral components of urban governance and social welfare (Rangarajan, 1992). The administrative regulations of the Arthashastra mandate the construction and maintenance of water systems through collective community participation, outlining penalties for negligence and misuse. Furthermore, tax exemptions and incentives were planned for the restoration of abandoned tanks and embankments, reflecting an early recognition of the socio-economic value of sustainable water governance. The interconnectedness of water structures with marketplaces, public spaces and sacred precincts in the city grid affirms that water systems were deeply woven into the economic, religious and administrative fabric of ancient Indian cities.

These findings are further consolidated in the analytical framework of this research, summarised through two key tabular forms:

These dimensions and principles reflect an epistemology of relational intelligence, where water is understood in relation to human society, the environment and the cosmos. The Asthamukhi Stepwell at Janakampet, as studied in this research, becomes a living embodiment of this holistic worldview. Its octagonal design, ecological placement and ritualistic function are not isolated aspects but part of a larger cultural landscape that integrates architecture, cosmology, governance and community engagement.

The inclusion of medicinal flora around the stepwell, the ritual economy aligned with lunar phases and the community's participatory role in its upkeep exemplify how sacredness and sustainability coexisted in traditional water systems. These systems transcended functional hydrology to become sites of cultural memory, ethical responsibility and environmental consciousness. Oral narratives and temple legends surrounding the Asthamukhi Stepwell further reinforce the belief that water was a medium of divine agency, health and communal well-being.

The intricate integration of water systems within the Vaastu Purusha Mandala and the urban grids of the Arthashastra reflects an understanding that governance, urban planning and ecological sustainability were not separate domains but inherently interdependent. Water management was conceptualised as a dynamic interplay between human agency, natural systems and cosmic forces—a philosophy that modern water governance frameworks often overlook.

In the contemporary context, where water scarcity, pollution and mismanagement threaten ecological stability and social equity, these insights hold profound relevance. The findings of this research invite policymakers, planners and scholars to revisit and revive the embedded principles of decentralisation, community stewardship, ecological balance and sacred values that underpinned traditional water systems. These principles advocate for participatory, ethical and context-specific approaches to water governance that recognise the socio-cultural and ecological embeddedness of water resources.

By acknowledging the architectural, ritualistic and ecological intelligence of India's traditional water systems, contemporary water management can move beyond techno-centric solutions toward more integrated and culturally respectful frameworks. The Asthamukhi Stepwell and other similar structures offer valuable lessons in how community engagement, cosmological consciousness and environmental ethics can converge to sustain water security and cultural heritage.

Thus, the analysis reaffirms that the resilience and sustainability of traditional water systems were not accidental but the result of a profound civilisational wisdom. Revisiting this wisdom is not merely an academic exercise but a necessary step toward reimagining water governance in an era of climate change, resource depletion and cultural disconnection.

Discussion and Conclusion

The relationship between water and human societies is far more than utilitarian; it is deeply experiential, cultural and metaphysical. Scholars such as Strang (2004), Mosse (2003) and Orlove and Caton (2010) have emphasised that water, beyond its physical properties, functions as a medium of cultural meaning and social identity. This research sought to delve into this complex relationship by examining India's traditional water systems (TWS) within the broader framework of cultural landscapes, with specific reference to Telangana.

At its core, the study was premised on the recognition that TWS were not conceived solely as hydraulic infrastructure but were expressions of integrated environmental knowledge and cultural sensibilities. Drawing inspiration from the spatial philosophy of the Vaastu Shastras (Sinha, 1998) and informed by classical treatises such as the *Arthashastra* (Rangarajan, 1992), *Mayamatam* (Dagens, 1994) and *Samarangana Sutradhara* (IGNCA, 2021), this research positioned these water systems as 'living

cultural entities' embedded in spiritual, social and ecological networks. The architectural configurations of stepwells, tanks and rainwater harvesting structures revealed an ontological understanding of water as an agent of both material sustenance and cosmic order (Kramrisch, 1946; Eliade, 1969).

The archival and textual analysis conducted in the first stage of the methodology illustrated how water systems were integrated into the cultural landscape across dynastic periods such as the Rashtrakutas, Chalukyas and Kakatiyas. As Sinha (1998) argued, settlement design in ancient India was not simply a functional exercise but an act of environmental and cosmic harmony, reflected in the placement of water bodies within the Vaastu Purusha Mandala. Stepwells like the Asthamukhi Koneru at Janakampet exemplify this philosophy, where architectural form, cosmological alignment and community ritual intersect to shape a lived cultural landscape.

The case study of the Asthamukhi Stepwell further revealed how such water systems continue to function as sites of ritual engagement, ecological stewardship and social cohesion. The octagonal geometry of the stepwell corresponds to the eight cardinal directions, embedding it within cosmic spatiality. Ritual practices such as the theertha snanam on Astami and Amavasya, particularly on Shani Amavasya, reaffirm the sacred association of water and celestial cycles. This aligns with Sinha's (1998) observation that water features in Indian settlements were designed to foster passive engagement with deities, enhancing the spiritual experience of space.

Empirical observations from field visits at Janakampet directly anchor these interpretive claims. Community elders traced water routes on the red loamy soil, mapping seasonal rivulets and aquifer seepages that recharge the stepwell during monsoon pulses—a practice rooted in local hydrological memory. Certain lunar panchang dates commemorate the community faith and the TWS. Women participants, during participatory sketch sessions, layered these soil-drawn maps with lunar calendars and indigenous knowledge of flora and fauna lore, revealing gendered water knowledge that sustains both ecological and ritual functions. These co-created visual-tale artifacts, combined with oral narratives of desilting rituals and shared maintenance, provide concrete evidence of how TWS operationalise Vaastu principles in everyday stewardship, thus linking methodology, data and findings with coherence and depth. See Figure 10 for the integrated design–ritual–healing framework of the Asthamukhi Stepwell (Koneru), Janakampet.
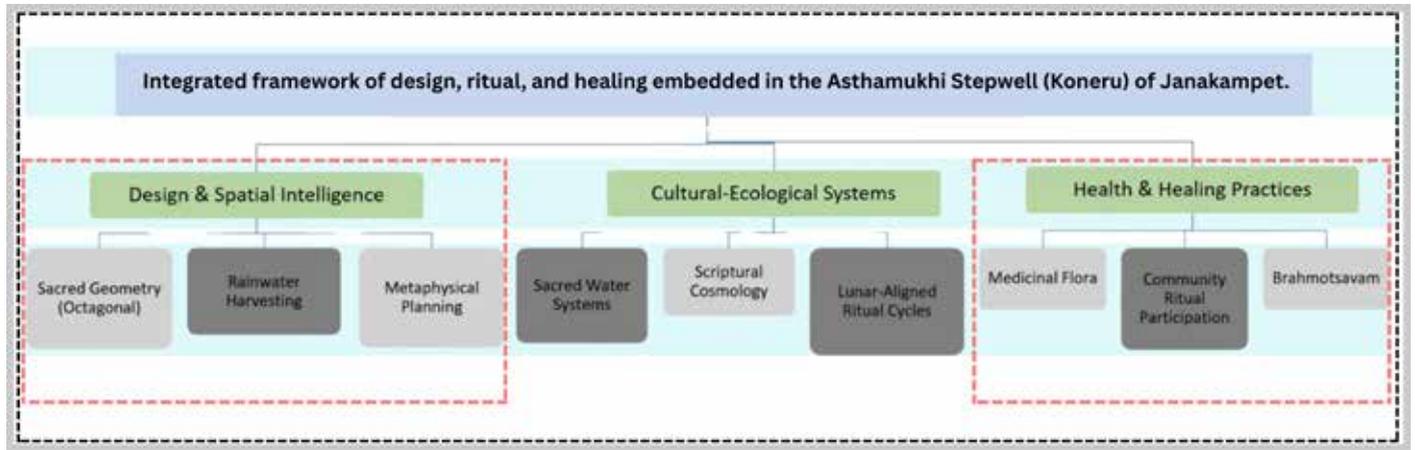
Figure 10: Systems Framework of Embedded Ecological Intelligence in the Asthamukhi Stepwell (Koneru), Janakampet. Integrated framework of spatial design, ritual practice and healing traditions embedded in the Asthamukhi Stepwell.
Source: Created by Author, 2025.

Furthermore, the study traced how these systems reflected an early understanding of hydrological cycles and environmental management. Ancient texts such as the Rigveda and Atharvaveda described the water cycle with remarkable accuracy (Dying Wisdom, 2022), demonstrating an empirical knowledge base that was embedded in cultural and ritual practices. This knowledge was codified in technical treatises such as the *Arthashastra* and *Samarangana Sutradhara*, which laid down regulations for ownership, maintenance and ecological responsibility related to water systems (Rangarajan, 1992; IGNCA, 2021).

The findings also reaffirm the cultural universality of water as a communal resource and a unifying force. This is reflected in the teachings of Kabir Das, who underscored the inherent equality of water irrespective of social divisions and in the communal usage of stepwells where people of different backgrounds gathered (Mukherjee, 2018). Such practices embedded values of community stewardship, decentralisation and ecological balance—principles now recognised in contemporary discourses on sustainable water governance (Boelens, 2013; Prasad & Singh, 2017).

However, the study also acknowledges certain methodological limitations. Primarily qualitative in nature, the research relied on textual interpretation, secondary data and archival material (Sinha, 1998; Mukherjee, 2018), which may entail subjective biases. The geographical focus was limited to select case studies in Telangana and empirical hydrological data were not collected. These limitations were necessary delimitations, as the research prioritised cultural, spiritual and ecological dimensions while consciously excluding economic and political variables.

Notwithstanding these constraints, the research offers valuable insights into the contemporary relevance of traditional water systems. It suggests that the embedded wisdom of these systems—rooted in cultural narratives, community participation and ecological sensibilities—offers a holistic and sustainable framework for water governance. Such integration must not be tokenistic but should systematically incorporate indigenous knowledge alongside modern scientific methods (Ahmed, 2015; Pollack, 2013). This is particularly critical in an era marked by water scarcity, ecological degradation and growing disconnection from cultural landscapes (Mehta, 2014; Schneegans et al., 2021).

In alignment with Sinha's (1998) reading of the Vaastu Shastras, this study affirms that the spatial organisation of water systems was historically an articulation of environmental and cultural harmony. The Vaastu Purusha Mandala, with its placement of water bodies guided by cosmic principles, reflects an approach where utility, spirituality and ecological balance coalesce. Re-engaging with such embedded wisdom provides not only a historical lens but also a sustainable blueprint for addressing contemporary water challenges.

In conclusion, this research reaffirms the significance of India's traditional water systems as cultural and ecological artefacts that continue to offer meaningful lessons for sustainable development. The reciprocal relationship between water, landscape and community embedded in these systems calls for a renewed engagement that transcends technocratic solutions. By acknowledging the ontological and functional intelligence of TWS, contemporary water governance can be reoriented towards more inclusive, resilient and culturally sensitive frameworks.

To operationalise these insights, policymakers in semi-arid regions like Telangana should pilot hybrid restoration models—reviving stepwells through community-led desilting and ritual renewal, augmented by low-cost sensor networks for real-time aquifer monitoring. Such initiatives, grounded in the Asthamukhi case, would institutionalise intergenerational and gender-inclusive water memory, ensuring that indigenous ecological intelligence informs adaptive governance in the face of climate-induced scarcity.

Future research should build upon these findings through empirical assessments, interdisciplinary collaborations and community-participatory studies to bridge the epistemic divide between tradition and modernity.

Limitations

- The research primarily relies on textual analysis, secondary data and qualitative interpretation of historical and ethnographic sources (Sinha, 1998; Mukherjee, 2018), which may result in interpretive bias. It acknowledges inherent limitations associated with its scope and methodology.

- Furthermore, the study's geographical focus is limited to select regions such as Telangana, which may not fully represent the diversity of traditional water systems across India.

- The lack of quantitative primary data from field surveys restricts the empirical generalisability of the findings.

Delimitations

- The study confines itself to traditional water systems, specifically stepwells and rainwater harvesting structures and deliberately defines certain boundaries to ensure clarity and focus in its investigation.

- It prioritises the cultural, spiritual and ecological dimensions of water management while deliberately excluding economic, political and livelihood aspects.

- The analysis is regionally limited to India, with specific case studies from Telangana, without undertaking cross-cultural comparisons with similar systems outside the Indian subcontinent.

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Conflict of Interest

The authors declare no conflicts of interest regarding the publication of this manuscript. No financial, personal, or institutional affiliations have influenced the outcomes or interpretations presented in this study.

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STUDENT WORK

Spatial Practices of Informal Street Vendors in Udupi Bus Stand Precinct

By Aaditya Kuyyamudi and Ar. Sanjana S. Shetty

1. Introduction

Street vending is a widely practised livelihood strategy across Indian towns and cities. National estimates indicate that millions of people depend on informal vending for income, daily sustenance and local employment. Vendors provide affordable goods and services, animate public space and create convenient points of purchase for commuters and residents. Despite this, planning and design discourse often treats vending primarily as an encroachment problem, managed through enforcement measures such as eviction, fines and temporary clearances. Such approaches overlook the spatial logic by which vendors select locations, the temporal rhythms that shape their activity and how vending is integrated into the everyday choreography of mobility nodes.

This study focuses on the Udupi Bus Stand Precinct, a compact transit hub in coastal Karnataka where the Service Bus Stand, City Bus Stand and KSRTC terminal are located within a short walking radius of each other (refer Figure 1 and 2). The precinct experiences continuous pedestrian churn throughout the day. Within this tight spatial frame, vendors, commuters and formal retailers negotiate overlapping claims to visibility, circulation and commercial access. The research asks three related questions: How do vendors negotiate space and visibility in the precinct? How do edge conditions, micro-infrastructure and temporal rhythms shape vending practices and conflicts? What spatial recommendations can support vending livelihoods while improving commuter movement and shopfront access?

By situating a small-town transit precinct at the centre of analysis, the study addresses a gap in existing literature that is heavily concentrated on metropolitan contexts. The research argues that vending in such compressed precincts is not

Figure 1: Location of the Udupi District, Karnataka, India

simply a matter of illegality or encroachment. Instead, it is a tactical spatial practice shaped by visibility requirements, commuter rhythms and infrastructural scarcity. The study proposes design-led and time-sensitive interventions that aim to reconcile livelihood needs with movement and retail equity.

Figure 2: The Udupi Bus Stand Precinct showing Service, City and KSRTC bus stands

2. Methodology, case-studies and derivations

The study adopted a mixed-methods approach combining spatial mapping, temporal observation, quantitative surveys and qualitative interviews (refer Figure 3). This mixed approach was chosen to capture the multi-scalar nature of vending practices: the morphologies of space, the rhythms of time and the perspectives of different stakeholders. Spatial mapping identified vendor locations, circulation paths and congestion points. Temporal observation recorded activity during morning and evening peaks. Surveys measured commuter and shopkeeper perceptions, whereas interviews with vendors and municipal officials provided in-depth accounts on survival strategies, enforcement experiences and infrastructural needs.
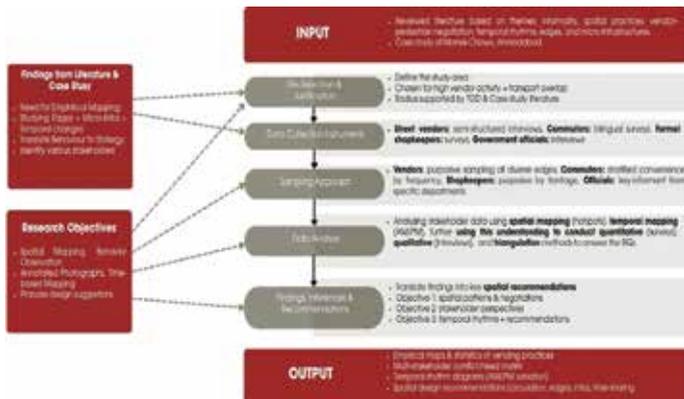

Figure 3: Methodology flowchart illustrating data collection and analysis steps

2.1 Study area definition and sampling rationale

The Udupi Bus Stand Precinct was defined as a 200 metre radius around the Service Bus Stand, capturing the overlapping influence zones of the Service, City and KSRTC terminals and the adjacent footpaths, stairways and narrow lanes. This definition draws on transit catchment approaches and reflects the local intensity of vending activity. Sampling combined purposive selection for vendors and shopkeepers to ensure representation across edge conditions and stratified convenience sampling for commuters to include daily, weekly and occasional users. Seven vendors were interviewed representing stair edge sellers, junction vendors and food stall operators. Seventy-one commuters and twenty-six shopkeepers were surveyed as well as two municipal officials with enforcement and health responsibilities were interviewed.

2.2 Data collection instruments and analysis procedures

Spatial mapping involved on-site plotting of vendor positions relative to staircases, junctions, bus bays and formal shopfronts. Temporal diagrams compared activity at 08:00 and 16:00 to capture morning and evening rhythms. Surveys used structured questionnaires to collect data on usage frequency, purchasing habits and perceptions of congestion and fairness. Quantitative data were analysed through frequency distributions, cross-tabulations and chi-square testing. Interviews followed semi-structured guides and were coded thematically to identify recurring motifs such as visibility, eviction cycles, health concerns, competition and infrastructure needs. Triangulation across methods ensured that mapped patterns were validated by stakeholder perspectives.

2.3 Case-study comparison and derivations

To locate Udupi within a wider practice of time-sensitive market strategies, the study draws a contrast with Manek Chowk in Ahmedabad, where temporal zoning allows distinct uses at different times of day. Manek Chowk operates as a jewellery market in the morning, a vegetable market in the afternoon and a food hub in the evening, demonstrating how the same physical space can be reorganised through time-sharing practices and informal governance. This comparative perspective informed the derivation of time-based interventions for Udupi and underlined that small-scale design and coordination can produce coexistence without large-scale displacement.

3.   Results and observations

Spatial clustering and edge conflicts: Spatial mapping shows strong clustering of vendors at staircases, junctions and major entry and exit points. These edges provide maximum visibility, which is essential for sales, but they are also the primary circulation thresholds for commuters. The result is a recurring pattern in which vendors occupy marginal threshold spaces to capture passing customers, while their presence simultaneously produces pedestrian spillover onto vehicle lanes or forces pedestrians to skirt vendor pitches. Shopkeepers located on corners or at stair entrances reported the highest levels of obstruction, because vendors often position themselves directly in line with shopfronts and intercept customers before they reach formal retail (refer Figure 4).
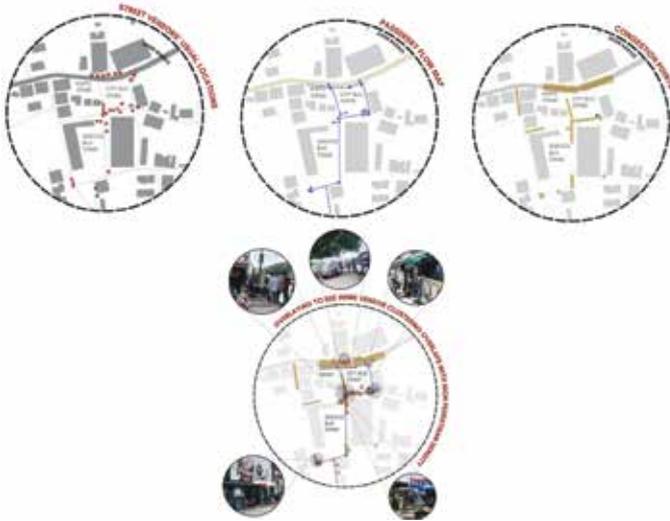

Figure 4: Spatial clustering map showing vendor concentration, pedestrian flows and congestion points

Temporal rhythms and seasonal patterns: Temporal analysis reveals distinct morning and evening dynamics. Morning activity is dominated by essentials such as flowers, snacks and newspapers. Vendor numbers are relatively low in the morning and pedestrian flows are dispersed, resulting in limited conflict. Evening activity sees a marked increase in vendor presence, particularly food stalls and accessory vendors, which coincides with the return commute. Buses arrive in quick succession in the evening, concentrating pedestrian flows and amplifying the impact of vendor clustering at edges. Commuters and shopkeepers identified evenings as the period of greatest congestion and obstruction (refer Figure 5).

Quantitative perceptions and stakeholder divergence: Survey results highlight divergent stakeholder perceptions. Among commuters, 56

Figure 5: Temporal mapping comparing vending intensity at 08:00 and 16:00

percent reported using the bus stand daily or weekly and 42 percent purchased from vendors at least occasionally. Attitudes toward vending were mixed - 34 percent described vending as enlivening the space, while 38 percent perceived it as congesting circulation. Frequent buyers and daily users tended to value the convenience of vendors more than occasional users. By contrast, shopkeepers reported stronger negative perceptions, with 60 percent indicating reduced sales and 80 percent framing vendor activity as unfair competition because vendors avoid rent and licensing costs. Chi-square testing confirmed a strong association between purchasing frequency and positive perceptions of vending and between perceived obstruction and support for stricter regulation.

Qualitative themes from interviews: Interviews with vendors revealed five recurring themes. First, visibility is essential for survival. Vendors deliberately occupy stair edges and junctions to capture footfall (Refer Figure 4). Second, eviction produces a predictable cycle of removal and return. Vendors reported that confiscations and fines are temporary interruptions; they return within days because alternative livelihood spaces are not available. Third, health and working conditions are precarious - limited shade, prolonged standing and inadequate waste disposal create physical strain. Fourth, competition with formal shops centres on visibility and customer capture rather than on product differentiation. Fifth, there is widespread recognition across stakeholders that micro-infrastructure, such as shade, bins and designated bays, would reduce conflict.

4.   Discussion

Interpreting spatial tactics as survival strategies: The evidence positions vendor location choices as tactical responses to the spatial logic of the precinct. Edges such as staircases and junctions are not merely convenient; they are productive thresholds where visibility translates directly into transactions. Treating such positioning as simple encroachment misreads the spatial economy of street vending.

Enforcement that seeks to clear these edges without offering alternatives undermines livelihoods and perpetuates a cycle of displacement and return.

Temporal strategies as design opportunities: Temporal rhythms emerged as a critical variable that can be harnessed for design. The contrast between morning and evening routines suggests that time-based vending windows offer a pragmatic pathway to co-existence. For example, restricting vending on the most pressured stair edges during peak commuter flows and allowing vending during off-peak times can balance circulation needs with livelihood rights. Such time-sensitive management aligns with precedents like Manek Chowk and avoids the blunt instrument of eviction.

Micro-infrastructure and edge-sensitive zoning: Small-scale infrastructure solutions matter. Shade structures, bins, seating and modular vending bays are not cosmetic improvements. They mediate heat exposure, reduce litter, clarify vendor positions and protect pedestrian routes. Edge-sensitive zoning that categorises precinct edges by pressure level - green for low pressure, yellow for moderate pressure and red for high pressure, where vending should be restricted - translates spatial analysis into implementable rules. This zoning enables selective protection of circulation thresholds while preserving vending opportunities in less sensitive areas.

Governance implications and stakeholder negotiation: The study highlights the limitations of enforcement-first governance. Municipal officials acknowledged enforcement fatigue and the limited deterrent value of fines and confiscations. Instead of top-down clearance, the evidence supports negotiated frameworks involving vendors, shopkeepers, commuters and municipal authorities. Town Vending Committees under the Street Vendors Act provide an institutional mechanism, but their effectiveness depends on local capacity, trust building and design-sensitive implementation.

Contribution to literature and practice: This research contributes a documented case from a Tier-II town that extends debates on informality beyond metropolitan contexts. It combines spatial mapping with temporal diagrams and stakeholder analysis to show how spatial compression intensifies conflicts in small-town transit hubs. The study reframes micro-infrastructure and time-based management as central, not peripheral, to vending policy.

5. Conclusions and recommendation

The study concludes that vending in the Udupi Bus Stand Precinct is a spatially and temporally organised practice shaped by visibility imperatives, commuter rhythms and infrastructural scarcity. Vendors cluster at staircases, junctions and entry points to secure livelihood opportunities. These practices generate congestion, particularly during evening peaks and produce tensions with shopkeepers whose frontage is directly affected. Enforcement through eviction is ineffective without alternatives and small-scale infrastructural deficits exacerbate conflict.

5.1 Recommendations

Edge-sensitive zoning - Adopt a three-tier edge classification that guides permissible vending: green edges for encouraged vending, yellow edges for limited vending and red edges for protected circulation where vending is prohibited. This zoning should be empirically grounded in spatial mapping and revised periodically.

Time-based vending windows - Introduce vending permits that specify operating hours aligned with commuter rhythms. For instance, restrict vending at the most pressured stair edges during the 07:30 to 09:00 morning window and the 16:00 to 19:00 evening window, while allowing activity during off-peak hours.

Designated modular bays - Implement painted or modular bays at lower-pressure edges to formalise vendor positions and reduce disputes with shopkeepers. Bays should be low-cost, movable and easy to reconfigure.

Micro-plazas at hotspots - Convert the most congested junctions into pop-up micro-plazas with shading and seating to absorb pedestrian density and provide temporary vending space without obstructing primary circulation.

Shopfront clearance rule - Enforce a minimum 1.5 metre clearance in front of formal shopfronts to protect retail visibility while allowing nearby vending in designated bays.

Micro-infrastructure nodes - Install bins, shade, lighting and water taps at strategic points to improve working conditions and pedestrian comfort.

Participatory governance - Strengthen Town Vending Committees and engage vendors, shopkeepers, commuters and officials in co-design and pilot interventions. Trial tactical urbanism measures during a six-month pilot phase and adapt based on monitoring.

Phased implementation - Begin with tactical, low-cost trials for 0 to 6 months, institutionalise successful measures between 6 and 18 months and integrate permanent design interventions over 18 to 36 months.

6. Limitations and future research

The research is limited to a single precinct and a modest sample size. Seasonal variations, festival peaks and monsoon impacts were not systematically captured. Future work should include longitudinal studies to trace seasonal dynamics, comparative studies across multiple small towns and participatory design experiments that test the recommended interventions in situ.

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All images courtesy author

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ARTICLE

Architecture Quotes Meets Spaces

By R. Ragavendira

INTRODUCTION

In the field of education, it is a common practice to highlight examples of architectural achievements, both locally and globally, to inspire students. Although all may not have the opportunity to visit these buildings in person, exposing them to these remarkable structures sparks their curiosity and motivates them to explore them further in the future. When instances of Indian architecture are emphasised, students are more inclined to encounter them during their travels. This establishes a significant link between the knowledge acquired in the classroom and their real-world experiences, enabling them to correlate theoretical concepts with empirical observations.

It ultimately varies from person to person, so we can never be completely sure that someone's description of a space aligns with their imagination. At times, an individual may envision something entirely different from what was intended. While we can't ignore what resonates with most people, we also can't make broad assumptions about these perceptions. It's all about recognising that everyone sees things differently, and that's what makes these conversations about space so interesting.

In certain instances, both language proficiency and architectural education play a significant role. The understanding of the words with spaces will be tough for first-year students; for example, when a serene space is shown to a first-year student, he may tell that it is a beautiful or calm space. But as the year goes on, they receive training to think deeply and produce words like serene. And for the architects, it is based on their clients. We have trained ourselves to understand who we are working for and the language they need to understand the project, and we act accordingly.

The aim of this paper is straightforward: how can architects' quotes align with our mental images of places we've visited or seen online? To explore how these quotes deepen our understanding and emotional connection to the built environment, we have selected several impactful quotations and sought to capture the essence of the architectural spaces they describe.

ARCHITECTS QUOTES VS SPACE

Architects' quotations offer a powerful lens through which we can glimpse the intellectual and emotional essence of spaces. These words often encapsulate a building's deeper meaning by conveying its context, purpose and design philosophy.

By comparing these quotes with the actual spaces we've encountered, either in person or virtually, we can assess how effectively the architecture communicates its intended message. When language and space intersect, abstract ideas transform into tangible experiences, fostering a deeper connection to the built environment.

Ultimately, the words used by architects help us appreciate not just the physical form of a space, but the emotional and cultural significance embedded within it.

LEGENDARY ARCHITECTURE

Architectural spaces convey various emotions. It is not only the architect-designed spaces after independence, the everlasting indigenous architecture for common people and tribes, or the architecture that served kings or queens. As a

creator, he/she has tried to provoke the emotions through built forms, material, and texture. What is the best way to put these emotions into words? Is it a single word that defines the whole space, a single sentence, or a single paragraph? Which one evokes the precise meaning of the thought, construction and communication?

CASE STUDY 1

"People often ask me what my secrets are for Ronchamp. Is there nothing but a harmonic search for the problems posed? The gospel: an ethic; the place: the four horizons; the means: the crab shell. »

Le Corbusier, Le Livre de Ronchamp, Les Cahiers Force Vive, 1961 (Refer Image 1).

Image 1: Original site plan sketch by Le Corbusier, defining the pilgrims' path up to the Chapel (in yellow)
Source: Wood, P. (2015). Le Corbusier's secret geometry: Speculations on regulating lines hidden in Ronchamp. In proceedings of the 5th International Congress on Architecture and Urban Design (LC2015) http://dx.doi.org/10.4995/LC2015.2015.926

Le Corbusier's description of Ronchamp in six simple words beautifully captures the heart of the chapel:

1. **The Gospel: An Ethic** – He saw the chapel as more than just a building—it was rooted in moral and spiritual values, reflecting deeper principles through its design.

2. **The Place: The Four Horizons** – The chapel's location on a hill lets it embrace views in all directions, symbolising a connection to the world and its surroundings.

3. **The Means: The Crab Shell** – The curved roof, like a protective shell, not only shelters but also creates a sense of harmony with nature.

Le Corbusier captured the essence of Ronchamp in just a few words, highlighting its purpose, connection to its surroundings, and its organic, creative design. This is a simple yet profound approach to architecture. Given architecture's complexity, it

often requires a series of evocative words to fully express the emotions and experiences it evokes. These words not only help in recalling the structure but also establish a deeper and more meaningful connection with the built spaces, emphasising their character, functionality and emotional resonance.

CASE STUDY 2

"To create an atmosphere where you don't see divides and doors"

Indian Institute of Management (IIM), Bangalore by B.V.Doshi (Refer Image 2).

Doshi's design breaks down physical barriers to encourage interaction and a sense of openness. It mixes big, grand spaces with smaller, cozy areas that help both group activities and personal reflection. By blending the campus with nature and keeping things open, he created a welcoming environment for learning. His approach shows that architecture isn't just about function but also about making people feel comfortable and connected. Ultimately, the campus
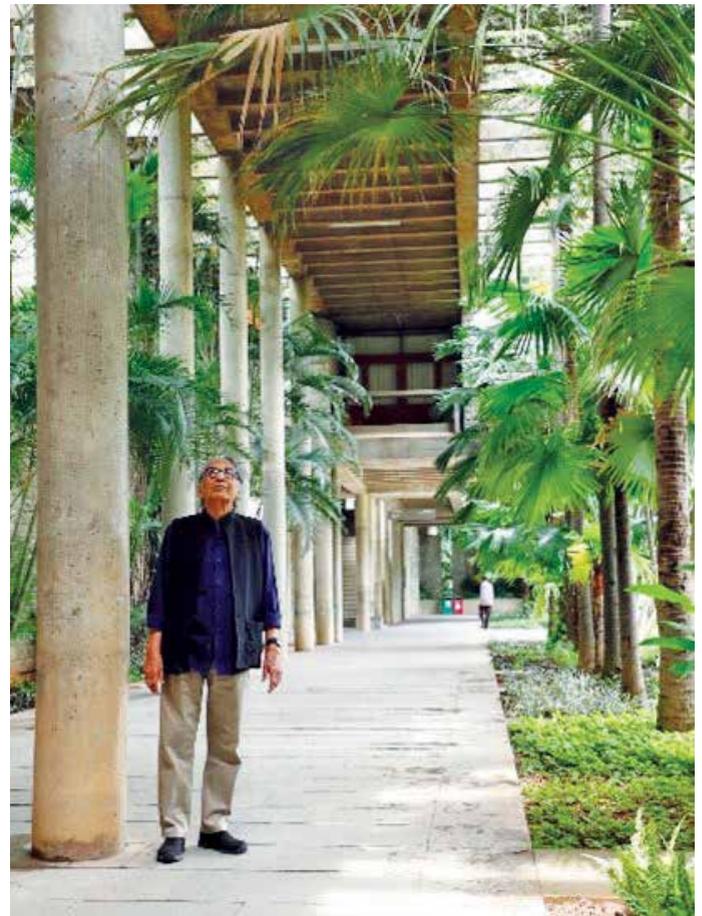

Image 2: The Pritzker Architecture Prize-winning architect Balakrishna V. Doshi built the iconic Indian Institute of Management, Bengaluru campus
Source: https://www.thehindu.com/news/national/karnataka/iconic-iimb-campus-testament-to-the-genius-of-bv-doshi/article66429089.ece

is designed to enrich the experience of everyone who uses it. Doshi's choice of design shapes the way people experience the space, making it both inviting and meaningful. The campus, with its thoughtful design, feels welcoming not just for the present, but for generations of students to come, creating a timeless environment for learning and growth in management studies.

CASE STUDY 3

The Kandalama Hotel in Sri Lanka is not merely a building within the landscape; it is a building that emerges from the landscape itself.

— Geoffrey Bawa, describing how the hotel blends seamlessly with the natural environment of the Kandalama area (Refer Image 3).

The natural evolution of the building is stated by the word 'grow' where the building grows as extension of the land in an organic way. He wants to convey that architecture as a living entity which adapts to its environment and context. It doesn't allow it to impose itself upon it.

DESCRIPTION OF WORDS IN ARCHITECTURAL CONTEXT

The following table presents a structured idea of how specific words can establish strong and diverse connections with architectural spaces. It highlights the artistic, functional, and emotional dimensions that these words can convey (Refer Table 1).

CONCLUSION

This paper underscores the deep connection between language and architecture, illustrating how both shape perceptions and evoke emotions. Architects such as Le Corbusier, Doshi, and Bawa use precise language to express not only the design and function of their buildings but also their deeper philosophical and emotional meanings. By doing so, they foster a stronger connection between people and the environments they occupy. Much like language, architecture tells a story that embodies cultural identity and human experience. Understanding how words influence our perception of space is vital in creating environments that nurture emotional and spiritual connections.

Image 3: The building that emerges from the landscape - Kandalama Hotel, Sri Lanka
Source: https://archeyes.com/the-kandalama-hotel-geoffrey-bawas-architectural-masterpiece-in-sri-lanka/

Table 1: Connection Between Descriptive Words and Built Spaces
Source: Author

Category	Descriptive Words	Connection with Built Spaces
Positive	Organic, Harmonious, Welcoming, Serene, Dynamic, Elegant	These words convey a sense of balance, comfort and creativity within a space, highlighting how architecture can create uplifting, peaceful and inspiring experiences. For instance, spaces described as "organic" typically incorporate fluid shapes or natural materials, while a "serene" space emphasises calmness and tranquillity, often achieved through open layouts, lighting and soothing materials.
Functional	Practical, Efficient, Accessible, Spacious, Connected	These terms emphasise how effectively a space fulfils its intended function. Words like "practical" and "efficient" refer to optimising the space for usability, while "accessible" and "spacious" highlight inclusivity and ease of movement. Describing a space as "connected" may refer to its integration with the surrounding environment or the seamless connection between different areas for an enhanced user experience.
Aesthetic	Textured, Layered, Rustic, Minimalistic, Sculptural, Vibrant	These words capture the visual and sensory characteristics of a space, describing material choices, forms and the interplay of design elements within the environment. For example, "textured" spaces emphasise tactile surfaces and depth, while "minimalistic" spaces are defined by simplicity, clean lines and an emphasis on functional form with minimal clutter.
Neutral	Eclectic, Spatial, Organic, creative, Contextual	These words describe a design approach and its connection to the environment. They don't convey strong emotions but instead reflect the underlying design philosophy. For instance, an "eclectic" space blends different styles and materials, while "contextual" design focuses on how the building harmonises with its surroundings and respects cultural heritage.

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ARTICLE

Natural Light as a Design Tool

Early-Stage Daylighting Analysis in Indian Architecture

By Ar. Abhilasha Sharma and Dr. Sampada Peshwe

1. Introduction

Natural Light is one of the major components of Interior Design and Architecture, a variable element, unlike materials that are fixed and tangible. This changes with seasons, time and weather conditions in most of India. Sunlight is abundant for most of the year. Additionally, due to India's environment and culture, this has led to the sensitive development and use of daylighting. However, in a lot of current projects, either the abundance of daylight is uncontrolled, or the design is not properly configured to use it (Lechner, 2015). Therefore, the paradox is based on the deeper issue of how daylight in design is usually considered and addressed late in the process of design (Nick Baker, 2014). Analysis of daylighting during the conceptual and schematic design phases (early stages of design) is when important decisions are made concerning how to orient, mass or create a spatial hierarchy and the detail to which each of these aspects will be incorporated into the final envelope of the structure. The quality of daylight experienced through these early design decisions is much greater than any technical solution to daylighting. Daylight has a massive impact on the best outcomes in architecture for students and designers in terms of the products and processes used at these initial stages of design and understanding of daylighting. This is especially relevant in a country like India that is influenced by climate, culture and lifestyle and where these three elements are integrated into the use of light.

Therefore, this article intends to present daylight as a design tool that can be used to facilitate the overall design of any building, not just as a checklist of how to light a building. The intent of this article is to reach architecture and design students, teachers and practitioners to use a reflective and human-centred approach to the design language.

2. Light and Architecture: A Timeless Bond

2.1 The spatial and emotional component of light

Apart from illuminating the things we observe, light also gives us spatial depth and shows us texture (Bureau of Energy Efficiency, 2017). This same light, when soft and diffused, provides space for serenity and contemplation, whereas when it is bright and focused, it boosts our energy level in an active setting (Nick Baker, 2014).

Architects from all periods of history have intuitively used light to create experiences for people. In Indian architecture, light is notably important for its symbolic representation of knowledge, divinity and life.

2.2 How daylight was historically used in Indian architecture

Meticulous planning is seen in traditional Indian buildings regarding daylight usage; this applies to both the principle of using light (without modern technology) and how to manage the impact of daylight and other elements of the building (Lechner, 2015).

Examples of structures designed to regulate light include haveli houses with courtyards, Mughal architecture featuring jaalis, colonial-era buildings featuring deep verandas and baolis (stepwells) with their stepped geometries (Lechner, 2015). The responses of these structures to the harshly bright and overpowering rays of the sun using environmental features, as well as demonstrating

their capabilities for reducing glare, minimising heat gain and providing a visually comfortable work environment (Patil, 2024; Morphogenesis, 2013).

It is noteworthy that daylight has never existed in isolation but has always been coupled with the use of various forms of ventilation, the materials with which they were constructed and their respective societal applications. Hence, their integrated relationships provide valuable insight into the practices of today.

3.   The Indian Climatic Context and Daylight

3.1   Climatic diversity of India

India has a wide variety of climate types, which include dry and hot areas, humid and warm coastal areas, composite climates, cold mountainous areas and temperate areas (Lechner, 2015). This variety causes various levels of interaction with direct sunlight, which means that dry and hot areas will need some type of shelter from excessive amounts of solar radiation while cooler climates will have more need for solar energy to survive during winter months (The Energy and Resources Institute (TERI), 2010).

Architects must understand these climatic differences while designing buildings to maximise the benefit of natural light. This is because techniques that are effective in the state of Rajasthan may not be suitable for the states of Kerala or Himachal Pradesh. Early-stage daylight analysis gives architects an opportunity to create solutions that are customised to meet the specific climate-related requirements of the particular site, rather than using a "one-size-fits-all" type of solution that doesn't work for the unique environmental conditions.

3.2   Sun Path and Seasonal Variation

The path of the sun throughout each season (fig. 1) varies in India (Bureau of Energy Efficiency, 2017). The high solar angle during summer months and the low solar angle during winter months will determine how light penetrates buildings (Fig. 2). Thus, early analysis of sun paths allows designers to determine building orientation, locations of windows and shading methods. The earlier this analysis is done, the less artificial light and mechanical cooling will be required.

4.   Natural Light as a Design Tool

4.1   Beyond the Numbers Associated with Daylight – Illuminating Space

Daylight in many projects often comes down to numbers (e.g., lux levels), and while these numbers have their place to provide guidelines on a physical
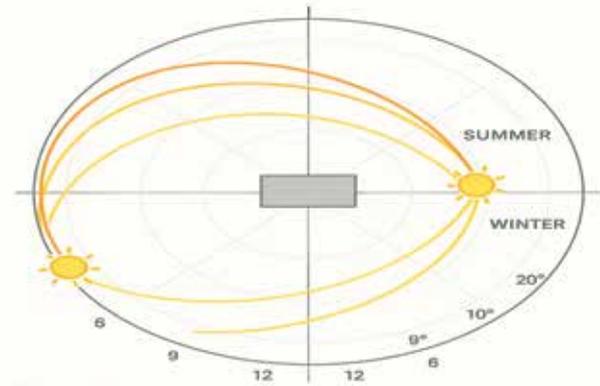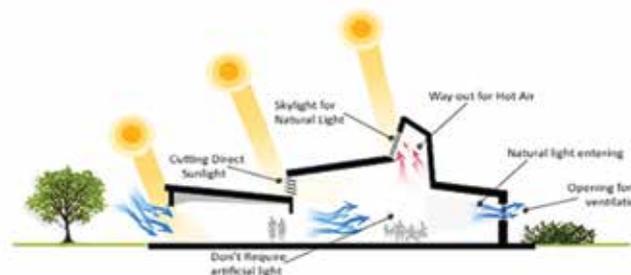

Figure 1: Sun path diagram
Source: https://greenpassivesolar.com/2010/06/winter-summer-sun-solstice-pictures/

Figure 2: Natural light diagram
Source: https://layakarchitect.com/daylighting/

level, they do not account for qualitative aspects of light in terms of creating comfort and inviting you to be there (The Energy and Resources Institute (TERI), 2010). By using daylight as a tool, daylight should be used to help create pathways through the space, providing space for concentration (e.g., classrooms), areas for privacy (offices) and connecting to the outdoors or their surrounding environment.

4.2   Daylight as a Tool for Form Creation

Daylight created through the design and space location of buildings has an impact on their form and volume; thus, by using daylight at the early stage of a project, it is likely that the massing created will allow for day-lit building interiors, courtyards, atriums, light wells and stepped forms that are not an aesthetic part of the space; rather, they are responding to the needs of light. Many of the buildings in India have historically been built to face away from the outside (inward), which has enabled them to create an excellent balance between providing daylight and thermal comfort. Thus, daylight plays a major role in developing the built form of the spaces.

5.   Early-Stage Daylight Analysis: The Beginning and Importance

5.1   Defining the early-stage analysis

The early-stage daylight analysis provides an investigative analysis of the light quality present within the building during the initial phases of conceptual and schematic building designs of a project (Baker, 2014; Doshi, 2019). The conceptual and schematic designs typically consist of basic models, diagrams or sketches and do not provide detailed drawings that identify the actual light quality in the building. Therefore, the analysis during this stage focuses on identifying the potential light for use in the project rather than a detailed measurement.

5.2 Importance of early decisions

The orientation, depth and spatial zoning are decisions that will remain with the building through its lifespan. Therefore, the operational impacts of artificial lighting controls and high-performance glazing cannot provide adequate compensation for poor decisions made in the initial stages of design. In the Indian context—where a significant increase in demand for energy occurs—using daylight to its full potential can allow for an overall reduction in operational energy usage. Introducing a sustainable design programme helps in developing green buildings.

6. Tools and Methods for Early-Daylight Exploration

6.1 Manual and intuitive methods

Before digital tools, architects relied on intuition, experience and physical models. Even today, sketching sun paths, creating section diagrams and building simple study models are powerful ways to understand light. These methods encourage a tactile and intuitive connection with design.

6.2 Digital simulation at concept stage

Basic digital tools can support early exploration without dominating the design process. Simple daylight simulations help visualise light distribution and identify potential issues. The key is to use these tools as guides, not as decision-makers (Doshi, 2019).

7. Flowchart: Study of Natural Light as a Design Tool

Figure 3 explains the process of study of natural light as a design tool.

8. Design Strategies for Daylighting in Indian Architecture

8.1 Orientation and planning

Orienting buildings to maximise north and south light while minimising harsh east and west exposure is a common strategy in many Indian climates. Early-stage planning ensures that primary occupied spaces receive balanced daylight.

8.2 Courtyards and transitional spaces

Courtyards act as light collectors and social spaces. Verandas, balconies and shaded corridors create gradual transitions between exterior and interior, improving daylight comfort.

8.3 Openings, Shading and Filtering

The size, position and treatment of openings strongly influence daylight quality. Traditional elements like jaalis and jharokas inspire and modern shading devices (pergolas, stretch ceiling, awnings, chajjas) filter light while maintaining a visual connection.

9. The Human Experience and Well-Being

9.1 Daylight has a psychological effect

Many research (The Energy and Resources Institute (TERI), 2010) studies and the experiences of most people believe that exposure to natural sunlight creates better moods (The five am club/ prisoners kept in dark rooms) and more concentration. Daylighting has been shown to create a more positive mood while providing an environment conducive to good health and productivity within the workplace and classroom settings.
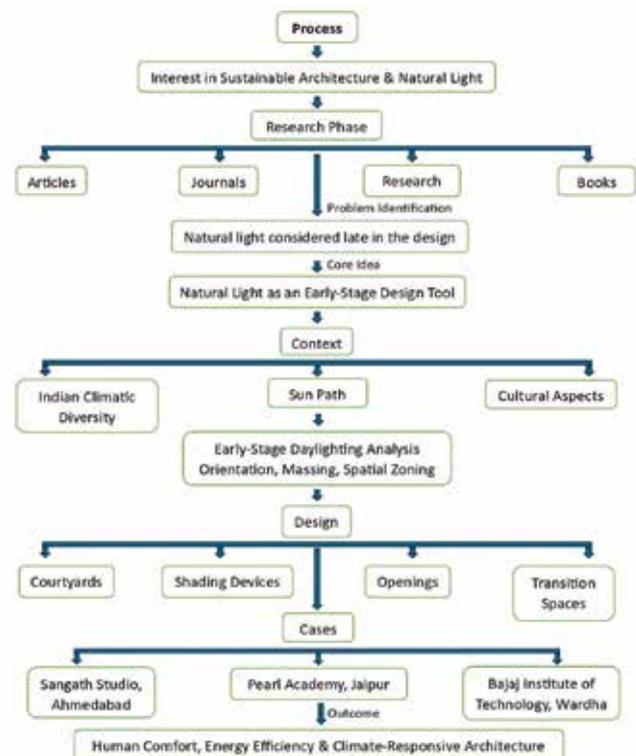

Figure 3: Flowchart of study of natural light as a design tool
Source: Author

9.2 Cultural and social impact

In India, daylight defines our traditions and social activities. For example, in many Indian homes, the lighting of lamps signals sacred moments of prayer at dawn and dusk. Courtyards act as places of household activities, family gathering as well as culture festivals. Natural light played a very important role in the planning of homes and public spaces. Using daylighting as a design tool helps create spaces that acknowledges these cultural and social experiences.

10. Case-Based Reflections from Indian Architecture

To understand daylight as a design tool in contemporary Indian practice, it is important to examine built examples where natural light was consciously integrated from the early design stage. The following case-based reflections focus on institutional and studio environments where daylight shapes learning, working and creative processes.

10.1 Sangath Studio, Ahmedabad (1981)

Sangath Studio, located in Ahmedabad, India, designed by Balkrishna Doshi, represents a new type of architecture being developed in regions with hot climates that rely on the use of natural daylight during the day (Metcalf, 2011). The design includes creating a structure that is partially below ground to minimise heat gain and provide controlled natural daylight into the space via a series of vaulted roofs (fig. 4) that open to the north (Baker, 2014).

Figure 4: Sangath Studio, Ahmedabad (1981)
Source: https://www.archdaily.com/158300/ad-classics-sangath-balkrishna-doshi

Natural daylight is diffused using reflective finishes that are white to create soft-glare-free interiors for creative activities (Metcalf, 2011). A combination of vaults, skylights and landscaped open-air courts clearly depicts how daylight can affect both the structure's form as well as the user experience. Moreover, as explained, the concepts of daylighting were developed during the conceptual design phase, which resulted in a strong influence on how the spaces were detailed/divided, selected and arranged. Sangath demonstrates how an emphasis on daylight in the early conceptual phase can lead to long-lasting, climate-responsive architecture (Metcalf, 2011).

In conclusion, this example illustrates that an environment with an effective naturally-lit interior space does not solely rely on high-tech inventions but rather results from early architectural design choices that take into account the impact of climate on human activities on the building's orientation, shape, structure and overall arrangement.

10.2 Pearl Academy, Jaipur (2008)

Jaipur's Pearl Academy, located in a hot and dry climate, is designed by the firm Morphogenesis, headed by Ar. Manit and Ar. Sonali Rastogi. The main challenge for designers was to provide enough light into the school buildings so that students and teachers did not have to use artificial lights, while also providing comfortable temperatures.

The designers solved this problem by designing the campus area to be inward-looking by doing things like creating shaded open-air courtyards and arranging buildings in specific directions. Creating shaded openings, open-air courtyards and filtered facades, (fig. 5) allowed natural light to enter classrooms and studios instead of allowing direct sunlight.
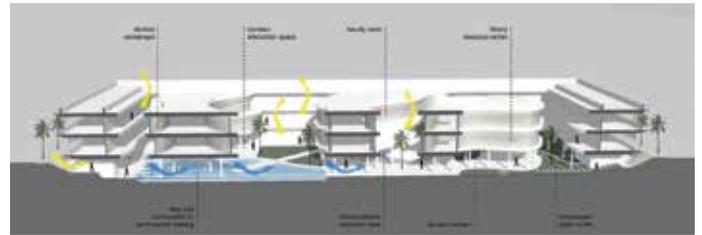
Figure 5: Sectional view (Pearl Academy, Jaipur)
Source: Pearl Academy of Fashion / Morphogenesis | ArchDaily

The use of perforated screens, deep overhangs and recessed windows (fig. 6) helped to diffuse the bright sun and allowed natural light to enter the interior spaces, while at the same time minimising glare and preventing the heating of the interior space by passive cooling. As most of the circulation spaces are naturally lit, less reliance on artificial lighting is experienced during the day.

From the above case study, it can be derived that shape and orientation of the buildings is the result of early light analysis and climate information. The

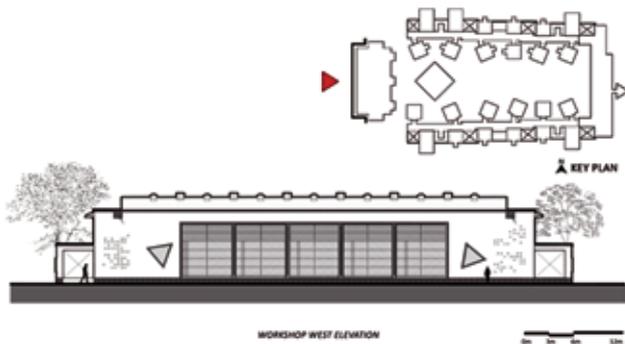Figure 6: Interior/exterior view (Pearl Academy, Jaipur)
Source: Pearl Academy of Fashion / Morphogenesis | ArchDaily

design ensures that the school spaces have enough even distribution of natural daylight (Morphogenesis, 2013).

10.3 Bajaj Institute of Technology, Wardha

The Bajaj Institute of technology, located at Wardha, Maharashtra, was designed by Ar. Christopher Benninger (of CCBA Designs), creating a campus known for blending modern design with traditional Indian elements, inspired by sustainability and a sense of community learning. The climate of the region combines a hot season during summer, moderately humid during the monsoon season and mild during winter months.

The architectural layout of the institution has been designed to create a sequence of open areas that provide adequate light penetration and ventilation into all its classrooms; these open areas consist of courtyard style (fig. 7) structures arranged around a main corridor. (Archidiaries, n.d.)

Figure 8: Bajaj Institute of Technology, Wardha (courtyard view)
Source: Bajaj Institute of Technology Wardha / CCBA Designs | ArchDaily

Figure 7: Bajaj Institute of Technology, Wardha (sectional view)
Source: Bajaj Institute of Technology Wardha / CCBA Designs | ArchDaily

The architectural arrangement of classrooms and laboratories provide natural light to them from several different directions, thus providing improved visual quality and decreased contrast when compared with rooms having only northern or southern facing windows (fig. 8).

To achieve the desired design intent of using natural light efficiently and effectively, the layout includes multiple levels of transition zones (fig. 9) between external and internal environments, courtyards and corridors.

In developing the strategies for maximising natural lighting, the designers have also considerd how to plan their air conditioning units to maintain good humidity/ventilation control in all areas throughout the campus; this has provided adequate light without introducing heat build-up into the area where it is to

Figure 9: Transition spaces
Source: Bajaj Institute of Technology Wardha / CCBA Designs | ArchDaily

be used. The double-heighted lobbies and thoughtful triangular openings not only create a visual treat but pattern and rhythm restricts sunlight penetration (fig. 10). Common spaces not only help in transition but mitigation of heat.

Figure 10: BIT Wardha's interior view
Source: Bajaj Institute of Technology Wardha / CCBA Designs | ArchDaily

11. Comparative Analysis of Case Studies

Table 1: Natural Light as a Design Tool in Indian Architecture
Source: Author

Aspect	Sangath Studio, Ahmedabad	Pearl Academy, Jaipur	Bajaj Institute of Technology, Wardha
Architect / Firm	Ar. Balkrishna Doshi	Morphogenesis (Ar. Manit & Ar. Sonali Rastogi)	Ar. Christopher Benninger (CCBA)
Year	1981	2008	2017-2018
Climate	Hot & Dry	Hot & Dry (Desert Climate)	Composite (Hot, Humid & Mild Winter)
Building Type	Architectural Studio	Educational Institute	Educational Campus
Design Intent	Controlled daylight with thermal comfort	Maximum daylight with minimum heat gain	Balanced daylight, ventilation & comfort
Early-Stage Light Analysis	Strongly applied during conceptual stage	Integrated from initial planning stage	Used during planning & massing stage
Orientation Strategy	North-facing vault openings	Inward-looking campus planning	Multi-directional classroom orientation
Form & Massing	Partially sunken structure, vaulted roofs	Compact inward form with courtyards	Clustered blocks around courtyards
Daylighting Elements	Vaults, skylights, courtyards	Jali screens, shaded courtyards, deep overhangs	Courtyards, double-height spaces, cut-outs
Light Quality	Soft, diffused, glare-free	Filtered, evenly distributed daylight	Balanced light with reduced contrast
Glare & Heat Control	Earth cover, reflective surfaces	Perforated screens, recessed openings	Transitional zones, shading geometry
Human Experience	Calm, contemplative creative spaces	Comfortable learning environments	Community-oriented academic spaces
Energy Efficiency	Reduced artificial lighting & cooling	Minimal daytime artificial lighting	Lower dependence on mechanical lighting
Key Learning	Daylight-driven form generation	Climate-responsive filtered daylight	Courtyard-based daylight planning
Relevance to Article Theme	Daylight as design generator	Early-stage daylight shaping form	Integrated daylight & spatial planning

12. Discussion

12.1 Contemporary Daylighting Practice Challenges

Even though daylighting techniques are beneficial at the early design stage, they still face many challenges. Examples of these challenges are short time frames for projects, not understanding the benefits of daylighting and depending too heavily on artificial lighting. Through this article, architecture schools are urged to raise awareness of these issues in students and incorporate this aspect of climate-responsiveness into their curriculum in an in-depth manner.

12.2 Implications of Architectural Schools

When students learn how to design with daylighting, they develop an ability to think holistically about design solutions. In studio-level coursework,

daylighting analysis should be incorporated into the design concepts instead of adding on additional technical components. Incorporating these ideas during studio time fosters creativity, responsibility and creates a sensitive design approach.

13. Conclusion

The above case-based reflections focus on institutional and studio environments where daylight shapes learning, working and creative processes. If the daylight utilisation is not properly thought off at the initial stages, challenges like excessive heat and glare may affect physical and mental health as well thermal discomfort and sick buildings.

Natural light serves not only as a technical element of the design process, but also as an effective tool to improve and develop architectural forms (Lechner, 2015). When designing buildings in India, where there is an abundance of sunlight (which can be considered both intense and plentiful), conducting a daylighting analysis early in the design phase will assist a designer in designing spaces that are comfortable, meaningful and sustainable. If architects bring daylight into their designs from the early stages of their projects, they will not only reconnect with traditional architectural concepts but will also address current issues in architecture and design. In addition, both students of architecture and academicians benefit from using light as their partner to create built forms that are functional, humane and grounded in the context of their site.

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ARTICLE

Beyond Worship
Pandals, Dekhavas and the Architecture of Collective Experience

By Ar. Mahesh Rameshwar Bangad and Jahnavi Dudhane

Ganpati pandals (mandaps and temporary stalls) are compelling examples of ephemeral architecture—spaces created for the duration of a festival but that leave a lasting impression on culture, memory and urban identity (figure 1). These vibrant, short-lived structures redefine the ideas of permanence and spatial experience, revealing how temporary forms can have enduring social and symbolic resonance. At the same time, their temporary nature often creates contradictions—materials like thermocol, plastics and plaster of Paris generate significant post-festival waste, with studies by the Central Pollution Control Board (CPCB, 2020) noting sharp rises in water toxicity in cities like Mumbai and Pune after immersion ceremonies.

1.   Ephemeral Architecture: Redefining Space

Ganpati pandals transform everyday urban and rural environments into dynamic places of ritual performance, gathering and celebration. For the 10-day Ganesh Chaturthi festival, communities and artisans collaborate to build grand structures—sometimes out of bamboo, cloth, jute, plaster of Paris and eco-friendly materials—and adorn them with colourful lights and artistic decor inspired by mythological themes/narratives, folk traditions or contemporary events. Themes may range from social causes to elaborate mythological narratives, causing even familiar sites to take on new meanings and uses for the festival period.

For example, the Khetwadi pandals in Mumbai (figures 2 and 3) are known for using social issues like women's safety or climate change as central design motifs, shifting the space from purely religious to civic commentary (Indian Express, 2022).

Dekhava: Storytelling through Ephemeral Architecture

A dekhava, featured in many Ganesh pandals, is a dynamic tableau or short theatrical piece performed by community groups. In Pune, these presentations

Figure 1: An immersive Ganpati pandal demonstrating how temporary architecture transforms ritual into a powerful urban experience, blurring the line between permanence, spectacle and collective memory.
Source: Outlook India

Figure 2: Khetwadi pandal in Mumbai
Source: Indian Express, 2022

Figure 3: Khetwadi Ganpati in Mumbai
Source: Outlook, 2022

Figure 4: Hatti Ganpati mandal showcasing a live dekhava of Lord Krishna. There were 21 moving idols of Lord Krishna and the gopis. They were seen playing Holi.
Source: Ravindra Joshi/HT PHOTO

Figure 5: Ganpati Decoration: replica pandal of the Mahishmati Darbar, from the renowned movie, Bahubali
Source: www.localsamosa.com

often consist of 10–15 minute live performances, with moving idols, sound and visual staging—highlighting mythological episodes or socially relevant themes such as water conservation or empowerment. Contemporary dekhavas increasingly embrace modern media and design techniques. For instance, one installation animates an image of Vitthal through multimedia effects—intersecting cultural memory with technological novelty. Beyond mere spectacle, dekhavas are creative expressions of community identity, storytelling and localised aesthetics—merging daily life, craftsmanship and ephemeral architecture into a memorable communal experience (figures 4 and 5)

2. Materiality and Sustainability

Traditional pandals were crafted using easily available, inexpensive materials—bamboo frames draped in cloth or plastic, with decorative motifs. Current trends favour sustainability, with many organisers opting for biodegradable or recycled components such as clay, jute, wood and floral embellishments. This conscious selection of materials not only reinforces the ephemeral nature of the structure but also carries symbolic meaning: clay idols symbolically highlighting cycles of creation and dissolution that are culturally significant in Indian traditions.

Civic bodies like the Pune Municipal Corporation (PMC) now incentivise pandals to use shadu clay and restrict PoP idols above 4 feet (PMC Circular, 2021), linking regulation with sustainable practice (figures 6 and 7).

3. Material Examples and Symbolism

- Clay: represents earth and the transient nature of life.

- Bamboo and wood: chosen for their connection to nature and sustainability.

- Plaster of Paris: traditionally used for sculpting large idols, though now less favoured due to environmental concerns.

- Floral and recycled materials: promote messages of eco-consciousness and community participation.

Figure 6: PMC Eco-Friendly Ganesh Utsav Initiative
Source: The Bridge Chronicle

Figure 7: Reusing shadu from immersed idols to help reduce sand mining.
Source: The Times of India

Lalbaugcha Raja in Mumbai experimented with energy-efficient LED lighting and partial bamboo frameworks in 2017 (figure 8), reducing electricity consumption significantly (Hindustan Times, 2017).

4. Symbolism and Cultural Impact

Every aspect of a pandal, from spatial arrangement to ornamentation, reflects cultural choices that borrow from religious motifs or popular culture (figure 9). The layouts often echo mandala-like geometries derived from temple architecture, functioning as symbolic or cultural representations rather than permanent temporary cultural spaces. Diverse themes—such as social harmony, environmental protection or mythic events—invite communal

Figure 8: Ganesh Chaturthi 2017: Lalbaugcha Raja day 1 first look
Source: www.dnaindia.com

Figure 9: The Padmanabhaswamy replica will include detailed scenes from the Ramayana and Krishna Leela, along with idols of Vishnu-Lakshmi, Shiva-Parvati, Krishna and Narasimha.
Source: Express photo

storytelling and reflection. The cycle of construction and dismantling illustrates how temporary architecture can create recurring cultural events that temporarily reshape urban space and social behaviour. This also reflects the duality of "festival architecture"—it is temporary yet monumental, a paradox noted by architect Rahul Mehrotra in his work on the Kumbh Mela, where temporary settlements rival permanent cities in scale and impact (Mehrotra, 2014).

Challenging Architectural Permanence

Ganpati pandals disrupt established notions of architecture by proving that brevity in existence does not diminish significance. These short-lived spaces:

● Create collective memories and traditions.

● Influence urban layouts as streets and squares become places of congregation.

● Foster craftsmanship and innovation.

● Serve as focal points for annual cultural renewal.

Even after dismantling, the stories, photographs and community bonds endure, demonstrating the capacity of ephemeral forms to shape cultural and spatial histories. This ephemeral architecture also creates a larger impact on the urban public spaces, though temporal in nature.

INTACH Pune documented eco-friendly pandals through exhibitions between 2018 and 2020 (figure 10), showing how even dismantled structures continue as heritage through archives, photographs and collective memory. However, there remains a tension between spectacle and sustainability—large pandals attract massive crowds and sponsors, sometimes prioritising visual impact over ecological responsibility (Outlook India, 2021).

Reshaping Urban Public Spaces
Ganesh Chaturthi pandals dramatically reshape urban public spaces by temporarily transforming streets, squares and neighbourhoods into vibrant, communal zones that support cultural, social and spatial exchange. For the duration of the festival, these structures act as focal points of urban life, redefining movement, use and identity within the city.

I) Reconfiguration of Urban Flow
Pandals are often erected at crossroads, public parks and market squares—places with high footfall. Their presence can necessitate traffic rerouting, temporary closure of lanes and alterations in public transit schedules to accommodate increased pedestrian activity and ensure safety. Some innovative solutions include elevated or "hanging" pandals that allow traffic beneath the structure, minimising congestion while maximising public engagement. The 2016 Shivaji Park mandal in Dadar, Mumbai, designed a raised platform for idol placement, keeping traffic flow underneath—a rare architectural response balancing devotion with mobility (Mid-Day, 2016).

II) Social and Cultural Activation
These temporary installations convert otherwise utilitarian urban spaces into sites of collective celebration, performance and worship. Activities include night aartis (ritual performances), cultural performances, food stalls, artisan displays and exhibitions of artistic craftsmanship, establishing new social geographies for the city's diverse residents. For residents of high-rise buildings and fast-paced neighbourhoods, pandals serve as rare "third places" for meaningful interaction and community formation. Sociologists like Janaki Nair argue that such temporary festive spaces act as "counter-

Figure 10: Intach (Indian National Trust for Art and Cultural Heritage) Pune, along with the Parijat Foundation and Centre of Contemporary Dance has introduced a series on YouTube to create awareness about the forthcoming Ganesh festival from an environmental perspective. *Source: Rahul Raut/HT representative photo*

publics," where ordinary citizens reclaim the street from cars and commerce, reasserting its role as a common (Nair, 2018).

III) Commercial and Economic Effects
Urban markets, businesses and street vendors thrive around major pandals, enjoying a seasonal economic boom. This increased activity reshapes microeconomics, creates new temporary employment and changes the spatial dynamics of commerce for the festival period.

IV) Environmental and Regulatory Challenges
With the installation of pandals comes the challenge of increased noise, waste and crowding. City administrations set norms for permission, size and location, while community organisers are encouraged to consider eco-friendly materials and public amenities such as waste disposal and baby feeding centres. These considerations shape not just festival logistics but inspire longer-term debates about sustainability and equitable access to public spaces. During the pandemic years, digital darshan and live-streamed aartis replaced large-scale pandals in many cities, offering an alternative mode of collective participation without the environmental burden (Scroll, 2020). This hybrid model suggests how cultural continuity can coexist with ecological sensitivity.

Lasting Cultural and Spatial Impact
After the festival, the ephemeral transformation of the city lingers as collective memory—bonding residents, inspiring urban design innovations and reinforcing the identity and adaptability of public spaces. The annual event reveals the potential of temporary architecture to challenge, animate and renew urban space beyond the festival itself.

The annual ritual of constructing and deconstructing pandals:

● Reinforces community identity and creative expression.

● Inspires advances in design, material technology and sustainable practices.

● Encourages participatory architecture, where local artisans, residents and leaders collaborate organically.

● Leaves an indelible mark on cityscapes and neighbourhood life, as each festival cycle transforms familiar environments and social routines.

Ganpati pandals illustrate how ephemeral architecture can shape urban culture and public life. Their short existence challenges assumptions about permanence in architecture, proving that temporary structures can leave long-lasting effects on memory, design practice and urban identity.

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PEDAGOGUE'S PERSPECTIVE

Lest we forget in the era of AI
Design ESSENTIALS

By Ar. Harshad Bhatia

In addition to the five tangible and recognised senses, as well as the sixth sense of an intangible nature, the key to good design in architecture lies with two essentials - common sense and civic sense.

Often taken for granted, common sense is thought of as too common to be consciously considered. Similarly, the notion of civic sense itself is too far-fetched to be important for good design.

Take the case of a common, ordinary Indian water closet, the 'W.C.' Who bothers about this essential element in any type of shelter. It features in all types of building projects - from railway stations to houses, institutions to site offices, museums to transit camps.

The W.C. is too common literally. Yet when one designs the type of shelter, if the W.C. itself does not suit the purpose for which it was provided, how good is the design? "But how can a thing like a W.C. go wrong?" is often asked.

Well in many ways if you just use common sense. Just an example, take the case of W.C. in a traditional Indian context. The size of a W.C. room is standardised in a majority of design schemes as 900mm by 1200mm. Why? To make sure that our commode - the Indian pan type unit fits in and the user can squat to comfortably use the space. That is great and that is design.

Now what about the door? Well, as usual or as in common sense, it opens inside. So, you think you have designed a good W.C. space?

Now place that W.C. space in a 3-star category hotel's cloakroom or what is often confused with 'common toilet' areas. Okay, put it there and so what? So, what about the W.C. commode now? Is it yet the Indian 'squatting pan' type or is it the 'western' style?

Being a hotel, of a commonly known urban image of high class, high gloss, star rating and palatial comfort, the Indian 'pan' type is not considered apt. Therefore, the sitting type unit is envisaged in the W.C. Just conventional sense, is it not?

How about the size of the room and the direction of opening its door now? Does the standard module of 900mm x 1200mm still work? Yes, provided the door opens outside. However, one often really never applies this thought as part of initial design thinking.

Design for all purposes needs common sense. Common elements in the design of shelters are often successfully integrated by virtue of common sense.

How does one train to get common sense? It's simple, just observe and record your own facilities in different situations of existing spaces. Architecture for that matter has come a long way.

We are fortunate enough today to experience design at a realistic 1:1 scale and often learn things that should not be done from them, as well as recognise the good part of what exists. Feel the space you use and you will be learning to be the user of the space you design. It is common sense that ultimately matters.

How about that other essential called civic sense?

To begin with, you must exercise your abilities to perceive your individual environment as a single human performing a required function in the given space. Thereafter, start expanding your perception in observing group behaviour. That enables the

thought of collective action. It suggests a sort of harmony, a rhythm, a cohesive unit that functions as one 'whole'.

Now, perceive the trend of architectural design prevailing in a large city. Is it in harmony? Is there a collective image of a group? Is it a form or a number of forms trying to outdo one another?

The situation in today's urban environment resembles the latter part of the last question. An architectural project is today site specific to its own needs; it is trying to be different and is downright selfish in terms of design. It lacks civic sense.

For example, in a society where the buildings themselves do not portray a sense of unity (not to be confused with 'similarity'), the urban attitude of anonymity and territoriality cannot be blamed. If the design had been rooted with a sense of discipline in its surroundings– that is by a qualitative enhancement, it would reflect that essential called 'civic sense'.

It is a moral responsibility to abide by the civic sense lest we tend to lose our identity of the settlement as an entity. After all, civic sense in architecture is the significance of good urban design.

If common sense brings you in good stead with the individual user, civic sense puts you in an amicable position with the citizenry. Therefore, by using these design essentials there can only be that good feeling which inculcates a 'goodness' in society.
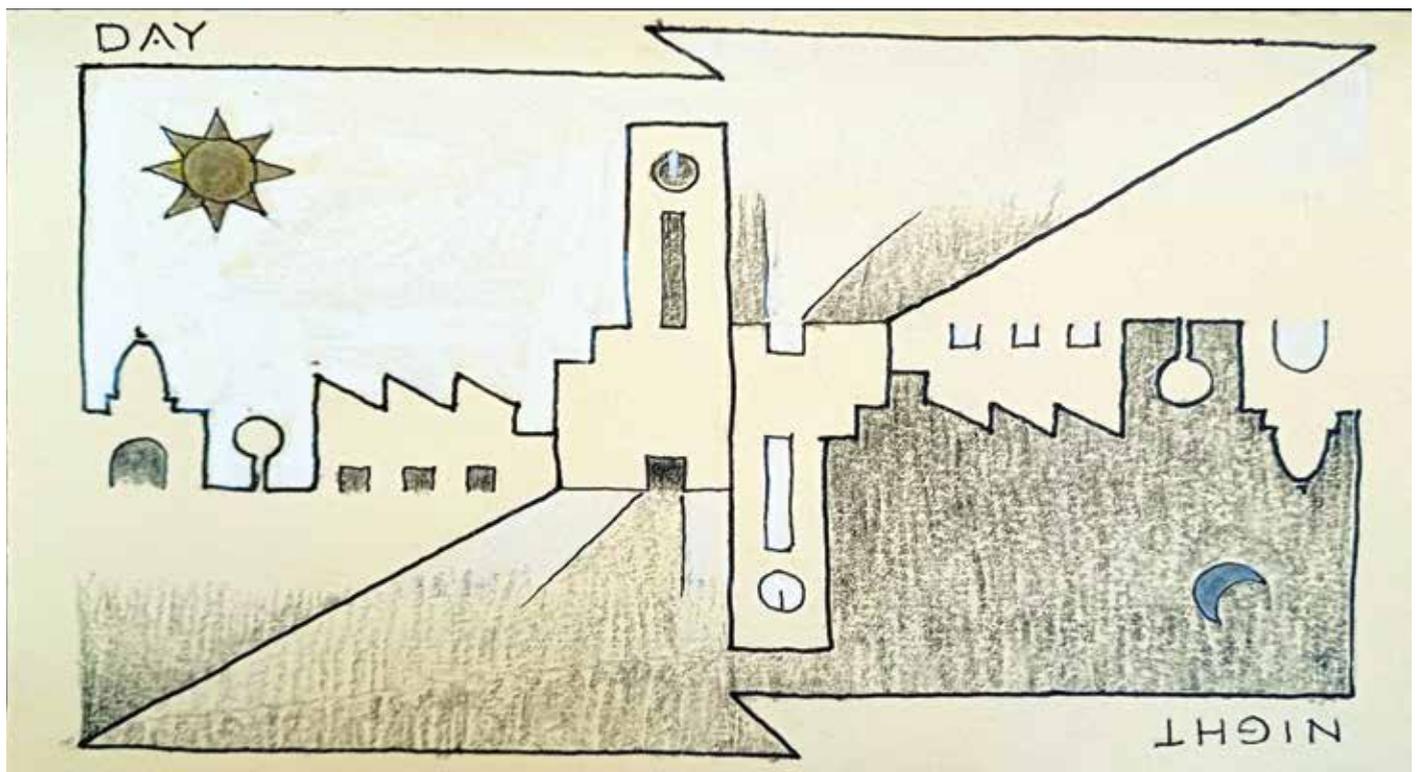
This image shows 'day' and 'night' as inverted skylines, also symbolic of the Earth's rotation in the system. It is done on a postcard, and the inverted drawing makes one turn it around, thereby exercising eye and hand coordination of the reader.
Source: Made by Ar. Harshad Bhatia

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SKETCHES

WATER

By Ar. Shirish Beri

I have always been fascinated by water – by its different moods.

Sometimes it is still and tranquil as in a lake; sometimes gushing and frothing in a stream; mighty and roaring in stormy sea; as navigation and wash medium.
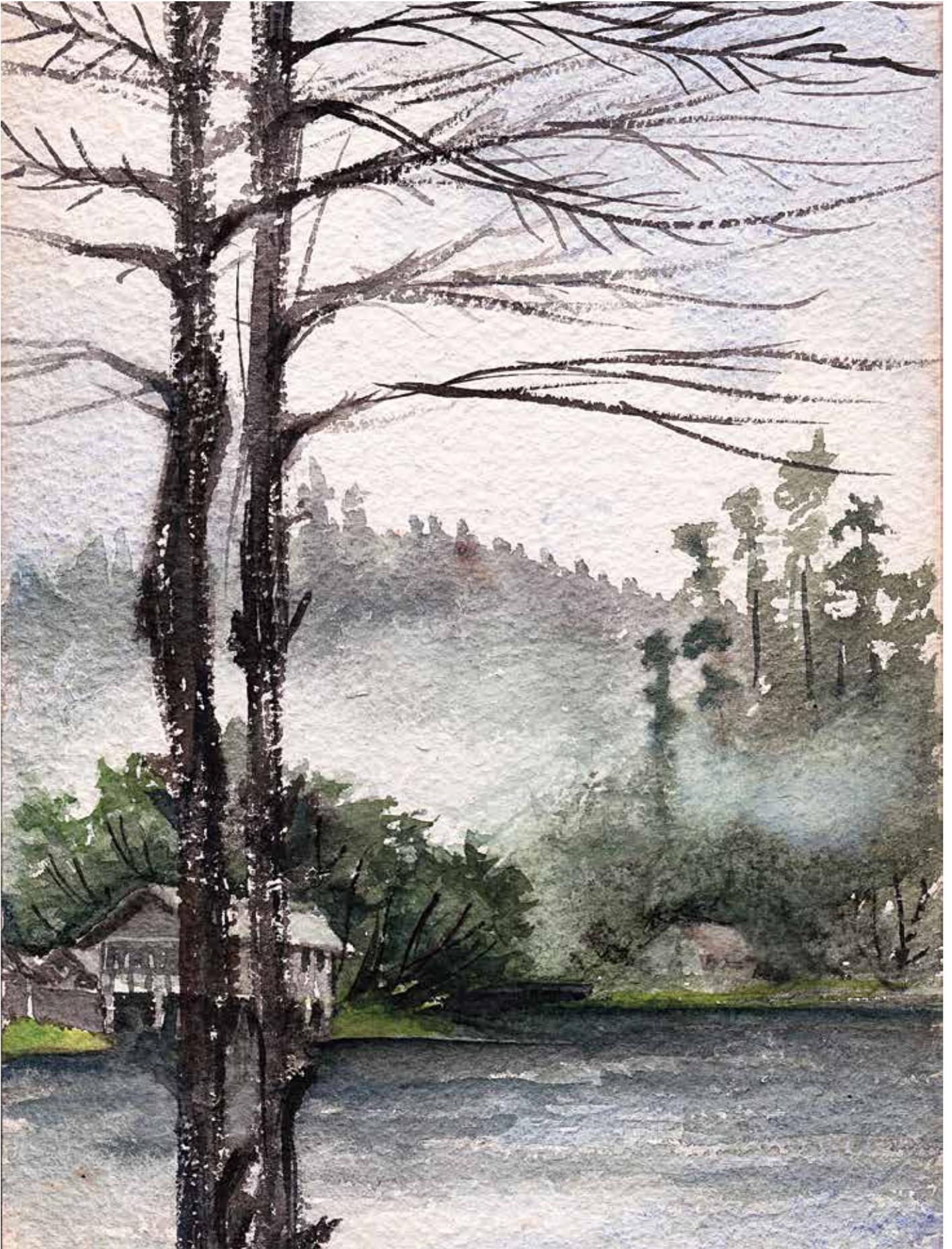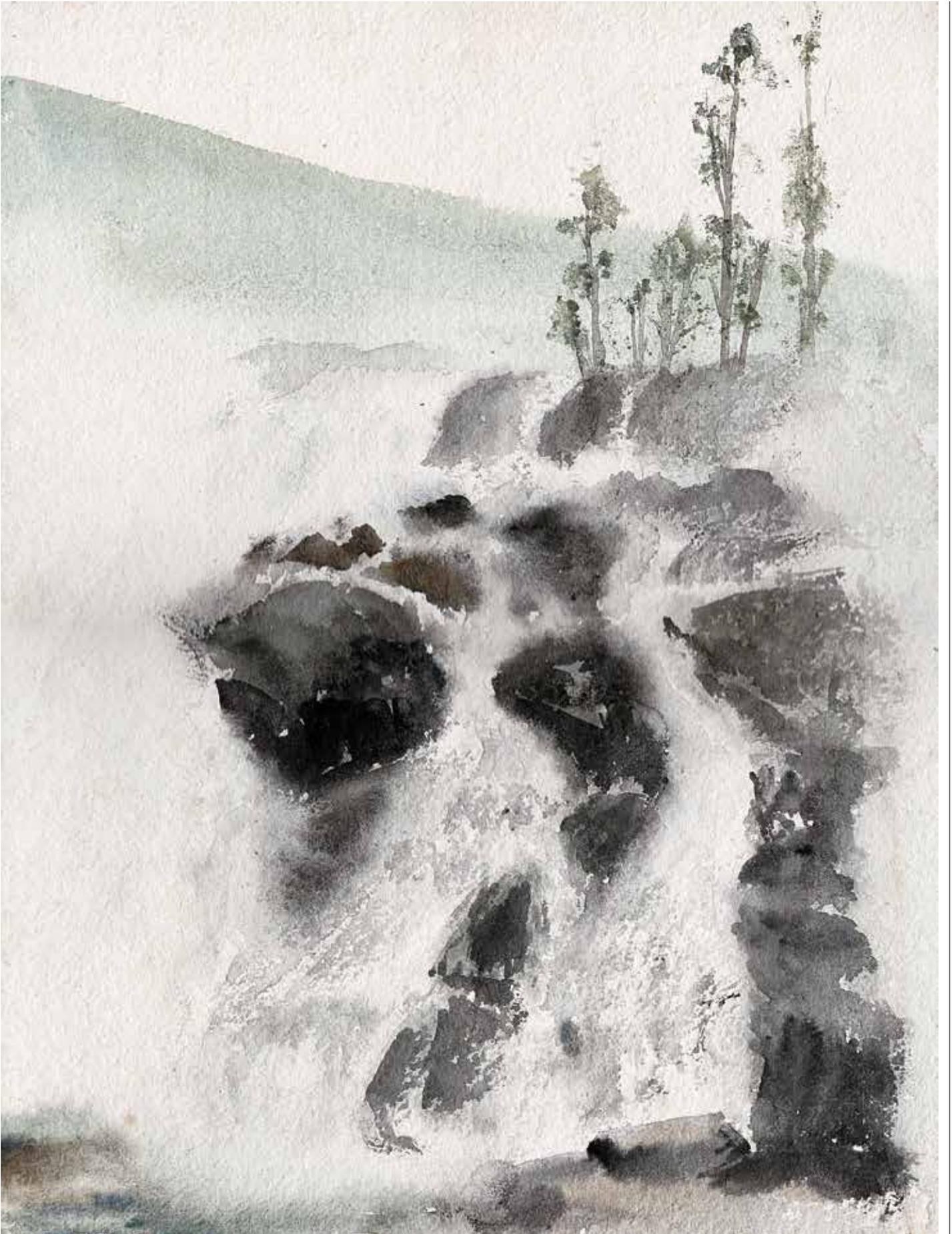
In whatever form, it is our life giver.

Alleppey Beach, Kerala

Storm in the Andaman Sea

Kashmir

Rivulet in Meghalaya

Kodaikanal

Lake District, UK

Stream near Ooty

Stream near Ooty

Ar. Shirish Beri (F11304) has a love of nature, solitude, meditation, philosophy – yoga, photog¬raphy, all arts, writing poetry, painting, films, gardening, farming, deep ecology – with a live experiment of creating a balanced ecosystem at his farm. He is widely travelled to around 40 countries and to remote corners of India.
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PHOTO ESSAY

The Essence of Spiritual Architecture

By Ar. Moksha Bhatia

For thousands of years, people have been captivated by the idea of experiencing a spiritual component of life. As a result, in addition to the early structures they used as shelter, humans have always built structures with greater purpose. The spiritual architecture emphasises a broad sense of being and the five senses. It provides a physical space for worship, sacrifice or simply being present. Its style is distinctive. There is much more work and thought involved in creating an experiential space than just the size of the building. Spaces have a lot to do with emotions and having an essence that impacts people. The most significant ideas that architecture can express are spirituality and sacredness.

As Arthur Erickson said, "Space has always been the spiritual dimension of architecture. It is not the physical statement of the structure so much as what it contains that moves us."

Consequently, spiritual architecture is defined by spaces that give individuals a feeling of aliveness and allow them to feel tranquil.

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Ancient stones and contemporary elegance of Tara Devi Temple

A picture of the tranquillity at the Golden Temple

The intricate craftsmanship of Jatoli Shiv Mandir

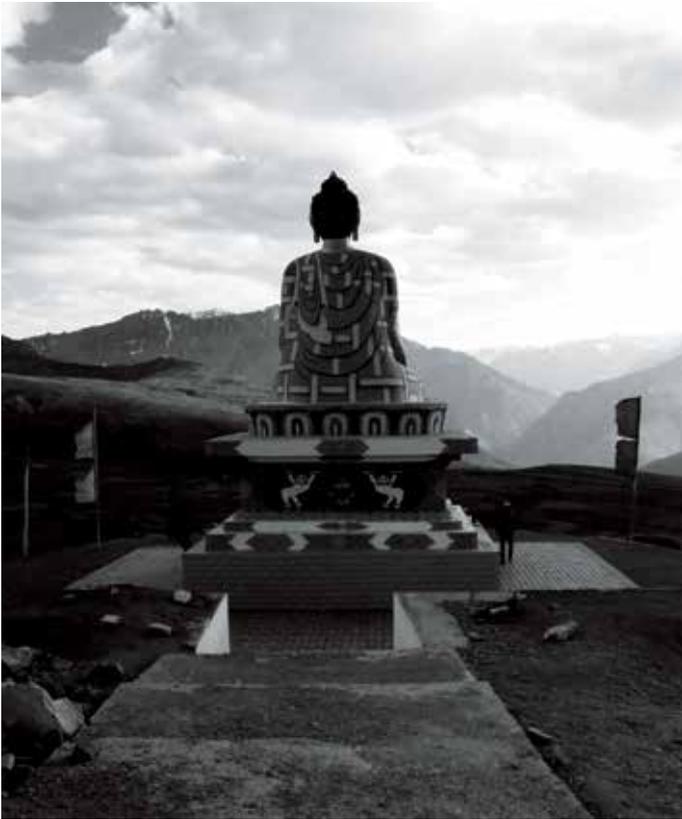Divine architecture of Immaculate Conception Church

St. Ann's Church inspired by faith

Gyuto Monastery, where the peace resides

A journey of discovery at Kunzum Mata Temple with snow-capped mountains behind

Sacred vibes of Langza Buddha Statue

Convent of Santa Monica and The Chapel of The Weeping Cross

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Details of Nagar Koti Shaktipeeth temple

ALL IMAGES COURTESY AUTHOR

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BOOK REVIEW

Umballa to Ambala
A Tale of Twin Cities

Author: Ar. Aradhana Jindal
Reviewer: Ar. Surinder Bahga

ISBN: 978-81987543-8-7

Genre: Coffee Table Book

Language: English

Publisher: Copal Publishing Group

No of pages: 198

Year of publication: 2026

Dimensions: 24.13 x 24.13 x 5.08 cm

Type: Hardcover

Available at https://www.amazon.in/dp/B0GMD5NRVR

Some cities are read in statistics and skylines. Others are felt in the echo of temple bells, in fading cornices, in the dust that settles upon old thresholds. The Coffee Table Book, *Umballa to Ambala: A Tale of Twin Cities* belongs to the latter kind. It does not merely document a city, it listens to it. It gathers whispers across centuries and binds them into a narrative at once visual, historical and deeply human. Ambala emerges not as fixed geography but as a living palimpsest. The story begins in antiquity, where memory outpaces record and the land holds impressions of earlier civilisations. The book through visuals guides the reader across epochs, suggesting
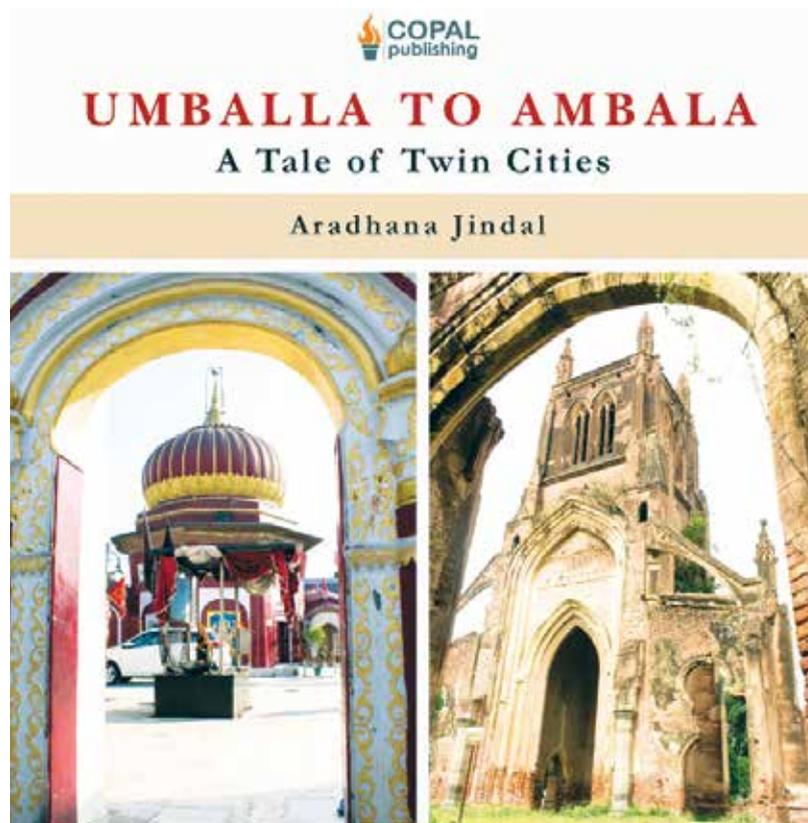
Umballa to Ambala: A Tale of Twin Cities - Book Cover
Source: Author

history is less rupture and more continuum. Each era leaves an imprint - subtle, enduring, transformative.

The arrival of the British and the naming of "Umballa" mark one such imprint. Yet the narrative resists simple conquest. Instead, it reveals how colonial planning reshaped terrain, introducing the measured geometry of the cantonment alongside the organic sprawl of the older city. Archival maps become quiet revelations. In their grids one sees governance, military discipline and the negotiation between imposed design and inherited settlement. Architecture speaks eloquently throughout. The gracious bungalows of the cantonment, with deep verandahs and generous compounds, breathe with climatic wisdom and restraint. Afternoons filtered through slatted shutters seem almost recoverable. In contrast, the havelis of the old city turn inward, enclosing courtyards where light shifts across carved balconies. Their fading ornamentation bears witness to craftsmanship rooted in intimacy and tradition. Some survive with dignity, others yield to time. Yet all remain vessels of memory - repositories of laughter, lineage and layered belonging.

The soul of Ambala, however, is not confined to brick and mortar. The book wanders through lanes attentive to everyday theatre. Food streets pulse with aroma and inheritance; recipes become heirlooms passed across generations. Markets shimmer with exchange - of goods, gossip and memory. Culture here is not curated. It is lived. There is tenderness in the remembrance of vanished cinemas and community halls where collective dreams once flickered. Their absence underlines a central truth - cities change, often restlessly. Yet in recording them, the book grants them afterlife, preserving what urban speed might erase.

Gardens such as 'Raja Ka Talaab' and 'Rani Ka Talaab' unfold like pauses in a long sentence. They are breathing spaces where water meets sky and the city once gathered in leisure. Heritage resides not only in monuments but in shared public realms - those quiet landscapes that nurture community without proclamation. Interwoven with these spaces are stories of individuals - philanthropists and visionaries whose generosity shaped institutions and futures. Their presence affirms that cities grow not solely through policy but through care and conviction. Equally resonant are sacred sites anchoring Ambala's spiritual life. Temples, gurudwaras, churches and shrines appear not as static markers but as living centres of continuity and solace, woven into daily rhythm.

What makes *Umballa to Ambala* compelling is its refusal to indulge nostalgia without awareness. It neither mourns change nor glorifies the past unquestioningly. Instead, it presents evolution as dialogue between old and new, memory and aspiration, loss and renewal. As a coffee table book, it invites browsing; as narrative, it rewards contemplation. One may begin with images and linger in reflection, or enter through history and arrive at intimacy. Either way, the reader departs with a deepened sense of place.

Ultimately, *Umballa to Ambala: A Tale of Twin Cities* reminds us that a city is not merely where we live; it is what lives within us. To trace its story is to trace inheritance itself. In preserving its layered voice through maps, markets, bungalows, havelis, gardens and sacred spaces; the book offers Ambala not only remembrance, but reverence.

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Reviewer

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EVENT REPORT

THE JAIPUR ARCHITECTURE FESTIVAL 2026

A Celebration of Lessons from Vernacular Architecture and Timeless Use of Local Stone

By Ar. Abhishek Jain

The Pink City of Jaipur recently witnessed a landmark convergence of architectural thought and industry engagement as the 6th Edition of the *Jaipur Architecture Festival* (JAF) was successfully held on 6-7 February 2026 at the Jaipur Exhibition and Convention Centre (JECC), Sitapura. Conceived as a dynamic platform for dialogue, the festival was anchored in the dual thematic vision, 'A Celebration of Lessons from Vernacular Architecture and Timeless Use of Local Stone' and 'Stone in the Age of Glass and Steel: Reclaiming Relevance.' Together, these themes formed a foreground for the critical inquiry facing contemporary practice: how can architecture remain deeply contextual- responsive to climate, culture and material heritage while embracing technological innovation in a rapidly transforming world?

Organized by the *Centre for Development of Stones* (CDOS), the festival was held concurrently with *India Stonemart*, one of India's most significant international exhibitions dedicated to the stone industry. Providing academic and professional direction, the IIA Rajasthan Chapter served as the Knowledge Partner. Curated by Ar. Tushar Sogani, Chairman of the IIA Rajasthan Chapter, along with coordinators Ar. Nishta Pandey and Mrs. Juhi Kedia Dhaka, the festival was thoughtfully structured to celebrate architecture, conservation, heritage, urban transformation and the evolving role of stone in contemporary design. The event received strong

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A visit and discussion at the under-construction IIA Rajasthan House of Architects

Ar. Dean D'Cruz sharing insights on architectural practices during the panel.

Curator and IIA Rajasthan Chapter Chairman, Ar. Tushar Sogani, moderating the panel discussion alongside international architects Ar. Rebecca Gurang and Ar. Wu Xiang.

Smt. Diya Kumari-ji, Hon'ble Deputy Chief Minister of Rajasthan gracing the occasion.

institutional backing from the *Rajasthan State Industrial Development and Investment Corporation* (RIICO) as the principal sponsor and *Laghu Udyog Bharati* (LUB) as the co-organiser.

The inaugural session on 6 February combined the formal proceedings with the prestigious *All India Stone Architectural Award*s ceremony, underscoring the socio-cultural significance of the gathering. The session was presided over by Smt. Diya Kumari-ji, Hon'ble Deputy Chief Minister of Rajasthan, with Shri Sanjay Sharma, Hon'ble State Minister (Independent Charge), Forest, Environment and Climate Change, and Science and Technology, Rajasthan, as the Guest of Honour. The ceremonial lighting of the lamp marked the commencement of two days of meaningful exchange. Setting an inspiring intellectual tone, acclaimed architect Dean D'Cruz delivered the keynote address, positioning architecture as a medium of storytelling and collective memory while

emphasizing sustainability, material intelligence and the ethical responsibility of architects toward context and community.

Ar. Tushar Sogani invited the IIA National Council Presidents of ARCASIA country and Chairman Ar. Wu Xiang to visit the upcoming IIA Rajasthan Chapter House of Architects, envisioned as a hub for collaboration and growth.

Day two, 7 February, was dedicated to intensive professional discourse. The *Master Speaks* sessions featured distinguished practitioners Ar. Jitendra Mehta and Ar. Gyanendra Singh Shekhawat, who reflected on their professional journeys and explored themes of adaptive reuse, narrative-driven design and the evolving responsibilities of architects in balancing creativity with social and environmental accountability. Their insights resonated strongly with both established professionals and emerging practitioners.

The international panel for 'Reinventing Local Stone with Modern Construction Technologies' to discuss the fusion of traditional materials and modern engineering.

Friendship dinner event on 6 February 2026

Panelists, reflecting on the collaborative and international spirit of the Jaipur Architecture Festival.

Central to the festival's intellectual engagement were two major panel discussions that examined the intersection of tradition and modernity. The session titled 'Reinventing Local Stone with Modern Construction Technologies', moderated by Ar. Tushar Sogani, explored how indigenous materials can be adapted to meet contemporary engineering standards and sustainability benchmarks. Featuring an international panel comprising Ar. Wu Xiang (China), Ar. Rebecca Gurang (Bhutan), Ar. Ishwar Joshi (Nepal), Ar. Dilumini (Sri Lanka), and Ar. Vilas Avachat (India), the discussion reflected a shared South Asian commitment to contextual and climate-responsive design. Later, 'Stone in the Age of Glass and Steel: Reclaiming Relevance', moderated by Ar. Mukul Goyal and featuring Ar. Amit Sukhthankar (India), Ar. Swarup Gurung (Nepal), Ar. Debatosh Sahu (India), Ar. Sudhir B. Pillai (India), and Ar. Ashish Gupta (India), critically examined the challenges of integrating natural stone within urban landscapes increasingly dominated by industrial materials, proposing instead a synthesis of traditional wisdom and modern innovation.

Recognizing the importance of nurturing future practitioners, JAF 2026 introduced the initiative 'Opportunity for Young Minds', including a Students' Installation Competition where invited architecture colleges reinterpreted India's vernacular principles through contemporary spatial interventions. The initiative was strengthened by the participation of leading institutions such as Poornima University, Manipal University Jaipur, Vivekananda Global University, Amity University Rajasthan, MNIT Jaipur, Banasthali Vidyapith and Aayojan School of Architecture and Design, along with professional bodies including the ISOLA, Rajasthan Chapter, the IIID, Jaipur Regional Chapter, and the WICCI Rajasthan.

The *Jaipur Architecture Festival 2026* ultimately emerged as more than a professional gathering; it was a meaningful confluence of heritage and innovation, graciously embraced and elevated by the timeless warmth and welcoming spirit of Jaipur's renowned hospitality.

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NEW MEMBERS ELECTED AT THE 19TH COUNCIL MEETING OF THE TERM 2023-2025 AT JAIPUR, RAJASTHAN ON 06-02-2026.

Sr. No.	Associate to Fellow	Chapter	Membership Number
1	Ar. Ramesh Kumar V	Tamil Nadu	F13723
2	Ar. Vamsi Krishna Katta	Andhra Pradesh	F20940
3	Ar. Arun Kumar	Jharkhand	F07451
Sr. No.	Direct Fellow	Chapter	Membership Number
1	Ar. Ritika Singh Chauhan	Karnataka	F30713
2	Ar. Rakesh Kumar Singh	Uttar Pradesh	F30714
Sr. No.	Associate Members	Chapter	Membership Number
1	Ar. Shweta Mahant	Uttar Pradesh	A30715
2	Ar. S Ajay Bharath	Tamil Nadu	A30716
3	Ar. Sarthak Dnyanoba Tikone	Maharashtra	A30717
4	Ar. Ataulla Khan	Uttar Pradesh	A30718
5	Ar. Husniya Luba Ks	Kerala	A30719
6	Ar. Sakshi Jain	Madhya Pradesh	A30720
7	Ar. Chandra Kirti Singh	Uttar Pradesh	A30721
8	Ar. Anshika Sharma	Madhya Pradesh	A30722
9	Ar. Shihab A C	Kerala	A30723
10	Ar. Aditya Aryan	Jharkhand	A30724
11	Ar. Priyadarshini K	Tamil Nadu	A30725
12	Ar. Paras Kumar	Haryana	A30726
13	Ar. Omar Khan	Tamil Nadu	A30727
14	Ar. Niranjan Ravikant Bhavar	Maharashtra	A30728
15	Ar. Naveen Prashar	Madhya Pradesh	A30729
16	Ar. Bhavesh Garg	Haryana	A30730
17	Ar. Aiswarya V S	Kerala	A30731
18	Ar. Jigarkumar Rasikbhai Navadiya	Gujarat	A30732
19	Ar. Krishna Kamalkishore Varma	Maharashtra	A30733
20	Ar. Habeeb Mohamed Aslam S	Tamil Nadu	A30734
21	Ar. Sapna Ramdas Varpe	Maharashtra	A30735
22	Ar. Shreya Sen	West Bengal	A30736
23	Ar. Bindu M P	Kerala	A30737
24	Ar. Akshay Balwant Khandagale	Maharashtra	A30738
25	Ar. Saira Izhar	Jammu & Kashmir	A30739
26	Ar. Hrithwik P R	Kerala	A30740
27	Ar. Rahul Soma Londhe	Maharashtra	A30741
28	Ar. Dhanaji Uttam Pawar	Maharashtra	A30742
29	Ar. Nishith Nilesh Kapadia	Gujarat	A30743
30	Ar. Pranjali Pravin Shinde	Maharashtra	A30744

31	Ar. Amit Kamlesh Phokmare	Maharashtra	A30745
32	Ar. Jayant Nagar	Haryana	A30746
33	Ar. Sameer Ravindra Sawant	Maharashtra	A30747
34	Ar. Hitarth Parimal Majithiya	Gujarat	A30748
35	Ar. Vikrant Singh	Uttar Pradesh	A30749
36	Ar. Arindam Ghosh	West Bengal	A30750
37	Ar. Ankit Ajit Bhagat	Maharashtra	A30751
38	Ar. Asha Kiran M R	Karnataka	A30752
39	Ar. Gurjeet Singh	Punjab	A30753
40	Ar. Ridhima Sogani	Rajasthan	A30754

NEW MEMBERS ELECTED AT THE IIA 20TH COUNCIL MEETING OF THE TERM 2023-2025 HELD AT NEW DELHI ON 26-02-2026.

Sr. No.	Associate to Fellow	Chapter	Membership Number
1	Ar. Amshunath R	Kerala	F18067
2	Ar. Mohan Vamsi Sykam	Telengana	F25762
Sr. No.	**Direct Fellow**	**Chapter**	**Membership Number**
1	Ar. Ahmad Miyan	Uttar Pradesh	F30755
2	Ar. Rashmi Dikshit	Northern	F30756
Sr. No.	**Associate Members**	**Chapter**	**Membership Number**
1	Ar. Garima Jaiswal	Uttar Pradesh	A30757
2	Ar. Syed Mohammad Aamir	Uttar Pradesh	A30758
3	Ar. Ujjal Halder	Rajasthan	A30759
4	Ar. Roma Thomas P	Kerala	A30760
5	Ar. Yogeshwar Prasad Sinha	Northern	A30761
6	Ar. Aysha Latheef	Kerala	A30762
7	Ar. Mayank Kumar	Uttar Pradesh	A30763
8	Ar. Amit Ashok Chaubal	Maharashtra	A30764
9	Ar. Manojkumar Rameshbhai Patel	Gujarat	A30765
10	Ar. Siddhesh Nitin Neha Patil	Maharashtra	A30766
11	Ar. Chaitanya Hemant Rutuja Lele	Maharashtra	A30767
12	Ar. Joydip Bar	West Bengal	A30768
13	Ar. Niraj Paresh Doshi	Maharashtra	A30769
14	Ar. Ankur Srivastava	Karnataka	A30770
15	Ar. Rahul Chandrakant Shrikhande	Maharashtra	A30771
16	Ar. Zaba P	Kerala	A30772
17	Ar. Om Vinod Merchant	Maharashtra	A30773

NEWSLETTER FEBRUARY

IIA MAHARASHTRA CHAPTER

IIA Pune Centre

The IIA Pune Centre hosted a grand celebration *Celebrating Excellence* on 11 February 2026 at Bougainvillea Farms, Pune. The prestigious event brought together nearly 450 architects, professionals and academicians for an evening dedicated to honouring outstanding contributions to the architectural profession and academia. On this special occasion, IIA Pune Centre conferred the *IIA S.K. Belvalkar Awards for Excellence in the Profession* upon distinguished senior professionals - Ar. Ramchandra Gohad, Ar. Narendra Dengle, and Ar. V.V. Badawe, recognizing their remarkable contributions to the field of architecture.

In recognition of exemplary contribution to education, Dr. Anurag Kashyap was felicitated with *the IIA S.J. Contracts Lifetime Award for Excellence in Academia*. Furthermore, celebrating academic distinction, the *IIA S.J. Contracts Awards for Excellence in Teaching* were presented to Dr. Asmita Joshi, Dr. Ashwini Pethe, and Prof. Vinish Desai for their dedication and impactful role in shaping future architects.

IIA Pune Centre also felicitated the players who represented the IIA Maharashtra Chapter at IIAPL 15, Kochi, where they achieved remarkable success by winning in various sports categories, showcasing excellence beyond professional practice and strengthening inter-Chapter camaraderie.

The Chief Guest for the evening was Shri. Amitesh Kumar (IPS), Honourable Police Commissioner of Pune City.

During a panel discussion with Ar. Vikas Achalkar (Chairperson, IIA Pune Centre), Ar. Shitesh Agarwal (Vice-Chairperson, IIA Pune Centre), and Ar. Sandeep Mahajan, the Chief Guest, Shri Amitesh Kumar addressed the attendees, offering valuable insights and guidance on legal frameworks and professional responsibilities relevant to the architectural fraternity.

The evening concluded with the unveiling of the *IIA Box Cricket Season 3 Trophy*, marking yet another milestone in fostering camaraderie, teamwork and sportsmanship within the architectural community.

Celebrating Excellence
(L to R) Mr. Saurabh Jangle of SJ Contracts, Ar. Vikas Achalkar, Chairman IIA Pune Centre, Chief Guest Hon. Amitesh Kumar, Ar. Ramchandra Gohad, Ar. V.V. Badawe, Ar. Narendra Dengle, Mr. Sameer Belvalkar of S.K. Belvalkar and Ar. Shitesh Agrawal, Vice-Chairman, IIA Pune Centre

The *Celebrating Excellence* event stood as a testament to IIA Pune Centre's continued commitment to recognizing professional achievement, academic leadership and community engagement within the architectural ecosystem. Continuing the spirit of engagement beyond professional practice, IIA Pune Centre organized the *IIA Box Cricket Season 3* Tournament at Runbhumi, Balewadi, Pune, on 14-15 February 2026. The two-day event witnessed enthusiastic participation from 24 architectural office teams, with around 260 players competing in a highly professional and spirited manner. After an exciting tournament filled with competitive matches and exemplary sportsmanship, Team MKM Mavericks, led by Principal Architect Ar. Karan Maluste, clinched the Season 3 title. Team Arconics, led by Principal Architects Ar. Jinesh Dhumavat and Ar. Shekhar Nahar, emerged as the runners-up.

The successful execution of both, the awards ceremony and the cricket tournament, reinforced IIA Pune Centre's dedication not only to professional excellence and academic distinction but also to fostering unity, collaboration and a vibrant community spirit among architects.

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B	INSIDE COVER (2 PAGES, FULL SPREAD)	NIL	9,00,000	15,00,000	24,00,000
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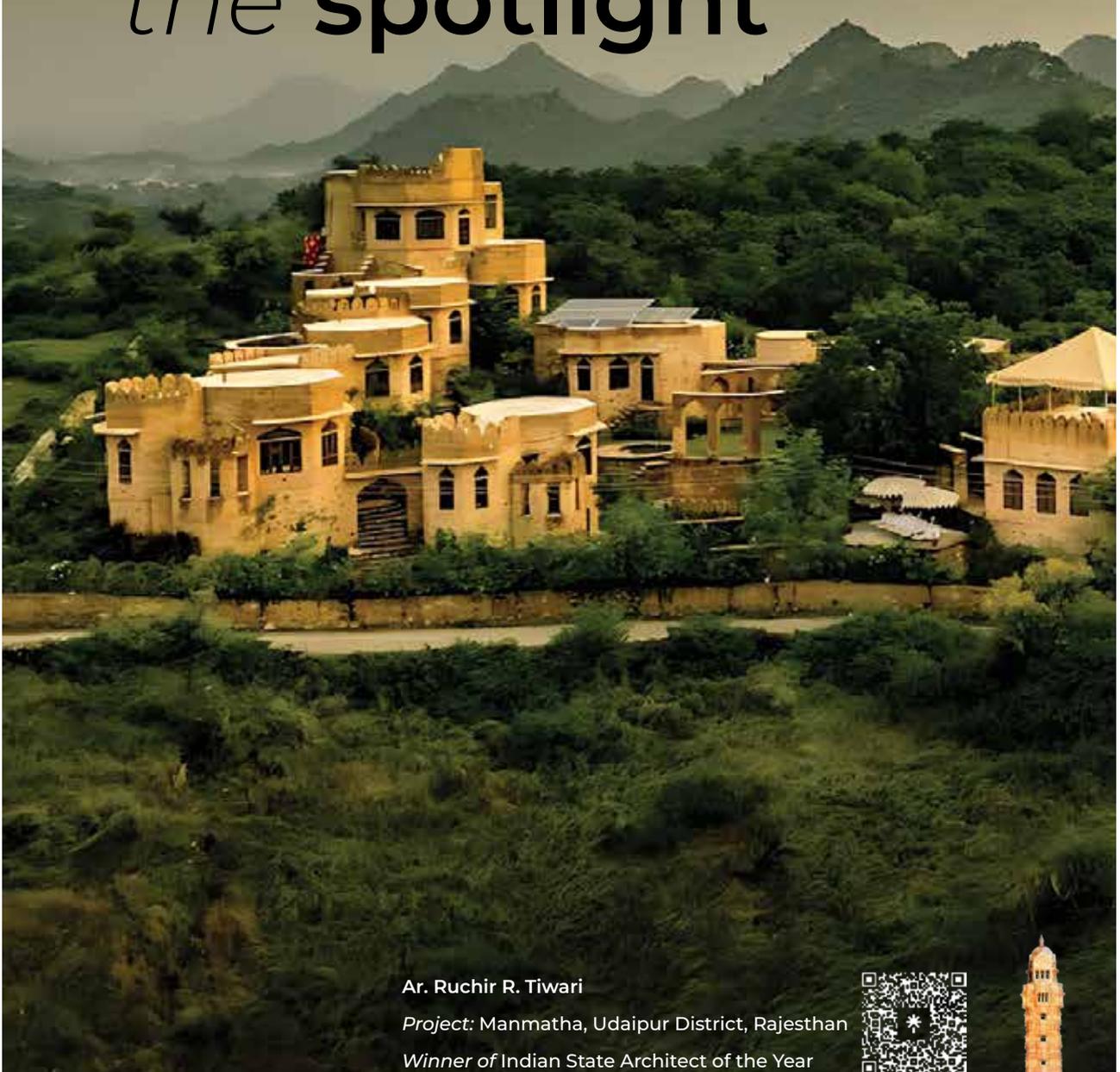IIACAD is an affordable, cost effective and perpetual CAD solution

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