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CONTENTS

07

PRESIDENT'S MESSAGE

08

EDITOR'S NOTE

09

COVER THEME

WHERE WATER, GEOMETRY AND MEMORY SPIRAL
TOGETHER : An artistic interpretation of the Walur Helical
Stepwell, Maharashtra

Ar. Nikita Mahale Sakpal

10

JIIA CALL FOR
PAPERS, ARTICLES,
PROJECTS

11

RESEARCH PAPER

**Shading Strategies for Outdoor
Thermal Comfort in Urban Plazas**

Ar. Apoorva Bhargava

Dr. Archana Singh Rathore

22

STUDENT WORK

**Beyond Façades : Preserving Spirit in
Contemporary World**

Janhavi Dudhane

Dr. Vaishali Prasad Latkar

28

ARTICLE

**Historical Architecture Against Time and
Neglect : Documenting Azam Khan Ni Sarai**

Ar. Surbhi Sharma

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33

ARTICLE

**Architects at the Crossroads
: Protecting the Identity and
Future of the Profession in
India**

Ar. Rajesh Nagula

48

ESSAY

**From Blueprint to Frame :
Notes on Architecture, Cinema,
and the Spaces Between**

Ar. Rahul Saxena

36

ARTICLE

**Thinking beyond the Site for
Sustainable Architecture**

Ar. M Pratap Rao

53

BOOK REVIEW

**Sustainable Rural Development
and Agriculture**

Author: Ar. Ashok Kumar Jain

Reviewer: Ar. J.D.S. Sodhi

40

ARTICLE

**Did Mumbai Architects and
Developers of the 1970s
and 1980s : Design the Most
Affordable Apartment Plans?**

Ar. Dhanush Vayalambron

55

NEWSLETTER JULY

43

DESIGN PROJECT

The Heritage Haven

Ar. Syed Mohammad Wasil

Ar. Syed Ather Qayoom



Dr. Abhijit Natu



Dr. Parag Narkhede

Dr. Abir
Bandyopadhyay

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www.indianinstituteofarchitects.com

Editor Ar. Vinit Ramkrishna Mirkar

601, Ratnagar Chs, Jaiprakash Road, Four Bungalow,
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Maharashtra - 400053.

vmirkar@gmail.com

Advisors : Ar. Mukul Goyal

Printer's Email

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Dear Members,

It is a pleasure to share this edition of the *Journal of The Indian Institute of Architects* with you. As the Institute moves into a new phase, I look back with gratitude at the journey we have undertaken together and at the collective efforts that have strengthened IIA and our profession.

The coming months are particularly significant for IIA, with the **23rd ARCASIA Forum**, scheduled to be held from 8th to 12th September 2026, and the **UIA International Forum in Mumbai**, themed “*Urban Regeneration – Reimagining Cities for Future Generations*” scheduled to be held from 23rd to 28th September 2027 in Mumbai. These important international platforms will provide valuable opportunities for Indian architects to engage with the regional and global architectural community, while strengthening IIA’s international presence and fostering meaningful exchange of knowledge and ideas.

With the **IIA Elections for the term 2026–2028 now announced**, I encourage all eligible members to participate actively and responsibly in the democratic process. Elections are an important opportunity for members to contribute to and shape the future direction of our Institute. I wish best of luck to all the candidates participating in the election.

As my tenure approaches its conclusion, I sincerely thank all our members, Chapters, Centres, office bearers and committees for their continued support and cooperation. It has been a privilege to serve the Institute and the architectural profession.

I am confident that, with our collective commitment and unity, IIA will continue to grow and serve the profession with strength and purpose.

With warm regards,

Ar. Vilas Avachat

President

The Indian Institute of Architects

EDITOR'S NOTE

A TERM OF VISION, ENGAGEMENT AND ACHIEVEMENT

Building Momentum. Inspiring the Future.

Greeting to all IIA Members..!

As we present the July 2026 issue of *JIIA*, we reflect with pride on a remarkable term of the Indian Institute of Architects (IIA) 2023–26. It has been a period defined by renewed purpose, collective energy and an unwavering commitment to strengthening the architectural profession and its larger role in society.

Across the National, Chapters and Centres, the term witnessed an impressive range of activities—seminars, exhibitions, lectures, outreach initiatives and professional programmes—creating meaningful opportunities for dialogue and exchange. The participation of elected representatives through National Council, Chapter and Centre meetings strengthened institutional engagement and enabled diverse voices from across the country to contribute to the functioning and direction of the Institute.

The National flagship programmes further enriched this journey. **NATCON** provided an important platform for dialogue on contemporary practice and emerging challenges. **IIAPL** brought together the fraternity through sport, camaraderie and fellowship. **Anveshan – the IIA Research Conference** strengthened the culture of inquiry and knowledge-sharing within the profession. **PINKPRINT** amplified the achievements, experiences and leadership of women architects. The **IIA National Awards** continued to celebrate excellence and inspire the profession through exemplary architectural work. Together, these initiatives created platforms not merely for events, but for conversations, collaborations and a stronger professional community.

The outreach of IIA has also expanded significantly during this term. Its engagement with architects, students, allied professionals, institutions and policymakers has brought the voice of the profession more prominently into conversations concerning cities, sustainability, housing, heritage, infrastructure and the future of the built environment. This widening engagement is perhaps one of the most meaningful achievements of the term.

The crowning achievement, however, is undoubtedly India's successful bid to host two significant international architectural gatherings—the **ARCASIA Forum in September 2026** and the **UIA World Congress of Architects in November 2027**. These landmark opportunities place India and its architectural fraternity firmly on the international stage. They are also a testament to the vision, persistence and collective effort that have characterised this term.

Our heartfelt appreciation goes to our President, Ar. Vilas Avachat, for envisioning this journey and providing decisive leadership; to Vice President Ar. Jitendra Mehta, for his steadfast guidance and institutional support; and to Junior Vice President Ar. Tushar Sogani, for his energy, dynamism and

tireless outreach. Equally deserving of recognition are all the Office Bearers, National Council members, Chapter and Centre teams, committee members and volunteers who worked together with a consistently positive approach to turn aspirations into achievements.

An institution, however, is ultimately strengthened by its members. To the IIA fraternity, your participation, trust and support have been the foundation of this successful term. We hope that you feel represented, engaged and served through the initiatives undertaken during these three years. As one term concludes, we look forward with optimism to a new chapter—one that can build upon this momentum and take IIA to even greater heights.

Elections are an important expression of our collective democratic responsibility. We therefore urge every eligible IIA member to exercise their right to vote and thoughtfully choose the team that will lead the Institute in the coming term. The future of IIA rests not only with those who are elected, but with the collective choices and aspirations of its entire membership.

The next chapter of IIA awaits us. Let us enter it with confidence, unity and a renewed commitment to architecture and society.

The journey continues. The opportunity is immense. And the future is ours to shape it together.

Ar. Vinit Mirkar

Editor

Journal of the Indian Institute of Architects (JIIA)



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COVER THEME

WHERE WATER, GEOMETRY AND MEMORY SPIRAL TOGETHER

An artistic interpretation of the Walur Helical Stepwell, Maharashtra



The cover artwork is an abstract interpretation of the Walur Helical Stepwell in Maharashtra, an unusual expression of Indian water architecture where geometry, movement and water converge. Rather than depicting the stepwell literally, the composition captures its spatial experience- the sensation of descending, turning and moving towards the depth of water.

The artwork is structured through concentric and overlapping curves derived from the helical organisation of the stepwell. Circular bands suggest the movement of the stairways, while repeated steps establish a rhythmic pattern that draws the eye inward. The gradual contraction of the geometry creates a transition from the surface towards the enclosed depth of the well.

At the centre, the dark void becomes the anchor. It evokes the presence of water and transforms emptiness into a space of mystery, memory and possibility. Around this void, fragments appear to revolve, suggesting how the structure is organised around water.

The fragmentation of planes and shifting perspectives dissolves boundaries between plan, section and elevation. Stairways appear to cross surfaces, arches emerge and walls fold into one another. The viewer encounters the stepwell as architecture, landscape and abstraction.

The palette of ochre, sandstone, charcoal and muted grey recalls masonry, exposed earth and the Deccan landscape. Textured surfaces evoke age and material memory, while geometric forms offer a contemporary interpretation of a spatial system. The spiral becomes a metaphor for time and memory; each ring represents layers of construction, use, weathering and remembrance.

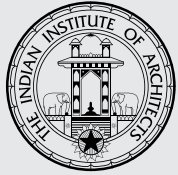
The artwork explores the stepwell not merely as a means of accessing water, but as spatial memory embedded within the landscape. It celebrates an architectural intelligence where necessity generated geometry, geometry generated experience, and water became the centre around which space and community evolved.

The spiral leads inward—not simply towards water, but towards memory, depth and the intelligence of place.



Ar. Nikita Mahale Sakpal is Assistant Professor at Rachana Sansad's Academy of Architecture (IIA-IM-003) where she graduated from. She holds an M.Arch. in Landscape Architecture from Vivekanand Education Society. She is a landscape architect, educator and co-founder of Dhirty Hands, exploring intersections of landscape, ecology, architecture and sustainable practices through design, teaching and community engagement.

Email: nikitamahale@aoamumbai.in



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

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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

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- (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

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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

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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 : jiiacomment@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.

Shading Strategies for Outdoor Thermal Comfort in Urban Plazas

By Ar. Apoorva Bhargava and Dr. Archana Singh Rathore

ABSTRACT

This study examines the complex relationship between shading techniques and outdoor thermal comfort in urban plazas, addressing the urgent challenges posed by urban heat islands and rising temperatures. Thermal comfort is assessed using indices such as the Universal Thermal Climate Index (UTCI) and Apparent Temperature, which integrate meteorological parameters such as air temperature, wind speed and specific humidity. To examine the effects of shading comprehensively, a 50 m × 50 m urban plaza model was simulated using Rhino and Ladybug, considering dynamic factors and localised microclimatic conditions. The results demonstrate the complex interaction between shading design and thermal comfort, showing that well-designed shading strategies can significantly improve outdoor thermal conditions and the liveability of public spaces. By bridging the gap between theoretical knowledge and practical application, the study provides architects and urban planners with useful design insights for creating sustainable, people-centred and climate-resilient urban environments. Ultimately, this study contributes to urban planning approaches that prioritise comfort and resilience in rapidly warming cities.

KEYWORDS: Outdoor Thermal Comfort, Shading Strategies, Urban Plazas, Urban Microclimate, Universal Thermal Climate Index (UTCI)

1. INTRODUCTION

Museums and cultural centres are examples of public spaces that provide semi-outdoor and outdoor areas for a variety of activities in addition to indoor spaces. Thermal comfort, which ASHRAE defines

as the condition of satisfaction with the thermal environment, is essential for both physical and social well-being. This study examines the relationship between urban plaza design and thermal comfort, with particular emphasis on how geometric layouts influence shading and visitor experience.

Urban public spaces serve as important transitional areas that support leisure, social interaction and engagement with outdoor displays. However, thermal comfort has become a critical urban design concern due to urban heat islands and extreme weather conditions. In addition to encouraging social interaction and outdoor recreation, shaded plazas contribute to environmental resilience. This study investigates how the geometric layouts of plazas influence shading and thermal comfort, thereby contributing to the creation of more hospitable public spaces.

The objectives are to review the existing literature on urban plaza design and thermal comfort, analyse the impact of shade distribution on outdoor thermal comfort by comparing temperature variations across different plaza designs, examine how different plaza geometries influence shade distribution and thermal conditions and propose design guidelines for improving thermal comfort in outdoor plazas. These objectives are derived from existing studies on urban microclimates and shading strategies, which highlight the role of spatial configuration in influencing outdoor thermal conditions.

The research question guiding this study is: Does the geometry of an urban plaza influence outdoor thermal comfort? The hypothesis proposes that the appropriate design of urban plaza geometry

significantly enhances shading and consequently improves outdoor thermal comfort. By examining the size, scale, orientation and height-to-width ratios of urban plazas in relation to shading and thermal comfort, this study addresses a gap in the literature by applying microclimatic tools from a human-centred perspective. Using Jaipur as a case study representing a composite climate, the findings are intended to inform sustainable urban design practices.

This study examines outdoor areas of up to 2,500 square metres in Jaipur, with a particular focus on plazas within cultural institutions. It considers conditions during June between 8:00 am and 6:00 pm, excluding indoor areas and service zones. The study is limited to outdoor spaces and does not consider personal factors affecting thermal comfort, such as clothing, metabolic rate or health conditions.

To provide practical insights for designing thermally comfortable urban plazas that balance functionality and aesthetics, the study employs a literature review, field measurements, digital simulations and data analysis.

2. LITERATURE REVIEW

The concept of outdoor thermal comfort is dynamic and context-specific, influenced by a range of spatial and environmental factors. To establish a foundation for further empirical research, this chapter reviews the existing body of knowledge on the primary factors affecting outdoor thermal comfort, with particular emphasis on spatial configuration. Understanding these factors is essential for designing urban spaces that support user satisfaction, comfort and well-being.

According to Chen and Ng (2012, pp. 118–125), outdoor spaces are essential to the vibrancy and liveability of cities. The ways in which people use and occupy these spaces are strongly influenced by local microclimatic conditions.

The thermal environment is shaped by several factors within the built environment, including anthropogenic heat (Robitu et al., 2006, pp. 435–447), ground-surface materials (Johansson, 2006, pp. 1326–1338), plant evapotranspiration (Ali-Toudert & Mayer, 2006, pp. 94–108) and shading provided by trees and built structures. Shading plays a particularly important role because it reduces exposure to direct solar radiation. Previous studies have assessed shading through variables such as street orientation, height-to-width ratios (H/W) (Giridharan et al., 2005, pp. 1583–1595; Dimoudi & Nikolopoulou, 2003, pp. 69–76; Nikolopoulou & Lykoudis, 2006, pp. 1455–

1470) and sky view factor (SVF) (Gulyás et al., 2006, pp. 1713–1722; Brager & de Dear, 1998, pp. 83–96; Thorsson et al., 2007, pp. 1983–1993).

Behavioural research also highlights the critical role of shade in outdoor environments. For example, Lin et al. (2007, pp. 213–221) found that 93% of visitors to a public square in Taiwan preferred to remain in shaded areas during summer. Outdoor spaces generally experience the highest levels of pedestrian activity when thermal conditions fall within users' comfort ranges. This indicates that the thermal environment is a major factor influencing the use of public spaces. However, the extent to which thermal comfort affects space use varies according to regional climatic conditions and users' specific thermal preferences.

2.1 Existing Studies on Spatial Configuration and Outdoor Thermal Comfort

As comfort is based partly on human sensation and perception, both qualitative and quantitative approaches have been used to assess outdoor thermal comfort.

Qualitative Approaches

Gehl (1971, p. 45) examined the influence of microclimatic conditions by counting the number of people occupying shaded and sunlit areas. He concluded that local solar conditions strongly influenced people's decisions about whether to remain in a particular space. Similarly, Whyte (1980, p. 19) used time-lapse photography to observe how people used public spaces and found that shading significantly influenced patterns of occupancy and activity. Both studies adopted a behavioural perspective and relied on direct observation and relatively simple measurement methods.

Quantitative Approaches

Advances in technology and analytical methods have encouraged the development of quantitative studies and indices for measuring thermal comfort. One widely used steady-state indicator is the Predicted Mean Vote (PMV) index (Fanger, 1982, p. 3). PMV is commonly interpreted alongside the Predicted Percentage of Dissatisfied (PPD), which estimates the proportion of people likely to experience thermal discomfort.

Other thermal indices include Physiological Equivalent Temperature (PET), the Index of Thermal Stress (ITS) and Outdoor Standard Effective Temperature (OUT-SET). These indices have been used to assess human thermal responses to local climatic conditions. However, many steady-state indices do

not adequately account for people's physiological, psychological and behavioural adaptation to outdoor environments.

The Universal Thermal Climate Index (UTCI) is highly sensitive to climatic conditions and their effects on the human body. Even small variations in air temperature, solar radiation, wind speed and humidity can produce noticeable changes in UTCI values. This sensitivity makes UTCI particularly useful for assessing outdoor thermal conditions.

2.2 Research Approach and Application

Understanding the interaction between environmental conditions and urban geometry is essential for designing viable and comfortable outdoor spaces in rapidly developing cities. This study adopts a comprehensive approach that integrates urban form and environmental variables to assess and improve outdoor thermal comfort. By connecting theoretical understanding with practical applications, the study supports evidence-based strategies for creating liveable and climate-resilient urban environments.

Despite the valuable insights provided by previous studies, many proposed design improvements face difficulties during practical implementation and their long-term effectiveness has not yet been adequately established. The UTCI provides an effective method for assessing outdoor thermal comfort because it offers relatively clear calculations and interpretable categories of human responses to weather conditions. Nevertheless, a gap remains between quantitative thermal-comfort assessments and actionable design interventions. Many existing recommendations are difficult to implement within actual urban projects or have not been evaluated over extended periods. This study therefore seeks to connect microclimatic analysis with practical spatial and shading strategies that can be applied to the design of urban plazas.

3. METHODOLOGY

This study investigates the impact of urban plaza geometry on outdoor thermal comfort using a combination of field measurements and digital simulations. It examines temperature variations in open spaces, tree-shaded areas and building-shaded areas and uses simulation models to validate the field observations. Different urban geometry scenarios are also investigated to identify suitable configurations for improving thermal comfort and shade distribution. These scenarios include variations in aspect ratio, enclosure, orientation, building height and tree placement.

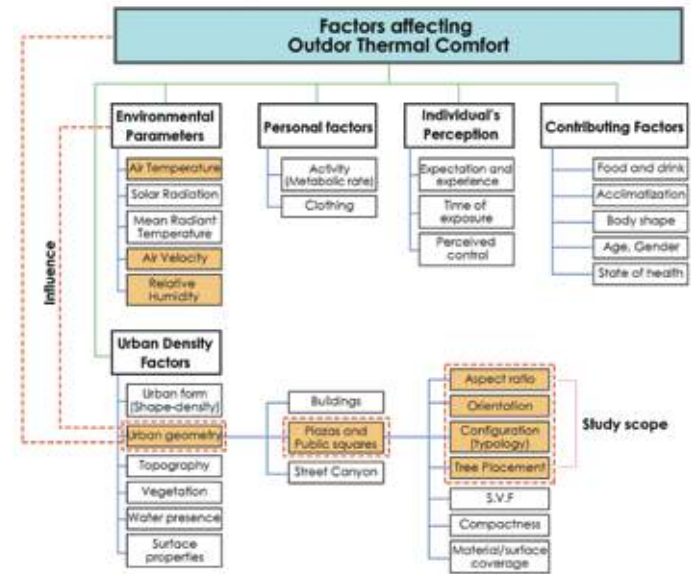


Figure 1: Factors Affecting Outdoor thermal comfort
Source: Author

3.1 Field Measurements at the Selected Sites

Field measurements are a critical component of this research because they provide practical insights into the complex dynamics of outdoor thermal comfort. The study focuses on urban plazas with different environmental conditions, including open spaces, tree-shaded areas and building-shaded areas.

Two locations in Jaipur, Jawahar Kala Kendra and Regional Science Park, were surveyed with an emphasis on outdoor thermal comfort. Air temperature, wind speed and relative humidity were measured using a five-in-one anemometer in three different settings: open space, building shade and tree shade. These measurements were used to calculate Apparent Temperature. The method aimed to understand how variations in thermal conditions, urban plaza geometry and natural features influence outdoor comfort.

Site Selection: Jawahar Kala Kendra and Regional Science Park in Jaipur were selected because of their diverse environmental and spatial characteristics.

Measurement Instruments: On-site data were collected using temperature sensors, an anemometer to measure wind speed and a hygrometer to measure relative humidity.

Data Collection Points: Specific locations within each plaza were selected for measurement:

- Open spaces
- Tree-shaded areas
- Building-shaded areas

Data Collection Period: Measurements and observations were conducted between 8:00 am and 6:00 pm during the selected study period.

Data Analysis: Data collected from the three designated spatial conditions were analysed to identify variations in thermal comfort.

3.1.1 Site Study A: Jawahar Kala Kendra, Jaipur
Jawahar Kala Kendra (JKK) contains a variety of spaces, including courtyards, outdoor plazas, indoor galleries and open-air theatres. This spatial diversity makes it possible to examine different thermal conditions and

microclimates within a single complex.
Field measurements were conducted in selected plazas within the Jawahar Kala Kendra complex to evaluate outdoor thermal comfort. Key meteorological parameters, including air temperature, wind speed and relative humidity, were recorded using a five-in-one anemometer. Apparent Temperature was then calculated, compared and visually represented for three spatial conditions: open space, building shade and shade beneath tree canopies.

Thermal index used: Apparent Temperature

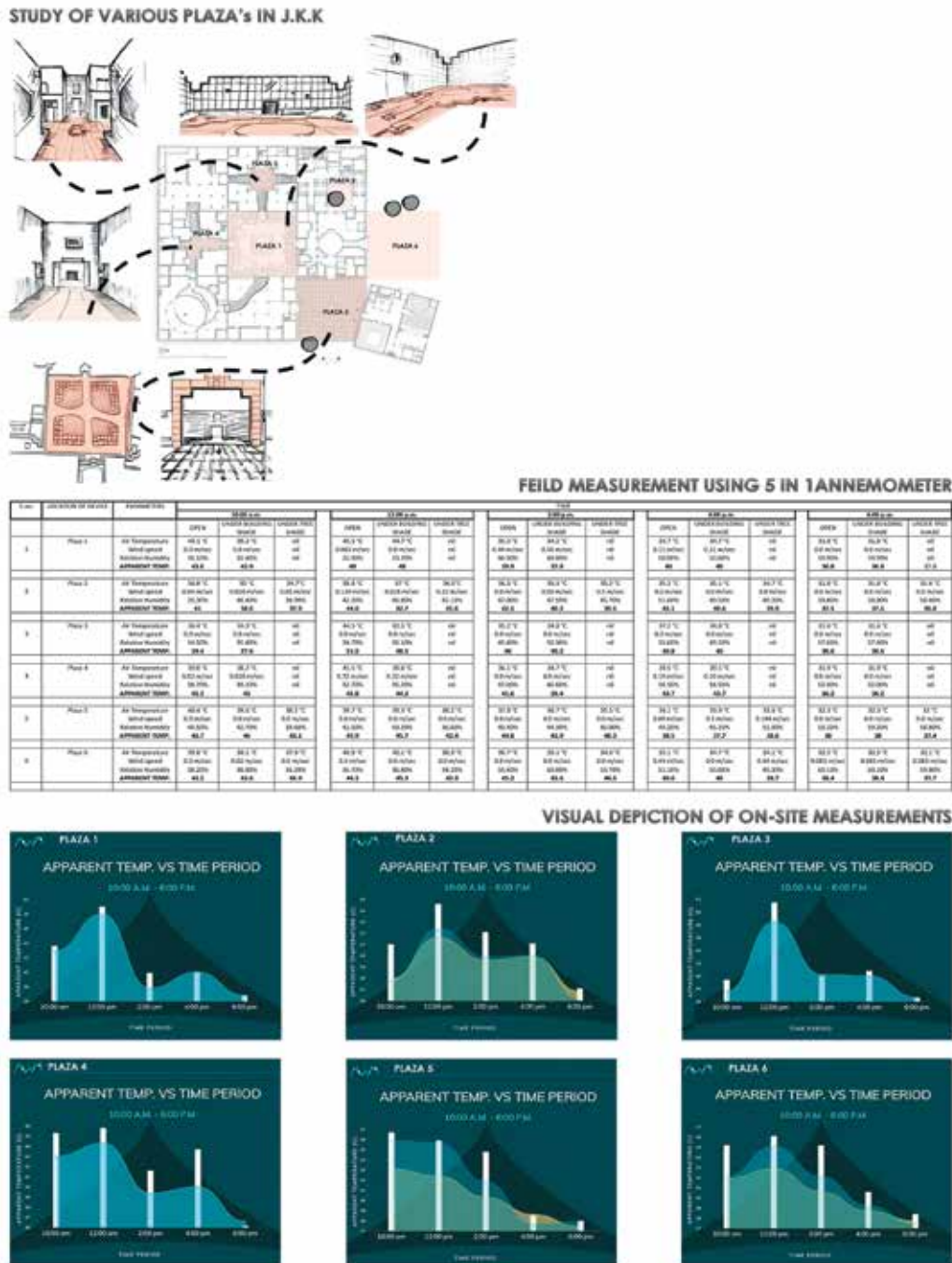


Figure 2: Illustration of selected plazas at Jawahar Kala Kendra, on-site thermal comfort assessment using a 5-in-1 anemometer and visual representation of measured thermal conditions.
Source: Author; Plaza illustration adapted from Abhyasgram: Urban Knowledge Village (Aayojan School of Architecture Students, 2021).

3.1.2 Site Study B: Regional Science Park, Jaipur

Regional Science Park contains interactive installations, scientific exhibits, open plazas and outdoor display areas. These spaces provide an opportunity to examine how outdoor thermal

conditions influence visitor engagement and learning experiences. The variety of spatial settings also supports the study of different microclimates and their effects on user comfort.

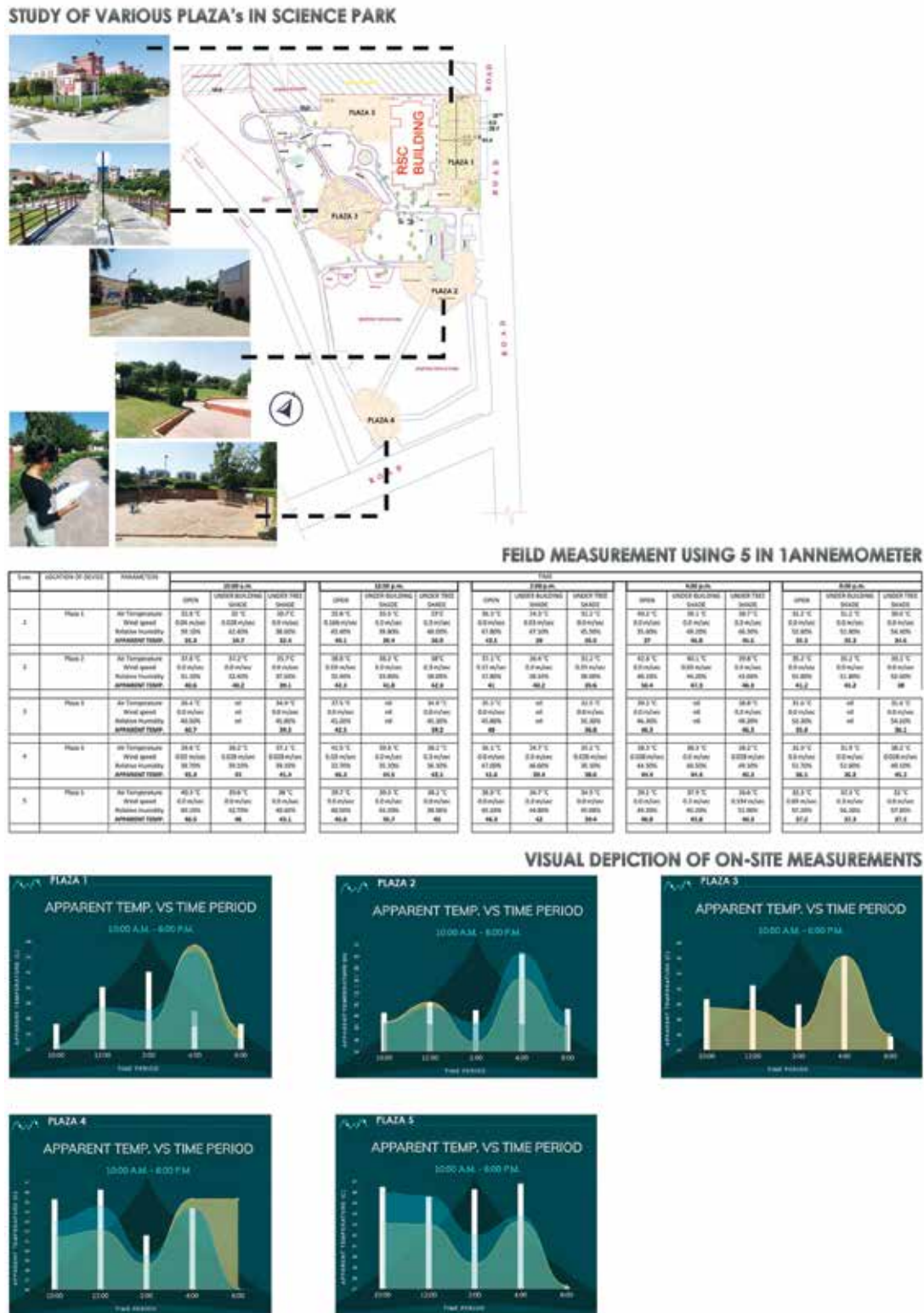


Figure 3: Illustration of selected plazas at Regional Science Park, on-site thermal comfort assessment using a 5-in-1 anemometer, and visual representation of measured thermal conditions.

Source: Author

On-site observations revealed the following:

- **Insufficient shaded seating:** A lack of shaded seating made the outdoor spaces uncomfortable for visitors seeking protection from heat and direct sunlight.
- **Direct solar exposure in outdoor spaces:** Most outdoor exhibition areas received prolonged direct sunlight. Extended exposure without adequate shade increased thermal discomfort and the risk of sunburn.
- **Reduced interaction with outdoor exhibits:** Visitors were less active around outdoor exhibits during hot and sunny conditions than they were within indoor exhibition areas. Thermal discomfort limited the time spent exploring the exhibits and negatively affected the overall learning experience.

Data Sources and Analysis

The first stage of the study involved on-site data collection, documentation of the physical characteristics of each site and measurement of climatic parameters, including air temperature, relative humidity and wind speed.

Measurements were taken at a height of 1.1 m above ground level in accordance with the ASHRAE Standard 55 protocol.

3.2 Digital Simulations

Input Data: Climatic data obtained from the field measurements were entered into the simulation software.

Scenario Creation: Different scenarios were developed by modifying urban plaza geometry parameters, including aspect ratio, building height, orientation, enclosure type and tree placement.

Simulation Runs: Simulations were conducted for each scenario to assess shade distribution and variations in thermal conditions within the plaza.

Influence of Plaza Design Parameters on UTCI

A series of simulations was conducted to evaluate the influence of key plaza design parameters on outdoor thermal comfort using the Universal Thermal Climate Index (UTCI). The analysis considered four variables: enclosure type, plaza orientation, aspect ratio and tree placement. All simulations were conducted using plazas with consistent dimensions of 50 m × 50 m, while individual parameters were modified to assess their effect on thermal conditions.

The results indicate that enclosure type significantly influences thermal comfort by affecting the

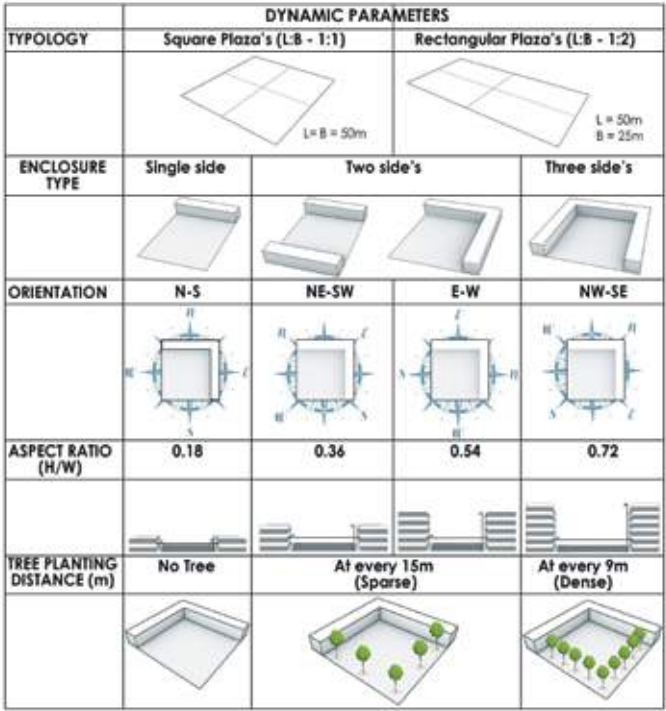


Figure 4: Dynamic Parameters for analysis of plazas through simulation
Source: Author

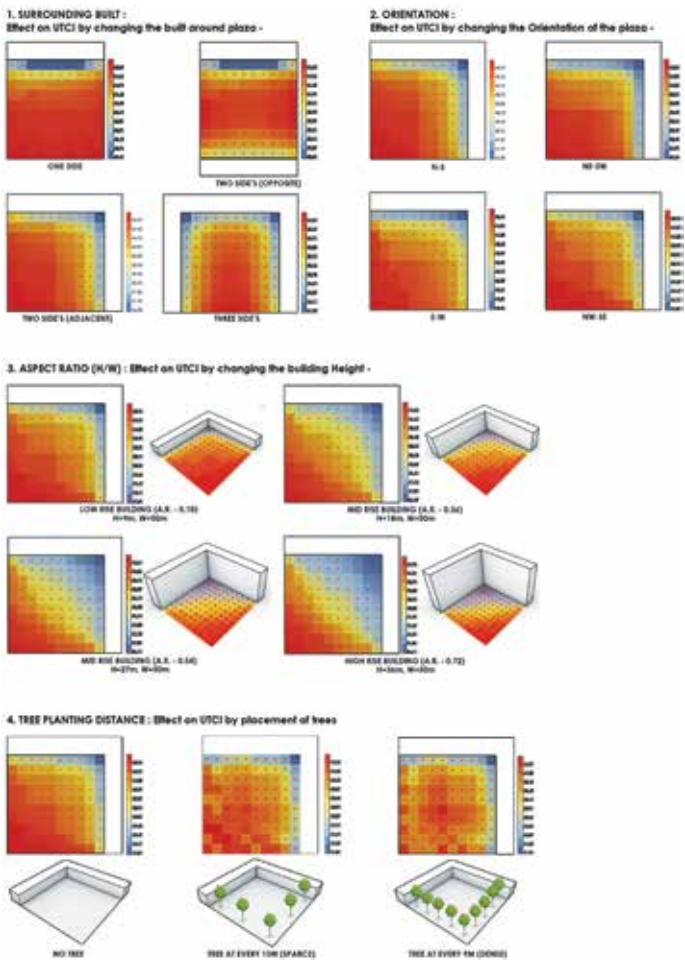


Figure 5: UTCI simulation results illustrating the influence of enclosure type, orientation, aspect ratio, and tree placement on outdoor thermal comfort.
Source: Author

availability and distribution of shade within the plaza. Among the tested enclosure configurations, the most favourable thermal conditions occurred when buildings were positioned along two adjacent sides of the plaza. This arrangement generated larger shaded areas and cooler microclimates, resulting in lower UTCI values and improved outdoor thermal comfort.

Plaza orientation also had a noticeable effect on UTCI values. Among the orientations examined, the north-west–south-east alignment was the most effective in reducing solar exposure across plaza surfaces. By limiting direct solar radiation, this orientation moderated UTCI values and improved thermal comfort within the outdoor space.

The analysis further demonstrated the importance of aspect ratio and building height in shaping the thermal environment. Changes in building height affected the amount and duration of shade cast within the plaza. Higher height-to-width ratios generally improved thermal conditions by increasing shaded areas and reducing the level of heat stress experienced by users.

Tree placement emerged as another critical factor influencing outdoor thermal comfort. Scenarios containing trees consistently produced lower UTCI values than scenarios without vegetation. The shade provided by tree canopies, combined with evapotranspirative cooling, contributed substantially to reducing thermal stress and improving overall comfort within the plaza.

Overall, the findings demonstrate that enclosure configuration, orientation, aspect ratio and strategic tree placement collectively influence thermal comfort in urban plazas. The integrated optimisation of these parameters can reduce UTCI values and contribute to the creation of more comfortable, liveable and climate-responsive public spaces.

4. RESULTS / FINDINGS

This section examines the relationship between urban plaza geometry and outdoor thermal comfort through a synthesis of quantitative data and qualitative observations. It analyses the selected case studies by comparing their geometric characteristics and their influence on outdoor thermal conditions. Each case study highlights specific contextual and spatial features, contributing to a broader understanding of how urban design affects the comfort and usability of outdoor spaces.

The analysis combines observational data, on-site measurements and simulation results. Temperature distribution maps and shading assessments were

generated using Rhino and Ladybug to represent thermal conditions across different geometric configurations. These visual outputs illustrate the relationship between plaza geometry, shade distribution and thermal comfort and help identify the main patterns and trends emerging from the analysis.

4.1 Case Study Analysis

PARAMETERS	Plaza Characteristics	Type of Activities	Peak Usage Times	Apparent Temperature
	Plaza 1: Central Plaza area is the focal point with expansive open space and iconic landmark structure.	Recreational activities	Throughout the day (Especially During Outdoor performances)	Min.: 34.6 °C (94.3 °F) Max.: 41 °C (105.8 °F)
	Plaza 2: Combination of pergolas, strategically placed trees, and low-height walls.	Recreational activity	During performances at other social activities only	Min.: 37.1 °C (98.8 °F) Max.: 44.6 °C (112.3 °F)
	Plaza 3: Built mass around the plaza creating a sense of enclosure and isolation.	Circulation and small social gatherings	During special events, programs, or performances	Min.: 34.6 °C (94.3 °F) Max.: 33.2 °C (91.8 °F)
	Plaza 4: Transition space surrounded by machines providing instant shading.	Transition space	During Commencement and conclusion of events	Min.: 34.2 °C (93.6 °F) Max.: 43.6 °C (110.5 °F)
	Plaza 5: Green spaces strategically placed around the plaza.	Entrance Plaza for welcoming users	Depends on scheduled events, visitors are usually present	Min.: 38 °C (100 °F) Max.: 44.7 °C (112.5 °F)
	Plaza 6: Simple Open and flexible planning.	Internal Meeting space	Weekends	Min.: 38.4 °C (101 °F) Max.: 45.1 °C (113.2 °F)
	Plaza 7: Plaza with central garden and other spaces around the perimeter, strategically placed trees.	Recreational activities, food and leisure activities	During special events, programs or performances	Min.: 35.3 °C (95.5 °F) Max.: 44.6 °C (112.3 °F)
	Plaza 8: Entrance Plaza with open-air canopy planning.	Art display and Circulation	Depends on scheduled events, especially when scheduled are hosted	Min.: 41.4 °C (106.5 °F) Max.: 52.4 °C (126.3 °F)
	Plaza 9: Circulation Plaza with green spaces all around entrance, walkability of users.	Transition spaces used for circulation	Scheduled events planned for educational field trips	Min.: 33.8 °C (92.8 °F) Max.: 44.3 °C (111.7 °F)
	Plaza 10: Open Plaza for outdoor ventilation display.	Outdoor ventilation display	During commencement and conclusion of an organized event	Min.: 34.1 °C (93.4 °F) Max.: 43.3 °C (110 °F)
	Plaza 11: Open plaza with built mass around the space, used for parking and other services.	Service facilities, Internal Parking	Varies with respect to the needs of an event	Min.: 37.2 °C (99 °F) Max.: 44.6 °C (112.3 °F)

Figure 6: Comparative Analysis of Sample Sites

Source: Author

4.2 Simulation Results

The simulations were conducted using a square plaza measuring 50 m × 50 m, with a length-to-breadth ratio of 1:1.

4.2.1 Enclosure Type: Effect on UTCI through Changes in the Built Enclosure

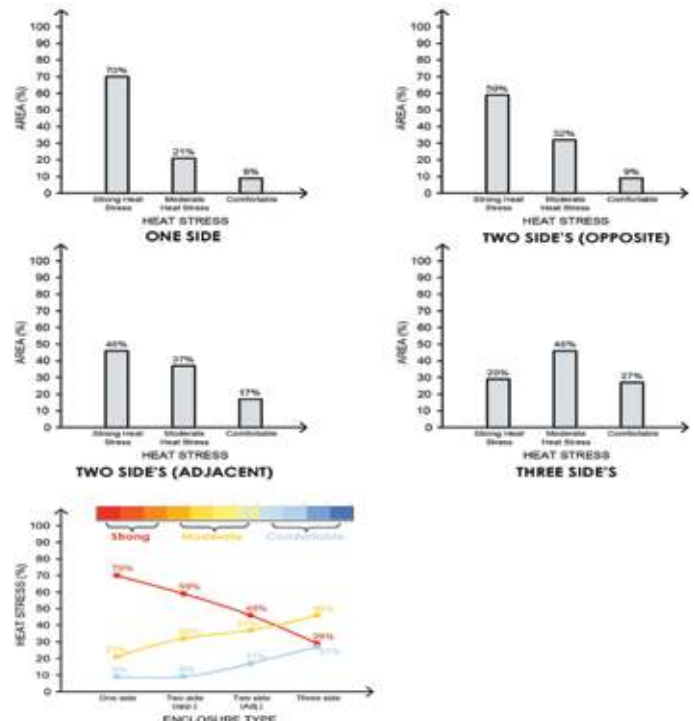


Figure 7: Area % vs Heat stress Graphs for UTCI w.r.t Enclosure Type.

Source: Author

The graph illustrates the varying levels of heat stress associated with different enclosure configurations. Among the tested alternatives, the L-shaped building configuration surrounding the plaza was the most effective in reducing heat stress. It produced a significantly lower proportion of plaza area under uncomfortable thermal conditions than the other enclosure types.

This result suggests that buildings positioned along two adjacent sides of a plaza can provide effective shading while maintaining sufficient openness. The resulting shade distribution reduces direct solar exposure and contributes to lower UTCI values across a larger proportion of the plaza.

4.2.2 Orientation: Effect on UTCI through Changes in Plaza Orientation

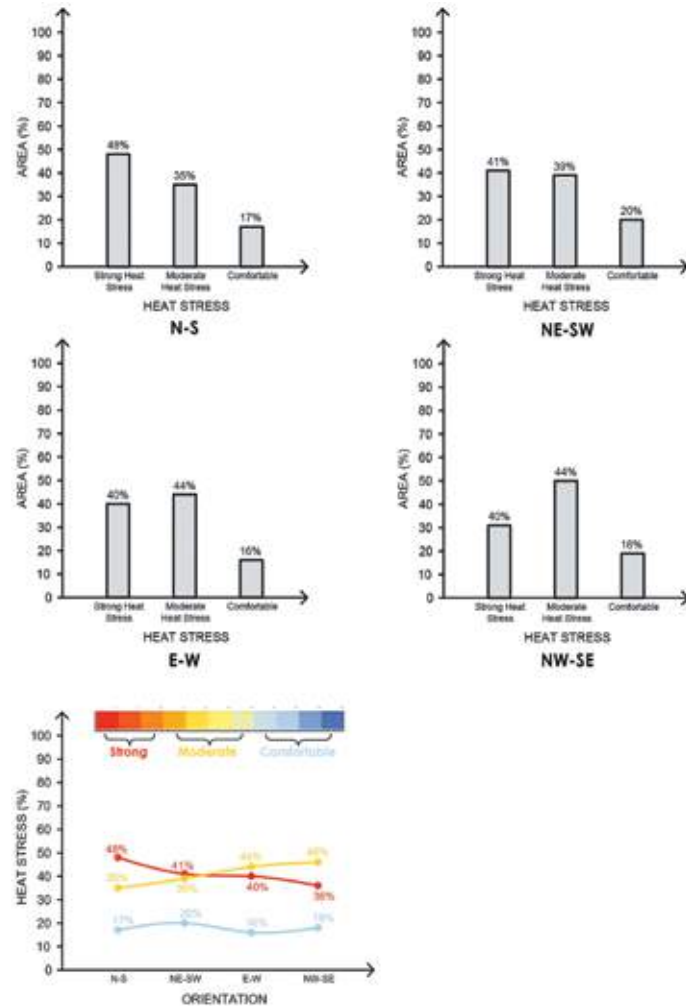


Figure 8: Area % vs Heat stress Graphs for UTCI w.r.t Orientation
Source: Author

The graph demonstrates that the level and distribution of heat stress vary according to plaza orientation. Among the orientations examined, the north-west-south-east alignment consistently performed better than the other alternatives.

This orientation produced the lowest percentage of area exposed to strong heat stress and the highest proportion of area within comparatively comfortable thermal conditions. The findings indicate that plaza orientation influences the duration and intensity of solar exposure and should therefore be considered during the early stages of urban design.

4.2.3 Aspect Ratio: Effect on UTCI through Changes in Building Height

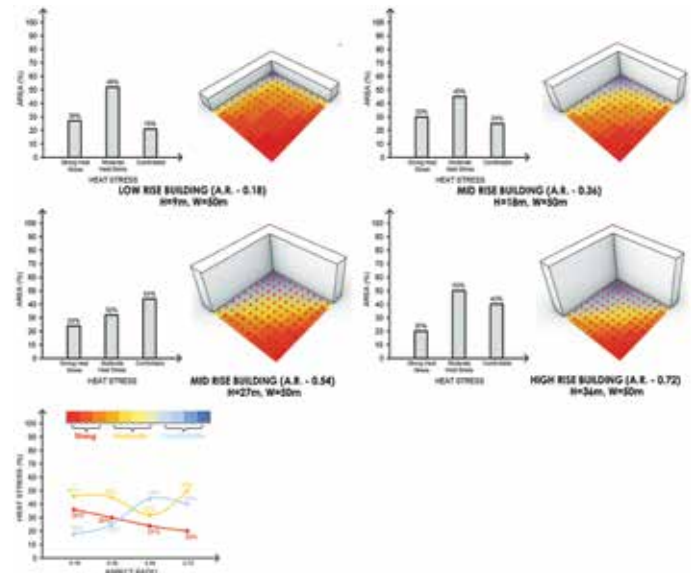


Figure 9: Area % vs Heat stress Graphs for UTCI w.r.t Aspect Ratio
Source: Author

The observed trends demonstrate the importance of aspect ratio in influencing the thermal comfort of urban plazas. As the height-to-width ratio increased, the proportion of the plaza exposed to strong heat stress decreased, resulting in a more favourable distribution of thermal conditions.

Higher surrounding buildings increased the duration and extent of shade within the plaza. The findings therefore suggest that higher aspect ratios can help reduce direct solar exposure and mitigate heat stress. However, aspect ratio should be carefully balanced with other considerations, including daylight availability, ventilation, spatial openness and visual connectivity.

4.2.4 Tree-Planting Distance: Effect on UTCI through Changes in Tree Placement

The study examined the influence of tree density and planting distance on heat stress within the plaza. A clear trend was observed as the conditions changed from no trees to sparse planting and then to dense tree planting. Decreasing the distance between trees and increasing tree density produced a gradual reduction in heat-stress levels.

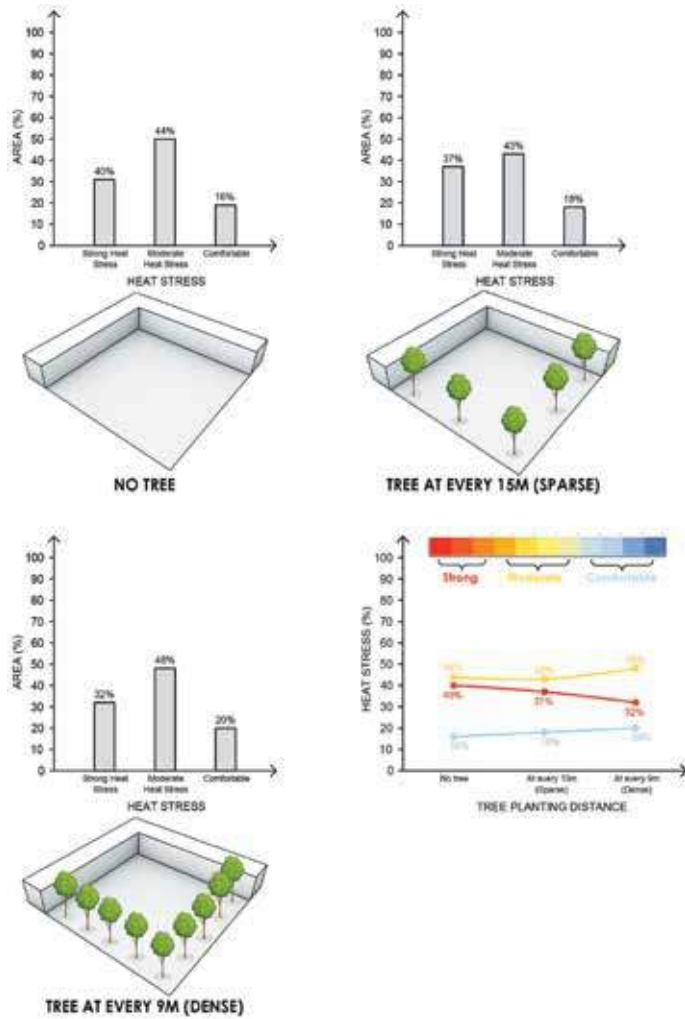


Figure 10: Area % vs Heat stress Graphs for UTCI w.r.t Tree Placement
Source: Author

The simulation results showed that denser tree planting substantially reduced the proportion of the plaza exposed to strong heat stress. As the number of trees increased, a larger area experienced comparatively comfortable thermal conditions. This finding highlights the important role of tree canopies in providing shade, reducing solar exposure and improving the thermal performance of urban plazas.

Overall, the simulation results demonstrate that enclosure type, plaza orientation, aspect ratio and tree placement have a measurable influence on outdoor thermal comfort. The L-shaped enclosure, north-west-south-east orientation, higher height-to-width ratio and denser tree distribution produced the most favourable thermal conditions among the tested scenarios. These findings indicate that thermal comfort can be improved by integrating geometric and landscape parameters rather than considering each design variable in isolation.

5. DISCUSSION

The study examined the influence of urban design parameters on the outdoor thermal comfort of plazas located within Jaipur's composite climate zone. By analysing air temperature, wind velocity, relative humidity and thermal comfort indices such as Apparent Temperature and the Universal Thermal Climate Index (UTCI), the research evaluated how different plaza configurations affect microclimatic conditions.

The findings indicate that plaza orientation has a significant influence on thermal comfort, with the north-west-south-east (NW-SE) orientation performing most effectively in reducing heat stress. Building configuration also played an important role, with L-shaped surrounding structures providing greater shade and improving thermal performance.

The study further established that higher aspect ratios contribute to lower levels of heat stress by creating more extensively shaded environments. In addition, increased tree density significantly improved outdoor thermal conditions, highlighting the importance of vegetation within urban public spaces.

Overall, the research demonstrates that the careful integration of design parameters such as orientation, aspect ratio, building form and vegetation can substantially improve the thermal comfort and liveability of urban plazas.

6. CONCLUSION & RECOMMENDATIONS

This study concludes that urban design parameters significantly influence the outdoor thermal comfort of plazas located in composite climate zones. Among the parameters examined, plaza orientation emerged as one of the most influential factors, with the north-west-south-east (NW-SE) orientation producing the most favourable thermal conditions.

The findings also indicate that architectural configuration plays an important role in reducing heat stress within public spaces. In particular, L-shaped building forms improved shade distribution and enhanced the thermal performance of the plaza. Higher aspect ratios also contributed to more comfortable thermal conditions by increasing shaded areas and reducing direct solar exposure.

The study further confirms the positive influence of vegetation on outdoor thermal comfort. Increased tree density substantially reduced the intensity

of heat stress, emphasising the importance of integrating greenery into the design of urban plazas.

Overall, the research demonstrates that an appropriate combination of orientation, aspect ratio, building configuration and vegetation can significantly improve the thermal performance and liveability of urban public spaces. The findings provide a practical framework for planners, architects and policymakers involved in the development of climate-responsive urban environments.

Recommendations

Orientation: Urban planners should prioritise a north-west–south-east (NW–SE) orientation when designing new urban plazas, as this orientation provides improved thermal comfort through more effective shade distribution and reduced solar exposure.

Vegetation Planning: Trees should be incorporated into plaza design at an approximate spacing of 8 metres. This arrangement can provide effective shade while maintaining adequate airflow and improving the visual quality of the space.

Aspect Ratio: An aspect ratio of 0.54 is recommended, as it produced the most favourable thermal conditions among the configurations examined in this study. However, its suitability should be evaluated in relation to site-specific factors such as building height, solar exposure, ventilation and surrounding urban form.

Building Proximity and Configuration: Buildings positioned along two adjacent sides of a plaza are recommended to create favourable microclimatic conditions. This L-shaped configuration can improve shade distribution, influence wind movement and reduce thermal stress within the plaza.

Extension to Other Climate Zones: As this study was conducted in a composite climate zone, similar investigations should be undertaken in hot-dry, warm-humid and other climatic regions. Such studies would broaden the understanding of how plaza geometry affects outdoor thermal comfort under different environmental conditions.

Expansion of Plaza Typologies: The present findings are based on square plazas with a length-to-breadth ratio of 1:1. Future studies should examine rectangular, irregular, enclosed and semi-enclosed plaza typologies to compare their thermal performance.

Long-Term Monitoring: Long-term field measurements and post-implementation monitoring should be conducted to evaluate seasonal variations in outdoor thermal comfort. Such studies would help assess the long-term effectiveness of design interventions and support adaptive urban design strategies.

User-Based Evaluation: Future research should incorporate visitor surveys, behavioural observations and subjective thermal-comfort assessments. Combining physical measurements with user responses would provide a more comprehensive understanding of thermal comfort in urban plazas.

REFERENCES

- Ali-Toudert, F., & Mayer, H. (2006). Numerical study on the effects of aspect ratio and orientation of an urban street canyon on outdoor thermal comfort in hot and dry climate. *Building and Environment*, 41(2), 94-108. doi:10.1016/j.buildenv.2005.01.013
- Brager, G. S., & De Dear, R. J. (1998). Thermal adaptation in the built environment: A literature review. *Energy and Buildings*, 27(1), 83-96. doi:10.1016/S0378-7788(97)00053-4
- Chen, L., & Ng, E. (2012). Outdoor thermal comfort and outdoor activities: A review of research in the past decade. *Cities*, 118-125. doi:10.1016/j.cities.2011.08.006
- Dimoudi, A., & Nikolopoulou, M. (2003). Vegetation in the urban environment: Microclimatic analysis and benefits. *Energy and Buildings*, 35(1), 69-76. doi:10.1016/S0378-7788(02)00081-6
- Fanger, P. O. (1982). *Thermal Comfort: Analysis and Applications in Environmental Engineering*. Malabar, Florida: Robert E. Krieger Publishing Company.
- Gehl, J. (1971). *Life Between Buildings: Using Public Space*. Copenhagen: Danish Architectural Press.
- Giridharan, R., Lau, S. S., Ganesan, S., & Givoni, B. (2005). Lowering the outdoor temperature in high-rise high-density residential developments of coastal Hong Kong: The vegetation influence. *Building and Environment*, 40(12), 1583-1595. doi:10.1016/j.buildenv.2004.10.020
- Gulyás, Á., Unger, J., & Matzarakis, A. (2006). Assessment of the microclimatic and human comfort conditions in a complex urban environment: Modelling and measurements. *Building and Environment*, 41(12), 1713-1722. doi:10.1016/j.buildenv.2005.07.001
- Johansson, E. (2006). Influence of urban geometry on outdoor thermal comfort in a hot dry climate: A study in Fez, Morocco. *Building and Environment*, 41(10), 1326-1338. doi:10.1016/j.buildenv.2005.05.022
- Lin, T.-P., Matzarakis, A., & Hwang, R.-L. (2007). Shading effect on long-term outdoor thermal comfort. *Building and Environment*, 45(1), 213-221. doi:10.1016/j.buildenv.2009.06.002

- Nikolopoulou, M., & Lykoudis, S. (2006). Thermal comfort in outdoor urban spaces: Analysis across different European countries. *Building and Environment*, 41(11), 1455-1470. doi:10.1016/j.buildenv.2005.05.031
- Robitu, M., Musy, M., Inard, C., & Groleau, D. (2006). Modeling the influence of vegetation and water pond on urban microclimate. *Solar Energy*, 80(4), 435-447. doi:10.1016/j.solener.2005.07.007
- Thorsson, S., Lindberg, F., Eliasson, I., & Holmer, B. (2007). Different methods for estimating the mean radiant temperature in an outdoor urban setting. *International Journal of Climatology*, 27(14), 1983-1993. doi:10.1002/joc.1537
- Whyte, W. H. (1980). *The Social Life of Small Urban Spaces*. Washington, D.C.: Conservation Foundation.



Apoorva Bhargava, graduate of Ayojan School of Architecture, Jaipur, completed her Bachelor of Architecture in 2024. Her research focuses on climate-responsive design, examining shading strategies and outdoor thermal comfort in urban plazas through environmental simulation. She is committed to creating resilient, people-centric and sustainable built environments.
Email: apoorvabh28@gmail.com



Prof. (Dr.) Archana Singh Rathore (A16640), an Architect and Urban planner, with over 27 years of teaching experience at Ayojan School of Architecture, Jaipur. Holding degrees in architecture and town and country planning and a PhD from MNIT, Jaipur. With committee roles at the Council of Architecture, she contributes significantly to architectural education and research, specializing in building science, technology and climate-responsive design.
Email: asr@aayojan.edu.in

Beyond Façades

Preserving Spirit in Contemporary World

By Janhavi Dudhane and Dr. Vaishali Prasad Latkar

1. Introduction

Architecture is not only about physical form, it is about meaning, memory and the spirit of place. Conservation is something which should not be understood in a superficial way of preserving bricks, stones, or façades, but as a practice of sustaining its significance (Chen & Zhu, 2024; Güner, 2023). In contemporary architecture, conservation is increasingly reduced to this so-called superficiality. Buildings are often stripped of their lived qualities and transformed into hollow shells, with façades preserved as decorative masks while interiors are replaced by glass, steel and commercial elements (Kyriazi, 2022). This phenomenon is known as *facadism* and creates the whitewashed appearance of heritage while erasing its essence.

The question today isn't about whether heritage buildings should be preserved or not, but rather how they should be preserved. If conservation merely protects the external image, it risks producing empty symbols that satisfy nostalgia without maintaining relevance and true character of the space (Chen & Zhu, 2024). True conservation must preserve the spirit of architecture: the relationships, rituals and meanings that give life to built-forms (Norberg-Schulz, 1980; Puspitasari, Sudarwani, & Nugroho, 2011). This article explores the problem of facadism in contemporary conservation practices, demonstrates why façades in which spirit isn't preserved undermines the authenticity and highlights adaptive and community-based approaches that preserve both continuity and vitality (Diwaan, 2024; Malhotra & Dobriyal, 2023). This study is based on secondary research, drawing from scholarly literature, international charters, archival records and documented case studies. Various archival materials, including historical texts,

policy documents and visual records, were reviewed to understand shifts in conservation theory and practice. Conservation operates along a continuum - from pragmatic façade retention in dense urban cores to immersive community stewardship in living heritage towns. Each approach carries its own logic of survival, economy and identity.

2. Historical Context of Conservation

The idea of architectural conservation has shifted over time. In the nineteenth century, European theorists such as Eugène Viollet-le-Duc promoted restoration toward an imagined ideal state, while John Ruskin defended the value of decay and authenticity (Liang, Ahmad, & Mohidin, 2023). Both perspectives treated conservation primarily as a material or aesthetic problem.

With modernity and industrialisation, conservation entered tension with urban development. As cities expanded, heritage often stood in the way of progress. Facadism emerged as a compromise: retaining visible fronts while sacrificing interior spaces (Kyriazi, 2022). It allowed modern development to coexist with nostalgia, but at the cost of depth and authenticity.

India followed a unique trajectory. Colonial architecture became embedded in the civic identity of cities like Mumbai, Kolkata and Delhi, but after independence, many structures were left to decay or adapted pragmatically (Jha, 2019). In recent decades, rising land values and globalised aesthetics have encouraged façade preservation without functional or cultural depth (Yazdani Mehr & Wilkinson, 2020). This trend reveals a recurring dilemma that, is conservation about freezing the image of the past, or about nurturing the spirit of continuity.

International frameworks have progressively moved conservation discourse beyond material authenticity toward community and cultural values. The Venice Charter (1964) initiated global principles emphasising authenticity of fabric, while the Nara Document on Authenticity (1994) expanded this view, recognising that spirit, traditions and cultural diversity are equally integral. The Burra Charter (1999, revised 2013) introduced conservation as a living process rooted in community custodianship, while the Faro Convention (1994) contextualised these values within South Asia, stressing heritage as a living cultural resource rather than static remains. These charters collectively argue that conservation is not simply about freezing façades, but about sustaining the 'spirit of place' across time. While these charters advanced theoretical clarity, practice on the ground evolved differently. For instance, London's Covent Garden (1970s) shows how adaptive reuse can revitalise while retaining memory, whereas Connaught Place in Delhi illustrates how façade restoration alone can create hollow commercial shells

3. Conservation as Preserving Spirit

To move beyond facadism, it is necessary to redefine conservation not as the freezing of form but as the preservation of spirit. The concept of *genius loci*, or spirit of place, emphasises that architecture carries meaning through memory, ritual and social practice (Norberg-Schulz, 1980; Puspitasari, Sudarwani, & Nugroho, 2011).

A façade without function cannot preserve spirit. A building becomes authentic not only because of its materials but because of how it is inhabited (Güner, 2023). The smell of food in a market, the rhythm of worship in a shrine, or the craft of labor in a workshop - these intangible layers give architecture its vitality (UNESCO, 2003). When conservation reduces heritage to façades, it erases these dimensions.

Preserving spirit means allowing heritage to evolve while sustaining continuity. Markets may change goods, workshops may adapt techniques, institutions may shift functions, but the identity of place remains alive if its essence is respected (Chen & Zhu, 2024; Yazdani Mehr & Wilkinson, 2020). Conservation, therefore, should not be about stasis but about meaningful adaptation.

Heritage is not only the tangible - buildings, streets and crafts, but also intangible - festivals, oral traditions and skills that animate spaces. UNESCO's 2003 Convention on Intangible Cultural Heritage emphasises that memory, ritual and craftsmanship sustain vitality as much as material form. Traditional



Figure 1: Victoria Memorial, Kolkata

Source: <https://www.bing.com/newtabredir?url=https%3A%2F%2Fwww.reddit.com>



Figure 2: Paris Haussmannian Buildings

Source: <https://www.shutterstock.com/search/haussmannian-buildings>

settlements such as Pushkar demonstrate how sustainability and unique identity are inherently embedded within heritage architecture. Climatically responsive materials, local craftsmanship and culturally rooted spatial practices create environments that are both environmentally efficient and deeply place-specific, reinforcing a distinct architectural identity. Retaining craft traditions is therefore not nostalgia but continuity, ensuring that conservation remains a living practice, where rituals, stories and community engagement matter as much as material survival. In Rajasthan, the architecture of towns like Pushkar was once inseparable from the work of local artisans - the lime plasterers who polished walls with organic mixtures, the painters who narrated myths across haveli walls and the carvers who gave depth to the jharokhas that looked onto the street. These practices were not decorative excess, they were acts of meaning, embedding stories, identities and

collective memory into the very skin of architecture. The use was both cultural and climatic - polished lime reflected sunlight, keeping interiors cool, while deep openings diffused glare. These techniques reveal that traditional façades were not only artistic but environmental responses to desert life (Agrawal, 2016).

Today, however, such traditions are vanishing under the pressure of cement, synthetic paints and factory-made substitutes. When the craft disappears, it is not only a skill that is lost, but also the spirit of architecture that erodes, leaving behind facades that may look preserved but no longer carry life. To move beyond facades is therefore to safeguard not just the walls, but the rituals and knowledge systems that animate them. Supporting artisans, integrating traditional practices with contemporary needs and allowing heritage to remain lived rather than museumised, ensures that conservation in the contemporary period is not static preservation but a living continuum. Today, the tourism-driven cosmetic restorations threaten to reduce this climatic wisdom to ornament, showing how heritage can be



Figure 3: Craft Workshop in Kutch (continuity of artisanal skills preserving cultural identity)

Source: <https://www.gujaratexpert.com/blog/crafts-cultures-in-rann-of-kutch/>



Figure 4: Structure of Pushkar - Traditional crafts embedding memory and climate

Source: <https://www.mochilerosviajeros.com/pushkar/>

both sustained and strained under contemporary pressures. When the hands that made the walls no longer practice their craft and the rituals that gave them meaning vanish, what remains of the architecture we claim to preserve?

The Vienna Memorandum (UNESCO, 2005) advanced the concept of the Historic Urban Landscape, urging integration of heritage with contemporary development, it represents landscape rather than isolating it. This aligns with the notion of *Zeitgeist* - the spirit of the time, suggesting that conservation must honor both the genius loci (spirit of place) and contemporary needs. A city that preserves only the past risks becoming a museum; a city that neglects the past risks losing identity. True custodianship lies in balancing continuity with change.

4. Positive Alternatives: Adaptive Reuse in Contemporary Practice

Adaptive reuse offers a powerful counter to facadism by reimagining heritage for contemporary needs while retaining memory and character. Instead of freezing buildings as static images, it treats them as living frameworks. Yet, not all reuse succeeds. Mumbai's Ballard Estate retains façades but struggles with social vitality, while Chettinad's ancestral houses thrive through everyday inhabitation. These contrasts show that adaptation works only when functional continuity and cultural meaning coexist.

The Buffalo AKG Art Museum (USA) demonstrates this balance. OMA's design wove modern glass with neoclassical fabric, shaped by community consultation, creating a vibrant public 'Town Square' and doubling visitor engagement (Chen & Zhu, 2024). Similarly, the High Line, New York, transformed a disused railway into a cultural landscape that preserves industrial traces while enabling new social life (Yazdani Mehr & Wilkinson, 2020).

Closer to home, the Jaipur Bazaars embody living heritage, where continuity lies not in cosmetic restoration but in sustaining daily trade and craft practices (Jaiswara, Bhatt, & Choudhury, 2024). The Aga Khan Trust for Culture has likewise shown, from Cairo to Delhi, how restoring historic cores as active neighborhoods of housing, commerce and culture ensures vitality (Malhotra & Dobriyal, 2023).

Industrial sites also offer fertile ground, whether in London's Tate Modern or Toronto's Distillery District. Here heritage and modern use are bridged seamlessly. These cases highlight that adaptive reuse succeeds not through formula but by aligning context, community and continuity.

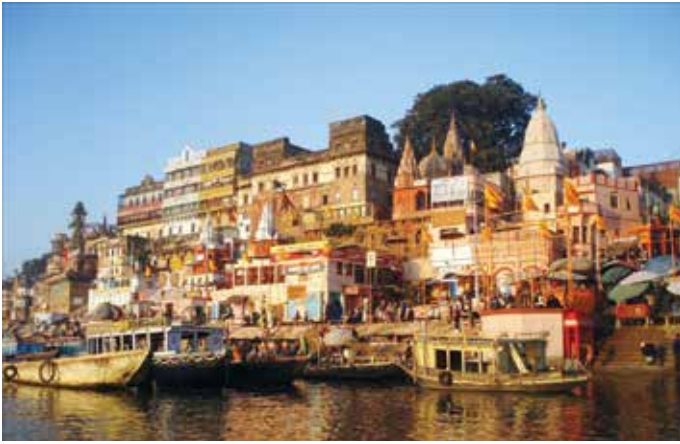


Figure 5: Varanasi Ghat, Uttar Pradesh -Rituals and festivals keep heritage architecture alive

Source: <https://www.indiatravelblog.net/ghats-of-varanasi/>

5. The Problem of Facadism

Facadism refers to the retention of architectural exteriors while interiors are demolished and rebuilt. While it claims to conserve heritage, its outcomes are often superficial and misleading. In Mumbai's mill lands, for example, remnants of chimneys or façades have been preserved in luxury redevelopments, yet the industrial culture that once defined the site - its workers, unions and struggles, has been erased. The result is an empty reference - the image of industry without its meaning.

Similarly, in Paris, conservation laws have led to the careful maintenance of historic fronts, while interiors have been gutted to accommodate luxury housing or commercial uses. The city becomes a stage set. It is attractive for tourism but disconnected from its original communities.

Facadism creates three problems. First, it reduces architecture to an image, stripping away spatial and material richness. Second, it commodifies heritage, turning it into a consumable aesthetic. Third, it undermines authenticity by breaking the link between built form and lived culture. In this way, facadism betrays the very purpose of conservation, offering the mask of heritage without its spirit. Nevertheless, in rapidly urbanising cities, facadism sometimes becomes a pragmatic compromise, thus, allowing historic identity to visually survive where full-scale conservation is unfeasible. The challenge is ensuring that such compromises remain transparent and contextually justified.

6. Principles for Contemporary Conservation

From the analysis of facadism and adaptive reuse, several principles emerge for contemporary conservation. The following principles have been identified through a synthesis of conservation theories, international charters and scholarly works by

key thinkers and institutions in heritage conservation (drawing upon Norberg-Schulz, 1980; Ruskin; ICOMOS, 1964, 1994, 2011; UNESCO, 2003, 2005; Yazdani Mehr & Wilkinson, 2020; Plevoets, 2021).

1. **Preserve spirit, not just image** - Heritage is more than façades or relics. It is memory, identity and lived experience. True conservation sustains these intangible dimensions.
2. **Engage communities** - Heritage belongs to people. Their participation ensures relevance, allowing places to evolve rather than stagnate as lifeless décor.
3. **Adapt functionally** - Buildings must serve contemporary needs while retaining essence. Without this, reuse risks becoming trend-driven spectacle.
4. **Balance authenticity and flexibility** - Integrity must coexist with innovation, avoiding both rigid stasis and careless erasure.
5. **Keep heritage alive in daily life** - Monuments should not be embalmed as static relics but remain woven into urban routines, breathing alongside contemporary life.
6. **Embrace contemporary directions** - New frameworks like the ICOMOS Historic Urban Landscape (2011) view heritage as a dynamic layer integrated with housing, mobility and climate resilience. Examples include heritage hotels in Rajasthan, digital archives of Varanasi's ghats and artisan training in Kutch, which reframe preservation as active participation.

Recent practice shows how this can work: from laser scanning Jaipur's havelis to adaptive policies in Ahmedabad's pol houses, conservation today merges craft knowledge with digital tools and sustainability metrics (ICOMOS, 2011; UNESCO, 2005). Such efforts reflect custodianship rather than ownership - heritage as a responsibility across generations. Without this spirit of stewardship, façades risk



Figure 6: Buffalo AKG Art Museum, USA

Source: <https://news.artnet.com/art-world/buffalo-akg-art-museum-2323983>

collapsing into empty shells, severed from the lives they once carried.

7. Conclusion

Contemporary architecture faces the challenge of reconciling heritage with modernity. In rapidly transforming urban contexts, heritage conservation is increasingly challenged by pressures of densification, real estate value and globalised development models, making the question of how we preserve architectural spirit more urgent than ever. Too often, conservation is reduced to facadism, preserving only images while hollowing out meaning. This produces hollow symbols that satisfy surface nostalgia but fail to preserve spirit.

Yet alternatives exist. Adaptive reuse projects - from the Buffalo AKG Art Museum to the High Line, from Jaipur's bazaars to Aga Khan initiatives, show that it is possible to conserve by sustaining continuity. These approaches do not freeze the past but reimagine it, enabling heritage to remain relevant to communities today.

Conservation, therefore, must be redefined as the preservation of spirit in contemporary practice. It is not about façades, but about the bonds between architecture, memory and community. To conserve is to keep alive, to ensure that places continue to tell their stories not as static images but as living narratives, only then can contemporary conservation architecture truly go beyond façades. This approach also resonates with the INTACH Charter for the Conservation of Unprotected Architectural Heritage and Sites in India (2004), which emphasises context-sensitive conservation, community involvement and continuity of use rather than mere aesthetic preservation.

Equally, conservation is an ecological practice. Adaptive reuse directly aligns with the United Nations Sustainable Development Goals - particularly SDG 11 (Sustainable Cities and Communities) by safeguarding cultural heritage, SDG 12 (Responsible Consumption and Production) through material reuse and reduced demolition waste and SDG 13 (Climate Action) by conserving embodied energy and lowering carbon emissions. Retaining traditional crafts like the lime plastering, stone carving, hand-painted murals, is not merely cultural sentiment but environmental wisdom, rooted in local climates and sustainable materials. Safeguarding craft traditions ensures both cultural and ecological continuity. Conservation is no longer a static discipline but a constant negotiation between economics and ecology, past and future, image and essence.

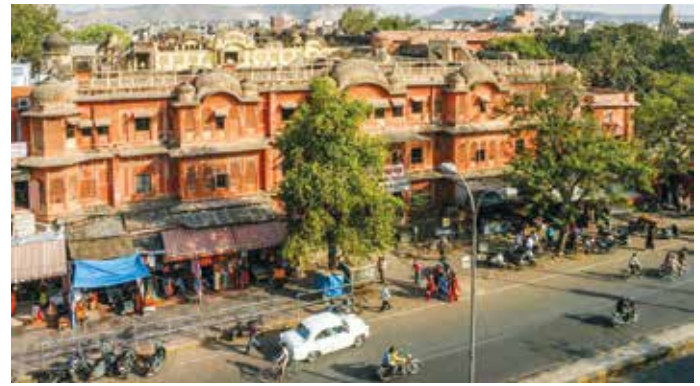


Figure 7: Jaipur Bazaars

Source: <https://www.travelandleisureasia.com/in/destinations/india/jaipur>



Figure 8: Tate Modern

Source: https://en.wikipedia.org/wiki/Tate_Modern

References

1. Agrawal, O. P. (2016). Traditional crafts and contemporary conservation practices in Rajasthan. *Indian Journal of Heritage Studies*, 7(2), 45–59.
2. Chen, E., & Zhu, K. (2024). Adaptive reuse approach to the conservation of historic urban landscape: Evolution and role of facadism. *Landscape Architecture*, 31(10), 49–57. <https://research.tudelft.nl/en/publications/adaptive-reuse-approach-to-the-conservation-of-historic-urban-lan>
3. Diwaan, E. (2024). Revitalizing heritage: Adaptive reuse for cultural preservation and sustainable development. *Vidhyayana – An International Multidisciplinary Peer-Reviewed E-Journal*. <https://j.vidhyayanaejournal.org/index.php/journal/article/view/1982>
4. Güner, R. (2023). An evaluation for “spirit of place” focused preservation approaches in historic environments. *MEGARON*, 18(3), 344–365. <https://doi.org/10.14744/megaron.2023.20587>
5. ICOMOS. (1964). *International charter for the conservation and restoration of monuments and sites (Venice Charter)*. https://www.icomos.org/charters/venice_e.pdf
6. ICOMOS. (1994). *Nara document on authenticity*. <https://www.icomos.org/charters/nara-e.pdf>
7. ICOMOS. (2011). *Recommendation on the historic urban landscape*. <https://www.icomos.org/en/our-work/historic-urban-landscape>

8. Australia ICOMOS. (2013). *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance*. <https://australia.icomos.org/publications/burra-charter-practice-notes/>
9. Jaiswara, A., Bhatt, R., & Choudhury, D. (2024). Adaptive reuse of heritage structure in India: Case study – Jatan Nagar Palace, Odisha. *ShodhKosh: Journal of Visual and Performing Arts*, 5(ICoMABE), 157–171. <https://doi.org/10.29121/shodhkosh.v5.iICoMABE.2024.2255>
10. Jha, R. (2019). Protecting India's built heritage against natural disasters. *ORF Issue Brief No. 293*. Observer Research Foundation. <https://www.orfonline.org/research/protecting-india-s-built-heritage-against-natural-disasters>
11. Kumari, S. (2024). Adaptive reuse of historical buildings: Breathing new life into the past. *Vidhyayana – An International Multidisciplinary Peer-Reviewed E-Journal*, 10(s1), 637–652. <https://www.vidhyayanaejournal.org/journal/article/view/1984>
12. Kyriazi, E. (2022). Façadism, building renovation and the boundaries of authenticity. *Aesthetic Investigations*, 2(2), 143–156. <https://doi.org/10.58519/aesthinv.v2i2.11967>
13. Liang, W., Ahmad, Y., & Mohidin, H. H. B. (2023). The development of the concept of architectural heritage conservation and its inspiration. *Built Heritage*, 7(21). <https://doi.org/10.1186/s43238-023-00103-2>
14. Lycophron, S. (2024, June 8). About-face: How Australian architects rethought the 'wild west' facade as a nod to conservation. *The Guardian*. <https://www.theguardian.com/artanddesign/article/2024/jun/08/about-face-how-australian-architects-rewrote-the-wild-west-facade-as-a-nod-to-conservation>
15. Malhotra, A., & Dobriyal, R. (2023). Adaptive reuse of heritage architecture as a sustainable development tool: Opportunities and challenges. *ShodhKosh: Journal of Visual and Performing Arts*, 4(2ECVPAMIAP), 21–27. <https://doi.org/10.29121/shodhkosh.v4.i2ECVPAMIAP.2023.703>
16. Nasrullah, N., & Syafri, S. (2024). Adaptive reuse in architecture: Transforming heritage buildings for modern functionality. *The Journal of Academic Science*, 1(5), 1–12. <https://doi.org/10.59613/69jqt639>
17. Norberg-Schulz, C. (1980). *Genius loci: Towards a phenomenology of architecture*. Rizzoli.
18. Plevioets, B. (2021). Juxtaposing inside and outside: Façadism as a strategy for building adaptation. *The Journal of Architecture*, 26(4), 541–558. <https://doi.org/10.1080/13602365.2021.1923552>
19. Puspitasari, P., Sudarwani, M. M., & Nugroho, S. (2011). The significance of preserving the genius loci in nurturing historic-religious urban settlement: Case study Kampung Luar Batang (Jakarta, Indonesia). *TATALOKA*, 13(1), 35–45. <https://doi.org/10.14710/tataloka.13.1.35-45>
20. Singha, M. R., & Kumar, S. V. (2019). Architectural features and characterization of 16th-century Indian monument Farah Bagh, Ahmednagar, India. *International Journal of Architectural Heritage*, 14(9), 1398–1411. <https://doi.org/10.1080/15583058.2019.1610524>
21. Times of India. (2025, May 13). UP Tourism breathes new life into historic sites through adaptive reuse. *The Times of India*. <https://timesofindia.indiatimes.com/city/lucknow/up-tourism-breathes-new-life-into-historic-sites-through-adaptive-reuse/articleshow/121131925.cms>
22. Times of India. (2025, June 5). New Heritage Conservation Committee orders audit of past restoration approvals in India's first UNESCO World Heritage City of Ahmedabad. *The Times of India*. <https://timesofindia.indiatimes.com/city/ahmedabad/new-heritage-conservation-committee-orders-audit-of-past-restoration-approvals-in-indias-first-unesco-world-heritage-city-of-ahmedabad/articleshow/121632576.cms>
23. Times of India. (2025, August 4). Belagavi's British-era buildings to retain heritage value. *The Times of India*. <https://timesofindia.indiatimes.com/city/hubballi/belagavis-british-era-buildings-to-retain-heritage-value/articleshow/123079114.cms>
24. Trancik, R. (1986). *Finding lost space: Theories of urban design*. Van Nostrand Reinhold.
25. UNESCO. (1994). *Convention for the safeguarding of the intangible cultural heritage of South Asia (Paro Convention)*. <https://ich.unesco.org/en/convention>
26. UNESCO. (2003). *Convention for the safeguarding of the intangible cultural heritage*. <https://ich.unesco.org/en/convention>
27. UNESCO. (2005). *Vienna memorandum on world heritage and contemporary architecture – managing the historic urban landscape*. <https://whc.unesco.org/en/activities/593>
28. Yazdani Mehr, S., & Wilkinson, S. (2020). The importance of place and authenticity in adaptive reuse of heritage buildings. *International Journal of Building Pathology and Adaptation*, 38(5), 689–701. <https://doi.org/10.1108/IJBPA-01-2020-0005>



As a forward-thinking third-year architecture student at BNCA, Pune, **Janhavi Dudhane** (IIA-SM-2025-28/1592) is driven by a passion for designing environmentally conscious spaces that seamlessly blend form and function. With a keen interest in 3D modelling and visualisation, her ultimate goal is to minimise ecological footprints and bring sustainable designs to life. As a writer, content creator and Canva Developers Community member, she explores creative ways to communicate design ideas. Currently she is serving as BNCA's SDG Officer (2025–2026).

Email: janhavid2403@gmail.com



Dr. Vaishali Prasad Latkar is a conservation architect with PhD in architecture. She heads Center for Cultural Studies at Dr. Bhanuben Nanavati College of Architecture for Women at Pune (IIA-IM-134). She is also Vice president (Asia) in international committee of Education and Training (CIF) of ICOMOS. She is a former member of Board of Studies in Architecture of Savitribai Phule Pune University (2017–2022). She has published her research papers in national and international journals and conference proceedings. She is actively involved in heritage related activities in various capacities.

Email: lvaishali@gmail.com

Historical Architecture Against Time and Neglect

Documenting Azam Khan Ni Sarai

By Ar. Surbhi Sharma

Introduction

India possesses a vast and layered architectural heritage, much of which remains under-documented and increasingly vulnerable to neglect. *Azam Khan ni Sarai*, located within the Bhadra Fort complex in Ahmedabad, represents an example of historical architecture with a complex history of functional adaptation. Constructed in 1637 by Azam Khan, the then Mughal governor of Gujarat, the structure was originally intended as a royal residence. Over the centuries, it has served multiple roles which include a caravanserai for travellers during the Mughal period, an armoury and a prison under later administrations, a hospital during the British colonial era and most recently, a government book depot (Figure 1).

The building's continued repurposing over time reflects a unique case of architectural resilience. However, its current physical condition indicates significant deterioration. This is not an isolated occurrence but part of a broader pattern observed in numerous heritage structures across India. The decline of monuments such as *Azam Khan ni Sarai* points to systemic challenges in conservation practices, institutional neglect and a lack of awareness regarding the importance of historical monuments.

This article documents *Azam Khan ni Sarai* and presents its architectural drawings documented by students of School of Planning and Architecture, New Delhi. It further examines the broader challenges associated with the conservation of historical architecture in India. The study analyses the monument's architectural and historical significance, traces its successive functional transformations



Figure 1: Azam Khan ni sarai, Bhadra fort complex, Ahmedabad
Sources: Amit Pasricha, 2020

and situates its current condition within the wider framework of heritage management practices and policy discourse in the country.

History of the Monument

Mir Muhammad Baqir Iradat Khan, better known by his title Azam Khan, was a prominent Mughal noble and administrator originally from Iraq. He arrived in the Indian subcontinent during the reign of Emperor Jahangir, who appointed him as *Khan-i-Saman*. Over time, he rose to high offices, serving as Subehdar of Kashmir and later as *Mir Bakhshi*. In 1628, Emperor

Shah Jahan honoured him with the title Azam Khan and appointed him as Grand Wazir. From 1632 to 1635, he served as the Subehdar of Bengal.

In 1637, Azam Khan built the Azam Khan Sarai in Gujarat. This grand structure, intended as a resting place for travellers during the Mughal era shifted its purpose over time. Notably, a gibbet stood on its roof, used for public hangings during both the Gujarat Sultanate and British periods. The Azam Khan Sarai remains a striking reminder of Mughal architectural patronage and the layered history of the region (Figure 2) and (Figure 3).



Figure 2: Azam Khan ni Sarai, 1866.

Source: "Architecture at Ahmedabad, the Capital of Goozerat" p: 353, photographed by Colonel Biggs



Figure 3: Azam Khan Ni Sarai, early 90's

Source: Unknown

Architectural Documentation

The entrance of the Sarai is one of its most prominent features, standing about 5.5 meters high. It opens into an octagonal hall, which likely served as a central gathering space. The structure is decorated with carved stone balconies and windows fitted with intricate Jali (lattice) work. These details, typical of Indo-Islamic architecture, add beauty to the building while also allowing air and light to pass through, ensuring comfort and privacy (Figure 4).

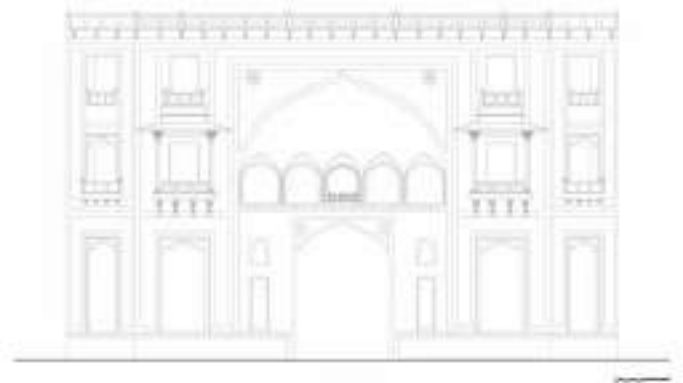


Figure 4: Elevation Drawing of Azam Khan Ni Sarai

Source: Author

In the basement, there is an octagonal *hauz* (water tank) at the centre, into which water once flowed through a slit in the rock. This water system was connected to the Sabarmati River and entered the basement through a chute decorated with the fish-scale or *mahi pusht* pattern. The *hauz* is believed to have been designed for noble women, such as the queen, as it was considered inappropriate for them to bathe in public spaces. Today, the channel from the river has dried up and most of the rock slits that once filled the tank have been sealed, leaving only one open (Figure 5).

The basement also has a carefully designed system of ventilation. Openings were planned both inside the rooms and at ground level outside. These vents

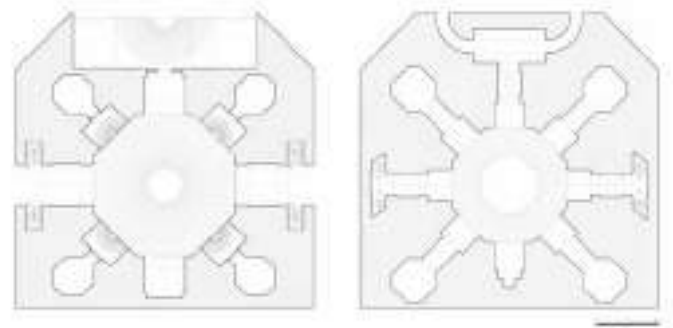


Figure 5: (i) Ground floor plan (ii) Basement floor plan

Source: Author

are said to have also served as hidden passages for soldiers to escape into the basement during attacks. They allow a surprising amount of air and light to enter, making it possible to sense what is happening above ground even from below. The vents are cleverly hidden in the façade, blending with the design while still giving those inside the basement a view of the outside world (Figure 6) and (Figure 7).

Current scenario

Currently, Azam Khan ni Sarai accommodates several government offices, including the Government Book Depot, the Vigilance Directorate, the Scheduled Castes Welfare Department and an ASI office. Continued use, combined with a lack of heritage-sensitive management, has altered much of its historic character. The grand entrance is now flanked by parked motorbikes and street vendors and in 2014 a substantial portion of the structure housing the city civil and sessions courts was demolished to make way for a new building, despite heritage advocates' objections.

Revitalisation plans have been proposed as part of efforts to restore the historic core of Ahmedabad, including structural strengthening, removal of

intrusive modern additions, improved landscaping and adapting the space for cultural exhibitions, markets and events. Although funding for a major facelift was approved under the JnNURM in 2010, progress has been limited and the site continues to fall under state-level heritage regulations rather than central protection. As a result, Azam Khan ni Sarai remains a living but compromised monument, caught between functional demands and the need for careful conservation.

The fact that this remarkable structure - which has continuously served public purposes for nearly 400 years - is now "in shambles" while still functioning as a government archive facility perfectly encapsulates India's heritage crisis. Here we have a building that has proven its utility and adaptability across centuries, yet the very government that uses it has allowed it to deteriorate.

Root cause of Systematic Neglect

One significant challenge in the preservation of India's monuments is that many deteriorating structures remain in active use by government departments. This on-going use can create the impression that the buildings are being maintained, when in fact the focus is often limited to keeping them minimally functional. Maintenance work is typically carried out without specialised heritage conservation expertise, leading to the use of modern materials and quick repairs that may damage the historic fabric and compromise the architectural integrity of these structures (Figure 8). A lot of factors play a role in this systematic neglect which includes the following points:

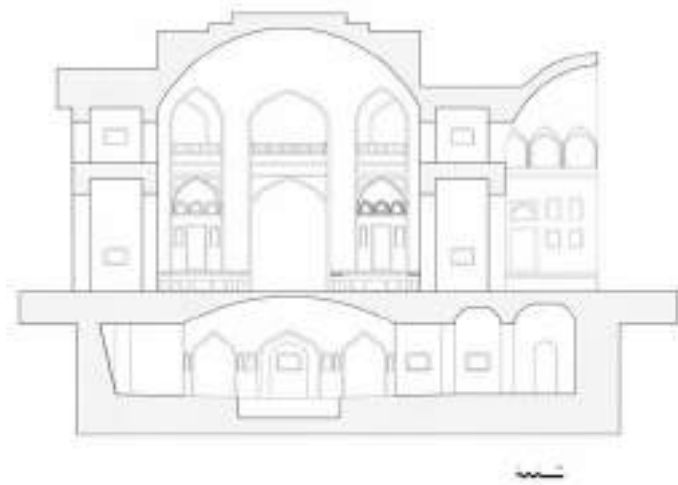


Figure 6: Sectional Elevation

Source: Author

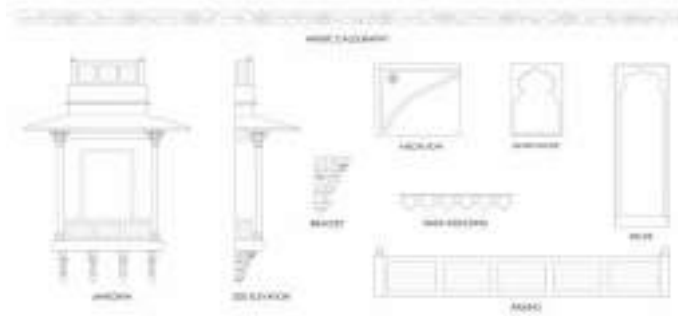


Figure 7: Architectural details

Source: Author



Figure 8: Azam Khan ni Sarai, Bhadra Fort Complex, Ahmedabad.

Sources: Amit Pasricha, 2020

Institutional Coordination

Heritage site management is often complicated by overlapping responsibilities between central, state and local authorities. This division of roles can result in multiple agencies being involved, yet no single authority being fully accountable for the site.

Conservation–Function Conflicts

Continued functional use presents unique preservation challenges. Modern office requirements such as electricity, plumbing and IT infrastructure can impact the historic fabric of the building. Accessibility provisions may require structural changes, while climate control systems for archival preservation can conflict with the structure's original natural ventilation.

User Behaviour Factors

Regular daily use contributes to wear and tear, particularly when there is limited awareness among users of the building's heritage value. Inappropriate storage methods can damage the structure and architectural details and the absence of protective protocols for historic elements further increases the risk of deterioration.

Political and Economic Considerations

The political economy of heritage conservation also shapes outcomes. Preservation work tends to lack electoral appeal, with visible new construction projects often preferred over less visible conservation efforts. Short political cycles are misaligned with the long timelines required for effective restoration and the absence of a strong heritage-focused constituency reduces political incentives for sustained action.

Professional Ecosystem Gaps

There is a shortage of trained conservation architects in India, alongside limited research facilities in heritage science. The link between architectural education and conservation practice remains weak and many trained professionals take up international assignments, resulting in a domestic loss of expertise.

Legal and Regulatory Weaknesses

While the Ancient Monuments and Archaeological Sites and Remains Act provide a framework for protection, enforcement is often weak and penalties for damage are minimal. Complex approval processes can discourage proper conservation interventions, while unclear jurisdiction between government levels further complicates effective site management.

Path Forward

Azam Khan ni Sarai, once known for its striking blue plaster, now reflects the wider challenges of

conserving historic monuments in growing urban environments. To address these issues, conservation needs to be seen as part of a broader, well-organised framework. Stronger coordination between government agencies, with clearly defined roles and responsibilities, can reduce overlap and improve decision-making. Learning from global practices such as integrated management systems used at UNESCO World Heritage sites can provide useful direction. At the same time, conservation strategies must look at adaptive reuse and sensitive design approaches so that the monument continues to serve contemporary needs without losing its historic value.

Building skills and knowledge in conservation is another essential step. This can be achieved through research centres, training programmes and professional networks that support architects, engineers and heritage managers. Incentives that encourage skilled professionals to work in India, along with collaborations across disciplines, can help fill the existing gap in expertise. Legal reforms are equally important, focusing not only on protecting heritage but also on making approval systems more efficient and enforcement more effective, in line with international conservation guidelines.

Equally vital is the role of local communities. Successful models of participatory conservation show that heritage survives best when people feel a sense of ownership. Encouraging public involvement, awareness campaigns and inclusive decision-making can create stronger support for long-term preservation. By combining better governance, skilled practice, legal support and community engagement, the conservation of Azam Khan ni Sarai can move beyond temporary solutions and become part of a sustainable model of heritage management for the future.

References

- Devdiscourse. (2024, December 10). *Government's vigilance on preserving India's heritage: ASI's role*. Devdiscourse. <https://www.devdiscourse.com/article/headlines/3255840-governments-vigilance-on-preserving-indias-heritage-asis-role>
- Drishti IAS. (2023, April 4). *Our heritage, our responsibility*. Drishti IAS. https://www.drishtias.com/daily-updates/daily-news-editorials/our-heritage-our-responsibility/print_manually
- Drishti IAS. (2024, August 20). *Preservation of cultural heritage*. Drishti IAS. <https://www.drishtias.com/to-the-points/paper1/preservation-of-cultural-heritage>
- IASGoogle. (2025, March 21). *March 21, 2025 current affairs*. IASGoogle. <https://iasgoogle.com/news/march-21-2025-current-affairs>

- NextIAS. (2025, February 15). *Preserving India's cultural heritage*. NextIAS. <https://www.nextias.com/ca/current-affairs/15-02-2025/preserving-india-cultural-heritage>
- The Print. (2025, February 5). *A heritage law left homeowners at ASI's mercy. Now Modi govt plans to ease it*. The Print. <https://theprint.in/ground-reports/a-heritage-law-left-homeowners-at-asis-mercy-now-modi-govt-plans-to-ease-it/2697741/>
- Times of India. (2025, August 10). *SC places monuments in Mehrauli complex under ASI supervision*. The Times of India. <https://timesofindia.indiatimes.com/city/delhi/sc-places-monuments-in-mehrauli-complex-under-asi-supervision/articleshow/123392792.cms>
- Times of India. (2025, July 18). *₹12 lakh allocated for Kundrandar temple: Union minister*. The Times of India. <https://timesofindia.indiatimes.com/city/trichy/rs12-lakh-allocated-for-kundrandar-temple-union-minister/articleshow/122843128.cms>
- Times of India. (2025, May 12). *Punjab and Haryana HC orders removal of encroachments from Thanesar archaeological site*. The Times of India. <https://timesofindia.indiatimes.com/city/chandigarh/punjab-and-haryana-high-court-orders-removal-of-encroachments-from-thanesar-archaeological-site/articleshow/121218474.cms>
- UNESCO. (2023, November 24). *India: Heritage theft remains a challenge*. UNESCO. <https://www.unesco.org/en/articles/india-heritage-theft-remains-challenge>
- Wikipedia contributors. (2025, August 20). *Ancient Monuments and Archaeological Sites and Remains Act*. In *Wikipedia*. https://en.wikipedia.org/wiki/AMASR_Act
- Wikipedia contributors. (2025, August 18). *Bhadra Fort*. In *Wikipedia*. https://en.wikipedia.org/wiki/Bhadra_Fort
- Wikipedia contributors. (2025, August 19). *National Mission on Monuments and Antiquities*. In *Wikipedia*. https://en.wikipedia.org/wiki/National_Mission_on_Monuments_and_Antiquities
- YoursHeritologically. (2024, September 22). *Heritage laws in India: A comprehensive overview*. YoursHeritologically. <https://yoursheritologically.in/heritage-laws-in-india-a-comprehensive-overview/>



Surbhi Sharma (A30786) is an architectural designer based in New Delhi, with a degree from the School of Planning and Architecture (2023). Her work sits at the intersection of space, story and social intent, translating contextual needs into bespoke designs that blend traditional architectural vocabularies with a contemporary sensibility. Equally drawn to the lens as to the drafting table, she documents vanishing heritage through photography and writing, drawn to the stories that places carry before they disappear.
Email: surbhisharmaspa@gmail.com

Architects at the Crossroads

Protecting the Identity and Future of the Profession in India

By Ar. Rajesh Nagula

Architecture in India is going through a crucial phase today. Cities are growing faster than ever before, infrastructure development is happening on a massive scale and technology is rapidly changing the construction industry. While these developments bring new opportunities, they also raise an important concern — the gradual weakening of the professional identity of architects in India.

The issue today is not simply about competition in the market. It is about protecting the dignity, relevance and future of the architectural profession itself.

The title “Architect” is not just a word or a business label. It represents years of education, training, professional practice, technical knowledge and ethical responsibility. Architects play a vital role in shaping the spaces in which people live, work, learn and interact. The profession carries responsibilities towards public safety, sustainability, environmental balance and the overall quality of life. This is why the profession is legally protected under the Architects Act, 1972.

However, in recent years, the misuse of the title “Architect” has become increasingly common. Across many cities and towns, unqualified individuals — including draftsmen, contractors, builders, software operators, interior decorators, consultants and even social media influencers — are presenting themselves as architects without possessing the required qualifications or registration under law.

This growing misuse is gradually weakening the credibility and identity of the profession.

At the same time, India is speaking about smart cities, sustainable development, climate- responsive

planning and world-class urban growth. Yet, in many places, professionally trained architects are not adequately involved in shaping the built environment. Developments often proceed without proper architectural involvement, resulting in unplanned urban growth, insensitive construction, environmental imbalance and buildings that lack contextual understanding and long-term vision.

Another concern is the increasing commercialisation of architectural services. Architecture is increasingly being reduced to a commercial service measured only by square feet and fees. In this process, professional expertise, design thinking, technical understanding, creativity and statutory responsibility are overlooked. This creates a challenging environment, especially for young architects entering the profession.

There is also a growing misconception that software and Artificial Intelligence can replace architects. Technology is undoubtedly transforming the profession in many positive ways. Tools such as BIM, AI, visualisation software and automation improve efficiency and coordination. However, architecture is much more than drawings and digital images.

Architecture is about understanding people, culture, climate, emotions, materials, movement and human experience. It is a combination of science, creativity and sensitivity. No software can replace human judgment, contextual understanding, ethical responsibility or the emotional connection that architects bring into spaces. Technology should support architects, not replace them.

The future belongs to professionals who can combine technology with human-centric thinking.

Architecture Beyond Buildings

Architects do much more than design buildings. They shape human environments and influence the quality of life in society. Good architecture affects sustainability, safety, energy efficiency, mental well-being, environmental balance and urban identity.

India is currently witnessing one of the largest urban transformations in its history. New airports, metro systems, educational institutions, housing developments, tourism projects and smart infrastructure are emerging across the country. Such rapid growth requires strong architectural leadership and responsible planning.

The future also offers tremendous opportunities for architects in areas such as sustainable design, heritage conservation, climate-responsive development, urban regeneration and digital innovation. Indian architects today have the ability not only to contribute nationally but also to participate meaningfully in global architectural discussions.

Legal Protection under the Architects Act, 1972

The profession of architecture in India is governed by the Architects Act, 1972, which regulates architectural education and professional practice in the country. Section 37 of the Act clearly states that only registered architects or firms of architects are permitted to use the “title and style of Architect.” Further, Section 36 provides penalties against individuals who falsely claim to be registered architects.

Under Section 37(2) of the Act:

- The first offence can attract a fine up to ₹500.
- Subsequent offences may attract a fine up to ₹1,000, imprisonment up to six months, or both.

Although these provisions were framed decades ago, the legal principle remains extremely important — the title “Architect” is protected by law and should not be misused by unqualified individuals.

However, considering today’s scale of construction activities, digital marketing and commercial representation, these penalties appear extremely nominal and no longer serve as effective deterrents. Unqualified individuals continue to use the title ‘Architect’ across digital platforms and advertisements despite legal restrictions.

The issue is not only about misuse of a title. It is about public trust, accountability and the quality of the built environment. Citizens deserve clarity about the qualifications and responsibilities of the professionals they engage.

Therefore, there is a strong need to revisit and strengthen the punitive provisions under the Architects Act. Stronger penalties, stricter enforcement, digital monitoring systems and faster grievance redressal mechanisms are essential to protect both the profession and public interest.

Role of the Council of Architecture and Professional Bodies

The Council of Architecture has taken commendable initiatives in recent years to address the misuse of the title “Architect.” Through its official platform, COA has introduced mechanisms for reporting unauthorised usage of the title. This is a positive step towards protecting the dignity and legality of the profession.

Professional bodies such as the Indian Institute of Architects and the Council of Architecture play an important role in safeguarding the profession. However, protecting the profession cannot remain the responsibility of institutions alone. It requires collective support and active participation from architects themselves.

In 2020, the Supreme Court clarified that while unregistered individuals cannot legally use the title “Architect,” they are not completely prohibited from undertaking certain construction-related activities, provided they do not represent themselves as architects.

This makes public awareness and stronger implementation even more important.

The Responsibility of Architects

As architects, we must also reflect on our own responsibilities.

The profession cannot survive merely by blaming external forces. Architects must strengthen professional ethics, institutional participation, public engagement and collective advocacy. Many professionals still work in isolation without participating actively in professional forums or awareness initiatives.

Young architects entering the profession deserve dignity, recognition and opportunity. They deserve an environment where creativity, innovation, sustainability and ethics are valued more than shortcuts and unauthorised practice.

The time has come for architects across India to collectively reclaim the identity and dignity of the profession.

We must advocate for stronger implementation of the Architects Act, greater public awareness

about professional qualifications and mandatory involvement of registered architects in significant developments. At the same time, architects must continuously update themselves in technology, sustainability, interdisciplinary collaboration and professional ethics to remain relevant in an evolving world.

Architecture has survived through civilisations because it is deeply connected to human life, culture and society. The profession will continue to remain relevant — but only if architects stand united to protect its integrity, dignity and purpose.

The question before the architectural fraternity today is simple:

If qualified architects themselves do not protect the profession, then who will?

And if not now, then when?

The views expressed in this article are personal and intended towards strengthening professional awareness and responsibility within the architectural fraternity.

References

1. The Architects Act, 1972
2. Council of Architecture – www.coa.gov.in
3. COA Mechanism for Reporting Misuse of Title and Style of Architect
4. Supreme Court Judgment (2020) regarding use of the title “Architect”



Ar. Rajesh Nagula (F13197), Chairman, IIA Visakhapatnam Centre, graduated in Architecture from Andhra University in 1998. He has been practicing architecture from Visakhapatnam with experience in institutional, tourism, residential, planning and urban development projects. He actively contributes to professional initiatives related to architecture and the built environment.

Email: rajeshnagula@gmail.com

Thinking beyond the Site for Sustainable Architecture

By Ar. M Pratap Rao

Modern architecture often revels the preservation of existing site features. Architects proudly design buildings around a mature tree, an exposed rock, a pond or a small lake, presenting these gestures as evidence of environmental sensitivity. While such efforts may appear commendable, they raise a fundamental question: are we truly protecting nature, or are we merely shifting environmental damage beyond the boundaries of the project site?

A building does not emerge from the site alone. Every brick, stone, bag of cement, load of sand and truckload of fill material comes from somewhere else. When topsoil is imported to raise site levels, another landscape loses its fertile layer. When stone is quarried for walls and foundations, hills and rocky ecosystems are permanently damaged. Bricks consume clay excavated from agricultural land, while sand mining alters rivers and groundwater systems. The environmental cost is simply transferred to locations that remain invisible to the project.

This selective concern for nature is comparable to keeping one's house impeccably clean while ignoring the condition of the surrounding neighbourhood. The house may look perfect, but the environment as a whole continues to deteriorate. Just as mosquitoes do not originate only within a house but breed in the neglected surroundings, environmental degradation cannot be addressed by focusing solely on the project site while external ecosystems are sacrificed to supply construction materials.

True sustainability demands a broader perspective. The environmental footprint of a building should be assessed from the source of its materials to the completion of construction, rather than only by what is preserved within the site boundary. Preserving a

tree while importing thousands of cubic metres of earth or stone extracted elsewhere is an incomplete understanding of ecological responsibility.

Architects should therefore begin by asking a different question: how can the natural resources already present on the site contribute to the building itself? Construction inevitably alters topography through excavation for foundations, basements, utilities and grading. Instead of treating excavated soil and rock as waste while importing similar materials from distant sources, projects should maximise the reuse of on-site resources. Excavated stone can become retaining walls, pavements or building masonry. Earth can be reused for landscape formation, rammed-earth construction, compressed earth blocks, or site grading. Such practices reduce transportation energy, minimise quarrying and mining elsewhere and significantly lower the embodied carbon of the project. This does not imply that every natural feature on a site should be removed. Features of exceptional ecological, hydrological, cultural or geological significance certainly deserve protection. However, preservation should be based on comprehensive environmental reasoning rather than visual appeal or symbolic value. If every element of a site must remain untouched, then perhaps that land is better suited for conservation than for construction.

Equally important is the choice of where we build. Degraded lands, abandoned industrial areas, brownfield sites and other wastelands often offer more appropriate opportunities for development than ecologically rich landscapes. Directing construction toward such sites minimises the destruction of healthy ecosystems while revitalising neglected land.

By contrast, there are projects that demonstrate a genuinely holistic approach. Buildings constructed from stone excavated during foundation work, earth reused for landscaping, or soil converted into compressed earth blocks significantly reduce the need for imported materials. Such projects minimise transportation, conserve natural resources elsewhere and reduce embodied carbon. Here, sustainability is achieved not merely by preserving selected site features but by reducing total environmental disturbance.

Case Studies: Building with What the Site Provides

1. Druk White Lotus School, Ladakh, India 2001

Designed for the harsh Himalayan climate, the school extensively uses stone excavated locally and earth from the surrounding area. The thick stone and earth walls provide thermal mass while reducing the need to transport heavy materials over long mountain distances. The project illustrates how site-derived materials can improve both environmental performance and climatic comfort. (Fig 1)



Fig 1: Druk White Lotus School, Ladakh, India
Source: *Earth architecture webpage*

2. Auroville Earth Institute, Tamil Nadu, India 1989

The Auroville Earth Institute has completed numerous buildings using compressed stabilised earth blocks manufactured from soil obtained directly on or near the construction site. By converting local earth into durable building blocks, these projects minimise transportation, reduce dependence on fired bricks and significantly lower embodied energy. The architecture proves that the ground beneath our feet can often become the primary building material. (Fig 2)



Fig 2: Auroville Earth Institute, Tamil Nadu, India
Source: *Auroville webpage*

3. Sangath, Ahmedabad, India 1981

Designed by Balkrishna Doshi, Sangath demonstrates how excavated earth can become a resource rather than a waste product. Much of the soil removed during construction was reused to create landscaped berms that insulate the building and merge it with the site. Instead of relying entirely on imported landscaping materials, the project transformed excavation into an integral part of the design. (Fig 3)



Fig 3: Sangath, Ahmedabad, India
Source: *Architect magazine webpage*

4. Centre for Development Studies, Thiruvananthapuram, India 1970

Architect Laurie Baker consistently advocated the use of locally available materials and site resources. Laterite stone excavated from building sites was often used directly in walls, reducing transportation and quarrying elsewhere. Earth from the site was reused for landscaping and level adjustments, while construction techniques were adapted to the materials naturally available in the region. Baker demonstrated that economy, beauty and sustainability could coexist. (Fig 4)



Fig 4: Centre for Development Studies, Thiruvananthapuram, India
Source: *Architecture students corner webpage*

5. Falling water building, Pennsylvania, USA 1939

Falling water is often celebrated as the finest example of organic architecture. Wright did not simply preserve the waterfall—he built the house over it, making the waterfall part of everyday life. He also used native sandstone quarried from the property, local craftsmen and even incorporated existing boulders into the building, such as the large rock that forms part of the living room hearth. The stone walls were built with sandstone quarried on-site and even some aggregates for the concrete came from the streambed. Falling water also illustrates the limits of site preservation. The house still required reinforced concrete, steel, glass, cement and timber that were brought from elsewhere. Access roads had to be built and significant construction activity altered the landscape. Therefore, although the project used on-site stone extensively, it was not entirely self-sufficient in materials. (Fig 5)



Fig 5: Falling water building, Pennsylvania, USA
Source: *Falling water webpage*

These projects differ in climate, scale and architectural language, they share a common principle: the site is treated not merely as a location for a building but as a source of building resources. Excavated soil becomes landscape or wall material. Stone removed during foundation work becomes masonry. Materials are viewed as assets rather than waste. These examples reveal an important distinction between visible sustainability and actual sustainability. Visible sustainability is what the eye observes within the project boundary—a preserved tree, a rock, or a pond. Actual sustainability considers the hidden environmental costs incurred outside the site to make the project possible. The future of architecture depends on giving greater importance to the latter.

The future of sustainable architecture lies not in isolated acts of preservation but in understanding the entire ecological chain of construction. Buildings should be judged not only by what they leave untouched within their boundaries but also by the environmental consequences they create beyond them. Sustainability is not about protecting a single tree while destroying a distant hill to obtain stone. It is about reducing total ecological damage across the entire life cycle of a building.

Architecture must move beyond the illusion of site-specific sustainability and embrace truly holistic environmental ethic. Only then can we claim that our buildings are genuinely in harmony with nature rather than merely relocating its destruction.

References

- Baker, Laurie. Laurie Baker: Life, Work, Writings (1996). Laurie Baker: Life, Work, Writings. New Delhi: Viking.
- Auroville Earth Institute. (n.d.). Compressed Stabilised Earth Block Technology. Retrieved from <https://www.earth-auroville.com/>
- Kibert, Charles J. Sustainable Construction: Green Building Design and Delivery. (2016). Sustainable Construction: Green Building Design and Delivery (4th ed.). Hoboken, NJ: John Wiley and Sons.
- Intergovernmental Panel on Climate Change. (2022). Climate Change 2022: Mitigation of Climate Change. Cambridge University Press.
- United Nations Environment Programme. (2023). 2023 Global Status Report for Buildings and Construction. Nairobi: UNEP.
- McDonough, William and Braungart, Michael. Cradle to Cradle: Remaking the Way We Make Things. (2002). Cradle to Cradle: Remaking the Way We Make Things.

New York: North Point Press.

Council on Tall Buildings and Urban Habitat. (2021). Embodied Carbon in Buildings. Chicago: CTBUH.

Frampton, Kenneth. Modern Architecture: A Critical History. (2020). Modern Architecture: A Critical History (5th ed.). London: Thames and Hudson.

Druk White Lotus School. (n.d.). Project Information. Retrieved from <https://www.arkshelter.org/>

Sangath. Balkrishna Doshi Foundation. (n.d.). Sangath. Retrieved from <https://www.vastushilpa.org/>

Fallingwater. Western Pennsylvania Conservancy. (n.d.). Fallingwater. Retrieved from <https://fallingwater.org/>



M Pratap Rao (A6174) is an Architect-Planner based in Hyderabad with over 30 years of experience. A Gold Medallist from the University of Mysore, he received the IIA Research Award, VSF Fellowship, HUDCO Sir M. Visvesvaraya Prize, authored six books and is an Associate Member of the IIA and ITPI professionally.

Email: mprataprao@gmail.com

ARTICLE

Did Mumbai Architects and Developers of the 1970s and 1980s Design the Most Affordable Apartment Plans?

By Ar. Dhanush Vayalambon

Mumbai's mass housing history has come a long way from the early chawls provided by mill owners for their out-station workers to the opulent mansion mimicking apartments we have today. After the chawls, sometime around 1915, came the time when Bombay Improvement Trust (BIT) built the infrastructure for a new type of housing called 'apartments' to house the influx of educated lower middle class employees who came from other states, primarily from Tamil Nadu. The apartment had a self-contained toilet, unlike the chawls which had a common toilet. Nikhil Rao in his book 'House, but No Garden: Apartment Living in Bombay's Suburbs, 1898–1964' enumerates the history with the characteristics of each type of housing in different eras. Later, after independence in the 1970s and 1980s, came a time when there was a boom in the housing market due to the city's expansion to Greater Mumbai and a large number of apartments being built along the Bandra to Borivili and Kurla to Mulund corridors. Lack of willingness to spend among the affluent led to the developers and architects arriving at the most affordable apartment design without any square inch being wasted. The lack of affluence, civic sense and unwillingness of residents to pay maintenance charges led these apartments to look like slums. It was only in the late 1980s when Hafeez Contractor built the three colourful towers with different designs at different places in South Mumbai that Mumbai was once again set on the course of its original beauty. But in the 1970s and 80s, the apartment plan was an exercise in frugality and the slightest increase in cost causing your practice to lose a developer client.

As imperial measures were prevalent then, the same have been used to explain the typical apartment design of that period (figures 1-3).

Habitable rooms

Area: 100 sq. ft.

Minimum width: 8' 0"

Kitchen

Area: 60 sq. ft.

Minimum width: 6' 0"

Bath

Area: 16 sq. ft.

Minimum width: 4' 0"

WC

Area: 12 sq. ft.

Minimum width: 3' 0"

1. The floors were 9 feet high (from slab top to slab top) which gave almost 2 feet of beam depth after a door height of 7 feet and a flooring thickness of 2 inches. A beam depth of 2 feet was not needed, somewhere around 1 1/2 feet was enough but it was retained as 2 feet so as to avoid the cost of another lintel beam above doors and windows.
2. Toilet window height goes over to the loft above the toilet to provide light to the loft area.
3. The loft carried a Sintex PVC (in later years) loft water tank of size around length 120cm, width 72cm and height 60cm with enough space between the top of the tank and the bottom of the ceiling to give access to occasionally clean the inside of the tank through an opening above.
4. The ceiling of the adjacent passage was used to dry clothes.

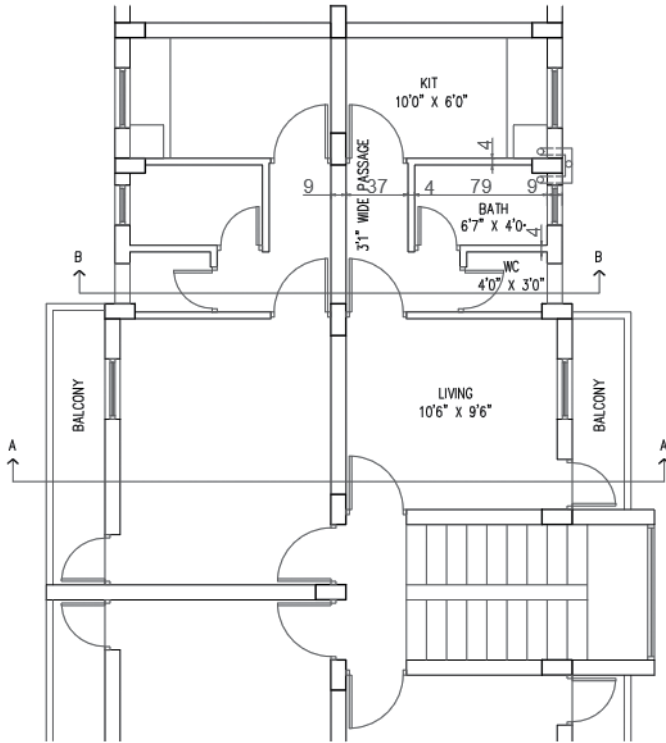


Figure 1: A typical plan
Source: Author

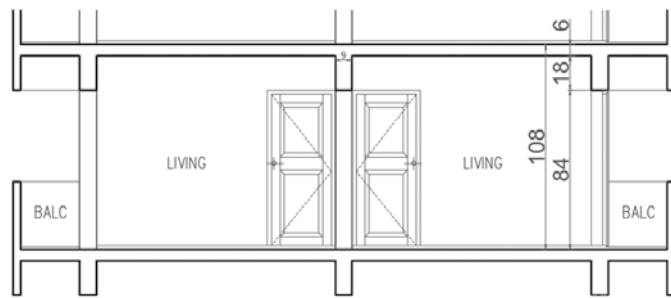


Figure 2: Section A-A
Source: Author

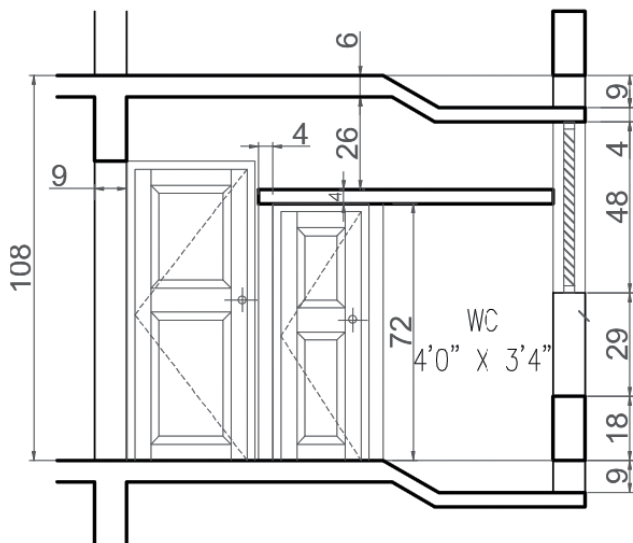


Figure 3: Section B-B
Source: Author

5. The toilet windows had horizontal bars at regular intervals as a security measure and the windows were pimped louvered glass windows because glass panes for louvers could be cheaper as it required lesser thickness as compared to regular window panes.
6. Bathroom and kitchen sink floor traps were adjacently placed so that a common downtake pipe could be used on the outside (figure 4).



Figure 4: Common downtake pipe
Source: Author

7. Window grills had a standard design which was the cheapest to fabricate and at the same time able to provide the minimum gap required for safety concerns (figures 5 and 6).
8. The kitchen counter was cast out of concrete topped with Cudappah stone and with a sink adjacent to the bathroom wall so that a common drain pipe for both the bathroom and kitchen would suffice. On the other side of the counter was a section for the cooking gas cylinder.



Figure 5: Window grill designs
Source: Author



Figure 6: Window grill designs

Source: Author

Cudappah stone slab was the cheapest stone slab that could be used. The counter had a dado of 150mm X 150mm white glazed tiles upto three full tiles. The partition below the counter was also made with Cudappah stone slabs. Figure 7 shows a stainless steel sink which appears to



Figure 7: Interior view of a kitchen

Source: Author

be a recent renovation as in the earlier days the sink was also cast out in concrete and lined with Cudappah stone and pointed white cement to make it water tight.

9. The 'chajjas' or sunshade was a simple concrete ledge with a concrete coba near the wall extending 60 cm outside (figure 8). The rest of the external walls were plain without any fenestration.
10. Rough cast concrete plaster band was used for elevation treatment which was the cheapest decorative surface finish (figure 9).



Figure 8: Typical building elevation

Source: Author



Figure 9: Typical building elevation

Source: Author

All Images Courtesy Author



Ar. Dhanush Vayalambbron (A24298) is an architect and educator who graduated with a B.Arch. from Sir J. J. College of Architecture, Mumbai (1982–1987). His professional experience includes working with Shashi Prabhu & Associates, Habitat Group, Kumar Group, Gulf House Engineering (Bahrain) and Ajit Associates. He is currently an Assistant Professor at ASADI, Kochi.

Email: dhanushvayalambbron@gmail.com

The Heritage Haven

By Ar. Syed Mohammad Wasil and Ar. Syed Ather Qayoom

FACT FILE:

Location: Wanbal, Srinagar, Jammu & Kashmir
Typology: Boutique Residence

Design Firm: AW Designs

Project Completion Year: 2021

Total Site Area: 3770 sqft

Total Built up Area: 2100 sqft

Floor area ratio: 0.56

1. Introduction

Located in Wanbal, Srinagar, this heritage villa stands as a distinguished testament to architectural refinement and cultural continuity. The building exemplifies a harmonious fusion of European architectural influences, most notably visible in its steeply pitched, turreted roofs with the rich traditions of Kashmiri craftsmanship. These local sensibilities are articulated through finely detailed brickwork, carefully proportioned arched windows and the overall precision of its construction. The villa's stately façade, ordered symmetry and measured proportions lend it a dignified presence within its setting (figure 1). Together, these elements position the structure as an enduring symbol of colonial-era architecture, one that has withstood the passage of time while continuing to reflect the layered historical and cultural narratives of Srinagar.

2. Concept

The heritage architecture of Kashmir is a testament to the region's rich cultural history, blending local craftsmanship with influences from Persian, Mughal and Central Asian traditions. It is characterised by intricate craftsmanship, the use of local materials like Kashmiri stone, brick, wood and an emphasis on detail. The architecture reflects the artistic genius of master craftsmen who worked with precision to



Figure 1: An aerial view of the site
Source: Author

create some of the most beautiful buildings in the region. Intricate Kashmiri brickwork is a hallmark of traditional Kashmiri architecture, combining the beauty of locally sourced bricks with finely crafted patterns and designs. The work includes detailed geometric locally sourced bricks with finely crafted patterns and designs. The work includes detailed geometric patterns, floral motifs and arched structures, often combined with other materials like wood and stone. This brickwork not only contributes to the aesthetic appeal of Kashmiri buildings but also plays a functional role in the region's cold climate, offering thermal insulation and durability. The craftsmanship is an enduring symbol of Kashmir's rich architectural and cultural heritage.

3 Architectural Style

Traditional Kashmiri design: The residence incorporates steep and pointed roofs, reminiscent of classic Kashmiri architecture, designed for heavy

snowfall during winter (figure 2). The angular rooflines add a Victorian flair, creating a regal, castle-like aesthetic.



Figure 2: Conceptual architectural visualisation
Source: Author

Brick façade: The use of exposed bricks complements the local construction style while lending a timeless and earthy appearance.

Roofing: Sloped roofs with decorative ridges are not only visually striking but also functional for shedding snow and rain.

Windows: Large, arched windows bring in natural light and create a grand effect. Symmetrical window placements enhance the balanced look of the structure.

Balconies and turrets: Semi-circular protruding sections with elongated windows evoke the style of historical manor houses. Provides panoramic views of the surrounding landscapes, particularly significant in Kashmir.

4. Spatial Organisation

Ground floor plan (figure 3a): The ground floor primarily accommodates service and ancillary functions, forming the functional base of the villa. Access is organised through a controlled entry sequence that leads into utilitarian spaces such as storage areas, service rooms and support facilities. A dedicated parking zone is integrated within the layout, reflecting later functional adaptations while maintaining the original spatial logic.

First floor plan (figure 3b): The first floor represents the principal living level of the house. A central living hall acts as the focal point, reinforced by its generous proportions and visual prominence. This space is directly connected to adjacent living and dining areas, allowing for fluid movement and social interaction. Private rooms, including bedrooms are



Figure 3a: Ground floor plan
Source: Author



Figure 3b: First floor plan
Source: Author

arranged along the periphery, ensuring privacy while maintaining visual and physical connection to the central core.

Second floor plan (figure 3c): The arrangement follows a more compact and inward-focused organisation, reinforcing privacy and seclusion. Bedrooms are distributed around the central circulation spine, with attached washrooms, reflecting evolving residential needs. This level emphasises retreat and personal use, contrasting with the social openness of the first floor.

5. Materials, Textures and Functionality

Brick and stone: A mix of local red brick and stone enhances insulation and pays homage to Kashmiri architectural traditions (figures 5a and 5b).



Figure 3c: Second floor plan

Source: Author



Figure 4: Exterior view showing the conical roof

Source: Author

Metal fences and details: Ornamental fencing around balconies and boundary walls adds a vintage charm.

Wooden accents: The inclusion of wooden carvings (common in Kashmiri interiors) for doors or ceilings further celebrate local craftsmanship.

6. Functionality and Interiors (figure 6)

Spacious layout: Large living spaces with high ceilings for comfort during harsh winters and summers.

Warmth and insulation: Traditional *hamams* (heated floors) and *khatamband* wooden ceilings for thermal regulation.



Figure 5a: Front elevation

Source: Author



Figure 5b: East side elevation

Source: Author



Figure 6: Section AA'

Source: Author

Garden and surroundings: Landscaped lawn with indigenous Kashmiri flora like Chinar trees and tulip beds enhance the residence's aesthetic.

Climate responsiveness: Sloped roofs are used for snow and rain management. Insulated brick walls for winter warmth and summer cooling.

Craftsmanship: Use of carved wooden brackets, rafters and accents to highlight Kashmir's rich artisanal traditions.

Elegance and functionality: Symmetrical design elements (windows, turrets, balconies) create an organised aesthetic while maintaining a functional layout.

Timeless appeal: A blend of red brick, woodwork and ornamental roofing ensures the residence feels regal yet is grounded in tradition.



Figure 7: Hamam Room
Source: Author



Figure 8: Family lounge area
Source: Author



Figure 9: Staircase
Source: Author

7. Interior Character and Craftsmanship

The interiors are dominated by rich, dark-toned timber panelling, intricately carved screens and handcrafted doors, reflecting the region's long standing woodworking traditions (figures 7-9). Spaces such as the *Hamam* room and family lounge evoke a sense of warmth and enclosure, achieved through seating arrangements, traditional carpets and detailed wooden wall treatments that emphasise comfort and intimacy. The first-floor gallery and staircase act as transitional spaces, showcasing carved balustrades, ornamental panels and framed niches that elevate circulation areas into experiential zones rather than mere passages. Lighting is warm and subdued, enhancing the texture of wood and carvings while reinforcing the home's historic ambience.



Ar. Syed Mohammad Wasil (A27228) is an alumnus of the prestigious Pune University and the founder and Principal Architect at AW Designs established in the year 2012. With over fourteen years of working experience in the industry, he is a patron of traditional architecture and specialises in the amalgamation of heritage architecture and state-of-the-art design and technology.

Email: fwasil@gmail.com



Ar. Syed Ather Qayoom (A27229) completed his B.Arch. degree from the prestigious University of Mumbai and is the founder and Principal Architect at AW Designs. Owing to his prolonged exposure in this field, his area of expertise lies in architecture in cold regions with sustainable interiors.

Email: aw.designs77@gmail.com

From Blueprint to Frame

Notes on Architecture, Cinema, and the Spaces Between

By Ar. Rahul Saxena



Figure 1: 82nd Venice International Film Festival, 2025. Left to right: Adil Hussain, Nidhi Saxena, Vimukthi Jayasundara, Trimala Adhikari, Rahul Saxena.

Source: Author

I found myself on the red carpet of the 82nd Venice International Film Festival — the world's oldest, where cinema has been judged and celebrated since 1932 — standing beside Nidhi Saxena, Adil Hussain, Trimala Adhikari, and Vimukthi Jayasundara, filmmakers and actors of international standing, surrounded by the particular spectacle that Venice commands: the water, the light, the accumulated weight of that history pressing against the present moment. It was a world unlike anything architectural practice had prepared me for. International press. A film that had travelled farther than any drawing or building of mine ever had. And yet, standing there, I understood that I was not entirely a stranger to it. Architecture and cinema, though separated by medium and method, are joined by a common preoccupation: the shaping

of space, atmosphere, and human experience. I had spent three years learning the precise nature of that connection — not in a classroom or a festival hall, but in a decaying house in the old city of Ahmedabad and in the freezing hills of Kumaon.

This is an account of what happened when the rigours of architectural practice encountered the fluid, demanding world of independent international filmmaking — and what each discipline, in the end, returned to the other.

The House in Ahmedabad

Three years before Venice, I had been standing in a very different kind of space. The house was in the old city of Ahmedabad — peeling plaster, fractured furniture, dust settling into every surface, a palpable sense of accumulated time. It would become the primary world of *Sad Letters of an Imaginary Woman*, written and directed by my sister Nidhi Saxena, which received the Asia Cinema Fund and premiered at the Busan International Film Festival — Asia's most significant platform for new cinema — in 2024. I came to it not from film school or the art department, but from architecture.

By the time I arrived to work as Production Designer, Nidhi had already spent months living in relation to the house. She and the actors had inhabited its rooms, tested its silences, and allowed the house to become an active presence rather than a passive location. The work was not to impose a visual identity on the place, but to recognise the one it already possessed.

My first act was simple: I photographed everything. Not selectively, but obsessively. Every corner, every intended frame, every spatial relation the house

had already established between light, surface, and the life accumulated within it. The house was dense — choked with decades of inherited furniture, discarded objects, the heavy residue of domestic life. Our task was an exercise in subtraction. We stripped the spaces back not to impose a pre-conceived aesthetic, but to allow the fundamental architecture to breathe.



Figure 2: The courtyard window opening, Ahmedabad old city. The house that became the spatial world of *Sad Letters of an Imaginary Woman*.

Source: Author

The inner chowk stopped me. Light came from directly above through a narrow slice of sky, the wooden balconies stacking on all sides into a vertical sequence of thresholds — a section drawing made habitable. The teal walls carried a chromatic logic — muted, worn, the colour of old lime plaster that has absorbed decades of weather and domestic rhythm. Iron-barred windows filtered afternoon light into the interiors in shifting patterns through the day, never decorative, always structural. These were not surfaces to be designed. That was the house's own language. We had to learn it before we could work inside it — and learning it meant mostly staying out of its way.

Most of what entered the frame came from neighbouring houses in the same lane. We borrowed it, carried it by hand. Not because it looked good — because it was from that world. A staged object announces itself. We could not afford that. Everything that entered the frame had to carry its own history — not one we invented for it. Richness wasn't the point. The only test was whether something looked like it had always been there.



Figure 3: Film still from *Sad Letters of an Imaginary Woman*. The protagonist presses a boom microphone to the bare plaster.

Source: Author

What stayed with me most was the density of time held in those walls. Their surfaces were not neutral backgrounds. They had absorbed weather, domestic rhythm, fatigue, and memory. There is a moment in the film where the protagonist presses a boom microphone directly to the bare plaster — listening, recording what remains inside the wall. The image needs no exposition. The house had been speaking all along. As an architect, I recognised in this a discipline I already held but had perhaps never tested so precisely: one does not begin with form, but with evidence. Space must be interpreted before it is altered. In Ahmedabad, production design was not the manufacture of appearance. It was an act of reading with unusual attentiveness.

Nidhi's cinema is restrained: the camera holds, dialogue is spare, and emotional movement often appears through minor disturbances rather than overt action. In such a cinematic language, fabric catching wind, a plant shifting near a window, or the gradual drift of afternoon light can become dramatically charged. One of the most striking gestures in the film was the use of sari fabric as curtains — deliberate, and precise. In Nidhi's cinema, and in the demand of this particular story, the sari curtains did not decorate the interiors. They answered a narrative need — movement in a space that was otherwise still, breath in a world that had forgotten how to exhale.

What Cinema Was Teaching Me

Nidhi and I grew up reading from the same shelves — Gorky, Tolstoy, Vinod Kumar Shukla. But we followed our curiosities differently. I moved toward architecture, technology, structure. She moved toward painting, art, and eventually cinema — not casually, but with the rigour of someone building a visual language from the ground up.

Before we began production design for *Sad Letters*, she showed me Amit Dutta's *Nainsukh*. I had not anticipated what that film would do to my thinking. Dutta constructs space the way a Pahari miniaturist constructs a procession — each figure held precisely within its architectural frame, the landscape measured not in metres but in the time it takes to move through it. The use of windows as thresholds for conversation, the scale of Pahari architecture holding a solitary figure, the yellow of mustard fields seen from horseback — watching it, I understood that architecture has pace. Not just proportion or light, but the rhythm of threshold, arrival, and delay. The time a corridor takes to release you into a room. The moment a doorway holds you before the next space declares itself.

Wong Kar-wai had already shown me what compression does to colour — how a narrow passage and a specific quality of green can make confinement feel like longing. The teal walls and warm amber interiors of the Ahmedabad house were not chosen in isolation. They had been absorbed from films before a single frame was shot. Apichatpong Weerasethakul showed me that a landscape can hold memory without explaining it — that pace, in cinema as in architecture, is not the absence of movement but its careful measure.

These were not lessons about filmmaking. They were spatial observations arriving through a different instrument than the one I had trained with.

The Mountains of Kumaon

If *Sad Letters* taught me about intimacy and spatial listening, *Secret of a Mountain Serpent*, also written and directed by Nidhi, taught me something equally demanding: that the making of cinema at an international level is also a project of coordination, endurance, and strategic management. This time my role was different. I worked as Executive Producer.

The film is set in Almora and Kausani during the shadow of the Kargil War of 1999 — a time when the men of the region were absent, leaving the women behind to navigate both reality and a local myth concerning a serpent guarding a forbidden river. The Venice Biennale College Cinema programme selected and funded the project, one of only four global projects chosen that year, accompanied by a €200,000 grant. To be selected from thousands of international applications was a recognition of considerable consequence. My responsibility was to help make the project operational.

We spent four months in Kumaon — two in pre-production, moving through Almora and Kausani on

foot and by road, reading landscapes the way one reads a site before committing to a design, and then twenty-eight days of shoot before the production moved to Mumbai for post. What we were looking for was not beauty alone, but spatial truth — places whose existing character could carry the weight of the narrative without being asked to perform beyond their nature.

In the old Lala Bazar of Almora, we found a house more than a hundred years old — built by an army family, its architecture carrying the particular hybrid character of that history: a Kumaon vernacular absorbed into cantonment-era English influence, a central staircase rising through both floors with rooms opening on either side, the whole structure organised around a logic of occupation that had not changed in a century. Inside, a painted wooden ceiling the colour of deep water, family portraits watching from the walls, carpets laid over carpets, time accumulated in every surface and every silence. The building knew exactly what it was. We could not drill a single hole. Every intervention was negotiated, every placement considered, every piece of equipment moved with the precision that its age and dignity required. An architect arrives at a site with a programme. In Almora, this building already had one. The task was not to override it but to find, within its existing logic, the space the story needed.



Figure 4: Primary location, Lala Bazar, Almora. A house more than a hundred years old, its Kumaon vernacular absorbed into cantonment-era English influence.

Source: Author

Along the river, flat rocks of layered stone held the cold light of February mornings with the patience of things that have been waiting a very long time.

The twenty-eight days of shoot that followed were among the most demanding of my professional life — not despite the conditions, but because of what

the conditions required. The crew numbered around fifty. Equipment had to be sourced from Mumbai, Delhi, and Chandigarh and transported into the hills. Night shoots ran twelve hours. By four in the morning the cold was serious enough that keeping the crew warm was not a support function. It was the work. We gathered one hundred goats and horses for a single bridge scene. We shot in a government school in Almora with a hundred schoolchildren who had their own ideas about the day's schedule. Every location was borrowed, requested, or negotiated — nothing owned, nothing imposed.



Figure 5: With Adil Hussain on the Lala Bazar street, Almora, 2 AM, between shots. A hill town bazaar is not a Mall Road — it is older, narrower, generationally inhabited; the lived-in spine of a town, layered with shops and homes above, carrying a cultural density entirely its own.

Source: Author

We shot in houses whose families opened not just their doors but their lives to us. In one small mountain village, word had spread that a film was being made — and by the time the crew was ready, what felt like the entire hillside had arrived to watch. The AD called silence. The hillside disagreed. I stood there, Executive Producer of a Venice Biennale project, completely powerless before the collective curiosity of a mountain community that had decided this was the most interesting thing to happen in years. Vikas Urs called camera rolling. The murmur held its ground. Nidhi said action — and the film began anyway, as it always does, in the middle of beautiful, ungovernable chaos. No budget line prepares you for this. No production schedule has a column for it. And yet somehow, it is exactly this — the place insisting on its own presence — that ends up in the film.

What Architecture and Cinema Share

I would hesitate to claim that cinema taught me architecture anew. That would overstate the case. What it returned me to was the discipline I already practised — but with sharpened perception and a harder-won understanding of what that discipline actually requires.



Figure 6: The crew of *Secret of a Mountain Serpent* on the Kumaon riverbank after the final shot. Twenty-eight days.

Source: Author



Figure 7: *Secret of a Mountain Serpent*, the Kumaon river.

Source: Author

In both architecture and cinema, space is never neutral. The decaying house in Ahmedabad did more than hold its characters. It pressed in on them — setting the terms of their emotional and psychological confinement. In Kumaon, the landscape was never just a setting. It made freedom feel immense and, in the same movement, gave weight to being left behind. These are not literary metaphors laid over form. They are spatial facts. A house argues. A mountain argues. The architect's task, like the filmmaker's, is to listen to that argument before proposing anything in response.

Across both productions, I came to understand authorship differently. On a film set, as in an architectural studio, there is ultimately a singular vision. Every contribution must either strengthen that vision or it becomes noise. Nidhi authored these worlds entirely. I entered them in service of their coherence — first as someone who read the space and prepared it to receive a story, then as someone who built the scaffolding that allowed the story to reach the world. I had not expected that distinction

— between authoring and serving — to clarify my own professional life so sharply. Architecture had always asked me to author. Cinema asked me, for the first time, to serve with complete commitment and without reservation. Both require rigour, but they require it differently.

What Cinema Returned to Architecture

I will not claim that working in cinema gave me a new methodology. But I returned to practice with two things I have not been able to set aside.

The first was that instinct about pace — which I now find everywhere in built space, once you have learned to look for it: in the sequence of rooms in a house, in the speed at which a space releases you toward something you are not yet ready for, in the moment a threshold asks something of the person crossing it before allowing passage.

The second was more personal. I had worked alongside women of considerable professional authority throughout my practice. What was different in Kumaon was not the presence of that authority — it was my proximity to the full, unmediated cost of sustaining it.

Bangkok, and Beyond



Figure 8: Nidhi Saxena with the Best New Director award for *Secret of a Mountain Serpent*, Bangkok International Film Festival, 2025.

Source: Author

The photograph from Bangkok arrived late at night. Nidhi on stage, holding the Best New Director award. I was not thinking about architecture, or cinema, or anything we had spent three years discussing. I was thinking about what it costs to build something true. Both films continue to travel. *Sad Letters of an Imaginary Woman* and *Secret of a Mountain Serpent*

are still moving through festivals and screens across the world — carried by The Open Reel to audiences in cities and contexts their maker could not have fully anticipated when she was standing in a decaying house in Ahmedabad, or on a frozen riverbank in the Kumaon hills, asking a story to trust the space it was being given.

That journey has no fixed destination, which is, I have come to understand, precisely what makes it architectural.



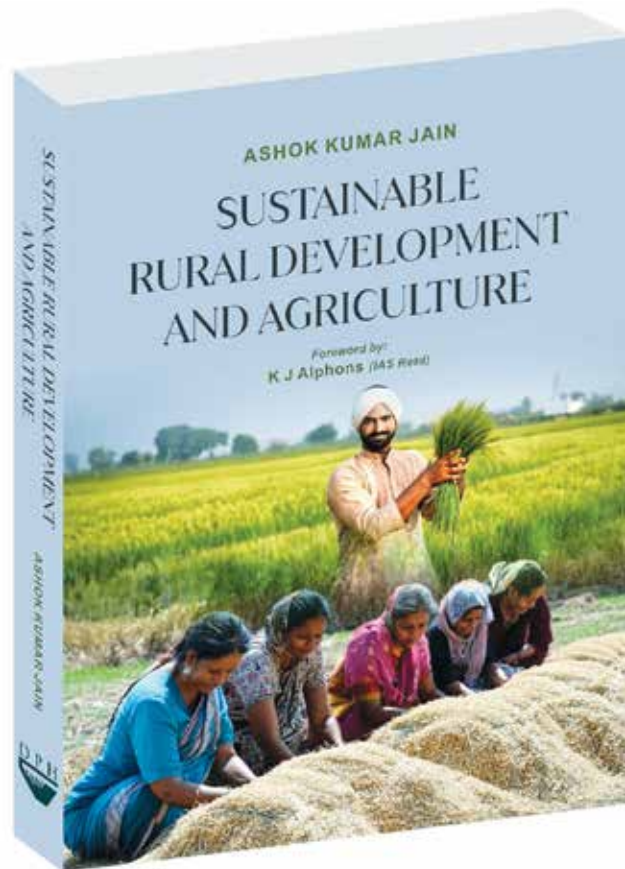
Ar. Rahul Saxena (A22690) is Principal Architect and founder of Studio Athenos, Jaipur (est. 2007), with twenty years' practice in healthcare and residential architecture. He was Production Designer on *Sad Letters of an Imaginary Woman* (Busan, 2024) and Executive Producer on *Secret of a Mountain Serpent* (Venice Biennale College Cinema, 2025).

Email: rahul@studioathenos.in

Sustainable Rural Development and Agriculture

Author: Ar. Ashok Kumar Jain

Reviewer: Ar. J.D.S. Sodhi



Sustainable Rural Development and Agriculture - book cover

Source: Author

Publisher: Discovery Publishing House, New Delhi

Year of publication: 2026

ISBN: 978-93-6224-221-1

Language: English

Genre: Technical

No. of pages: 304

Dimensions (in cm): 19 x 25

Type: Hardback

Available at: Available on Amazon/Publishers

The book '**Sustainable Rural Development and Agriculture**' by Ashok Kumar Jain projects an important role of rural development and agriculture in making India a developed nation (Viksit Bharat). In India a population of 956 million (out of its total of 1447 million) lives in 6,40,930 villages. The agriculture sector contributes about 17.4% of GDP and engages 55% of India's workforce. This indicates the dichotomy of rural income, which is about one fourth of the per capita urban income. In 2047, it

is projected that the population of India would be 1640 million, of which the rural population would be 820 million. According to the author, the paradox is that India with 328 million hectares of land, the largest cultivable landmass on the planet, has a very low agricultural production as compared to other countries. The agriculture sector in India uses 85% of country's freshwater with irrigation efficiency of 20 to 25% only.

The author emphasises that in the context of climate change, it is time to focus upon climate resilient precision agriculture, together with timely weather forecast and efficient water and fertiliser use. The multi-faceted optimisation strategies should focus not only on crop production and quality, but also reduce the inputs, labour, time and resources. This involves leveraging new technologies such as GPS mapping, soil sampling, satellite/drone imagery and artificial intelligence.

The mandate of self-governance under the Seventy-third Constitutional Amendment Act (73rd CAA) is still to be fully realised. As a result, the rural areas often suffer from lack of jobs, education, linkages, livelihoods, health amenities and sustainability. According to the author, the rural urban gap is not only in income, but also in education, health care, sanitation, infrastructure services, roads, transport, water, energy and technology. This paradox is discernible in the plans and programmes, investments and research. As a result, the issues of rural development, governance and financing remained neglected. According to the book, on an average rural women spend five hours a day cooking and suffer from respiratory, lung and other ailments due to smoke, reflecting environmental and gender injustice. This necessitates a deep concern and paradigm shift towards rural development.

The Central Government has launched several flagship schemes of rural development and agriculture, such as Viksit Bharat Ram-G-Ram (that had recently replaced the MGNREGA), Jan Jeevan Mission, PM Awas Yojana, Livelihood Mission, Poshan, Ayushman Bharat, SBM-Rural, Watershed Programme, Solar Power, Fisheries, Lakhpati Didi, Telecom Infrastructure, Gram Swaraj, Agro-Infra Fund, Handloom Development, Shyama Prasad Mukherjee Rurban Mission, Svamitra and Adi-Adarsh Gram Yojana. Under the Pradhan Mantri Awas Yojana (Gramin), the construction of 29.5 million PMAY (Gramin) houses was taken up during 2016-24. The PMAY 2-0 (Gramin) has committed to build an additional 20 million houses. The author emphasises the need to establish linkages between rural and urban development, between incomes and social transformation and between traditional agriculture and new technologies.

The book 'Sustainable Rural Development and Agriculture' in its 11 chapters covers a wide range of issues, viz. Challenges of Rural Development, Sustainable and Climate Resilient Agriculture, Spatial Surveys, Mapping and Analytics, Rural Development Planning and Infrastructure, Rural Housing, Sustainable Energy, Sustainable Water Management, Biodiversity, Landscape and Urban Farming, Environmental Services, Conservation of Rural Heritage and Disaster Resilience. These have been explained in a simple language. The pragmatic examples provide reference points for understanding the nuts and bolts of sustainable rural development and climate resilient agriculture.

As summed up by K.J. Alphons in his Foreword, '*Ashok Kumar Jain's book juxtaposes the phenomenon and positionality of evidence, economy and ecology. It weaves commonalities strand by strand in what emerges as a rich array of interconnected themes under one cover. The author has integrated the diverse issues of rural development and agriculture comprehensively, concisely and clearly. The text has been lavishly illustrated that lightens its denseness and makes the reading easier and interesting*'.



Author

Ar. Ashok Kumar Jain (F04179) is an eminent architect and urban planner. Former Commissioner (Planning), Delhi Development Authority, he served as a Member of UN-Habitat HS-Net (2007-2012) and Eminent Citizen, Ministry of Rural Development (2010-2012), contributing to national policy and rural development initiatives. He received the IIA Living Legend Award (2022) and IBC Lifetime Achievement Award (2023).

Email: ak.jain6@gmail.com



Reviewer

Ar. J.D.S. Sodhi (FIIA, FITP) - is an accomplished architect, town & country planner and academic, with extensive experience in Rural and Urban planning and development. He has served as Director, Delhi Development Authority, Founder Director of the Ganga Institute of Architecture and Town Planning (Jhajjar, Haryana) and held senior positions at the Council for Social Development, K.J.Arora & Associates Realty Pvt. Ltd., etc.

Email: jds@sodhis.org

NEWSLETTER JULY

JULY 2026

The Rachana Design Research Conference: RDRC 1.0

On the occasion of its 72nd anniversary, the prestigious Rachana Sansad Trust will be hosting the Rachana Design Research Conference. This brings together researchers, academicians, professionals and students to explore the evolving landscape of art and design, spanning four dynamic themes: Scale & Perceptions, AI & Technology, Decoding the Past, and Design: Today and Tomorrow.

The Conference invites original research papers and creative reels that interrogate design's role in shaping human experience, culture and innovation, from the fields of architecture, interior design, art and fashion.

Date: Saturday, 16 January 2027

Location: Rachana Sansad, Mumbai

Call for Papers and other details: <https://rachanaconference.rachanasansad.edu.in/>

Google form for submission: <https://forms.gle/hVKPHyaGtdYyfBir8>

Publication: Proposed Scopus indexing for selected papers.

IIA MAHARASHTRA CHAPTER

IIA Kalyan-Dombivli Centre, Rotary Club & Paradigm Shift Design Lab Enable Inclusive Vocational Training

IIA Kalyan Dombivli Centre Supports Inclusive Vocational Training for Hearing-Impaired Students. A pioneering Vocational Training Programme in Interior Site Operations for hearing-impaired (Divyangjan) students concluded successfully on 22 June 2026, creating new avenues for skill development and employment in the architecture, interior design and construction industry. The initiative was conceptualised and conducted by Ar. Shreya Ghatge, Principal Architect, Paradigm Shift Design Lab, with the vision of making vocational education more accessible and inclusive for specially-abled youth.

The programme, funded by the Rotary Club of Dombivli Saudamini through a Rotary District Grant, provided structured training to eight hearing-impaired students, introducing them to the fundamentals of interior site operations, construction practices, materials, workmanship, safety and professional site procedures. The programme concluded with

a certificate distribution ceremony recognising the successful completion of the training by all participants. The sign language interpreter was also felicitated for his invaluable contribution in ensuring effective communication throughout the course.

A key strength of the programme was its inclusive teaching methodology. Technical concepts were delivered through visual representation techniques like presentations, sketches, physical material samples, live demonstrations, videos and practical site-based learning exercises. Ar. Shreya also learned some necessary sign language, which she felt was important for effortless communication. An interpreter was also there to support the same. This experiential approach enabled students to grasp technical concepts with confidence while actively participating throughout the training.

Sharing her experience, Ar. Shreya Ghatge highlighted the importance of creating equal learning opportunities for Divyangjan students and emphasised that vocational education can empower them to build meaningful careers in the design and construction sector. Ar. Jayraj Ghatge (Member of IIA – Kalyan-Dombivli Centre), who has also been a part of the program also delivered some lectures specifically about the Bill of Quantities and calculation of material requirement.



Certificate distribution ceremony: All Students are seen holding certificates; other dignitaries are - from left - Mrs. Chhaya Ghatge (Front), Ar. Jayraj Ghatge (Behind), Ar. Shreya Ghatge, Mr Deepak Suryavanshi (Behind), IIA Kalyan Dombivli Centre Hon. Secretary, Ar. Uday Salavlekar, Chairperson, Ar. Keshav Chikodi, Mrs. Sushma Gholap –President of Rotary Club of Dombivli Saudamini, IIA Kalyan Dombivli Centre Member Ar. Swati Nachne, Rotary Saudamini secretary Mrs Shital Patil and their member Mrs Thakre.

The valedictory function was attended by office bearers and members of The Indian Institute of Architects, Kalyan–Dombivli Centre, including Chairman Ar. Keshav Chikodi, along with Secretary Ar. Uday Satavlekar and members Ar. Swati Nachne and Ar. Jayraj Ghatge who interacted with the students and appreciated their enthusiasm and commitment. Representatives of the Rotary Club of Dombivli Saudamini were also present.

Speaking on the occasion, Ar. Keshav Chikodi commended the initiative and reiterated IIA Kalyan–Dombivli Centre’s commitment to encouraging inclusive educational programmes that broaden opportunities within the profession. Parents expressed their appreciation for the confidence and practical exposure gained by the students, many of whom also expressed a keen interest in pursuing advanced training in CAD and construction-related software.

The programme concluded on a positive note, demonstrating how collaborative efforts between professional bodies and social organisations can create meaningful pathways for skill development and employment for specially-abled youth.

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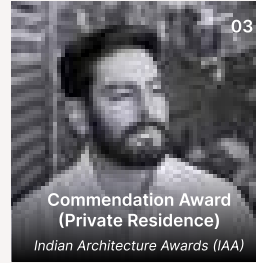
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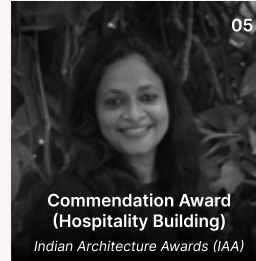
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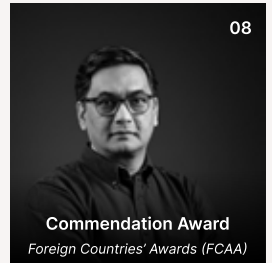
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Architect Of The Year Award
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Commendation Award
Foreign Countries' Awards (FCAA)



09

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Indian State Awards (ISAA)



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12

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