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▲● RAJ REWAL ● DESIGN JATRA ● SHIRISH BERI ● LOUIS KAHN ● DE EARTH ● NEW GARAGE DESIGN  
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# EDITOR'S NOTE

*The world as we have created it is a process of our thinking.  
It cannot be changed without changing our thinking.*

ALBERT EINSTEIN

Architecture is an art that reflects many hues of the human emotion spectrum. It is also the science and craft that manifests these abstractions into tangible elements for the world to experience. We are looking to make the JIIA a platform for quality discourse and conversation on architecture. The twelve issues of the forthcoming year will attempt to explore architecture through the lens of human emotions, by attributing to them - times, elements, skills and more where practitioners could present and perceive a holistic view of architecture. Architecture as an umbrella, shelters various abstractions and practices underneath its nomenclature. Hence the first letter of each concept in this twelve-part compilation spelling out ARCHITECTURE, is an ode to all that it encompasses.

**Attitude:** Attitude plays a very important role in ascertaining outcomes. What is the attitude that architects should have? What attitude can architecture have? Through stories of architects, projects and other snippets, we will explore the 'Attitude of Architecture' through this issue.

**Resilience:** COVID 19 is a test none of us were prepared for. Yet, for a profession that relies so heavily on the outdoors, communication and physical presence, architecture and architects showed great resilience while facing this challenge. This issue will feature stories of resilience that emerged in the face of this, and other adversities.

**Compassion:** Architecture should be for the people, by the people and also of the people. Spaces should resonate with all strata of society through projects, ideas, interviews and stories. This issue will bring forth the softer, more people-oriented face of architecture.

**Honesty:** Honesty is one of the most important virtues of humankind. This needs to be reflected in architecture as well. But that begets the question, what does honest architecture entail? Honesty to materials, to space, to the people, of expression? In this issue, we will explore architecture that is raw and sincere to its context, construction, design and people.

**Innovation:** Necessity is the mother of innovation and architecture is a basic necessity for all. From materials, to designs to architecture that exists without any of these, this dynamic issue will celebrate innovations in architecture.

**Time:** This is the single most powerful element that charts the course of the world. Architecture is no different. Let this issue take us all on a journey through the ages, back to the advent and initial days, to the present, and its positioning, to imageries of the future, creating a brief chronology with snippets of interviews, ideologies, theories and projects.

**Emotion:** Emotion and space are a tightly-knit weave, complementing and building each other up. This issue will explore the power of architecture in influencing emotions and vice-versa.

**Collaboration:** An alliance of brick-and-mortar laid the foundation for architecture, and it is the spirit of collaboration that takes architecture to unimagined heights. This issue will celebrate stories of collaboration- between architects, between materials, between technologies and more.

**Technology:** This issue will explore prevalent ground-breaking technologies, innovations of history that took the world by storm, the future that is brewing and the stories of projects and architects who facilitated the same.

**Universal:** Architecture does not exist in a vacuum. It thrives on an amalgamation of ideas, minds, contexts, cultures and spaces. This issue will go beyond the Indian sub-continent and look at the architecture of the world and will explore inclusive architecture that is meant for all.

**Reflections:** As important as it is to look outwards and onwards, it is important to look inwards too. This issue will have not only architects but also non-architects from allied fields talking about technology, design and the role and responsibilities of architecture in the current world-view.

**Excellence:** In this edition, we will focus on exemplary projects that raise the bar of architectural standards.

The Journal of the Indian Institute of Architects (JIIA) is in the process of change—in both, its attire and its contents. The new format of JIIA will have four sections: Research, Features, Newsletters and Product Information. To make these happen, we are fortunate to have an editorial team of seven architects to fulfil our objectives: Ar. Gita Balakrishnan, Ar. Mukul Goyal, Ar. Manguesh Prabhugaonkar, Ar. Brijesh Shaijal, Ar. Dr. Shilpa Sharma, Ar. Dr. Pratheek Sudhakaran who will work on the first three sections and Ar. Tushar Sogani for the section on Product Information. Along with this team will be Ar. Suneet Paul, an experienced journalist in architectural publications who will come in as the Executive Editor. The art direction will be done by Goa-based plural design studio November. Each one of these team members will be responsible for the concept notes of based on the twelve themes. This JIIA issue of March 2021, on the theme of "Attitude" is crafted by Ar. Gita Balakrishnan.

We thankfully acknowledge the consistent efforts of Ar. Anand Palaye, the Chairman of the Publication Board and Ar. Divya Kush, the Editor of JIIA during the last term, in publishing the Journal.

We invite both, your suggestions and your criticisms to ensure the success of JIIA.



Ar. Lalichan Zacharias  
Editor, JIIA

# PRESIDENT'S MESSAGE



Dear Fellow Architects,

Warm Greetings!

On behalf of all the members, let me appreciate the dedicated work of the Publication Board and the Editorial Team in conceptualizing and reformatting the Journal with multiple sections and with increased and diverse content. Bringing it out in a short span of time with quality that is in line with international standards is commendable and I am sure all of you will enjoy reading this Journal.

Our Members are our strength. Each one is a repository of ideas and with so much energy, that given the right opportunity, they can bring in a lot of value to our profession and Institute by their contribution in good measure.

In my recent visits to Kalyan-Dombivili and Mysuru Centres for their Installation Ceremonies, which were well-organized with excellent participation, we could see the eagerness in their inclusive approach which is the hallmark of progress. The Kerala Architectural Leadership and Resource Initiative (KALARI) was an enriching experience of Leadership Training for all the elected members of Kerala Chapter, Centres and Sub-Centres. It is encouraging to note that many Chapters, Centres and Sub-Centres are working actively and coming up with innovative ideas and themes to enhance the membership experience of IIA.

The calendar for 2021 looks very promising with a series of National Programs on the anvil— Training program for all office bearers, IIA National Awards, IIA PL, Young Architects Festival and National Convention. We are happy to share that Chapters have come forward to organize and host these most awaited programs for members from across the country.

Though there is considerable growth in the awareness of architecture amongst the public and availability of increased strength of young architects, much more needs to be addressed to increase their participation in both private and public projects by an active deliberation with the stakeholders and authorities, apart from increasing our involvement with hard work and passion. An interface with the Government at all levels is a challenge, but needs to be taken up earnestly.

As we slowly come out of this pandemic, we look forward to better times ahead but still need to be cautious as reports suggest a surge in cases in some areas.

Let us embark together on this exciting journey towards increasing our relevance to the built environment through sheer hard work and integrity.

Best wishes for better times ahead!

Ar. C. R. Raju  
President IIA



## HON' TRUSTEES



Hearty greetings to all dear and worthy fellow Architects and readers. This indeed is a matter of great joy and satisfaction to learn that the "Journal" of "our institute" is being given a new and fresh outlook both in its contents and format covering/ including a wide range of useful, relevant and meaningful topics. My hearty greetings and best wishes to the 'new dynamic editorial team' and happy, fruitful reading to all those who receive and use "our journal." God Bless

**Ar. Ramesh Bhambhani**



Best wishes to the IIA team in your effort to revitalize the journal. The contents listed are quite comprehensive and should provide something of interest to all members of our fraternity. Along with the contents, I am sure the design and production qualities of the journal will maintain a suitably high standard and I have no doubt the issues will continue to evolve and improve further over time. Looking forward to receiving the new revamped issues.

**Ar. H.C. Thimmaiah**



My sincere congratulations on your appointment as the Editor-in-chief of our IIA Journal. I am sure that with your wide knowledge and with competent members in the Editorial Board, the Journal will find a long shelf-life. Wishing you all a successful term.

**Ar. Dilip Chandra Chatterjee**

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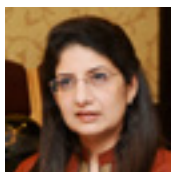


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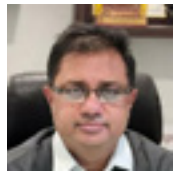
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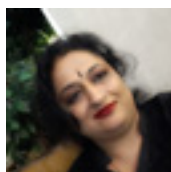
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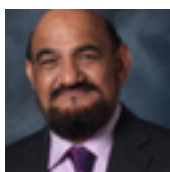
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# ATTITUDE OF ARCHITECTS SHAPES ATTITUDE OF ARCHITECTURE

*Ah, to build, to build!  
That is the noblest art of all the arts.  
Painting and sculpture are but images,  
Are merely shadows cast by outward things  
On stone or canvas, having in themselves  
No separate existence. Architecture.  
Existing in itself, and not in seeming  
a something it is not, surpasses them  
As substance shadow.*

H.W. LONGFELLOW

Architecture has an important role to play in influencing lifestyles, lives and even personalities. Buildings and spaces can make one feel welcome or unwelcome, happy or sad, energetic or lethargic and evoke a plethora of other emotions including indifference. In Juhani Pallasmaa's words, "A profound design process eventually makes the patron, the architect, and every occasional visitor in the building a slightly better human being."

As Prof. Kate Jeffery puts it at the conference themed 'Conscious Cities' in 2017, we are "creatures of the place we're in". The attitude of architecture can dictate the attitude of users of the spaces. Buildings have been described to be stately, cheerful, unobtrusive, iconic, homely and indifferent and these are expressions of the character perceived of the building. People interact with these different dispositions and their reactions are evoked based on how they are affected by them.

A socially responsible attitude in architecture is essential for socially responsive trends in architecture. William Mangold from *The People, Place, and Space Reader* defines socially responsive design as "...generally characterized by attitudes that value justice, equality, participation, sharing, sustainability, and practices that intentionally engage social issues and recognize the consequences of decisions and actions."

Take for example, the Pruitt-Igoe complex that had to be brought down since the design and the architecture are believed to have been the cause for squalor and crime. There are many such stories of architecture that fosters

By Ar. Gita Balakrishnan



nothing positive and actually encourages the negative. British grime artist Tinie Tempah, who grew up in ill-conceived surroundings is known to have said about them, it was as if they'd been "designed for you not to succeed".

This power that architecture wields is directly vested in the architect and hence the attitude of the architect and that of firms in their practice of architecture are responsible in ensuring the well-being of people. There are tales related by the clients of Frank Lloyd Wright who felt his presence when they used buildings designed by him, almost directing the use of the spaces as he had imagined.

An extremely intriguing example of attitude of architecture and the way it shapes the world can be found in the fictional world created by Ayn Rand, through her popular *Fountainhead*. Be it the modernist temple that Howard Roark designed, that stood tall in ideals and challenged accepted notions of architecture, to the complex that was blown up for the very same value system, architecture reflects the ideals and attitude of the architect, a mirror of time.

The Pompidou Centre can be studied as an example of the effect architecture has on its environment—social, political, built and countless others. With its brightly coloured pipes and massive steel struts, the 'building turned inside-out' challenged traditional notions. Through its bold countenance, it showed what space could also be. The attitude of the architects—fearless and audacious, translated into this work of architecture.

Architecture, as much as it is about light, ventilation and materials, is about attitude. It is about what it portrays to the world, and what the world gleans from it. Just as the seven notes of music can weave different emotions, can seven bricks weave different attitudes? Architects are the craftsmen of these symphonies in brick. Hence, it is important for us to first understand and perceive and then build influential and contextual attitudes in architecture.

In the immortal words of Zig Ziglar, "Your attitude and not your aptitude will determine your altitude."

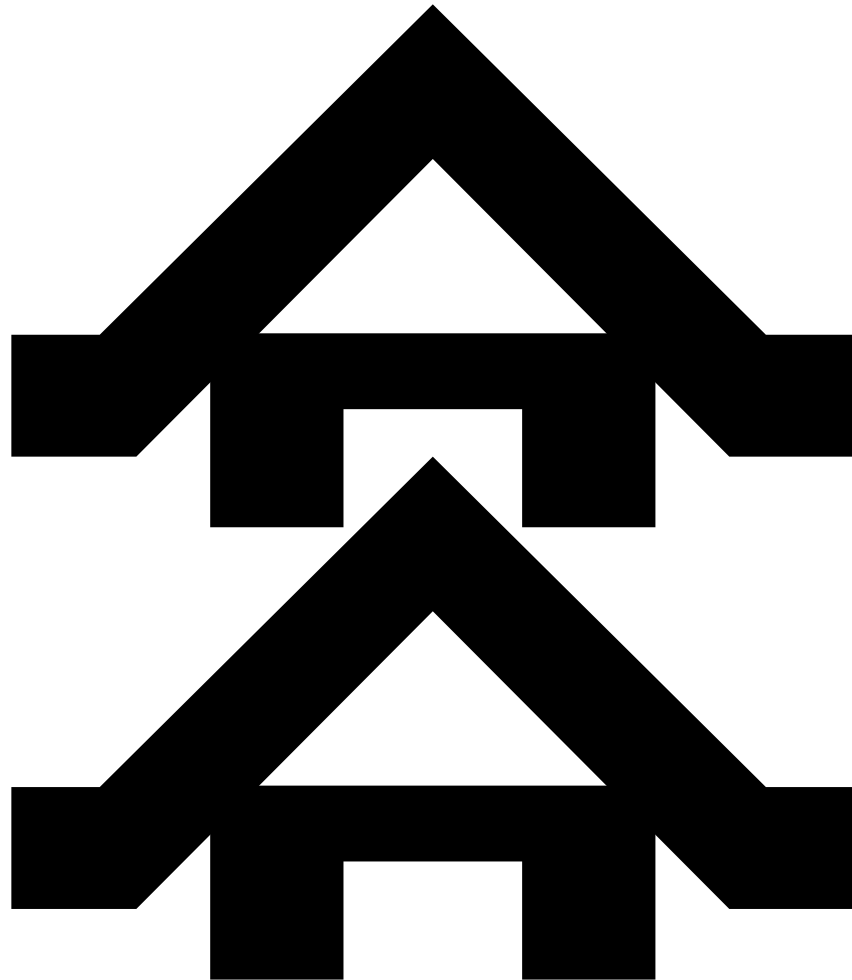




# RESEARCH

01	Decoding the semantics of Cultural Ecology	Salahsha T.N. & Sriparvathy Unni
02	Transformation of the Streets Decoded	Rutuja Kendurkar

# DECODING THE SEMANTICS OF CULTURAL ECOLOGY



**The Evolution of Sustainable  
Practices in Liveable Habitats**

By Salahsha T.N. & Sriparvathy Unni

The underestimated segment of sustainable habitat architecture — the cultural analysis of beliefs, practices and the often-inarticulate presumptions which determine the elementary relationship between humans and the environment is being habitually overlooked. Throughout explorations into the socio-cultural processes that ultimately determine the environment attitude and behaviour, along with the qualitative assessment of climate compatibility, a prognosis can be achieved to bridge the gap between time tested cultural dictation and evolution in building construction practices. This paper focuses on addressing the practical challenges of environmental sensitivity in the backdrop of socio-cultural norms of Kerala while examining building examples from other regional contexts in India. The linguistics of the construction sector is constantly evolving. This has resulted in a barrage of neither culturally relevant nor climatically suitable structures; ultimately progressing to a bleak future of over-polluted steel and glass skyline. India being a land of a myriad of rich cultural heritage is slowly losing its uniqueness. This situation can be traced back to the incessant need to oppress inherent societal characteristics by covering them under the blanket of stigmas and superstitions. Hence, this paper also aims to extirpate the notions of cultural constraints in design principles like Vastu and trace the origins of the contextual architectural forms and styles back to our ancestors' primal need to sustain life from climatic conditions through the construction of shelters. This can shed light on the various architectural features of different communities, evolved through socio-cultural practices and how they can be interspersed effectively in the present context, open to a multitude of technological advancements. Only with a root-level understanding of how and why architectural elements, forms, and planning—nurtured by evolving technologies and climate sensitivity—are existing, can there be a future for sustainable and resilient architectural practice.

## INTRODUCTION

From the dawn of creation, mankind has strived to adapt to their environment and sustain life through shelters. The evolving relationship between man, buildings and climate has been a tumultuous one; with an unbalanced utilization of nature by man causing large-scale climatic impacts. The building sector has been contributing to about 30% of global annual greenhouse gas emissions and consumes up to 40% of energy resources. Since most 21st-century buildings around the world depend heavily on active mechanical systems of cooling and heating, emission levels are rising at alarming rates. In 2013, global CO<sub>2</sub> emissions were 36 gigatonnes,

showing an increase of 61% compared to the 1990s. Modern buildings are being criticized for their incompatibility with their surroundings (Farshchi, 2000). Poorly designed regional specificities further worsen the issue along with the propagation of incorrect architecture that is irreconcilable with climatic contexts.

## CONSENSUS:

Traditional and vernacular methods of building design and construction are known to be inherently climate-responsive. They represent a guide to sustainable design principles by using locally available materials, employing local people, utilizing renewable sources of energy and adopting construction practices that favour recycling and respect for nature (Mohammadzadeh E, 2015). These buildings naturally respond to their surroundings and express the means to live in harmony with nature. Through vernacular construction practices, it is possible to understand appropriate approaches to utilize available natural resources to create comfort zones.

**Aim of the Study:** The paper aims to dispel the stigma surrounding the science of Vastushastra by examining the defining principles and bridging the gap between traditional and contemporary architectural practices.

**Scope and Limitation:** The study is limited to the evolutionary changes in Kerala residential architecture and identifying the principles of Vastu used in building and planning.

## CULTURAL MORPHOLOGY

Architecture can be compared to a crucible of various realms of science and anthropology— physical elements, cultural inclusiveness, social gratification and economic balance; reacting together to present a physical product— the building. 'Culture' can be summarized as a system involving more than values and necessities needed for a group of people/ community, or the whole 'way of life' of society. Architecture is a manifestation of the cultural context which sustains it. The form and relationships of buildings and spaces act as a kind of 'cultural marker' that can be read (Chopra, n.d.). Culture is the way society lives through the behaviour of the people and their religious lexis. In particular, the way humanity sees itself in relation to its surroundings is the fundamental reflection of human culture. Heritage springs from human culture. It is an accepted fact that disconnect in the transference of heritage from previous generations has resulted in losing our cultural uniqueness. People have become estranged from their natural surroundings and forgotten time-honoured traditions of respecting the

ecological values. The fragmentation and alienation of people is the consequence of implementing borrowed notions of progress.

Traditional Indian architecture has devised a set of guidelines for building construction known as Vastushastra. It states that the microcosm (building) is a reflection of the macrocosm (environment). Vastushastra analyses the blueprint which provides for sustainable building design systems responding to the local context. The concept of sustainability is a product of respecting the social fabric of people and the environment to make sense ecologically and economically. Presently, the principles of Vastushastra are being regarded as a science not meant for the common man, even though in traditional Kerala architecture Vastushastra was the common norm. As the current environment scenario calls for a paradigm shift, there is a scramble to find alternative construction practices. Here, vastu can play an important role in propagating sustainable architecture; though, a root-level understanding of core aspects is needed to expel the myths and superstitions so that more architects rely on it.

### VASTUSHASTRA FOR KERALA RESIDENTIAL BUILDINGS

The traditional architectural forms of Kerala have been influenced by people, cultural differences and geographical features of the region. Kerala consists of mainly three landforms: highlands, midlands and lowlands (Thampuran, 2001). The highlands of the Western Ghats region have a sparse population, while the highly populated midlands consist of paddy-fields and the lowlands consist of backwater-rich coastal areas. This variation in geography created differences in comfort zones and construction techniques. Though mild variation in climatic conditions persisted, the predominant climate of Kerala is warm and humid. Formation of settlements in Kerala was the result of the evolution of clan-like habitation but built forms diverged from typical settlements of other Indian villages. Kerala villages are of 'ekakudumbaka gramam' (unitary residential units) type as opposed to the 'bahukudumbaka gramam' (multi-residential units) type in other Indian villages. This system resulted in individual houses with landscaped areas separated from each other. Another important aspect of traditional Kerala culture is the matriarchal society where women held a more prominent role in society. These factors have enriched the culture, thereby honing the aesthetics of Kerala architectural style.

Vastushastra is an architectural science that prescribes rules for design and construction of buildings. It gives instructions to create harmony between man, nature and building. It should be understood, not as a superstition but as laws of nature. The first geometrical pattern defined as floor plan is

usually a 'mandala' (diagrammatic basis for building plan) which stipulates all other concepts and patterns. The symbolic patterns and geometries of mandalas are purely environmental in origin and picture the natural phenomena and their influence on built space (H. Fazeli, 2010). The environmental features which suggest the shape and spatial arrangements of the patterns, sun rays, magnetic poles, geopathic zones and concentric zones dictate the principles of Vastu architectural linguistics.

### FIVE ELEMENTS (PANCHABHOOTHAS)

Vastushastra considers the earth as a living entity from which other organic forms emerge; thereby each possessing 'life energy'. Panchabhoothas are the five fundamental elements that sustain life. Every living being, as well as buildings, exist because of the harmonious interaction of these elements, namely:

Space (*Aakaasha*)

Air (*Vaayu*)

Fire (*Agni*)

Water (*Jala*)

Earth (*Bhoomi*)

In a static environment, these elements exist in equilibrium. Presence of a built structure impinges this equilibrium as the elements tend to act with or against one another to return to equilibrium so that cosmic energy flow remains unaffected. This is seen in birds, animals and plants through natural defence mechanisms against hostile climates. Similarly, for centuries man has manipulated the elements to create comfort conditions in their habitats. For example, in harsh desert conditions, where the heat from the sun (*Agni*) create unfavourable living conditions, people tried to harmonize the elements by having thicker walls (*Bhoomi*), facilitating and controlling air-flow through openings (*Vaayu*) and providing water bodies for evaporative cooling (*Jala*) as well as respecting overall site context. But in the present scenario man gives precedence to appearance and forgets to manipulate the elements.

### PRINCIPLES OF SUNRAYS

Sunlight is a crucial element of Vastushastra which forms the basis for the Vastupurusha Mandala as it consists of the invisible spectrum—ultraviolet (UV) and infrared (IF) rays. The UV rays are known to kill bacteria and aid in Vitamin D synthesis in the body. The IF rays are the cause of heat in sunlight. Designing based on Vastushastra ensures that the occupants of the house are inadvertently exposed to the useful rays of sunlight while performing daily activities. Since different occupants perform different activities in various parts of the house, the sun's position keeps changing throughout the day. Therefore, each room is positioned to ensure that occupants get exposed to sunlight, based on the



<u>TIME</u>		<u>EFFECTS</u>
6:00		Effects of IF rays begin which has purification effects and is beneficial to human health
11:00–15:00		Effect of bodily-harmful UV rays is high
15:00–18:00		Heat quality of IV rays is high
<u>SPACE/ACTIVITY</u>	<u>DIRECTION</u>	<u>SIGNIFICANCE OF DIRECTION</u>
Watersource/ Well	East, North, North-East	Purification properties of UV rays are beneficial for killing germs
Kitchen	East-facing preparation counter	Morning routines begin here so sunlight is necessary. The UV rays help in sanitising the food preparation area
Bathrooms/ Store-rooms	West	These lesser-used rooms act as thermal buffers and the heat keeps them dry

activities performed. Since the sun moves in the clockwise direction from N-E to W, entrance doors are positioned in the north/east direction to ensure morning sunlight.

### PRINCIPLES OF MAGNETIC POLES

The earth's magnetic force field is said to affect humans and animals in many ways due to the reaction of cells to electromagnetic currents as well as producing them. More specifically, it is proved that geomagnetic anomalies can desynchronize circadian rhythms and melatonin production which leads to depression and other associated effects. The strong magnetic North Pole (geographical south) is said to have positive effects on the body while the South Pole (geographical north) has negative effects. This is considered in Vastushastra when prescribing east-west or south directions for bed placements so that occupants are constantly aligned in the right magnetic axis.

### PRINCIPLES OF GEOPATHIC ZONES

All heavenly bodies (sun, moon, etc.) emit cosmic energy just like telluric radiations emitted by earth. *Prana* (Sanskrit for 'life'), the notion of which energizes the bond between human psyche and nature. Accordingly, there are invisible energy lines running like a large grid across earth. This is represented in the mandala as the '*sutram*' lines (orthogonal and diagonal lines). When a building is placed, a balance is caused due to a break in the grid. So, while designing, buildings should restore the

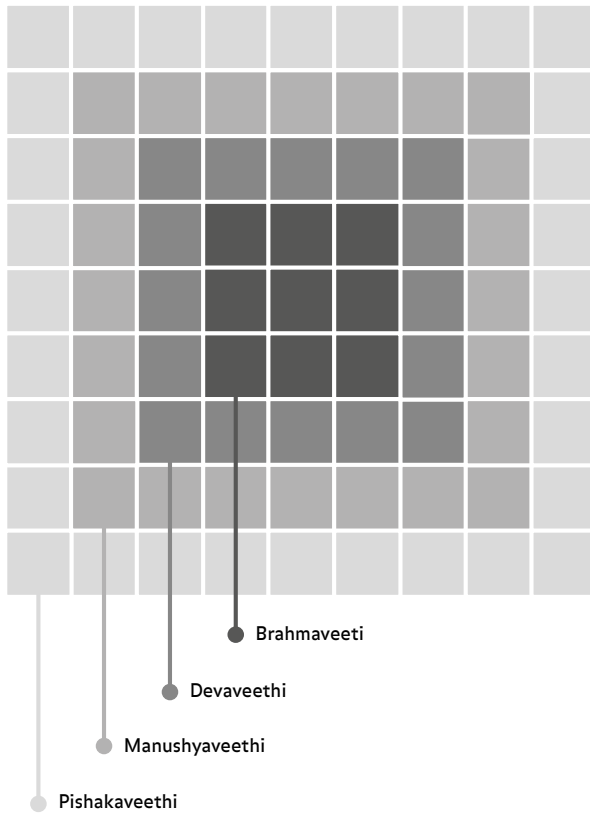
balance of the cosmos because when buildings echo this fundamental cosmic doctrine, they vibrate in harmony with the universe affecting the occupants in a positive way. In many high-rise buildings, over-glazed and under-daylit spaces cause electromagnetic disturbance as there is a detachment from nature, making them energy-deprived and unhealthy. Incorporating elements of the natural environment, efficient material use and effective planning can restore the cosmic balance.

### PRINCIPLES OF CONCENTRIC ZONES

Vastushastra dictates two principles concerned with the division of a large space into smaller units based on characteristic properties:

**Padavinyasam** Division of the Vastupurusha mandala into a number of smaller squares (*padams*) which are named after deities. They range from 1x1 to 32x32 padams.

**Veethinirayam** Division of land systematically into open and built areas in a circumferential manner with respect to the centre. Four such '*veethis*' are: *Brahmaveethi* (realm of Brahma)– innermost sacred *veethi* or 'luminous space' should be left open; *Devaveethi* (realm of Gods)– semi-built space usually consisting of corridors; *Manushyaveethi* (realm of man)– closed living quarters or 'conscious space'; and *Pishakaveethi* (realm of demons)– outermost *veethi* should be open.



These concentric padas of energy with the highly charged centre being the Brahma-sthana should be kept free of walled spaces. The Devaveethi and Manushyaveethi form the habitable spaces with the material space (Pishakaveethi) encompassing all of it.

### VASTUPURUSHA MANDALA

The Vastupurusha Mandala is a square, meta-physical plan of a house which defines the position of the rooms/spaces. This mandala is a square, meta-physical plan of a house which defines the position of the rooms/spaces. Here, the rooms have been positioned in specific directions according to the context. Vastupurusha is believed to encompass the cosmos with his head resting in the north-east direction representing balanced thinking; feet facing south-west representing strength and stability; his navel located at the centre of the cosmos symptomatic of sanctity and cosmic awareness to be kept open in the form of courtyard; and his limbs facing north-west and south-east signifying energy (Patra, 2017). Though he is the presiding deity, the eight directions have their own gods. Scientifically, the mandala can be explained as a means to design keeping the beneficial effects of the sun and wind direction in mind.

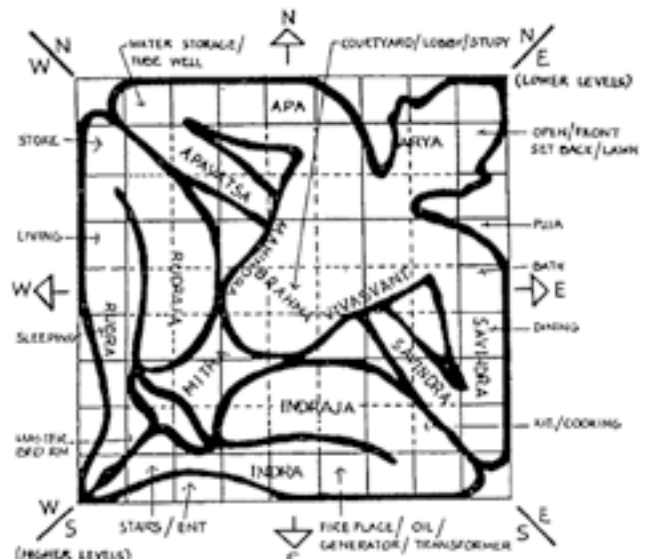
The different spaces assigned to specific corners of the mandala are purely contextual in reasoning.

- The head of the Vastupurusha aligns to north-east direction which is the direction of

the rising sun. The rooms facing east (N-E and S-E) are auspicious in nature as well as associated mostly to the women who usually use these spaces; like puja room and kitchen.

- The predominant wind direction of Kerala being south-west to north-east direction, the kitchen is allocated facing the east to avoid the spread of smell. Bigger windows are prescribed for north, east and north-east direction with smaller openings/jaalis in the south-west and south directions. This serves the dual purpose of catering to the wind-direction and satisfying Venturi Effect<sup>1</sup> during cross-ventilation.

- The navel of Vastupurusha (building) is the converging point of all the energies, hence should be left open. This is done through central courtyards aiding the Stack Effect by expelling stale, hot indoor air.



Vastupurusha Mandala (Patra, 2017)

### TRANSITIONAL DEVIATIONS IN ARCHITECTURE

The architectural styles of the region have evolved from Kerala's peculiar climatic conditions and a long history of influences from its major naval trading partners like the Chinese, Arabs and the Europeans. Traditional Vastu-associated houses were constructed mostly from materials readily available in the vicinity and built by members of the family or clan. But the shift from traditional to contemporary building planning and materials denotes the transformation of social and economic stature of society. Nuclear families, migration of young workforce to major cities in search of independence and income and transcending gender constraints have indirectly affected architectural practices in Kerala.

## BUILDING EXAMPLES

Though climatic variations and societal hierarchy have changed the spatial nuances of residential architecture in different parts of India, the basic principles of Vastushastra can be observed in traditional houses. A comparison between a haveli in Delhi and a naalukettu in Kerala highlight how these effects have subtly permeated the spatial planning process while sustaining basic Vastushastra guidelines.

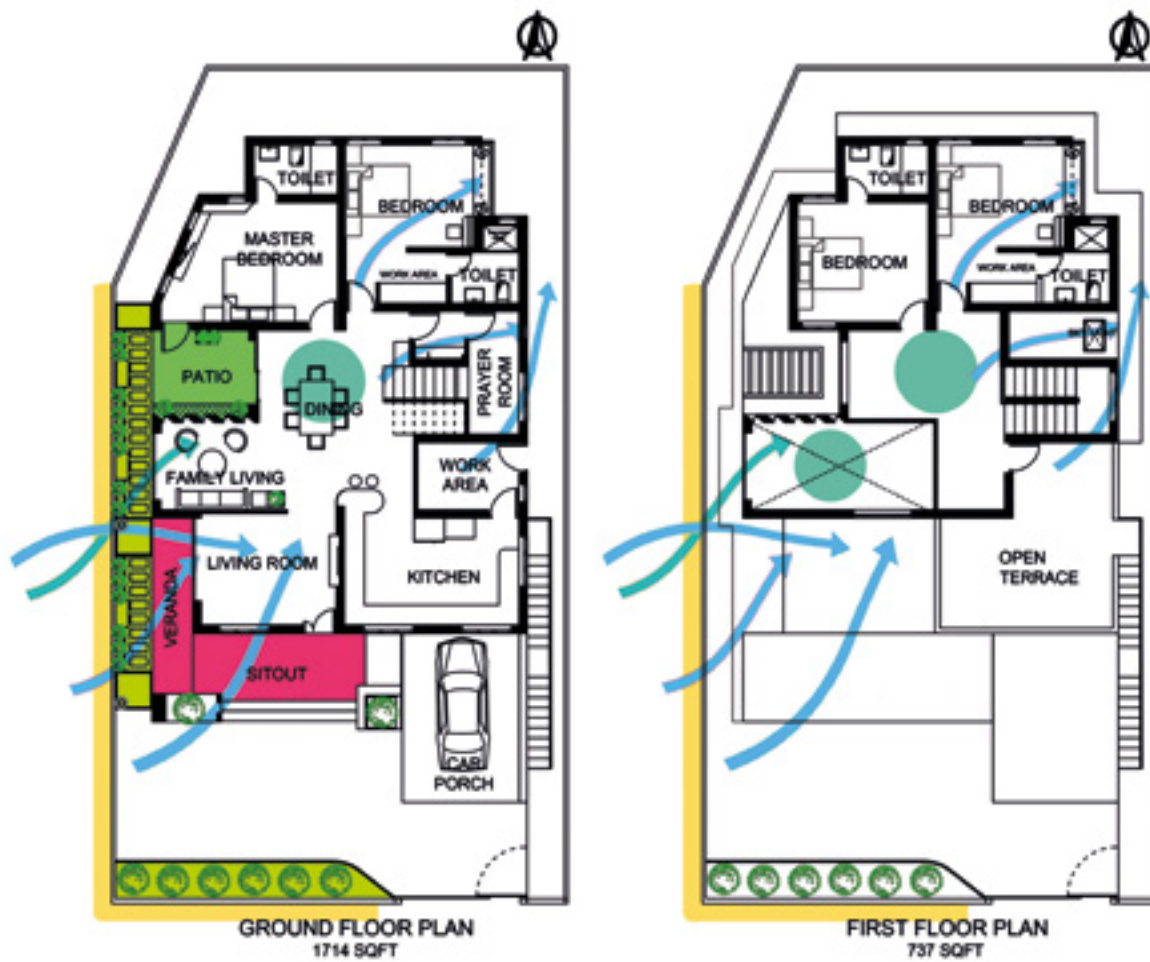
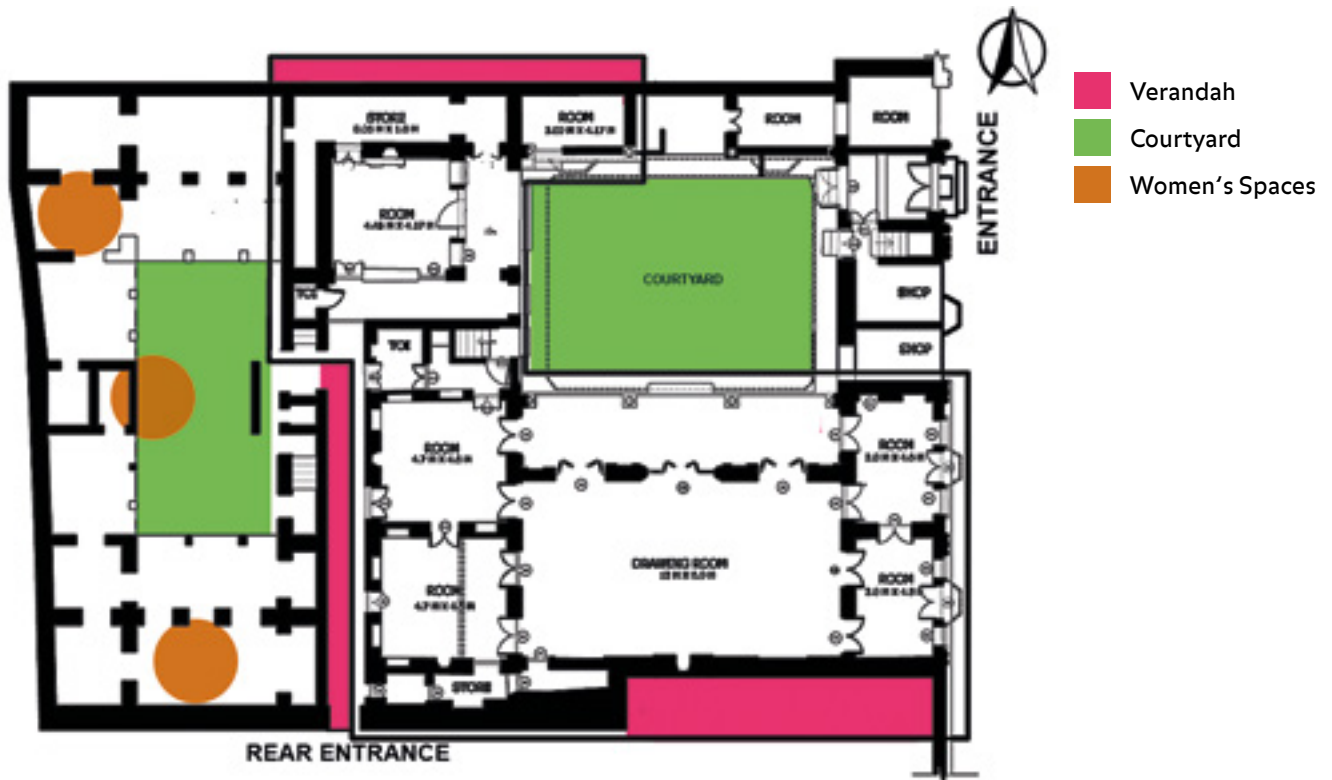
Evolving trends in architecture and construction have led to large-scale innovations which in turn has led to aping the West for façade treatments and unwarranted glazing to roof styles and box-structures. Though technical advancements have significantly contributed to a reduction in construction time, innovative design solutions and material choices, it has led to disregarding the contextual aspect of planning. Residential architecture in modern Kerala is currently dealing with space-constraints, economic strain, availability of materials

and overexposure to magazine-worthy ideals. This has led to time-honoured traditions like Vastushastra being forgotten and even considered as hindrances to good design. An example of a residence in Aluva, Ernakulam highlights how key aspects of Vastushastra have been applied to the design which has resulted in a context-sensitive structure.

Understanding the principles of Vastushastra has led to favourable alterations of spatial allocations while upholding the significance of the direction and space. For example, while the kitchen and puja room windows overlook the eastern side, the Brahmasthana is maintained as a space without walls (open dining). The south-western sides have an adequate opening with green buffers and verandah to perpetuate wind-flow and prevent overheating of walls. Toilet positions have also been planned accordingly. The overall equilibrium of the site has been tried to be restored through site-specific design form and planning, which can be said is the ultimate goal of traditional architectural planning principles.

Moothamana,  
Ernakulam







## A SUSTAINABLE APPROACH

According to Brundtland Commission 1987, sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The core concepts of sustainability are efficiency in functioning and equity in resource distribution between generations. The important dimensions of development are a steady improvement in material and infrastructural circumstances of all, towards greater health, comfort and greater self-reliance to enhance their capabilities (Patra, 2017). Thus, the parameters of sustainability are in alignment with principles of traditional Indian architecture. The current state of development follows a chaotic and nebulous approach unhinging the ecological relationship with built forms. The milieu of dynamic changes in climate, pollution levels and population densities have heightened the relevance of Vastushastra in modern times. Sustainable development and traditional architecture (Vastushastra) form the two sides of the same coin— one concerned with efficient resource management and the other with a contextual program for reducing the harmful impacts of man on nature.

The role played by Vastushastra in promoting sustainability is based on lifecycle approach which includes:

- Usage of locally available vernacular materials and endorsing resource-efficient usage.
- Dependence on renewable sources of energy.
- Monitoring water-use and adherence to natural drainage patterns.
- Enhancing the quality of life of occupants.

Sustainability is thus a product of ecological balance and culturally-stimulating development, solidifying the notion that Vastushastra is the stepping stone to the realistic delivery of context-responsive design.

## C O N C L U S I O N

Society can sustain itself through cultural adaptations of environmental elements. Through proper channelization of the natural elements, built-spaces can co-exist with nature. The science of Vastu strives to highlight the sensitive manipulation of available resources to create comfortable habitable environments; acting as a conduit between man and nature through rational and ethical principles. In the name of modernization, this time-tested tradition often gets side-lined and scorned by designers as it is perceived as a hindrance to good design. Through this paper, Vastushastra is revealed not as an assemblage of disconnected systems, but as a lucid framework for sustainable architectural practices. Though Vastushastra cannot completely solve every design problem, the aspects of context- specificity can be properly manoeuvred through design innovations making it applicable for various typologies and situations.

## REFERENCES

- 1 Chopra, D. *Culture and Architecture: Form*. Retrieved from <https://www.academia.edu/>
- 2 Farshchi, M. A. (2000). *Emotion and Environment: the Forgotten Dimension*. In D. Clements-Croome, *Creating the Productive Workplace*, Edition: 2. London: E& FN Spon.
- 3 H. Fazeli, A. (2010). The principles of Vastu as a traditional architectural belief system from an environmental perspective. *WIT Transactions on Ecology and the Environment*, Vol.128, 97-107.
- 4 Mohammadzadeh E, Akhavan Farschi M. (2015). *Vernacular Architecture and Energy Use in Buildings: International Journal of Advances in Mechanical and Civil Engineering*, ISSN: 2394-2827, 35-42.
- 5 Patra, R. (2017). *Vaastu in Perspective of Technology*. International Education & Research Journal [IERJ], 775-780.
- 6 Thampuran, A. (2001). *Traditional Architectural Forms of Malabar Coast*. Calicut: Vastuvidya-prastisthanam, Academic Centre, Saraswatham, Kiliyanad, Calicut

## FOOTNOTES

- 1 The Venturi effect is the principle of accelerating air-flow through a narrow inlet.



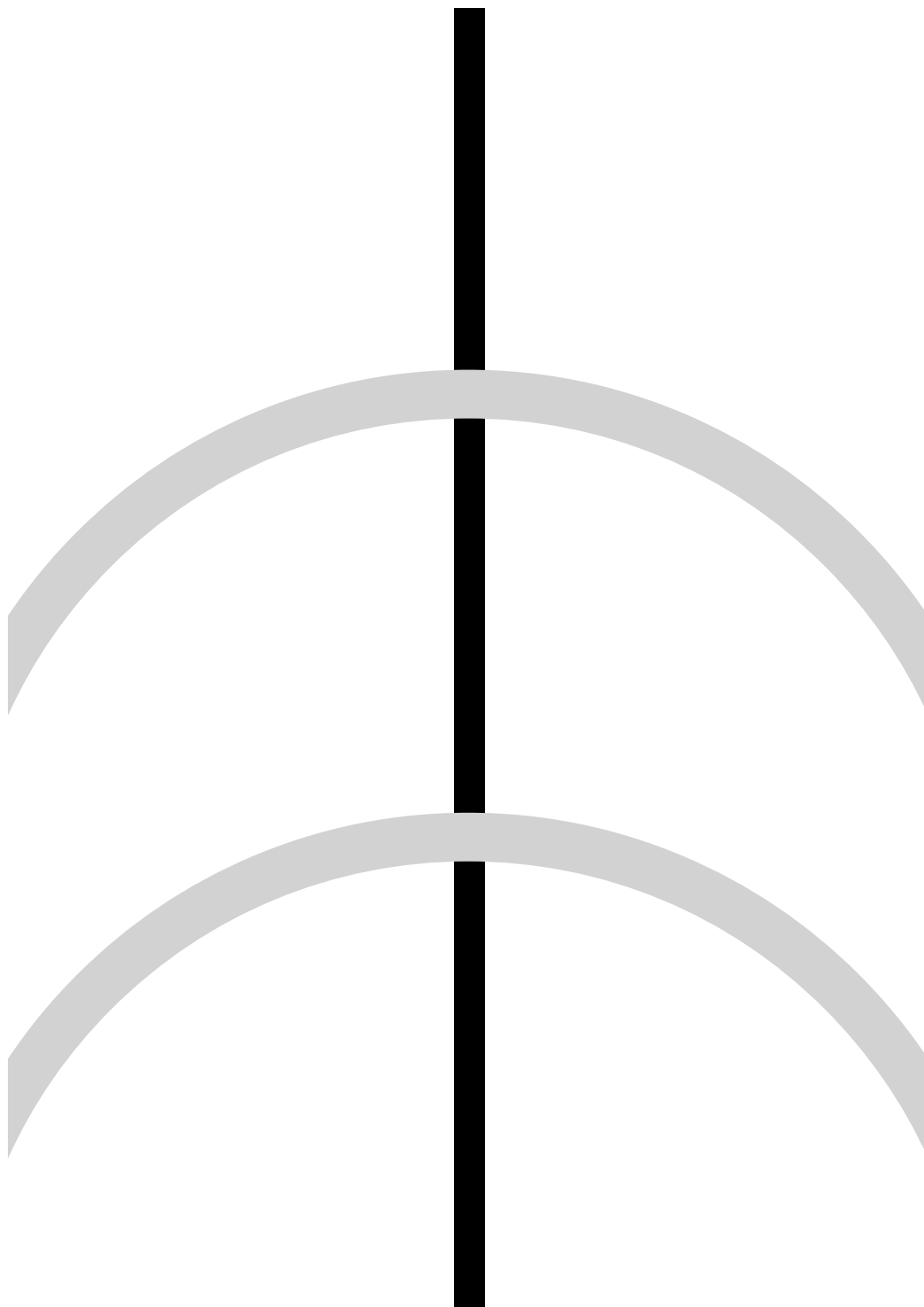
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# TRANSFORMATION OF THE STREETS DECODED

22



Indian cities have been in transition for hundreds of years, however, never more since the last decade of the twentieth century when international trade and competition was injected into the nation's economy. We face unique pressures as a result of the development of infrastructure, increase in construction and gentrification.

This concern is typically expressed all throughout the recent literature studies, which try to explain the developing complexity of urban conditions. Tracing throughout history, as cities start evolving, a river or water body acts as a magnet for most of the settlements. It is then that the roads and streets appear forming the most dynamic and transient space of the city which is extremely prone for transformation. This not only happens in the built form or the activity, but also in the portrayal of the image of streets over a period of time. Hence, the prime motivation for writing this paper is to address the transforming nature of the city and primarily its streets.

This paper mainly focuses on examining the changing experiential nature of the streets, understanding what transformation is and during the process what is that's actually transformed.

## WHY STREETS?

Streets account for the maximum amount of land in a city, and historically, they served as public spaces thus acting as a backdrop for social interactions. However, nowadays transportation is usually misunderstood to be the major characteristic, or maybe the only characteristic of a street. Supposedly preferred streets are the ones designed to encourage high traffic speeds. While the unrestricted movement of people and goods within a city is certainly essential to its commerce and vitality, and streets provide the physical space for this, however, within the quest of creating sensible transportation systems unpleasant places for the people are being formed. Thus, all around the world, communities are increasingly becoming concerned about the consequences of designing streets that function exclusively for the efficiency of automobile movement versus those that serve for a broader economic and social concern of the communities.

Great Street is memorable as a symbolic or ceremonial place in the city and a venue for events, parades, fairs and other civic events (Alan, 1995).

A great street creates an outdoor room— a place where buildings and vegetation define the limits of the public realm, an extension of the private living. Some streets are better than others to be on, to do what one came to do...One goes back to some streets more than others, not just because the things you have to do is much closer, but because of its experience (Jacobs Alan B, 1995).

"A street is the river of life of the city, the place where we come together, the pathway to the centre." (William H. Whyte)

It is a very commonly used metaphor; the streets of a city are referred to as river of life, or its arteries, indicating that the life of an urban formation courses through these passages. Essentially, a street is a public road in the city meant for movement and pauses with a comparatively smaller denomination than a road. Sociability is the major factor which differentiates a road and a street. It gives the built form a shape and definition, but this urban formation is never still. Forever elusive, its only constant is change.

As Curt Gambetta has rightly said, that across India, the street has always been a centre stage in discussions of transport, eviction drives, new economic settings, emerging forms of public life and lifestyles, and has been subjected to forces that are constantly changing: festivals, markets, protests, bandhs, acts of love, violence, unpredictable emanations of sound and smell, but has remained strangely absent as an object of concern.

If we can develop and design streets so that they are wonderful, fulfilling places to be—community building places, attractive for all people—then we will have successfully designed about one-third of the city directly and will have had an immense impact on the rest. (Jacob Alan B, 1995)

Therefore, rather than perceiving a street, solely as a backdrop to the urban life, there is a great need to understand how it functions as an urban condition. It is rather interesting to see, how a street actively produces the life of the city and in turn, it is constantly produced by the forces that constitute it, thus changing its experience every minute, every second.

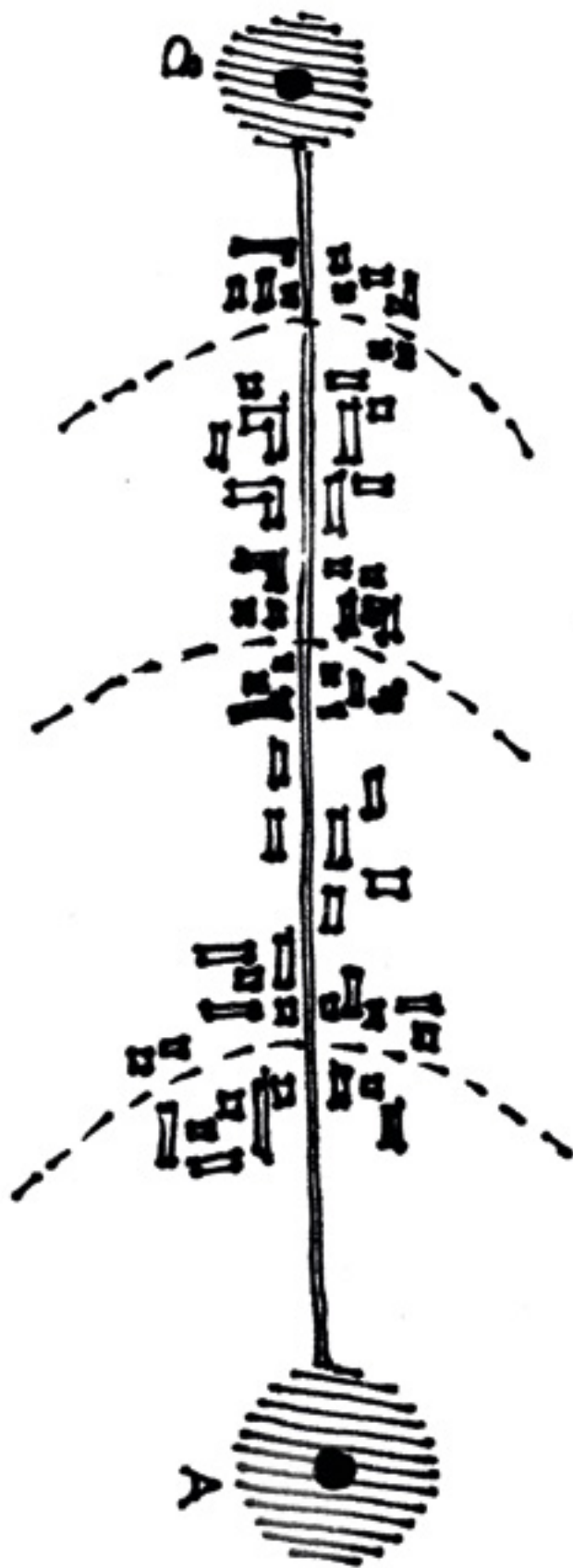
Currently, the transformational pressure on the street is such that it becomes difficult for a person to recognize the same street, after a couple of years. It is a common sight of a group of people meeting after a long time, engrossed in the discussions about how the built forms and streets have changed in the surroundings. But what has changed and transformed is a frequently asked question but never analysed or put forth in discussion.

The paper will attempt to understand various layers on a street and the transformations happening within them, responsible for the change in its experience.

## TRANSFORMATION

A transformation is a thorough or dramatic change in the form or appearance, a marked change in appearance or character. Synonyms of 'transformation' are conversion, change, alteration, shift (Definition, Merriam Webster Dictionary).

It is a movement, especially for the people of fleeting faces and forms, changing postures and dresses, i.e., streets change. (Jacobs Alan B, 1995)



Top Activities generated on the street

In a way, streets are the first things to change in the evolutionary phase of the city. They consist of the major part of our everyday life, thus depicting the culture, way of life and rhythm of the area, in turn defined by the actors (the people) on the streets. The street acts as a stage, a vessel or rather a backdrop to activities that are programmed within its boundaries. Somehow those functions and roles assigned to the street, be they social, economic or vehicular, are constantly shaped, re-shaped or unsettled by the tangible/intangible forces in the city.

Nowadays to cope with the changing needs and trends, alterations in the built forms and the spaces around it becomes mandatory.

Therefore, changes due to the introduction, extraction or modification of any object/entity is bound to happen. But such desire to transform, sometimes result into some drastic changes which are un-predictable and uncalled for. This does not mean that transformations should be totally discouraged, or they always create a negative impact. Change is a part of life and transformations must happen in our surroundings to cope up with the changing trends.

But drastically losing the experience of the spaces which have developed and been there for years, is not what is asked for during the process. For even a meagre change in the built form or activity, the price that the streets have to pay is very high and this needs to be understood and planned for well in advance to negate or at least minimize the impacts. Such transformations can be witnessed in the built forms as well as the spaces around it, forming a specific character and giving an image to the precinct as well as the area. Even as this image appears to focus and solidify, it is continually transformed by the events of each passing moment on the streets. Such transformations tend to alter the way of life on the streets for a period of time, making these transformations more visible.

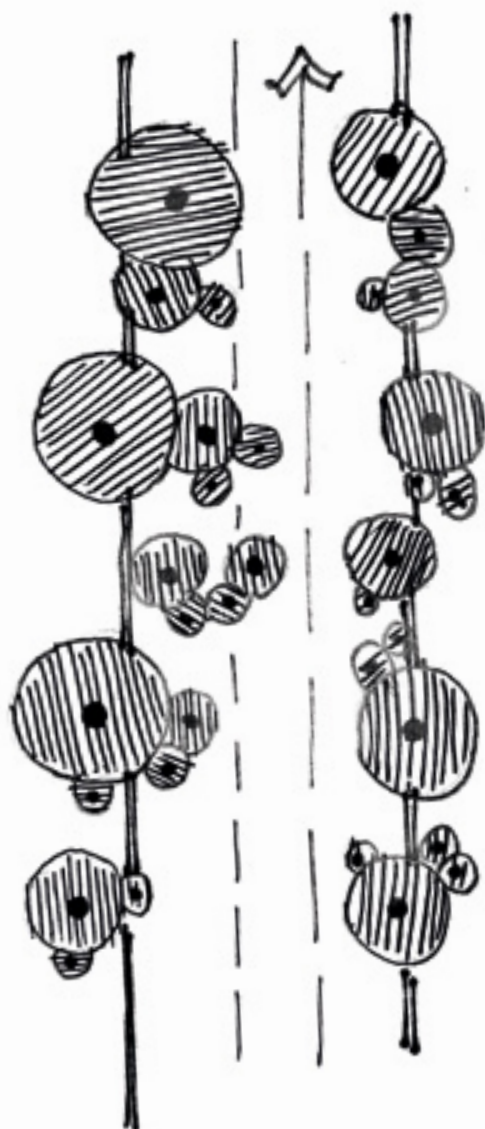
Every minor change in the activity need not necessarily hamper the working of the streets but the larger transformations have resulted into a chaotic situation, as change in times has not brought adaptive change in the surroundings.

To tackle this insufficiency, newer ways and plans are being devised but nothing is being done in order to speculate the upcoming transformations and plan accordingly, thus resulting in the experiential change on the streets. Therefore, all the attempts made, ultimately result as a problem-solving exercise.

## TRANSFORMED

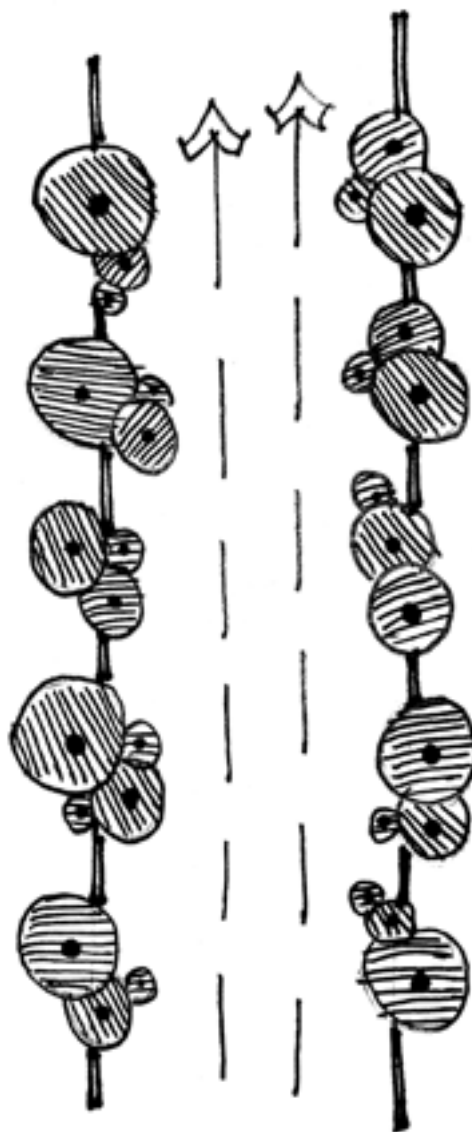
The street is essentially considered as a link between two important entities within the overall (urban) structure; the linking function becoming a generator for a circuit of spaces, each of which would be somewhat meaningless without the internal linkages.





**Left** Altered patterns on the street

**Right** Existing patterns on the street



A street has various layers and categories coming together as a whole, as an outcome of the phenomenal response of the people due to their everyday life patterns.

Every activity happening on the street creates a definite experience or an impact on a user, thus demarcating its area of action for a certain period of time. These impacts are a result of the space created by the enclosure of the built form around, the street-lights and other features on the street below, the street itself and the density of users and activities on the particular street. Thus, a street becomes a product of an entangled mixture of such experiences and impacts one upon the other— of honking horns, of shouting hawkers, colourful goods, different kinds of people, personalized spaces, etc.

By and large, these impacts are a result of a rhythm of movement, of faces and postures, actions and responses sound and personalization, etc. Some of these are transient and the impacts created are momentary. Some are constant and create

a long-lasting impact. Some are forced at various points in the timeline which then either fade away or continue to stay as constants. These are the ones which are evolved and interwoven together over a period on the streets. Therefore, any changes in the surrounding built form or the street fabric are the ones responsible for a person's perception of that street. And these spaces are the ones that are actually transformed during the process of transformation thus affecting the already created impacts.

The mood or the experience of the street is not made of just its tangible elements, the width of the street, the buildings, their architecture, the spaces around, the street monuments, etc., but also some intangibles, one upon the other, so that many elements and activities co-exist. All these functions at some point of time have originated because of one another which now have framed the overall experience and feel of the street.

Understanding of the whole street can be explained very well through de-layering the street.



These layers are classified by taking elements of similar characteristics together, for example, the street below and its furniture, lights, etc., can be included in one layer. Similarly, all the built forms/built fabric are included in the second layer and the entire dynamic thing under the third layer. These layers are interconnected, and produce an effect on each other in case of transformation occurring in any one of them.

### **Layer I: Infrastructure**

Elements which remain constant for a certain period of time and act like reference points for the activities as well as people to orient them can be classified under this layer. These points define an area of action for the informal activities to happen, an example can be given of the hawkers settling around street lights, telephone posts, street furniture, etc. They enhance the overall experience of the area, adding specific abilities or functions to the existing one.

### **Layer II: Enclosure:**

Elements of the street which do not change often and gives a third dimension to the street, i.e., the built fabric. As the name suggests, this layer is responsible for creating a kind of envelope to the street, thus defining its functional boundaries and giving a sense of enclosure. This layer is the one which creates a backdrop for the street activities to happen and gives a definite area of action for them.

### **Layer III: Dynamics**

Elements which are ever-changing and do not remain constant even for a short duration can be considered in this layer. It is partly formed by the activities which get attracted to the initial two layers. The major share of this layer is taken up by the people moving around, the informal activities and the vehicular thoroughfare, both being forever elusive.

## **OVERALL STREET FABRIC**

As said earlier, the layer of dynamics is the one which is forever elusive and cannot be figured out. Therefore, the changes happening every second are very much a part of this layer, never majorly hampering any activity. These transformations are temporary and do not create any long-lasting effect.

But the transformations happening in an enclosure as well as the infrastructure layer are specifically permanent in nature and are sometimes responsible for a drastic change in the land use of the area thus eventually changing the built fabric or even creating an impact on the adjoining precinct. A number of such permanent transformations at a close proximity can create great impact on the overall experience of the street.

For example, in an enclosure, addition in the existing space, such as an extra floor, a new built

form on the existing plot, spill-overs from shops or the built form. Amalgamation of plots for a bigger built form, such as the coming up of a large mall in place of smaller built forms; the creation of an open space, etc. For example, in infrastructure, road widening projects, construction of flyovers or skywalks, etc. Projects such as construction of flyovers, skywalks, metro, etc., interrupt with the activities as well as communication on the street below, disturbing its working for a great duration. Road widening projects encourage speedy vehicular movement, thus disintegrating its experience drastically.

Thus, the major changes happening in the enclosure as well as infrastructure can change the whole dynamics of the street, making it more difficult for the street to adapt and get the same experience again, permanently altering the image of the street.

Now that we have established, what exactly is transformed, the next part of this study will try and focus on how these transformed spaces try and adapt with the changes and if they succeed in this quest.

### **REFERENCES**

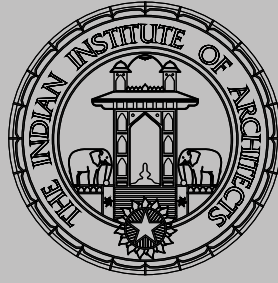
- 1 Jacobs, Allan B., *Great Streets*, MIT Press 1995.
- 2 Ahuja, Sarayu, *Where the Street Leads*, Penguin Books 1997.
- 3 Rudofsky, Bernard, *Streets for People – A Primer for Americans* Rossi, Aldo, *Architecture of the city*, MIT Press, 1931.
- 4 Tayyibji, Riyaz, *The Conceptual and the real. Understanding the experience of the City: Ahmedabad*, (Unpublished Thesis), CEPT July 1998.
- 5 Alexander, Christopher, *Pattern Language*, Oxford University Press, New York, 1977.
- 6 Certeau, Michel de, *the Practice of Everyday Life*, 1968.
- 7 Curran, Raymond J., *Architecture and the Urban Experience*
- 8 Lynch, Kevin, *Image of the City* Whyte, William H., *The Social Life of Small Urban Spaces*, 1980.
- 9 Gambetta, Curt, *Streetscapes : The Future of the Streets*, Symposium at NIAS Bangalore, 2012

### **READINGS**

- 1 *Thinking the City through the Street*, (open discussion report), NIAS Jan 2010.
- 2 Garimella, Annapurna and Ishaq, Fiza, *Procession and Community Identity: Muharram in Johnson Market, Bangalore*, (Published paper in workshop on "Streets"), NIAS Jan. 2010.
- 3 Anjaria, Jonathan, *Street Dwelling* (Published paper in workshop on "Streets"), NIAS Jan. 2010.
- 4 Wright, Bradley R. Entner, *Pathways off the Streets- Homeless People and their Use of Resources*, Ph.D. thesis, Department of Sociology, University of Wisconsin-Madison 1996.
- 5 Sidh, Sintusingha; Kasama, Polakit and Bruch, Richard. *Urban Dynamism : A Contrasting Experience: Street Life in Unplanned Bangkok and Planned Melbourne*, 2002.
- 6 Upton, Dell, *Architecture in Everyday Life*.



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# CALL FOR PAPERS

Journal of the Indian Institute of Architects invites original and unpublished contributions from members (academicians, practitioners and students) under the following categories:

## Category 1

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

## Category 2

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

## Category 3

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

In order to be accepted for publication, all material sent in the three categories above should be sent in the following four components:

- 1 MS Word document file with text only. The numbered captions for all the images will also be in this document.
- 2 Folder with all images (minimum 300 DPI), numbered according to the captions which are in the text file.
- 3 Photograph of the author/s (minimum 300 DPI).
- 4 Author biodata (maximum 50 words).
- 5 PDF, showing the intended layout. This PDF should include text with all images (with numbered captions).

**DIALOGUE**  
**MASTER**  
**ARCHITECT**  
**RAJ**  
**REWAL**  
**RESPONDS**



This issue of JIIA, based upon the theme of 'Attitude', showcases an interaction between Master Architect Raj Rewal and the Immediate Past President of IIA, Ar. Divya Kush. The architect wields power through his works to evoke various reactions and emotions. Hence, the attitude of the architect is directly responsible in making certain that he bears this onus correctly. An iconic name in the Indian architecture industry, a visionary whose designs and methods of construction and aesthetics helped build an identity for modern India, leading Architect Raj Rewal shares here his thoughts and ideals for our readers.

Interview of Ar. Raj Rewal (RR)



Interviewed by Ar. Divya Kush (DK)

**DK**

What, in your opinion, is the potential of architecture for bringing about change in society?

**RR**

Architects must realise the pivotal role of our profession which can bring about positive change in the environment of our society. Traditional architecture based on meticulous craftsmanship and subtle spatial arrangement could achieve appropriate expression for a variety of works, ranging from monumental architecture to vernacular architecture. The serenity of the Padmnabhapuram temple complex, the lyrical romanticism of Taj Mahal and the vigour of the Jantar Mantar observatory point the way towards appropriate rasa for each building type. It is possible to seek the right ambience for a variety of buildings, whether they be educational institutes, office blocks or shopping areas to serve humane values.

**DK**

Could you elaborate for our readers, what changes can an individual architect bring about?

**RR**

It is commonly acknowledged that architecture is the art and science of building. Considering our market economy, we should certainly enlarge that architecture is the art, science and commerce of building. We have to build meaningful architecture within constraints. Our civilization has maintained a unified approach to art, science and spirituality. Would it be worthwhile to give up this

holistic attitude to meet the crass commercial concerns of our society? The craft of architecture fuses structures, services and landscape. In fact, all the professions that play the smallest role in erecting a building are allied with the profession. The architect's thoughts and ideas must go beyond buildings and involve the larger scale, the urban values and the regional concerns. We need to assess the impact that our work can and will have on the environment and life of a common man. As professionals we need to look deeper into finding ways of conserving our natural resources, utilizing renewable energy, and pedestrianizing parts of our cities.

**DK**

And what do you think are the changes required at the institutional level of the government?

**RR**

The institutions which govern us need to be drastically over-hauled so that the arts and our profession can flourish. We are unfortunately ruled by philistine establishments. Our earlier work, the Hall of Nations in Pragati Maidan, designed to celebrate the twenty-fifth year of India's Independence, was based on a large span structure as a sun-breaker— a jali. The project was considered a great achievement by the international community of architects. It was a fusion of the state-of-the-art technology of three-dimensional spatial structures and local pragmatic possibilities. The Hall of Nations was demolished by an architecturally illiterate and insensitive administration





**Previous Page** Nehru Memorial Pavilion, New Delhi

despite the protest from the Indian Institute of Architects, The Union of International Architects and civil society.

Architecture and urban design is carried out within the framework of public and private institutions. Urban design is a civic responsibility and the architectural profession should be given the prime responsibility for creating and heading institutions like Urban Art Commissions. In my opinion every city should have a think tank to evaluate the urban concerns.

**DK**

What is essential to ensure that the role of urban planning in our cities is carried out correctly?

**RR**

The exploding population and the emergence of a new middle class in very large numbers has posed serious urban crises of traffic jams and pollution. At the same time, the last two decades have seen the emergence of institutes of technology, complexes for research and education and other building types on a gigantic scale, which can be described as 'epic' works, somewhat between urban scale and architecture. It is important to harness this situation in the right direction.

For the Parliament Library in New Delhi and the Arts

University in Rohtak, my approach has been to create a peripheral road which gives way to different segments of these complexes, keeping the central space strictly for pedestrian use. Internal spaces within the University are closely related to the different departments. In fact, each department or school is built around a distinct courtyard surrounded at four levels with verandahs that give way to the classrooms and studios.

**DK**

Do you have a message for the younger generation of our readers?

**RR**

The opportunities and tools that we have at our disposal today are fantastic, and we need to make sure that these are not wasted. The craft of building is very important and one must understand that it is one thing to conceive a design and it is another to actually build it. My advice to younger architects is to master the techniques of building before starting their journey in the profession. The role of the architect is to guide and direct engineers, building contractors and landscape works. For this to be a successful process, we have to be able to coordinate the works of others without losing our vision.





**Top** Library for the Indian Parliament, New Delhi

It may be a good idea for younger architects to travel extensively and absorb the values of heritage and the technology of our time. The process of learning never stops.

**DK**

In conclusion, what would you like to tell all the architects and also about the direction of your current work?

**RR**

Architects' works have the potential to bring about environmental changes. The idea that Mahatma Gandhi had, of a self-sufficient village, can be reinterpreted as an organically evolved city, like a university town, supported by schools, hospitals and industries. The design of a city, based entirely on solar energy with recyclable waste, is not a utopian idea. It is time to stop copying wasteful, energy-consuming, high-rise towers of glass from elsewhere and evolve organic solutions for work, study and life in harmony with our surroundings. Local aspirations can be well connected with the global techno-scientific world, through the internet. Traffic and pollution can thus be minimised.

The issue of global warming has brought about a major transformation in our current works. We have tried to fuse the essence of traditional wisdom with technological

advancements of our time to create humane, ethical and sustainable architecture. Passive energy saving systems learnt through traditional methods can go hand in hand with smart buildings based on state-of-the-art technologies. In our projects, open spaces between the buildings are designed to create micro-climate and reduce the use of energy.

In recent works, we have introduced photovoltaic panels as a major part of design. In the State University of Performing and Visual Arts in Rohtak, photovoltaic panels have been used for the entire university, as umbrellas. In fact, the slanting roof above the library is designed as a solar disc of monumental proportions to harness the energy requirements of the University. Similarly, in an office building for Coal India Ltd. in Kolkata, the architectural expression reflects progressive values based on sustainable growth, energy-saving devices and incorporation of photovoltaic panels to generate electricity.

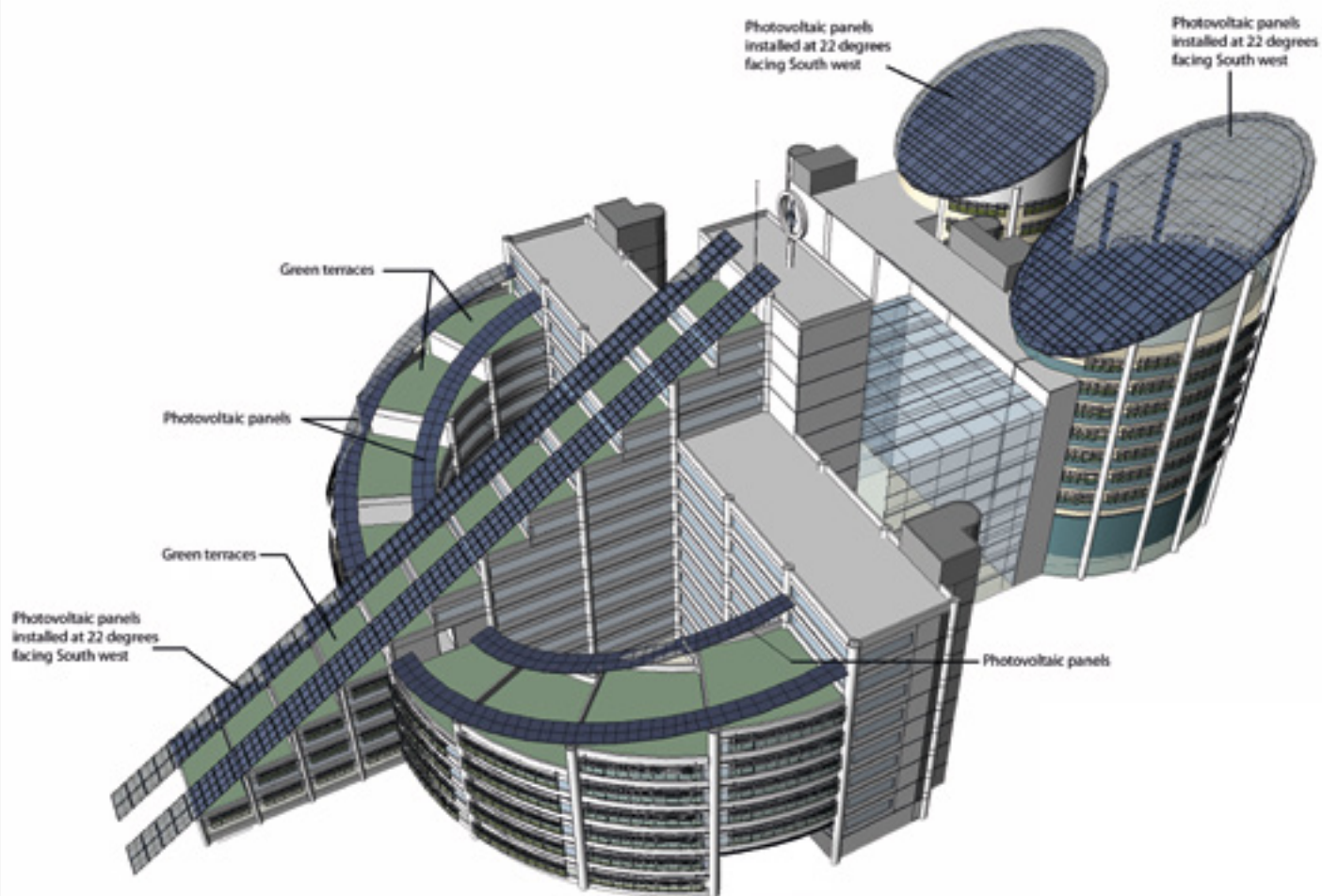
In the past, architecture and urban design in our country had been designed to modulate the scorching heat of the sun. At this stage, the architectural profession should consider utilization of photovoltaic panels in a sun-drenched country to generate power as a necessity and the design should be based on embracing the sun.





**Top** Visual Arts Institutional  
Campus, Rohtak

**Bottom** Hall of Nations,  
New Delhi



**Ar. Divya Kush** is the immediate past president of the Indian Institute of Architects (IIA).





# DESIGN JATRA ARCHITECTURE AT THE GRASSROOTS

By  
Shardul Patil &  
Vaishnavi Patil

Determining the direction of one's architectural practice is a self-scrutinizing and highly deconstructive process, particularly for the alumni of Indian architectural discourses. This process promises adventurous endeavours into cultivating a principled design philosophy over a rigorous pedagogy of architecture. At the same time, the burden of the viability of our principles in the contemporary economic context frequently threatens to weigh us down. In spite of our academic experience being adorned with scintillating examples of successful and passionate architectural practices derived from strong doctrines, there is always a narrative of design and philosophical principles that are compromised due to the economics of practice.

Design Jatra is a product of one such entropic process catalysed an enquiry into the relevance of architecture with the rural contexts of our nation. This indulgence into intellectual and personal enquiries eventually enticed

Design Jatra's three co-founders, Ar. Pratik Dhanmer, Ar. Vinita Kaur Chiragia and Ar. Shardul Patil to explore the tribal hinterlands of Palghar district of Maharashtra. As two of the co-founders were native to the region, it was the perfect backdrop for experiments with the principles of sustainability, ecology, advocacy and architecture, while incorporating daunting questions of the viability of its practice. With intense travels, inquisitive excursions and documentation workshops conducted across Palghar district, as well as with the guidance from the practising mentors from various fields, many of its core beliefs and principles transformed and were inherited within its practice.

The practice now has enlarged to include a team of five architects, three interns and about twelve skilled tribal artisans. Design Jatra has, till date, completed 16 architectural projects using natural materials and two projects with the government, which focused on re-imagining



The evolution of ecology around a restorative process done as part of designing for the house in Pen, Raigad District. Picture courtesy ► Ar. Kartik Rathod

policy framework to integrate natural materials in government construction. We also actively work with two tribal self-help groups on various tribal developmental and advocacy issues.

While prevalent tribal lifestyles in Palghar district inspired Design Jatra, since its inception in 2016, the practice has been continually evolving as a practice that upholds sustainable architecture and ecological community development, and simultaneously help strengthen the ethos of contemporary sustainability for the tribals. With the robust architectural and community systems of the tribal tenets guiding our operations, Design Jatra builds itself through constant feedback from practitioners of community building, participatory planning, ecological agriculture and forestry, democratic governance and most importantly, from the large community of ecological builders with whom India is blessed.

The titillating process of understanding rural contexts to gauge the relevant architectural expressions that will enhance it, led Design Jatra to be a platform that facilitates willing communities towards sustainable self-development. Along with ecological building, Design Jatra constantly tries to find avenues to encourage community-built structures, thereby asserting the restoration of rapidly-diminishing principles of community architecture. Community ethics being the primary prerequisite for sustainability, Design Jatra cultivate them through projects like tribal community centres, tribal forest mapping and building of government-subsidized homes under the Pradhan Mantri Awas Yojana. Through participatory design and collective pooling of knowledge, skills and resources, the thrust is towards establishing processes that generate an immense sense of belonging towards the built-form in the soul of every member who has participated in its design and construction. The importance of a healthy ecology for the existence of sustainable architectural practice was realized during the initial documentation and ideation of Design Jatra. Hence, every Design Jatra project soon came to be conceptualized as an opportunity towards ecological restoration. This is where the tribal discourse regarding construction served an intrinsic role—inspiring the idea of building with cyclic zero-waste materials like mud, wood and bamboo. Learning to use local biodiversity in the process of building rather than importing materials from elsewhere, Design Jatra also imbibed the tribal ethic of conserving the biodiversity of the site. An example would be the diverse use of trees: Design Jatra homes are built with a wide diversity of timber species instead of just relying on teak. The practice then is to actively plant these different species in the owners' properties, thus encouraging the growth of a biodiverse timber forest.

One of the driving factors of Design Jatra was to make sustainable architecture accessible to all tiers of society instead of plainly reserving it as the privilege of the rich. Through its years of existence, Design Jatra has been fortunate to have served the needs of home-owners from all socio-economic backgrounds. As such, the practice has always moulded itself according to the specific needs

of such home-owners. For instance, while designing for tribals, sustainability and cost-effectiveness become driving factors. By encouraging the tribal to build their house through efficient use of community resources—such as, labour through the utilization of the community sweat equity and raw materials from the community conserved forests or trees planted by their ancestors— Design Jatra makes available cost-effective solutions through prudent project planning.

On the other hand, projects of home-owners who are economically stable offer an opportunity to push the limits of experimentation with natural materials. The architectural product is envisioned as a structure made of natural materials, which serve to fulfil the needs and the lifestyle of a contemporary Indian family. Thus, the focus of such projects moves away from cost efficiency towards establishing an efficiency of materials while incorporating their climatic properties, their structural integrity and their aesthetic appeal. Design Jatra thus strives towards shedding new light to the possibilities of sustainable architecture through constant experimentation with natural materials and technologies.

Veti Murbad, the tribal village that inspired Design Jatra, now serves as the base for its operations, with the office becoming an intrinsic part of the village community and its activities. Through the introduction of native

seeds and the building of a native seed bank, Design Jatra hopes to better the agrarian cycles of the village. The practice also tries to work with youth self-help groups of the village to ensure efficient governance, self-employment and sustainable development. The belief that architects should not only be the designers of buildings but also of the contexts in which they find themselves, drives Design Jatra to work on landscapes, governance schemes and community-driven employment initiatives in addition to architectural design and building.

As there is a huge gap between architectural education and the rural context of our country, Design Jatra is also developing itself towards becoming an experiential and experimental space for students of architecture. By hosting workshops and volunteering activities in the rural contexts, there is an attempt towards bridging this gap through sensitization of students towards the relevance of the rural Indian rationale and belief systems. These workshops, being hosted by both architects and tribal masons, also aim at re-energizing the faith of the tribal masons in their own craft.

Although the discourse around the merits of natural materials, their climate sensitivity and their environmental efficiency is abundant; there is a need to ensure that these materials are not assessed merely in isolation. They are a part of an entire system of existence and a very

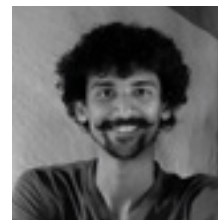
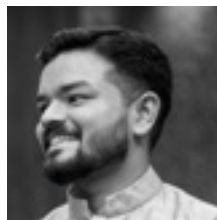
Designing for a sustainable and cost-effective abode for a tribal community head, Palsunda Village, Palghar District





grounded lifestyle. Mud buildings cannot exist if the soil in the forests keep eroding. The soil cannot stop eroding if there are no grasses or trees. Trees would not exist without the community to take care of them and the community will not take care of them until they truly value them. The core of sustainable practice then falls squarely upon the promotion of a strong community. Hence, Design Jatra believes that propagating the use of natural materials in construction necessitates collaboration with communities, ecologies and grass-root governmental and non-governmental organizations.

Architecture today has come to be perceived as a predominantly urban profession. However, a large majority of our country still lives in its rural regions and the architecture, with respect to this majority, is constantly and rapidly changing. A country, which once had an immense diversity of archetypes, now struggles to define the identity of its own architecture. The Indian-ness of our architecture irradiates as much from its rural contexts as it does from its cities. It is therefore, the need of the hour for sensitive architects to venture into this richness and imbibe its virtues. The haphazard development with which the rural areas of the country are currently being afflicted need to be envisioned as a more integrated, sustainable and holistic development. Design Jatra is just a small attempt towards achieving that, one village at a time.



**Top (L-R)** The founders of Design Jatra Ar. Shardul Patil, Ar. Vinita Kaur Chiragia, Ar. Pratik Dhanmer

**Ar. Shardul Patil** is the Co-founder of Design Jatra Architects.

**Ms. Vaishnavi Patil** is a social researcher.



**Left Top** Sorting of native rice seeds post the harvest season by the tribal self-help group of Veti Murbad Village, Palghar District

**Right** An experiment with timber portal frames, made for Mohran Farms, Thane district. Picture courtesy ► Mr. Sachin Adhikari



**Left Bottom** Students of architecture at a workshop at the community seed bank in Veti Murbad Village, Palghar District



# FREEDOM SQUARE



## UNBRIDLED EXPRESSION OF THE VALUES OF A CITY

BY DE EARTH

Calicut, a quintessential port with a glorious cultural inheritance and widely known for its hospitality, has a treasure trove of unrevealed historical tales yet to be shared with the world. The city, known for its social life, boasts of many lively active public spaces like Mananchira Maidan, S.M. Street, Sarovaram Bio Park, Calicut Beach and cultural venues like Tagore Hall and Town Hall. But even as a city with a rich history, it had, for a long time, lacked built spaces which evoked any sense of history, leaving tourists and travellers to reconstruct the mediaeval splendour of the place by themselves.

The city's heritage spaces were long overdue for a facelift so that they could stay relevant with the passage of time and yet able to convey layers of its history for the new generation. Out of this shared need grew a beautiful partnership between Shri A. Pradeep K., MLA and IIA-Calicut Centre, known for its social and public initiatives. This collective movement by the people's representative in collaboration with professionals was spurred by a desire to unveil the potential of public spaces and the values embedded in society. This partnership has been exploring the true prospects of design in every facet of life from birth to death, right from Ammathottatil, anganavadi, primary schools, schools, streets, bus stops, hospitals, parks, old age shelters and crematoriums. One such initiative, Freedom Square, stands as a testimony of the rich past and of the aspiring future. The multi-disciplinary firm De earth was entrusted the conceptualisation and design of Freedom Square on behalf of IIA-Calicut Centre.

## THE PAST

Kozhikode, land of the Zamorins, is an abode of historic tales, trade and truth. Rich in art, culture and cuisine, this legendary city has welcomed people from all parts of the world, a glimpse of which is offered through the history walk.

Most of Kozhikottukar or people of Calicut who grew up in the city have childhood memories woven together with the waves, the wind and the familiar sight of dilapidated piers. Dashing into the waves, frolicking on the beach, we only had to look up from our play to see the long piers stretching into the sea. The waves relentlessly rolling on, crowds wavering, times changing and through it all, the piers simply stood in their raw barren beauty, with waves of change relentlessly lashing against their pillars.

The old Beach Stage—once stood where the Freedom Square is situated now—hosted many historical events and personalities. The Beach Stage was the most prominent and largest venue for cultural programmes and political conventions in the region. The ageing structure of this stage, reminiscent of the past was now sinking and dilapidating.

Kozhikode shore has been a witness to many historic events, including pitched naval battles and the arrival of ships from distant lands. Several national leaders like Mahatma Gandhi, Khan Abdul Ghaffar Khan, Indira Gandhi and Krishna Menon have addressed the public on this beach. The road running past this beach, originally called Evan's Road, was renamed as Gandhi Road after

Mahatma Gandhi's visit in January 1934. The remains of the port and the trading culture can still be seen in the form of two dilapidated piers extending into the sea—the North and the South Pier. The pier near the stage was originally of the iron-screw type in the north, built in 1871. It was 400 ft long (120 m) with a T-end. Numerous cranes on these piers once loaded spices and other goods destined for foreign ports like Aden, Genoa, Oslo, London, Bremen, Hamburg, New York, etc.

On May 12, 1936, at the peak of the nationalist movement, satyagrahis assembled at this historic beach under the leadership of Mohammad Abdurahiman to break the Salt Laws, and were ruthlessly attacked by the British police who injured more than thirty people. P. Krishna Pillai and R.V. Sharma proudly defended the national flag from forcible seizure. Freedom Square commemorates this heroic fight and all other historic movements for the liberation of our nation that were staged here. Unfortunately, this stretch of space had no landmarks or built space evoking a sense of the historical significance of the place, and hence, Freedom Square.

## WHOLENESS

This project was conceptualized and realized through its design as an integrated solution: a multi-functional space which could revitalize the entire stretch of the beach as a nodal point, not only from the perspective of public life but also for tourists of history and also for the leisurely travellers as well as the citizens themselves.

The existing stage has been attentively carved to be a multifunctional space, diverging the performance stages with a symbolic spine into the sea creating positive spaces. The built area subtly evokes a sense of the multi-culturalism of Calicut and its openness to new ideas. The large main stage facing south is designed for political events and other large gatherings. The northern stage is for cultural events, and the central walk radiating from the space is designed as a reminiscence of Calicut's history, with a walking gallery which narrates historical events engraved on curated plates. A curio shop will sell artefacts and collectibles relevant to the region, while the state-of-the-art green rooms will be used in conjunction with the performance areas. Abstract wall sculptures depicting the historic Salt Satyagraha arouses historical memories and points towards the invisible roots of our city. The place created has become an identity for the city for ages to come.

## VERSATILITY

The cultural versatility of Calicut has been thoughtfully incorporated into the design. Freedom Square itself responds to seasons, time, function and users. The space is equally open to political and cultural events of various scales. It also acts as a meeting place, a striking photo destination, an urban gym and more.

# FREEDOM SQUARE

On 23 May 1936, Nationalist movement men to post and telegraphist assembled  
at the historic grounds of Calicut under the leadership of  
Mahatma Gandhi to launch the Salt March.  
were undoubtedly attracted by the British police trying to stop them from going  
to the beach. That day, the British police tried to stop them from going to the beach.

"Freedom Square" commemorates the historic fight and all other  
historic movements for freedom  
and liberation of our nation that were inspired by

Freedom Square is the heart of the nation's freedom struggle.

It is a place of culture and history.  
This legendary city has been witness to the birth of a nation.  
The History Walk offers a glimpse through the glorious past.

"Freedom Square"

Inspired by  
Sir P. V. Narayana Murthy  
The National Museum of Kerala

20th January 2018

Project initiated under NCL's Special Development Fund  
Sri A. P. J. Abdul Kalam  
New NCL's Freedom Square







## സാമൂഹ്യ ചിന്താ

മനുഷ്യൻ ഒരു ജീവിതം നയിക്കുന്നതിന് വേണ്ടി അനേകം കാര്യങ്ങൾ ചെയ്യേണ്ടിവരുന്നു. ഇതിൽ അദ്ദേഹത്തിന് തന്റെ ജീവിതത്തിൽ ഉൾപ്പെട്ടവരുമായി ബന്ധപ്പെടേണ്ടിവരുന്നു. ഈ ബന്ധം നല്ലതായിരിക്കണം. അല്ലെങ്കിൽ മനുഷ്യൻ ജീവിക്കാൻ കഴിയില്ല. അതിനാൽ മനുഷ്യൻ തന്റെ ജീവിതത്തിൽ ഉൾപ്പെട്ടവരുമായി ബന്ധപ്പെടേണ്ടിവരുന്നു. ഈ ബന്ധം നല്ലതായിരിക്കണം. അല്ലെങ്കിൽ മനുഷ്യൻ ജീവിക്കാൻ കഴിയില്ല.

മനുഷ്യൻ ഒരു ജീവിതം നയിക്കുന്നതിന് വേണ്ടി അനേകം കാര്യങ്ങൾ ചെയ്യേണ്ടിവരുന്നു. ഇതിൽ അദ്ദേഹത്തിന് തന്റെ ജീവിതത്തിൽ ഉൾപ്പെട്ടവരുമായി ബന്ധപ്പെടേണ്ടിവരുന്നു. ഈ ബന്ധം നല്ലതായിരിക്കണം. അല്ലെങ്കിൽ മനുഷ്യൻ ജീവിക്കാൻ കഴിയില്ല.

മുഖ്യമന്ത്രി  
ശ്രീ. പി. വി. വർഗ്ഗീസ്

എ. കെ. അബ്ദുൾ ഖാദർ

എ. കെ. അബ്ദുൾ ഖാദർ

എ. കെ. അബ്ദുൾ ഖാദർ



In the gentle morning light, the space opens up inner vistas of freedom, openness and possibilities in the minds of people strolling along the path. The poignant evening light adds a subtle depth to the space. The idea of optimal lighting that accentuates the freestanding walls add to the aesthetics as well as the functionality of the place as the people stroll through the beach till the wee hours of the night. Locally sourced natural materials add a contextual charm. They not only bring in an unaffected rustic charm but also withstand the harsh sea weather, aging gracefully. Freedom Square along with the light house and cultural beach, welcomes heritage walks that will raise historical awareness and invites and integrates people to support preservation and conservation of historical monuments.

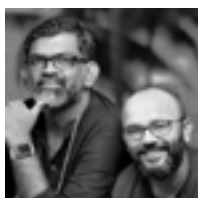
### TOWARDS A DESIGN-INSPIRED CITY

IIA Calicut Centre along with the leadership of the local government and bureaucrats could carve out a series of public spaces through thoughtful design with the vision of inspiring a new generation of sensitive citizens. Freedom Square is one such space of learning, sharing, caring, one which will foster higher civic sense and create an everlasting identity for a city. It is a space of togetherness, of celebration, of nostalgia and of immense pride. A garden for art, music, literature and culture to thrive, Freedom Square gives bountifully to the society of Calicut. Simply put, a space designed to raise the happiness quotient of the land, and to give it an identity and pride it deserves.

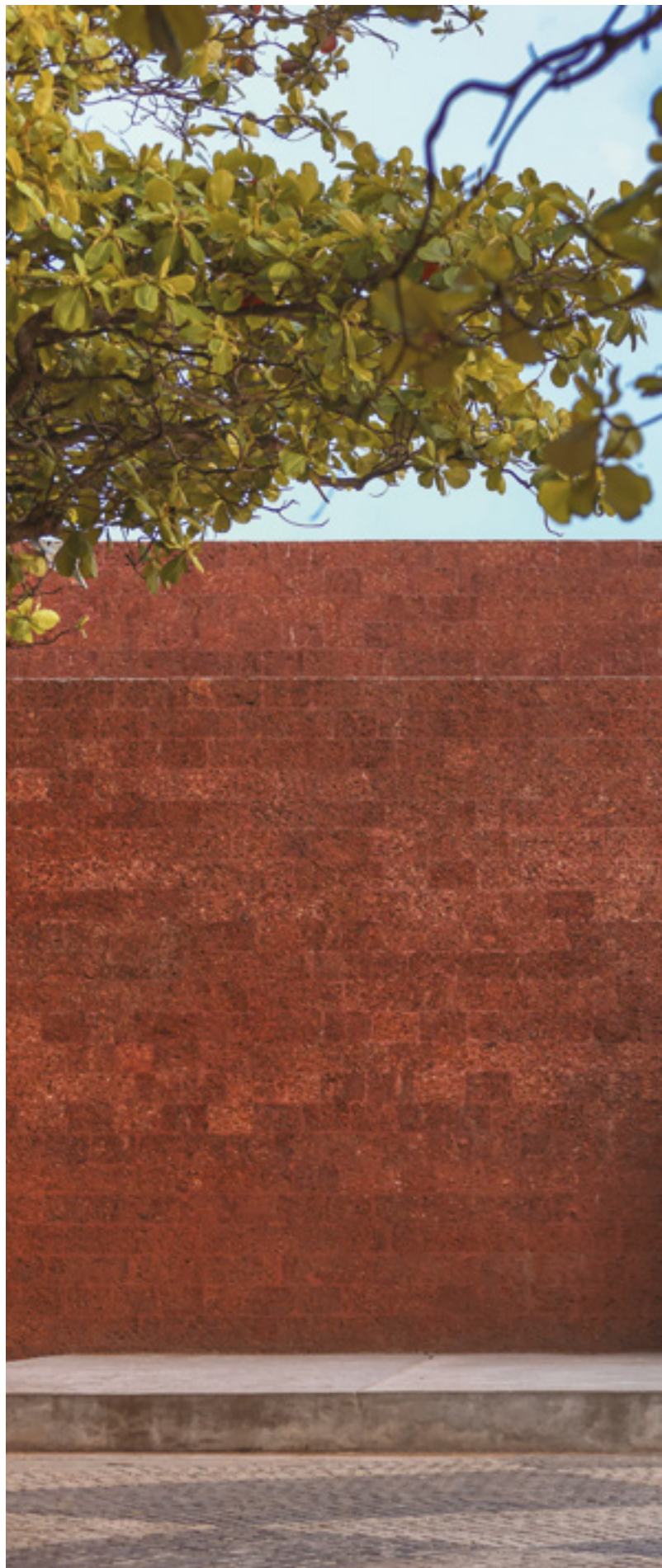
### BEYOND THE IMAGERY

Monolith sculptures enhanced by the light house in the backdrop, stand upright as symbol of Calicut's historical resistance to domination. The walkway through these monoliths has possibilities of deep personal inner awakenings as well as awakening of civic and public identity. One can only try to capture in words the ethereal feeling of walking through the monoliths inviting us to see beyond what is visible. As one walks, glimpses of the blue-grey emerge, saltiness of air intensifies, gentle music of waves rolling as though from one's own forgotten memory awakens the senses and then the vast, vast openness of sea envelopes your being completely. At such blissful moments, the space can even act as a place on this earth offering a tiny glimpse of eternity.

Freedom Square is a standing testimony of the endless potential of architecture and urban inserts, in inspiring a better life filled with love, respect and pride.



**Ar Vivek P P** and **Ar Nishan M**, co founded de earth, a multidisciplinary practice based at Calicut, Kerala known for their socially, culturally and contextually relevant designs. De Earth has a wide variety of projects from residences, restaurants, hotels, hospitals & housing to urban design, all over india. De Earth's practice has been constantly looking into the various potentials of re inventing the vernacular to create soulful spaces, meeting the contemporary needs.



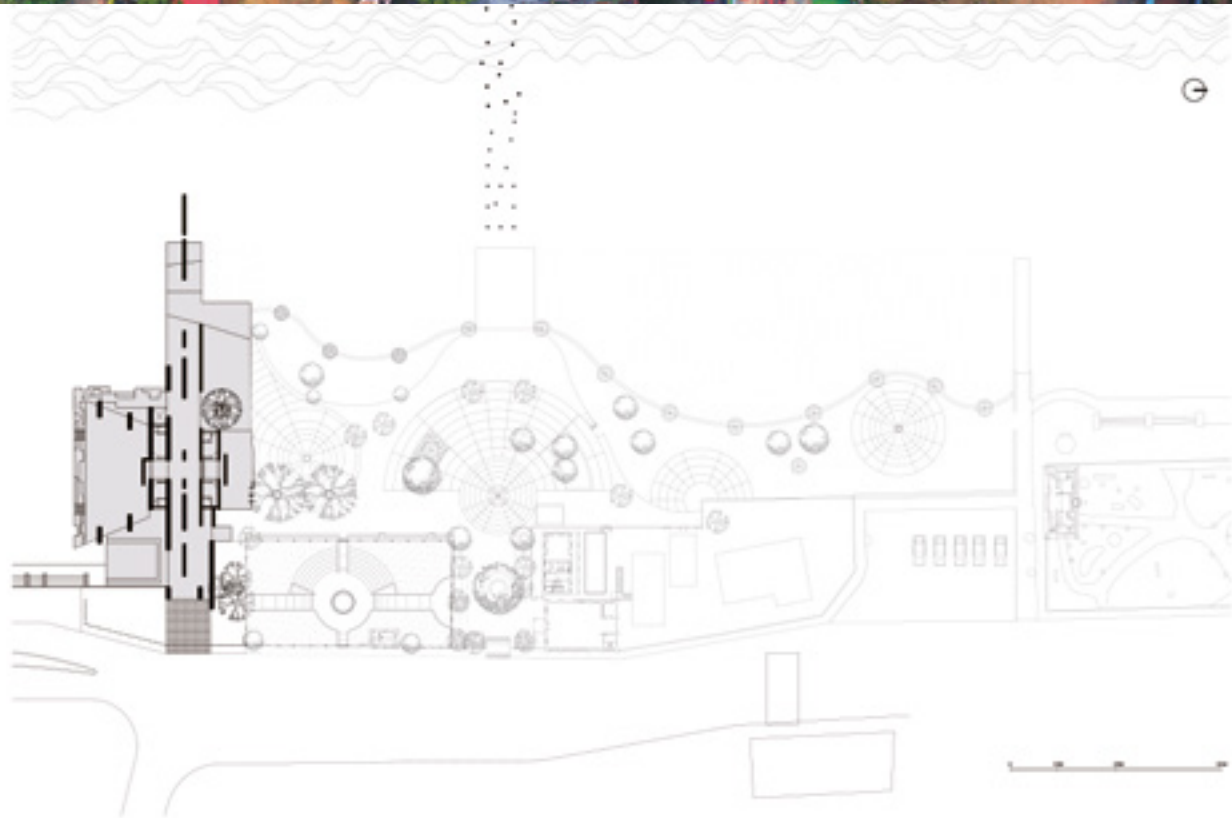












**Information** ► **Project Name** Freedom Square ◦ **Project location** Calicut, Kerala, India ◦ **Architecture Firm** De earth ◦ **Firm Location** Calicut, Kerala, India ◦ **Total Floor Area** 3366.61 sq m, 36237.88 sq ft ◦ **Completion Year** 2020 ◦ **Contact** support@deearth.com [www.deearth.com](http://www.deearth.com) • **Additional Credits** ► **Design Team** Ar. Vivek PP, Ar. Nishan M, Ar. Chinnu. Ar. Anamika. Ar. Shahim, Ar. Avani, Yadu Pradeep ◦ **Clients** Govt. of Kerala ◦ **Project Contractor** ULCCS ◦ **Landscape** De earth ◦ **Consultants** De earth ◦ **Lighting Consultant** Anusha Vivek, Kiara Lighting ◦ **Photography** Prashant Mohan, Hamdan Muhammed ◦ **Funded By** MLA Special Development fund



# RESIDENCE DESIGN



# THE NAKED VAULT

Designed by New Garage Architecture

## Introduction

The Vault House occupies a tight location in a densely populated region of east of Jaipur, the capital city of Rajasthan. A significant volume of this area is surrounded by the Aravalli Mountains. The design brief was simple: it was to add a floor, similar to the lower one, with two bedrooms, toilets and a dry store, complete with basic interiors. But, during the design process, it was realised that this place could go beyond being just an extension. This led to the emergence of the Naked Vault Space Lounge, and the challenges that came with it.

Jaipur is famous for its eighteenth-century town planning and Indo-Saracenic architecture, the fabric of which is seen to live on till today, even though it may seem to have failed to cope with the aggressive surge of development. The new realm of architecture disregards the context of the old city and the climate, and sets its own scale of the so-called 'international' standards. These cause us to lose the traditional art and architecture and the dexterous skills of old masons. In the face of such chaos, we wanted to re-introduce history through vernacular and thermally comfortable elements, through old but cost-effective construction techniques which involved masons who were experts at these traditional crafts of a bygone age. This brought us to a 70-year-old contractor with his old but skilled masons, and the Naked Vault in bricks from there came into play.

## Design Process

The vacant space sits over the 40-year-old house, 7.5 x 15 m in size. This complements the envelope without changing the original floor below. With the emphasis on thermal comfort, optimum natural light and ethereal sensibilities, the vault came into the design process. The space accommodates an entrance foyer, living-and-study and a bedroom with a toilet. The layout sits as an island flanked with terraces on both, the east and west-facing facades. While the living space is placed at south-east corner with low solar radiation quotient, the bedroom is at the south-west corner with louvered fenestrations. A three-decade-old peepal tree shades the south-western side and deflects the low altitude solar radiation. Its huge foliage and deep shadow during the setting sun shades the terraces and the space within. This makes the structure thermally comfortable during the afternoon hours when it is in maximum use. Louvered wooden windows augment the effect in spite of limited breeze and moving shadows. Three terraces add to the element of visual interaction with the neighbourhood.

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## Statements of Sustainability

The Art of Vernacular  
Structural Engineering:  
The Progress of the Vault

The role played by engineering has contributed to the creative discipline of architecture. It has helped by re-writing and innovating vernacular forms to fit in contemporary space and time. Through the ages, circular built forms such as arches, vaults and domes have been taken as representations of the earth and sky. With the development of R.C.C. and tensile and steel structures, time-consuming vaults were kept aside due to the demands of speedy construction and of diminishing skilled labour. Our design intended to explore these forgotten skills.

The structure is load-bearing and crowned with a longitudinal segmental barrel vault in exposed brick which is locally available and recyclable. The header is laid orthogonally till the abutment. Cow dung scaffolding and mud plaster control the thermal and economics quotients.

## Bricks controlling the Thermal Comfort Quotient

### The Walls

The load-bearing structure is made with hollow brick piers which are 0.6 x 0.6 m. Thick walls act as a strong buffer against the harsh setting sun's insolation.

### The Vault

The compressed stabilised earth blocks create an effective retardation for the movement of heat and hot wave currents during the month of June. Terracing with cow dung and mud plaster and finishing with white terrazzo have enhanced the insulation performance.

Left Lounge attached  
to winter terrace





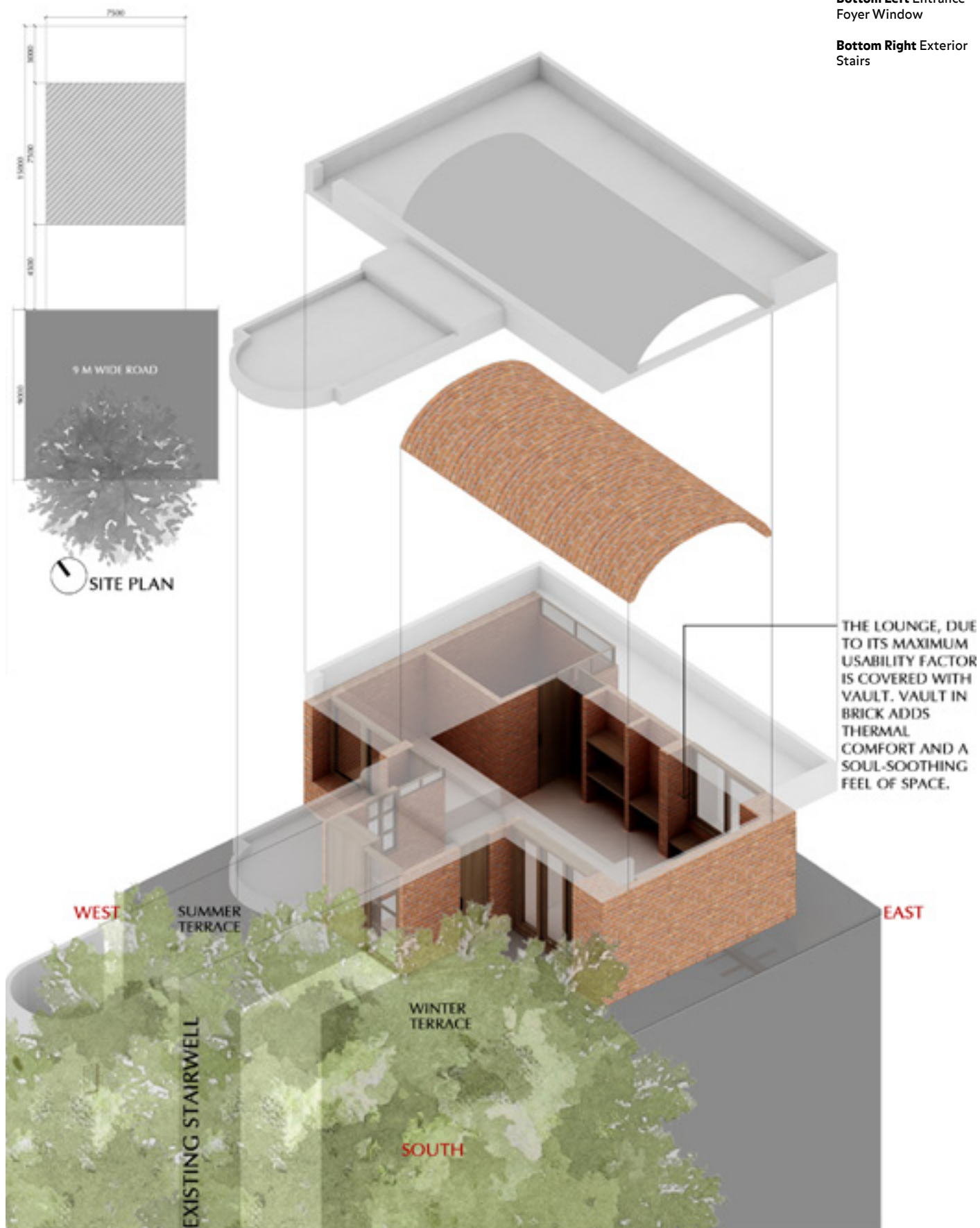
Entrance Foyer  
Window

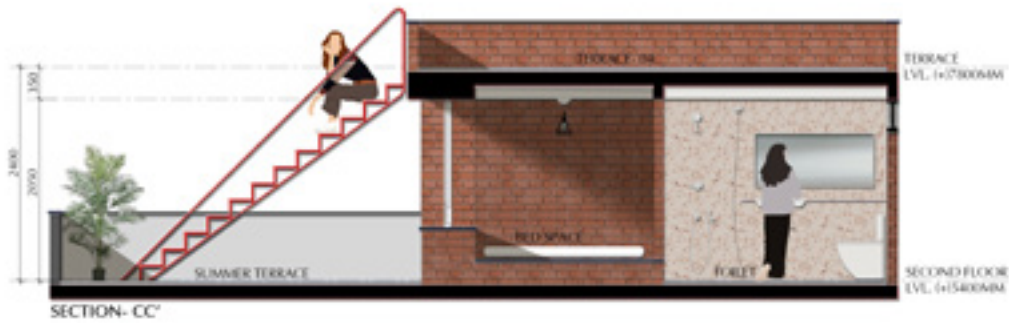
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**Top** Summer Terrace  
and giant 'Peepal' tree

**Bottom Left** Entrance  
Foyer Window

**Bottom Right** Exterior  
Stairs





4/20 THE VAULT HOUSE  
JAPUR, RAJASTHAN  
SECTIONS



3/20 THE VAULT HOUSE  
JAPUR, RAJASTHAN  
SECTIONS

Entrance Foyer



**Photographs By**  
Prashant Vishwanathan  
& Saahil Khatri

**New Garage Architecture**  
Malaviya Nagar, Jaipur  
[www.newgarage.in](http://www.newgarage.in)



# PHOTO ESSAY HERITAGE OF THE BUILT ENVIRONMENT OF GOA A PALIMSEST

By Ar. Maanasi Hattangadi

The unique cultural, urban, artistic and social landscape of Goa has evolved as a kaleidoscopic narrative. It has witnessed and grown under the reigns of the Kadamba dynasty, the Vijayanagara empire, the Bahmani Sultanate, the Bijapur Sultanate and the Portuguese until 1961.

India's smallest state, Goa, has fostered human occupation that can be evidenced back to at least the Lower Palaeolithic Age. Though the influences of each period cannot be formally consolidated and presented in distinct regions, they are found ubiquitously in the architecture across Goa in a trans-cultural, heterogeneous landscape. Temple complexes, palacios of European noblemen, churches (many of which are now designated as world heritage sites), forts and civic buildings (now restored and open to functioning with new programmes). Old Latin quarters, the hinterland villages, local crafts and skills such as kaavi mural art are intrinsically a part of the built environment.

Modern buildings by contemporary architects such as Charles Correa and Achyut Kanvinde also constitutes heritage in Goa. This region, abutted by the western ghats and the Arabian Sea, with all its geographical diversity and a unique urban system, historical stratifications and multiplicity of styles, the buildings all maintain their architectural and aesthetic qualities and bear an independent yet syncretic identity.



**Ar. Maanasi Hattangadi** is the partner of the Goa-based firm Studio Matter since 2014. She has led the editorial at the Indian Architect & Builder magazine for five years and also works as an independent writer in several cross-disciplinary publications. She has also taught as a visiting faculty at NITTE School of Architecture.











**Top** Namazgah Masjid  
**Bottom** Ruins of a Jain Temple, Kudnem





**Top** Ruins of a Jain Temple, Narora  
**Bottom** Pandava Caves, Margao







**Left Page** Capela da Nossa Senhora do Monte

**This Page** Fontainhas, an old Latin quarter in Panjim









Prehistoric rock  
engravings:  
Petroglyphs





BOOK  
REVIEWWANDERINGS &  
PONDERINGS  
BY SHIRISH BERI

Review by Ar. Manguesh R. Prabhugaonker

The life-journey of architect-author, Shirish Beri, spread across fifty illustrious years of professional experience reflects five key dimensions of his life, which are his heart's true calling which show his evolving understanding of the world.

Oneness and empathy with nature, compassion for everyone, simplicity with sayyam or restraint, honesty and truthful living, silence and solitude have been an integral part of his wanderings, irrespective of any conditioning or identification with any country, religion, region, language, age, gender or species.

"Being one and being myself, beyond the profession of architecture," narrates tangible and intangible experiences of his life's journey with inclusivity and inter-connections to the integrative wholeness of life.

While wandering and pondering with a sketch book from lazy park benches to an architectural, inspirational heritage of the past, as a young architect, Shirish Beri has expressed both graphically and through his critical writing, an amazing part of the life journey. One that involves his many solitary days at different retreats in the lap of nature, which connects architects with universal energy, nature to the society and to oneself.

A spectrum of illustrations ranging from Alhambra to Fatehpur Sikri, moments of travel captured during train and bus journeys across human settlements opens

up new thought-provoking dialogues between architecture and organic lanes, streets and plazas, all the while savouring the vistas, surprises and spontaneity.

If one goes by the graphical sketches by the author, a student of architecture or an architect may just glance it as a visual art collection, but if one reviews them deeply, the analytical findings depicted in the writings are far beyond just sketches. On the one hand, when architecture has to experience stereo-typed norms of social behaviour with the prevailing fatty degeneration of its conscience, the book reflects avenues on how humane, beautiful and constructive creations are in the realm of various arts, architecture and literature, and how they can make a difference to our profession of architecture and planning.

Some of the sketches of fascinating temples, churches and mosques reflect the symbols of another form of the dominating religious powers, in equity and injustice along with exemplification of the un-sustainable and egoistic over-consumption of the royal families and the elite. This also narrates a critical part of the historic past with various architectural elements and social divides caused through the use of natural resources which were instrumental in keeping people apart and inducing hatred and intolerance. The presence of these observations by the author brings forth the need for transformation in the social fabric of our society.



The design process in today's pseudo-centric, cosmetic architectural world needs to pause and review the wanderings and ponderings, which not only respond to socio-cultural norms, politics, finance, materials, technology and even micro-climate. The stories of travel have unique expressions of security, grandeur, luxury, power, simplicity, sustainability, art, community and many more. These, I am sure, will touch the inner, universal chord in many architects' works that are practiced in the country, especially while analytically reading today's modern architectural spaces.

His writings underline the overall social norms, behaviour and creations, all ranging from anger, frustration, sadness and the desire to change all of that through pacifist tolerance, acceptance and even appreciation.

The author has touched upon a very sensitive point of nature, through his sketches, on the use of advanced modern technology to enrich and replenish, instead of changing our ways and adjusting with it. Taking a note of the pandemic situation of 2020, he highlights the fact that though nature can do without us, we cannot do without nature. This itself speaks of the author's design approach towards architecture through the writings in this book.

The sketch-pad, the pencil and the author with his abilities of being able to capture the intangible and immeasurable in society and nature helps architects realise the need to listen to what different places have to say to them, and to address this context through design ideas and concepts, with both sketches and writings.

The book also touches upon the sufferings of several workers who were forced to work on mammoth constructions. Due weightage is also given to skilful craftsmen who are depicted in the sketches down memory lane among various communities.

The concepts of search, travel, society, people, nature, being one, being myself— have been well-pictured. The importance of the framework of architectural education in the country has been mentioned, which needs to make its way forward with the review of design processes in architecture and planning.

The author, while sketching, states that his journeys were not meant to escape daily life, but rather to immerse oneself deeper into life's journeys. I am sure that the direction for the way forward is the message from the author to the readers. 'Wanderings and Ponderings' contributes towards understanding and exploring the reliance of the quality of our outer physical space to the quality of inner psychological space through his numerous path-breaking architectural designs in his tangible, measurable projects. Through his sketches and writings, he is constantly and intensely aware of the importance of the intangible, immeasurable values that are embodied as well as expressed by them.

His search for wholeness in life initiated these wanderings and ponderings, those silent pauses and also the frenzied action, which together simultaneously contribute to his life as an architect and as a good human being who always maintains that life will always be a continuous, amazing journey for him, an unending learning experience.

'Wanderings and Ponderings' is worth a read and introspection, and good for re-visiting several times to increase architectural vocabulary and to understand emerging trends in architecture and planning with inclusivity. After fifty years of experience, the author's processes of thinking, understanding, responding and experimenting continue through his ever-evolving sketches and writings.

The book is available on [www.shirishberi.com/book](http://www.shirishberi.com/book) for Rs. 1,050



**Shirish Beri**

Born in November 1950, Shirish Beri graduated in architecture from School of Architecture (CEPT), Ahmedabad in Jan 1974. His works, which tend to reflect his values and concerns in life have been bearing their distinct mark on modern Indian architecture since 1975. They strive to address his life concerns of man moving further away from nature, from his fellow human beings and from his own self.



**Mangesh R Prabhugaonker**

Architect, B.Arch., landscape arch (Spa, New Delhi), FIIA, FISOLA, AIID

National Council member  
Indian Institute of Architects  
(IIA)





# SKETCHES STREETSCAPES BY AR.SANJEEV JOSHI

Of late, I have been using my hobby of sketching as a form of art. I wear my artist's hat when I travel to places to sketch. On architectural study tours, it was a dual hat of both, an architect and an artist. I enjoy sketching in all mediums: pencil, ink, pens, crayons, calligraphy pens and watercolours, but acrylic paint is my personal favourite.

Sketching has given me much more than just technical knowledge and support. I have been able to make many friendships through my art. It has given me a new identity too: I feel liberated when I sketch, almost like meditation, as a stress buster. Sketching is a part of my life now.











# URBANISING THE INDIAN COASTLINE AND PUBLIC SPACE: A PERSPECTIVE



By Ar. Anup Gadgil

**Left** Marinelines in Mumbai photographed by Abhishek Fodikar

The Indian coastline measures around 5400 km along its mainland and nearly 2000 km of island territories. The nine states of Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha and West Bengal, along with the Lakshadweep and Andaman Nicobar Islands make up the Indian coastline. Some of the most vibrant towns and cities of India are located along her coast—be it large cities like Mumbai and Chennai or small towns like Porbandar, Panaji and Pondicherry—they all have their unique coastlines. One-fifth of India's population lives along the coast and it is envisaged that this will at least double by 2060.

While there is a lot to study and research with respect to the ecology and the impact of urbanisation of the coasts on their environment, this article will focus on the public spaces in coastal settlements, the transformations envisaged and the role of architects and urban designers in sustaining these transformations.

The 3.6 km-long promenade of Marine Drive in Mumbai, the 6 km-long promenade along the Marina Beach in Chennai, the nearly 2 km-long Marine Drive of Kochi and the 6 km-long Panjim Promenade along the D.B. Road in Panaji are some examples of good public space along the coastal waterfront in India. What then could be said to be the qualities of a 'good' coastal waterfront public space?

Studying the above examples, one could conclude that a good waterfront public space should be inclusive and open to all, should have access to water—both visual and physical, wherever possible. It should be built using robust materials which can withstand harsh coastal environments and offer a variety of activities to cater to the needs of different user groups, both on its land-wards edge and along the water-edge.

**Ar. Anup Gadgil** graduated from the Goa College of Architecture and went on to pursue his Masters in Urban Design from the School of Planning and Architecture, New Delhi. Born and brought up in the city of Panaji, he is a keen observer of the evolving dynamics of the city as a public space. He is currently a practising architect and a visiting faculty at the Goa College of Architecture.



We will now walk through one such promenade to understand it better. The case in point is the Panjim Promenade in the city that I live and work in. Dotted all along the D.B. Road, between the edge of the road and the River Mandovi, are a series of spaces for activities that allow participation and engagement of many of the city dwellers. This Promenade has been taking shape slowly and steadily over the last 200 years, since the city began, and has grown into becoming one of the most inclusive public spaces for the city of Panaji.

The drama along the promenade unfolds from sunrise to sunset and beyond...making it one of the most versatile and active parts of the city through the day. Visiting tourists, children, arts and craft enthusiasts, music and dance lovers, sports-persons and health freaks, young and old alike participate in this drama along the promenade at some point or the other in time. Dotted along the promenade are varied activities, starting from the Santa Monica jetty which is predominantly used by tourists. Beyond the Santa Monica jetty, one is sure to spot a fishing enthusiast angling happily while watching life go by along the river, reinforcing the Goan ethos. The office of the Captain of Port is also located along the promenade. The area is currently used as an entry and exit point for off-shore casinos and other tourist vessels. It was at one point also a place for docking of the Bombay-Goa ferry service. Beyond the Captain of Ports jetty is the only riverfront restaurant along the entire stretch, known as Quarterdeck, which is an excellent place to chill out with a picturesque view of the river and the hillocks beyond.

Beyond the Betim Panjim ferry jetty, the scene along the Promenade changes drastically. Seasonal markets, festival bazars, the arts and crafts are all on display here throughout the year, and a spectacle not to be





**Top** Chennai, Tamil Nadu

missed is the Carnival Parade. Beyond these are a series of parks and playgrounds, beginning with the art park, children's park, the forest department nursery and Kala Academy, one of the finest buildings of the world designed by the world-renowned architect, Padmashri Charles Correa. The coming together of the football ground, Panaji Gymkhana for cricket, the multipurpose sports ground of the Sports Authority of Goa and the indoor sports complex and swimming pool are a treat to any sports lover. The parks and playgrounds together form the largest open green space of the city.

The Promenade then dwells through a brief stretch edged by built-forms on either side, which create a visual contrast and help in appreciating the openness offered by Panjim's most cherished Miramar Beach.

Having reviewed some of the qualities of a good waterfront public space, we now come to the second part of the essay: the transformations emerging along the Indian coastline. The two 'Ts'—Trade and Tourism, are emerging as major forces that are bringing about drastic transformations and causing urbanisation of our coasts. We currently have around 187 major and minor ports and harbours along the 7400 km stretch of the coastline, along which lie thirteen major ports. Large linear connectivity corridors are being built to facilitate movement of goods and people along the coastal areas. This in turn

**Right Top** Panaji, Goa  
**Right Bottom** Marine Lines, Mumbai

is opening up more and more previously uncharted territories to tourism and trade. And this, in its turn, is urbanising many coastal villages and transforming small towns. The concern here is the tendency towards privatisation of the coastline for the purpose of both trade and tourism, which is creating a hindrance to both visual and physical accessibility to water. We need to ensure that a right balance is achieved between space requirements for trade and tourism-related activities and the creation of a 'good' public space. The two go hand-in-hand—a holistic approach towards waterfront development which is accessible to all encourages harmonious and sustainable living in coastal settlements.

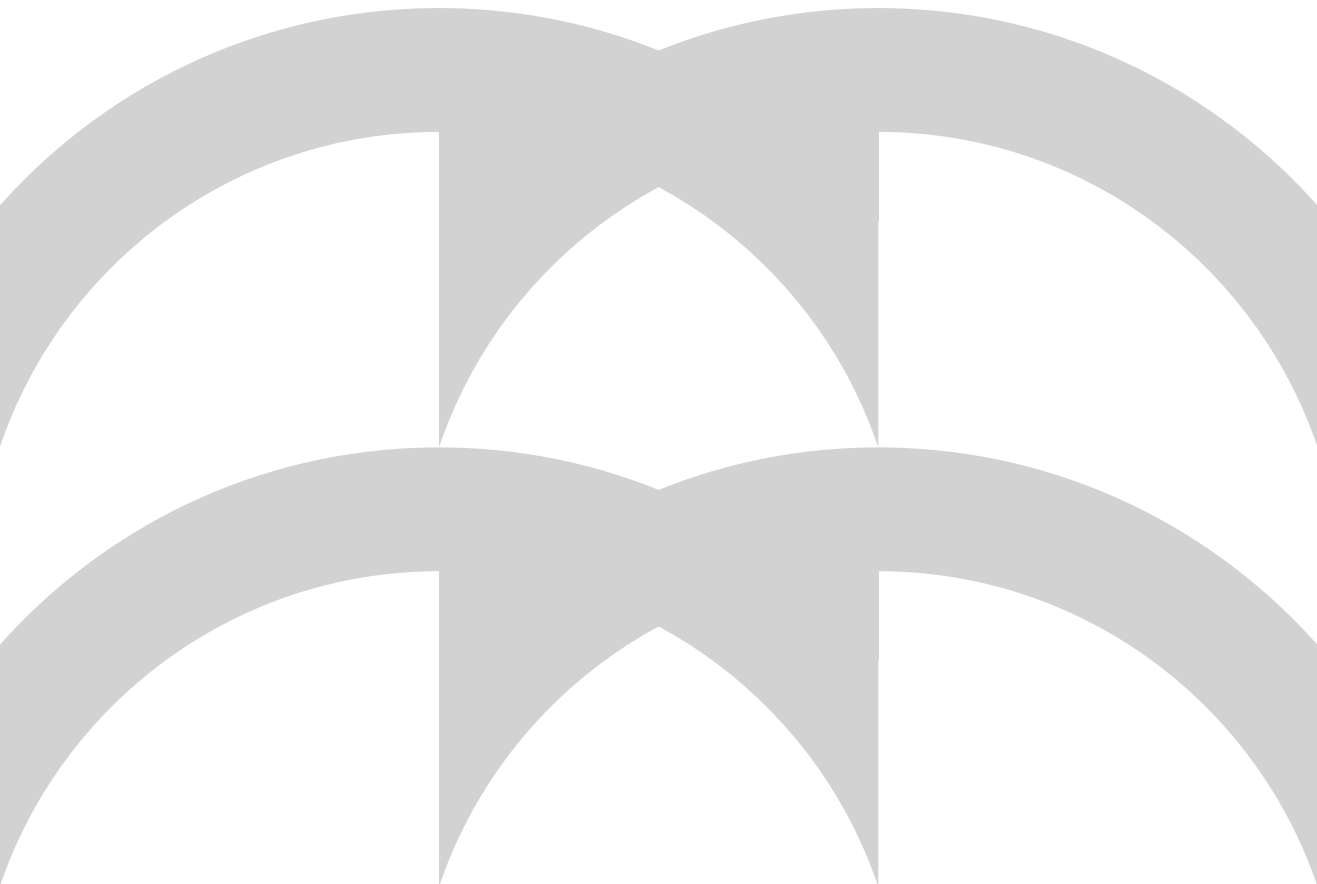
In these changing landscapes, the role of a space designer assumes significance. We as architects and urban designers would find ourselves engaged in many of the projects that are to come up in these coastal settlements. It will be upon us to ensure that we strike the right balance between public good and clients' needs. It is time we start working towards a public space, making vision documents along with a coordinated and continued research and documentation of our coastal settlements, which will allow us to frame place-specific public space policies for transforming our coastal settlements, with the hope of having many more promenades and lively public spaces that are inclusive and robust, where the drama of life can unfold!





# NEW LANDSCAPE URBANISM FOR CITIES

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From combating climate-change challenges, restoring eroded seafronts, managing storm-water to prevent flooding, helping replenish the fast-diminishing ground water, protecting and regenerating the planets biodiversity—it is only with the help of a new landscape design paradigm that these problems can be addressed across our urban centres.

**Akash Hingorani and Sujata Hingorani**  
*Oasis Designs Inc.*



Strategic plan for eco-restoration of Coimbatore lakefronts

Eco-Restoration of 8 Lakes Under Coimbatore Smart City proposal Phase-1

## GREEN INFRASTRUCTURE

The green infrastructure approach is becoming increasingly important as urbanization grows. Rapid development degrades the landscape ecology, and now it has become imperative to think of how the planet shall sustain. It is time to rethink the conventional grey infrastructure approach and looking at finding opportunities to create a place for nature in our cities.

The eco-restoration of eight lakes as part of the Smart City projects in Coimbatore, encompasses this approach and aims at the creation of cross-sectoral solutions for the city to re-align itself, and to protect, conserve and celebrate its rich cultural heritage and help tackle problems of sewage pollution.

As a result, these sewage-carrying, debris-ridden lakes are getting transformed into the city's new 'public realm' and the attempt to harness eco-system services help the city become more sustainable and liveable for the future. The lake system built by the Cholas over 1200 years ago, was an intricate inter-connected system: water flowing into the Noyyal Valley from the surrounding hills of Western Ghats is first intercepted by these lakes. Its overflows then feed subsequent lakes, before finally connecting to the river. The Coimbatore Smart City Plan lists out eight lakes situated north of the Noyyal River valley, which are fed by canals from overflow weirs constructed on River Noyyal and storm-water streams originating in

the Western Ghats situated further north of the Noyyal basin. Making connections by identifying and working on the missing links, the eight lakes project for Coimbatore Smart city focusses on three areas: Water linkages; Green linkages; and walking and cycling linkages.

Public open spaces define the quality of life, and is an extremely critical component in high density urban centres. Apart from contributing to mental health issues, access to high quality common public realm contributes to creating more equitable and cohesive communities. Access to free play areas, public waterfront promenades, safe pedestrian-friendly streets, is what defines a good city.

Public open spaces should not be left-over spaces in cities or townships, but should be carved out at the planning stage itself. This gives way to a network of open spaces that enrich the urban environment and help preserve urban ecology. Similar initiation was taken up while developing the TOD Masterplan for the 69 km-long Mumbai suburban rail corridor which focused on detailed design plans for three greenfield stations— Nighu, Narivali and Nilaje stations in collaboration with Ernst & Young. The project was taken up for the World Bank. The network of open spaces that was developed, interconnected the greens along corridors required for the high-tension lines, road edge buffers and the green buffers planned along water streams, creating an entire system of 'green-blue' network. Apart from ecological services, these greens shall help provide pedestrian and NMT connections to complement the proposed greens.





View of Coimbatore lakefront development

Under the Mega Streets Program, a similar approach was undertaken in the North Chennai precinct, where plans have been developed to convert all the challenges into opportunities which aimed to leapfrog urban redevelopment in this area to create a new sustainable walkable community. The project leveraged the newly constructed metro accessibility and envisioned to redesign the public area from streets to open spaces and create a visitor's paradise. A seafront promenade was also designed as a destination public space.

With modern high-quality mass-transit options being built in all our cities, there is also a need to invest in a corresponding 'transit-culture' that celebrates this new way of people commuting and travelling around. Pedestrian plazas at metro stations, multi-modal integration allowing seamless modal connections; be it by bus or para transit, all become part of the new public-realm design for the city. Multi-modal integration at Chattarpur Metro Station was one such project that celebrates the transit culture and enables a convenient, modern, safe and universally accessible, barrier-free environment for people to connect to different modes of transport like the public buses, feeder buses, non-motorized transportation and other para-transit modes. Conscious efforts were made to encourage better connectivity to and from the metro stations and hopefully help convert a lot of small vehicular trips to more sustainable modes. Special care was also taken to design the entire facility as a 'pedestrian-first' zone both in terms of climate comfort, shade, etc.

A place-making approach that aims at focusing on creating vibrant public spaces by transforming unused, wasted, un-programmed space for the city is essential. This, combined with an innovative approach to creating new attractions—be it a waste-to-wonder park, or re-purposing prefabricated structures—helps to do 'more with less'. Developing spaces underneath flyovers in Coimbatore near Valankulam Lake was one such approach which showcased how unused, wasted and un-programmed space can be re-purposed, and can be developed as a new attraction in the city.

Open space is something that is not missed—till it's once created. Once a new open space or a public realm is created with host of activities, it becomes so integral to the lifestyle of the place that it is difficult to imagine the place without it. All such spaces created in our dense urban centres soon become popular with morning-walkers, nature enthusiasts, birding groups, fitness groups, and develop a self-help mechanism to keep themselves active, clean, and fiercely protected by resident groups. The challenge is to first identify the opportunities and create the basic infrastructure to catalyse all derelict spaces in the city to become vibrant active public spaces.

Oasis Design Inc manifested this approach in the design of J.M. Road and F.C. Road in Pune, which were designated as one-way streets. These streets offered great potential and possibility of reclaiming space along the road and repositioning them as destination public spaces on the lines of Orchard Road, Singapore. The roads were designed to create cycle tracks and wide pedestrian plaza spaces to



Before and after images of spaces underneath a flyover bridge in Coimbatore

allow people to walk around safely. Each street was being treated as a public open space that integrates all the public land-uses adjoining the street, whether it is a park, religious plaza, destination places, landmark buildings, heritage objects, retail shops, or any other, to create a cohesive, all-inclusive and connected public realm for the city.

Health is not only physical but also encompasses mental health issues. Public open spaces where one can see other people and also be seen is extremely critical for high density neighbourhoods. The view of open expanse, vista views, proximity to water, plants, butterflies are all valued natural assets of the new habitats we create.

A new systems approach that allows the landscape design to incorporate all the hues of a public open space—be it around transit, or around natural easements—railways, HT lines, drains, etc., to create a connected green-blue network that should underpin all the different urban development in the city.

One such attempt was made while designing the South Delhi Greenway. Mainstreaming ecological restoration of dirty storm water drains to transform the 12.5 km-long Barapullah drain into an ecological corridor. This project initiative plans to reclaim nearly 700 acres of open space for the south of Delhi. Planned to address the problems of solid-waste management, waste-water pollution and storm-water management, the South Delhi Greenway project aims to also showcase the ecological solutions, while using a place-making approach to create a vibrant new public realm for the city. The project aims to create the

city's first permanent car-free cycling and walking corridor, offering critical first-last mile connectivity to and from the metro-stations and bus-stops. Connecting five of the seven ancient cities of Delhi, apart from linking up tourism sites like the Bahai Temple, Qutub Minar, Dilli Haat, Garden of Five Senses— this parkway shall also become Delhi's tourism spine allowing people to experience nearly a thousand years of the city's history, all within 10-15 km distance. With the help of specialized natural bio-remediation techniques, the parkway shall use decentralized biological wastewater treatment facilities to clean up the sewage water polluting the drain. The presently dirty, foul-smelling drain shall be transformed into the city's ecological corridor restoring and regenerating the region's riverine ecology.

### ECO-SYSTEM SERVICES

The eco-system services approach as a new tool that values the holistic value of benefits that the city can accrue with the help of a sensitive landscape approach, is fast gaining acceptance to bring about the necessary policy changes to set up enabling framework.

### THE RESILIENCE PLAN

The Resilience Plan is something all cities need to focus upon, especially with the new global pandemic outbreaks and freak weather events— all cities need to focus on becoming self-sufficient and less dependent on the outside



world, making the concepts of circular economy integral to the way in which the city works; all waste becomes a resource material to other processes, etc. Focus on the use of clean, green, renewable energy, closed loops in terms of local food production with innovative solutions, like aquaponics, for example. Resiliency planning can also be addressed by updating land-use codes, zoning, development standards, incentive programs, landscape strategy and other plans or policies to better prepare for likely shocks and stresses.

North Chennai is a major beach hotspot which began eroding rapidly at a rate of 3–50 m per year since the Chennai port was built, about a kilometre into the sea more than four decades ago. This, combined with storms and swells, will lead to more frequent flooding and further erosion of beach. As a part of the resilience strategy under the Chennai Mega Streets Program, beach restoration was proposed to stabilize and widen beaches, and was used as a tool to buffer coastal hazards. Beach restoration acts as a buffer against the unexpected events and restore beachfronts which can be used as a vibrant public place in a city.

Necessity is the mother of invention— in this case all the environmental and climate change problems have now forced this new ecological approach in the way we plan and operate our cities. This new approach with a big focus on solar, EV, closed loops, etc., shall not only help us reduce our ecological footprint but shall also help us make the planet more sustainable. The planet should be able to sustain all the anthropogenic pressures where the damage being done is within the sustainable limit—as we do not own the world—we have just borrowed it from the next generation.

### BUILT IN FLEXIBILITY

Public spaces are best when they can be used differently, at different times of the day— catering to different activities for varied groups at varied scales. Being heavily contested, open spaces now must be smart to enable variable use— and the same space should be able to host several activities. Designed to work for weekend events, and daily practice workshops, such spaces work as social catalysts encouraging talent, competition, and events to celebrate life.

Open playgrounds can be used for big gatherings, big social events, rock shows, fashion shows, fairs, etc. Similarly, paved courts can be used for yoga, meditation and martial arts in the morning, design and pottery workshops in the daytime, dance and music in the evenings, then double up as event space on weekends to host cultural dance, music, martial arts festivals during the weekends, or even new interesting concepts like co-working spaces in the landscape.

### COLLABORATIVE EFFORT

Design for the community involves many discussions and group decisions, and therefore, the ability to collaborate is an important skill. Collaboration helps understand the bigger picture and prevents getting stuck within

processes, while trying to find perfection in our design. When whole arrays of complementary yet contrary fields are woven together, the result is a more comprehensive and an efficient design. Collaboration between consultants is one aspect, public consultation is another, which not only acknowledges the desire for humans to have a say in decisions that affect their lives, but it also provides this opportunity for the affected people (and interested parties) to do the same.

Aapki Sarak, Malviya Nagar, Khirki Residential Colony was one such project that addresses both these aspects. Regular consultations were conducted between the consultant and the locals to develop the pedestrian and NMT accessibility plan in the neighbourhood, which was served by various public transit systems. The project looks to bring about macro-level systemic change in terms of public transport network connectivity, pedestrian-friendly environment as well as micro-level change in user behaviour, vehicular dependence, and site-specific physical obstacles.

Also, under Chennai Mega Streets programme, extensive public consultations and collaborative meetings with various experts were conducted to inform the design. The site was analysed in different layers— for instance, different layers of transport like vehicle movement, mass transit network, pedestrian network, freight movement, port activity, etc., to reach to a deliverable plan that addresses various stakeholders across the entire gamut. Apart from this, experts from NCCR and PondyCAN were brought on board to discuss the beach restoration strategy and later meetings were held with concerned government authorities for their consent. Meetings with local cyclist groups, hawkers and schools were also organized which informed the pedestrian and cyclist infrastructure.

### DESIGNED FOR CHANGE

Over time, cities evolve and the same space should be able to be repurposed with time to address various activities within the city. The approach while designing an open space should be such that it acts as a catalyst for activities and is not over-designed. This, in long term, ensures that a space dwells into a place and then into a destination and value is added to a place over a period. One of the approaches to ensure the ability of a space to change over period is to use prefabricated and precast structures.

The changing paradigm of landscape urbanism in India appears to offer a new way to consider the complex urban condition; one that is capable of tackling infrastructure, water management, biodiversity, and human activity; and one that asks and examines the implications of the city in the landscape and landscape in the city.

It offers an approach which draws from multiple disciplines to promote a forum in which the negative consequences are understood and avoided. It celebrates uncertainty, underlying complex processes, and promotes green infrastructure instead of grey in our contemporary urban conditions, to regenerate local biodiversity to achieve environmental resilience.



View of the promenade along the beachfront, Chennai



**Akash Hingorani and Sujata Hingorani** are the founding partners of Oasis Designs Inc. at Delhi. It is a consultancy firm focused on creating nature-oriented urban public realms in urban design, master-planning, architecture, and landscape design.

Envisioning and creating new public destination spaces in cities, reclaiming derelict landscape spaces and transforming them into usable public common areas is the central mission of the firm.

Using a place-making approach to reimagine public spaces around transit, storm water, ecology and heritage, and then to transform them into people-friendly usable public realms is their focus in their projects— parks, waterfronts, streetscapes and may others. The awards won by them include the prestigious IIA Architect of the Year Award for Landscape in 2012 and in 2018. Pioneering sustainability concepts into mainstream practice, the firm also engages in working for critical policy interventions in the fields of storm water management, open-space, transit-oriented development, multi-modal integration at transit stations to bring about a systemic change.



# VISION RAILWAYS

## THE FUTURE IN SIGHT

Prof. Charanjit Singh Shah & Ar. Gurpreet Singh Shah

The Indian Railways, as significant and prestigious an organization it is; is known to be the fourth largest railway network in the world. The contribution of the Indian Railways to the national integration has been exceptionally unparalleled. It has efficiently knit India together by connecting different regions and states together in a tie. It is one of the highest employment generating organizations and contributes towards the Indian economy through numerous attributes. From cutting down distances by serving the travel needs of the citizens/common individuals to being a reliable source of transporting goods, the Indian Railways stand gallantly as an unwavering segment of the nation. This article is about the journey of the Indian Railways in its unfiltered forms and look forward to the vision sculpted by Creative Group for an outstanding tomorrow.

## HISTORY OF INDIAN RAILWAYS

*"There is always a trail of enormous events behind something so remarkable."*

The Indian Railways has had a captivating journey over its 167 years of existence. Let us draw a startling timeline glorifying the major highlights of the railways journey.

The first passenger train took off on April 16, 1853, and ran between Bori Bunder (Bombay) and Thane, a distance of 34 km. It was operated by three locomotives and had 13 carriages.

From 1869-1881, it took control of railway construction from external contractors and increased expansion to help areas struck by famine after intense droughts in the country. The length of the network reached 9,000 miles by 1880, with lines snaking inward from the three major port cities of Bombay, Madras and Calcutta.

The 1890s saw the introduction of new passenger amenities, including toilets, gas lamps and electric lighting. By this point, the popularity of the railways had skyrocketed and overcrowding led to the creation of a fourth class on-board. By 1895, India had started building its own locomotives and by 1896 was able to send its own experts and equipment to assist with the construction of the Uganda Railway.

The Railway Board was established in 1901. The first electric train ran between Bombay and Kurla on February 3, 1925, setting a precedent for further electrification in the coming years. A few years later, Indian Railways set about manifesting its own destiny, moving into the second half of the 20th century, the railways increasingly made steps towards modernization.

Nevertheless, the greatest step forward for IR was the launch of online train reservations and ticketing through its IRCTC system in 2002. Passengers could now book their journeys online or buy tickets from thousands of agents across the country—a necessary addition, considering that passengers had reportedly traversed a distance of more than 4.5 billion kilometres on the railways in the period from 2000–2001.

Today, Indian Railways manages the fourth largest railway network in the world and gazes forward towards the upcoming extravagant face of the Indian Railways aiming to becoming the largest railway network in the world.

## NETWORK EXPANSION

The growth of the Indian Railways has been rising exponentially high and with the rapid constructive widespread of railway stations alongside the vastly spread railways network, in no time had the railways become the indomitable city centre. The expansion of settlement and amenities was strikingly seen mapping alongside the railways' epicentres.

Railways have been successful in attaining the confidence of a wholesome of public eye and thus are used as the principal mode of transportation for passengers and freight.

*Land parcels are planned to be developed as the walk-able centres. While we aim at creating a sustainable city, we look at a balance between built mass and the green pockets, which helps in creating the user experience needed for the people.*

—  
Prof. Charanjit Singh Shah

## RAPID URBANIZATION

*"Achievements attract opportunities."*

The rise of the 20th century went hand in hand with the rate of growth of urbanization in India. The unimaginable tempo of urbanization bought along a bandwidth of responsibilities and requisites to fulfil.

The aim is to draw and underline the relation between rapid urbanization and the growth and development of the Indian Railways. With the outrush of the growing population, the surge in transportation capacities had dawned to almost double.

The Indian Railways serves as an inevitable backbone to numerous realms such as tourism, freight carriage, business travellers, daily passengers and so on, and rapid urbanization gauges the need to fulfil the rise of demand in every realm simultaneously.

The Indian Railways certainly have a hefty hand in the augmentation of the Indian Economy, and therefore, the economy lies strongly in support of the cause of development of the Indian Railways.

The network spanning up to 68,000 km, knotting together one end of the country to another, this organization



is undisputedly a major contributor to jobs, GDP and mobility.

**The Coming of New-Age Railways**

*“No ordinary plans for the future of India, aiming big, achieving bigger.”*

The look of the new-age railways as per the vision adorned for it would be radically different from what it is today. From the ease of passengers travelling long distances between cities or transporting of the freights in the promised time, journey on Indian Railways would be perceived as nothing less than pleasant, fast, punctual, comfortable, clean and indeed, memorable.

The improvisation in the infrastructural aspect of the existing railways shall look like never before. The tremendous usage of the land under the Indian Railways with a vision of making it not just the best railways around the

world, but the most magnificently designed and planned transportation hub one could experience. Elevated corridors could serve well in keeping with the pattern of habitation and the constraint of land in our country.

Aiming towards operating these stations parallel and be well-integrated with other modes of transport in the cities and easy to access and use. There would be no congestion. The vision Indian Railways also sets sight on successfully achieving the last mile connectivity criteria and is focused to get along the minutest of details to achieve the world-class standards. In other words, these stations would go beyond being mere transport hubs. They would become vibrant centres of the life of the cities, for commerce, entertainment and social space. They would also become major tourist attractions, as is happening with redesigned railway stations in many parts of the world.

Aiming towards providing multifarious facilities like offices, retail, entertainment, restaurants, theatres, hotels and health in the proximity of the planned city centres.

**The Creative Group sights no ordinary plans for the future of India, the plans aim to make it count amongst the best of the best worldwide.**

*A venture initiated by Creative Group was to instigate a change in the urban fabric of the city, from the low height residences, and abandoned industries to the high-rise towers, and easy commute for the citizens, creating ripple effect for the rest of the city.”*

**AR. GURPREET S. SHAH**

**Bottom** Futuristic vision for Howrah Railway Station

**Facing Page** Futuristic vision for Nagpur Railway Station

**Next Page** Futuristic vision for Howrah Railway Station





## HOWRAH RAILWAY STATION

The futuristic vision of Creative Group has already begun with jet pace on their upcoming project that foresees what the supreme futuristic ideologies behold for us through the Howrah Railway Station. The intermodal hub and mixed-use development project brings to life some hugely creative and sustainable planning in context to the development of all land parcels, working towards a Transit Oriented Development (TOD), where, transit was not just one source, but an intermodal network near the riverside as well as the city.

As a team of urban planners and architects, the target was not just to initiate the development of the Howrah Railway Station, but analysing the impact of the proposal on the future development, which sums up to factor sustainability as a concern for a developing city, where amelioration of infrastructure, easy accessibility to the amenities, designing of a tourist place, and making of a walk-able city has also been highly prioritized.

The sensitivity of the firm towards architecture and nature has been held in high regards and reflects as not only the tomorrow has been noted of utmost importance but a diligent effort towards beholding and respecting the historic element has also been prioritized.

Howrah Railway Station has an iconic historic structure which needs to be retained, as people connect to it, to the city they've stayed in. The conservation of such a historic structure then becomes a necessity and hence became a key aspect while designing. As an attempt to conserve the rich heritage of the Howrah City, a huge arched structure, which has a contemporary roof with solar panels, is proposed, where the egress route would be present.

## NAGPUR RAILWAY STATION

With the strength to bring the most brilliant imaginations to life, the Nagpur Railway Station commences with an aim beyond ordinary imagination that gets together a mini district centre in an air space above the yard tracks.

Connecting the epicentre of the city with well-planned intermodality and offering the efficiency and ease of last mile connectivity, the Nagpur Railway Station becomes one of the most anticipated projects bridging the connection between the present and future.

The pedestrian-friendly passages, designed for the utmost convenience of the day-to-day users and the smartly planned structure that has effectively reduced vehicular traffic surrounding the railway station adds up to the applaudable design performance.

The Creative Group aspires to add onto the high standards of the vision for the future of the Indian Railways and shall strive hard to achieve the world-class standards and leave a mark on the railways industry worldwide.



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# MAKING INDIA ZERO WATER WASTE

Water ranks high among the numerous gifts made available by nature to living organisms including human beings. Life on this planet has its genesis in existence of water, made available in different forms and in different locations. Water remains sustainer, protector and promoter of life. Known as the elixir of life, water constitutes the most important component of human living. Water and life on this planet remain synonymous. Without water, cities and communities are known to come to a grinding halt and will cease to exist. Water is valued for making people happy, healthy and more productive. Water continues to make and remake lives in this world of climate change and the so-called rapid economic development. It is also known to be major determinant of quality of life. Most of the prevailing problems of pandemics, health and well-being of human beings can be largely attributed to non-availability of water of appropriate quality and quantity. Despite the fact that 75% area of the planet is covered with water, availability of adequate potable water for human consumption is fast emerging, both as a major global threat and a challenge. Looking at the prevailing scenario, majority of the mega and metro cities are reeling under the pressure of inadequate availability of safe drinking water adversely impacting quality of life, threatening economic stability and productivity. Large number of cities in general and mega cities in particular, are forced to source water from rivers, lakes, reservoirs, located at far off distances, for bridging the ever-widening gap between demand and supply and making available adequate water for human consumption. Many cities globally are known to face major water challenge and many more are likely to join the race in future. Lack of availability of good quality water is causing both social, physical, economic and environmental distresses and disruptions. As per the estimates made by the UN, more than three billion human beings living on this planet are known to be water stressed. According to estimates made in the UN report on the state of the world's water, more than five billion people could suffer water shortages by 2050 due to climate change, increased demand and polluted supplies. Majority of the victims of water stress are communities occupying the bottom rungs of the economic/social pyramid, women, children, people with different abilities, rural migrants, refugees, slum dwellers, etc., who remain outside the formal system of urban planning and development.

Considering the role and importance of potable water as the determinant of quality of life, United Nations recognized, "Safe drinking water and sanitation are basic human rights, as they remain indispensable to sustaining healthy livelihoods and fundamental in maintaining the

dignity of all human beings. International Human Rights Law also obliges states to work towards achieving universal access to water and sanitation for all, without discrimination, while prioritizing those most in need. It further states that, fulfilment of the human rights to water and sanitation requires that these services be made available, physically accessible, equitably affordable, safe and culturally acceptable. 'Leaving no one behind' is at the heart of the commitment of the 2030 Agenda for Sustainable Development, which aims to allow all people in all countries to benefit from socio-economic development and to achieve the full realization of human rights."

India, housing one-sixth of the global population and the largest count of animals, has merely 4% of the global water. Accordingly, India faces the greatest challenge in terms of making potable water available, on equitable basis to all its existing and future inhabitants and meeting the basic demand of water for human beings, animals, industries, agriculture, trade and commerce besides other needs of communities and states. The most challenging part of water remains identifying the existing and future potential sources of water supply, effective management of available water, minimizing and rationalizing consumption of water, protecting sources of potable water from pollution, equitable distribution of water at affordable cost, conserving and preserving water, etc.

India has the distinct advantage of housing a large network of perennial river systems spread across its length and breadth. In addition, India holds great promise in terms of sourcing water from rainfall harvesting, with large areas having the advantage of concentrated rainfall. However, irrational rainfall management, river water mis-management and annual recurring floods have been the root cause of enormous economic and human losses which India as a nation has suffered. As per estimates, 40 million hectares of land is known to be flood-prone in India. With effective flood control measures, not only 32 million hectares of land can be saved, but also enormous quantities of water can be sourced for meeting the needs of agriculture, and human and animal consumption during the water deficit period. It calls for a holistic look at the entire context of water for effectively managing it and minimizing its wastage, misuse and abuse.

Considering the peculiar situation India faces as a nation and the factsheet of water-related problems and issues prevailing in the country, few of the options which can be exercised by India to make available adequate potable water, on equitable and sustainable basis, for its current and future population, have been enumerated below.

# FACTSHEET WATER CRISIS IN INDIA

## As per IDEI; Water- India Facts; ide-india.org

- ▶ With just 4% of freshwater India is required to support one-sixth global population for meeting its entire set of water-related needs for living, working, agriculture, urbanization, industrialization, trade and commerce, healthcare and education.
- ▶ 76% Indians are known to remain without access to safe drinking water.
- ▶ 21% diseases in the country can be attributed to poor quality of water used for human consumption.
- ▶ Over three lakh children, under the age of five years, die annually due to diarrhoea caused by poor quality/unsafe drinking water.
- ▶ Women are known to be major victims of water stress and are estimated to spend 150 million workdays every year for fetching and carrying water, causing losses of income to the tune of Rs. 10 billion in economic terms.

## As per 'IDR- water and sanitation, March 21, 2020: Arpit Jain & Reshma Anand'

- ▶ The 2030 Water Resources Group estimates that if water consumption continues at the current rate, India will have only half the water needed by 2030.
- ▶ Led by a large number of tube-wells deployed in rural areas, India uses as much as 80% of freshwater for agriculture.
- ▶ For drinking purposes, rural India uses as much as 90% ground water as against 50% by urban India.
- ▶ India is known to be the largest user of ground water drawing nearly one-fourth of global groundwater.
- ▶ China, despite ranking higher in population and agriculture, industry and economy, draws half the amount of ground water as compared to India.
- ▶ With 60% districts in the country declared as 'water-critical' in terms of

quantity and quality, majority of rural households in India face enormous risk in livelihoods.

- ▶ With 70% of water remaining contaminated, caused by large water extraction, low level of treatment of extracted water, discharge of untreated water and poor water management, India ranks 120 out of 122 countries in the global water quality index.
- ▶ More than half of India's cultivated land remains under water-intensive crops like rice, paddy, sugarcane, etc., due to government supported MSP for these crops.
- ▶ Indian agriculture remains highly water inefficient, consuming twice the amount of water for producing same quantity of food and cereals by other similarly placed countries.
- ▶ More than 100 million Indians are estimated to consume drinking water with excessive fluoride contents.
- ▶ NITI Ayog estimates a likely loss of 6% in national GDP, emerging from severe water scarcity that India is likely to face in the future.

## ISSUES

Major water-related issues in India are, primarily and essentially, the outcome of mismanagement of water resources, rapid increase and irrational consumption of quality water arising out of:

- ▶ Ever growing, rapid and massive increase of human count and animals.
- ▶ Rapid urbanization led by massive industrialization, liberalization of economies and globalization.
- ▶ Rapid increase in water demand coupled with decrease in water supply.
- ▶ Water demand increasing 35 folds during the last three centuries from 1700–2000 CE.
- ▶ Large-scale mis-management of water resources.
- ▶ Global warming, climate change

and repeated occurrence of floods, droughts and natural disasters.

- ▶ Lack of awareness about rational, efficient and economical usage of water.
- ▶ Large-scale pollution of fresh water resources due to discharge of polluted water.
- ▶ Rapid growth of water-based sanitary systems, water intensive fixtures, coupled with low capacity to treat waste water.
- ▶ Irrational pattern of agricultural practices which adopt water intensive commercial crops.
- ▶ Attaching little importance to water, adopting practices leading to large consumption and wastage of water.
- ▶ Absence of a rational water management policy at local or regional levels.
- ▶ According to low priority and absence of a holistic approach to waste water management.
- ▶ Irrational management of rainwater resources.
- ▶ Irrational and unrealistic pricing of fresh water.
- ▶ Absence of efficient management system of water supply, outdated and inefficient system of water delivery at the city and local levels, plagued by large-scale leakage, theft, wastage and unaccounted water.
- ▶ Focusing more on water supply rather than on water management.
- ▶ Lack of understanding, accountability and transparency on the part of agencies involved in sourcing water, supply and water management.
- ▶ Irrational and outdated water supply systems, norms and standards for water consumption.
- ▶ Lack of reliable data about the availability of water resources and consumption pattern at local/state levels.



- Prevailing inefficient and outdated practices for usage of water in agriculture, industry, etc.
- Outdated and inefficient technologies for water sourcing and distribution at local levels.
- Discrimination, exclusion, marginalization, entrenched power asymmetries and material inequalities.
- Poorly designed and inadequately implemented policies. Inefficient and improper use of available financial resources.
- Inequalities in access to safe drinking water and sanitation.

### **OPTIONS**

As per UN World Water Report, 2019:

*Water use has been increasing worldwide by about 1% per year since the 1980s, driven by a combination of population growth, socio-economic development and changing consumption patterns. Global water demand is expected to continue increasing at a similar rate until 2050, accounting for an increase of 20 to 30% above the current level of water use, mainly due to rising demand in the industrial and domestic sectors. Over 2 billion people live in countries experiencing high water stress, and about 4 billion people experience severe water scarcity during at least one month of the year. Stress levels will continue to increase as demand for water grows and the effects of climate change intensify.*

Considering the existing and future scenario of water availability, usage, coupled with the urgent need of holistically managing and ensuring equitable distribution of water on a sustainable basis for all end-purposes and usages, India needs to evolve a comprehensive policy for water, looking holistically at the prevailing regional peculiarities/disparities and challenges faced in terms of effective and efficient water supply and water distribution. Looking at the prevailing trends of urbanization, population growth and trends defined by global institutions, India would continue to be primarily rural till the year 2050 with majority of Indian population living in rural areas.

India, as a nation, will continue to be dependent largely on agriculture for economy, employment, development and providing basic resources for industry and human consumption. Considering the fact that more than half of the water is used by agriculture, accordingly, India will have to reinvent the agriculture economy to minimize the consumption of water. In addition, water consumption by industries will need rationalization. Considering rapid and massive urbanization with 800 million people living in urban India by the year 2050, urban planning will have to be redefined and rationalized, to make cities water efficient. Adoption of a multi-pronged strategy, using state-of-the-art technologies and looking holistically at the entire gamut of water will be critical for rationalization, its availability, sourcing, management and consumption, as has been defined below.

### **PHYSICAL PLANNING**

- Planning urban settlements on the basis of circular economy cities.
- Making cities 'spongy' by basing planning upon promoting porosity.
- Adopting the regional planning approach for rationalizing sourcing, consumption and conserving water for urban and rural India.
- Planning all cities to be water efficient and zero waste water human settlements.
- Making water conservation/waste water management integral part of urban planning process and human settlement structure plan.
- Linking/integrating all human settlements with adjoining peri-urban/agricultural land, for rationalizing/meeting the basic needs of water for urban and agricultural purposes.
- Rationalizing urban planning, development and management, with focus on minimizing consumption of water.
- Rationalizing provision of open spaces in urban areas, considering availability/usability of water at the local level with focus on minimizing the use of fresh water.

► Linking all open spaces with appropriate level of rainwater harvesting to eliminate the consumption/use of ground/surface fresh water.

► Evolving innovative landscaping design for the green spaces, including choice of flora and fauna, based on the principle of minimizing water consumption.

► Promoting use of local and native trees known to be more water efficient, and consumers of least amounts of water.

► Preserving/protecting/promoting/augmenting all existing water resources/draining systems by making them an integral part of city planning, development and management processes.

► Planning of human settlements to include: identifying/promoting/protecting all existing areas of biodiversity and natural heritage for safeguarding water resources.

► Using all existing low-lying areas, within/outside urban areas, for creating manmade water bodies/lakes/ponds for preserving/collecting/sourcing rainwater; for promoting ground water recharging; lowering urban heat island impact and modulating urban ecology and environment.

► Creating urban forests in the cities to promote soaking of rainwater, water harvesting, ground water recharging and augmenting ground water supply.

► Using all available spaces under traffic rotaries/islands for rainwater harvesting/ storing of rainwater and minimizing the use of potable water.

► Using porous concrete in all pavements/parking areas to promote rainwater harvesting and ground water recharging.

► Framing bye-laws mandating minimum requirement of open spaces to be provided within the plotted area for water absorption/ground water recharging within the plots and minimizing discharge on the street.

► Evolving norms and standards and creating SOPs for minimizing creation of the hard surfaces and maximizing soft areas in the city for higher water absorption and making cities spongy in terms of water sourcing.

► Creating/specifying framework for mandating provision of number/typology of trees to be planted at the individual/institutional/commercial sites.

► Mandating all new buildings to be planned, designed and constructed as green buildings to promote water conservation.

► Retrofitting all existing buildings to be water efficient.

### **AGRICULTURE**

► Making agriculture zero ground/potable water dependent.

► Using state-of-the-art methods of irrigation/drip irrigation for minimizing water consumption in agriculture sector.

► Making agriculture highly water efficient by changing the cropping pattern from water-intensive commercial crops to water-efficient cropping pattern.

► Promoting efficient flood management to save water, land, crops for effective utilization during water deficit period.

► Creating awareness among farming communities for promoting water-efficient cropping pattern and efficient use of water.

► Preserving, promoting and creating old and new source of water at local level to meet the water requirement for agriculture and human habitation.

► Incentivizing farmers using water efficient cropping pattern and water strategies.

► Involving agricultural related research institutions/universities to redefine the agricultural economy to make it water efficient.

► Linking human habitation with agriculture by promoting use of household waste water for meeting the irrigation needs of agriculture.

### **WATER MANAGEMENT**

► Decentralizing waste water collection for recycling and reuse at the community/neighbourhood level to minimize use of potable water.

► Mandating all industries to be zero-waste water, by defining standards/

norms for water consumption, based on the products and production capacity, by incentivizing/penalizing them.

► Making all group housing societies/healthcare-educational/cultural institutions/ shopping malls, consuming large amount of water to be zero-water waste by incentivizing/giving rebates in property tax, etc.

► Eliminating single use and making multiple use of water mandatory at all levels of water consumption.

► Adopting dual plumbing systems in all residential/commercial/industrial/institutional buildings to promote multiple use of water and minimize waste water at local levels.

► Setting standards for water consumption for indoor water equipment, mandating all manufacturers to be compliant with defined standards.

► Fixing standards for outdoor water usage based on the analogy and pattern used for indoor water usage.

► Making rainwater harvesting an integral part of building construction and building operation processes.

► Promoting rainwater harvesting/usage at community level rather than at individual level.

► Protecting fresh water resources by declaring/defining protected belts around them, with no urbanization/construction/industry/institution permitted in this belt. Using land under these belts for massive plantation for protecting sources of water from possible pollution.

► Declaring ground water as a valuable natural/national resource, prohibiting individuals/institutions to tap the source without prior permission of the competent authorities.

► Promoting the concept of 'slow the flow' to reduce water usage.

► Promoting the principle of refusing, reducing, recycling and reusing for effectively managing water usage.

► Involving communities/incentivizing communities/recognizing/awarding communities, adopting/promoting best practices in waste water management.

► Reinventing/promoting traditional/

existing systems of water conservation/preservation/protection/management for sourcing, preserving water and for promoting community-oriented usage of water besides making water cost-effective.

► Charging a fee from owners, for storm water drainage, based on area of the plot, for financing rainwater harvesting at local and city levels. Incentivizing the owners, protecting/preserving/storing/reusing the storm water for minimizing loss of storm water.

► Awarding people/communities/institutions reporting minimum water waste/usage.

► Charging water usage by metering—adopting a slab system based on the pattern followed in the levying of income tax—with higher charges for higher consumption.

► Adopting and promoting a holistic approach to water—potable water, rainwater, sources of water, waste water management.

► Ensuring 24x7x365 approach to water supply, to minimize wastage/storage of water.

► Rationalizing/optimizing/minimizing use of ground water.

► Using seasonal rivers/choes/low-lying areas for sourcing/storage of rainwater and meeting water demand during the water deficit seasons.

► Integrating water systems at macro and micro levels for making optimum use of water resources.

► Creating an integrated system of water network/grid by linking all perennial sources of water, such as rivers at the national level to ensure optimum/equitable distribution of water across nation/regions/cities/communities.

► Ensuring quality of water of rivers by prohibiting urbanization, release of household/industrial/city waste into rivers by the cities located on the river banks.

► Rationalizing water-based tourism/transport of goods to protect sources of water from possible pollution.

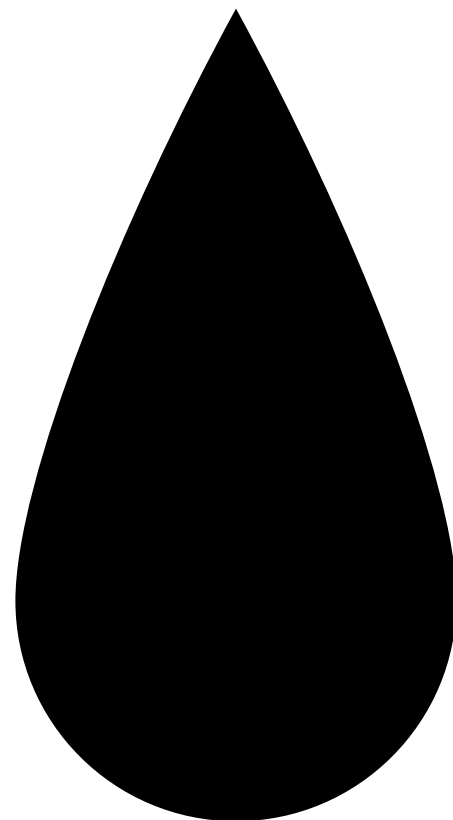
► Rationalizing allocation/water usage for food, agriculture and environment.



- Optimizing/protecting all wetlands as major sources of fresh water sourcing, storage, supply, ground water re-charging, modulating climate, promoting wild habitat and revitalizing bio-diversity in the region.
- Preserving, protecting, augmenting and making value addition to all fresh water sources from all possible man-made pollution.
- Promoting traditional/vernacular/ local sustainable water management practices to preserve water.
- Re-evaluating/rationalizing/ promoting fresh water/waste water usage for different urban purposes.
- Balancing water supply demand at all levels– analysing/focusing on high water consumption areas for minimizing water demand.
- Making 'water conservation' a people and community-based movement rather than a government responsibility.
- Documenting/sharing/incentivizing/ rewarding/adopting/promoting good water management practices of local communities.
- Promoting awareness for minimizing a consumerist approach on the parts of individuals.
- Capacity-building of the institutions involved in water management at local levels and promoting good governance based on accountability, integrity and transparency.
- Training man-power, on regular basis, engaged in water management at local levels about the latest trends/practices/technologies used in promoting water management.
- Creating appropriate regulatory and legal frameworks for water management including a mix of incentives and enforced penalties (carrots and sticks).
- Allocating adequate resources, promoting fair and effective management of financial resources for water management.

### **TECHNOLOGIES**

- Putting in place state-of-the-art technologies for treating and managing waste water to make it fit for use in human habitation/agriculture.
- Evolving state-of-the-art/cost-effective/energy efficient/water efficient technologies to minimize the use of water in flushing.
- Shifting sanitary systems from water-based to non-water-based mechanisms on the pattern followed in zero-water urinals.
- Using phyto-remedial mechanisms instead of sewerage treatment plants for treating the sullage water for preserving/protecting/re-generating the waste water for reuse.
- Re-inventing/redesigning the water fixtures/faucets based on the principle of breaking the water into ions/mixing air to minimizing water consumption, without reducing water pressure.
- Reducing water consumption during construction of buildings by rationalizing the methods of construction and re-inventing water efficient construction technologies.
- Incentivizing the production of building materials, having minimum water requirement for usage.
- Shifting from construction to manufacturing of buildings through pre-fabrication to minimize the use of water on construction site.
- Focusing on efficient water delivery, using technology to minimizing wastage/theft/ leakage/unauthorized use.
- Putting in place intelligent systems of water management at city and local levels for optimization and effectively monitoring public water systems with respect to their misuse and abuse.
- Putting in place state-of-the-art waste water treatment facilities for reuse as fresh water.
- Innovations such as creating water stupas in the cold regions– for storage/ harvesting of water for use during the warm/hot/water deficient periods.
- Minimizing water loss due to evaporation in hot regions– by shading areas, covering with plastic sheets or by installing solar panels upon the sources of water.
- Promoting evidence-based knowledge on water resources and mapping all available sources of water supply digitally, and monitoring them through GIS for optimization.
- Evolving technologies for using geothermal water for human consumption.
- Adopting a community-based approach rather than individual-based approach for effective water management and equitable distribution of water.
- Ranking cities based on water efficiency and productivity at the national/ state levels and rewarding them for the efforts made to optimize water usage.
- Mapping/sharing all good practices of water sourcing/water management/ conservation of water for optimization of water resources.



## CONCLUSION

Potable water remains valuable for the simple reason that 97% of the total water available on this planet is primarily and essentially salt water which is not suitable for drinking. Only 3% of the total water on earth is freshwater, out of which only 0.5% is suitable for drinking, while the remaining 2.5% of freshwater is found locked in glaciers, ice caps, atmosphere, soil, or under the earth's surface. Looking at the entire context of human existence, growth and development, it will be important to study, understand and evaluate the role and importance of water as the fulcrum around which the entire human eco-system gravitates. Known as the elixir of life, water will continue to hold its dominant position of being the promoter, sustainer and preserver of human living on this planet. Accordingly, water needs to be valued, preserved, protected and used with utmost care and caution. This would require in-depth study and analysis of the entire context of availability of water, existing and future sources of water and its usage besides looking at its preservation and protection in a holistic manner. Considering multiple implication and multiple usage of water, an integrated approach to water management shall remain valuable and crucial. Accordingly, it will be appropriate, to evolve a comprehensive policy framework to look at various aspects of water management and made operational at national, state and local levels. Involving communities and making them active partners in understanding and appreciating the criticality of water in human living. Involving educational institutions for creating awareness for safeguarding water, among students and communities, will remain valuable. Evolving appropriate technologies for restoring waste water for human consumption would hold the key to successful water management. Re-orienting, rationalizing and redefining, urban planning with water as the basis of settlement planning, will enable cities to overcome the challenges posed by inadequate availability of water and bridging the gap between supply and demand. Adopting a regional approach in planning will help optimization by sharing and integration of the use of water in both urban and rural setting. Reinventing sanitation systems and shifting them from water-based to non- water-based, will be vital to save precious water and ensure its optimum use. Promoting multiple use of water and adopting a circular economy approach will help in conserving and preserving valuable water. Reinventing and restoring the traditional systems of water sourcing and storage will augment the availability of potable water at local level. Optimization of rainwater harvesting, improving water resources management and providing access to safe and affordable drinking water and sanitation for all will hold the key to achieving sustainability in water for human living. Putting in place good governance, appropriate regulatory and legal frameworks, adopting a multi-pronged strategy, involving individuals, communities, stakeholders and bringing them on a common platform besides mapping, preserving, protecting, promoting, integrating all

the available sources of water, their rational and optimum usage will hold the key to achieve water sustainability in any region and nation. Adoption of a holistic and integrated approach to water management will not only help in eradicating poverty, building peaceful and prosperous societies, and achieving the agenda mandated in goal 6 of sdg 2030, but will also ensure that 'no one is left behind' on the road towards sustainable development.

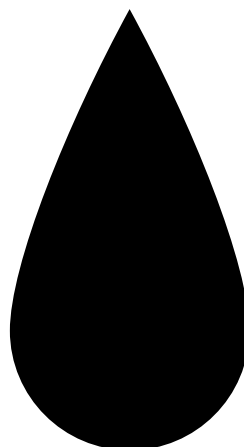
## REFERENCES

- 1 A Guide to Water Conservation – Saving Water and the Earth <https://theberkey.com/pages/a-guide-to-water-conservation>
- 2 IDEI; Water- India Facts; [ide-india.org](http://ide-india.org)
- 3 Jain Arpit & Anand Reshma, IDR- Water And Sanitation, March 21,2020
- 4 UN World Water Report, March 18, 2019; <https://www.unwater.org/publications/world-water-development-report-2019/>



**Ar. Jit Kumar Gupta** is the former Director, College of Architecture, IET Bhaddal.

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# ATTITUDE OF ARCHITECTURE

## LEARNINGS FROM THE LEGENDARY LOUIS I. KAHN





*"The sun did not know how great it was until it hit  
the side of a building"*

LOUIS KAHN

February 20, 1901 was a special day when the Master Architect, Louis Kahn whose buildings communicate through their silence and light was born. As we began ideating for this Issue around his birthdate, it was decided to include a feature that would recall some of these Masters in every issue. Louis Kahn was born in Estonia but his influence on the architectural arena was felt all across the world. The South-Asian Region— particularly India and Bangladesh had the good fortune of having Louis Kahn create masterpieces which defined and helped create a new vocabulary and direction for architecture of this region. In the feature for this month, we have Ar. Rahul Kadam paying homage to this legend through his photographs and sketches that speak for themselves.

By Ar. Rahul A. Kadam

For me, Louis I. Kahn has been a spiritual guru. I first felt the depth of the labours of love in the spaces created by him in 1993, when I trained at Studio HCP, Ahmedabad under the legendary Hasmukh C. Patel and Bimal H. Patel. There was a practice deeply influenced by Kahn's philosophy. As a trainee apprentice, one had to do a detailed study of the Indian Institute of Management, Ahmedabad (IIM-A) as a homage to Kahn! Those spaces kept the bell of inspiration ringing in me for many years, and motivated me sub-consciously.

Spaces in IIM-A designed by Louis Kahn exemplify spaces where light and shadow are an integral part of the building's aesthetic and architectural grammar. The 'scholarly setting' of IIM, Ahmedabad was conceived as a monastery of knowledge by Louis Kahn, where light has a dialogue with the space and asks what it could do to the space.

Further, I was extremely fortunate to celebrate a pilgrimage to his work in the US through two trips while I was working at Edifice. The first was to The Salk Institute in La Jolla, California (which I regard as his best work). The Salk Institute is like a Temple of Knowledge, where 'cure' begins in a campus setting that is designed to aid innovation and creative thinking.

*"Hope lies in dreams, in imagination, and in the courage of those  
who dare to make dreams into reality."*

—  
Dr. Jonas Salk

The following year, I travelled to the East Coast of America to see the Yale University Art Gallery in New Haven, the Philip Exeter Library in New Hampshire and

the Roosevelt Memorial on the edge of New York. At the Philip Exeter Library, the synergy of exposed concrete, natural wood and natural light create a magical silence.

Kahn on the Roosevelt Memorial: "A memorial should be a room and a garden. I just choose it to be the point of departure. The garden is personal nature, a personal kind of control of nature and the room was the beginning of architecture. The room wasn't just architecture, but was an extension of self."

The spaces in these projects have really moved me and one can still feel Kahn in them. They have greatly influenced my design thinking. I still try to explore the silence and spirituality that Kahn brought through his spaces. Honest expression through materials, classical proportions, romance of light and shadow are all things that have greatly enriched me by merely visiting these projects.

This pure, honest and spiritual attitude towards creating architecture is what Kahn, I feel, exhibited to the world. Many of the spaces, seen and felt, subconsciously manifest into design ideas in my own work in an abstract way.

In our own work, I have tried to explore the silence that Kahn exemplified, through simple spatial articulation. The honest use of materials and their dialogue with light is something we have recently explored in a project nearing completion.

In conclusion, I would say the work of Louis I. Kahn has inspired at least two generations of architects to look at space with an attitude that could make it timeless, intangible and sensitive. I feel this is the greatest and most important attitude that Kahn gifted us — to create, feel and realize architecture.

**Ar. Rahul Kadam** is a graduate of BKPS College of Architecture, Pune and has a Masters from South Bank, London. He has been a student member of AA, London, UK. He has extensive work experience with leading architects like Ar. Bimal Patel, Ar. Hasmukh Patel, Ar. Kamal Malik and Ar. Karan Grover. He has been the Director and Regional Head at Edifice Consultants Pvt. Ltd (ECPL) for over 15 years. Presently, he heads The Nature's Green Kinesthetic (NGK) Studio, his own design firm. He has presented papers on subjects related to design and planning in India and overseas in many prestigious forums. His portfolio involves diverse projects such as hospitals, hotels, special economic zones (SEZs), IT campuses, schools, neighbourhood urban design projects, adaptive reuse projects, workspace environments and others.

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# TRAVELOGUE **SNOW SNOWING**



Khajiar, Himachal Pradesh  
February, 2021

BY AR. GIRISH DARIYAV KARNAWAT





Am walking where there are no roads and am looking for a mirror...

To 'create' by virtue is to give rise to something that didn't exist before

It's not same as producing or manufacturing...one may reproduce but not recreate, recreating is a myth.

And creation is always an outcome of a clean slate...of stepping into a strange space seemingly...a conscious break away from familiarity...

Familiarity is a comfort zone as also a baggage of the past...it's also very sceptical of the unknown, distrusting, fearful, cautious...it ensures survival...that's it.

What is familiar to us could be strange to someone and vice versa, it's relative.

However, it's always a space of learning and discovery to be in a zone that is unfamiliar...because creativity arises out of that...And so as an architect, it's a constant need to revive, refresh, re-learn and mostly start from scratch. It's not same as Re-Inventing a wheel.

Another of such journeys was taken up recently where I chose to land at Dharamshala and then hired a Royal Enfield Himalayan and ride down to a region called Khajiar that is located across Cham-ba in Himachal Pradesh. I parked my bike in a village called Pukhri there and then trekked down to a home-stay in a village by name Bhodolli. All I did the next few days was to trek through the steep terrain, go to other villages. I met a lot of locals, enjoyed the food and hospitality, enjoyed the snow, snowing and the cold weather. All this while, I forgot that I was an architect and was observing the villages, how the people interacted and carried out the activities, saw the fields, valley, forest and the mountains...nothing governed my life...it was a complete break...

I felt one with the space and that brought me closer to what was in the space... I started enjoying the temples and houses and school, etc., more as someone inhabiting them rather than someone designing...the experience was totally reversed. For once there was no judgement nor was there any glorification. It was as is.

Consciously being unconscious and unconsciously being conscious...Took another longer route via Dalhousie and Chamba to return on my bike to Dharamshala and the flight back home.

I don't know what it has done.

But I do sense the acceptance in me.

For once, I didn't go there as an architect to observe built forms, for once I was just there as an anonymous entity engulfed with anonymity...beauty that was so strange and yet comforting.

*High rise of worn-out tyres,  
Pistons trying hard to impregnate  
the car, glistening oil and sweat of  
charpoy web, slithering fumes of  
enlightened coal,  
Waves repeatedly slapping the civi-  
lization, Spray of chai and sipping  
of the Fly,  
Shifts morphed on the soil,  
Fractured horizon and textured  
infinity,  
Petrol bunk pumping insanity,  
Wheelies of fate,  
Helmeted destinations,  
Standing on top of the light house  
the creative bladder became one  
with the ocean below."*



**Ar Girish Dariyav Karnawat** graduated from the School of Architecture, CEPT in 1992. He worked with a few firms in India and in Europe till 2001. After experimenting with, and gaining valuable experiences at the studios of Ar. Bimal Patel, Ar. Leo Pereira, Ar. Bijoy Jain and Ar. Ralph Baenziger, he established his own design firm, GDK Designs in 2001-2002.

He designed and initially executed most of his projects himself across several states. He continues to work closely with his construction sites and provides project management and architectural supervision on an everyday-basis to all his projects. All of his built or unbuilt projects have won several prestigious awards. Apart from practice, he is deeply involved with teaching and documentation of vernacular architecture. His practice determines his journey in seeking the unfamiliar and pushing thresholds to achieve what is contextually appropriate. An intense and elaborate conceptual stage is followed through with sustained design development and into meticulous working drawings- all following his unshakeable faith in mediums of exploration such as sketches, manual drawings and rendering, study models coupled with present day softwares.

Other than architecture, he loves cooking, travelling on his motorbike or driving his car and trekking in the Himalayas. He has covered approximately more than 1,75,000 km on motorbike and almost 3,00,000 km by car.









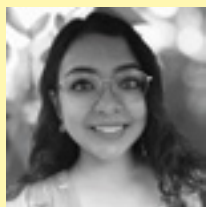
# NEWSLETTER MARCH

## JIIA CORRESPONDENTS

For the purpose of reporting the activities of the chapters/centres and subcentres, IIA correspondents were appointed all the chapters across the country.



**Ar. G. Karteek**  
IIA Andhra Pradesh Chapter



**Ar. Sukanya Das**  
IIA Assam Chapter



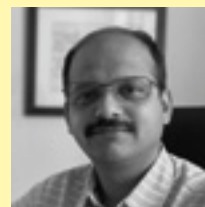
**Ar. Kamini Sinha**  
IIA Bihar Chapter



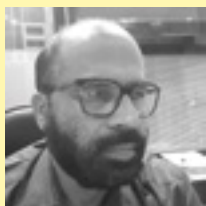
**Ar. Sanyam Bahga**  
IIA Chandigarh Chapter



**Ar. Saurabh Rahatgaonkar**  
IIA Chhattisgarh Chapter



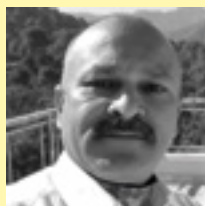
**Ar. Anup Gadgil**  
IIA Goa Chapter



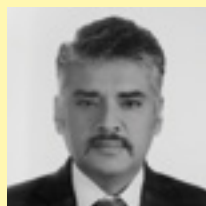
**Ar. Sailesh Nair**  
IIA Gujarat Chapter



**Ar. Surender Singh Chaudhary**  
IIA Haryana Chapter



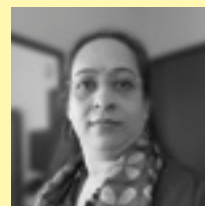
**Ar. Dr. Satish Kumar Katwal**  
IIA Himachal Pradesh Chapter



**Ar. Vikas Dubey**  
IIA Jammu & Kashmir Chapter



**Ar. Nalin Goel**  
IIA Jharkhand Chapter



**Ar. Nandita**  
IIA Karnataka Chapter



**Ar. Kajol Joan Williams**  
IIA Kerala Chapter



**Ar. Amber Vyas**  
IIA Madhya Pradesh Chapter



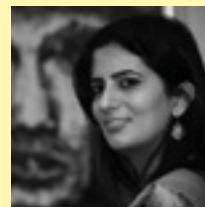
**Ar. Mrinalini Sane**  
IIA Maharashtra Chapter



**Ar. Shuvojit Sarkar**  
IIA Northern Chapter



**Ar. Asit K. Rout**  
IIA Odisha Chapter



**Ar. Tara Singla**  
IIA Punjab Chapter



**Ar. Abhishek Jain**  
IIA Rajasthan Chapter



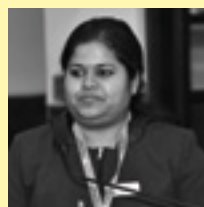
**Ar. Antony S L Morais**  
IIA Tamil Nadu Chapter



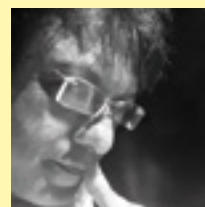
**Ar. Shankar Narayan**  
IIA Telangana Chapter



**Ar. Shubhra Mittal**  
IIA Uttar Pradesh Chapter



**Ar. Kanika Agarwal**  
IIA Uttarakhand Chapter



**Ar. Anindya Basu**  
IIA West Bengal Chapter



## President's Trail — Ar. C. R. Raju, President, IIA

### Kalyan-Dombivili Centre

My first visit as President of IIA was at the invitation of Kalyan-Dombivili Centre. Ar. Shirish Nachane, the Chairman, rolled out a well-planned evening with a structured program. The presence of a number of Past Chairmen, members, representatives from allied organisations gave enough impetus to the meeting. The report of the Imm. Past Chairman, the Installation of the Office Bearers and EC Members, the vision of the new team were presented with great enthusiasm.

### Mysuru Centre

The Mysuru centre Installation with Ar. Sudheendra as the Chairman and the team was well coordinated and conducted with the participation of members not only from Mysuru, but also the presence of elected members in large numbers from various centres and the chapter. It was a memorable evening filled with great camaraderie, with a number of ideas discussed by the participating speakers Ar. Leena Kumar, Ar. B.R.Mohan, Ar. Haroon Salim and others. The Chairman rolled out good initiatives and also motivated a number of architects, who were present, to join the Institute.

### KALARI, Kerala Chapter

KALARI, Kerala Architectural Leadership And Resource Initiative, organised by the Kerala Chapter for all the elected members of the Chapter, Centres and Sub-Centres over two days with sessions to disseminate information and leadership initiatives with resourceful speakers Ar. Lalichan, Ar. N. Mahesh, Ar. S. Gopakumar and many more, was a morale booster for all participants. I had the privilege of being there at the invitation of the Chairman Ar. L. Gopakumar, whose meticulous planning was evident all through. Towards the evening, after my address, the long interactive session with all participants was very useful as it was good to hear different perspectives and share information.



## Ar. A. Mahesh on IIA CAD

At Iyer & Mahesh, Trivandrum we have been using exorbitantly priced CAD software of multinational giants.

The IIA CAD brought out by the IIA is a great relief and boon to all Architects especially the young upcoming professionals for whom this perpetual software is priced attractively and there are no hidden cost.

At Iyer & Mahesh, we purchased NINE Nos. of IIA CAD software because we found that it is as good as competing multi-national software.

→ IIA CAD has exactly the same interface and set of 'commands' as other reputed packages.

→ IIA CAD handles heavy autocad files efficiently.

→ Plotter & printer – supports are good.

→ Back-end supports through pre-fixed tutorials were very useful and response in emergencies were very timely.

→ Moreover, IIA CAD and its developers GRAEBERT India Software are open to suggestions for improvement towards superior versions and were helpful whenever we queried.

→ The IIA CAD is attractively priced and has perpetual license. Therefore, this reliable CAD software will be very useful for reputed and large Architectural Firms as well as younger professionals.

This IIA CAD is definitely the outcome of "Atmanirbhar Yojana" initiated by our Government. JAI HIND!



**Ar. N. Mahesh,**  
Iyer & Mahesh  
Trivandrum

## Pritzker Prize: Two French Architects: Anne Lacaton and Jean-Philippe Vassal

French architects Anne Lacaton and Jean-Philippe Vassal, who've embraced a vow to 'never demolish buildings', and have always focussed on re-adaptive use with their creative ways to re-configure materials and avoid waste, won the Pritzker Prize, the topmost recognition in architecture.

Recognizing the environmental costs of buildings—from the energy they use to the carbon emissions embodied in their materials—have focused their work on adaptive reuse. Instead of tearing down ageing or obsolete buildings, they find ways of adapting existing spaces to meet new needs.

In addition to clever and environmentally-conscious new buildings, they have always believed in projects that show how creative design thinking can reduce architectural waste, lower costs and provide social benefits.

Lacaton and Vassal have also specialized in adapting ageing social housing projects across France. One of the projects cited by the Pritzker jury is La Tour Bois le Prêtre, a cramped 1960s-era social housing tower on the outskirts of Paris. Here, they revitalized the building and expanded the area of its 96 units by tearing off the original concrete facade and extending the apartments with large terraces and balconies, turning a drab and potentially problematic housing project in an impoverished area into modern, light-filled residences.

Some of their other projects often employ simple greenhouse-style building materials, such as semi-transparent polycarbonate panels. Used in a private house in

Bordeaux, these helped craft a large, barn-like winter garden and patio. This not only drew in natural light inexpensively, but also created a blurring of the separation between inside and outside, and was also used in several social housing projects, as well as commercial buildings.

These simple, often unpredictable approaches to projects have established Lacaton and Vassal as two of France's most thoughtful architects with their focus on reducing waste and avoiding demolition which has guided their work for more than 30 years.

Lacaton has been quoted at the announcement of the Pritzker, "Transformation is the opportunity of doing more and better with what is already existing. The demolishing is a decision of easiness and short term. It is a waste of many things— waste of energy, waste of material, and waste of history. Moreover, it has a very negative social impact. For us, it is an act of violence."

Using architecture to counter this waste is more than just a design concept to Lacaton and Vassal. It's a philosophy for how architecture should co-exist with the world.





## Assam Chapter – SpringCon '21

The Indian Institute of Architects–Assam Chapter held a spring meet in conjunction with the release of the quarterly magazine/ house journal of IIA–Assam Chapter, CONCORD. Ar. Sukanya Das had been appointed Editor of CONCORD for the term 2020-22 and with the dedication and hard work of the Editorial Board, Volume IV Issue I of the magazine with the theme 'Architecture in Times of Pandemic' was released during SpringCON '21. Every season a new issue will be similarly released.

The meet commenced with the State Anthem of Assam *O Mur Apunar Dex*. Ar. Sukanya Das delivered the opening address and Chairman Ar. H. K. Rajkhowa congratulated the Editorial Board for this publication. Imm. Past Chairman Ar. Ramendra Nath Baishya handed over an archive of all the previous issues of CONCORD to Chairman Ar. H. K. Rajkhowa.

The Conveners of all the Sub-Committees presented their respective Plan-of-Action for the coming months with Ar. Bidisha Das, Convener of Young Architects Sub-Committee, starting an initiative called 'Metro-Polish' in which spaces within Guwahati are being identified and beautified with Art, Sculpture and Plantation. Every season along with the release of CONCORD architects from the chapter shall be given a platform to present and share their projects. Ar. Chinmoyananda Phukan delivered a presentation on his ongoing project 'Shri Shri Madhabdev Kalakshetra' during the event.

Ar. Mathew L. Umdor from Shillong was present during the meet and discussions were held regarding the formation of Meghalaya Sub-Centre under Assam Chapter. The event ended with a Vote-of-Thanks by Jt. Hon. Secretary Ar. Budhin Borthakur.



## Bihar Chapter – The Elected Executive Committee of Bihar Chapter of IIA assumes Office

The unanimously elected office bearers and Executive Committee 2021-'23 of the IIA-Bihar Chapter assumed office after the installation ceremony held on February 7, 2021. The ceremony was followed by a General Body Meeting (GBM) of the chapter members.

The Hon'ble Mayor of Patna Smt. Sita Sahu was the chief guest at the occasion. In her address, Smt. Sahu congratulated



the team and extended support to the architects towards building a better future Patna. The immediately past Chairman, Ar. Vishnu Choudhary handed over the charge to the newly elected Chairman Ar. Amit Ranjan. The team of office bearers who assumed their charge under him are Vice Chairman, Ar. Abhishek Sharma; Ar. Ashesh Kumar and Ar. Shyam Prasad as the Joint Secretaries; Treasurer, Ar. Amit Kumar. The members of the Executive Committee are Ar. Ajay Kumar Mishra, Ar. Pradeep Kumar, Ar. Bipul Prakash Singh, Ar. Md. Danish, Ar. Umashankar Kumar, Ar. Nishi Jain, Ar. Kanishk Sinha, Ar. Anand Saurabh and Ar. Anupam Sunil.

All the members of the new team were presented with a medallion by the Chief Guest. The Chairman urged budding new architects to be actively involved in the forthcoming activities of IIA-Bihar. The Chief Architect of Bihar, Ar. Anil Kumar, past Chairman Ar. Dhananjay Kumar and Ar. Fulena Rajak, also addressed the meeting.

Intensive brainstorming during the open session brought forward new opportunities and issues to be worked out during the tenure of the new Committee. It was decided that the Committee would take up the matter of registration in ULBs with the Urban Development Department. The members were informed that the decision regarding the adoption of the single window registration system was pending in the Cabinet of the Government of Bihar. The Treasurer, Ar. Amit Kumar confirmed that the Committee would work on generating revenue so that the IIA-Bihar Chapter could acquire its own premises. Other ideas discussed included increasing interaction with academic institutes and raising awareness through more social activities. The Chief Architect of Patna, Ar. Anil Kumar assured that a number of posts for employing architects would shortly be announced by the State Government.

The GBM concluded with a vote of thanks by Ar. Kanishka Sinha to all members present.

## Chhattisgarh Chapter – Activities 2020–2021

❶ IIA-Durg Bhilai Centre conducted a programme on February 21, 2021 at Indian Coffee House, Bhilai for their members to discuss and share issues related to the profession and its practice. This program also included the oath-taking ceremony of the new body of the Committee.

❷ IIA-Raipur Centre conducted a friendly cricket match on March 6, 2021 at Green Park, between interior designers and local vendors to enhance bonding between



these allied professions.

⑤ IIA-Chhattisgarh Chapter organized their first GBM on March 6, 2021 at Hotel Babylon International, where the new body took charge. All the three Centres were also felicitated.



**Goa Chapter — Pre-Budget Meeting of IIA-Goa Chapter with Chief Minister of Goa, Dr. Pramod Sawant.**

The Office of the Chief Minister of Goa invited the Goa Chapter to present their suggestions to be incorporated in the preparation of the Budget 2021 for the state of Goa. The meeting was held on March 4, 2021 at the official residence of the Chief Minister, Dr. Pramod Sawant. IIA-Goa put forward their suggestions and proposals addressing the following aspects:

① Architectural Education:

→ IIA-Goa chapter proposed the setting up of a dedicated, permanent complex for the Goa College of Architecture that would work as a pivotal institution for all design-related courses in the state of Goa, from diploma to doctoral studies. A feasible site has been identified and proposed to the Government, with a proposal for a budgetary provision of Rs 10 crore.

→ Under the aegis of Swayampurna Goa, the initiation of Urban Design & Sustainable Architecture Research Cells were proposed to be put up at the Goa College of Architecture. These would carry out ongoing and continuous research in the field of conservation, urban design and sustainable architecture. An initial budgetary provision of 25 lakh rupees was asked for.

② Concerns of professional practice:

→ With an aim to providing equal opportunities to all practicing architects in the state of Goa for participation in Government projects, the Institute proposed holding at least ten architectural competitions for various levels/scales of projects for Goan architects. While making this proposal, the Institute stressed on the benefits that the state would also receive, of being able to choose the best of the designs for construction of public buildings and spaces. A budgetary provision of Rs. 25 lakh was asked for as provision of prize money to be awarded to the winning participants. The Institute also proposed to handhold the government in the conduct of all these competitions.

→ The Institute also impressed upon the Chief Minister the need for standardization of professional fees for all government projects as specified by the Council of Architecture.

③ Ease of doing business in the state of Goa for the construction industry:

→ The state of Goa has recently introduced an online Building Plan Approval Management System (BPAMS) for granting technical clearances for construction projects in Goa. This initiative taken by the State Government as a part of ease of doing business, is welcomed by the IIA-Goa Chapter. To further improve the efficacy of this system and to ensure a hassle-free online approval system, of last-mile end-to-end for buildings, covering all concerned departments of the government, IIA-Goa Chapter proposed the creation of a dedicated IT cell to enable smooth functioning of BPAMS.

→ IIA-Goa chapter also proposed the streamlining and rationalizing of government processes concerning conversion sanad and payment of various taxes like infrastructure taxes and processing fees in the state of Goa which would further improve the state's ease of doing business for its people.

④ Suggestions and proposals to address concerns of industrial and construction workers housing as a part of our social responsibility

IIA-Goa Chapter brought to the notice of the Chief Minister the hardships faced by the industrial and construction workers in the state of Goa during the early part of the corona virus pandemic and proposed to the state government to make budgetary provisions for improving housing conditions of construction and industrial labour. The Hon. Chief Minister was very receptive to the idea and proposed to the IIA-Goa Chapter with concepts for the same. The Institute was also informed about the availability of funds for this purpose with the Goa Building and Other Construction Workers Welfare Board. The Institute takes this as a step in the right direction and is looking forward to work with the government to address the concerns of the construction industry workers.

The meeting concluded with a formal handing over of our budgetary proposals to the Chief Minister of Goa, Dr. Pramod Sawant. The members of the Institute that attended the meeting were as follows:

Ar. Milind Ramani, Vice Chairman of IIA Goa Chapter  
Ar. Rahul Sardesai, Hon. Secretary, IIA Goa Chapter  
Ar. Manguesh Prabhugaonkar, IIA National Council Member  
Ar. Anup Gadgil, Executive Committee Member, IIA Goa Chapter  
Ar. Siddharth Naik, Member, IIA Goa Chapter  
Ar. Sumedh Naik, Member, IIA Goa Chapter  
Ar. Rajesh Kenkre



## Gujarat Chapter

### ① IIA-Surat Centre:

IIA-Surat Centre organizes many events like professional presentations, talk shows, panel discussions as well as fellowship programs like theatre, talent shows, family games and many others.

The Cricket Tournament is one such awaited event organized in the first quarter annually. Besides cricket, many family games are held simultaneously. Organized with the support of IIID SRC, this was the last event held before the pandemic. After nearly a year without any physical programmes, the Committee proposed to start the new IIA SC 2020-'22 term with this fellowship event, which received an overwhelming response from more than a hundred members. An innovative auction for the team players was held on February 20, 2021 hosted by Ar. Vishal Shah, Ar. Deepak Sahajwani and Ar. Neelkanth Burkhawala, leading to the formation of eight teams named after Master Architects: Beaming Bawa, Doshi Daredevils, Zesty Zaha, Fascinating Fosters, Le Corb Legends, Ando Avengers, Charismatic Correa and Fantastic FLW. Each team comprised of a team owner (sponsor), the team captain, senior players (aged above 50) and a female player. After two weeks of practice sessions filled with camaraderie, the event was held on March 6 and 7, with two semi-finals and the final. The winners were Fantastic Fosters owned by Prabhusurat and the runners-up were Zesty Zaha owned by Plezza Kitchens.

Many family games were organized and the event was well attended by over three hundred. Ar. Jabeen Zacharias, President of IIID, Mr. Manish Kumat, Treasurer of IIID, Ar. Bankim Dave, the Past President of IIID, Ar. Sarosh Wadia, NEC Member of IIID and Ar. Azmi Wadia, National Council Member of IIA graced this occasion with their presence. Ar. Jignesh Modi, Chairman of IIA Surat Centre and Ar. Vishal Mashruwala, Chairman of IIID Surat Regional Chapter jointly conducted the award function, giving away the prizes for the winning team, runner-up team, man of the match for each match, man of the series, Nari Shakti of the tournament. Mr. Mahesh Kumat, Treasurer of IIID National Body awarded the Super Player of the tournament. The sponsors for this event were Shipra Chemicals, Prabhsurat, Olive, Alta Vista, Latt Liv, Hans Grohe, DecoDrapes, Mango Art Gallery, Plezza, Bath Magic World, Narmada Flooring Corporation, Better Living, Tiles Ahead, Guardian Sunguard and Modi Guard.



### ② IIA-Ahmedabad Centre:

IIA Open Minds, a new mission initiated by IIA-Ahmedabad, is an exclusive conglomerate of open-minded and progressive architects of Ahmedabad who deliberate, debate, discuss and dilate upon various aspects of the profession of architecture. They first met on March 6, 2021 at Kalrav Farm, Rancharda in Ahmedabad, designed by Vipul Patel Architects (VPA). The entire team of VPA and the client welcomed the IIA architects at the venue and showed them around the site and gave them a run-through of the entire design process, including execution and the challenges faced. This engaging and interactive evening set the ball rolling for the IIA Open Minds venture.

### ⑤ IIA-Saurashtra Centre:

Ar. Mayank Duliya from IIA-Saurashtra Centre has written a book called Architecture and Finance aimed at understanding various aspects of finance in architecture, for architects. It consists of five chapters: Over-financed architecture, Under-financed architecture, Architecture and financial instruments, The Real Estate Act and Contemporary financial issues of architects. Such a book expects the society to be aware of the current social, professional, and personal issues of contemporary architects, with respect to current issues of globalization and sustainability.

## Himachal Pradesh Chapter

### ① Wall Painting in Jwalaji Town and temple premises:

On the recommendations and advice of the IIA-Himachal Pradesh Chapter, a team from the School of Architecture, Rajiv Gandhi Govt. Engineering College, Kangra at Nagrota Bagwan, Himachal Pradesh worked for more than a week on numerous sites. The team consisted of fifty undergraduate students and faculty from the Bachelors of Architecture course. Under the supervision and guidance of Dr. Satish Kumar Katwal, Head, School of Architecture, they painted upon more than 150 walls in the town of Jwalaji, including the main Jwalaji Temple Complex.

The paintings depicted historical events and religious importance of the temple in the main gathering space and at the entry point to help people understand the historical significance and mythology of the Jwalaji temple.

The team stayed in Jwalaji Town for the duration of this project which gave them a better understanding of the public spaces which had been facing neglect due to various factors like physical connectivity, geographical location, management inattention, etc. This helped them plan how to correctly rejuvenate the numerous sites facing public neglect.

By adding vibrant colour to these neglected spaces, the local inhabitants and tourists were made to realise the importance of these spaces and of maintaining those spaces thereafter.

This initiative was focused towards public awareness about drug abuse and environmental issues and increasing participation towards cleanliness drives like Swachh Bharat Abhiyan.



This initiative by the team was appreciated by the local residents, municipal authorities, Shri Ankush Sharma, HAS SDM of Jwalaji and by the Hon. Deputy Commissioner of Kangra, Shri Rakesh Parajapati, IAS.

The work was greatly appreciated by the UD Minister Govt. of Himachal Pradesh by gifting mementos to the students and faculty during a national level public event held in Jwalaji.



② World Architecture Day 2020 was celebrated at School of Architecture at Rajiv Gandhi Govt. Engineering College Kangra at Nagrota Bagwan

Ar. Nand Lal Chandel, Chief Architect, HPPWD, Mandi zone and the current Chairman of IIA-Himachal Pradesh Chapter graced the occasion of World Architecture Day 2020 as the Chief Guest, which was celebrated at the School of Architecture at Rajiv Gandhi Govt. Engineering College, Kangra at Nagrota Bagwan.

### Jammu & Kashmir Chapter

#### From the Chairperson's Desk

I'm delighted to present my first report for the conversion from Jammu and Kashmir (J&K) Centre to Chapter following an interesting and exciting period. J&K Centre was formed in the year 1996 and today has more than 100 members. It has a major role to play in promoting the architectural profession by uniting the architects of J&K in fellowship to promote aesthetics and scientific and efficiency of the profession both in practice and in education. This has resulted in the formation of J&K Chapter on March 9, 2021.

I thank all my fellow architects for their valuable contributions and efforts to convert the J&K Centre into a full-fledged Chapter. The Centre has been increasingly busy with its activities of monitoring, compliance and enforcement, aimed at protecting the public and upholding the standard of the profession. It has continued to experience growth in membership, predominantly coming from the student categories, while other categories remain steady or have shown a slight increase.

#### Strategic Plan

We are starting with a comprehensive assessment process to confirm what had been accomplished and what

still needs to be done. Our strategic plan consists in following four guide-posts for future action:

- ① Increasing membership
- ② Enhancing the profile of the profession
- ③ Advocating to higher bodies
- ④ Achieving a sustainable Chapter

I am quite sure that this strategic plan will serve as an excellent vehicle to help engage directly with the State Chapter Executives and Chapter Managers. In sharing our ideas for the Institute in the years to come, we will all reflect on how we can work effectively together to realise these goals.

Ar. Vikas Dubey

**Chairman**, The Institute of Architects,  
Jammu & Kashmir Chapter



### Karnataka Chapter

#### Centre Installations

##### ① IIA, Hubballi- Dharwad (IIA-HD) Centre:

Installation of the new office-bearers headed by Chairman Elect Ar. Anand Pandurangi was held on February 5, 2021 at the Royal Palm Gardens, Dharwad.

Past Chairman of the Karnataka Chapter, Ar. Vidyadhar Wodeyar was the Chief Guest. The newly elected Chairman, Ar. B.R. Mohan was the Guest of Honour. The Vice Chairman Ar. Mahesh Hiremath, Treasurer Ar. Haroon Salim and Secretary Ar. Somu Dhotrad, all graced the function along with the Chairman and Executive Committee Members of Belgaum Centre, Mangalore Centre and Mysore Centre.

##### ② IIA-Mysuru Centre:

The installation of the new team of office-bearers of IIA-Mysuru Centre was held on February 24, 2021 at JW Golf Club, Maharana Pratap Road, Mysuru. The occasion was graced by the presence of the President of IIA, Ar. C. R. Raju. The Hon. Secretary of IIA, Ar. Leena Kumar and the Chairman of the Karnataka Chapter, Ar. Mohan were also present. The event was attended by over 75 architects from Mysuru (both IIA and non-IIA), architects from the other IIA centres of Hubli, Mangaluru and Manipal, members of the Executive Committee of Karnataka Chapter, leadership of various organisation like NAREDCO, BAI, CREDAI, ACCE (I) and others.



Ar. Haroon Salim, Hon. Treasurer, IIA, Karnataka addressed the gathering and shared the road map of IIA Karnataka. The Chairman of Karnataka Chapter, Ar. Mohan advised architects to invest their time in inclusive development for the betterment of the society. Ar. Leena Kumar, Hon. Secretary, IIA stressed the importance of rendering a humane touch to our work. Ar. Sudheendra G.K., the incoming Chairman shared his vision of increasing the number and income of the architects of Mysuru by 10– 15% by the end of his term.

#### ⑤ IIA-Belagavi Centre:

The Installation of the IIA-Belagavi Centre was done on February 28, 2021 at Hotel Fairfield By Marriott. The body of the new members was inducted by the outgoing team. The Chairman of the new team, Ar. Kuldeep Hangirgekar spoke about the go-green initiative 'Help Mother Nature Heal Her Wounds' by reducing the disruption of nature due to construction activities. This oath was sworn by the Vice Chairperson, Ar. Megha Khandekar, Hon. Jt. Secretary, Ar. Rupali Kavilkar, Treasurer, Ar. Ashwinkumar Kalmani and the Executive Committee Members, Ar. Nishita Tadkodkar, Ar. Pradeep Nandagaon, Ar. Sagar Gourgon-da, Ar. Chandan Nandi, and Ar. Juned Jalihal.

The chief guests of the event, Mr. Basavraj Hiremath, T.P.O., Belagavi spoke about the need for coordinated efforts by the architects and the Corporation in easing the building process for the public. The Assistant Executive Engineer, BUDA, Mr. M.V Hiremath lauded the much-needed green initiative. The event was successful in reaching out to people from the construction industry who congratulated the entire team for this unique initiative.

All the past Chairmen of IIA Belgaum Centre, from the time of the inception of the Centre were all felicitated.

#### Women's Day Initiative Other Programmes

*Dream...Achieve...Believe You go gal!*

IIA-KC acknowledges the women architects for the richness, value and diversity they bring to this profession. To celebrate and salute the spirit of womanhood in the architectural world, IIA-KC took up the initiative 'Dream...Believe...Achieve! You go gal!' where women architects could share their thoughts, experiences and anecdotes through short videos. Within a short span, the initiative received an overwhelming response with nearly 40 videos. The entire program was curated by Ar. Tapasya Das and Ar. Nandita.



On International Women's Day on March 8, 2021, IIA-KC dedicated this initiative as a visual tribute to all the amazing women in the architectural fraternity through a poster, a short video as well as an hour-long film. The initiative's tagline 'She believed she could and so she did' was truly accomplished.

#### Other Programmes

On January 30, 2021, under the direction of the MP, Hubli-Dharwad, Shri. Prahlad Joshi and DC, Shri Nitesh Patil had organized a meeting at the Chamber of Commerce Hall where the overall vision of the Rani Chennamma (RC) Precinct and Flyover was presented by NHAI to the members of the Chamber of Commerce, IIA-HD Centre, ACCE (I), Citizen Forums and others present. After the presentation, The IIA-HD Chairman, Ar. Anand Pandurangi put forward his views on the RC Precinct and Flyover.

IIA-HD organized and participated in several social events to raise awareness about the Centre amongst citizens. IIA-Karnataka Chapter had a brief but memorable interaction with the Hon. Chief Minister of Karnataka, Shri. Yediyurappa to urge him to include architects in the processes of policy-making for the development of the state of Karnataka. He requested the team to present this proposal for a focussed discussion with him at a later date.

#### Kerala Chapter – KALARI (Kerala Architectural Leadership and Resource Initiative)

IIA-Kerala Chapter organised a two-day leadership training program for the Chapter and Centre office bearers of the new term on March 13 and 14, 2021 at Trivandrum. The aim of the event was to rejuvenate the new office bearers and structure activities for the new term at the Chapter and Centre levels. Being a completely residential programme conducted at O by Tamara, Trivandrum, it was a first of its kind event organised by the Kerala Chapter.

The first day commenced formally with IIA-Kerala Chapter Chairman Ar. L. Gopakumar and the office bearers of the state as well as the Centres. Various sessions were conducted by senior architects:

Ar. Lalichan Zacharias gave an informative talk on the legacy and structure of IIA, which helped the new office bearers to understand the organisation at the national state and centre levels.

Ar. N. Mahesh conducted a session on leadership focusing on the structuring of professional practice and academia for architects, an essential learning for young architects.

Ar. Jose K Mathew familiarised the participants with the IIA Awards, their inception, history, structure and relevance. He explained the importance of carrying forward the IIA-Kerala Chapter Award and its importance to the fraternity.

Ar. S. Gopakumar conducted a session on the process of organising events for the Chapter and the Centres, without the help of any event management professionals.

Dr. Anand Parameshwaran held a session on behavioural economics, emotion and design through the Nudge



Theory, opening up a different perspective for all architects.

The highlight of the event was the presence of the National President of IIA, Ar. C.R. Raju, who interacted with the office bearers and discussed various aspects of the profession with him. He also announced the winner of the ABS logo design competition and launched the first event of the term, CRICKETIIA, the inter-centre cricket tournament. The website of IIA-Kerala Chapter [www.iiakerala.org](http://www.iiakerala.org) was also inaugurated by him. The evening concluded with an ice-breaking session, DJ and cultural events performed by architects of various centres.

The second day commenced with a yoga session and a talk by Ar. B. Sudhir on the social responsibility of architects and the various ways in which they could get involved and contribute at the state, national and international levels.

The next session saw the discussion of the Nine Verticals envisioned by the Chapter. These Verticals covered various aspects of architecture, its practice and education, such as socially responsible actions, professional practice, heritage cell, gender balance, social security, legal cell, research and development, pedagogy and public relations.

Following this, the Centres presented their event calendars and proposals for activities and the distribution of activities to be held during the forthcoming term of two years. There was a theatre workshop held by Mr. John T. Vekkan. The event ended with a vote of thanks by Ar. Sudheesh S., the Jt. Secretary of IIA-Kerala Chapter.

### Maharashtra Chapter

Maharashtra is one of the largest Chapters of the Indian Institute of Architects. It has 16 Centres and four Sub-Centres, with over 6000 members. Maharashtra has over 110 colleges of Architecture in Maharashtra, putting it at the forefront of architectural education. Some of the principal activities conducted by the Centres are enumerated below:

#### ❶ IIA-Satara Centre

The first Executive Committee Meeting of the IIA-Maharashtra Chapter was held on January 30, 2021. It was followed by the installation ceremony of the newly-elected IIA-Maharashtra Chapter team as well as the IIA-Satara Centre team. The outgoing Chapter Chairman,

Ar. Satish Mane presented the report of his tenure. All charge and documents were handed over to the new team, followed by the address of the new Chairman, Ar. Sandeep Bawdekar. The event was sponsored by Jaquar Company Pvt. Ltd., Greenply and Parshwa Sales. Their presentation was followed by a fellowship dinner at Hotel Fern. The programme was well attended and enjoyed by all.

#### ❷ IIA-Kalyan-Dombivli Centre

The installation ceremony of the new team of the Kalyan-Dombivli centre was held on February 20, 2021 at Dombivli Gymkhana. Ar. C.R. Raju, the newly elected President of the Indian Institute of Architects was the Chief Guest of the ceremony along with his team: Vice President Ar. Vilas Avachat, Jt. Hon. Secretary Ar. Satish Mane, with Chairman of Maharashtra Chapter Ar. Sandeep Bawdekar who also attended this function. The new team and the Chief Guest presented their vision for the future, which was appreciated by the audience comprising of architects as well as students of architecture. The event was sponsored by Schindler India Pvt. Ltd. while Ultratech Cement supported it.

#### ❸ IIA-Nagpur Centre

IIA-Nagpur Centre has been active with many events under its belt in the duration till March 2021. The centre kick started with the last GBM and the first GBM on January 22, 2021 at Hotel Centre Point. This meeting was clubbed along with the installation ceremony at Hotel Centre Point, Ramdaspath, Nagpur.

The first Executive Committee meeting was held on January 29, 2021, where the new team under the leadership of Ar. Ravirak Sarwate discussed plans for the future. This was followed by the fortnightly event called T-Talks, where Ar. Sanjay Patil from Nashik was invited to talk on 'Taiwan-Exploration beyond Experience through Cycling' on February 2, 2021. The meeting of the Nagpur Centre Office Bearers was held on February 10, 2021. It was decided to start the planning of Golden Jubilee Year celebrations to be held in 2023.

#### ❹ IIA-Nashik Centre

IIA-Nashik Centre under the chairmanship of Ar. Rasik Bothara conducted six activities till date and has planned many more. The last GBM of the previous term and the first GBM of the new term was held online on Janu-





ary 26, 2021. This was followed by first Executive Committee meeting at Vairaj Hall on February 4, 2021, while their second meeting was held on February 26, 2021. A series of discussions were held with the Heads of the colleges of architecture of Nashik, with the agenda of improving and increasing their interaction and involvement with the IIA. A joint coordination meeting was held on March 2, 2021, to discuss the implications of the 'Saving Clause' between Architects and Engineers Association and IIA- Nashik Centre. A meeting with the Joint Director, Town Planning was organised on March 5, 2021 with the members of IIA-Nashik Centre and the members of CREDAI regarding UDCPR.

#### ⑤ IIA-Kolhapur Centre

The GBM was organised on February 17, 2021 at Rutugandh Lawns. The activities of handing over and taking charge took place smoothly. The new Chairman, Ar. Vijay Korane addressed the gathering regarding the membership development and about planning other activities.

#### ⑥ IIA-Pune Centre

The Pune Centre held the last GBM on February 5, 2021 online and their first Executive Committee meeting on February 12, 2021 at their office premises at Mantri Terrace. Subsequently, the first GBM with the members of the new team headed by Chairman Ar. Sandeep Khatpe was also held online on February 19, 2021. Ar. Jyoti Panse was unanimously co-opted for the post of Vice-Chairman, which had been vacant.

International Women's Day was celebrated successfully on March 12, 2021. The chief guest, Ar. Jayashree Deshpande felicitated Dr. Sarah Melsens and Dr. Shubhada Kamalapurkar for their exemplary work in the field of architecture and education. This event was also held online. Ar. Mrinalini Sane, Jt. Hon. Secretary of IIA-Pune Centre, was invited to speak on 'Work-Life Balance' on the occasion of Women's Day on March 8, 2021 by Allana College of Architecture.

### Punjab Chapter

#### General Body Meeting of IIA-Punjab Chapter and IIA-Ludhiana Centre

Amidst the pandemic of COVID-19, the IIA-Punjab Chapter did not hold back any of its major activities. Celebrating the tough challenges of the lockdown year 2020, the strategic development plans for the forthcoming year 2021 were laid out at the GBM held at Ludhiana, under the guidance of our worthy Chapter Chairman, Ar. Sanjay Goel. Observing the required safety measures for COVID-19, the meeting was held on January 31, 2021, at Hotel Park Plaza Ferozepur, Ludhiana.

According to the adage, "Without knowledge action is useless and knowledge without action is futile," the IIA-Punjab Chapter believes in constantly updating knowledge by arranging seminars and presentations to gain awareness of various pioneering products which have made their mark in the construction industry.



Speaking on 'Cutting the Cost of Corrosion on Infrastructure', Dr. Rahul Sharma, Director of International Zinc Association (IZA), India, along with Mr. Randhir Rathaur, Vice President of Sales and Marketing of the Madhav KRG Group and Ar. Sanjay Goel, Chairman of IIA-Punjab Chapter and Director of Ludhiana Smart City Ltd. disseminated practical and technical knowledge on the causes of corrosion in infrastructure and how it can be avoided by using the right materials. Paralleling the concerns of sustainable development in Smart Cities, the seminar also presented case studies of galvanized structures in India and around the world. After the seminar, the KRG group introduced their new product, the continuous galvanized rebar. The specialty of this product is that it uses a small amount of aluminum (0.2 %) in the zinc bath to produce a thin alloy layer which adheres to the steel interface.

#### GBM of the IIA-Punjab Chapter

The last general body meeting of IIA-Ludhiana Centre for the term 2015-2017 was held during this event, presenting the accounts of the fiscal year 2019-2020. Along with this, the swearing-in ceremony of the newly-elected members of the IIA throughout the state of Punjab was also held. The first general body meeting of IIA-Ludhiana Centre for the term 2020-22 was also held. During this, the results of the elections of IIA-Punjab Chapter for the term 2020-2022 were also announced.

A welcome ceremony was held for LPU's Chief Architect and Founder Principal Architect Prof. Dr. Ar. Atul Singla by the KRG Group, after his election as the Chairman of the IIA-Jalandhar Centre of the IIA-Punjab Chapter.

The swearing-in ceremony of all the members of the IIA-Jalandhar centre was one of the key attractions at the start of this year as the national body of Indian Architects in the country. The IIA has elected Prof. Dr. Atul Singla as the Chairman of the IIA-Jalandhar Centre of the IIA-Punjab Chapter. Ar. Atul Singla, a pioneer in the field of architecture is the Chief Architect at Lovely Professional University, Phagwara, Punjab. He is also the Founder Principal Architect of IDEARCH Architects and Designers and the Dean of Lovely School of Architecture and Design. The newly-elected Executive Committee of the IIA-Jalandhar Centre comprises of the Chairman, Prof. Dr. Atul Singla, the Vice Chairman, Ar. Shruti H. Kapur, the Hon. Treasurer, Ar. Rahul Ratra, the Jt. Hon. Secretary, Ar. Lalit Verma. The Executive members are Prof. Ar. Tara Singla, Ar. Arpan Ag-





garwal, Ar. Ashish Batra and Ar. Gurkirpal Singh. The newly elected members swore the oath during the event.

Our worthy Chairman, Ar. Sanjay Goel has always been a keen observer of the activities of the current government and the initiatives that fuel the development of a better, sustainable and liveable tomorrow for all of us. He shared his opinions in tandem with his great vision for a better tomorrow. Critically analysing the budget of this year, he highlighted some valid concerns regarding the insufficient allocation to infrastructural projects in the budget. Applauding the government's concerted efforts for providing seven hostels for women, he said it was truly a 'conscientious gift to women on International Women's Day'. He also stated that the provision of a medical college was definitely a very good step by the government to support medical professionals. He appreciated the reforms in the budget which made allocations to the sectors of education and health. However, he felt a more detailed understanding would help the government understand that the actual financial needs of the Smart Cities' Infrastructure and rural infrastructure.

#### Lohri celebrated by IIA-Ludhiana Centre

Lohri was celebrated on January 13, 2021 by the IIA-Ludhiana Centre. There was a kite flying contest in addition to a bonfire, along with exchange of sweets.

#### Women Architects from IIA-Ludhiana Centre celebrate International Women's Day 2021

Acknowledging women as equal partners in decision-making processes, IIA-Ludhiana Centre reiterated this with a fun-filled celebration of the International Women's Day 2021 with the theme 'Women in leadership while achieving an equal future in COVID-19 world'. The role of women architects and their achievements in all walks of life was appreciated enthusiastically. Needless to say, safety measures remained a prime priority due to the pandemic.

### Rajasthan Chapter

#### Elections:

The new committee of IIA-Rajasthan was installed under the newly-elected Chairman Ar. Tushar Sogani.

#### Executive Meeting and Various New Committees:

① The first meeting was convened in the new IIA-Rajasthan office in which the Imm. Past Chairman thanked and welcomed the members of the new IIA-Rajasthan Committee.

② A Vision document is also been prepared and unveiled by Shri Bhaskar Sawant (IAS), Principal Secretary-U.D.H., Government of Rajasthan.

Committee	Convener
Architect's Hand Book Committee	Ar. Manish Thakuria
Membership Growth Committee	Ar. Vikas Vijay
Education Committee	Ar. Neeraj Gupta Ar. Preethi Agrawal (Co-Convener)
Collaboration Committee	Ar. Arpit Sancheti Ar. Ankur Singh Tanwar (Co-Convener)
Heritage Conservation Committee	Ar. Kavita Jain
Sports Committee	Ar. Raghuveer Singh
Cultural Committee	Ar. Rekha Nemani
Social Responsibility Committee	Ar. Ayush Bhardwaj
Newsletter/Social Media Handling Committee	Ar. Shweta Choudhary
Centre/Sub-Centre Handling Committee	Ar. Abhinav Sharma

③ The incumbent chairman laid down the future road map of the various tasks of the chapter and formed various committees under the convenorship of the Executive Members of the committee.

#### Meeting for the new building for IIA-Rajasthan:

The New Committee visited the site selected for the new Chapter office. The future road map and various development-related points were discussed. It was decided to float a design competition for the new building.

#### Various Courtesy Meetings with Government officials:

① In order to increase collaboration with various local government departments, the new committee led by Chairman Ar. Tushar Sogani, paid courtesy visits to the following government officials— Principal Secretary UDH, Commissioner JDA, Commissioner Housing Board and Chairman RERA Rajasthan. The meetings were successful and the officials conveyed the willingness for more participation with IIA-Rajasthan.

② The Chapter Chairman was invited by the Government for a state level expert committee for review of approval for some of the construction projects.



### Webinar with Rajasthan Chief Town Planner:

An interactive webinar was organised with the CTP Rajasthan over the New Model Rajasthan Building Regulations 2020 which was very well received by majority of the practising architects of the state helping to resolve their queries.

### Jodhpur Centre and Kota Sub-Centre Programs:

→ Kota Sub-Centre: A national photography competition and exhibition for architects and students of architecture was hosted by Kota Sub-Centre on March 7, 2021.

→ Jodhpur Centre: On occasion of international women's Day IIA-Jodhpur Centre organised Cyclothon on March 8, 2021. The event was inaugurated by both Women Mayors of Jodhpur. All architects participated actively in this event.

## Tamil Nadu Chapter

### Architectural Awareness Filmlet:

IIA Tiruchirapalli Centre & Archtrust Tiruchirapalli, have announced an Architectural Awareness AV Contest for IIA Members and Students of Architecture across the Country. The aim of the contest is to further familiarise Architecture among General Public, to highlight as to why Architecture and Nature should co-exist, to project the presence of Architects and their importance, to showcase how Architecture accomplishes people's desire and enhances their lifestyle. Judging Criteria: The Filmlet should have an easy connect with the target audience encompassing the positive effects of Architecture on its environs. Entries demeaning / discrediting other profession(s)/professional(s) shall be disqualified.

#### **For Details, contact:**

Ar. Karthick K.K. ► 95008 88242

Ar. Muthuraman T. ► 93601 59359

#### **Format for Submission**

MP4 / AVI / WMV

Motion Picture/Animation/Cartoon/

Any new creative genre.

**Duration** Max 120 secs

**File size** Max 20mb

**Prizes** Winner ► Rs.15,000/-

Runner ► Rs.10,000/-

### Technical Session by IIA Coimbatore Centre:

IIA Coimbatore Centre organised a Technical Session, 'Connecting the Dots, on 20th Feb 2021, in which Ar.Murali Murugan presented some of his works including the recently inaugurated Memorial of former Chief Minister Ms.J.Jayalalitha. The First EC Meeting of IIA Tamilnadu Chapter was also held at the same venue in Coimbatore.

### Z-Axis 2020 Competition Winners

Ar.Vijaykumar Sengottuvelan (Founder & Principal, Vijay Architects, Trichy) & Ar.Kapilan Chandranesan (Junior Architect, Orange Architects, Rotterdam, Netherlands), won the National Award at the Z-Axis Competition conducted by Charles Correa Foundation, under the category 'Commons and the City' for their entry on the 'Revival of Uyyakondan Canal'.



### Chennai launches Photography Club & Quarterly Publication:

IIA Chennai Centre has launched 'The Clique', a Photography Club through which Architects and Students of Architecture will come together and explore the Architecture of Chennai through Photography Tours and Workshops. The Centre has also announced its Quarterly Publication and the first issue will be released in the month of April. An open call for articles has been sent out in which interested persons may address any topic that furthers the cause of Architects and Architecture in Chennai. The articles can be mailed to [iiaccpublications@gmail.com](mailto:iiaccpublications@gmail.com). More information available at [iiachennai.com](http://iiachennai.com)

### IIA participates in Chennai's Third Master Plan:

IIA Chennai Centre & Tamilnadu Chapter discussed expectations from the Third Masterplan of Chennai and shared inputs with the State Government, on assessment of Master Planning process and capacity in the Chennai Metropolitan Area. The Chennai Centre as expressed its keenness to play an active role in the preparation of the Third Master Plan for the Chennai Metropolitan Area and create an opportunity to conceive a city that is not only extremely livable but a city that is alive and naturally sustainable.

### IIAPL to be hosted by IIA Tamilnadu Chapter:

This year's IIAPL Sports Tournament will be hosted by IIA Tamilnadu Chapter. The dates and other details will be shared soon.

## Uttarakhand Chapter

The Kumaun Centre of IIA, organized a Virtual Interaction on Monday, 08 March 2021, as part of its endeavor to celebrate Women Architects of Kumaun. During the day, (Kumaun) Centre Office Bearers, visited Offices of Women Architects and greeted them with blooming Flowers and compliments on behalf of the Architect Community.

The Evening Program (Virtual Event) was attended by Members of Kumaun Centre and the Uttarakhand Chapter (including Garhwal Region). The Session moderated by Ar. Pradeep Kori, Secretary, IIA Kumaun Centre, had a Key Note Address by Ar. Kanika Agarwal, Treasurer, IIA Uttarakhand Chapter, who expressed her thoughts on the ever-increasing representation of Women Architects, in

the past 15 years, and also facets of Architectural Practice, for Women Architects. She highlighted upon the challenges faced by Women Architects on multiple fronts of Family, Household, Office and Clients, from Sunrise till after Sunset. Ar. Subhi, Treasurer, IIA Kumaun Centre, seconded the Key note Speaker, and recalled her (obstacle) experiences in dealing with Development Authorities, where men are still in abundance, and at times, hesitate to communicate with Women Architects, regarding Building Permits and Regulatory Approvals. Further, she also (proudly) recalled her Class at Architectural College, which had 13 Girls out of the Batch strength of 15.

A message of the Chapter Chairman, Ar. Shashi Mohan Srivastava, was read by the Chapter Secretary, Ar. Saurabh Suman, wherein, the former laid emphasis on the IIA serving as an enabler for Gender Equal Opportunities in Architecture, in Public and Private Sector Consultancy of Architect Services. Further, the Chapter Chairman, through his message, also emphasized on the importance of Gender Sensitive Design, especially in Public Buildings, and ways in which it impacts end user behavior and adoption of Public funded infrastructure.

Adding to the Chapter Chairman's Message for the Day, the Chapter Secretary, also reflected upon the need to include more Women as part of IIA Membership Drive. In contrast to Women being 49.5 % of Population of Uttarakhand, Women Architects comprise 28% of the Chapter's Membership Figures.

The issue of Gender Sensitive Design, was seconded by Ar. Ritesh Singh, Ar. Shahzad Ahmed Malik and Ar. Pankaj too. Ar. Ekta Agarwal, suggested IIA Uttarakhand, to prepare a Model Flyer of Best practices on the issue, for circulation and adaption by Member Architects of IIA Uttarakhand Chapter.

There was consensus on an In Person Celebration of a bigger scale and magnitude, in the year 2022.

The Virtual meeting of 60 Minutes, closed with a Vote of Thanks by Ar. Sanjay Kumar Singh, Centre Chairman, IIA Kumaun Centre, read by the Secretary of IIA Kumaun Centre, on behalf of the Former.

## Arcasia News – Edition 01

On March 6, 2021: The Thesis of the Year (TOY) 2020 awards were announced and the winners were as follows:

<b>First Prize</b>	Ma Chun Yu Kelvin (Hongkong)
<b>Second Prize</b>	M Faris Azim Bin Ab Razak (Malaysia)
<b>Third Prize</b>	Wilson Tan Xern EE (Malaysia)
	Wong Lok Hei (Hongkong)
<b>Hon'ble Mention</b>	Lawrence Neil (Philippines)

On March 13, 2021: Arcasia Committee on Social Responsibility held an online meeting on which they discussed various issues. Each country presented their country reports to inform the situation in their countries. Dr Thana from Thailand explained about the upcoming ACSR award parameters. Tony Wong from Singapore updated everyone on the setup of Arcasia Emergency Architects community. The meeting was rounded up by Ar Thomas Cheung of Singapore with a promise to meet again soon in person.

On March 20, 2021: Arcasia Committee on Young Architects will be holding an interesting online symposium by the name Alumini Talk. There will be three papers presented by Ar Star Florentino Marudo, Ar Gyanendra Shekhawat, Ar Lim Jeong Taek. The panel discussion that will follow will be moderated by Ar Alice Leong (Malaysia)

On March 27, 2021: A memorial Symposium is organised by the Fellowship committee in memory of Ar Ahmed Djuhara who was President of IAI (Indonesia) and passed away last year due to the pandemic. Various speakers shall be remembering him on that day with his wife and partner Ar Wendy Djuhara and along with the very capable past apprentice Ar Denny Setiwan who is now the Vice Gen Secretary of the IAI.





# IIA NEW MEMBERS

2nd Com dated 27th February, 2021  
Meeting at Chennai

Mem. No.	Associate to Fellow	Place
F17344	Ar. Vijayaram K.	Tamil Nadu
F15863	Ar. Arun S. R.	Thiruvananthapuram
F06021	Ar. J. A. Richardson Perez	Chennai
Mem. No.	Associate	Place
A24339	Ar. Subham Somani	Raipur
A24340	Ar. Manisha V. Dharwadkar	Thrissur
A24341	Ar. Namraota Jain	Uttar Pradesh
A24342	Ar. Karanveer Singh Chawla	Jammu & Kashmir
A24343	Ar. Neha Aditya Bhaiya	Akola
A24344	Ar. Bhakti Ruturaj Jadhav	Sangli
A24345	Ar. Sandeep Pandurang Hinge	Satara
A24346	Ar. Neena Raicha	Chhattisgarh
A24347	Ar. Samragini Madhav Madhuri Deshpande	Mumbai
A24348	Ar. Radhika K Chivate	Belgaum
A24349	Ar. Hemant Jiwnani	Chhattisgarh
A24350	Ar. Abhishek D	Coimbatore
A24351	Ar. Varsha M. B.	Kochi
A24352	Ar. Raguraman P.	Coimbatore
A24353	Ar. Fazil Moidunny Kutty	Kerala
A24354	Ar. Nisham Mohamed	Kerala
A24355	Ar. Matinder Kumar	Ahmedabad
A24356	Ar. Niraj Kantilal Patel	Mumbai
A24357	Ar. Paras Subhash Netragaonkar	Pune
A24358	Ar. Sandeep U	Karnataka
A24359	Ar. Amirah Ahamed	Karnataka
A24360	Ar. Nandita	Karnataka
A24361	Ar. Anchit Sharma	Jammu & Kashmir
A24362	Ar. Aditya Jain	Delhi
A24363	Ar. Kubair Vatsa	Gurgaon
A24364	Ar. Abhishek Jain	Delhi
A24365	Ar. Pragya Mittal	Jharkhand
A24366	Ar. Madhav Raman	New Delhi
A24367	Ar. Aniket Rajendra Khade	Nashik
A24368	Ar. Ashutosh Kumar	Bihar
A24369	Ar. Ankur Prakashnath Dadheech	Rajasthan
A24370	Ar. Ayyappa G.	Kerala
A24371	Ar. Subeesh S.	Kollam
A24372	Ar. Amrita Madan	Noida
A24373	Ar. Stuti Bindlish	Hisar
A24374	Ar. Khushboo Agarwal	Uttar Pradesh
A24375	Ar. Javed Iqbal	Rajasthan
A24376	Ar. Nitin Nehra	Rajasthan
A24377	Ar. Rishabh Sharma	Rajasthan
A24378	Ar. Ashish Kumar Singh	Jharkhand
A24379	Ar. Deepa S. Wani	Karnataka
A24380	Ar. Deepti S. Mayee	Kalyan - Dombivli
A24381	Ar. Shabnam Kutub Kapasi	Gujarat
A24382	Ar. Yashpal Singh Sengar	Uttarakhand



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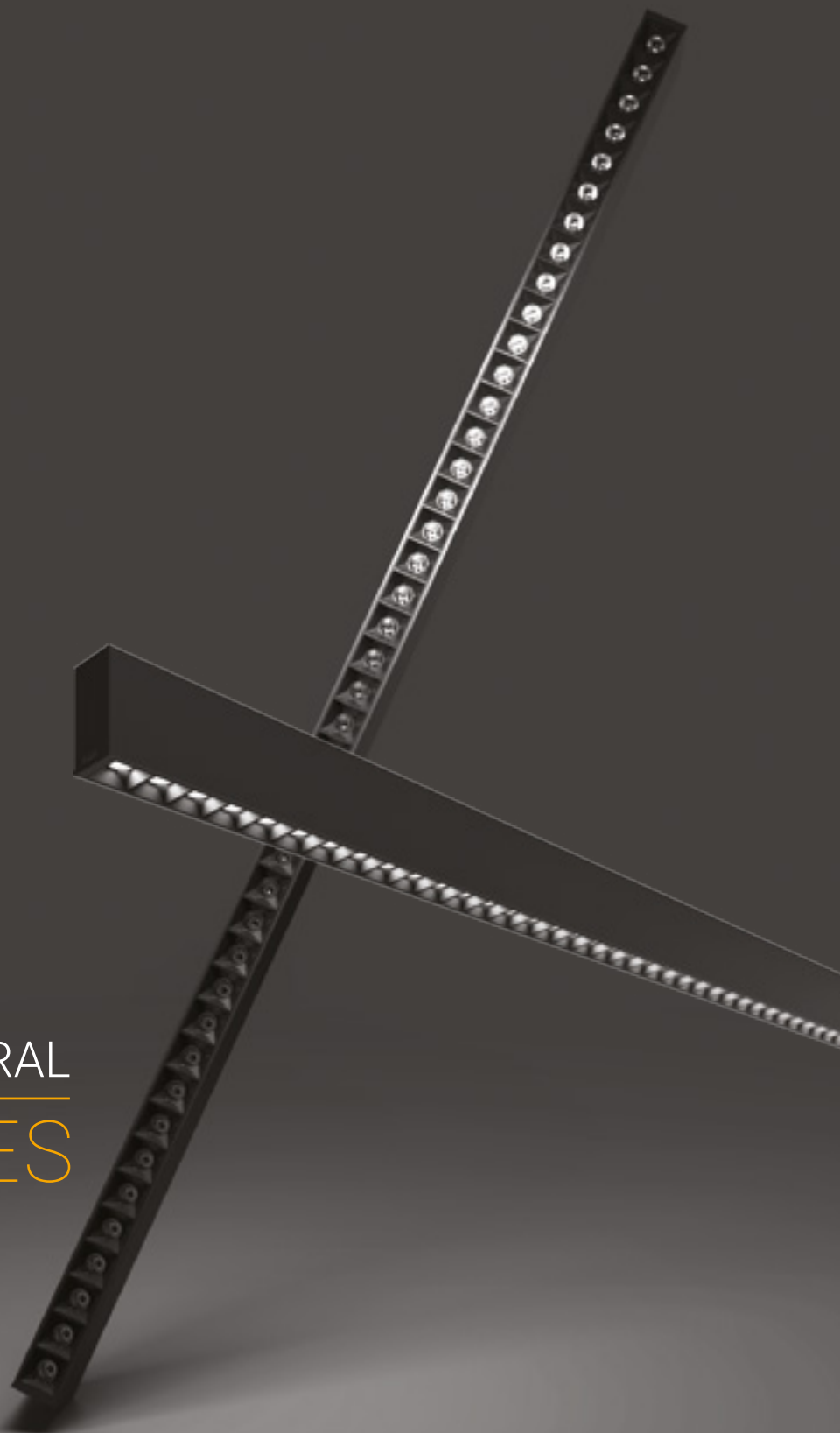
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