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EDITOR'S NOTE

Our world is changing at a rapid pace. The global population is increasing and more so in a developing country like India. There is naturally an increasing demand for housing which positively emerges from the needs of the people. It may be an independent bungalow or an apartment - there always seems to be a demand for more. There are many in need of and in search of cost-effective housing. The biggest challenges in this sector are environmental, economic and social sustainability. These challenges need to be discussed and confronted by architects effectively. We need to carry out a holistic review of mass housing paradigms, trends and challenges to uncover its future scope and potential.

The September issue of the Journal focuses on ***Housing.***

We have Ar. Brijesh Shaijal in *Dialogue* with Ar. Kamal Malik in this issue. Ar. G. Srinivas Murthy remembers Ar. Michael Graves in the column 'In Memoriam'. We feature *Sifti Design Studio* as the Young Practice. A Pedagogue's Perspective from Ar. Akshaya Lakshmi Narsimhan is also featured. We continue with our regular columns and much more. Keep reading.

Warm Regards
Ar. Lalichan Zacharias
Editor

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PRESIDENT'S MESSAGE

Dear Members,

Greetings!

With the onset of the festive season, I take this opportunity to wish all our members and their families the best of health and happiness.

The Northern Regional Conference (NRC) which was organized, after quite a considerable time, brought together the Chapter Chairmen, Office Bearers and Members from all the Chapters in the region for a two-day conference preceded by a meeting of the IIA office Bearers and National Council. The Northern Chapter honoured the senior architects from the region for their valuable contribution to the profession. Congratulations to Chairman Ar. Ashish Gupta and the organizing team for their efforts in organizing the NRC with eminent speakers, programme and hospitality.

There is a concern that the fresh young architects coming into the profession lack sufficient employment opportunities. It is desirable to lend them a helping hand in finding placements to enable them a foothold and confidence in advancing their careers.

The number of Institutions affiliated to IIA has crossed the 100 mark and more coming in, thanks to the efforts of the Chapters and Centres who have the opportunity to bridge the profession and the institutions.

The Chapters are requested to send their nominations for the 'Young Architect of the Year Award' in time for their presentation at the Young Architect's Festival.

New Sub-Centres are in process at Gandhi Nagar, Gujarat; Sambalpur, Odisha; Nandurbar, Maharashtra and for the upgradation of the Sub-Centres at Rourkela and Palakkad to Centres.

By the time this issue is out, the 11th IIAPL hosted by IIA Tamil Nadu Chapter would have just concluded and Members can look forward to the Young Architects Festival at Calicut, hosted by IIA Calicut Centre, Southern Regional Conference at Bengaluru, hosted by IIA Karnataka Chapter, Eastern Regional Conference at Bhubaneshwar, hosted by IIA Odisha Chapter and the IIA National Convention at Raipur, hosted by IIA Chattisgarh Chapter as well as the IIA National Awards.

With best wishes,

Ar. C. R. Raju
President, IIA

Ar. C.R. Raju
President, IIA

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THE INDIAN INSTITUTE OF ARCHITECTS
DECLARATION ON WORLD ARCHITECTURE DAY

We, the Members and Office bearers of The Indian Institute of Architects, on this World Architecture Day, October 3, 2022, do hereby solemnly commit, affirm and declare that;

- **We shall remain committed to the ideals and philosophy of the profession and practice of architecture to make the life of people and communities more qualitative and productive.**
- **We shall use all the resources and knowledge available at our command to promote and achieve the agenda defined by the UNO, in the 17 Sustainable Development Goals, to make this world a happy and healthy place to live and work.**
- **We shall continue to use our knowledge, understanding and expertise in promoting the state of the art of planning and designing of the built environment in cities, towns and rural areas to make them a role model of affordable, healthy and quality living and working spaces for all including the marginalized sections of the society.**
- **We undertake and commit ourselves to provide all the possible support to the programs and policies launched by the government, to create affordable housing for all including the poor and making them sustainable, livable, inclusive and safe.**
- **We commit ourselves to review and redefine teaching-learning process of architecture to make the profession of architecture and young future architects supportive of a healthy built environment .**
- **We commit that, we as a National Apex Institute dedicated to the profession of Architecture in India, shall co-operate, collaborate and co-ordinate with all our sister professional Institutes, working in the domain of built environment ,planning and designing of cities and towns, to make them happy and healthy places for the communities to live and work.**

Ar. C. R. Raju
President, The Indian Institute of Architects.
October 3, 2022

COMMENTS

Greetings from Chandigarh!
Allow me to introduce myself as the former principal of the Chandigarh College of Architecture with a large compendium of published works including books, articles both in architectural journals (specially Architecture Plus design as part of its founding editorial team) and major newspapers of India.

This mail is primarily to compliment you in completely transforming IIAJ --from a sleepy, inconsequential slim publication to a highly respected 'Refereed Journal' with serious research papers and a marvellous mix of contents with projects, reflective essays, photo features, sketches/art --all that goes into making it both a mirror, a moral compass and a beacon of light on major issues confronting the state of the profession in the country.

I heartily congratulate you and your brilliant team, whose passion for truly making it a professional journal of repute is amply manifest.

I will be honoured to contribute to the journal occasionally, should you feel it of value. On your response I will pitch some topic/ideas with synopsis for your team to consider.

Warm regards
Rajnish Wattas
Former principal,
Chandigarh College of Architecture, INDIA 16002

We welcome your comments and suggestions.

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

STATUS OF HOUSING IN INDIA

Housing is a basic human need and a commodity most-invested in during a lifetime. All aspirations arise and culminate towards one's home. The sheer existence, lineage and memories of a family remain associated with it. A house symbolizes permanence and stability for an individual about to venture into any life decisions and growth. So many things are attached with this simple notion of housing. In India, housing is an emotional phenomenon into which everyone aims towards, regardless of their income bracket, whether it is ultra-luxury housing like Palais Royale to a slum in Dharavi or Behram Baugh in Mumbai.

This emotion has been captured well by real estate developers and therefore has become a major sector which contributes up to 6-7 per cent of India's GDP, and predicted to rise to 13 per cent by 2025. But the real question is whether it really contributes to the ground reality of solving the housing shortage or whether it only produces a profit for the stakeholders involved, since the inventory created can hardly be called 'affordable' for any income groups, even if it is HIG . . . so MIG or LIG and EWS is even a further shot.

But the scenario is changing fast. The new generation perspective towards housing is changing. With everyone going 'global', and 'permanence' diminishing fast,- relationships or investment or jobs or housing- none retain the connotation of durability. So, investing in a house is less likely in the times to come. Instead, rental housing will be the new future. Architects, developers and financial institutions all have to address this change and plan for it or else this void will be filled by some other players. New start-ups are already coming up based on the concept of this tech community- co-living concept of housing, like co-working spaces, which automatically will be affordable to all salaried personnel, budgeted to suit their income levels. So EMIs need not bother any individual and stop them from other decisions for growth- which currently is the story of the common man all across the country, since many a times, a large percentage of earnings goes to banks and developers, instead of you and your family. The amount of the home loan EMI, pretending to save income tax, would actually be used profitably elsewhere, as advised by any good financial expert.

But this story differs for those who come to cities in search of job opportunities and live on daily wages- then housing is a compromise on every aspect of life, housing, whether is space, sanitation, clean water or health concerns- whatever the circumstances, they have no option but to struggle for survival. All this has to be paid for through 'informal' channels to government middlemen, politicians or slum gangsters. This happens since there is a lack of formal income sources and documentation. The irony is that this very large, unorganised and unauthorised sector of the population is responsible for electing political representatives due to their sheer numbers as a vote bank, but fail to leverage their rights to their advantage.

As is always said, India is a land of diversity and this shows it in the housing sector as well, and also in aspirations, concerns and the way various people adapt to these. Learnings are profound and experiences are rich, for all professionals- architects, planners and developers. It is very important to invest these learnings and experiences, and adapt to changing trends and current issues to give housing its rightful status to citizens. It remains unarguable that access to affordable housing is essential in order to achieve policy objectives like poverty reduction, equality of opportunity and more inclusive and sustainable growth for all.

Prof. Vinit Mirkar is the Principal of IES College of Architecture, Mumbai and a member of the Board of Studies of at the MGM University, Aurangabad, Dr. BAMU, Aurangabad, and Dr. BATU, Lonere. Fellow of IIA, he is an Executive Committee Member, Brihan Mumbai Centre of IIA. He is also a member of the Board of Examination and Education, IIA and of the Board of Reviewers of the Journal of IIA.

RESEARCH

Conservation and the Phenomenology of Identity
Ar. Rajratna U. Jadhav

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Energy Efficient HVAC technology based on controls Towards Improving Thermal Comfort and Indoor Air Quality
Ar. Baishali Pradhan

CONSERVATION AND THE PHENOMENOLOGY OF IDENTITY

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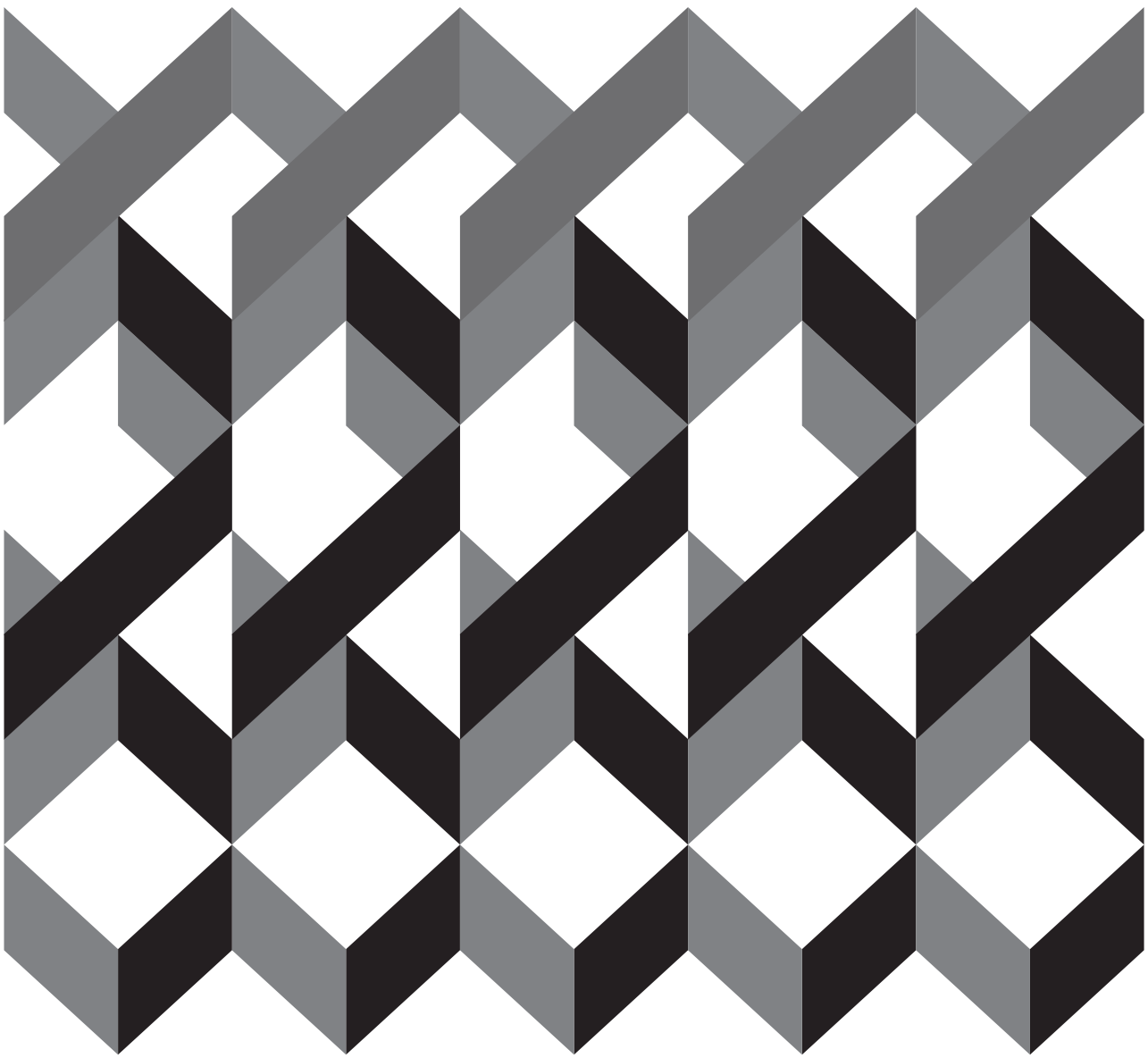

ABSTRACT

This paper addresses the issues of heritage conservation in the urban post-colonial city of Mumbai (formerly, Bombay), India. While the Colonial period and its attendant constructs are generally rejected and looked at as a bad memory, buildings constructed by the British are considered worthy of conservation. This paper aims to understand this apparent contradiction from the viewpoint of memory and identity as a phenomenological construct.

An understanding of the ideas of identity used are with relation to dwellings as written by three authors: the Norwegian architectural historian and theorist, Christian Norberg-Schulz; of memory in association to a house as explicated by French philosopher Gaston Bachelard (1997); and of multiplicity of identities as proposed by Indian economist, thinker and Nobel Laureate, Amartya Sen as a framework to understand the apparent contradiction mentioned above.

The ideas of these three authors are discussed with relation to the heritage Fort precinct in Mumbai. The idea of fragility of identity is explored within the context of Sen's explication of security and collective and individual identities. The paper argues that the insecurity with regard to modern interventions in the heritage precinct of Mumbai may be caused due to the assumption that fragments of existing identity may have to be discarded to accommodate new interventions, potentially, leading to the need to redefine the localization that is now secure in the collective memory of the society. The notion of fragility of collective and individual identities is then related to the impulse to preserve identity within the realm of the built environment. It is, therefore, proposed that the apparent contradiction between the two positions of rejection of colonialism and its constructs and the movement toward conserving colonial buildings is explained within the realm of memory and identity related to the built form. Further, the history of heritage conservation in the city of Mumbai is discussed and how conservation raises numerous questions, including those related to authenticity and the replication of environmental meaning, based on the writings of author Kimberly Dovey. The paper ends with some speculations on the future of the Fort precinct with regard to heritage conservation and the issues they raise.

Key words: *Memory, Identity, Heritage Conservation, Phenomenology, Authenticity, Mumbai (Bombay)*

1. INTRODUCTION

Heritage conservation is an established form of architectural discourse and practice. The world over, heritage conservation is done with purposes arising out of local histories, present realities and projected futures. In many cities, heritage precincts are the most valued real estate where some of the most well-known buildings are located. These precincts present a sense of time to a visitor and enables one to engage directly with the past of the precinct and, sometimes, of the country.

Many times, such precincts are the centre of the city around which new developments have grown over the centuries. They attract a large number of tourists where old-world charm juxtaposes itself with varied experiences related to art, culture, commerce, hospitality and more. However, heritage buildings and precincts can also be reminders of a past which can be troublesome in the discourse of history of some cities and countries. This discourse can raise uncomfortable questions which can bring forth contradictions in attitudes toward heritage conservation. In post-colonial countries like India, for example, colonial heritage can evoke awe while at the same time raising questions related to the appropriateness of appreciating its colonial past. These contradictions can arise particularly in the discourse of heritage conservation.

This paper attempts to understand this contradiction in the intent of conserving heritage. The Fort precinct in the city of Mumbai is considered within the theoretical explications of phenomenology, memory, identity and authenticity. The writings of Christian Norberg-Schulz, Amartya Sen, and Kimberley Dovey are used to address this apparent contradiction in the city of Mumbai.

2. METHODOLOGY

The methodology used is a theoretical exploration of ideas related to heritage conservation. In that sense, this paper is literary in nature where a theoretical framework is used to understand the contradiction mentioned above. At the beginning, it is necessary to differentiate between heritage conservation, preservation and restoration to present clarity on the specific subject of this paper. Subsequently, a theoretical framework is created out of the writings of Christian Norberg-Schulz, Gaston Bachelard and Amartya Sen. Within this framework of understanding, the ideas of memory and identity are explored in an attempt to make sense of the apparent contradiction under consideration.

The Fort area of the city of Mumbai is used as a case study due to the author's long association with the city and familiarity with the history of the debate on conservation, along with a background of association with some of the propagators of conservation in the city and engagement in the activity of documenting, writing about and publishing the city's heritage. Also, the availability of information and documentary resources made Mumbai a preferred choice as a site of study.

The future of the Fort precinct is discussed in light of directions of the local Heritage Committee. This discussion gives rise to the issue of authenticity, using author Kimberley Dovey's explication of the authenticity and replication of environmental meaning. The conclusion is on the basis of relating the ideas of memory, identity and authenticity to the future of conservation in the Fort precinct.

3. BACKGROUND

Conservation versus Preservation versus Restoration

Numerous commentators have attempted to understand the difference between conservation, preservation and restoration with regard to historical buildings. It would be prudent to recognize that all the three terms relate to values associated with a historical object.

Due to a built object's heritage value, most appropriate understandings of these three terms relevant to our area of discussion come from the realm of archaeology. The Archaeology Department of the Museum of Ontario (2022) says that conservation is "the hands-on

act of working directly with the object to preserve its current condition.". It further says that such a method can be invasive. Conservators can use restoration treatments that can "enhance the object to its original state or appearance by removing accumulated layers of dirt and/or adding necessary components that have gone missing. Preservation, on the other hand, the Museum says is the "non-invasive act of minimizing deterioration and preventing future damage of the object." The Museum has not mentioned anything about restoration.

The *Central Public Works Department* (CPWD) of the Government of India in its *Handbook of Conservation of Heritage Buildings* (2022) says that conservation means "all the processes of looking after a place so as to retain its historical and/ or architectural and/ or cultural significance and includes maintenance, preservation, restoration, reconstruction and adoption or a combination of more than one of these." Preservation, on the other hand, "means and includes maintaining the fabric of a place in its existing state and retarding deterioration. Restoration attempts to return "the existing fabric of a place to a known earlier state by removing accretions or by reassembling existing components without introducing new materials".

Alex Boyer (2020), the owner of the website *MakeBuildingsLast.com* and a stakeholder in ensuring buildings last longer, has a more elaborate understanding of the terms. According to him, preservationists in the field of built environment like architecture, historical archaeology, advocacy, and so on, focus on research, documentation, advocacy and physical preservation of artifacts. For Boyer, those who work on cultural property are called conservators who are involved in the physical activity of saving cultural property. "Their work includes examination, documentation, treatment and preventative care. Architectural conservators work on historic buildings and typically help determine the cause of deterioration or staining and help craft a treatment plan based on research, testing, and evaluation."

He further adds that the main point differentiating preservation and conservation is that preservation encompasses a wider context regarding historic properties, such as the history of a neighbourhood and its cultural background, and that both, the buildings and their stories, both need preserving. Preservation further includes designation of properties, whereas a conservator treats a work that has already established its significance. "In that way, architectural conservation is a discipline under that greater historic preservation field."

The *Archaeological Survey of India* (ASI), the official government body responsible for identification and maintenance of all archaeological monuments and sites in India, in its *National Policy for Conservation of Ancient Monuments, Archaeological Sites and Remains* defines conservation as "the processes through which material, design and integrity of the monument is safeguarded in terms of its archaeological value, its historical significance and its cultural or intangible associations" (2020). The document goes on to say that conservation activities include examination, documentation, treatment, and care of monuments, archaeological sites and remains, supported by adequate research, diagnostic studies, etc. Most importantly, the document says, conservation is a continuous process implemented as per a prepared Annual Conservation Plan (2020).

In the same document, ASI defines preservation as an activity that maintains "the status quo of a monument including its setting thereby not allowing any changes, either through deliberate human interventions or due to action of natural agents of decay to its fabric or its immediate environment (ASI, 2014). 'Fabric' here is defined as 'all movable and immovable contents of or within a monument including its setting.' (2020).

Restoration is defined as an activity that aims to bring back "the monument or any part thereof, as nearly as possible, to an earlier known state or condition" (2020).

All four understandings above agree that conservation is an intervention that attempts to maintain the historical and/or architectural and/or cultural and/ or archaeological values of a heritage object. This intervention can be invasive, if necessary, to bring the object to its original state or condition. Also, ASI says that it is a continuous process.

Preservation, on the other hand, is an attempt to maintain a heritage object in its existing condition when it is found or identified as a heritage object worthy of preservation. No changes are permitted to the existing state or condition of the structure or object. The idea is to minimize deterioration and prevent future damage whether manmade or natural.

Restoration attempts to retrieve an object to its known earlier state or condition. No new materials or objects are permitted. However, reassembly of existing components is allowed. Both preservation and restoration do not allow invasive interventions, but may allow treatments that may help achieve the objectives of preservation or restoration.

4. LITERATURE REVIEW

Phenomenology and the Issue of Identity

". . . we have to stress that dwelling above all presupposes identification with the environment. . . 'identification' means to become 'friends' with a particular environment. . . (Therefore,) Human identity presupposes the identity of place."
Norberg-Schulz, 1996

Norberg-Schulz goes on to say that the identity of a person is defined in terms of the schemata developed, because they determine the 'world' which is accessible to that human being. Therefore, human identity, whether individual or collective, is to a high extent, a function of places and the environment. The tendency to say that 'I am a Delhi-ite or a Mumbaikar' is a connotation of identity. But what does the term 'identity' really mean? Can it be broken down?

Economist Amartya Sen discusses identity in the cultural sense in his book, *Identity and Violence: The Illusion of Destiny* (2006). In the essay, Sen alludes to the history of a person or of the events related to the person as one of the formative elements of that person's identity. It could be language, region, or historical events that define political or economic ideology in practice within that community. This history could be the memories with which the person associates.

French philosopher Gaston Bachelard has spoken of human memory in association with a house. ". . . the more securely they (memories) are fixed in space, the sounder they are . . . localization in the spaces of our intimacy is more urgent than the determination of dates." (Bachelard, 1997).

The possibility of a person identifying with the physical environment could mean that localization in human memory is more secure. The longer the dwelling in that environment, more is the possibility that the localization will be secure. Within the realm of subsequent generations of a community, these localizations may not be immediate experience, but the understanding of the development of the environment in the history of the place. Therefore, it may be logical to infer that the older the city, more fixed would be the localizations in the minds of the individuals as well as the community. Perhaps, this deep localization could be one of the formative elements of 'identity'.

Amartya Sen speaks of the pluralistic nature of the construct of identity. Indeed, identity cannot be made of a single construct. Multiple issues go into the formation of identity. Besides, the formation of identity can be a continuing process. It is at this juncture that Sen cautions us. On such occasions when the construct of identity needs to absorb or is expected to absorb an additional element, the reaction, usually, is that of strong hesitation (Sen, Identity and Violence: The Illusion of Destiny, 2006) (Sen, The Argumentative Indian: Writings on Indian Culture, History and Identity., 2005). If hesitation is not observed, the common understanding is that while including certain characteristics within one's identity, other positive features are threatened. According to Sen (2006), identity discussions, on many occasions, assume that asserting identity must involve denying other aspects of an identity. Hence, while identity formation can be a continuing process, such attitudes are indicative of the idea that identity is considered to be a fragile construct.

5. DISCUSSION

5.1. Conservation and the Reality of the City of Mumbai

With regard to heritage buildings, therefore, conservation may become an issue when the realities within which the building was built and the values that the building expressed, may not be significant determinants of events at the time in which the building is identified as being worthy of 'conservation'. The term 'conservation' can be associated with such buildings built in the past that have the capability for relevant and meaningful interaction with contemporary society and have potential for such continued relevant and meaningful interaction in the future. Preservation can relate to conservation in the sense that the realities within which the building was built are no longer determinants in societal events. However, the difference in interpretation may become evident when we recognize that the interaction of such elements or buildings with society is limited to the potential for its study or to the appeasement of curiosity. It is at such a time that historicism may start becoming an issue inviting interventions from those who may disagree with the idea of conserving buildings that are representations of the past.

In the city of Mumbai, for instance, the issues that went into the creation of a school of thought opposing the conservation of buildings representative of the past were more practical than theoretical. In other words, cultural theory was not involved as much as practical concerns such as housing and its economics within the demographic realities and the market forces. Against such practical arguments was a body of citizens that favoured 'conservation' as a strategy. The reaction of this body was so strong that the strategy of conservation was adopted by the city council as legislation.

It may be premature to identify the two sides in the city of Mumbai as *avant-gardists* and *arriere-gardists.* Perhaps the issues least discussed at the time were historicism or its relevance. While the world over, cultural theorists have argued with each other over the positions of Neo-Historicism and futurism, here is a case where the term historicism and its relevance were not the motivating factors. The case becomes even more interesting if one observes that Mumbai had a long history of British Colonial rule. Most post-colonial nations including India, have attempted to put behind the colonial rule as a bad memory, not to be remembered again. But here, in Mumbai, one does not seem to sense such an attitude, especially, toward colonial architecture. On the contrary, the patronage given to these colonial monuments is surprising.

How can one explain such behaviour? Could the aesthetics of these buildings be so appealing that political and cultural attitudes are set aside in favour of retaining monuments that are symbolic of long years of foreign rule?

Alternatively, could it be that political and cultural ideologies are not the issues at all? Could the explanation be in areas other than politics, culture and history?

5.2. Memory and Identity in the Case of Mumbai

Among the significant events that led to the assertion of the conservationist ideology is the construction of *The Bombay Stock Exchange* (Figure 1) and *The Reserve Bank of India* (Figure 2) buildings in the 1970s (Guzder, 1997). This high-rise building was constructed in the old Fort area in the midst of low-rise Neo-Classical buildings built in the last century and in the early 1900s. The absence of legislation may have been one of the causes for the development. Objections were raised at the time, marking the birth of the conservation movement (Guzder, 1997).

Figure 1: The Bombay Stock Exchange built amidst heritage buildings
(Source: Author)

Figure 2: The Reserve Bank of India built within a heritage precinct
(Source: Author)

Such interventions within their environment have been known to cause a sense of insecurity within the local communities, resulting in strong opposition to the development. This insecurity appears to be due to the need to redefine the localization that is now secure in the collective memory of the society. The environment that has grown over two hundred years might have effected extremely secure localization in the memory of the community. The insecurity may also be caused due to the need to redefine the identity of the community as a subset of the new intervention--an intervention that for the past two hundred years could not have been present.

Potential communal or individual dilution of identity, or the call for a redefinition of identity have traditionally evoked strong reactions due to what Sen calls the assumption that identity is threatened (Sen, 2005; Sen, 2006). If one were to interpret Sen's thoughts in the case of Mumbai, it would appear that the community that displayed opposition to the construction of the Bombay Stock Exchange and other new buildings within the heritage precinct, may have felt the need to discard certain fragments of their identity to accommodate this new development.

In the case of Mumbai, the development could not have been stopped since there was no legislation preventing such development. The absence of legislation prompted architects and allied professionals to propose legislation (Guzder, 1997). The passage of the legislation preventing similar developments in the future seems to have ensured the security of the community's identity for the present. It is such attitudes toward identity that seem to have given rise to attempts at maintaining constancy and continuing familiarity with intangibles, such as schedules, and tangibles, such as place-ballet and the built environment (Seamon, 1980) operating within the community.

Figure 3: The Esplanade Mansion (formerly Watson's Hotel)
(Source: Trushad G. Poladia. Reproduced with permission)

5.3. The Future of the Fort Precinct of Mumbai

It seems obvious that the next step of inquiry would be to pose the question--what if some of these buildings start to collapse after a while or get destroyed in a fire? Such cases have already begun. The *Esplanade Mansion* (Figure 3) in the Fort area is one such instance. Bhattacharya (2019) explains that built in 1863 by a private British citizen as *Watson's Hotel,* the building was the first to be built in cast iron structural members fabricated in London and assembled on the site.It was also the venue for the first motion films to be displayed. The Lumiere Brothers' collection of six short films was shown here in 1896. Besides, the building is infamously known for denying entry to Indians which compelled an Indian industrialist, Jamshedji Tata who was denied entry, to build the world famous *Taj Mahal Hotel* in Mumbai more than a hundred years ago. By all accounts the building is an important part of the narrative of colonial history. The *United Nations Educational, Scientific and Cultural Organization (UNESCO)* recently declared it a *World Heritage Property* (Bhattacharya, 2019). The Indian chapter of *International Council on Monuments and Sites (ICOMOS)* had offered its technical guidance in the conservation of the building. The building is listed in the city's heritage buildings list and has to follow certain conditions for its conservation as per local law. Despite such attention, the building started crumbling part-by-part since the last decade or so. In 2007, the authorities declared the building unsafe for occupation. Last year a balcony fell down (MCGM, 2018). Funds are not easy to come by. Bhattacharya (2019) further talks about local law prevented increase in rent for the last 50 years or so The owner claims he has no money for the repairs. In fact, a report prepared by a team of experts from *The Indian Institute of Technology,* Mumbai said that the structure was beyond repairs (ibid., 2019). While the authorities and local citizens are working toward a solution, the building may simply collapse in the near future. There are other buildings that are in a similar condition or are headed there. Would the constancy be maintained then? Certainly, there would again be the need to restructure the localization in human memory. Perhaps such an event would be accepted as an inevitable development.

But what of the development that takes place in place of a collapsed building or a part of a building? Is it expected to conform to certain regulations that dictate the architectural features it needs to display? Rahul Chemburkar and Bhalchandra Tople, conservation architects and partners in the firm *Vaastu Vidhaan Projects,* Mumbai, have faced a situation like this. They have been chosen as consultants for the conservation and partial reconstruction of a listed heritage building in the Fort area of Mumbai. *The Atmasing Jessasing Bankebihari ENT Municipal Hospital* (Figure 4) built as *The City Improvement Trust Office* in 1904 had two towers on the northwest and southwest corners. These towers collapsed or were demolished partially. Chemburkar and Tople had to submit their proposal to the *Heritage Conservation Committee* of the local municipal body. The Committee permitted the reconstruction but with an ambiguous direction that indicated that the new building facade should resemble "as closely as possible" (as mentioned by Ar. Rahul Chemburkar in a personal discussion) to the original façade.

Such directions by the statutory bodies may invite criticism since it may not be entirely possible to replicate the original façade all the time. At cursory observation, it appears that the element of time is encouraged to remain frozen for as long as the mind of the community can readjust themselves phenomenologically. But, one can argue that the corrosion of a domain of historic and/ or homogenous value can only be cared for until another change occurs. The debate between those who pose as *avant-gardists* (within the limited context of our discussions) and the others who favour maintaining the constancy and continuity despite the change may start again.

6. CONCLUSION AND RECOMMENDATION

Authenticity and the Future of Heritage Conservation in Mumbai

Certain changes that are beyond the control of legislation, technology, and money may give rise to new issues. One such issue is that of authenticity.

Kimberley Dovey (1985), in his essay *The Quest for Authenticity and the Replication of Environmental Meaning* discusses this issue of authenticity with respect to the built environment:

'…authenticity is a property of connectedness between the perceived world and the believed world. It connects us spatially with the places in which we dwell and temporally with the past and the future…its deeper significance lies not in its connection of appearance to reality, but in its connection of people to their world…It is a spatial-temporal rootedness which enriches our world with experiential depth."

Figure 4: The partially restored The Atmasing Jessasing Bankebihari ENT Municipal Hospital
(Source: Vaastu Vidhaan Projects, Mumbai. Reproduced with permission)

He also argues that authenticity or truthful replication of environmental meaning within circumstances that are other than the original, is more a property of process and relationship.

The process includes the quantity of time. Certain processes conducted even one generation ago may be almost impossible to replicate due to the difference in the cultural, social, technological realities of the present. This is especially true in established non-Western societies that are going through a process of redefinition of identity due to the almost inevitable insertions originating from contemporary Western art and sciences. Dovey (1985) adds that authenticity cannot be achieved with the "connection of appearance to reality". The manifestation of inauthenticity in the form of fakery is a replication of meaning. "It is a cosmetic solution for a deeper schism in the system."

It is this cosmetic nature of the inauthentic replications that this paper argues against. While natural degradation of any structure is inevitable, to wish to permanently retain its visual character while accepting internal changes per changing times as in the case of the hospital project in Mumbai is inauthentic. As far as this study goes, the idea of conservation is aimed at maintaining identity phenomenologically through body-subject and time-space routines (Seamon, 1980). But the situation changes if a building naturally collapses due to age or is destroyed in fire or is beyond structural repairs. A living heritage building that is beyond restoration, repair, conservation or preservation can be a liability to the owner and to the public. It can be a waste of land, waste of potential built area for productive usage, threatens public safety, and deprives the owners of their rights. Hence, in case of such buildings it is inevitable that the plot is redeveloped per existing societal realities for it to be productive to life and society.

However, if inauthenticity is encouraged, deeper disconnectedness with the changing times and their imperatives will only grow. The earlier colonial creations of the Fort area were contemporary when they were built. They became identified as heritage over time. Similarly, the new inauthentic replications will be identified as a phenomenon of the times in the future when such replications become commonplace. Their inauthenticity will be called out and people may express their disconnectedness with the intended authentic.

On the other hand, if the building is not subjected to the principles of the heritage legislation, the constancy that was attempted to be maintained as a result of the heritage legislation would see numerous interventions that might prompt the community to redefine their identity almost holistically and rapidly. This would threaten the very idea of conservation.

The cases of the *Bombay Stock Exchange* and the *Reserve Bank of India* towers are examples of such a situation. Could they be called authentic and contemporary of the 1970s when they were built? From the viewpoint of this paper, it seems so. Other cases around the world may add to the debate. The *Centre Pompidou* in France is another such case. In all such examples, authenticity

can be said to be an existent feature of the times. However, does it resolve the debate of what needs to be done in a heritage precinct in case a building or its part collapses or is destroyed?

To maintain constancy, change is resisted. Should this be the way to build in a heritage context? Dovey's (1985) explication as quoted above seems to answer this question when he says, *"…authenticity is a property of connectedness…It connects us spatially with the places in which we dwell and temporally with the past and the future…"*

Implicit in Dovey's words is the response that one can adopt when building in a heritage precinct: to be authentic is to be true to the times while acknowledging the past and looking to the future. The difficulty in addressing contradictions in the intent of heritage conservation can be partially resolved by understanding them within the larger domain of phenomenology, and more specifically, using the constructs of memory, identity and authenticity.

This study tried to relate the impulse of conserving colonial buildings with these ideas of memory, identity and authenticity. Secure localization in the collective memory of citizens tends to create an identity associated with the place. The environment that has grown over two hundred years might have effected extremely secure localization in the memory of the community. Any change in the physical identity may be seen as being disruptive of this secure localization. As Amartya Sen says, identity is considered to be a fragile construct and, therefore, the need to discard fragments of this identity to accommodate new developments may explain the resistance of the community to new developments in the Bombay Stock Exchange building giving rise to the heritage conservation movement. Subsequently, the passage of the legislation preventing similar developments in the future seems to have ensured the security of the community's identity for the present.

However, the directions of the authorities that a façade needs to resemble the earlier façade as closely as possible in buildings that need repairs, raises questions of authenticity. According to Kimberley Dovey (1985), this is a "cosmetic solution for a deeper Schism in the system." The issue of authenticity becomes more prominent in case of buildings beyond repair or those which have collapsed. The deeper disconnectedness with changing times will only grow. Over time, if most of the buildings need redevelopment, the question of what are we conserving—authenticity or inauthenticity—becomes pertinent.

This paper argues, therefore, that to be authentic is to be true to the times while acknowledging the past and looking to the future. The past of the physical context in the Fort precinct can play an important role in determining an authentic response. Such a response will make the public phenomenologically readjust until a new identity is embedded in memory. This readjustment is easier if one considers that it is only one building out of the entire precinct that will change. Hence, the larger visual and functional identity remains, making readjustment easier.

The Fort domain, in the city of Mumbai, is yet to experience a transformation where inauthenticity is more commonplace than rare. The dynamism, therefore, of current thought continues. Conformity with current thought is recognized as being sensitive. But that may not last long.

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ENERGY EFFICIENT HVAC TECHNOLOGY BASED ON CONTROLS

TOWARDS IMPROVING THERMAL COMFORT AND INDOOR AIR QUALITY

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ABSTRACT

With growing temperatures and extreme weather conditions, air-conditioning has become a necessity rather than a luxury. However, with air-conditioning contributing to almost 40% of a building's overall power requirement, it becomes essential to select energy-efficient systems as well as equipment. Indoor air quality (IAQ) has also become an integral part of air-conditioning as more and more people are spending over 90% of their time indoors. Since AHUs and chillers are an integral part of any central air-conditioning system. It is vital to design energy efficient AHUs, chillers, and heat recovery systems employing various components for energy recovery. The energy-efficient equipment can be provided inside the heating, ventilation and air conditioning (HVAC) system to maintain the IAQ and thermal comfort for the occupants of the indoor space. Current climate control systems frequently depend on building occupancy to maintain proper temperatures. However, rooms are commonly unused and may be heated or cooled inefficiently. Intelligent HVAC system control may enable large energy savings by detecting occupancy and accurately predicting usage trends. This paper will discuss various HVAC approaches with new techniques and control systems that can be used to increase energy efficiency for a building while also improving indoor air quality and occupant thermal comfort.

Keywords: *Energy efficient, HVAC, IAQ, Controls.*

INTRODUCTION

With growing temperatures and extreme weather conditions, air-conditioning has become a necessity rather than a luxury. However, with air-conditioning contributing to almost 40% of a building's overall power requirement, it becomes essential to select energy-efficient systems as well as equipment. Cooling systems are used for nearly 45- 55% of the energy consumed in commercial buildings. Furthermore, the refrigerants that is used in traditional heating, ventilation and air conditioning (HVAC) systems are frequently chemicals that deplete ozone also emit greenhouse gases and not ecofriendly. Low energy cooling systems that employ eco-friendly refrigerants are therefore essential for balancing comfort and energy-efficiency. People now spend 90% of their time indoors, so creating and maintaining healthier environments. Poor air quality frequently contributes to health issues among workers in their workplaces. The primary goals of HVAC control systems are to maintain thermal comfort for occupants while using as little energy as possible. According to recent research, HVAC systems can have a significant impact on the thermal comfort, health, satisfaction, IAQ and productivity of building occupants. The aim of this research paper is to understand the Energy efficient HVAC systems and how it can be thermally comfortable for the occupants as well as keeping in mind indoor air quality (IAQ) in the enclosed space. Section 1 will show the vapour absorption system chiller is most energy efficient HVAC technology for the commercial buildings. Section 2 shows the AHU in IAQ and its effectiveness in treatment. Section 3 discusses thermal comfort-based technology used in HVAC systems.

1. Vapour Absorption Chiller: A Low Cooling HVAC System

For the refrigeration cycle, the vapour compression system is mostly used for air conditioning systems where the refrigerant is compressed by a mechanical process that uses a screw compressor, centrifugal compressor and reciprocating compressor. This system is driven by the electrical mode. So, the alternative technology to the vapour compression technology which is more energy efficient and that is vapour absorption technology. Under this technology, there are two types of systems that are lithium bromide water absorption which is a solid mounted packaged unit that can run with a variety of heat sources to achieve positive and negative cooling. Basically these compressors need renewable heat sources for the operation in the chillers. The significance of the technology is that it is thermally activated technology which means that this equipment runs not by the electricity but by the heat. Heat can be in various forms such as steam, hot water, exhaust gases, engine, turbine or furnace (Vaidyanathan, 2019). It can be driven by thermic fluid which is available in industries or can be run with fuel like natural gas or LPG. Every chiller has the refrigerant which is the driver of this equipment. In case of an absorption chiller, the refrigerant is a natural one like water which may be demineralized. Unlike the electrical chiller, where it has mechanism drives like an electric motor or an engine which helps in driving the compressor. Here, the absorption of a chiller is driven by heat which is used by recharging or reactivating the absorbent which is a lithium bromide solution. This salt solution works along with the refrigerant to drive the cooling needed for the application.

(A) Basic Principle of Vapour Absorption Chiller

The evaporator is the component of the chiller where the refrigerant, i.e., demineralized water will be used to remove the heat from the processed water. So, from the air-conditioner system, the chilled water circulates through the evaporator tubes and the refrigerant would be spread on it. It will then pick up the heat from the chilled water pipe and cool it to the required temperature. The heat gained by the refrigerant will be used to convert it from the liquid phase to the vapour phase. The refrigerant will boil out and the vapour is accumulated inside the evaporator. To maintain a low pressure and low temperature inside the absorption chiller, water evaporates at as low as 3-4 ºC. The chilled water is cooled in the evaporator of the absorption chiller. The refrigerant vapour generates with high pressure and starts operation in vacuum. The pressure should be constant in the vacuum while operation. So, the refrigerant can evaporate can evaporate constant temperature delivering chilled water. There is an absorber chamber adjacent to the evaporator. The function of absorber is to absorb the refrigerant vapour which is generated in the evaporator. Thereby maintaining the constant vacuum pressure inside the chiller. By using concentrated bromide solution in the absorber section, this can be accomplished. This lithium bromide solution has high hygroscopic property which helps in absorbing the water vapour. Then, the heat of dilution generates and it dissipated to the cooling tower (Vaidyanathan, 2019). At the end of the absorber process, the refrigerant vapour which has been generated in the evaporator and the concentrated solution of lithium bromide becomes dilute. It gets collected at the bottom of the absorber.

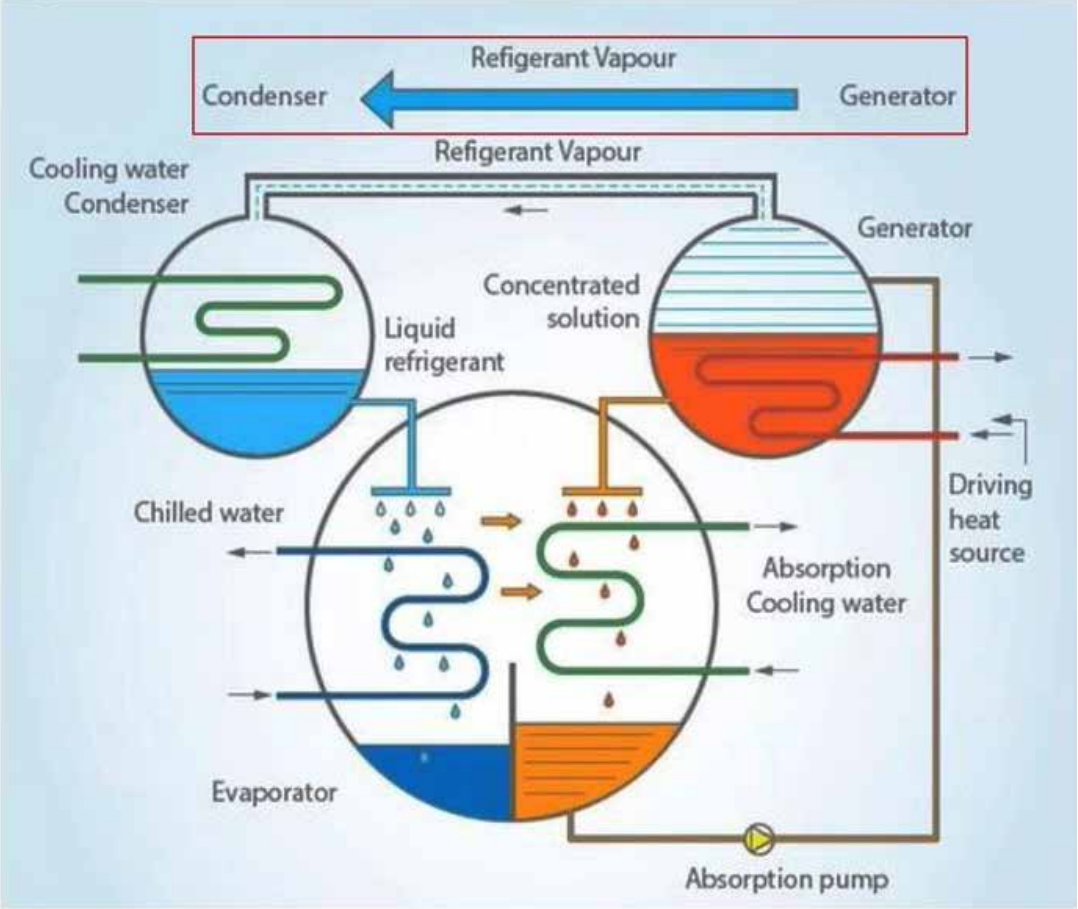

Figure 1: Schematic diagram of VAM system.
(Source: Adapted from Vaidyanathan, 2019)

So, taking the dilute solution from the absorber, pumping it into the generator chamber. Here, the waste heat source is used to boil the lithium bromide solution and separate the refrigerant vapour out of it. When the refrigerant vapour separates after boiling, the concentrated lithium bromide solution is left behind which is returned to the absorber section for further cyclic activity. The refrigerant vapour is separated in the generator for condensation. The cooling water circulates through tubes of the condenser and the refrigerant vapour when it comes in contact with it. After that, the refrigerant is taken back into the evaporator for further cyclic operation (ibid.).

The system starts with the evaporator where the refrigerant evaporated, then absorbed in the absorber, after that it separates in the generator and finally, it condenses in the condenser before it comes into the evaporator part in the chiller system. Then, the cycle repeats to cool the space.

(B) System Efficiency with the Heat Recovery System:
The system efficiency of an engine-based power generation may be with heat recovery or without heat recovery. So, the typical gas engine efficiency would be 40%, which means that 40% of energy from the fuel is converted into electricity whereas 60% of the energy dissipates into the atmosphere as waste. Now, there are two predominant forms of the waste in the heat furnace of the engine with heat recovery systems. One is the exhaust gas coming from the engine and the second is the HT jacket water coolant water which keeps the cylinder cool. So, the jacket waste water and exhaust fuel gas recovers with the help of the absorption chiller. The overall system efficiency achieves can be up to 75-85%. The net heat rejection to the atmosphere will be reduced. The waste heat that is removed will actually deliver more output than the conventional system without a heat recovery system. A vapour absorption machine (VAM), in conjunction with heat recovery, is used in an HVAC system to provide cooling. This energy utilisation boosts the system's efficiency. The heat recovery process used by VAMs can be used to classify them. VAMs are classified into the following types (Vaidyanathan, 2019):

i) Water-driven vapour absorption chiller: It is frequently used for very small cooling capacity and has a coefficient of performance (COP) of 0.7. It is typically utilised for small cooling capacities.
ii) Direct fired absorption chiller: This is commonly found in commercial establishments such as hotels, hospitals and shopping malls. Fuels like natural gas, LPG, propane, etc. are used as sources of heat. The COP is typically 1.5.
iii) Exhaust gas driven absorption chiller: This system uses the heat from the exhaust fumes. It has a COP of roughly 1.5 and can handle capacities of up to 3500 TR.
iv) Multi Energy Absorption Chiller: This VAM can use heat from a variety of sources, including exhaust gas, hot water, or a combination of the two.

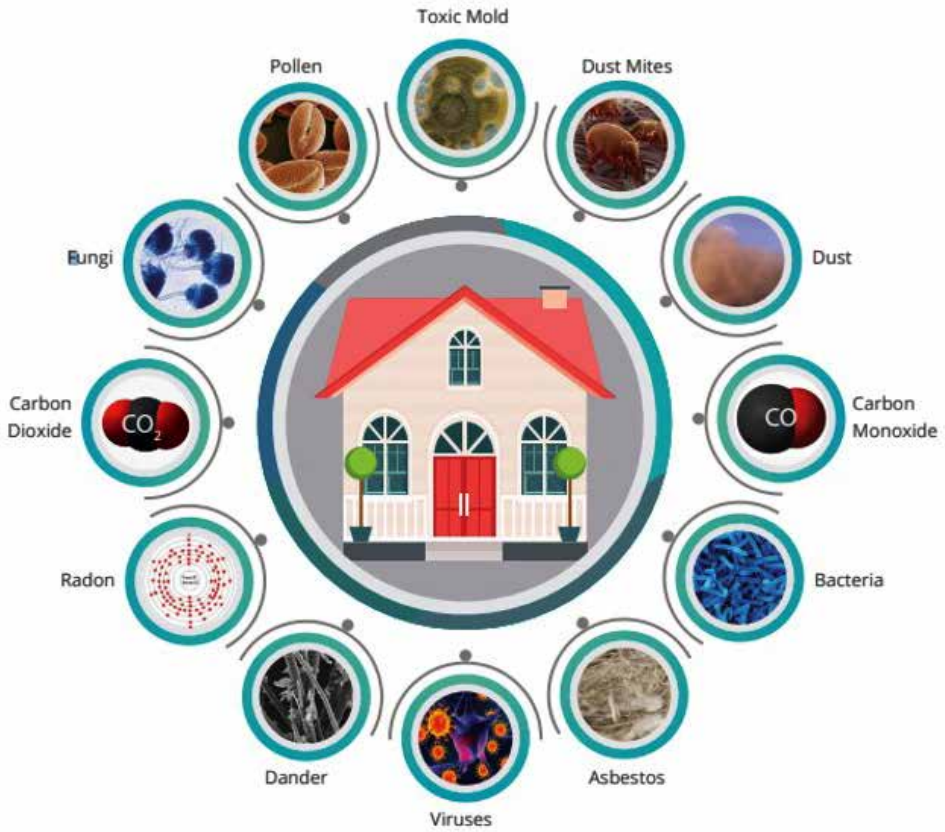

Figure 2: Contaminants affecting the indoor air
(Source: Adapted from Ensavior, 2002)

(C) Vapour Absorption Chillers Benefits:
There are various factors that it's better to choose vapour absorption chillers:

i) Low operating cost and maintenance cost – As absorption chillers work on waste heat, so, the same heat source when the mechanism is off, is 'waste' heat.
ii) Environmental-friendly refrigerant – The important factor is using an environment-friendly refrigerant like water, which does not harm the environment.
iii) Waste heat can drive an absorption chiller – Waste heat in various forms can drive the systems such as fuel, LPG, steam, exhaust gases, engine, turbine, etc. which are not costly.
iv) Substantial reduction in carbon footprint – As the system uses renewable sources for operation, the ozone depletion potential and global warming potential becomes zero.
v) Reduced dependency of the power grid and 92% lower electrical consumption than electrical chillers.

2. Energy Efficient AHUs for improving IAQ

One of the many variables that affect a building's economics and functionality is its indoor air quality. Because it influences the building occupants' capacity to carry out their daily activities and leaves a positive or negative impression on them, good indoor air quality makes a building a more appealing place to work, learn and conduct business. Comfort, health and productivity of occupants are directly impacted by its IAQ. Poor IAQ can have serious health effects such as carbon monoxide (CO) poisoning, lung cancer from radon exposure, and legionnaires' disease (Ensavior, 2002).

The air handling unit (AHU) is a very important part of the HVAC system. The function of AHU is to control the temperature, humidity, air motion and cleanliness of the air and provide cool air inside the space. The AHU consists of a fan, cooling coil, filter, humidifier, dehumidifier and other necessary equipment to perform different functions like filter the air, circulating, cleaning, heating, dehumidifying, etc. The AHU has the capability to provide pure air inside the space and archives good IAQ for the indoor environment. There are various types of techniques that are used to provide a good IAQ. The purpose of this research is to develop an air purification system in an AHU that successfully treats and/or controls the physio-chemical and microbiological components in the entering fresh and/or recirculated air, thereby ensuring a safe and pollutant-free environment. Although photo-oxidation with UV light and TiO_2 as a photocatalyst has been used for gas-phase detoxification of organic pollutants and microbe inactivation in water, significant efforts have been made to apply it to indoor air disinfection in closed loop systems. The following are the techniques:

a) Electrostatic Precipitator: It has two principles: the dust removal principle and the sterilisation principle. In the first, a high voltage charges airborne pollutants and particles come to contact with a pre-filter that

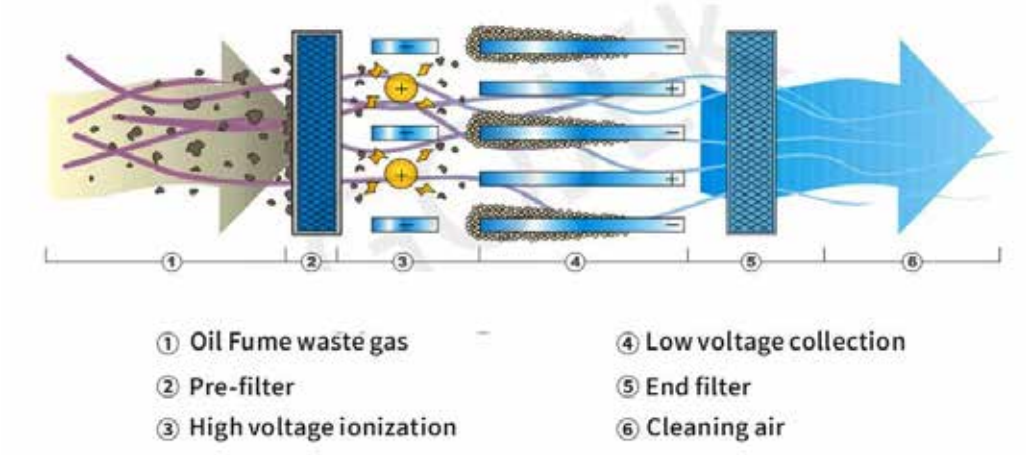

Figure 3: This figure shows the Electrostatic Precipitator Process in AHU *(Source: Adapted from Dustech, 2022)*

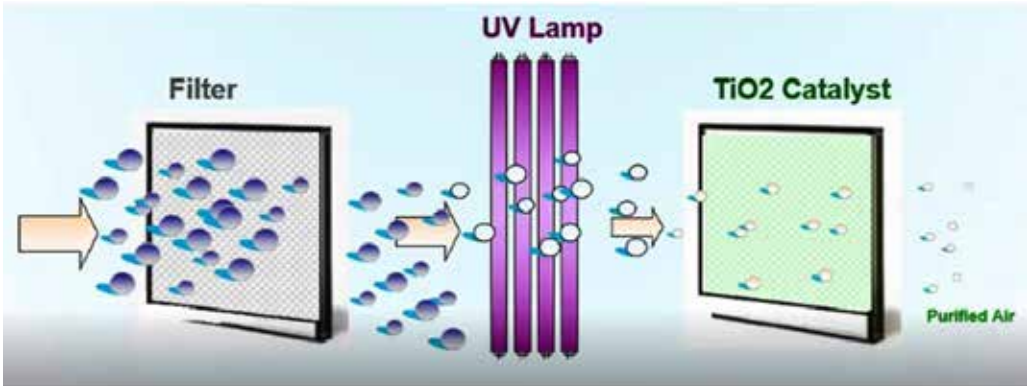

Figure 4: Oxidization process through nano TiO_2 in AHU *(Source: Adapted from Matrix Air, 2020)*

enters to the series of metal collection plates that are oppositely charged to ionized particles. The negative filter plates then attract and capture these microscopic particles. The sterilisation principle has a high voltage ionisation which produces a shock wave which causes irreversible damage to the bacteria attached to the particles to achieve the effect of sterilisation. By this mechanism, the pure air will enter the indoor spaces and achieve a good IAQ.

b) Nano TiO_2 Sterilizer: This is the part of AHU where the outside air filters through the TiO_2, causing oxidation process when the particles pass from the filter to the UV lamp, which kills the bacteria. It is mandatory to use UV lamps in all mechanical ventilation. After this the air passes through the TiO_2 catalyst and the pollutants get attached to it, and the purified air can enter into the space.

3. Thermal Comfort-Based Advanced Control

Air is regulated in buildings so that its occupants can enjoy a secure and comfortable atmosphere. Out of all the components of environmental satisfaction, thermal comfort is the most crucial one. Most heating, ventilation and air conditioning systems, however, are often simply controlled by an air-temperature set-point (Sherman, 1984). The primary environmental elements that affect human comfort are air temperature, mean radiant temperature, humidity and air speed. If HVAC systems responded to comfort levels as opposed to air-temperature levels, significant efficiency increases might be made.

There are currently commercially available wireless micro-electro-mechanical systems with semiconductor sensors for measuring typical environmental variables including temperature, humidity, light level and pressure. On the other hand, use proportional integral derivative (PID) control techniques which are effective, stable, efficient and dependable, are continued to be used in contemporary building HVAC systems (Fanger, 1970). The provision of thermal comfort for users while consuming less energy is the main objective of the HVAC sector.

A lot of work has gone into creating thermal comfort models that can be used to control HVAC systems in relation to the first component of this goal. The predicted mean vote (PMV) index accurately reflects thermal comfort evaluations, making it easier to maintain healthy and comfortable interior conditions to preserve occupants' high productivity (Guo & Zhou, 2009). Based on the PMV index, more sophisticated controllers should be created to accomplish a good trade-off between occupant comfort measurements and energy usage minimization.

In an effort to satisfy the rising demand for energy savings, it has been suggested that a neutral network (NN)-based system of thermal comfort control of HVAC be used. This is similar to the comfort index regulators control but uses more sophisticated functions in place of simple on/off control or conventional PID control (Liang & Du, 2005). According to this approach, the PMV values of the traditional temperature control can

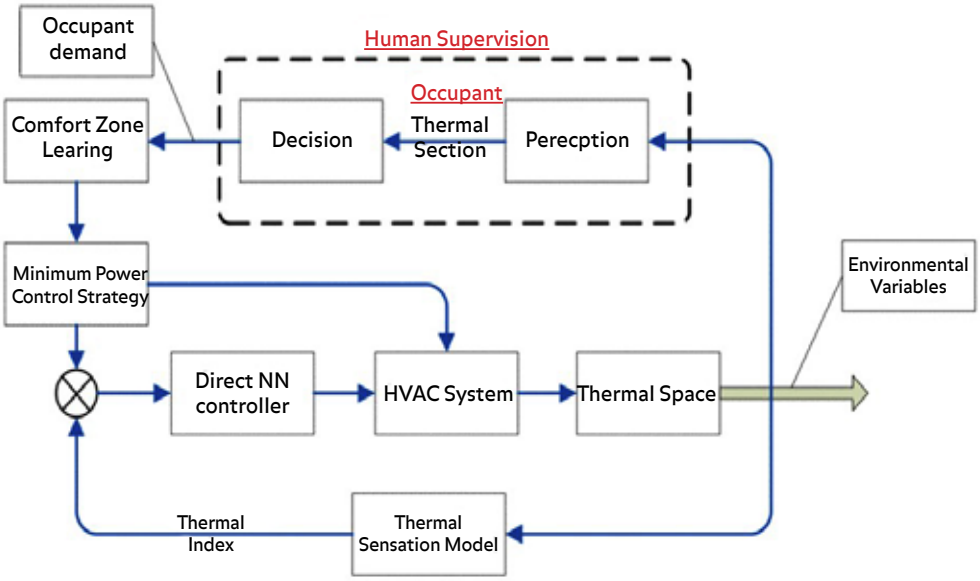

Figure 5: The figure shows the Neural Network-based control for HVAC system *(Source Adapted from Guo & Zhou, 2009.)*

vary between (-0.5, 0.5) in the presence of ambient disturbance. As a result, this novel approach might help one reach a better degree of comfort. But there are still certain restrictions (Guo & Zhou, 2009). The Fanger model incorporates human activity and clothing insulation, as was previously mentioned. These two distinct dependent variables are now designated as a season constant because they are not measurable. Because of this, their strategy can be enhanced by directly measuring and utilising sensor data. As a result, this novel approach might help one reach a better degree of comfort. But there are still certain restrictions. The Fanger model incorporates human activity and clothing insulation, as was previously mentioned. These two distinct dependent variables are now designated as a season constant because they are not measurable. Because of this, their strategy can be enhanced by directly measuring and utilising sensor data (ibid.)

The main purpose of the controller can be summed up as follows as compared to the earlier comfort controllers (Liang & Du, 2005):

i) The user's input command is learned to establish the comfort zone according to the preferences of that particular user.
ii) The non-linear PMV calculation feature is overcome and control performance is improved using a direct NN controller based on a back-propagation method.
iii) An energy-saving approach and variable air volume (VAV) control are combined to create the minimum-power control technique, which increases system effectiveness.

CONCLUSION

In today's world, HVAC is the most useful system in commercial buildings. It should be energy efficient in order to utilise less power. For this, we can employ vapour absorption chillers, which are energy efficient. Vapour absorption chillers with environmentally-friendly refrigerants will improve the efficiency of the HVAC system. So, if we employ efficient HVAC components, we can save energy while avoiding the release of CFC emissions. The primary function of the HVAC is to ensure thermal comfort and appropriate indoor air quality. The AHU has filters that may include an electrostatic precipitator and a nano TiO_2 sterilizer which can aid in supplying pure air to the areas. Similarly, the HVAC system is in charge of thermal comfort by employing NN controllers, which improves system efficacy and indoor air quality. The system design can incorporate other real-time environmental data, such as temperature, air velocity, humidity and human activity level. It offers inhabitants a high level of comfort while significantly reducing energy consumption. To realise this vision, it is obvious that research and development in this direction are required.

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Ar. Baishali Pradhan has a Master's degree in Building Services. She has been practising and freelancing for two years and teaching for over four years. She is currently Assistant Professor at the School of Architecture, REVA University.

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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.

Please note:

❶ When you correspond with us, please give your email id (that you regularly use) and your cell no. (preferably with whattsapp).
❷ Please mention your IIA regn. No.
❸ The review process takes anywhere between 4-6 weeks. Since it may not be possible to respond to all authors who send in their work, we will definitely revert if and when your work is accepted.
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- For design projects, plans and sections of the project are desirable along with the photographs.
- Book reviews should be only of books by Indian authors. please include the "Fact File" with the following details : book title, author name, publisher, year of publication, ISBN, language the book is written in, genre (technical/ fiction/ etc.), no of pages, dimensions (in cm), type (Kindle / paperback/ hardback), available at (amazon.in/ flipkart.com/ others).
- Please send a write-up of about 200-300 words along with sketches and photo-essays.
- 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.

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

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Research papers (2000-5000 words) in the prescribed format. The research may be based on their ongoing or completed research. (Format 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.

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© *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.
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REINTEGRATING THE CHAWL CULTURE IN THE NEW DEVELOPMENT OF GIRGAON, MUMBAI

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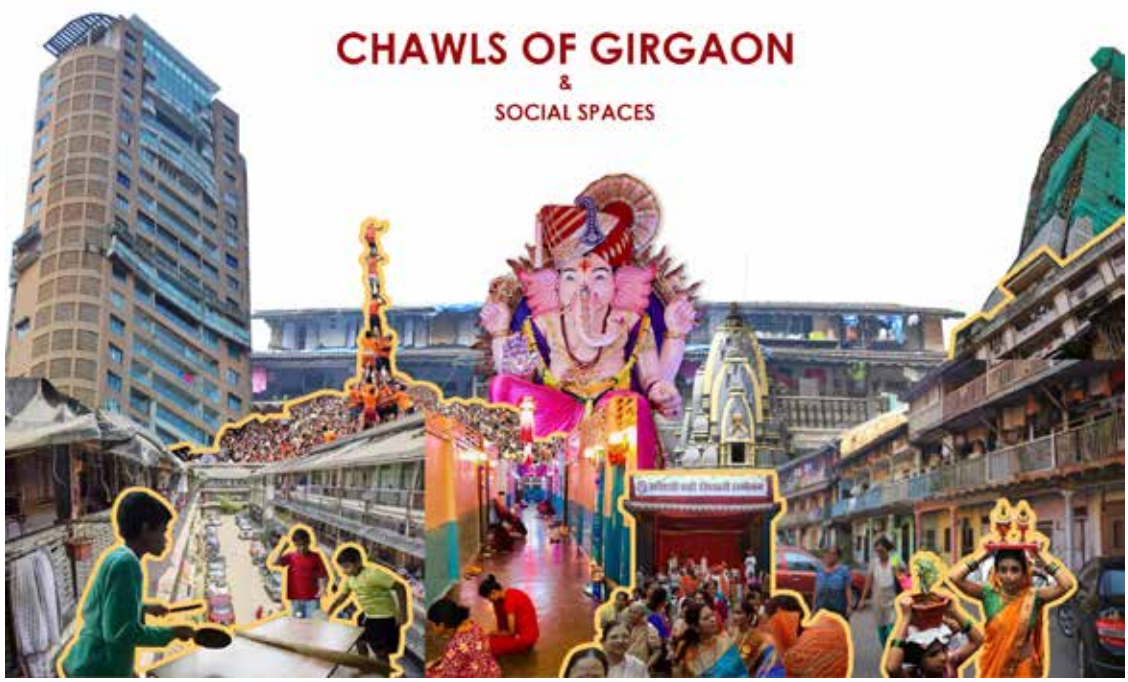

Figure 1: Chawls of Girgaon. *(Source: Author)*

ABSTRACT

Girgaon was called the 'native town' of Mumbai, during the British Colonial rule. The economic activities in the ports and the Fort precinct of Mumbai drew migrants from all over western Maharashtra. 'Chawls' in Girgaon developed as a form of social housing, to house migrants from different religious and cultural backgrounds. While staying together in the chawls, people formed a sense of community bonding owing to their spatial character. This bond is still seen today in chawls that have survived the test of time, but is broken when they are redeveloped and people are forced to stay in the new 'isolated flat' system.

This dissertation analyzed the 'chawl culture' of Girgaon through architectural lenses to attempt solutions to reintegrate the 'social spaces' into a new model of redevelopment, that sustains the chawl culture as well as addresses the pressing needs of today.

Keywords: *Girgaon, Chawl, Social Housing, Chawl Culture, Social Spaces, Redevelopment*

1. Introduction

1.1. The Chawls of Girgaon and their Culture.

The 'chawl' as an architectural form can be described as one in which the boundaries between private and public spaces are blurred, and in which social spaces are as significant as private ones. Chawls are typically urban because they are multi-storeyed. Yet, they incorporate features of village life in the urban setting of Mumbai. A chawl consists of single-room tenements accessed by common corridors and shared toilets. A group of chawls, arranged around social spaces is called a 'wadi'.

Many chawls in Girgaon, arranged around a common courtyard, have their tenements arranged along a common gallery. The gallery and the courtyard are the locations where socializing among residents takes place throughout the day. This type of built environment fosters a distinct way of communal living that is characterized by open doors, close relations among residents and a distinct lack of privacy, especially in comparison to high-rise apartment towers (Holwitt, 2021).

Today, high-rises are replacing the chawls in Girgaon. Owing to the developments in construction technology, changing lifestyle requirements and mindset of people. But, since these towers attempt at accommodating a maximum number of people, by going vertical and reducing the footprint. The main focus is accumulating maximum profits, while the connection of residents with each other is lost, as the multiple levels of interactive social spaces present in the chawls are no longer seen.

1.2 Aim and objectives of the study

The aim of this study is to analyze the chawls of Girgaon and draw out strategies for reintegrating their social spaces into a new form of development keeping in mind the current trends of redevelopment. The exploration attempts at satisfying the retention of culture as well as the aspirations of people.

2. Literature Review

Girgaon chawls support a unique cultural system. According to residents, the fact that anybody and everybody living in the chawl is part of a 'one big family, is something that provides security and satisfaction to the residents. People look after each other. Togetherness spreads across religions, where people share ideas, worldviews, food, rituals amongst each other, due to the social spaces present.

Figure 2: Map of Girgaon Area, with its urban context. *(Source: Author)*

Figure 3: Ambewadi Chawl. *(Source: Author)*

Figure 4: Kshatriya Niwas. *(Source: Author)*

Today, a number of circumstances have contributed to the slow unmaking of Girgaon's chawls. These are:

- Younger residents who want to live in 'respectable' homes than in chawls, and pressurize their parents to shift to an isolated flat system of living.
- Legal arrangements like Rent Control Act, 1976 and the Chawl Redevelopment Scheme.
- Weather conditions like Mumbai's annually recurring monsoon rains, ageing building materials of chawls and State authorities that exhibit neglect towards investing in the preservation of chawls.

3. Methodology

For this study, the chawl culture of Girgaon was defined in terms of spatial connotations as:

The manifestation of social interaction, community bonding and a feeling of togetherness between middle-class residents, brought about by 'common social spaces' that are public, semi-public and private in nature and the see-through sort-of built form of the chawls.

The methodology used to conduct the study had observation as the main approaches, to look at Girgaon and learn from its chawls. The remaining chawls that have survived the test of time and fall within the delineated boundary of Girgaon were mapped.

3.1 Typologies of Chawls in Girgaon

One can generalize that the chawl type in Girgaon is essentially a set of rooms with a corridor, architecturally, this type comes in several different configurations. With each configuration, there is a corresponding spatial arrangement and a newer possibility for life to unfold, as seen in figures 5 & 6 (Gupte, 2018).

3.2 Chawl Culture and Social Spaces

The case of Datta Mandir Wadi was selected, in order to understand its morphology, imageable elements and understand the role of social spaces in facilitating conversation, play and celebration between different age groups of residents. This also included looking at the daily activities performed by different age and gender groups during the day. The activity chart helped in analyzing the indoor and outdoor activities, with focus being on the outdoor ones, as these are the activities performed in social spaces.

3.3 Case studies for integration of Social Spaces

Another approach was examining case-studies of architectural projects that showcased an understanding of social spaces, integrated into the built form. For each of these case studies, their information, images and drawings were collated and area programmes were analyzed. These were:

- Tara Apartments, Alaknanda, New Delhi by Ar. Charles Correa Associates, 1978.
- Via Verde, Bronx, New York City by Grimshaw Architects, 2012.
- Dadamaharaj Heights, Girgaon, Mumbai by Vastudeep Developers, Ongoing.

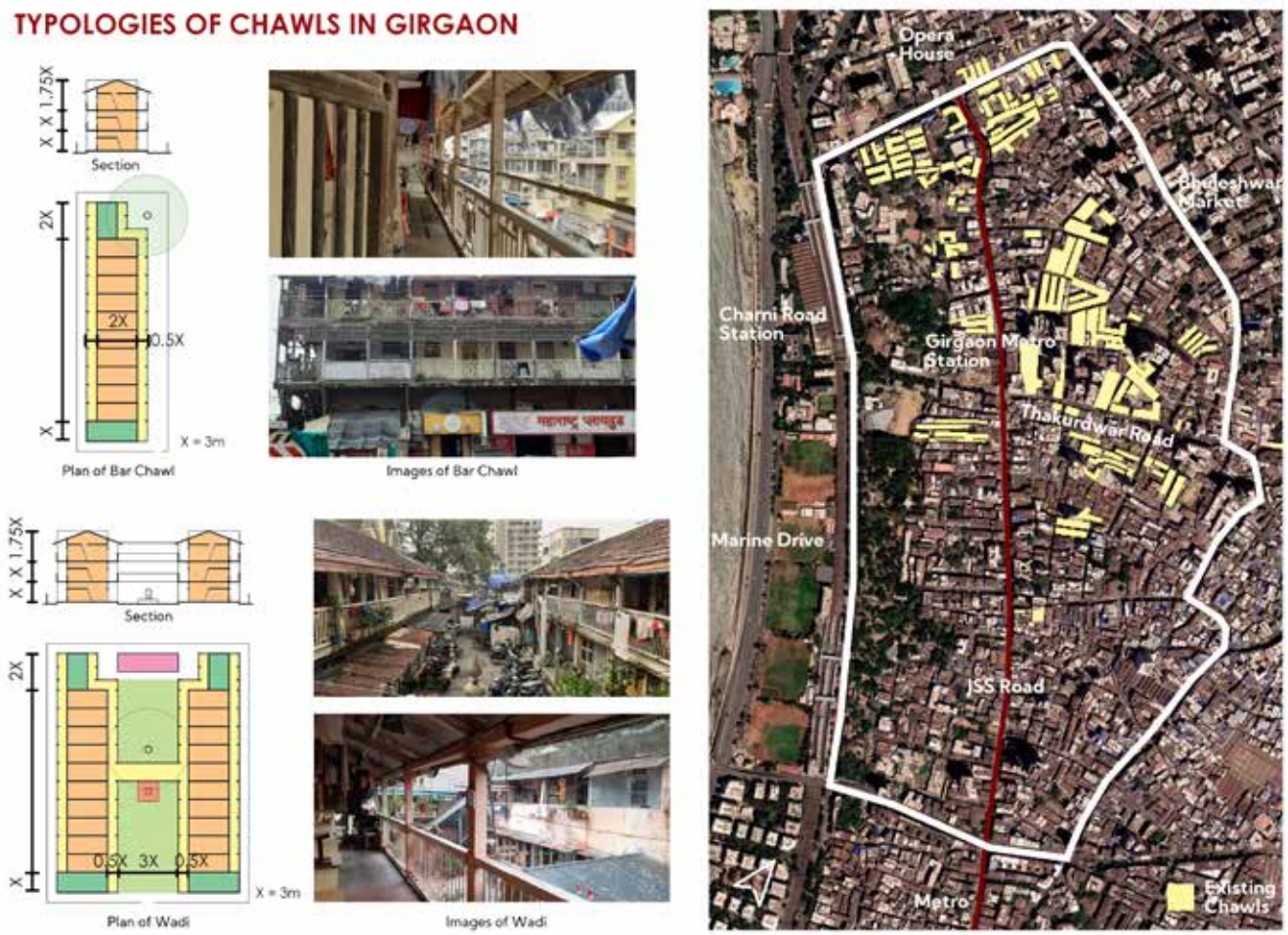

Figure 5: Typologies of chawls in Girgaon. *(Source: Author)*

Figure 6: Chawl culture and social spaces. *(Source: Author)*

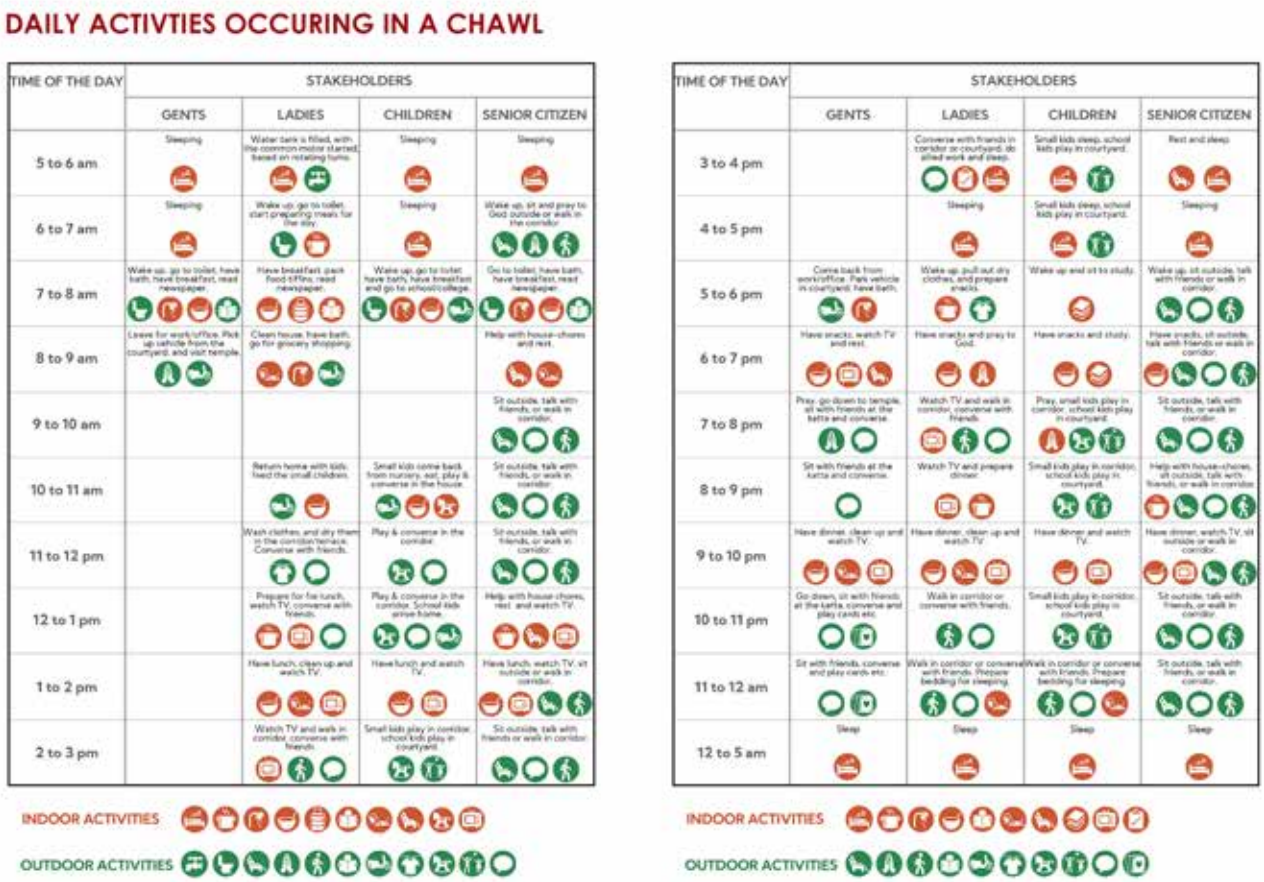

Figure 7: Daily activities occurring in a chawl. *(Source: Author)*

4. Discussion and Results

Based on the findings, the design intent was formulated and applied to the chosen site:

1. Design and integrate social spaces that rejuvenate the lifestyle of the Girgaon chawl residents.
2. Design public, semi-public, semi-private social spaces to boost interaction to the lowest level while still maintaining the privacy requirements in today's times.
3. Allow people of all age groups to utilize them, and have a sense of security, with eyes on such spaces continuously.
4. Allow social celebrations to occur in spaces and a commercial aspect to be attached to them for their maintenance.

4.1 Architectural Programme Development based on Site

The programme was derived based on the chosen site's metrics with two major stakeholders: existing residents and future sale-flat owners. As the project would be of a self-redevelopment model, incentive areas were calculated and a portion of the incentive areas would be dedicated to the design of social spaces within the built-form. The intention of this would not only be to improve liveability and retain culture but also attract good returns to the existing dwellers on the sale flats generated through the process. The proportionate distribution of the built form would be as follows:

- 45 % : residential areas
- 30 % : social spaces
- 15 % : utility spaces
- 10 % : circulation areas

4.2 Architectural Exploration

The interventions made in terms of social spaces would include those from individual flats, lobbies, floor areas, the building level and ultimately the housing complex level, extending to the community in turn.

Figure 8: Selected site: Jitekar Wadi. *(Source: Author)*

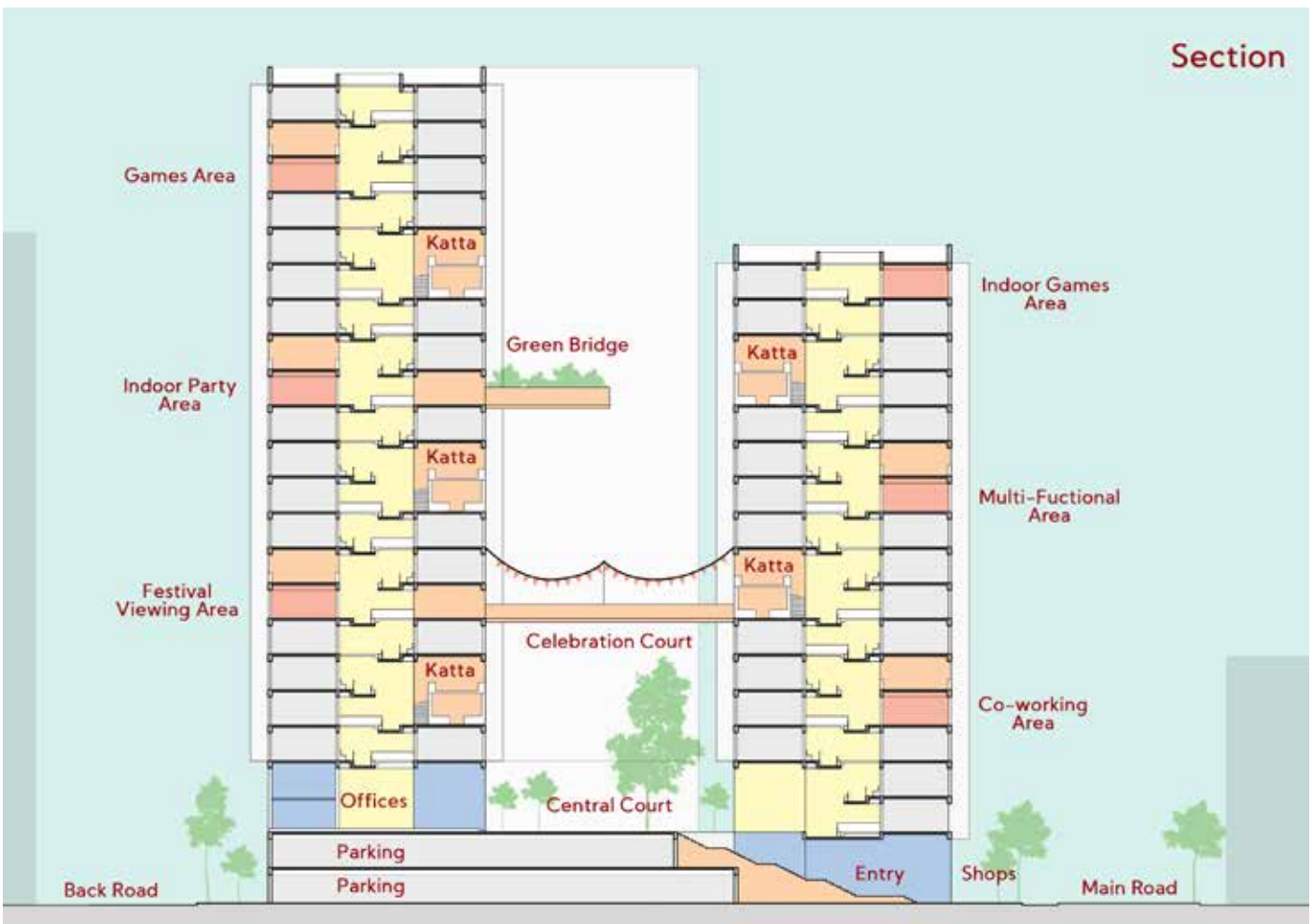

Figure 9: Design ideas for social spaces. *(Source: Author)*

Figure 10: Design interventions in terms of social spaces. *(Source: Author)*

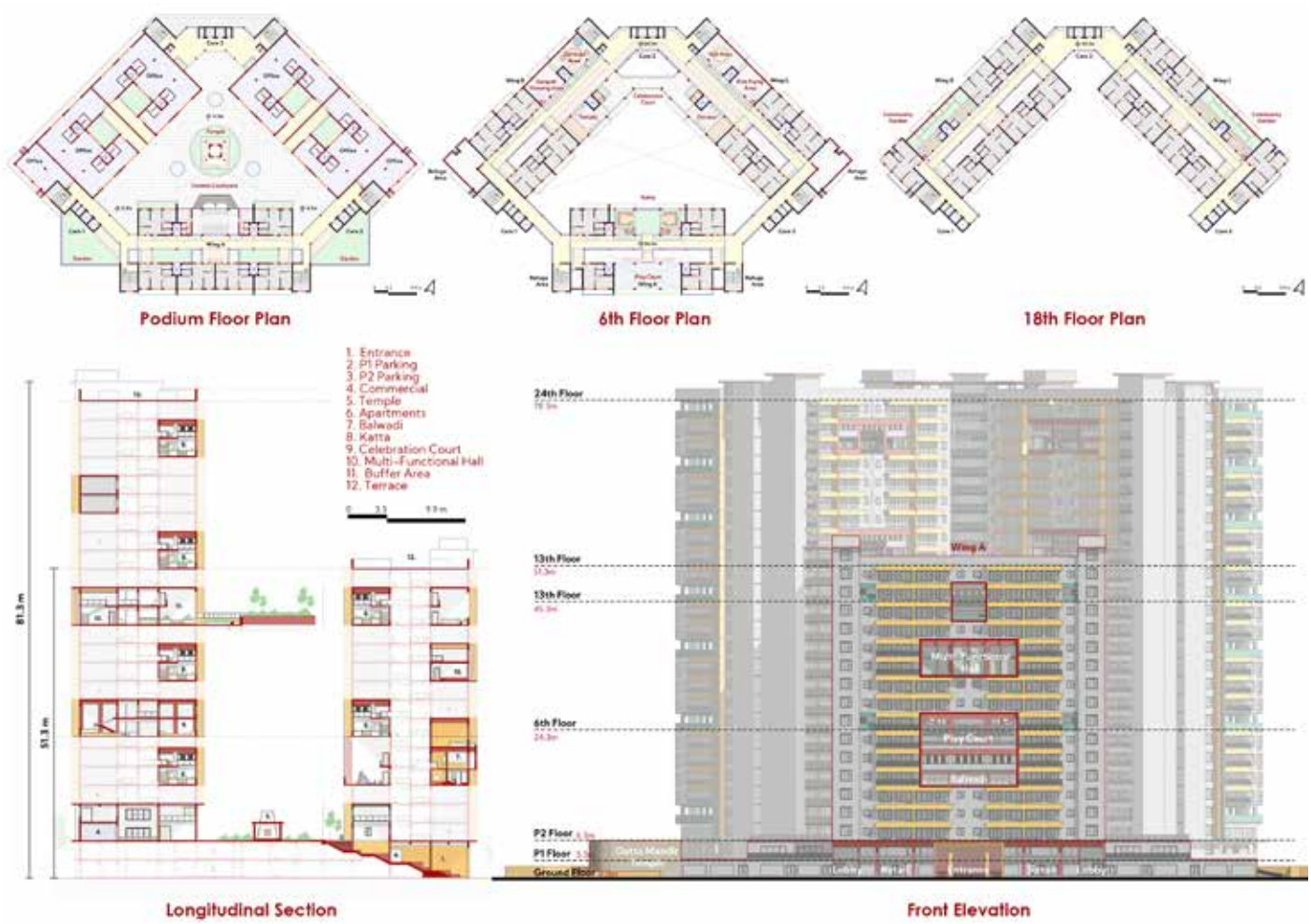

Figure 11: Coming together of the built-form. *(Source: Author)*

Social spaces would be used to connect multiple floor levels together. Major social spaces like the celebration court and the green bridge, would be zoned on a vertical difference of seven floors, an interval typically used for placing refugee areas in modern buildings. These major spaces would be used for celebration activities by the community like Ganeshostav, Holi, Garba, and others, with small temples designed within these areas. The minor spaces could be used for functions such as katta (parapet-seating), bal-wadis, yoga and gym areas, multi-functional halls, gardening and farming areas. While the verticality of the project would be inevitable owing to FAR regulations, the porousness in the built form would be brought about by these social spaces, that would allow people to come together and interact with each other.

5. Conclusion and Recommendations

The outcomes of this dissertation include finding a practical way of building, that encompasses culture, aspirations, financial as well economical aspects, giving a holistic solution to the problem of diminishing chawl culture in the built form constructed today, in Girgaon. The idea can be taken forward by pitching it to developers and interested parties, in order to benefit both the residents as well as the developers with their individual gains.

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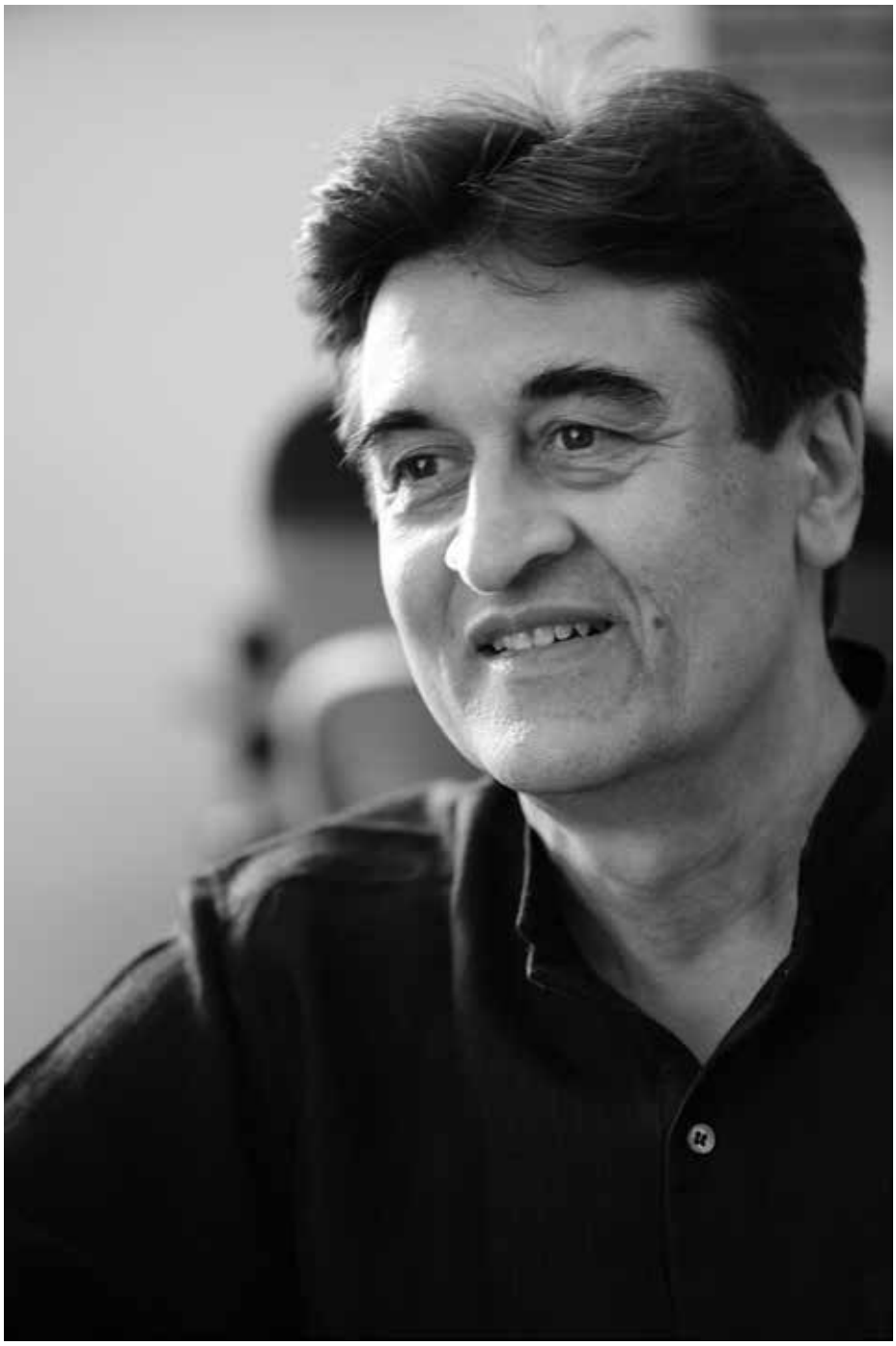
Ar. Mihir Vaidya graduated from IES College of Architecture, Mumbai in 2022. He is currently pursuing his Master's in Urban Design at SPA Delhi. His core interests lie in urban related issues, something he feels, has developed because of the setting he has been brought up in. Mumbai's multi-faceted architecture and urban fabric have always fascinated him. This article is a summary of his final year thesis journey that began as a dweller in a chawl to an architect, trying to reintegrate the social essence of a chawl into a new form of development.

Prof. Vinit Mirkar is the Principal at IES College of Architecture, Mumbai. He graduated from Academy of Architecture in 1996 and has worked for various architectural and interior projects for the last 23 years pan-India. He is currently pursuing PhD in architecture at the Jamia Millia Islamia University, Delhi. He has published several papers and conducted workshops and lectures on research in various architectural institutions. He has been appointed as Member of Board of Studies at the MGM University, Aurangabad, Dr. BAMU, Aurangabad, and Dr. BATU, Lonere. Fellow of IIA, he is an Executive Committee Member, Brihan Mumbai Centre of IIA. He is also a member of the Board of Examination and Education, IIA and of the Board of Reviewers of the Journal of IIA.

DIALOGUE WITH AR. KAMAL MALIK

Ar. Brijesh Saijal talks to Ar Kamal Malik on, the influence of nature in his designs, his popular design-Houses of three streams, the evolution of his career, the use of exposed natural materials, his message to young Architects etc



Ar. Kamal Malik Founder and principal architect of Malik Architecture, Kamal Malik was born and raised in Shimla in the pristine environs of the Himalayas; even today, nature remains the source of his inspiration. He completed his architectural studies at the School of Planning and Architecture (SPA) in New Delhi.

With over 35 years of experience, the firm continues to strive to develop a contemporary design syntax approaching Architecture as a synthesis of 'Ecology' and 'Spirit'. Ecology speaks of a seamless, cohesive and integrated approach to design. Spirit implies balance, understanding and tranquility.
ekam@malikarchitecture.com

ON ARCHITECTURE..

Architecture is not about structures: it is about 'LIFE'. And to understand LIFE you have to develop a deep relationship with 'NATURE' (which we are an intrinsic part of). Only then does Nature open its doors to you: to the awareness and understanding of 'Consciousness' that pervades all existence.

The planet is poised precariously and unless there is a sea change, a radical transformation not merely in the collective but the change must manifest in each one of us, in our very subjectivity, there is little hope.

The seed of Mysticism was planted in me somewhere in my childhood in the Himalayas. Perhaps it was simply being surrounded by unspoilt Nature, maybe a tryst with the sages who sometimes lived with us for extended periods

With this backdrop we generated a matrix that would reflect and be a guide to a design process that explores the complexities of a meaningful sustainability.

Lupin

Lupin

ON LEARNING ...

The word 'EDUCATION' has not been deliberately used. Education is synonymous with 'KNOWLEDGE'. It is a process of accumulation of all things borrowed.

Learning is something completely different: it is moment to moment like the flow of a river, never the same, always original, always new.

In the past, Learning was the key, opening the doors to Nature, door to the inherent uniqueness present in each one of us and finally the door to creativity that is not borrowed.

LUPIN RESEARCH PARK

The act of research and discovery is essentially an intuitive function. This complex therefore explores those elements, that to my mind, foster and inspire intuitive thought, which is the core of the creative process.

Nature has therefore become the nucleus both at the micro and the macro levels and serves as a backdrop for two almost paradoxical elements: eastern philosophy and western technology.

The inspiration for the complex is the timeless 'mandala' with the administration complex representing the head (at the highest point of the hill) and the main research park flowing south to north, wrapped around a central courtyard.

ON TIME & SPACE

Time does not consist as ordinarily conceived of three tenses of past, present and future. Time consists only of two tenses past and future. The present is not part of time; the present is beyond time.

CANCER CENTER, JAIPUR

This project gave me an opportunity for introspection. On one hand, the observatory of Jai Singh, a brilliant set of devices to measure physical time, at that juncture the Hubble telescope was being used to look further into physical space and finally the subject at hand : Cancer: bringing into sharp focus the finite nature of all manifestations.

Somewhere these multiple lines began to cross intertwine. We are an intrinsic part of Nature of consciousness : The age old adage from the Upanishads: 'TATTVA MA SI' meaning 'thou art that'.

In this simple awareness of realisation lies our freedom and consequent creativity.

Cancer Center

Cancer Center

Cancer Center

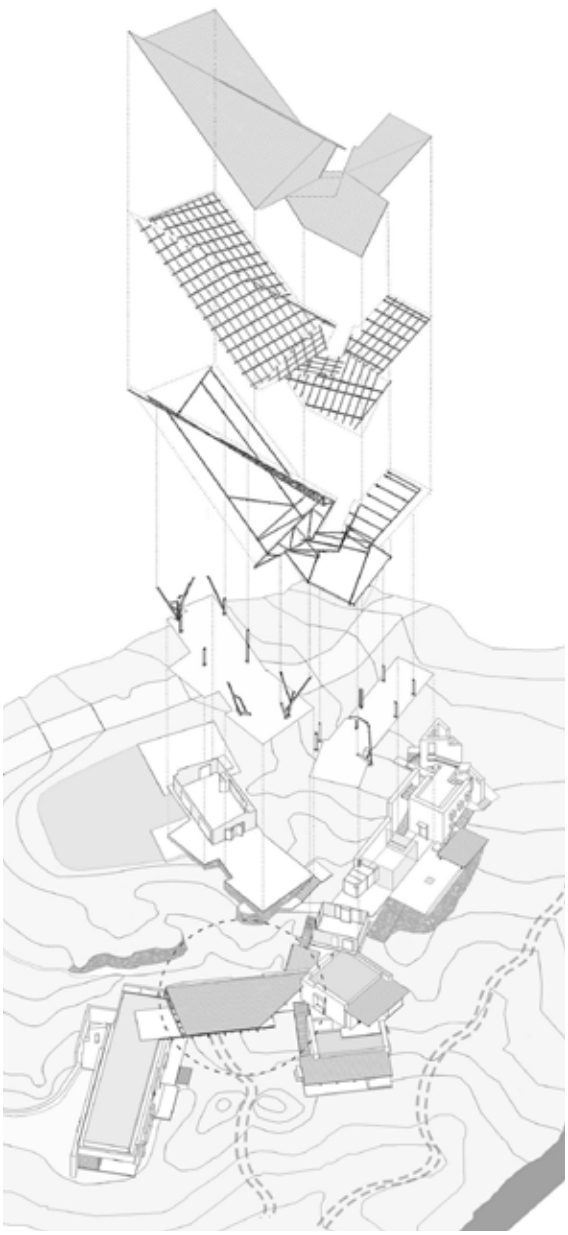
IN CONVERSATION WITH THE FOREST... SELF HABITAT AT TUNGI

The topography of the land, the material memory of the surrounding forts, the light of the forest, and the deep-water discharging ravines have created a dominant palimpsest of contextual parameters onto which the house has been woven. As a home for 4 generations, it behaves like a condensed village, allowing for private and communal life. The massive load-bearing " Fort" wall that traces the ridge between two ravines anchors the house, from where lightweight pavilions flow outwards to occupy natural clearings within the forest.

Paraphrasing Peter Rich, **"This is Building as Landscape- Landscape as Building."**

Tungi

Tungi



SITE AXO 1.6

Tungi

ON MATERIALITY :

Emphasis on the use of local materials , coupled with the introduction of the local artisan, provide sound base for passive & sustainability plus an initiative to keeps the crafts tradition alive.

Stone

Wood

Rammed Earth

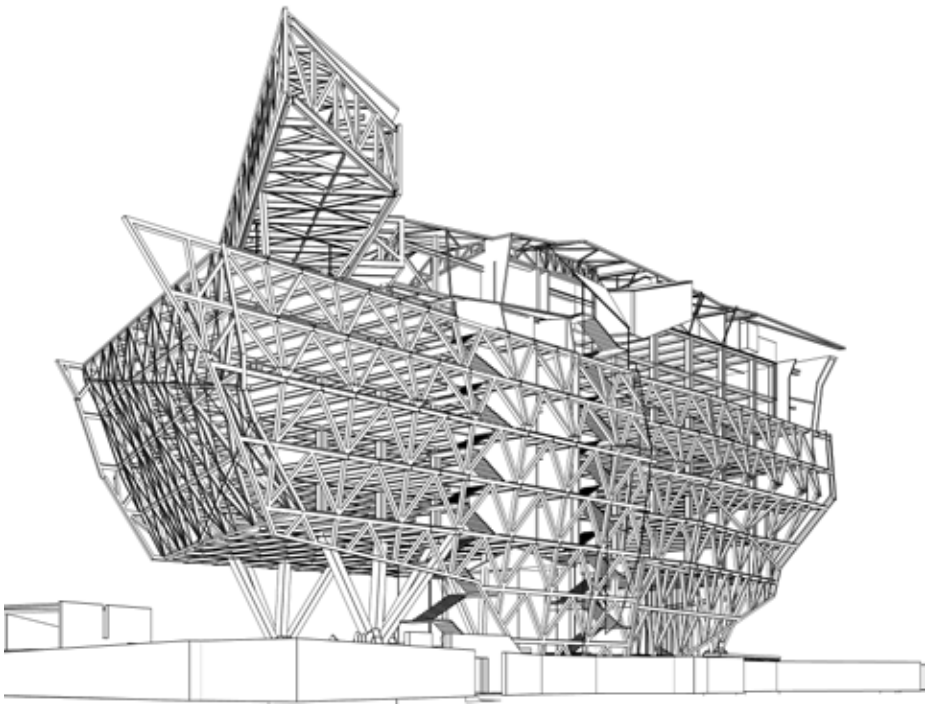
Brick

ON GRAVITY

The importance of understanding structural behavior is something that is being lost amongst architects and perhaps it is the educational foundation itself which is flawed.

Architects have come to assume that they are the creators and someone else will address the structural aspects .

It is only a synthesis of the architect/ engineer team right from the concept stage that can result in an architecture that does not draw a line between the roles of the architect and the engineer and in fact encourages both to understand and learn from each other's strength.



GMS Grand Palladium

GMS Grand Palladium

TO THE YOUNG GENERATION...

Become more
AWARE, more MINDFUL, more CONCENTRATED and single pointed (EKAGRATA).

With all the distractions of media , the net , this is vital if you are to be creative . also , you cannot understand the depth of the ocean merely watching the waves .: you will have to dive deep.

Ar. Brijesh Saijal graduated Bachelor of Architecture from BLDEA's V P Dr PG Halakatti College of Engineering & Technology. He established Design Ashram, a multidisciplinary Architectural firm along with Nimisha Hakkim and has carved out a niche for themselves in the field of Architecture. Established in 2005, the firm deals with a wide variety of projects that incorporate heritage conservation and adaptive reuse, to urban design projects. Ar. Brijesh, upped the notch on his passion for travel through World Architecture Travel, a curated Architecture and travel experience, being the organization's co-founder and director. He is also a National Council Member for IIA and also the Young Architects Committee chairman.

MEETING THE MASTER MICHAEL GRAVES

(9 July 1934 - 12 March 2015)

Ar. G. Srinivas Murthy

The Author showing his works and sketches to the master, with Ben Wintner, Chief Executive Officer for Michael Graves Design
(Source: Author)

Signed sketch by Michael Graves for the Author *(Source: Author)*

Architecture is not all about the design of the building and nothing else, it is also about the cultural setting and the ambience, the whole affair.
Ar. Michael Graves

My association with Michael Graves was, predominantly that of a fan, follower, admirer and probably a bit of Eklavya, the mythical student character and young tribal prince from the epic *Mahabharatam.*

I was introduced to his style of architecture probably in my college days at SPA, New Delhi. It was many years later, in 2000, that I started following him. It was due to a visit by Ar. Satish Grover, known for his books on the history of architecture, to one of my projects in Visakhapatnam. It was a small spiritual centre on top of a hill, overlooking the Bay of Bengal. After inspecting the project thoroughly, as a very strict guru would do, assessing to see whether his student had really learnt well, he told me two things, which in many ways, established some of the core principles of my practice. The first being that I was, so early on in one's career, indeed very lucky to have got a break to do such a project in a small city like Visakhapatnam away from the big metropolis of Delhi, where competition for a young architect was so tough. Second, that my style of sketching and architecture was so much like Michael Graves and that I should check his works out. It was the second observation that really caught my attention.

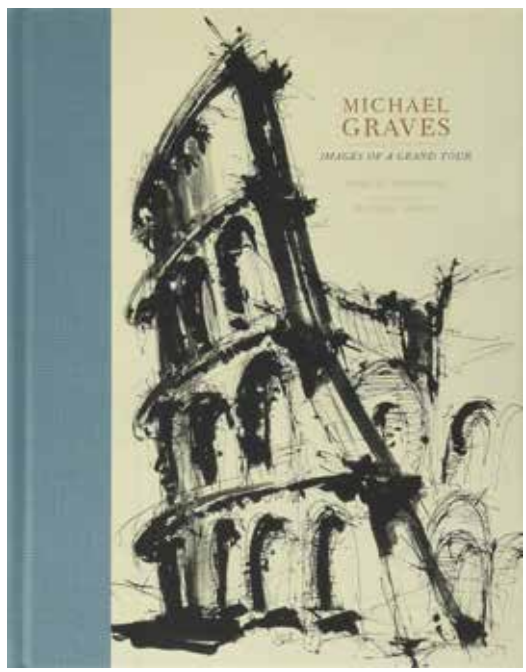
In the late nineties, access to the internet being rare, I headed to my college library, looking for Michael Graves' works, only to find some striking similarities of some typical architectural elements between the master and his new follower in India. Since then I started following his works and writings wherever I could lay my hands on them, till the invention of the internet as an active and integral part of our lifestyle. On every visit of mine to the United states, I would try and visit his projects and I was becoming his fan, unawares. My several visits to the Metropolitan Museum in New York ended in the souvenir shop buying watches and products exclusively designed by Michael Graves. One watch with a crimson dial was my favourite and was always on my wrist, during those several visits to Princeton, with the hope of meeting him someday. Now, I could say that I was well informed about him as an architect, product designer, thinker, prolific artiste and a painter. Meeting him in person happened much later, after many years and several visits to his studio at the corner of Nassau Street and Harrison Street in Princeton. The visits were always limited upto the small reception lobby and ended without getting to meet the Master. This would result in yet another very interesting aspect of my memories of him.

I have always been an ardent collector of paintings. During every visit to Michael's studio, I would look at all the sketches, pictures and paintings that adorned the walls. I could see in Michael Graves an inspiring personality, who believed and practiced that an architect's life is that of creative existence without any borders. His medium of expression could not be restricted only to buildings but extended to writings, designing graphics, furniture, products and paintings and some philanthropic activities as well. As he would say, "Architecture is not all about the design of the building and nothing else, it is also about the cultural setting and the ambience, the whole affair." My transformation into being his ardent follower was now complete and I started dreaming of the meeting of Eklavya and the Guru Drona.

With my own interest in collecting paintings, I once enquired about the availability of his paintings and soon found that they were far too expensive and beyond my affordability. My wish to have even the smallest of his paintings remains a dream even today.

Finally, the day came when I would meet him. A meeting with him materialised through an associate of his, Ms Vinita, an architect of Indian origin and to my pleasant surprise, an alumna of my alma mater, though many years senior to me. It was a bright Monday morning in the month of July 2012. All through the drive to Michael's office, I was excited,

One of the many paintings by Michael Graves *(Source: Office of MGAD)*



Cover page of Michael Graves: Images of a Grand Tour, his book of sketches *(Source: Author)*

nervous and at the same time, preparing myself . . . what should I say first to him . . . how should I greet him . . . should I shake hands with him or just do a simple Indian traditional *namaste.* I was ushered into his room and asked to wait. I could feel the energy flowing coupled with the anticipation of the meeting, his creations- the miniatures of his designs on the shelves, the paintings and sketches on the walls were already doing the talking. And then Michael arrived with a big smile and greeted me with a "Hello Mr. Murthy " in a typical American accent, in his electric wheelchair, which had become a common accessory during his last years.

Our hour-long conversation covered all the relevant topics of the time and he went on to share some details of his experience of interacting with some prospective clients in India. He was very particularly impressed with the rich architectural heritage of India and wished that Indian architects prioritised their architectural styles as a continuum of this great lineage which was so intrinsically related to the crafts of India. Michael himself was a great advocate of this approach, as in his early days, he had undertaken a study tour of Italy and Europe, and was deeply influenced by the classical and the vernacular architecture of the region.

This stayed with him for a long time and he became a strong advocate of exploring and promoting native architectural styles in many ways. He became part of the group of five architects, who initiated modernist design ideas primarily advocating that history need not be a burden to be carried in the form of representational historicist imagery and ornamentation but be integrated in exploring the spatial and geometric complexity. He believed that what can make a domestic setting truly 'home' is the infusion of a cultural dimension. He wished that this logic extended itself to all types of architectural projects. Graves switched philosophies after he became increasingly interested in more figurative, historically referential architecture. He sought to replace abstract metaphors with easy-to-read metaphors, a move toward 'narrative' design. And through his numerous projects, he established himself a master of postmodernism. His friend and collaborator in the prime years of Postmodernism, Charles Jencks said, "Graves could pull together ideas with his FreeStyle Classicism, his line drawings, watercolours and paintings. These were sometimes the equal of Le Corbusier, a tradition of graphic work that is still very rare among successful architects."

Michael Graves became popular as a member of The New York Five, also sometimes known as the 'The Whites' after a book titled Five Architects featuring works of five New York based architects Peter Eisenman, Michael Graves, Charles Gwathmey, John Hejduk and Richard Meier was published in 1972. This group of architects were invited by Arthur Drexler, then-Director of the Department of Architecture and Design at Museum of Modern Arts, New York under the aegis of the *Committee of Architects for the Study of the Environment* (CASE). At that time, they all had committed to exploring modernist architectural style of the early 20th century European architects like Le Corbusier. Ar. Philip Johnson, who later contributed a postscript to the book, called these five architects as 'The Whites' because of colour white being used predominantly by all the five in their projects. Michael Graves' works, as part of the New York Five has been characterized by architectural historians as an important contribution in the evolution of postmodernism and critiques of modernism.

Denver Central Library, South Facade, 1993. Graphite and coloured pencil on tracing paper *(Source: Office of MGAD)*

By the late 1980s, Graves had become a star architect endorsing shoes, crafting furniture and designing everything from teapots and bookends to carpets and clocks. His *Portland Building* in Oregon, completed in 1982, stands as the seminal work of the postmodern movement. It was unlike anything that had gone before, taking classical elements and flattening them into appliqued decoration in a bold graphical manner. Examples of Graves's Modernist sensibilities are evident in the *Hanselmann House* (1967–71) in Fort Wayne, Indiana, and the addition to the *Benacerraf House* (1969) in Princeton, New Jersey.

Continuing his exploration in product design, the 'whistling bird' kettle for Alessi, became one of his most popular product till date and has sold more than two million pieces across the world. Michael designed more than 2000 consumer products, from colanders for Target to coffee-makers for JC Penney and a vegetable brush for Marks & Spencer, bringing design to the mass market in a way his modernist Bauhaus forebears had only dreamed of. Michael had said "The Alessi relationship and one with the Target has broadened the role of architects in society and broadened the concept that design belongs to everyone."

The postmodern American architect Michael Graves, who died aged 80, injected more childlike exuberance into his buildings and product designs than any of his contemporaries and produced some of the most decisive works of the period as a result. Michael's works surely have left an enormous and lasting influence on design culture in the American subcontinent and maybe even beyond. It may be fair to say that Graves is the only American architect who developed and gave a meaningful expression of the American vernacular in large-scale buildings.

In 2014, Kean University established a new architecture school based on the design philosophy of Michael Graves. Following the footsteps of a man who was very critical of the 'loss of drawing' the *Michael Graves School of Architecture* prioritizes hand-drawings as a key to the design process. In our technologically savvy world, to this day, Michael Graves' philosophy is to draw by hand first so that the students 'see, feel' and experience' the new building spatially. Only after the drawing is complete would the students transfer the design to a computer so that the machine computer becomes 'an execution tool, not an ideation tool' describes David Mohney, the Acting Dean of the *Michael Graves School of Architecture* and former student of Graves.

In 2003 Graves came down with a sinus infection that developed into an infection of the spinal cord and left him paralyzed below the waist. While recovering in a hospital, Graves quickly realized the deficiencies of the room's design, which did not address the needs of the wheelchair-bound individual. So he started redesigning the recovery rooms and related objects within, such as wheelchairs, walking canes, and bathtub grab bars to make them more functional, more comfortable and more attractive.

His significant contributions to architecture and design were recognized many times. His most notable accolades are the *National Medal of Arts* (1999), the highest award of the *American Institute of Architects -Gold Medal* (2001), and the *Richard H. Driehaus Prize* for Classical Architecture (2012) for his contribution to "classical and traditional architecture in the modern world." He was trustee of the *American Academy* in Rome and was the President of its *Society of Fellows* from 1980 to 1984.

Hotel at the site of Sardar Patel Statue of Unity project *(Source: Office of MGAD)*

Sardar Patel, the Statue of Unity Project, Gujarat *(Source: Office of MGAD)*

Coming back to my meeting with him, he enquired why I was so interested in meeting him. I narrated my years of following him and desire to meet him. And like a true student, following my deeply rooted Indian cultural ethos, I did not make the first move to show him my works and especially the sketches, for the fear of both - self-boasting and of being rejected outright. Once Michael insisted on seeing them, I was super-excited and elated. My joy saw no bounds when he agreed that indeed my style of design and sketches were very similar to his. I felt, I had reached the skies. My interaction with him ended with him gifting me a signed book of his sketches *Michael Graves: Images of a Grand Tour* from his Europe tour. And then the unexpected happened. Back in my hotel room, later in the day, I opened the book only to find that the first page of the book had a sketch specially drawn for me and signed by Michael. I had earned my long-cherished dream of having a painting of his. And there it was, my own Michael Graves original work of art, with me.

He gave me my 'Pritzker Prize'.

Michael Graves' office was associated with the *Sardar Patel- Statue of Unity* project in Gujarat, probably the only built project in India. Some of the other unbuilt projects include *ITC Pattigadda,* Hyderabad (mixed-use hospitality, residential, retail, offices), *ITC Kohinoor,* Hyderabad (mixed-use hospitality, residential), *Statue Circle Competition,* Jaipur (luxury residences and club), *Svadeshi Mills,* Mumbai (mixed-use hospitality, residential, office, commercial, retail).

Acknowledgements

The Author thanks Ben Wintner, Chief Executive Officer for *Michael Graves Design,* Dodie Colavecchio- Communications & Business Development Manager, Ms Vinita Kapur, Mani Akella and Priyamvada Gannavarapu.

Ar. G. Srinivas Murthy is an urbanist and an academician, and alumnus of School of Planning and Architecture, New Delhi (1991). His practice *SMG Design Inc.* in Hyderabad undertakes projects across the world in hospitality, institutional and educational, healthcare Services, eco-tourism, museum design and master planning and urban design of large scale townships and campuses. He has served on the Board of Association of Architecture Organisation, Chicago, USA as the Founding Board Member since its inception in 2009. He is the Founder and President of *Architecture and Design Foundation,* India.
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GoodEarth

Ar. Jayakumar Soman, Ar. Natasha Iype & Ar. Jeeth Iype

Confluence Club

GoodEarth is a multi-disciplinary company whose ethos stems from sustainability, harmony and combating climate change. We work across an array of ventures that touch the grass roots of development spanning agro-ecological farming, water management, organic retail, design and development of communities; design for enterprises and institutions; interior design & landscaping, and much more. All under a single umbrella that finds it's DNA in a core that spans: **"Creating sustainable communities, enabling harmony between people and nature while working with passion for a greener, better tomorrow."**

At GoodEarth, under the residential vertical we are engaged in crafting communities that are sustainable, eco-friendly and unite like-minded people with a common vision of building a greener future. We bring to the table over 35 years of experience, while our team collectively spans different disciplines and practices. We unite art, craft and knowledge to deliver homes and communities that resonate and live with people for decades at large.

GoodEarth Malhar Overview

Good Earth Malhar is an eco-village spread over 55 Acres of land, located in Kengeri, Bangalore. Designed to accommodate 600 plus families, Malhar is divided into 7 communities. Each community has an extent of 5 -12 acres. This has enabled us to create a development which is human in scale, and steeped in nature and sustainability.

The homes here can be best described as charming and traditional surrounded by nature, openness, light and best of all - a great community. Whether 7 or 70 a child, parent or grandparent, every age group gets the best out of life here.

Malhar's offering array spans Villas, Townhouses, Villaments and Apartments. This ensures that we can meet the aspirations of different families.

With diverse typologies and offering types, the villas at Malhar feature front and back gardens, open and covered courtyards, inner courtyards, split levels and wrap-around verandahs with an array of size options. The apartments and walk-up homes come with terrace gardens and most communities are pedestrian friendly ensuring the comfort and safety of children and older family members. Many of our home types can be customized with different design options for specific needs. Even the flooring and tile options can be changed to any personal choice one may have.

Confluence Club

Confluence Club

Goodearth Footprints

Goodearth Footprints

Goodearth Resonance

Goodearth Resonance

Goodearth Footprints

Goodearth Footprints

Malhar is designed around green-living, sustainability and community harmony. The homes within each community are also designed with a multitude of environmentally friendly features. They are planned with natural materials (as a part of their construction materials) a solar passive design, ample light flooding through them, water capture and reuse, gardens and open spaces for community engagement.

For construction, we use mud blocks made out of the soil excavated for the foundation with certain percentage of cement, and aptly tested for strength & stability. Earth colored hues, terracotta tiles, ochre walls, wooden pillars and granite slabs are integral features of each home here.

The homes themselves feature external walls are made from locally available stone which our craftsmen use to create artistic feature walls. All windows and doors are of locally available hard wood. Pillars and balcony railings are artistically carved by skilled carpenters. We also use non-toxic paints across most of our projects.

The open and community spaces teem with a variety of flora and fauna offering ample engagement with nature to the residents. At Malhar we possess over 500 different species of native plants which have medicinal and ecological values. Dense plantation attracts different species of birds and insects which deeply add to the local ecology. It is in fact a bird watchers paradise.

Malhar is a water surplus community. By implementing an efficient rainwater system for water conservation and groundwater recharge along with an effective decentralised approach for wastewater management, Malhar is an exemplary model that showcases efficiency of water use. The comprehensive approach such as creating large open spaces, run-off percolation pits, buffer tanks, landscaping with indigenous species, grey water recycling and low-flow fixtures have collectively enabled the community to successfully stay off-the-grid throughout the year.

Malhar also possesses its very own sports and recreational club - Confluence. Residents drop by for a game of badminton, keeping fit in the gym, grabbing a game of cards or squash along with having a swim or a scrumptious meal.

Goodearth Resonance

Goodearth Resonance

Water Management

We have a vibrant community with residents kept active through a variety of local initiatives like cooking, book clubs, art and crafts, celebrating festivals and much, much more.

Courtyard Koota is a space that celebrates the coming together of families, individuals, and communities to share and exchange ideas. It was created to be a safe, welcoming, and nurturing space, where people from different walks of life find a platform to voice their thoughts. From theatre, music, dance and storytelling, audiences gain a holistic experience through visual and performing arts, craft, and literature.

Once a year we hold a Malhar Mela where we celebrate our wonderful community through food, fun, music and good cheer.

GoodEarth Malhar is an encouraging example of a successful green community one that resonates with the beauty and fullness that nature and graceful living offers.

Ar. Jayakumar Soman **Ar. Natasha Iype** **Ar. Jeeth Iype**

The 3 architects have shaped the design for Malhar over a span of 10+ years, with their combined experience of 75+ years in this field. Environmental and community based sensibilities root their design process.
siddharth.cyriac@teamgoodearth.in

ELEMENTS BY SHANTILAL

Arijeet Raikar Design Studio

Fact File

Project	▶ Elements by Shantilal
Project Type	▶ Residential
Location	▶ Chicalim Mormugao, South Goa, India
Year of Completion	▶ 2019
Site Area	▶ 4141 sqm
Total Built up area	▶ 17191.54 sqm
Architecture Firm	▶ Arijeet Raikar Design Studio
Principal Architect	▶ Arijeet Raikar
Design Team	▶ Ezekiel Machado, Nathaniel Dmello, Namith Bollady, Sidhi Tendulkar
Intern Team	▶ Aneesha Cholera, Alicia D'souza, Kajal Gaonkar
Clients	▶ Shantilal Real Estate

The context

Monolithically pitched on a hilltop escarpment, is a cube-like constitution called *'Elements'.* It attentively witnesses the meandering waters of the Zuari river flowing by from its vantage point, breathing in silent meditation. The hilltop design intervention is more than just a calm spectator, in a sparsely populated town in Goa's coastal city. It is in fact home to 100 abodes and several recreational amenities. The upscale development conceals a systematic spatial arrangement that is unique, setting the stage for contemporary communal living.

The Facade

The external profile of the built form, manifests a linear lattice-like composition of white painted vertical and horizontal structural elements. It is the sheer simplicity of this trellis like pattern that creates a unique minimalist and modern statement to the Architectural language.

The boldly white-washed **verticals** are spaced out evenly along the length of the building, greatly accentuating the verticality of the 8-storey form. It is complimented with intermediate thin **horizontal** lines at different levels. The horizontal lines manifest the edge profiles of staggering, recessed or cantilevering slabs. The cube-like profile of the architecture appears punctured amid these lines, tucking in idyllic open to sky balcony sit out spaces for each unit. Not only do these punctures add a bit of depth and 3-dimensional aspect to the surface facade, they also serve as air passages for the structure to inhale fresh air into its anatomy. The external envelope encloses a central core or oasis to the building where all residential units share a communal central court that is open to sky.

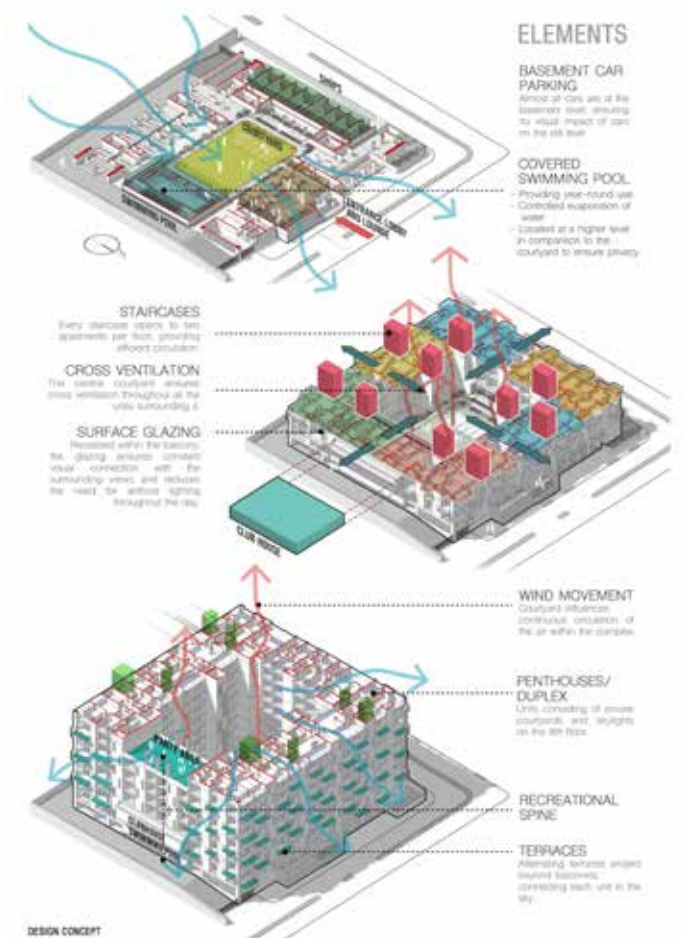
The internal elevation

From the complex's central court, the building appears to sport a similar composition as the exterior, but with a more 2 dimensional appeal. It's interior envelope adorns a checkered pattern of white-washed vertical and horizontal lines with intermediate punctures that accommodate balconies. To highlight recreational amenities from the residential, the external skin of these spaces exhibit a different elevational finish.

Spatial Constitution

The hierarchical pattern of spaces that constitutes the spatial interiors of the building, sports a neutral palette of tones and textures in finish. Rendering a subdued but tasteful composition of neat and clean lines. This creates a clean slate for each space to be furnished and styled to personal taste and preference. The design intervention especially highlights the use of exposed concrete in different manifestations, as a structurally aesthetic element.

The **building entrance** exhibits an exposed concrete portal that strategically frames a scenic vista of landscaped features at the staircase foreground, and the central court of the building in the background. This arrangement is visually luring for a visitor to enter the building into the 'Reception and Lounge'.

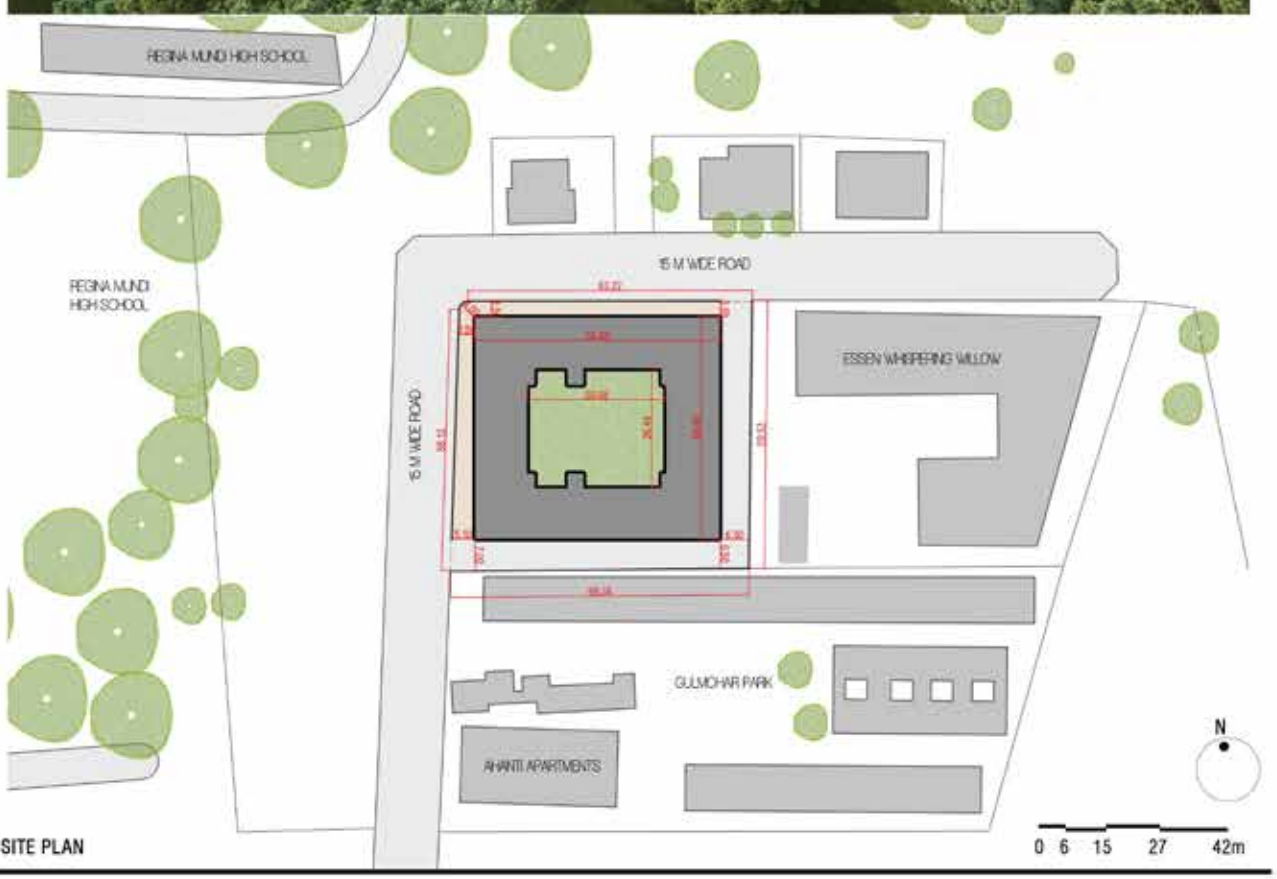


The **lounge** is aesthetically sandwiched between a serene water feature on one side, and the scenic vista of the central court on the other. It is sparsely screened from these features by a row of concrete structural fins on either side. The semi-open lounge showcases exposed concrete finishes in all its structural elements giving the space a contemporary edge to its appeal. It attempts to connect visually with the central landscaped court and physically terraces down into it becoming one with its scenery.

On entering the court, the pool and clubhouse appear to the left. Whilst the remaining circumambient elevation, showcases the 100 residential units scaling up to all 8 storeys.

The clubhouse externally adorns a vertical striated appeal, constituting a series of powder coated aluminium box sections all along its facade. This makes it appear delicately veiled and different as opposed to the rest of the elevational treatment. It is lifted off the ground by a few structural columns, giving it a levitating effect.

The clubhouse amid levitation, shelters the semi-open indoor pool below, protecting it from the unpredictable local weather conditions. It is crowned artfully with a coffer slab ceiling exhibiting concealed lighting features midst each of its sunken panels. When illuminated the circumambient space is indeed transformed aesthetically. This coffer slab manifests the deployment of certain R.C.C design to engineer large span column-less spaces.


REGINA MUNDI HIGH SCHOOL
REGINA MUNDI HIGH SCHOOL
15 M WIDE ROAD
15 M WIDE ROAD
ESSEN WHISPERING WILLOW
GULMOHAR PARK
ANANTI APARTMENTS
N
0 6 15 27 42m

SITE PLAN

The pool is flanked on either side by an intricate screen of powder coated box sections, on one side, and a few rectangular columns on the other. The structural columns supporting the clubhouse above, appear to plunge into the pool waters becoming one with its design. Water from the main elongated pool cascades over between these columns into a paddling pool that merges with the central court landscape.

'Elements' showcases 10 variations of apartment designs, ranging between 2&3 bhk and duplex spatial arrangements. The uniqueness of all these designs is in the way they span the thickness of the building envelope in plan.

Each individual layout extends to a covered or cantilevered balcony on either side of its span. Enabling the residents to enjoy a picturesque view of the river on one side while the other shares a view of the communal central court. The balconies on the external facade, stagger strategically to provide each house with the best vantage point for unobstructed views of river to sky.

All apartments also adhere to the concept of finishes rendered across the rest of the building, sporting clean lines and minimalistic neutral tones. The extensive glazing seen in the facade fenestration illuminates each of the spaces, bringing the simplicity of this palette to life. This canvas serves as an ideal backdrop to be juxtaposed with any color scale of furnishings and finishes.

The central court of 'Elements' essentially is the most important element that makes the building a breathing structure. With the unique facility of a two way cross ventilation system seen across the peripheral envelope of the building, air is able to filter into and refresh all spaces internally, eventually exhaling through the open to sky central court. Making it ideal to counter the harsh weather conditions of Goa. A landscaped garden central to the court adds a finishing touch to the oasis.

The outward and inward looking structure is a celebration of simplicity in form, and sophistication in functionality. It's most noteworthy attribute manifests the quality of light and air that filters through its carefully designed envelope of spaces. It's virtue is not only to be a beacon of great residential design, it also caters great recreational amenities, a stilt basement parking facility, and retail provision conveniences for its residents. Further adding to the conveniences is the proximity of medical facilities, schools, cafés & restaurants, supermarkets, places for worship and jogging parks within a one mile radius of its location.

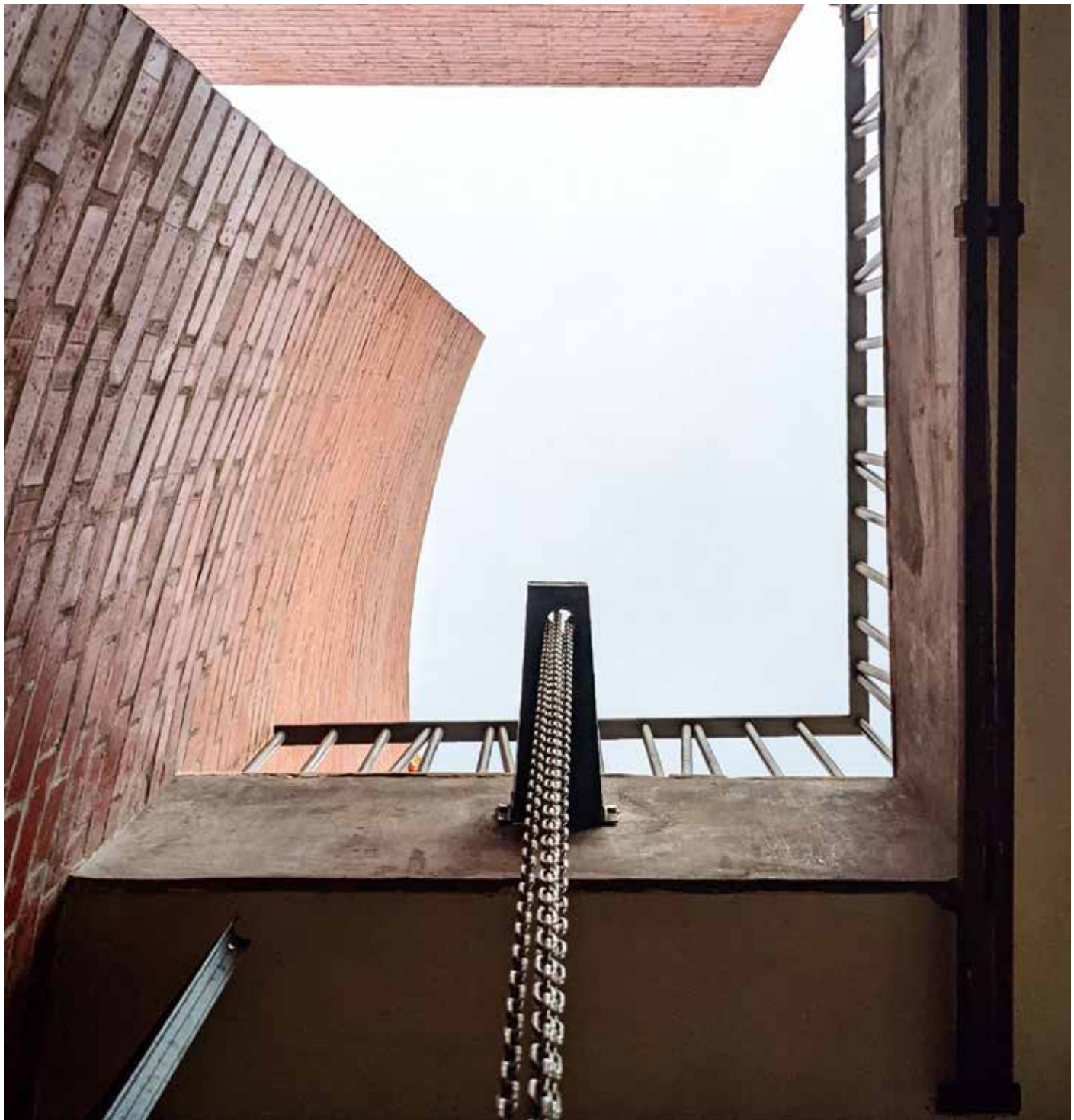
'Elements'', the breathing edifice, indeed creates the most idyllic and comfortable habitation for a hundred families to experience all year round.

Arch. Arijeet Raikar graduated from Goa College of Architecture and is the the Principal Architect of ARIJEETRAIKARDESIGNSTUDIO based out of Goa. He has worked with reputed firms such as Hijjas Architects + Planners, KL, Malaysia as an Architect and as an Associate Architect at DDIR Architecture Studio, Bangalore, India. His work has spanned across Private Residences, Multi Dwelling Residential Projects, Boutique Hotel and mid size Commercial Projects. ARCHITECT & INTERIORS India listed him in the Top 50 emerging designers in India under the iGen2020. His work on Micro Housing was recognised as amongst the 50 best entries for an ideas competition, and was later displayed and published at the London Design Biennale along with his conceptual ideas for a Public Lavatory. The studios work has also been nominated in the top 5 entries for the Penang Bay Design competition held in 2020 for an Urban renewal scheme for Penang.
office@ards.design

YOUNG PRACTICE

SIFTI DESIGN STUDIO

Ar. Jagbir Singh, Ar. Harmanpreet Singh & Ar. Priyadarshini Nanda



The Firm's Philosophy

SIFTI Design Studio was founded by a group of young professional architects in 2018. After collaborating on various projects of different scales in Delhi for three years, we decided to officially establish our firm in the city of Amritsar. Our aim is to make creative designs and build projects which are close to nature, aid in creating a better living environment for people, and contribute to changing the outlook of Indian residents about the architectural landscape of the country. Through our curated architectural works, we wish to create a social image that promotes the exploration of novel and unique solutions for the different construction conditions existing in our country.

Through an iterative design process, the firm aims to address four principles which are creativity, sustainability, efficiency and significance. By approaching the design problem creatively, we intend to produce simple but distinctive works translated through architecture form, spatial structure, material and spatial technology. Attempting to bring light in mystical ways through playing with the volume and geometry of the built form, we try to create a unique experience for the users visiting our building. Our occupant-centric design approach tries to create awareness towards designing buildings that are sustainable. Addressing the surrounding environment, weather conditions, and material availability we intend to create spaces for users which provide comfort and an area for enjoying their surroundings. With regard to the efficiency of the built environment, we understand the economic and locational constraints of the project and actively take on the challenge to develop alternative effective solutions to meet our envisioned design. Finally, The team also understands and constantly contemplates the significance of the designed projects on the urban fabric of the locality and the city as a whole.

In the peri-urban area of Amritsar, several plotted housing developments have emerged with standard planning schemes such as plots for row housing placed on both sides of a six metre wide road while premium plots are given frontage of parks. Through the following sections, we would like to show how through our design approach and principles we have designed the houses for this scheme. The varying designs are a result of specific design briefs created through extensive discussions with the clients and the principles that SIFTI Design Studio has imbibed.

House of Voids

The House of Voids at New Amritsar Colony is nestled in an upcoming township in the city of Amritsar. The plot is narrow and deep, bounded by residential buildings on three sides while facing a beautiful park on the fourth edge. This context challenged the possibility of opening up the interior to air and light while maintaining privacy – which became the driving force behind the layout of spaces. Having a built-up area of 350 sq.m, A combination of passive design techniques have been used to make the enclosed spaces comfortable and open to the elements of nature. From the outside, the mass of the home is solid and unassuming, giving almost no hint of the vibrant interior. A four feet buffer with cut-outs

Entrance courtyard of House of Voids in relation to Dining space and Kitchen

along the south side has been introduced, which follows the sun's path to catch light in all the spaces. The entire mass is punctured with green spaces and courtyards, which become necessary voids allowing porosity between the interior and exterior spaces – blurring the line between the two. This, coupled with the tall clerestory windows, allow natural light to filter through both storeys.

The materiality of the house complements the quality of light – both strive to be rich, natural and grounded. In keeping with the quiet modesty that the house assumes, an important feature was to use reclaimed wood in areas such as the living room partition and the main entrance door. What would typically be an opulent entrance is a humble form of reused hardwood and plywood coming together in a restrained elegance of its own. The walls are made of fly ash brick, laid in a rat-trap bond to enhance the much-needed thermal barrier in a city like Amritsar. The material is left in its raw and exposed form in most areas, the tones of grey add a natural, earthy feel to the walls. The brickwork seamlessly flows from the exterior façade to the interior spaces, bringing continuity and scale when one makes the transition. These come together in a thoughtfully curated manner to experience the house by drawing the user in - frame by frame, space to space. Brick, stone, concrete, and wood are juxtaposed throughout the home in different ways to create a sense of raw richness that is tactile and present. Light and proportion bring contrast to the spaces that begin to create warmth and timelessness that the family can identify with over the years.

Depiction of Flyash Brick wall in Rat-trap Bond flowing from Exterior to Interior space

Double height space allowing flow of natural light into the interior spaces

Porous House

In our second project, the site was situated in a medium-sized urban dwelling, surrounded by houses on three sides and faced by a string of row houses on the front with a 10 m wide road in between. This left little to no privacy for the exterior spaces. To overcome this, the house is designed to ensure the views of the rooms faced inwards into their own lush green courtyard spaces. These courtyards also have been strategically provided to create a comfortable micro-climate within the built environment. With a total built-up area of 371 sq.m, this house responds to exterior conditions by smartly playing with the form of the building and carefully placing the functions within.

Inspired by the Hawa Mahal in Jaipur, the facade of the house comprises an exterior porous screen ensuring the connection of the house with the front street is retained. The screen also doubles as a strategy for passive ventilation and natural lighting within the interior spaces. By installing a lush green patch between the exterior screen and internal glass wall, the interior of the house results in a cool breeze entering the interior spaces keeping it cool during summer. By placing the living area adjacent to this courtyard a space that can be enjoyed by the family together has been created. After sundown as the interior spaces are lit-up, the facade appears like a lantern. This screen has a bold character that aids in creating powerful imagery in the viewer's mind.

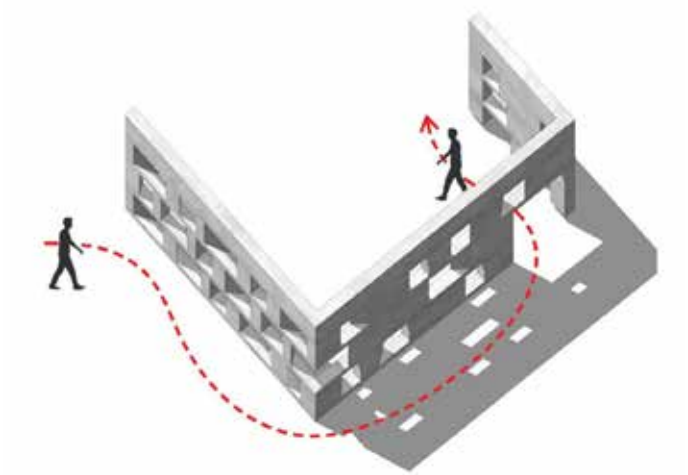
The lime-plastered screen acts as a filter for the house while the red sandstone accents the screen. The seamlessly flowing red sandstone from the exterior to the interior creates an inviting entry for the house, guiding the user to the living space. A split slab of the first floor allows sunlight to enter the space from the east. With the help of clerestory windows and courtyards, all internal spaces are well-lit and aim to create an emotive experience for the viewer. By placing the family lounge in the centre of the house the private functions are strategically divided from the public functions further creating privacy for the owners.

Perennial House

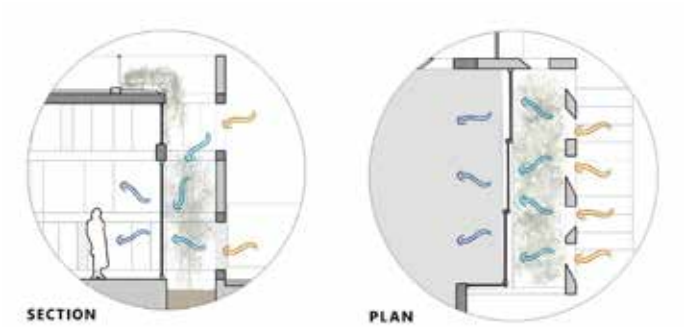
With a similar plot setting as the *Porous House,* this house posed unique constraints due to its smaller plot area

Graphical section of Porous house

Front facade



Graphic indicating the screen's ability to navigate user experientially into the house



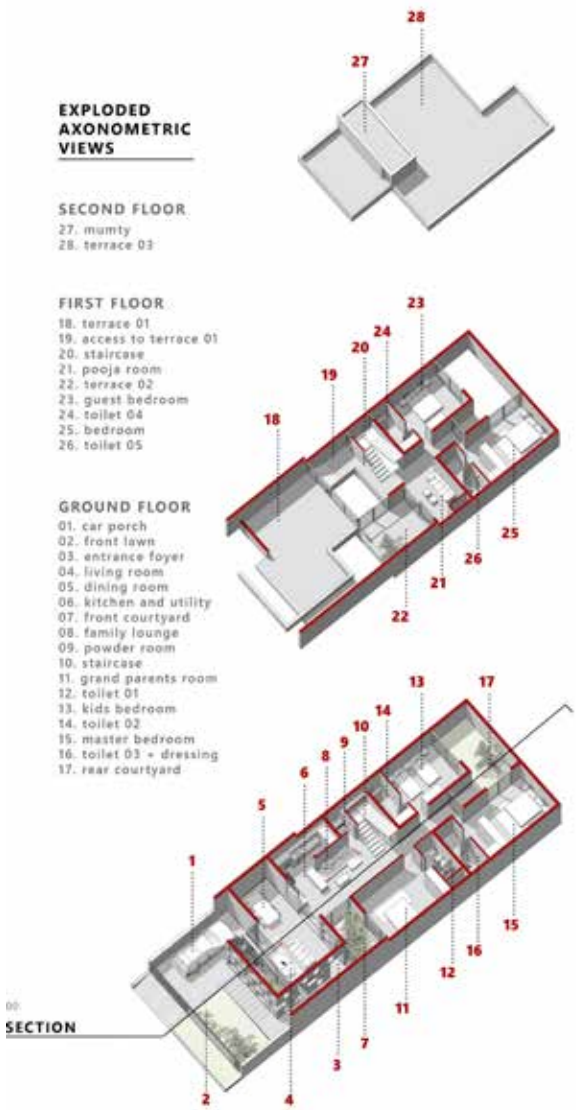
Facade details in plan and section

and extensive client brief. However, due to the strategic placement of masses, material selection, and play of light, the house feels open, and speaks boldly with its volumes but still feels grounded, and, most importantly, feels like home. The built-up area of this house is 278 sq.m.

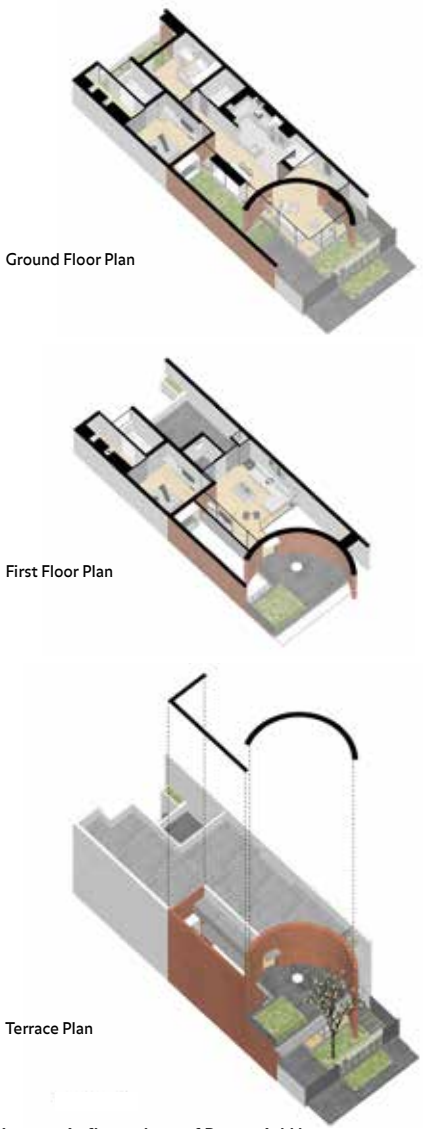
A curved wall blocks the extreme southern heat and divides the public living area from the private spaces of the house. This not only obstructs the glare from the south with its one-and-a-half brick thick rat trap bond but also contains a tree in the front yard of the house as its centre. On the first floor, the curved wall embraces a humble terrace garden and a sit-out area creating a comforting outdoor experience. Experientially this accent wall directs movement from the front yard to the side courtyard through the entry door. An attempt to invite the cooling wind inside the building has been made. For this purpose instead of opening all windows in the direction of the natural wind flow, they have been opened in a long narrow courtyard. This courtyard coupled with the driveway channelizes the wind leading to an increased wind speed, while the lush green plants in the courtyard provide a cooling effect. The courtyard's longitudinal nature aids in plant growth as it allows ample south light.

The interior space is warm and welcoming, a result of the exposed brick walls while the Jaisalmer stone flooring unifies the different functional spaces. The spaces of this house have been designed for the user's comfort and as a place to pause and contemplate the surrounding environment.

Interior view of the Living area

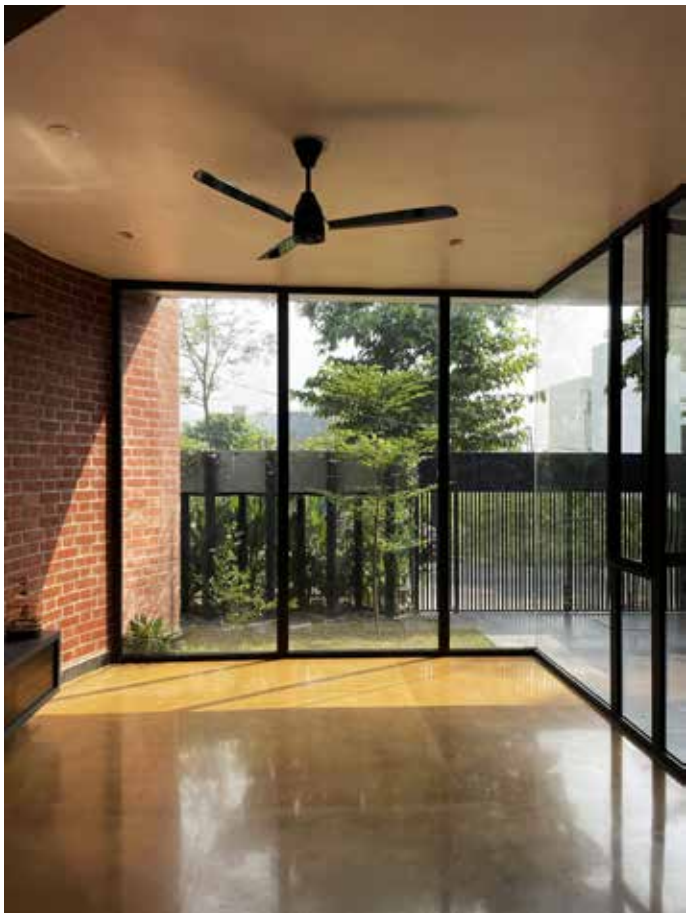


Exploded Isometric floor plans of Porous House



Exploded Isometric floor plans of Perennial House

Pedestrian entrance



Living area overlooking the front yard

Night view of front façade

Interactive long and narrow internal courtyard

Image depicting the materiality

Construction image of Bay window in dining area

End note

With individual houses becoming more accessible to a larger section of society, the diverse needs of each occupant can be catered to. At the onset of the designing process, The initial questions we pose to ourselves are: what does the site want and how can the needs of the clients be justly incorporated into it? We acknowledge that the site is going to accommodate humans, plants and various other small organisms, and creating a harmonious living space for each of its inhabitants needs to be paramount. Amritsar has had a history of fine masons skilled at building brick masonry walls, an art lost due to the demand for fast construction. As architects, we believe it's our duty to bring back lost construction techniques that are more curated than manufactured and still relevant to our culture and history. Through our upcoming projects, we wish to instil the concept of sustainability and work towards designing and executing a built environment that aligns with the UN sustainable development goals. In this process, we wish to create memorable experiences and reflect these ideologies that we strongly believe in.

All Images Courtesy: ***SIFTI Design Studio***

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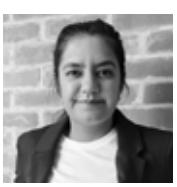

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A BUDGET FOR THE PEOPLE, BY THE PEOPLE

Ar. Rahul Kadri

True governance is about utilitarianism. The right choices in terms of policy and action should create maximum happiness for the greatest number of people. And budget allocation, the funding designated to expenditure on civic infrastructure and services, usually serves as the first and most vital step to city administration.

In most cities, the mandate for allocating the budget is with the municipal corporations, municipalities, and nagar panchayats (town councils). But for these agencies to serve their constituents better, there must be a reliable process to ascertain what the people need and want, what projects will lend the most satisfaction to the majority of citizens. An effective process that is not dependent on guess-work, would prevent wastage of funds, and ultimately aid in providing a better quality of life – by truly accounting for needs and concerns of the residents.

More often than not, there are never enough funds and time to do everything – so how should funds and time be prioritized and whose aspirations should the authorities address? How can we make the civic budgeting process more inclusive, equitable and effective?

Participatory Budget-Making

Participatory budgeting is a tool for inclusive policy-making that directly involves citizens in deliberations on the distribution of municipal funds. It provides elected representatives with insights and perspectives from multiple stakeholders to create focus on funding choices. The process follows an annual cycle of engagement with phases for planning, executing and reviewing the budget. Citizens define what features, problems and sectors in their neighbourhoods and cities should receive funding- which can range from demands of footpaths, street lights, parks, drainage systems to paucity of housing, hospitals and schools and so on- and are then asked to collectively prioritise these projects through a transparent and democratic rating system.

Global Success Stories

The roots of participatory budgeting can be traced to the Brazilian city of Porto Alegre in 1989, under the leadership of the Workers' Party in coalition with pro-democracy social movements. Its initial success soon made it attractive to other municipalities. Today, participatory budgeting is successfully being implemented in 1500 cities worldwide in countries such as Latin America, North America, Asia, Africa and Europe.

1. Pune, India: Pune was among the first Indian cities to introduce and implement participatory budgeting in 2005 and has been successfully doing so ever since. Every August, to spread awareness and gather citizen input, the city's municipal corporation publishes advertisements and invites people to submit suggestions for the forthcoming budget. This takes place through a system wherein citizens are encouraged to fill in and submit a 'Citizen Suggestion Form,' which is available online or at the ward office. The proposals on civic work are then sent to the prabhag samiti (division committee), which is made up of the elected representatives of the locality, to be incorporated in the municipal budget. [Further reading at: https://participedia.net/case/4280]

2. Seville, Spain: Participatory budgeting was introduced in Seville in 2004. The city is divided into 21 assemblies, and each year the council decides the amount that will be allocated by the assemblies. Approximately $17 million of the total city budget of about $1 billion is allocated through participatory processes. Participatory budgeting has led to the development of infrastructure including a network of cycle lanes across the city, several swimming pools and sports grounds in the city. Urban renewal programmes, such as the construction of new drains and pavements, have also been undertaken in poorer neighbourhoods and work on repairing schools has also been executed. [Further reading at: https://www.tni.org/en/archives/act/16822]

3. Chicago, USA: In 2009, residents of Chicago's 49th Ward were the first to introduce participatory budgeting in the United States. Since then, Chicago has successfully implemented six voting cycles across the city (and currently is in the seventh cycle), engaging more than 26,000 residents in 12 wards in directly deciding how to spend approximately $31 million on over 160 community projects. In all this time,

the residents have managed to fix streets and sidewalks, improved parks, build on biking and transit infrastructure and more. [Further reading at: https://greatcities.uic.edu/uic-neighborhoods-initiative/participatory-budgeting/]

The Case of Mumbai

For the city of Mumbai, let us consider a bottom-up system where municipal budget-making is decentralised to the neighbourhood level, where citizens are directly involved through all stages of the planning process. The process would involve the following steps:

i) Identification of Percentage Share and Budgetary Constraints:

The initial step should be to clearly define the percentage share of the total capital budget that would be determined by the citizens. For instance, from Mumbai's Rs. 10,000-crore capital budget for the year 2021-2022, about 30% of the budget, Rs. 3,000 crore, could be decided by the citizens through the participatory process.

ii) Delineation of Neighbourhoods:

Once the allocation of city funds towards participatory budgeting is defined, each ward can be divided into about ten neighbourhoods, and each neighbourhood can be given a fixed sum out of the total amount. Thus, 600 sq.km. of Mumbai can be divided into pockets of 5 sq.km. each. Within the fixed sum, each neighbourhood can be given the freedom to decide their demands for various civic or public works.

iii) Annual Public Neighbourhood-level Meetings:

To deliberate and collectively decide on where money should be spent, citizens can be invited to public neighbourhood-level meetings through pamphlets and newsletters sent by their respective RWA societies. The use of social media platforms and apps can be used as effective tools in sensitizing people about the budgetary process and spreading awareness. Clear information about the budget, its timeline and process, must be provided — allowing citizens to come prepared to the meeting with ideas, concerns and suggestions. Such transparency would also help gain the trust of the citizens.

Assuming about one hundred residents show up to each meeting, the features requested by them can be recorded, enlisted and prioritised by a rating/voting system in a short span of three hours. Features can range from works pavements, street lights, bus stands, public toilets, public parking, drainage, bus stands etc. The priority of each feature can be determined by the number of citizens it affects – a larger pool affected would increase the rank of the feature.

iv) Drafting of Prioritized List of Proposals and Submission of Citizen Input:

The prioritized list of proposals can then be drafted and sent by each neighbourhood to the Municipal Corporation of Greater Mumbai (MCGM in the case of Mumbai), made up of elected representatives of the people for review and financial feasibility. This would then culminate in a budget presented to the city at large.

Citizens should be offered feedback about their ideas and notified about developments and work undertaken during the year. Additionally, before the next meeting, citizens should be encouraged to review the successes and failures of the previous year's budget.

v) A System of Checks and Balances:

Critics may argue that the participative budget is time-consuming compared to an imposed budget. Since the budget preparation starts right from the ground level, up to the top authorities, too much participation may derail the process, and instead waste time on issues of less concern. Also, the participatory model could sacrifice long-term planning to prioritize local issues and ignore regional or national issues to meet citizen demands.

However, it is especially important to understand that while any tool meant to support decision-making processes may be lengthy, such processes are aimed at deepening democracy, preventing corruption and building equitable communities for all. Moreover, such detailed timelines often allow important decisions that affect citizens directly to pass through multiple rounds of deliberation and scrutiny-allowing the most-refined outcomes to be generated. Further, addressing local issues is of extreme importance since there already exist numerous other decision-making processes done by municipal corporations and governments that target national concerns. Also, it is recommended that only 30% of the total budget should be participatory. This gives enough of the remaining budget to be decided by municipalities for allocation towards macro-issues.

In order to ensure that the participatory budget doesn't become redundant over a period of time, a system of checks and balances can also be put in place. A system can be laid out wherein, depending on the total capital budget, a range of 1-3 projects can be allowed per neighbourhood in order of priority. Hence, when proposals are submitted by each neighbourhood to the MCGM they are strictly required to follow the order of priority and not pick and choose between projects based on which is cheaper. In this sense, the MCGM could work through decentralized power to ensure transparency, coordination and develop adequate infrastructure that would best address the needs and concerns of all citizens.

A Democratic Future for Budget-Making

It is important to ensure money generated by the people is spent for their own benefit. As we shape cities of the future, we need to encourage diversity in thought and value local knowledge. As a democratic tool, participatory budgeting holds the key to reaching a more representative sample of people and addressing their needs as well as aspirations in the built environment. It is only through such a process that our cities can truly represent the needs of the people they serve and foster an equitable future.

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ARTIFICIAL INTELLIGENCE, MINDSCAPE, ARCHITECTURE

Ar. Niranjan Garde

There are a number of residential projects that tout the integration and hoopla over artificial intelligence (AI)-based automation systems to make life more secure, convenient, flexible and controlled for individuals. What few people probably realize or may admit that automation also affects our social experiences thereby affecting the perception of spaces that we imagine and live with. How things have come to this point, is a complex topic, well beyond simple logic- but we may try to trace a few thoughts to see what relationships with spaces we are generating along the way through enhanced reliance on automation or AI in residential or other architectural spaces. The point is, what kind of lived environment do we experience and let children grow up with? The process of learning has changed with time from indigenous cultures to pre-industrial ones to colonial times to contemporary times and will continue to change. At the heart of this change lies the idea of empathy and connecting with people and environment and what processes or systems or actions and thoughts enhance the connect or seem to jeopardize the same?

It is not very difficult to imagine what will happen if all things are minutely surveyed and controlled by automation and refined as per individual requirements– resulting in a mindscape of an island having nothing to do with the 'other'. When we meet, greet, act, discuss, or do things together– it is more than a chance encounter and develops bonds with people, things, environment and situations. We develop tendencies to empathize, accept variety, be patient, offer our support, nourish and be non-judgmental. There is a lot of 'sharing' of mindscapes and of physical spaces. Hence an architecture of sharing, transition spaces, buffers, pause points, streets, balconies, visible circulation areas, multiple functions can develop (and does develop). Conducive climate also has a lot to offer for generating such shared, multi-use spaces, thereby creating a mindscape of sharing and empathy. This sharing also happens at the level of the site plan, topography and natural features leading all the way to the cosmos. Thus visualizations, conceptions and perceptions of the designer (who is the part of the larger environment) thus develops accordingly and he/she then considers water, wind, air, tree, site, court, movement and openings as expressions of the above values. Values, people, environment, climate- all indicate lateral, organic and slow processes of synthesis and expression in terms of architecture. In such an approach, the 'collective' seems to be more reinforced than the 'individual'.

In today's times of automation, all spaces from playgrounds to lobbies to corridors to lift spaces to flats to each room are surveyed by CCTV as if someone is watching and one requires 'permission' to go somewhere to get to a place to ask a favour or to talk or to do anything. Not only that, organic infringement of climate or kids or dogs or dung or grass or messiness is strictly barred from entering anything– as if the messiness or the organicness has become sort of untouchable! Whereas earlier contexts encouraged sharing of ideas or values and landscapes, the contemporary situation asks for the opposite- strict compartments, highly ordered or structured, extremely sanitized, perfect. The situation has become grave by coming down from psychological to functional to a purely physical level of debate. Is a dining room required, are common spaces required, demands for individual gadgets, surveillance of all items, security passwords- all indicate this tendency. Here the 'individual' seems to become the centre of all experiences at the cost of ignoring/dismissing/suppressing 'collective' values of the environment.

This means that there is no idea or experience of the collective, so no space or time can even be visualized in the manner of the collective. If collective experience gets negated from consciousness or mindscape, then what are we considering as designers of spaces? And what becomes of the nature of experience, change, identity, time and memory that we create as designers?

Automation seems to subsume all previous experiences of human existence. But why blame automation? We seem to have taken a path of logic or intellect at the cost of feelings/ collective/ context/ diversity and seem to consider all the world in one uniform logic - exasperated by automation.

Thus the question then is about what *mindscape* do we choose to follow for generating humane landscape and architecture? Shouldn't automation or AI be seen from under a critical lens?

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EPHEMERAL CITYNESS OF MUMBAI (CASE STUDY OF MUMBAI MARATHON)

Ar. Esa Shaikh

Cityness: It is the way people perceive that collection of building materials that matters in how cities are presented to the outside world.
(From: https://cityness.wordpress.com/2010/10/23/what-is-cityness-and-why-should-you-bother/)

It was an era, where along with pigeons, humans were dispatched to deliver important letters and news within the large empire. This news can sometimes turn over the running empire or might save the king with a secret planned wasp of death. The importance of the news delivery, made postmen or dispatch boys active, loyal and one who can have great stamina. In the year 539 BCE, when Romans won a victory over the Persians in the Battle of Marathon, it was very important to deliver the news back to the administrators in Athens as soon as possible. The army general chose Pheidippides, meaning 'sparing a horse', who mapped the distance from Marathon to Athens in the scorching summer heat. His last word was *nikomen* meaning 'we win' and he collapsed and died. Many other myths are attached to this story as well.

During plans for the 1896 Olympics, the first modern Games, the organizers wanted an event to celebrate Greek history. TheFrench historian Michel Breal suggested a long-distance race from Marathon to Athens to honor Pheidippides' run. The Greek runner Spiridon Louis won the race, winning Greece's only gold medal of the Games. The local excitement over the race ensured that it would be included in later Games and soon became the heart of Olympic games.

Fig. 1: The route of Marathon highlighting Landmarks to 'advertise' city of Mumbai *(Source: Author)*

Fig. 2: The landmarks and Marathon in Mumbai
(Source: Indian Express, 16 January 2017)

DREAM RUN IN COSTUMES

TIMES CITY

Despite humidity, elite runners lead the way, amateurs mark victory at finish line

Over 42,000 Take Part in Mumbai's Biggest Event

Mumbai gets fitter, fewer athletes seek medical aid

Fig. 3: Bandra-Worli Sea Link as Mumbai Marathon Route *(Source: Times of India, 16 January,2017)*

Fig. 4: The New York Marathon showing crossing the Verrazano-Narrows Bridge *(Source: New York Times, 2018)*

Fig. 5: The London Marathon which crosses major landmarks of London. *(Source: worldsmarathon.com)*

Fig. 6: Map of Mumbai showing thee routes of the various Marathon *(Source: Author, on a base map of Mumbai)*

Marathons are now encouraged to support different purposes. They can be run to encourage healthy lifestyles in modern times or to promote social causes like peace, global warming or lost rights. Sometimes, its run to show the fight against corruption or to exhibit solidarity and support.

Apart from their rich histories, different cities exhibit different Marathon runs. In these marathons, citizens are allowed to participate along with the professionals from different countries. In a way, it's open and celebrated to promote social integrity. The city's administrative in-charges are very particular with the route map of the marathon run.

Urban Planners and designers make sure they exhibit the 'image of the city' by selecting routes where the key landmarks of the city are highlighted. The marathon is displayed on various sports channels in different countries and that can be used to enhance tourism in many ways. As Kevin Lynch explained, 'map-making' in the individual's mind arises due to the five basic principles of urban design: paths, edges, nodes, districts and landmarks.

Planning for the marathon in Mumbai is organized from six months prior to the day of the event. The day is chosen so that it does not clash with any other festival or event. It is ensured that all construction on the route for the event is completed before the run. Special armed forces and military teams are called to augment the local state police for these special events. Paths and roads of the marathon route are announced to the public a week prior so that vehicular entrance is restricted. Planning of entrances

Fig. 7: 'Street welcoming all' and 'Social enrichment of the city through sports' *(Source: DNA, 16 January 2017)*

Map showing route of the Sydney Marathon *(Source: worldsmarathon.com)*

The Sydney Marathon showing the landmarks of the city of Sydney *(Source: mensbestrun.com)*

The Sydney Marathon showing the landmarks of the city of Sydney *(Source: mensbestrun.com)*

plays a very important role and are classified according to the participants. Special entrances are made for VIPs and participants who are differently-abled. Even though the clean-up takes days to complete, the services of infrastructure used, are taken care of on the same day itself. It is clear that now the original aim of the marathon is lost to a capital form of money-earning. Participants make sure they train prior to the run for a long route once in a year. Meanwhile they buy products which yield profits for the sports and brand manufacturers. Around ten thousand people participate in the run that is divided according to the distances of 7 km, 21 km and 42 km. Runners are informed about the location and the place of start of the race.

More than a competition, the marathon acts as a social event which allows citizens to come together. It's not only a factor of health but also the connection of citizens with their city. Public events allow people to express themselves. The marathon is more than an Infrastructural change in the city. It promotes community involvement in the city with a lack of community space. It is a mass procession of citizens. The marathon is a classic example of appropriation of spaces for multiple use of the city. For the first time, roads welcome human beings instead of cars. It caters universally to all classes and castes of citizens. It is a form of freely expressing and standing for your thoughts and for what the city represents. It can thus be seen that marathons have been modernized from passing one message in Greek history to passing mass messages in modern civilizations.

Jane Jacobs, aptly defined the conditions which demonstrated where cities went wrong and how civilization has totally different perspective towards it:

The trouble with paternalists is that they want to make impossibly profound changes, and they choose impossibly superficial means for doing so.

Jane Jacobs (1961) The Death and Life of Great American Cities.

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MUMBAI'S GIRANGAON AN URBAN TRANSFORMATION

Ar. Rohit Shinkre

Introduction

The article looks at the urban planning of Mumbai's industrial centre *Girangaon,* literally 'city of mills', that developed from the 19th till the late 20th century when the textile industry in Mumbai declined till complete closure by 2007. The working-class neighbourhoods around the mills illustrated the key principles of 'New Urbanism' well before their theoretical statement in the 1980s- 90s. Ironically, the urbanism propagated by the recent and ongoing redevelopment of the same precincts are an antithesis of the same principles.

Girangaon

Modern industry came to India in 1856 at Tardeo, Mumbai. It marked a new era in the economic and social conditions of the city which was essentially a colonial trading port till then. The American Civil War (1861-65) drastically affected the supply of cotton and textile to an industrialising Britain. The Suez Canal, completed in 1869, was expected to multiply the volume of trade between Europe and India. In anticipation of this, the British laid the first railway link between the Island City and the mainland in 1857. Within the following decade, there were nine more mills in Byculla, Mazgaon, Parel, Lalbaug, Naigaon, Sewri and Prabhadevi, the *Girangaon,* located about 4 to 6 km north of what was the 'native' or 'black' town, in the Central Mumbai of today. Here resided all the clerks and traders that supported the port, its allied activities and the colonial administration. In urban sociology terms, Mumbai transformed from being a colonial city, characterized by the trade port, naval docks, army cantonment, fortified colonizer's settlement and the adjacent native town to an industrial city of rampant migration, appalling living and working conditions of labour, emergence of an oligarchy of traders and mill-owners, development of railways and the emergence of a working-class culture (Refer Fig. 1). In 1862-62 symbolic of this transformation, the fortifications of the Fort were demolished.

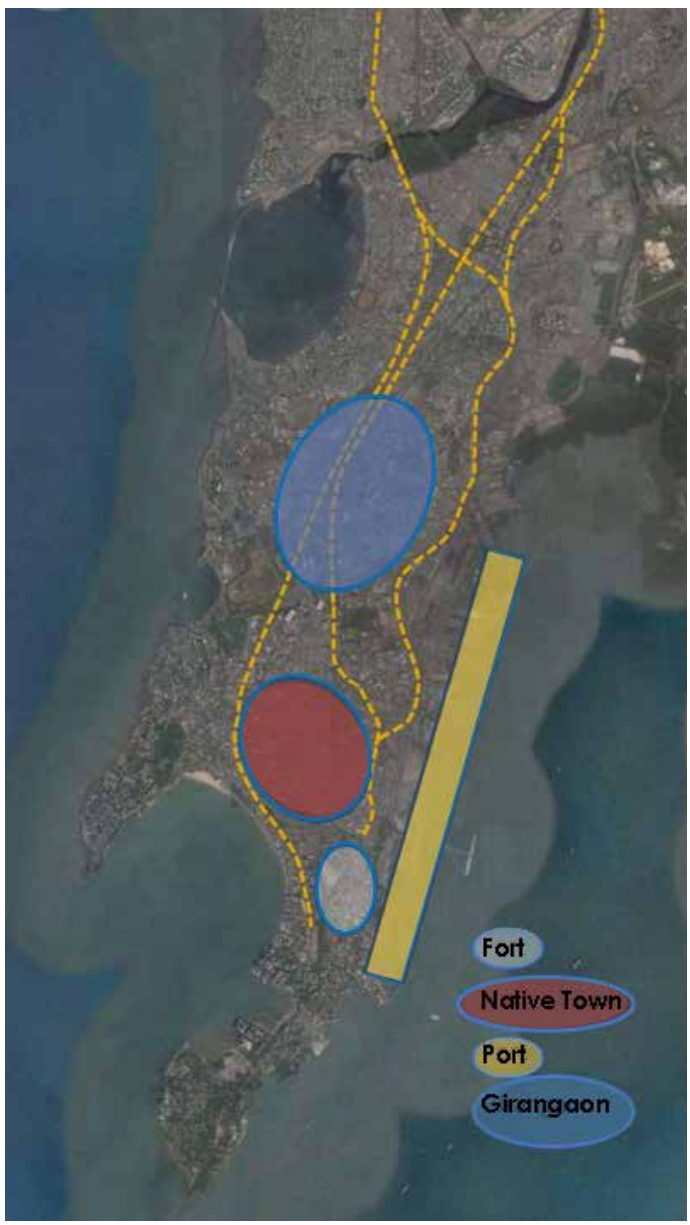

Fig. 1: Colonial and industrial Mumbai
(Source: Author, Base map from Google Earth)

Working-class community and culture

At its peak the textile industry employed 300,000 workers. When the 1982 strike was declared, that number was 250,000. Given the rampant migration there was a pressing need for affordable mass housing. The typology consists of a linear array of single room tenements, sometimes partitioned into a living and kitchen space, served by a corridor and a common sanitary core shared by each floor. This seemed quite suitable to the climate and social ethos of the workers of Girangaon. The reason could be that though there was diversity in the workers' population, a vast majority came from the Konkan region of Western Maharashtra. Sports, games like *kabaddi, kho-kho, atyapatya,* performing arts and religious rituals from the native Konkan flourished in Mumbai with new metropolitan influences. Chawls were developed mostly by private and sometimes by public initiative[1]. Mill-owners themselves built chawls or encouraged private investors assuring them of rental revenue. Affordable rental housing was thus available to support the industry.

An urban community: well-equipped and well connected

The chawls were within walking or cycling distance from the mills. The district was well equipped with schools, playgrounds, markets, etc. Kids would walk to the school or the playground. The ground floor street fronts were commercial and retail. Groceries and other necessities were thus in proximity. Innumerable *krida mandals* (sports associations), *bachat gats* (cooperative groups), *mahila mandals* (women's groups), etc. supported an active community or associative life. Intermediate space between the chawls was shared and used for various community activities. There was 'sharing' at different scales: neighbours shared newspapers and appliances, the corridor and the sanitary core was shared by the floor, and whole chawl shared the courtyard and the shrine. The *maidan* and the school served a cluster of chawls so on and so forth.

By the 1910s, cultural institutions like *Mumbai Marathi Grantha Sangrahalaya,* the Hanuman theatre, Damodar Hall, etc. were established. Naataks or plays are a very important trait of Maharashtrian culture in general and more so of Konkani culture. Many amateur and few professional troupes were based here. The cinema halls- Hindmata, Bharat Mata, Chitra Talkies and Deepak Talkies- started in the 1940s.

Girangaon is traversed by arterial roads and rail transit networks. Access to local and regional transits is convenient, with city and state buses, trams, western and central railways. The State Transport bus stands in Parel and Naigaon were a much-used link to the Konkan. Mobility was assured. A unique metropolitan culture that distinguished Mumbai from other Indian cities emerged here.

Principles of New Urbanism

After noting the many dysfunctionalities of the automobile-centric, single-use zoning-based post-war city planning in America and Europe from the early sixties, many architects and urban thinkers[2] advocated a return to community-based planning. Even before the new charter for A New Urbanism[3] was elaborated by the early 1990s, *Girangaon* already demonstrated all its key principles (Refer Fig. 2) :

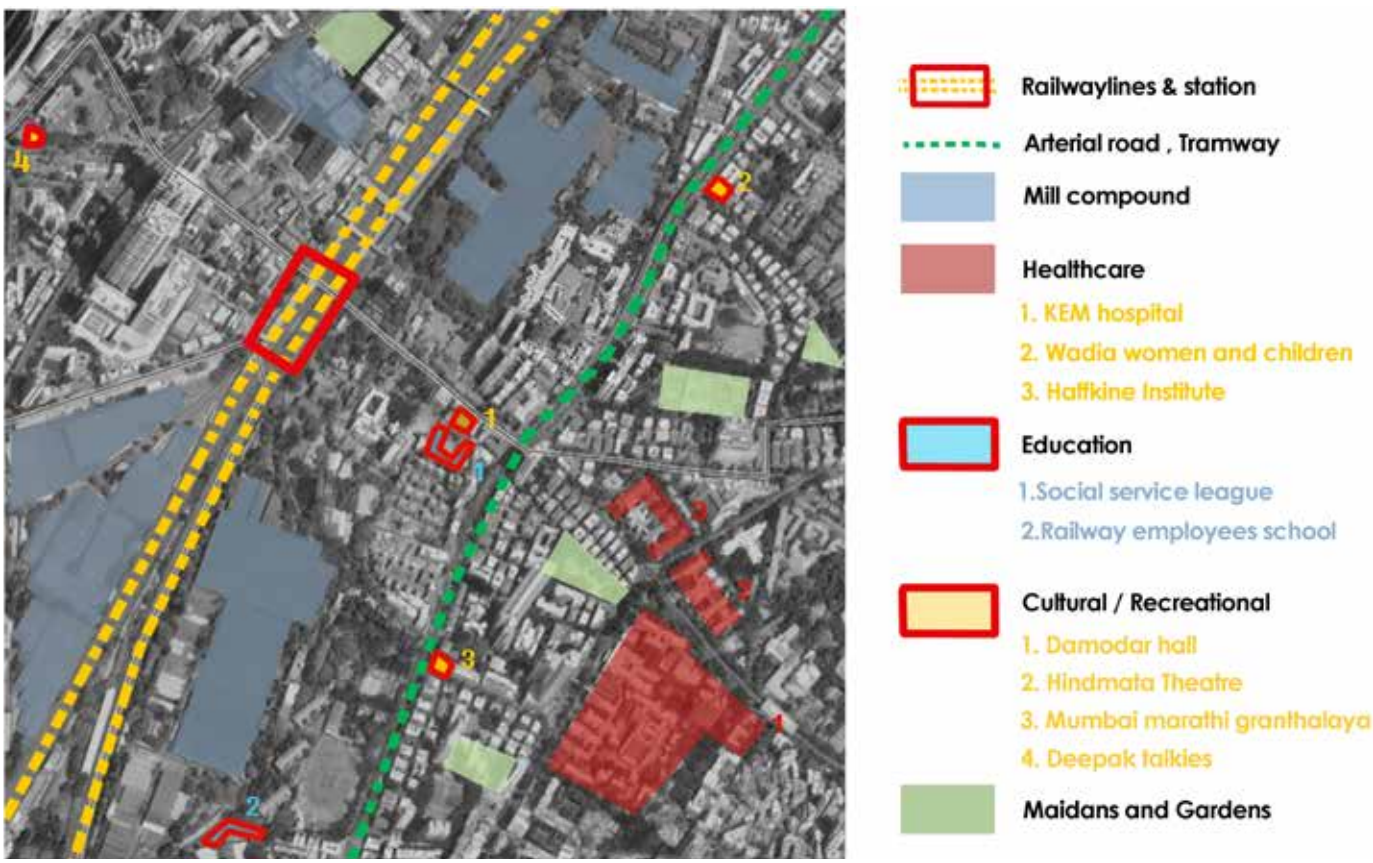

Fig. 2: 1 square kilometre of Girangaon
(Source: Author, Base map from Google Earth)

- *Mixed use:* The mills, the housing of various social groups, the market and institutional buildings were all in proximity. This always made for an animated public realm which was safe and secure.
- *Social mix:* Mill, railways and port employees of all grades, from workers to executives; caste, religion etc., lived in the same neighbourhood. There was no 'ghetto' formation, and the city-form was not an expression of social segregation.
- *Walkability:* The neighbourhood offered everything- live, work, play, within a pedestrian or cycling radius. There was no daily commute. The urban fabric was permeable to pedestrian movement.
- *High density, medium-rise built form:* Sustainable urban form and occupation that could counter the sprawl of the post-war cities (in the US and Europe)
- *Architectural value:* Resilient composite construction in stone, bricks, timber and metal. Simple adaptable architectural typology that could serve occupants for a long time.

Community-centric planning traditional neighbourhood

Educational, healthcare and cultural institutions and maidans and parks were integral part of the neighbourhood. There was strong scope for 'sharing' at different scales.

Urban form and society

All of the above made for a vibrant and lively city and an extraordinary quality of (community) life. The chawl was an appropriate example of affordable rental housing in that context and era. Likewise, *Girangaon* was an excellent example of sustainable community-centric urbanism. The built environment facilitated social interaction and hence organisation. There was 'space' for an active community life. A strong sense of shared well being and progress made *Girangaon* a natural hub of intense cultural and political activity. It was the centre of unionism and political activism since the pre-Independence era and the hub for the *Sanyukta Maharashtra* movement post-Independence. Many an eminent personality from different spheres - politics, literature, social reform, cinema - B.R. Ambedkar, N.M. Joshi, Narayan Surve, *Shahir* Amar Sheikh, Pralhad Keshav Atre, Dada Kondke and others rose from this background.

The redeveloped Girangaon

Since the closure of the mills, the reuse of the mill compounds and their neighbourhood precincts is perhaps inevitable. Its model is questionable, more so given its urban legacy. Many redevelopment projects have already cropped up, many are under construction or proposed. The current urbanism, of gated compounds, parking podiums and elevated recreation spaces and amenities amidst elevated flyovers is integrally antithetical to the principles of new urbanism.

1. Mixed use is restricted.
2. The social mix does prevail but in a highly segregated form of sale and rehab blocks. With prosperity comes the need for a 'pure identity'.
3. Impermeable gated compounds, elevated podiums and flyovers severely impact walkability. One cannot be a *flaneur* here anymore. The street here is now merely for transit preferably by car.
4. The new high rises with luxurious apartments would make for a low density but for the *rehabilitated* residents of the *rehab* buildings.
5. The value resides not in the architectural or urban quality but in the provision of privatised amenities, double height entrance lobbies and 'bespoke' interior finishes and provision.
6. This fragmented and rigid urbanism undermines adaptability and thus community resilience.

Community life is squeezed into the setbacks and corridors of the rehab building and only occasionally tolerated beyond on grand festivals like *Govinda* and *Ganesh utsav,* almost as a release mechanism. The emerging environment is practically anti-city as it is unlikely to support any form of social organisation and political activity. These have shifted to the virtual space.

Endnotes

[1] BDD chawls developed by the Bombay Improvement Trust from 1930s - 1950s stretch all the way from Worli to Sewri.

[2] Patrick Geddes, Leon Krier. (1984). Urban Components, Architectural Design, Vol. 54, no 7/8; Christopher Alexander (1977) *Pattern Language;* Lewis Mumford *Culture of Cities* (1938) and *City in History* (1961), Jane Jacobs (1961) *The Death and Life of Great American Cities* laid the basis of what was to be later defined as *New Urbanism.*

[3] Charter inspired from https://www.cnu.org/who-we-are/charter-new-urbanism and https://www.cnu.org/who-we-are/charter-new-urbanism.

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4. *Principles of Urbanism.* From: http://www.newurbanism.org/newurbanism/principles.html
5. *The Charter of the New Urbanism.* From: https://www.cnu.org/who-we-are/charter-new-urbanism

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BRINGING QUALITY BUILT-IN ENVIRONMENT TO THE URBAN POOR:

EXPERIENCES OF UNIQUE COMMUNITY-LED HOUSING INITIATIVES BY SHELTER ASSOCIATES

Ar. Pratima Joshi & Geetanjali Deshmukh

***ABSTRACT**:*

Architects at the Pune-based non-profit collective Shelter Associates (SA) are creating a paradigm shift in slum development by following a city-wide multi-stakeholder approach to urban development by recognizing that slum communities are an inevitable part of our cities.

SA gives slum-dwellers a voice by arming them with data about their community, empowering them to take decisions making them partners in the developmental process. This data is the ultimate evidence of critical gaps in the service delivery system bringing the Urban Local Bodies (ULB), communities, and the civil society on a level-playing field.

Understanding lived experiences, cultural practices, and preferences of slum-dwellers has helped SA architects break the chains of their academic discipline. Involving communities and ULBs in the process of designing is leading to innovations both in design and processes setting precedents for a multi-stakeholder approach to slum rehabilitation.

Using data and technology, SA accurately targets the vulnerable communities and their needs leading to the efficient allocation of resources contributing to degrowth. As environmentalists, SA architects don't just consider land and other commons as resources but as life-sustaining forces and therefore nudge all stakeholders to jointly work towards the preservation of the commons.

This article attempts to highlight the phenomenal success architects can achieve as facilitators and enablers owing to their technical abilities and the sensitivity and humane touch they bring to the process of social development. Their ability to take along diverse groups like ULBs, civil society, and slum communities for the transformation of the lives of the urban poor. Demonstrating the transformation that collectively designed built-in spaces bring about.

INTRODUCTION:

The Non-profit organization Shelter Associates (SA) was founded by three architects in 1994 with a passion to ensure equitable rights and access to essential services for the urban poor. Over time, professionals from diverse backgrounds including Engineers, Data Scientists, Geographical Information Systems (GIS) experts, and social workers joined SA to design and implement data-driven solutions in Sanitation and Housing.

SA is a pioneer in using spatial data for social impact in Maharashtra and its core sanitation project called the One Home One Toilet (OHOT) has facilitated individual toilets to 1.5 lakh individuals leading to vast improvements in their health and well-being.

SA's has gained expertise in housing the poor through the implementation of three major resettlement projects in Pune and Sangli-Miraj, which are quite different from each other. These projects demonstrate a workable alternative to the typical slum rehabilitation projects that are prioritised by the government which: fail to take cognizance of ground realities; do not view the issue of housing for the poor at a city-wide level; and are implemented in an intrusive and opaque manner.

The housing projects implemented by SA are: (1) based on accurate data which has been spatially organised; (2) generated from a city-wide approach that considers housing as an integral part of the city along with areas of employment, healthcare, education, and convenience; and (3) implemented in partnership with beneficiary communities.

Another path-breaking work SA undertook recently is the city-wide slum rehabilitation research project with ATE Chandra Foundation and Pramiti Foundation that advocates Creating citywide spatial data to have a clear understanding of the on-ground situation to identify vulnerable slums within the city and also proposes innovative yet simple solutions to design a resilient social housing for the poor.

Learnings from the city-wide research has led to a unique slum rehabilitation project at Bondre Nagar in Kolhapur which is currently being implemented under the 'Beneficiary Led Construction' model under the Pradhan Mantri Awas Yojana.

A TIME TESTED APPROACH TO SOCIAL HOUSING: Three decades back when SA started studying the urban slum space, it observed that many social housing projects fail because they are designed without considering the city that it is situated in, its surrounding, economic activity and practices of the communities. Lack of accurate on ground data meant many missing pieces of information, critical to the acceptance of the very people it is intended for. This led to the development of SA's own approach to implementing housing solutions -

Granular Spatial Data: The settlement level and socio-economic data collected provides an accurate description of the lifestyle of the residents, their on-ground condition, and the issues they face while living in dire conditions. The collected data is leveraged during multi-stakeholder interactions to ensure that extensive engagement with the community informs decisions in design development. It ensures (1) tenure security (2) well-designed internal spaces and 3) infrastructural amenities.

Furthermore, it also takes into consideration factors such as the location of (re)settlement, and the provision of amenities available to people within the neighborhood. These factors are equally important for conducive development but often neglected during social housing. The design developed with such an approach results in houses that are teeming with natural light and ventilation. They have unique areas such as (1) spaces for keeping cattle, (2) terraces to carry out traditional domestic chores such as: making papads; exposing grain to the sunshine; cleaning beds, etc. (3) Open spaces that are essential for forging community spirits and promote health and mental well-being.

City-wide Perspective: Mapping and analysing the slum location along with their level of vulnerability helps in prioritizing and planning the housing projects. It helps in resource allocation and planning logistics well in advance.

Multi-stakeholder Engagement: SA advocates for involving both communities and ULBs in the planning , designing and financial decision making of the projects. All of SA's housing projects have been successful due to the active involvement of communities who have even contributed financially, taking micro loans.

PREVIOUSLY COMPLETED HOUSING PROJECTS

Dattawadi Housing project (1996-1998): Moving Mountains

Our first project was initiated in Pune, during the first rains of the monsoon, with the sudden demolition of an informal settlement known as Rajendra Nagar by the city administration. We worked with the community to ensure that 56 families were resettled into formal housing within a kilometer of the existing slum with financial support from HUDCO.

This was a unique experiment in Pune where the beneficiary families assisted with the design, monitoring and construction of their own homes. It has resulted in a healthier, hygienic lifestyle that has upgraded their education and employment options.

Kamgarputala Housing project (2003-2005): Disaster averted

In 1997, Pune faced one of its worst floods and the city administration invited us to carry out detailed surveys of 6 informal communities along the river which flows through the city, the river Mutha. Kamgar Putala, one of the oldest informal settlements in Pune, was the worst affected by the floods due to its location at the confluence of the Mula and the Mutha Rivers. We worked with the 176 flood-affected

families of Kamgar Putala to help them secure formal housing away from the flood-prone banks of the river.

The community accumulated the capital for contributing to the construction of new homes by forming micro credit groups and building savings. Since flooding along the river Mutha was an annual occurrence and the community of Kamgar Putala was determined to find long lasting solution for the safety and future of their children.

Thus a well structured, liveable and safe housing was designed while respecting the traditional way of living of the community.The floor area of each unit is 200 sq. ft. divided into two bays. Each unit includes a toilet, a bathing area, a kitchen area and a multipurpose living-dining- sleeping area in the front bay.

IHSDP/City-Wide slum housing project, Sangli-Miraj-Kupwad (2009-2013): Multistakeholder success

We were appointed as consultants for the Integrated Housing and Slum Development Programme (IHSDP) in Sangli-Miraj-Kupwad, a peri-urban area about 400 kms south of Mumbai on the banks of the river Krishna, with a population close to 550,000. Our city-wide design proposal, informed by our poverty mapping and use of GIS technology, optimised use of the limited land available to meet the rehabilitation and relocation needs of the families living in 29 slums across the city.

The IHSDP had been introduced by the Government of India (GOI) for the improvement of slums in cities and towns under the Jawaharlal Nehru Urban Renewal Mission (JNNURM). The critical objective of the IHSDP was holistic slum development with a healthy, and enabling urban environment, by providing adequate shelter with security of tenure and basic infrastructure facilities.

The housing stock created would be sufficient to provide formal housing, with security of tenure and improved sanitation, to the families in 29 slums, almost half of the slum population of the peri-urban area.

A critical aspect of our approach was that it did not involve moving the beneficiary families to faraway sites on the edge of the peri-urban areas which lack services (transport, water and drainage) and drives them deeper into poverty. Hence, relocation would not impact their access to places of employment, and amenities such as schools, health centres, emergency services and markets.

The GOI approved this project for its innovative, holistic and inclusive approach, which could be emulated in other cities. This approach later became part of the Government policy framed under Rajiv Awas Yojana (RAY), which requires cities to map its poor using GIS and remote sensing technologies.

CITYWIDE RESEARCH PROJECT

SA envisages an India where every citizen has access to basic infrastructure, secure tenure, and recognition of equal rights. To achieve this vision, SA undertakes slum rehabilitation projects using a process sensitive to the needs of all stakeholders, especially the community. Shelter Associates in collaboration with the Pramiti foundation and funded by ATE CF had undertaken a research project to provide a framework for implementing social housing projects across 44 slums on government land in Kolhapur.

Through data collection, mapping, socio-economic surveys and discussions with the concerned stakeholders the research project provides a detailed on-ground scenario for affordable housing in the city of Kolhapur.

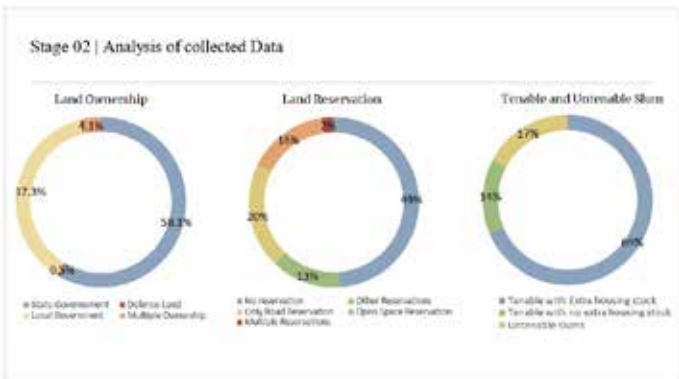
Stage 01 | Gathering Data based on –

(1)| Rapid Infrastructure Mapping (2)| Study of Planning rules (3)| Rapid Household Surveys

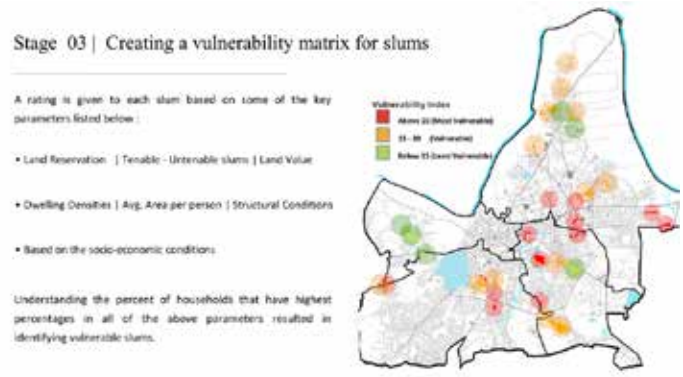
This highlighted loss of judicious use of land, issues due to lack of holistic development and lack of inclusive planning.

Through the research project, SA has observed that the lack of comprehensive data available with the ULB makes it difficult to take a holistic view of the entire urban area. This can lead to piecemeal slum rehabilitation projects which represent a suboptimal use of the limited resources, such as tenable land and fail to leverage an economy of scale. It can also lead to hesitancy by the ULB in undertaking slum redevelopment projects due to complexities and conflicts that may arise during planning.

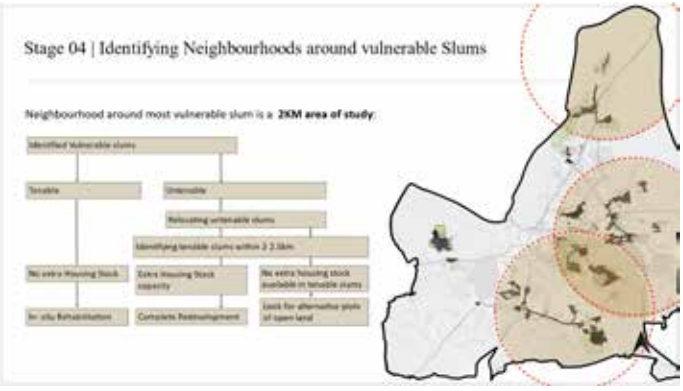
SA strongly advocated that the research follows the core principles of (1) a Data-driven approach (2) a holistic citywide perspective to identify vulnerable settlements, and (3) Including diverse multi-stakeholders in planning. It follows a process of federating the data collected on a unifying base map leading to a citywide dataset that can be leveraged to make informed decisions in the planning and preparation of slum rehabilitation projects across the urban area.



This ensures that an accurate profile of the surveyed area, whether a city, a neighborhood, or an individual slum, is generated.



SA advocates that a city-wide approach and identification of the most vulnerable slums in the city will ensure optimum utilization of government land and an inclusive planning approach that will be beneficial for all concerned stakeholders.



Solutions based on the vulnerability matrix.

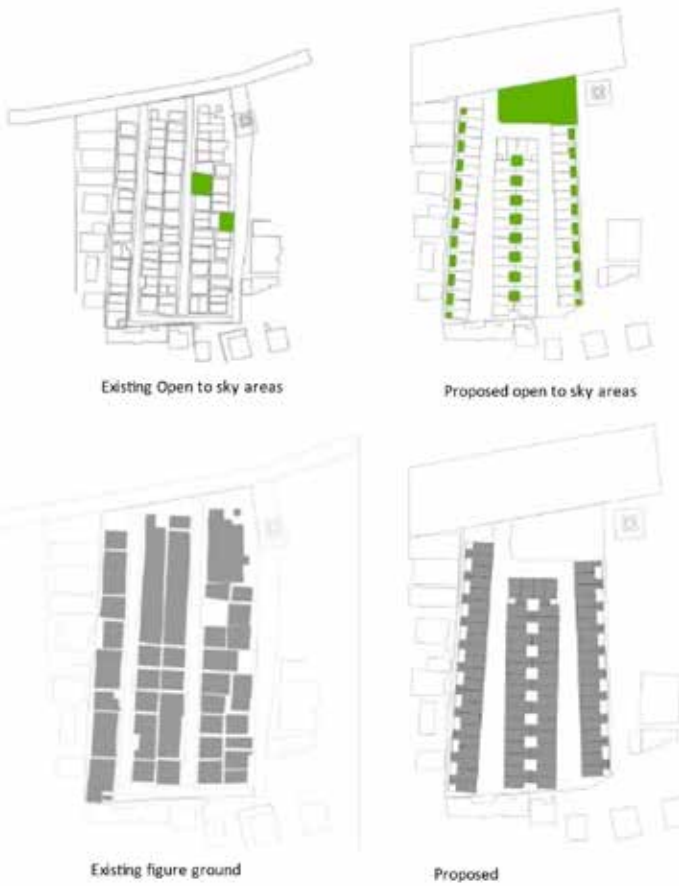
The proposed solutions have the potential to be replicated in similar 2-tier and 3-tier cities willing to implement social housing programs.

LIVE PROJECT: SLUM REHABILITATION AT BONDRENAGAR, KOLHAPUR

A few years back, the Urban Local Body (ULB) had proposed a slum rehabilitation scheme for the Bondre Nagar slum. The scheme proposed generation of extra housing stock to become the saleable component in the design. This approach was questioned as there was no demand for extra housing in the area. Furthermore the residents opposed the development of a multi-storeyed structure. Being farm labourers with lifestyles that were incompatible with a high-rise construction, the solution proposed by the PMAY department was unsustainable as it followed a top-down approach. There was a need for a holistic solution that had the approval of all concerned stakeholders with the interests of the community at the centre. SA at the behest of the community intervened with its multi stakeholder approach and designed housing solutions based on the findings of the city-wide research project.

Bondre Nagar Slum Rehabilitation Project:
For the rehabilitation of Bondre Nagar SA engaged the community in an inclusive process of designing. From taking door-to-door discussions to engaging the residents in a to-scale mock-up plan, SA has given a clear understanding of the space and its functionality. The developed design is a low-rise, high-density development consisting of G+1 tenements planned such that the adjacent tenements share a common wall and a rear open space that doubles up to form a courtyard. The tenements are designed to have adequate light and ventilation and the developed design has the approval of all concerned stakeholders.

BONDRE NAGAR REDEVELOPMENT
Designing homes for 77 families considering the aspects of Affordability, The Community and the Site. One House unit design caters to the fundamental functional spaces. One unit is G+1 making the settlement a low rise.
The open to sky spaces play a vital role irBondre Nagar Redevelopment plan as it makes a decisive difference between liveable habitat and claustrophobia as the design revolves for lower income group.
Spill over spaces like courtyards, backyards not only cater to informal activities but also increase the indoor living quality.
Repetitive units make a cluster and such clusters create spatial richness by minimalistic means leading a safer, healthier and affordable living environment



The road lengths have been modified as per the standards. The dwellings open onto the internal road making it easier to locate and reach.
The massing of the unit has evolved in a grid pattern considering the spatial requirements from the community.

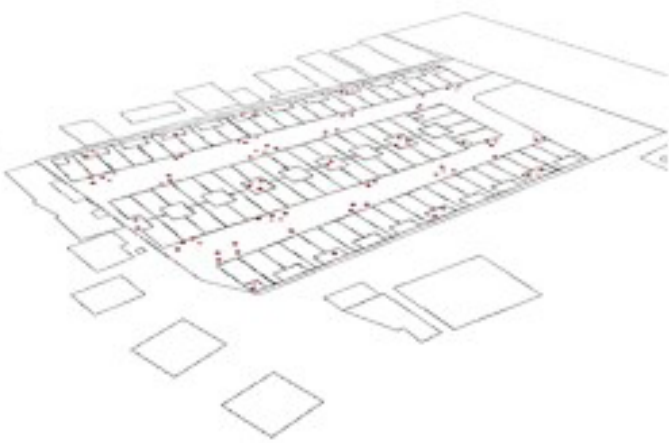
Existing road hierarchy

Road widening area

Proposed road hierarchy

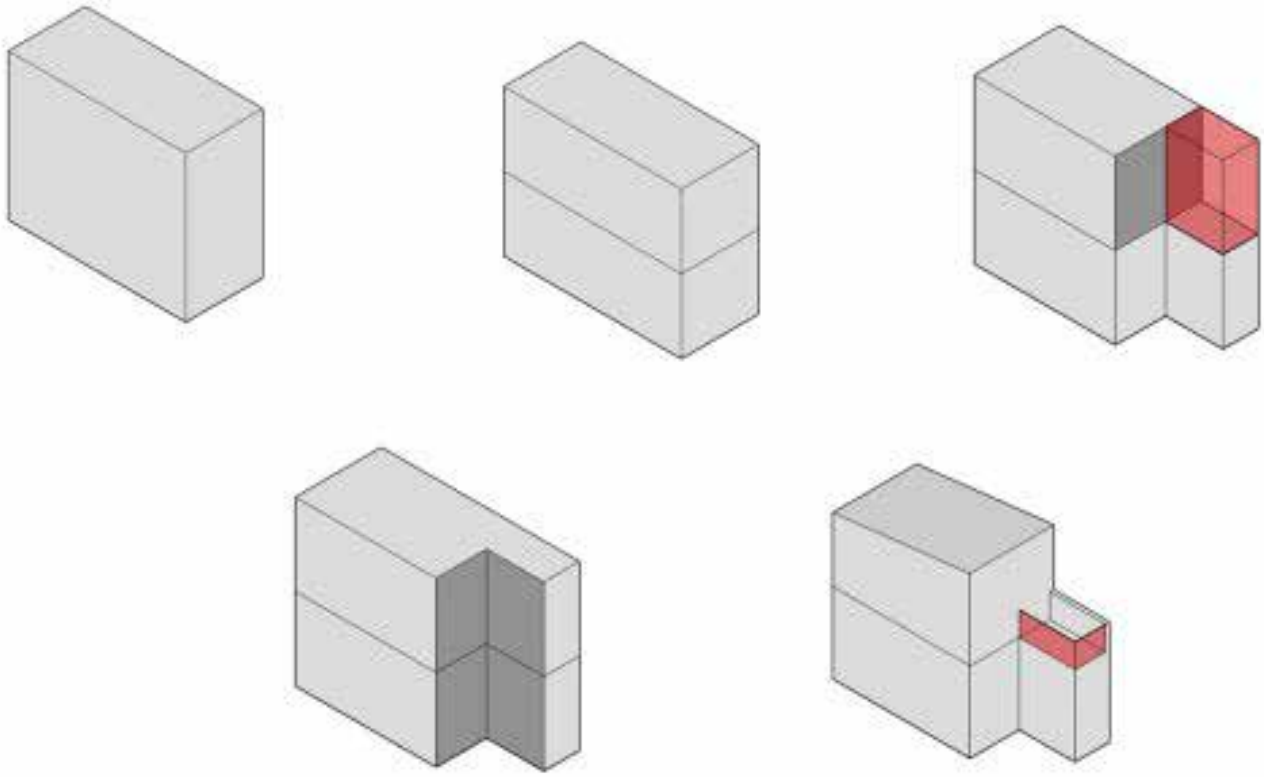
The density of the people does affect the living condition of the community. Here In Bondre nagar we have proposed permanent homes to the existing families with additions to their floor space index. The settlement proposed is well organized and follows all the by-laws. Houses are proposed in RCC making it a Permanent home for the family.
As many of the family members work in farms surrounding the site, people have preferred low rise housing complex rather than a high rise one.
The urban migration rate from core of the city of Kolhapur to the outskirts is very low, hence the exact number of houses are given on the site.
After the proposed layout each house has got equal areas, and each house has an accessible approach road.
With community lead design we have finalized the design of individual houses leading then for a cluster plan.

EXISTING ROADS CREATING CONIESTION ON ROAD

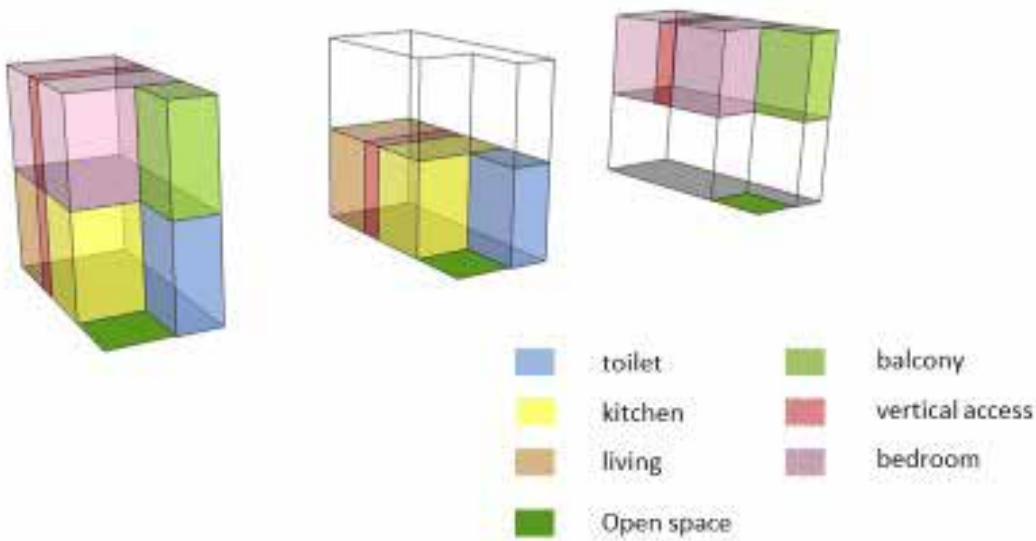


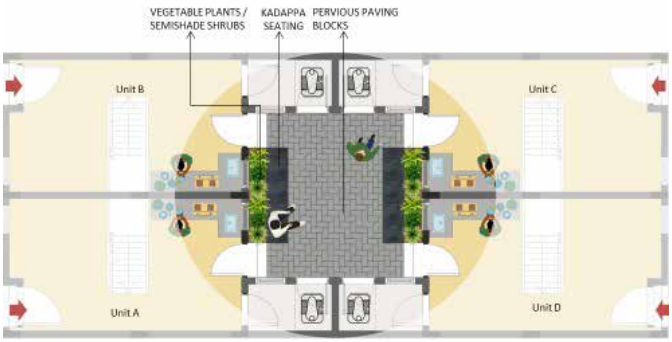
PROPOSED ROAD WIDTH ENSURING LESS CONIESTION AND ACCESIBILTY OF FIRE FIGHTING TRUCK TO EACH UNIT

Massing of a unit



Space Analysis





Sectional plan showing the courtyard design

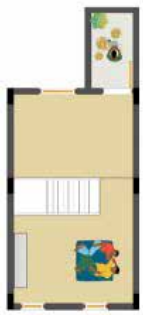
Section showing open, semi open and indoor areas with human activities

Informal activities in courtyard view 1

Informal activities in courtyard view 2

Cluster Planning

Ground Floor Plan



First Floor Plan

The Detailed Project Proposal for Bondre Nagar was submitted to the government under the Pradhan Mantri Awas Yojana's -Beneficiary Led Construction category and has received subsequent approvals. The land has been transferred in the name of the beneficiaries thus providing tenure security. All approvals of various agencies including the town planning department. The residents have also formed a cooperative society and are applying for micro loans. The Kolhapur Municipal Corporation is also actively involved in planning the common infrastructure. The site has been cleared and the beneficiaries are now living in a transit camp nearby. We move towards the construction phase with great enthusiasm and hope for a dignified future.

Alongside Bondre Nagar, in the years 2022-24, SA would like to explore translation of the research project into actionable on-ground impact for social housing projects that will have a citywide impact. As SA strongly advocates the approach of focusing solutions for the most vulnerable slums within the city, planning future projects for them is of utmost importance. Projects that are planned around the vulnerable slums will ensure optimum utilisation of prime government land. Alongside monitoring the Bondre Nagar Project, SA would like to develop solutions for the vulnerable slums that are conducive to on-ground scenarios and in accordance with the inclusive, multi-stakeholder involvement. SA would like to ensure that these settlements are undertaken for rehabilitation that benefit all concerned stakeholders.

CONCLUSION: LEARNINGS FROM DIVERSE EXPERIENCES

SA's holistic approach and involvement of the communities and ULBs have resulted in robust housing for thousands of urban poor. Residents now have a dwelling that is structurally stable and well-designed. The sense of ownership and responsibility further ensures the maintenance, cleanliness, and hygiene of the space. Their lifestyle transforms into one that is in stark contrast to the vulnerable living conditions in the slums. It is also observed that they strive to maintain this transformed lifestyle by promoting the economic betterment of the family. They also have a sense of financial responsibility as a new lifestyle also comes with awareness of savings for repaying loans, maintenance of their apartments,

Open Space

Street View

etc. This results in upward economic mobility and the future generations greatly benefit from it.

The residents of the completed housing projects now have a dwelling that is structurally stable and well-designed. The sense of ownership and responsibility further ensures the maintenance, cleanliness, and hygiene of the space. Their lifestyle transforms into one that is in stark contrast to the vulnerable living conditions in the slums. It is also observed that they strive to maintain this transformed lifestyle by promoting the economic betterment of the family. They also have a sense of financial responsibility as a new lifestyle also comes with awareness of savings for repaying loans, maintenance of their apartments, etc. This results in upward economic mobility and the future generations greatly benefit from it.

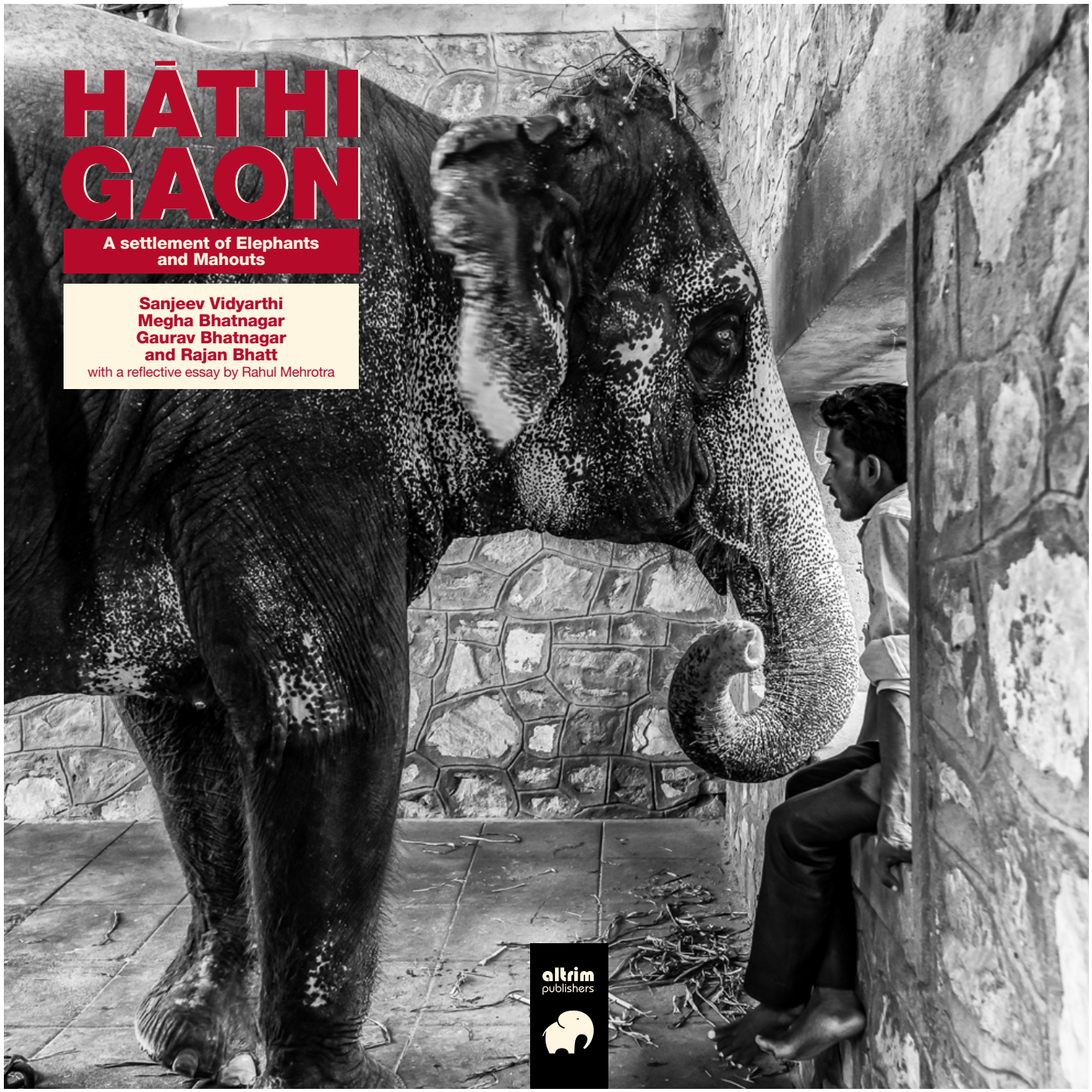
Changing the built-environment changes the perceptions of the society toward the marginalized communities. It leads to their acceptance and gradual assimilation into the mainstream. They can now forever leave behind the stigma of being slum dwellers.

Ar. PRATIMA JOSHI, Founder-Director, Shelter Associates
Who founded Shelter Associates in 1994, has pioneered the use of spatial data for slum development. Using concepts like multi-stakeholder consultation and participative governance, she has uplifted 4 lakh urban slum dwellers. An Ashoka fellow, Google Earth Hero, she is recognized as an eminent social architect by BBC and Forbes.

GEETANJALI DESHMUKH, PR Manager, Shelter Associates
Geetanjali is an Engineer by education, a Public Policy enthusiast passionate about social development. As a communications specialist, she has worked with various Non-profits contributing to fundraising, research, policy formulation, volunteer management and strategic planning. She is currently working with SA as a PR Manager.
info@shelter-associates.org

HATHIGAON

Author: **Sanjeev Vidyarthi, Megha Bhatnagar, Gaurav Bhatnagar and Rajan Bhatt**
Reviewed by: **Architect Pushpak Pandit**



The field of architecture features many voices promoting diverse ideas. Few publications however focus on critical subjects of architectural interest, which range widely from the rather abstract end of theory of design to the more practical arts of building services. Most books dealing with Indian architecture—a subject unfortunately occupying limited shelf-space in most libraries—illustrate personal views and normative thinking. Not surprisingly, many architectural design books are often centred upon promoting an individual's vision and self-experiences described through documented projects delineating the architect's philosophy, and the gradual evolution/refinement of that philosophy. Commonly employed parameters such as overall siting, surrounding context, built form, building geometry, and resolution of services etc. help the reader understand the individual's work and associated philosophy. However, few available books describe a single project in illustrative detail; focusing upon the power of an intellectually-stimulating design idea and the effective resolution of myriad challenges faced while turning that concept into reality.

The book, *Hathigaon,* or a village for elephants, written by Professor Sanjeev Vidyarthi, Megha Bhatnagar, Gaurav Bhatnagar, and Rajan Bhatt, distinguished scholar and accomplished practising architects, is a welcome addition to this genre of intellectually-simulating books. It reminds me of the engaging book *The biography of a building* by Witold Rybczynski, who describes the intent of the client and the interpretation of that intent by the architect while designing the well-known Sainsbury centre of visual arts in the United kingdom.

It is probably for the first time in the Indian context that a government sponsored project has been explained in such fine-grained detail. By doing so, the authors illustrate the developmental journey of the Hathigaon project from design conception to project completion in a clear and lucid manner. Divided into five chapters, each authored by an individual contributor, the book describes the various relevant contexts, predictable as well as unforeseen constraints, the many challenges, and the overall adopted planning process involved in creating a self-sufficient habitat of elephants and mahouts. In this sense, the merit of the book lies not only in exhaustive documentation of pertinent project details but also clearly putting across the viewpoints of the various stakeholders via one-on-one interviews describing how the project moved ahead amidst changing circumstances and many uncertainties. From this perspective, this innovate book elucidates the manner in which many government projects in our country are conceptualised, planned, administered and executed. Very helpful to understand the challenges designers face while working with the government as a client.

Moreover, many architectural projects treat landscape design as a tool to embellish the site but here the architect and the landscape consultant turned away from looking at landscape as an appendage to the building toward employing the natural landscape as a core guiding principle of design process. Such a reading of the landscape helped simultaneously address the issues of site planning, water management, and plantation. The idea of public consultation, typically absent in many government projects, was mobilized and used effectively to understand user needs and design the project accordingly. In this sense, this well written book raises interesting questions about the ways architecture is perceived and practised in contemporary India. It encourages practising architects to introspect about the nature of their practice.

All those interested in sustainability aspects of our built environment will enjoy the book's easy-to-understand writing and excellent photographs. Sharing architect's sketches of design development process would strengthen the book's next edition further. To summarize, a must read for students, academicians, practising architects, and everyone else interested in the power of design ideas and their execution on the actual ground.

Pushpak Pandit is a scholar-practitioner based at Jaipur. He is both an avid reader and keen thinker of the meaning and purpose of architecture in contemporary India.

Author
Sanjeev Vidyarthi has long, fruitful ties with Jaipur. He did foundational work along with his friends establishing the city's leading design practice—Aayojan, which sponsored the state's first school of architecture in 1998, before turning to other intellectual pursuits. Author of several books and essays illustrating the nature of Jaipur's city planning and physical development over time, Sanjeev is currently a professor of urban planning and policy at the University of Illinois, Chicago, from where he collaborates with progressive scholars and professional practitioners worldwide.

Megha Bhatnagar Born and raised in Jaipur, Megha is a leading architect of the city today. Her practice pays particular attention to crafting simple and elegant designs suited to the cause and context. Her well-known design firm, established in 1998 with husband Gaurav Bhatnagar, has been widely awarded for a variety of meaningful projects. Megha cares deeply for her hometown and seeks to conserve and advance its rich architectural traditions via purposeful design and outreach work. She loves to write poetry, is a fitness enthusiast and enjoys long nature and heritage walks.

Gaurav Bhatnagar After completing his bachelor's in Architecture from MNIT, Jaipur in 1997, and having worked under several architectural firms, Gaurav finally settled into his own practice with Megha Bhatnagar in 1998 in Jaipur. During their formative years of practice they both worked passionately in various design and architectural projects and have, since then, won many regional and national awards. Gaurav's keen interest in Nature and Nature photography, which started as a serious hobby, made a huge impact on him. It gave him a sense of ecology and environment and thereby a very different perspective on architecture, design and Landscape. He has, since then, designed several ecologically friendly and sustainable projects.

Rajan Bhatt is an architect and industrial designer by training, and passionate about touring, art and photography. He believes design plays a crucial role shaping the human life and better design can enhance the quality of how we live, work, and play. He founded and heads a multidisciplinary design firm called Bezel Design that provides comprehensive design and build services in the fields of spatial design and visual communication. Rajan grew up in Jaipur and established Mool Foundation, city's premier art & design forum as a tribute to his father who was the Rajasthan state's Chief Town Planner and an artist at heart.

Book Reviewer
Pushpak Pandit is a practising architect and urban designer based in Jaipur for the last 32 years. He has handled projects of various sizes and complexities. He is, right now also involved with the Indian Institute of Technology, Jammu as owner's architect for their ongoing construction project. He enjoys reading and sketching during his free time.

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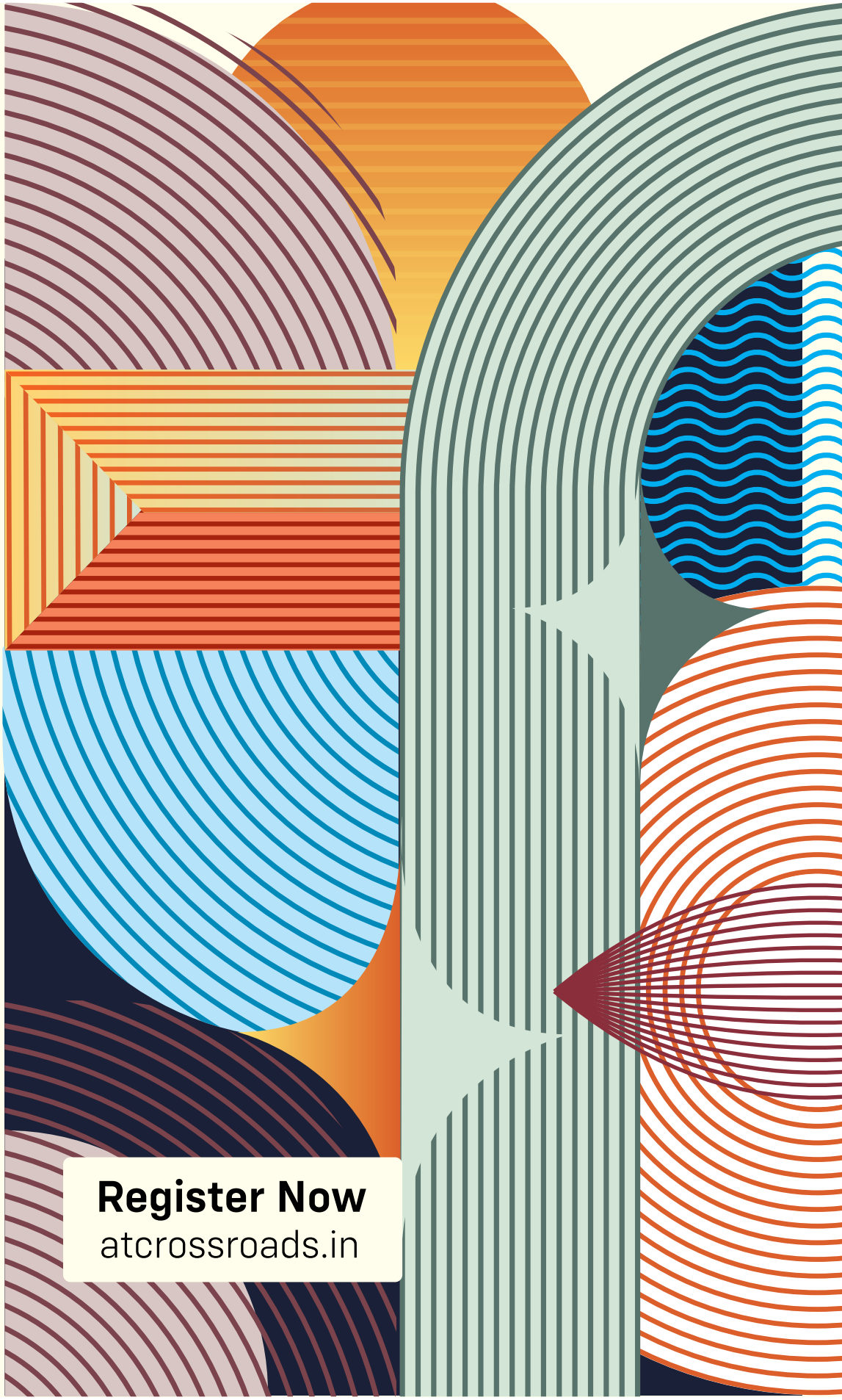

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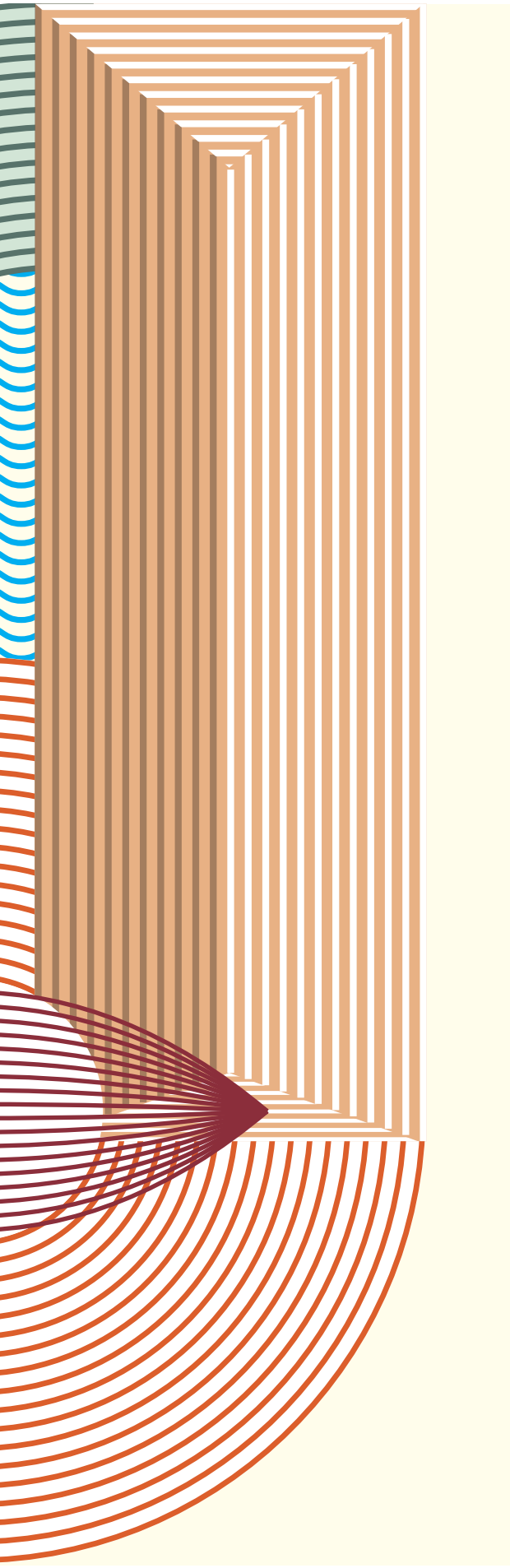

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You could self update your profile credentials, add work portfolio images apart from the profile picture, connect and collaborate within the community, share business information like number, website, awards, publications, specialisation etc. Establishing an organic secure digital datatbase.

PROJECT REGISTRATION SYSTEM

We propose an Industry first - BETA' project registration system on MAPS which intends to secure the Architects Interest. This will be closely monitored reviewed to evolve a fair and organised PRACTISE in future improving Quality of service, ethical operating process & paperless digital authetication. Its a start in listening to the general concerns.

WHY ONE NATION APP ?

- With COMMON goals of the association, we dont have to do the same work at twice the cost.
- Central user footprint will help us to develop and shape the application better.
- We will grow better extents and reach far better connect. Higher users numbers will make the implementation better and effective as a professional body.
- One click Connect to All Our SUB COMMITTEES, No remembering email id's /numbers etc. Write to us directly , immediately and effortlessly. We have defragmented and linked all the Committee activities back on the APP simplyfying the process for our users. Webpage will help our memebers grow their practise and also understand the functioning of IIA at large.
- Clients can search for their architect online with the help of experience, profile pictures, expertise, region of operations and write to them without sharing any personal information. This could help reduce dependability on other portals with time. Also hand hold citizens to better buildings and nation building excercise once we have a suffecient database.
- Architects Portal will become a dependable source with higher footfalls .
- Centralised platform to share official information over emails as best industry practice with response and expectations of the user community from comments and reactions.

CONNECT COMMUNICATE COLLABORATE

ARCHITECT'S WELFARE COMMITTEE **support@iiakarnataka.com**

ON THE ROAD

Ar. Jayakrishnan KB

Sunrise on top of Borobudur, Yogyakarta.

The encounter of Buddha with the mount Merapi , a live fuming volcano -a sun rise scene from the top of Borobudur .

Adding to the dilapidating condition of the wooden roof supports, the recent incidents of heavy rains have caused the roofs to cave in. The charkas can be seen in a room near the looms.

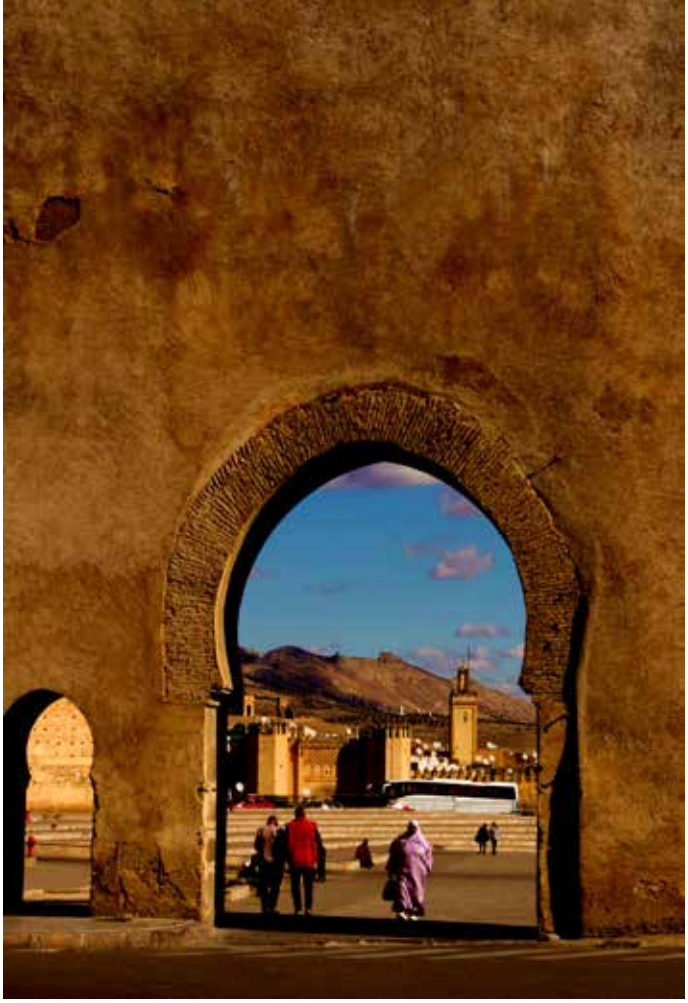
Condition of the south wall of the main building.

The transition space at the Casa Gillarmo by Luis Barragan.

The yellow city of Izamal . Izamal is a small town in the state of Yucatan. The name Izamal means "dew that falls from the heavens.".,

Lovers in a corner - from Rabat, capital of Morocco

It's a blue world in Chefchaouen, the small city of narrow, winding streets in the mountains of northern Morocco



Fez el Bali, The wallad city of Fez, the cultural capital of Morocco - with its vibrant cultural heart.

Ar. Jayakrishnan KB, graduated in architecture from Universityof Kerala . After graduation he has worked with Arvind J Talati , Ahmedabad, Ar S Gopakumar in India and Ar. N Kang in Malaysia before starting his own Practice JCJR Partnership, In Trivandrum along with his wife Chitra Nair. It has grown into one of the major architectural practices in the state of Kerala., and has won numerous awards and recognitions over the years.
JK, as he is popularly known, is an architect with multiple talents. He is an artist, urban sketcher, a passionate photographer, and an avid traveler.
ar.jayakrishnan@gmail.com

Chapel of silence - Kamppi chapel in Helsinki, by K2S architects

SKETCHES

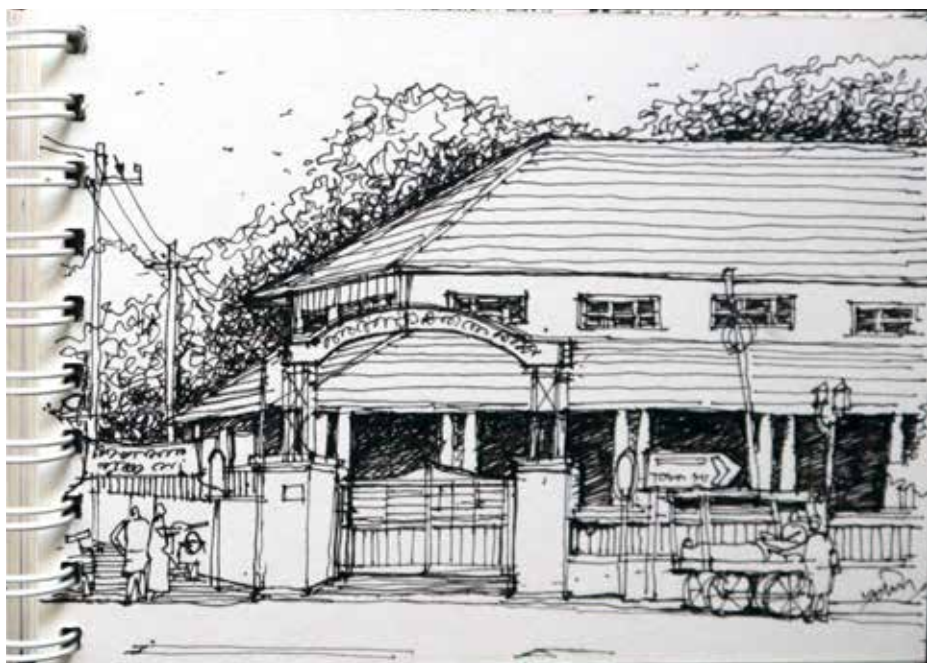
Ar. Praveen Ram

Sketching is the most essential part of learning design. A sketch can never be replaced by computers, because it's not about creating a pretty drawing or a presentation. The whole process of sketching is an act of observation. Whenever you sketch something you will inevitably observe it, study it intricately and then start translating it on paper. It cannot be done any other way. It immediately registers in your memory and stays with you forever. This, a computer can never do for you.

I had started basic sketching while in college and work, but my real journey of travelling and live sketches started only in the year 2015, due to a very significant turn in my life(that story, may be another time!!). During the lockdown in 2020, I had made it a point to do one sketch every day, which turned out to be a boon in disguise. Never stopped after that !!!

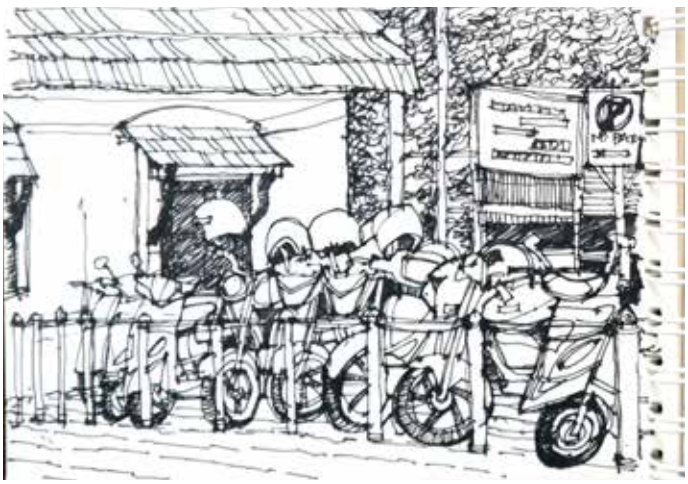
Join me, whenever in Calicut. Would love to go sketching with all of you!!!

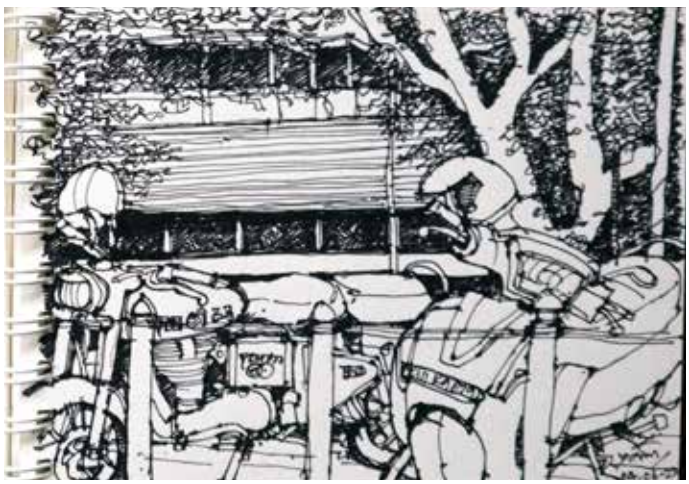
Crown Theatre, Calicut



Town Hall, Calicut

Tali Temple Pond, Calicut





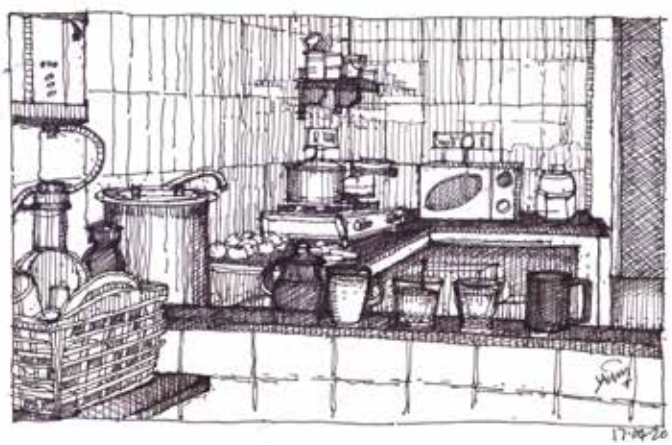
Tali Temple Bike Parking, Calicut

Apartment Terrace View

House in Pondicherry

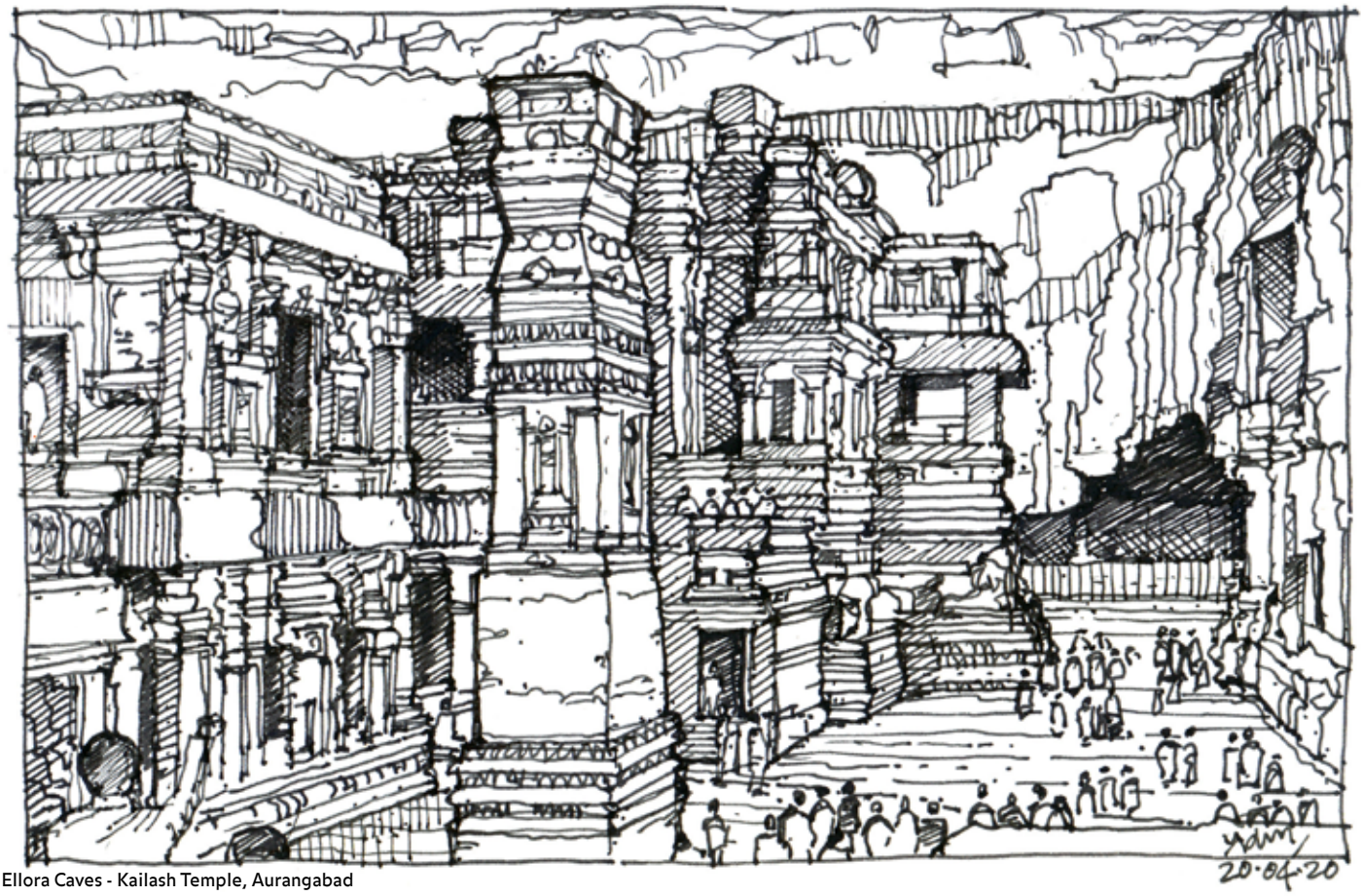
Amphitheatre at Mananchira, Calicut

Tali Temple, Calicut



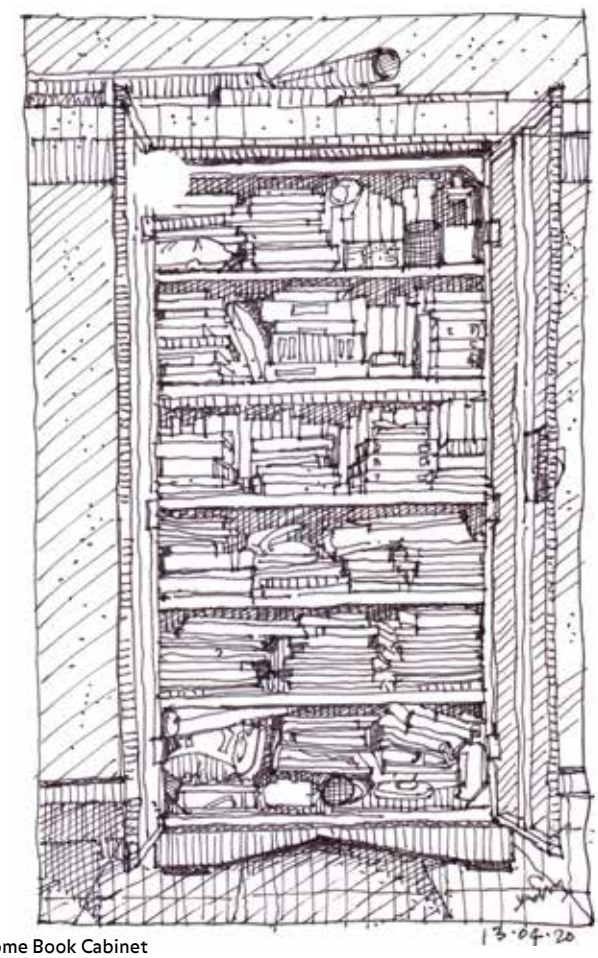
An Indian Home Kitchen

Thiksey Monastery, LEH

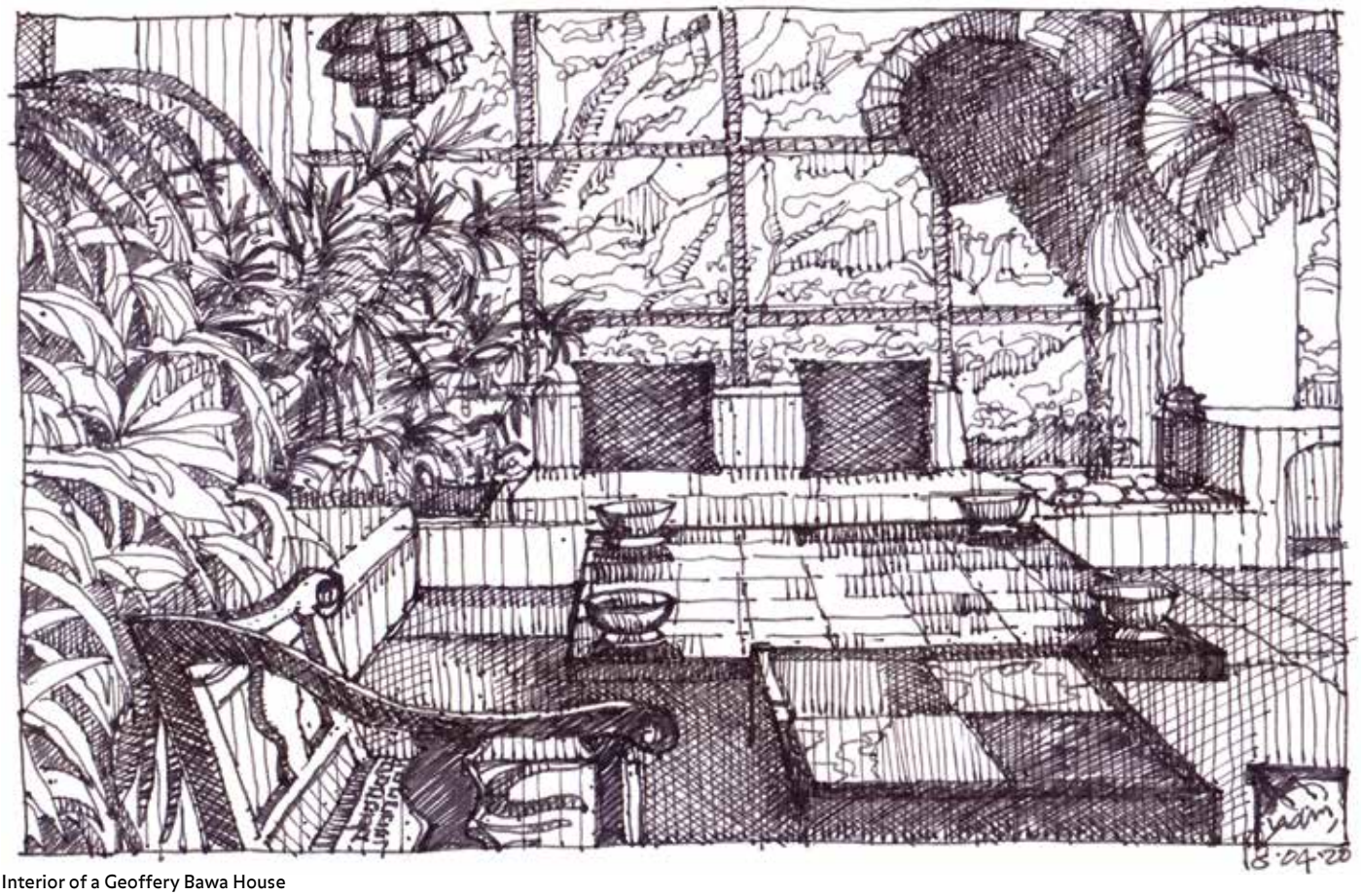


Ellora Caves - Kailash Temple, Aurangabad

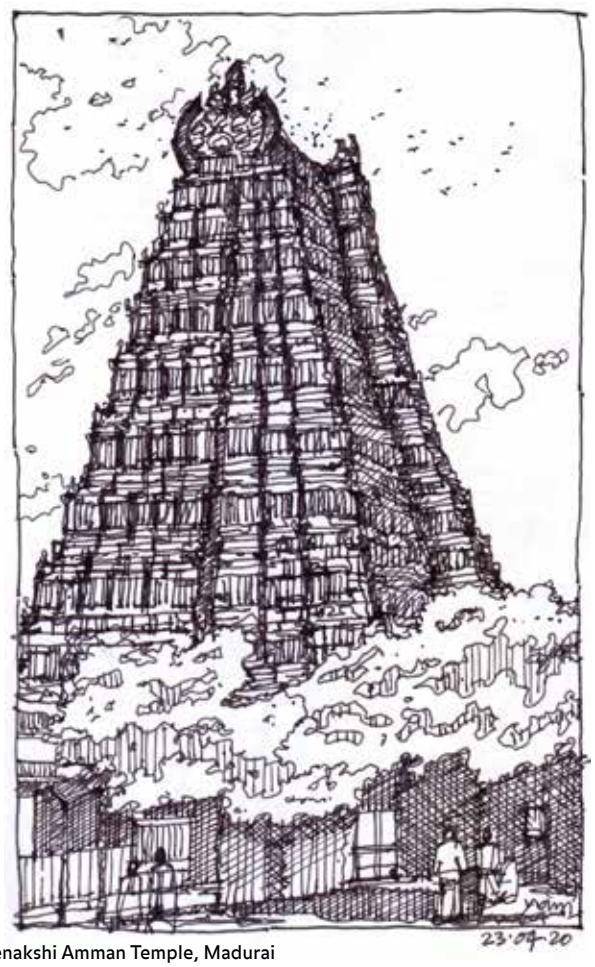
Harmandir Sahib, Amritsar



Home Book Cabinet



Interior of a Geoffery Bawa House



Meenakshi Amman Temple, Madurai

Ar. Praveen Ram, an architect for the last 22 years. His firm, **BaDoLoKA** is a one man practice constantly exploring and experimenting with spaces. Travelling and sketching on a regular basis has been an integral part of his learning process.
studiobadoloka@gmail.com

TOWARDS A DECOLONISED AND EQUITABLE ARCHITECTURE EDUCATION IN INDIA

Ar. Akshaya Lakshmi Narsimhan

Introduction

Architecture education in India owes its origins to its colonisers, who set up art schools in the country over 170 years ago. These schools were instituted to produce draughtsmen who could assist British engineers, who in turn designed buildings (Menon, 1998). Architecture was taught vocationally at the time, with little to no thought to contextual and critical thinking skills, the humanities and other forms of professional development. Ontologically biased towards a technical model, architectural education was birthed in an exigency, with a tendency to seek validation from engineers and the colonisers, estranging architecture from the humanities (Menon, 2000). Although more than a century has passed, the curriculum taught within architecture schools today, deviates very little from its colonial past. Genuine attempts have been made to contextualise the curriculum through an appreciation of geography, climate and sometimes social considerations: these perspectives are however understood from a pragmatic, technical point of view. Architecture education today needs a sensitised humanistic approach, to challenge its orthodox predicament and enable a significant, contextual repositioning.

India, for centuries, pre- and post-colonisation, has subsisted within an intricate web of caste, class, religious, gender, language, economic and geographic disparity. A technical disposition has today peripheralized critical thinking concerning social issues and has positioned the field of architecture within a fictitious universal civilisation (Ricouer, 1965). To even begin to shed the profession's colonial ancestry, architecture education needs to confront the turbulent layers of social oppression ingrained within the country's history and contemporary life. Similar to Paulo Freire's 'banking concept' of education, the current model poses the student as a mere object, with little to no agency and only the capacity to accept, fill and store knowledge deposits with a value addition of demonstrating skill and proficiency through the Architectural Design Studio (Freire, 1970). The student is viewed as devoid of gender, caste, religion, class, historic, linguistic, physical or economic character and vacuous of complex individuality. This exclusion of the self has empirically led to a mindset of 'othering'. The author proposes a confrontation and acceptance of these oppressive layers, towards a collective futuring and decolonising of the current educational model. This article advocates for an educative model that empowers students and teachers, through the acceptance and inclusion of their personal, diverse narratives within the curriculum and the pedagogy. Possible trajectories and interventions have been studied and proposed, to advocate for a bilateral approach towards the process of decolonisation.

Theoretical Motivation

It is important to consider a philosophical perspective at this point, that of positivism and antipositivism. While positivism focuses on scientific methods of understanding social phenomena, antipositivism focuses on understanding and interpreting social actions and therefore social phenomena (Tharakan, 2006). In a positivist approach, a building may be seen as the reality of a project, with universal aspects that all stakeholders and viewers can understand, assimilate and appreciate (Mazumdar, 1993). The positivist view, therefore, reinforces cultural universalisation, leading to the oppression of alternate viewpoints, outside the glorified normative. On the other hand, the antipositivist approach believes that reality exists in multiple and diverse ways, as is understood by the involved social groups. Knowledge, therefore, is based on the observer. An antipositivist accepts that the same building may have multiple realities and recognises that it may be meaningful in different ways by perceivers of different backgrounds (Mazumdar, 1993). Congealed by colonisation, most architectural schools in the country today align with the positivist approach. There is however an urgent demand for architectural education to associate with the antipositivists as well. To authentically be able to appreciate and educate architects from diverse contexts, histories and narratives, architectural education needs to at the least, feature and study the antinormative. "While curriculum is content-based, pedagogy is process based" (Desai, 2006). To truly rethink the current model of architecture education, we require a two-pronged approach that challenges both the content and the process in which architecture is taught today.

Decoding the Curriculum

"Under the provisions of the Architects Act, 1972 the Council of Architecture is required to prescribe the Minimum Standards of Architectural Education for imparting a 5-year undergraduate degree course in Architecture." (Council of Architecture, 2022). As of 2020, there are four course types within the COA-stipulated B. Arch. curriculum in India, these are Professional Core Courses, Building Sciences and Applied Engineering Courses, Elective Courses, and Professional Ability Enhancement Courses (Council of Architecture, 2020). One may refer to the Minimum Standards of Architectural Education Regulations 2020 to further understand the relevance and structuring of these courses. Within the Professional Core Courses, the Architectural Design Studio (or the AD Studio) embodies the core of the program. The AD studio in most schools is typically structured, through the 5 years, to engage with progressively complex 'building typologies'. Projects are assessed on their response to issues of the site, topography, climate, program, project brief and the user. In most cases,

however, much like the student, the user is rarely personified and thought of as neutral, devoid of gender, caste, class, religion, historic, linguistic, physical, or economic character, with only 'needs' that add to the elaboration of the 'typology'. Additionally, no mention is made of the students' personal narratives or how they might be able to find representation of their narrative within their designed outputs. While structuring studios by architectural typology tends to fortify the student archetype, the prototypical evaluative methods of the studio, additionally align with the orthodox normative.

Analysing the document further, one finds History of Architecture and Culture, Principles/ Theory of Architecture and Human Settlements Planning mentioned within the Professional Core Courses. However, most subjects relating to sociology, anthropology and the humanities are pushed into Elective Courses, thus trivialising their impact. The humanities subjects that do find representation within the Core Courses are also taught purely from a technical, uni-directional perspective, engaging very little with the politics of representation and therefore equity within the subject. A quick look at the subject syllabi of multiple schools helps uncover this politics of representation. One finds little to no mention of the spectrum of gender, ethnicity, caste, religion, class, historic, linguistic, physical or economic complexities within the country. These minority narratives influence, and are in turn influenced by the built environment and thus have a direct correlation with both the industry and academic practice.

Proposed Curricular Reform

Taking an antipositivist approach towards a more inclusive curriculum, the author presents a few recommendations. Foremost, within the AD studio, the author advocates for architecture schools to consciously work with architectural typologies of the 'other', as they might be thought of today. Steering away from a typology-centric studio, the studio could embark upon real-world, people-centric problems, with buildings positioned as social mediations. Studio projects may be initiated in the understanding of people, with project briefs, programmes, area statements and spatial, aesthetic and technical requirements germinating from an empathy-centric approach and a thorough study of the stakeholders. This provides an opportunity for students to genuinely deep dive into social, cultural, oppressive or oppressed narratives, to then find spatially relevant interventions, germane to the current discourses, within and beyond architecture. Design projects today are undertaken outside the AD studio, in various 'technical' courses like Building Construction and Building Services. These design projects could also begin to be tackled in similar ways, germinating from the social realm and resolving into the technical. Projects may be initiated from a people-centric, problem-solving position, and materials, structural and service-based resolution may be studied as an outcome of the requirements of the said people.

To legitimise the experience of students, teachers, and professionals who identify beyond the prevalent archetype, the substantive domain of theory subjects within the B. Arch. curriculum can creditably begin to find representation for persons outside of the stereotypical, cis-gendered, upper-caste, and most importantly, male normative. Subjects like History of Architecture and Culture and Principles/ Theory of Architecture could look to steer away from singular narratives and begin to include multi-perspective descriptions that probe into questions of 'built for' vs 'built by' and 'patron' vs 'builders'. History of Architecture could further focus on the prevalent social milieu and oppressive structures that lead to the construction of the buildings being studied. Students and faculty can be encouraged to identify biases present within each subject to further dismember the syllabi. "Such discussions may allow students to understand the impact of biases and to think about tools to acknowledge and challenge inequity in the design of the built environment and the design professions themselves." (Vallerand, 2022).

Towards introducing an egalitarian perspective within evaluative formats, the author favours the introduction of personal narratives, social equity and holistic critical thinking, in the success matrix of projects and submissions. Projects may be evaluated using an equitable format that rewards the representation of students' personal nuances. While this method will be physically and emotionally painful for both teachers and students, as "cultural jugglers", the process will help challenge our object position in the society, which we are part of, yet alien to (Macedo, 1970). The architectural education curriculum, in this way, could be used as a tool to "empower 'minorities' and build on privileged students' minimal experience of 'otherization'" to allow for visions of alternative viewpoints and diverse social interventions (Stam and Shohat, 1994, p. 19).

Preceding Experimental Pedagogies

Paulo Freire (1970) recommends the 'problem-posing' concept of education as an instrument for liberation. He calls for a model of education that germinates in the practice of freedom through dialogue and disposes of the typical roles of students and teachers. Freire further advocates the diminishing of authority and for pedagogy to align with a call for freedom, where "The teacher is no longer merely the-one-who-teaches, but one who is themselves taught in dialogue with the students". In a recent publication from the MIT Press, titled Radical Pedagogies, editors Beatriz Colomina, Ignacio G. Galan, Evangelos Kotsioris and Anna-Maria Meister bring together a collection of over 100 essays, presenting post-colonial, radical pedagogies undertaken across the world, between the 1960s and 70s. While most of these experiments were challenged by political and institutional forces, they have had multiple lives through the liberalisation and emancipation of minority cultures and philosophies. Despite their premature deaths, remnants of these pedagogies can still be seen in mainstream architectural education today (Colomina et al., 2022). At the Delft School of Architecture in 1966, Aldo Van Eyck introduced a design studio where design briefs and processes were individually tailored to match students' interests, histories, and backgrounds. The studio questioned assumptions in the form of open debates, democratising the studio space, by breaking hierarchies within the student-professor paradigm (Huiberts, 2022). In the 1980s, Pakistan-born conceptual artist, Rasheed Araeen highlighted racial and cultural hierarchies in creatives through an article titled "Our Bauhaus, Others' Mudhouse". In acknowledgment, South African architect Julain Beinart, devised Basic Design workshops at the University of Witwatersrand, formulated to address societies in transition to modernity. Through his 'blitz technique' students took on new lives for otherwise cheap African materials, as a response to the prevalent social conditions of scarcity (Levin, 2022).

Hiroshi Hara, at the University of Tokyo, used an ethnographic method, to document over 200 villages across 40 countries, to legitimise the architectural vocabulary of the vernacular, and expand the focus of architectural education beyond the studio and into the real world (Zhang, 2022). These experimental pedagogies had multiple goals. While some were student, and others faculty-led, through tacit means, these models created cognitive actors and participants within their student and faculty bodies.

Proposed Pedagogical Positions

There are multiple ways to respond and proceed with the experimental pedagogies of the 20th century, and the author recommends a range of suggestions. Foremost, must be to acknowledge bias, exclusion and outright omission of non-canonical forms of being and building within the curriculum, and to emphasise these narratives through our pedagogies. Tutors through a dialogic process could create alternative methodologies to critique the current model and its tactic of exclusion. Case studies across subjects could make visible, the contributions of designers and architects from minority backgrounds. Students could be encouraged to study the politics behind occupation and the representation of spaces and structures of social segregation that might manifest within. Students may be emboldened to challenge ideological positions taken up by 'master' architects, to critique principles that dictate decisions behind choosing formal or functional roots for architectural projects.

Building on an antipositive perspective, multiple studio briefs may be created, to directly align with individual students' narratives. The tutors in this regard may strive towards non-hierarchical roles and mediate the student-teacher contradiction through a conversational process of design, where both teachers and students learn together. Community engagement and participative projects may help foster collective agency and transdisciplinary learnings, creating empathy for the 'other'. The boundaries of the institute could be pushed further by engaging with ontological questions of sites of production and building. In teaching theory modules, the student and faculty may together explore multiple surrogate stories regarding the structures in question, to steer away from a unidirectional narrative. Faculty members from diverse individual self-identification can cultivate intersecting processes, to validate minority experiences that have been ignored in architectural discourse (Vallerand, 2022). In addition, faculty members consciously may be appointed from diverse ethnicities and experiences. A mentorship program may be brought into place that matches student-teacher backgrounds, to forge intersections and positions faculty members as nuanced role models within the student-teacher community.

Conclusion

Architectural practitioners have often projected themselves as liberal-minded, progressive individuals, but have failed to create truly meaningful changes through practice and pedagogy. It might be time to urgently question if the curriculum and pedagogy, and therefore the professionals of today, are exclusively catering to narratives of the oppressor and creating architects capable of only understanding narratives of the elite, uppercaste, gendered, urban individual. Students possess relevant, yet unidentified knowledge, skill and experiences, and it is time that architecture education recognises that.

Architectural education needs to move from a directive model towards a transformative model, to shape intellectually astute students who can engage with India's social realm in all its complexities. India has seen its own history of experimental pedagogies across various schools and geographies. The author, however, calls for the legitimisation of such experiments within both the curriculum and the pedagogy and wishes to open the debate for the advocacy of similar pedagogies to counter oppression and acknowledge intimate histories towards decolonised, collective built futures. To honourably shed its colonial lineage, and to create a safe intellectual space for students from varied genders, castes, religions, classes, geographical, historic, linguistic and economic backgrounds, the current architectural curriculum and pedagogy need to strongly deviate from its prevailing proclivity and engage critically with the nuances of India's narrative of oppression and exclusion.

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ARCASIA FORUM 21
42ND ARCASIA COUNCIL MEETING

Ar. Debatosh Sahu

When we learnt that ARCASIA Forum 21 will be held in Ulaanbaatar, we decided that we won't miss it this time. We missed the first opportunity 12 years back, when ARCASIA Conference was also organised. One of our senior architect's mother had passed away at that time. As such, all our bookings and tickets went in vain.

This time, Ar. Vilas Avachad and Ar. Debatosh Sahu have physically attended 42nd Aracasia Council meeting as official delegate and represented IIA. The conference was held in The Best Western premier Tuushin Hotel, in the "Soyombo Hall". Ar. Tushar Sogani, Ar. Dilip Chatterjee, Ar. Gopa Chatterjee and Ar. Malay Kumar Ghosh have also attended the conference.

We landed in Ulaanbataar on 4th September, at 10:40 am. It was a chilly, windy morning, with temperature touching 4-5° C. After we landed, the best treatment awaited us. The VP of UMA (Union of Mongolian Architects), Mr. Daovadarj had personally come to the airport to receive us. We were supposed to get the visa on arrival, as per our communication with UMA, and we submitted the form and required fees of $95 each and got the visa. I almost crossed the immigration lobby, when my name was announced and I was stopped by the officer. A lady from the office was running towards me. I felt a bit nervous at first, but I was astonished to see that the lady from the immigration office was apologising to me, and returned all our immigration charges. It turns out that Indians are exempted from paying the visa charges, and

ARCASIA COUNCIL

INDIAN DELEGATES WITH PRESIDENT AT AWARDS NIGHT

this was possible because of the super bilateral relationship between India and Mongolia.

We reached the venue hotel and everything was very smooth.

After checking in, I thought of roaming around in the city, and experienced light snow fall at Sukhbaatar Square, in front of the parliament building, which was next to our hotel.

5TH SEPTEMBER:

This day was dedicated for all the committee meetings and OB meetings. ACGSA (Arcasia Committee for Green Sustainable Architecture) meeting was conducted by present chairman Ar. Tushar Sogani, from Rajasthan.

ACGSA MEETING REPORT

Ar. Sogani chaired the ACGSA committee at Arcasia Forum-21 in a first hybrid committee meeting under the following theme: Alternative Energy options for the Future - The world now needs to prioritize to transform our energy systems and speed up the shift to renewable energy - "because without renewables, there can be no future." The meeting started with the welcome address by the Chair which was followed by approval of the minutes of last held round table meeting organised during the Rajasthan Architecture festival at Jaipur. All the members presented their country report in online as well as physical mode. The major attraction of the meeting was the launch of the Vernacular wisdom book which was the outcome of the previous meetings of ACGSA committee under the editorial panel of Ar. Qazi M Arif, Ar. Debatosh Sahu & Ar. Acharawan Chutarat, Past Chair ACGSA, Ar. Tushar Sogani, Chair ACGSA & Ar. Amina Q Mirza. The Green AsiArch exhibition, curated by Ar Debatosh, was also inaugurated in Hybrid mode. It was also conveyed that the election of the zonal representatives would be held soon. Another vital step taken was the formation of Task force for finalizing the various tasks for the calendar year. The meeting concluded with special Address by Ar. Abu Sayeed M Ahmed, President-Arcasia.

ACPP meeting was conducted by chairman Ar. Mukat Goal, from Delhi (virtually) and Ar. Dilip Chatterjee (physically). The Fellowship Committee meeting was attended by me physically.

REPORT OF ACPP MEETING

This time in ACPP we had the highest number of participations with around 18 countries participating in the Hybrid mode, and had country reports in the first half.

An important discussion was taken up in the second half of the day. In alignment with the world forums thrust on a more sustainable development in all walks of life, ACPP took up the views of various countries on the challenges professional practices were facing in achieving a negative carbon footprint despite the growing need for mechanical systems to keep it functional. Many countries showed, case studies and data of how they were managing. Although time was less most of the reports were collected to be corroborated later.

ACGSA MEETING

UIA REGION IV MEETING

UNVEILING OF WISDOM BOOK

An important point of mentoring younger generation of architects with respect to the sustainability of the profession was touched upon and this will be a discussion point for the next round table meeting.

The meeting was well attended with past committee chairs and also past Arcasia President Rita Soh.

6TH AND 7TH SEPTEMBER:

These days were dedicated for the council meeting at the "Soyombo Hall", in the venue hotel. The council meeting was attended physically by Ar. Vilash Avachad and myself, as official delegate. The night of 6th September was reserved for AAA 2022 Annual presentation ceremony and 'Studio Lotus' from India was awarded a 'Mention' in category B-2 (Public Amenity and Resort Buildings) for their project-RAAS CHATRASAGAR, INDIA.

UIA REGION IV MEETING

Apart from the regular proceedings of Arcasia Conference meetings on 7th, we also had UIA Region IV meeting, which was attended by officials of UIA president, Ar. Jose Luis Cortez Delgado, General secretary Ar. Tan Pei Ing, Region IV V.P Ar. Ishtiaque Jahir Titas and UIA Council member from Region IV Ar. Debatosh Sahu. Ar. Vilash Avachad represented IIA. We had appraised the latest development regarding the restructuring of UIA and various other activities of work programmes.

There were 2 bidders for the forum for the next year: Sri Lanka and Philippines. After the presentation, Philippines was elected through voting. ACA20 (20th Asian Congress of Architects) will be held at Boracay Island, Philippines, preferably in the month of September.

In the last part of the meeting, on 7th the election of Dy Chairs of various committees and President elect was held. The result is as follows:

There were 4 contestants for the post of President elect. Ar. Wu Jiang from China, Ar. Saifuddin Ahmed from Indonesia, Ar. Butjav from Mongolia and Ar. Edric Florentino from Philippines. Ar. Edric withdrew himself from the floor and Ar. Saifuddin Ahmed was elected after the voting.

In the evening, all the delegates were taken to MINI NAADAN for experiencing the show of traditional Mongolian national festival and reception.

8TH SEPTEMBER

FORUM 21 was held in the Government Palace which was next to our hotel. The theme was 'Future of Sustainable Urban Development'. Ar. Prof. Dr. S. Ramkrishna Rao from India, was one of the speakers. The topic was "Decoding the future of Sustainable Urban Development". The evening was full of enthusiasm through each country's cultural presentation. IIA had a collage of patriotic songs with dance which was joined by all countries.

Ar. Debatosh Sahu
He began his career working for market-driven architecture that is environmentally conscious and has a minimal carbon footprint. He is a founding partner of Espace (Kolkata, India). Under his guidance, Espace is now one of the leading architectural firms in the region. Being the recipient of several awards, his projects and articles are being published in several architectural journals. A visiting lecturer & Jury Member in various architectural colleges and competitions, he has presented papers in various forums in India and abroad. Ar. Sahu is the Council member of UIA (International Union of Architects) and IIA, Chairman-ASSOCHEM GEM, W.B. Chapter and the Past Chairman of ACGSA.
info@espaceindia.com

KARNATAKA
CHAPTER

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Latitude

SOUTHERN REGIONAL CONFERENCE

BENGALURU

11 & 12
NOVEMBER 2022

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At "Anantya", Palace Grounds, Gate 9, Jayamahal, Bengaluru, India

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SOUTHERN REGIONAL CONFERENCE
BENGALURU
11 & 12
NOVEMBER 2022

NEWSLETTERSEPTEMBER

GENERAL NEWS

IIA PL Championship trophy 2022

IIA Team Maharashtra Red Lifts the IIA PL Championship trophy for 2022. Congratulations Team Maharashtra Red.

Runner up - IIA Rajastan Chapter 2022
The detailed report of IIA PL 2022 will be published in the October issue.

Ar Saifudeen Ahmed Elected as the Next President of ARCASIA.

AR. SAIFUDDIN BIN AHMAD
Age: 62
Diploma in Architecture (1980, University Teknologi Malaysia) Bachelor of Architecture (1983, Deakin University, Australia) SAIFUDDIN ARCHITECT (Principal) SNO ARCHITECTS SDN BHD (Managing Director)

Ar Saifuddin is a fellow of Pertubuhan Akitek Malaysia, Registered Asean Architect, APEC Architect and Honorary Member of Australian Institute of Architects, Association of Siamese Architects by Royal Patronage, Council Member (Alternate) Region IV the International Union of Architects (UIA) (2017- 2021), Vice President Zone B Arcasia (2019-2021), Past President on Council of Pertubuhan Akitek Malaysia (2015-2022), President (2011-2013).

Ar Saifuddin is a member of the Board of Directors Mass Rapid Transit Corporation Sdn Bhd since February 2021. He is a Chairman of its subsidiary Lingkaran MRT Sdn Bhd. Ar Saifuddin was a member of the Board of University Directors at Universiti Malaya from 2011 to 2022.

He was awarded by his alma mater, Deakin University, Australia, Alumni of Year 2020. He was chosen as one of the distinguished alumni by Universiti Teknologi Malaysia during the university's 50th anniversary in 2022

RED CROSS Honours Ar Satish Jagdale

Dr. N.C. Puri Trophy for the Remarkable Red Cross Activities for Humanitarian services to the society for the Year 2019 -20 is given to Ar. Satishraj Jagdale and his Team at hands of Hon. Governor of Maharashtra Bhagat Singh Koshyari at Raj Bhavan Mumbai.

Ar. Satishraj Jagdale had contacted National and International Red Cross and other organizations and collected the required material for flood affected people of Kolhapur District Amounting 3.50 Crore rupees and with help his Red Cross District Team Distributed amongst Kolhapur

District flood affected people. He is Secretary of Indian Red Cross Society Kolhapur District Branch.

The other social activities carried out are attached with this mail.

IDRC 2023

Aditya College of Architecture, Mumbai is organizing its third International Design Research Conference- IDRC on 21 January 2023, with the theme *Building Envelope.*

A building envelope is everything that separates the internal building from the external environment. At first glance, it defines the characteristics of the built form and imparts the aesthetic and facilitates climate control. Design intervention on any of its entities positively or negatively impacts the structures performance, thereby measuring its contribution towards a greener planet.

Call for Papers: Inviting Research papers on the Theme *Building Envelope* from UG, PG, researchers, academicians and professionals.

For more information and registration:
http://adityacampus.org/idrc/.

International Conference

International Conference on Introspection of Sustainable Development Goals (ICISDG) 2022

ICISDG discussions focus on how the research community must and can play a significant role in achieving the SDGs by 2030. The Conference theme, *The Salutogenic SDGs,* offers an opportunity for students, academicians and professionals to present their views in hybrid mode at Mumbai on 9-10 December 2022. Abstracts can be submitted at icisdgresearchbridge@gmail.com until 30 Sept. 2022. Publication will be in peer-reviewed conference proceedings with ISBN and a selected few in Scopus-indexed journals. The conference is backed by IIA Brihan Mumbai Centre, UNAI, ESRAG South Asia, MACCIA.

Details at: http://shilpasagar.com/view.php?event=ICISDG.

DEADLINE EXTENDED : IIA NATIONAL AWARDS 2021

The deadline of Entry Submission for the **IIA National Awards 2021** is being extended to 15th October 2022.

For more details please visit:
https://awards.indianinstituteofarchitects.com/

Dorfman Award 2022

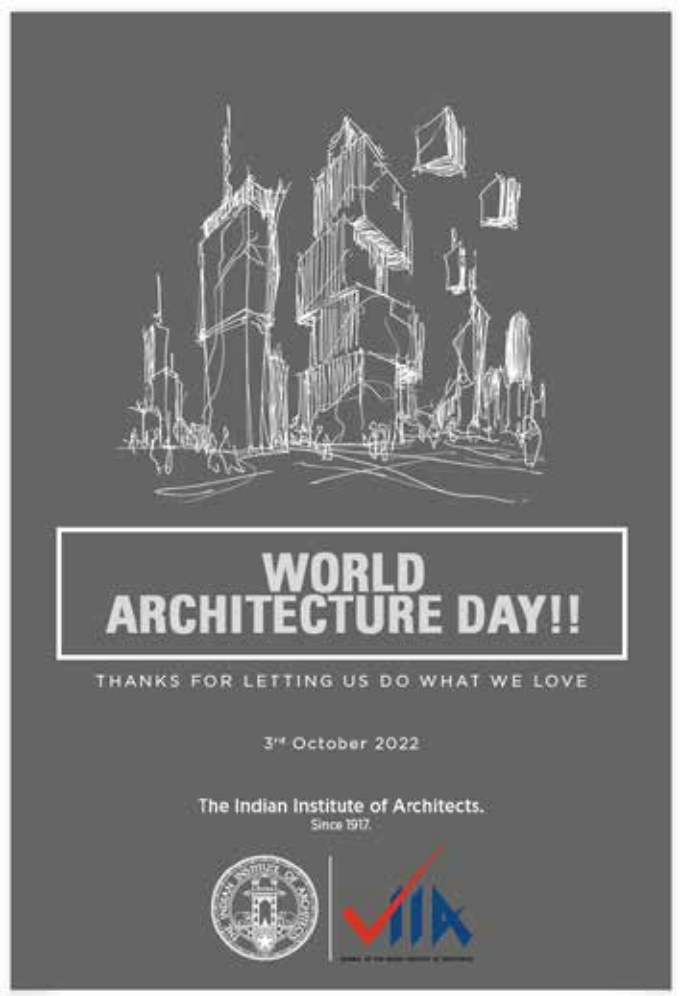
Ar. Vinu Daniel, Wall Makers, India scooped the Royal Academy Dorfman Award 2022. The prestigious accolade, offered once a year to an architecture practice that represents the potential the field has through innovation and pioneering ideas.

Support For the Journal

During the National Council Meeting, Ar Uday Shanker Dhony, Chairman Telangana Chapter offered to give ₹5,00,000/- contribution to JIIA. Thank you Team Telangana for this timely help.

Also Ar Brijesh Shaijal, Council Member offered to give a min amount of ₹5,00,000/- from the proceedings of the young Architects Festival , Calicut.

The Team JIIA Express our sincere gratitude to Telangana Chapter and Calicut Centre to their kind Contributions.



OBITUARY

Prof. Dr. Mohammed Haris

Respectfully addressed to as Prof. Harris by all, like any other teachers had fond names like Harry Bhai and even Charles Bronson. Having obtained B. Arch as well as Master of Town Planning from School of Architecture and Planning (SAP) even while running a successful architectural practice joined his alma mater as teacher.

From lecturer and reader posts he rose to the coveted Dean and Director positions.

He was a good teacher, liked by all students for his understanding and ever helpful gentleman nature.

He always had great pride whenever he heard about laurels and accolades of his students.

He was a good administrator and had good rapport with the University. He was instrumental in the formation of 'Faculty of Architecture' in Anna University when more and more Schools of Architecture were seeking affiliation.

As an architect he had several projects to his credit and more particularly emerged as the architect to have designed the maximum number of Mosques in his peak.

Both his sons are architects presently, one heading a school of architecture mentored by him and other leading a good practice.

Thus both, his teaching and practice lineages continue on. What more, several hundreds of his students excel as good architects and teachers.

Prof.Mohammed Harris like his contemporary late Prof. Altaf Ahmed, was instrumental in starting quite a few schools of architecture as mentor and advisor. In fact some of them were joint efforts of the two masters.

Prof. Harris was always there to help SAP (School of Architecture & Planning) and SAAPA the alumni association wholeheartedly. Ignoring his age he attended all the important events of SAP and SAAPA.

Even as an octogenarian he mentored and guided the school he started.

He was honoured by IIA, with the prestigious Madhav Achwal Gold Medal in the year 1998.

The condolence messages and homages flooding show the respect and affection his students always hold for him.

I join the numerous students of Prof. Harris in praying to Almighty to usher him to the special place He has reserved for him.

- Ar.J.Manoharan

IIA-Karnataka Chapter

IIA KC @ IIA Natcon 21

Around 60 members of the IIA, Karnataka Chapter participated in the IIA Natcon 21 that was held in Hyderabad from 14 -16 May 2022. The official newsletter of IIA KC Blueprint won the Best Chapter Newsletter Award 2021-2022. IIA-KC members Ar. Anand Pandurangi, Ar. Shyam Sunder and Ar. Nandita were given the certificate of merit for their outstanding contribution in IIA activities during the year 2021-2022.

Blueprint, the official newsletter of the IIA Karnataka Chapter won the BEST CHAPTER NEWSLETTER AWARD 2021- 2022 on 16 May 2022 at the IIA NATCON 21 held at Hyderabad

IIA-KC's Mysuru Center's Event : Presentation by Ar. Uttaran B Ray

Uttaran, an architect by qualification & a facade specialist by profession presented his strategies to make an architect's dream come true. Focused on executing the facade designed by the architect is his forte of work. He took the audience through his experiences in various cities of India & with many architects. The event was attended by a good number of IIA members & architects of Mysuru.

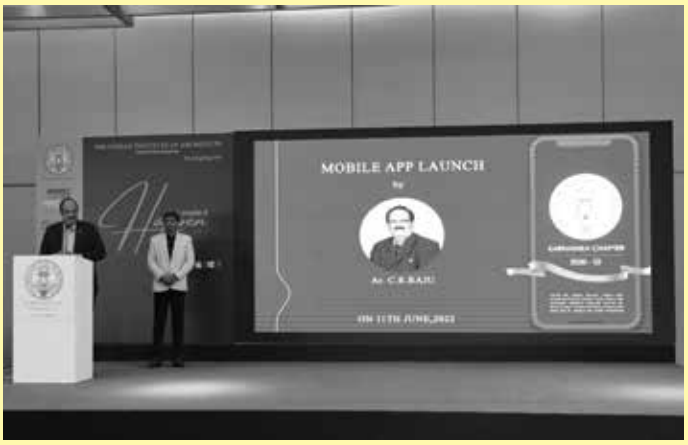
Presentation by Ar. Uttaran B Ray at the event organized by IIA-KC's Mysuru Center on 27th May 2022

Launch of India's First Professional App for Architects - The 'IIA' app

The IIA app is a networking and knowledge platform for architects to connect, create and collaborate. The app enables and strengthens communication among architectural professionals and creates awareness within the fraternity.

The app is not just a repository or an indexing platform. Rather the dynamism encompassed within it allows architects to reach out and learn and in turn, evolves the fraternity as a whole.

The app was launched on 11 June 2022 at the Four-Season Hotel, Bangalore, and was attended by 300+ attendees. The launch presentation began with the lighting of the lamp ceremony and was addressed by the President of IIA, Ar.C.R. Raju. The presentation was furthered by Ar. Mueen Haris, who spearheaded the conceptualization and development of the application. Right at the outset, the motive behind the app was articulated to the audience and then an overview of what the app has to offer was given.



IIA App launched by the IIA President Ar. C.R Raju on 11 June 2022

Celebration of International Yoga Day by IIA-KC's Hubbali Dharwad Center

The IIA- KC's Hubballi Dharwad Center in association with Khsmatha and Dhanyosmi Yoga Center celebrated International Yoga Day at Karnataka Gymkhana Grounds on 21st June 2022 at 7 am.

UltraTech Cement Limited
VIJAYAPURA
Cordially invite you to Participate
in
" International Yoga Day Celebration"
On Tuesday, 21st June, 2022
at 06.45 a.m.
Venue :
Shridevi Natural Therapy & Yoga Vignyan Kendra
Near Darga Jail Compoud, Jalagar Colony,
Ameen Nagar, Vijayapura.
Looking forward for your gracious presence
Team UltraTech, Vijayapura.
Supporting Organizations
Shridevi Natural therapy and Yoga Vignyan Kendra, Vijayapura.
A.C.C.E., Vijayapura.
I.I.A. Vijayapura Centre & A. G. A. Vijayapura

Poster of International Yoga Day celebrations by IIA-KC's Vijayapura Center in association with Ultratech Cement on 21st June 2022

Celebration of International Yoga Day by IIA-KC Vijayapura Center

The IIA- KC's Vijayapura Center in association with UltraTech Cement Limited celebrated International Yoga Day at Shridevi Natural Therapy and Yoga Vignyan Kendra, Vijayapura on 21st June 2022.

IIA-KC's Mangalore Manipal Center's Event

IIA-KC's Mangalore Manipal Center organized an event – An Evening with Ar. Anup Naik on 30th June 2022 in Mangaluru.

Ar. Anup Naik is an Architect and Urban Designer and is the Founder Director of Urban Frame Pvt. Ltd. (A Space Matrix Group Company) with 28 years of experience. He is also an active academician.

The event was sponsored by Greenlam and well attended by IIA KC members and architects.

IIA-Maharashtra Chapter

Mumbai Centre: On Saturday, 20th August, 2022, Zion Exhibitions in association with D-Arc Build had organized an event Lap of Luxury at ITC Grand Central. The Indian Institute of Architects (Brihanmumbai centre), The Indian Institute of Architects (Maharashtra Chapter) and The Indian Institute of Architects (Northern Chapter) were Conference partners and The Institute of Indian Interior Designers (Mumbai Chapter), The Institute of Indian Interior Designers (Delhi Chapter) were Knowledge Partners for this event. It was well attended by around 200 participants who were Architects as well as Interior Designers from Mumbai.

The Keynote Speakers for the evening were Ar. Reza Kabul, Ar. Dikshu Kukreja and Ar. Arjun Malik. The Chief Guest was Ar. Premnath & the Guest of Honour was Ar. Nitin Kilawala.

Ar. Arjun Malik gave details on integrating the nature and local materials within a dwelling unit at Lonavala while Ar. Dikshu Kukreja gave insights of the work executed by their firm, M/s. C.P. Kukreja & Associates in the last 5 decades. These included some prestigious projects like Jawaharlal Nehru University, New Delhi, Amba Deep Towers, New Delhi, Rumtek Monastery, New Delhi, Pathways World School, Aravali, India Pavilion- Dubai 2020 Expo, Dubai, India International Convention Centre, New Delhi.

The conference ended with an invitation by Ar. Ashish Gupta, Chairman of The Indian Institute of Architects, Northern Chapter inviting everyone to attend the conference event to be held from 21st to 23rd September 2022 at Pragati Maidan in association with The Institute of Indian Interior Designers (Delhi Chapter) and sponsored by Zion Exhibitions in association with D-arc Build.

Thane Centre: IIA Thane Centre celebrated Foundation Day and Environment Day on 4th June at Hotel Satkar Grande at Thane. A get-together and celebration event was arranged for foundation day of IIA, Thane centre and World environment day followed with fellowship cocktail and dinner.

A Lecture was given by Mr. Chandragupta Bhide on Japanese way of Sewage Water Treatment. After this lecture, Mr. Sachin Kulkarni and Mr. Amol Phadke delivered a presentation on Water Conservation.

The final event was of Creative Impact masterclass. This was conducted by Mrs. Archana Satoskar. All the Architects and attendees enjoyed on-the-spot colouring event on waste material to create their own masterpiece. This event was well attended by about 75 budding and well known architects. It was sponsored by Daikin Axis, Centaac and HWC.

IIA Thane Centre participated in the event Utsav @75, Thane to celebrate 75th Independence Day of India. Enthusiastic young members of IIA Thane centre curated the panels displaying the History of Thane city over the last 75 years. IIA Thane centre also organised a competition for young Architects in Thane. 6 groups from Thane city participated in the competition.

Nagpur Centre: June and July saw interesting activities at the IIA Nagpur Centre. The 13th consecutive annual exhibition of thesis works of final year students of Bachelor of Architecture of all institutes of architecture in the region was organised on 17th & 18th June at VNIT Campus, Nagpur. 28 students from 9 Institutes exhibited their works. This exhibition was largely attended by students and practising architecture fraternity of the city. This exhibition is a part of regular activities of the Nagpur Centre for motivating students to excel and for promoting awareness about architecture among the prospective students of architecture in particular and the public in general.

The need to understand the details of hospital planning was addressed through a presentation by Mr. Abhay Santoshwar on 15th July, 22. With the improvement of hospital facilities, surgical intervention areas are one of the areas where most elements have to be taken into account, and where at the same time more problems can occur. Thus, one of the main tools for improving operating theatres is innovation in their design and conversion into modern units. The correct design of the operating theatre is what will allow hospitals to have the most efficient operating theatres that are adaptable to the unstoppable innovation in health. This event was organised at Laburnum Hall, Chitnavis Centre. It was well-attended by about 50 architects.

The Nagpur Centre this year is entered into its Golden Jubilee phase on its Foundation Day, August 26th, 2022. For the said reason, The Executive Committee of Nagpur Centre has decided to conduct various events & programs to commemorate the Golden Jubilee year (August 26th 2022-August 26th 2023) for both the fraternity as well as the public at large. The themes for The Golden Jubilee year are Awareness of Architecture and Connect with the People.

On the occasion of its 49th Foundation Day, an Audio

Visual presentation was organized by IIA Nagpur Centre at Chitnavis Centre. The speaker Dr. Ujjwala Khot Palsuley from Pune spoke on Khmer Architecture: Manifestation of Indic Culture, elaborating on the Architecture of Cambodia. The program was attended by more than 100 members & students. The program was conducted by Ar. Sanyukta Shaw. Ar. Neha Jaipuria Shelke, Jt Hon Secretary IIA Nagpur Centre proposed the formal vote of thanks.

"Prarambh" Swarnim Samwatsar

Being the golden jubilee year of The Indian Institute of Architects(IIA) Nagpur Centre (Maharashtra Chapter) a formal event celebrating the "SWARNIM SAMWATSAR" was held at Hotel Center Point, Nagpur on 10th Sept 2022, called "Prarambh" to inaugurate & kick start the celebrations along with an outreach Program of Council of Architecture (CoA), New Delhi.

The program was graced by Ar. C. R. Raju, President IIA, Ar. Habeeb Khan, President CoA, Ar. Satish Mane, Jt. Hon. Secretary IIA & Ar. Sandeep Bawdekar, Maharashtra Chapter Chairman. A delegation of COA was also present to grace the occasion.

Ar. Raviraj Sarwate, Chairman of Nagpur Centre, Ar. Satish Mane , Jt. Hon. Secretary IIA & Ar. Sandeep Bawdekar Maharashtra Chapter Chairman in their notes lauded the efforts taken by the Nagpur Centre & highlighted the past achievements of eminent members. Ar. C. R. Raju in his address stressed the need for architectural firms to fully support young architects & encourage them to be a part of organization. Ar. Sunil Degwekar, Vice Chairman & Convener informed about the year round activities planned to celebrate this Golden Jubilee year by organizing various programs to create awareness about the profession.

Rachana, an exposition of building materials is being organized from 17th -20th February 2023. The website of Rachana was launched by Ar. C.R Raju along with the logo of Golden jubilee celebrations that was designed by Ar. Sukhada Ritesh Raj.

Ar. Neha Jaipuria Shelke, Jt. Secretary, Nagpur Centre gave a brief presentation about journey of 49 yrs. Nagpur Centre is one of the most active Centres having won the Best Centre Award 7 times and runners up for 5 times.

Ar. Habeeb Khan in his speech highlighted the efforts taken by CoA to complete the herculean task of drafting Manual of Architectural Practices (MAP). Giving the credit to his team, he informed how they worked through the pandemic to make this document a reality. Ar. Puneet Sethi, EC member CoA, gave a presentation about MAP. It is in 5 volumes and each volume touches a specific context in architectural practice like types of services, scope of works, fees structure, agreements, moral code, roles & responsibilities, management of firms etc. The MAP guides projects and practices from small scale to large scale, covering a wide range to benefit one and all. He informed that this manual is not only helpful to architects but public at large.

The Executive Committee of IIA Nagpur Centre alonwith Ar. C.R.Raju, President IIA, Ar. Habeeb Khan President COA, Ar. Satish Mane, Jt. Hon Secretary IIA & Ar. Sandeep Bawdekar Maharashtra Chapter Chairman

IIA-Rajasthan Chapter

Chapter chairman Ar. Tushar Sogani chairs the ACGSA committee at Arcasia Forum-21 held at Ulaanbaatar, Mongolia.

In a first hybrid committee meeting held during the recent Arcasia Forum-21 at Ulaanbaatar on 5 September'22, Ar. Tushar Sogani Chaired the session which was held under the following theme: Alternative Energy options for the

Discussions during the ACGSA Meeting

Future - The world now needs to prioritize to transform our energy systems and speed up the shift to renewable energy - "because without renewables, there can be no future."

The meeting started with the welcome address by the Chairman Ar. Tushar Sogani which was followed by approval of the last held round table meeting organised during the Rajasthan Architecture festival at Jaipur.

All the members presented their country report in online as well as physical mode.

The major attraction of the meeting was the launch of the Vernacular wisdom book which was the outcome of the previous meetings of ACGSA committee under the editorial panel of Ar. Qazi M Arif, Ar. Debatosh Sahu & Ar. Acharawan Chutarat, Past Chair ACGSA, Ar. Tushar Sogani, Chair ACGSA & Ar. Amina Q Mirza.

The Green AsiArch exhibition was also inaugurated in Hybrid mode. It was also conveyed that the election of the zonal representatives would be held soon. Another vital step taken was the formation of Task force for finalizing the various tasks for the calendar year.

The meeting concluded with special Address by Ar. Abu Sayeed M Ahmed, President-Arcasia.

A group photo of the Members attending the ACGSA meeting

IIA-Kerala Chapter

If entertainment is the best antidote for professional stress, then MAMANKAM 2021 epitomized it with a complete package of cultural extravaganza, creativity and camaraderie.

For the first time in the history of Indian Institute of architects, IIA Kerala chapter celebrated the festival of togetherness with the onset of *Mamankam* at the land of vibrant festivals, Palakkad.

More than 300 delegates representing all the eight IIA Centers of Kerala participated in the event. The two-day cultural fest kick started on 17th September morning at United Convention Centre, Ottapalam, Palakkad.

Hon. Minister for LSGD and Excise, Mr. M. B. Rajesh flagged off the event and Kerala Chapter Chairman Ar. L. Gopakumar presided over the inaugural function. KC Vice Chairman Ar. Vinod Cyriac handed over Mamankam Flag to Hon. Minister, Vote of Thanks was delivered by KC Secretary Ar. Binumol Tom, Host Centre (Palakkad) Chairman-in-charge Ar. Anoop K. welcomed the gathering and Event Convenor Ar. Murali G briefed the event. Host Centre (Palakkad) Secretary Ar. S. Krishnakunmar & Treasurer Ar. Karl Marx S. lit lamp along with other dignitaries.

Events were categorized under Online and Regular; Adzap, Dubsmash and Dance reel were pre-event online events, whereas, Regular events were further subdivided into onstage and off stage which happened on 17th and 18th September.

First day started off with Carnatic music followed by standup comedy, skit, group dance & fashion show. Off stage events such as installation and face painting also happened simultaneously. Musical night lead by team "soul of folk" gave vibrant end to day 1.

Second day began with early morning cultural visit to a nearby traditional architectural marvel 'Varikkassery mana' by delegates. Later, at the venue, light music & musical band events took place along with off stage competitions panel painting and 'pookkalam'.

The ever rolling trophy was named in the loving memory of late Ar. Aswathy Mohan, a multifaceted talent. She was an architect, model, dancer, painter and an entrepreneur.

During the Valedictory ceremony, winners were announced and trophies were presented. Calicut Centre won the ever rolling trophy with 66 points. Cochin and Kannur Centers were the 1st and 2nd runner ups with 65 & 62 points respectively. Competitive spirit rose to unimaginable heights and certain appeals were filed over judgments. Kerala Chapter constituted Scrutiny Committee to check the appeals and their final verdict is awaited.

During closing ceremony, vote of thanks was delivered by Co-convenors Ar. Mohammed Ashik and Ar. Anupama Sivaram. IIA Mamankam flag was handed over to next event host Centre (Thrissur) Chairman Ar. Vinod Kumar as a closing down gesture.

The cultural fiesta ended up with a musical night by team "the backup plan".

Mamankam 2021 was the right place to foster team and arts man spirit. It helped to bring back youthfulness and brought all architect friends and family members close to each other.

WELCOME NEW IIA MEMBERS

9th Com list New Delhi, Delhi to Northern.

Sr. No.	Associate to Fellow	Memb. No.	Place
1	Ar. Vijay Gautam	F12135	Faridabad
2	Ar. Shabnam Dixit P. C. Dixcit	F12918	Faridabad
3	Ar. Sandeep Kumar Saraswat	F17311	Uttar Pradesh
4	Ar. Rahul Vishwas Suriarao Sardesai	F16963	Goa
5	Ar. Batul Tinwala	F21406	Mumbai
6	Ar. Rajasekaran Hemasree	F44831	Karnataka
7	Ar. Sanjyot Vinodkumar Shah	F19841	Karnataka

Sr. No.	Dirct Fellow	Memb. No.	Place
1	Ar. Sunanda Satwah	F25862	Mumbai
2	Ar. Sukumar K R	F25863	Karnataka
3	Ar. Harshika	F25864	Indore
4	Ar. Gurunathan R	F25865	Chennai
5	Ar. V. V. S. Narayana Chelaboina	F25866	Telangana
6	Ar. Sapna	F25867	Chandigarh
7	Ar. Roopal Rahul Deshpande	F25868	Nagpur
8	Ar. Sriti Singh	F25869	Patna

Sr. No.	Assoicate	Memb. No.	Place
1	Ar. Dhrubojyoti Saha	A25860	West Bengal
2	Ar. Akash Patel	A25861	Jabalpur
3	Ar. Stalin K. Oommen	A25870	Karnataka
4	Ar. Ashna S. Aslam	A25871	Karnataka
5	Ar. Mahesh Guruswamy	A25872	Karnataka
6	Ar. Harshal Abasaheb Pramila Desai	A25873	Thane
7	Ar. Nikhil Gajanan Sarita Shelke	A25874	Navi Mumbai
8	Ar. Gurpreet Singh	A25875	Karnal-Kurukshetra
9	Ar. Rajesh Kumar	A25876	Amritsar
10	Ar. Chandani Sachin Gandhi	A25877	Pune
11	Ar. Navin Vrajlal Tank	A25878	Pune
12	Ar. Suraj Abhimanyu Agarwal	A25879	Talegaon
13	Ar. Rutuja Chandrabhan Khalde	A25880	Talegaon
14	Ar. Shraddha Rameshlal Oswal	A25881	Pune
15	Ar. Soumyajit Kar	A25882	West Bengal
16	Ar. Shruti Dubey	A25883	Punjab
17	Ar. Hrishikesh Revansiddh Patil	A25884	Solapur
18	Ar. Suraj Gourishankar Panure	A25885	Solapur
19	Ar. Muthu Kumar S	A25886	Coimbatore
20	Ar. Farozan Ishtiyaque Ahd Azra Bano Ansari	A25887	Kalyan
21	Ar. Abhinav Uday Sawant	A25888	Kolhapur
22	Ar. Shreya Menon	A25889	Kochin
23	Ar. Namitha Krishnan	A25890	Trivandrum
24	Ar. Ravindra Arun Kanhere	A25891	Pune
25	Ar. Arun Vinayak Kanhere	A25892	Pune
26	Ar. Kirtikamal Dutta	A25893	Assam
27	Ar. Shreyas Prafulla Kalpita Gavande	A25894	Mumbai
28	Ar. Sharvil Tinish Shah	A25895	Surat
29	Ar. Balavenkatesh P	A25896	Tamil Nadu
30	Ar. Hem Kumar R	A25897	Tamil Nadu
31	Ar. Ankita Ramesh Nisha Shukla	A25898	Mumbai
32	Ar. Thomas K Mathew	A25899	Kochin
33	Ar. Cyriac Panamkuzha	A25900	Kochin
34	Ar. Akhil Johny	A25901	Kochin
35	Ar. Chinchu Kumar S	A25902	Tamil Nadu
36	Ar. Namitha Nasar	A25903	Thrissur
37	Ar. Sigiri Sai Akhila	A25904	Telangana
38	Ar. Madhu Sewta R.	A25905	Madurai
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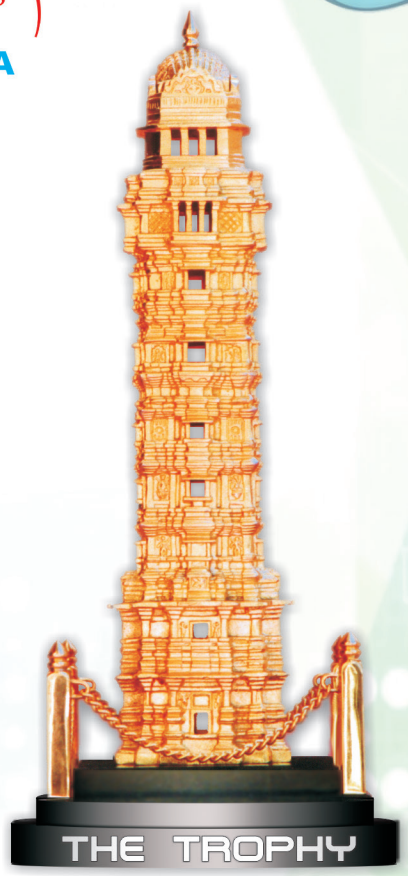

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