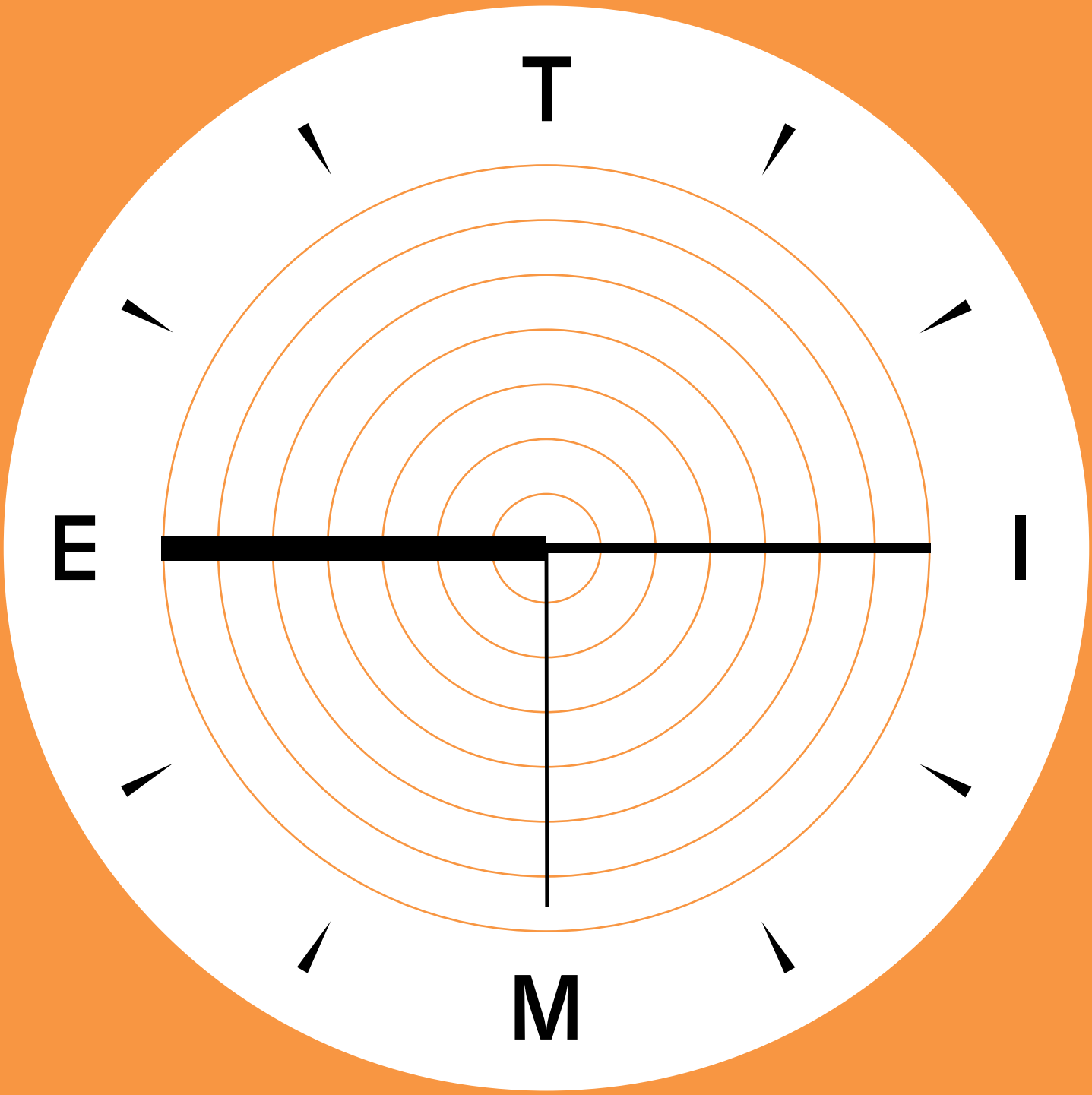
JOURNAL OF THE INDIAN INSTITUTE OF ARCHITECTS
REFEREED JOURNAL OF IIA ●
ISSN-0019-4913 AUGUST 2021
VOLUME 86 ▲ ISSUE 08
● RS. 100



CONTENTS

Prof. Jitendra Singh

Prof. Chandrashekhar

Prof. Parag Narkhede

Prof. Abir Bandyopadhyay

Prof. Vinit Mirkar

Prof. Rama Subrahmanian

Prof. Abhijit Natu

BOARD OF REVIEWERS

Printed & Published by Ar Lalichan Zacharias on behalf of The Indian Institute of Architects.

Designed by **November**
Printed by **Arihant Digiprint**
Shed No.1, Ground Floor, CTS No.15, 16, 20, 21 & 37, Italian Compound, Dindoshi Village, Ittbhatti, Goregaon East, Mumbai-400063.

Published at The Indian Institute of Architects, Prospect Chambers Annexe, 5th Floor, Dr D N Road, Fort, Mumbai-400001.

+91 22 22046972 / 22818491 / 22884805
+91 22 22832516 (FAX)
iiapublication@gmail.com
iiaho2014@gmail.com
www.indianinstituteofarchitects.com

Editor Ar. Lalichan Zacharias
R.N.I. No.9469/57
lalichanz@gmail.com

Cover page designed by **November**
info@nvmbr.in
www.nvmbr.in

REDBOX DESIGN STUDIO
redbox.studio4@gmail.com
www.redboxdesignstudio.in

Printer's Email
arihantdigiprint.offset@gmail.com
krish.graph2020@gmail.com

JIIA IS REFEREED JOURNAL
ISSN-0019-4913

REGISTERED UNDER SOCIETIES REGISTRATION ACT, XXI OF 1860

JOURNAL OF THE INDIAN INSTITUTE OF ARCHITECTS
VOL 86 • ISSUE 08 • AUGUST 2021

www.indianinstituteofarchitects.com

EDITOR'S NOTE

Space is the Now
Now is the Time!

We are all aware that we are running out of our natural resources and the stress on our resources is stressing us out too. The rapid transformation of our environment is affected by our lifestyles and in turn influences our everyday lives. We feel this transformation in our built environment as well. We have developed many time-saving technologies, but we always feel like we have less time than ever.

The scarcity that exists today in the developed world is not food, clothing or shelter- it seems to be *Time.*

'All things that bind us together and make life worth living - Community, Family, Friendship- thrive on one thing we never have enough of : TIME'.'
says Carl Honore.

How Time, Space and Matter come together can be the difference between good and great architecture that allows a deep Human Experience.

The theme for the August issue is *TIME.*

Dr. Ar. Pratheek Sudhakaran is in *Dialogue* with celebrated Architect Ranjit Sabikhi.

In memoriam, Ar. Eero Saarinen is remembered by Ar. Fatema Kabir.

We continue with our other regular columns like travelogue, book review, photo essay, design features, education and more.

Enjoy reading the issue. Keep contributing to JIIA.
Time is the Fourth Dimension of Space.

Stay safe and Blessed.

Ar. Lalichan Zacharias
Editor

Ar. Lalichan Zacharias

Ar. Gita Balakrishnan

Ar. Brijesh Saijal

Dr. Shilpa Sharma

Ar. Manguesh R. Prabhugaonker

Ar. Mukul Goyal

Dr. Pratheek Sudhakaran

Ar. Tushar Sogani

EDITORIAL TEAM

PRESIDENT'S MESSAGE

Dear Members,

Greetings!

It is quite refreshing to see the steady progress of JIIA and the encouraging responses from the members. Some Chapters and Centres have come out with newsletters and magazines with varied and interesting content.

With the growth in number of architects across the country there are many who have established themselves in many towns and cities across various states. The Chapters can identify towns and cities where there are sufficient number of architects to form a Centre or Sub- Centre. This can help in bringing together members of our fraternity on a platform that will provide opportunities for interaction, be beneficial for them and help in the growth of our Institution. IIA Lonavala Centre in Maharashtra has been formed recently with Ar. Vishwas Kotkar as Chairman. Our best wishes to the new Centre.

The Young Architects Festival is being revived after a considerable time and it is being hosted by IIA Jharkhand Chapter in the month of October at Ranchi. The Chapter Chairman, YAF Committee and the Young Architects Committee are working together on programmes and initiatives for maximum participation of young architects. it will be a great opportunity for young architects to come together, subject to travel restrictions, and also partake on the virtual mode as it is being planned as a hybrid event.

The IIA National Awards has received a good response. Appreciate the efforts of the Committee and best wishes to all the participants.

We have to focus on affiliating more institutions to IIA. Chapters and Centres can identify and help. IIA is planning some initiatives to be unfolded in the coming months for the benefit and participation of the students of the affiliated colleges.

Congratulations to Ar. Debatosh Sahu on his election as a Member of the UIA Council with me as an Alternate Member.

As the situation unfolds, towards hopefully better times with people safe and healthy, let us look forward to some engaging initiatives and programs.

Ar. C. R. Raju
President, IIA

Ar. C.R. Raju
President, IIA

Ar. Vilas Avachat
Vice-President, IIA

Ar. Jitendra Mehta,
Jr. Vice President, IIA

Ar. Gyanendra Singh Shekhawat
Hon. Treasurer, IIA

Ar. Ashutosh Kr. Agarwal
Jt. Hon. Secretary, IIA

Ar. Leena Kumar
Jt. Hon. Secretary, IIA

Ar. Satish Mane
Jt. Hon. Secretary, IIA

Ar. Divya Kush,
Immediate Past President

IIA OFFICE BEARERS

COMMENTS

Just recieved the May Issue of JIIA. Congratulations for a smart production.

Ar. Ashish Acharjee

It is great to see that the last few issues of JIIA have been focusing on the research in architecture. One can see that many faculty members, as well as students, have been writing research papers and JIIA is actively publishing the same. I feel this will go a long way in the promotion of research and development in our profession. I really appreciate IIA and JIIA and its Editorial Board for this initiative.

Ar. Anand Ukidve
Principal, *Aayojan School of Architecture and Design,* Pune.

It is inspiring to go through all the JIIA issues till date. There is an excellent balance of articles related to academics, professional practice and construction technology.

Congratulations to the Board of Reviewers and the Editorial Team.

Prof. Mahesh Nagecha

Really like the quality of this new magazine. Have to congratulate the team for that. Keep up the wonderful work. All the best.

Ar. Sanjay Mohe

We welcome your comments and suggestions.

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

THEME

ARCHITECTURE AND TIMELESSNESS

by Dr Pratheek Sudhakaran

It is rather fascinating, why a material phenomenon such as architecture, so physical, so temporal, would strive to achieve this much desired quality of 'timelessness'.
Dr Pratheek Sudhakaran

India, a living civilization, enters its 75th year of Independence, with it's vast, pluralistic, and timeless traditions, where towns, streets and cities are a celebration and architecture has been an undeniable union of space and time. The land where the work of designers, filmmakers, artists, architects, musicians, poets, writers, and sculptors are considered to be unforgettable, iconic, everlasting, legendary, special, and meaningful that describe the general notion of it being 'timeless'.

One then wonders, what makes architecture 'timeless'? Is it one of these things, maybe all of them, or maybe none?

Traditionally, buildings in India have grown intuitively out of an interaction with the landscape, soil, climate, material, and various types of cultures. Just as a bird shapes its nest with its own body, so the traditional community shaped its habitat with its collective memory. Through this tradition, the overall interaction between physical conditions, a way of life, and psychological needs are developed towards a balance. Architecture converts the community's cosmological view of the world into a physical reality.

In India the temporal order and the mythical order are linked simultaneously. In the end, there is a complete affinity between the individual and the community, between thinking and place, between space and time. Thus, architecture becomes a 'timeless' entity. 'Timeless' does not mean something that belongs to no particular time, but in fact, something that perfectly fits its place yet flows across the boundaries of time.

For every site, whether it's for a home, a school, a market, or the ghats, there are sets of events, human and non-human, and the repetition of which contributes to the greater structure of events that make our world. All these events, anchored in our spaces, in buildings, towns, and cities, across different contexts, different geographies, different patterns, originating from different cultures, in different sub-cultures and societies, with varying forces that make good architecture a 'living' entity and in turn renders it 'timeless'.

Numerous master architects designed a series of masterworks in India that changed the way we think about architecture. Their buildings were not only modern in their form, construction and technology, but also evoked timeless architectural values in their use of space, geometry, light, shade, and scale. These buildings touch the mind, imagination and senses of those who inhabit them or move through them through their metaphysical sense of order.

Understanding this evolution of architecture in India to modern-day practices, one can realize the timeless quality when various forms of the architect's creative expression suit the present, but are also anchored in history and tradition. In this way, it would be timeless, by belonging to the past, present, and future at the same time. The connection and reinterpretation with the past are vital, the modernization of the past. We need not simply revisit the past, but to reinvent it through our current standpoint, to see it not as it was, but as we understand it in the present.

And yet, architecture must evoke our sense of identity – individual and collective.

In this way, every society will have its own character, moving away from an industrial, standardized homogenous design language. This would lead to rooted, yet profound architecture, much more experiential, meaningful, embodied and spiritual, than just being objectified.

As Mark Crimson rightfully states, "Something seems to have happened to cities and their relation to the past recently".

Architecture must foster a generative force for civilizations, instead of scattering the meaningful life in it, into infinite individual divergences, leading to a loss of identity, loss of collective memory. In order for it to be timeless, Architecture must establish, always, a temporal continuum, given to it by being rooted in tradition, in contextuality.

"Architecture is deeply engaged in the metaphysical questions of the self and the world, interiority, and exteriority, time and duration, life and death".
Juhani Pallasmaa

When you see aesthetic and cultural practices as changing expressions of space and time, as spatial representations and artifacts of human experience. Architecture, thus, becomes a primary instrument in relating us with space and time and giving these dimensions a human measure.

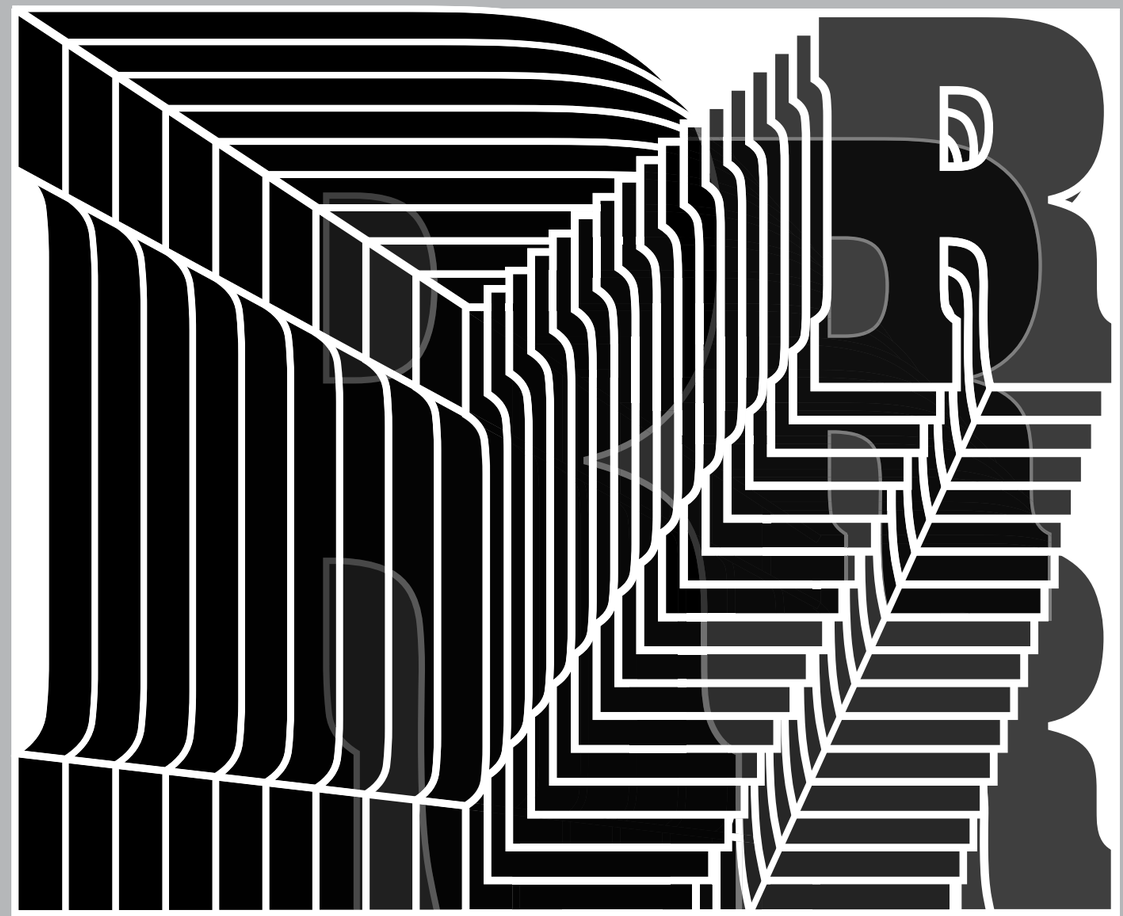
The expressions in the language of architecture must reinstate man's sense of identity – which seems lost in many modern cities and buildings. The streets, public buildings of many contemporary towns hardly evoke our sense of identity when we are in them.

The language of geometry and abstraction, of glass and steel, might not be working the way it should. The forceful imitation of traditional motifs would be of no use either, because the meanings that have been lost in our cities, cannot be compensated for by a superficial reference which ultimately is 'out of place'.

The timeless character of architecture can come from its connection with the spirit, the essence of humankind.

That's the intent of the JIIA, to discuss, deliberate and articulate meaningful conversations. To be able to bring about a change in the way we perceive architecture in India and achieve true 'timelessness' in our built environment.

So read on, participate and contribute!



RESEARCH

THE HIVE : BIOPHILIC CO-WORKING SPACES

K.Thenmozhi
Final Year B.Arch.
School of Architecture, VIT (Vellore Institute of Technology), Vellore
thenmozhip123@gmail.com,
vk.thenu@yahoo.com

Dr. Sharmila Jagadisan
Associate Professor
School of Architecture, VIT (Vellore Institute of Technology), Vellore
sharmila.jagadisan@vit.ac.in.

Prof. Ankit Kumar
Assistant Professor Sr.,
School of Architecture, VIT (Vellore Institute of Technology), Vellore
ankitkumar@vit.ac.in

The Project titled *The Hive : Biophilic Co-working Spaces* is the architectural design project of semester 9. Each student had to select a building typology of their choice and develop a programme as a design solution by setting parameters for the design, understand environmental impacts of the pre- and post- design functioning of the project after identifying the problems and explore possible design solutions in urban and peri-urban contexts. The final design solution is expected to be functional, efficient, aesthetic and eco-friendly, respond to historical, environmental and urban contexts while providing apt urban infrastructure for the present and future developments around the project site. The student has selected co-working spaces to encourage people from diverse background to meet, interact, share and exchange resources and knowledge to motivate business and enact new sustainable strategies.

WHAT IS A CO-WORKING SPACE?

Co-working spaces have been observed as a novel office phenomenon for those who are self-employed professionals, entrepreneurs, start-up companies and gig economy workers [1] who would prefer to work at home, coffee shops or rented isolated office spaces. It is an alternative to traditional workplaces and provides a new business model that supports the lifestyle and culture of the independent or remote worker. It provides new learning opportunities for employers from diverse backgrounds to interact and expand their network by creating more flexibility and inclusivity in their working environments. Philosophically, co-working is embedded in the growing movement known as the sharing economy (Jackson, 2013). People seek out co-working spaces because of the intangible and tangible benefits it offers such as reducing loneliness and binds co-working communities together through socializing, sharing knowledge and reduce huge rental or upfront office space costs respectively. Although there are several types of co-working spaces, they share the same core values, namely: collaboration, community, accessibility, sustainability and openness (Kwiatkowski & Buczynski, 2011).

Co-working spaces are preferred to traditional lease setup since in today's fast-paced world, companies are leveraging agile workplaces that integrate flexible, short-term and long-term lease options to effectively anticipate organizational needs, and for powerful technology that includes suitable collaboration tools to enable productivity in the workplace.

NEED OF CO-WORKING SPACES

- Government funded research projects and start-ups at major IIT universities are booming, hence the demand for a flexible, cheaper yet a luxurious modern, informal office setting arises.
- Helps companies save 20% of cost on real estate, maintenance. According to Coldwell Banker Richard Ellis (CBRE) and Jones Lang Lasalle (JLL) surveys approximately 26% drop in absorption of prime office space in Q1 2016 over Q1 2015 (refer Fig.1) (ibid).
- 65 % of the population under the age of 35 years who are seeking greater social engagement and looking for a work environment and be a part of a large community of like-minded people.
- Approximately 40-45% of the business opportunity in co-working sector lies with mainstream corporate firms/ large enterprises while small and medium enterprises (SMEs) along with individual professionals, together contribute another 35-40% of the demand for co-working space, followed by startups (15-25 percent).

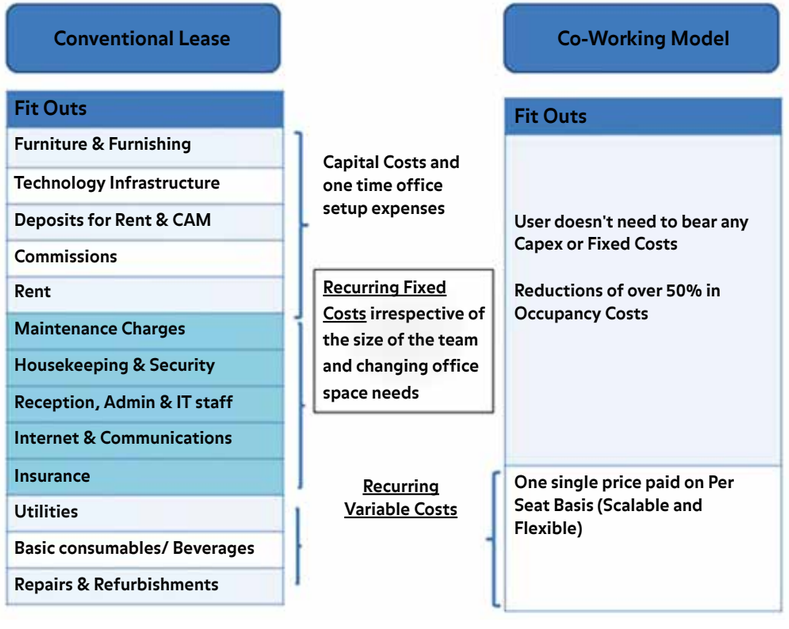


Fig.1 Reduction in Office Occupancy Costs by 50% (Source: Lakhani Vikas, 2021)

AUGUST 2021

JOURNAL OF THE INDIAN INSTITUTE OF ARCHITECTS

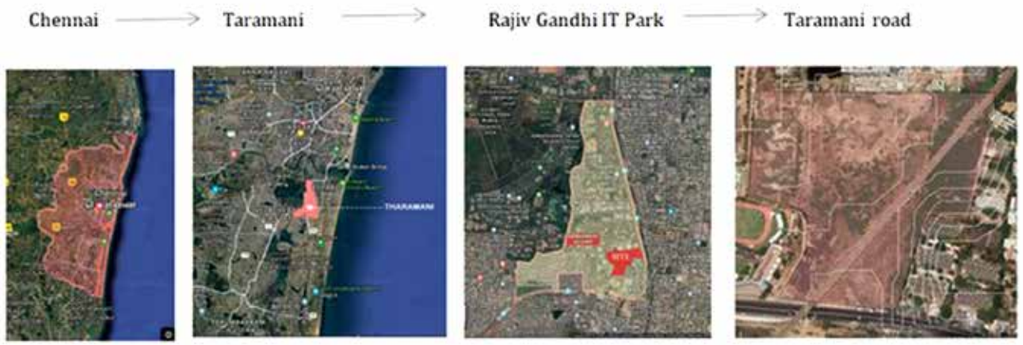


Fig. 2 Location map (Source: Google Maps)

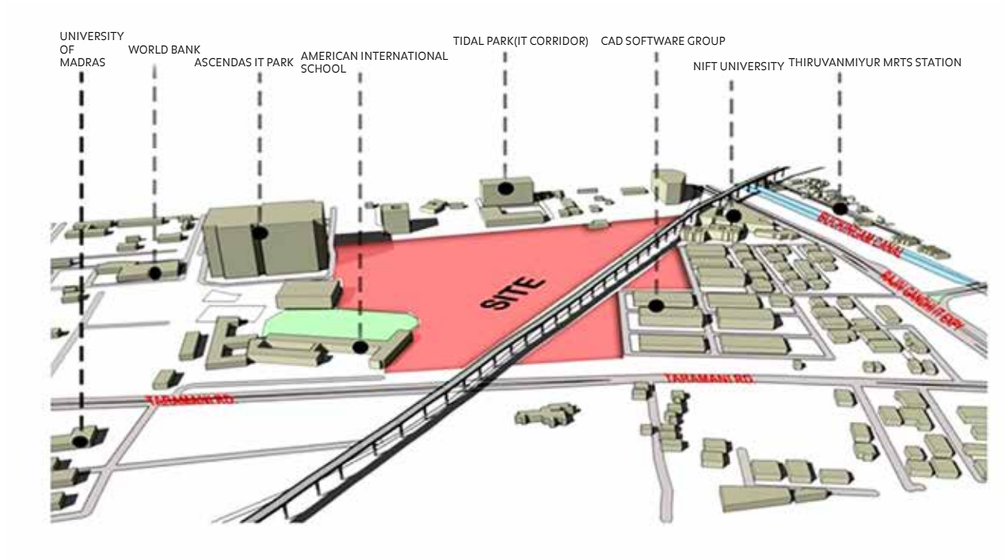


Fig.3 Site and its surroundings (Source: Author)

LOCATION OF THE PROJECT

Site Analysis

The site is situated at Taramani, Chennai. It is situated along the Rajiv Gandhi IT Expressway and is a part of the IT corridor influence and MRTS influence area. The site is close to major IT parks like Tidal Park, Ramanujam IT Park, etc. and universities like NIFT, IIT Madras (within 2 km radius) etc. (Refer Fig.2). Residential buildings and apartments in ECR, OMR and Taramani area can benefit from this space as it is close by and it is cheaper when compared to the cost of the traditional conventional lease of building spaces to work. Self-employed professionals and under-graduates from the nearby universities (NIFT, IIT Madras, etc.) can utilise the space for freelance purpose and to collaborate on projects (refer Fig.3). The extent of the site is 2.75 acres.

Intent

The HIVE co-working spaces is a program to build an inclusive work environment that encourages its users to interact, a place where like-minded people collaborate and inspire each other through communicating their ideas and views. It creates a positive work environment which extends beyond the office space and develops a better work-life balance for each individual. The main intent is to create a serene home like space that can provide a dynamic, open and flexible work environment which enhances productivity, work efficiency and brings out the strengths in them as well as provide a cozy, relaxed and home like space. The proposed site is located at Taramani Road, Chennai which appreciate many nearby conveniences. Fig 4 shows the micro and macro analysis of the site.

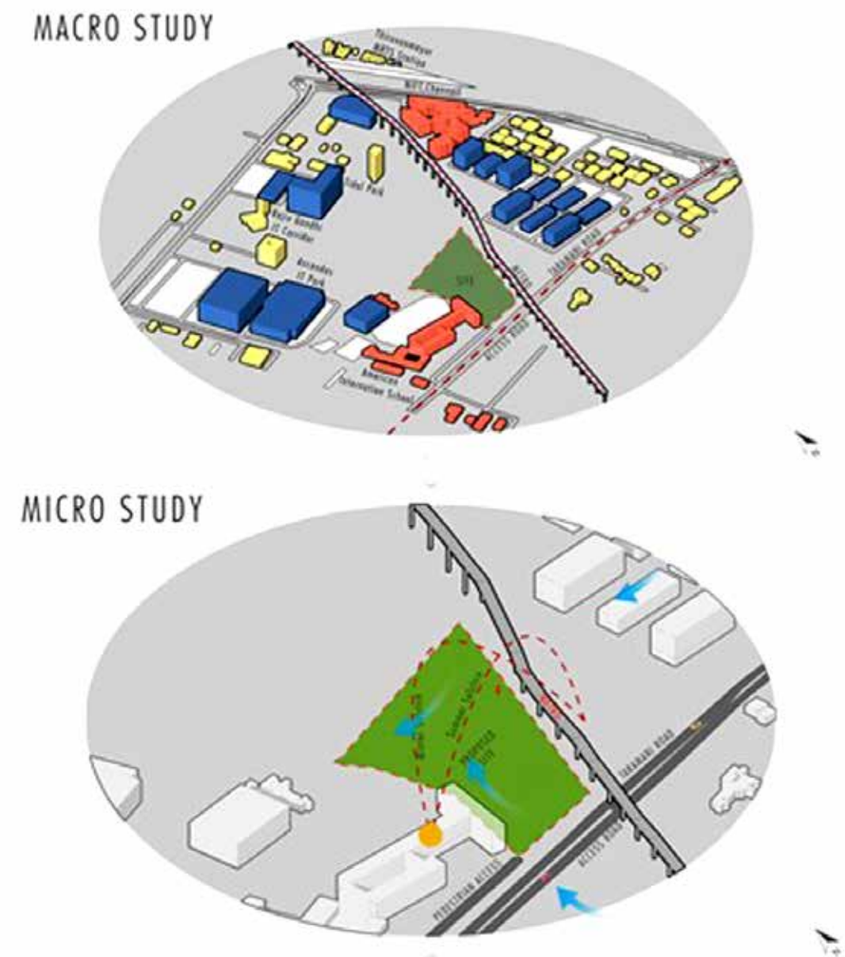


Fig.4 Macro and Micro Analysis of the site (Source: Author)

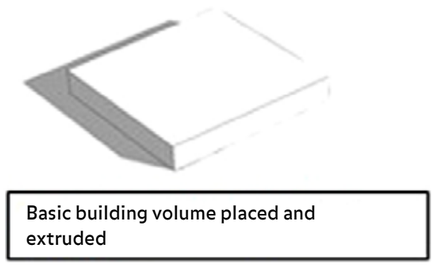
Regulations

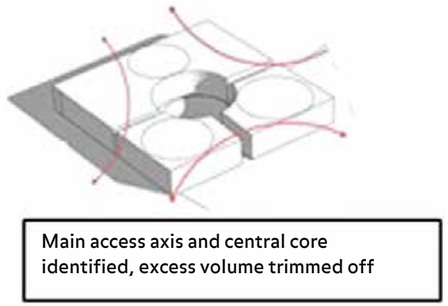
- F.S.I – 2.75 (MRTS influence area)
- Height Restrictions – Around 30m
- Open Space Reservations – 10%
- Setbacks – 7m for Service Roads (From MRTS Line at least 15m Setbacks)
- Zone – Industrial
- Seismic Zone –Zone III
- Roads – Taramani Road
- Fire – a minimum width of 1.5m for the staircase has to be provided. For the floors above 24m height, a refuge area is to be given on the immediate floor.

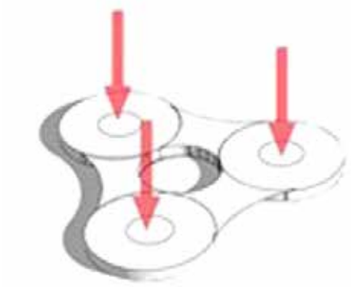
Fig. 5 shows the micro and macro study of the site

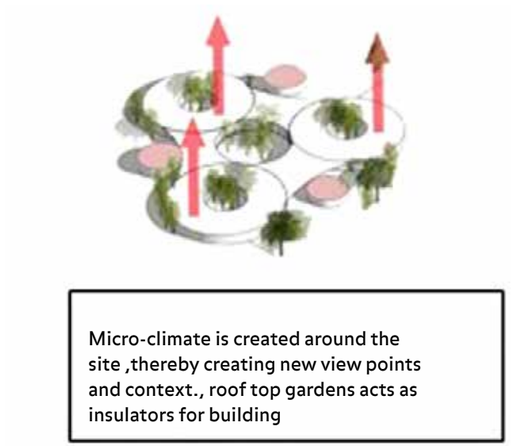
WHY CO-WORKING SPACE IN THE SITE?

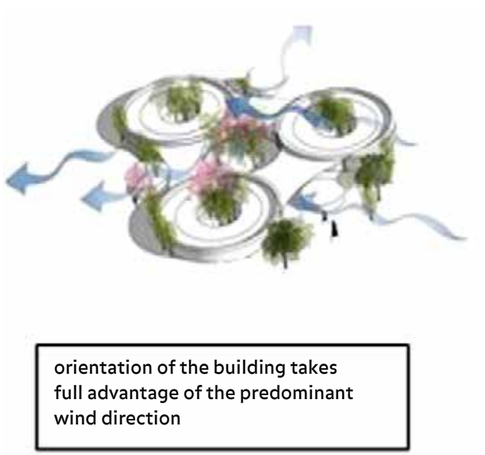
- Major IT Parks (Tidel, Ascendas, Ramanujam IT Park) and companies within 1 km radius
- Along the Rajiv Gandhi IT Expressway and Taramani Rd. – Tidal park, Ascendas Park, Ramnujam IT park away (immediate adjacent to the site)
- Surrounded by 6 schools (British International school, Nellai Nadar, American International schools etc. within 1.5 Km radius) and 4 colleges (University of Madras, NIFT, IIT Madras Etc.). Self-employed people and research students from university majorly flock to these co-working space as it provides a luxurious space with all the amenities, cheaper (when compared to renting or leasing a space), near-by and more convenient for them.
- Situated in a hot spot commercial area IT Corridor (ECR, OMR Junction).
- Taramani MRTS Station and Thiruvanmiyur MRTS Station is only minutes away from the site (within 800 m radius).











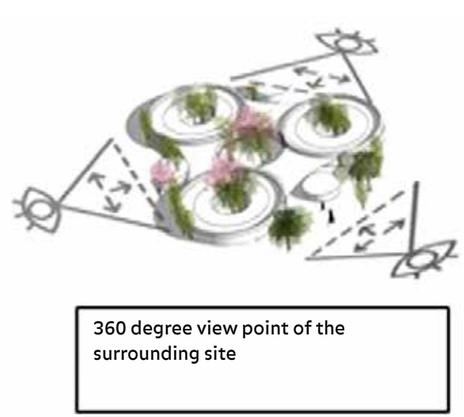


Fig.5 Development of building height and massing (Source: Author)

Fig. 7 Ground Floor Level (Source Author)

Fig.9 Courtyard Space (Source: Author)

Fig.10 Interaction Space (Source: Author)

- Attracts users of IT parks, college students and several residents situated near the site.
- The site is under the MRTS influence area as the MRTS track pass through the site.

TARGET USERS

1. Start-ups
2. IT projects
3. Entrepreneurs
4. Self-employed professionals : architects, writers, designers, artists, photographers, theatrical artists and writers, web designers, graphic designers, fashion designers, etc.

TYPES OF WORK SETUP

Four major types of work setup preferred by the users:

- Web working – setup for the large group collaborations with other groups
- Group working – set up for a medium sized group collaboration
- Chain working – for those who prefer to work independently
- Spoke working – self-employed professionals (research), temporary setup, more secluded work space

Hence spaces will be tailored accordingly for the target users and group.

CONCEPT DEVELOPMENT

The concept is to create an innovative workspace which breaks the chain of monotony that exists in traditional office setup and to establish shared multifunctional spaces which are flexible, reconfigurable and designed to meet the current global trends. Since there is burgeoning demand for biophilic office spaces the author intended to develop spaces with more vibrant décor having an indoor and outdoor plants to improve the quality of space which are more relatable at the sensory level. Figures 5 to 10 show the conceptual development to final stage of the design.

CONCLUSION

The Hive : Biophilic Co-working Spaces promotes a collective and a community – based approach to the organization and it provides workspaces for creative minds. This community driven co-working ecosystem will act as a node for the local community and will be booster for technological growth and innovation to create a strong social and business network in the city.

Endnote

[1] In a gig economy, temporary, flexible jobs are commonplace and companies tend to hire independent contractors and freelancers instead of full-time employees. A gig economy undermines the traditional economy of full-time workers who often focus on their career development.

REFERENCES

1
Jackson, Katy (2013). Making Space for Others. Retrieved from : http://www.makingspaceforothers.com on 8 Aug. 2020.

2
Kwiatkowski, A. & Buczynski, B. (2011). *Coworking: Building community as a Space Catalyst.* Fort Collins, CO: Cohere Coworking.

3
Lakhani Vikas (2021), "How Coworking is Transforming the Corporate Real Estate", Creative Destruction. Retrieved from : https://speakerdeck.com/instaoffice/creative-destruction on 5 June, 2021.

4
Hassan Razjan (2018), *Coworking Hub,* Masters Thesis. Retrieved from : https://issuu.com/razjanhassan/docs/razjan_hassan____co-working_hub____bo on 26 Sept. 2020.

K. Thenmozhi
K. Thenmozhi is a final year B.Arch student at School of Architecture, Vellore Institute of Technology (VIT) Vellore who loves learning and exploration in Landscape design, urban design, art, architectural illustration and various architectural presentation techniques. Sketching is her way of communicating concepts, ideas and designs.

Dr. Sharmila Jagadisan
Dr. Sharmila Jagadisan, B.Arch, (University of Madras, 1999), MCP (IIT Kharagpur, 2001), PhD (University of Auckland, 2009), MBA (2018). She has 16 years of work experience as an architect and planner with a focus on positive outcomes for communities through interdisciplinary thinking. She has been involved in teaching and research in the areas of urban planning, community development and EBS (Environment Behaviour Studies).

Prof. Ankit Kumar
Ar. Ankit Kumar, B.Arch., M. Arch (Environmental Design) has been active in the industry since 2013 and has a teaching experience of more than 5 years and also presented papers in international conference. He has been project coordinator for various mixed land use projects. He is currently pursuing his doctoral research on vertical landscape and thermal comfort in high rise buildings.

BUILDING RESILIENCE INTO APARTMENT HOUSING- LESSONS FROM COMMUNITY ACTION DURING PANDEMIC

Ar. Niyati Gupta
Research Scholar
Department of Architecture, School of Planning and Architecture, Delhi
niyatigupta101@gmail.com

Ar. Manoj Mathur
Professor
School of Planning and Architecture, Delhi
mmmath@gmail.com

Ar. Anil Dewan
Head of the Department
Department of Architecture, School of Planning and Architecture, Delhi
anil.anildewan1@gmail.com

ABSTRACT

Corona Virus Disease-2019 (COVID-19) pandemic provided us with an opportunity to reflect on actions taken up by the community and the volunteers in ensuring health and well-being. These actions undertaken by the non-government organizations, non-profit organization and resident welfare associations is the true indicator of country's 'resilience culture'. However, current policy initiatives do not provide a direct mechanism in fostering community resilience. It is observed that multiple networks ensuring community resilience are dependent on each other. Therefore, in this paper, an evidence-based methodology is adopted which narrates the performance of the residential apartment design for community action. Semi-structured interviews are conducted with the architects, planners and resident welfare association of the residential community-based in Delhi, India. Maintaining the anonymity of the interviewee, this methodology helps in performing content analysis of responder transcripts. The outcome of this analysis presents a set of attributes for the design and planning of apartment housing. The corresponding attributes further assist in ensuring community resilience to withstand external shocks of pandemics.

Keywords: *community resilience, apartment housing, design attributes, pandemic*

1. INTRODUCTION

The COVID-19 pandemic has presented us with global and local challenges and has affected humans and humanity to a vast extent (WHO, 2020 a). Urban areas are especially responsible for the higher pandemic transmission rate (World Bank, 2019). Both communities and governments faced unprecedented challenges given the countrywide patient surge from 1 lakh to more than 3.5 lakhs per day (WHO, 2021). The challenges have led to several quick fixes and agile responses from the community to combat the pandemic scenario. Some such actions taken up by the community and the volunteers are the true indicators of 'resilience culture'. These actions can be interpreted as mobilizing resources, effective networking, dissemination of information and strengthening the sense of ownership amongst the community (Al Siyabi, et., al., 2020).

While the entire governance system seems to be inefficient in delivering the services and taking timely actions, 'empowering local communities could be a direct translation to Atma Nirbhar Bharat'. The new strain of corona virus presented itself with horrid situations in India in April 2021 (UNICEF, 2021). The countrywide oxygen requirement which was previously 700 metric tons per day increased to more than 8400 tons per day given the exponentially high number of COVID 19 cases. Siddharth Jain, director, INOX Air Products pointed out, while the production of the oxygen gas has been increased as per the requirement but supplying to the end-user is a challenge. Much of the local population was seen using its networks to either import the oxygen concentrators or cylinders or were trying to procure them through interstate transport facilities.

In recent times, community participation has been observed through three different means:

a) engagement through networking and information dissemination regarding availability of resources

b) reviewing health information and status quo regarding the health of the local community to meet the evolving demand

c) community volunteers for resource mobilization, procurement and delivery of the services (Farrington, M.,et. al, 2020).

It is imperative to review existing government policies for the design and planning of residential communities. Data analysis of urban planning and design attributes of residential facilities have resulted in a pandemic-resilient built environment (Yang, Y. et. al, 2021).

Hence, crafting 'participatory health management' policies to enable basic access to medical services is more prudent than ever. In this context, an executive order was issued by the Lieutenant Governor of Delhi which directed the District Magistrates to tie up with Residents' Welfare Associations (RWAs). Various residential colonies and communities were benefited through this setup in ramping up the COVID-care facilities locally. One such example of community action is showcased in this paper. Amidst various exemplary examples of community action, Habitat Society in Delhi was chosen as a case study due to its uniqueness of project inception. This residential society is designed, built and owned by more than 150 veteran architects in Delhi, who shared their experiences via semi structured interviews. The interview questions were prepared by reviewing the academic literature and existing policy initiatives by national and international organizations. Through these interviews, this paper represents the key attributes of design and planning of residential apartments for enhancing community resilience. In addition, the outcome also draws a fundamental understanding of community response to the pandemic for recovery and long-term urban resilience goals.

2. LITERATURE REVIEW

Button (2020) defines resilience as an act of maintaining livable and healthy conditions through devastating circumstances. This definition is derived in the context of built environment and community participation. According to the Resilient Design Institute (RDI), the term resilience is also defined as "the intentional design of buildings, landscapes, communities, and regions to respond to natural and manmade disasters and disturbances—as well as long-term changes resulting from climate change….".

The design initiative to pursue resilience is drawn from the local and state governments, non-profit organizations, and the building and construction industry (Rockefeller Foundation, 2018). These initiatives can be categorized in the three broad domains: (a) Spatial arrangement (b) building configuration and built-form © community/ user response.

The corresponding domains are derived from a literature review of resilient design parameters and are presented in Table 1. These identified parameters help in defining the role of design and planning in empowering community resilience.

Table 1: **Construct of Design and Planning Parameters for Community Resilience**

ID	Domain	Parameters	Source
D1	Spatial arrangement	Accessibility to essential services, accessible parking area, residential building density, housing campus occupancy, the average number of occupants	Batty., M., 2009; WHO, 2020 b
D2	Building configuration and built-form	No. of dwelling units per building, convertibility of open/semi-open spaces in breakout areas, placement of residential units/blocks, fenestrations and openings for ventilation, internal circulation of the residents, distancing of the residential blocks	Blake, K. S., et.al., 2007; CDC, 2020
D3	Community/user response	Social-interaction and interdependencies between the residents, role of managing and maintenance committee, number of visiting commuters, total residents, car/vehicle owners of the building, residents with house help, work from home residents, residents with more than 6 hours outside-exposure	Forsyth, A. 2018; Chu, T. 2020

3. CASE STUDY : HABITAT APARTMENTS, DELHI

Habitat Society in New Delhi is a residential complex constructed in 1999 by Mathur and Kapre Associates, a design consultancy firm based in New Delhi. Habitat Society is the only residential complex in India which proudly holds the title of a cooperative housing society, designed, built and owned by the same set of veteran architects.

"The cooperative was conceptualized and constituted in the dining hall of SPA" says a veteran architect, resident of Habitat Society. "It is the architects' own society," he adds. More than 150 architects from the School of Planning and Architecture (SPA), Delhi, an institution of national importance by the Act of Parliament, Government of India, jointly formed the housing cooperative.

Community collaboration and participation are well represented through a case study of this housing complex, Habitat Apartments located in east Delhi. The Habitat Society is two decades old and comprises 130 residential flats of different sizes. There are 9 towers out of which 1 tower is of 7 floors with a central courtyard located at the entrance of the society. 6 towers are of 3 floors each placed around the central garden. The two towers located at the rear end are made up of 4 floors which also face the garden area. Following the norm of community living there are presently 100 plus families residing in this apartment complex. More than 40 % of the ground area is dedicated to the open spaces which are used for community celebration, yoga practices, playground, walking tracks and other recreational activities.

Prof. Manoj Mathur, principal architect of Habitat Apartments states, "Resilient design is a state of mind, so it starts even before you put your pen to paper". He further reiterates the importance of designing breakout areas and interactive spaces to enhance community participation.

The interviews were conducted online and the recordings were transcribed. Based on these text transcripts a content analysis for the identification of key terms is performed and are presented in the next section. Anonymity of the interviewees (residents and residing veteran architects) has been maintained during this research.

4. CASE FINDINGS

A security and community management application 'MyGate' is used for management and monitoring of the residents' and visitors' activities. Activities such as approval of visitors or visiting help, log of maids, society guards and other staff, an online notice board for faster communication amongst the residents are all managed through this common portal.

During the second wave of the pandemic, about 50 families were affected within 20 days. When the cases started shooting up, the residents collectively decided to stop the entry of the visitors, house help and other staff. With the help of this common platform, effective communication could be made to help the households which were quarantined. The lessons learnt while taking care of each other when the situation was so grim were:

i) Strengths not Vulnerabilities

Every community comprises people with diverse cultural backgrounds, perspectives and ideas to find a solution to the current situation. Effective communication and collaboration of all the residents, irrespective of the diverse views is the biggest strength. For example, delivering the food to COVID affected households was catered through various tiffin services from north, east and south Indian cuisine. Several volunteers from the society provided tiffin to the affected household with minimum or no expense charge.

ii) Flexibility in Design and Planning of spaces

The residents proposed to convert empty flats into isolation facilities. The facility would be beneficial, especially for the young adults to isolate themselves from the elderly at home. The common room located at the entrance of the society which was otherwise used for yoga and zumba practices was converted into an isolation facility for the intake of oxygen.

Apart from the built spaces, the open courts and gardens which were used for recreational activity earlier are now serving as a buffer space for piling and distribution of essential deliveries to the households. Given the openness of the courtyard space, it is easier to maintain social distancing while collecting individual essential deliveries.

iii) Long-term visionary actions

In the second week of April 2021, residents volunteered to get spare oxygen cylinders, cans and concentrators from the common pool of finances. The availability of the resident doctors in the society helped the patient to take oxygen in the apartment facility in lieu of going through the stress of unavailability of the hospital bed. People also volunteered to offer their own personal resources like nebulizers, medicine, nasal cannulas and face masks for the intake of oxygen.

iv) Interface between the outdoor and indoors

Isolating oneself with or without the family structure presents several nuances. Resilience is often interpreted as the system's ability to withstand external stress. While talking about the human body as a system, it is required to withstand the virus by maintaining both mental and physical well-being. The World Health Organisation (WHO) states that "Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

Similarly, global practices for a green-built-environment helps in maintaining the overall well-being of the end-user. Given that more than 90% of the time is spent indoors, the overall environment has a vast impact on our state of being. Taking an evidence-based approach, it is suggested that natural ventilation improves air quality and interaction with the outdoor environment which in turn increases the cognitive performance of the users. In habitat apartments, two parallel lines of towers are located 50 feet apart and are separated by the central garden court. Most of the houses open up to the central garden area which keeps the indoor spaces well ventilated along with the lush green view on the outside.

v) A collective effort, not individualism

A fall in the number of tests per day was observed on 28 April which was as high as 1.01 lakh tests per day in Delhi on 13 April 2021. Many private labs were overworked and overbooked hence the delay in results of the tests reports. Habitat Society organized timely campaigns at the time, to test more than 20 residents at once. The camp benefitted both the residing community and the locally available private test center. Given the sensitivity rate to be as high as 98 % for the RT-PCR test, 16 out of 20 residents were tested positive.

Given the spike in the positivity rate from 5.54 % to approximately 30 % in April 2021, the Delhi Government sought to get assistance from RWAs in Delhi for community action to contain the virus at a personal level. The Delhi Government held several meetings with the RWAs to seek their cooperation in managing the crisis.

Design and operational interventions like sanitation, and ventilation systems in designing homes and common open/ semi-open spaces can help in preventing insect and vector proliferation. Resilience measured could help in preventing disease transmission at the community level (Neiderud, 2015).

Thus, the importance of spatial design and planning of residential spaces in a pandemic situation has a direct response to community activities. In WHO (2020 b) multiple scenarios are listed for which community action is required. According to the evidence collected from studying Habitat Society, the community action and role of design and planning is concluded in Table 2.

Table 2: **Community actions during pandemic scenarios**

Scenario	Community Action	Mitigation through Design and Planning	Risk Impact
No confirmed- active cases	Social distancing in common spaces, temperature check/ monitoring of external commuters, robustness of surveillance system	One point check, no multiple-entry exit from the residential campus	Low Impact
Sporadic cases	No clear signal of direct transmission within the dwelling units, precautionary quarantine of all the members of the household, provision of essential services at the door step of the quarantined households	Maintenance and sanitization of common spaces, frequent checks of electricity and water supply backup	High Impact
Cluster of cases	Isolating the households, restriction of house helps and other external members, restriction to retrofitting activities	-	Medium Impact
Community Transmission	Mass testing campaign for the residents and external help, conversion of empty dwelling units into isolation facilities, medical stockpiles and logistics for the residents	Usage of ICT for management of logistics, conversion of common and recreational spaces into spaces for testing campaign, flexibility of dwelling units for isolation facilities	Low Impact

5. CONCLUSION

The role of community actions in pandemic response to COVID-19 in India has benefited the overall well-being of the citizens. The case of this housing complex identified the potential role community engagement plays through the design, planning and management of built spaces. Both technology-based and manual-override management systems are vital to building resiliency. The flexibility of spaces and managerial decisions assists in better adaptation both in the short and long term.

REFERENCES

1
World Health Organization (2020a). *Coronavirus Disease 2019 (COVID-19) Situation Report- 51.* https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200311-sitrep-51-covid-19.pdf (Accessed: 30 April 2021)

2
World Bank. (2019). *The World Bank Annual Report 2019: Ending Poverty, Investing in Opportunity.*

3
WHO (2021). *WHO Coronavirus (COVID-19) Dashboard.* COVID19 Data. https://covid19.who.int/ (Accessed: 6 May 2021).

4
Al Siyabi, H.; Al Mukhaini, S.; Kanaan, M.; Al Hatmi, S.; Al Anqoudi, Z.; Al Kalbani, A. Awaidy, S. (2020). Community Participation during COVID-19 Pandemic. *Frontiers in Public Health, 8,* 1044.

5
UNICEF India. (2021). *UNICEF supports 26 oxygen plants and sends over 4,000 oxygen concentrators, and other critical supplies as India continues to grapple with COVID-19.* https://www.Unicef.Org/India. https://www.unicef.org/india/press-releases/unicef-supports-26-oxygen-plants-and-sends-over-4000-oxygen-concentrators-and-other (Accessed: 15 May 2021)

6
Farrington, M.; Santos, R. F. D. (2020). *Community Engagement During Covid-19: A guide for community facing staff. consultado en* https://oxfam.box. com/s/nds89hah3bsxoml9blmhd41762qirhak. (Accessed: 26 April 2021)

7
Yang, Y.; Li, Y.; Kral, K.; Hupert, N. & Dogan, T. (2021). Urban design attributes and resilience: COVID-19 evidence from New York City. *Buildings and Cities,* 2(1).

8
Button, Roxanne. (2020, February 16). *Resilience Planning in Design and Construction.* https://constructible.trimble.com/construction-industry/resilience-planning-in-design-and-construction (Accessed: 01 June 2021).

9
Resilient Design Institute (RDI). (2021). *The Resilient Design Principles.* https://www.resilientdesign.org/ (Accessed: 23 May 2021)

10
Rockefeller Foundation. (2018). 100 Resilient Cities Initiative (100 RC). https://www.rockefellerfoundation.org/our-work/topics/climate-resilience/ (Accessed: 05 June 2021)

11
Batty, M. (2009) Defining Density, *Environment and Planning B: Planning and Design,* 36(4), pp. 571–572. doi: 10.1068/b3604ed.

12
Blake, K. S.; Kellerson, R. L. & Simic, A. (2007). Measuring Overcrowding in Housing.

13
CDC. (2020). *Communities, schools, workplaces, & events.* Centers for Disease Control and Prevention (CDC). https://www.cdc.gov/coronavirus/2019-ncov/community/multifamily-housing.html. (Accessed: 29 May 2021)

ACKNOWLEDGEMENT

The author is thankful to all the veteran architects of the Department of Architecture, School of Planning and Architecture, Delhi and Prof. Neeraj Gupta, Interim Vice-Chancellor, Central University of Rajasthan for their valuable inputs and guidance. They are also part of the Habitat Housing Cooperative. Extended gratitude to the managing committee and residents of the Habitat Society for ensuring community resilience and sharing their valuable inputs with the author.

14
Chu, T. (2020, October 5). *COVID-19 Is Not The 'Death of The City' - It's The Rise Of The Neighborhood Center.* Forbes. https://www.forbes.com/sites/tiffanychu/2020/10/01/covid-19-is-not-the-death-of-the-cityits-the-rise-of-the-neighborhood-center/?sh=493779952491 (Accessed: 18 June 2021)

15
Forsyth, A. (2018). Congested cities vs. sprawl makes you fat: unpacking the health effects of planning density. *The Town Planning Review,* 89(4), 333-354.

16
Neiderud, C. J. (2015). How urbanization affects the epidemiology of emerging infectious diseases. Infect. Ecol. Epidemiol. 5, 27060.

17
WHO. (2020 b). *Coronavirus disease 2019 (COVID-19) Situation Report- 80.* https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200409-sitrep-80-covid-19.pdf (Accessed: 10 July 2021)

Ar. Niyati Gupta
Ar. Niyati Gupta has a master's degree in Urban Development and Management and is presently, pursuing her Ph.D. in healthcare resilience from Department of Architecture, School of Planning and Architecture (SPA) Delhi. Her area of work is solutions on disaster resilience, healthcare architecture, programming and planning.

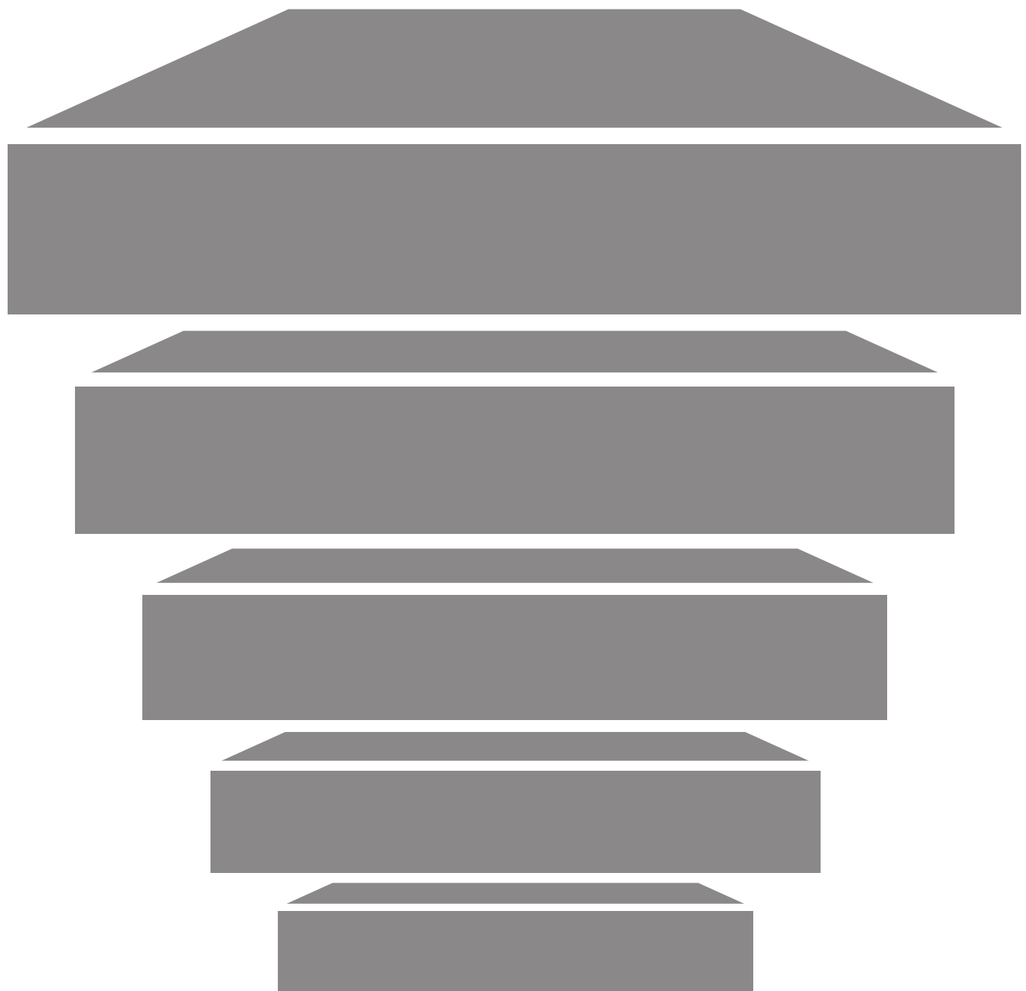
Prof. Manoj Mathur
Prof. Manoj Mathur Professor of Architecture, Department of Architecture, SPA Delhi. He is also the Joint Hon. Secretary, IIA-Northern Chapter. He is a member of the Advisory Committee for planning and construction of various central government institutions. He was previously practicing architecture at Mathur and Kapre Associates and has been involved with many award-winning designs and a diverse portfolio.

Prof. Dr. Anil Dewan
Prof. Dr. Anil Dewan is the Head of the Department, Department of Architecture, SPA Delhi. He has been teaching hospital programming, planning, designing and construction and project management for healthcare facilities in India and abroad for more than forty years. He has been Adviser to many multi-lateral Institutions including World Bank, World Health Organization, Bureau of Indian Standards etc. He is presently the vice president of Institution of hospital Engineering, India and is also affiliated to the International Hospital Federation.

SOCIAL SUSTAINABILITY IN URBAN COSMOPOLITAN RESIDENTIAL SOCIETIES

Nishant Mandhan
Final Year, B.Arch.
Aayojan School of Architecture and Design, Pune
nmm2017.pune@aayojan.edu.in

Ar. Rajiv Raje
Professor, Design Chair
Aayojan School of Architecture and Design, Pune
rpr.pune@aayojan.edu.in



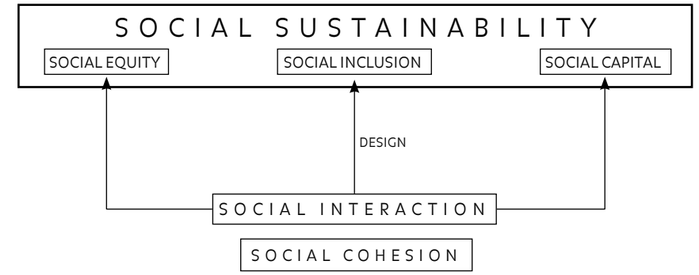


Figure 1 : Components of social sustainability (Source : Author)

ABSTRACT

The current spike of migratory movement of people from rural to urban settlements is building a future scenario of population compaction and leading to an increase in the densification of the urban populace. Due to the upsurge of land rates, cost becomes the most crucial criteria for choosing homes in the era of rapid urbanization. This fast-growing process has resulted in the settlements of multi-cultural communities making people with different cultures and lifestyles settle together. This diversification gives rise to the problem of social and cultural differences which makes the society as a whole divided into small groups which reduces the social participation of people towards development. The agenda of sustainable development needs the hands of action which are achieved by initially making a community socially stable. Architecture plays a major role in affecting the life and behavior of users daily which makes it one of the important tools in accomplishing the overall sustainability of society. This paper discusses the relation of social sustainability to architecture and focuses on listing the design criteria required to measure and develop the social environment.

Keywords: *Multi-cultural communities, Residential societies, Social sustainability, Social Capital, Social Equity, Social Inclusion.*

INTRODUCTION

The world currently is facing the problem of urban migration as people are in search of economic and educational opportunities, preferred amenities and better living conditions. This movement is leading a way for the densification of the world populace in major urban centers. The current migratory movement has given rise to the term 'cosmopolitan cities' where ethnic diversity among the communities residing physically can be seen widely. This cultural and social diversity which represents different social attitudes of people among communities can be a driving component towards a socially unstable society.

Sustainable development, as defined by the World Commission on Environment and Development (WCED, 1987) is 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED, 1987) there is a need to develop humane societies as modern settlements are growing independently with effects of cultural and communal diversities as compared to prior times where people chose to settle interdependently. The concept of sustainability could be broken down into its three main streams which are environmental, economic and social, which are also known as the three 'Ps' - planet, profit and people- of sustainable development (Boström, 2017). The social dimension on a major basis has been given less importance whenever sustainability has been put into practice and also less attention has been paid to the inter- relationship of all the three types. The upcoming culturally diverse communities need to be socially strong as cohesion and inclusiveness will provide the hands of action to bring the aim of overall sustainability come into existence.

SOCIAL SUSTAINABILITY

A socially sustainable society is one that is equitable, inclusive, and democratic and provides a decent quality of life for current and future generations (Partridge 2005). In simpler terms, it can be stated that social sustainability means basic well-being of the society, fulfillment, and distribution of basic human needs and resources, and making sustainable use for preserving them for future generations and continuation of culture. According to Stren & Polese (2000, pp.15–16), social sustainability is "development (and/ or growth) that is compatible with the harmonious evolution of civil society, fostering an environment conducive to the compatible cohabitation of culturally and socially diverse groups while at the same time encouraging social integration, with improvements in the quality of life for all segments of the population."

Broadly it can be stated that social sustainability is formed by three of its main components, which are social equity, social inclusion, and social capital achieved by using the tool of social interaction.

THREE MAIN COMPONENTS OF SOCIAL SUSTAINABILITY

The three main components of social sustainability, as seen in Fig. 1, are :

1. Social Capital

Social capital is that aspect of a society that facilitates interactions of individuals within a social structure. In simple words, it can be defined as "Social networks that increase the efficiency of the functioning of society" (Spellerberg, 2001). The three main factors which help in achieving an effective and stable social capital in a given community are: 1) participation 2) networks 3) confidence.

2. Social Equity

Equity is a basic and crucial dimension of social sustainability (Chiu 2003). Social equity can be termed as a social condition in which there is a sustainable and fair distribution of resources among the inhabitants and generations. But this alone doesn't define the meaning of social equity in the residential sector. According to Pincetl (2003) social equity mainly implies consideration of social, cultural, and spiritual needs of the people.

3. Social Inclusion

Social Inclusion means the participation of the society/community or the initiatives taken by the residents in making decisions for the development of the society. Social inclusion makes the networks among the tenants stronger which could contribute to building up the social capital of the community.

URBAN COSMOPOLITAN RESIDENTIAL SOCIETIES

The current trends of migration display a clear picture of the upcoming cosmopolitan development of cities that could lead to socially and culturally unstable societies. Cosmopolitan developments which consist of people who are oriented to settle independently, face the issue of social disagreement as there are few willing factors apart from culture that makes people connect. Along with the problem of the social and cultural difference, the complication of space and user relationship also rises with typically designed apartments responding to all types of cultures. These multicultural societies need to be socially stable to achieve the goals of economic and environmental sustainability as the social stillness among the residents will pave the way for further sustainability goals. The effects of cosmopolitanism could be the fuel to problems of loneliness and isolation put forth by modern technological advancements resulting in the development of depressed environments affecting human outcomes. Future housing developments need to largely focus on socially responsive architecture with the help of space and environment interventions and the topics of infrastructure reflecting the community of urban work culture need to be taken into debates.

OBJECTIVES

With the ongoing cultural diversification among the newly set up urban populace, there tends to be less visible factors that could lead to efficient social interaction among the residents. Modern technological advancements can be a major obstacle in achieving the required social interaction among communities as they lead to human isolation which could decrease the opportunities of building the intent of social interaction among people. Social sustainability, though a practically neglected stream, is crucial in achieving the future goals of sustainability and well-being among communities. It is important to address the social issues of future societies as the communities based on cosmopolitan cultures can loose interaction patterns which could lead to outcomes of a socially unstable society.

Social sustainability has a wide conceptual framework that also involves the role of design and architecture in achieving social capital, inclusiveness, and equity. Architecture plays a major role in shaping the behavior of the people which indeed can lead to the social well-being of residents in physically settled communities. This paper aims at studying various design criteria involved in making a society socially sustainable and also further studies the indicators used to measure the same.

METHODOLOGY

Social sustainability, being a very vast concept, needs some simplification and a framework theoretically to form a basis for data evaluation and analysis. This paper attempts to cut down and clarify the subject and also studies how social sustainability can be implied in upcoming cosmopolitan societies. To understand the theoretical framework of social sustainability, data from various secondary sources (books, papers, and articles) was evaluated and conceptualized to form a background for this study. Out of this data, various design criteria are listed out and studied which constitute in achieving a socially inclusive and connected society. Based on these factors different indicators are listed, which help in evaluating the data to measure the index for social sustainability. Data collection is done from the evaluated sample population of cosmopolitan residents living in newly set up high-rise housing societies. The main intent of using the methodology of the questionnaire was to find out the reviews of inhabitants on the design factors that contribute to building the social sustainability of the community. After collecting this implicit data from the residents, different design criteria are analyzed and conclusions are drawn regarding the relation of design and social sustainability.

CONCEPTUAL FRAMEWORK

Social sustainability could be briefly defined as the fulfillment of basic human social needs which are happiness, security, freedom, dignity, and compassion. In the modern changing times of cultural diversity, the need for these factors is more intense as compared to the prior eras. The observations made out of the current cosmopolitan settlements state that there has been less attention paid to the social dimension of sustainability and not enough focus is laid on strategies that can make future multicultural societies socially stable. The architecture for the basic social needs should be responsive to the human behavior patterns, culture, and beliefs of modern people. The culturally and socially stable environments could provide the needed support for building cohesive communities which make people engage in different societal activities with a common aim of creating urban cultural values and identity. To make the future diverse communities liveable, the subject of people and their relation with behavior and modern culture needs to be taken into consideration. The role of public space should be that of enhancing human life by analyzing the effects of human behavior, culture, and social life which majorly differs in multicultural communities with the context of time and place.

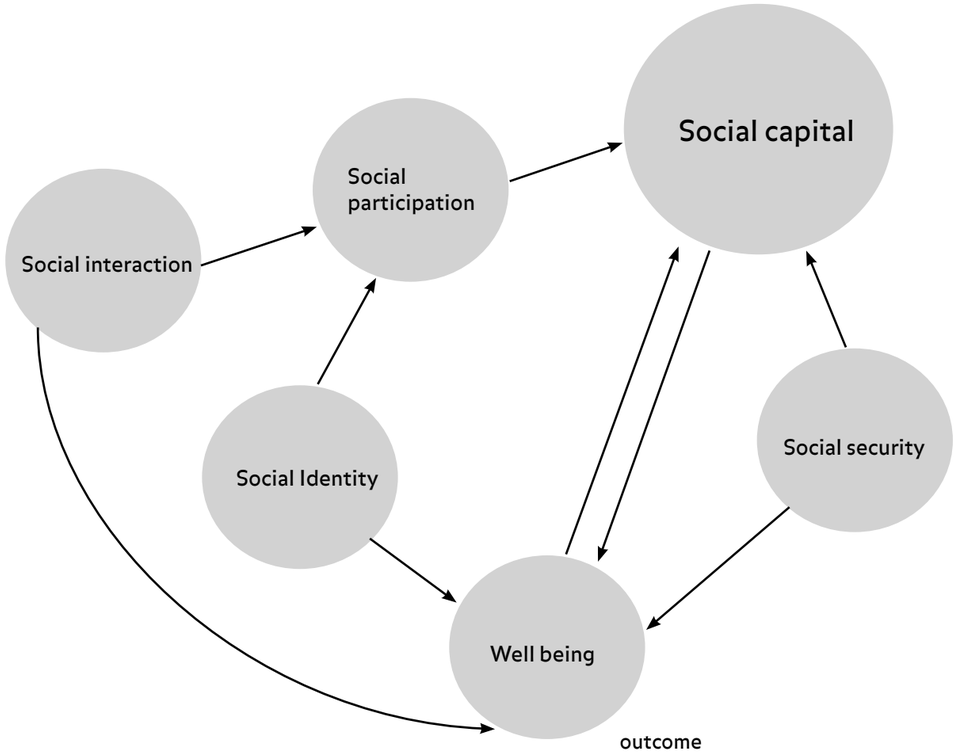


Figure 2 : Relationship between social sustainability indicators in architecture (Source : Author)

DESIGN CRITERIA FOR SOCIAL SUSTAINABILITY

Based on the principles of social sustainability and the needs of sustainable community development following are the design criteria (Moztarzadeh, 2015) which will help in developing a socially compatible society (see Figure 2).

1. Social Interaction : Socially responsive architecture should have social interaction as one of its main factors while aiming for the goal of social sustainability. The architecture of a place could help in building the social capital by providing opportunities for social interaction which will result in a socially stable and compatible society.

2. Social Securit y: Social security is another crucial factor that affects the social sustainability of a place architecturally as it provides a sense of safety among the users. Physical security of a space is the component that makes people interact with each other which further adds to the social development of the society. There should be enough discussions about enhancing the controllability of users, creating safe building facades that offer comfort in human perception, and providing a safe environment for all types of users.

3. Social Identity : Every settlement and development of territories in the past carries a kind of identity with it which can be social, physical, cultural, ecological, or economic. The architectural identity of a place deeply rooted in any of the factors stated above could provide a sense of confidence and pride among the inhabitants which can make them more interested and involved in their community matters resulting in the increment of social participation.

4. Social Participation : This component indicates the participation and involvement of people in the activities and works of the community. The participation of the tenants in societal matters helps in the development of socialization among the community thus increasing the people's connection to the norms and values set up by the group. Participation of people could be increased by providing the community more chances of cultural and customary activities by diversification of public space usage which indeed will help in building a stronger social capital for the community.

5. Well-being : The well-being of the dwellers depends upon the social justice provided to each individual. Social justice relates to the fair distribution of services among the people living currently and for future generations too. The physical factors which include safety and sanitary services contribute to the sense of belonging in an individual. On the other hand, psychological factors such as providing basic human comfort add to the ease of living in a place.

DATA ANALYSIS

A questionnaire consisting of 11 questions based on the social sustainability indicators was circulated in five cosmopolitan societies of Pune, India, and accordingly, data was evaluated concerning the design criteria stated above. Responses from 86 tenants were recorded and analyzed accordingly.

Sample evaluation : The sample was evaluated based on a person's will to answer the questions by using the Snowball method of distribution.

Analysis : Among the five listed design criteria of social sustainability, social participation and social well-being are considered as the outcomes of the other three criteria which indicate the problems related to social sustainability in the current cosmopolitan societies. The graph in Figure 3 shows the data collected from the residents of urban cosmopolitan housing societies based in the city of Pune, India which categorizes the questions and compares the responses received from the inhabitants based on three given indicators.

QUESTIONNAIRE

Indicators	Questions
(A) Social Interaction	Q. 01) How frequently do you use your society's public space for recreation purposes and public interaction? (Consider a week i.e 7 days as 100) Q. 02) On what scale you are willing to interact casually with people from other cultures? Q. 04) What percentage of society activities you take part in? Q. 08) From what percentage of people in your society won't you hesitate to seek help? Q. 09) What percentages of people in your society do you have an informal connection with?
(B) Social Security	Q. 03) On what scale you feel your society architecturally secure? Q. 06) Living in a multi-cultural society, to what extent are your society people ready to help each other? (Consider 0 as disagreeing every time,50 as sometimes, 100 as helping every time) Q. 10) Rate the natural light and ventilation comfort level in your building corridor. Q. 11) Rate the natural light and ventilation comfort level in your apartments
(C.) Social Identity	Q. 05) To what scale you feel there is a fair distribution of services in your society? (Services like proper sanitation of the building, access to society public areas, allowance for participation in society matters, proper security for the vehicles) Q. 07) To what extent you think your building face (aesthetics) makes your eyes feel comfortable? (Consider 0 for total discomfort and 100 for total comfort)

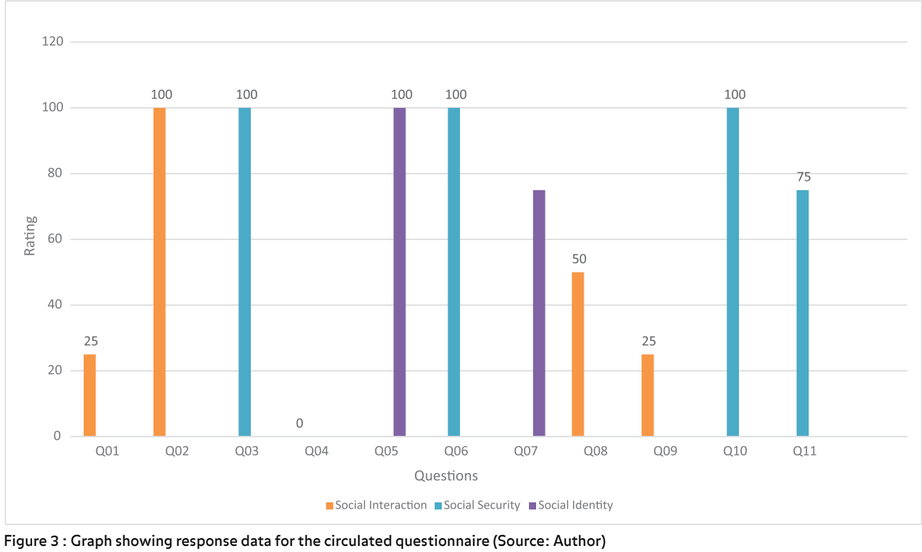


Figure 3 : Graph showing response data for the circulated questionnaire (Source: Author)

The average value for each design criteria as seen in the graph in Figure 3 are as follows:

(A) Social interaction : 40
(B) Social security : 93.75
(C.) Social identity :87.5
(50 is considered as the least value for a factor to be socially sustainable)

From the collected data it can be noted that social interaction can be the contributor for a socially unstable society as the cultural diversity provides a weak base of reason for interaction as compared to a culturally dependable society. Based on this analysis social interaction for urban cosmopolitan societies can be stated as the most crucial and lacking pillar for the goal of a socially compatible society which needs to be paid enough attention as the modern agenda of housing tends to be solely shifted towards profit rather than people.

Based on the three main design components of social sustainability, Table 1 depicts some of the fundamental design strategies that can be used in achieving the respective components:-

Table 1: **Derivation of design strategies based on design components of social sustainability (Source: Author)**

Design components of urban cosmopolitan housing societies	Type	Description
1. Social Interaction	**Physical**	•Creating environments and spaces that provide opportunities for social interaction among the inhabitants. (Eg.- local commercial market for the residents) •Using design strategies that make people interact with others while performing their daily chores.
	Activity-based	Initiating various weekly or monthly community development programs or activities. (Eg.- weekend farming/ gardening, monthly sports competitions, etc.)
2. Social Security	**Physical**	•Designing spaces that respond to the cosmopolitan culture, which will increase the belongingness factor among the residents. • Providing basic needs of inhabitants for social and psychological security which include adequate light and ventilation in public, semi public and private spaces that helps in providing a good physical security promoting social interactions among the tenants and ensuring a socially secure community.
	Activity-based	•Arranging various community programmes for residents of all age groups. •Strategizing for building trust among the inhabitants by actively allowing social participation of tenants in the development programmes
3. Social Identity	**Physical**	Representing modern culture of cosmopolitans architecturally which will increase pride and belongingness among the residents.
	Activity-based	Promoting social justice by ensuring fair distribution of services among the residents and across generations too.

CONCLUSION

The physical environment has the capability of shaping the behavior of the user. Humans, who are described as social animals, always carry the urge of interacting with the other. But due to current technological advancements, there is the immediate availability of people on devices which makes the physical interaction among people possible only when needed. Social interaction has to have some basis of reason where culture plays one of the primary motives for conversation. The modern trend of migration from rural to urban has resulted in the creation of many multi-cultural communities residing in the same physical environment. This could result in diversification of views among a single community which could lead to less participation of people in community affairs and development.

From the collected data, it could be seen that the problem of social instability among the current cosmopolitan societies is due to less social interaction among the habitants. Social interaction is the factor that has the capability of affecting the other components of social sustainability. It is the most effective indicator of social sustainability which directly shows the place satisfaction among the residents. A less socially interactive community could result in less social participation of people and could also affect the well-being and sense of belongingness among the people. Modern societies need to develop sufficient reasons for people to interact with each other with the help of architecture and the physical environment. The space program of modern cosmopolitan societies needs to focus on space flexibility and cultural cohesion of people through active public spaces which ensure social security, social interaction, and social identity to the residents.

The relation between social sustainability and architecture could help in providing a good quality of life to people and a sense of place belongingness and satisfaction to the residents. Following are some of the suggestions that can help in achieving the social sustainability goals of current culturally diverse societies:

1. The current housing programs need to focus on the short leg of the social dimension in the sustainability tripod. There needs to be the intervention of flexible apartments as the current rigid spaces tend to change human behavior, rather than be changed according to it. This could lead to the subjective satisfaction of inhabitants.

2. Focus on developing enough reasons for social interaction other than culture should be given and social justice among the residents and across generations should be maintained and developed.

3. The current context of social development through architecture seems to be weak in the existing cosmopolitan societies. To achieve the aim of sustainability, the social network among the people needs to be developed first which can be possible by shifting the focus of housing development from economic to social.

4. Enough design strategies based on design components of social sustainability need to be developed and implemented in order for a socially sustainable cosmopolitan society.

5. The design for physical environment needs to conceptually take into account the activities of people and their behavior as the modern relation between the people and the space tends to make people shape themselves according to the place which indeed should be the other way.

REFERENCES

1
Boström, M. (2012). A missing pillar? Challenges in theorizing and practicing social sustainability. Sustainability: Science, Practice and Policy.

2
Chiu, Rebecca L.H. (2003). Social Sustainability, Ssustainable Development and Housing Development: The Experience of Hong Kong.

3
Moztarzadeh, Z. K. (2015). Developing Effective Social Sustainability Indicators In Architecture. Bulletin of Environment, Pharmacology and Life Sciences.

4
Partridge, E. (2005). 'Social sustainability': a useful theoretical framework? Australasian Political Science Association Annual Conference. Dunedin,New Zealand.

5
Pincetl, S. (2003). Toward A Sustainable Los Angeles: A "Nature"s Services" Approach. Longcore,Travis.

6
Spellerberg, A. (2001). Framework for the measurement of Social Capital in New zealand. Statistics New Zealand.

7
Stren, Richard; Polese, Mario (2000). The Social Sustainability of Cities: Diversity and the Management of Change. University of Toronto Press.

8
WCED (World Commission on Environment and Development) (1987). Our Common Future. United Nations.

Nishant Mandhan
Nishant Mandhan is a Final Year B.Arch. student at Aayojan School of Architecture And Design, Pune. He is curious about the humane aspects of architecture and after the spike of the current pandemic, wants to learn more about the modern psychological struggles of human beings for their physical environments and the role architecture plays in nurturing the behavior of its users.

Ar. Rajiv Raje
With a proficiency in industrial and institutional design, Ar. Rajiv Raje has an experience of over 35 years in architectural and planning practice with an involvement of 25 years in academics. He has served as the Chairman for the Architects Engineers Surveyors Association (AESA), Pune and was also a part of the Editorial board of JIIA. He is Fellow of IIA, life member of IIID and a member of PCERF.

CALL FOR ARTICLES PROJECTS & PAPERS

Journal of the Indian Institute of Architects invites original and unpublished contributions from members (academicians, practitioners and students) under the three categories given below.

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

❶ MS Word document file with text only. Please do not format it in anyway. The numbered captions for all the images will also be in this document.

❷ Folder with all images (minimum 300 dpi), numbered according to the captions given in your text file

❸ Photograph of the author/s (minimum 300 dpi)

❹ Author biodata – Maximum 50 words.

❺ PDF (optional)– showing the intended layout. This pdf should include text and all images, with numbered captions.

Category 1

Essays, interviews, articles (1500- 2500 words) and book reviews (600 and 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 of the format will be available on the JIIA website given below).

• For a design project, please include the "Fact File" with the following details : Project Name, Location, Plot area, Total built up, Structural consultants, Project completion. Also please give the photo captions and credits. Please ensure that the image is referred to within the text. For eg, "As seen in Figure 1…". This is essential for the layout.

• For design projects, plans and sections of the project are desirable along with the photographs.

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

Category 2

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

Category 3

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

Category 4

Contributions from Chapter Correspondents

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

❶ MS Word document file with text only. Please do not format it in anyway. No pdfs will be accepted. The numbered captions for all the images will also be in this document. This should NOT contain any images.

❷ Folder with all images (minimum 300 dpi), numbered according to the captions given in your text file.

(b)*Projects:* Identify outstanding architectural projects of members and send them to JIIA Team to consider for publication. (Please follow the design project requirements as given in Category 1)

© *Obituaries :* Obituaries of IIA members should consist of the photograph of the departed soul, the dates of birth and death and a short 50-word note.

Note

❶ Please email all papers and articles through the Chapter / Centre or directly to jiiaeditorial@gmail.com.

❷ Format is available on the JIIA website :

https://indianinstituteofarchitects.com/wp-content/uploads/2021/06/Doc_for_Call_for_articles__projects_and_papers__10.6.2021_.pdf


RAK
CERAMICS
GLIMPSE
OF
ULTIMATE
LUXURY
Create your dream space with the
luxurious collection of tiles, sanitaryware
and faucets offered by RAK!
Tiles on wall : NEW MARFIL BEIGE
(1200x2400mm) Polished finish
Tiles on floor : SURFACE XL SAND
(1200x2400mm) Hard Matt finish
Sanitaryware : RAK-SENSATION
Kludi RAK Faucet : PRIME
RAKCERAMICS.COM

DIALOGUE WITH RANJIT SABIKHI

Ar Ranjit Sabikhi
Ranjit is a distinguished architect and urban designer who has been in practice since 1961. One of the pioneers of modern Indian architecture, he taught at the School of Planning and Architecture, New Delhi, from 1959-1975 where he was Professor and Head of the Department of Urban Design. He has been a Visiting Critic to the Urban Design Program at the Graduate School of Design at Harvard University, and the School of Architecture at Washington University St. Louis.

Travelling through time with Ar. Ranjit Sabikhi - Dr. Pratheek Sudhakaran engages on Architecture, Urban Issues, Practice and Academics.

Oberoi Wildflower Hall at Mashobra, Shimla, 1996. Recent drone view. Photo: Anuj Rawla.

Pratheek Sudhakaran [PS]:

You have had a long-running practice since 1961 and have been considered one of the pioneers of modern Indian architecture and urban design. It's an honour for me to interview you for the Journal of the Indian Institute of Architects. JIIA has a diverse group of readers, ranging from students, to researchers, to academicians, to practitioners, for whom I would like to capture a wide spectrum of your thoughts on architecture and urban design.

How would you describe your practice and body of work, its evolution over the years and reflect on your journey in architecture and urban design?

Ranjit Sabikhi [RS]:

The Design Group was the firm Ajoy Choudhury and I set up in partnership in the early sixties. Over the years we got involved in a wide variety of work starting with residential houses extending to institution complexes, hotels, larger housing complexes and urban design projects. Looking back, what I find most significant is the fact that we had the opportunity to design and implement projects in different countries across the world. From 1961 onwards we designed and implemented projects in Saudi Arabia, Iran, Kuwait, Dubai, Singapore, Malaysia, Switzerland, and California. Being exposed to different cultures, and building in a variety of conditions, has been a fascinating and unique experience.

Along with working abroad, we designed and built a wide range of projects in different parts of India, which helped to keep us grounded. We were quite clear that we were not aiming to develop a lucrative practice but focused on doing work which met client requirements and was related to location and context. We were fortunate to have a client list that included private homeowners, commercial companies, hoteliers, and government agencies like DDA, ITDC and NBCC. The projects varied in size from small homes to mixed use complexes, educational institutes, and sizeable urban design developments.

In the first fifteen years I continued to teach at the Department of Architecture, SPA Delhi, along with practice, and this was very productive in many respects. Doing research and discussing issues with students helped to clarify problems. This helped students to get an idea of what the process of designing and implementing projects in the real world involved. It was a two-way process that was invigorating and meaningful. The government deciding that teachers should not be involved with professional practice brought about a break, and in the long term both the work of teachers and students lost an advantageous link.

PS:
How would you describe some of your recent and ongoing projects? Could you tell us something about them, and maybe share what drives your design today?

RS: Over the years the conditions of practice have totally changed. It is indeed unfortunate that the quality of professionals as well as the state of the profession has steadily declined. The number of qualified architects has steadily increased. Close to 20,000 young students graduate every year facing an increasingly depressing future in terms of the remuneration that they may expect, and the possibility of satisfaction in work that they are asked to do.

The Code of Conduct prescribed by the Council of Architecture is no longer followed. Fees paid by government agencies to architects are negotiated on an arbitrary basis, forcing most professionals to design and implement projects at unreasonably low professional fees and often to resort to dubious methods to recover costs.

For senior professionals like myself and my colleagues, the whole framework of professional practice has completely changed. Most of our clients now are developers who are market-driven. They want the kind of design and buildings that they believe will sell well. It is difficult to convince them that good design will ultimately be more remunerative. They prefer to follow the advice of their sales and marketing executives. In such an environment we still do our best to convince clients to build what is both functionally and environmentally good design. We resist the pressure to follow form for form's sake and produce visually flashy architecture. We also do not produce cut-and-paste architecture, with bits and pieces picked up from different sources. Our efforts are concentrated on addressing environment and context issues and ensuring that projects are clearly articulated and conceptually clear. Current projects consist of shopping centres, office buildings, group housing and urban design.

PS:
What are the values and principles that define the work you do? What can one learn from the way you design your architecture?

RS:
The most important thing is to effectively service your client's needs whether it be a small house or a large complex. The next is to respect the context in which buildings are located with proper linkage to the surroundings. Most of our towns and cities consist of a variety of buildings constructed over several years and in their own way they define a sense of space and change over time, and it is important that what we design relates to this.

PS:
Your Book "A SENSE OF SPACE" the crisis of urban design in India - Would you like to briefly describe why you thought it was important to write this book and what is the core message that you are trying to convey?

RS:
I have been writing and reflecting on architecture and urban design over the years in a series of articles. They often concerned broader issues of urban development across the country, but many of them focused on how the city of Delhi and its adjoining areas steadily grew over time, and how the nature and quality of life slowly changed. The process of planning of urban areas began in the early sixties with the first Master Plan of Delhi 1961. Before that Delhi had been a collection of villages and refugee settlements scattered between and around the walled city of Shahjehanabad and the British capital of Lutyens' New Delhi. The Master Plan sought to bring about a sense of order in the growing city and laid out an overall infrastructure for a population of five million in 1981, with a land use plan as a basic instrument of control. The Delhi Development Authority was charged with the responsibility of implementing the Master Plan. The planning concept was completely different from the traditional form of our older cities which was based on an organic process of growth and change.

Living and working in Delhi, I became aware of the changes that began to take place in different parts of the city as the population steadily grew. New development followed the guidelines laid in the plan, but side-by-side change was beginning to come about in the form of growing density and unauthorized colonies. These were settlements for the poorer sections of society for whom adequate provision had not been made in the plan.

Change in the form of commercial use like offices and shops began to appear in residential areas. Such developments had a variety of repercussions which gradually began to transform the very nature of the city. These were changes which the authorities did not acknowledge, and for which they did not make necessary alterations in the plan. The book records this process of gradual change illustrating this with the help of plans and photographs.

PS:
What are your thoughts on the modern-day Indian city, both positives and negatives?

Yamuna Apartments Delhi 1973. Access space between apartment blocks with staircases leading to individual apartments. Photo: Shivam Pandey.

RS:
Most Indian cities have grown around older settlements, but no attempt has been made to establish proper links with the older development or to base the growth of new areas on concepts related to what existed in the original development. New growth areas in larger urban agglomerations like Mumbai, Kolkata and Chennai have tended to follow the same pattern of planning and control as in Delhi's Master Plan. There is a kind of bland urbanity in almost all new development without any clear definition of urban space and character.

Urban development is conditioned by the natural environment in cities that have grown around existing natural features like rivers, lakes, beaches, and hills. Urban design also helped to define the character of historic settlements like Jaipur, Amber, Udaipur, and Jaisalmer. Elements like standard wall color, stone jaalis, jharokas, platforms, and courtyards, helped create a strong unified architectural character.

Few modern-day Indian cities have any strong sense of individual identity. Growth over time is one aspect that has not been addressed, with the result that as they are subjected to the pressures of increasing population over time their character begins to change. Even cities like Chandigarh, Navi Mumbai, and Gandhinagar all show how change over time has significantly altered their basic form. In most cases this is the result of overbuilding and extensive unauthorized construction all of which happens because of increased demand and changing use, which has not been addressed.

PS:
How do we make our cities more inclusive of the needs and aspirations of all sections of society? What are your thoughts on urban livability in India? How would you compare Indian cities with other global cities?

RS:
As cities continue to grow with more and more immigrants from rural areas, the demand for adequate space has steadily increased and land values have gone up. As a result of this the economically weaker sections of society have been pushed into smaller spaces on minimal pockets of land. Earlier as per regulations in the Delhi urban area, individual small plots were 80 sq. yards, which were later reduced to 50 sq. yards and which are now 25 sq.m. Most of such plots have four floors of construction with one apartment on each floor. With this kind of development, the EWS section which constitutes an average 60% of the population (approximately 67.5 lakhs in Delhi) live on 15% of land space in the city. Residents have no direct access to schools, health centres, open spaces and community facilities.

Due to monetization of land all government development agencies and builders continue to extract maximum value from land. As a result of this all development for the low-income sector is pushed to the fringes of the city far removed from access to jobs. A system needs to be evolved where all sections of society have equal access to land and community facilities. There is no doubt that large numbers of

Aardee Mall Gurugram 2020. View of central hall with escalators and staircases leading to shops, food court, and cinemas on upper levels. Photo: Saksham.

cities across the world have unequal distribution of residential and communal facilities for their residents, but in India we have allowed such conditions to deteriorate to an extreme. Despite the marginalization of the needs of a large section of society, change is not easy to bring about because politicians and administrators have a vested interest in maintaining the status quo. This calls for urgent change.

PS:

Based on your experience of teaching Urban Design in India and in universities in the United States, could you elaborate on your experiences in education? What are your thoughts on the current situation in architectural education in India?

RS:

Teaching in universities abroad has been a stimulating experience. It brought me in touch with students from different parts of the world and helped me to understand that there were strong cultural roots that conditioned their way of thinking and their way of dealing with urban issues. It also made me recognize the fact that there are no standard solutions for urban development problems. While teaching at the School of Planning and Architecture in Delhi I tried to get my students to understand what exactly was happening around them and get them to address real issues of change.

As towns and cities continued to grow across the country the demand for trained architecture professionals steadily increased. The number of institutions offering training in architecture grew, and in order to approve the quality of courses being offered, the Council of Architecture was set up in 1972. The Council has to date approved 463 schools of architecture and approximately 20,000 fresh young graduates join the profession every year. Due to the conditions that prevail most of them are disappointed in not finding suitable jobs after graduation, and do not find fulfillment and satisfaction in the kind of work they are expected to do. For a large country like ours, we do need large numbers of qualified professionals to address different aspects of urban development. We have however failed to create a proper framework to employ and take advantage of their professional skills. Extensive work in rural areas is being implemented without proper planning and design.

Change is necessary and can come about with joint action by the Council of Architecture and the Indian Institute of Architects. By employing more young architects and related professionals in all the different states It is possible to bring about real change across the country on a large scale.

PS:

Despite so many colleges and institutions churning out urban planning and architecture professionals each year, why, in your opinion, is the design of new cities and major projects entrusted to foreign consultants?

RS:

Most government agencies responsible for the development of new cities, as well as developers implementing large projects, appoint foreign consultants because of their star value, and because they believe that they will produce a superior project. They believe that buildings designed by foreign consultants are easier to sell. However, most of the complexes designed by foreign consultants have a superficial sheen and lack an understanding of local values and conditions. In all such projects the detailed design and implementation is done by local professionals. No known foreign architect undertakes the complete job including the detailed design and implementation of projects because of the kind of fees that are currently being paid. As a result, what you get is glitz and glamour without real depth.

This kind of condition has come about because both the Council of Architecture and the Indian institute of Architects have failed to get the importance of proper professional involvement in urban development understood and recognized. To this day both large developers and senior officials in government agencies responsible for implementing projects do not really understand the value of proper city planning and urban design. They treat qualified professionals like contractors asking them to deposit pre-bid money to bid for projects, appoint architects at the lowest fee quoted, and ask them to submit performance guarantees for the project. The Council should take action to insist that their Charter (which has been approved by an Act of Parliament) be judiciously followed, and government agencies should stop subjecting qualified professionals to humiliating exploitation.

In fact it is time for the Council of Architecture to update its Charter to spell out a comprehensive framework for the manner in which architects are appointed, with their responsibilities clearly defined, and proper fees paid in relation to the nature and complexity of projects. The changes should ensure that the Charter and all its contents can withstand any legal challenge in the future.

PS:

Are Indian cities resilient towards the effect of climate change? How do you think we could adapt to this crisis?

RS:

In many ways it is still too early to evaluate what will be the overall effect of climate change. At present most of our cities are certainly not resilient to climate change as can be clearly seen by the adverse effects of heavy unseasonal rains and the resulting floods, landslides, and extensive damage to settlements. The only real lessons we can learn from this is to be more respectful of nature and learn to live in harmony with it. We need to avoid building structures that obstruct the natural flow of water in rivers and streams. Large areas of forests need to be maintained, and the exploitation of resources like minerals need to be carefully planned, to avoid extensive destruction of natural terrain and existing settlements. The location of new industries must be planned with care to avoid damaging the environment and avoid pollution. The gradual shift from petrol driven to electric vehicles will help in a big way to reduce air pollution in all urban areas.

PS:

How do you think the ongoing COVID-19 pandemic has had an impact on our cities? Do you think that change is necessary and a new approach to planning needs to come about?

RS:

The COVID-19 pandemic has for the first time made us aware of the conditions of excessive crowding in our cities and, also of the extent of pollution caused by extensive traffic in urban areas. The long period of lockdown helped clear the air and reduce pollution. Parks in cities saw the return of various species of birds, and plants were no longer covered in layers of dust. The lockdown resulted in large numbers of informal sector workers returning to their homes in rural areas and this forced city dwellers to review and consider the extent of their dependency on them. The pandemic has called for all of us to use masks and keep a distance from other persons, and to avoid crowded places. In terms of planning it has made us realise that urban space needs to be available to citizens on an equitable basis along with equal access to schools, healthcare, community facilities and open space.

PS:

What are your views on the way new cities are developed? What is the key message you would like to give to stakeholders and designers of the new Indian city?

RS:

In the design and development of new cities much can be learned from our experience over the last sixty years by making a careful evaluation of successes and failures. I believe that it is necessary to understand the values of society and how they are steadily changing and effectively provide for them. Above all it is important to recognize that cities provide homes to people from all sections of society, and we must attempt to meet their needs on an equitable basis. It is important to realise that there must be a limit to the maximum population in new cities. New urban development needs to be planned on a regional basis in clusters so that as they grow to a certain size, it is possible to divert new immigrants to separate new growth centres.

Dr. Pratheek Sudhakaran
Dr. (Ar.) Pratheek Sudhakaran is an internationally recognized Building Scientist and expert in the field of High-Performance Buildings, Envelope Information Modelling and Bio-inspired Architecture. He graduated from the University of Mumbai and was an IUSSTF BHAVAN Research Fellow at the High-Performance Building Lab at Georgia Institute of Technology, Atlanta, USA. He is the Exec. Director of the ASADI Vision 2030, Cochin and Board of Studies Member (Architecture) at Mahatma Gandhi University and a PhD Guide at Amity University and SPA, New Delhi.

EERO SAARINEN: CATALYZING INFLUENCES

Figure 3: Florence Knoll and Eero Saarinen with Tulip Chair

Mies's orthodox Modernism, introduction of concrete technologies, mechanization of home through appliances, impacts of World War I and II, skyscrapers and reflecting glass idea, trend of privately owned automobiles- these and many other philosophies, events and controversies make the time-period amidst which Saarinen grows. Unlike many, he consciously and subconsciously establishes an interdisciplinary connection in his architecture. The article maps his collaborations that influence and diversify his style of architecture.

Ar. Fatema Kabir

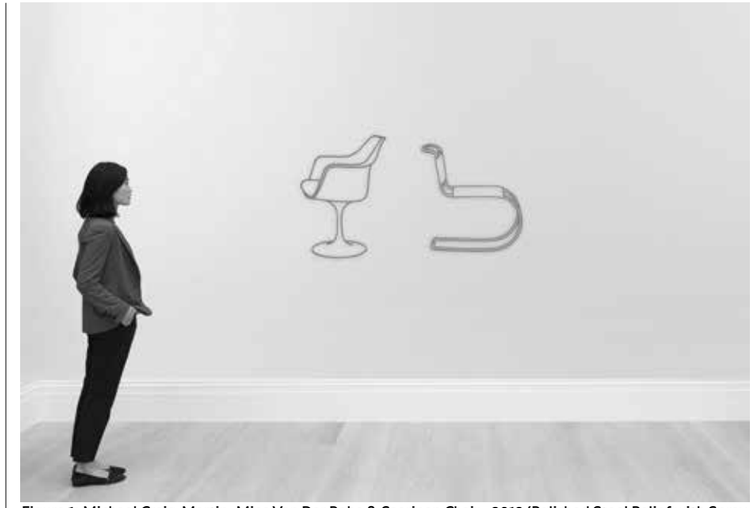


Figure 1: Michael Craig-Martin, Mies Van Der Rohe & Saarinen Chair - 2019 (Polished Steel Relief with Spray Paint).

Figure 2: Organic Chair, Charles Eames & Eero Saarinen - MOMA 1940

Figure 4: Mies Van Der Rohe, Farnsworth House - Plano IL – 1951

Figure 5: Eero Saarinen, Irwin Miller House, Columbus Indiana – 1957

We have chairs with four legs, with three and even with two, but no one has made one with just one leg, so that's what we'll do. Eero Saarinen

Michael Craig Martin in 2019 put Mies Van Der Rohe and Eero Saarinen's chair designs next to each other as a critique on the connections and influences of Modernism as seen in Figure 1. It is also a statement on the collaborations of Saarinen, that catalyzed his diversity and explorations. Saarinen's encounter with Charles Eames in 1940, led to their Organic Chair design that won first prize in the Organic Design Competition conducted by MOMA as seen in Figure 2. After joining Knoll Company (Figure 3), Eero designed the most celebrated Tulip Chair and a series of 70 chair designs.

I would like a place in architectural history. Eero Saarinen

Eero's resonance with Mies may not have been long lasting or limited to furniture design. Clear horizontality capturing the external serenity and reflecting the same in internal minimalism can be read in Mies' Farnsworth House (Figure 4) and Irwin Miller House of Eero (Figure 5). This is also the house when Eero started collaborating with experts, namely, interior design (Figure 6) by Alexander Girard and landscape design (Figure 7) by Dan Kiley. On the other hand, the towering transparency of Mies' Seagram Building was contrasted by the opacity of Saarinen's Canadian Black Granite cladded CBS Building also known as the 'Black Box'. Seagram displays its surrounding as a reflection in itself (Figure 8), while CBS displays its surrounding as a shadow onto itself (Figure 9).

Figure 6: Alexander Girard (Interior Designer), Irwin Miller House, Columbus Indiana – 1957

Figure 7: Dan Kiley (Landscape Designer), Irwin Miller House, Columbus Indiana – 1957

Figure 8: Mies van der Rohe, Seagram Building, New york – 1958

Figure 9: Eero Saarinen, CBS Building, New York - 1961

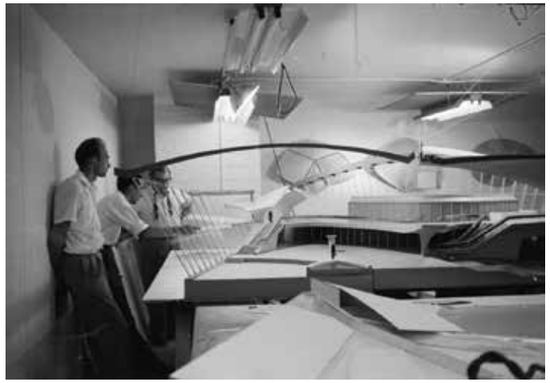


Figure 10: Eero Saarinen, Model of TWA Terminal, JFK New York – 1961

Figure 11: Eero Saarinen, TWA Terminal (Detail View), JFK New York – 1961

Figure 13: Santiago Calatrava's Milwaukee Art Museum (1988) is seen in foreground. Eero Saarinen's War Memorial

Figure 15: Santiago Calatrava's Milwaukee Art Museum (1988)

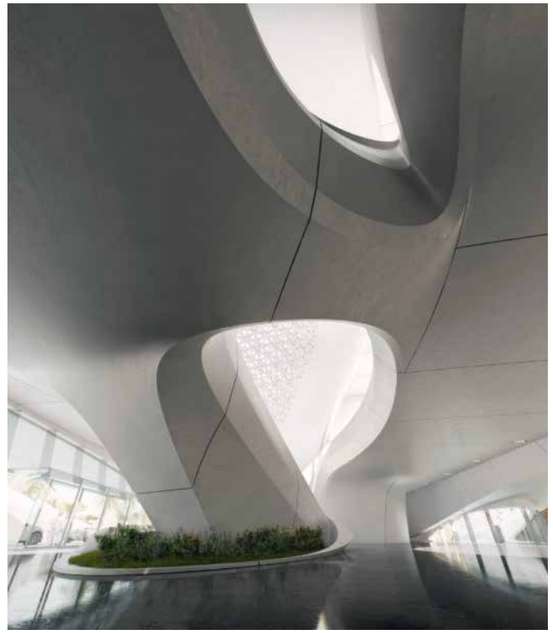


Figure 12: Zaha Hadid, Bee'ah Headquarters, Sharjah UAE – 2014- 2021

Figure 14: Eero Saarinen, TWA Terminal (Ext View), JFK New York – 1961

...the reason why these (plastic forms) are being built now... is really aesthetic and not economic; and we should face that. Eero Saarinen

The Pritzker Prize winner of 1982, Ar. Kevin Roche, was an associate at Saarinen's firm. After Saarinen's death in 1961, Roche and Dinkeloo undertook Eero's ten pending projects. These projects were a major platform that set Eero Saarinen in the history of Contemporary Architecture. One of these projects was the TWA Terminal at JFK International Airport, New York (1961). To understand the curvaceous forms, their impact on spatial experience, their structural resolve and aesthetic appearance; making life size models and becoming part of the project before execution, as seen in Figure 10, was one of Saarinen's design approaches.

TWA terminal design forms were indeed a challenge when Saarinen conceived it without digital mediums. Half a decade later, with parametric tools, architects explored such forms to its peak. An echo of Saarinen's work is also seen in some cases. Zaha Hadid's Bee'ah Headquarters, Sharjah UAE (2014-2021) has a very close resemblance to TWA in its spatial ambience (Figures 11 and 12)

Santiago Calatrava's Milwaukee Art Museum of 1988 is located right next to the 1957-Milwaukee County War Memorial Center of Eero Saarinen as seen in Figure 13. It may not be farfetched to then assume that Calatrava's design is a response to Saarinen's Architecture. Saarinen's TWA terminal as seen in Figure 14, appears to be a conceptual version of the bird flight that may have inspired Calatrava's Milwaukee Art Museum Figure 15.

If the [MIT] campus is a sentence, then the chapel is the full stop that makes you pause. Ar. David Adjaye

Through sheer manipulation of light and its focus on a blazingly white marble altar block, Saarinen created a place of mystic quiet. Leland M. Roth

Figure 17: Eero Saarinen, MIT Chapel, Cambridge – 1955

Figure 16: MIT campus, Cambridge having Eero Saarinen's Chapel

Figure 18: Eero Saarinen, MIT Auditorium, Cambridge – 1955

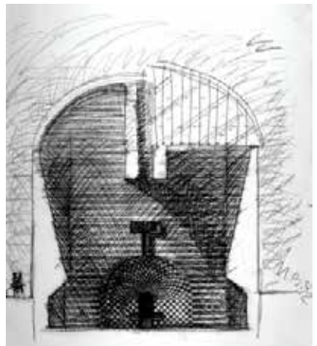


Figure 19: Mario Botta, The Church of San Giovanni Battista (Concept study sketch), Switzerland – 1994

Figure 20: Eero Saarinen, MIT Chapel (Concept study sketch), Cambridge – 1955

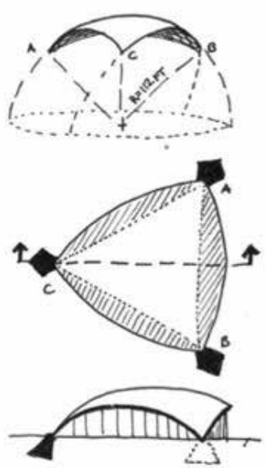
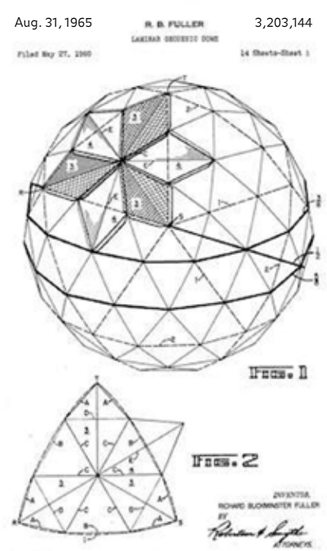


Fig 6. Kresge Auditorium, sketch of geometry (sketch by the author, after [Saarinen 1962: 127])



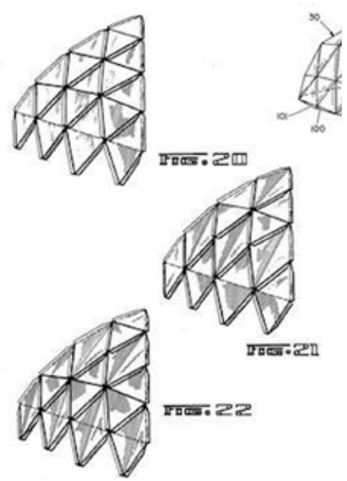


Figure 22: Eero Saarinen, MIT Auditorium, Cambridge (Construction concept development dwgs) – 1955

Figure 21: Buckminster Fuller, Geodesic dome (Construction concept development dwgs) – 1965

Another example on the lines of diversity is at the MIT Campus, Cambridge (Figure 16). Contrasting to each other are the two buildings of 1955: the brick mass of MIT Chapel and the thin shell reinforced concrete structure of MIT Auditorium. The skylight of the Chapel filtering light, creating focus within is seen in Figure 17, while the direct light through glazed walls of the auditorium connecting to the outside is seen in Figure 18.

... The strongest and most economical way to cover an area with concrete is with a dome and a dome with a thin concrete shell seemed appropriate for a college interested in technological progress... Eero Saarinen, 1955

Studies of figure-ground, mass-void and dark-light in Mario Botta's architecture were always there (Figure 19). But for once, a similar approach was observed in Saarinen's MIT Chapel's concept development too, though way before in the timeline (Figure 20). Owing to their technological approach, the geodesic dome of Buckminster Fuller went from a module to becoming a sphere as seen in Figure 21, while Saarinen's MIT Auditorium went from a sphere to becoming the 1/8 that formed the roof Figure 22. The contrasts yet connections continue to reflect in Saarinen's works.

The design is based on steel—the metal of the automobile. Eero Saarinen

The project that put Saarinen on the cover of TIME magazine in 1956 (Figure 23), continued to inspire researchers to study it further. Susan Skarsgard's publication Where Today Meets Tomorrow: Eero Saarinen and the General Motors Technical Center of 2019 (Figure 24) heralds the project to its maximum.

General Motors' Design owes its success to 'FUTURAMA' of Ar. Norman Bel Geddes. Eero Saarinen was assisting Geddes when General Motors' Highways and Horizons exhibit was under design for World's Fair of 1939. The exhibit was a full-scale embodied experience of the 1960's roads and intersections, convincing the users of the privately owned cars as the new normal. Though only the silver-gray windowless façade that covered the exhibit was Saarinen's design (Figure 25), he took away the connection of Automobile and Architecture from here. This understanding is reflected in the aluminium-clad, shadowless lit dome design of General Motors display centre which made automobiles a piece of art as seen in Figure 26.

Just after the General Motors's project, Saarinen was put on the jury for the Sydney Opera House design competition, where not surprisingly he pulled out the proposal of the future Pritzker prize winner Ar. Jørn Utzon (Figure 27). Figure 28 shows Jørn Utzon (centre) with two of the judges of Opera House, Leslie Martin (left) and Eero Saarinen (right). The

Figure 25: Eero Saarinen, General Motors 'Highways and Horizons exhibit at the World's Fair' (silver-gray windowless façade). 1939

Figure 26: Eero Saarinen, General Motors Technical Center (Dome), Detroit -1956

Figure 23: TIME Magazine cover - 1956, Eero Saarinen with General Motor Design plan in background

proposal reflected an engineering feat and an architectural expression that would establish the future vocabulary of the discipline, a purpose that Eero Saarinen may be found to have throughout his career.

Saarinen begins at the heart of Modernism and concludes at the door of Post-Modernism. Versatility in his designs engage a researcher while provoking critiques like Vincent Scully. It is due to his connections and multi-faceted learning that one sees this diversity. Collaborations and interdisciplinary connections became the new normal, yet the variety in the design language of a single architect is yet being challenged.

Figure 28: Jørn Utzon (centre) with two of the judges of Opera House, Leslie Martin (left) and Eero Saarinen (right).

Figure 27: Jorn Utzon, Sydney opera House, Sydney - 1957

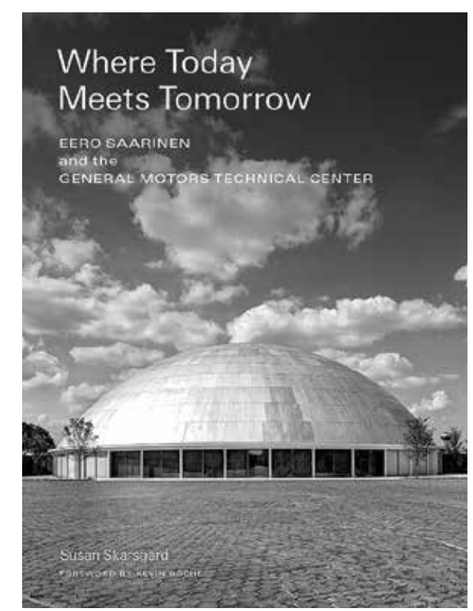


Figure 24: Susan Skarsgard, "Where Today Meets Tomorrow: Eero Saarinen and the General Motors Technical Center" 2019

Image Credits

Figure 1: Craig-Martin, M. a. (2019). michael-craig-martin-mies-van-der-rohe-chair. Retrieved from sothebys: https://www.sothebys.com/en/buy/auction/2020/contemporary-art-london/michael-craig-martin-mies-van-der-rohe-chair)

Figure 2: Noyes, E. (1941). exhibitions/1803. Retrieved from moma.org: www.moma.org/calendar/exhibitions/1803)

Figure 3: Company, K. (2017, may 24). Celebrating 100 Years of Florence Knoll . Retrieved from knoll.com: https://www.knoll.com/cs/Satellite?c=Page&cid=1356043252866&d=Touch&pagename=KnollEurope%2FPage%2FLayout)

Figure 4: Jonathan_nesci. (n.d.). miller-house-and-garden-tour. Retrieved from columbus.in.us: https://columbus.in.us/miller-house-and-garden-tour/)

Figure 5: Disanto, R. (2018, April 4). miller-house-garden. Retrieved from parkandoak: https://parkandoak.com/tag/miller-house-garden/)

Figure 6: joshblackwell. (n.d.). miller-house-and-garden-tour. Retrieved from columbus.in.us: https://columbus.in.us/miller-house-and-garden-tour/)

Figure 7: miller-garden-columbus-indiana-usa/dan-kiley-miller-garden-7. Retrieved from oldgardens.wordpress.com: https://oldgardens.wordpress.com/2012/12/22/miller-garden-columbus-indiana-usa/dan-kiley-miller-garden-7/)

Figure 8: 375parkavenue. (n.d.). seagram-building-mies-van-der-rohe. Retrieved from arch2o: https://www.arch2o.com/seagram-building-mies-van-der-rohe/)

Figure 9: Horsley, C. B. (n.d.). cbs. Retrieved from thecityreview: https://www.thecityreview.com/cbs.html)

Figure 10: Congress, U. S. (n.d.). twa-flight-centre-new-york-by-eero-saarinen-capturing-the-spirit-of-flight. Retrieved from re-thinkingthefuture: https://www.re-thinkingthefuture.com/case-studies/a3201-twa-flight-centre-new-york-by-eero-saarinen-capturing-the-spirit-of-flight/)

Figure 11: Fiederer, L. (2016, June 16). ad-classics-twa-flight-center-eero-saarinen. Retrieved from archdaily: https://www.archdaily.com/788012/ad-classics-twa-flight-center-eero-saarinen)

Figure 12: zaha-hadid. (n.d.). beeah-headquarters-sharjah-uae. Retrieved 2021, from zaha-hadid: https://www.zaha-hadid.com/architecture/beeah-headquarters-sharjah-uae/)

Figure 13: Ryan, S. (2017). Odonnell-park-transferred-to-milwaukee-art-museum. Retrieved from bizjournals: https://www.bizjournals.com/milwaukee/news/2017/12/18/odonnell-park-transferred-to-milwaukee-art-museum.html)

Figure 14: nyc-architecture.com. (n.d.). ad-classics-twa-terminal-eero-saarinen. Retrieved from archdaily: https://www.archdaily.com/66828/ad-classics-twa-terminal-eero-saarinen)

Figure 15: milwaukee-art-museum. (n.d.). milwaukee-art-museum-506. Retrieved from visitmilwaukee: https://www.visitmilwaukee.org/partners/milwaukee-art-museum-506/)

Figure 16: Korab, B. (2017, july 24). midmod-monday-kresge-auditorium. Retrieved from claasshaus: https://www.claasshaus.com/blog/midmod-monday-kresge-auditorium)

Figure 17: archjourney. (n.d.). mit-chapel. Retrieved from archjourney: https://archjourney.org/projects/mit-chapel)

Figure 18: Gribkoff, E. (2020, nov 9). environmental-solutions-initiative. Retrieved from news.mit.edu: https://news.mit.edu/2020/environmental-solutions-initiative-puts-sustainability-front-and-center-mit-career-fair-1109)

Figure 19: botta, m. (2020, Feb 10). san-giovanni-battista-church-in-switzerland-mario-botta. Retrieved from archeyes: https://archeyes.com/san-giovanni-battista-church-in-switzerland-mario-botta)

Figure 20: Chun, H. (n.d.). 389209592773742631. Retrieved from pinterest: https://in.pinterest.com/pin/389209592773742631/)

Figure 21: Fuller institute, B. (2019). the-reflectionist. Retrieved from medium.: https://medium.com/the-reflectionist/buckminster-fullers-self-disciplines-efb3d9ed4092)

Figure 22: Foxe, D. M. (2010). Saarinen's shell game: tensions, structures and sounds at MIT. Recalling Eero Saarinen 1910-2010, 191-211.)

Figure 23: Artzybasheff, B. (1956). 0,16641,19560702,00. Retrieved from content.time: http://content.time.com/time/covers/0,16641,19560702,00.html)

Figure 24: archidose. (2020). where-today-meets-tomorrow. Retrieved from archidose: https://archidose.blogspot.com/2020/07/where-today-meets-tomorrow.html)

Figure 25: Hayden, D. (2012). "I HAVE SEEN THE FUTURE": Selling the Unsustainable City. Journal of Urban History , 13.)

Figure 26: smithgroup. (n.d.). general-motors-design-dome. Retrieved from smithgroup: https://www.smithgroup.com/projects/general-motors-design-dome)

Figure 27: Chiu, C.-y. (n.d.). covers-of-Utzons-Sydney-National-Opera-House-Red. Retrieved from researchgate: https://www.researchgate.net/figure/The-front-above-and-back-below-covers-of-Utzons-Sydney-National-Opera-House-Red_fig4_332968338)

Figure 28: RIBA, C. (n.d.). the-architect-jorn-utzon. Retrieved from sydneyoperahouse: https://www.sydneyoperahouse.com/our-story/the-architect-jorn-utzon.html)

References

1
Anay, H. (2009). Analysis And Evaluation Of The Design Process Of Mario Botta's Single-Family House In Breganzona . *Journal of Engineering and Architecture Faculty of Eskişehir Osmangazi University,* 24.

2
Architecture, B. (2020). *Gateway Arch National Park.* St. Louis, Mo: Getty Foundation.

3
Berke, D. (2014, April 10). My Favorite Architect: Eero Saarinen. Indianapolis, Indiana , USA.

4
Company, K. (2017, may 24). *Celebrating 100 Years of Florence Knoll .* Retrieved from knoll.com: https://www.knoll.com/cs/ Satellite?c=Page&cid=1356043252866&d=Touch&pagename=KnollEurope% 2FPage%2FLayout

5
Craig-Martin, M.A. (2019). *michael-craig-martin-mies-van-der-rohe-chair.* Retrieved from sothebys: https://www.sothebys.com/en/buy/auction/2020/contemporary-art-london/michael- craig-martin-mies-van-der-rohe-chair

6
Foxe, D. M. (2010). Recalling Eero Saarinen. (K. W. Rees, Ed.) *Nexus Network Journal.*

7
Girard, A. (Germany). *A Designer's Universe .* 2017: Vitra Design Museum.

8
Hayden, D. (2010). "I Have Seen The Future": Selling the Unsustainable City. *Journal of Urban History* , 3-15.

9
Noyes, E. (1941). *Exhibitions/1803.* Retrieved from moma.org: www.moma.org/calendar/exhibitions/1803

10
Noyes, E. F. (2017). Organic design in home furnishings. *The Museum of Modern Art's exhibition history,* 57.

11
Peregoy, B. (2016). *architect-eero-saarinen-landmark-buildings.* Retrieved from architecturaldigest: https://www.architecturaldigest.com/gallery/architect-eero-saarinen-landmark-buildings

12
theartstory. (n.d.). *life-and-legacy.* Retrieved from theartstory: https://www.theartstory.org/artist/saarinen-eero/life-and-legacy/

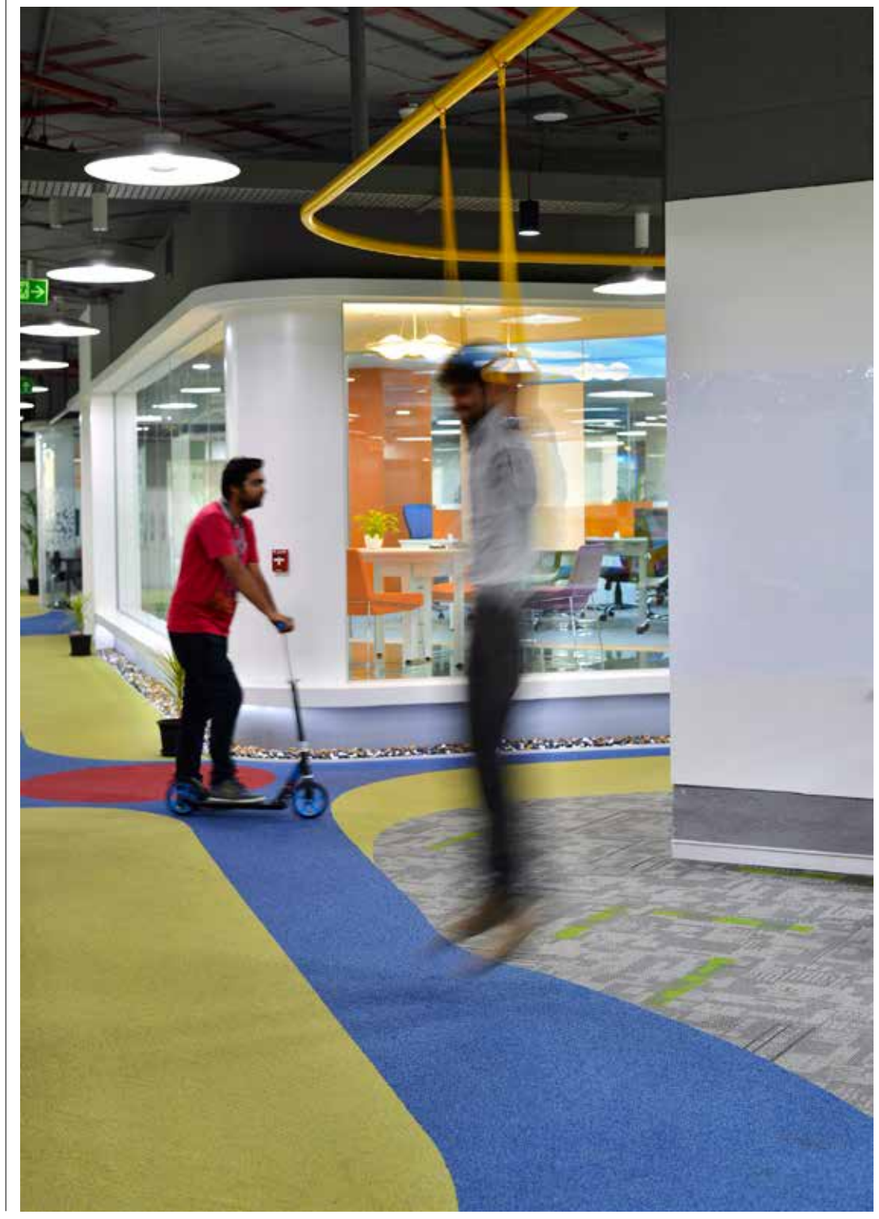
13
Whitehead, R. (2014). Saarinen's shells: The evolution of engineering influence. *Proceedings of the IASS-SLTE 2014 Symposium .* Iowa State University: Digital Repository.

14
Whitehead, R. (2014, Sept 20). *Saarinen's Shells and the Emerging Influence of Engineering.* Retrieved from thinkmakebreak: http://think-makebreak.blogspot.com/2014/09/saarinens-shells-and-emerging-influence.html

Ar. Fatema Kabir, is a full-time faculty at Aayojan, Pune; with 11 yrs of teaching experience. She is currently Pursuing her PhD in Experiential Analysis of Architecture. In her quest of Architectural Theory; Fatema has gone from being a writer at IA&B to being a Professor in Architecture Schools to being a workshop Organizer and resource person for FTP at COA TRC. Ar. Fatema has also curated art galleries as part of her exploration. She has a couple papers published to her name that reflect her varied interests.

Designation: Associate Professor; Aayojan School of Architecture, Pune
Email: kabir.fatema@gmail.com

COMMERCIAL INTERIORS
A JOURNEY THROUGH TIME



Activities in open office

Agile working

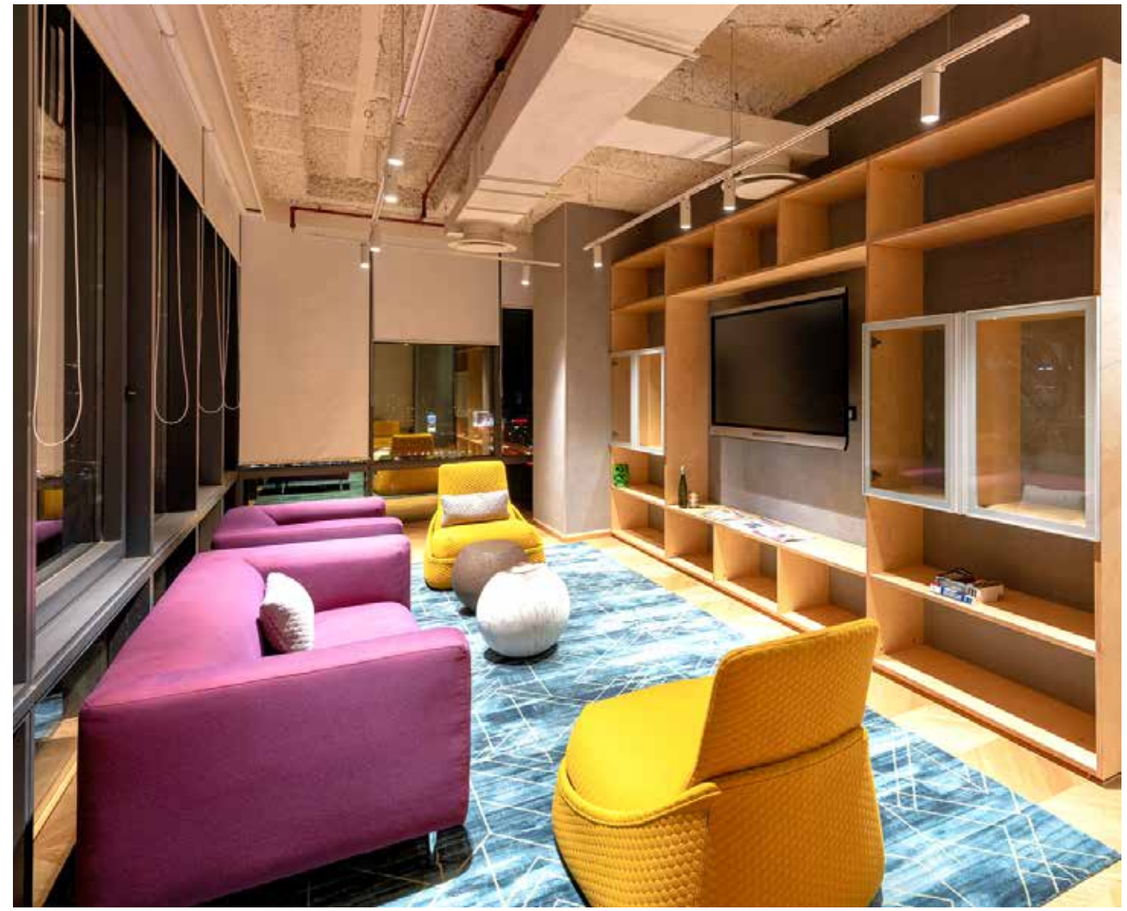
The profession of commercial interiors in India is undoubtedly an endearing story, an evolving and impressive trend that we can be proud of today. The year 1991 paved a new path for India's economic policies. The surge in foreign investment then onward was truly encouraging, creating a huge opportunity for commercial interiors. While investments started pouring into India, the natural need for human resource and office space began rolling.

The industry then was immature. We were unaware of the basics of MEP and global standards which are generally followed and also ignorant about FM global, BIFMA certification and all such certifications following good industry practices. The US and Europe were about 15-20 years ahead of us. The interior work that was done prior to this was very nascent. We used typical age old methodology, and materials were not handy. Just as an example, until early 2000, we used plywood partitions with framing of wood or sometimes aluminium. Soon we saw a revelation with the need for larger office spaces and realisation of gypsum and its extensive use in interiors, and so was the case with many other materials and construction technologies. These were small but sure changes that started emerging with a big impact. Our exposure to western world, their culture, use of technology and their project process methodology resulted in extensive learnings for us.

The trend of commercial interiors in India continued to rapidly evolve in the last 10 years, becoming ever more global and at the same time demanding the fine focus of specialized areas of critical knowledge that includes interior design specialties which are now widely accepted as part of global norms in built environments where the emotional quotient, human health, safety and welfare are of foremost importance, including, but not limited to, ageing in place design, universal design, accessible design, specialty workplace design and more.

Two notable recent and fast evolving concepts in commercial interiors are co-working spaces or enterprise solutions and design and build concepts. Co-working spaces are proving to be a very lucrative option for start-ups and MNCs who do not wish to invest capital expenditure and now with the COVID-19 pandemic we see an increasing need of such hubs with the intention to enable employees to gain easy access to a working spot close to their homes. The design of such spaces also has pushed us to explore further on design criteria including flexibility and extensive modularity of all interior elements not to forget the aggressive demand for quick completion and scale of economy.

While back in the year 2000, architects were the prima facie to designing and project handling, the emergence of project management companies (PMC) in recent years has shifted the focus of client to PMC as the primary single point of contact (SPOC) for their office space and building requirements who in-turn are responsible for architect appointments, vendor selection and execution. This has brought in more accountability and professionalism as compared to 20 years ago. The design-and-build concept, which are either driven by PMC or architects who have the capability to handle complete projects, is enabling clients to gain more accountability and achieve scale of economies.



Home away from home

While, today we are almost at par in terms of materials, designs and global thinking, in my opinion there are three areas for improvement: firstly, use of technology, secondly, use of advanced materials and thirdly, detailing and manpower issues.

Indeed, as Indians we work harder than our western or south-eastern counterparts, but what we lack is focus and time for research. We notice that in other parts of the world every project is based on some research that has gone before the thought process and design. We definitely see this missing in Indian designers. This is a big takeaway for us, not just as designers but also for clients because if clients can ensure effective planning with the required timelines, they will surely reap good results.

Till date we do not see much technology used in execution and it is more or less a manpower-oriented or a hard copy drawing-oriented field which relies on human interaction. Soon we will see artificial intelligence, augmented reality, virtual reality and BIM coming into the area of execution. We also will see a rise of 3D printing technology for interior and architectural products although it comes with a cost. However with the rise in volumes and demand setting in, we can expect the prices to come down. We can then have access to enhanced design ideas which are possible with 3D printing technology- a welcome and exciting trend to keep tabs on!

A stepping stone to equipping emerging Indian designers is to have the Council of Architecture mandate a curriculum that is aligned with the latest in the profession so we can close the current gap between academics and the real world design expectations. In short, we need to make fresh graduates profession-ready.

Over the years, the business reasons drawing multinationals to India have evolved, and based on their market focus, MNCs can be grouped into three distinct categories: those that look on India as an end market, or treat it as a centre for back-office functions, or as a global business hub (including for exports). Each of these verticals of business posed new client expectations and challenges in design thereby giving us a huge opportunity for versatility and growth.

Informal cafeteria

Informal zone

This pages (Clockwise from Left): Nature mimic; The fun office; Work cafe

India remains an unavoidable draw for MNCs where they ultimately find success. All businesses, whether IT, ITES, BPO, R & D, NBFC, BAFC, BT and manufacturing are here to sustain and grow in our country.

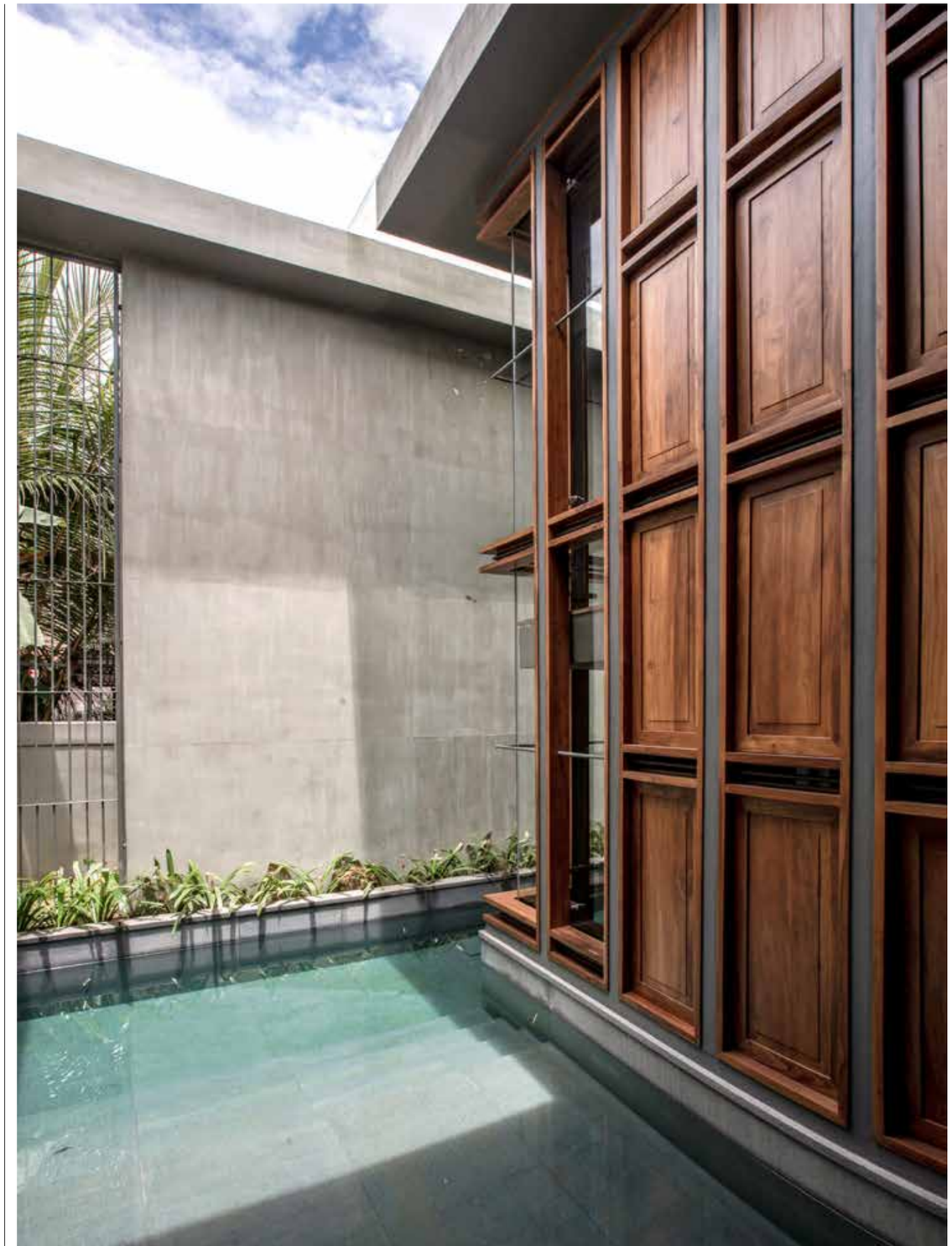
Indians surely hold the baton as a fine example for innovation and growth with commercial interiors being one of these channels. Designers alike can take the pride of fusion designing and sensibilities which has the class of Indian ethnic style mixed with global trends and technologies thereby creating a beautiful blend of both worlds. It's an exciting profession and opportunities limitless!

Ar. Alhad Gore
Ar. Alhad Gore is the Managing Partner of Beyond Design Architects. He began as a junior designer soon after his graduation in 1993 from Academy of Architecture, Mumbai, and progressed to become a director, a partner and a CEO in top architectural firms in Mumbai within a short span in his career. He started his own firm Beyond Design Architects & Consultants in late 2009 with a clear focus on aesthetics coupled with functionality. They are internationally and nationally recognized with awards and magazine publications, including The Society for British and International Design award for the best office design, London (2016), BERG Singapore award for the best office design, 2017 and APDC-IDA award for the best office design, New York 2018. He was appointed as an industry expert by Maharashtra State board of Technical Education to improvise Interior design curriculum in the state in 2017 and on Amity Business School Advisory Board (2022 -2024) for Amity School of Architecture and Design.
Email: alhad@beyonddesign.in

Photo Credits : Beyond Design Architects

ALANKAR RESIDENCE SENSORIAL DWELLING

Front Elevation



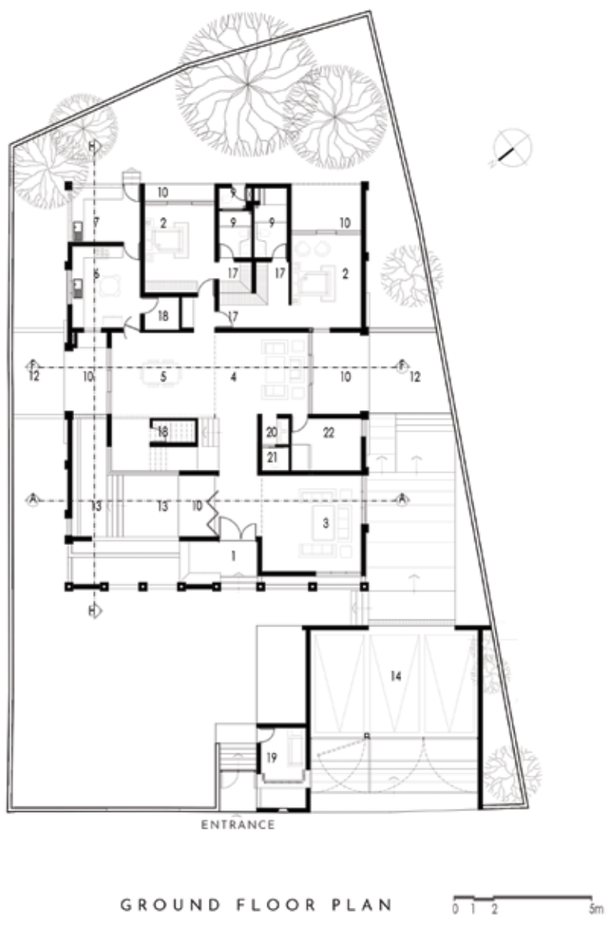
Indoor pool and Double height window

Fact File
Project Name ▶Alankar Residence
Project location ▶Changanassery, Kerala, India
Completion Year ▶2019
Gross Built Area (m^2/ ft^2) ▶456.12 m^2
Typology ▶Residence
Firm Name ▶Roy Antony Architects/ Platform Poesis
Lead Architects ▶Ar. Roy Antony Illampallil
Photo Credits ▶Syam Sreesylam

Alankar Residence for Mr. Shahabudeen is one of the latest projects completed by our firm. It is located 4 km from the Changanassery town-centre and is within a residential neighbourhood. Situated on a 410 sq.m property, with an average site elevation of 1.2ms, the total building area amounts to 456.12 sq.m (4900 sq.ft).

The client approached us with a single requirement of 5 bedrooms, basically, giving us the go-ahead and total freedom to conceive the building and choose its architectural form and vocabulary. What we have attempted in Alankar Residence is a harmonious reconciliation of the diverse set of design factors that are part of any architectural project, in a process which are conceived akin to 'knitting'. It is thanks to such a conception and realization of architecture, that Alankar Residence satisfies the needs and interests of the client and speaks to the contemporary Kerala socio-cultural and urban reality, while at the same time aspiring to manifest its noblest ideals.

The settlement pattern of the location also plays an important factor in the design. Individual residences set in enclosed compounds, with compound walls segregating one plot from another is a typical pattern that we see throughout Kerala. It is neither 'urban' nor 'rural' in the full sense of these terms. For Alankar, we sought to redefine and better articulate the conventional compound wall and entrance. For this, we made use of the elevation of the site from the street to create a 3 m tall boundary wall. The boundary wall also has a solid-void interplay by means of a garage, offset from the street, a covered pedestrian entrance and some openings. Thus, there is visual continuity between the street, front-yard and facade.



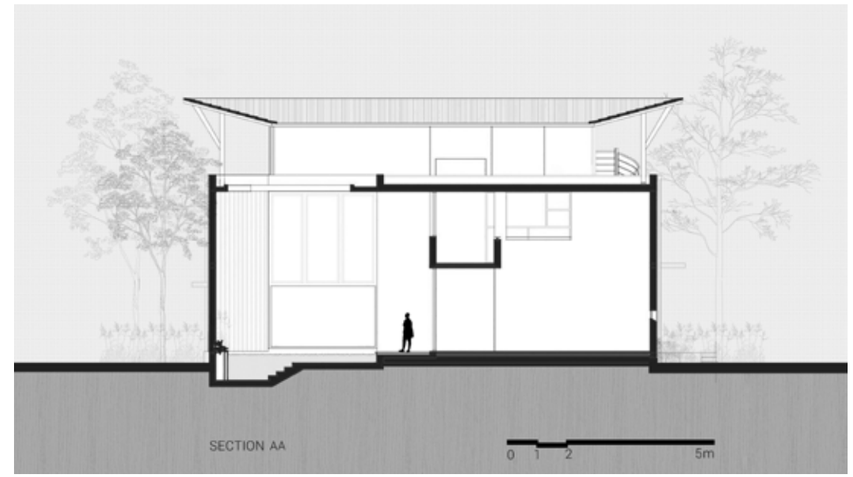
GROUND FLOOR PLAN

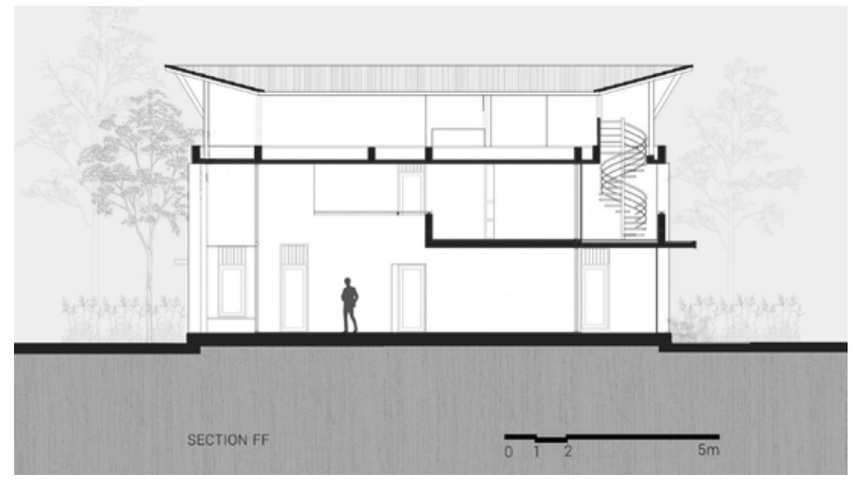
1. Entrance
2. Bedroom
3. Living Space
4. Family Living
5. Dining Space
6. Kitchen
7. Work Area
8. Utility
9. Bath
10. Deck
11. Passage
12. Landscape
13. Waterbody
14. Porch
15. Balcony
16. Terrace
17. Dressing area
18. Store
19. Security
20. Wash Area
21. Powder Room
22. Prayer Room

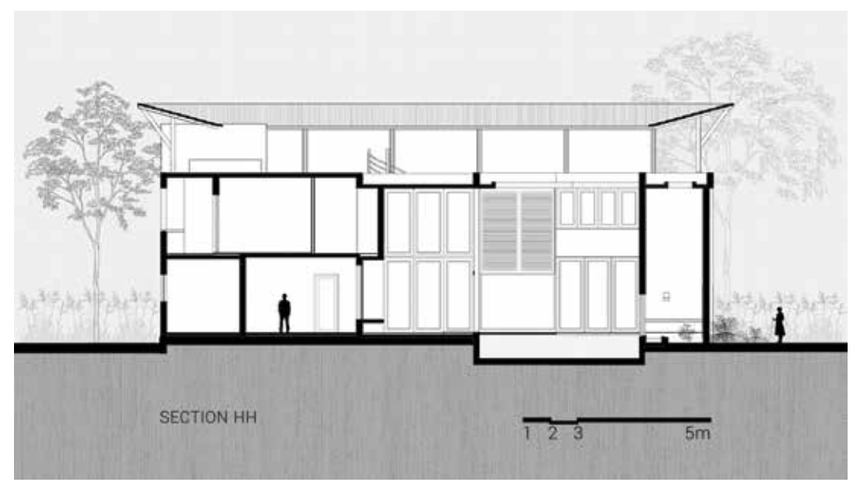
Double height dining room

Indoor pool and double height window

Double height formal living

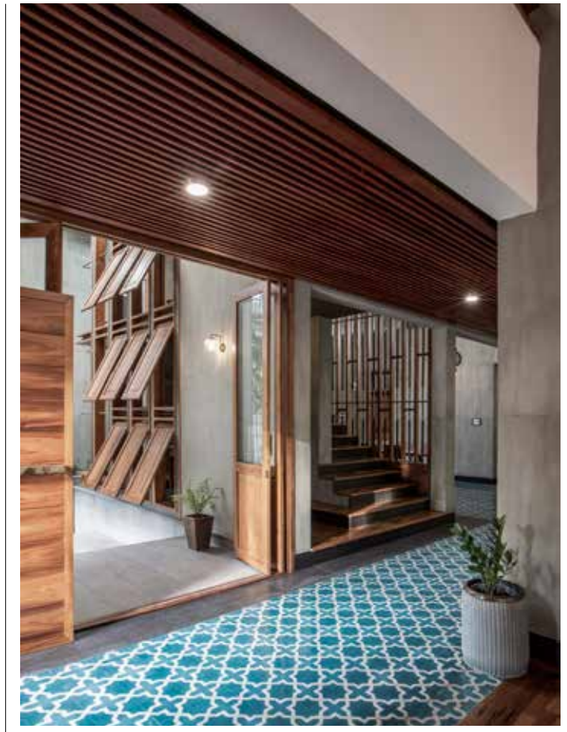






View towards dining room from the deck

Double height formal living



View from the formal living to the pool deck and stairs

View from pool deck to passage.

The main entrance to the building is axial to the pedestrian entrance from the street. On either side are gravelled front-yards and the roof of the garage is to be transformed into a landscaped terrace. The façade is constituted by double-height columns and solid brick-clad walls.

The form also plays with spatial volumes to create areas for living, work and leisure. Given the desire of the client-family to be somewhat reclusive, these spaces are predominantly introverted, focusing around an internal open-to-sky pool. Already, the pool and the reflection of light on the water together affect a play of chiaroscuro (light and shadow/ darkness) in the covered spaces around, which is further accentuated by a system of diverse fenestration: louvers, grills and glass-wood shuttered windows.

The careful use of diverse finishes for walls and floors such as cement plastering, unplastered brick cladding, wood, glazed cement tiles with geometric pattern and brushed granite also extends the visual effect of light-darkness interplay into the tactile sphere. This offers the inhabitants a rich sensorial experience of the building.

The inverted-sloped tiled-roof pavilion that covers the terrace, a dominant element in the architectural composition deriving from the tropical-monsoon climatic conditions of Kerala, has not yet been constructed. Still, the building, as it stands presently, is "complete" in a sense. When the client constructs this pavilion someday, it will only render the building "more complete".

Our firm believes in an 'architecture appropriate' ideology which emerges from the context of the project in questions and always aims to create a fine balance between achieving the clients' needs with urban aesthetics. What we have attempted in Alankar Residence is a retrospective and speculative exploration of the notion of dwelling. Through such an exploration, the work aspires to manifest the basic ideals that sustain architecture, offering a sensorial, rich ambience for life to unfold.

Roy Antony Architects | Platform Poesis
Roy Antony Architects is a mid-sized firm of committed architects, architectural assistants, architectural interns, well supported by associates and consultants. The lead architect, Ar. Roy Antony Illampallil, is a well-respected figure within the architectural community in Kerala and has professional experience both internationally as well as locally. The firm has received various architectural awards and accolades. The practice is committed to make places that are sensorially resonant, symbolically significant, culturally sensitive and responsibly built.
admin@royantonyarchitects.com

Team Members:
Sainath Kadavil, Shyam Prasad, Vaishnavi Aneesh, Aswathi Shajan, Casia Maria John, Dhiya Anna Charley, Jinju Ann Johnson, Karoline Morera, Mohammed Shibin K, Neha Miria Ninan, Vinu Elias Jacob, Anju Rajan.

Theoretical Analysis & Writing: Jose Jacob Thevercad

MEJAGARH FORT AT BHILWARA, RAJASTHAN CONSERVATION PROJECT

Figure 1

Figure 2

Mejagarh Fort

Located in the northwest India, about 16 km from Bhilwara, (a highly industrialized sector of Rajasthan) lies the Mejagarh Fort. The study unravels how the founder of the royal legacy of Meja Rawal Amar Singh-ji, who was in the service of the Maharana of Mewar, inherited the property. Impressed and overwhelmed by his act of bravery and loyalty, Maharana Shambhu Singh-ji granted him a j

agir in 1871, comprising of a picturesque village called Meja along with 23 other hamlets, surrounded by a scenic topography. Meja dam is one of the biggest irrigation projects in the state. Began in the year 1875, the fort was assertively built over five years, under the supervision of Rawat Amar Singh Ji. Meja easily resolves into two cognate units, inseparable yet distinct and unique: fort and village. Meja's architecture is a superlative blend of Rajput and Mughal style that was favoured by ruling elite at that time. Its austere facade is lightened by a large intricately carved jharokha on the top of an arched gateway with a huge wood and iron doors. The palace is built on a regular plan with two chowks (courtyards) and a burj on each of its four corners.

The arched entrance leads to the Mardana Chowk (outer courtyard) which is enclosed on all sides by various areas such as Mataji ka Mandir, Salah Khana, Neeche ki Tabariya, Mardana Baithak etc. The Janana Chowk, located in a separate wing with its entrance through the Mardana Chowk. The Janana Chowk is enclosed in the same manner as the Mardana Chowk with areas such as Devata ka Tabariya, Devata ka Kamra, Bartano ka Kamra, Dhaan ka Kamra, Bhandaar, Tulsi ka Kamra, etc.

The land Area of the Fort is approximately 48,260 sq. ft. while the plinth area is 19,000 sq. ft. Comprising four floors, the Fort had about 50 rooms and 12 restrooms apart from about 10 open courtyards, which can be converted into halls.

Interfacing Conservation

With the art of building gradually fading, lost knowledge needs revival along with repair of lifeless buildings. (Figure1)

Conservation of heritage is a continuous process as every generation leaves behind a legacy for the future in form of records, traditions, literature, customs and indeed architecture as built-up heritage. Conservation contributes to the historical continuum in the larger local, regional and national context.

Recreating the old and adding the new.

The conservation strategy concurrently encompasses the approaches of preservation, rehabilitation, restoration and reconstruction. The approach should place a high premium on the retention of historic fabric, components and features through conservation, maintenance, care and repair. For conservation, it is of utmost importance to know the building materials used in the past and understand their nature and properties. Most buildings in the past have used the locally available materials. The ethics, ethnicity and ecology can be interwoven with contemporary lifestyle.

The basic tenet of conservation is to do minimum.

Presently, reusing of traditional buildings has become a common phenomenon for maintenance, management and sustainability of the structure. Reuse must be sympathetic to the existing structure. The conservation works include strengthening structures, basic stabilizing, removing accretions, making roofs leak proof, repairing projected brackets, stone elements etc. To preserve and conserve our built heritage we need to create awareness followed by mapping of our cultural resources.

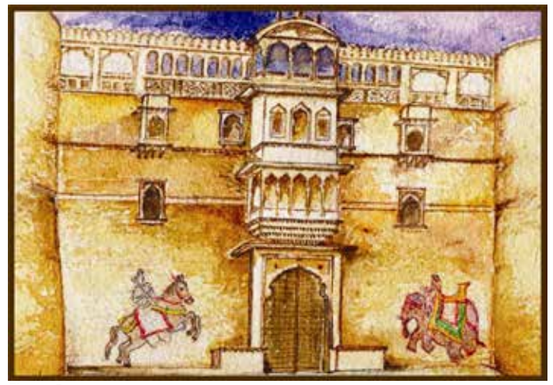


Figure 3

Figure 4 (A)

Figure 4 (B)

Top to Bottom:
Figure 3: Proposed Building Façade
Figure 4 (A-B): Entrance from Village (before and after)

Figure 5

Figure 6 (A)

Figure 6 (B)

Figure 7

This page (Clockwise from Left):
Figure 5: Kesar Kyari.
Figure 6 (A-B): N-W Burj.
Figure 7: Entrance of Plaza.

Conservation Stages

The project journey went through six rigorous process-based stages over a period of five years and still around the clock. (Figures 2 &3).

Stage 01 - Documentation and Damage Assessment
Stage 02 - Redefining the Area
Stage 03 - Planning at Macro Level
Stage 04 - Planning at Micro Level
Stage 05 - Architectural Detailing
Stage 06 - Design Implementation

Aims and Challenges

While improving the quality of life for resident population the project aims to integrate conservation, socio-economic development and environmental improvements as well. In order to maintain the historic character of fort, most materials used in conservation project were the same as those in original construction. However, some new materials and methods were used for extra strength and to suite adaptive re-use. Conserving the dynamic space, with its embedded histories, centuries of wisdom and versatility of spatial experiences, was a colossal task. It was necessary to make it a utilitarian property which serves as a good hospitality project with the comfort of a hotel and essence of a fort, at the same time, to make it a self-sustainable and commercially viable fort hotel. The solid lime and mortar masonry of the past now became a great impediment to chase the stone wall or to pierce the windows, so essential for cross-ventilation of air and for splendid views.

About Mejagarh Fort

Each hotel project in the historic facility is specific and requires its own combination of compromise, creativity and inventiveness. The conservation strategy was evolved with a comprehensive reuse plan. This has been accomplished with sensitive design considerations, responsive both to historic values and contemporary needs.

Restored on its own footprint with addition of appropriate infrastructure, interiors and landscape, it allows the visitors to glimpse into historic times. A handsome perimeter fort wall made of locally available stones is crenellated with

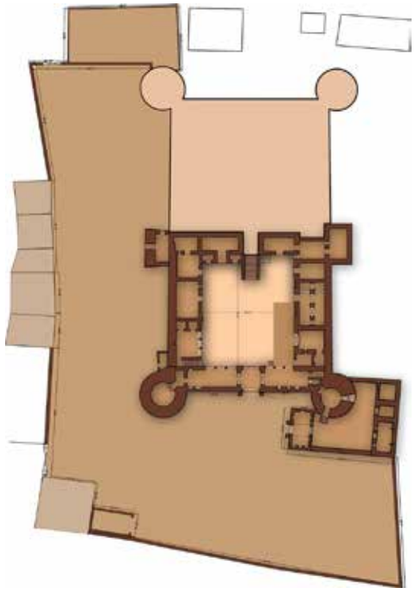


Figure 8: Site Plan

Figure 8: Site Plan

Figure 9: Mardana Chowk

Figure 10: Conceptual Sketch

Figure 11: Main Entry Mardana

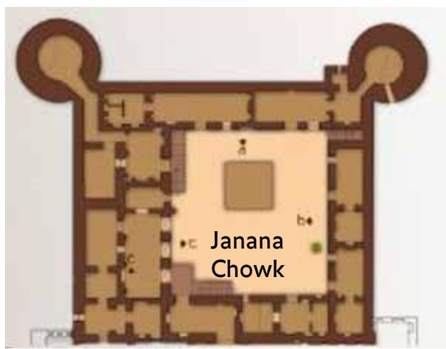


Figure 11: Janana Chowk

rounded merlons (Figure 4), giving the outline of the fort a crisp edge against the sky. From the main entrance visitors are taken across immaculate Kesar Kyari (Figure 5) and lawn to the doors of the palace. The outer walls of the palace are without fenestrations, their solidity broken only by a row of gun slits at regular intervals. A quartet of round towers (burj) distinguishes the basic rectangular plan. (Figure 6).

The palace with a special artistry of its own incorporates the work of local artisans in its decorative scheme. The evening terrace lounge is specially positioned on a higher level where the night sky is in full view along with a magnificent water reservoir.

All architectural elements in the palace have been conceived after careful study, building survey for the measured drawing, technical understanding of structural repairing and strengthening and prudence to bring back its life in the best possible way to help gain its own respect. We restored the structure and converted the interior spaces into a dynamic place where culture and commerce could thrive together.

Carved stone elements such as jaalis (stone screens), brackets give a special and decorative effect on facade. An efficient water management plan has been implemented at the hotel. The final outcome is an astonishing combination of historicity in content and spirit and modern facilities.

Mardana Chowk : Design implementation

The room mix was reworked, the problems of natural light and ventilation allowed flexibility to the courtyard. The arches on the skin were opened up to overlook the courtyard.

Figure 19: Coffee House

Figure 20: The Blue Room

Figure 21: Inspired from five elements of the universe...The Water Room

Figure 22: The Janana Chowk, 150 year old Neem tree with the vintage artifacts and furniture.

Figure 15: Design Implementation of Gate (before)

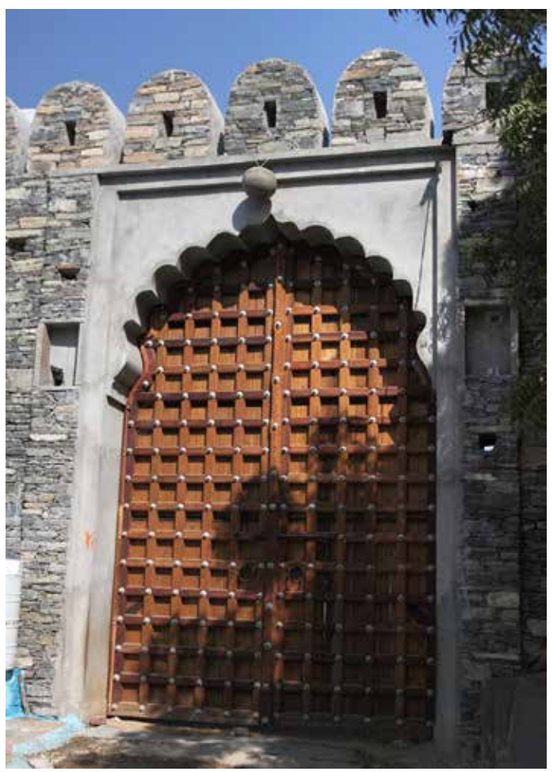


Figure 15: Design Implementation of Gate (after)

Thus, the space connected with the season of the year, with the time of the day, with the usage of the building, and with the site. (Figure 9)

The functions of the rooms were redefined to suit the new function of the palace. In order to create the ambience of the space, windows in arch shape were built to allow light and ventilation and also overlook the courtyard. (Figure 10).

The facade was recreated to exhibit symmetry, as it is the main facade on entering the Mardana Chowk and also the main entry to the Janana Chowk. (Figure11)

Janana Chowk : Design Implementation

The facade is dilapidated condition was recreated with reworking the rooms and creating a floor above. The facade is treated organically which creates a blend of appearance and harmony. Redeveloping the spaces resulted in a planned and engaging atmosphere of the courtyard. Residual spaces were converted into usable spaces result in a cohesive plan throughout the palace, the splendour of an era gone by.(Figure 13).

Acknowledgement

This project consumed huge amount of work, research and dedication. Still, implementation would not have been possible if we did not have the support of these individuals: Princess Priyamvada Singh, who gave us the opportunity to renovate and conserve her ancestral property, Mejagarh Fort. Bhanwar Singh-ji, our project manager who managed the site with expertise. My assistant, Neeti Vishnoi and the whole team of Sthapatya for their immense dedication and passion towards the work. We are also grateful to the people of Meja, the local skilled labourers, craftsmen and artisans for their enthusiasm and commitment towards their work.

Sthapatya
Architectural Design Studio

Established in 1994, Sthapatya Architects in Jaipur, Rajasthan, has designed a large range of building types and sizes throughout and outside Jaipur. Graduates of the very first batch of the Architecture Dept. of MNIT, Jaipur, with Ar. Sandeep Khandelwal as the Principal Architect, they aim to create a sensitive, responsive and aesthetically appealing built environment.

COMPARTMENT S4
THE SPIRIT OF COLLABORATION!

Nadi ke Parvat - a multifunctional bamboo pavilion and playspace for underprivileged kids in Khadki, Gujarat.

Instilled with an innocent excitement to build and a determination to contribute to the social fabric of the country, eight inexperienced pairs of hands set out on a journey in 2018 to explore the possibilities of extending architecture beyond its limits. Even before graduating, the team of eight started venturing out in search of community-driven projects and started having discussions regarding them. Compartment S4 was formed later when the team started receiving some commissioned professional work. The first few projects they were involved in were a mix of different kinds of design approaches and those became the stepping stones which developed into a multi-disciplinary collaborative practice which used each partner's individual skill-sets and their complementary strengths to extend the role of an architect in multi-dimensional ways. Some of their earliest commissioned projects included a watchman's house in a municipal school, an ice-cream shop in Ahmedabad and a lake development project in a village near Ahmedabad. Alongside, they had started getting their hands dirty by engaging in various projects with a design-and-build approach. Tired of circling around government offices and development departments, they decided to just get into the field and start building with the community's support. These self-initiated projects in remote rural areas of the country, especially in Uttarakhand and Gujarat, started becoming a keystone in the arch of growth, to influence the firm's overall approach and philosophy in undertaking any kind of project, be it in rural areas or urban, government or private, architecture or interior design.

Their design ideas are primarily people-centric and environment and context-sensitive. Their striving to achieve efficient design, reflects in various aspects such as cost sensitivity, environment consciousness, minimum wastage, use of local resources and techniques and climate responsiveness. The primary focus being 'to create enhanced spatial experiences', stimulates them to not only explore alternative materials and techniques, but also craft sensitive ways of using conventional materials to achieve the same. Discarding the redundancies in modern design trends, they believe in the idea of a derived functional aesthetic rather than plastered decorations. Not limiting themselves to doing just particular kinds of projects, they believe that the intent rendered to the project matters the most, whether it is an interior design project, architecture, urban design or research. Rejecting the practice of creating a distinct "design style", they believe rather that harnessing the collective consciousness (in research as well as design) and the contextual constraints (of space, culture and landscape) gives depth to the process and makes the end product more rich, yet restrained.

One of their first projects, Gather-Together, which was in the public eye to see and review, was the design of the interiors of an ice cream shop. They wanted to break the conceptions and notions of how such a space should be organised and how it functions in a classical way. They introduced the concept of a 7 meter long shared table where people of different ages, cultures and classes could congregate and interact to create a collective ritualistic experience of eating ice cream and foster the idea of "eating like a family". The table expands and contracts at various places. Couples can sit close to each other and share their ice cream where the table becomes very narrow and big families can accommodate themselves at the corners where the table becomes larger. The table slithers in the available space and it weaves a different story in the space everyday. They finished the design and execution of this project in less than 2 months and it remains close to their hearts.

Another project, Lakdi ki Kathi was approached as a hands-on workshop. It was one of the first times when the 8 partners of compartment S4 along with 25 volunteers and people of the village of Ghuggukham in Uttarakhand came together to build a multifunctional extension to a public school with their bare hands using local materials like stone, mud and wood. Diverse people like photographers, architecture students, engineers, interactive media designers, local artists and craftsmen, all came together to erect the whole structure in just about 14 days. This was one of their first experiences of community engagement and collective hands-on building and it paved a way for more such experiences in the future.

One of the most challenging briefs to tackle in general are the ones in which the architects have to make the brief themselves by understanding a sensitive context, people, landscape and societal constructs. One such project called "BASA" was basically the birth of a new idea in the field of ecotourism and community engagement. After conducting intensive research on the rural narratives of the village of Khirsu, Uttarakhand, Compartment S4 proposed to build a model ecotourism centre which would educate people about the culture and society of the place, consisting of a community kitchen, an exhibition space and a few lodging rooms.

They designed and built this in collaboration with the district government authorities and with the local craftsmen and labourers in the area. An already existing self help group of local women was motivated and trained to take up the business of running this model centre to generate employment and inculcate self-reliance amongst the hard- working women of the village. The brief was not only limited to a spatial design response, but extended its arms to ideas of sustainability, community engagement, cultural rejuvenation, employment generation, skill enhancement, alternative resource use and responsible tourism.

The participatory nature of the project ensured the involvement of the locals in research, design, execution as well as the running and maintenance of the structure, instilling a strong sense of ownership in them. In such hands-on projects the architect has to don several hats and become a multi-tasker, and their role extends beyond a desk designer to include construction management, contracting, material procurement, community activism, etc. Participation opens up a range of avenues of negotiating with the context beyond built outcomes. The designer eventually diversifies her/his

Gather-Together - an ice cream shop in Ahmedabad

BASA - a project promoting rural livelihood in Khirsu, Uttarakhand

Lakdi ki Kathi - a design-and-build project in Ghuggukham, Uttarakhand

Engaging with the community for the design of BASA

role to include other modes of engagement that can make the design richer. As one begins to inquire like an anthropologist, raise their voice like an activist and envision systems like a planner, they realise the impact it can create on the design and the way it is perceived and received by people.

Many of these design-and-build projects were used as a platform to conduct workshops. In these workshops, architects, designers, photographers, anthropologists and other allied professionals join hands with Compartment S4 to engage with the community and landscape of the area and experience hands-on building in its true essence.

When it comes to projects for private clients, the effort is still to not only create enhanced spatial experiences, but to also think about aspects such as responsible material procurement, revival of hand skills, optimum use of space and minimum wastage. Apart from that, all the people involved in the process like the clients, contractors, masons, carpenters, etc, work in a collaborative way to achieve something larger.

One such project, Kandinskiosys, was a work-space designed for Automation Engineers. The design of the office was inspired by a painting by Wassily Kandinsky. The lines, colours, shapes, composition, balance, imbalance, intersections and divisions - all of these parameters are decoded and deciphered from one of Kandinsky's untitled paintings and later materialised to conceptualise the overall available space. The result is an abstract three dimensional interpretation of the ideas that Kandinsky tried to project in his work. Every corner is carefully thought out and various compositions of lines and shapes are used to create a feeling as if one is actually inside a painting. There are tables hung from the ceiling and the design of the flooring reflects the elements of furniture in the space. Spatially, the space is designed to create elements that are floating so that the overall space does not look cluttered. Everything from the floating tables to the storages and even the door handles were designed and crafted by carpenters on site to create a space full of warmth and character.

Apart from professional practice, Compartment S4 is also constantly striving to engage with the community in other ways. They hold informal discussion sessions in their studio (and now online, owing to the pandemic) called Friday Night Conversations (FNC). FNCs are open conversations related to design to understand the intersections and overlaps that exist between academics, practice and other allied fields. These conversations touch upon the shared realities affecting design practices, which we as younger professionals are generally unaware of. The discussions are generally on issues and questions raised in everyday practice and other young professionals are invited for the same. These sessions gave birth to a biannual magazine called Unmute. Unmute is an independent publication that aims at curating content around contemporary architectural discourse. Each publication is curated around a theme and discussed in a public forum as a part of FNC. Unmute, published by Compartment S4, invites creators from various backgrounds to submit articles, essays, photo stories, illustrations etc. expressing ideas, observations, and thought constructs with respect to that theme.

This collaboration of eight minds, is the essence of the practice at Compartment S4. It allows the firm to act as an umbrella under which professionals with new ideas and skills can explore and experiment. It is because of the collaboration that the firm can engage in not only all different scales of design, but also generate a creative discourse through discussions, publications and workshops. The spirit of the collaboration reflects in the growth of the practice in time.

Kandinskiosys - interior design for a work-space

Gau-ghar - a gaushala designed using bamboo as primary material

The team of Compartment S4

Compartment S4
Compartment S4 is a collaborative of eight architects, providing design solutions across various sectors of design, including architecture, urban design, rural infrastructure and interior design. Their design ideas are primarily people-centric and environment- and context-sensitive.

Ar. Kishan Shah
Kishan is one of the Co-founders and Principal Architects at Compartment S4 and is actively involved in urban design projects, residential architecture, educational institutions as well as furniture design. His design approach is influenced by his keen personal interest in visual arts and cinema.

CITY SYNTAX: UNFOLDING THE URBAN SPHERE

Ar. Rahat Varma and Ar. Samruddhi Bhalerao

Much like language, a city too has syntax- with rules in place that each citizen or visitor must use to navigate through the space. With parameters that define land use, networks, carrying capacity, built and void type in place that mimic grammar rules aid in understanding the city. Modern cities are perhaps the most complex human intervention which in itself has an expanse of investigation. The vigour of a city includes the stakeholders and their negotiations across the fabric- be it social or physical. Jane Jacobs poetically puts the same thought across in her famous quote, "The point of cities is multiplicity of choice."

Human beings are navigating through the realm using different mediums of engagement be it intelligence, power, technology or nature. The relationship between man and city goes back in time and undoubtedly has grown and flourished. The people's use and access to the city in all aspects are considered to be their right to the city (Lefebvre, 1968). The essay outlines the city's involvement with its people while examining in retrospect, various parameters that have influenced the physicality and spatiality of the polis.

The city networks are explored by the people who traverse through them for leisure or for work. The character of these veins is always distinct owing primarily to the cultural and traditional alignments of the region. The secondary influences are made by external inputs be it technology, environment laws or government policies. Here, intangible features too, frame space.

Pragmatics of the City : Stakeholders

Language is the road map of a culture. It tells you where its people come from and where they are going
Rita Mae Brown

Breaking down elements to understand a city, is a method probing the tangible and intangible essentials that make up an organized settlement. The past has taught us that if patterns are not resilient, then they perish. We today stand on the shoulders of giants, to discuss the arrangement of the physical aspects that make up the city fabric and not only give character and personality to an area, but also allow people to engage with the city.

In 2018, an estimated 55.3 percent of the world's population lived in urban settlements. By 2030, urban areas are projected to house 60 percent of people globally and one in every three people will live in cities with at least half a million inhabitants (United Nations, Department of Economic and Social Affairs, Population Division (2018). Given that the user group of our cities are only going to multiply in the future, we need to start understanding the needs of these stakeholders.

One needs to understand that our cities are like machines that need to function at various modes so that they can cater to all kinds of people whilst allowing them to utilize the methods they prefer not only to navigate through but also engage with the city. The idea that "one size fits all" does not apply when it comes to urban spaces. It is the diversity in solutions that lend character to a city and that is why it is imperative that one looks at the 'needs of all' before 'designing for all'.

Debunking popular definitions of stakeholders to understand their true soft power. A stakeholder is someone with valid interest in the organization's activities (Donaldson & Preston, 1995), someone who can influence the organization's activities or someone with a share in the organization's activities (Sautter & Leisen, 1999). With so much influence on what the physical outcome is, it is unclear why so little is done by the people and for the people. Governments need to have a closer look at the people's needs and then use the resources available to aid in creating connections to the city.

In language, pragmatics are used as rules for appropriate and effective communication. In the city syntax, the governance plays a similar role. An ideal governance framework aids in keeping the city organism up and running without any glitches. Given the number of variables that comprise the city and its stakeholders, it is imperative that governance holds the framework together. In times of crisis it is the resilient plans that these authorities put together which allow us to bounce back from adversity. The citizens' expectations of our cities are simple: existence and cultural freedom in its true sense. Here the comparison of language system and city system hence validate themselves.

The citizen has the power to invest capital and construct and abolish the networks as he pleases in his city, within the framework that the governance permits. This in turn adds a third dimension of evolution and change in that it no longer takes a natural course over time as an external force in changing the trajectory for the physical image of the city. It must be noted that finance and culture have a tight grip on how one views the city, with virtue of ownership and memories. It accurately is able to predict 'who lives where' and this sets the tone for local heritage. The routes (networks) that link all this and eventually lead to symbolic economy and in turn influence the character of the symbols and spaces that the city produces.

Semantics of the City : Networks

Your network is your net worth.
Porter Gale

This does hold true even for our cities' connections and networks- the stronger the web, the more can be transmitted (by the citizen) or traversed (by the citizens themselves) through them. Cities are hubs of human interactions and the innovations which are repercussions of them. Urbanization has led to numerous developments in the society, and yet have contributed to many of our most persistent challenges. Complex network systems have invariably provided valuable approaches to further our understanding of the practices which drive how cities form, develop, and function as milieus. The cities' networking offer an intricate complexity which furthers into human action and reaction to the economy and globalization. All these entanglements differ from region to region and each time a diverse character zone is born. A city has its own culture, which shouldn't be layered, submerged or replicated anywhere and by anyone (Zukin, 1995).

As understood, urban spaces have numerous functions and these consequences are more often interdependent forming a web of activities across the city. These activities seamlessly develop interaction and cohesiveness within the urban sphere. While the networking of the city could be related to the semantics of the city. Semantics in the context of language are defined as the study of the meanings of words and phrases and its translation to the polis sits at the intersection of networks and voids. The spatial activities and user experiences of the citizen inform and evolve the eventual vocabularies and the dynamics of the city's syntax.

These dynamic semantics of urban spaces could also be understood in spatio-temporal patterns of human activities (Cai et al, 2019) which solely depend on the time and space. The functions happen to change given the time and so does the usability of the space change amicably. Negotiation of spaces within the public realm has distinct significance which may be foreseen as the city's dialogue with its people. The plurality of space here makes its own contribution by resonating to the user experience in the public realm. These opportunities that allow multi-faceted uses of space that give us a passageway into the finer details of how we can more efficiently access the city, furthermore leading the democratization of these networks and evaluating if each citizen has an equitable stake in terms of admittance or usage of these networks.

Networks of the city exist in intangible configurations, with routes of trade, markets, global finance, cultural and social links that have historical relevance in our lives. All these are deeply intertwined in the case of India as the age of the settlement too here plays the role of complexity and evolution of these networks. Imagine seeing our cities evolve over time with fine layers of cultural, fiscal, environmental and natural influences. Furthermore, these very web-structures would be allowed to overlay themselves and impact the way we negotiate through the city and live in it.

Panorama of the City Dynamics : People and City

Cities have the capability of providing something for everybody, only because, and only when, they are created by everybody (Jacobs, 1961). Our learning has led us to believe that cities are living ecosystems. Cities are far beyond mere aesthetic universalization and the quest for newness and invention. It is about emotions and values that people attach themselves with. It's about keeping 'a certain cultural ethic alive'.

Culture is not composed of elements which can be disassembled and re-composed: culture has to be lived. Cultures mature and sediment slowly as they become fused into the context and continuity of tradition. (Pallasmaa, 2007).

Cities and its spaces thrive for a living which brings people together, only to reinforce the idea of the collective.

Cities without layers of inhibition not just creates social problems but also fails to be resilient to function as a 'place', lacking spatial endurance. Not to forget cities are about people and their communities. Hence, the ideology that everything that is built, must respond to the citizens daily needs and the preferred networks that they use to negotiate through the city fabric. These networks result in tangibles and intangibles of the space that give a distinct character to a city, this character is ever evolving and continuously shifting. Which means that buildings and infrastructures, along with its landscape, must not be seen as static assemblies, but rather as dynamic, coherently interactive and integrated systems that persistently adapt themselves as a response to contextual changing parameters in their urban fabric. It is here that one needs to establish the premise that the Social network and social interactions play a vital role in structuring our cities. It is one of the dimensions that shapes the debate between community and cosmopolitanism. The ultimate purpose of cities is to promote social interaction- what we call 'urbanity' - the potential to fulfil that purpose.

Urban places today present several different levels of urbanity- varying with morphology, configuration and infrastructure- and therefore, it can be designed and managed. Social interaction occurs across cities in many different ways, but all of them contribute to the social output of a city. In this sense, social output encompasses the so-called productive activities as expected as well as many others that invest in civilization. All of them flourish in the city, some in concentrated ways while others are scattered around, some daily, some occasionally, and depend upon the city to carry on.

Leading on from here to understand urban memory, one needs to establish an 'identity of a place'. It is imperative to understand the role of the social and cultural undercurrents of a city. The idea of memory has a strong sentiment in the way we read the city or in the way we belong to it. Distinctiveness of place, or as we often refer to it as 'identity' is an essential element that plays a vital role in the social and cultural life in urban spaces. Permanence of a place's identity is deeply linked to attachment and sense of belonging. In environmental psychology, it is presumed that people fundamentally endeavor to develop a sense of identity with a place and the cities that adhere to it. Place attachment and a sense of fitting in are both paramount in order to create an emotional bond with a place that leads to the feeling of safety and sense of community.

Hence, the uniqueness of a place is far more than just the physicality and spatial character of a space. Personal interpretations of memory and meaning for the citizens and their communities plays a key factor in how the space is used and networks often play a large role in the way these spaces are remembered. Here it would be correct to establish that the image of the city fabric uses the threads of the popular networks, both perceptible and imperceptible, to leave behind a mental image of the city that all the stakeholders hold closely in their memory.

REFERENCES

1
Cai, L., Xu, J., Liu, J., & Ma, T. (2019). Sensing Multiple Semantics of Urban Space from Crowdsourcing Positioning Data. *Cities,* 31-42.

2
Donaldson, T.; Preston, L. (1995). The Stakeholder Theory of the Corporation: Concepts, Evidence, and Implications. *The Academy of Management Review,* 65-91.

3
Frampton, K. (1981). Ten Points on an Architecture of Regionalism: A Provisional Polemic. *Architectural Regionalism : Collected Writings on Place, Identity,Modernity, and Tradition.* Princeton Architectural Press, New York.

4
Jacobs, J. (1961). *The Death and Life of Great American Cities.* New York: Random House.

5
Lefebvre, H. (1968). *Le Droit à la Ville.* Paris: Anthropos.

6
Pallasmaa, J. (2007). *Space, Place, Memory and Imagination: The Temporal Imagination of Existential Space.* 230-245.

7
Sautter, E. T., & Leisen, B. (1999). Managing Stakeholders: A Tourism Planning Model. *Annals of Tourism Research,* 312-328.

8
Zukin, S. (1995). *The Cultures of Cities.* Cambridge: Blackwell Publishers.

Ar. Rahat Varma
Ar. Rahat Varma is a writer on architecture, urbanism and allied fields. She graduated from Vastu Kala Academy (GGSIPU) in 2010 completed her Master's degree in Architecture and Urban Design from the University of Calgary, Canada in 2012. She is an Assistant Professor at Sushant School of Art and Architecture, Gurgaon. She is currently also a PhD Scholar at Sushant University.

Ar. Samruddhi Bhalerao
Ar. Samruddhi Bhalerao is an architect and urban designer, currently an Assistant Professor at School of Art and Architecture, Sushant University. She graduated from Nagpur University and Master's from KRVIA, Mumbai. She is currently pursuing her PhD from Sushant University.

MY JOURNEY OF CREATIVITY

Ar. Riteish Deshmukh

I'm an actor today. As a child, I never thought I wanted to be an actor, but I loved watching films. I enjoyed being creative as a child. I wanted to take on creativity to a higher level from where I was. And eventually I got attracted towards architecture. I fell in love with buildings. I must admit that when I started architecture, I probably wasn't in love with it, as much as I was when I finished. So it was almost like falling in love with architecture and design during the course of the five years of training at the college of architecture. After I graduated as an architect, I worked for a year in New York. Then I came back to India and started my firm.

After a year, someone approached me, out of the blue, and asked whether I wanted to act. At that point, I thought that life had given me an opportunity to try something that I really enjoyed watching, but had not envisioned as a profession. And there I was, with an option to take up, or let it go and regret it for the rest of my life. So when this opportunity knocked at my door, I decided to give it a shot. And I became an actor.

Yes, I missed architecture. I missed going to office. I missed designing. But for the longest time, I kept both of them going - my acting career and being an architect, actively working on designs and buildings for nearly up to 14 years. Eventually, when it got a bit more hectic while acting, I had to figure out which was the profession that took up more of my time. I had to be truthful to myself and acting eventually became my calling, and that's what I stuck to.

If you ask me whether I miss architecture - of course, I miss it! Every time I go to a nicely-designed house or some new building, I may go, "Wow, this is wonderful." While other people are looking at the spaces, I'm looking at the detailing- how this hinge is joined and what the finishing is and how the materials complement each other. When shooting takes me to different countries to work, I make sure that I visit museums and historical places, well-designed, acclaimed structures, because that's my calling too, you know, and I need to be around good architecture- it gives me a great high.

Being an architect eventually helps me in my profession. Absolutely any education – whether you're an architect or a doctor or an engineer, and you want to become an actor- any kind of education will help you, it has to. That's what I truly believe in. That's what my father told me - you need to be educated, because that will widen your horizon, widen your perspective, and it will ultimately help you in whatever you do. My father had B.Sc., B.A. and LLB degrees, and eventually he went into politics. But I'm sure that his education helped him reach where he did. So similarly, yes, I miss architecture.

I feel I can draw parallels between architecture and films through simple things. We learned in architecture that beauty lies in proportions. The proportion of my performance, as an actor, similarly varies – it tells me where it has to go slightly higher or where do I need to dip it down. As an actor, though you are dealing with scenes broken into individual shots, when you look at a performance in totality, throughout the film, you should know that there are certain high points and certain low points. So it is with architecture - you're probably making a toilet separately, or you might be doing a living room, maybe doing a roof- each of which are taking different timelines. But for an architect, it's important to realize how it's eventually going to sync and look like as a whole. It cannot be that the living room looks different from the roof of the structure to a varying bathroom. Then it's a mess- a design mess. So, yes, beauty lies in proportion. You learn lessons. There are films where you do less to give a better impact. There is also beauty in being cluttered and that is true of cinema and certain scenes as well.

I tremendously miss being an architect. Once an architect, always an architect. I'm just excited that within my stint as an actor, I got to design Karan Johar's house and Shah Rukh Kahn's office. Within the industry, I got opportunities to design spaces for my friends. So that's where I get to do what I love the most: being an actor and an architect.

Finally, a message to young architects - don't let your creativity be trampled upon by anyone. That is who you are. There will be influences upon you, by great architects and designers. It's important to take help and draw inspiration from them, but eventually be the architect you truly want to be. That is an extension to your personality. Be an original- that's what the world needs, and that's what will make you happy.

We thank **Ar. Vilas Avachat, Vice President, IIA,** for facilitating this feature.

BYGONE ARCHITECTS OF JAIPUR CITY

Mayo Hospital (Source: https://education.rajasthan.gov.in/content/raj/education/sms-medical-college--jai/en/attached-hospital/mahila-chikitsalaya/general-information.html)

Jaipur walled city (Source: https://www.jaipurstuff.com/places-to-visit/seven-gates-of-walled-city-of-jaipur/)

Jaipur was notably the first designed city of India. 'Architect' Vidyadhar Bhattacharya was not just the designer of Jaipur city but also the chief executive officer to approve and implement the byelaws of the proposed house and building plans. But after Vidyadhar there is no mention of any building or planning architect for almost a hundred years till the late 19th century where again, the building designing team was put in the limelight in the texts of Jaipur.

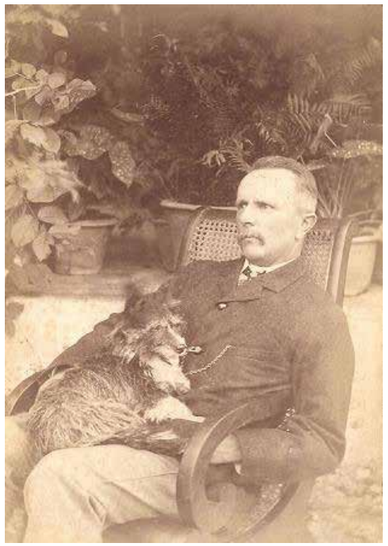
The title of "architect" was unknown in those early days, and anyone who was a skilled craftsman who could draw, was given the task of putting a built structure together along with master masons. In those days in England, architecture was taught as a subject in the fine arts college. So, 'skilled' British architects would collaborate with Indian master masons and craftsmen to create fascinating buildings which can be seen today.

Therefore, when the Maharaja of Jaipur saw the British open four schools of art in the four prominent cities of Delhi, Calcutta, Madras and Bombay, he insisted on a school of art in Jaipur also. The British agreed and the School of Art, Jaipur was started in 1866 from where craftsmen were trained in the various trades prevalent locally, including drawing. The teachers for the drawing classes were picked up by the British technocrats to help in visualizing buildings and to enable craftsmen and masons to create it. The projects were executed by the Jaipur state PWD.

The first superintendent of PWD was Colonel Price and the first director of the School of Arts was Dr. de Fabeck, a British surgeon, who was an enthusiast of Rajasthani art and culture. The two of them decided to collaborate as Dr. de Fabeck was an enthusiastic designer as well. But Col. Price did not stay in Jaipur for long and was succeeded within a year, in 1867, by a young 26-year old army major, Samuel Swinton Jacob. He joined hands with Dr. de Fabeck and it is this team which started the development of an organized construction sector. Swinton Jacob, stayed on to lead the Jaipur State Architecture Wing and later went on to become in icon in pre-independence architecture; so much so that he was appointed as local architect to Edwin Lutyens and Herbert Baker for the Viceroy's Palace (Rashtrapati Bhavan). He was also awarded a knighthood by the queen, and was addressed as Sir Jacob Swinton.

Now this is where the story of the architects of Jaipur starts. The late 19th century saw the Jaipur Art School producing art students who were then employed as draftsmen in the PWD office of Sir Jacob or in the Maharaja's special building department called Raj Imaarat. On the Raj Imaarat front, Ar. Chimanlal, then director, made a significant mark with the design of Mubarak Mahal and Rajender Pol in Jaipur. It was during this era that local architectural designers were promoted to execute state level projects.

Sir Jacob's office trained and developed several draftsmen in the practice of architecture. The main designer with Sir Jacob was the art school teacher, Lala Ram Baksh. He trained the future architects of Jaipur. Prominent amongst them were Shankar Lal Rajaura and Lal Chand Gehlot (1860 – 1940). Sir Jacob's greatest contribution were the twelve volumes of highly detailed books on Rajasthani architecture called The Jaipur Portfolio.



Swinton Jacob (Source: https://www.myjacobfamily.com/favershamjacobs/sirsamuelswintonjacob.htm)

Statue circle (Source: https://www.pinkcityroyals.com/jaipur-places/Statue_Circle.php)

Lal Chand under Sir Jacob, made the drawings of Chomu Palace which today is a famous five-star hotel and site for many film shootings. He also worked on famous buildings like the Sikar Palace, Mayo hospital and King Edward Memorial. Lal Chand had a younger brother by the name of Damodar Lal Gehlot (1865 – 1960). He was picked up by the Maharaj of Bikaner to become the state architect. The most unusual thing about Damodar Lal is that in his service book, Sir Ganga Singh-ji, king of Bikaner, had fondly written that he was not allowed to retire!! It was only after Independence that his retirement was approved by the Government of India at the age of 70!

Under Lal Chand Gehlot a whole new breed of architectural designers was mentored. One of the famous students of Lal Chand Gehlot was Ar. Durgalal Nandiwal (1898 – 1978) who was also his nephew. Durgalal did not have any formal schooling education but due to the family tradition of craftsmanship, he joined Sir Jacob's office as an intern. He soon made his mark with his impeccable drawings. It was in 1935 that some architects from Bombay got to see his drawings and in 1936 he was nominated as an Associate of IIA. His high time came in 1968 when he was awarded a Commendation Certificate from the President of India, Dr Zakir Husain for the design of the unique white marble

Chomu Palace (Source:http://www.chomupalacehotel.com/)

canopy over the statue of Sawai Jai Singh at a location called Statue Circle.

Ar. Lal Chand was blessed with an equally talented son (Padma Shri) Ram Prakash Gehlot (1902 – 1982). He sent Ramprakash to Bombay Sir JJ School of Arts where he obtained his degree in architecture. Ramprakash was one of the first few Jaipur students who did their formal degree in architecture. Immediately he was absorbed in Jaipur PWD as State Architect. In 1939 he became associate of IIA and in 1945 he became the first Rajasthani architect to receive the International Fellowship of Royal Institute of British Architects (RIBA). This was a big achievement for an architect in those days.

The Vigyan Bhawan, Delhi was designed by him and completed in nine months, was an architectural miracle and Ram Prakash Gehlot was awarded the Padma Shri in 1957 by President Dr Rajender Prasaad.

He was also recognized by UNESCO who invited him for the opening ceremony of their new headquarters in Paris where Ar. Ram Prakash sat alongside famous international architects, Walter Gropius and Le Corbusier.

Padmashri Ar. A.P. Kanvinde (1916-2002) is known as the father of modern Indian architecture. Little do people know that this graduate of the Sir J.J. School of Art in 1935 started his career as a draftsman with the Jaipur State PWD. Here he did an exemplary job for the Maharaja of Bharatpur. So impressed was the Maharaja that he sent him to study at Harvard University, USA. After his studies Ar. A.P. Kanvinde settled in Delhi.

Post-independence, the number of architects increased many fold, who worked hard to change the face of the city, giving it a fresh look in each forthcoming decade. But it's the seeds sown by these great men mentioned here which have created a canvas large enough for us to revere forever !!

Vigyan Bhawan Delhi (Source: https://www.showincity.com/venues/v-24/vigyan-bhawan)

Source:

a) Interviews with Late Ar. Shivdaan Singh Gehlot, Late G.S. Nandiwal, Late Ar. Varun Sen and Ar. Ravi Gupta along with research of documents provided by them.
b) Ar. Umedh Singh Nandiwal, grandson of G.S. Nandiwal for his suggestions for this article.
c) *Building Jaipur* by Vibhuti Sarkar
d) *Jaipur Nama* by Giles Tillotson

Ar. Mukul Goyal
A graduate of GCA Lucknow 1994 batch, Ar. Mukul Goyal took to teaching in MNIT Jaipur for eight years after which he opened a successful practice in Jaipur. His interest in reading and writing kept him academically active. This article is the result of research on the growth of the architectural profession in Jaipur, intended for inclusion as a chapter in a coffee table book on Jaipur. He has a second office in Delhi and operates from there.

THE GOOD THE BAD AND THE UGLY!

Ar. Samir Chaudhari

Ar. Samir Chaudhari in the role of an army officer -1994.

The above expression unfurls a wide spectrum of feelings embedded within the professional part of being human. Human beings are supposed to be "intelligent" and the attachments with these intellectual assets as we travel through the dimension of time, cause us to focus our minds on a particular pattern of thinking - termed as a "profession" - it becomes the means of survival.

One of these assets, with bipolar extremities found their way into my life, as I started to evolve from teens into adulthood. After completing my degree in architecture it seemed a moment of a great achievement when I cleared my SSB (Services selection Board) exam in the first go (after several failed attempts to clear the NDA (National Defence Academy) exam earlier in the 9th and 10th standards) and was selected to join up for training at IMA (Indian Military Academy)- a step towards becoming an Indian Army Officer through the TGC (Technical Graduates Course).

The decision of coupling two opposite patterns of lifestyle - namely, "creativity for the good of living through designing inspiring spaces" and "destruction for good of the nation through fighting an enemy" - was difficult to make. Nevertheless the decision was made by the adventurist spirit typical of that age. I must admit that, then too, it was a fast track modality to settle down as soon as possible so as to achieve my aim of getting married to my better half by proving my worth to my in-laws before asking for her hand in marriage! But that's a story for another time.

Thus started this journey of mine in experiencing the "Good Bad and Ugly" of both professions. Graduating as an architect in 1989 and getting commissioned in the Indian army as a lieutenant in 1992 seemed worth all the effort.

As an architect I had a glimpse of trying to make the neurons fire so as to create beautiful and helpful spaces for society. But here was a journey that challenged my soul to contribute my bit in protecting my nation. Initially the lifestyle of the army and nature of work churned the very core of my personality of being an architect. The daily routine with the scheduled repetitive work of the day was compensated by the love and affection received from the troops. The regimental spirit developed in the initial years of service and soldiering became the way of an ideal lifestyle when posted to the regiment. The nature of duties and responsibility varied from time to time within the regiment from looking after administration of the troops, vehicles to being adjutant to the commanding officer and other duties as an officer.

A whole new world of learning opened up for me as I gradually went through the courses of the army. The first course as an officer taught us the basics of applied engineering in warfare like bridge-laying, mine-laying, establishing electrical and water points, demolition and some other confidential warfare tactics. The KRA (Key Result Areas) focused on the speed of these activities combined with effective management for success in war. My earlier role as an architect in civil, working for the betterment of society was slowly fading into the background. In the regiment, it was a very satisfying experience looking after, training and motivating the troops according to the directives of the commanding officer.

By virtue of me being an architect, my posting in MES (Military Engineering Services) as a deputy architect, again called for a complete overhaul in thinking. It seemed logical but the work culture of MES seemed a challenge to the OG uniform. Designing accommodation, regimental areas, hospitals in field and peace areas were some of the tasks in MES but coordination with agencies like army end users, planning section and contractors is also expected and becomes a bit messy within the uniform.

Every profession has its good, bad and ugly manifestations and it did not seem a surprise to see it there too. Life looked very systematic and cozy but internal conflicts as a soldier and as an architect started to arise with the passage of time. Post-army service, life seemed illogical but a soldier is taught to never regret his actions if he stands true.

To conclude and to keep it sweet and simple - my opinion is that young architects should have clarity of intent towards the profession. True love and respect for the olive-green uniform is equivalent to designing a divine space as per the client's needs, but a combination of the two professions needs a tactful mindset to tackle. This journey should be undertaken with great devotion and care.

Ar. Samir I. Chaudhari
Ar. Samir Chaudhari, Ex-Captain in the Indian Army, is a designer, thinker and wordsmith. A graduate of COETA, Akola, he has explored architecture as a practitioner and an academician also. He trained at the Indian Military Academy to join the Indian army as an officer. Post-retirement, he resumed work as an architect. He has executed projects and taught in various colleges in Pune. A curious and adventurous mind, he is often found reading and wondering about the scientific sequence of the cosmos while sipping a cup of tea.

Footnote

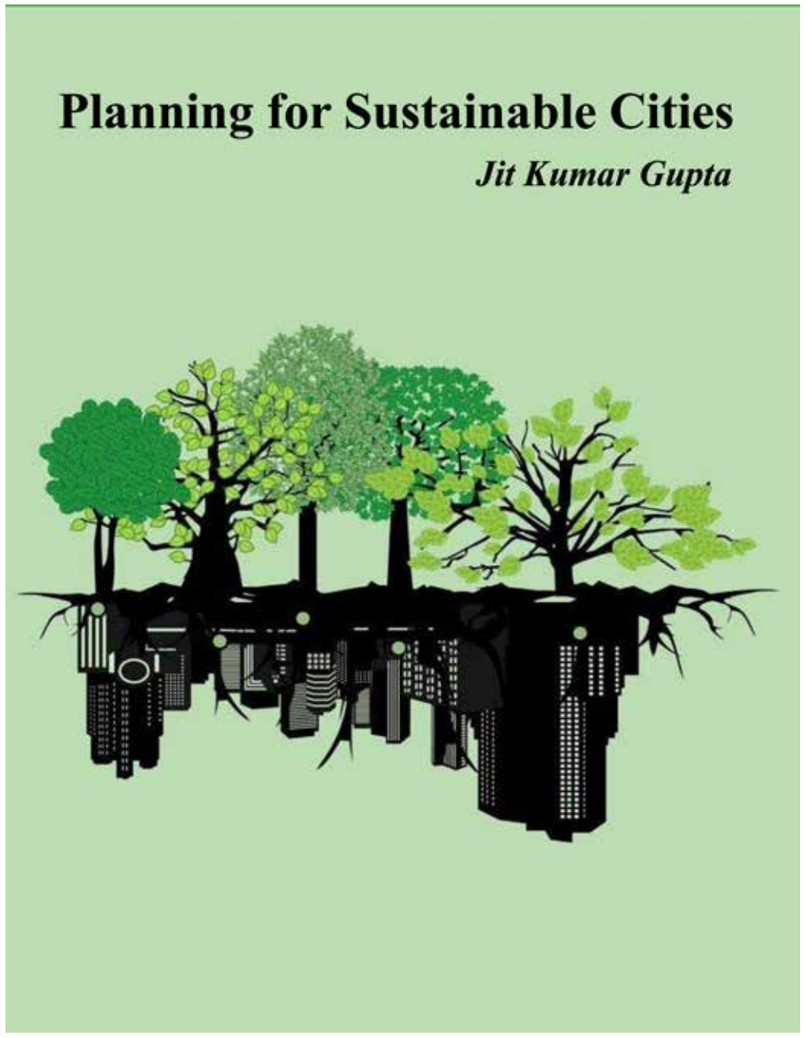
We are obliged to feature this article again owing to inadvertent errors in the previous feature. This is deeply regretted

AUGUST 2021

JOURNAL OF THE INDIAN INSTITUTE OF ARCHITECTS

PLANNING FOR SUSTAINABLE CITIES

Ar. Jit Kumar Gupta



Planning for sustainable cities written by Jit Kumar Gupta, addresses challenges to Planet earth which is undergoing crisis in all the aspects of uncontrolled, unregulated and irrational growth & development with enormous developmental stresses .

The issues of rapid changes in city planning with its structure, fabric, environment, ecology & bio-diversity and the impacts of addition of large number of human beings and manmade environment is very well narrated that makes architects and planners of current times to re visit strategies towards different typologies of human settlements. The Book has very well scripted the global race of growth and development of our cities which occupy central space & form the basis and axis of sustainable concepts that need a futuristic Holistic approach in Planning .

Occupying only 2% of land mass, housing more than half the population, cities are known to consume two-third of global energy and generating 70% of greenhouse gases . Cities, housing large population and activities in a limited area, are fast emerging, as entities dominating the canvas of planet earth. Cities are known to be major contributor and largely responsible for ozone depletion, global warming and making this planet carbon positive. Considering the entire context of human settlements, cities remain critical and hold the key to make this planet sustainable.
Jit Kumar Gupta

Author has tried to highlight broad framework that needs to be integrated in planning between built and natural environment, so that Sustainability policies get prime emphasis in city planning, designing, including development, management and governance. Experts associated with Academics and Practice in Planning & Architecture India need to refer this book with its specific chronological and analytical perspectives that makes us re-position the growing the ay forward vision in sustainable cities with a defined framework for their orderly development.

The issues linked to defined ownership and leadership reflect the generators of wealth and economy in cities which promote prosperity. The book also makes one rethink on the places of high concentration of poverty which has been a major aspect in our Cities, that represents a mosaic of colours, patterns and development, distinctly marked by dualities and contradictions. Which make the readers think on the current directions of operationally inefficiency , socially exclusive and environmentally unsustainable policies .

Author in this compilation in Planning for sustainable cities , also makes a special mention of city promoters and stake holders role and their equity based inclusiveness with innovative options which need to be shaped and monitored very closely as part of education at grassroots in planning and architecture. Author while making reference of the historical past of the last century has very well addressed the futuristic trends of integrating alternative forms of energy and resources , generators of minimum waste which I am sure is the need of the hour in formulating the appropriate policies and options for creating sustainable built environment besides rationalizing and re-ordering the way people choose the means of mobility .

With authors huge experience , one can see that he has tried his best to also emphasize the practice of green buildings and its related benefits for way of emerging lifestyles of newer normal post pandemics for people. Jit Kumar Gupta hasn't hesitated to also speak a loud on the energy efficient and carbon neutral policies by integrating them in the guidelines of the global building codes by using low carbon power and promoting clean transportation for leveraging the low carbon communities. While reading this book, one would realize that we all are crossing through the crossroads which again strongly highlights the need of Good governance and good leadership to project the resilient character of our cities on the fast trajectory of sustainability and livability. The author in this book ' Planning for Sustainable Cities', has compiled this multi-dimensional articles over a period of time , defining strategies and options to make cities sustainable with an agenda of drafting independent cities with different multi-faceted aspects of Comprehensive planning, development, built environment and Urban governance.

Overall a perfect guide and a tutorial for professionals, researchers and readers to understand, appreciate, analyze and evaluate the entire context, role and importance of making cities sustainable and livable. the current policy makers need to review and revisit their policies and how appropriately they are adopted towards making our development SMART .

Ar. Jit Kumar Gupta
Ar. Jit Kumar Gupta holds professional and academic experience spanning over five decades. He is Fellow, IIA, ITPI, Senior Fellow IGBC, Ex- Co-opted Member of the Working Group Planning Commission, India, the Past Chairman of BOS Architecture, Punjab Technical University, Jalandhar, the Past Vice-President of IIA, Chairman of BE & A Chandigarh Chapter, IGBC. He is also winner of academic and professional awards. He has delivered guest lectures at USA, China, Kathmandu, Bhutan and Switzerland. He has been a member of Jury ACA-19 awards and guest faculty at reputed universities and institutions. He was a team leader at the World Bank Project-CADS Gujarat. He has been consultant for 8 Master Plans and authored over 300 technical papers and nine e-books on architecture and planning.

Ar . MANGUESH R PRABHUGAONKER
Ar . MANGUESH R PRABHUGAONKER ,along with B Arch degree , has a Masters post graduate degree in Landscape Architecture from SPA New Delhi and is a Fellow Member of IIA , ISOLA and an Associate Member of IIID . He is a National Council Member of the National Council Member , The Indian institute of Architects . He is also an Expert member of Goa state Wetland Authority and a Senate Member at School of Planning & Architecture , New Delhi . He is also an Visiting faculty at Goa College of Architecture for Post graduation in Masters in Architecture .

PHOTO ESSAY

KERALA ARCHITECTURE

The cultural heritage of any country is seen best exposed in its architectural monuments. The ways in which the buildings are designed, constructed and decorated speak not only the technical and artistic capabilities of the craftsmen, but also of the aspirations and visions of the preceptors, for whom the construction was a medium for thematic expression. From the single dwellings to the magnificent edifices, architecture also reflects the human endeavour meeting ever-changing social needs. Kerala abounds with many such architectural monuments- prehistoric megaliths, tombs, caves, temples, mosques, churches, theatres, houses, palaces and public buildings- built and renovated over centuries representing a panorama of architectural development. None of these structures is very big; the aesthetic appeal of these buildings mainly arises from the simplicity of form and functional perfection.

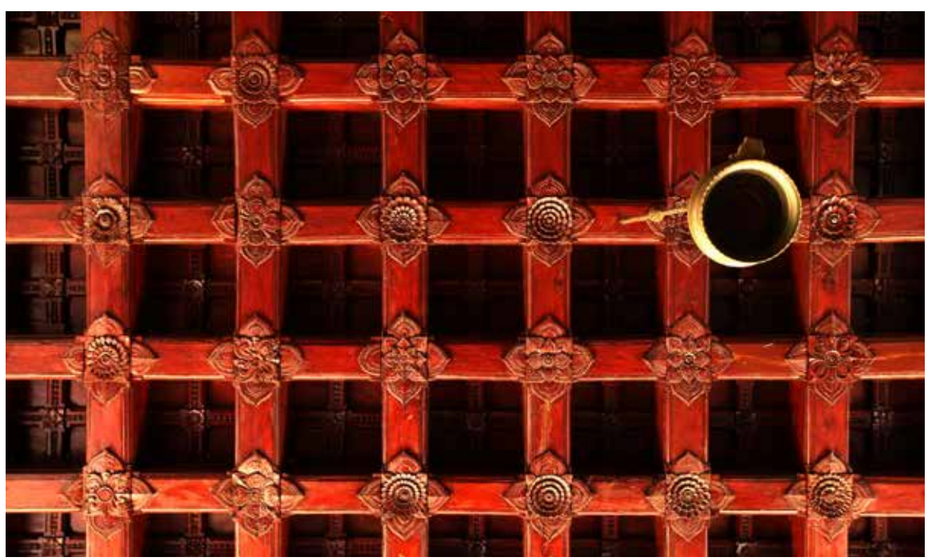
Ar. Prasanth Mohan
Prasanth Mohan is an architect turned architectural photographer and cinematographer. As a graduate in architecture from TKM College of Engineering, Kerala, he initially started his career as faculty of architecture. But his passion for photography nudged him to initiate strong academic research into the field of architectural photography. His works on architectural and conservation photography have bagged numerous recognitions at both national and international levels. He currently heads his firm Running Studios exclusively for architectural photography and heritage documentation. In the past few years, Prasanth has carved his niche in travel photography too, by capturing architecture across Europe, the Middle East and South-East Asian countries.

www.runningstudios.in

The Padmanabhapuram Palace Thuckalay, is one of the old palaces of Kerala. Once the residence of the royal family of Travancore, it is located in Southern India adjoining the state of Kerala, in a region with high rainfall and a tropical climate.

The variety of styles in the group of buildings which comprise the present palace complex reflects the socio-political background in which they developed. However, the interesting mixture of styles evident in the later buildings are dominated by the strong unifying characteristics of indigenous building practices lending cohesion to the whole complex.

Even though no records exist of its exact date of origin, the initial structures within the Padmanabhapuram Palace are dated around 1400-1500. It grew incrementally over the years into its present form, developed by various rulers of the same dynasty.



Ceiling Details at Padmanabhapuram Palace

Padmatheertha Kulam, The sacred pond near to Padmanabhaswamy Temple, Trivandrum.

AUGUST 2021

JOURNAL OF THE INDIAN INSTITUTE OF ARCHITECTS

Thanjavoor Amma veedu, East Fort, Trivandrum.

Hill Palace is the largest archaeological museum in Kerala, at Tripunithura, Kochi. It was the administrative office of Kochi Rajas. Built in 1865, the Palace complex consists of 49 buildings in the traditional architectural style, spreading across in 54 acres.

East Fort or Kizhakke Kotta, as it is known in Malayalam, is today the heart of Thiruvananthapuram city.

An aerial view of Punkunnam Siva temple, Thrissur District.

A tree house built by the tribals near to Munnar, Kerala.

The front facade of a traditional tharavadu, Palakkad district, Kerala.

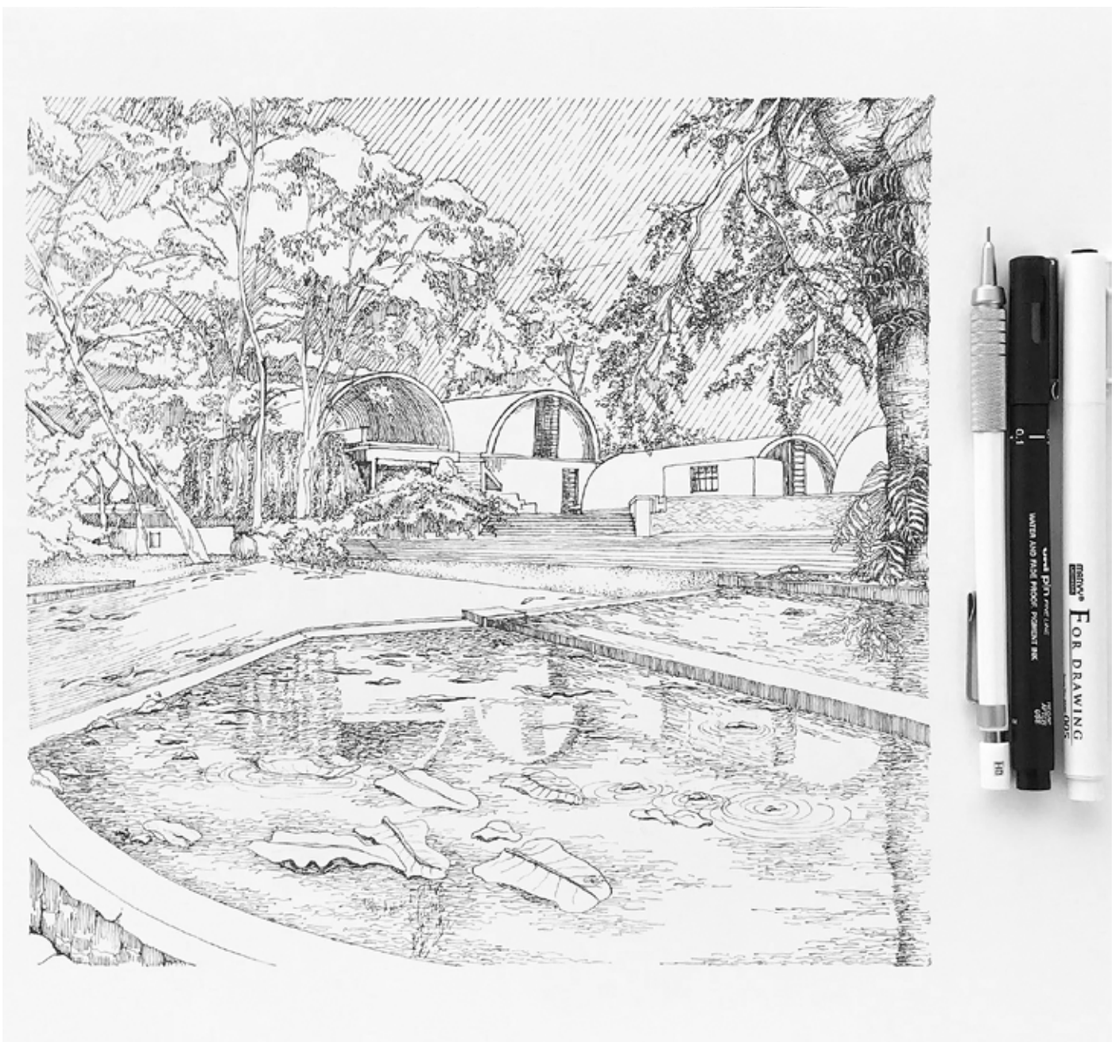
Palakkad Fort also known as Tipu's Fort is an old fort situated in the heart of Palakkad town of Kerala state. It was built by Haider Ali in 1766 CE and remains one of the best preserved forts in Kerala.

Mishkal Mosque is a medieval mosque located in Calicut, Kerala. One of the oldest in Malabar, is an important cultural, historical and architectural monument in Kerala.

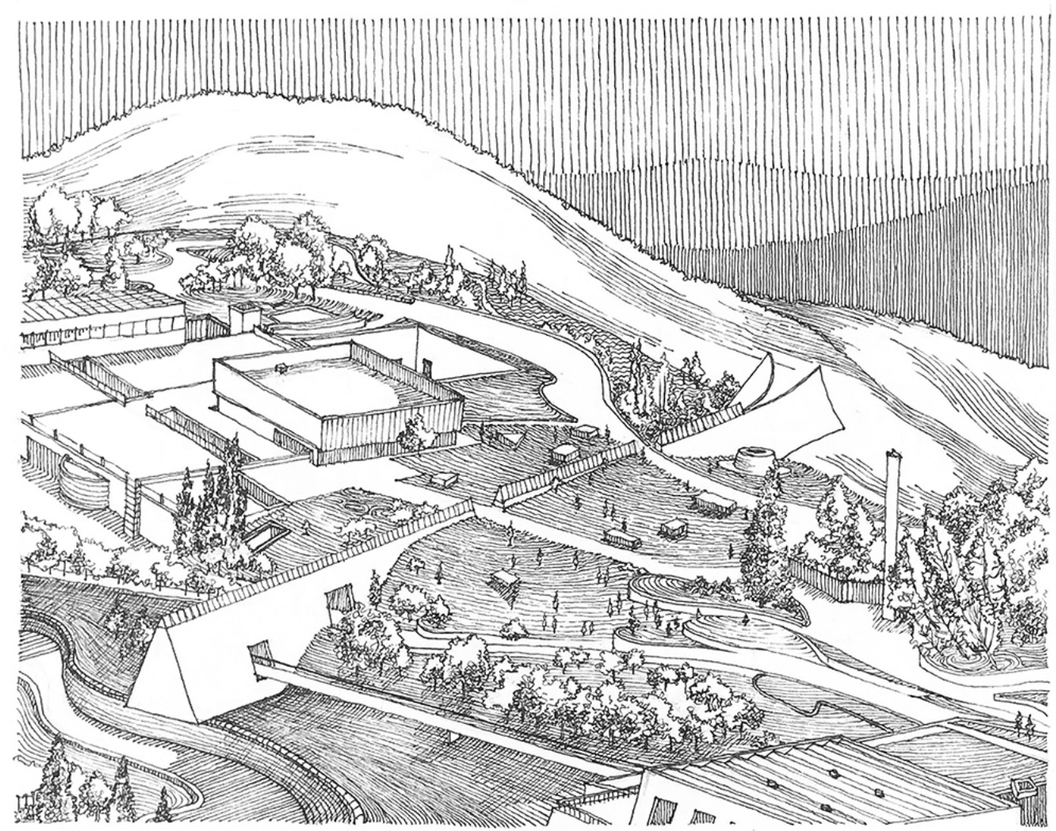
SKETCHES

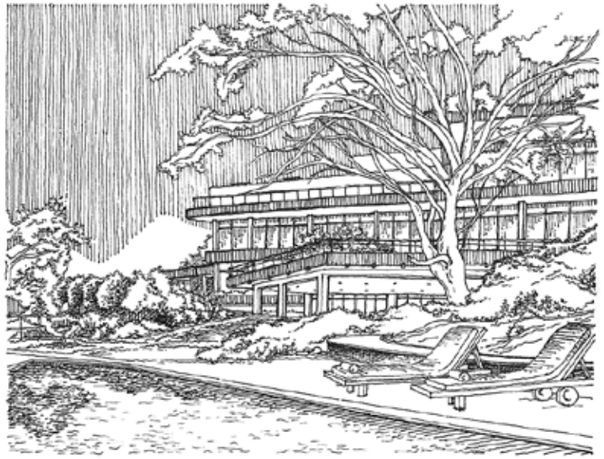
Drawing has always been close to my heart. And the more I get to practice in the profession, it helps me understand more intricately the relationships built between human beings, the environment, material and details. My travels inspire most of my sketches and I strive to put on paper the moment I experienced while in the vicinity of that particular built environment. Over the years, drawing through most of my thoughts, has always helped me emote and communicate better. Therefore, the pen and paper is the way I associate my memory to a lived experience.

Doshi's Sangath, Ahmedabad,
January 2020

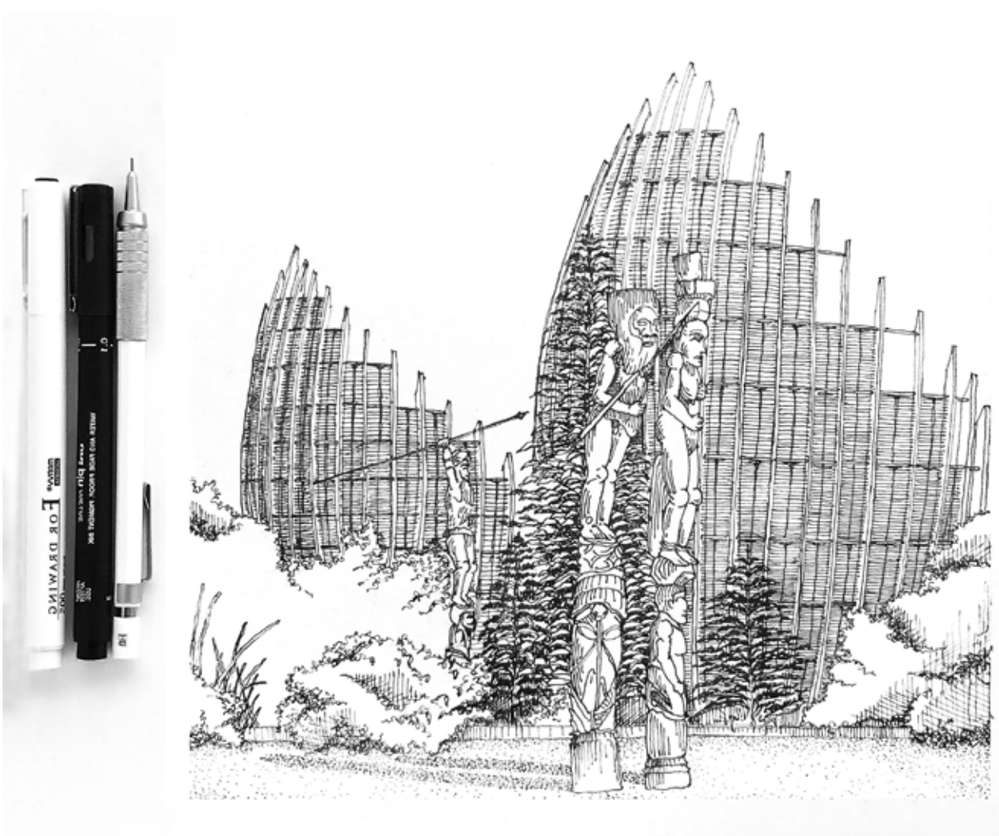


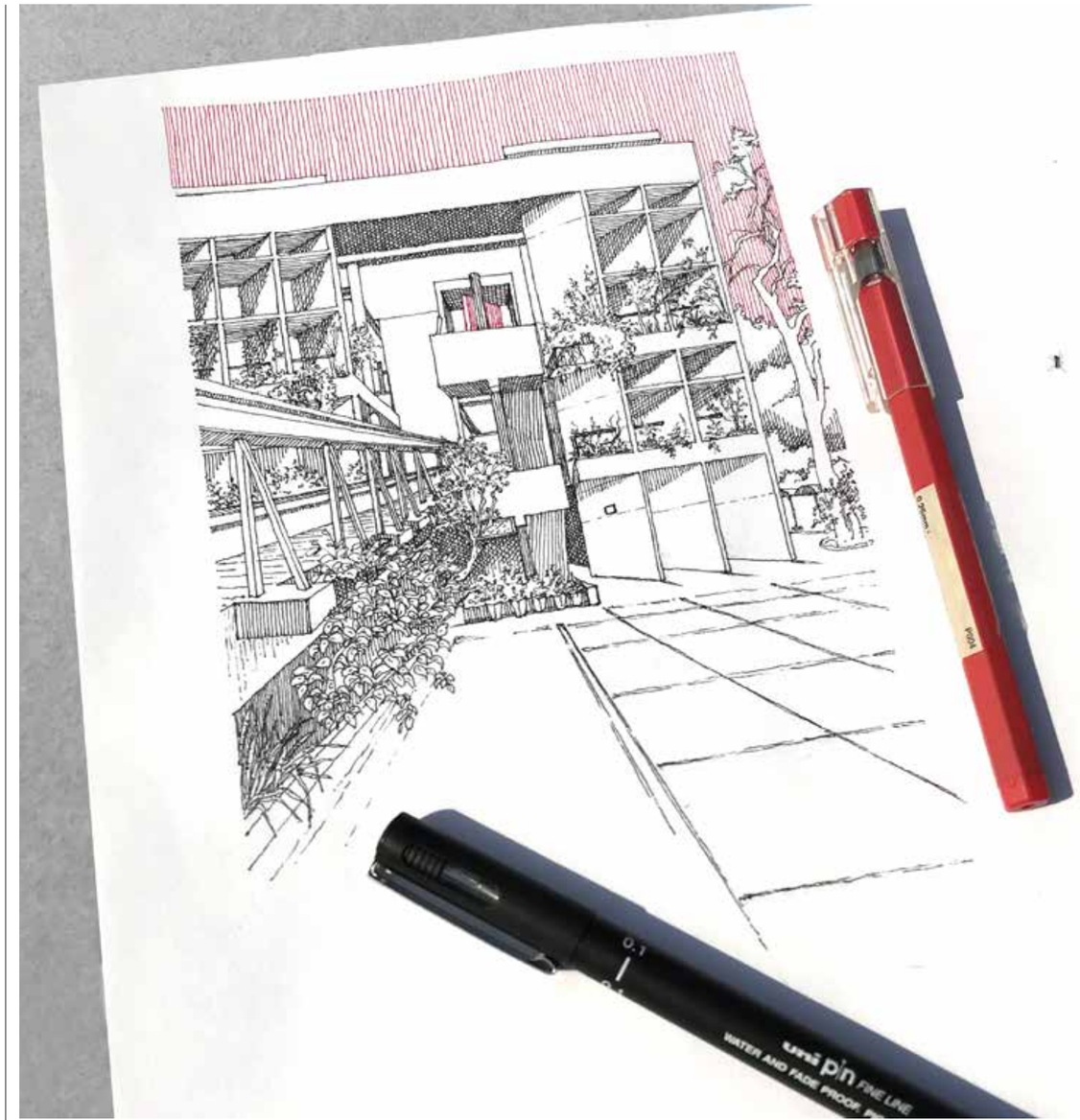
Safdie's Yad Vashem Holocaust
Museum, Israel





Left: Bawa's Heritance Kandalama, July 2018;
Bottom: Piano's Jean Marie Tjibaou Cultural Centre, New Caledonia





Corbusier's Mill Owners' building,
Ahmedabad, January 2020

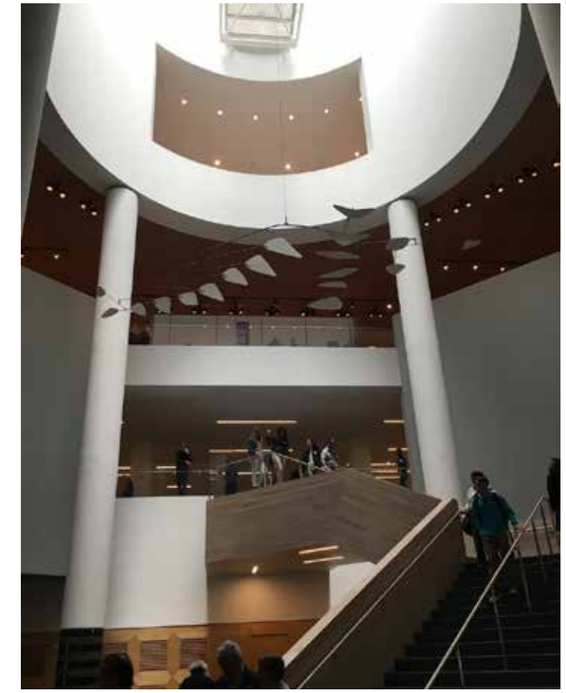
Ar. Neha Harish
Neha Harish, an architect at CollectiveProject and a recent graduate of R.V. College of Architecture, Bengaluru has a keen interest in contextually-driven architectural endeavours that focus on the connections between humans and environments. She has recently been awarded the Gold Medal at the national finale of Asia's Young Designer Awards and went on to secure the Sustainability Award at the international finale for her dissertation project. Her illustrations attempt to understand the built environment and its relationship with its social, climatic, and cultural influences.

THERE MAY NOT BE A HEAVEN, BUT THERE IS A SAN FRANCISCO.

Ar. Tanya Khanna

Near the Yerba Beuna Centre for Arts.

Views around the SF MOMA



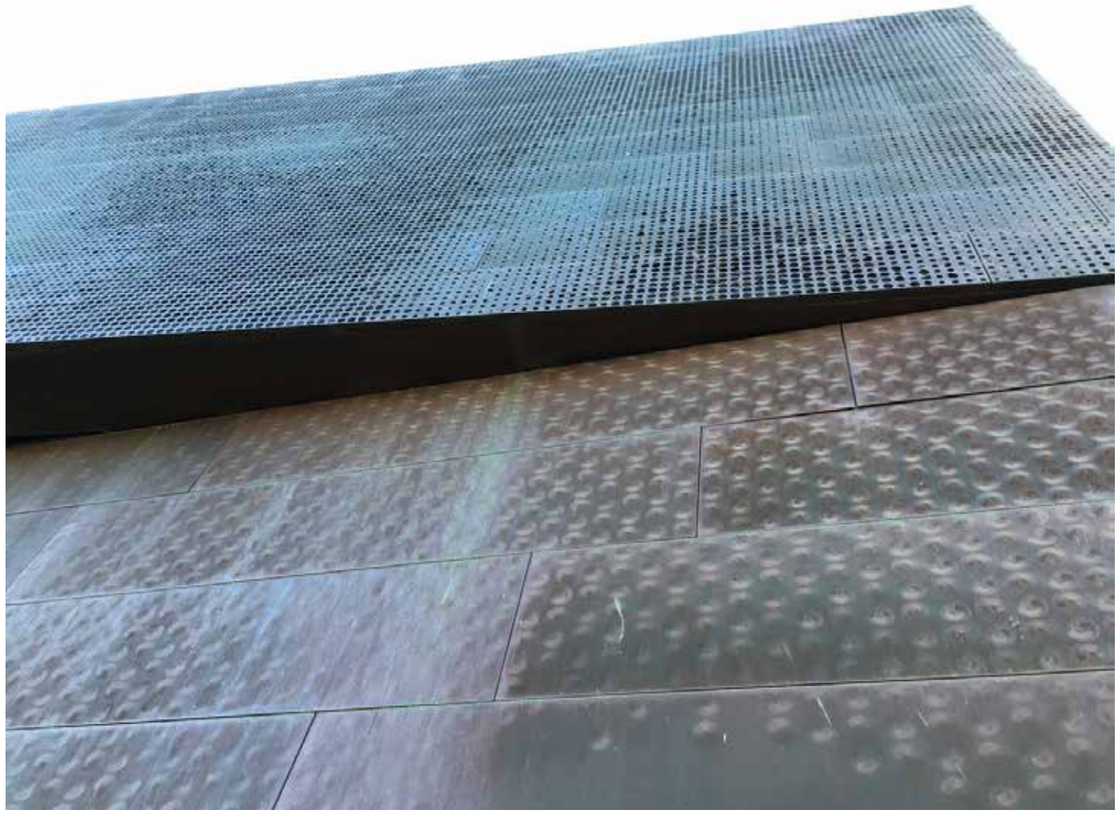
SF MOMA

In the past almost two years, as we inhabit and become accustomed to a post-pandemic world, almost all of humanity has become extremely cognizant of the little treasures, that we all took for granted until the COVID catastrophe struck us. One such realization was that of travel and its pertinence in a human being's overall well-being, including physical and mental. Almost everyone has spent time reminiscing days when they could travel freely and enjoy leisure time while taking a break from the regular rut, and sharing the same on social media. In fact, #travelthrowback may be the trend that will continue for a while, until all restrictions open up and people travel regularly.

As the world slowly starts to open up, and occasional waves of lockdown and travel alternate, while the new normal at least encourages us to think about travels, I can't stop thinking about my last trip just a month before the COVID catastrophe struck the world. While it was family holiday to the USA, where an equal part of my family stays, this piece focuses on San Francisco, which is undoubtedly, my first choice of an alternative place to live in, if not Delhi, where I currently am. Luckily, the trip was not the first, and I hope and assume will not be the last, and hence- I have been fortunate enough to enjoy the SFO journey and its architecture over many years. My first trip was in 2007, and then since then I have been to SFO more than 2 or 3 times- and each time, my love for the city has only increased. So, for those who are planning to visit San Francisco anytime in the near future, here are a few ideas and some must do's and don'ts. While I am not one for super planned itineraries, and ticking off checklists, I usually do try and catch some new additions in a city each time I visit. As an architect, it's a missed opportunity to not visit that last, most popular building on all the global media platforms- and experience it yourself; they are often highly disappointing, in the absence of glorified photography- but at least the experience is more real and informed. Often, my trips are planned around a few such buildings and include a drive or walk in parts of the city that are usually unexplored.

While most people talk about the Golden Gate bridge, and there are the very popular cycle rides and drives, the best way to absorb the city is by simply walking down the bridge, and absorbing the famous breeze, right on your face, amidst the clouds. The experience is different in the morning and at night, and I definitely cannot pick any one. Long walks in the area nearby are the perfect way to enjoy the city's glory and the local context.

The famed De Young Museum by Herzog De Meuron is one that I got the opportunity to visit multiple times, and hence, experience its ageing first-hand. Almost a 40-minute drive from the heart of the city, it is sited in a lush, landscaped Golden Gate park, and can be the perfect culmination of a drive away from the Golden Gate Bridge. Ideally viewed at dusk, the copper façade, increasingly grows on even those who resist modernity at its best. No feature on the highly popularised design media platforms can communicate how a building is perceived in reality, years after its manifestation. Amidst the Conservatory of Flowers, and the Strawberry Hill, this green inject in between a residential area on either sides. Planning for people takes on an entire new meaning. The route back can include a halt at the oh so popular Lombard street famous for its zig-zagged street form, towards the very touristic Aquatic Cove, Fisherman's wharf and Pier 39 and a tourist sea-food meal, if you really must have one.



De Young's Museum

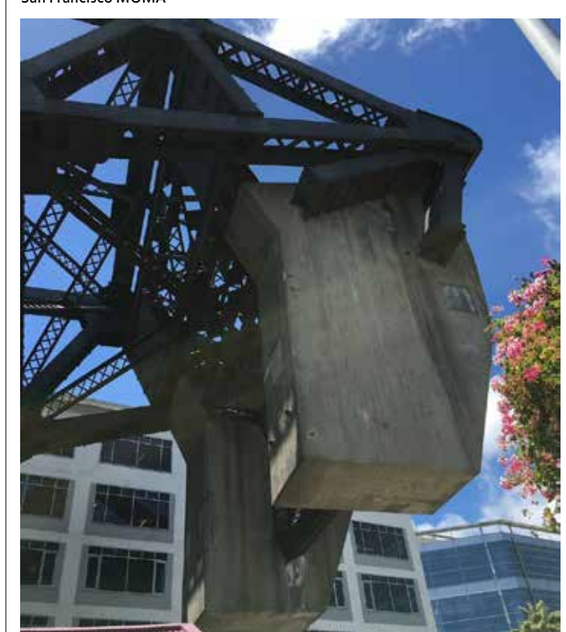
Within the city, a walk from the AT&T / Oracle park at the South Beach Harbour (and a baseball game, if possible), through the central town towards the SF Museum of Modern Art (MOMA), all along the Yerba Beuna Center for Arts and the Yerba Beuna district near the Union Square and Dragon Gate is the way to experience how cities evolve over time. With the San Francisco City Hall, the buildings along Mission street and O Farell gracing the encounter with the city, the details are missed if one is not walking along. Contemporary inserts shape the old, while the long-standing, mature architecture often offsets the new. Personally, for me, it is this architecture, more than the touristic landmarks, that sculpts the place-making experience.

If one has more days, then a trip to the historic Alcatraz island or the Stanford district and its many popular buildings can complete the architectural experience, for the modern archi-lover. A day trip to the Monterey Bay is something that your trip to the bay area cannot be completed without the drive along the Carmel Valley with panoramic views of the pacific ocean; it is possibly the best approach to experiencing the 'bay area'. One can skip the marine museum, but if one has the time and the inclination, the water sports and the marine park are a must. Famous for its scenic beauty and picturesque outdoors, the Carmel Beach is the perfect setting for a sunny day and brunch outdoors. Skip the Cannery Row walk, but do hop on to the recreation trail to have a complete bay experience. The bay area can also be explored from the water and its best to embark on a dawn trips that criss-cross the various attractions. The Muir Woods, north of the Golden Gate bridge and Sausalito are areas of outstanding natural and make perfect day-trips away from the city. The scale of the ancient redwood trees need to experienced first-hand to be appreciated.

Once in the bay area, there are many more day trips and short visits that one can plan, to enjoy the food, drink, culture and of course- the weather experience as well. The local wineries, the seafood, the famous 'fog' and the very perfect temperatures, barring the 'cold summer'- all are unique San-Fran elements that make up the 'SF city' as it is proudly known. A complete tourist experience, it is one of those rare destinations where one finds the beach, the mountains, Over and above the culture, the Silicon Valley is also proud of its quirks- the tech city, the cold beaches, the lakes, the vineyards, the countryside, the dense forests and the many small towns with their organic produce, and each with their own unique cultural and architectural identity. Not very often, in one city, can one experience all of the above!

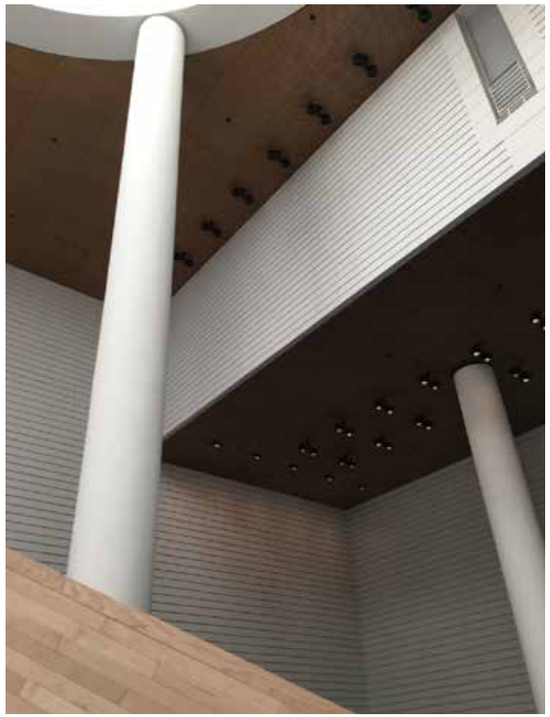
There is no summer colder than the summer of San Francisco and there is no weather more perfect than San Francisco's- who wouldn't want to live in a city with a maximum 10 degree variation. With the clouds coming in, blue skies through the year, and the simplicity of a city, heaven can truly be experienced in the San-Fran marvel that touches the right cords.

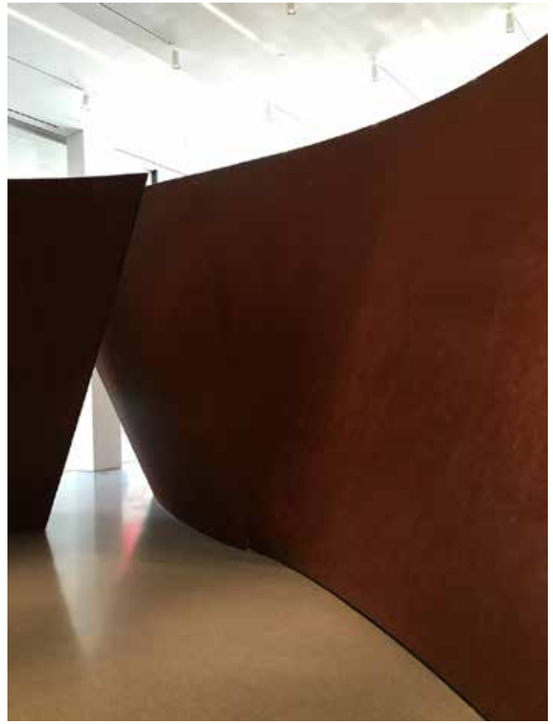
San Francisco MOMA



Views near the Mc Covey Cove, South Beach Harbour

De Young's Museum





San Francisco MOMA

San Francisco MOMA

Golden Gate Bridge

Golden Gate Bridge

De Young's Museum

Ar. Tanya Khanna
Founder, Epistle
B.Arch, M.Arch, FIIA
W: www.epistle.co

Indian architect and curator Tanya Khanna is the founder of Epistle, the first and largest communications consultancy for architects and designers in South Asia. Through her work with over 100 leading practitioners, brands, and events over 15 years, she has committed herself to Democratising Architecture –– giving a voice to design and to all those who practice, influence, or experience it.

tanya@epistle.co

SOFT POWER OF INDIAN ARCHITECTURE

Dr. Ujwala Chakradeo

Capitol Complex, Chandigarh, 1964 (Source: https://www.dezeen.com/2016/08/07/le-corbusier-capitol-complex-unesco-world-heritage-listing-chandigarh-india-benjamin-hosking/)

IMPRESSIONS OF INDIAN ARCHITECTURE

A) Meaning

Any building which has a meaning to it, is architecture. Stronger, deeper and rooted meaning makes architecture more eloquent with the soft power to proliferate impact. Aesthetics, context and culture take the building beyond being merely a functional commodity: they render social relevance to the buildings and make it architecture. Architecture, thus has meaning, memory, identity and connection with society.

Defining architecture in precise words is a difficult task. It has been a reflector of prevailing social, economic and cultural trends of society. Not only designs of buildings, but even planning of towns and cities is influenced by various social, economic and cultural issues like religion, rituals and customs, political system and trade and commerce, therefore architecture can be rightly called the mirror of society. Architecture is considered to be the cultural resource with the supremacy to control bilateral influence. It can be considered as a spatial manifestation of prevailing ideologies, and the soft power of architecture lies in its inherent qualities.

- Memory

There is a symbiotic relation between architecture and memory. Aptly designed space has the power to dissolve the fragmentation of time. Perceptions and empathy associated with the imagery is the connecting point of designed spaces. Architecture thus becomes the point of reference and its expression evokes a sense of belonging, to time and space.

- Identity

Relationship of architecture and identity is based on symbolism and the idea of 'local'. Architecture helps to understand the identity of a culture through its tangible manifestation. Even when global and local seem to have merged due to globalization, architecture continues to play its role of imparting significant identity and meaning: the Capitol Complex of Chandigarh is the signature architecture of democracy; glass facades of Gurgaon are representative of a consumerist society; the Bahai temple of New Delhi symbolizes merging of religions; the Red Fort of Delhi is associated with the midnight freedom of India. Temples of India personify deep-rooted faith. Some identities are personal, individual or collective, while some are local, some national and others global.

- Sense of pride

Public buildings arouse national consciousness and express a nation's personality. Architecture of national importance is a matter of pride for every citizen. To quote Sir Christopher Wren, "Architecture has its political use, public buildings being ornaments of a country, they establish a nation, draw people and commerce, make people love their country, this passion is stimulant to all great achievements of a nation." Symbolism plays an important role in such buildings. Government buildings and monuments are associated with the memory of victory and manifest collective national pride. However patriotic symbolism in architecture can emerge in any significant building in the public realms.

- Sense of local

Authority, modernity and tradition is depicted through architecture and paradoxically it can still be "local". Architecture influences the manner in which nationalism is imagined and evoked. A sense of 'local' can evoke belongingness to the place. Familiar architectural elements and expressions, use of local material, skill and technological know-how of local craftsmen all contribute to this factor.

- Culture

Culture is the physical and mental manifestation of human beings. Man's journey is continuously evolving in two states, materialistic and spiritual. On the materialistic path, there is a tendency to improve physical enjoyment and comfort, while on the spiritual path, man progresses in religious, philosophical, ethical, literary or artistic fields through his thoughts or mental intervention. As culture develops, it is necessary to reconcile this journey on both paths. Architecture is the best example and the indicator of both states. Whether a house or any other building- it is built for worldly happiness, its structure and its philosophy are a symbol of the collective thinking of that society.

B) Diversity

India is vast and extraordinarily diverse in all aspects – geographically, physically, cultural and dialectal differences exist region to region. Many religions with their sub-sects have differentiating characteristics which co-exist. With a cultural history of over five thousand years, India has been ruled by many. Each of these left their mark of identity, escalating her original diversity. The architectural responses to the immense

Corporate office in Gurgaon
(Source: https://worldarchitecture.org/architecture-projects/hggvh/cyberwalk-2c-manesar-project-pages.html)

Red Fort, New Delhi, 1648
(Source: https://hindi.thequint.com/news/india/coronavirus-effect-on-independence-day-2020-celebration-at-red-fort)

Kailasa Temple, Ellora, 8th Century C.E
(Source: Digital Maps of the ancient world (Twitter Account)

variety of environmental conditions too, have evolved over time to present a most extensive and characteristic typology of building forms across each region of India.

C) Evolution

Architecture in the Indian sub-continent presents us with a very long lineage. Archaeological evidence of the Indus valley civilization shows well-planned and architecturally cohesive cities as early as 2500 BCE. Excavations at Mohenjo-Daro reveal a defined urban pattern of major and minor streets, compactly structured built forms suited to the climate of this region, and distinct public buildings set within the residential quarters. Recent research and GIS mapping has established the existence of the Saraswati civilization on the banks of river Saraswati. These show the two axes of Indian architecture - of historicity and of landforms and natural resources.

The formal language of Indian architecture is also influenced by the third axis formed by the philosophical tradition- ancient schools of thought - Vedanta and Buddhism, Jainism and the comparatively recent ideologies of Islam and Christianity. The architectural experience of the Indian subcontinent can be therefore comprehended

at the conjunction of the triple axes of history, geography and philosophy, carried from the classical traditions of the shastras dealing with vastu vidya, jyotisha, yoga, ayurveda and alamkara – set out in the earliest architectural canons.

• Temples

Philosophical traditions of the Indian subcontinent are deep-rooted. Indian traditions use the word 'darshana' for philosophy. Temple architecture is the true manifestation of this and can therefore be called the 'soul' of Indian culture. A temple is the best tool to understand Indian society, religion and culture. According to the mythological concept, a temple is a visible expression of an invisible Brahma with an idol installed. This offers an opportunity to perceive the invisible with our senses. The period from the ninth to the twelfth centuries can be said to be the golden age of temple building when most temples were built all over the country. They showcase the economic, intellectual and spiritual splendour of India. The *Samarangan Sutradhar* written during the reign of King Bhoj, *Mayantam* written by Maya, as well as *Agni Purana, Manasar, Bhrigu Samhita, Shilpa Shastra* and many others write about vastu shastra and temple construction and provide knowledge for generating a humane built environment.

Magic diagrams, called yantras, explain the nature of the cosmos. Of these, the Vastu- Purusha Mandala forms the basis of architecture. It has the potential for infinite applications and adaptations in the making of houses, palaces, temples and even cities.
Charles Correa in Vistara.

• South East Asia

India produced her masterpieces also through foreign influences and in foreign lands- Angkor in Cambodia and Borobudur in Java, for in content and spirit, these, and other monuments, are purely Indian.

• Patrons of Architecture

Indian architecture has also reflected the ideals and visions of its patrons. Ashoka, who has contributed to Buddhist architecture, tombs and mosques from Islamic rulers and the colonial architecture of the British to reflect their imperial power. The Shantiniketan school professed in accordance with the folk image and the first buildings here were simple rural structures. They soon gave way to a more intellectual, aesthetic approach to design under the influence of swadeshi ideals. Tagore's architecture represents a paradigm in strong contrast to the radical modern movement in the West and to the colonial architecture of contemporary India.

Independence was accompanied by a feeling of ecstasy and opportunities and prospects. Accompanying this was the sober realization of future challenges. Now the Indian government was the patron of the architecture to be created for free India. There were only three schools of architecture at this time, so the paucity of architects was felt. Masters like Corbusier were invited to depict the spirit of a free India. Soon the government realized that all construction could not be patronized, and shifted the responsibility onto the private sector through privatization and globalization policies.

POST-INDEPENDENCE ARCHITECTURE

Three types of architects were practicing in India at that time: (1) foreign architects (2) Indian architects who had studied abroad and (3) Indian architects mostly

Top to Bottom:
Shanti Niketan, Kolkata, 1863 (Source: (A) https://www.nytimes.com/2013/02/03/travel/where-a-poets-vision-lives-on-in-india.html).
Revival of Nalanda University, Nalanda (Source: https://nalandauniv.edu.in/campus-life/upcoming-campus/).
Saraswati statue outside Indoneasian Embassy, Washington DC (Source: https://id.wikipedia.org/wiki/Berkas:Sculpture_of_Saraswati_at_the_Embassy_of_Indonesia,_Washington,_D.C.jpg).

working for the government of India. After independence the need for a new capital for Punjab provided an opportunity to Jawaharlal Nehru to invite Le Corbusier to India, who was to influence Indian architects, architecture and also Indian society. In 1951 Corbusier started work on the plan of Chandigarh which was to be the true celebration of Indian spirit. Kanvinde, Rahman, Bajapai introduced a new language of architecture that was different from the style being practiced by British architects in India. The Supreme Court in New Delhi designed by Deolalikar of CPWD (1952), *Vigyan Bhawan,* New Delhi by Gehlot (1962) and many others designed by the government. architects during the 1950s and '60s show an urge towards Indian identity by use of elements such as chajjas, chhattris, jalis and domes. The hangover of colonial impact lingered in this period. The museum built by Charles Correa (1963) at Mahatma Gandhi's Ashram at Ahmedabad is one of the successful attempts of reviving Indian architectural values. Other attempts were Doshi's *IIM*, Bangalore (1977-85), Sangath (1979-81) and *Vidydhara Nagar* (1984-86) which derived their inspiration from a variety of sources from within traditional Indian architecture. Among the architects who have tried to interpret the Indian context, Laurie Baker's contribution is remarkable. Formation of new states contributed to the design of new capital cities- Chandigarh, Bhubaneshwar and Gandhinagar. Council of Architecture came into existence on the basis of the Architects Act 1972 with the mandate to patronize and regularize architectural practice and education in India.

ISSUES OF CONCERN FOR ARCHITECTS IN THE 20TH CENTURY

Indian architects in the 20th century tackled various issues and resolved many. Search for Indian identity seemed to be prominent. Yet many sections of the society were untouched by architectural thought processes. Attempts to address needs of the common man were initiated:
a) The Energy crisis: The concern for the energy crisis in the '70s emerged architecturally through passive solar design, energy conscious design, climate sensitive architecture, etc.
b) Conservation : Restoration of our heritage buildings has been an issue of concern for the architects of this decade.
c) Barrier-free architecture : Guidelines and space standards for disabled and elderly persons were formed by the Central PWD Department, Ministry of Urban Affairs and Employment, India in 1998.
d) Globalization : Globalization of the world economy is resulting in a uniformity of architecture, particularly commercial architecture in the central business districts of cities across the world.

21ST CENTURY ARCHITECTURE OF INDIA

The 21st century commenced with the trepidations continued from the 20th century, but there was a hope and confidence supported by technology and revolution in the field of information and connectivity. Boundaries of region and nation blurred giving rise to a global community. Ideologies, faith and beliefs, once place-specific and contextual, now became universal, and no longer remained responsive to climate or restricted to available local building materials. Global corporate cultures became uniform. Regional offices of large multinational companies followed specific guidelines of the company and all its offices in the world looked the same. Architectural communities thus face the challenge of AIDS – "architectural identity difficulty syndrome"- it is now difficult to identify - by the façade or external expression - which part of the world any architecture belongs to. Does that mean identity is no longer a determinant quality of meaning for architecture?

Meaning of 'meaning of architecture' has changed to a great extent. So has the meaning of identity, memory, pride, priority. Functional aspects of architecture and efficiency parameters fluctuated considerably. Connotations of local-global and sense of pride associated with these have to be dealt with a new perspective and vision. Wellness through architecture continues to be an expectation.

Impact of real estate is more on economic and financial aspects, rather on planning, policy or culture. However, with the growing economy and population 'designer shaped buildings' are shunned by some of the sensitive architects. Glass steel and aluminum are still in fashion yet revival of the search for identity has urged for the revival of Indian craft in buildings. Neelam Manjunath, Anupama Kundu, Yatin Pandya, Sanjay Mohe, Dean D'cruz have tried in their own ways to contribute new expressions with local material and locally available skills and crafts.

• City and Town Planning

Metro cities, Tier 2 cities and small villages of India have reached the stage of disorder and need immediate attention. Architects need to focus on city planning and infrastructure development. Some initiatives have been taken by the Government but the ultimate results are not sustainable.

• Smart city Mission

The purpose of the Smart Cities Mission is to drive economic growth and improve the quality of life of people by enabling local area development and harnessing technology, especially that leading to Smart outcomes. The HRIDAY scheme (National Heritage City Development and Augmentation Yojana) was launched by the Ministry of Housing and Urban Affairs on 21 January 2015 to preserve and revitalize the rich cultural heritage of the country.

• Green Initiatives

Over the years, green buildings have taken the front seat in many government ingenuities like Smart Cities Mission, Pradhan Mantri Awas Yojana (PMAY) and Atal Mission for Rejuvenation and Urban Transformation (AMRUT). Benefits of going green are now known in the real estate field. The road to achieving sustainable growth and an energy-efficient real estate sector has been initiated by several buildings like Suzlon One Earth in Pune, CII- Sohrabji Godrej Green Business Centre in Hyderabad, ITC Maurya in New Delhi and others.

Government and regulatory bodies need to play a motivating role to enable consumers as well as developers to understand the need for green buildings in India.

POST- PANDEMIC ERA

In the post-pandemic era, many major architectural projects are being conceived with the new normal in focus : Noida International Greenfield Airport, Jewar, Uttar Pradesh

Hill of the Buddha by Tadao Ando, Sapporo, Japan
(Source: https://www.gq.com/story/9-brutalist-wonders-of-the-architecture-world)

with carbon net- zero design, Central Vista Redevelopment Project in New Delhi as a new expression of power, revival of Nalanda University and Ram Mandir in Ayodhya, among others, which have something to state in the form of soft power.

INDIAN ARCHITECTURE AWAY FROM INDIA

Pritzker Prize-winning architect, Tadao Ando, designed a monumental lavender-covered temple enveloping a giant statue of Buddha at the Makomanai Takino Cemetery in the northern Japanese city of Sapporo. Indonesia, the country with the largest Muslim population in the world, has gifted an imposing 16-foot high statue of Saraswati, the Hindu goddess of education and wisdom, to Washington DC. It stands atop a lotus, a block away from the Indian Embassy in front of a statue of Mahatma Gandhi.

ROAD MAP

- Populist Architecture

Soft power is about winning the hearts and minds of people. Hence, there has to be a people-centric approach. There is a need to explore how architecture can impart a heroic vision of modernity to India.

- Religious Tourism

India has all the major religions of the world, all of which attract a large number of tourists, for whom architectural and infrastructure planning to facilitate the experience of pilgrimage is required, as has been initiated through the Buddhist circuit development by the UP Government. India's art and cultural festivals with the backdrop of appropriately and sensitively designed architecture can fetch meaning to tourism and effect a positive attitude towards our country. Identification of our built heritage is a priority for their conservation and restoration, with the help of GIS mapping and multilingual mobile-based tourist guide applications.

- Cultural Centres

To project New Delhi's soft power across world capitals, the MEA has embarked upon building diplomatic missions and cultural centres using the country's diverse styles of architecture, starting with New Zealand, Indonesia, Malaysia, Thailand and other countries. Their architectural expression shall be designed to reflect the Indian identity.

Yog has now been accepted as a soft power of India. Yog centres across the world would also help in dispersion of the compassion of Indian culture.

- Wellness architecture

Wellness architecture is designed with tactics specific to increasing the wellness of the building occupants, with respect to indoor air quality, appropriate views through windows, play of music, use of daylight, staircase design.

- Post pandemic architecture

A global impact of the pandemic has been that spaces of traditional office typologies, residences and other buildings are undergoing transformation. Space is being perceived again through a physico-mental lens. Even the city landscape has to be designed to deal with pollution control measures, safety and fitness. Health and wellness tourism through appropriate architecture is also a possibility.

ARCHITECTURE EDUCATION

We need to bring back architectural thinking and discourse on a range of themes and issues concerning Indian identity, possibly through craftsmen and the artisans and revive relevant regional vocabulary. Meaningful and serious research initiatives in architecture and space making are required. Tools and systems of understanding, analysing and discussing architecture need to be experimented with and developed. Useful and relevant reading material will have to be made available to young architects and young thinkers.

SUMMARY

The numerous icons of Indian architecture, past, present, and yet to come, not only unfold the history of the nation but also demonstrate the status of knowledge and technology prevailing at the given point of time, as well as represent the beliefs and values of society when they were built. Need of a particular typology to be constructed has many stories to narrate. Presence of the Great Bath in the Indus Valley Civilization or complex multilayered design of the Vedic altar tell us about the intellectual, social, cultural values as well as the day to day rituals and traditions of that time. Perished wooden palaces of the Mauryan dynasty led to the use of stone by Ashoka in Buddhist structures, with an intention of making the region permanent, not only in India, but far and wide.

Architecture thus is the open book of society. Temples of India, apart from being a place of worship, were the representatives of the spiritual growth attained by society. Elevations and facades of these temples were intricately decorated with the beautifully carved sculptures or shilpas which reflected the day to day happenings in the lives of common men.

Mughal invasions and early Mughal structures remind us of the destruction carried out of the temples to use the removed elements in new constructions. In later periods however India witnessed the creation of the Taj Mahal, a masterpiece of perfection. The British attacked basic belief systems of Indians. Huge colonial structures -GPOs council halls and almost all administrative buildings- still remind us of their power and supremacy. However in the later part of their rule, when they started recognizing Indian society, Indo-Saracenic and Indo British styles became prominent.

Shantiniketan and its architecture, initiated by Thakurji showcase the continuum of original Indian thought processes unadulterated by British invasion. Pandit Jawaharlal Nehru, the first Prime Minister of India after Independence believed in science and technological advancement of the western world. He invited architects from different parts of the world to design for India. The design of Chandigarh and its buildings built in the 1950s continued to influence Indian architects for years to come. B.V. Doshi and many architects of India who were ardent followers of Corbusier, later in the decade of '60s and '70s started their search for Indian-ness through their architecture.

Globalization in the '90s changed the entire outlook and beliefs of society and also that of architecture. Ideas, technology and materials could now flow from one place to another with ease. Adaptation of many ideas that did not belong to us led to chaotic situations in society and in architectural expression. Search for "Indian identity" instantly became feeble. But for some this search continued.

Until the objective of what we stand together as a nation is not identified and accepted largely, this chaotic state of affairs will continue. There is an urgent and strong need for a policy at the national level to decide what we as a nation need to project through architecture to the world.

REFERENCES

1
Lang, Jon T.(1986) Creating an Architectural Theory. 1986

2
Dagens, Bruno (Tr.) (1994) Mayamata: Treatise of Housing, Architecture and Iconography. Vol.1. Sanskrit text edited and translated. Indira Gandhi National Centre for the Arts, New Delhi.

3
Lang, Jon; Desai, Madhavi; Desai, Miki (1997) Architecture & Independence: The Search For Identity –India 1880-1980, , Oxford University Press, New Delhi.

4
Lannoy, Richard (1971) The Speaking Tree: A Study of Indian Culture and Society. Oxford University Press.

5
Bahga, Sarabjit, Surinder and Yashinder, Modern Architecture in India, Galgotia.

6
Carmen (Ed.) (1986) Vistar: The Architecture of India, Catalogue of the Exhibition, Kagal. The Festival of India.

7
Filipović, Ivan; Tomić, Dragana Vasiljević (2019) Soft Power Architecture: (Un)Intentional and Incidental in Culture Relations Policies.

8
https://www.lokaa.in/blog/top-10-green-buildings-india/

9
https://list.ly/list/L34-indian-architects-of-20th-and-21st-century

10
https://www.archdaily.com/877329/tadao-ando-envelops-giant-buddha-statue-in-lavender-planted-hill-temple

Dr Ujwala Chakradeo
Dr Ujwala Chakradeo is an architect, planner and educationist. She holds the post of Professor and Principal at Smt. Manoramabai Mundle College of Architecture, Nagpur. Her experiences with her students are documented in a Marathi book Scale ani T-Scale published in 2013. Her involvement in experiential learning has been documented through books co-authored by her, Anubhuti- 1 and Anubhuti- 2. She is a PhD guide and President of the Maharashtra Association of Schools of Architecture (MASA) and a member of Bhartiya Shikshan Mandal.

Email: uchakradeo@gmail.com

COLLEGE FEATURE

ASADI WHERE FREEDOM MEETS DESIGN

Prof. Ar. BR Ajit,
Founder Chairman & Director, ASADI

Nestled in the silver waters of the Kaniyampuzha river and flanked by the Vyttila Mobility Hub and the Kochi Metro, is a breathtaking green haven called Silver Sand Island, housing the premier Architecture School, ASADI (Asian School of Architecture and Design Innovations) - an institution that plays the metaphorical role of a seamstress, weaving together design intellect, innovative practices and an instinctive eye for the natural world.

Crafted meticulously under the internationally acclaimed architect, Ar. B.R. Ajit, ASADI reflects the pinnacle of ABR Foundation's vision - an ultimate testament to designing with freedom. With groundbreaking pedagogical practices, rigorous hands-on training, and a never-ending pursuit of design education, research and practice, Asian School of Architecture and Design Innovations is an educational institution worth taking note of!

View of ASADI Campus from AWHO_©ASADI

THE GENESIS

The Asian School of Architecture and Design Innovations is an initiative of the Charitable Trust ABR Foundation and a lifelong dream envisioned to be the threshold, giving many a young mind the ability to lay down their dreams in concrete upon becoming socially responsible and environmentally promising architectural designers.

THE VISION

With the aforementioned motto of 'Freedom to Design', ASADI fulfils the five-year long journey of all of its students by teaching them to indulge in the legacy of the Great Masters of Architecture whilst aiding in awakening individual identity and ideologies. ASADI also aims at bestowing dexterous skill sets and imparting important life skills to all of its pupils.

ASADI, with the terminology of 'Innovations' set in stone within its name, lays down the path for many life changing initiatives such as the ASADI Think Architecture Club (ATAC) - an exercise which urges students to strive towards being innovative designers and inventive thinkers, ASADI Conversations - which expose the students to experts from various walk of life and the ASADI Vision 2030 - a research initiative that carries out relevant and impactful research in diverse areas of Architecture, Planning, Urbanism and Technology by means of technically oriented, conceptually focused, and/or philosophically and historically driven research.

THE CAMPUS

The ASADI campus does not fall short of the ideologies that embody the life force of the institution but rather amplifies and enriches the same by exposing the students to an amalgamation of neo-eclecticism, modernism, traditional and tropical regionalism, and on the forefront, green and sustainable architecture.

Front Facade of the Main Building_©Ajay Varakil Santh

The campus upholds a chic and alluring main building that basks in a soothing landscape with numerous well-ventilated studio blocks and labs. It combines the quiddity of traditional architecture with the functionality of modernism. Juxtaposed with great views of the Kaniyampuzha River, the institution seamlessly curbs the monotony and the stark seriousness of an architectural studio environment. The campus also houses a 180-year-old 'Koothambalam, a traditional temple theatre, that pays homage to Kerala's captivating past.

ASADI is also an IGBC platinum certified institution - with much of the building using sustainable furnishings made of jute and recycled materials and a green studio that is mostly clad in bamboo trunks topped with large openings providing ventilation as well as a clear view of the surroundings, paired with a cozy tensile fabric roof - reveling in a thorough connection with nature.

This pages (Clockwise from Left): Rear Facade of the Main Building_©Joel Sara; The Koothambalam_©Madhav Anil; Interior of the Koothambalam_©Karthik Ajikumar; View of the Green Studio depicting the Tensile Fabric Roof_©ASADI; View of the Green Studio depicting the Tensile Fabric Roof_©ASADI; Cafeteria Entrance_©ASADI

Hands-On Workshop Training_©Albert John-Karthik Ajikumar

Onam Celebration_©ASADI

Mrs Ammu Santhosh
CEO, ASADI

Ar SR Vipin
Principal

Dr Pratheek Sudhakaran
Executive Director, ASADI Vision 2030

THE METHODS

The highlight of the institution is the very highly qualified, experienced, dedicated and involved members of the faculty who put their heart and soul into mentoring every student of ASADI into an excellent architect who would satisfy the need of the future world.

ASADI functions within the rule books of the traditional Gurukulam system of learning - a method that fosters healthy student relationships and cultures a nurturing dynamic between the student, the teachers and the staff. Under the same, every student that enrolls in the institution is assigned a mentor who helps him/her throughout the academic life cycle thus forging a common ground for the exchange of knowledge.

The students are exposed to a hands-on training experience that spans masonry to parametric workshops to farming. Additionally and most importantly, prestigious large scale projects undertaken by ACD (ASADI Consultancy Division) provide students with the much needed practical experience as they work alongside senior faculty members and architects on real-time projects.

They are encouraged to celebrate and be attuned to every walk of life through avant-garde celebrations, competitions and much more, paving way to one unified and sizable family that has its roots stretching out globally!

A MEMORY HEWN IN STONE

An architectural course is never easy going on any student, it could be pushy and demanding, asking for all or nothing from every student that embarks on the journey and thus, it is of key interest that every student be encouraged to be their self during their time engaged in learning. ASADI is an institution that helps its students with self-discovery and takes them on that long ride, striving for excellence by reiterating values and goals, aiding its many peers to be a step closer to their innate potentials.

www.asadi.edu.in

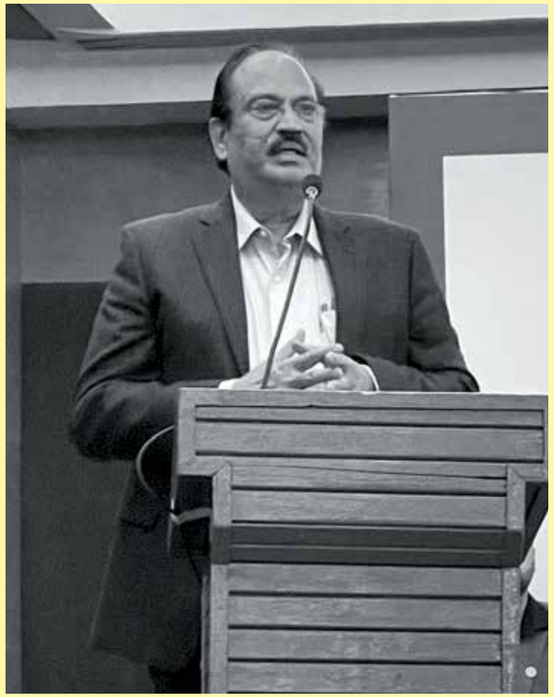
facebook.com/cochinasadi instagram.com/official.asadi

NEWSLETTER AUGUST

IIA Lonavala Centre

President C.R. Raju inaugurates IIA Lonavala Centre

Ar C.R. Raju, President of IIA inaugurated the Lonavala Centre of IIA on 28 August at Lonavala. The National Office Bearers of IIA were present at the event. The IIA Lonavala Team is led by Ar. Vishwas Kotkar, Chairman.



Dear Chapter Chairpersons & Council Members,

Greetings!

Fifty-two of them have become members and others are in the pipeline. Chairman, Ar. Vishwas Kotkar, a senior architect, is an inspiration for many in that area and is instrumental in motivating members with great enthusiasm. The organization of the ceremony, the exchange of views by members and the participation of many young architects augurs well for the growth and future of our Institute. We appreciate the Maharashtra Chapter and the Office Bearers for the effort.

With the growth of the number of architects across the country, there are many who have established themselves in many towns and cities across various states. They may not be a part of the Chapter or Centre or Sub-Centre. I request the Chapter Chairpersons to identify towns and cities where there are sufficient numbers of architects to form a Centre or Sub- Centre. This can help in bringing together members of our fraternity on a platform that will provide opportunities for interaction, be beneficial to them and help in the growth of our profession and Institution.

Looking forward to your cooperation and support.
Warm Regards

Ar. C.R. Raju
President,
The Indian Institute of Architects.

OBITUARY

Heartfelt Condolences

Ar. V. Balasubramanian
(25 September 1972 – 8 August 2021)

Ar. V. Balasubramanian, fondly known as Bala, completed his schooling in American College High School, Madurai, after which he joined Architecture at SAP, Anna University in 1989, and subsequently did his Masters Program in Housing from the SPA, New Delhi. He then joined as a Lecturer in Department of Architecture, Thiagarajar College of Engineering, Madurai in 1997. He was awarded PhD in Architecture in 2013. He was currently working as the Head, School of Architecture, Kalasalingam deemed University. He was one among the most inspiring teachers of architecture in Tamilnadu. He was genuine, sincere, hardworking, affectionate and a role model for students of architecture from poor economic backgrounds. He has also served IIA, as an office bearer in Madurai Centre, and was currently elected as the Executive Committee member of IIA Tamilnadu Chapter. The architectural fraternity of Tamilnadu and IIA Tamilnadu Chapter deeply mourn the death of Ar. V. Balasubramanian.

COA

Council of Architecture (COA) launches its Re-organised Website

The re-organised website of COA was launched on 29 August, during the 75th Council Meeting, by Hon. Union Minister, Shri Nitin Gadkari-ji at New Delhi.

IIA CAD in COA website

President Habeeb Khan permitted the download link for IIA CAD download link for the student version to be included in the COA website, on request by Ar. Asuthosh Agarwal.

Architectural Practice

Victory again !!!!!

Architects in Karnataka go registration-free across municipal corporations and urban local bodies across the state

The architects in India are bound by the rules laid down in The Architects' Act, 1972 with regards to individual practice and teaching at an institution and other allied matters. Whereas it is clear that architects can practice anywhere in India without having to get any additional registration done, the issue of registration of architects under individual corporations albeit holding a COA registration has been causing inconvenience to the architects in Karnataka for a long time. This hurdle persists in spite of the Supreme Court of India having upheld the Architects Act as a complete one. Though a matter of high gravity, a perpetual way out of it was a distant dream.

An initiation was made at Vijayapura in February 2017 by the then Vice-Chairman of IIA Vijayapura Centre, Ar. Ravindra B. Jammanakatti who brought the plight of architects across Karnataka to the notice of the Honourable Prime Minister of India, Sri Narendra Modi. The PMO gave a quick response and instructed the concerned State Government office to resolve this problem. Simultaneously, intervention was sought from the President of COA, who issued a public notice in prominent news dailies in Karnataka that no further registrations need to be made for those architects who hold a valid COA Registration. At this point of time, directions from the concerned departments of the Karnataka state government and the individual efforts of Ar. Ravindra B. Jammanakatti reaped the first step of success at the district level of Vijayapura with the Commissioner of Vijayapura Municipal Corporation, enrolling the names of architects with a valid COA registration in the Vijayapura Corporation office, along with a registration-free process for approval of their plans within his administration limits.

After this first success, there was hardly any time to relax. Under the guidance of the then Chairman, IIA Karnataka Chapter Ar. Leena Kumar, Ar. Ravindra B. Jammanakatti led a delegation to the Principal Secretary of the Government of Karnataka, to discuss the matter along with all relevant documents for perusal of the officer, which was successful. This was followed up with correspondence through letters to the concerned state government offices by Ar. Ravindra B. Jammanakatti. As a result, the Principal Secretary to the Government, Urban Development Department, vide letter No.: Na.a.I 49 Si.S.S 2020, dated 19 April 2021, directed the Department of Municipal Administration to issue instructions in par with the Architects Act 1972, which is a National Act, clearly reiterating that it cannot be transgressed. The Director of the Department of Municipal Administration in the letter No:28100 DMA 8 DEVT 2019-20 dated 25 September 2020 issued directions thereupon to all urban local bodies and municipal corporations to exempt all architects from the process of re-registration (seen in the images).

Karnataka is now a state where architects are free to pursue their profession without apprehension of the re-registration hassle in all municipal corporations and urban local bodies. It is a matter of pride that this has proved yet again that 'truth always prevails'. The need is to trust and move further with faith and not give up.

Ar. Ravindra B. Jammanakatti
Ravindra Jammanakatti, is an architect from Vijayapura (Bijapur), Karnataka and founder of Jammanakatti Associates. He is an expert under SARFAESI Act with nationalised banks. He is an Assistant Professor at BLDE's Dept. of Architecture. He was Vice-Chairman of IIA VC 2016-2020, special invite to EC to IIA Karnataka Chapter and is a National Member of IIA Young Architects Committee (YArC).

IIA-Karnataka Chapter

Representation to the Government

Ar. Mohan B.R., Chairman of IIA Karnataka Chapter, submitted a letter to the Honourable Governor of Karnataka, Shri Thaawar Chand Gehlot on 27 July 2021, highlighting the need for architects to be included in overall sustainable development of Bengaluru. Support and encouragement was requested to promote the architectural profession by ensuring that all the government projects involving buildings and urban interventions are designed by architects to the highest standards following best global practices.

Webinars

IIA Belgaum Centre organised a webinar Architecture as a Tool and Skill to address Climate Change on 2 July 2021 by Ar. Lalit Kishore Bhati, the co-founder of Path Architects

Planners, Auroville. He presented projects at Auroville, details of materials, planning and construction techniques used.

On 2 July 2021, IGBC Mysore Chapter in association with IIA Mysuru Centre organised a webinar on Traditional Indian Knowledge and Energies of the Built Forms by Ar. Sashikala Ananth, highlighting key insights on the science and architecture of vastu shastra.

National Real Estate Development Council, Mysuru organized a webinar on Development Opportunities in Mysuru Post-COVID on 10 July 2021. Ar. Sudheendra G.K., Chairman of IIA Mysuru Centre, a panellist at the webinar, expressed his opinions on possible future courses of action.

Bamboo Society of India, Karnataka Chapter along with the Working Committee on Architecture, Design and Civil Engineering organised a webinar on Designing with Bamboo along with IIA Karnataka Chapter, IIID, Bangalore Chapter and ISOLA, Karnataka Chapter on 11 July 2021. The webinar provided the required traction to the bamboo sector, making it a desirable material than just 'poor man's timber.'

IIA Karnataka Chapter organized a webinar on 31 July 2021, where renowned architect Ar. Christopher Benninger shared the unique design process and design details of his latest and award-winning projects. This webinar was part of the knowledge-sharing series and got a tremendous response with more than 760 registrations. The webinar had 337 participants and was well appreciated by the fraternity.

Launch of IIA Karnataka Chapter's Blueprint July edition

During the webinar of Ar. Christopher Benninger, the July edition of the IIA Karnataka's official newsletter Blue Print, put together by the Publications Committee headed by Ar. Nandita, was launched by eminent architect and ex-president of COA, Ar. Vijay Garg, in the presence of Ar. Christopher Benninger and IIA Karnataka Chairman, Ar. Mohan B.R.

Blood Donation Drive

A blood donation drive was organized by the IIA Hubballi Dharwad Centre in association with Rashtrotthana Blood Bank, Hubballi in cooperation with Infosys Foundation and Vijayanagar Housing Cooperative Society, Hubballi, on the 11 July 2021. Around 120 members donated 80 units of blood.

In news

In an article in Times of India on 2 July 2021 and in an interview to the Forbes India magazine published on 13 July 2021, Dr. P.S. Harsha, Commissioner, Department of Information and Public Relations and Nodal Officer ICUs BBMP, Karnataka, mentioned the contribution by IIA Karnataka Chapter's for conducting a baseline assessment for setting up of ICU beds in government hospitals in Bengaluru on 21 May 2021.

IIA Kalaburagi Centre's newly appointed members for the term 2020-2022 recently held its first general body meeting on 14 July 2021. Senior architect Ar. Basavaraj J. Khanderao was felicitated for his developmental role as a Past-Chairman of the IIA Kalaburagi Centre. The event was covered in the local newspapers too.

The IIA Karnataka Chairman Ar. Mohan B.R. along with other office bearers and Chapter Members, meeting the Honourable Governor of Karnataka, Shri Thaawar Chand Gehlot on 27 July 2021.

IIA-Haryana Chapter

Celebration of 23rd Foundation Day at Karnal

IIA Haryana Chapter celebrated its 23rd Foundation Day on 29 August 2021 at a function at Karnal which was attended by members from across the state. Ar. Naveen Goyal, Chairman, Karnal-Kurukshetra Sub-Centre, welcomed them and outlined future activities. In his key note address, Ar. Punit Sethi, Chairman, Haryana Chapter, highlighted the challenges faced by young architects and changes in the profession. He emphasized the importance of public awareness of the role of the profession in shaping the built environment and the necessity of continuous education programmes for architects, which will be taken up by the Chapter in the near future. Ar. Sethi acknowledged the role played by members in the formation of the Chapter and building a strong foundation for it. The contributions of the past Chairmen of the Chapter, viz., Ar. Jatinder Saigal, Ar. R.L. Malhotra and Ar. Satish K. Singla were recognized and felicitated.

Ar. Satish Singla recounted his journey in the architectural profession and explained the role and importance of The Indian Institute of Architects in the welfare of the profession and professionals. He expressed his concerns regarding unemployment and under-employment among young architects and urged IIA and Council of Architecture to look into these matters. Ar. Surender Singh, Jt. Hon. Secretary of the Chapter, outlined the activities the Chapter intends to take towards membership growth, improvement of more proactive interaction with authorities on important issues and a regular interface among the profession and education. He said that the Chapter will start working for it silver jubilee through various initiatives and activities. Ar. Shiv Singla, Vice-Chairman recounted the history of the Chapter since inception and highlighted the necessity of guidance for young architects so that they can perform successfully. He urged members to actively participate in sports and other activities of IIA. Ar. Vivek Logani, Hon. Treasurer, stressed upon creating awareness among the society about the profession through information campaigns and quality of work, so that its importance is understood by the public, as well as the difference between the work done by architects and non-architects. Ar. Vivek Singh Rao, Chairman, IIA Gurgaon Centre, suggested that good contract documents are required for professional practice which are in tune with the changing times. Ar. Ram Kumar Barwal, Chairman, Panchkula Centre, congratulated the members and urged them to work towards more cohesiveness among the fraternity. Ar. Nirmal Makhija, Chairman, Faridabad Centre, highlighted the problems faced by architects in online sanction systems and the steps taken to address these issues. He said that educational institutions should also spread awareness about activities of IIA among students and encourage them to become members at both, the student and professional levels. Ar. Shilpa Ranade, Chairperson, Hisar Sub-Centre, talked about the importance of team leadership to be taken by architects and the need for healthy competition among professionals. Ar. Rishipal Denod, Vice Chairman, Ambala Sub-Centre congratulated the members and urged gearing up for the silver jubilee in two years time. Ar. Khurram Ali, Chairman, Sonepat Sub-Centre thanked the Chapter Executive Committee for the efforts made towards development of the Chapter. Ar. Lalit Sukhija, Vice Chairman of Karnal-Kurukshetra Sub-Centre proposed the vote of thanks.

The Foundation Day program was preceded by a combined meeting of all Executive Committees of Haryana Chapter, its three Centres and four Sub-Centres. This was the first meeting of its kind to be held in a long time and allowed for discussion among all office bearers and EC members on various matters. The members were felicitated for their continued contribution in the activities of the Institute. All sponsors of the event were also thanked for their support in organising the program which was hosted by IIA Karnal-Kurukshetra Sub-Centre.

IIA-Himachal Pradesh Chapter

Participation in the 4th Stakeholders Consultation Workshop at Shimla, Himachal Pradesh

The fourth Stakeholders Consultation Workshop for the finalization of the draft Standard Operating Procedure (SOP) for registered private professionals for granting planning permission for residential use was organised by the State Town Planner, Town and Country Planning Department, Himachal Pradesh. The meeting was held in the Conference Hall of TCP Department at Shimla, Himachal Pradesh on 31 July.

Invitations to the Chairpersons of ITPI, Regional Chapter Himachal Pradesh, the Chairperson, IIA Himachal Pradesh Chapter and Chairperson, Institute of Engineers, Himachal State Centre Shimla were sent by TCP department with a request to sponsor the profession from their respective Chapters in order to finalise the SOP during the workshop.

The meeting was chaired by the Director, TCP Department, addressed various professionals and highlighted their role and importance in the various planning activities related to the building and infrastructure of the State. Around fifteen architects affiliated to IIA Himachal Pradesh Chapter, directed by Ar. Nand Lal Chandel, participated actively to draft the SOP. The State Town Planners thanked all the Chapter Chairpersons and the members for their concern. The workshop ended with a vote of thanks to the Chair.

Planning the seating arrangement for 75th Independence Day celebration at Mandi, Himachal Pradesh

Ar. Nand Lal Chandel, Chairman of IIA Himachal Pradesh Chapter along with other members of the Chapter actively participated in the 75th state level Independence Day celebration held at Sery Manch, Mandi, Himachal Pradesh. The Chairman and his team of architects were actively involved in planning the seating arrangement of around 3000 participants on this occasion. The Hon'ble Chief Minister of Himachal Pradesh, Shri Jai Ram Thakur was the Chief Guest at this occasion.

The occasion was also celebrated at School of Architecture at Rajiv Gandhi Govt. Engineering College, Kangra, at Nagrota Bagwan with Prof. P.P. Sharma, Director/ Principal of the College was the Chief Guest. Dr. Satish Kumar Katwal, Head, School of Architecture along with his faculty members were also present. Various cultural activities were organised at the state and institutional levels.

IIA-Rajasthan Chapter

Celebration of 75th Independence Day

It was proud moment for the entire IIA Rajasthan family as they celebrated the 75th Independence Day on their very own new site. The programme was attended by more than 200 IIA Rajasthan members and their families. Chapter Chairman, Ar. Tushar Sogani and the entire Executive Committee hoisted the flag for the first time on the newly purchased land marking the beginning of the new era for IIA Rajasthan to develop its own building for the benefit of the architects of the state. The programme was further enhanced with the wonderful performances by the children of IIA members who showcased their talent of singing, poetry-writing, dances, etc. The event was followed by high tea and prizes were distributed to the participating children.

Launch of Journal

IIA-Punjab Chapter

Lovely Professional University (LPU) in association with Hariawal Punjab, IIA Jalandhar and IIA Punjab Chapter have planted 400 trees dedicated to the 400th Prakash Utsav of Guru Teg Bahadur-ji in LPU campus. Ar. Sanjay Goel, the Chairman of IIA Punjab Chapter, Dr. Sanjay Modi, the Senior Dean and Head of Faculty, LBFA, LPU, Dr. (Ar.) Atul Kumar Singla, the Chairman of IIA Jalandhar Centre, Chief Architect of IDEARCH and Dean of Lovely School of Architecture and Design (LSAD), Lovely Professional University, Dr. Saurabh Lakhanpal, the Dean, Division of Students Welfare, Lovely Professional University, Ar. Amrita Shukla, Mr. Rishabh Gaba, Ar. Nagendra Narayan, HOD of LSAD, Ar. Tara Singla, Co-founder of IDEARCH, Jalandhar, and many students, faculty and divisions of students, welfare members and NSS members of LPU were present for the plantation drive. Ar. Dinesh Bhagat, the Joint Secretary of IIA Punjab Chapter along with members from Hariawal, Punjab, Puneet Khanna, the Punjab State co-convenor, Revathi raman, the State Educational Institution Head, State Co-NGO Chief Subedar Mr. Ashok, Jalandhar District Executive Mr. Sudhir Sehgal, Mr. Ashok Aggarwal, Mr. Pulkit, Mr. Lavkesh and little green warriors Myra Khanna, Parth, Bhavesh Raghav etc. were also present.

Hariawal Punjab is on the way to make Punjab Hariawal Punjab again from 2018. Hariawal Punjab is working in the dimensions of Plant Trees - Save Water - Manage Waste. We are planting more than 7 lakh trees by the year 2020 under this campaign across Punjab. Efforts are being made for water conservation in the house, farm and factory to send rain water underground for water conservation. Continuous efforts are being made to manage the waste. Lovely Professional University has always been in the forefront of environmental protection for the betterment of society, state and the nation at large and in this endeavour, LPU is planning to adopting

400 trees of Hariawal Punjab in the year 2021. Plants will be taken care of by Lovely Professional University, Punjab. Efforts of IIA Jalandhar Centre under the able guidance of IIA Punjab Chapter admirable in such sustainable and environment friendly endeavors.

IIA-Tamilnad Chapter

Spatial Acoustics

IIA Chennai Centre organised an online event on Spatial Acoustics, presented by Rolins Thomas Roy of Arcoustics on 26 June 2021. It was a deliberation on the principles of the design and development of elements required to make the room sound and look right.

#architectchennai

Hashtag Architect Chennai is an initiative by IIA Chennai Centre, through which, the works of IIA Members along with their name and name of their firm, is shared as a collage poster on the Facebook and Instagram pages of IIA Chennai Centre. As an ongoing initiative, the Centre aims to exclusively showcase the works of IIA member architects to the public.

Business Meet at Trichy

IIA Trichy Centre conducted its second Business Meet for the term 2020-2022 on 5 August 2021 at Hotel Blossoms, Trichy. Ar. Karunakaran, Karan Group Architects, Dindigul presented his works.

Architectural Awareness Filmlet Contest

The results of the Architectural Awareness Filmlet Contest, conducted jointly by IIA-Trichy Centre and Archtrust-Trichy, were announced by Ar. Ramanan during the second Business Meet at Trichy. The first prize was shared by two entries, both by the team consisting of Ar. Murali and Ar. Naveen, Trichy. The second prize was shared by two entries: (1) Allen Anil Verghese, student of Satyabama Institute of Science and Technology, Chennai. (2) Team consisting Achintya Mishra, student of Chitkara School of Planning and Architecture, Ludhiana and Niharika Dawar, student of University School of Architecture and Planning, New Delhi. The Jurors were Ar. Ramanan, Ar. Maniyarasan and Ar. 'Kaththu' Saravanan.

Launch of Journal "TRiiaL"

TRiiaL, IIA Trichy Centre's Journal, was launched at the second Business Meet at Trichy. Ar. Ramanan released the Journal and the first copy was received by Ar. Vijaykumar Sengottuvelan.

Streets for People Challenge

The office bearers and members of IIA Trichy Centre participated in the walking audit of Streets for People Challenge, Tiruchirappalli on 31 July 2021, conducted by the City Corporation.

Business Meet at Trichy

IIA-Telangana Chapter

Discussion on G.O. 103

Chai pe Charcha is the regular meeting event of Telangana Chapter. Once a lively intermingling has now sadly reduced to sipping virtual 'chai' in front of a screen. This event in July was a discussion on a recently released Government Order by the Municipal and Urban Development Dept called the GO103. This essentially states that in high rise buildings, the podium can be used to meet parking requirements, which was not the case earlier. All parking had to be provided in cellars. This led to deep excavation which in Hyderabad's rocky strata is expensive, polluting and interferes with ground water movement. Representations from architects and builders to remedy the situation had the government pro-actively consider this and act on it.

The discussions started with a brief presentation by Ar. Ananth of Genesis Planners (one of the petitioners) laying out the reasons for the change. The panel then discussed the impact of the new GO on the city scape. The panel was moderated by Ar. Kuldeep Singh and consisted of Chairman Ar. Uday Shankar, Treasurer Ar. B.Suresh, Ar. Jaipal Reddy, Landscape Ar. V.V.L. Narasimham and Ar. Shivleelanand.

Several issues were discussed, like rainwater percolation, debris filling of lakes and nalas, equity in making of GOs, the urban design aspects of large 'dead' podiums and the connect with the street, safety and security at road level due to a reduction of active spaces, vertical gardens etc. All Government Orders evolve with time and lived experience, so the consensus was that IIA will take up with the government again in time to come to fine tune the GO for better benefit of the citizens and environment.

E-Conference

- **International Design Research Conference (IDRC) 2021**
(18 December 2021)
Aditya College of Architecture Mumbai is organizing its second conference, with the theme : **Monadic Architecture.**
Monadic or modular architecture, imaginatively formulated, contributes algorithms that range from a single volume of space or scale up to form the urban fabric of a city.
Inviting research papers from UG, PG, researchers, academicians and professionals.
Information & registration: http://adityacampus.org/idrc/

ERRATA

Please note the following modification in the research paper *A Study of Construction Workers' Accommodations in Mumbai Metropolitan Region of India* by Ar. Himani Tawade Parte published in the JIIA June 2021 issue on pages 23-34:

- Pg. 28 – column 2 - "Refer Table 2 for the comparative study of standards to derive framework for evaluation."
- Pg. 29 – column 1 - "Table 1 presents an evaluation of each type of accommodations on basis of these 17 parameters."

JK SUPER CEMENT
BUILD SAFE

JKcement

JK CEMENT
WhiteMaxX
White Portland Cement

Architect of the Year Awards

JK AYA

Instituted by JK CEMENT LTD. since 1990

AWARD CATEGORIES

GREAT MASTER'S/ CHAIRMAN'S AWARD
(Once in 3 Years) Next due in 33rd JK AYA)

Green Architecture (Environment Conscious Design)
(Eligible Countries : India, Bangladesh, Bhutan, Kenya, Maldives, Mauritius, Nepal, Seychelles, Sri Lanka, Tanzaniza & Uganda)

Indian Architecture Awards (IAA)
(Eligible : Any Indian Architect)

Includes Architecture Student of The Year Award
(Eligible : Final Year undergraduate students of Indian Colleges)

Foreign Countries' Architecture Awards (FCAA)
(Eligible Countries : Bangladesh, Bhutan, Kenya, Maldives, Mauritius, Nepal, Seychelles, Sri Lanka, Tanzaniza & Uganda)

Indian State Architecture Awards (ISAA)
[Eligible States / UT : States by Rotation]

www.aya-jkcement.com

32nd JK AYA shall open for participation for sending entries From 1st January, 2022.

Our Products :

- ★ JK Super OPC (53 Gr, 43 Gr & 33 Gr)
- ★ JK Super PPC
- ★ JK Super PSC
- ★ JK Super Strong Weather Shield
- ★ JK WhiteMaxX
- ★ JK WallMaxX
- ★ JK TileMaxX
- ★ JK GypsoMaxX

www.jkcement.com

For Further Information About JK AYA Pl. Contact :

Award Secretariat :
Rana Pratap Singh
Administrator (JK AYA)
JK White Cement Works, P.O. Gotan
Dist. Nagaur - 342902 (Raj.) INDIA
Ph. 01591-230201, Ext. 2299
Mo.+91 95822 19292
Email: ranapratap.singh@jkcement.com

RPS-01/07/-21