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**R**evathy Kamath was a sensitive spatial designer who created strong contextual settings rooted in the idea of “indigenous”. Whether it was the organization of space, selection of materials, techniques of their usage, she always celebrated the vernacular. In his tribute, Shirish Beri while remembering her notes that her works always showed respect and concern for all life and the environment while consuming minimal embodied energy. Some of these ideas of respecting the vernacular find reflection in many of the contemporary designs including the design of a cultural space ‘Kala Bhoomi’ in the historic city of Bhubaneswar. In a far distant region, the local agricultural practices and homestead inspire ‘Dharitri’, a small Indian garden where a series of stepped terraces with carefully selected planting palette mimic cultural practices.

The role of the first generation of landscape architects, who established their practices in the 60s-70s, in the evolution and growth of the profession will remain unparalleled. With the idea to acknowledge their contribution, two monographs—Ravindra Bhan and Ram Sharma—were conceptualized and released in the month of July. Dr. Shishir Raval and Sanjay Kanvinde review the two books for the readers.

Eminent environmentalists Kanchi Kohli and Manju Menon note that tribal societies and pastoral communities are a few of the examples that can be looked at to explore lessons for sustainable living in this age of fast-paced development and growth. Stewardship of environment in design and planning and its further education to masses has been the mandate for Idea Design, a landscape and urban design practice of three professionals based in two States of the country.

The organizational process of the ‘EnteKochi’ urban design competition for the city of Kochi promotes the idea of public participation in the decision-making process. The winning entry attempts to create a dynamic, climate responsive design intervention that reintegrates an urban canal into the city fabric in a contextually sensitive and sustainable manner.

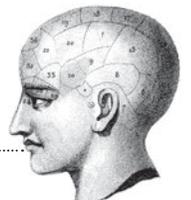
Urban culture in respect to a multicultural country like India is quite complex and multilayered. One of the most important but often ignored subjects in development discourses, Gender Studies, has been an area of focus of Madhavi Desai. In an interview, she shares various aspects of the subject. Another important character of Indian urban planning is “Informal”, a point deliberated by Sanjay Prakash, who calls for improvement and up-gradation of these areas keeping in view their inherent spirit. Many socioeconomic factors of the societies influenced the design and organic planning of our historic cities, a subject of research of Pratyush Shankar. He shares many of such insights in the story of the evolution of Indian cities.

We do hope that you enjoy the issue.

These are difficult times but yes, these too shall pass. Stay safe and take care.



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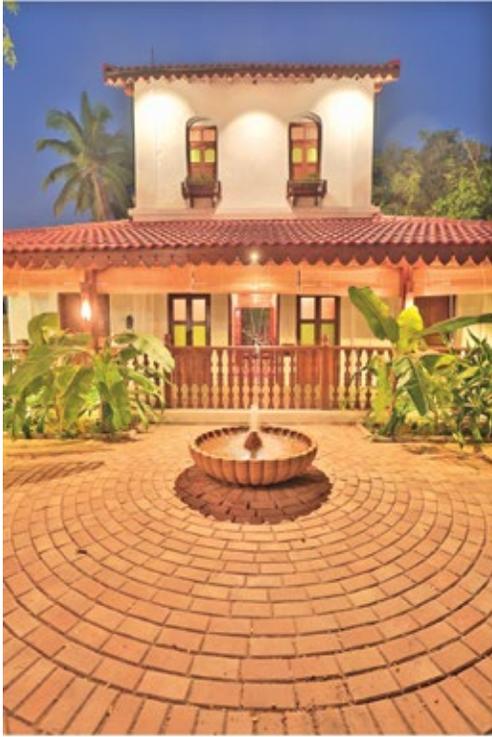
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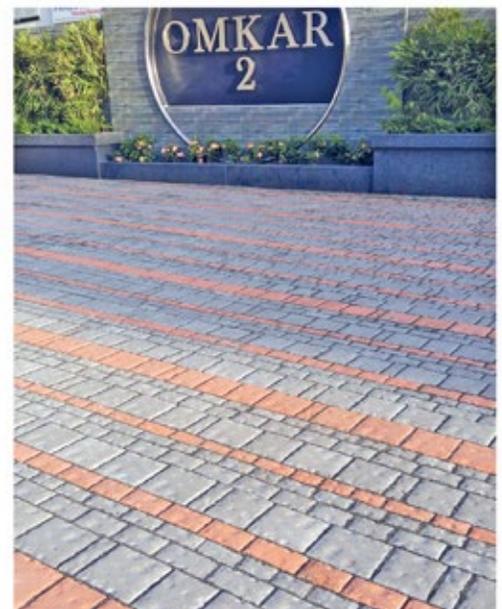
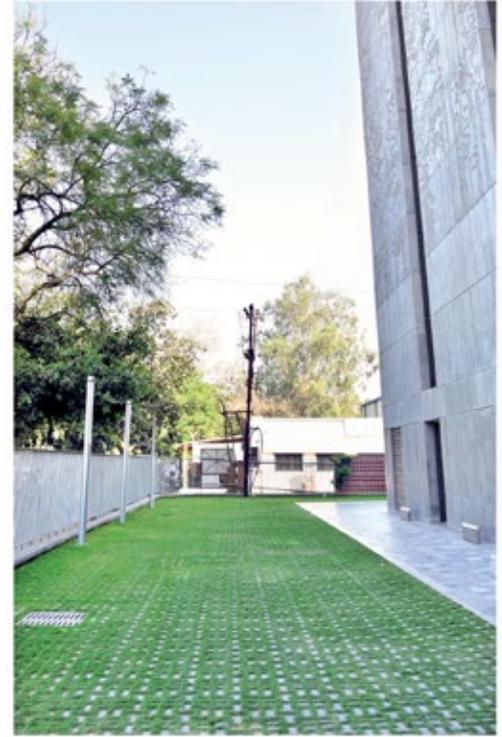


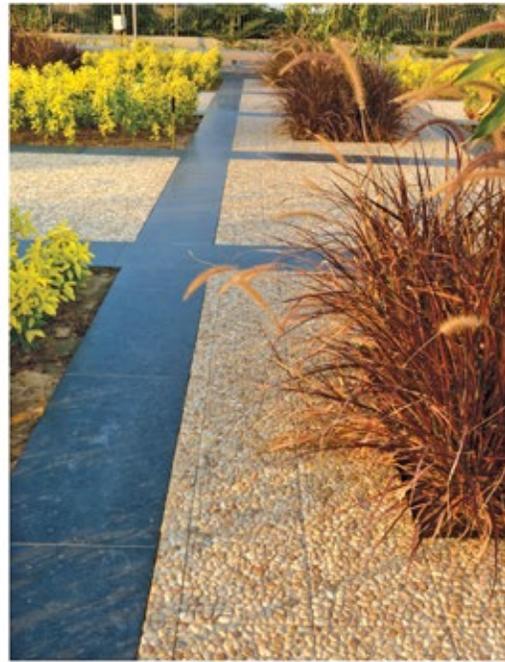
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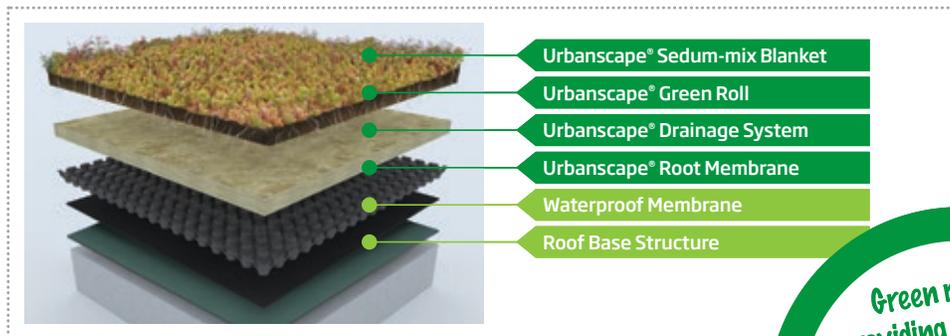
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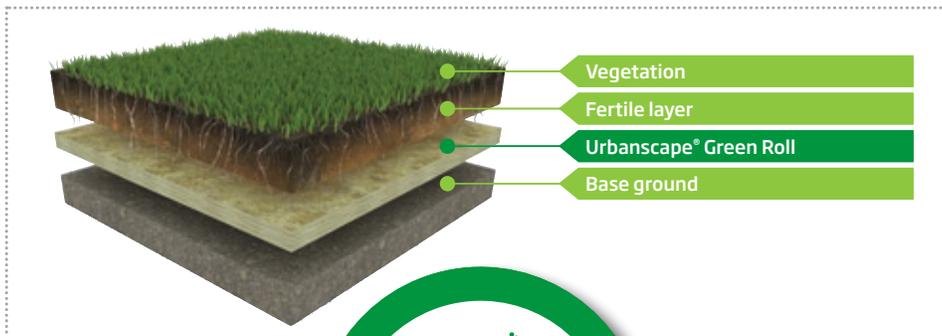
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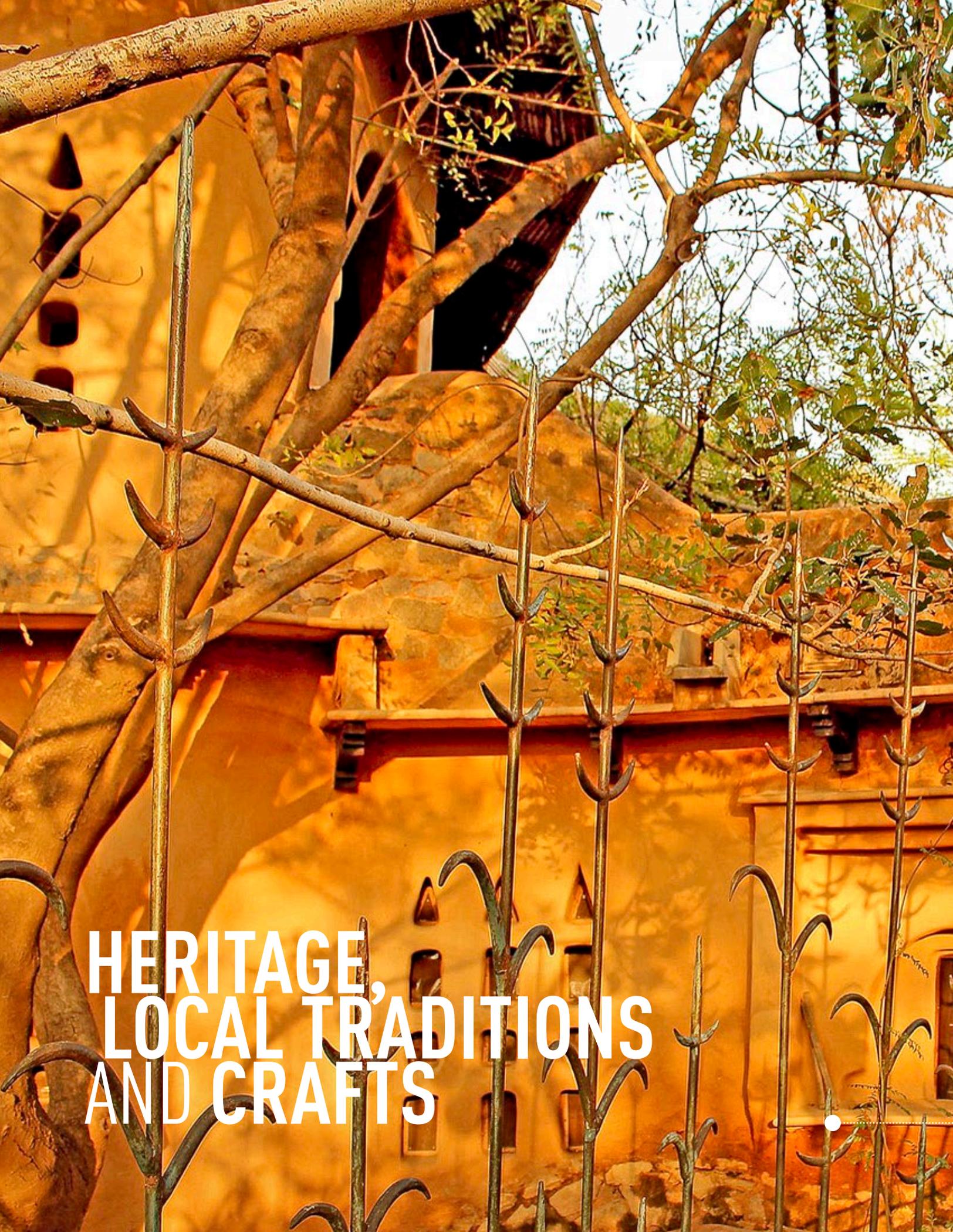


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# HERITAGE, LOCAL TRADITIONS AND CRAFTS



**Shirish Beri**, Architect  
| shirish.beri@gmail.com



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## HARMONY, SIMPLICITY AND UNITY IN DIVERSITY

Known for the creation of low-embodied energy buildings inspired by vernacular traditions, **Revathi Kamath** holds a special place in the discourse of the built environment in the country. **Shirish Beri** remembers her while sharing the values of some of her works.

● .....  
**M**y first encounter with Revathi Kamath happened through the print media way back in the 90s. TOTO Japan had just published its exhaustive book called “581 Architects in the World”. Her work was featured in it, along with mine and that of four other architects from India. I had liked her work, so I decided that I must meet her and Vasant when I am in Delhi. But unfortunately, that did not happen.

But we both kept sharing each other's vibes through our published works and through some young architects and students of architecture. This happened because we shared common values in life and in architecture like...

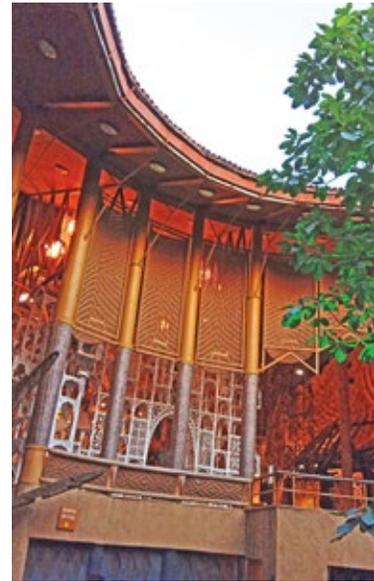
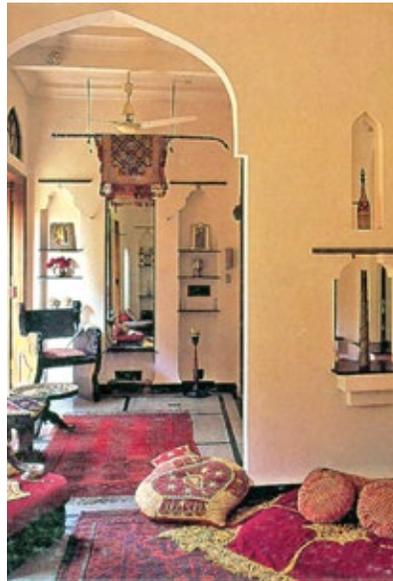
- Respect and concern for all life and the environment
- Understanding of the 'spirit of the place' and its celebration
- Working with the regenerative and self-healing capacity of the environment
- Appreciation of the vernacular, traditional and artistic expressions
- Consumption of minimal embodied energy by using local, environmentally-conscious materials

With these values, the spontaneous design outcome in Revathi's works was that of simplicity and harmony with a sense of belonging to the architectural space. This happened because of the restraint exercised by her in the colour and material pallet. The built form too exercised this "*sayyam*". Her works have always been extremely contextual.

But in the latter part of her practice, Revathi experimented with a wide conglomeration of materials like steel, bricks, stone, tiles, galvalume, concrete, mud, bamboo, and grass to achieve a similar but different kind of harmony, simplicity, and unity in diversity. This is evident in her design of the Tribal Museum and the Gnostic Center. The built fabric of the Tribal museum "is inspired by their rich culture with which the tribal communities can identify."

Thus, we find that Revathi's restless creativity did not confine her to a particular material or architectural character. She would work in the traditional simplicity and scale of the 'mud house' as well as in the modern materials and monumental scale of the O. P. Jindal Gateway. She also tried out a different structural steel spanning system and the 'machine aesthetic' for the long span structure of the JSPL auditorium. It was manufactured in the adjacent steel mill. She indulged in conservation work at her Laxman Sagar resort and also designed the contemporary Tomar house to go well with the historical context of Hauz Khas.





ABOVE [LEFT TO RIGHT]

**Tal Chappar Project, Churu, Rajasthan**

**Nalin Tomar House, Hauz Khas Village, New Delhi**

SOURCE FOR BOTH PHOTOS: **Kamath Design Studio Facebook Page**

**Tribal Museum, Bhopal**

PHOTO CREDIT: **bsd+grafiniti**

Two more projects need a special mention here to illustrate her versatility in designing a new building or renovating or retrofitting it. Through the Tal Chappar project in Rajasthan, she tried to reverse the colonial domination of the existing architectural character by making a number of local traditional additions and interventions. While at the Maheshwar community centre project, she made detailed plans to enable the building to be continually modernised and transformed without disturbing its traditional architecture. The building is now transformed into a café for the tourists, without losing its original charm. Though there are some projects like the wellness centres at Sonapat and Faridabad which somehow do not express the same creative input and involvement, they may have had some other limitations or where Revathi may not have been the lead designer.

Revathi was one of the few Indian architects who believed in and realised the potential of architectural space in improving our quality of lives. She also seemed to feel that the quality of our living and working spaces could contribute to the transformation of our life attitudes.

I truly feel that Indian architecture would have gained much if we would have had her continued presence for years to come on our national architectural scene.

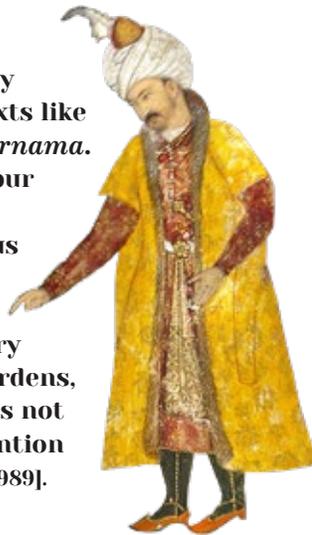


James L. Wescoat Jr., Aga Khan Professor Emeritus of Landscape Architecture  
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# THE AESTHETICS OF PLANTINGS IN EARLY MUGHAL GARDEN PAINTINGS II: HISTORICAL MANUSCRIPTS

The first essay in this series introduced the aesthetics of planting design in early Mughal paintings, a rich source of evidence for landscape architects and horticulturalists. It focused on two of the earliest Mughal manuscripts in the mid-16th century, the *Tutinama* and *Hamzanama*, which illustrated marvelous legends and morality tales. They featured the aesthetics of “tree-lined forest borders” and lushly planted “garden enclosures,” displaying diverse species in two distinct spatial layouts.

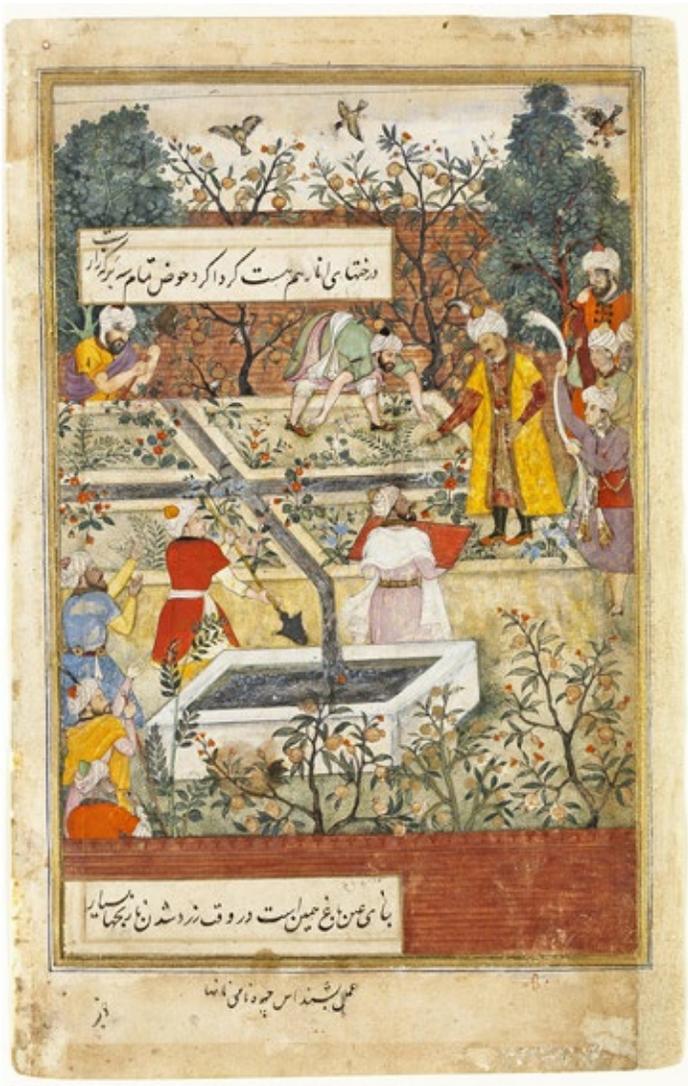
This second essay builds upon those themes as they developed in historical texts like the *Baburnama* and *Akbarnama*. The iconic painting of Babur Laying out the Garden of Fidelity is the most famous Mughal painting of a historical garden, reproduced in almost every publication on Mughal gardens, but its planting design has not received the detailed attention that it deserves [Wescoat, 1989].



THIS & FACING PAGE  
**‘BAGH-I WAFĀ’**  
*Babur laying out the Garden of Fidelity*  
Victoria & Albert Museum. c. 1590 CE. IM.276-1913



# THE BABURNAMA [MEMOIRS OF BABUR] AND AKBARNAMA [CHRONICLE OF REIGN OF AKBAR]



**H**istorical plantings have special relevance for landscape architects because they are the most frequently encountered vegetation in professional practice [Shaheer 2016]. Every site has existing plants that require a close study by designers [Gupta 2018]. Some plants and plantings figured prominently in historical events depicted in Mughal paintings, they are not merely decorative. Others show how plants enriched the daily cultural life of historical villages and towns. Almost all of the plants of early Mughal times are long gone, but the plantings depicted in historical paintings have continuing value for garden historians, designers, and heritage conservationists.

## Historical Aesthetics of Plants and Plantings

This essay focuses on the *historical aesthetics* of early Mughal planting design. The concept of *historical aesthetics* deserves some elaboration. It suggests that there are aesthetic experiences associated with historical images of plants. Such experiences include the pleasures of recognition and remembrance, that is, of recognizing a tree or flower, and remembering or imagining its fragrance, and so on. There is an aesthetic excitement associated with the recognition of plant species, as well as the events depicted.

Images of historical plantings can stimulate strong aesthetic emotions [*rasas*] of heroism, compassion, wonder, love, fear, and so on [Pollack 2016]. Mughal viewers would have directly experienced those emotions, while the paintings enable more distant viewers like ourselves to imagine those past experiences [Beach 1987].

Historical aesthetics have an element of “realism” in them, because the events depicted may actually have happened in places that existed. Historical paintings shape aesthetic experience in ways that differ from those associated with legendary, poetic, and mystical genres. The precise rendering of Mughal paintings amplifies the historical aesthetic and invites us to think about the reality of plants and plantings depicted in historical paintings. Those engaged in Mughal heritage conservation may draw upon the historical aesthetics conveyed in Mughal paintings when considering planting design alternatives.

The historical aesthetics of planting design co-exist with other registers of aesthetic experience. These include the marvelous qualities of myth, legend, and folklore discussed in the first essay in this series, and it will continue with the poetic aesthetics discussed in the next essay. Historical aesthetics do not stand alone, but given their importance in landscape history, design, and conservation, they are an especially important aspect of early Mughal paintings

Three sets of historical paintings are considered here: 1] the “found plants and plantings” in individual paintings; 2] garden plantings in the *Baburnama* [“Memoirs of Babur”]; and, 3] the eclipse of planting design in the *Akbarnama* [“Book of Akbar”]. The first category includes some of the earliest paintings produced for the second Mughal ruler Humayun. The second set is drawn from the *Baburnama* written by the first Mughal ruler but not illustrated until a half-century after his death. The *Akbarnama*, by contrast, was written and illustrated in the later years of Akbar’s reign while he was still alive. Thus, it provides a history of the recent and directly experienced past. These three sets of paintings offer distinct aesthetic insights.

### Found Plants and Plantings in Early Historical Paintings

Some of the earliest Mughal paintings feature existing plants and plantings found by Mughal observers. They did not involve largescale planting, but instead revolved around extraordinary specimens found in the field, often a magnificent *chinar* tree [*Platanus orientalis*]. Several early paintings involve *chinar* tree houses. In one, the young prince Akbar presents a painting to his father Humayun in a treehouse, surrounded by tree limbs and colourful foliage [Canby 2011]. The treehouse is accessed from the second floor of a colourfully decorated polygonal pavilion where musicians play. The tree has a strong mature form with balanced asymmetrical branching that supports the treehouse. Its modeled trunk stands in contrast with the more planar quality of the Persian pavilion, court, walls, and gate. Cypresses and flowers punctuate the background and ground plane.



Found *chinar* trees recur in many Mughal paintings. Why the *chinar*? How does any plant come to be favored? The preference for *chinar* probably originates from its prominence along montane streams of the Timurid and thus Mughal homeland in Central Asia. Although less adapted to the semi-arid plains of northern India, it was introduced there and planted extensively in Kashmir, again to evoke the historical aesthetic of tree-lined mountain streams in Central Asia and Persia.

Some of the earliest paintings for Humayun involve larger “found landscapes,” e.g., dramatic rock formations framed by wild and domesticated plant species. One of the most famous depicts Humayun and his brothers in a landscape outside Kabul. Parodi and Wannell [2011] convincingly interpret this painting as the setting for prince Akbar’s circumcision ceremony. Many of the plants in this rough environment have a contorted beauty, that at the same time softens the settings of small groups of celebrants seated in the landscape. Their semi-wildness fits this coming-of-age life event.



An imaginary historical painting by ‘Abd al-Samad combines these two aspects of a found plant in a found landscape that set the stage for the multi-generational dynastic scene titled, “Princes of the House of Timur” [Canby 2011]. Its central pavilion is sited next to a beautiful *chinar* tree, a found specimen, which is flanked by cypresses and small flowering trees along the natural stream of a found landscape. Cooks prepare large meals in the landscape while the rulers and attendants occupy the elevated walks and pavilion.

**PRINCES OF  
THE HOUSE OF TIMUR**  
1550-1555 CE  
British Museum.  
1913,0208,0.1



## The Prominence of Historical Garden Plantings in the *Baburnama*

The first Mughal ruler Babur wrote an extraordinary memoir of his life in Central Asia, Afghanistan, and India at the start of the 16th century. The memoirs were translated into Persian and illustrated in multiple copies during his grandson Akbar's reign at the end of the 16th century [Verma 2016]. They depict individual plants, plantings, and natural vegetation, sometimes in historic garden settings that may be grouped into four main types: a) found plants and plantings continued, b) enhanced streamside plantings, c) suburban plantings opposite citadels, and d) "formal" garden enclosures.

***Found plants and plantings continued.*** The tradition of found plants and plantings continued in the *Baburnama*. A painting of Babur and his court seated on a flower carpet celebrated the birth of his son Humayun. This modest setting occurred beneath a tent attached to a fine old *chinar* tree that stands in the very center of the painting. Cypress and other trees are arranged along a lined water channel in the background, while a parallel channel and small pool run through the center of the enclosure, dotted with red, pink, white, and blue flowers.

A significant innovation in the *Baburnama* involved detailed portraits of individual plant and animal species. These were found in the sense of being observed in the landscape and selected for illustration as exemplars of the distinctive flora of India, some of which were incorporated in garden design.

***Small waterworks improvements.*** The next step in the progression from found plantings to designed landscapes occurred in Babur's earliest gardens, where he inserted small waterworks to mark and enhance the natural landscape [Wescoat, 1991]. Several *Baburnama* paintings depict stone-lined streams and small masonry pools, 10 by 10 gaz wide, presumably to provide for ablution, irrigation, and brief periods of enjoyment. Trees line the edges of these small waterworks, alternating between a *chinar* on one side and a flowering tree on the other, always a mix of species, never just one type.





**CELEBRATIONS**

Celebrations in honour of the birth of Humayun in the Chahar Bagh of Kabul [1508] [Sur Gujarati].  
British Library.  
Or. 3714 Vol. 2 f.295

***Suburban gardens opposite citadels.*** One of the most fascinating historical paintings, from a planting design standpoint, depicts Babur receiving Rajput and Uzbek visitors in a garden opposite the Yamuna river from Agra fort. The early Mughal opposition between gardens and citadels is well-known [Wescoat 1992], and it led to the development of Mughal riverfront garden cities [Koch 1997]. Less closely studied are the plantings in these garden paintings. In this case, the garden is bounded by a thin wall with a narrow gate in the foreground, and the Yamuna river and Agra Fort walls in the background. When approaching this garden, the visitors might see the tops of one small fruit tree on the left and one small flowering tree on the right. Once past the guards, they would pass between these two delicate young trees, but not directly toward the ruler. Instead, their path would be deflected diagonally to the left both by the alignment of carpets, and also by a clump of white narcissus flowers growing right in front of them! Only after that would they approach Babur seated beneath a bright red and orange-fringed textile structure, supported on thin poles. And only then would they perceive the rich organic array of multi-trunked trees, flowers, and attendants. Plantings shape the garden's spatial path and visual experience, in sharp contrast with the heavy masonry structure and logic of the fortress beyond.

***“Formal” garden enclosures: Multiple versions of the Bagh-i Wafa planting design.*** The most famous Mughal garden painting is of “Babur laying out the Garden of Fidelity,” a historical garden in Ningnabar, Afghanistan, about which Babur recalled:

“In 914 A.H. [1508-9 AD] I laid out the four gardens known as the Bagh-i Wafa [Garden-of-fidelity] on a rising ground facing south.... There oranges, citrons, and pomegranates grow in abundance.... I had plantains brought and planted: they did very well. The year before I also had had sugarcane planted; it also did well.... In the middle of it, a one mill stream flows constantly past the little hill on which there are four garden plots. In the southwest part of it there is a reservoir, 10 by 10, round which are orange trees and a few pomegranates, the whole encircled with a trefoil-meadow. This is the best part of the garden, a most beautiful sight when the oranges take colour.” [Baburnama, pp. 208-9].

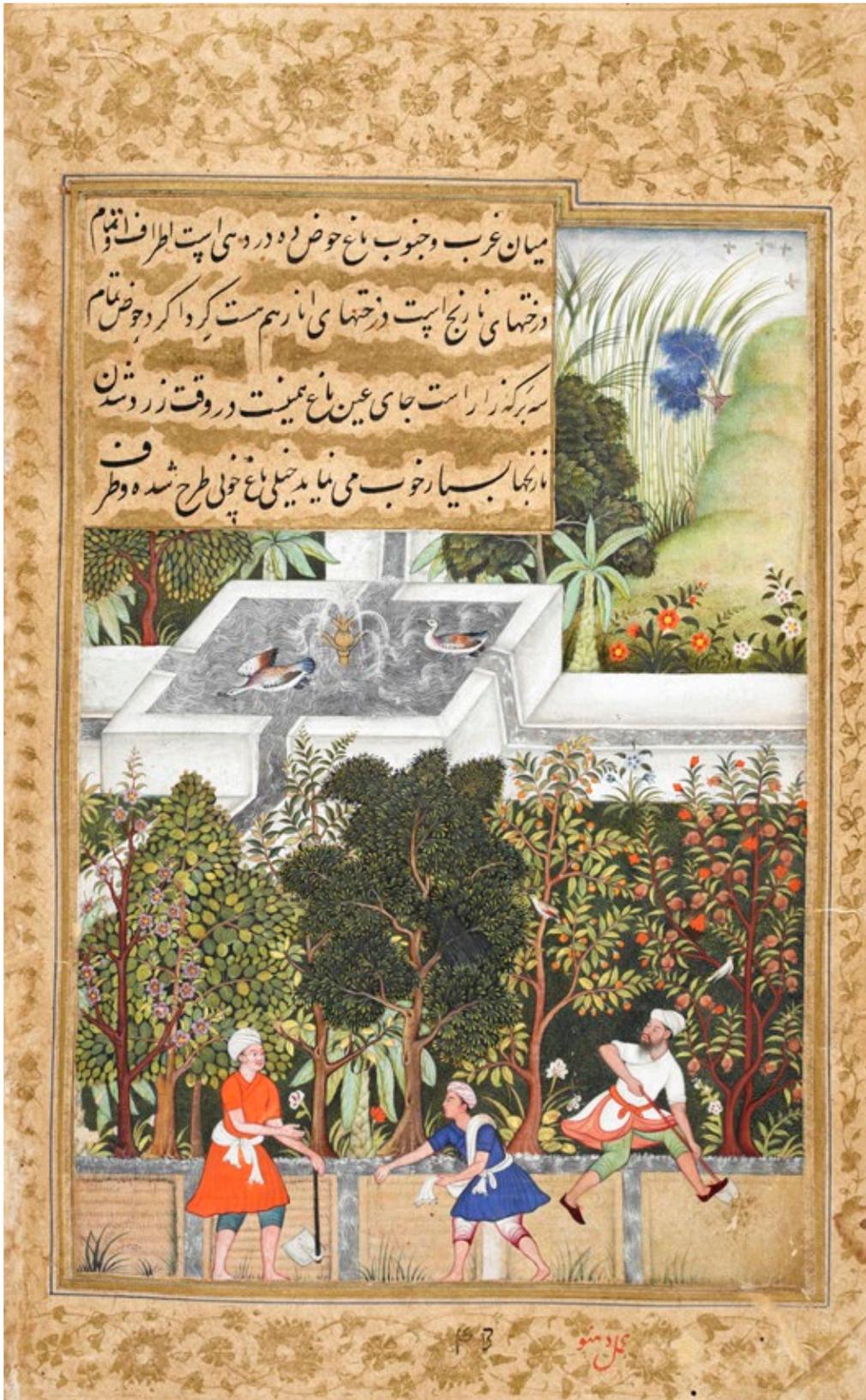
There are multiple depictions of this event in *Baburnama* manuscripts, and comparing them offers fascinating insights into the historical aesthetics of Mughal planting design. The Victoria & Albert Museum painting [at the beginning of this article] features a masonry garden enclosure perched on a plateau with sparse wild vegetation on the mountains beyond. Inside the walls, Babur directs a set of male gardeners and attendants, one of whom holds a gridded plan of the garden. Three others hold a string to lay out the cross-axial water channels that flow into a square pool, defining the four main planting beds of the garden. Two men work with shovels while the rest look on. Fruit trees follow the garden walls, sometimes alternating and sometimes in pairs, while flowers ornament the four planting beds. The trees and flowers have a clear structure but are not rigidly symmetrical.





**THE SUBURBAN GARDEN**

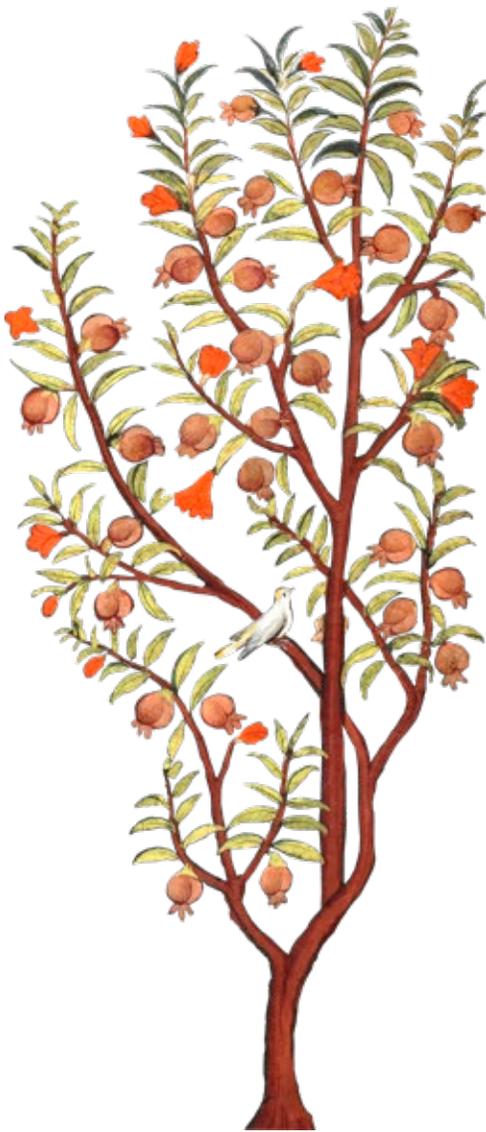
*Babur receiving Uzbek and Rajput envoys in a garden at Agra.*  
Victoria & Albert Museum.  
Painted by Ram Das.  
IM.275-1913. C. 1590 CE



**'BAGH-I WAFĀ'**  
The Gardens of  
Fidelity being laid out  
at Kabul. Baburnama.  
By Dhanu.  
British Library.  
Or. 3714 f.173v.

The British Library painting of the Bagh-i Wafa offers an oblique perspective on the garden plantings. It too has a four-fold layout defined by white cross-axial water channels emanating from a central pool. Plants along the main channels include a non-repeating low series of bananas and flowers. Tall sugarcane stands adjacent to a hillock in the upper right. A secondary irrigation channel in the foreground supports a row of larger non-repeating trees distinguished by their flowers, fruits, and foliage, held together by overlapping limbs and a lower tier of bananas and flowers. Three gardeners work in the new fields fed by tertiary irrigation channels in the foreground.

A third Bagh-i Wafa painting in the National Museum of India presents the fourfold layout in a clear plan view of the garden with the wider landscape shown in elevation beyond. This depiction features a Persian wheel to supply the red sandstone irrigation channels and central pool. The four quadrants each have one dense mango fruit tree, with different combinations of palms, cypress, and flowering shrubs. The important point for our purposes is that each of the Bagh-i Wafa paintings have a clear planting structure combined with subtle variations in planting patterns. They have a rough but not rigidly symmetrical layout.



The *Baburnama* paintings also define the historical progression from found plantings to delicate waterworks interventions and elaborate garden enclosures in early Mughal planting design. They have increasing structure that mirrors the stabilization of Mughal rule over time while retaining a planting aesthetic that complements rather than emulates the architectural symmetry of garden walls, walks, and water channels.

### A Partial Eclipse of Planting Design in the *Akbarnama*

How do the striking representations of planting design in the *Baburnama* compare with those of the *Akbarnama*, the paintings of the king's own reign written during his lifetime [Beach 1998, pp. 112-128]? The *Akbarnama* is a different type of historical text. It is a near-contemporary biography rather than a personal autobiography. Its events occurred during the memory of the patron and at least some of the painters involved. We might therefore expect *Akbarnama* paintings to be more detailed and historically accurate than those of the *Baburnama*. Representations of planting design might also be more elaborate but that was not the case. Surprisingly, planting design recedes from view.

**The eclipse of planting by masonry building.** The lack of vegetation in many *Akbarnama* paintings is striking, especially when compared with the *Tutinama*, *Hamzanama*, and *Baburnama* manuscripts. This short article does not allow me to prove the point, but readers are invited to view the 116 online images in the Victoria & Albert Museum *Akbarnama* to check this assessment. *Akbarnama* paintings are packed with scenes of architectural and urban design. Whether in the capital cities, fortresses attacked on military campaigns, or the construction of Fatehpur Sikri, there are few plants or plantings to be seen. There are some partial exceptions. Battle scenes include some impressive trees for context, as do some courtly scenes and images of the treetops above distant garden enclosures. But it seems reasonable to conclude that while Akbar probably had many gardens, they had less significance and thus less of a historical aesthetic.

**The advent of urban planting design?** One partial exception begins to appear in an *Akbarnama* painting of the ruler talking with fishermen. In addition to the trees along the riverbank, there are rich plantings outside the fortified city. Two workers draw irrigation water using the rope-and-bucket *charas* technology in use at that time. Trees are situated within the city walls, as well as beyond them. Taken together, these plantings within, outside, and beyond the city walls begin to suggest the development of a historical aesthetic of urban-scale planting design.

## Reflections

This article on historical paintings complements the images of plants and plantings in legends and morality tales in early Mughal painting. In addition to their descriptive qualities, these paintings suggest the relevance of *historical aesthetics* for the field of planting design. In the early Mughal context that began with the recognition of beautiful plants and vegetation found in the natural landscape. It led to small but strategic design interventions. Historical paintings produced long after the events occurred gave rise to imaginative reconstructions of Babur's Garden of Fidelity, which underscores the breadth and variation in historical aesthetics. The *Akbarnama* reminded us that the historical significance and thus aesthetics of plants and plantings vary over time and in relation to different aspects and elements of the built environment. It is fascinating to consider that these very different historical insights were produced concurrently with one another. The next article in this series will turn to additional questions of experience and meaning in the extraordinary representations of plants and plantings in illustrated poetic manuscripts of Akbar's era.



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**AKBAR**

Akbar talking with fishermen.

Victoria & Albert Museum.  
IS.2:85-1896. 1590-1595.

**Acknowledgments by the Author**

This series of articles is dedicated to Professor Milo C. Beach who taught me how to look at Mughal paintings in his home in Williamstown, Massachusetts, and to the Aga Khan Program for Islamic Architecture at MIT where I was able to offer these lectures in my seminar on Islamic gardens. I also want to thank Geeta and Brij for their continuing encouragement.



All images provided by the Author

heritage, local traditions and crafts |

FICUS, Bengaluru  
| studioficus.com

# IN SEARCH OF AN ESSENCE

KALA BHOOMI-ODISHA CRAFTS MUSEUM





“Kala Bhoomi” is a confluence of Odisha’s diverse ethnic, folk and craft culture. It is situated in Bhubaneswar, a place noted for its magnificent Kalinga architecture, and city planning in ancient and modern history. The site is within an institutional and public land-use zone, close to the Biju Patnaik International Airport. An erstwhile as a workshop-type facility under the State Department of Handicrafts and Handlooms, it was designated for redevelopment as a world-class museum. It has dedicated galleries for terracotta, traditional painting, puppetry, stone and wood crafts, metal crafts, and handloom while the courtyards are dedicated to tribal living and temple architecture. Its Master Plan themes and architectural character [both by *Architects’ Studio*, Bhubaneswar] reference the diverse ethnic and cultural layers of Odisha through the framework of its handicrafts and handloom traditions.

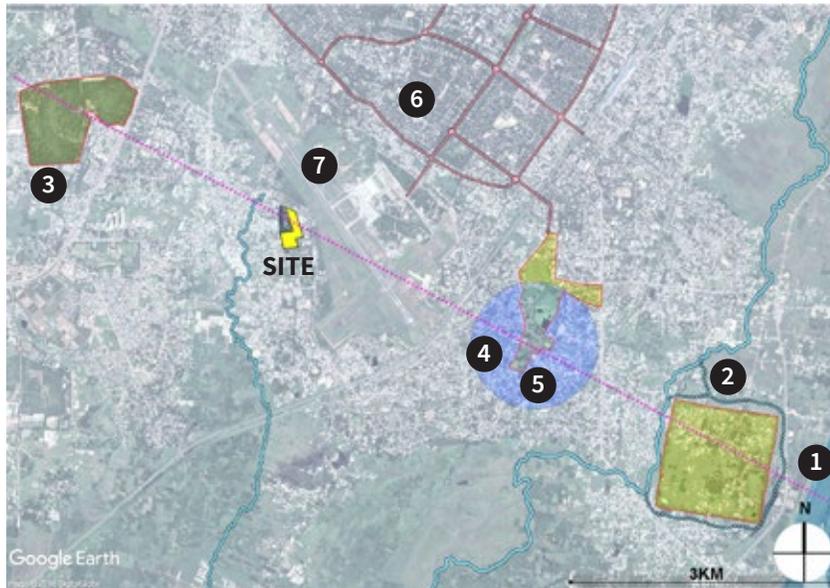
### Site Impressions: Pre Design

The site comprised of dilapidated sheds in a regular interval with a mix of trees occupying the in-between spaces. These trees, along with a chimney of a kiln and a couple of dilapidated wells, were earmarked for integration into the landscape design. Elsewhere, the possibility of walking through clumps of teak and other trees suggested brief encounters with deciduous woods and plantations, enhanced by the presence of birds flying about in the early and late hours of the day, from the adjoining campus.

Site clearing works brought into focus two large banyan trees [*Ficus benghalensis*] at the front and a skyline of lofty palmyra/ tala palms [*Borassus flabellifer*], that extended beyond the site along the low-lying south-west. The presence of mango trees as clusters pointed to an old orchard.

#### RURAL SETTING

The museum forecourt suggests a rural setting; its artefacts recall utilitarian and folk rituals



**CONTEXT PLAN**

*The site has an intangible connection to a notional east-west axis of a broader cultural landscape*

1. Daya River
2. Sisupalgarh [4 BCE]
3. Udayagiri Khandagiri [2 BCE]
4. Ekamra Kshetra- Old Bhubaneswar
5. Lingaraja Temple [11 CE]
6. Bhubaneswar City [1950 CE]
7. Biju Patnaik International Airport

**Looking for the Essence**

The tree survey of the cleared site contained a serendipitous discovery whereby three culturally important species occupied the start-middle-end parts of the site. The banyan and tala—lying beyond building lines—find representation in temple murals, *patachitra*, some Odia poetry; the fronds of the tala palm also influenced the curvaceous, non-cursive Odia script. Mango—around parts where the handloom and handicraft block was being planned—is a plant of mythological significance for Bhubaneswar. The deity Lingaraja [a name of Lord Shiva] is believed to have emerged as a *linga* under a solitary mango tree [*ek-amra*] as noted in Ekamra Purana, [13th century CE]. The trees on site were beginning to be read as layers of human interests—as cultural allusions and productive landscapes [orchard, plantation, kiln, workshop]. Bringing attention to this palimpsest became a key point of the landscape design.

Conversations with the project architects about points of design reference led to a brief landscape-centric study trip prior to the design stage. This brought in immersive experiences such as the Bindusagar tank in the evenings, carpentry works for the Jagannath Ratha Yatra in Puri and Baripada, articulation of threshold and enclosure in rural hinterlands and introductions to some Odia handloom [Sambalpuri and Pasapalli]. Observing people modifying an outdoor space, for ritual and utilitarian needs on a daily basis, encouraged design thinking about open spaces transcending utilitarian purposes and having relative or changing meanings.

The search for an indivisibility between place and design expression pushed deep readings of the site beyond its natural and physical contexts. One revelation was the site’s intangible connection with a notional East-West axis of a broader cultural and temporal landscape. The challenge for the landscape design now was to bring out the essence of vernacular Odisha’s diversity, communicate the value of tradition and regionalism, and direct attention to what exists on the site. Readings within and beyond the site thus became vital cogs in reigning the exuberance of landscape design gestures and interventions, when critiques and feedback for ‘more design elements’ were exchanged. The project architects steered such situations admirably, under pressure, ensuring that an overall integrity between intent, design, and execution was achieved.

## Curation and Design Cue

The first cue for reading the landscape design intent comes through the architecture which recalls streetscapes of rural Odisha. Traditional outdoor themes and forms, a limited material palette, and recurrence of trees create a unity between program, site features, buildings, open spaces, and curation. The spaces provide opportunities to the individual and the collective, towards gathering, celebration, performance, play, contemplation, and appreciation of nature. Through curation and design cues, artefacts set in the landscape direct attention towards the erasure of technique, ritual, or even utility [e.g. laterite carving, the Tulsicharaha, terracotta pottery].

### WILDERNESS

*Extending beyond the site, along the south-west edge, a linear thicket of palmyra/ tala palms [Borassus flabelifer] form a clear skyline, as seen through the artists' residence courtyard*

For the landscape design, it is, therefore, a good day when participants in the hugely popular guided tours pause a bit longer in its open spaces, intentionally or accidentally, and notice some of its many stories.



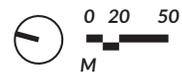


**GROUND: PRE-DEVELOPMENT**



**GROUND: POST-DEVELOPMENT**

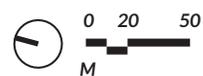
*The museum occupies the void of the erstwhile workshops adjusting itself to existing trees, which in turn, transfer their age to the new occupation of the site*



**ACTIVITY & LINKAGES**

*A tight weave of activity and linkages underpins the design*

- Arrival
- Vehicular Circulation & Service
- Outdoor Display Lawns
- Pathways and Tree Courts
- Activity Courts
- Leisure
- Playspaces
- Performance Space
- Future Development
- Conservation Zone
- Footpath
- Vehicular Driveway
- Parking
- Informal Pathway
- Formal Pathways & Landscape Courts
- Tree Courts



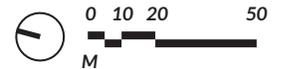


**LANDSCAPE MASTER PLAN**

- A Entrance & Ticketing Block
- B Handicrafts Block
- C Handloom Block
- D Workshop: Handicrafts
- E Workshop: Handloom
- F Future Expansion
- G Cafeteria Block
- H Restored Chimney
- J Old Well

- E1 Service Gate
- E2 Pedestrian Gate
- E3 Parking Entry
- E4 Parking Exit
- E5 Future Gate
- P1 Parking [2 Wheelers]
- P2 Parking [4 Wheelers]
- P3 Parking [Buses]

- 1. Arrival Forecourt
- 2. Museum Forecourt with Village Shrine
- 3. Outdoor Displays & Installations
- 4. Amra Marg - Pedestrian Path
- 5. Kund below existing Mango Trees
- 6. Multipurpose Courtyard with Stage
- 7. Play Spaces and Traditional Board Games [Play Fort, Sitout along Play Area, Sandpit, Traditional Games Pavilion, and Chessboard]
- 8. Area for Cultural Performances [Puppetry Hut, Amphitheatre, and Green Rooms]
- 9. Cafeteria Chowk
- 10. Walkways with Pergolas
- 11. Sitout Cluster
- 12. Kadamba Grove [Biodrainage Zone]
- 13. Open Mixed Thicket with Tala Palms



### ARRIVAL COURT

The arrival forecourt provides a clear line of sight towards the entrance block



### Landscape Master Plan Themes

- A wide forecourt focusing towards the entrance block as a sense of arrival, the museum forecourt is designed like a village scene anchored by an existing banyan tree as a Gramadevi shrine. This zone will continue to be thematically curated by the museum.
- A rainwater *kund*, referenced from Kalinga architecture as punctuation. This is a space for spontaneous expression for art and music, or contemplation when there is no crowd.
- A 'ceremonial path' passing along the *kund*, as an abstraction of the 'Bada Danda'.
- Space for traditional and folk performances in axis with the ceremonial path.
- Design of the courtyards to facilitate spill-over of museum activities from respective blocks.
- Articulation of existing trees [one of each species] that are used in traditional handicrafts and handloom, with a carved laterite planter.
- Weaving existing trees as walk-through encounters alluding to orchards and plantations.
- A limited material palette for unity and patina; such as laterite and brick paving along with eye-catchers like brick *jaali* screens, mud-plaster effective in verandahs with thatched lean-to-roofs.
- Space for imaginative and collective play including a scaled-down and simplified 'fort', a puppet house, and raised platforms inlaid with traditional games. A set of modern play equipment is deliberately inserted on the fringe of this space.
- Habitat strengthening through green reservation and infill using trees associated with the handicraft and handloom traditions of Odisha.



**THE VILLAGE SCENE**

*Looking back: The village scene from the handloom block porch*



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**THE KUND**

*The kund—referenced from Kalinga architecture as punctuation—and its surrounding spaces are a place of many moods*



**TREE COVER ON SITE IN RELATION TO HANDICRAFTS AND HANDLOOM TRADITION**

FOREST   FORAGE	
ODIA NAME [BOTANICAL NAME]	ATTRIBUTE/ USE
Amaltas [ <i>Cassia fistula</i> ]	● ● ●
Arjun [ <i>Terminalia arjuna</i> ]	● ● ●
Bara/ Bada [ <i>Ficus benghalensis</i> ]	● ● ●
Belpatra [ <i>Aegle marmelos</i> ]	● ● ●
Dhaura [ <i>Anogeissus latifolia</i> ]	● ● ●
Dimri [ <i>Ficus racemosa</i> ]	● ● ●
Gambhari [ <i>Gmelina arborea</i> ]	● ● ●
Jamu [ <i>Syzygium cumini</i> ]	● ● ●
Jangli Baans [ <i>Bambusa spp</i> ]	● ● ●
Kadambo [ <i>Neolamarckiacadamba</i> ]	● ● ●
Kovidara [ <i>Bauhinia variegata</i> ]	● ● ●
Muchkunda [ <i>Pterospermum acerifolium</i> ]	● ● ●
Sagwan [ <i>Tectonagrandis</i> ]	● ● ●
Simili [ <i>Bombax eiba</i> ]	● ● ●
Siris [ <i>Albizia lebbek</i> ]	● ● ●
Tala [ <i>Borassus flabellifer</i> ]	● ● ●

CULTIVATED	
ODIA NAME [BOTANICAL NAME]	ATTRIBUTE/ USE
Amra [ <i>Mangifera indica</i> ]	● ● ●
Bakul [ <i>Mimusops elengi</i> ]	● ● ●
Champo [ <i>Michelia champaca</i> ]	● ● ●
Devdaru [ <i>Polyalthia longifolia</i> ]	● ● ●
Imli [ <i>Tamarindus indica</i> ]	● ● ●
Kadali [ <i>Musa paradisiaca</i> ]	● ● ●
Katthol [ <i>Artocarpus heterophyllus</i> ]	● ● ●
Narali [ <i>Cocos nucifera</i> ]	● ● ●
Neem [ <i>Azadirachta indica</i> ]	● ● ●

- **Arts and Crafts** - Basket Weaving, Patachitra, Coir Handicrafts
- **Worship** - Reverence, Ratha Making, Religious Artefacts
- **Utility** - Carpentry, Firewood, Construction, Rope Making, Fodder, Perfume
- **Dyes and Colours** - Painting, Textiles, Writing
- **Cuisine** - Food, Preserves, Fruit, Liquor, Essence
- **Medicine** - Various

**SPILLOUT**  
 The spillout beyond the museum comprises of a play space and puppet hut nestled between old trees and a chimney





### PROJECT SNAPSHOT

EXTENTS

12.68 Acres

LOCATION

Pokhariput, Gandamunda, Bhubaneswar, Odisha

YEAR OF COMPLETION

January 2018 [Inaugurated on 22nd March 2018]

CLIENT

Handlooms Textiles and Handicrafts Department, Government of Odisha

MASTER PLANNING ARCHITECTURE & ALLIED SERVICES

Architects' Studio, Bhubaneswar

LANDSCAPE ARCHITECT

FICUS, Bengaluru: Aparna Rao, Sagar S., Saptaparni C., and Sriganesh R.

SCOPE OF LANDSCAPE WORKS

Site Planning and Landscape Design

### VISUAL CONNECTION

*The way out/ exit experience visually connects with all the thematic zones of the design*

All images and drawings courtesy  
FICUS, Bengaluru





# ENVIRONMENT, ECOLOGY AND BIODIVERSITY



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# NATURE CONSERVATION, SOCIAL DEVELOPMENT AND FREEDOM

In India, the preposition of development and nature conservation has a complex, and often conflicting character. The context of the country's rich natural and cultural history, the demands of development and legal frameworks many of which were formulated during British times and hence need nuanced advancement based on present-day realities are some of the key aspects that are being discussed by **Kanchi Kohli** and **Manju Menon**.

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## Environment and Development

India is very richly endowed in natural and cultural heritage. We have some of the most breath-taking land and waterscapes and monuments of the world right here. Our diversity and abundance of plant and animal life draw so many people to them all the year-round. Most Westerners find it mind-blowing that all this survives in a country with such a large population of people. Our syncretic traditions have respect and appreciation for the power of nature, millions of people in India practice agriculture, fisheries, pastoralism, and other livelihoods that are possible only if a balance between nature protection and harvest is maintained. Unfortunately, our policies and institutions governing social and economic development are quite distant from these livelihoods and cultural knowledges of nature.

Environment and development issues in India are discussed like “pristine” nature exists in rural areas. At the same time, being dependent on nature for survival and livelihoods is considered a primitive form of existence. When it comes to wildlife and biodiversity aspects of the environment, we have relegated them to enclaves, in the form of Reserved Forests and Protected Areas [PA]. Today, the urban form in India is supposedly planned but it has no notion of nature or the environment. We pursue landuse planning assuming that these are all neat compartments but these categories are constantly challenged by the real world. Urban regions have to deal with invasive species and locust attacks, rural areas have to accommodate intensive industrial development and our PAs have some of the richest mineral deposits or are depopulated of wildlife. Environment and development planning in India caters to outmoded ways of rigid thinking. They simply don't understand or don't want to accept cultures of co-existence.

### **Vulnerable Indian Regions**

All regions in India are very prone to environmental conflicts. In the early years after independence, certain areas faced these challenges because governments were mostly building irrigation dams, mines, and industry. But in those periods of a command economy, the centre also could prioritise certain areas for environmental and social protections, for example, Nehru's policies for the NE region or Indira Gandhi's actions on tiger conservation. This did lead to a situation of uneven development as some states remained constrained for revenues. But since the 1980s, with the increasing privatisation of economic sectors, most regions have turned into playgrounds for investors. Lands and environmental resources, especially water, are made available as a priority to industrial and infrastructure projects. Today these environmental allocations are taking place everywhere, like in coastal areas and in the Himalayan region where land and water need to be managed carefully. These are also regions that are transforming rapidly due to climate change and so the effects are even more pronounced. If we were to name places that are most vulnerable to severe climate and environmental impacts, the list would include the coastal erosion in the Sunderbans, the central Indian forests which are ravaged by coal mining, polluted industrial areas of Vapi in Gujarat, Cuddalore in Tamil Nadu and Siltara in Chhattisgarh. The regions of Singrauli, Korba, and Ennore are major coal power hubs. They produce electricity at great cost to the ecology and people of these regions.



*A lone tree in place of a great forest Talabira coal mines*  
PHOTO CREDIT: Manju Menon

## Legal Frameworks

We have a very large body of laws on the environment. But broadly we can say that the land and forest laws we have today have colonial roots and when looking at these, there is a distinct feeling that we are yet to decolonise. The continuation of these laws has caused tremendous hardships to generations of people especially Adivasis and Dalits. Although few attempts at reforms have been made, the interests of the more privileged majority have prevailed and reforms are not implemented or are very slow. Our land and forest laws are a vestige of our feudal pasts.



... *Adivasi communities like the Paudibhuiyas of Odisha are caught between mining projects and forest conservation*  
... PHOTO CREDIT: Manju Menon

Many environmental scholars have written about stewardship. Interventions by the Indian state in forest regions only exacerbated the loss of traditional stewardship by forest-dwelling communities. Today inhabitants of many Adivasi regions face displacement due to setting up of projects or lack of any means of survival. This is despite the constitutional safeguards for them in the form of Scheduled Areas. For them, our laws are an abstraction. Adivasi and other forest-dependent communities are evicted or ignored by forest governance because these lands are rich in minerals. All of central and eastern India and many parts of the Northeast have become mining areas. These are profound losses for the communities who live here, but equally, this is a natural heritage that the generations after us will never know. Forests are nature's laboratories, they promote genetic diversity. We hardly know the many ways in which they stabilise weather patterns and their role in climate change. Yet we destroy them at alarming rates.

### Environment Impact Assessment EIA

In the early 1990s, the EIA process was introduced in many countries, most of which including India were in the process of economic liberalisation. The EIA regulation was introduced as a package law that could provide environmental safeguards against the impacts of manufacturing or infrastructure projects manufacturing or infrastructure projects for which investments were being sought. An initial list of 29 projects required an environmental clearance before they could start constructions or operations. By 2004 the list was up to 32 including real estate projects. One of the most significant features of the EIA regulation was the introduction of

This is not the same with pollution legislations. They were mostly enacted post-independence and are reactive rather than progressive and foresighted. We have many regulatory institutions and bodies that are set up under these laws because environment is seen to be a technical subject that needs scientists and other technical experts. Our higher courts also deal with a lot of environmental matters. They mostly operate in silos and their fragmented and narrow approaches don't match up to the scale and intensity of our environmental problems.



..... *An unbroken landscape of farms and forests in Uttara Kannada, Karnataka*  
 ..... PHOTO CREDIT: *Kanchi Kohli*

public hearings in 1997. This gave the law a social face and has been embraced by affected communities, ordinary citizens, and activists. Over the years the EIA regulation has been substantially read down and many amendments have been made to the notification allowing exemptions from prior approvals, reduced public participation, and feeble protocol for monitoring compliance of environmental safeguards. Administrative orders have asked expert committees not to ask follow up questions or additional studies while scrutinising project EIAs, to keep the paperwork moving. Even as citizens have socialised this law and used it to secure rights and protect ecologies, the government has systematically reduced the requirement for both scientific scrutiny and democratic decision making.

### **Draft Amendments in EIA 2020**

The draft amendments have been questioned on both content and process. The first question was on the need to pursue amendments to the EIA notification during the Covid-19 restrictions. Even today, there is little scope of discussing the proposed changes in many parts of the country already affected or likely to be impacted by the changes proposed. The draft amendment consolidates several piecemeal amendments made to the 2006 version of the law, especially fast tracked since 2014. But it does not stop there and makes big changes resulting in fewer projects requiring detailed impact assessments and even lesser needing public hearings. The proposed draft of 83 pages gives the impression that it covers a long list of 43 projects. It does, but in the case of many projects, the oversight is extremely thin. For instance, Inland Waterways now require environment clearance, but don't need



Sustainable fisheries supports many local livelihoods like artisanal boat making in Tuticorin, Tamil Nadu

PHOTO CREDIT: Manju Menon

a detailed EIA or public hearing for applications to be appraised. All projects up to 50% expansions do not need to go through public hearings. One of the most damaging features of the new amendments is a permanent amnesty to any project found operating without an environmental approval under the EIA law. The new draft once again misses the opportunity to strengthen the post-approval monitoring protocol that is presently applicable to over 16000 projects. Breach of environmental safeguards can lead to buildings collapsing, oil fires, or landslides. The post-approval regulatory process presently suffers from sub-standard EIAs and public hearings and is unable to encourage compliance.

## Urban Environment

Urban planning [and planners] suffer from hubris. We pretend like cities are immune to the elements. We build them with no concern for the survival and

well-being of those who live in them. Urban planning is so technocratic and captured by vested interests. Everyone complains about it but they also feel helpless and this fosters a relationship of mutual disinterest and disregard for each other. Take the example of concretisation. We love pouring concrete everywhere and this does so much damage to the few trees we have, to the soil, and to rainwater drainage. It seems impossible to deal with this. A few people who are committed go around deconcretising pavements and tree areas, but this is really quixotic given our love for concrete.

## Role of Expert Agencies and Professionals

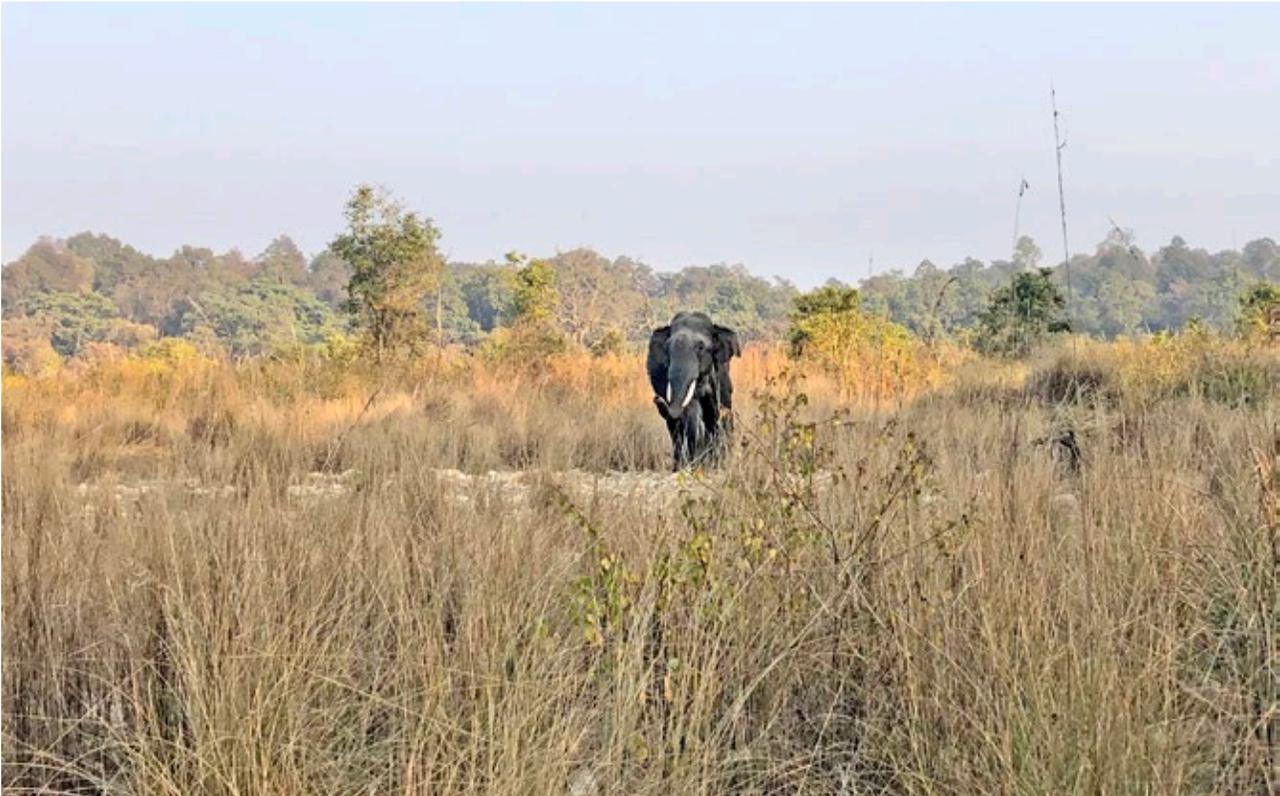
The role of expert agencies and professionals is the most crucial. We need to bring greater reflexivity into our practice by questioning our own notions of development, prosperity, and well-being. Our political-economic systems are large and we all don't



..... *Young boys drying a fresh catch of Bombay Duck on the Kutch coast, Gujarat*  
 ..... PHOTO CREDIT: Manju Menon

experience it the same way, in fact, there is great unevenness. So we must find ways to have open-minded engagements with others before we recommend or initiate plans or schemes or projects. Professionals need to weigh their practice or craft against the values of public interest and sustainability. We can't rely on laws alone to achieve these. So professionals can play a very important role in persuading their own peers, clients, and society at large to adopt these values in their practice or craft. Most importantly, as professionals, we have the duty to question the terms, definitions, and rules presented to us as given. As privileged elites of society, professionals and experts cannot let the status quo continue. The inequalities in our society are appalling. Irrespective of whatever our areas of work, we all must engage with issues of gender, family, caste, class, and environment. These intersectional approaches are essential for development.

There are a number of individuals who have made very significant contributions to our understanding of environmental issues. Medha Patkar and Sudha Bharadwaj are personal heroes and role models. They have fought long battles on the streets and in courts for communities affected by large dams and mines. Medha works doggedly on the Narmada dams and for the rehabilitation of those affected and she has brought people from across the world together in support of free rivers. Sudha is a phenomenal community lawyer for those who the Indian state has failed the most, landless Dalits and Adivasis. The National Fishworker Forum NFF is a non-partisan trade union of fishing communities that works for the rights and development of fisher families through sustainable fisheries. NFF is a remarkable organisation because its members have led the building of knowledge and practices for fisheries and coastal area management based on traditional skills and modern science. Fisheries, trade, and



Wild Elephant in Corbett National Park, Uttarakhand  
PHOTO CREDIT: Kanchi Kohli

coastal development policies are hostile to fishing communities and fishery resources and NFF members located all along India's coastline are frontline environmental defenders. There are many other environmentalists who are responsible for building the field of conservation, environmental rights, and justice in India. Anil Agarwal set up a huge institution that raised important questions and investigated the relationship between modern science and the environment. There are several wildlife and ecology experts who have worked on innovative projects and public communication on the place of wildlife in our lives. Rom Whitaker and Bittu Sahgal are two who influenced a couple of generations of ecologists and wildlife conservationists and also pushed the debates on different approaches to wildlife protection. Ashish Kothari has been very passionate about infusing the imagination of human-nature coexistence into drab government policy. The work he has done with many colleagues in the field of communi-

ty-based conservation and Protected Area management has tried to show that "wilderness" or wildlife spaces sans humans are neither possible nor desirable. These are only a few names in a very vast and rich field made up of many thinkers and practitioners. They all have their critics too and it is up to all of us who work on environmental issues to build on their work while addressing their limitations and blind spots.

### Way Forward

The most important aspect of environmental and development planning is maximum democracy. Our systems of planning are turning inwards, closing up rather than being more inclusive and participatory. We also need more forums in which to listen, discuss, share, and debate ideas and approaches to solving very complex and challenging environmental issues that face us today. Many environmentalists

prefer to take technological routes to solve environmental problems because the social routes of behaviour change and collective action are uncertain. But these technologies then face questions and criticisms and are not socially accepted. So we can't bypass social processes and dynamics.

Secondly, our discourses need to shift focus from production systems to consumption patterns and consequences. Most people, especially city dwellers are clueless about the footprint of their consumption. The links between resources and consumers have to be laid out clearly. We simply cannot expect to create just and sustainable living conditions for all without reflecting on what, how, and why we consume. Another aspect that is now a part of our lives like never before is uncertainty. No matter how much information, data, and other knowledge we produce and disseminate, we will still be faced by events and changes that disrupt present arrangements. We have to develop principles and values of how to live together through such events. Climate change is already creating a large number of ecological refugees. We will need to redefine notions of rights and citizenship to make space for these uncertain futures that we all, humans and non-humans, face.

### **Models for amalgamation of nature conservation with sensitive development**

There's a wonderful group of Dalit women mobilised by the Deccan Development Society. Together they have turned around the practice of small scale, dryland farming into a movement for social and economic empowerment. Their work has demonstrated a viable alternative to conventional, resource-intensive, monoculture farming systems. Several groups work on ecological restoration projects. Mine Labour Protection Committee is a special one among those. It is made up of mine workers and owners who are phasing out quarrying and restoring their lands, while also pursuing community development projects like education for the children of workers. There are many wonderful initiatives that bring together ideas of nature conservation, social development, and freedom to pursue dignified jobs. But these initiatives need support and recognition to sustain and grow because these exist outside mainstream policy which still promotes private capitalist growth at great social and environmental costs.



*Critically-endangered resident vulture atop a cenotaph in Orchha, Madhya Pradesh*  
PHOTO CREDIT:  
*Manju Menon*

# ENTEKOCHI URBAN DESIGN COMPETITION 2020

A national-level Urban Design Competition that aims to jointly ‘design the future city’ of Kochi in Kerala, **EnteKochi** [meaning ‘MyKochi’ in the local language Malayalam] is envisaged to plan and then facilitate the implementation of an integrated civic project that is of key relevance for the sustainable development of the city.

**A**s part of Indo-German Development Cooperation project, Sustainable Urban Development – Smart Cities Project [SUD-SC], Deutsche Gesellschaft für Internationale Zusammenarbeit [GIZ] GmbH India supported Kochi Municipal Corporation [KMC] in organising ‘EnteKochi’, a series of multi-stakeholder participatory visioning and public awareness activities in the city towards achieving sustainable development of Kochi in 2019. The EnteKochi initiative was launched in March 2019 and it was all about encouraging citizens to participate in planning the future of Kochi city. Over a half-year’s period, the initiative worked closely with the public, encouraging their involvement through interactive public events, neighbourhood level workshops in 6 different locations around Kochi, focus group discussions with persons with disabilities, architecture students and school children. It also created an interactive website that was connected to an interactive exhibition in Fort Kochi during which the residents shared their views, voiced their civic concerns and made suggestions for changes to their city. One important theme identified from this exercise was the significance of the city’s water bodies and associated open spaces—also known as the blue-green infrastructure—and their direct impact on the quality of civic life. On analysing the people’s responses, it soon became clear that intervening in this space would help in improving the overall civic quality of Kochi to a maximum.



## The Jury

### K.T. Ravindran

Urban Designer; Head of the Jury [Chair],  
National Representative

### George Mathews

Financial and Development Journalist;  
Local Representative

### Dr. Gladis Mary John

Sociologist; Local Representative

### Anne Fenk

Architect and Urban Researcher;  
International Representative

### Dr. Shilpa Phadke

Sociologist; Sectoral Expert [National]

### Dr. Mohanasundar Radhakrishnan

Climate Adaptation Consultant;  
Sectoral Expert [International/ National]

### Dr. Shalini Sinha

Transport and Urban planner;  
Sectoral Expert [National]

### Dr. Rajan Chedambath

Director, Centre for Heritage Environment &  
Development [C-HED];  
Organiser’s Representative [Local]

### Georg Jahnsen

Project Head, GIZ India;  
Organiser’s Representative [International/  
National]



## Site Selection

The EnteKochi Urban Design Competition [UDC] was a concrete next step supported by Indo-German Development Project the SUD-SC, commissioned by the German Federal Ministry of Economic Cooperation [BMZ], to formulate the most appropriate interventions by technically supporting Kochi Municipal Corporation. To make a successful competition that invited participants from all over the country, a specific site suitable to the planned city-level improvements was chosen. The choice of Mullassery Canal followed a process during which several other areas of the city as well as other canals were considered. This decision followed many stakeholder meetings and discussions with the city's authorities, site visits and consultations with urban experts. After careful consideration, it became clear that this particular site that was central to the city had the potential to allow for strategies and design ideas that could be also applied to other areas in the city. The site faced problems like flooding that affected the city as a whole. It was a strategic site suitable for a national competition even in terms of its central location and connection to many transport hubs - from the boat jetty in the west, to the metro station on MG Road and the KSRTC bus terminal in the east. After the finalization of the site, several neighbourhood level consultations and focus group discussions were organized again to inform the competition process. Kochi Municipal Corporation nominated the Centre for Heritage, Environment and Development [C-HED], a semi-autonomous Centre instituted in 2002 by the urban local government as the nodal agency on behalf of the city to jointly organise this process with the support of GIZ. This partnership and local consultations provided inputs for the selection of winning concepts as the information had helped the participants in the competition to come up with the most relevant strategies and interventions for the sustainable future of Kochi.

## Kochi

The city of Kochi is an intrinsic part of Kerala's extensive water-ways. The region is a priority urban system under the state's urbanisation policy with high connectivity in terms of transportation and trade across global, regional and local levels. Its population is constantly on the move, and its migration patterns flow to global centers bringing back capital, skills and resources all the time. Its rich ecological landscape is an expression of a history of active engagement with economic activities and trading routes, infused by an old, global cosmopolitanism. An important theme identified from the EnteKochi Phase I, which took place in 2019 [a multi-stakeholder participatory

visioning process] was the significance of Kochi's blue-green infrastructure as a key constituent of its identity of a coastal city, and its direct impact on the quality of public life in the city. EnteKochi started 2020 with its Phase II in the form of an Urban Design Competition which spotlights this theme and envisions an integrated, implementable project along the Mullassery Canal in Ernakulam that covers multiple sectors and engages diverse stakeholders in the city.

## The Site

Historically, the Mullassery canal was built for inland mobility, connecting the backwaters, in the west of Kochi to the Perandoor Canal, in the east. The eastern end has the Kerala State Regional Transport Corporation [KSRTC] bus terminus that caters to intra and inter-city public transportation. Waterfront reclamation of the past, at the juncture where the canal meets the backwaters, has produced a linear public recreational avenue called Marine Drive, juxtaposed with housing towers and commercial buildings. Over the years the canal seems to have been built upon by adjacent plots as its use for effective transportation faded into the past with the advent of other modes of personal and public transport and a road centric development. While the total length of the canal is 1.3 kms, more than half of it is presently covered by concrete slabs which are used for on-street parking and dedicated vending zones. It is lined with prominent educational institutions of the city, heritage sites, major shopping avenues, street markets, warehouses, formal and informal housing. It is surrounded by low-rise high- density development of the 80's that transformed the city of Kochi.

## The Competition

The competition aims to generate dynamic, climate responsive design interventions that reintegrate the canal into the urban fabric in a contextually sensitive and sustainable manner. Apart from the canal's re-imagination as a binding theme for this design competition, key sites have also been identified along the canal for more specific and integrated interventions that can revitalise this central location in the city of Kochi.

In June 2020, the competition invited multidisciplinary teams to develop implementable ideas that are scalable, based on local needs and multi-sectoral in their approach. The idea is to facilitate Participatory Development by connecting various stakeholders, and at the same time bridge technical, community and institutional gaps, thereby increasing the likelihood of implementation of the winning entries by tapping existing funding





## Competition Winners

### FIRST PRIZE

#### SPONGE COLLABORATIVE

Praveen Raj R.M., Sourav Kumar Biswas, Shreya Krishnan, Manushi Ashok Jain, Suriya K.P., Aditi Subramanian, Balaji Balaganesan, Sujhatha Arulkumar and Pankti Sanganeer

### SECOND PRIZE

#### TEAM

Chandra Sekaran S., Bala Nagendran M., Preetika B., Ganesh Perumalsamyh and T.R. Radhakrishnan

### THIRD PRIZE

#### TEAM

Samira Rathod, G.K. Bhatt, Umang Prabhakar, Rhea Shah, Jeenal Sawla and Dr. Aparna Parikh

possibilities. Participation of consortia of multi-disciplinary professionals from diverse backgrounds [Social Sciences, Humanities, Ecology & Environmental Sciences, Spatial Planning, Architecture, Urban Design and allied fields] to participate in this competition was encouraged. 117 eligible entries were accepted and an esteemed jury, representing experienced as well as diverse professional backgrounds, selected three winning entries and two special recommendations.

## Next Steps

The ideas that were received are comprehensive and visionary, focusing on a participatory, multi-stakeholder and multi-sectoral approach. As a next step, the multi-stakeholder consultations will continue in the next months, and the three winning teams will have the opportunity to elaborate their ideas to achieve detailed plans ready for implementation. GIZ with the supporting planning agencies urbanista [Germany], urbz [Mumbai] and Design Combine [Kochi] are offering technical expertise with the framing of the competition and fine-tuning the proposed integrated solutions to ensure they are implementable by city stakeholders.

In summary the entire process has the objectives to:

1. Crowd-source integrated ideas which are scalable, based on local needs identified and are multi-sectoral and incremental in their approach
2. Foster a participatory development through connecting various stakeholders among others administrative representatives, the private sector, citizens, academia and special needs groups [e.g. persons with disabilities]
3. Increase the focus on implementability by targeting a phase-wise approach, by tapping existing funding possibilities [e.g. national and state missions]

The entire process is meant to ensure informed decision making in urban development so that local authorities have all the information they require and can utilise a multi-stakeholder approach. This process provides the possibility to bridge technical and institutional gaps and focus from the beginning on local buy-in through open communication and co-creation among the knowledges of technical experts and citizens as local experts. All measures to ensure sustainable urban development in Kochi.

# ADAPT + CONNECT + EMPOWER

## TOOLKITS FOR A RESILIENT, VIBRANT, AND INCLUSIVE KOCHI

**ADAPT + CONNECT + EMPOWER** is the winning submission to an open urban design competition organized by GIZ with the Kochi Municipal Corporation. The toolkits and framework of this project will guide the production of a detailed project report alongside two other winning teams. The ideas presented here will be further developed through collaboration and stakeholder engagement into implementable projects to improve the Mullassery Canal precinct in Kochi.

Mullassery Canal sits at the heart of Kochi as one of hundreds of waterways and canals that characterize the city's fabric, history, and future trajectory. The city spans a monsoonal estuary that is soaked by a network of canals, backwaters, and rainfall. Water is integral to Kochi's unique identity but climate change and unsustainable patterns of urbanisation threaten the balance between nature and society, land and water. Kochi faces multiple issues of flooding, aquifer depletion, saltwater intrusion, and coastal erosion. These interlinked risks are amplified

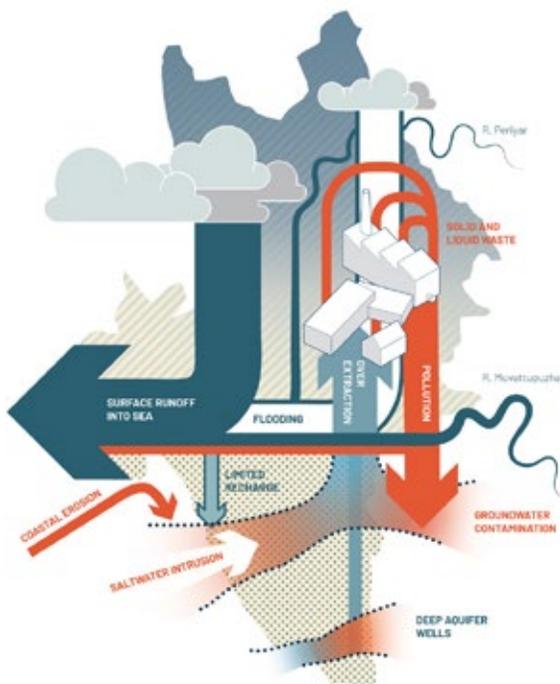
### FIRST PRIZE PROPOSAL SPONGE COLLABORATIVE

Praveen Raj R.M., Sourav Kumar Biswas, Shreya Krishnan, Manushi Ashok Jain, Suriya K.P., Aditi Subramanian, Balaji Balaganesan, Sujhatha Arulkumar and Pankti Sanganeer

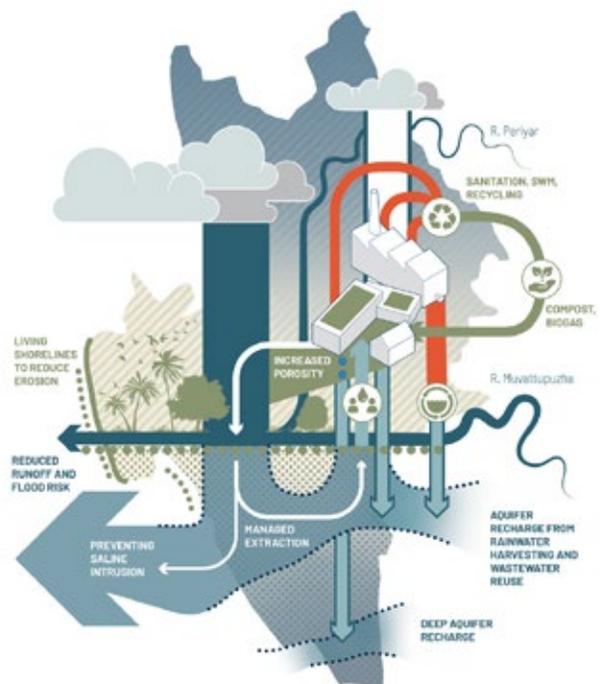
### Site Context and Urban Linkages



### Kochi's Environmental Issues



### Towards a Circular Resource Paradigm



by urbanisation. Canals that once linked waterways are concreted over, compromised by gray infrastructure, polluted or clogged by waste. COVID-19 and the recent floods have exposed compounding socio-economic vulnerabilities as well as the resilience of Kerala's social institutions and local communities. Our project leverages Kochi's natural assets, monsoon culture, and social capital to make the city more resilient, vibrant, and inclusive.

We take inspiration from the proximity of a green city to the rainforests of Western Ghats and traditional practices that sustain these landscapes. The Periyar and Muvattupuzha Rivers are the city's main source of drinking water. The monsoons generously renew and recharge these resources. However, contemporary development patterns disrupt the linkages between forests, water bodies, and the aquifer. We propose a nature based solutions [NBS] approach inspired from traditional forms of natural resource management and reinterpreted for the dense, cosmopolitan city of Kochi. We believe that investments to improve climate resilience should leave nobody behind and create co-benefits in well-being, placemaking, and biodiversity. To this end we propose a comprehensive toolkit of strategies: ADAPT, CONNECT, EMPOWER. The implementation of these toolkits in a strategic manner moves Kochi towards integrated climate-proofing.

Mullassery Canal is a strategic ecological spine linking the wetlands at the confluence of the Perandoor Canal to the Marine Drive waterfront. The ADAPT toolkit is used to make surgical interventions like parklets, infrastructural moves like daylighting and canal bed naturalisation, and strategic moves like opening up public spaces to a naturalised edge. The toolkit also transforms existing streets into green infrastructure and open spaces into multi-functional, floodable landscapes. We propose a network of green streets and open spaces that slows down runoff and recharges the aquifer. We recognize Kochi's unique groves as natural assets and strengthen them as

community resources. Community groves empower residents to sustainably manage and monitor natural resources like trees, rainwater, and groundwater. Green linkages between community groves weave into organic neighborhoods and informal settlements to improve residents' health and well-being.

Sited between the KSRTC bus stop, Mahatma Gandhi Metro station, and the ferry connection to Fort Kochi, the canal edge is transformed into a continuous walkway and bike path. The CONNECT toolkit creates a network of pedestrian-friendly arterial roads, neighbourhood streets, and open spaces of which the Mullassery bikeway becomes a centrepiece. This bikeway connects to a proposed waterfront trail along Marine Drive linking Subhash Bose Park to the Mangalavanam Bird Sanctuary. These connections make the area an ideal site to pilot Kochi's bike-sharing programme. The collective strategies ensure last-mile connectivity to important transit nodes and safe access to new vibrant open spaces. This network is further activated by a set of cultural and tourism trails that renew heritage sites like the Jewish Cemetery and connect to proposed public spaces.

We understand solid waste management along the canal as a proxy for several civic issues. Through the EMPOWER toolkit, we have addressed ways to mobilise communities to push back against the problems that plague the canal in its current form. In order to build up trust and social capital amongst various stakeholders, we propose design strategies and spaces that allow different groups to deepen their social ties and networks, and bring about a greater sense of community. The primary purpose of the community-centric toolkit is: to inform and engage all stakeholders, collaborate with stakeholders to formulate community-led solutions, and provide instrumental support in the form of funding, agency and capacity building. Each of these four strategies play out at three scales: the household, neighbourhood, and city scale to create lasting systemic change.

The toolkit approach is an effective way to integrate multiple systems within site-specific interventions. We showcase sites where the ADAPT+CONNECT+EMPOWER framework can be successfully implemented to reinforce each other and create multiple co-benefits. The M.G. Road intersection features a public plaza with dedicated vending space, bike-share docks, public toilets, pavilions, and green streets. The Jewish Cemetery is restored and connected to a cultural trail while the canal edge is naturalised as a public amenity with floating treatment wetlands. At the KMC waste collection centre, a community centre powered by biogas and surrounded by facilities for workers to harness “waste as a resource” becomes a showcase for mainstream circular economy concepts in waste management. Nearby, a circular model for living with water is demonstrated in the form of floodable and productive landscapes within a campus and residential setting. Priyadarshini Park is reprogrammed for active recreation and equipped with porous open spaces to protect aquifers from saltwater. Living shorelines — a NBS strategy to reduce coastal erosion — is piloted along its backwater edges. Community Groves become spaces for aquifer recharge, urban farming, as well as social gathering where community land trusts sustainably manage public commons.

**ADAPT** catalogs nature based solutions (NBS) that leverage the landscape to re-establish the linkages between urban greenery, monsoons, water bodies and the aquifer.



# CONNECT

describes a redesign of the public realm and mobility systems to improve access to transit, lively places, and safe spaces.



# EMPOWER

outlines how citizens can participate in the improvement of their neighbourhoods and build inclusive communities by facilitating the formation of social networks.





**Nagara Neerkatti**  
The Guardian of the Common Landscapes

*Nagara Neerkatti* is the community-elected caretaker who ensures urban forests, water bodies and aquifers are protected and sustainably managed. His role is to facilitate or oversee the following NBS actions:

**PROTECT** functioning ecosystems from encroachment or pollution, **RESTORE** degraded ecosystems through rejuvenation efforts or clean-up drives, **ENHANCE** ecological functions of riparian and coastal edges through hybrid infrastructure, **CONSTRUCT** green infrastructure to replicate ecosystem services within urban areas.

**Landscape Framework**

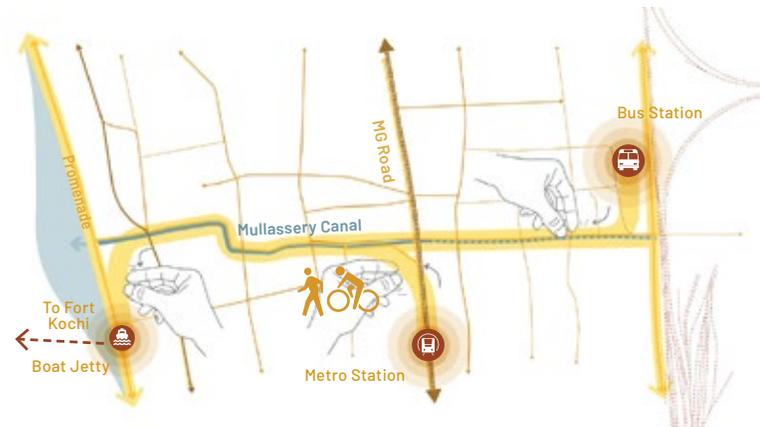


**Sahodari**  
The Reclaimer of Public Spaces

*Sahodari* represents the needs of women, children, aged, the differently abled, informal vendors and other marginalized groups who are not well served by public spaces and transportation today. She leads efforts to:

Improve **ACCESS** to transit for pedestrians and bikers, **INCLUDE** the needs of special groups in the design of public space and amenities, **ACTIVATE** spaces through inclusive placemaking, and **GENERATE** opportunities for livelihoods within the public domain for informal workers and vendors. She achieves this through tactical interventions and lobbying institutional efforts to make the public realm truly public.

**Mobility Framework**



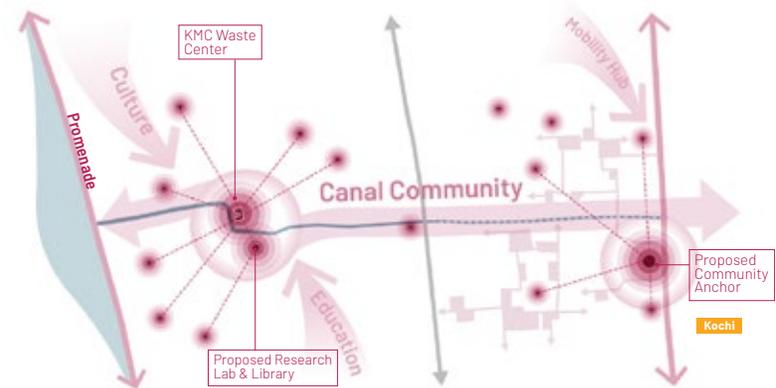
**Community Framework**



**Kudumbashree**  
The Bearers of Prosperity

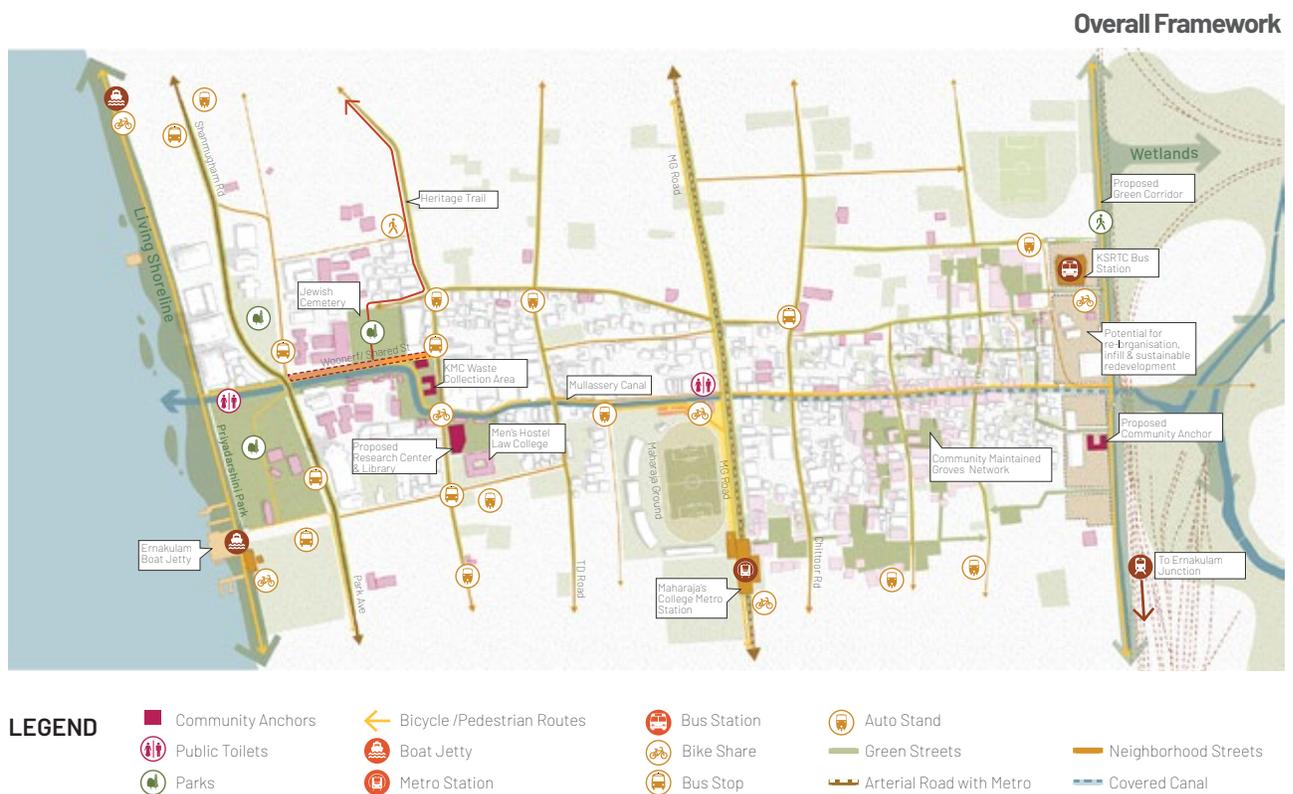
*Kudumbashree* leads community efforts to create awareness, lobby decision makers, and empower residents to realize their aspirations. She mobilizes her community in the following ways:

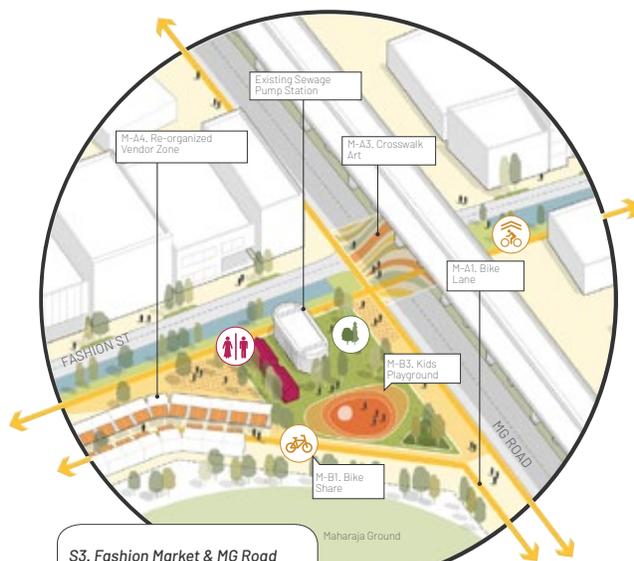
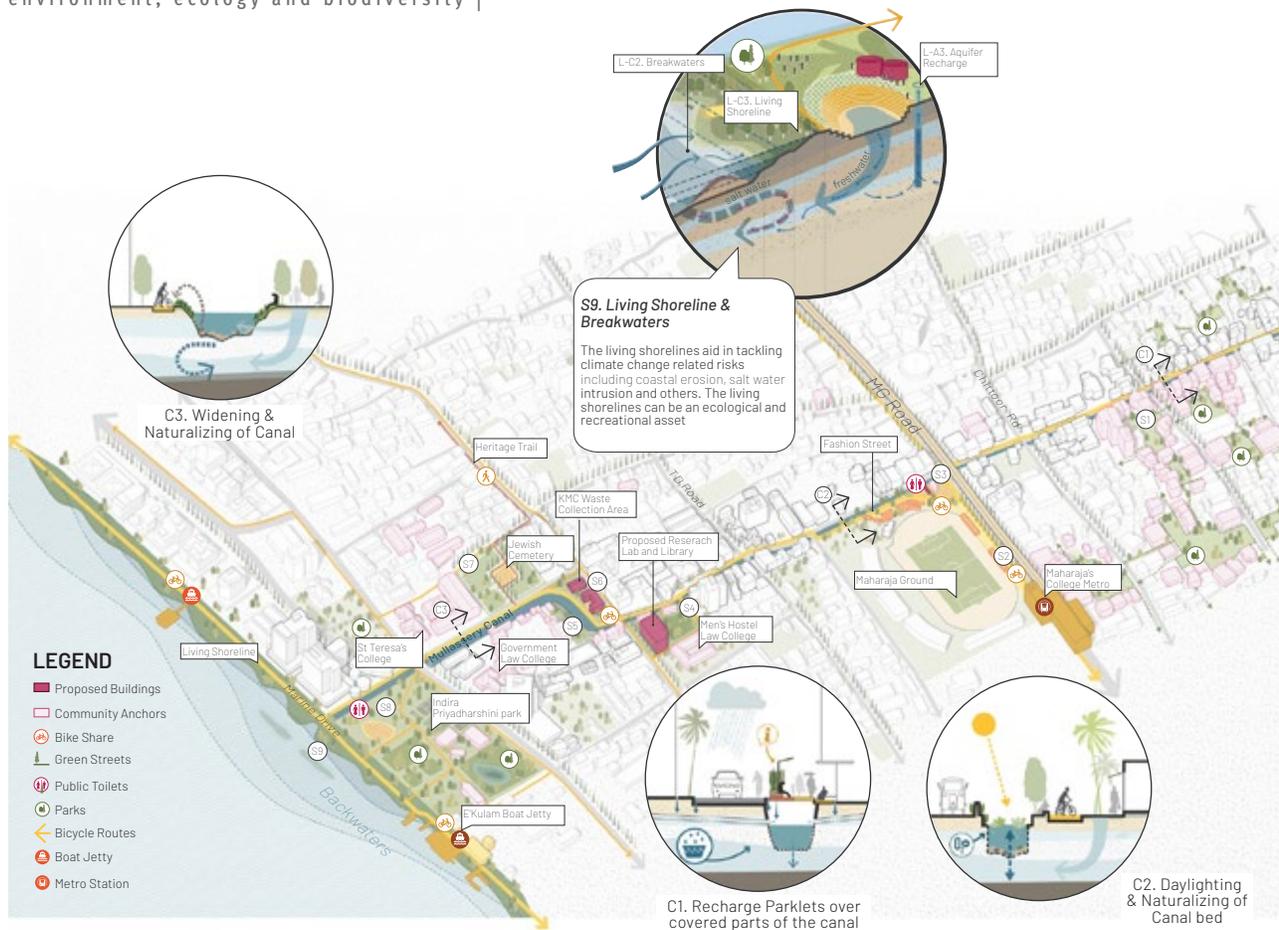
**INFORM** residents about solid waste management campaigns, canal clean-up drives, **ENGAGE** stakeholders in linking grassroots efforts to neighbourhood and city level programmes, **COLLABORATE** with members of civil society and government to foster participatory governance, and **SUPPORT** households looking for institutional or financial support.



The stretch of the canal from Karikkamuri neighbourhood to Priyadarsini Park is chosen as the focus area for detailed articulation. In that stretch, sites where the ADAPT+CONNECT+EMPOWER framework can successfully be showcased are detailed as priority scenarios. The drawings are presented as scenarios and exhibit how the toolkit interventions come together towards creating a better future. The proposed strategies include a diverse set actions, projects and programs that enable rigorous engagement of stakeholders at all levels. The Implementation framework takes into account all the on-going, and future initiatives in the region to build the envisioned framework. To add to that, some of the articulated scenarios are identified as pilot projects.

Finally, the pilot projects are organized into an implementation framework where stakeholders take ownership of the toolkits and continue to build upon community capacity or municipal and state programmes to scale up for city-wide impact.

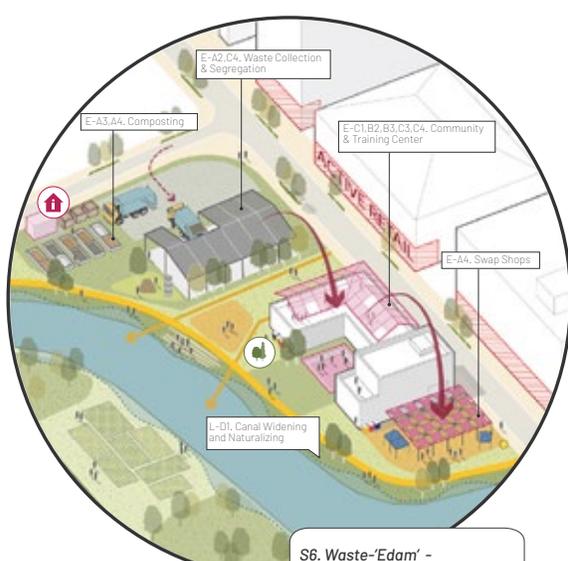




**S3. Fashion Market & MG Road Intersection Plaza**

The re-design of the MG Rd and fashion st intersection has increased visibility and footfall into the Mullassery canal area. My sales have increased because of the cyclists, children, and shoppers who live up the plaza at all times of the day! The new programs and activities along the canal, especially the re-organization of fashion st vendors has been financially rewarding.

KMRL KMC

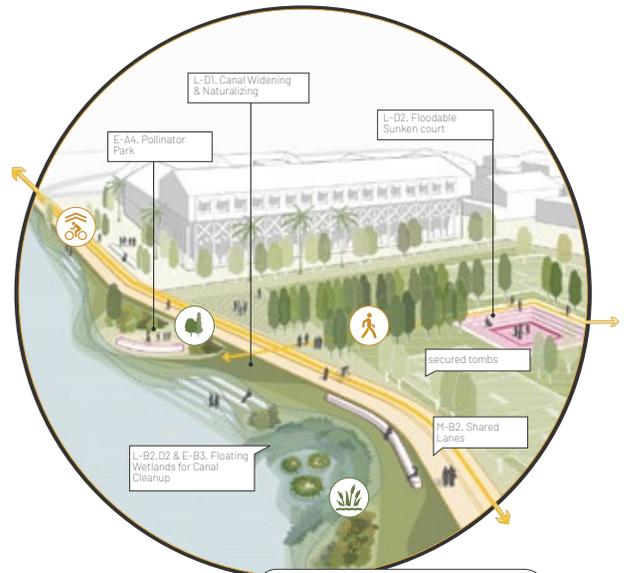
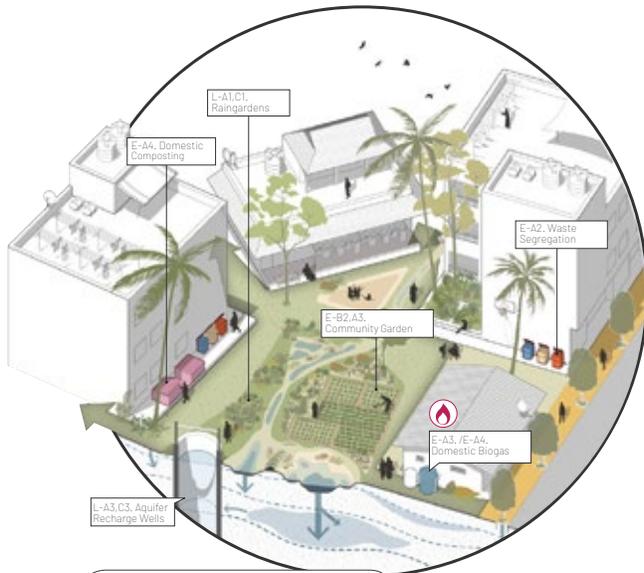


**S6. Waste-Edam' - Neighborhood Waste Center**

Earlier, I only used to collect waste and there was a stigma around this activity. Now I attend courses and sell upcycled products, along with the students and residents in the community. Who knew waste could help me realize my creative and business potential! Okay, time for me to attend the capacity building session at the canal-side OAT. Bye

Kudumbashree RWA KMC





**S1. Community-Managed Groves**

Did you know! Community groves have always been a part of Kerala's traditional rural landscape (Kavus) & remnants of it are still evident in the fabric of Kochi. A network of community-owned groves is carved out of the residential neighbourhood of Karikkamuri and reinterpreted as resilient community infrastructures. As the guardian of one such grove, I feel empowered and environmentally conscious. In the groves, we grow our own food, recycle waste into biogas, recharge our wells, while our children play in safety.

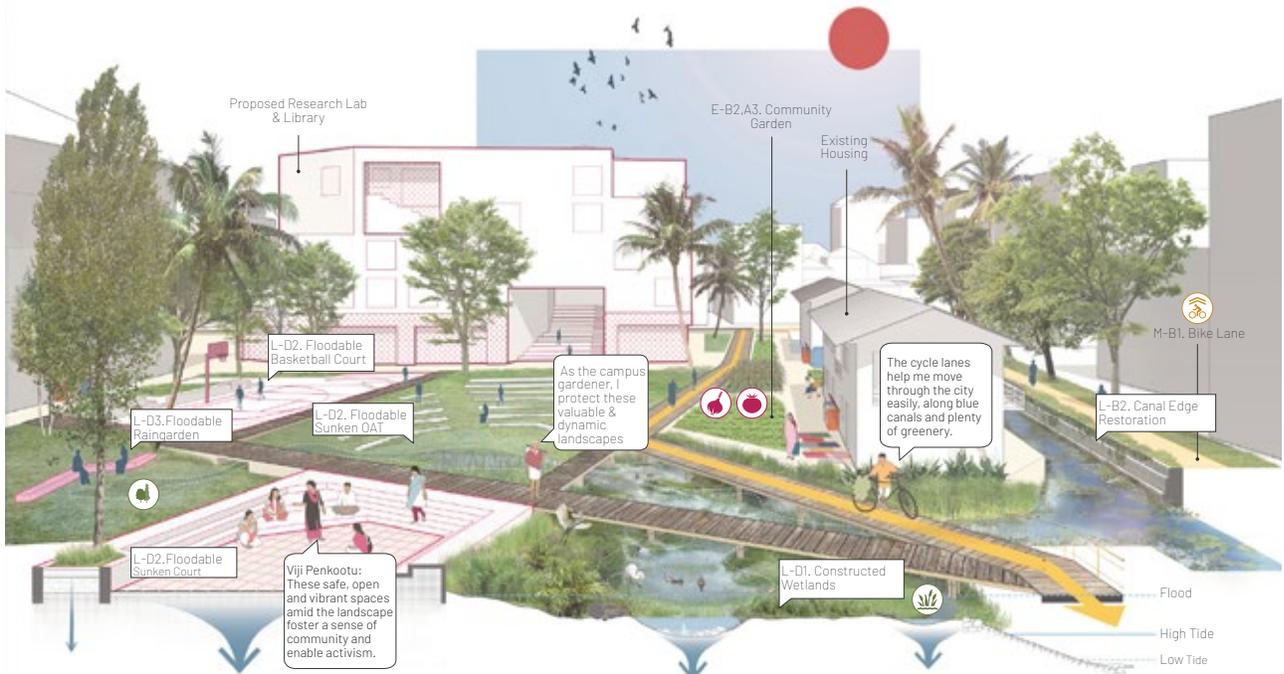


**S7. Canal Widening & Jewish Cemetery**

I have started to appreciate Kochi's multi-cultural heritage, as I walk safely through the cemetery to my college. I often spend time at the central 'courtyard of peace', a passive sunken space that floods. The widened canal edge is popular among tourists and residents, where our student union has installed a floating wetland system to absorb suspended waste particles.



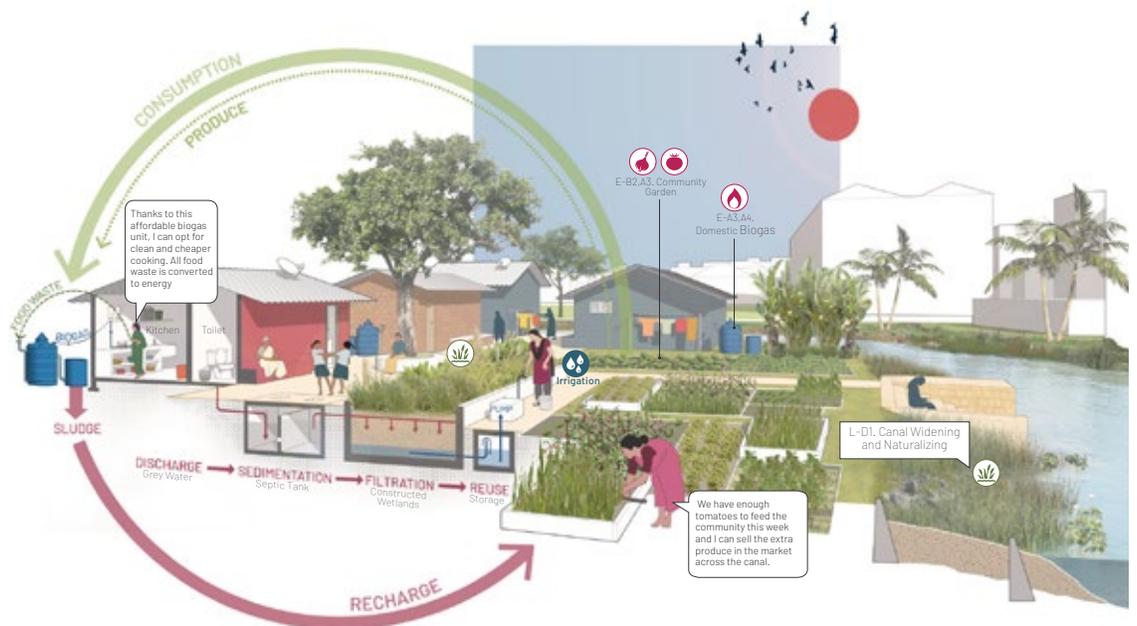
**S4. Gov't Law College - Campus Community Living:** This scenario presents the potential to leverage the Law College land towards creating landscape typologies and functions that will not only activate campus & community life, but also aid in climate proofing by increasing the flood capacity of the canal. The requirement of the Research Lab+Library can be integrated along with the landscape interventions.



**S2. MG Road - Arterial Street:** This scenario presents a complete arterial street, which is inclusive, vibrant, and caters to all users. Cultural pavilions and vending zones support livelihoods and the public realm. The blue-green infrastructures (tree pits and bioswales) work in tandem with the existing grey infrastructure to aid in water management.



**S5. Padikathukulam model community:** This scenario presents how the Padikathukulam community can be empowered by incorporating urban farming and zero-waste strategies and progress towards a circular lifestyle



More information: <https://entekochi.net/>  
 All the Winning and Special Mention Entries can be viewed at:  
<https://www.entekochi-competition.org>

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# CREATING ENVIRONMENTAL EDUCATION LANDSCAPES

**Idea Design** is a consultancy firm based in Cochin, which is engaged in the practice of architecture, landscape, and urban design. Known for its ecological approach towards design, the firm—with three partners **Chitra Biley**, **Michael Little**, both landscape architects, and **Biley Menon**, an urban designer—is involved in works of different design vocabulary in institutional, hospitality, residential, and architecture conservation developments, mainly in southern India.



IDEA DESIGN TEAM | *Chitra, Biley & Michael*

## Coming Together

### BILEY

I think it was sometime in 2005-2006. We have a common client and friend, a group called Good Earth, which has offices in Cochin and Bangalore. Once we went to one of their sites in Bangalore. There, we saw a gentleman driving a JCB and expertly sculpting the terrain. That was Michael, the landscape architect. We didn't spend a lot of time together then. Later in 2006, Joss Brooks from Auroville invited us and Michael, to form a group for the Adyar Ecological Restoration Project,

Chennai, which was about to start. Our office did the base studies and research – detailed site analysis, regional studies, traffic studies, and urban design studies. Later, he worked more closely when the implementation started on the ground. In the process, we understood that each of us has a different skill set. While Chitra is strong in landscape design, engineering, drawings, and documentation, Michael is hands-on and can think of landscape design from a different perspective, more like a sculpture and its connection with the site's natural history, a quite unique approach. I could contribute to assessing the impact of ecological systems and processes, understanding land with its unseen layers like groundwater, drainage, soil, geology, and hydrology. So all these different skill sets came together in a project which actually had a lot of opportunities. We also understood the power of teamwork. Some of the projects, on which we worked together, required our combined expertise. So trying to join our strengths for positive results was the way forward for us. Later we founded a formal partnership company with the three of us.

**MICHAEL**

It is true that we came together to take on large-scale ecological restoration projects and biodiversity landscapes. We saw that there is a genuine opportunity to merge ecological work with inspired design. This has become our niche. Biley, Chitra, and I all have different and complementary skills. But frankly, I think the primary factor was a deep trust in each other and an abiding friendship. I think we noticed something genuine about our shared interests in this field. It was not a commercial impulse to work together, but rather an excitement that we could do work that we are passionate about. We also sensed that we might be able to do explore a new design language in this work.

**Appropriating to Indian Context**

**MICHAEL**

Each step in my career has been a surprise! After my Master's program in Landscape from the University of Massachusetts, I and a friend decided to just get our boots on, rent equipment, dig holes, level land, and make design and build projects for residential clients. We would present a plan and then build the whole design ourselves. So I learned how to do stone masonry work, building stone walls, stone paving, bricklaying, and other construction works. We used to rent a bobcat and other machinery to do all the work ourselves- site preparation, sculptural landforms, creating expressive drainage patterns, and all. We learned how things get built and we had great freedom to make adjustments on site. I got to know what a quarter-inch means in the landscape.





**ADYAR ECOLOGICAL RESTORATION PARK, ECOLOGICAL MASTER PLAN OF ADYAR POONGA CREEK & ESTUARY CHENNAI**

*Adyar Wetland Reserve with the Poonga Ecopark is an environmentally-significant project in the city of Chennai. Initiated with the aim to restore the ecological balance—and raise public awareness on environmental issues in Chennai at the same time—the project subsequently included and encompassed the edge restoration of the creek and estuary. The Ecological Master Plan was envisioned at a conceptual level for the Adyar Creek and Estuary [358 acres] and detailed Ecological Restoration Plan and Design were done for the Adyar Poonga [58 acres]. Idea Design worked on the project as landscape architecture and urban design consultants with Joss Brooks, renowned ecological restoration specialist of Pitchandikulam Forest Consultants, Auroville. A combined fresh-water/ salt-water ecosystem was revived to make it an ecologically-rich and diverse system for migratory birds and estuarine ecosystems along with coastal vegetation being the significant link to tie them together.*

After a decade of that experience, I moved with my family to India. Here, everything was new to me. I had to adjust to the pace and style of work in India. I was shocked to see land formation being done by twenty or thirty labourers carrying soil across the site! I realized that I would learn a lot by coming to India because the weather, soil, history, plants, people, and culture are completely different. I knew that I would keep learning and that was a great draw.

We were very fortunate to take on public ecological projects on large scales. It allows you to explore dramatic ideas, engage in larger themes, and actually create ecosystems. I have also had the great fortune to work with unique and talented people - artists, architects, educators, scientists, and NGOs. Planning restrictions are also in some cases much more flexible than in the US. Our landscape centred housing work [Good Earth] in Bangalore would be near impossible in most places in the US because of zoning restrictions, but I still don't understand India. I'm fascinated by its history. The collective notions of the landscape here are in many ways different from Europe and North America. The subcontinent with its large arable land and the intensely hot and dry season is fragile. The population pressure is age-old. The forest is therefore a special entity here. Pockets of the Indian imagination have granted forests a magical status. We resonate with this. Our designed landscapes, in general, are leaning toward becoming complex forests, meadows, and scrublands. These archetypes flow through our work.

While we are creating landscapes in India, it's also important to understand the global angle. Humans build gardens everywhere in the world from a common impulse. The world landscape history is the treasure we build from. In a subtle way, the future and the past are embedded in our work. This may be true for all designers actually. How we contemplate the past and future are important. This may bring an intangible quality. I owe a great deal to neolithic landscapes both in Europe and North America, as well as Japanese Temple gardens, Mughal Gardens, Renaissance Gardens, contemporary sculpture, and Earth Art. All of the great documented and undocumented historic landscapes throughout India are resonant including the sacred groves, and indeed the ancient stories so often set in the forests of India.

## Ecological Landscapes

### CHITRA

Our practice is known for designing ecological landscapes. Anything that is sensitive to the site - I would call it an ecological landscape. Landscapes should have meaning and should be useful for someone. Most of our projects also have a strong educational angle. For all these ecological projects, we have a highly technical approach that includes the study of groundwater level, spring tide level, pH of the soil among other aspects. When it comes to landscape design, each and every space is individually detailed and sculpted with respect to the natural resources of the site. We have a strong inclination towards the use of local flora and local materials, but having said that, we have consciously gone out of these limits many times. For example, in a project, while creating a butterfly garden, we planted a lot of exotic plants. The place is full of butterflies. So, one is encouraging and supporting the ecosystem and adding to its dimension by actually having many compatible species. The term 'purist' is probably something that we wouldn't associate our works with, but then we would want to do something that is logical and technically correct. We are not scientists. We are not just merely trying to create pure native habitats. In the case of projects in South India, we are not really restoring an authentic South Indian native forest. We realize that the human footprint is so much a part of this whole discussion. The place has to be functional, accessible, and safe. It should follow all the rules of a functionally designed landscape and comply with all codes. Although that doesn't sound very poetic, it probably would be better to say that our designed landscapes are ecological landscapes which function as environmental education gardens.

FACING PAGE >

### GREENFIELD OFFICE EASTERN GHATS

*A work space that is 100% off the grid, built with reused steel members, local silver oak wood, mountain grass thatch roof and glass windows, the environment-friendly project overlooks an enchanting valley view. The building blends inside-out with the surrounding landscape. The walls are built with local stone boulders in mud mortar. Mudflooring, bamboo furniture, granite sanitaryware, earthenware plumbing lines, solar power, wind-mill are all features of this building. The entry of the building is through stepping stones in a waterbody [in the picture] that runs inside the building and ends on a wall mural made of vertical garden.*



## About Clients

**MICHAEL** Finding good clients is the most important first step toward making a good landscape. At the beginning of a project, our clients typically have only a passing familiarity with landscape and garden design. We are fine with it as long as there is a spark, a kind of passion towards the idea of the possibility of working together, and some deeper connect to nature. They may be builders, scientists, architects, developers, or campus department heads but there has to be something “out of the box” about them. They too want something fresh. There should be a relationship, a give and take. After all, a landscape is never complete. The client and users will be forever facilitating the adjustment and evolution of the landscape. A good project is always a collaborative process. Most clients come by word of mouth.

## Practice

### BILEY

Kerala is a unique place where a lot of people from all over the world travel, to just immerse in its beauty. It has forty rivers, vast stretches of backwaters, two big Ramsar wetlands in Vembanad lake and Ashtamudi lake, and the Western Ghats, which is one of the rich biodiversity hotspots in India, apart from the Himalayas. With a rich history, there is a deep-rooted cultural landscape, which gives a holistic understanding of the ecosystem. Kerala is a living example of the land-water-vegetation concept that we study in the first class of landscape. A Delhite may not be able to visualize it easily, but someone from Kerala would see all the three components working together seamlessly. There is a tradition of a wet-rice culture where rice paddy is actually done in water, which directly relates the livelihood with the ecosystem. This culture traditionally connects places like Indonesia, China, Cambodia, Vietnam, and Japan - Oriental cultures. Kerala suddenly finds a place in that map which is quite unique. One can see that connection in the unique vernacular landscape, timber architecture, roof forms, and boat design,

So there is a lot of learning from an ecological standpoint which has helped us build our career in a different mould. You're always working with nature, so the whole concept of designing with nature is something that is embedded in our minds. Of course, it took our education at the School of Planning and Architecture at New Delhi to actually bring it out. There was a learning curve. Once you cross that barrier, then you realize that there are so many opportunities that this canvas provides. Here the market is slightly different. You have to place yourself in a certain manner to be able to do such projects. In the whole of Kerala, there are probably about a handful of practicing landscape architects. After so many years of our practice, even today, we consider ourselves at the beginning of a big journey because there is a lot to learn and it's a huge world out there.

### CHITRA

When we started our practice in 2001, the profession was in the nascent stage. No one really knew much about landscape architecture. We had to educate the clients and introduce ourselves and explain what we did. Then there was a time when builders started bringing in consultants from abroad. This helped in creating the right exposure for the profession. We have always been selective in choosing our projects and clients, preferring to engage in projects of ecological or heritage value. This has helped us to develop a unique portfolio in the long run. We always had a small office with 8-10 people. A great emphasis is given to documentation, to prepare high-quality design drawings,

## SELECTED LIST OF PROJECTS

Adyar Poonga Ecological Restoration Project, Chennai

Nilgiri Biosphere Conservation Park, Anaikatty

Wild Orchid Estates, Eco-community Project, Yercaud

Teakayen Ecofarms, Eco-community Project, Kodai Hills

Ecological Retrofit of Wipro Electronic City Campuses, Bangalore [EC3, EC4, EC5]

ATREE Office Campus, Bangalore

Good Earth Eco-Community projects landscape in Bangalore & Cochin

C9 Event Centre & Gardens, Kothamangalam

Mountain Shadows Resort, Wayanad

Heritage Methanam Resort, Kochi

Conservation Management Plan for Fort Cochin [with UNESCO New Delhi]

Greenfield Office & Gardens, Eastern Ghats, Tamil Nadu

Ongoing  
Thrissur Zoological Park, Kerala [with Jon Coe Design, Australia]

Toyota Ecozone, Bidadi, Bangalore

Kovalam Craft Village Landscape

Ekantha Wellness Centre & Gardens, Kodai Hills

Prakriti Eco-Community Projects, Cochin



**TOYOTA ECOZONE  
BIDADI, BANGALORE**

*For this 20-acre environmental education park, Toyota has developed an in-depth curriculum and hosts more than 100 schools from urban and rural Bangalore areas. The park has many unique theme gardens for learning that include an Evolution Timeline that traces the developments of life on Earth over the past 600 million years.*

something that I learned, working with Prof. Shaheer early in my career. There is always a strong research component in our projects. We have associated with various ecological research institutions such as Pitchandikulam Forest Consultants, ATREE, FRLHT, and Zoo Outreach Organisation for many of the biodiversity conservation and ecological restoration projects.

**Inspirations**

**BILEY**

I had the privilege of studying under some very good teachers. K.T. Ravindran always encouraged me to carry on, even in my initial weak moments, when I thought of leaving the college. In the post-graduate program, site planning sensibilities were introduced to

me by Ravindra Bhan and Adit Pal, who were brilliant in the subject. We used to do an ecological site analysis with studies in all layers of natural processes – soil, hydrology, topography, vegetation followed by a synthesis map, and finally the master plan. While Bhan, in the site planning studio, actually handheld and taught us how to do a site analysis, Adit taught us the basics of road design, slopes, drainage, and all other technical aspects. We also had Rahul Ram, who introduced himself as the lead guitarist of Indian Ocean. He was a trained ecologist who was trained under Madhav Gadgil. That particular class influenced me a lot.

I went on to do my thesis in “Ecological Aspects of Urban Design”, a first of its kind in the department. While visiting Varanasi and Jodhpur for my case studies, I studied cultural and natural ecology and their symbiotic relationship. In practice also, in our large projects of site planning, we follow the same process and explain it to our clients.

In my initial years after post-graduation, I worked with K.T. Ravindran and Adit Pal for a year on a project in northern Kerala, which dealt with an ecologically sensitive tourism region.

Later in our practice, we got opportunities to work with many different professionals who are in the ecological landscape and restoration field. Working with Joss Brooks was very inspiring. He is a visionary and strong-willed person with an experience of more than three decades in the field of ecological restoration. Our professional engagements with Sally Walker, David Hancocks, and Jon Coe were very enriching. Working with Jon Coe was an experience that helped us to reinvent our professional skills. He was keen to impart as much of his knowledge and

expertise without holding back, and further would promote us at every opportunity when he gets inquiries and assignments for new projects. Michael has been a great source of inspiration too. We admire his talent, work, and unique understanding of ecology. So we have a lot of admiration for that, for his approach and his work.

#### CHITRA

Prof. Mohammad Shaheer has always remained a great source of inspiration for me in my life. My academic thesis, Cultural Landscapes of Kerala, guided by him, was perhaps the first-ever thesis on the subject at the institute. His silent and bold direction always guided me to reach greater heights. After completing post-graduation, I worked with him for a year. I was awestruck by the meticulous detailing done in the office, be it aesthetics, contexts, engineering or horticulture, and also equally important aspects like client interaction, office management, and last but not the least, inspiring colleagues and a tough boss!

Working with renowned Zoo designer, Jon Coe, landscape architect [2014-2017] on the project of Thrissur Zoological Park was like doing a second post-graduation. Jon is a loving senior professional, very generous to share his storehouse of knowledge. In fact, he is always happy to explain the nuances and reasons behind his design. I have always been wonderstruck by his deep knowledge and clarity of thought during the design process and his willingness to incorporate suggestions of his colleagues and juniors. He is never reluctant to revise design if he notes a flaw or finds a better solution. The process of working with him added a whole new direction to my professional life.



All images courtesy Idea Design team  
ideadesign.org



Deepthi C.B., Landscape Architect  
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## DHARITRI THE GARDEN OF MOTHER EARTH

The International Garden Festival at the UNESCO World Heritage site of Chaumont-sur-Loire, France offers a multitude of surprises and new plant-based creations to its visitors. The 29th edition started on May 16, 2020, and is on till November 1, 2020. With the theme, ‘Gardens of the Earth: Return to Mother Earth’, twenty-four international teams were selected by a jury for this edition and five “green cards” were given to special guests. In total, 30 new installations have been created to explore an incredibly ecological theme.

‘**Dharitri: The Garden of Mother Earth**’ designed by **Deepthi C.B.**, a landscape architect based in Bengaluru was one of the winning garden designs. The design was executed by her on-site with local assistance. The gardens and the castle premises are open to the public for the spring and summer months [April to November] when nearly half a million visitors are expected to participate in the landscape festival.

**S**ituated on the banks of the river Loire and 180 kilometers south of Paris, the fortress of Chaumont-sur-Loire was built around the year 1000 CE. It is situated in the former royal city of Blois which is adorned by the richness of its heritage as well as its numerous cultural sites. The thirty-two-hectare property is famous for its gardens and ornamental château built in the Renaissance style of architecture. At each epoch of French history, the Château has been owned, rented, or visited by numerous significant persons in French and European history.

## Design

‘Dharitri: The garden of Mother Earth’ is aimed to represent ancient Indian culture borrowing ideas from our harvest festivals and the self-sufficient homestead gardens. Since ancient times, the spirits of Earth and nature have been revered as the life-giving Mother. As per our scriptures and beliefs, Prithvi or Dharitri are names synonymous with Mother Earth. She personifies nature: the supreme power that gives birth to all life forms and nurtures them. She has been glorified and worshipped in folk songs, poems, and festivals in different cultures across the globe.

Agriculture for long has been a major occupation in India. Mother Earth has always been worshipped as the life-giver or the goddess of the ripened harvest. The annual harvest festivals celebrate the bountiful crops received that year and serve as a gratitude to the blessings of Goddess Prithvi or Mother Earth.

Along with the agricultural fields, the majority of the Indian households had homestead gardens. It is a traditional practice of using the adjoining garden area for the cultivation of trees, vegetables, and flowers for worship along with livestock, poultry, and /or fish production for the basic family needs. These gardens made the houses self-sufficient and nurtured unique biodiversity in itself.

The design inspired by these cultural references is aimed to be a place of reflection, knowledge and respect for all the mysterious harmonies of nature, a place of sharing and conviviality, and finally a garden – a microcosm mirroring the macrocosm.

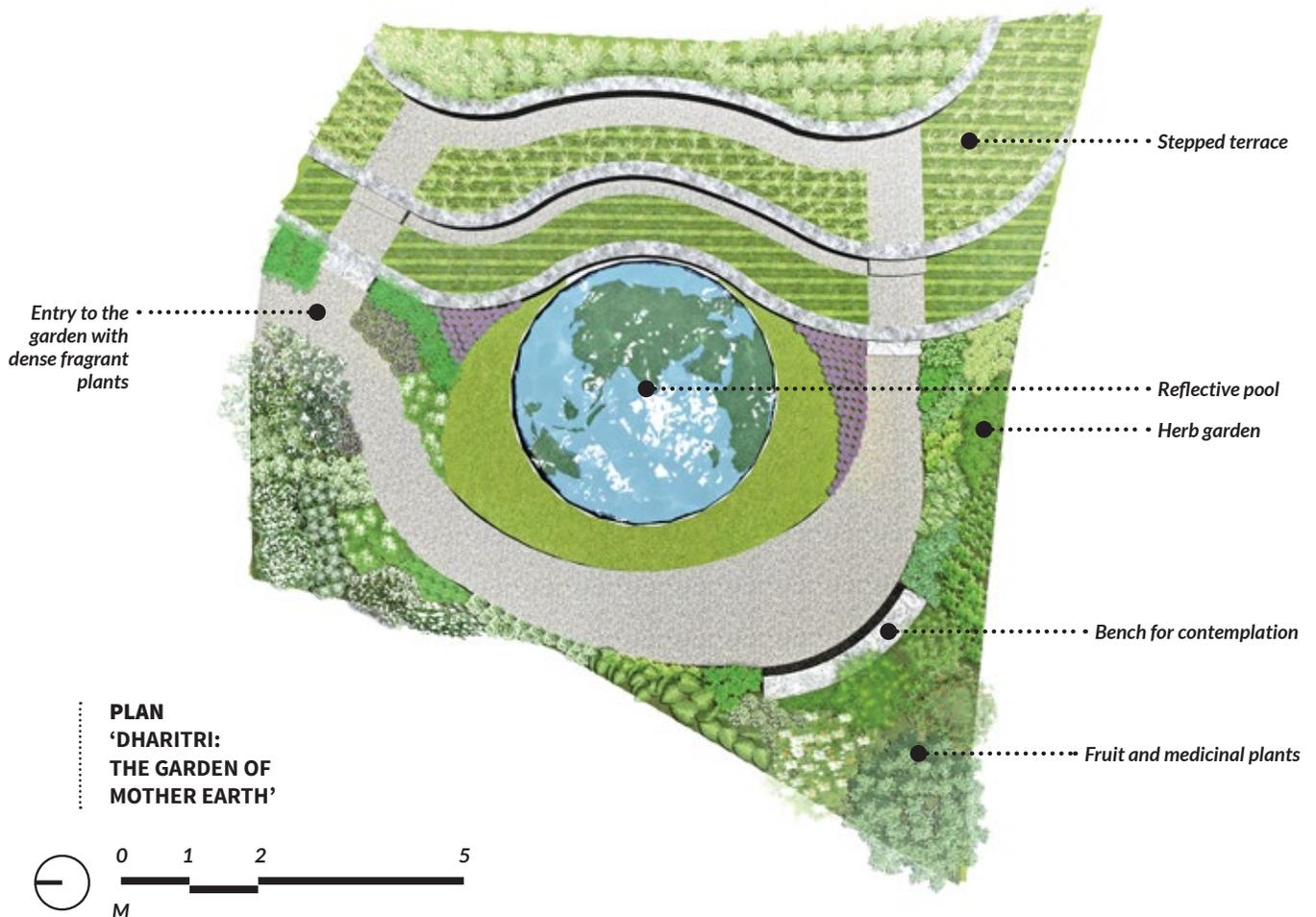


*The design inspired by cultural references is aimed to be a place of reflection, knowledge and respect for all the mysterious harmonies of nature, a place of sharing and conviviality, and finally a garden – a microcosm mirroring the macrocosm.*

## The Garden Experience

The visitor enters the 2000-sqft garden area through dense planting along with white fragrant plants [which can be used for worship and was inspired by the French perfume industry]. The aroma imbibes a welcoming feel and the planting thicket arouses a sense of curiosity of the journey beyond.

On further transition, the garden starts revealing itself. The walkway gradually opens up to a wider zone overlooking a series of stepped terraces that abstract the paddy fields, with a carefully selected planting palette mimicking the various stages of the paddy crop growth. A shallow circular pond at the base reflects the sky and the surrounding landscape. As per sacred narratives, *Prithvi Mata* [Mother Earth] is complementary to *Dyaus Pita* [Father Sky]. In the ancient scripture of Rigveda, Earth and Sky are addressed in dual as *Dyavaprihvi*.



A curved bench, placed along the wider walkway, allows the visitor to relax and contemplate. The planting transcends from the fragrance garden to fruit, medicinal, and herbs garden, deriving inspiration from the homestead gardens. The sensory experience illustrates the dialogue between man and nature.

The walkway further leads to the stepped terraces where the visitors can walk along with the abstract paddy fields. The pathway finally leads to the exit point, thereby completing the circumambulatory or *Pradakshina* path paying tribute to the sacredness of Mother Earth. The design gives reverence to Mother Earth for all the life forms she supports and celebrates the divine energies of nature.

## Collaboration

Since I had been freelancing for the past three years and a firm was required for registration, I collaborated with my friend Chandrakanth G. M.'s office namely *Design Cartel*. Our colleague Pannag Shet was a great help in developing the 3D views.

## Site Execution

For the process of the design execution, two visits were made to Chaumont-sur-Loire. During the first visit in January, the allotted plot was seen, followed by a meeting with the contractors, discussing plant and material palette. Since French was the most spoken language, I was assisted by a translator from Germany who made communication easier. It was my first trip to Europe and a new experience in terms of culture, food, streetscape, city planning, and the distinct seasons which is less evident in our tropical regions. Braving the chilling weather of 4 degrees, it was a wonderful experience exploring the tree-lined avenues and parks, bistros and cafés, architectural wonders ranging from Gothic structures, such as Notre Dame and the mesmerizing Sainte-Chapelle to modern buildings designed by Le Corbusier, Frank Gehry, Richard Rogers, and Renzo Piano.

### SITE WORKS

*Grading of the site and demarking the reflective pool; Cutting and making panels from Oak wood logs; Fixing the panels along the stepped terrace; and, The stepped terrace taking shape*



The second site visit was in March. It was the spring season and all the trees which were bare during winter were in bloom now. Paris was a dreamy vision. Flaunting white, cream, and pink Magnolias, yellow Daffodils, and pretty-in-pink Cherry blossom, the season made the landmark sights even lovelier.

This time I was accompanied by Chandrakanth. Once we reached the castle and were allotted the accommodation, we immediately started the site work. It was a completely new experience as we had to assist our contractor in the physical site execution. We started with leveling the ground and digging the earth to develop the three stepped terraces. It was followed by cutting the Oakwood logs and making nearly 200 panels to be fixed as retaining walls for the terraces. A very interesting detail was the use of 6" wide metal sheets as separators between planting and walkway. This gave a neat edging to the garden and looked less bulky as compared to the conventional curbs. Within a week, the garden started taking shape.

**GARDEN ENTRANCE**

Entrance to 'Dharitri:  
*The Garden of Mother Earth*'





On certain days, the temperature would drop down to seven degrees Celsius followed by rain drizzle. We enjoyed the site work as it was a great learning experience. It was wonderful interacting with fellow team members and learning about different cultures, food habits, and landscape patterns around the world. It was amazing to see the other teams build their gardens completely by themselves. Their friends, family, and neighbours would help in the execution. Later I came to know that their college internships involve working onsite with a contractor and physical knowledge is as important as developing a good design.

THIS & FACING PAGE

**THE GARDEN EXPERIENCE**

*The 2000-sqft garden area with its dense planting with fragrance and fruits, a wider zone overlooking a series of stepped terraces and a shallow circular pond at its centre reflecting the sky and the surrounding landscape—a microcosm mirroring the macrocosm*



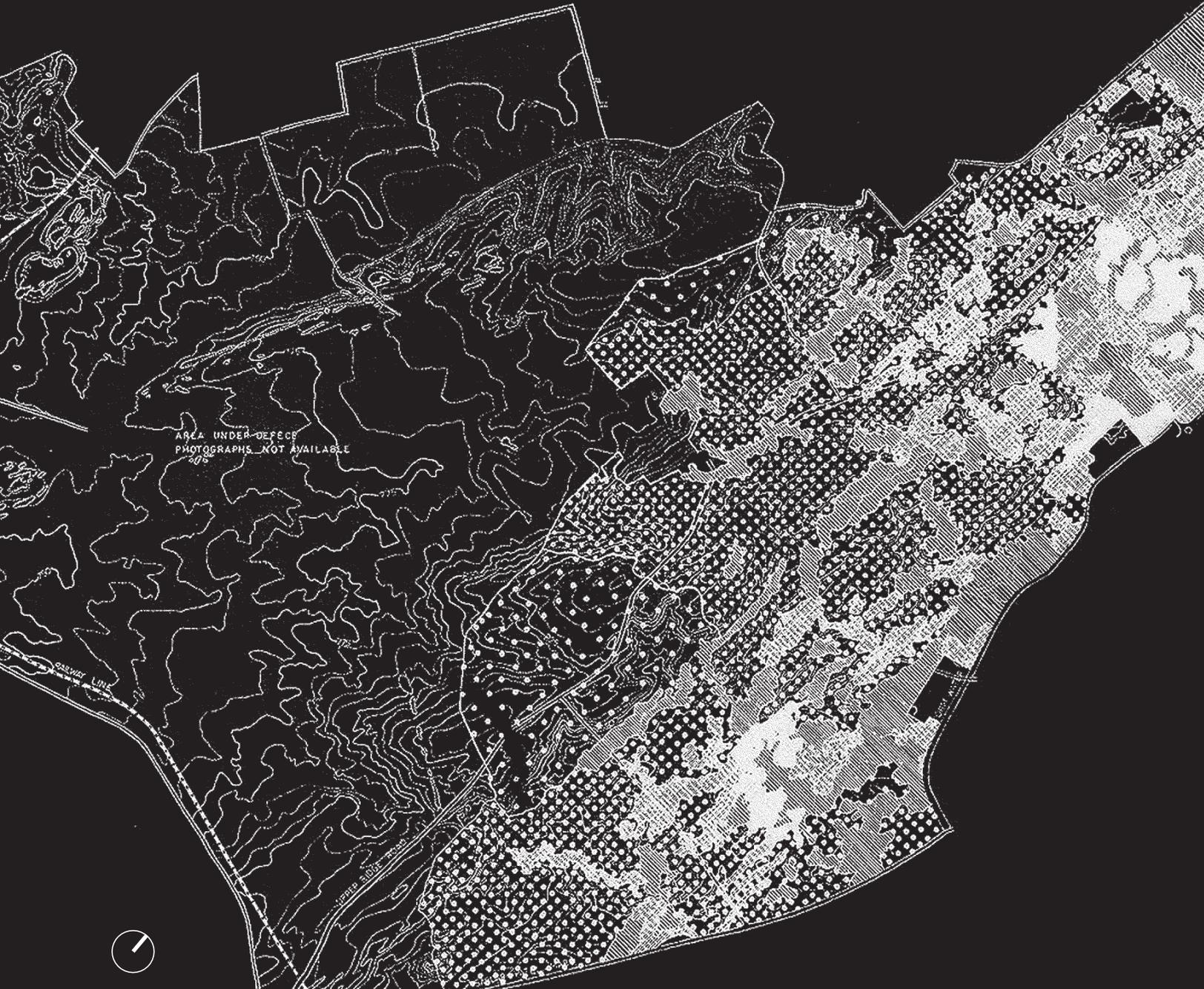
**PLANTING LIST**

*Liriope muscarii*  
*Cymbopogon citrates*  
*Pennisetum setaceum*  
*Iris*  
*Salvia microphylla*  
*Sedum*  
*Thymus vulgaris*  
*Rosmarinus officinalis*  
*Mentha × piperita*  
*Origanum vulgare*  
*Angelica archangelica*  
*Choisya ternate*  
*Lavandula angustifolia*  
*Agapanthus africanus*  
*Hymenocallis littoralis*  
*Jasminum grandiflorum*  
*Bambusa ventricosa*  
*Rosa setigera*

The garden execution was completed in March and the festival was inaugurated in May. We are glad to note that it has been a great success amongst the visitors.



Images by Alexandra von Bieler, Denis Broyer,  
Caroline Thomas and the Author



AREA UNDER DEFECT  
PHOTOGRAPHS NOT AVAILABLE

CALWAY LINE

WATER SUPPLY CANAL

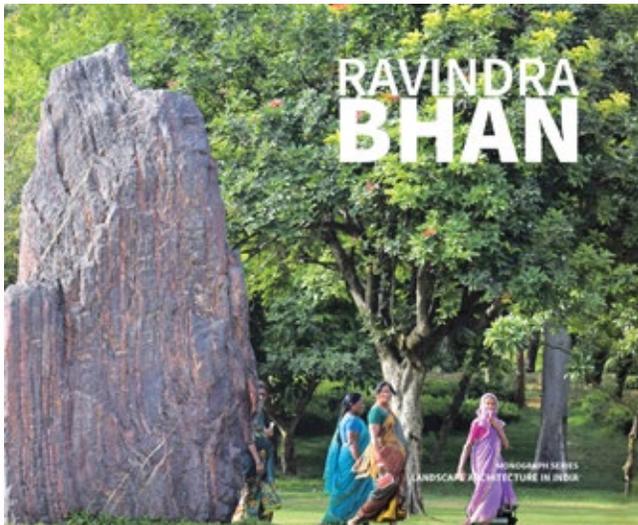


# DESIGN, CONSERVATION AND PLANNING



Review by Dr. Shishir R. Raval, Landscape Architect  
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# MUSINGS ON THE MIND AND MANNERS OF RAVINDRA BHAN



**RAVINDRA BHAN**  
MONOGRAPH SERIES  
LANDSCAPE ARCHITECTURE IN INDIA

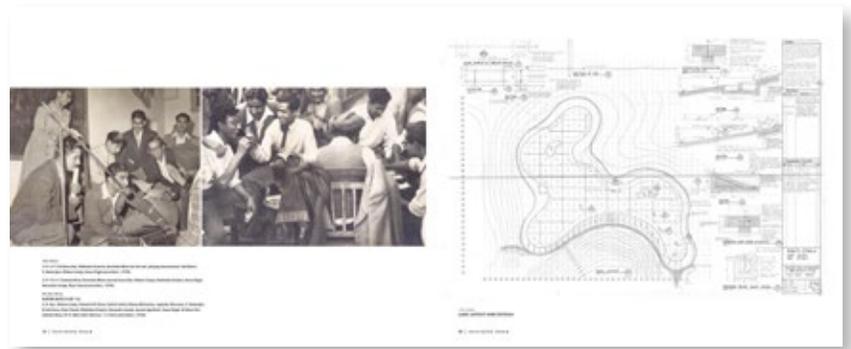
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## The Monograph

It becomes apparent that a great degree of thought and follow-through has gone into conceptualizing the form a, the contributors, and the contents of this volume. The initial essays by the editor, a senior colleague, and by RB himself [‘My Journey’] provide a useful introduction to the volume. Especially, ‘My Journey’ is vital to get a peep into the many forces that made RB, what he did, and why. A nice appendage to this is a short note on the role of Mrs. Vani Bhan. “Impressions” by colleagues, past students, and office staff of RB gives us the many perspectives on the same individual in different roles and settings. These are mainly personal recollections that exalt the person and his works and rightly so. However, to do so without any criticism or questions seems like a lost opportunity.

As I sit down to write a review of this monograph on life-work and ideas of the late Mr. Ravindra Bhan [RB], a highly renowned and esteemed landscape architect of India, I need to make a couple of observations. First, writing this review [as in critical appraisal] on a monograph that is designed to especially celebrate RB’s voluminous contributions in many domains through the voices of those who have known and have a deep respect for RB has been difficult. Second, I neither knew RB nor did I know much about his academic or professional contributions until I read this important monograph. Having shared these thoughts, I invite you to read the following “review” of this monograph.

A large part of the volume consists of meticulously documented “Projects”, “Brief Project Profiles”, “Studies & Documentations”, and “Writings & Interviews”. These have thorough documentation on a very wide range of work and themes with varying degrees of details and narratives for each. It is truly a treat to go through these pages and appreciate the manifestation of RB’s ideas, values, and approaches. A detailed “Biography” gives insights into a bewildering range of activities RB was involved with from winning a CPWD design competition in 1955 [age 23], through the years abroad [1958-1972] and in School of Planning and Architecture-Delhi [1972-76 and 1984-2006], to his professional practice and affiliations with international and national organizations [2020]. It ends with a list of staff in RB’s office, a brief on the contributors, selected references, and acknowledgments.



So that the reader gets an outsider’s and an insider’s view, the monograph has a variety of people, including RB himself, contributing to its contents. Everyone’s view reveals different relationships with and aspects of RB, but has the same two themes running through, that of RB’s character and traits [rigor, grace, discipline, perfection, integrity, professional values, etc.] and the strong influence of Ian McHarg [his teacher and mentor] and RB’s entrenchment in the ways of the legend over the many years. One only wishes to read more anecdotes and details that would help substantiate and appreciate these traits even more. At the same time, all these parts raise questions about the designs and approaches by RB and doubts about some of the claims made by the contributors about RB’s ideas and works. The volume strives to be both, a record of RB’s work and a collection of reflection on him. It succeeds to a degree except that it comes across as felicitations of RB and his works rather than an objective analysis of and debate on his ideas and works. Projects such as Shakti Sthala and RB’s own writings offer such an opportunity.

A salient feature of this volume is the inclusion of apt illustrations and images as interludes between its parts enriching the content and its flow. Graphically it is very well designed. Its size and page orientation make it easier to look at the illustrations than to read it. Proof reading would have helped avoid some minor errors in printing. On the whole, however, this monograph is truly a labour of love. This volume and others to follow are going to be a treasure trove, a one-stop insight into the minds and



manners of the trailblazers of landscape architecture in India.

As the field of Landscape Architecture completes almost five decades in India, producing a series of monographs on key individuals who pioneered and nurtured Landscape Architecture in India is praiseworthy. This is of great service to the current and future practitioners of landscape architecture and

allied disciplines in India and beyond. Hopefully, this volume and similar other ones will deepen our appreciation of this wonderful, multi-faceted field and help build upon the ideas and lessons in the coming, exciting and challenging, decades.

## Epilogue

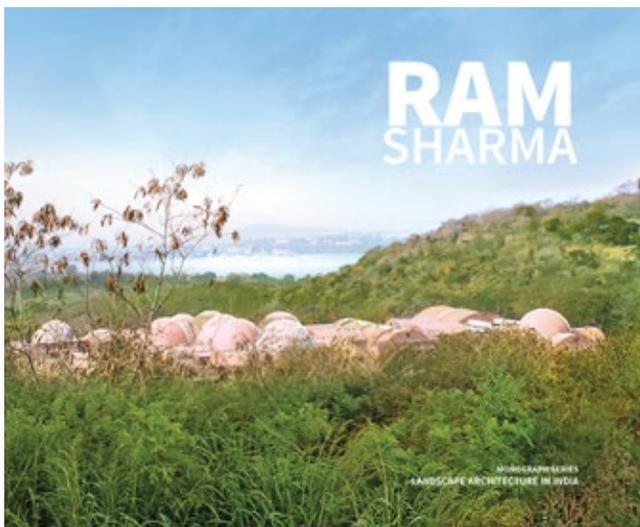
Reviewing this monograph felt like inadvertently and impolitely walking into an ongoing memorial service of a high-stature person commanding reverence. How can one critically appraise such glorious tributes showered upon the individual and his enormous contributions? In my view, monographs are about thorough and scholarly discussions on specific subjects. If the subject is a person then deciding what kind of story to tell and how to tell it to become vital. Should it objectively document only the life of the person and her/ his work? Should it present a critical analysis of the person's work and derive lessons? Should it mainly celebrate and praise the person, as this volume does? Or, should it be a balance between laudatory reflections and critical assessment of the designs and ideas of the subject of the monograph? These fundamental questions need serious discussion especially when substantial resources are invested in making such worthy volumes.

Perusing the monograph allows one to know RB more intimately. It gives an encapsulated and rich opportunity to understand what all makes a person what he was, how he thought, what he contributed, and how he worked, and why. Without such background narratives, our understanding of their works remains incomplete. It helps the reader appreciate Mr. Bhan's journey, personality, and vast and pioneering contributions to not only landscape architecture, but also to the larger social, economic, and political contexts in which it needed to evolve as a rigorous discipline and respectable profession in India. Peruse it!



Review by Sanjay Kanvinde, Urban Designer  
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# DIFFERENT STROKES



**RAM SHARMA**  
MONOGRAPH SERIES  
LANDSCAPE ARCHITECTURE IN INDIA  
Editor Geeta Wahi Dua  
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**M**odern Indian Architecture has been fairly well represented in terms of documentation and research over the last few years, with published books on several renowned architects such as Doshi, Correa, Kanvinde, Rewal, and Hasamukh Patel, among others. A new addition to this list is the recently published monograph on an architect extraordinary - Ram Sharma, as a companion volume to the other on the celebrated landscape architect Ravindra Bhan. It focuses on one of the first generation of architects to graduate from the Delhi School and return after their studies abroad, to teach.

Ram Sharma belongs to the “famous batch of 52”, with illustrious classmates such as Raj Rewal, Ranjit

Sabikhi, Ajoy Choudhuri, Kuldip Singh, Morad Chowdhury, Shibam Ganju, and Ravindra Bhan, all of who studied at the Delhi Polytechnic and worked abroad in the 50’s and 60’s. Many of them started teaching at their ‘alma mater’, it being the only Institute imparting architectural education in Delhi in those days. This ‘bridge generation’ of architects, comparatively younger, were actively involved in proposing several urban projects for Delhi.

The book is laid out in a landscape format, with good graphics and an easy to read the text, with a consistency in the overall layout. It is divided into several sections, starting with impressions, early life/student days, professional work in two parts, encompassing architecture/landscape projects and including unrealised proposals such as competitions, some of his select writings, and lastly, a list of projects under biography.

After reading this engrossing book, the reviewer has chosen to primarily focus on Ram Sharma’s early student life, his academic occupations, professional career including unrealized projects, and his select writings, as these are seminal to one’s understanding of this multi-faceted personality.



The first part of the monograph traces Prof. Ram Sharma's journey from the Delhi Polytechnic, Harvard, and Pratt to his return, where he combined practice and academics. It is fascinating to read about his formative years, especially his resolve and persistence. His student work is refreshing with its already modernist inclinations.

Surprisingly, in spite of his unique qualification of being both an architect and a landscape designer, he has not handled a large number of projects in his career. Quite a few of his landscape works remain unrealised. However, an often-ignored fact of his illustrious professional career has been his parallel involvement in academics, initially at the School of Planning & Architecture Delhi. Besides his major involvement with the Architecture department, he was also responsible for the groundwork of the yet to be established landscape department, later headed by his classmate Prof. Ravindra Bhan. This was followed by a stint at the Sushant School of

Architecture, before returning to SPA as the chairman of its executive council. Also, relatively lesser known is his involvement as a founder member and spearhead of the Alumni Association, SPA Delhi, and his stewardship of the Delhi Urban Arts Commission, where he coordinated the design exercise for the sub-city of Dwarka, as part of a planned expansion of Delhi.

As a teacher Prof. Sharma always came across as reserved and aloof but having experienced his teaching skills personally, there was a definite rigour to his teaching and he was always approachable, but only after one established a certain rapport. He didn't impose his ideas on students but gave them the freedom to explore and evolve their own approach. He has always been a man of few words, yet whenever he speaks, he is succinct and to the point. His often sardonic expression belies his innate sense of humour. Also, as is highlighted in the book, is his abiding love for sports especially cricket. Two separate segments of the book focus on him, as his contemporaries view him, as also his office associates, all of who regard him as a gifted designer as well as a generous and extremely warm human being.

The projects are categorised separately into the built work & the unrealised projects, either as competitions or work which was never built. It is rather unfortunate for the profession that a large number of his projects remained unrealised, in spite of their potential as concepts.

One of his early works is the Pragati Maidan Complex in New Delhi, where he was responsible for the landscape design, including the introduction of a central water body as well as handling the architecture of several individual pavilions. The Kalka-Shimla highway is one of his realized landscape projects, where an elaborate analysis of the terrain was carried out to establish slopes & drainage patterns, based on which, tree species were proposed according to their appropriateness.

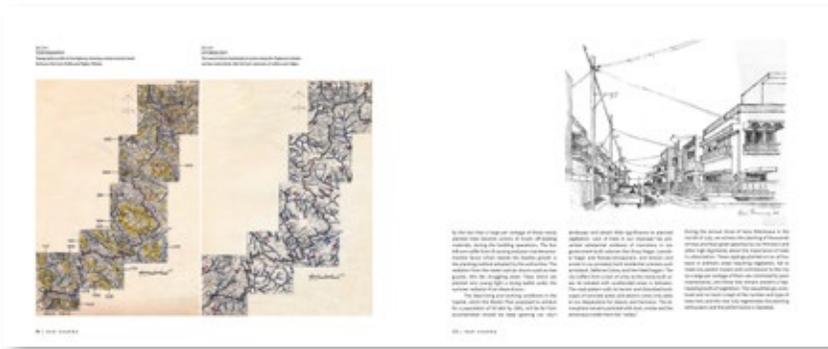
The Dilshad Garden Group housing project in Delhi was a winning national competition project. The low rise development has a layout characterized by peripheral access roads and generous open spaces, with dwelling units respecting orientation and provided with terraces at each level. It is quite refreshing to see photographs of the project soon after completion, which displays qualities of a 'brave new world'. It is another matter that the numerous alterations to this project today have completely transformed the scheme to the extent that, it is completely unrecognisable- a reality that affects almost all housing development in India today.



Ram Sharma's own residence in exposed brick and exposed concrete takes on a different approach on a small residential plot, with spatial volumetric integration between its two main levels. The buildings for the Doon School are again consistent in their use of brick in their natural setting of mature trees, respecting the context of the classical architecture of the campus and have a pleasant hill-station feel to them. The Central Institute of Buddhist Studies Ladakh, though planned on a grid, respects the site topography and expresses an architectural vocabulary influenced by local tradition, giving it a unique character, while the rigid geometry of the orthogonal plan for the Manav Sangrahalaya, Bhopal, is mitigated by the introduction of courtyards and levels, respecting the topography. The use of vaults and domes enlivens both the form and the skyline of the complex.

Among the unrealised projects, his structural innovative indoor stadium proposal in collaboration with the eminent structural designer Mahendra Raj would have been a more appropriate insert into the city's fabric. Both his proposals in Delhi for the re-densification of Bungalow area B-Zone and the NDSE redevelopment proposals portend an idea 'whose time has come' as it looks at the areas with enhanced FAR and densities.

Stylistically it is difficult to slot Ram Sharma's architecture, as it is quite varied in nature. However, despite a strong reliance on orthogonal planning and the recurring use of the grid in several of his works, one can also see the occasional influence of Corbusier and Kahn, though he remains consistently faithful to the Modernist idiom. It is also characterised by the use of locally available materials, be it brick, exposed concrete, stone, or timber. On analysing his professional work, Ram Sharma's design ideology has been shaped by a fairly pragmatic thought process, amalgamating functional elements with climatic & cultural overlays. His work exemplifies the ideal combination of the interdependent disciplines of landscape and urbanism.



The last section consists of his published articles is of particular interest, both in terms of the profession and education, as they give a deeper insight into his attitude to architecture and landscape and the urgent need to restructure them. In his views on the state of landscape architecture, Ram Sharma makes a case for 'standardization of professional fees and a more transparent and professional way of

engagement between government and the landscape fraternity, which is currently missing.' He argues for 'persuading government agencies to promote design competitions for designing public spaces in order to provide young professionals to showcase their talent and in the process, secure commissions.' He is also equally concerned and critical of the 'state of the Indian City posing a serious challenge.' 'The condition of our cities is less than satisfactory with problems of traffic congestion, water, and air pollution, the encroachment of public space and overall environmental degradation. It is also accompanied by deterioration of heritage precincts, forest cover, and water bodies.' Additionally, he feels that our ever-increasing population requires 'the concerted efforts of landscape architects to set things right.'

In his article 'The Search for Roots & Relevance' written for 'The Architecture in India' exhibition in France 1985, he traces the evolution of the profession in India with alienation setting in by the mid 60's and the resultant search for alternatives by using history and local tradition as inspirations. In a way, the exhibition was an eye-opener, both in India and abroad, as it was one of the first comprehensive compilation of modern Architecture in the country. Obviously, there may have been certain compulsions on part of the publishers regarding the size of the book, but it would have been in the fitness of things if more of his work had been selected under projects, as it would have better explained his design philosophy. The other drawback of the book is the several typographical errors that have crept in, but on the whole, it is a worthy addition to the list of architectural publications showcasing works of eminent Indian architects.

In conclusion, as present-day architects and students are probably unaware of the stature of Ram Sharma's achievements, the book is extremely important in revealing his design ideology and his dynamism in exploring new directions. His humane qualities, coupled with his integrity and steadfastness, will no doubt continue to inspire future generations of architects.



Geeta Wahi Dua, Landscape Architect  
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# DISCOVERING THE VALUE OF DESIGN CRITIQUE AND DESIGN REVIEW

The term *Critique* derives, via French, from Ancient Greek, *kritike*, meaning “the faculty of judgment”, that is, discerning the value of persons or things. Immanuel Kant, a German philosopher of the 18th century, most influential figures in the history of Western philosophy used the term to mean “a reflective examination of the validity and limits of a human capacity or a set of philosophical claims”. He further observed, “A critical perspective, in this sense, is the opposite of a dogmatic one.” In modern times, it means a systematic, disciplined, inquiry into a concept, a theory, a discipline, or an approach and/or attempt to understand its objective and vision.

Recently when a friend asked me to be on the list of “evaluators” for his new research work, it got me thinking. “Judging” and “critiquing” a work! Sounded terrifying, as a juror with all the power ready to demolish the pride of the creator! What was the reason for this reaction? This led me to ponder on the idea of critiques and reviews.

In present times, our *judgment abilities* about anything or everything on earth have reached exemplary levels. When we get an opportunity to look at the works of others [even under progress] briefly and remotely and asked for an opinion, we are overly critical. Most of the time, our comments are harsh and unapologetic, underrating the work. Some other times, under obligation or in friendships, if there is a lack of a clear and deep understanding, they are uninformed and simplistic assessments, without any in-depth analysis, which at times celebrates banalities, and overrates it. In both cases, the exercise fails to gauge a real impression, ending up showing the work and the reviewer in poor light.



### ***Critique***

Facilitated by the designer

Creates common vocabulary of understanding, analysis and improvement

Analysis goals, objectives, and directions of the work

Suggests in the proposed context, focuses on evaluating and converging the work under progress

Applauds the right direction while directing specific paths and changes

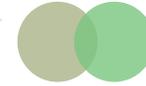


### ***Review***

Studies the synthesis and evolutionary process in an independent manner

Recognizes its merits, enriches the work with new insights and informs for future directions

Assesses it with a critical lens, in an objective manner with explanatory enquires, if any, without any critical commentary



### ***Critique+Review***

Both encourage a tradition of scholarship and exemplary works in a practice

Bring an intellectual and social consensus to the project, and in a larger sense to the practice

Inspire others who strive to tread on new directions

For assessing any kind of work, our inner struggle with prejudices, conflicts with intellect, and value systems come to the forefront. There are various factors – subjective and objective – against which one judges the work. One needs in-depth knowledge about the subject, appropriate professional vocabulary and its articulation in an empathetic language to convey the perspective. A responsible and balanced position applauds the value of the work, examines it with a critical lens, and points out to its future directions.

If we consider the context of spatial design, it may be a good idea to divide the process into two parts – *Design Critique* [internally] and *Design Review* [externally].

*Design Critique* is facilitated by the designer himself when his work [project, research, and any other], in its initial stage itself. It [a group work] manifests as regular conversations amongst selected experts and peers from respective fields of the project. They create a common vocabulary of understanding, analysis, and improvement of the project. The process is different than multidisciplinary working, where experts from different disciplines work together on a project. Here, the role of the group is to review it. With participation from the initial stage and with a clear understanding of the aspects that can be critiqued, allows the group to look at the goals, objectives, and directions of the work. Unlike a divergent brainstorming session, for looking out for new ideas, the group suggests in the proposed context, focuses on evaluating and converging the work under progress. Moreover, the engagement of many minds with a shared vision lends a rational, objective, and actionable approach. It applauds the right direction while directing specific paths and changes. As mentioned earlier, an expert, objective, advisory, and independent *Design Critique* raises the bar of any creative and intellectual endeavour that strives for higher levels of excellence. The process inculcates values of practices of engagement, participation, and inclusiveness.

Post completion, it is invaluable to invite an eminent/ expert person [different from those in *Design Critique*] to undertake a *Design Review* of the project and introduce it to the larger world. This reviewer, thus, studies the synthesis and evolutionary process in an independent manner. She tries to assess its value and relevance against what already exists and at the same time explores its role and position in a larger context. A conversation with the creator about the project plays an important role in shaping her rational approach. While recognizing the project's merits, she enriches it with new insights and informs for future directions. She assesses it with a critical lens and in an objective manner with explanatory inquiries, if any, without any critical commentary. These assessment processes can be adopted for various types of research works, studies, and other creative endeavours.

A positive culture of *Design Critique* and *Design Review*, once established encourages the tradition of scholarship and exemplary works in practice. It brings an intellectual and social consensus to the project and in a larger sense to the practice. These processes then become important milestones and inspire others who strive to tread in new directions.

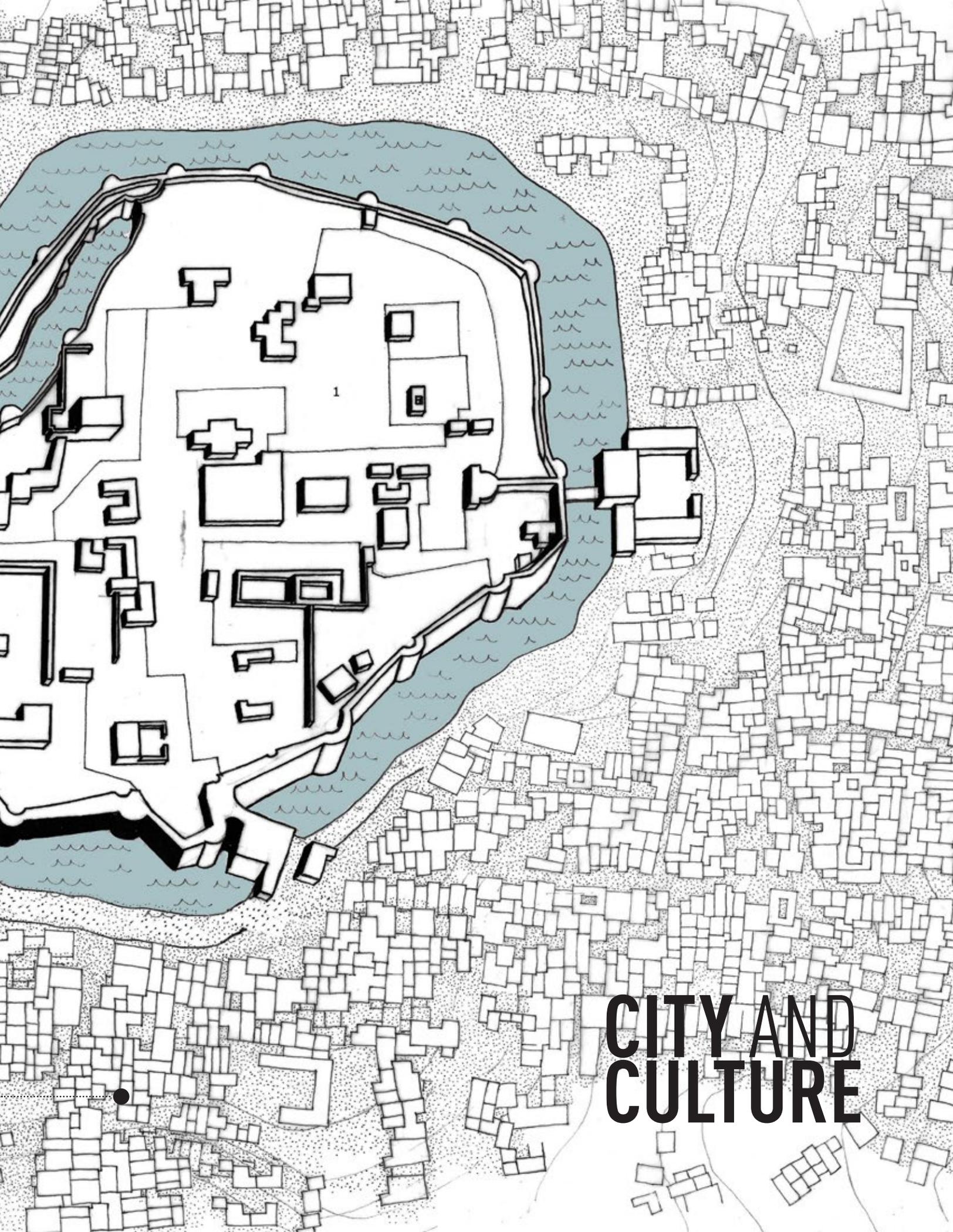


FACING PAGE |

Bijapur [Karnataka], Sketch Plan [Part] from upcoming book  
'History of Urban Form: India – From Beginning till 1900's'

AUTHOR: Pratyush Shankar

PUBLISHED BY: Oxford University Press



# CITY AND CULTURE

# GENDER STUDIES IN DESIGN

IN CONVERSATION WITH **MADHAVI DESAI**



**“A category so invisible in our mainstream discourses, that it has to be brought to the notice of all concerned... The acceptance of the reality of challenges faced by women architects can bring crucial modifications in education as well as practice.”**

**Madhavi Desai** along with her architect partner Miki Desai, is founder of ARCHICRAFTS, a research organization based in Ahmedabad, engaged in practice, research and documentation in the fields of vernacular, Colonial and modern architecture as well as gender issues in the built environment.

**You have written extensively about the role and place of women in the Indian design realm, both in history, education, and practice. Why do you think it is a different genre?**

It is a category so invisible in our mainstream discourses, that it has to be brought to the notice of all concerned. Though we talk about women [this includes gender minorities] here, I want to stress that these discourses also ignore class, caste, religion, etc. that are as important. In our 465 colleges of architecture, more than 50% of graduates have been women for at least the past twenty-five years, but this is not reflected in practice. Even in the 21st century, the rate of attrition is still high in architecture. One of the popular myths is that if a woman is really talented, she will succeed in the discipline and be recognized. This is not as simple as it sounds because women face structural, socio-economical, and other pressures.

A few talented and successful women architects are [re]invited for many events and are portrayed as representing the gender-neutral professional environment. Pioneering women from the 1940s and their work, as well as roles, are absent in the history books of Indian architecture. One finds a general erasure with no archives existing then to store their drawings, models, photographs, and writings. Perhaps, the women themselves did not perceive the real value of their work for posterity. Understanding this historical narrative is important in fostering appreciation and to inspire younger generations of women who may discover role models and comprehend the struggles faced by them. The acceptance of the reality of challenges faced by women architects can bring crucial modifications in education as well as practice.

### What are the key findings in the research that you think are important in this context?

There are two broad issues involved here: women as designers of space and as users of space. Research has to aim to impact both theory and practice and, in general, also contribute to education, advocacy, policy development, and community engagement. Unfortunately, the discipline of architecture is highly design-oriented in India, and therefore, the value of the scholarship is limited and the culture of research is not nurtured. Research receives hardly any funding from academia or the industry and publication of academic books is a huge challenge. My book *Women Architects and Modernism in India: Narratives and Contemporary Practices*, [Routledge, 2017], while celebrating the women architects of our country, also stresses on the general invisibility of women in leadership positions in the profession and academia. Our society contains complex and intersecting power relations that marginalize women and men differently. Women face the cumulative layering of many factors. Thus, women need support to stay and excel in the workforce. We have to dig deeper into how to make the profession more inclusive. About the other issue of gendered consumption of space, many avenues need to be explored, eventually leading up to the synthesis of research and design application. There is sparse feminist work on cities, urban planning, and architecture. Domestic architecture to commercial and public spaces and community toilets to urban neighbourhoods and police stations, just to name a few areas, have to be looked at from the gendered angle. It is not only about women's safety but also about their full participation in leisure and economic activities as legitimate citizens.

**“Our society contains complex and intersecting power relations that marginalize women and men differently. Women face cumulative layering of many factors. Thus, women need support to stay and excel in the workforce. We have to dig deeper into how to make the profession more inclusive.”**

**“There is a non-recognition and denial of gender issues in architecture education and practice in India, which has led to the marginalisation of the subject and its solutions. By contrast, in the USA for instance, by accepting the fact that there is direct/indirect discrimination towards women professionals, much has been achieved.”** [*Architecture Education in India: Women Students, Culture and Pedagogy*, Indian Architect and Builder]

### Can you please elaborate on this observation?

The Indian Constitution has given equality to all genders, however, the reality on the ground is much different, including the field of architecture. This fact resonates with the similarity of awareness and action in the rest of the world, especially the West where, the recognition of the direct, as well as subtle gender inequity in architecture and planning,

came about in the 1970s, mostly as a result of the feminist movement that affected many disciplines. Their modified, gendered approach includes the transport network to preference for pedestrian areas and adequate public lighting to use of safety apps. While this is a work in progress, many laws have been passed, especially in cities like Vienna, Barcelona, and Toronto. In the 1960s and 70s, the government of the United States introduced the rules of Equal Employment Opportunity and Affirmative Action. This was to create opportunities for women and people from the minorities [African-American and Hispanic backgrounds], as historically disadvantaged groups. It has been a controversial action but over the years, affirmative policies have positively helped small, women-owned practices.

In India, we are talking about a professional world traditionally dominated by men, within a patriarchal society where deeply internalized notions of femininity and masculinity exist. Diversity and inclusion cannot be achieved without the acknowledgment of sources of inequity and the importance of reducing barriers. We need to accept this fact and critically impact the status of women designers as well as the disciplines of architecture, urban design, and planning from the gendered lens, by bringing in structural changes.

**“The place of women in architecture is in sharp contrast to other design fields such as fashion, graphics, textiles, and perhaps even interior design where women have gathered the critical mass.”**

*[Woman’s Eye, Woman’s Hand, Making Art and Architecture in Modern India, Zubaan, 2014]*

**What are the main reasons for this? How has it empowered or improved the intellectual health of the professions?  
What difference has it made?**

The main reason is the nature of the profession of architecture in contrast to the other fields mentioned above. First of all, as a rule [with exceptions, of course] it is extremely hard for both men and women to set up one’s own practice without personal wealth or elite social and political connections. In addition, women also face many other challenges and biases. If having her own practice, she has to deal with subtle resistance from male clients, consultants, and construction workers and their patriarchal mindset. Marriage often brings a geographical transfer, resulting in the loss of familiar social networks/ connections. As an employee, on the other hand, a woman may get discriminated against in the workplace as a potential candidate for marriage and/or pregnancy. Taking some time off for childbirth and child-rearing may make her lose her job and/or her confidence as technology changes fast. Even without a long career break, there is a constant struggle for work/

**“Diversity and inclusion cannot be achieved without the acknowledgment of sources of inequity and the importance of reducing barriers. We need to accept this fact and critically impact the status of women designers as well as the disciplines of architecture, urban design and planning from the gendered lens, by bringing in structural changes.”**

life balance, for example, for out of town travels, early morning site visits, or late evening client meetings, further complicated by long working hours and relatively low salaries.

Having said this and in spite of the underrepresentation, the striving for equal representation is important. The jury is still out on whether women design differently but research in the West shows that women in senior management keep their companies financially stable, inspire team confidence, and share a collective spirit and vision. They often bring efficiency, pre-emptive problem solving, complex negotiation skills, an alternative dimension to the table.

**“Most men and women designers also consider themselves gender-neutral, though as professionals we are very much a part of the society and are somewhat embedded in the societal morals and ethics, including gender constructs.”**

**“Without gender sensitivity, the built environment is commonly treated as a neutral background.”** [*Architecture Education in India: Women Students, Culture and Pedagogy*, Indian Architect and Builder]

**With the objectives of striving for an egalitarian society, how do you look at this observation?**

I am aware that this is a highly contested statement, but it is true. Let us face it, we do not live in an egalitarian society. Till we reach that ideal state, we need to strive to bridge the gap. In fact, most men and women designers also consider themselves gender-neutral, though as professionals we are very much a part of the society and are somewhat embedded in societal morals and ethics, including gender constructs. The way men and women use spaces is mostly dictated by the socio-behavioural patterns we learn as we grow up. Though we are able to understand physical/sexual violence or dowry deaths as women’s problems, spatial discrimination, which is largely invisible and subtle, escapes our perception. This is illustrated in detail in my edited book titled, *Gender and the Built Environment in India* [Zubaan, 2007].

All buildings, neighbourhoods or settlements, when constructed and unoccupied, can be gender-neutral. However, once they begin to house people, human relationships and activities give them life and socio-cultural meanings, which includes the creation of gendered spaces. My favourite examples are the men gathered at the *paan* shops or tea stalls, the spatial masculinity intimidating women customers. Or the segregation of men and women on the occasion of, say, family dinner in traditional houses where men interact in the main hall, while women are often relegated to the inner areas. Gendered spaces can be deciphered if we analyze commercial buildings, educational institutions, or housing layouts. Without this application, the design will have shortcomings.



### How has it affected the conception of the built environment by designers in India?

Architecture is a cultural artefact and is shaped by human interactions and interventions. The misconception of neutrality has, unconsciously, had a huge impact on the built environments in India. A male figure is mostly portrayed as ‘The Architect’ in advertisements, social and other media. Within the dominant, patriarchal view, gendered design or women’s empowerment are hardly ever mentioned in our architectural/planning discourses or urban policy-making. This gets reflected in the range of designs undertaken at various scales [single residence to the city] and various building typologies, from low-cost housing to gated communities and public park planning to bus-stop design. I have recently submitted an edited manuscript, tentatively titled, *Gender and the Indian City: Re-visioning Design and Planning* which touches on several of these issues.

I will answer this question through positive suggestions about what can be done: our institutions, Indian Institute of Architects, and the Council of Architecture need to constitute working groups to look into gender issues for women as producers and also as consumers of space. Our urban development authorities ought to encourage the participation of all stakeholders and increase the involvement of women architects and planners. In their plans, there should be concerns for a] women’s mobility so that they can move around the

#### THE HOME & THE WORLD

ABOVE LEFT |

*Strong association of women with the interior of the house*

PHOTO CREDIT: Miki Desai

ABOVE RIGHT |

*Women at the forefront of the Indian freedom struggle*

PHOTOGRAPHER: Late Hiralal Dave

PHOTO COURTESY: Binita Pandya

**“Women’s mobility so that they can move around the city safely, easily, and affordably to participate fully in the economic life of the city; safe, clean, and accessible public toilets that are also well-designed; designing Metro stations with safety considerations; introducing women’s safety audits.”**



## PUBLIC SPACES

ABOVE LEFT |

*Men outside a famous tea shop  
in Lucknow*

PHOTO CREDIT: Madhavi Desai

ABOVE RIGHT |

*Women engaged in purposeful activity  
in a public space*

PHOTO CREDIT: Miki Desai



city safely, easily, and affordably to participate fully in the economic life of the city; b] giving safe, clean, and accessible public toilets that are also well-designed; c] designing Metro stations with safety considerations; d] introducing women's safety audits, just to name a few.

**Do you feel gender-specific events/ platforms actually end up defeating the very purpose/ intent by celebrating the gender role? Like feminism?**

**“Feminism is viewed as anti-men/ marriage/family, which results in men and women being afraid to call themselves feminists. In fact, the concept of feminism is ever-changing and contextual.”**

There is a significant misunderstanding about feminism in Indian society. This is mainly because of feminism's association with the West, especially with its vibrant women's movement since the 1960s and 70s. This legacy has played a crucial role in its apparent rejection, mainly because of its problematic construction along the lines of a Eurocentric liberalism. It is viewed as anti-men/ marriage/ family, which results in men and women being afraid to call themselves feminists. In fact, the concept of feminism is ever-changing and contextual. Most built environment professionals in India are, unfortunately, not aware of our own women's movement with its roots in mid-19th century reforms, further developed during the freedom struggle under Gandhi and then, several micro resistances in various fields during the post-Independence period. It is also a fact that the 450 odd schools of architecture have no connection with the knowledge developed in the women's study centres set up in India in the 1970s.

With this background, I want to say that gender-specific events/ platforms are necessary till gender consciousness gets embedded in mainstream discourses in our country. In these, I do not count industry-sponsored 'events' which perform lip-service to gender issues, if at all or the ones that superficially 'celebrate' women architects. I am referring to symposiums/conferences/events where some of the above-mentioned issues get seriously discussed, disseminated, implemented. In fact, one of the Sustainable Development Goals of the United Nations, for their 2030 agenda, includes 'Gender Equity'. These events can happen in educational or professional institutions and shared with key industry platforms.

**Broadly, what ways can be suggested to create a gender-sensitive realm, both in education and in practice?**

With the high number of women dropping out of the profession of architecture, we are missing out on an enormous amount of skill, talent, and knowledge. It is urgent to create an inclusive, diverse, and gender-sensitive realm. When I began discussion of the disparity about three decades ago, it was vehemently pointed out that these were social issues and had nothing to do with the discipline of architecture. I know much better now. Gender-sensitive training in all workplaces [educational and professional offices] are crucial in raising awareness, besides basic data collection to get an overall understanding.

Some existing issues in education are: general emphasis on the male star system as the 'creative genius', hardly any studio projects dealing with women's day-to-day concerns [crèche, women's hostels/ hospitals, or even public spaces], very few jury members or public lectures by women architects, subtle discrimination by male peers and/or faculty, not enough exposure to site work/ technical knowledge or to practice as a business. I have taught courses on Gender and the City/ Space/ Architecture which has greatly benefited not just the students but my own learning curve.

**“Gender-specific events/ platforms are necessary till gender consciousness gets embedded in mainstream discourses in our country... Symposiums/ conferences/events where issues get seriously discussed, disseminated, implemented. These events can happen in educational or professional institutions and shared with key industry platforms.”**

We need to develop strategies to address workplace inequity: empowering women to deal with male clients, consultants, workers, providing refresher courses to enhance her confidence after a child-bearing break, creating a system of mentoring, working out flexi-time and other facilities like a crèche to help with the constant struggle for work/life balance. Mentorship programs in the industry and academia, as well as the creation of a support network.

**In landscape architecture programs across the country, there are more than 50% women students. The faculty positions are also held in equal numbers by women. The young breed of landscape practices has many landscape architect couples as working partners. How does it reflect on the state of practice or profession?**

It is my personal belief that landscape design is perceived as a softer option by women and also by our society, just like interior design. Once women gather a critical mass, there is better acceptance of their professional role and it gets easier to practice. However, many issues faced by women in landscape architecture have commonalities with the women in other subfields due to the fact that they share similar societal, professional, and cultural conditions. Couples as working partners is a popular contemporary model, not just in India but the world over. The comradery helps in the sharing of design ideas to office infrastructure. The arrangement often gives more flexibility to the partners [read, the woman], if required, that supports the work/ life balance challenge.

**“I believe that if women are in leadership positions then they will mentor younger women graduates and also promote more equity in workplaces.”**

I believe that if women are in leadership positions then they will mentor younger women graduates and also promote more equity in workplaces. However, we need to ask other crucial questions, for a reality check, such as: do women’s participation rates still lag behind their graduation rates? Why are a huge number of graduates joining academia? What is the scale of the majority of women’s practices? What do we know about the parity in men’s and women’s salaries?



All images courtesy Madhavi Desai  
archicrafts.com

# SENSING THE INFORMAL

IN CONVERSATION WITH **SANJAY PRAKASH**



**Sanjay Prakash** is Principal Consultant of his design firm, **SHiFt: Studio for Habitat Futures**. His practice and research over three decades include exploring various tools and methods of energy-conscious architecture in different parts of the country. He has shared his views on various public platforms regarding Indian urbanization in 21st century and the role of architecture profession in shaping it.

● .....  
**Ranjit Sabikhi**, eminent urban designer, in his recently released book, **Sense of Place**, observes that with most of the development in post-independence India has geared towards the 30% –40% planned component of Indian cities as against the larger informal sector of urban villages, regularized and unregularized colonies, slums and historic areas, which has remained largely ignored.

This is entirely true. It's unfortunate that the tools that the planners have had at their disposal have not been able to deal with this kind of informality [not just in India, but also in South America and Africa]. The variety of tools – density, height regulations, setbacks, zoning, and so on are all really made for an industrially developed society and I guess the sooner we recognize this, the better off we will be. Seventy years after independence, the problem has become even more entrenched because people don't have an idea of what our alternatives are. It almost is like wishing that our cities should get Americanized rather than that we Indianise our development control rules.

We are not doing enough to change the situation. This also applies to architecture – not doing enough to develop an Indian regional architecture. The same goes for landscape architecture also. We are following American models because, simply, we all have been taught in the English language and in a certain kind of alien tradition. Therefore, we need to work from the bottom up. Clearly, this is not possible to do in a hurry but it needs to be dealt with in a deeper way. Unfortunately, society is not even aware that this needs to be done.

**As an architect, what are the important aspects do you see in these sectors, as compared to planned areas, that shape their spatial order and its character? How are they distinct?**

I remember when I was in the first year of Architecture, Vinod Gupta, who was our Studio Director, took us for a few weeks into Sukhanto Colony, then Asia's largest slum colony where we were expected study and work with the residents. What shocked me to a large extent was that there was a huge set of public health problems – cholera, dysentery, diarrhoea, which we did not know how to address at that point. The only tools we had were the tools of Modernism – piped sewage systems and water supply in place. That health and food are extremely primary to well-being and it's not something that the middle class can appreciate, was what I got out of the experience.

**“There is no separation between work and play, rest and recreation, as is designed to be there in most modern cities, which are loosely built on the lines of Western cities. But in our settlements, people can convert space from a bedroom to a storeroom to a living room in an instant... In reality, we tend to use space in the way that we best can.”**

The second thing that strikes you is that people live life as a whole. There is no separation between work and play, rest and recreation, as is designed to be there in most modern cities, which are loosely built on the lines of Western cities. But in our settlements, people can convert space from a bedroom to a storeroom to a living room in a jiffy, in an instant. The separation of work and family is something that is central to our Westernised way of thinking. Unfortunately, our Westernised education does this to us as well. No appreciation for informality exists in that paradigm. I suspect it doesn't exist anywhere in the world where there is this sort of education, not just in India. In reality, we tend to use space in the way that we best can. In Dharavi slum colony in Mumbai, Covid-19 infections are happening. There are two types of solutions. A highly capitalist solution would be to say that we need to house them in modern housing, maybe fifteen floors high, or whatever, and have touch-less lifts. But to my mind, the real solution is that we have to invent new patterns of development which would allow high-density housing to coexist with this new normal norm to isolate oneself from one's neighbors and that surely is possible.

Incidentally, all that I'm saying is not irrelevant for the rest of this twenty-first century because some people feel that we'll go back to business-as-usual, at least the middle class will, which may be true for a short period of time, But, it's now considered a given that we would have something like five to twelve infections or outbreaks in this century alone. So social distancing is going to be the new normal, whether we like it or not.

We cannot give up our right to socialize, but we need to do that along with allowing us to get the ability to distance ourselves. So those are the kinds of things that informal settlements need to do, which is an excellent area for architectural research to work on.

Let me share a story that David Foster of the Administrative Staff College of India, Hyderabad, once told me. He's a sanitary engineer from the USA and teaches sanitation to IAS officer trainees in Hyderabad. When he came to India, he was struck by the fact that water does not come in our pipes for 24 hours a day which he thought was a great idea to conserve water because of India's water shortage! But when he studied this in-depth, he became aware of the problems. First of all, he found that the last three countries left in the world which have this issue of nonsupply of 24 hours water are India, Pakistan, and Bangladesh, possibly because of some historical colonial reasons. But more than that, he also pointed out that the rate of waterborne disease is very high because most cities have water pipelines running parallel to sewage pipelines. For the 18 hours that there is no water in those pipes, they have sewage leakage that may be happening very close to those pipes. And therefore, he argued that it would be worthwhile to provide a 24/7 piped water supply to the whole nation.

As far as I know, this proposal was mooted by the Water Ministry to the Government of India at different times, but it turns out that the Indian Government considers the capital investment prohibitive and does not want to take that kind of loan to provide the infrastructure.

I find this quite sad that we have reached a level of affluence where we can spurn foreign aid even in the case of our Tsunami damage and send relief to Bangladesh and offer it to Pakistan, but we are unable to create the capital to be able to make something that the entire world has switched to, that is, pressurized 24/7 water.

By the way, Foster also researched that it saves water to have it running 24/7. It does not consume more water because people no longer invest in buckets. For example, in Chennai, it is common that people fill up buckets of water for safety and when the fresh water comes the next day, they throw away the water from the bucket of yesterday and fill it up with freshwater instead.

**“I find this quite sad that we have reached a level of affluence where we can spurn foreign aid even in the case of our Tsunami damage and send relief to Bangladesh and offer it to Pakistan, but we are unable to create the capital to be able to make something that the entire world has switched to, that is, pressurized 24/7 water.”**

So, it is much more economical to actually allow water to be a free 24/7 gift from the Municipal boards rather than provide intermittent supply.

Sewage carried in pipes was practically invented in London by the London School of Hygiene & Tropical Medicine after the cholera outbreaks of the 19th century, although even today, most of our cities do not provide a full sewage system, it is not something that we can call our own. It is a Western concept.

There are positive local stories also. Chitra Vishwanath in Bangalore talks about the concept of having dry toilets as the mainstream option in our cities. At her residence, she has a dry toilet and it's actually used. During water shortage, it is a great asset. Incidentally, she also gets manure out of it and uses it to grow plants, including crops [even rice] on her roof.

Anupam Mishra once wrote in his book, *'Aaj Bhi Khare Hai Taalab'*:

“...पाइपों से निकलता हुआ सन्नाटा ये दर्शाता है कि हमारी शिक्षा कितनी बिगड़ चुकी है कि हमें लगता है कि पाइपों से पानी आता है, हवा नहीं...”

*The hollow silence that comes from pipes tells us how bad our education system has deteriorated, that it produces students who think that water comes from a pipe, although all that comes from a pipe is air.*

**“The hollow silence that comes from pipes tells us how bad our education system has deteriorated, that it produces students who think that water comes from a pipe, although all that comes from a pipe is air.”**

—Translation of an Anupam Mishra's quote in his book, *'Aaj Bhi Khare Hai Taalab'*

**How do you position your ideas of 21st-century architecture practice as much more complex, interdisciplinary, and technology oriented in this context? Do you think it needs an exclusive planned domain to practice on? Are we addressing two entirely different worlds?**

There is a whole space that is not yet explored—commercially speaking—but it is the whole space for participation and self-help, which has not been tapped by architects. We have tapped it just a little bit, not substantially.

So the question is—can this be done on a large scale? What it means is that many people will not need to specialize but learn, just in time, what they need to about their specific problem. This hurts capitalism because it doesn't work well to have colleges that are empty.



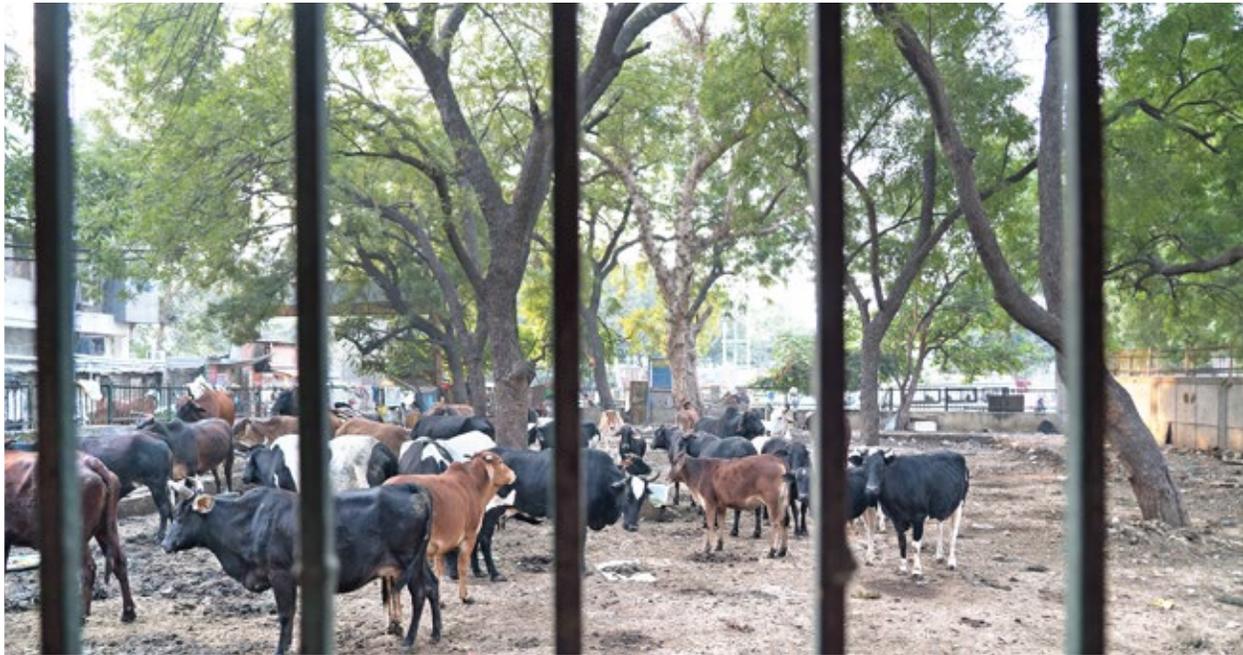
## गाँव जमरुदपुर

Urban Village Zamrudpur [New Delhi]

In recent years, we have picked up this theme again in our work because our office is in an urban village, Zamrudpur, in Delhi. To make our own neighbourhood much better, we have been involved with a *Yuva Samiti* [committee of youths] there, to get them registered, to get them to recycle cow dung, go-bar, of their cattle, to get the women some work through embroidery for an export house, and other ways of improving the economic conditions of local people. More than anything else, what the young people of Zamrudpur aspire for is recognition. Currently, when they say they're from Zamrudpur, their peers say, "Oh dear!". But ideally what they would like is that in the future when they tell someone they're from Zamrudpur, then they should be accepted by Dilliwallas as being "legitimate". Somehow there's a sense of illegitimacy which has been thrown onto these people. The only future for Zamrudpur that the people living there right now see is a highly capitalistic future but that's because of the way society as a whole is. They see Hauz Khas as their future. They are clear that they cannot become a Greater Kailash, but they can become a Hauz Khas [village].



I would like Zamrudpur to, more than anything, develop its own identity. I have seen similar places in, say, Barcelona, that have developed into thriving villages in their own right. They're in the middle of Barcelona, but it's okay. And while they enjoy the mod-cons of contemporary life, they have a reasonable income because all the people in those villages then work in the various offices and factories of Barcelona and they come home to their traditional old place.

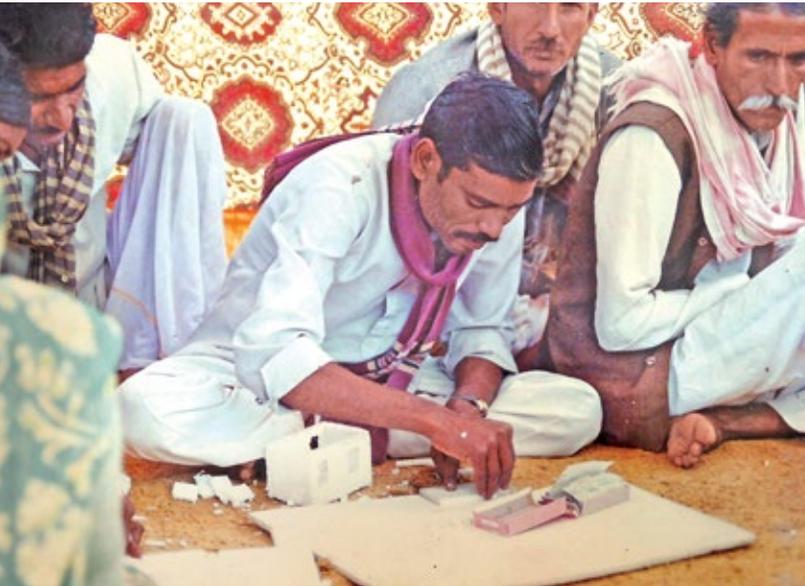


I think we give such ideas and areas too little importance in our quest for modernism, Americanization, Westernization, and globalization.

Now you might say these are all non-architectural issues, but this is the other point. That informality implies that there are no boundaries between medicine, public health, architecture, engineering, living life, and so on. This whole idea that there are sharp and exclusive professional specializations, I feel, is something whose time has come to be disbanded.

For example, in this Covid-19 situation, if you are a doctor with any specialization, you are asked, ‘Okay, you understand hygiene, you understand the human body, you understand some parts of the science, so please help.’ And a lot of them are, of course, helping.

Within architects, there is a tendency to say one specializes in institutional buildings, somebody specializes in tall buildings and somebody else specializes in sculptural spaces, somebody in parametric architecture. So I don’t think we have done the right thing, by over-specializing so much. I think this is all not solving the real needs of Indian society, even more so because of the kind of level of informality that we have here.



## लोक जुंबिश

Lok Jumbish [Rajasthan]

The Lok Jumbish [literally ‘people’s movement’] project was launched in Rajasthan in 1992 by GoI and GoR with support from the Swedish International Development Agency [SIDA]. Its main objective was ‘to develop, demonstrate, catalyse and transform the mainstream education system with the objective of ensuring that every child has access to basic education’. It created a desire, for better or worse, amongst all the people of Rajasthan to send their children to a school to somehow get them to become literate because somewhere they had realized that literacy is the portal to prosperity. Anil Bordia, a retired bureaucrat was the Chairman of Lok Jumbish Parishad. He got some of the best pedagogues from all over the world — French, English, and even Norwegian — to train all the young, rural teachers spread over Rajasthan. We were entrusted with the responsibility of supporting the people’s movement by creating buildings that would suit the pedagogy. So we worked by working with *Bhawan Nirman Samitis* [building construction committees] of twelve people from each village — typically parents of school-going children — who would, through discussions,



**“Samitis of twelve people from each village—typically parents of school-going children—through discussions, designed, planned [and managed] the construction and constructed the buildings.”**



design and then plan the construction and actually construct the building, manage the construction, and close the accounts. During 1991-97, we were able to build up to 150 schools in a year, in six years of our operations in a tribal district in eastern Rajasthan. This was made possible because the entire society of those 400 villages was slowly, over 5-6 years, empowered to design their own schools, to construction-manage them, and then to deliver the finished building. This was all done without any formal training nor any engineering degrees.

So due to this work, Rajasthan has become a reasonably literate state. At least I would like to believe that the 315 villages where we made schools are well-loved by the people and are therefore well looked after.

**So in these areas, the scale and economics are the limiting factors, right? So how do you see the word sustainable development in this context?**

Sustainability of the LEED building types is not sustainability at all. That is a very capitalistic version of sustainability. Sustainability for the so-called middle class or the capitalist class is not real sustainability because sustainability for a few cannot be said to be truly sustainable. Real sustainability can only occur when we are talking about the masses, the kind of migrants who are walking home right now, or have walked home in this ongoing crisis.

And so I think the best answer I have to this is something that was given by a friend of mine from Vancouver, who took out a coin from his pocket and said, “Look, we have to see sustainability and the attack on poverty as two sides of the same coin. If you don’t do that and we don’t invent our way out of both poverty and sustainability, then we will neither solve the problem of poverty nor solve the problem of sustainability.”

**So how do you think these integral but much-ignored parts of the city can be brought to the radar of the development from agencies’ point of view as a part of the policy, and also from professionals as interventions in their own independent way? Is it possible from both sides?**

We just need to leave these people alone. It’s probably good that they are not planned for because planning without understanding these communities can only lead to disasters as we have seen. As a way of achieving legitimacy, we do not want any formal recognition by any MLA in Zamrudpur because actually we believe that the resources to make the change exists within the village. What are the changes we are talking about? We are talking about cleaning the street – that has already started happening in an organized way. It required only a contribution of Rs.100 per shopkeeper for the main street to be cleaned twice a day extra, over and above the MCD sweeper [who doesn’t really do much]. So that’s already happening there. The only problem right now is that soon that ten thousand rupees that are collected from the shopkeepers could just be made illegal by the fact that they don’t have a registered society and they don’t have a bank account. So that is what we are trying to do through our chartered accountant [who is helping them to register themselves and start a bank account].

**“Sustainability for the so-called middle class or the capitalist class is not real sustainability because sustainability for a few cannot be said to be truly sustainable. Real sustainability can only occur when we are talking about the masses, the kind of migrants who are walking home right now, or have walked home in this ongoing crisis.”**

**“Small initiatives don’t need any Government permission, don’t need any planning. When any formal recognition is needed, sure we will need professionals, but I don’t see their role now. The fact is that a lot of this informality is feeding the formal system. It doesn’t require alms from the formal system. Actually, these people can do a lot for themselves if they are only allowed to and not shown legal dead-ends.”**

Secondly, there are lots of buffaloes in Zamrudpur, mainly for milk. We could clean up the streets further by selling the buffalo dung as good quality manure. So Rs. 4 a kilo is what we’re expecting to get and about Rs. 800 rupees per month per cow as a side income. Bharati Chaturvedi, the Founder-Director of *Chintan*, has collaborated with us, even during this lockdown, to create a poster which we’ll soon be putting out in Zamrudpur with the buffalo owners to show them that this is what they need to do. The only investment required for that is a drum to store the *khad*. This income, if goes to two families, will make them much more conscious and happy with their situation in life than they are right now.

The only reason that people don’t invest in something like this is that they don’t see the market, the opportunity, because they are, unfortunately, in a proverbial bottomless pit. It’s a society that the city has forgotten and continues to remain that way.

These kinds of small initiatives don’t need any Government permission, don’t need any planning. For the next stage, when some kind of formal recognition is needed, sure we will need professionals, but I don’t see their role now. The fact is that a lot of this informality is feeding the formal system. It doesn’t require alms from the formal system. Actually, these people can do a lot for themselves if they are only allowed to and not shown legal dead-ends.

Currently, they are illegal by simply wanting to help themselves. I mean, look at the lower middle class in Delhi. They are not allowed to build a house on their own terms. They’re not allowed to do so many things that they could easily do for themselves. They could save, keep livestock, they could start small businesses, or increase their income, they could elevate their prosperity level. But a lot of these in our complex government systems have been made illegal. And I’ve often found that even when I do sustainability work with institutions and major clients and in a lot of sustainability conferences I attend, I am asked: “What changes in the bye-laws would you want?” My honest answer is: “nothing”. All I want is for the bye-laws to not be implemented in too much detail.

For example, they ask: “don’t you need the necessity of making rainwater harvesting compulsory?”. And I say “that’s been done, but has only led to corruption”. So in a system that is rife with corruption, it is best not to try and create new laws.



All images courtesy Sanjay Prakash  
shift.org.in

# CONNECTING THE DOTS

IN CONVERSATION WITH **PRATYUSH SHANKAR**



**Pratyush Shankar** is a practicing architect and an academic. He is the author of *Himalayan Cities and Settlement*, a book that profiles the planning and design of towns and settlements in the mountainous regions. With a deep interest in Indian cities, he is presently writing a book on the *History of Urban Form in India*. He has remained Visiting Professor at the Mundus Urbano Program at Architecture Faculty, TU Darmstadt, Germany. He has recently joined as Dean of School of Environmental Design and Architecture at Navrachna University, Vadodara, after being an Adjunct Professor at the Faculty of Architecture, CEPT University, Ahmedabad, India.

**You have been involved in research and knowledge dissemination about the history and evolution of Indian cities for the last two decades now. Tell us more about your area of interest.**

My interest in cities really emerges from being a teacher or being in academics and being with young students. I have been teaching the course called Urban History in the undergraduate and at the postgraduate programs at CEPT University. In the last fifteen years or so, with digitization, it's not difficult to find maps or drawings. You can easily access them. Many schools and colleges have also been documenting many urban areas. What was really missing, and that was very glaring, is that we have information, but there is no knowledge based on cities. Nobody is connecting the dots. There is no framework to look at, say cities in western India, or to look at cities of the 15th century. What we did, especially in architecture schools, was almost like blind worship of Indian cities and everything of the past, a kind of a romance of Indian cities. Their over-simplification has not allowed us, in academia, to be critical of them in a positive manner. I felt that as a big gap.

**“When we look at cities, when we do a cross-cultural or a cross-geographical comparison, we do find something which is extremely universal. All cities, across all cultures, are almost like artificial objects that have to be managed. They are not self-governing in nature. There are political forces, bureaucracy, and an administrative structure. Also, cities would not have been possible if there were no tinkering with nature.”**

If I look at Western European urbanization, I can refer to certain frameworks that are deployed to understand urban forms that are missing for Indian cities. I am more interested in the form of the city. You'll find enough information in the fields of humanities, social-cultural studies, and even in literature, but not so much on their morphology.

So, I think the uncritical view of urban history was what was troubling me. And that is when I started engaging in more active research, either by the way of guiding students, but more than that, picking up data that I would have collected over years of study or years of travel. The book, *Himalayan Cities: Settlement Patterns, Public Places and Architecture*, was exactly that. I am trying now to connect the dots and find a framework or propose a model. I am trying to take the discussion away from information to frameworks. If we don't have frameworks, then history is of no use, because at the end of the day we are looking at history so that we can have an idea about the present and the future. So that is broadly my provocation or my foundational ideas of my interest in urban history.

**From the point of view of a researcher of urbanity, how do you differentiate between an Indian city and a from European city in terms of its spatial organization, form, and character, and relationship with nature? How are they similar or different in these contexts?**

When we look at cities, when we do a cross-cultural or a cross-geographical comparison, we do find something which is extremely universal. All cities, across all cultures, are almost like artificial objects that have to be managed. They are not self-governing in nature. There are political forces, bureaucracy, and an administrative structure. Also, cities would not have been possible if there were no tinkering with nature.

We do find that there are certain departures in the way an Indian city is made or a European city is made. There are few aspects that are very remarkable about Western European urbanization starting from the 15th century, mainly the rise of the Protestant culture and the consequent rise of the mercantile class which had a huge role to play in the management and the development of the city. Merchants were rich so became powerful pillars of society. It was in their interest that the city remained safe and stable. So they took a lot of interest in civic

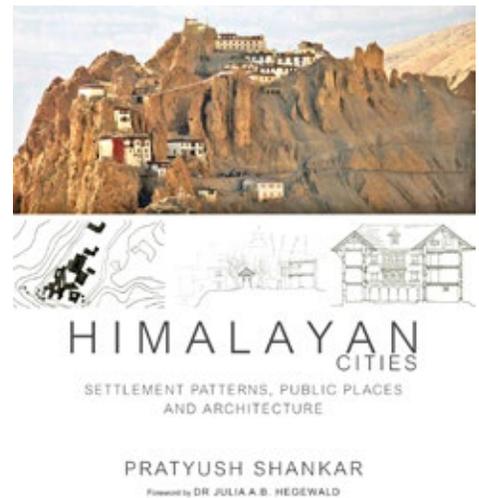
affairs. In fact, the birth of a kind of professional municipality was only possible not only because of the state but also because of the class of merchants, which is a very distinct phenomenon that we find in Europe. Max Weber, a German sociologist, and philosopher has correlated it to the Protestant culture. So the city became a more stable entity, if one may use the word. There were consented efforts to keep the city safe, to develop new infrastructure, to keep the market safe, and to create a kind of a public sphere. A Town Hall is a very good example. It was always funded by the merchants. It was a place where they met, along with the state officials to discuss civic affairs. Near town halls, there would be market squares.

In the case of Indian cities like in Ahmedabad, Patan, and some of the cities in Rajasthan, the merchant class was important. It becomes patrons of art and architecture but with a limited role. It did play a role in civic affairs, but not the kind of role that was played by their counterparts in European cities.

The second distinctive feature of European cities is that they were actually free cities or autonomous cities, which means that the larger demographical political organization might change, but the city remained fairly autonomous. The political organization of cities in India was not exactly the same in this regard. The Indian subcontinent saw very strong political forces in the form of empires. A city like Shahjahanabad was absolutely at the mercy of the royalty. So if the king decides to leave—and 40% of the time the Mughal king was actually on the move—then half of the elites of the city moved with him. And all of a sudden, it begins to look like a camp. That is why we were more affected by politics, whereas they were able to secure themselves and isolate themselves and were fairly autonomous.

When there is autonomy, there is more civic participation. So, European cities had an interesting public sphere or public place-making whereas we had rather patchy ones.

Another big difference would be that of the post-industrial era. Most cities under industrialization were undergoing major changes. Faced with the problem of labour, mobility, and migration, they started to reorganize themselves. The whole idea of parks, in the words of Frederick Law Olmsted—“*we want to bring in nature in the city*”—was as an antidote to the ills of industrialization. Mass housing, new street patterns with new public places for migrants,



**HIMALAYAN CITIES:  
SETTLEMENT PATTERNS, PUBLIC PLACES  
AND ARCHITECTURE**

Niyogi Books [2014]

*“The book explores the idea of settlements in different areas of the Himalayan region, cutting across national boundaries, from Kashmir via Nepal to the north-eastern parts of the Indian subcontinent, and their relationship with the landscape. By comparing these, it makes the case for peculiarities of the Himalayan city and succeeds in deducing key principles and general models, typical of the settlement patterns, nature of public places, and architecture shaped by this unique mountainous environment. The relationship between natural systems and human ingenuity as projected through its built traditions forms the underlying theme of the book. Illustrated with photographs and detailed hand drawings by the author and his students, Himalayan Cities not only engages the academia but also the general reader and helps provoke a discourse on this intriguing landscape and its architectural nuances.”*

and the role of technology changed the face of European cities. That century and a half was a golden period when most medieval cities started changing around the world.

At the same time India, which was under the British, faced a completely different attitude towards urban spaces. Strategically, they stayed away from the Indian cities. It was only post-mutiny that the British started looking at cities in a more serious fashion. It was very different from the Portuguese or French attitudes to city building. In my upcoming book on urban history, I am referring to it as the biggest missed opportunities in Indian urban history. That is why when you look at parts of Ahmedabad if you forget the architecture, it could still be in the 17th century. Nothing has changed.

If we look at the urbanization that happened in the Cauvery basin in South India in the temple towns—Madhurai, Srirangam, Chidambaram—my research shows that these temple towns were there because an immense amount of modification of nature was happening in the whole region.

According to Radha Champakalakshmi, an eminent historian from JNU, who has written extensively about the history of South India, temples were the ones that were initiating and managing irrigation projects. In fact, initiating irrigation works was the manner in which new territories were conquered or rather made more productive. The State had to invest in irrigation schemes, but the conduit of doing it was through a temple. So the temple was actually the political conduit of sponsoring irrigation projects. If we look at the landscape of the Cauvery basin, there is nothing natural about it. It has been a modified landscape for the last thousand years perhaps. So temples, acting at the behest of the states, were at the heart of the realignment of natural conditions. So these temple towns had to be extremely strong, authoritative, and strong symbols.

The way I have looked at temple towns is not simply as places of worship, but essentially as places that were controlling land and controlling water. In a temple town, it was almost a violent modification of nature with the purpose of furthering political gains.

In many other examples, there is a very pragmatic relationship with nature, a give-and-take kind. In the case of the Mughals, the relationship with nature began to change, because here for the first time, the idea of nature is related to recreation. One can see this idea in the location of cities like Delhi, Shahjahanabad, Lahore among others. In different eras of history, the relationship with nature keeps changing, but there is always an engagement, at times a violent one.

**“The way I have looked at temple towns is not simply as places of worship, but essentially as places that were controlling land and controlling water. In a temple town, it was almost a violent modification of nature with the purpose of furthering political gains.”**

## What kind of lessons can be learnt from traditional Indian settlements and cities for future growth and development models?

We need a more critical understanding of urban history rather than a romantic one.

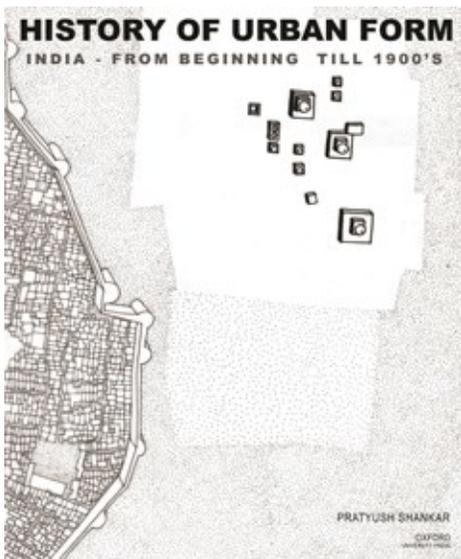
Ahmedabad has been nominated as a UNESCO World Heritage Site. The city never, ever created any kind of a public place for a very long time. In fact, Ahmedabad was totally caste-riddled and all the housing was caste-based. You might celebrate its beautiful stepped wells for their architecture or the art forms or the decoration, but from the perspective of a city, it never had a thriving public realm. You can't really call it a city. Cities also need to transform. Ahmedabad never changed. It would have to be called a settlement because cities are based on the idea of shared spaces.

While designating them as World Heritage cities, we are not allowing them to live on. So I'm not advocating fossilizing cities because that is the very antithesis to the idea of cities itself. Cities have to be always in a path of change. They are living systems. So you might want to work with certain old patterns, but we can change the use. There are enough debates in the conservation circles on how to do that, but coming from an urban historical perspective, cities are great if they keep changing with times.

They are about citizenship. Good cities are those where ethnic identities, religious identities, and caste identities actually get blanketed or subdued. They offer a possibility to find a common ground amongst people who actually come from very different backgrounds. Delhi and Mumbai are good examples.

I think one of the biggest lessons urban history offers is that there were cities in Colonial, Portuguese and French cultures that allowed a level of 'cosmopolitan-ness' and allowed public places to emerge. In Himalayan cities, Kathmandu Durbar Square and Patan Durbar Square are fantastic examples of such secular spaces. The princely cities of India like Mysore, Baroda, Gwalior had a unique advantage because they were under indirect rule. Many of their rulers started investing in a lot of social projects like museums, gardens, libraries, etc, and so were able to create public spaces.

**“Ahmedabad city never, ever created any kind of a public place for a very long time... From the perspective of a city, it never had a thriving public realm. You can't really call it a city. Cities also need to transform. Ahmedabad never changed. It would have to be called a settlement because cities are based on the idea of shared spaces.”**



**HISTORY OF URBAN FORM:  
INDIA - FROM BEGINNING TILL 1900'S**  
Oxford University Press [Upcoming]

*"The book is a comparison of historical urban morphology of some different cities of India. It tries to create categories of such cities while using the lens of geographies to look at each of these historical clusters from the point of view of their formations and presents theoretical framework that can be used for a better understanding of the historical evolution of cities in India. From the temple towns of South India to the tent cities of Mughals and the urbanization in Deccan, this book tries to cover key moments of urban history of India."*

So that, in my mind, would be a very good discussion to have, because it has huge repercussions on the cities that we create today—ideas of mixed neighbourhoods, gardens and parks and what kind of facilities we can create on a conceptual level. So, for me, 'public places', 'cosmopolitan-ness', 'diversity', 'mix of housing' would be some areas that I would like to examine in old cities because that might provide clues to the future cities.

**There are two viewpoints among urban thinkers and practitioners regarding the idea of an Indian city—one, which doesn't believe in any exclusiveness and distinction of Indian culture and equates it with other world cultures, and the other, which believes in its uniqueness and distinctiveness.**

I don't think we are a different animal. The kinds of forces that have been acting upon Indian cities are similar forces that have acted in different cultures. There might be circumstantial differences of a certain kind of political system or a certain kind of natural condition, but I don't agree that we are superbly distinct. I think we are as distinct as any other city because of their circumstances. The situations here of the informal sector are true for many other developing countries like Bangladesh, African countries, Latin American countries, and so on. I don't think the informality or the fact that urban villages are engulfed by the city is a uniquely Indian phenomenon. It has its own distinct character because of certain histories, certain regulations, certain policies that we might have, or they might not have. Argentina and Brazil are good examples. Brazil became independent around the same time as us. It has Brasilia, we have Chandigarh. Both have a large informal sector, the form of which might look different, but that's a cultural difference. The modern planning or city building has not been able to accommodate and not been able to anticipate the presence of the informal sector. We have not accepted the fact that we will have migration and migration is a positive thing.

We may have our own character in the sense that there would be cultural differences. I think the differences are more circumstantial, but not structural.

**So do you think the nation is still in the construction mode and we will be reaching some different form and picture after fifty years?**

It is very difficult to say what will happen in the next fifty years, but in the next ten years, nothing is going to change for sure, because I think the pace at which the cities are growing is not the pace at which the imagination of cities is growing. I think what one really lacks right now is a kind of visualization of ‘this is the kind of city we want to create’. We are in a phase where there is already a problem and we are fire-fighting all the time. The only thing that can and that will emerge is a kind of a hybrid model where the informality is formalized to a certain level. We need to accept that we will have to have a hybrid model with the kind of conditions of our population. We will not have the luxury of the kind of formal model that some other nations have.

Global cities like Bangalore or Hyderabad, with a community of white-collar professionals, create their own gated enclaves of campuses, housings. The same problem is there in European cities. The other problem is of privatized public places like malls. So I find a lot of parallels here in Berlin. We really need to talk a lot with other professionals facing similar problems in their cities all across the world. It will be very useful. Latin America has some very good lessons on managing the informal sector, making them dignified without erasing them.

**What is the character of your studio? How difficult or easy has it been to balance the idea of practice and research in terms of the intellectual thought processes and financials?**

I think my practice’s character has been shaped by CEPT University. It allowed me to travel a lot, to write books. It gave me time off whenever I wanted it. Also, I could have my own practices. I have been handling practice and academics together for quite some time. And recently, three years back, I built my own studio in Baroda. I’ve been shuttling between Ahmedabad and Baroda for some time. In between, I was in Germany. The studio is like a pavilion. It is a different kind of a practice. We do regular projects—bungalows, interiors, and schools. Under *City Labs* initiative that we started last year, I do a lot of workshops on cities. So it’s almost like an extension of the university, more than anything else. I think 30% of the time they are either busy with workshops or researching an article or a research paper or a book and 70% of the time they would actually be working on a hardcore project.



**PRATYUSH SHANKAR STUDIO** ●  
**BARODA**

*“For our own studio in Baroda, the design intent was to create a pavilion-like structure that responds to the far off horizons through the raised courtyard at the back. A light sloping roof covers the open space and Basalt stone masonry is used as the primary retaining structure. The larger idea is to create a space that is conducive for reflective thinking and collaborative work.”*



**CITY LABS**

*“An initiative to further our understanding of the Indian cities, as part which, workshops and publications are planned on relevant themes of Writing Urban Histories, Dystopia and Utopian Imaginations, Urban Mapping and Representation and Reimagining Urban Infrastructures, and more. The initiative aims to create a body of work that is publicly accessible and can be used to bring about a gradual change in the way we perceive and imagine our cities.”*



**You are involved both in academics and practice. What kind of relationship do you envision between them? In present times, there is a very visible thrust in institutes towards producing skilled hands at the cost of imaginative and thinking minds.**

I feel that our teachers must be practicing architects. Few of the faculty members may be theoreticians but at least 50% of the people should be actually engaged in practice, who are able to bring some kind of experience of practice. Unfortunately, schools of architecture have gone too much into the idea of 'skills'.

In a university, we have to produce people who are opinion leaders and opinion makers. If they want a job, they should get a job. That's very important, but they should be able to start their own practice, win competitions, and be thought leaders. I think academia also has to be critical of the practice. It has to show it the mirror because the job of the university is to also have a longer vision of the society, where our nation should be moving.

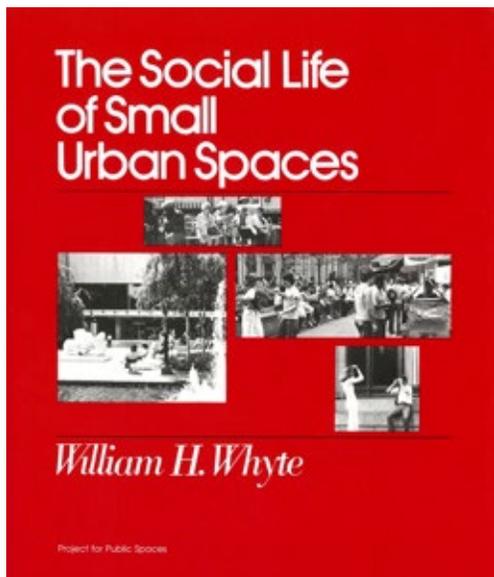


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Review by Sandip Patil, Landscape Architect  
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# VALUING OBSERVATIONAL DESIGN



## THE SOCIAL LIFE OF SMALL URBAN SPACES

Editor William H. Whyte

Published by Project for Public Spaces Inc., 1980

Size 238 x 195 mm, 125 Pages

Paperback

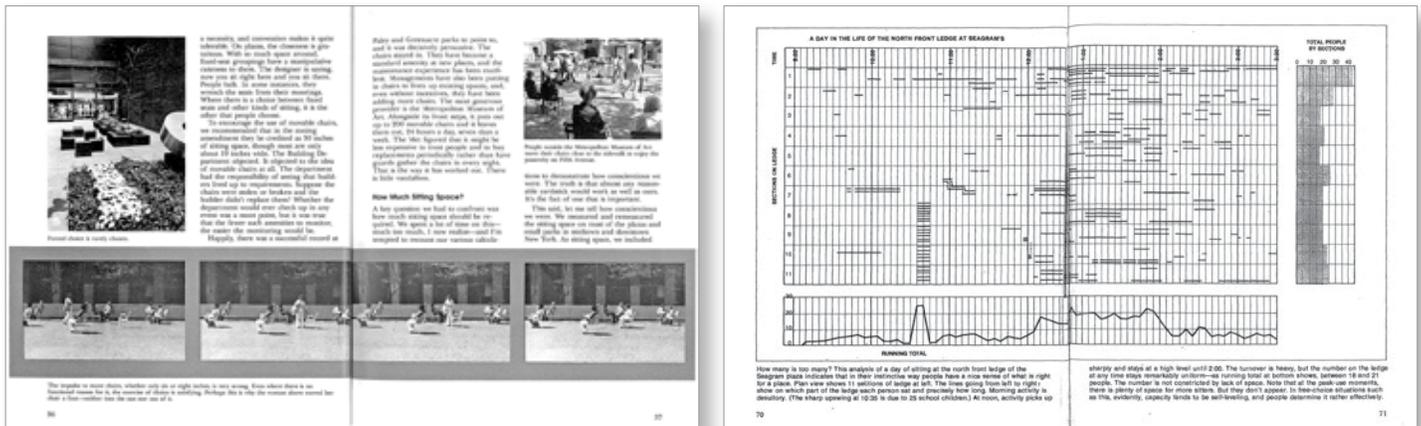
ISBN: 978-0970632418

**The Social Life of Small Urban Spaces** [1980] presents a framework for placemaking and liveability based on analytical conclusions of the direct observation process, very much rooted in reality. The knowledge thus imparted gains a contemporary relevance when more and more public spaces are now becoming canvas of spatial designers, especially in urban areas.

Placemaking and liveability are seldom spoken without reference to Jan Gehl's work and Jane Jacob's writing. Lesser known is the work of William "Holly" Whyte, who mentored Jane Jacobs. The 70s was a time when Western cities reached their cognitive limits, becoming self-serving organisms that little cared for the people who lived in them. Jacobs strongly advocated a grassroots community-driven urban design approach through demonstrations and writing. Gehl proposed a then-radical theory of reimagining urban design through the people's perspective. William Whyte, during his time at the New York Planning Commission, found something amiss in the quality of public spaces, especially private funded ones, that were subsidized by the city through floor space bonuses. He initiated a study to directly observe people's behaviour in public spaces through the Street Life Project. It ended up as a seminal documentation of urban life, precisely measured and organized. To this day, it continues

to inform the work of Project for Public Spaces, founded by Fred Kent after working with Whyte on the Street Life Project. Kent says: *“Perhaps his [Whyte’s] most important gift was the ability to show us how to discover for ourselves why some public spaces to work and others don’t... Whyte laid the groundwork for a major movement to change the way public spaces are built and planned.”* What was true for Western cities in the 70s, is as true today for Indian cities, and hence this book makes a necessary reading.

The book does not propound a theory, nor does it make tall claims. It is quite simply organized like an observation diary, with personal notes of the author. Whyte himself called the book a *“pre-book”*, an ongoing research which was *“fundamental... [without any] especial*



*applicability”*. In contrast, Gehl’s concurrent book *Life Between Buildings* is prescriptive and scales quickly from the human perspective to city design. Written in the first person, Whyte’s writing style gives a sense of intimately listening to his musings and analysis. His analytical conclusions of the direct observation process, simple yet powerful, are very much rooted in reality. The very fundamentality of his observations provides an irrevocable framework for placemaking and liveability. It is best read with its companion namesake movie.

The book is divided into five main themes through eleven chapters, though not organized together. Whyte moves between behavioural and spatial observations quickly, which can be a bit disorienting if one is trying to extract design standards. However, it’s always an amusing reading even when revisited, much preferred over Gehl’s writing style, which can become a tedious read, to be used more as a reference guide.

The first theme delves into the **geography of places** — plazas and the street, scale and proportion, entry and expanse. Together, these form the primary design knowledge that binds the book together. Whyte's witty observations like "*Sightlines are important. If people do not see a space, they will not use it.*" and "*People tend to sit more where there are places to sit.*" drive the point home subtly, and eye-opening conclusions like "*Circulation and sitting, in sum, are not antithetical but complementary.*" provide an insight into the value of direct observation.

The second theme analyses **human behaviour in these geographies** – positive and negative, formal and informal, exploratory and protective. Seen together with the place geography, this forms the basis of the entire book and its main premise. This is where Whyte's work shines, with common sense quotes supported by observations like "*What attracts people most, it would appear, is other people.*" and analytical ones that have forced designers to rethink their strategies: "*The best way to handle the problem of undesirables is to make a place attractive to everyone else.*" He is also able to analyse tricky problems that have befuddled designers for long: "*sitting should be physically comfortable... it's more important, however, it can be socially comfortable...the benefit of the extra [sitting] space is social comfort...*".

The third theme explores **elements and stimuli that enhance the first two themes** – seating, sculptures, totems, trees, water, food as well as natural phenomena of sun, wind and sound. Here too, Whyte extends his observational analysis to present some obvious yet disregarded universal facts: "*It's not right to put water before people and then keep them away from it.*" and "*Food, to repeat, draws people, and they draw more people.*" Further, he sensitively positions the role of informal, sometimes illegal, activities in enriching public places: "*By default, the vendors have become the caterers of the city's outdoor life... thus fill[ing] a void, and this can become quite clear when he is shooed away. A lot of the life of the space goes with him.*" Some of these observations have become fundamental principles of placemaking, also seen extensively in Gehl's work.

The fourth theme extends the book's premise into **indoor spaces** and criticizes faceless inwards looking architecture, while the final theme attempts to explain the application of this study to smaller cities. These last two themes seem perfunctory, maybe influenced by Jacob's writing. The accompanying movie, too, does not delve much into these themes, instead creating a memorable viewing of the first three themes.

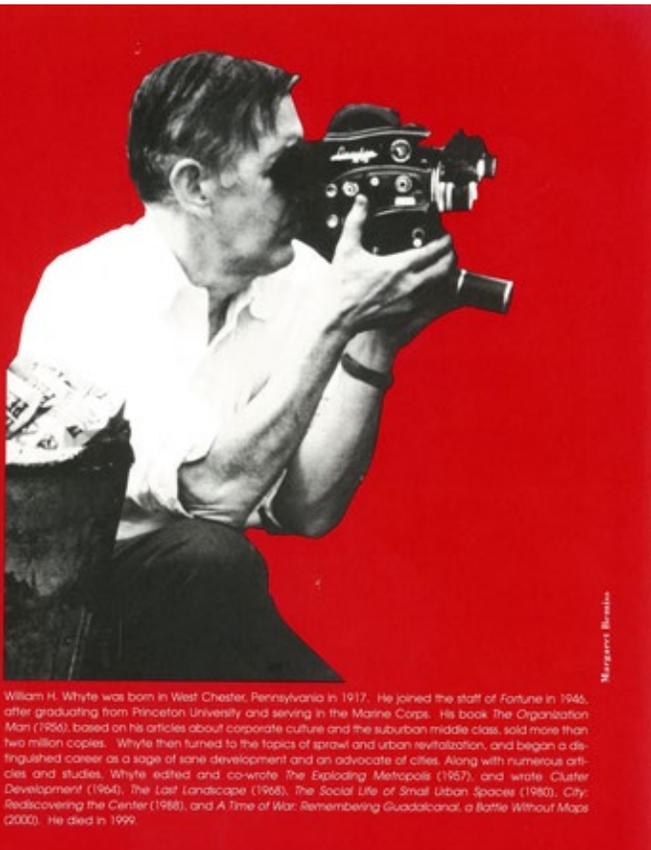
Whyte weaves several nuanced observations spanning from behavioural aspects like gender sensitivity, people watching, passive use and proximity to unnoticed people like undesirables, guards and vendors. He builds analytical standards for layouts, seating, sightlines, scale versus usage, adjacencies, design processes and placemaking objects. Subtly, he touches upon intangible aspects like capacity, stimuli, odd spaces, the attractiveness of a place, choice and trust.

“[Only]  
if we  
will  
look”

Of great importance are also the appendices. The first appendix on time-lapse filming has several important notes on choosing filming sites and intervals, although the equipment described is much obsolete now. The second appendix on the resulting Open Space Zoning Regulations of New York City is quite insightful as to how Indian cities are starting to emulate 50-year-old Western processes.

The world has changed much since Whyte’s study – people behave more like islands in crowded cities due to the extensive use of mobile devices and the internet, and narcissism is exaggerated through mobile photography. However, the basic tenets of movement and pause, opportunities for congregation and exchange are dependent on far more primaevial factors to be changed by these fads. These were minutely observed by Whyte through time-lapse filming, and are true even today. Thomas Balsley says, *“At the time, few design schools, let alone professionals, touched upon the sociological or psychological factors that should influence our planning and design approach to public open space. Then along came Holly’s book, chock-full of keen observations, a scientist’s approach, and a ton of common sense. The manual travelled with me as I camped out on city spaces, large and small, stoops and ledges.”* In 2017, SWA’s research lab XL revisited the value of Whyte’s work in current times through their project Plaza Life Revisited, using the same techniques – behavioural observations, site measurements and hand tabulation. The results are largely the same, with a few modifications due to the proliferation of mobile communication and computing. SWA acknowledges that Whyte’s work being fundamental, they were able to add a layer of modern patterns onto it.

The book’s subtle yet powerful message is best reflected in the words of William K. Reilly, past President of The Conservation Foundation: *“...things you will learn from this book, things that should not be surprising, but often are.”* Between Jacob’s writings, Whyte’s book and film, Gehl’s work and contemporary studies, designers of the urban realm have a ready insight into the successes and failures of public places – in Whyte’s memorable concluding words from the book: *“[Only] if we will look”*.



William H. Whyte was born in West Chester, Pennsylvania in 1917. He joined the staff of *Fortune* in 1946, after graduating from Princeton University and serving in the Marine Corps. His book *The Organization Man* (1956), based on his articles about corporate culture and the suburban middle class, sold more than two million copies. Whyte then turned to the topics of sprawl and urban revitalization, and began a distinguished career as a sage of sane development and an advocate of cities. Along with numerous articles and studies, Whyte edited and co-wrote *The Exploding Metropolis* (1957), and wrote *Cluster Development* (1964), *The Last Landscape* (1968), *The Social Life of Small Urban Spaces* (1980), *City: Rediscovering the Center* (1988), and *A Time of War: Remembering Guadalcanal, a Battle Without Maps* (2000). He died in 1999.

Margaret Bevan

# SEEING THE UNSEEN



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# INDIAN LANDSCAPE: A CINEMATIC RETROSPECTIVE

Movies play a significant role in offering a glimpse of the inter-relationship of nature and society, that in each context across time and place, impart a distinct character. The article explores the idea through the lens of Hindi cinema in the early decades of the 50s in the post-independence years.

The Indian Landscape is a naturally-rich spread of geographical diversity. Deep forests, divine rivers, colossal mountains, and vast plains hold an ancient intimacy with its folk. The agrarian lifestyle has evolved in this land as a subconscious response to the natural boundless tracts. Thus “*living with nature*” stays a core Indian lifestyle. Centuries of changing rules have failed in altering the Indian farmland scene, with its 8000 years of history. From prodigious Bronze Age civilizations to the earliest imperial kingdoms, nature has been a revered force. The lucrative Indian land also developed an attitude of subsuming the foreign cultures into itself with each incoming invasion. On-time extremes, ‘Graeco-Indian’ inspiring iconography, and ‘Indo-Mughal’ leaving a plethora of cultural heritage are exemplary.

The Briton’s culture has faced a similar fate in India. Followed by the appearance of the English polity and then architecture, the Western way of living found an oriental home with the emergence of a new Indian upper-middle class. These cultural alterations echo as manifestations in the makeover of the Indian Landscape. The intact villages and ever-changing urbanity rendered this landscape into a scenic polarity with the departure of the British Raj.

FACING PAGE |

**MADHUMATI | 1959**

Rock-cut temple and stone projections

SOURCE: *Shemaroo* | YouTube

European cinema—a lens for city life—ran in pace with the onset of the 20th century and soon arrived in India as Bombay cinema. This played a pivotal role in capturing the *zeitgeist* of the first independent decade of India. The films from the 1950s retain the ground of being unadulterated visual documentation of the infant nation's landscape. The cinematic canvas of the reborn nation was painted by a plethora of directors and writers from varied backgrounds. Raj Kapoor and B. R. Chopra migrated from undivided Pakistan whereas Guru Dutt, Bimal Roy, and Mehboob Khan came from Bengal and Gujarat respectively, to frame the collective imagination of a novel India.

The dawning Indian city is a stage of contrasting realities with a rich-poor dyad. Bombay's urban fabric makes this gap prominent. Here, the poor create their own 'plazas' to wash, play and dance whilst the rich celebrate—the English way—beneath pompous encapsulations. *'Aawara'* [1951] showcases this rich urban montage through a visual narrative which weaves the elitist localities and high-end urban bazaars sagaciously contrasted by the curtained slums.

The homelessness has claimed the roadside; the footpaths [which mimic the microcosm of a village] are shadowed by the imposing palace of the rich. The tramps use these spatial voids to perform basic life functions, to stage demonstrations, and ultimately celebrate life. *Chawl* squares facilitate informal school around the central tree. This Bombay posits an urban condition where the dissimilitude of high rise living and homelessness coexist in one vessel. *'Shree 420'* [1955] projects these very traits of metropolitan life through a confused urban sprawl, home to a perpetually mobile mass. Clusters of low-cost housing are shown as an efficient solution before the curtain falls. The economic advances of Bombay's apex society translated into industries, ornate seaside mansions, and racecourses by the end of the decade. These elements support the storyline of *'Kaagaz ke Phool'* [1959].

In an urban context, Calcutta exhibited analogous patterns to Bombay. Once a colonial capital, it is pinned with British neoclassical landmarks. Imperial hues are sensed through public buildings, statues, obelisks, colossal public squares, and even street lamps. *'Do Bigha Zamin'* [1953] puts its protagonist amidst these architectural expressions, symbolising suppression as against grandeur. Urban voids are occupied by slums catering for poor migrants who come out in the 'open' at night to sing away an exhausting day. Calcutta's packed alleyways divulge little as opposed to the wide avenues lined with English styled parks; the urban way of staying closer to nature. *'Pyasa'* [1957] employs similar parks [with Victorian benches] in the narrative. Paradoxically, *Pyasa's* sets also seek to create a concealed urban reality—that of red-light districts—and succeed in pouring realism through informality.



TOP

**AAWARA** | 1951

*Plaza of the marginalized*

SOURCE: *Shemaroo* | *YouTube*

MIDDLE

**SHREE 420** | 1955

*Footpath: Poor's abode*

SOURCE: *Shemaroo* | *YouTube*

BOTTOM

**PYASA** | 1957

*Garden from Calcutta*

SOURCE: *Ultra Bollywood* | *YouTube*



Landscape plays a vital role in setting the flipping tone for the city's mayhem and tranquil rural life. In the 1950s, the Indian soul had its abode in seven hundred thousand villages. Inhabitants welcomed the long-awaited arrival of monsoon in the village square, a spatial expression for congregations. Hay and reed huts perched together in spontaneity along with farmers' productive lands. These sightings are rendered succinctly by *'Do Bigha Zamin'*. The film's montage interplays between the typical village and metro life of the infant nation. Indian villages were its simple huts, unmetalled roads, dated temples, traditional *bazaars*, irregular squares, and lush environs. These squares are the sites frequented by celebrations and council meetings.

..... **DO BIGHA ZAMIN | 1953**  
..... *Neoclassical urban open spaces*  
..... SOURCE: *Shemaroo | YouTube*



..... **NAYA DAUR | 1957**  
*A day in the village, and*  
*the ceremonial village square*  
 SOURCE: Amazon Prime Video

*'Naya Daur'* [1957] erects this village with exactitude. In the film, the village hilltop is adorned with an archaic temple—dotted with spiky obelisks—reached through staircases with arched gateways; expression of a spiritual elevation for the low-lying villagers.

The primitive hamlet was a crude sketch of shallow brooks, untilled fields, vernacular reservoirs, and exuberant village squares with idols and temples. *'Mother India'* [1957] brewed a heightened nationalist effervescence by narrating this rural landscape. It draws parallelism with *Naya Daur* and *Do Bigha Zamin* in terms of usage of village squares for festivities, meetings, and as trade points. *Mother India's* *mise-en-scène* supports the theory of an intimate relationship between man and nature with its substantial utilisation of the aforementioned natural and open to sky spaces.



Urban man's venture back into nature's core has yielded nurturing ripples. These encounters have been subtle reminders to gain ingrained ecstasy from milky streams, flowering valleys, tall friendly trees, and chirpy birds. Tribes of these regions were the worshippers of nature. Their hilly grounds facilitated seasonal fairs and festivals too. Such has been the scene of remote villages of the time, untouched by distant urban upheavals. *'Madhumati'* [1959] is allegiant to these interactions of urban man with nature and its natives. The film replicates this apt scenery of the mountain village life and its culture and festivities. A tribal character is shown tracing her traditional bond with nature in the form of deities as abstract stone projections and rock-cut cave temples.

The cinema of the nascent 50s proves to be a useful visual archive of rural and urban outdoors of the decade. The common folk of the films tend to reciprocate to the natural milieu with a symbiotic attitude. The cities are fabricated by socio-political directives. Some urban environs are moulded to imitate their rural counterparts. Hence, innate cultural tendencies provoke both a lifestyle in accordance with space and vice versa. There is a spatial leitmotif in the outdoor scenes of these movies being constantly painted in ceremonial tints; a thematic recurrence. Inferentially, the 'open spaces' and natural settings of these movies are embodiments of rooted Indian culture. A culture with high esteem for mother earth, life, spirituality, and an absorbent attitude.

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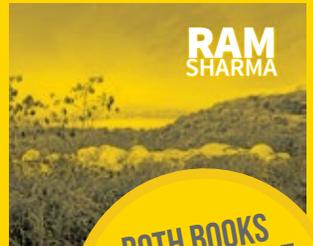
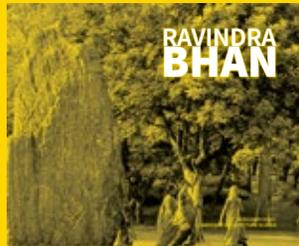
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