ADITYA
COLLEGE OF ARCHITECTURE

F . Y . I

FATHOM YEARN INNOVATE

TIME LAPSE.

VOLUME 1, ISSUE 1 / 100 PAGES/

SHRI HARISHCHANDRA MISHRA JI
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FROM THE CHAIRMAN'S DESK

"Hope is the pillar that holds the world."

Shree Ameya Public Charitable Trust has been formed with a mission to provide service for nation building. What better source could there be for achievement of this vision than thinking about and investing in education.

Archimedes said, "Give me a place to stand and I will move the earth." Aditya Institute of Architecture believes in growth of individuals and community, with reason and passion. We believe in imparting architectural education not for years but for life. There are only two ways to live. One is as though "nothing is a miracle". The other is "as if everything is". ACA stands as a pillar of quality education. The incredible infrastructure, a focused faculty group with curious student fraternity make ACA a force to reckon with. Explore this new and upcoming hub of holistic learning.

I am proud of the students of ACA for having put forth such exemplary work through sheer dedication and commitment.

"Our talents bring to your organisation a fresh set of ideating minds working in tandem to pursue a single-minded goal–of achieving excellence."

PREFACE

Ar. Rita Nayak
Principal of Aditya college of Architecture

'Vitai Lampada' - the torch of life. From time immemorial, mankind has always aimed to stimulate and ignite the fires of ingenuity and creativity, that enables a cohort to pass on its legacy and set examples for the coming generation. This torch-bearing empowers people's lives to give something productive back to the society by elevating their didactic lives.

Aditya Group of Institutions believes in the underlining motto to set examples and make students these torch-bearers for the community. Architecture as a course and profession is varied and diverse. It is obligatory for any architect to develop structures that respects the context and heritage of its user. We at Aditya College of Architecture believe in developing architects that nurture this maximum. The institute believes that students and teachers should get a milieu of a friendly work-ethic environment that widens the educational horizon of the former. As Principal of this institute, it elates me to be a part of a cycle to mentor, inspire students to the sensitivities and nuances of adopting sustainable architectural practices, that will ultimately aid in future building techniques. The institute believes itself to be a part in architecture's little oceans of fraternities that transpires and grows from mutual respect, rapport and learning.

To celebrate the institute's 7 years of immersive learning, growth and milieu, we warmly present to you the F.Y.I.- Fathom. Yearn. Innovate. – magazine. The magazine aims to display ideas, works and opinions of students and teachers alike on vast multitude of subjects, that shelve light on diversified, unexplored areas of and in architecture. The resourcefulness of this magazine will definitely pave way in apprising and igniting the minds of its readers. My best wishes for the magazine's future endeavours and expansions.

MENTOR'S NOTE

AR. JWALANT DAVE AR. NEETHU MATTHEW

Architects being writers is one of the most trivialized roles in the profession owing to an unsaid literary embarrassment. This is probably because writing makes an architect (who loves writing) vulnerable to having opinions and being publically sensitive. As readers and writers, we often think of writing as being temporary and opinionated, which is the exact opposite of the pride and permanence of a celebrated building. So why is writing a piece on architecture in popular opinion, 'not so architectural'? The official rights for building and designing were handed over to what the world calls an Architect only recently but my man Vitruvius wrote his first words on his personal knowledge of building technology in 80 BCE. Since early modernism, the time when architecture was fathered, sharing space with architects, be it in designing or writing, has proven to give a tough time to writing architecture. The fraternity owns predominant space, while socio-cultural and philosophical perspectives of the built environment are discouraged in discussions. But it should surprise everyone to know that, great people who proudly wrote about built spaces are not called architectural writers and great writers on architecture and are not always architects. This means that one can write about built spaces even if you haven't designed it with God's ego. So it is safe to say that it is never embarrassing or too late to claim your impossible page and start writing because it is okay to write, whoever you are. This magazine is an attempt to provide good writing space to impossible architects and it is an honor to be a part of the student team as they publish this first issue with a promise of getting the science of built space, opinions, criticism and quality writing out of curious minds.

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Atharva Belsare

NOTE FROM THE GENERAL SECRETARY

"As the General Secratary of ACA, the magazine's issue has been a matter of great pride for me. The efforts of several students and faculty has helped make this journey successful. I hope this stems as the beigning of a tradition that further binds all strings of this association."

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Dalit Sangh started as a movement for Dalit and Tribal rights in 1985. Gradually transforming into professional organization it got registered in 1996.

The organization works with Persons with Disabilities, Women and Children & with Pardhi, Mongia, Sapera Communities- recognized as Nomadic tribes. Its focus is towards promotion of Barrier-free environment; Equal rights and entitlements; Vocational skill development and Accessible health & education for all.

The organisation expanded its work into ten districts of Madhya Pradesh viz. Hoshangabad, Harda, Betul, Raisen, Narsinghpur, Mandla, Guna, Chindwara, Bhopal and Indore.

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-Image Courtesy : Nishra Jadav, ACA

THE F.Y.I. TEAM

EDITOR'S NOTE

KASHISH SINGH

To Those Reading,

Whats more endearing than venturing out in wild? That very first expedition that desires to be felt. There's a certain rush in rhythm of unlikeliness, a fractional unsettledness, heavy breaths in pounding senses. That first expedition is what FATHOM. YEARN. INNOVATE. demands one to do.

This pilot issue is certainly about what the words spell out as, "Fathom", to think beyond doubts and taboos. "Yearn", to long the everlasting thirst for greatness. "Innovate", to advocate this yearning an translate it into yet to imagined paradigms.

The pilot edition, themed as "Time Lapse" starts of with the documentation of time that revolved around a building and its very significance. Later, we jump onto the timeline through ancient standards and run through its impacts thereon today. While doing so, we question not only the often-spoken debacles, but also unearth the wonders of the past, present and the future. Very often than not is this transition justified rightly against the grain of time. Heritage is subjective and so is the expression for the future. And every single face of these anecdotes widens the vision one has towards it. In entirety, the following edition shall initiate questioning of several aspects of the society, practice and objectivity of things.

This magazine shall not deign to set boundaries, but purge its inhibitions and let the readers dive in the realm called new. As I introduce to you the first of the hopeful many, its with gratitude and humility.

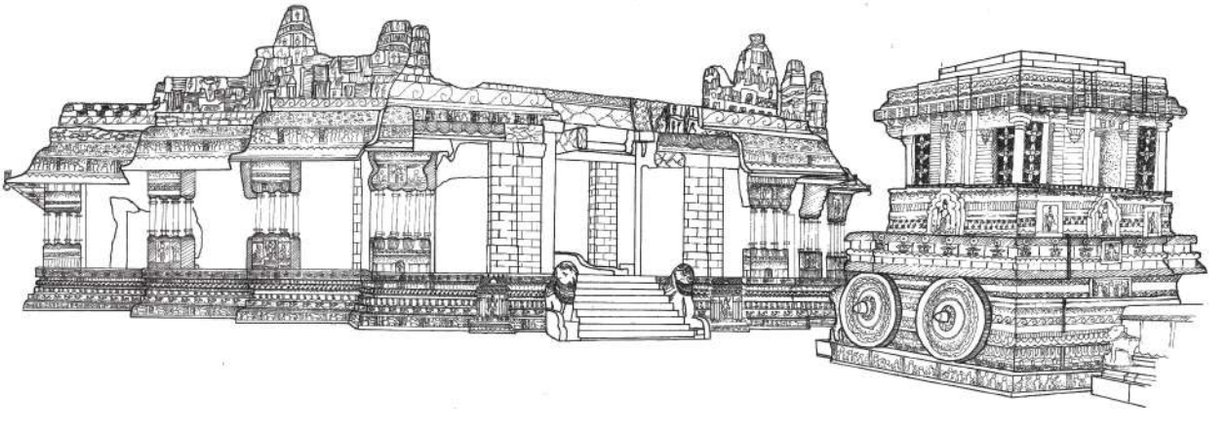
-KASHISH SINGH

HAMPI DOCUMENTATION

The Broken Language Of Ruins

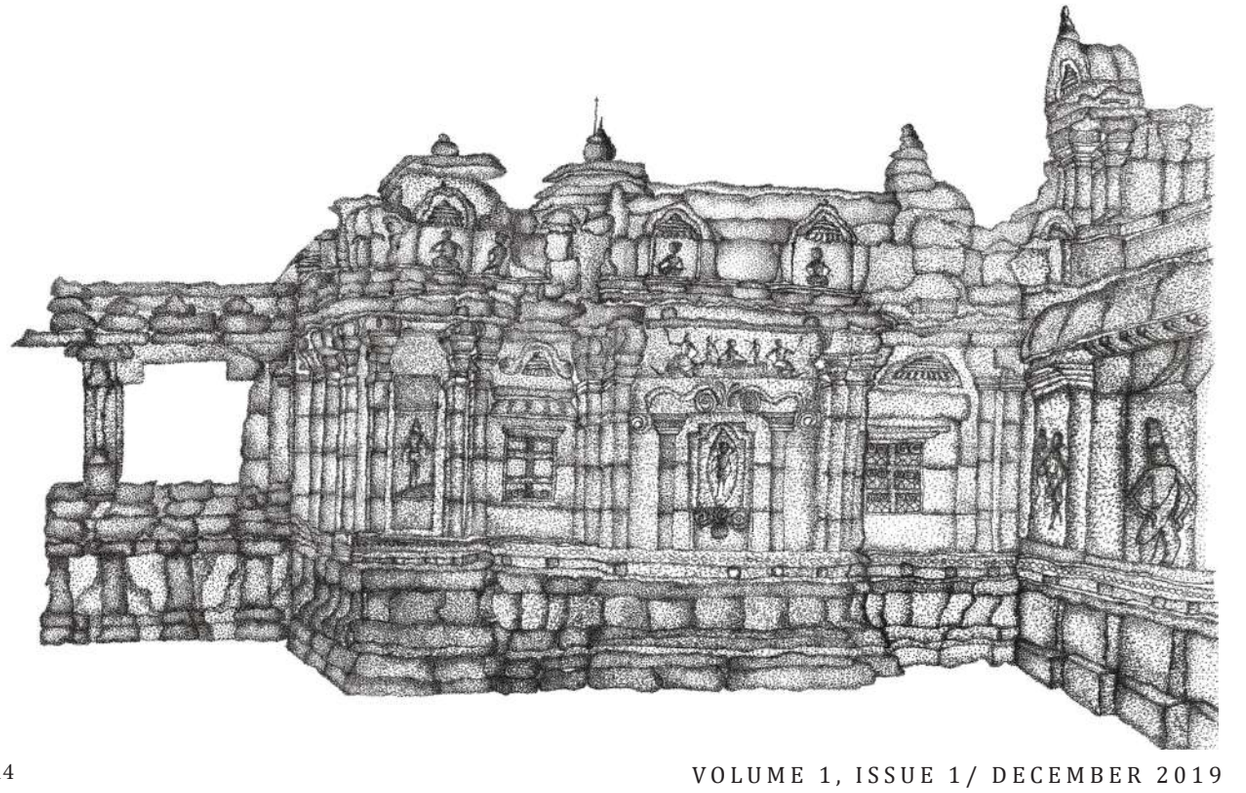
-Medhavi Bhiwandkar
- Maheshwari Parmar

Hampi speaks in a language you can't fathom. It has a lot of stories to tell, but the ruins only sing the tales of woe which send a chill down your spine. From peaks of grandeur to the deplorable state it is in now, one can only hypothesise as to how Hampi would have been in its full glory, but no clear picture can be drawn.



Hampi, the lost kingdom, has faced the brunt of brutal invasions. The city was deliberately destroyed by Turkish invaders, specially making sure that the structures that were most dear to the people were obliterated. The structures that survived the mass destruction still stand narrating broken stories of a glorious past.

The structures that still stand are the temples in Pattadakal and Aihole, carved and detailed, reflect extravagance. Walking through the unnervingly serene colonnades of these temples makes a person sombre yet curious about some parts of the dimly lit interiors.



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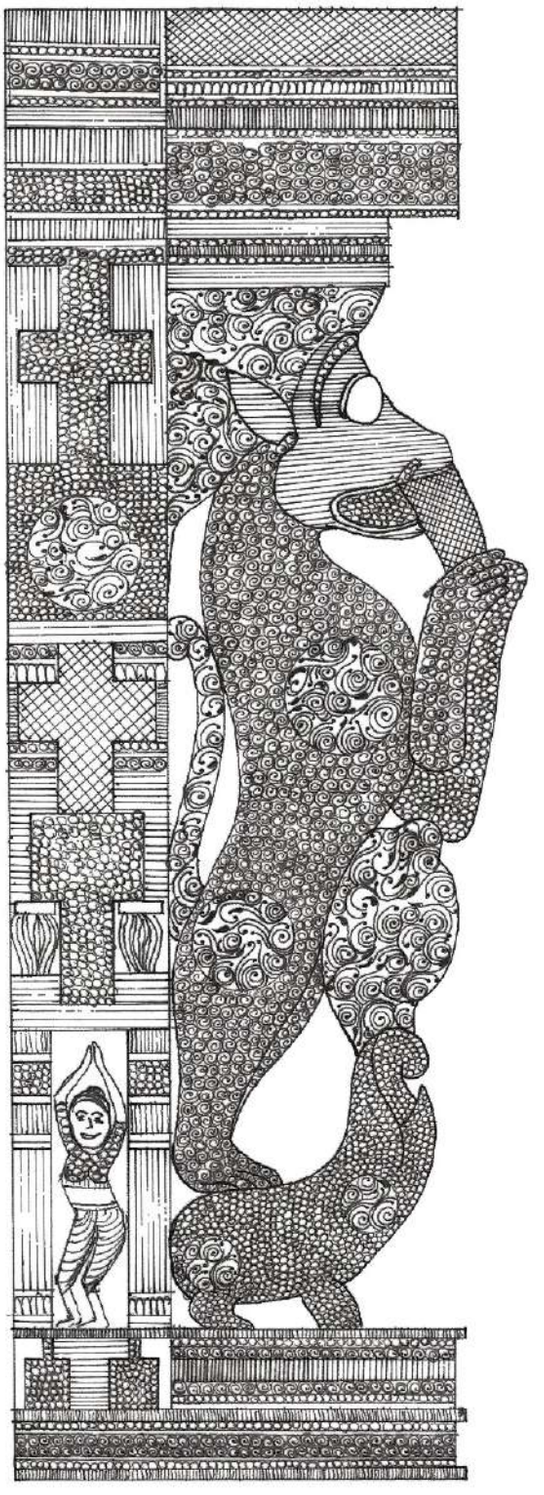
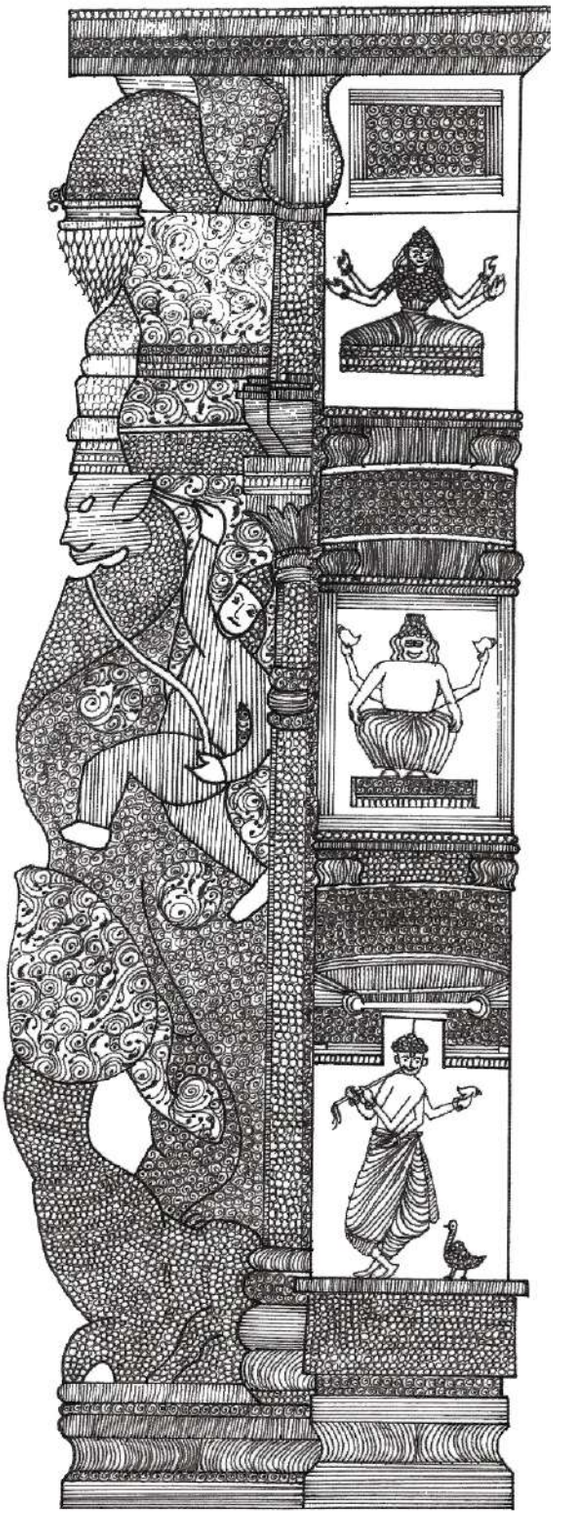
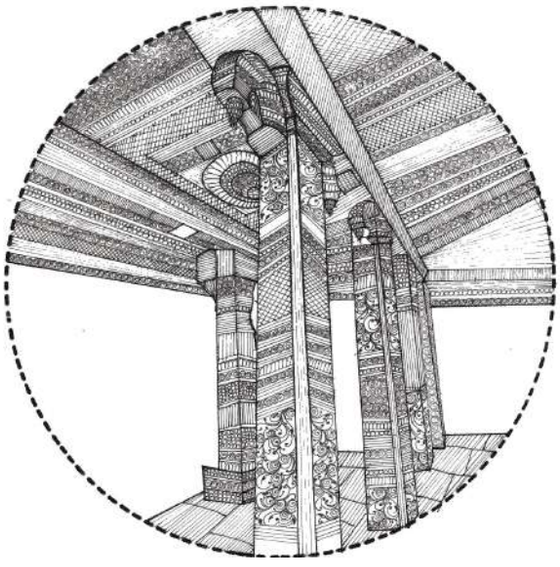
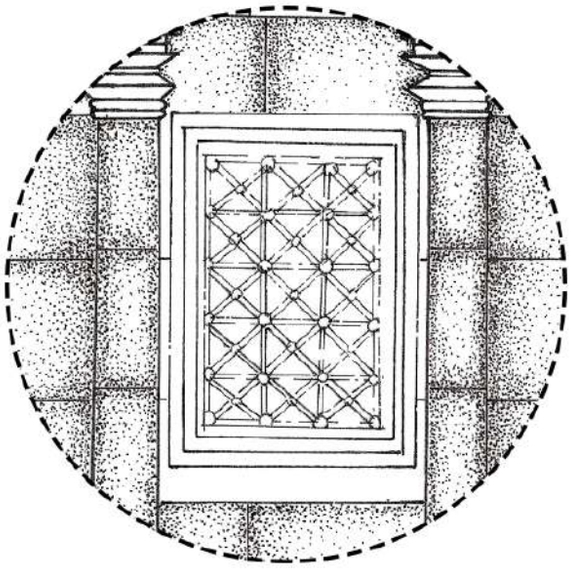


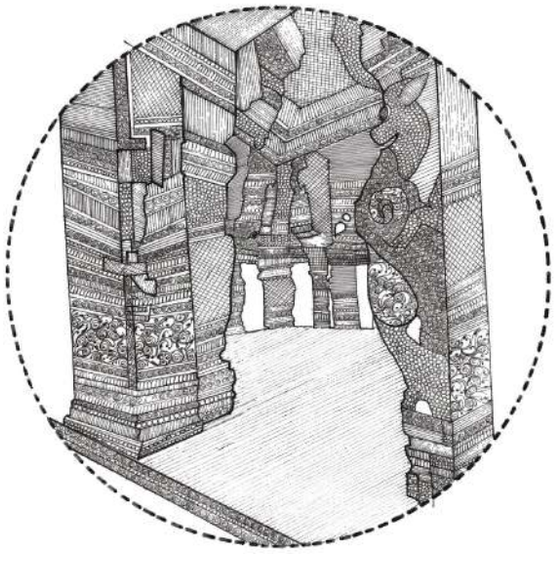
The Nrityamandapa in the Vitthala temple complex highlights a platform where dancers used to showcase their talents - nrityakala. The ingenuity of artisans of the time should be acknowledged, who gave the pillars of that Mandapa a purpose – creating music with touch. Once struck, each pillar makes a reverberating musical sound of varying frequency, giving the visitors a unique acoustic experience.

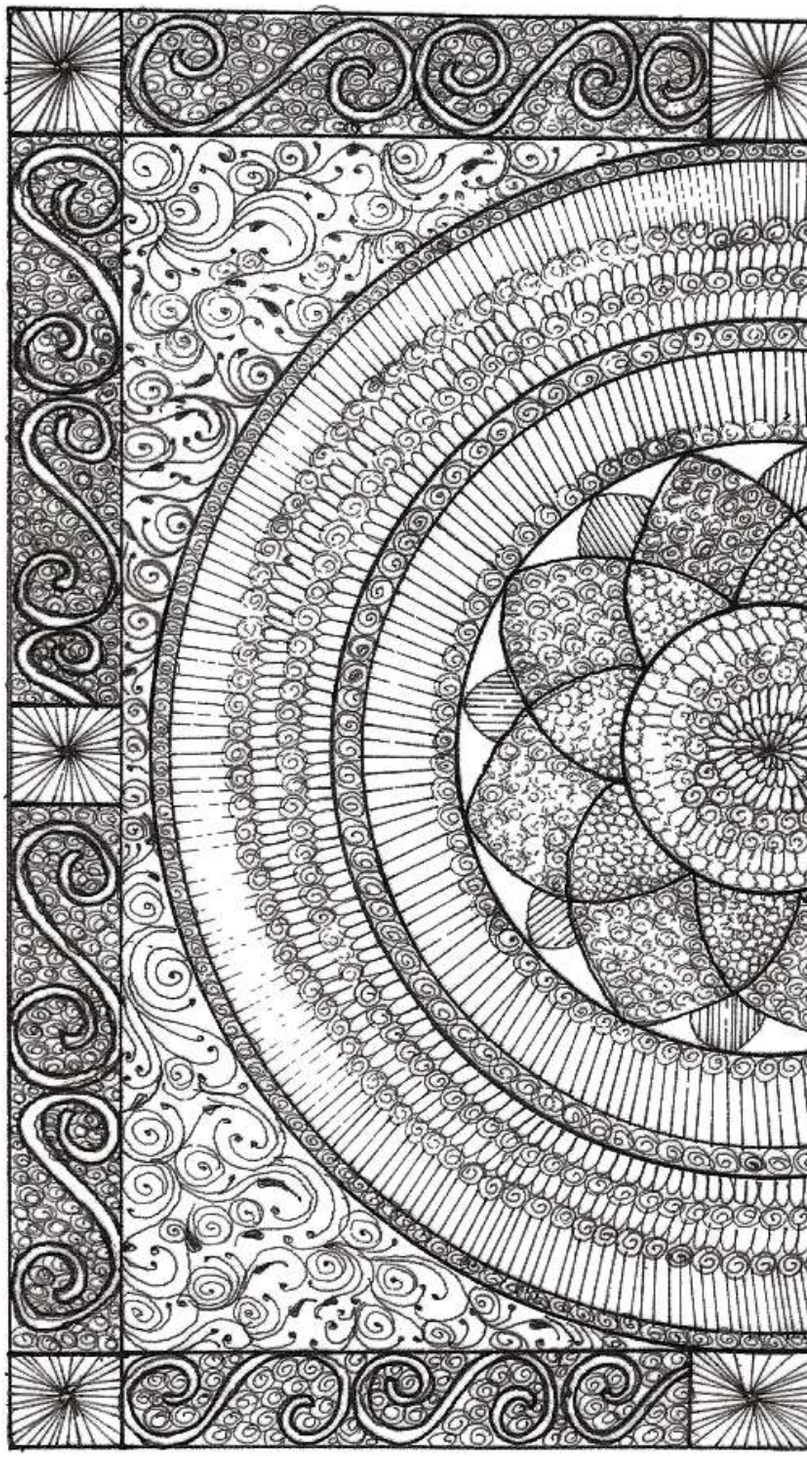
The amalgamation of the indigenous stones, granite and sandstone, with external sunlight dissipates warmth within these structures. Plinths, columns, and ceilings of these precincts, with their intricate carvings, narrate stories of religious scriptures and folklore - Panchatantra.











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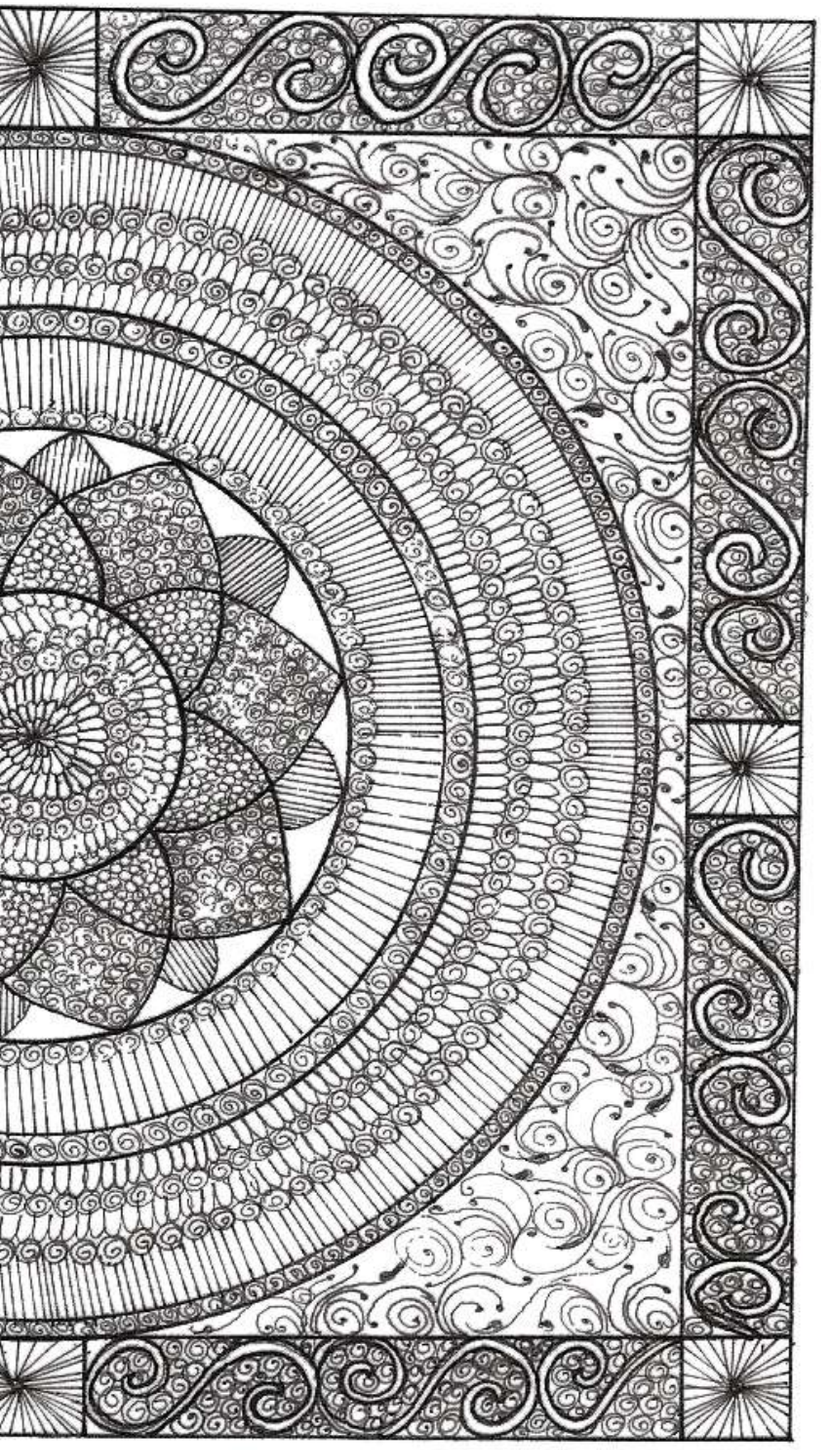
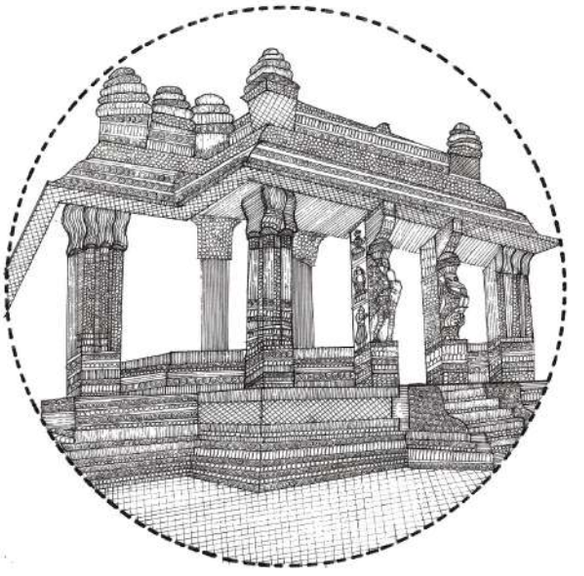
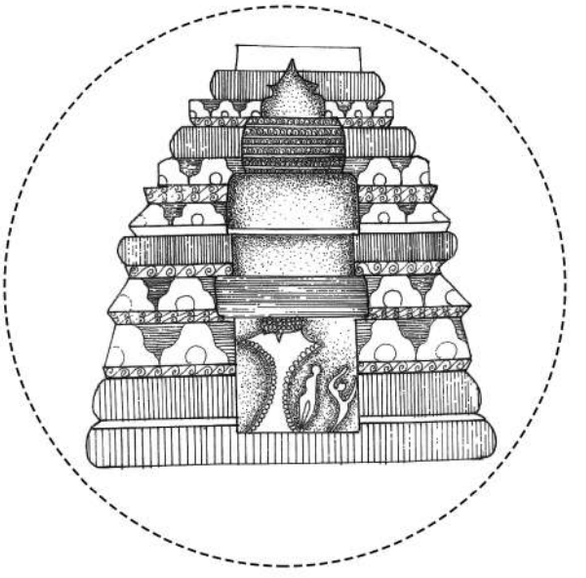
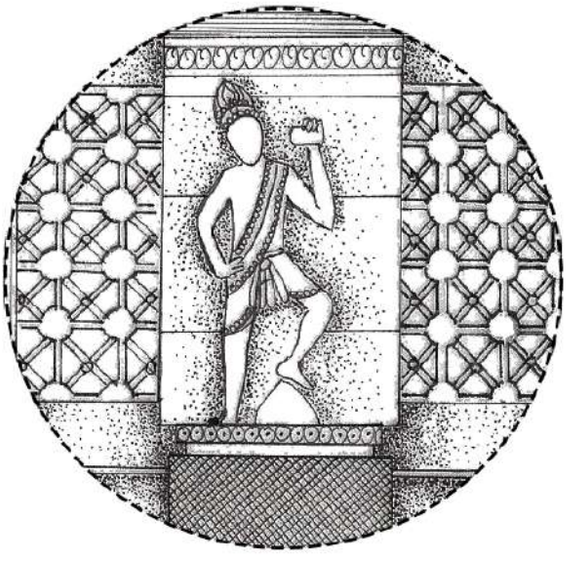
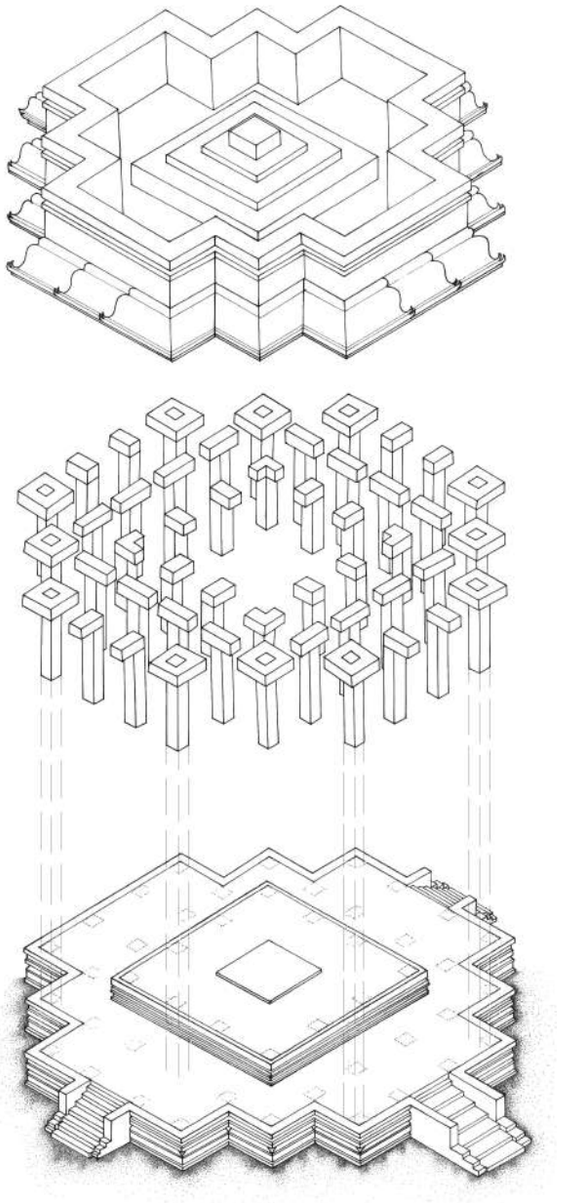
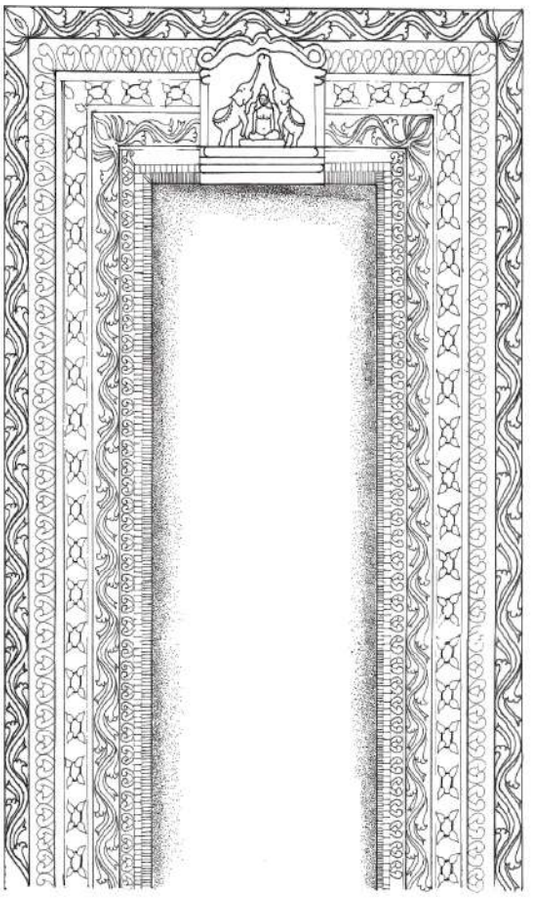




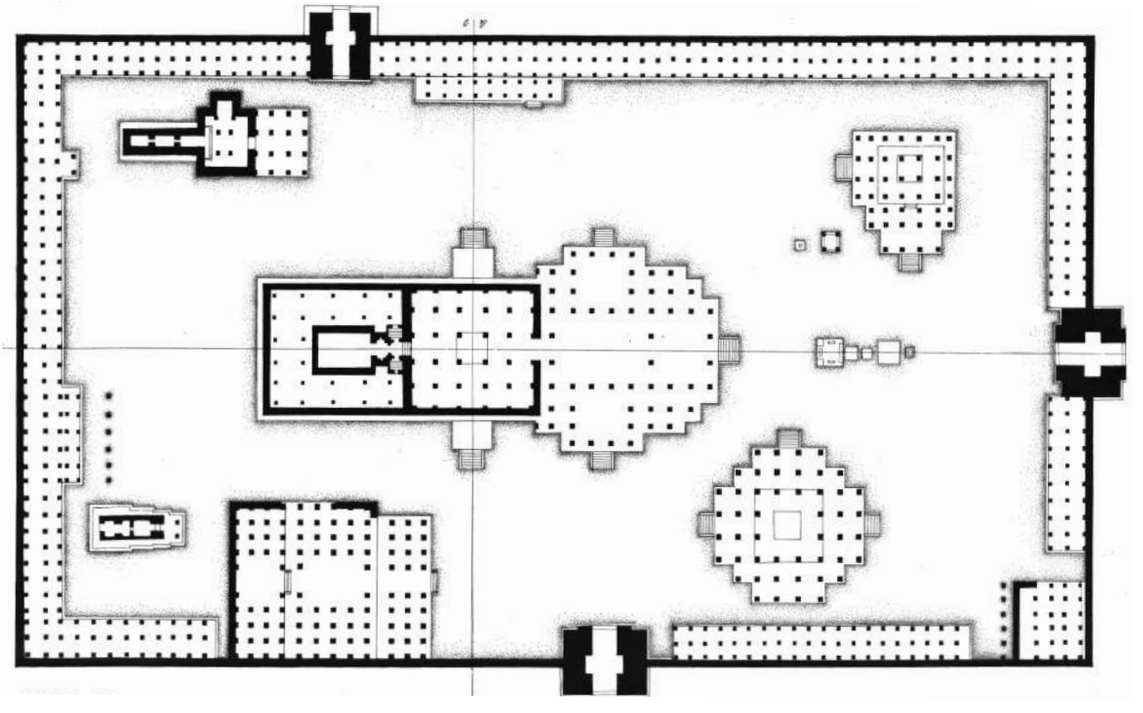








The daily life of the people revolving around deity rituals and customs were sculpted onto the architectural elements, for the purpose of embellishment. They stand testament to their tales and legends, for the future generations.



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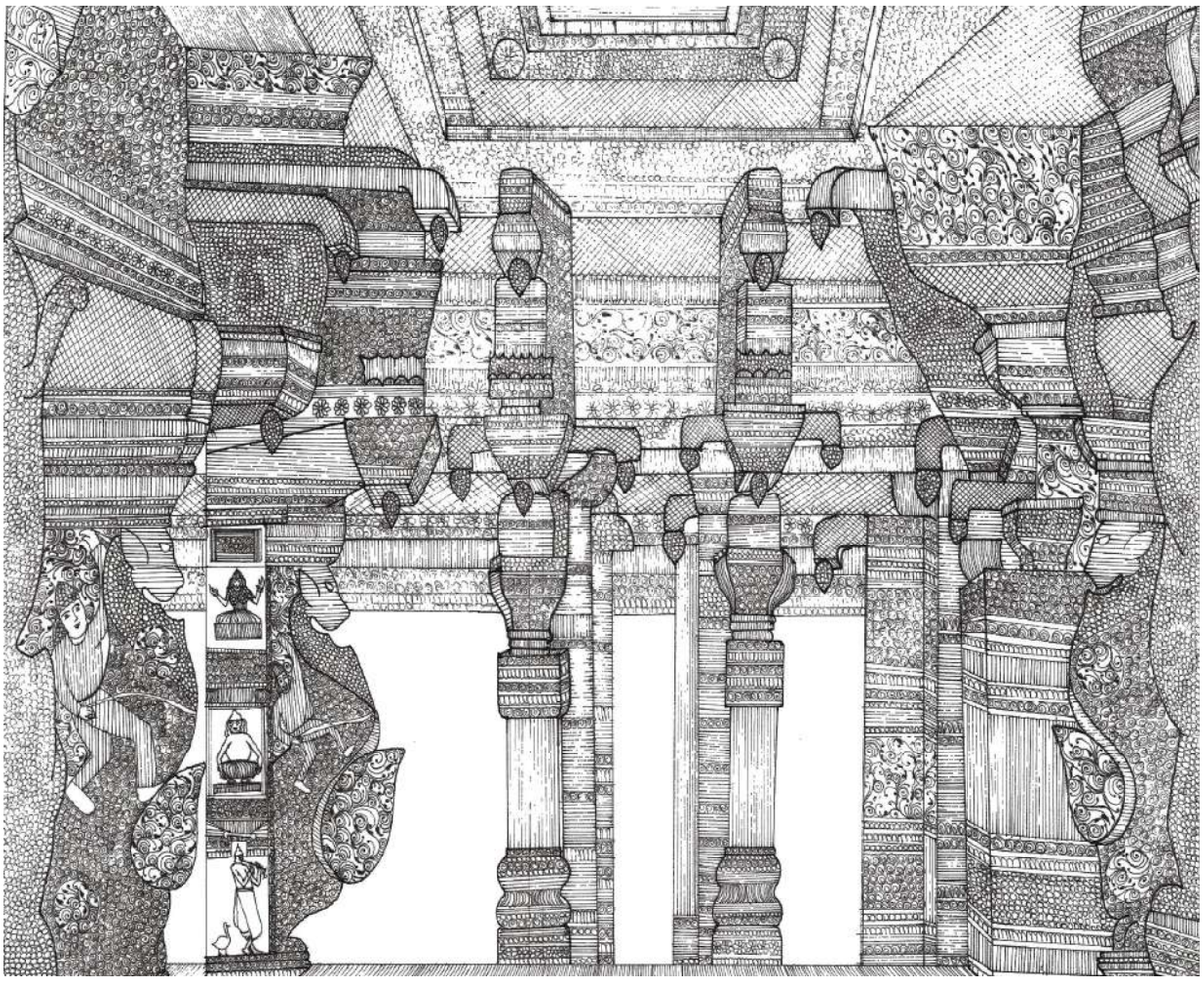
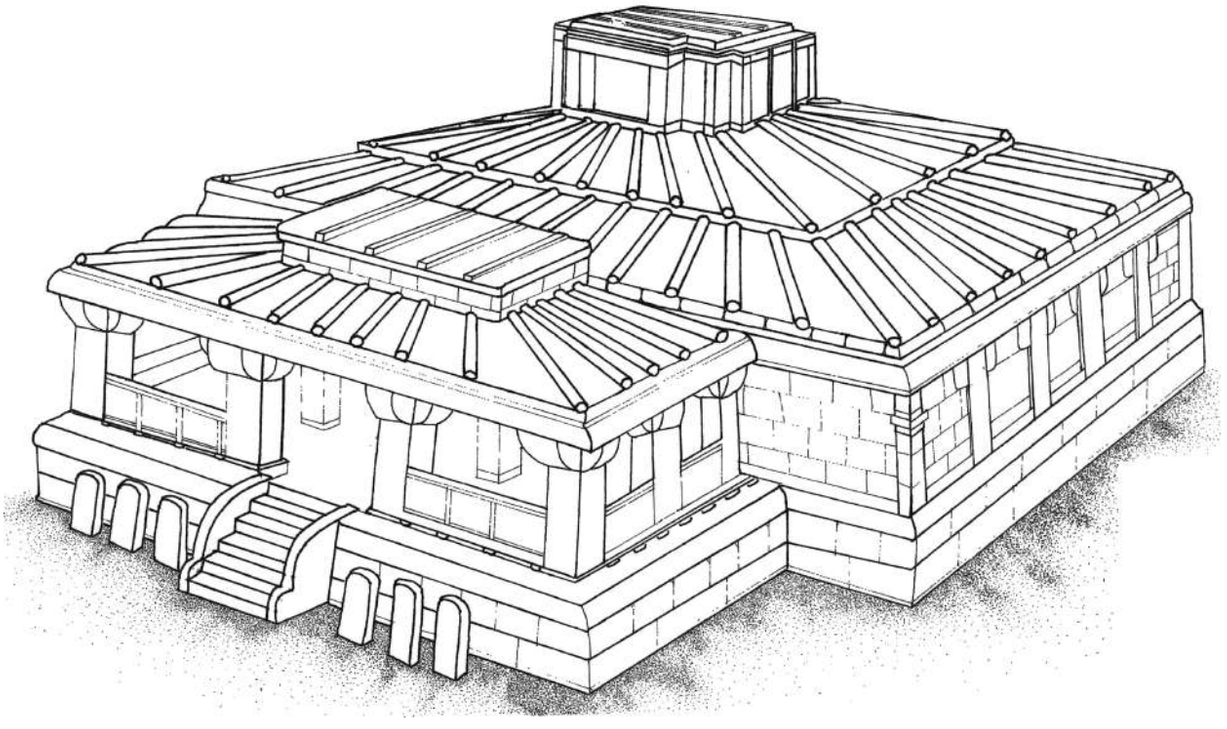
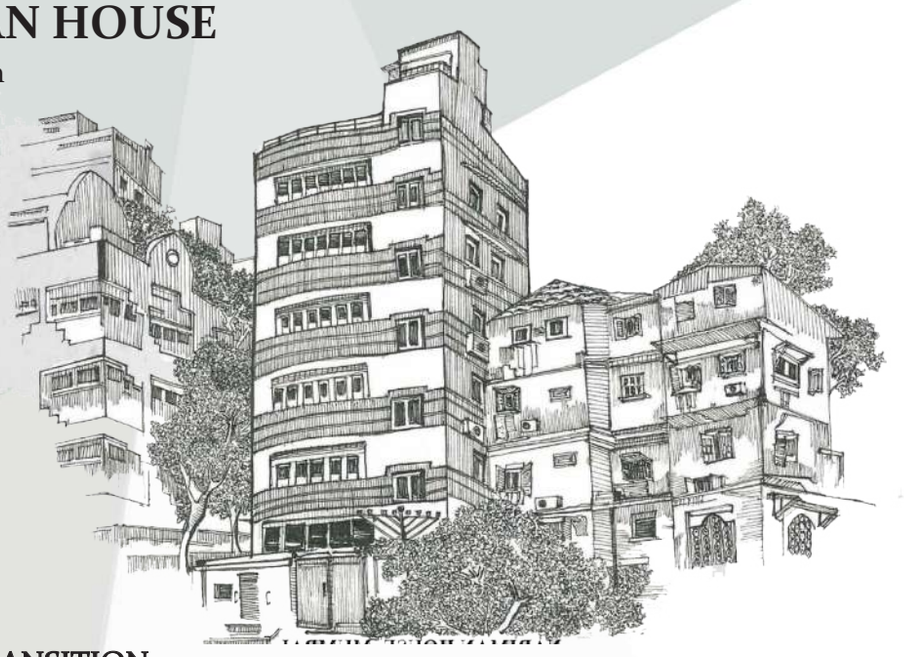




NARIMAN HOUSE

-Kashish Singh



TIME AND TRANSITION

Time is an eTime is an entity may simmer in silence or may be widely appreciated, but is never denied that obvious attention it deserves. Such a structure that commands recognition, absolutes in totality and backs its up with reasoning may only be achieved on paths yet to be travelled. Untraversed, they set paths that serve the future in ways unmarred manners until now. Such structures break norms formulating the present scenario

Context

The space, its surrounding and all the element of its physicality sum up under context. The way a structure environs its space defines many aspects with respect to its own fate. The immediate context therefore, impacts in several ways when an intervention takes place in the vicinity.

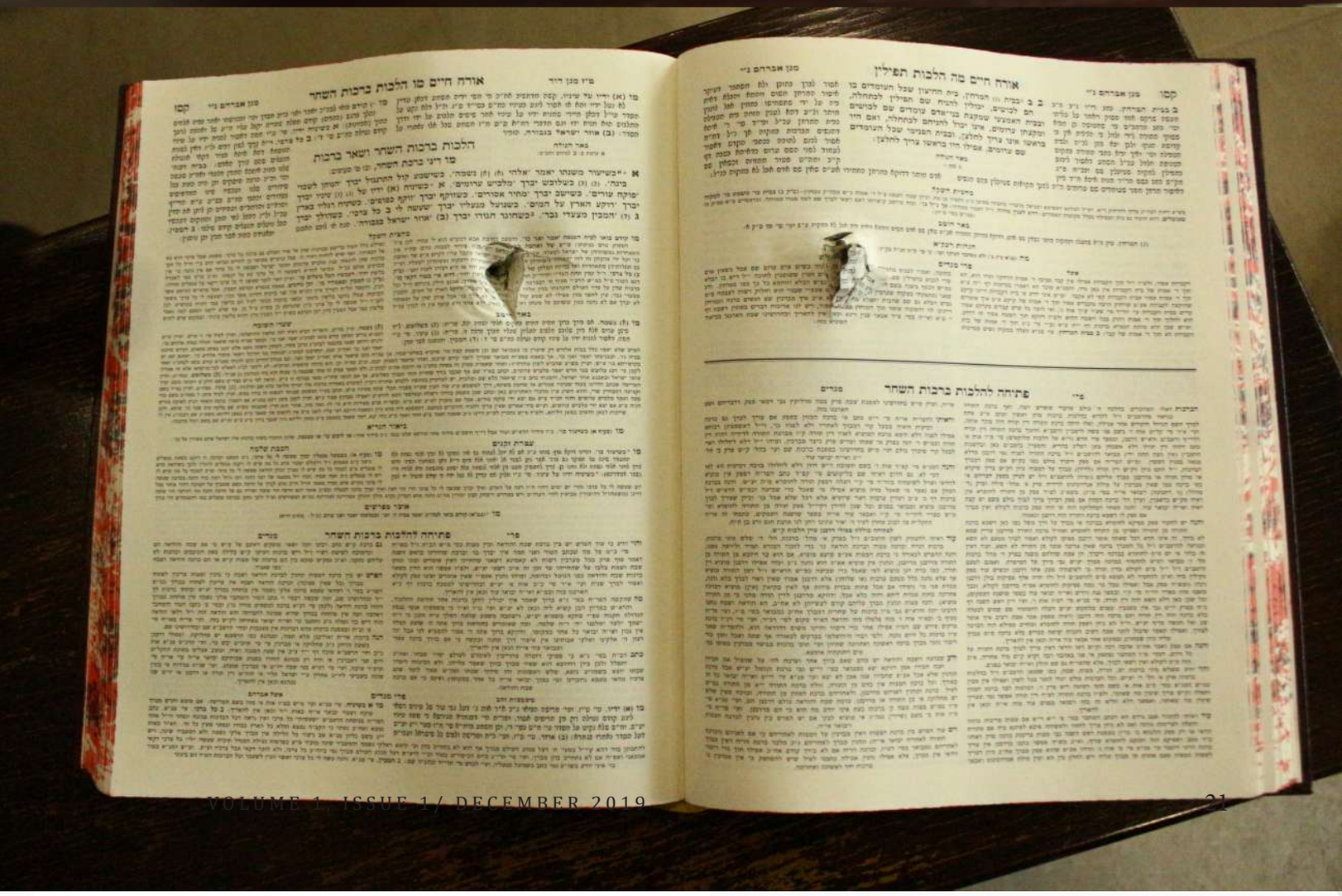
Chabad house (2002-2008)

One such structure is Nariman lighthouse in Mumbai, that shall remain frozen in time, bringing to reality the haunting of 26th November 2008 that globally impacted several lives. Despite the harsh incidents, this antifragile structure stands to promote Chabad and their vision, "A little light repels much darkness" ever so strongly. It stands in solace as the only memorial for all the victims of the attack, reminding us the importance of light, life and humanity.

Defining moment

Time is in a constant state of change defining every aspect of space and its setting. They form concrete grains of fleeting moments that symbolise that stretch. Periodicities that brought about a strong impact because of motives that came in progression of an establishment, context and time are invariably interdependent. Structures built around them take up the form of its physical representation, freezing time. Defining moments breathe this way in future hours and eons, diving all in while still retaining its essence and motive.

While the structure began its journey as a family home owned by Khambattas, in 2002, the Chabad community undertook this site to build the thereafter known Chabhad house. This structure's plain motive was to preach the conducts of Torah, the Jewish holy book and the understanding that "one should look past the outer form of a being and seek for the true identity that lies in the depth of one's soul.



The Attack

On the eve of 25th November 2008, a group of terrorists arrived in India through the Arabian sea, after hijacking a trawler, the Kuber to sail to India. Three nights later, the most horrific attacks of all times took place at strategic locations in Mumbai such as Taj Mahal Hotel, Cama Hospital, CST terminus and Chabad house. The attacks at the Nariman house were evident of several murders including Rabbi Gabriel Holtzberg and his wife Rivka.

The Aftermath

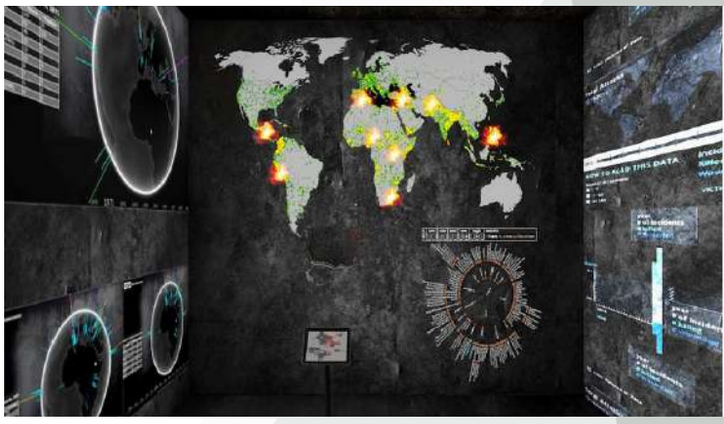
The three-day massacre at the Nariman house brought the whole structure down by all means, the attack was carried out by fourth and fifth floor of the building. Nariman house had to witness the tragic eventthatscatteredits soulintoheapsofdust. The bullet holes environed the two floors along with the neighbouring fires. The grenade scars remained the same along with blood stains on several walls. Holtzberg family's house was nothing short of horror. While the destruction was unmissable, so were the dispositioned belongings of the family. All things were moved to the store.

The toiletries were stacked up on their furniture, photo frames were worn out. The whole place since then gathered dust.

The Vision

A decade later, on 28th of November it went on to be declared as Nariman lighthouse, a memorial for the victims of the massacre. It is now is achieving the purpose of taking ahead the rabbi's campaign and emerging as a symbol of light triumphing over darkness. The fourth floor, or the. room where the cross firing took place, has been converted into a dive into light from darkness experiential museum The fifth floor has been restored to its original state, but in white. The elements of the house that preach the very teachings for torah are the only objects with a hint of colour.

The Nariman lighthouse shall stand as a bridge between loss and revival. It stands for growth in solidarity to express the significance of triumph over darkness, good over evil and most importantly humanity over terrorism. In entirety, the structure yearns to spread the holy word even more proudly and profoundly.



INTERVIEW OF SHRI GOPAL SHETTY

Interviewed by: Abhijit Kumar Arora and Parth Soman

9 th September 2019.

The void between the narrative of those governing the city versus those designing it is the cause of several lost conversations regarding the future associations. This gap has been a topic of concern between planners, architects and the government. A right-minded dialogue must be conversed. Gopal Shetty, Member of Parliament from North Mumbai touches upon this and other matters while in conversation with students of Aditya College of Architecture.

How do you view the changing times of Mumbai?

The infrastructure of Mumbai is developing at a fast pace. We try and encourage skill development from an early age. The Prime Minister's idea of Make in India will provide for more jobs. We just need support and cooperation from the people as well. We need the youth of the country to come forward if anyone tries to resist the development for any reason. As a father I admit that when I invest in the education of my children, I would want them to have a proper job in the future. So, people should understand that resisting the development will only slow the process of the growth of our country. In the near future, lots of money will be spent on infrastructure development. This will create a lot of jobs.

How do the policies regarding the social progress of the people of North Mumbai fit in the future scenario?

If you look at it from the educational point of view, North Mumbai is doing well. We have a number of schools, colleges and professional institutes. We have all the facilities for the upcoming generation. My onlyconcernistoprovidejobsforthemaswell.

What are your thoughts on the Borivali column painting which was done recently? Do you think it has impacted the people in any way?

It is good. The NGOs, school and college children come forward to paint and beautify our city but it should be a continuous process. Three years ago, the railway stations were painted but now they are already ruined, so no one pays attention to it. So, we should continue what work we've done. In fact, they should be painted again. It should be a repeated again. Continuity should be there in every work done.

How can architecture students get involved in beautification of Mumbai?

In foreign countries they decorate the salvaged or unused land due to which it becomes appealing. That should be done in India as well. If every single student contributes a bit then even a big project can be successfully pulled off.

ANTI - SOCIAL SOCIAL PARK

Water ,Water Everywhere?

-Ar. Jwalant Dave

The 1995 post apocalyptic sci-fi movie Waterworld begins with a scene that shows the protagonist, The Mariner (portrayed by Kevin Costner) standing on a catamaran like vessel floating in the midst of a vast ocean, as he takes a leak into a triangular shaped plastic cup. He picks the cup up and empties its contents into a crudely assembled contraption that resembles a hand-pump fused to a chemistry experiment and an IV drip. He then proceeds to pump it a few times, as the machine emits mechanical sputtering sounds, and opens an antiquated looking tap at the bottom of the machine to release a tiny stream of water that only half fills a metal cup fixed at its base. Finally he picks up the metal cup and takes a very satisfied drink of the freshly "recycled" water. Although his expression would have one wondering if it wasn't his favourite single malt scotch that he just took a swig of.

Sounds quite gross, or maybe like something one would only ever epect Bear Grylls do, doesn't it? But it may not be very far from our own reality in the very near future. expect Bear Grylls do, doesn't it? But it may not be very far from our own reality in the very near future. In 2018, the South African city of Cape Town found itself dangerously close to getting the unique distinction of becoming the world's first major city to have officially run out of fresh water. Water levels in the city's Western Cape Water Supply System reduced to less than 20% of its total capacity, making the possibility of the Day Zero scenario to appear very very real.

The people of Cape Town as well as the authorities, came together in a concerted effort at reduce the amount of water they were using and more importantly, the amount they were wasting, and were eventually successful in averting the Day Zero crisis. And, it is important to note the use of the word averting here, since the crisis was only barely avoided. There remains a very real possibility of it reoccurring if the delicate balance achieved between water consumption and storage gets disturbed. The fragility of this balance,

between what we can store and what we consume, is of essence as only the aspect of usage lies within the realm of human endeavor, because despite our best attempts at storage in reservoirs and replenishment of ground water reserves, we still cannot control rainfall itself. The crisis of running out of fresh water is one of the greatest challenges that our civilization is faced with today. On the one hand, while our cities and communities are becoming more and more unsustainable in their demands on fresh water; required not only for drinking, but also for washing, cleaning, cooling and crucially as a solvent and carrier for conveying the sewage and other waste we generate; but they are also progressively becoming more and more "hard", with larger and larger areas getting covered with impervious layers of paving; roads & parking, open drains & canals and swaths of previously open land being paved for other public utilities such as squares, plazas and promenades.

Thus preventing rainwater from percolating naturally into the ground to replenish the subterranean groundwater tables that are often interconnected to each other with networks of aquifers and underground streams. Instead the rainwater from these hard paved surfaces as well as that from various roofs and in general from the majority of our built environments, runs off as surface run-off, flowing over these paved areas, and finding its way to the drainage networks that are emptying into the oceans. Paradoxically, causing floods in its immediate aftermath and droughts as its eventual outcome.

The availability of running, clean fresh water in our homes, schools, offices, hospitals, factories, power plants, and essentially every aspect of our modern lifestyle in the urban landscape has become so ubiquitous that we often tend to be completely oblivious of the long and complex journey it passes through to reach us. Beginning with being collected at a reservoir for storage, then passing through many processes for filtration to remove solids and particulate impurities, treatments to neutralize and sterilize chemical and biological contaminants, transient storage in holding tanks, to then being pumped through a network of pipes that are spread across the city, till it reaches our flushes, faucets and showers so as to make an almost sublime, fleeting contact with our bodies (the contact literally lasting just a precious few seconds) and then continuing onward to flow through another separate network of pipes, chambers, drains, sewers, more pumps, more treatment systems and storage tanks, still more pipes and eventually till it finds its way to its final culmination, the point of disposal into the oceans. With this perspective in mind, this journey of our urban water supply seems almost unjustifiable against the very limited period of time (just a precous few seconds!)during which we are actually using that water. In fact, it may in reality, seem criminally wasteful!

Running Water... it's Running Out!

IN SILENCE, THEY REST

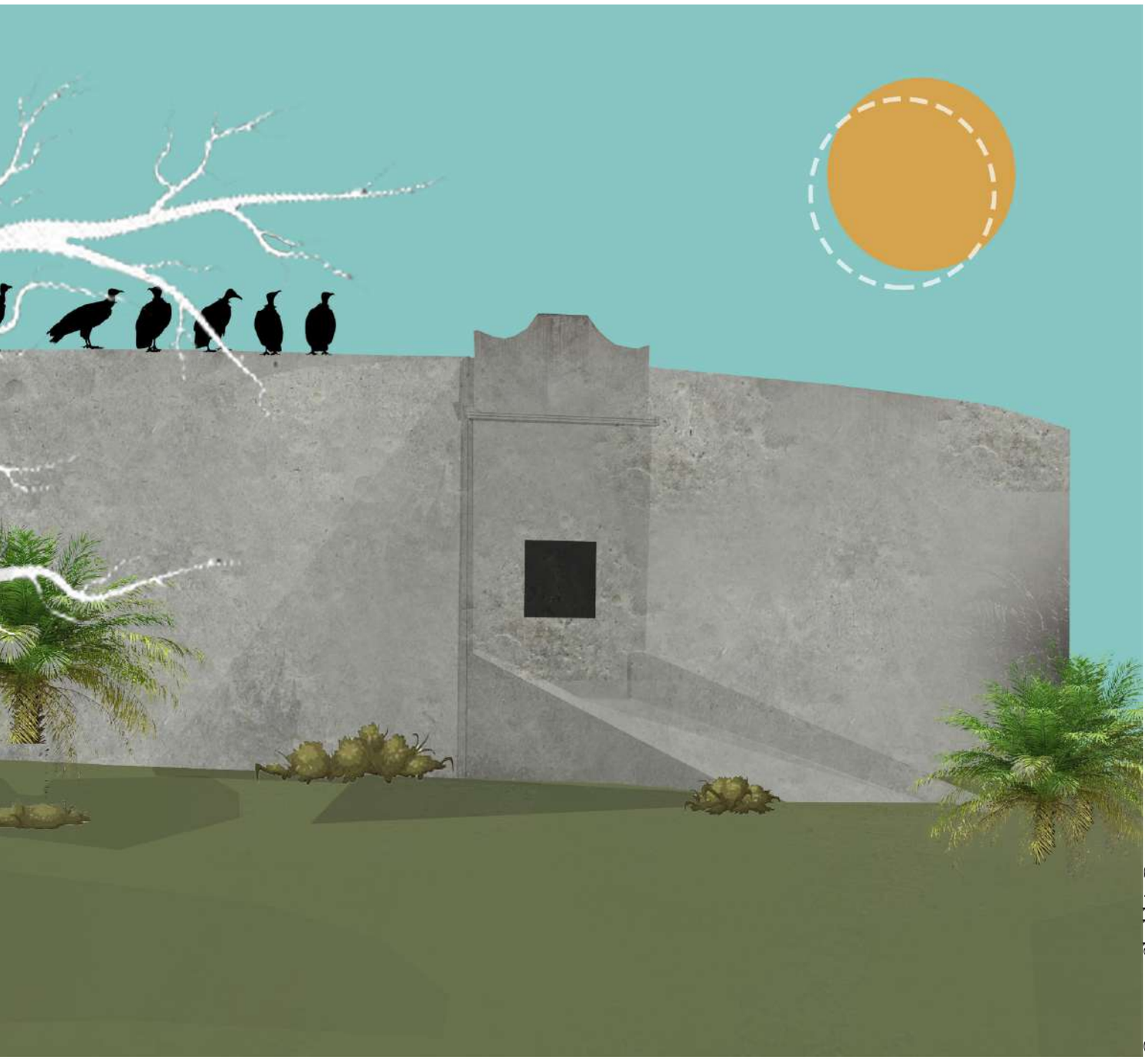
-Keerthi Kallanja

Within the calm of the crest of the Malabar hills, a posh area with skyrocketing rates for residential homes, lay in silence the famous cemetery of the Parsi religion: The Towers of Silence.

Life and Death. Stages that transcend beyond the mere existence and perishing of a being, manifest intimately for the Parsi community. The city's Parsi community continues its 3000-year-old tradition of disposing the dead by exposure to scavenger birds, as a corpse is considered to be impure, both physically and spiritually, and cannot be buried either in land, sea or burnt. This form of a valedictory ritual for a demised person has its history, consequent practice and present difficulties.

Built in the year 1672 by Seth Modi Hirji, a wealthy Parsi businessman, the towers of silence are circular structural precincts, spread across 55 acres in Mumbai. The word 'tower' gives the impression of a massive, imposing structure. But in contrast, the rather wide towers form a distinctive backdrop to the laid back landscape and residences. The towers are regarded as a space of holy and sacred importance. The approach with rising steps lead to the entrance porch of the tower. The roof of the tower, lower in the middle than the outer area, is divided into 3 concentric circles where the bodies are placed. The dead bodies are placed on stone beds with a pit in the center. The vultures drop off the bodies in the same pit, after they have eaten of the flesh. The bodies then disintegrate and decay naturally after added lime, washed off with rain water through filters of coal and sand, that finally reach the sea.

However, this customary ritual is slowly going out of practice due to the depleting number of vulture population. Moreover, the surrounding mushrooming of high rise towers in the area allows people to see the Towers of Silence and the decomposing corpses within, giving an unsettling feeling to the residents, that in turn, mounts extra pressure on the community to redevelop the site. This makes the age-old tradition quite dormant and these structures, as a result, are still standing without much use, as the Parsis today prefer other methods of cremation.



Courtesy: Shabbir Raza

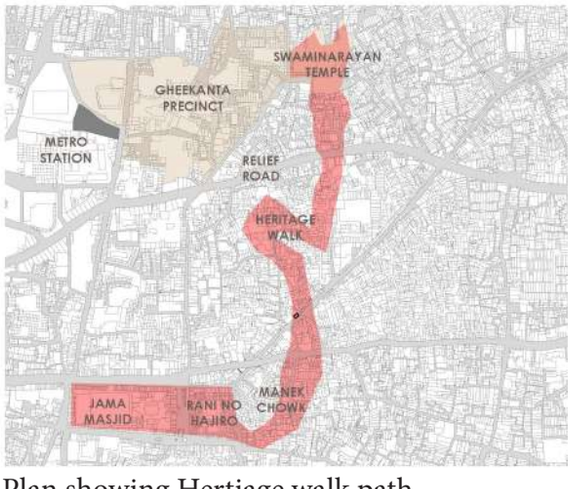
'This form of a valedictory ritual for a demised person has its history, consequent practice and present difficulties.'

To revitalize the surrounding, conservationists have proposed to construct breeding-aviaries to boost the number of vulture population. Also, architects have planned to build enclosures that conceal the disturbing visuals within the towers. The Towers of Silence in Malabar Hills is a place of solitude and tranquility at the same time. It is in the interests of the Parsi community, that their valedictory-ritual is respected; the stakeholders of our society must establish means of dealing and striking a balance to sustain their customary practice without any forced encroachment. Time will only, however, decide the fate of these silenced-towers.

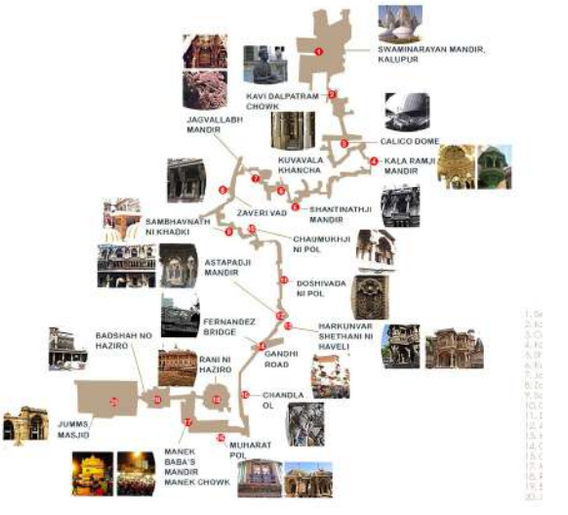
AHMEDABAD: REVITALIZING A HERITAGE PRECINCT THROUGH URBAN INSERTS

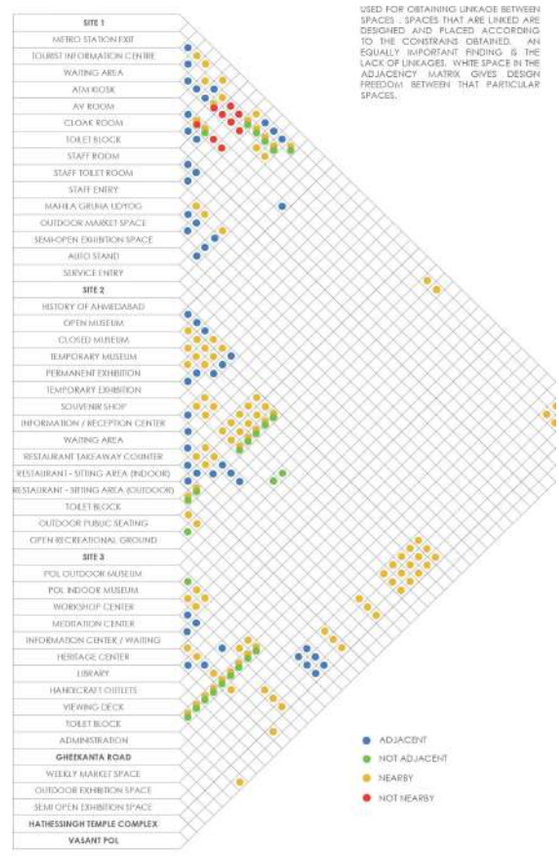
-Ar. Anand Shah, Alumni of ACA

The thesis looks at the heritage precincts in the Historic City of Ahmedabad. Ahmedabad, is inscribed in the world heritage list of UNESCO under the living heritage city with cultural significance for humanity. Some of the most significant attributes of its Outstanding Universal Value are its built and urban heritage: unique monumental architecture representative of Gujarat Sultanate idiom; building and crafts traditions; traditional Settlement Planning based on community linkages and social mores; traditional house form with its exquisitely carved wooden facades exhibiting cultural associations as well as climate responsive design.

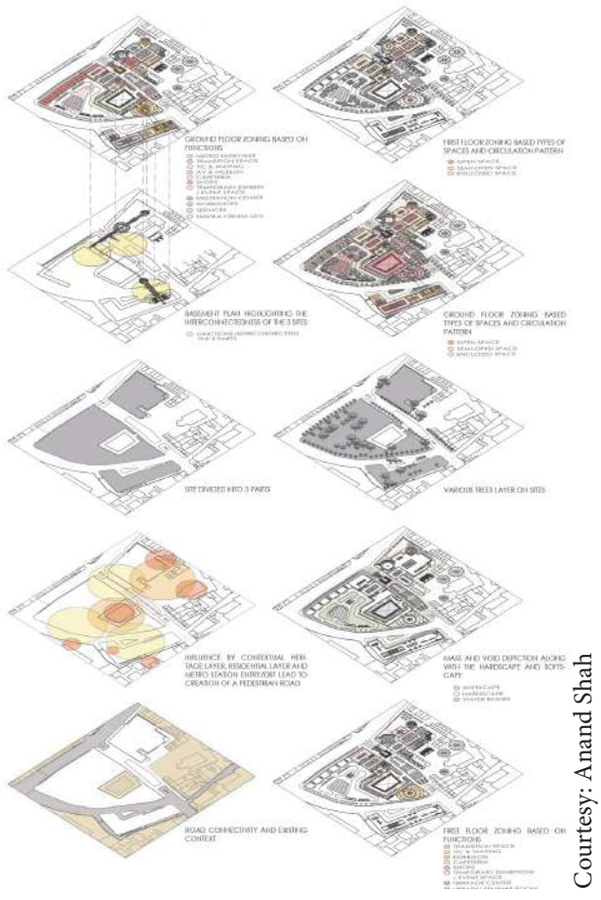


Plan showing Hertiage walk path





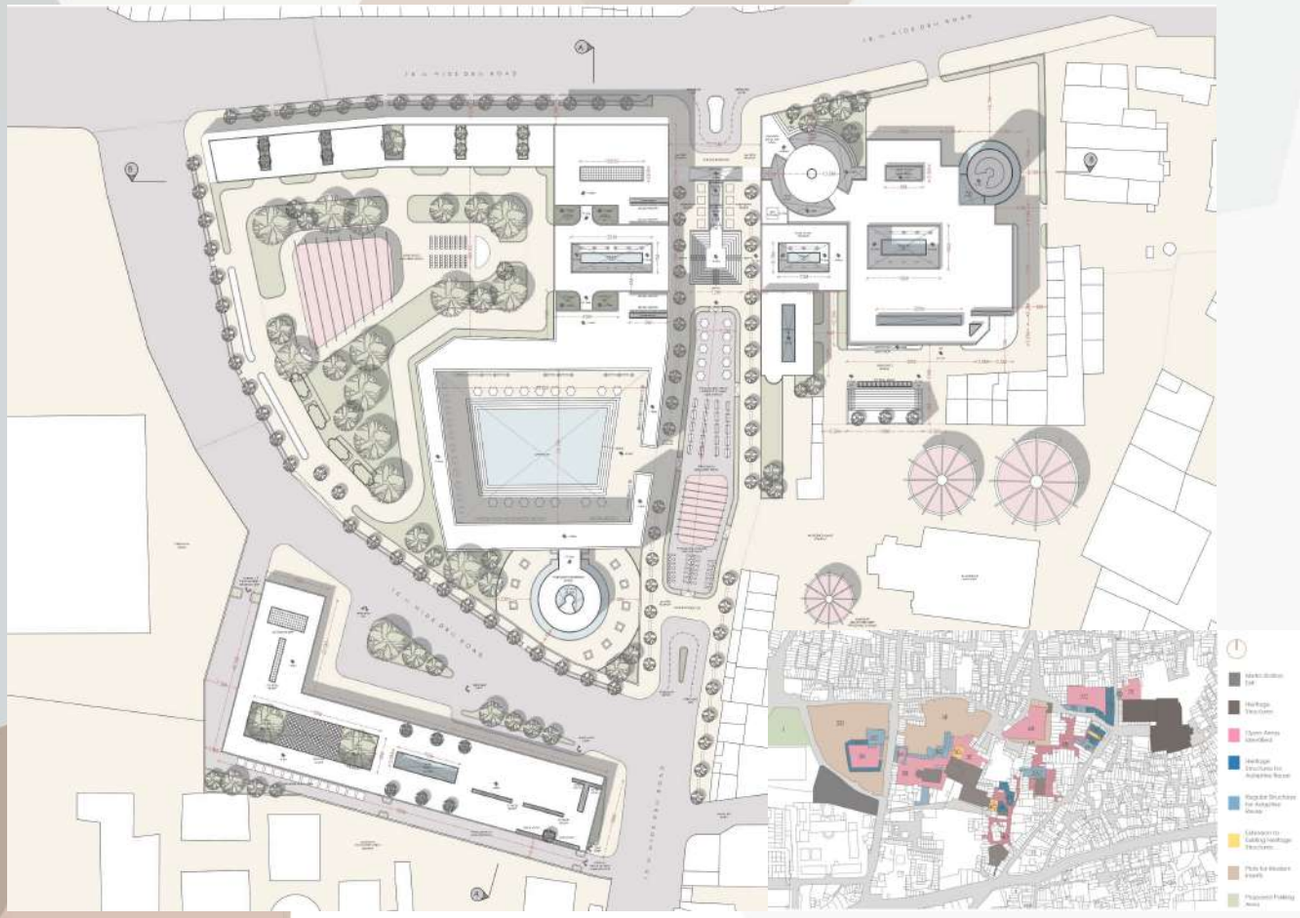
ADJACENCY MATRIX FOR OBTAINING CONNECTIVITY BETWEEN SITES AND FUNCTIONS



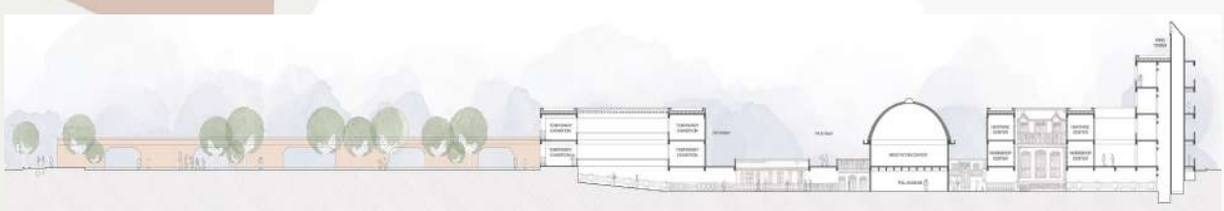
Courtesy: Anand Shah

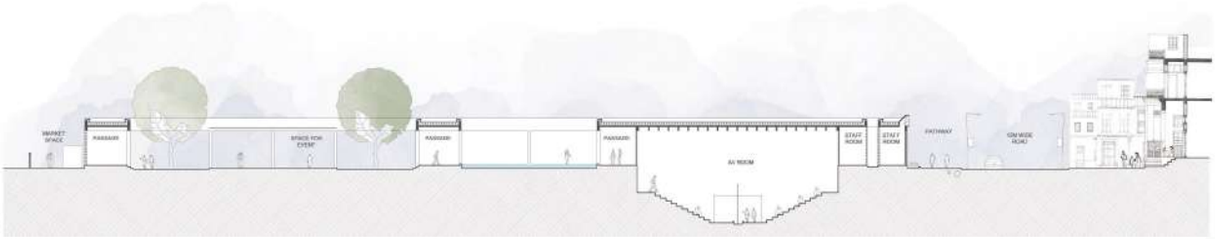
These values have increasingly come under pressure from the forces of globalisation, rapid urbanisation, changing socio-cultural scenario, general ageing of the building stock and modern intervention resulting in negative impacts on the tangible and intangible cultural heritage assets.

The aim is to ensure protection and enhancement of the Outstanding Universal Value of Historic City of Ahmedabad while developing new layer of modern intervention over the heritage layer.

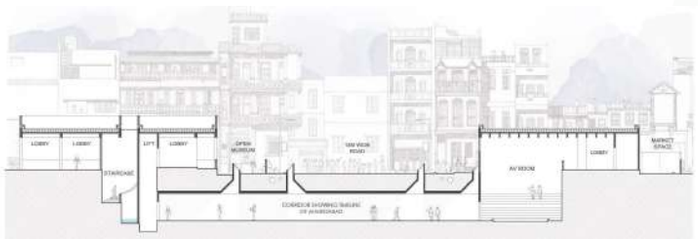


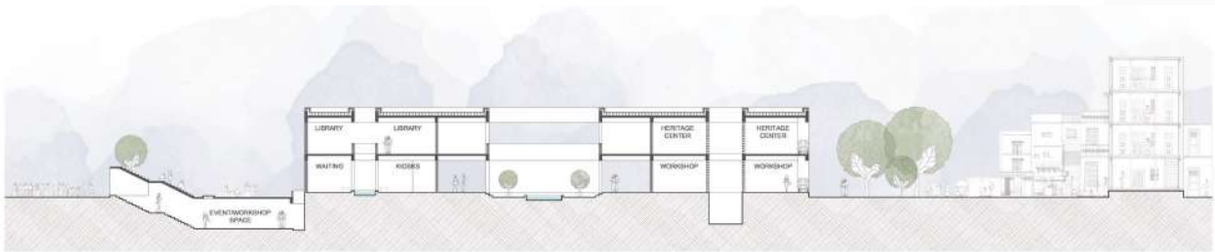
Integrated built form to depict the Heritage and Culture of the City is of vital importance. By proposing an integrated built form over one particular heritage precinct with highest density of Outstanding Universal Values will help in maximising the heritage experience of a global as well as local tourist. It will cater to needs and requirement of local community as well as tourist people and help in xship between both of these stakeholders (Tourists and Locals).





" This intervention intends to add an informal dimension to the proposal, which is experienced as a continuation of the existing in terms of materialistic and non-materialistic value. "

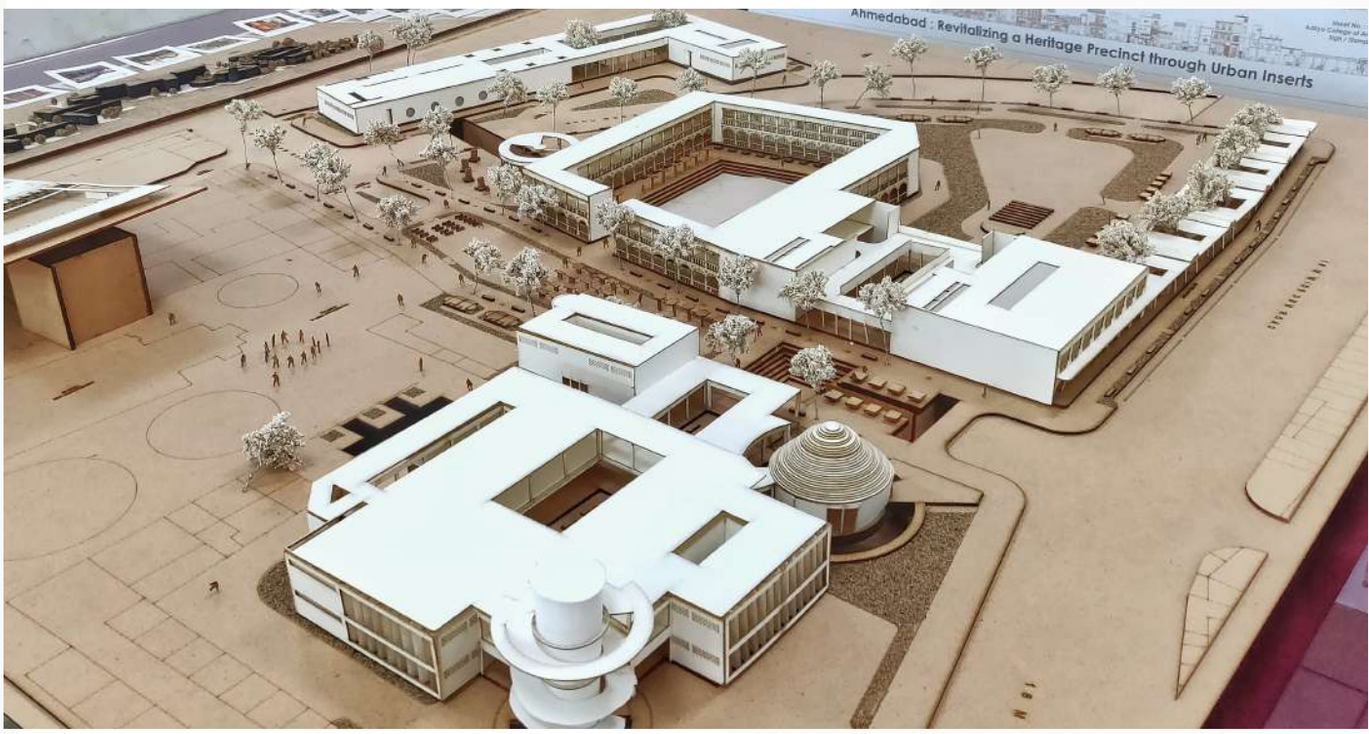




Courtesy: Anand Shah

" The key goal of this project is to make the proposal less formal, more porous and fluid in the context of its relationship with the context and its people. "

The intent is to create a journey by experiencing different tangible and intangible attributes of the Heritage City. The idea of the design is not to integrate all the functions at a single point rather distribute it all along the Heritage precinct over the proposed Heritage Walk.



OH 'SUSTAINABILITY'

-Ar. Swati Gupta

Against the backdrop of increasing consciousness regarding resource consumption and deteriorating global environment, not to mention mediahyped obsession over global warming and air quality standards of the mega cities worldwide, there is gigantic upsurge in the use of word sustainability in the architecture profession.

If data from Google Ngram is to be believed, the word Sustainability/ sustainable picked up momentum in 1980 and has appeared once in every ten pages, written between year 2005 to 2008 and the trend is pitching. So, I proclaim here that the abrupt rise in the use of the word sustainability is well, unsustainable.

Practicing architects such as Charles Correa, Geoffrey Bawa and Frank Lloyd Wright, to name a few did not practice in the times when sustainability was segregated from the general architecture curriculum. Under the umbrella of green architecture neither were their buildings certified by any rating agencies.

Sustainability as word was once valuable and not shallow as it is today. It meant more than just a sales pitch for architectural projects professionally. Academicians are equally guilty of promoting substantiality just as a hollow buzz word and a trend. Our educational system prepares students to address sustainability vogue in every which way. Under today's ethos, students are constantly badgered on how they have addressed 'suitability' in their projects.

It is but expected to provide design solutions responsive to climate, culture & socio-economic conditions of the community from a budding professional. A student of architecture should be concerned about environment, society and community at large. It must reflect not only in his designs but in lifestyle decisions, attitude and actions. The resolution should come naturally in favour of society at large.

Students should be encouraged to design empathetically and responsively. Sustainable techniques should emerge as a concern to the site requirements and not be as an overlay or an afterthought. The change should be brought in curriculum by not over emphasising on the word sustainability, but by objectively redefining architectural design to resolving integrated complex challenges of today.

Courtesy: Neil Dustakar

"Students are advised to not to restrict themselves to the obscure definition of 'Sustainability' but to experiment in open grounds with materials"

There are many green building certification agencies like USGBC, IGBC,GRIHA Council etc. which quantify sustainability parameters for the built environment and are reaching out to stimulate architecture students. All such bodies have similar intentions of quantifying efforts of a project to attain sustainability. Again, though gaining acquaintance to these rating professionally is imperative, the predicament is the checklist approach . It takes away the obviousness of the matter. On the other hand, Students have many live examples to follow and get inspired. Young architects are undoubtedly demonstrating their commitment towards the profession and better world. For instance, Pune based young couple, who are building cement free homes with their own hands or People like Sonam Wangchuk, who are finding solutions to community-based problem with action-based approach. Students are advised to not to restrict themselves to the obscure definition of 'Sustainability' but to experiment in open grounds with materials; techniques and solutions with are indigenous, adopted or reinvented, but are in alignment with the larger goal.

INDIGENOUS ARCHITECTURE OF KACHCHH, GUJARAT

-Mahak Jain

"In India, there are no incentives for building sustainable homes, in particular, faces several challenges while trying to be eco-friendly. The public, especially in the rural and semi-urban areas, believe that it is extremely expensive, largely because of lack of awareness and administrative support." – Monnanda Appaiah

Man-made interventions have had a tremendous impact upon the environment and the ecosystem, causing a major resource crisis across the planet. Sustainable use of natural resources in an overall structure of any said typology plays an important role in a country like India, which has a long history of sustainable and holistic living. Multiple eco-friendly building materials have emerged in the market reducing the environmental and social priorities that shape different regions which are eventually factored into green buildings. Therefore, there is a need to acknowledge and implement defensible construction practices that have a positive impact on the environment and preserve the culture of the place.

Monotonous buildings constructed without understanding their socio-economic background, suppresses the building patterns and creative techniques developed by the communities. Indigenous architecture, based on specific environmental and climatic conditions of a place, embodies the sustainable approach responding to the environment and the cultural continuity of a place. alternative to the conventional approaches.

Different types of masonry used across Kachchh are driven primarily by cost and availability. Traditional housing typology unique to Kachchh region is Bhunga. These circular houses were essentially made from organic renewable resources such as mud, grass, cow dung cane etc. The plinth and the foundation collectively consist of consolidated earth with stone and bamboo posts. The walls consist of mud, split grass, earth, cane and the roof, is thatched, made of wheat or maize straws. With new construction techniques used over conventional ones, brick and random rubble masonry in mud mortar became very common. These new built structures had very little resemblance to its origin.

"Sustainability in its true form can be revived by altering and mending the shortcomings regional indigenous architectural forms."

The major structural failure in this region is the erosion of plinth walls in the outward side, causing the entire structure to cave in. Saltwater, salinity, dry atmosphere, wave action, high velocity winds and abrasion affect the building materials resulting in corrosion and dampness of the structures built near the coast. RCC framed structures were constructed for locals to help overcome this challenge but failure of this approach was observed in 2001 earthquake, creating a swing of vernacular architectural projects in Bhuj. Kachchh started constructing buildings using indigenous materials but also experienced corrosion and dampness.

There may be various other construction techniques for addressing this challenge but my approach, considering indigenous architecture, would be to replace mud mortar with a combination of ground granulated blast-furnace slag (GGBS) cement and water proofing admixture that would prevent any corrosion or dampness to the structure. When GGBS cement hydrates, it releases excess of reactive alumina and silica as secondary hydrates. These fill up the gaps and pores of cement paste, slowing the rate of hydration, thereby reducing permeability of concrete cracking due to temperature rise. Krystol reacts with water and hydrates the cement particles, forming insoluble needle-shaped crystals, filling up capillary pores and blocking water. Even if there is a hairline crack due to hydrostatic pressure, Krystol crystallizes due to reintroduction of water.

Regional indigenous architecture being a culmination of its evolution, structure, public and private spaciality and form; is one of the best examples of sustainable architecture. While constructing any building of the said architectural style, contextual challenges should be addressed at both micro as well as macro level.

Images by: Mahak Jain

INTERVIEW OF MRIDUL ARCHITECTS

Interviewed By: Parth Soman and Medhavi Bhiwandkar.

Following is an excerpted interview with Ar. Mridul, who hails from Rajasthan, who talks about designing in Rajasthan, sustainability and construction practices in Rajasthan.

Interviewer: What are the parameters one should consider while designing a structure in Rajasthan?

Ar. Mridul: First and foremost is the climate. As I had discussed earlier in the seminar, India has 5-6 climatic zones. Similarly, within Rajasthan we have hot and humid, hot and arid, to an extent in some places cold and moderate temperature. That is the first thing we have to keep in mind that the building should be climatically responsive because of energy crunch in India which limits energy consumption. So, the buildings have to be foremost designed in a way that that they can tackle the extremities of climate. Places here should have a micro-climatic environment of their own.

Interviewer: Making its way in transitional architecture, because we have been looking around, the old architecture of Rajasthan is very rich, nuanced and expressive. So, is contemporary architecture making inroads in Rajasthan?

Ar. Mridul: Yes! That is part of it because if you look from the country's point of view, they are looking towards the west. That's what they consider modern. In small places like Jodhpur, they look forward to cities like Mumbai and Delhi, that has a different style of architecture. I don't really understand what is Modern Architecture. Whatever is done today is considered modern whichever way you do it. So, what does modern mean? Yes, contemporary architecture is making its way; unfortunately, we already have high-rise buildings but when you do high-rise buildings, there are a lot of climatic considerations that get divorced with your design, because the space traditionally and climatically may have not meant to be for that typology.

Intervierer: You talked about Birkha Bawri and we wanted to know if there are any other architectural mechanisms, construction techniques or materials that can be brought again?

Ar. Mridul: Fortunately for Jodhpur, stones still remains the non-detrimental means of construction, because that is the local material of construction and we don't use bricks extensively here as we have to import them from other cities. Influx of new materials remains, but materials for buildings by large remains stone.

Interviewer: In Rajasthan, major cities like Jodhpur, Udaipur and Jaipur follow a specific colour palette. So, in your opinion does it limits its potential or enhances it?

Ar. Mridul: I think it's more talked about than actually followed. They call Jodhpur the blue-city, but it was originally confined to a particular pocket where they used blue colour. There are mainly 2 or 3 reasons, one of them that they wanted to keep one caste apart from other.; Brahmins painted their homes blue to set them apart from other communities. The use of Indigo Neel was also used to keep some kind of mosquitoes away. Nowadays, today's houses are not extensively done in blue, but rather by Jodhpur stones. So, I don't see blue city spreading anywhere. Similarly, if you go to Jaipur, it was painted pink because of the nature of its stones. Same is the case with Udaipur, which was white initially.

Interviewer: But when we visited Jaisalmer, it was entirely golden?

Ar. Mridul: The city is the only exception in Rajasthan where they have placed policy frame control; they have material control that they have been sensitive towards the place. Authorities have made it clear that in Jaisalmer, use of Jaisalmer stone is imperative.

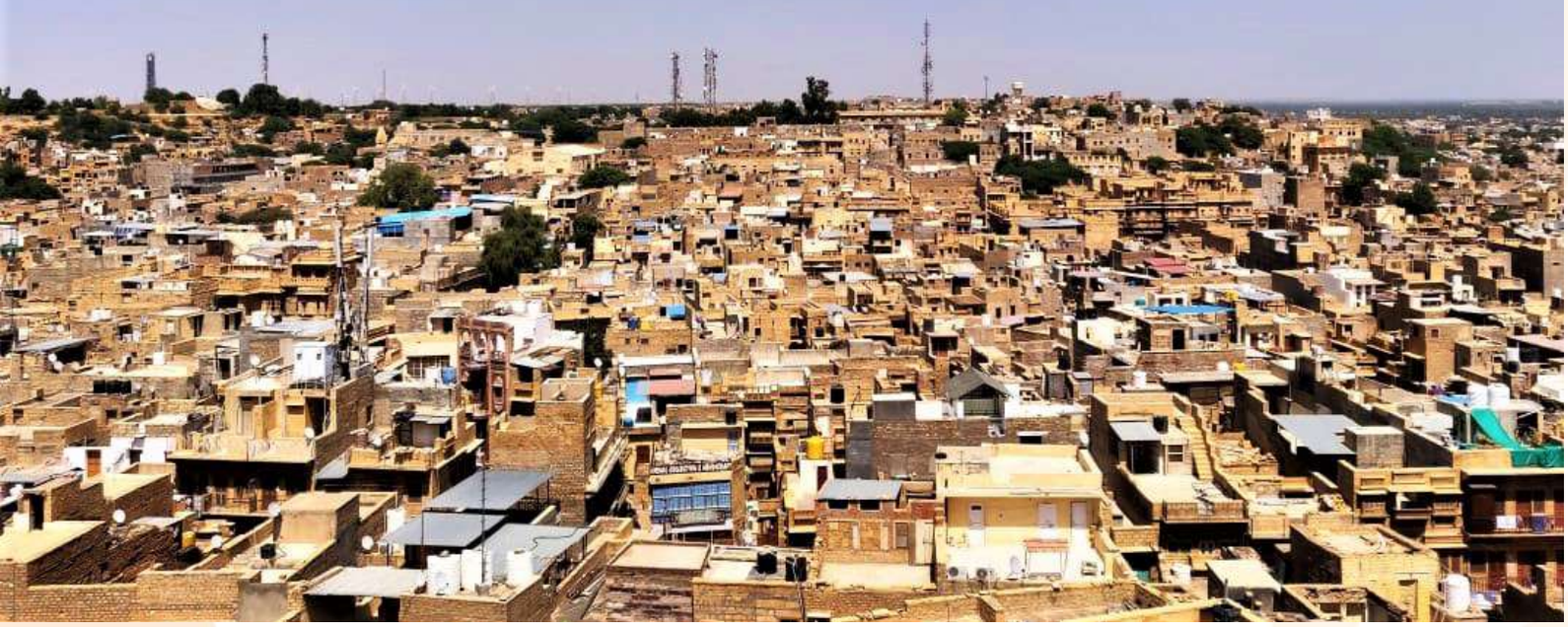
Interviewer: What are your views on automation of natural materials as well as recycled materials in today's age?

Ar. Mridul: If you are using natural materials, they can be easy to recycle. I can vote personally for stone as the most sustainable material. It can be reused, recycled and reinvented, and put in another shape even after hundreds of years. So that's a material I truly feel is the most sustainable.

STREETS OF JAISALMER
A GOLDEN AND WARM EXPERIENCE

-Durva Kamat

What makes a city even more alluring? – its people with their personified aura , thriving to be noticed. Warm and welcoming, they have a special way of getting around and hanging out with tourists. The houses built in close vicinity create a sense of oneness between the communities. Every individual has a story of their own experience in the city of Jaisalmer, even though the struggle to survive has been quite a task to the people due to low occupational and income businesses; the conurbation as a whole has never ignored their needs.



The older generation of the city often wonder as to what would happen if the heritage of the city is transformed into better versions of the same. Would the essence of the city get lost in the new world?

Jaisalmer as a city has a lot to offer besides its rich, nomadic desert culture and food. The rustic beauty of any city can be seen in its streets and alleyways. A city in its true essence can be visibly seen on its streets, where the community interacts, rejoices and celebrates in the most unique way.

Images by: Atharva Mahamunkar

The alleyways serve as a medium of interaction for people of all age groups, often rushed with craftsmen selling their works to shopaholics and other people, the backstreets have seen and settled as a timeless space. From busy, bustling afternoons to quiet evenings these pathways have perceived everything. Stories here are depicted distinctively. Strokes of a few fingers decide the faith for the puppets in the shows and so for Jaisalmer.

The puppetry shows often are a delight for children and even for the passerby's making it one of the most interesting parts of the streets.

Portraying the regal culture in all their crafts has been one task they take great pride in. From vibrant colors to the intricate details, Jaisalmer has always been that one city to make its architectural beauty

The jharokha is one such prominent feature designed with the belief that a queen shouldn't be seen by any outsiders which gave it a clear motive of pardah concept.

The makans of rich merchant in the city is now adorned with different and modern styles of jharokas , resembling their ancestor's creative handiwork.

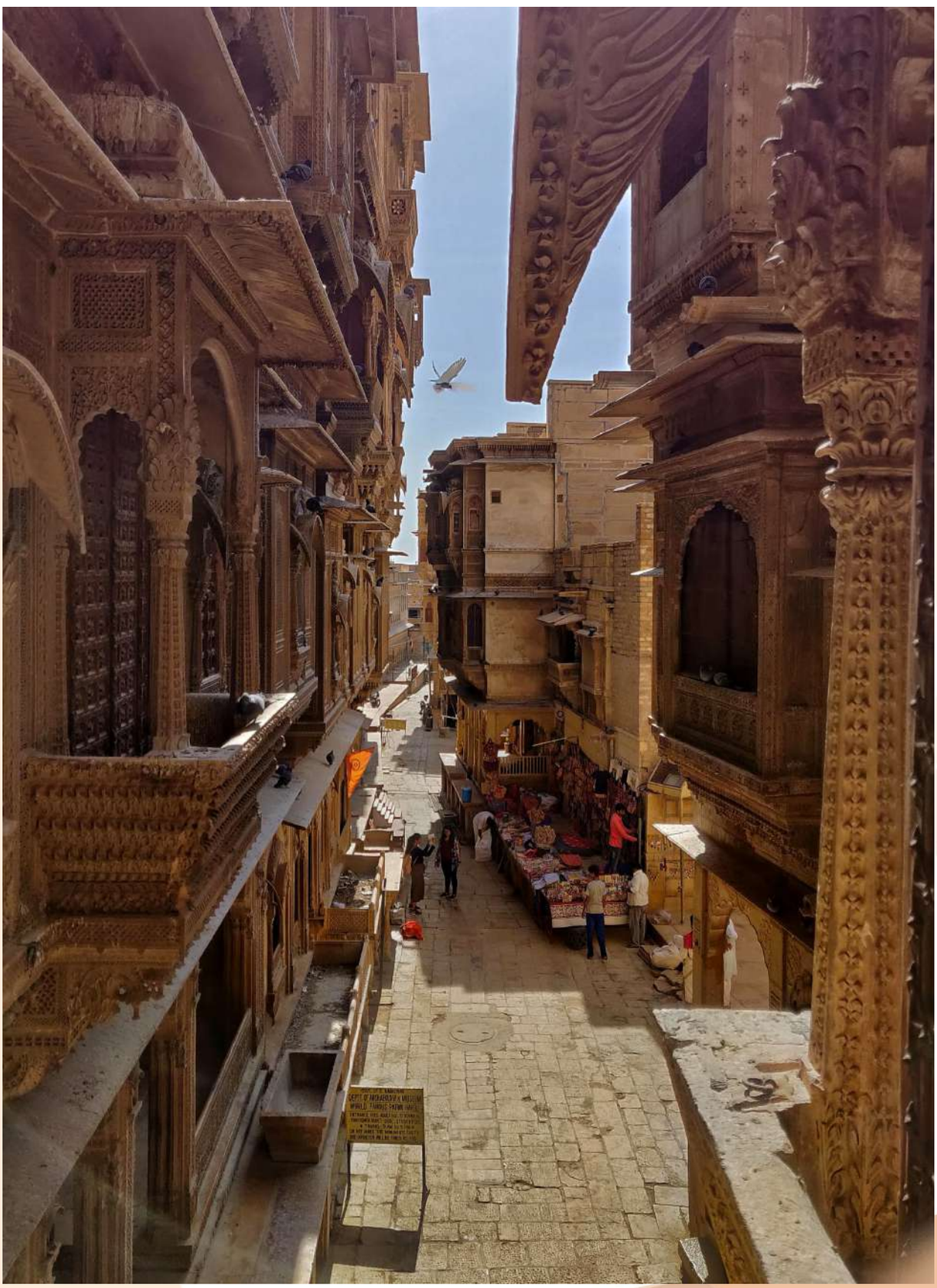


Image by: Atharva Mahamunkar

Image By: Adita Shetty

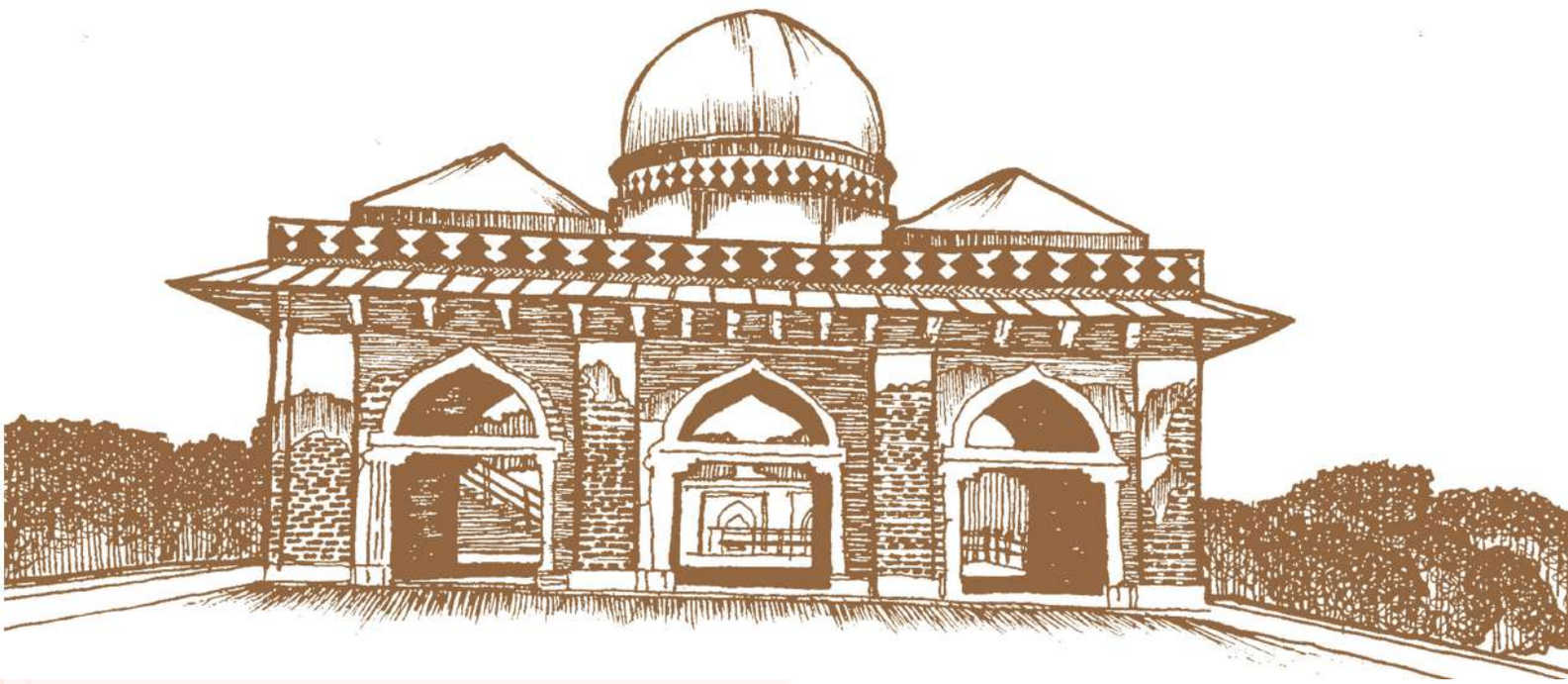
JAHAZ MAHAL

-Kashish Singh

Courtesy: Batch 5, ACA

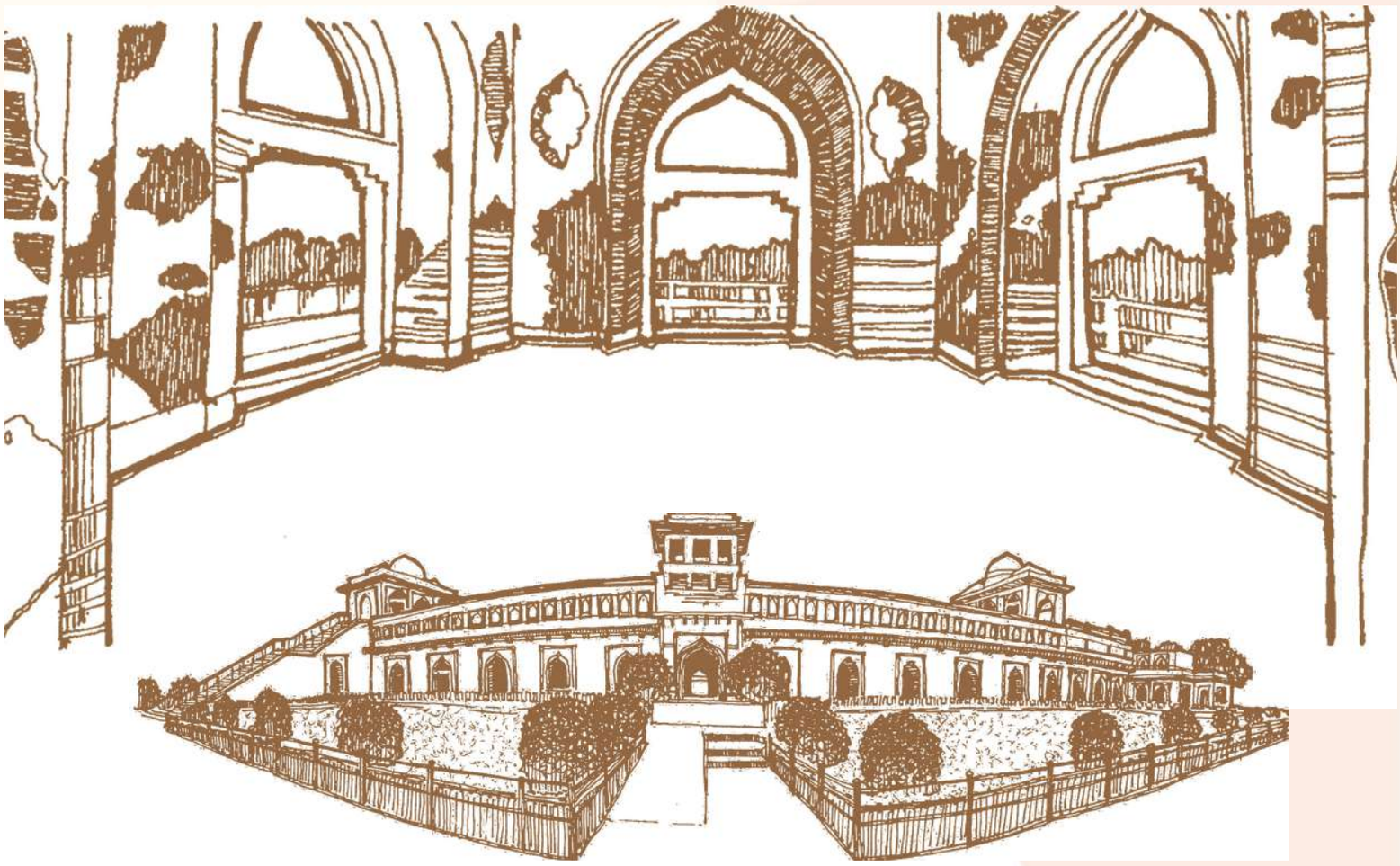
Heritage is the attained physical legacy and its intangible attributes that define, dispense and direct a society state or scenario in tandem with time space and inheritance by the growing community in question. This scheme goes branches out in derivative ideologies and collateral conflicting opinions that shape that given community's future.

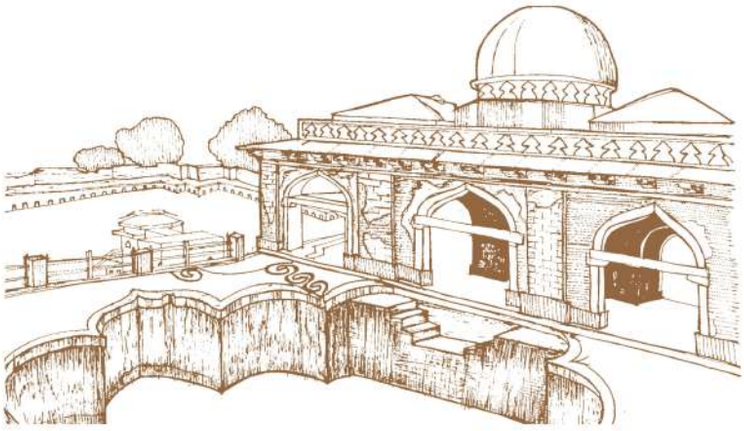
The whole flux born out of reprimanded debate between heritage and its significance against its irrelevance in fleeting time that hold potential reasoning on varied parameters. The ongoing whether heritage is merely of picturesque significance or holds any greater value provides the scheme thereon for if, at all, heritage should be preserved and why.

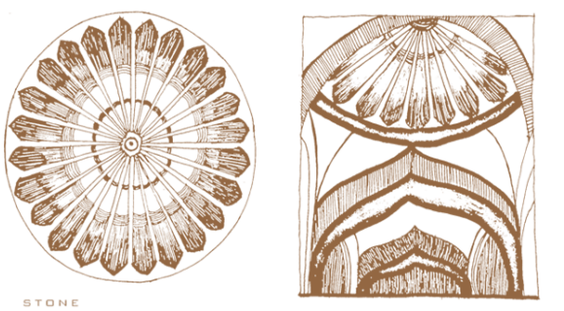


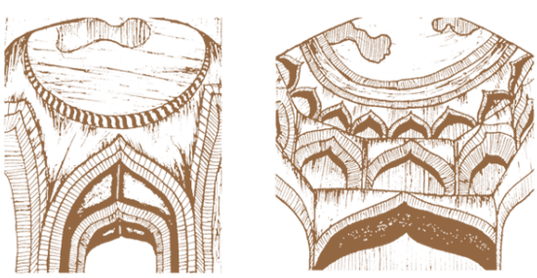
The intent of this project, therefore, is to identify one such example that defies the notion that heritage is merely an ornamental decorative with no greater significance. This documentation shall look for its own answers to the prove the relevance and need to preserve, adapt and henceforth, aquire from it a broader perspective towards the scope of heritage inheritance.

To dive in to find rather salient justifications. Jahaz Mahal sets an example in defence of heritage and its undeniable significance. Jahaz Mahal complex, Mandu, Madhya Pradesh has one of the earliest rainwater harvesting that provides water to far off territories. This mega structure promotes use of simple scientific principles of pressure and gravity aided by its natural context that lets it lie between two lakes, Munj Talao and Kapur Talao. Seamlessly justifying its relevance over centuries to follow. Till day, it serves its purpose and advocates in favour of heritage's marvel and implication.



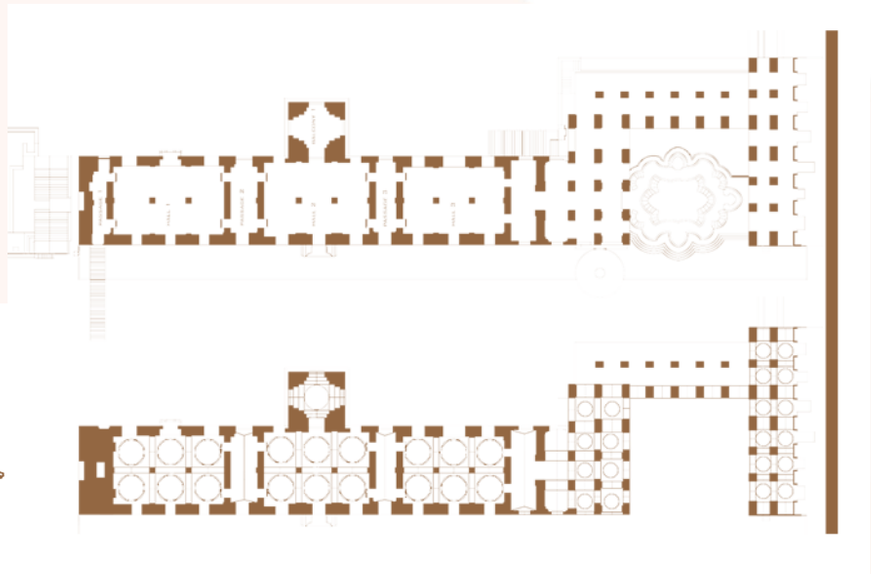


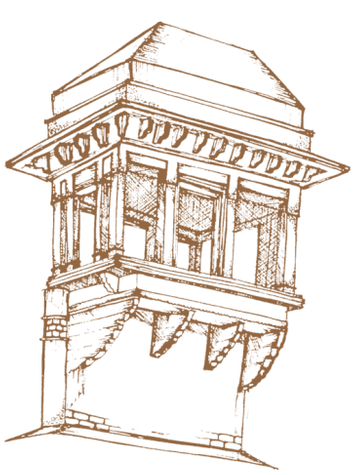


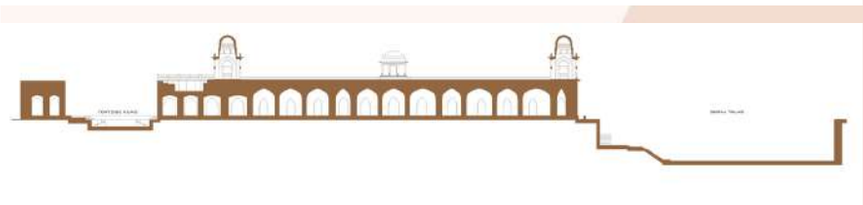


Hence, its only fair to conclude the necessity to admit and achieve an understanding towards relevance of past in today's reality. The Jahaz Mahal complex proves the significance, even centuries hereon, of preserving heritage that plays the role in supporting the sustenance of the community and uplifting them. It helps us arrive at alternatives that blend with previous usages and today's modern technology. Thus, this documentation studies and understands the bearing of heritage in modern times where it is questioned and contradicted at every step. It advocates rightly why legacy is taken forward

" Jahaz Mahal complex resonates to today's time contemporary society and way of life. "







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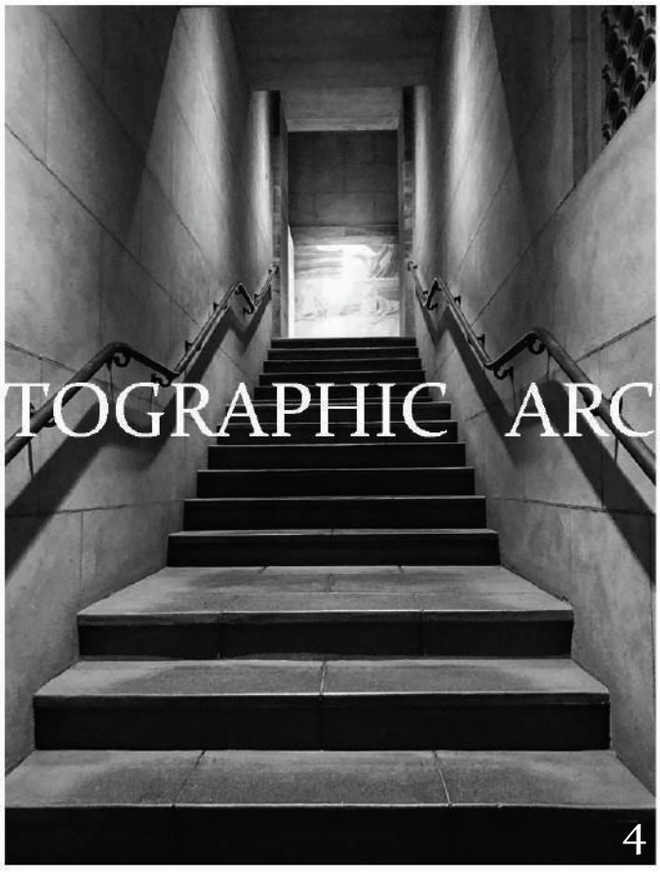

F FATHOM

Y YEARN

I INNOVATE

B & W
Perpetual Monochrome

Image Courtesy : 1. Swapnil Kulkarni 2. Adita Shetty 3. Jainam Jain 4. Hena Patel

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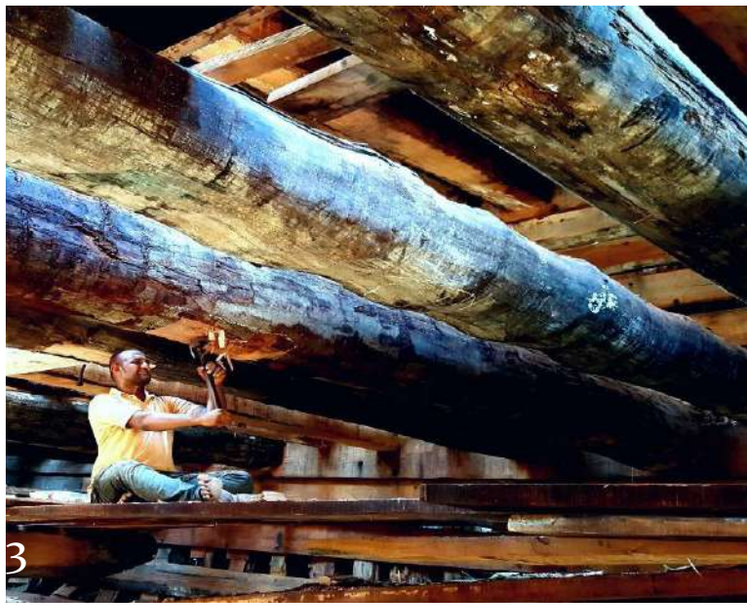
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Photo Archive

A narrative collection of Photographs captured by the students that showcase varied visual themes such as Architectural Documentation, Community Culture And Human Potraits.

Image Courtesy : 1. Swapnil kulkarni 2. Raj Dungrani 3. Chinmay Kamat 4-6. Raj Dungrani

Picture Courtesy : 1. Vaibhav kumar, 2. Swapnil Kulkarni 3. Kiran Binani 4. Meet Shah

Picture Courtesy : , 1. Swapnil Kulkarni 2. Kiran Binani 3. Meet Shah 4. Vaibhav kumar

Courtesy: Divyanshu Jaiswal

HOW ABOUT?

TRANSFORMING DIGITAL TECHNOLOGY INTO ARCHITECTURE FOR KNOWLEDGE INFRASTRUCTURE

-Chinmay Kamat, ACA

Imagine an Architecture so dynamic and futuristic, that it would make one want to jump out of bed and go on a recreational tour to explore and learn about the respective field of interest. A structure that would maintain a sense of stimulus from the entrance to the very end. A structure having the ability to house Immersive technology for the learning of various fields, starting from the basics to higher level. A structure portraying a different perspective, about how the technology that is commonly being used for recreational purposes only, can enhance one's experience of knowledge intake.

Since the beginning of time, Knowledge has always been an aspect in the history of humankind, that humans have been keen to explore about. This curious nature has led to great revolutionary discoveries and inventions.Discoveries such as ability to express through writings and drawings in the early stages, whereas, Inventions in the field Digital technologies such as Print-media, Computers, Internet, Artificial intelligence, etc. which has proven to be essential achievements over time.

Architecture in terms of geometry, form, space, experience, etc. has always played an integral part in the journey the whole time. Without architecture the essential experience of learning, may it be the sense of space
and boundaries, feeling of void and mass, darks and whites would all make no sense. Architecture is not just about designing a building but designing an Experience within.

In the 21st century, where the technology has reached a level of Artificial Intelligence, the possibilities for Augmented, Virtual and Mixed reality in learning environments seems limitless. But unfortunately, such an immersive technology has been observed to be used more for recreational purposes, whereas no path forward has yet been defined in the Education context. From information delivery to on-the-spot training, there might be no better application of the earliest successes in this technology than in Education.

Knowledge has today become a vital necessity for people belonging to all walks of life. A catalyst for economic, social and cultural transformation for various communities, knowledge is a predominant factor that helps mould minds that would work towards the progression of the society. **Therefore, the question that arises here is, why not use such state-of-the-art technology for the benefit of acquiring knowledge of various fields?**

" Ever imagined a transformation of the Immersive technology into an Architectural intervention for the betterment of the current conventional Knowledge Infrastructure? "

Architecture is a form of realistic art that can change the life of humankind temporarily as well as permanently. The study of how architecture can be altered with respect to the technology engineering to house a learning environment is an interesting field of research. An architecture as such may have large-scale positive implications on the knowledge infrastructure, such that, it may catch the interest for collective/ interactive learning of the vicinity, may introduce various methods of learning other than the present stereotypes and so on.

Also, financially, the knowledge infrastructure has grown to a great extent in the past few decades, so much that it has drawn the attention of many countries across the globe. According to Brinkley (2006), the Vdevelopment of the knowledge economy and globalization are closely related to each other. Globally known organizations have been able to benefit from this integration.

Considering all the perks of these technologies, the scientific fact that they radiate frequencies that are harmful, no matter at a marginal scale, to humans and other living species, cannot be overlooked. Apart from the application and ethical perspective of this innovation, can some research be carried out about the materials that can reduce the frequency radiations and limit its exposure to the users? Can these materials be indigenous? Can the structure still be designed with a futuristic and modern approach, with respect to the technology contained within?

How About exploring and understanding how the elements of space, technology, and the real-world work together, in forming the virtual world that can help in quicker and more efficient grasping and acquirement of knowledge? How About a simultaneous sustainable approach towards nature with respect to the construction and materials? How About studying the history of various modes of acquiring knowledge critically, to understand what created the base of learning, in order to design how it would function a decade down the line?

Courtesy: Neil Dustakar

NARChitecture... a growing epidemic?

- Parth Soman

Can trails of Narcissistic behaviour be spotted in the field of architecture?

Is architecture a profession for the creator or for the users? This question is an important one. It is common knowledge that architecture with its creator needs to abide by certain norms when it comes to designing spaces. The users, their wishes, their requirements are a top priority but so are the designer's insights, skills and a personal touch

Narcissism- a blend of vanity, self-absorption, entitlement and a clear disregard for the opinion of others, is a growing epidemic. Architecture, a field that is an amalgamation of both science and arts, might just be one of the many narcissistic professions. This occupation has continued to shape the human lifestyle and act as a medium to propagate one's ideology or agenda.

"The overpowering sense of imposing an egotistic style in any building, irrespective of the context, displays insensitivity with respect to the project."

The early 1900s saw pioneer architects like Laurie Baker and Charles Correa taste the limelight. Their ideologies and principles saw a gradual evolution of a particular style. It is necessary to consider that this period was the advent of popular professional architecture in main-stream India. This 'feeling akin to a style of architecture' may have resulted in the general notion of developing a personal style. But while achieving that, is there a degradation in the habitability of a space?

A lot of famous names in the history of architecture are known for iconic forms w hich were developed due to individual ideology, gradually resulting in the creation of a 'brand'. This branding, though very personal and unique to the respective artist surely puts barriers on the most superficial of the architectural aspects.

Queen of the curve, Zaha Hadid, known for curves and skewed angles are very original but a compromise in functionality is observed in some of her works. The London Aquatics Centre, with its flamboyant design was actually not in tune with the design brief with several sightlines cut off. The manifestation of this structure also went overboard in terms of expenses like many of her other projects.

The peculiar obsession with rigid and character-specific style has led to issues in functionality. It is easier for established architects who have distinct design elements, despite aesthetics, overshadowing the usability factor of buildings to get more design opportunities.

This trend has continued for years now, with architects' reputation acting like a saving grace. The arrival of post-modernism ushered in the development of individuality in the fields of art and architecture. Driving home some ideas from earlier times, a sense of nihilism can be observed in the general public, not just architects.

The overpowering sense of imposing an egotistic style in any building, irrespective of the context, displays insensitivity with respect to the project. The structures that architects design have the potential to change, not only its immediate environment, but also the future. So, the question is- In a bid to create something exclusive, are we being inclusive of the basic parameters in design?

"It is easier for established architects who have distinct design elements, despite aesthetics, overshadowing the usability factor of buildings to get more design opportunities. This trend has continued for years now, with architects reputation acting like a saving grace"

THE EVOLUTION OF LABOR IN TECTONICS

- Ar. Neethu Matthew

To the ones gathered around this article, if you belong to or contribute to any form of tectonic production, as an architect, planner, designer, writer, reader, or layman, you occupy space. If you are an urban dweller, you occupy space with a long evolved and inherited ability to adapt to and absorb from your surroundings, which currently is designed by a single person - an architect or a designer/planner. As architects and designers, we never see ourselves as laborers. We associate ourselves with our client, practice, profit, recognition, and structures. But there is more to this story if we look at us as laborers because we have a short history as architects and a long one as laborers of tectonics who are conditioned socially, politically, culturally and lately globally. Understanding this story is important as, we, the contemporary architects are faced with a certain degree of the political and cultural storm once we step out of the safe walls of schools into both practice and academia.

Architectural practices since the beginning have followed the associative path between practice and academia. This has set enough grounds for practitioners and academicians to analyze both these aspects of tectonic sciences standing across each other. In this brief article, we will be looking at practice and academia both as bedfellows of tectonic labor and brush aside the unpopular notion that academia has killed the practitioners' space or vice versa. The architect as a professional is not entitled in the same era as the origins of architectural practice. But in history notes, we might stumble across a set of skilled laborers such as masons, carpenters, engineers, smiths, etc. or painters, travelers, transient migrants and invaders who can be credited for historic cities and buildings. These people worked for the clergy or the king without referring National Building Codes, followed scale and proportion without reading Form, Space & Order, and no, we as architects never think less of these people.

Further traversing through history, we will find that pre-modern builders and architects, owing to the comfort of discovery and innovation that they were born into, worked at their own will to produce built environments. Somewhere in this transition, we must say that the right to build was monopolized by a set of experts who had access to abundant resources. The skilled laborers were reduced as mere 'consultants', who facilitated the production of historic landmark buildings. But we never call out the names of laborers while remembering the grandeur of Hagia Sophia or love symbolized in Taj Mahal but the emperors who funded these structures to mark the power of empire and power of love. Recently, the idea to name a builder or civil engineer 'an architect' in the West was a need of the global culture of the industrialized world.

We seldom say that cities are an outcome of demand for modern and accommodating spaces for the migrants who come to urban areas to compensate for what the outskirts won't provide them with. So are architects and planners. So are builders and developers. How do we look at the evolution of an architect in this demand? We merely know them as planners and urbanists who coined words like garden cities, utopias, urbs, suburbs, megacities, etc. We know them as fathers of skyscrapers and monumental residential complexes. As academicians and students, we look at these as case studies to frame concepts and theories to add to the existing database.

Behind the scenes of city-making lies a vast pool of socio-political and cultural phenomenons that places an architect in the labor pool as a mine worker or a postman. A city is not as simple as an output of mass-produced space. We are fortunate or unfortunate to have studied the origins of built spaces and to still build spaces and structures with thet

principles of our predecessors without losing validity or being outdated to the need of contemporariness. We are no more laborers, but someone who 'build cities' and 'monuments'. We are starchitects and have quirky taglines and website domains. Looking at architecture and planning in city building with an x-ray lense, we discover a lot of milestones or expectations out of us which is otherwise latent behind the veils of professionalism. In the present world, the clergy, kings, and emperors are replaced by governments and their personal investors, who are eager to develop their country towards a non-existent global finishing point.

Yes, we have a big client with a huge money-purse constantly recycling resources and discarding projects as per some need of a ghost population. Architectural or planning labor is secretly catering to a tussle between the survival of the fittest countries. Large countries (infrastructure and population density wise) with strong political parties, pleasant towards democracy or not, they have a constant need to invest in new projects, global tie-ups, and diplomatic ranking. In India, for example, mega-infrastructure projects are the highlight, where practicing architects and academicians alike run towards to adjust to this new culture and share the limelight. The cases of Delhi, Ahmedabad, Amravati, and the mega-dams are not the idea of planners. We don't have a Corbusian or Howardian theory that talks even remotely of the need for Delhi's revamping or concertizing Sabarmati and damming the Narmada or transforming Mumbai's mill lands into wealthy households.

The Gods of projects are officially the developers, politicians, and government in power. We architects have lost the upper hand in theorizing and building architecture.

Presently, we are just laborers of these Gods for whom we build, without questioning. This is the storm we are pushed into, to perform according to a set of standards governed by capitalism and face the embarrassing crits for government and developer-funded professional decline. If you feel that the development is taken over by powerful forces who don't know brick from wood and have a problem with it, it is a shame to also realize that the public is fascinated by the colorful 'project' trend. This trend of ghost produce is similar to where people buy airpods and are lured into buying airpod attaching straps to ensure that we don't lose one.

So, we are safe, right? Maybe yes maybe no. Let me take this opportunity to roughly predict a possible future for this progression. We, as the modern carriers of tectonic sciences, might be soon replaced by a high functioning intelligent designing and planning software, an uber-architect who will deem the persona of an architect in flesh and blood, obsolete. This uber-architect will monitor possible clients, feeds on Google maps for site searching, does site analysis, kicks out any occupants - living and nonliving, and makes the city and building prototypes within a matter of seconds for which we lousy architects takes months or weeks. This evolution is perceived in all forms of labor and professions. This, as a worst-case scenario, could be softened by understanding or seeing ourselves as laborers with a legacy and duty towards the art and science of tectonics. We study history of architecture but seldom understand, get inspired or criticize our legacy in the wide pool of labor-hood to which we belong, and have a rightful space to perform ethically.

Courtesy: Shabbir Raza

CAN DELHI'S AIR EVER BE BREATHABLE AGAIN?

Delhi's smog solution by mirroring China's air purifier.

Courtesy: Maheshwari Parmar

The cold and toxic winds of Delhi, bring a chill down the spine and clog the lungs. The worst conditions are recorded just after the insensitive firecracker-based celebration of Diwali, and post-harvest burndown. The Central Government is desperate to improve the situation of the nation's capital. The measures have been taken by the government to improve this degrading condition, such as implementing the odd-even scheme, shutting down schools, in addition to investing millions in foreign technologies to improve air quality. The approach of the government is less preventative and more superficial.

A SOLUTION FROM BEYOND THE GREAT WALL!

Xian, a city in North China situated in a depression surrounded by mountains, so it is difficult for the air to disperse. Accumulation of air in the region causing heavy smog which when combined with foggy winters make it impossible to see the sky.

Courtesy: Maheshwari Parmar

The country has an intelligent solution to this grueling concern which may apply to those budding in Delhi, more so, cost effectively. The Air Purifier Tower in Xian works on the principles of greenhouse effect. The major polluting factor that has been identified is 'Greenhouse gases', which is a by-product of modern daily sustenance. By tackling the core of the problem, a solution can be devised.

HOW DOES IT WORK?

Xian's smog tower's aim is to provide an effective and low-cost solution which is also sustainable. The effervescent technology is equipped with solar panels for heating the air, which is pulled inside through the glass covers surrounding the structure which functions as a greenhouse. The tower also contains multiple cleaning filters, through which heated air is raises. Filters separates the pollutants from air giving out cleaner air. This massive structure, often dubbed as one of the tallest structures of Xi'an, acts as the city's very own life-size air purifier. And since it works on solar energy it leaves very

HOW CAN IT DECREASE THE POLLUTION LEVEL OF DELHI? Xian's Air Purifier in Delhi?

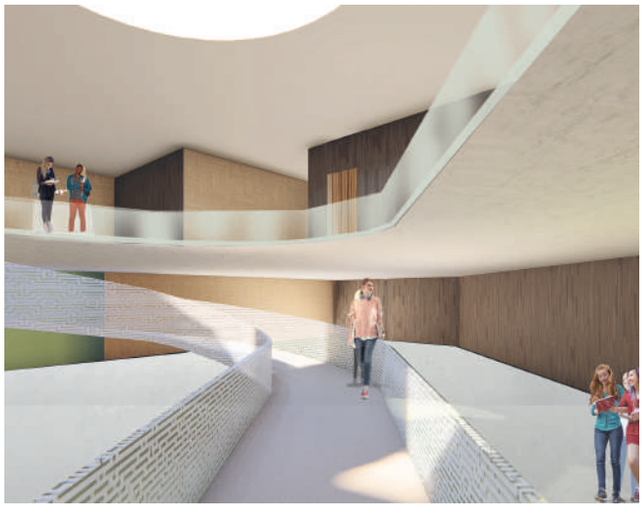
There are numerous factors which contribute to Delhi's pollution which are very similar to that of Xian. Delhi, with its vast land has scope for construction of such huge structure. Unlike Xian, Delhi NCR is humungous as well as it isn't restricted within a constraint radius against the former's rigid frame. Since spread of the pollutants germinates several nodes of caution, one may consider considering several of these small towers at strategic locations.

Instead of creating such huge structure in one part of the city, numerous towers can be constructed in different parts of the city in smaller proportion. As it works on solar energy it does not leave behind large amount of carbon footprint and construction should majorly focusing on area surrounding hospitals, schools and other public spaces that caters the masses.

Such towers can also be installed in high rise buildings and for greenhouse covers surrounding the tower which spreads horizontally can be constructed vertically along the façade of the building for maximum absorption of solar radiation, which can replace the air purifier installed in individual houses, saving the fuel and electricity of the resident.

"Instead of creating such huge structure in one part of the city, numerous towers can be constructed in different parts of the city in smaller proportion. "

By adapting and evolving from world's existing inventions, Delhi can overcome its pollution problem in more creatively than by just implementing old school but vague measures which have negligible impact and investing just for sake of it, drowning dollars in a jiffy .Sustainability is the most important aspect of the invention which makes the structure so successful and efficient. It is creditable that a solution which attacks the core of the problem was developed.



ROME DIARIES - AN EXPERIENTIAL TRAVELOGUE

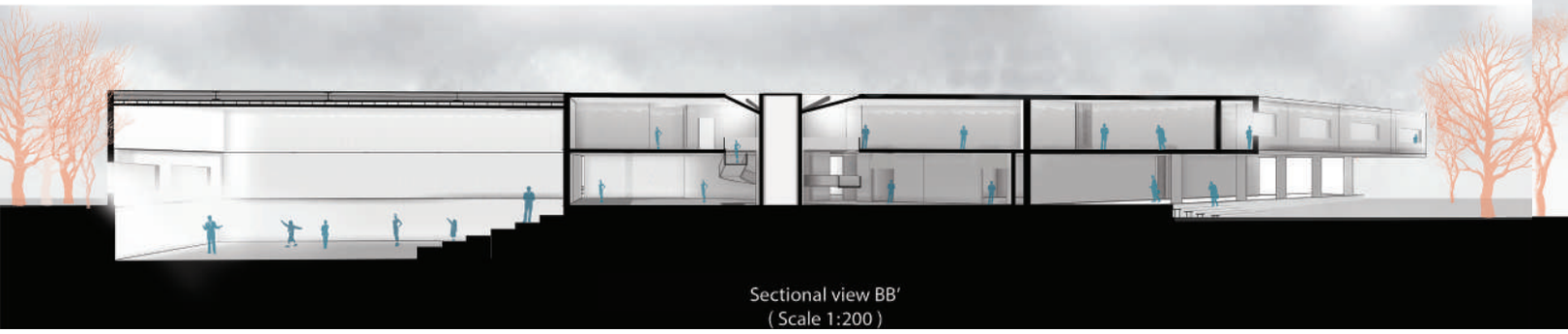
-Abhijit Kumar Arora

The world holds a wide repertoire of cultural and social diversity. Travelling to these new frontiers, is an enlightening and enriching experience in itself. Following is a month-long student-exchange educational excursion of three 3rd year students from Aditya College of Architecture; Raj Dungrani, Urmi Panchamia and Jainam Jain, to the cities of Rome, Pisa, Florence, Naples, Capri and Venice in Italy.

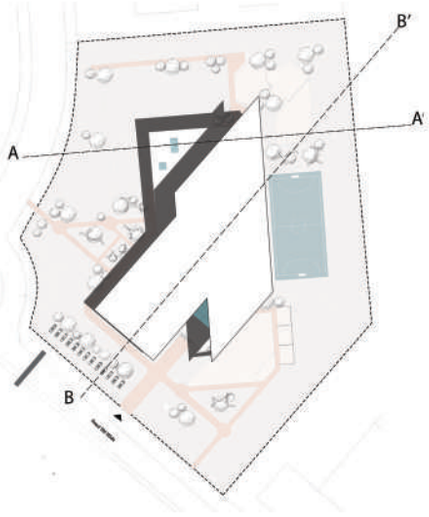
The exchange program, held in the month of May, 2019 at the University of Tor Vergata, Rome aimed to invite students from around the world, to collaborate and design a School Complex, an Artistic High School of 15 Aule (Classrooms), at a given peripherical 9000 m^2 area called 'La Romanina', south of the Naples-Rome motorway road, in close proximity to the University Campus. Tahe intent behind building a 'Collaborative School Complex' was to develop and grow an educational hub within the area that catered to the masses and its people's artistic education in the near future. Also, the precinct's landscape could function as a vital 'Public Recreational Space' after teaching hours was intended and thought about.

The design intervention was separated by two volumes, with neigbourhood aligned grids, the lower floor as a public zone available for all residents and the above floor as a private zone. In the core of the structure was the atrium ramp wrapped around the lift. It became a focal spot making the users curious about the space. There were two accesses and pedestrials connecting the user transitionally from the built to the unbuilt.

Cafeteria was stationed in such a way that it became accessible from the gymansium, auditorium and library areas. Open air seatings were provided for people to sit down and relax in the sunlight. An envelope over the main façade of the library sheltered the structure from extreme weather conditions. The indoor spaces and the outdoor spaces were separated using vertical louvers and solar roofs above the seating provided desireable sulight for the users to read and study.

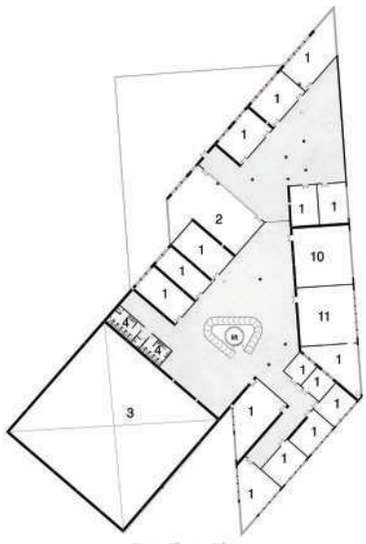


Sectional view BB'
(Scale 1:200)

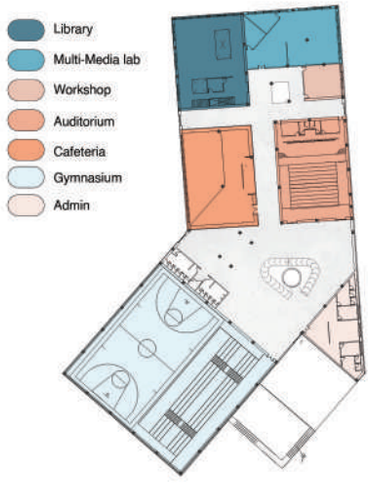


Site Plan
(Scale 1:1000)

Ground Floor Plan
(Scale 1:500)

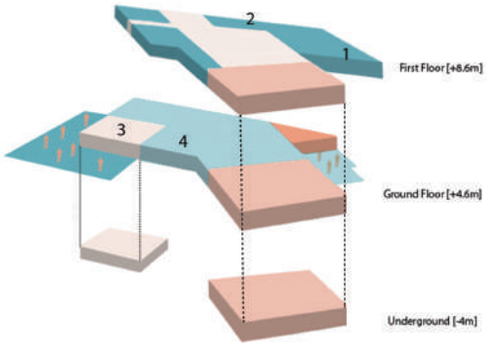


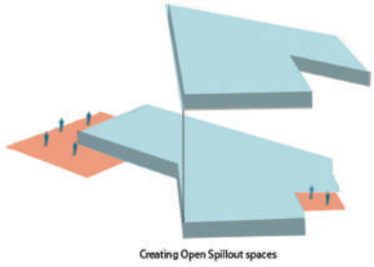
First Floor Plan
(Scale 1:500)



Ground Floor Zoning
(Scale 1:500)

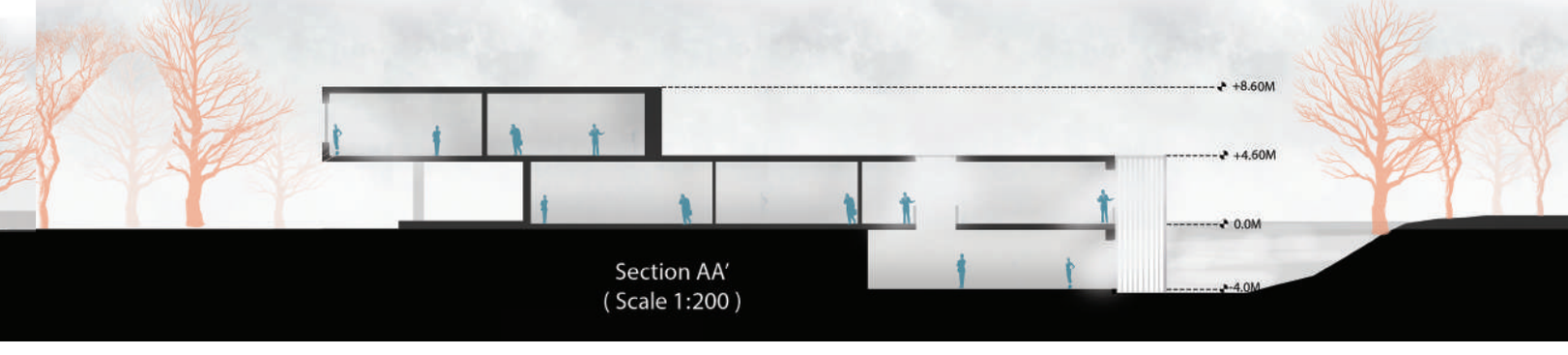
First Floor Zoning
(Scale 1:500)





Creating Open Spillout spaces

East elevation
(Scale 1:200)



Section AA'
(Scale 1:200)

Design: Urmi Panchamia, Jainam Jain, Raj Dungrani, Jyotika Joshi

A SWAMPING SURGE - FLOODS 2050

With an imminent climate change, what will you do when the first floor of your building is submerged under the sea, in the next thirty years?

-Neha Shenoy

If the ever-increasing population of Mumbai wasn't already a matter of concern, it definitely will be when a majority of the densely inhabited south and suburban Mumbai will be at risk of coastal flooding by 2050. A new study poses an alarming question- will the financial capital of India withstand the perils of the impending sea level rise? It noted that three times as many people may be affected and displaced as earlier projections estimated.

Coastal communities worldwide have been cautioned to prepare themselves, for much more difficult times in the future than previously anticipated, should the current rate of greenhouse gas emission continue. For vulnerable urban waterfront zones, locations that once made great sense economically now present formidable questions.

How much is at stake? What needs to change? How long do we have?

Such questions are becoming more urgent in coastal cities with the escalating risk of flooding.

To cope with this distressing news, architects not only need to help reduce the carbon footprints with their work, but also prepare construction measures for the inevitable. In this case, it means coming up with solutions that are adept at keeping the population safe and the city unassailable.

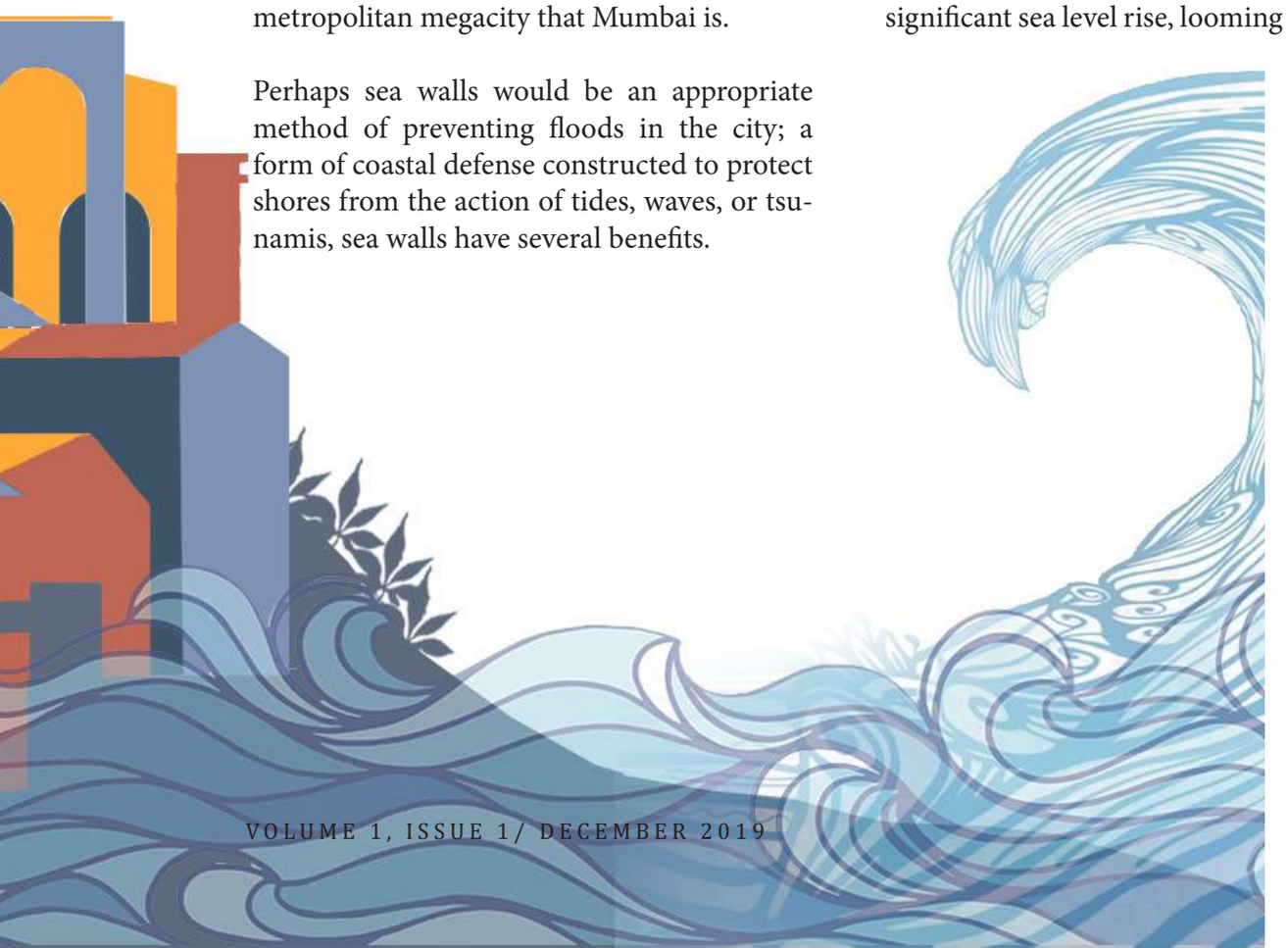
In many different parts of the world, stilt houses, urban and rural, have been constructed to protect the inhabitants from floods. Amphibious houses are structures which float off the ground when the waters rush in. However, neither of these seem practically viable in the metropolitan megacity that Mumbai is.

Perhaps sea walls would be an appropriate method of preventing floods in the city; a form of coastal defense constructed to protect shores from the action of tides, waves, or tsunamis, sea walls have several benefits.

They form a solid and strong coastal defense, effectively minimizing loss of life at the time of catastrophe and damage to property caused by erosion.

However, the drawbacks are: instead of curbing the tidal wave energy, these structures deflect it to adjacent areas. So, if waves pummel a seawall along one coastal property, their energy will be redirected to neighboring properties. That means, these areas will experience wave energies similar even when in the absence of seawalls.

How far the oceans rise will depend a great deal on how we formulate our line of action in the next few decades. Carbon emissions if restrained and greatly reduced will make a difference between manageable disruption and catastrophic inundation. Till what level the sea can rise by 2050 is known. But before that, everything also depends on how we make plans to avert detrimental environment discharges. Designing and building the necessary infrastructure with a transformation in mind demands investment today, that will save lives and assets in the long run. Whether it be floating houses, cities on stilts, bounded walls, or any other construction technique, it is imperative for us to introspect and deter a potentially significant sea level rise, looming in the future.



Courtesy: Shabbir Raza

Courtesy: Shabbir Raza

BACK TO SQUARE

Post-Apocalyptic architecture

-Manasvi Patil

The world is back at square one. All structures, big and small, have been razed to the ground. All that remains is debris and a few lucky survivors. How will the human society start rebuilding itself? Will the architecture that emerges be an attempt to recreate the past? Or will it be something extraordinarily different. The world might tip into dingy survivalist citadels, or rise up to vibrant innovative forms as a compensation for all that has been lost. It is safe to assume that the new world would be nothing like the one now, but it would still be eerily familiar.

In today's fully functioning world, construction materials are mass produced, ordered and transported to the site. But in a world where all that remains of these industries is a pile of debris, where does the building material come from? With the world terrain reset, will the architecture have to go back to square one? Will there be scavenger hunts to salvage the last remaining dredges of infrastructure? Or will completely new material be used?

Most probably, the post-apocalyptic architecture that first arises might be a

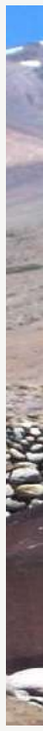
common community hall, reinforced against wild animals and the weather, and small individual houses. Would the most sensible material to use be mud? Or would a completely new norm fall into place. Further evolution of the architecture might be a combination of the readily available debris and mud. Nostalgia might direct the forms to be similar to those that were destroyed. There may develop a culture of integrating salvaged scrap from famous structures to preserve it. A vision of chaotic sustainability comes to mind, a motley arrangement of materials that have no correlation to one another except for the fact that they have faced the brunt of the Apocalypse. Driven by the urge to create a semblance of normalcy, a twisted architecture could take over, defeating its manifesto by its own existence.

After the first wave of danger has passed and survival is easier, the next generation would emerge. A generation of humans who would never see the Taj Mahal, the Eiffel tower or the Colosseum, who will grow in awe of these wonders, after hearing about them from their parents. But they won't understand the significance of that small piece of colourful glass from the Rose window of Notre Dame that their grandmother keeps. They won't know why a little piece of white marble from the Taj Mahal is such a priced possession of their parents.

After the survival period is over, and the people grow tired of the bland houses, there might be a reformation, introducing new methods, new thoughts. When the last person from the pre- apocalyptic era has passed away and there is no one to tell how the past was, will the humans reinvent the same things? Will bricks immediately again become the norm? Will structures develop underground? Will the forms remain cubicle? The new generation may choose to keep rebuilding the relics of the past, or keep souvenirs and vow not to make the same mistakes. Will the world emerge into something sensitive towards resources, respectful towards nature?

"Mistakes are followed by improvement. If the world gets a do-over, the survivors may develop to be more considerate, more sensitive"

Mistakes are followed by improvement. If the world gets a do-over, the survivors may develop to be more considerate, more sensitive. If or when the apocalypse happens, and the homo sapiens somehow survive, the new world that gets built will be the upgraded version, or so one can hope. Upgraded or not, without documentation, history starts fading away. Perhaps the stories of the pre- apocalyptic world would be dismissed as exaggeration and termed as mythology after enough time has passed. Perhaps this has happened before and the mythology we know of now was in fact a reality of a time we don't remember and don't want to believe.



'SLICE OF TRIBE'

A look at the Nomadic Rabo Tribe of Ladakh

-Abhijit Kumar Arora

Tribes have historically and invariably always led a life in isolation. Isolation of tribes is understood in terms of separated mode of survival in distant frontiers of geographical areas, far from modern interventions. The 21 st century world, unlike primitive tribes has embarked upon technological sophistication and digital advancement. It won't be incorrect to state that a world once considered unfathomed, is now much more known, accessible and integrated as a 'global village'. However, not all integrate with or acquaint themselves to this 'global village' due to social and geographic alienation.

The Rabo tribe of Ladakh tells one such story of isolation. The tribe is essentially of Buddhist lineage and descent. Here is a nomadic tribe that rears Pashmina goats and yaks for sustenance. These nomads live in the Nyoma block of Leh District, prominent in areas around Kharnak Zara, Samad Rukhten, Kurzok and Chagga on the Leh-Manali road, which are tent-dwelling clusters and settlements, being in transition and mobility every 3-4 months.

Their isolation is reflected in their architecture. As these are transitional units, permanency is elusive to them. A square form of pit, 6-7 feet deep, is dug on the ground. Yaks and goats stay in the open stone enclosure. A tent of conical or square form is erected over and above this pit. Interior walls of the pit are lined with stones erected for support. A narrow pit at the periphery protects the tent dwellers from cold and predators like leopards during the night. Earlier tents used to be made of priced and top-quality Pashmina wool that kept it warm. However, in recent years, tents of cheaper yak wool and even of thick cotton cloth have come as an alternative.

"The Rabo tribal life is now in a flux and undergoing a period of change by migrating to the city of Leh as meagre 'wage-wanders'– in search of wage-labour work at construction sites or roads"

Courtesy: Dr. Mohinder Kumar

Yak wool tent houses' prove to be frugal as shelters in terms of providing heat insulation as compared to 'Pashmina tent houses.'

No hurdle faced by the tribe is miniscule. Be it from lack of road accessibility, ration, medicines and occupational enterprises to extreme snowfall, snowstorms and dwindling pasture for cattle, every day is daunting for their sustenance. Competition for space with the 'Dopka' nomadic tribe of Tibetan migrant-refugees in the Changthang region is an imminent tussle for survival.

The Rabo tribal life is now in a flux and undergoing a period of change by migrating to the city of Leh as meagre 'wage-wanders'– in search of wage-labour work at construction sites or roads. They remain relatively isolated and stagnant, not only in physical-geographical terms, but also in terms of being devoid of diversified development occupational opportunities and lack of awareness towards healthcare and education.

Traditional way of life compounds and forces their dependency on rearing cattle-stock and live-stock. A paradigm shift in the state policies are required to bring a holistic social and financial development for the tribal community at large. Moreover, the cultural-potential of the community needs to be tapped into, so that more entrepreneurship and skilled based training avenues can be created. Only then will the tribe undergo a change from this social-geographic-economic'isolation'.

Courtesy: Dr. Mohinder Kumar

CONVENTION CENTER, MYSURU

-Yash Tambe

About 200m from the eastern side of the site lies the very famous Lalit Mahal Palace, which is one of the iconic structures in Mysuru.

The main idea or concept of the site plan was derived from the context of the site, respecting it and not dominating but rather embracing it. A central axis has been considered from center of the site. One of the reason for considering this axis was to retain the visual connection to the place. So that people passing through the front road of the site can still have a visual contact with the Mahal. Another reason which led to the decision of considering this axis was the topographical pattern and water shed pattern in and around the site.

The intent was not to disturb the natural water shed pattern. To support these decisions, a pedestrian plaza is proposed which lies on this axis surrounded by the built form.

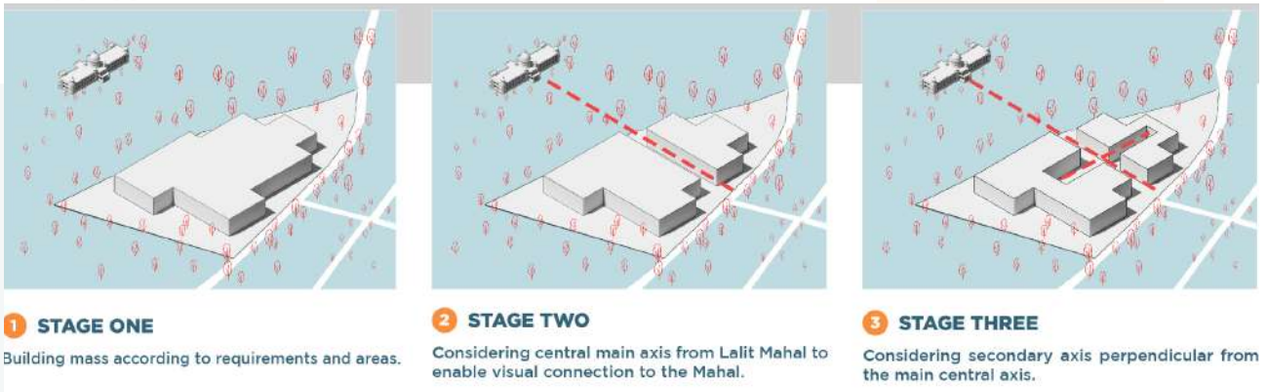
One of the most crucial aspects of a convention center is the public movement and circulation. The circulation should be easy to figure out, yet be interesting enough for creating an experience for the user.

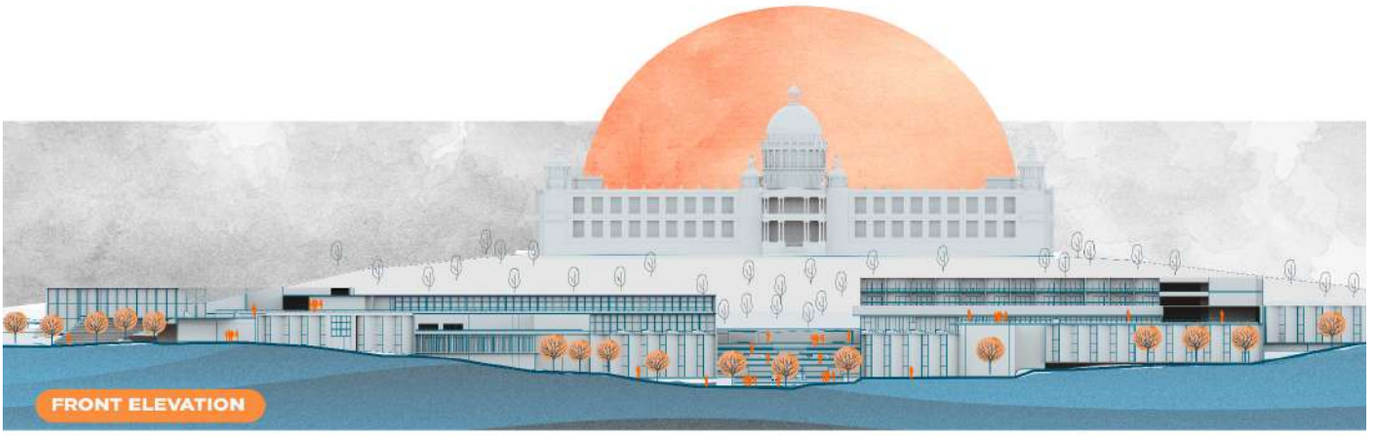
VYOMA (AVI)

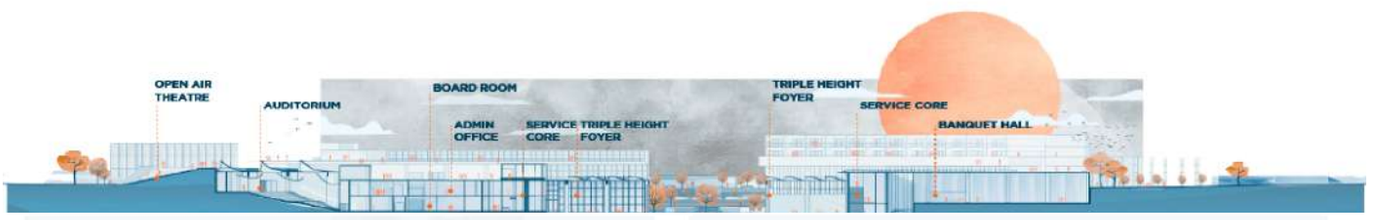
Vyoma
- A Sanskrit word which implies for sky, one that surrounds us

Avi
- Sense of enclosure
- An envelope

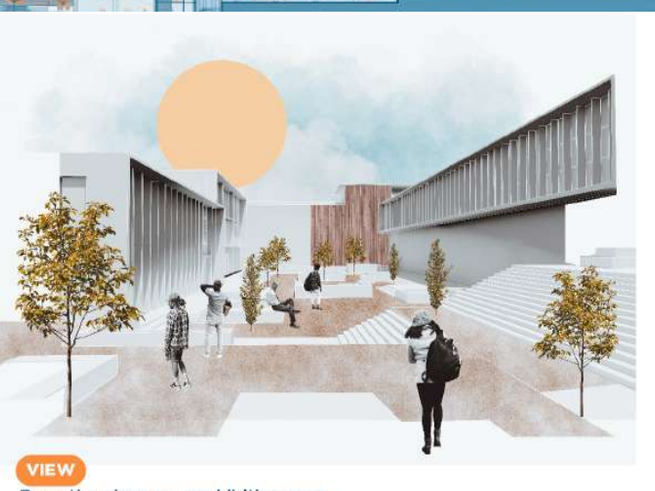
PROCESS



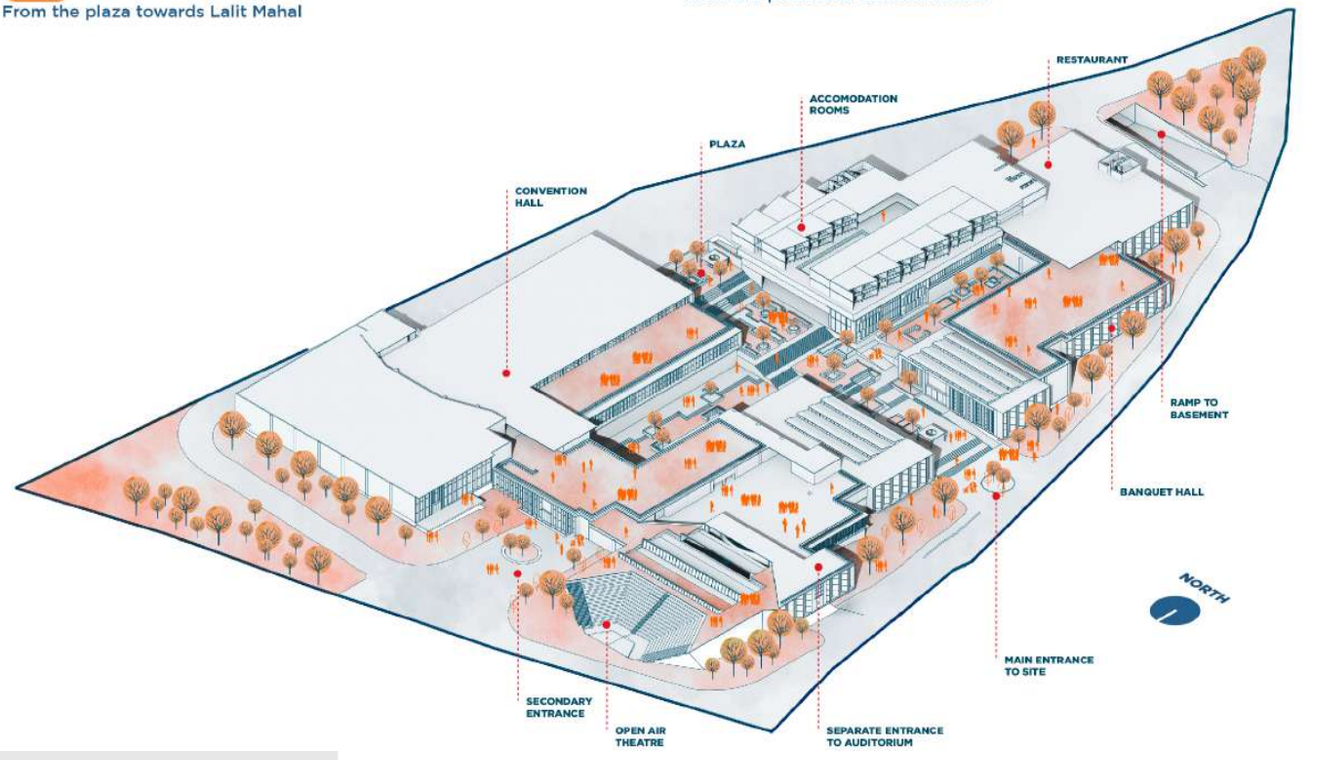




VIEW
From the plaza towards Lalit Mahal



VIEW
From the plaza near exhibition area



INTERVIEW OF SANJEEV VIDYARTHI

Interviewed by: Chinmay Kamat and Kashish Singh

What parallels can be drawn between other cities of the world and Mumbai?

The true ethic of when we compare and contrast between different cities, in order to draw useful insights and lessons for future practice of city design or architecture, or city planning, is distinctions. Each city is distinct and unique. There are no two cities, even if we follow the same rules, make the same plan, the grid iron system plan and make two cities, after fifty years, they become distinct. They develop their unique persona. Even within Mumbai, Koliwada has a different culture than Colaba which again has a different culture than Bandra and then Andheri. Distinctiveness is one factor, and then there are common things. Some of the most common things are how we deal with infrastructure. How do we create resilient places? How do we create more sustainable places? And there are good examples all
over the world, each city has some good aspects and some bad aspects.

It's not only a question of learning from other cities in the west, but also from cities within India. Some cities are doing better than
others. The distinctiveness of each city, resiliencies, sustainability, and the social aspect are factors to be considered. Every city has some or the other social challenges. Some cities do it better than others, and we can learn from those.
By looking for things that have worked, and

Interviewer: Yeah. So, also like, Mumbai's longitudinal plan, it sits on a longitudinal point, so the lot of focal plans like how Chicago has its own central focal point, you know, from where it radiates into other places. How can we enhance these specific points with respect to the public-private utilization of infrastructure?

Mumbai has a longitudinal plan with multiple focal points. How can these specific points be enhanced with respect to the public-private utilization of infrastructure?

Mumbai has a central business district which is a strong core. Urban planners actively promoted this idea that we should not have one single core, we should have multiple cores, like there are in New
Bombay, one being Bandra Kurla Complex which acts as a commercial core, while the Fort area acts as a historic core. 'Multiple nuclei' is a planning idea which is actively promoted by urban planners. At this
point in time, in the 21 st century the central core of the city has a legacy and a history, that has a strong tourist draw. It is where the tourists go when they visit Mumbai.

We realize the importance of having multiple nuclei, but we also realize the
importance of the touristic, the historical, the quality of life, importance of the central

body, that's where the debate at the point in time stands. It is difficult to determine which is better but paying attention to the core is increasingly important in all senses.

If multiple nuclei are a good planning tool, why did Chandigarh fail? Corbusier's approach towards Chandigarh may have worked in another country, but why did it not succeed in India? What can approach can work out in India?

The idea, especially in 1950's and 60's, was to segregate land users, residential, institutional, industrial, and commercial. More recent wisdom says that there should be mixed land users. Few land-uses which are really obnoxious, for example, slaughter houses, or polluting in the sea, are to be kept away, but otherwise, they should be more mixing of land-uses. Chandigarh has distinct land uses, there was no mixed land use. But people still mixed functions on their own. In the residential area, some shops were made, some temples were made. For India, this is what is important. In India, our land uses are traditionally mixed up. And it's a good thing. We have to figure out planning standards that preserve this character of India. Mixing of land uses is considered a good thing.

A major part of Mumbai is already developed, how can the aspect of mixed use or the ratio and allotment of public and private spacing be applied onto the existing infrastructure?

This has not been studied in great detail yet. How much open space should be there, how much built-up should be there, what kind of activities could be allowed in built-up, what should be the land use, is something that has to be researched. Western standards do not work in Indian cities, and Chandigarh is a great example. And the first generation of Indian masterplans took Western standards verbatim. This is something that would be same in all cities. But what exactly should be the mix is something that is not yet decided.

Can the informal market system in Mumbai, such as the hawkers, be integrated within the infrastructure rather than rejecting or trying to negate it?

Yes, in the 21 st century, 70 years after independence hawkers are a good thing. And it is an activity that actually makes the urban space lively. And people like it and people buy from them. For hawkers, this is a good employment. How do we incorporate in a formal urban plan, we do not know yet. We might know it in the context of US, for example, places like L.A., city of L.A. actively promotes food trucks and their market is where food trucks come and conduct business. In India, we are at the stage where we recognize this is important, how we do it is a question for the next generation to solve.

Will potentially revamping the pavement system in India work?

In many ways it will prove to be useful. How would we regulate pavements, which zones we should mark, where these zones should be, should they be closer to the train station, if they are then would it increase density too much? Would these become crowded places if we do it for hundred people and then what about the next five hundred? This is more of a debate than a conversation.

Delhi's Meena bazaar is a market within a monument, can an ideology like that be incorporated within the existing monumental structures?

Yes. Bazaar is the central feature of Indian urban fabric. Very few places love bazaars as much as this country does. Everywhere, we created a bazaar. And modernist urban planners did not think this was a good thing. They wanted to keep the residential area and the bazaars separate. This did not work. Indians love bazaars. The people with modern houses, converted ground floors into shops and wherever there were major streets, markets came up. Charles Correa's major ideological struggle was with Doshi, Correa, to some extent Raj Rewal, Achyut Kanvinde. They were trying to create an architecture which drew inspiration or used the vocabulary of modern architecture and create an architecture which suited the essence of this country. Charles Correa was trying to create an architecture suitable for a modern independent India using contemporary global ideas. For the next generation, the defining question is what kind of an urbanism is appropriate for country like India? We like bazaars, hawkers, restaurants, vada pav stalls, while adjusting these things in our city, how can we make a functional infrastructurally level city?

Mumbai has a lot of informal settlements, such as Dharavi. How do we enhance the "missing middle strata" with the use of the existing informal housing?

In the developing world, informal settlements supply the bulk of housing. In Mumbai 60 to 70 percent of housing in the city is supplied by the informal settlements. Policy wise, it has become clear that with we cannot remove all the informal settlements. SRA has been tried, but we cannot remove it all. What the government does is that it works strategically wherever there is road widening or some very important urban development project and resettles people very well. There was an architect called John Turler. He worked in 1970s in South America. The idea that he figured out is that we should rehabilitate people and give them land titles. Many places have incorporated this. For example, many places in Europe,
cities grow organically, and then they become more formalized and redevelopment happens, thus they make gradual progress. Slums are not going to go away in foreseeable future. Another 40-50 years we will continue to have them. How do we uplift them, how do we improve the quality of living, how do we give land titles to these people, which places do we do an SRA kind of development, which places are flood prone? For example, if a structure is constructed on the Mithi river, it would not work, some nature of planning has to be considered. But places prone to natural disasters have to be taken care.

INTERVIEW OF ZORICA NEDOVIC - BUDIC

Interviewed by: Chinmay Kamat and Kashish Singh

What is GIS?

GIS, geographical information system, is a technology that consists of a software that has been developed 30-40 years ago but has advanced to become much more user-friendly. It is a database for special information. It connects the data to graphical data such as each element on map including properties with roads and with hydrology. Everything on the map has a special element on the database. It is a special database which is used to store information about planning spaces, architectural plan, architectural information, value of plan, value of the building and use of building functions. Data can be selected in a targeted way and manipulated. The main point is to analyse the data and to understand what is going on in the space and imagine scenarios.

Are there any limitations on the micro scale data?

Yes, there exist databases which are under the bureaus of individual countries or with particular agencies. If they do not have it, the data has to be manually input with the help of existing potential maps and information obtained by scanning with a gps device.

Can GIS help in future planning and development? How were future sites of Chicago planned?

The data, there to support databases, can be used in various aspects to understand and justify the plan. The first part of the plan is to understand what is going on in the area. Since it is in the city it becomes a bit crucial, because the economy, roads, etc. have to be considered. That is how GIS helps in understanding. The second part is developing scenarios for development. This software helps in developing the functionality of the scenarios. There are all kinds of software that are existing but this helps in developing scenarios pertaining to what will happen if the line of the road is changed, what impact would it have on the area or what impact would it have if the height of the building is altered. This is helps in visualising the consequences of certain actions. The next step is what one wishes to do but it should be in tandem with the public decisions. That is how it coordinates with the reality before the project.

How can this software be effectively used in places such as Mumbai which are densely populated and have various issues related to infrastructure?

The software would help where the density is less and in areas which hold the capacity to build a certain project. There is a relationship between density and infrastructure. The software would help in understanding the key plans of the infrastructure. For example, in a 3-dimensional project way it can be understood where the potential pathways in the landscape could be and where in the landscape important parts of infrastructure could be made. Layers can be built in the system to understand how certain areas can be interactive. This data can be used in Mumbai. This kind of software and data are available online. GIS can be used to bring any area to potential use. Technology would help in identifying the missing link and visualising things. The implementation of a plan depends on the climate, the people and all the other things. Just knowing what to do won't define it politically and nationally. Technology cannot always be relied on. It is useful but it cannot take into account everything. All the planning and designing depends on the design, the software and its functions.

Can you tell us something about the project TUFP7 that you were working on?

I was in the university college at that time. This project was part of the site visits with the funding. FP7 is frame-work project 7. I was the principal investigator of the team. We had about 9 million euros to work with, with municipalities across Europe. Other universities also spoke and enterprises discussed the various ways and aspects to increase the urban system ability. Each place had a slightly different project and as the years went by, we were trying propose prospective solutions for sustainability across Europe. We had landscape architecture, the rules, the governor and community development. We had to look for economic cycle as well we had to travel for the economic cycle of all the materials that were being used in the development process. There were like 7 to 8 different aspects and they finally helped the project, the urban environment and one of them was special data. The technology is needed for all different aspects. It was a huge 5 years long project.

How important is it for us to start grasping the knowledge of the importance of assets and analytics about data?

We all inherit the world as it is, and we can only improve it if we do the best in our profession. In architecture and any profession that includes planning, developing, designing cities and spaces it is an important. If we do our part in the society well, we can contribute a lot. It is always good to focus and make sure we do well, when it comes to our part and fight, sometimes it's necessary to promote your ideas and to stand behind them. I usually say to my students regarding the projects in the studio "Don't be unrealistic because, we can dream up things that are out of the world, utopian and without any real sense." But at the same time, you have to be bold, whether it's Mumbai or Chicago, you have to push your ideas, push for better quality of life, aesthetic, better equipped environment, and services that need to be supplied. Sometimes planners are asked to solve the world! And it's not easy, so I think we just have to do our part.

-PHOTO COURTSEY- Harshvi Patel

“LET’S MAKE A BUILDING.”..... CRTL + V = BUILDING!!!

-Ar. Ajay Geevarghese

The fact that form follows a profit agenda has already brought us to building structures devoid of uniqueness of place and neither its country. Not to mention the use of ‘Astra’ (tools) as we Indian Architects offer a prayer ritual during Dusshera, i.e. to computer aided designs (CAD) and our workstations; has definitely proved to be as Charles Eames is for Ray and vice versa, ‘the first couple of design.’ But don’t you feel that the economically sound typical Floor is going out of bound? Does the work pressure & time constraint force us to do repetitive planning in our field of architecture? Or are we just afraid to get out of our comfort zone? Of course we have established that Architects in India can no longer wear purple, the color of wealth. So are we trying to churn out an algorithm of more money with lesser detailing, fewer drawings or more grades with less submissions? But what about a creator’s obligation.

The responsibility of the architect towards both the user and ‘Earth’ our only home. Does the term ‘Architect’ give us the right to zone the monotonous affordable housing for Sale incentives? These proposed buildings with minimal setbacks located to the corner of a plot, which can be achieved by stipulating hardships-deficiencies in our planning during statutory approvals? With this muddle of physical world command of copy & paste for buildings, a new agonizing issue is aimed towards our modern dilapidated world.

BIM should not be constructed as a philosophy of design. It is not the reason for designing a building in a particular way. Whereas other few personnel in our industry vision it as a mean of generating more profit. One of the personnel from construction industry approached our firm with a request to prepare a digital twinBIM (building information modelling) is a methodology which supports not only efficient integrated design, planning & project delivery but also the building operational parameters after occupancy is achieved. As a BIM & Green Arch. Design enthusiast, I have always looked forward to BIM for solutions at different stages of the project, right from reducing carbon footprints, to a client’s requirement; our interpretation of it & to the final outcome, which may result in completely new concept designs, calculations, paperwork, etc.; along with the prime tasks of coordination, execution, communication & facility management.

A positive economical & ecological impact is achieved by creating a digital twin of our designed structures. Virtual clashes between disciplines such as Architectural, Structural & MEPF can be viewed and calculated within astonishing time frame. Accurate study of site, structure and quantity analysis can be derived and visualized in real time. Wastages related to time, man-power, machine and materials are almost to nil. Every other person whether linked or not to a project can now see the outcome of an Architect’s visualization when both of our left and right cerebral hemispheres are working at the same time. Also Computational BIM has given us the ability to derive & achieve numerous combinations & variations for our design and planning. The factual data retrieved for an ideal architecture of a proposed structure after studying 100 variations of all related parameters will be much precise compared to a mere data of 10 variations.

A structure then can be built which is true to nature and its user simultaneously. Somehow again this wizardry of ours is observed by a few of our own in a way by forming shapes & spaces just because the software can. of their already established

Photography by SHOHKI ENO: Hong Kong - Cityscape
Courtesy: Shohki Eno- Hong kong- Cityscape

economic weaker section (EWS) housing scheme with all extracted quantities and real life data along with a specific computational feature added to it. This feature will give the said client the ability to repeat this housing module at various sites throughout the city; by just modifying few parameters. By this, every single drawing, detail and costing can be achieved by them at the very start of any project for the said EWS housing.

Now with upcoming of robots & 3D printing in the construction industry and with this computational design module in effect, are going to start mass production of buildings as well? Are we ready to see this specific type of monotonous building that is being produced nowadays just pasted throughout our town at a speeding rate? So as responsible Architects we have to question ourselves everytime we make a structure, that how do we control this wizardry turned sorcery spreading into our neighborhood and our city. To what extent should we control it? Are we moving away from being Greensville and getting closer to becoming Dullsville. Yes, the best time to change was yesterday, but we are still keeping the hopes in our hearts and working forward to save our Home.

But if this is the way forward, it has to be taken into serious consideration. Primarily by us 'Architects'. I am still in search for an answer to this oblivious to us - agonizing situation. But I know that we 'Architects' have the ability to mold/create our city spaces & buildings to fit its user & the nature and not the other way round. Design for the user, be it a human, tree, a squirrel or a boulder. Design for everything meticulously whether carbon dating can be performed on it or not. This is what we practice at our firm TERRAFORM ARCHITECTS. Living in balance. When something is taken, return it back. Back to the community and to the environment. As Brian Reed quotes, 'Everything is designed but only a few are designed well.'

Why the Largest Planned City Failed?

- Minoti Mehta

The city of Mumbai houses a population of over 20 million making it the 4th most populated city and one of the most populous urban regions in the world. The city being the economic capital has seen an explosion of population growth in the past 20 years due to the migration of people from other parts of the country seeking business and employment opportunities. The population density is estimated to be around 20,500 persons per square kilometre with a living space of 4.5 square metres per person.

With this ever-increasing population surge, Mumbai urban agglomeration extends its northern limits to house more people. Due to the high population density, the land rates in the metropolitan area of the city are very high. For cheaper habitation options, the migrants settle in the northern parts of the city far from their work places which leads to long commutes on the city's busy mass transit system. The rural to urban migration has also led to the growth of the slums. The percentage of people living in the slums is estimated to be as high as 41.3% in the city.

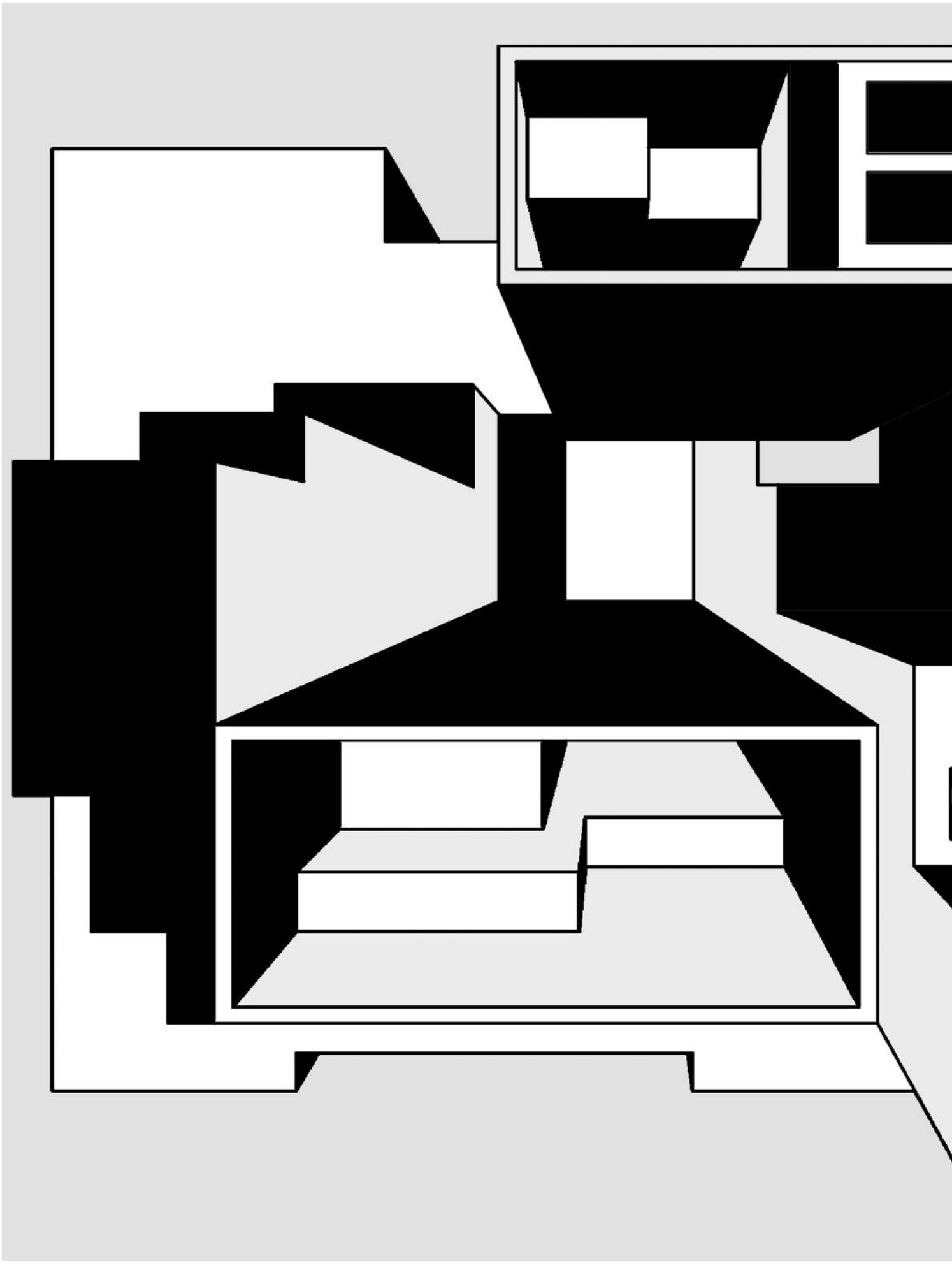
To help the situation of the rapid population growth and the deteriorating quality of life due to the organic growth of the city, the twin city of Navi Mumbai was proposed in 1970. When this new city was proposed, it was meant to settle a population of at least 4 million to try and contain the rapid growth of the old city and create more job opportunities. Navi Mumbai, planned by Charles Correa is one of the largest planned cities in the world. It was well-planned and used a mixed-use planning approach to avoid a Mumbai-like situation of activity concentration. Navi Mumbai has a nodal pattern of development based on the principle of decentralization. It breaks the concentration of population and activities in a particular area and balances the land use in every single nodal township.

"These 12 self-sustained nodal townships are very well connected to each other by mass rapid transit corridors meant to minimize the commute time."

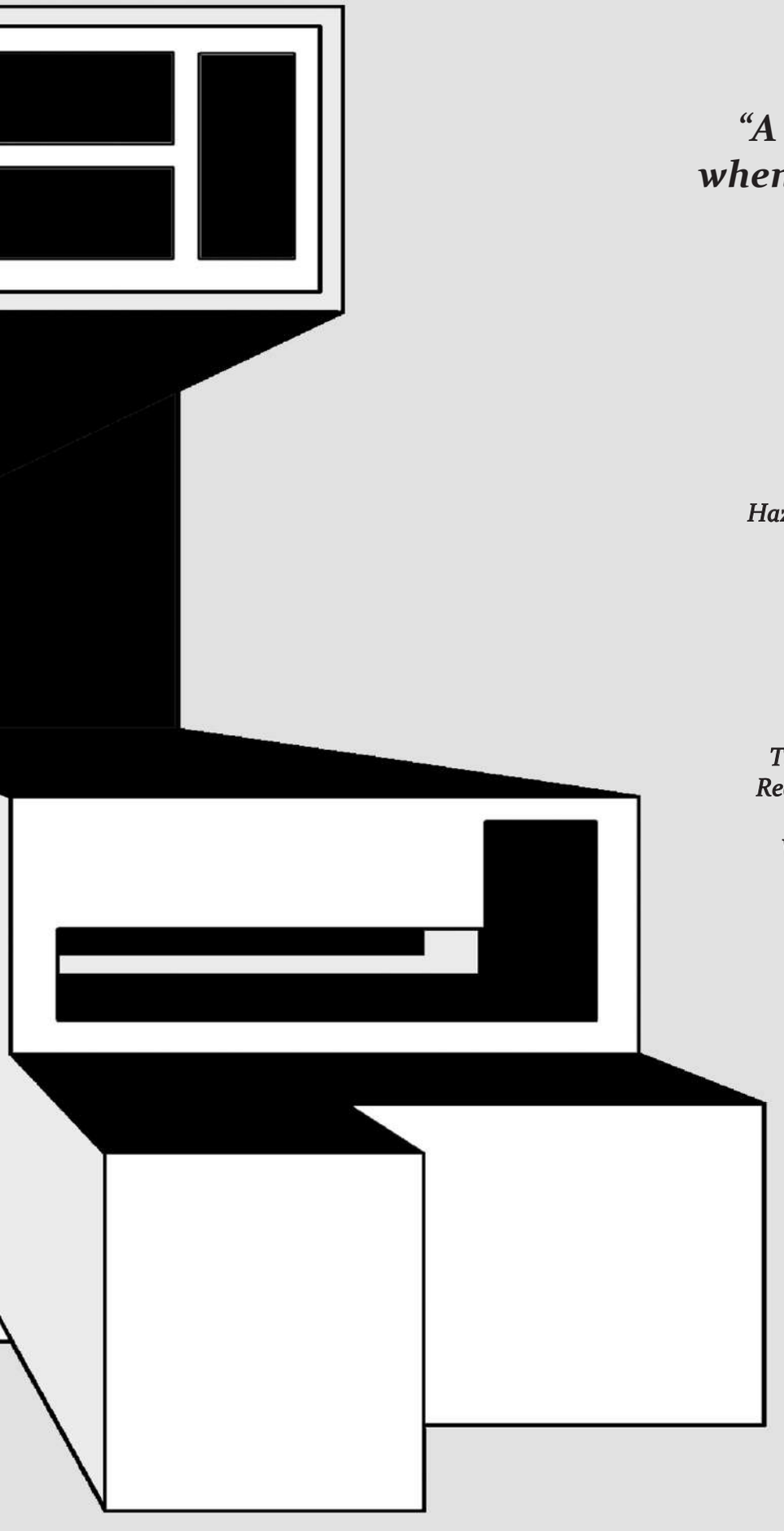
However, unlike the situation
Even though Navi Mumbai was planned during the time when Mumbai's population was just 20-25% of what it is today, it was still successful in reducing the population density of Mumbai but only to a certain extent. The original idea of creating a twin city on the eastern side of the old city to stop the growth on the northern side failed due to the lack in proper mass transit systems connecting the two cities.

The creation of a new city did not help with the problem of long commutes. In fact, it is still easier to commute using the local railways to travel from the northern most part to the southern side of the city than travel between the two cities. A similar yet slightly contradicting situation is seen in another planned city of India. Chandigarh, designed by Le Corbusier, was India's first planned city. The city in itself was very well planned using a grid pattern to divide the areas into different sectors. The only reason it failed was because it didn't plan for the future. The green belt on the periphery of the city limited its growth. This called for the development of the cities of Mohali and Panchkula. However, unlike the situation between Mumbai and Navi Mumbai, the introduction of the two new cities did help Chandigarh vastly. This was solely due to the fact that the three cities are very well connected to each other.

Planning cities in India has always been a mammoth task. As an individual unit, these cities make up among the best places to live in but as a whole, they fail to solve the issues of the urban population. With the addition to catering to the problems of climate change and designing more eco friendly cities, it is absolutely necessary to plan for the future in terms of population growth, connectivity and infrastructure as well. If the cities keep failing at its urban planning level, no amount of ideas and solutions for a sustainable development



Courtesy: Neil Dustakar



"A Community happens when you change the mono-tone cellularity"

"My dream melted into ideas,
Ideas of a distorted realm,
Hazy and scattered their organization,
Groups without formation.

They merged into each other,
Like two stars colliding,
Clays of gradation mashed,
Creating and destroying.

The give and take made me realise,
Realise that it was not a dream at all,
But a realm with diversity,
Where scattered were the pieces,
Pieces of an identity."

-Hrishikesh Patil

KHOTACHIWADI

The Alluring Wadi

The lane vintage and hypnotising ,
To rescue you from city agonising.
In the heart of the city, by the chaos' side,
Khotachiwadi is a serene paradise.

The lane vintage and hypnotising ,
To rescue you from city agonising.
In the heart of the city, by the chaos' side,
Khotachiwadi is a serene paradise.

Carols and spirits soaring high,
Lights brighter than the stars in the sky,
Cobblestones and planted shrubs,
With the guitar Mr Willy hums

Goan culture and Konkani cuisine,
With labyrinthine streets and a zeal pristine.
Manueline style architecture tread ,
Why does the glass façade spread?

As chattering and singing goes,
The little girl dances with her tiny toes.
It's Hidden classic rustic cottage,
In mind ,will create its lastinghomage.

The time has stopped since ages ,
Unspoken tales by sages .
My soul craves to wander,
In the place without a blunder.

-Vedanti Mandalia

CITIES OF THE FUTURE

-Kshitij Khare

Imagination is the testing ground for most of the human innovation and projection. Humanity has dreamt about the future of society and order since the days of antiquity, and for most of the known history we have envisioned a future more prosperous than one we live or have lived in. While some of these visions may seem to be farfetched, most sprout from one's understanding of and response to their contemporary social reality. The collective form of these dreams and visions hence have a key role in shaping the future of the society that envisions it, when it comes.

This, however is a doubleedged sword. It can work like a positive feedback loop or also a vicious circle such as ones we see in extremely impoverished countries ridden by disease, poverty or/and dictatorial regimes. Instances of radical changes can erupt out of the seemingly blues for the better or for worse but more often than not they result from a rejection to the current social order and its practices. Therefore it is in a society's self interest to take the self-built foresights of its people seriously, nurture the innovative and prosperous ones, and investigate and eliminate the potentially harmful ones.

Architecture as it is one of the strongest derivatives of the society that builds it, is a key part of these projections as it successfully and very visibly incorporates within its frames, the complexities of social order such as the politics, social hierarchy and economic balance. For the past century, a majority of all the future cities envisioned, may they be a work of animations, cinema or words have had a skyline brimming with skyscrapers with exotic spires. These structures emergent from an established social order and the use of sophisticated engineering technology suggest scientific progress. However they are quite deficient by themselves in painting a complete picture.

Scientific progress doesn't equate or lead to social progress, or social equity by extension. Several future cities envisioned by great minds are the best examples to explain this. Cloud Atlas, a 2004 bestselling novel by David Mitchell envisions a neo-Seoul with a similarly impressive skyline with translucent flying roads. This clever act of raising the datum of the city allows the utopian city to conceals its disturbing underbelly. While the parts over this it are of the prosperous and the powerful that

Courtesy: Milan Mathew

rule the society, the ones that are ruled are relegated to the hightech slums under it hidden by this new and open handed starting point of the society.

Having a fragile and suppressed community ruled by anarchy and made to bear weight of the civilized dome above it certainly doesn't makes for a stable social structure and is likely to default. This projection of a top to bottom social hierarchy is not unique to the novel as well. Though this might make for a good genre, it is also noteworthy to ponder over this trend of an ever increasing number of literary and cinematic works encompassing a pessimistic future of the society.

One may argue that this can be a result of a population that is becoming increasingly aware and is overcautious of the longterm consequences of its actions fact cannot be denied that it may also be a reflection of the society of extreme disparity that we are heading towards. In present day, more than half of world's wealth is controlled by the richest one percent and close to fourfifths by the top 5 percent.

The richest 50 people on the planet alone account for more wealth than the lower half of the human population numbering at around 3.8 billion people as of 2019.

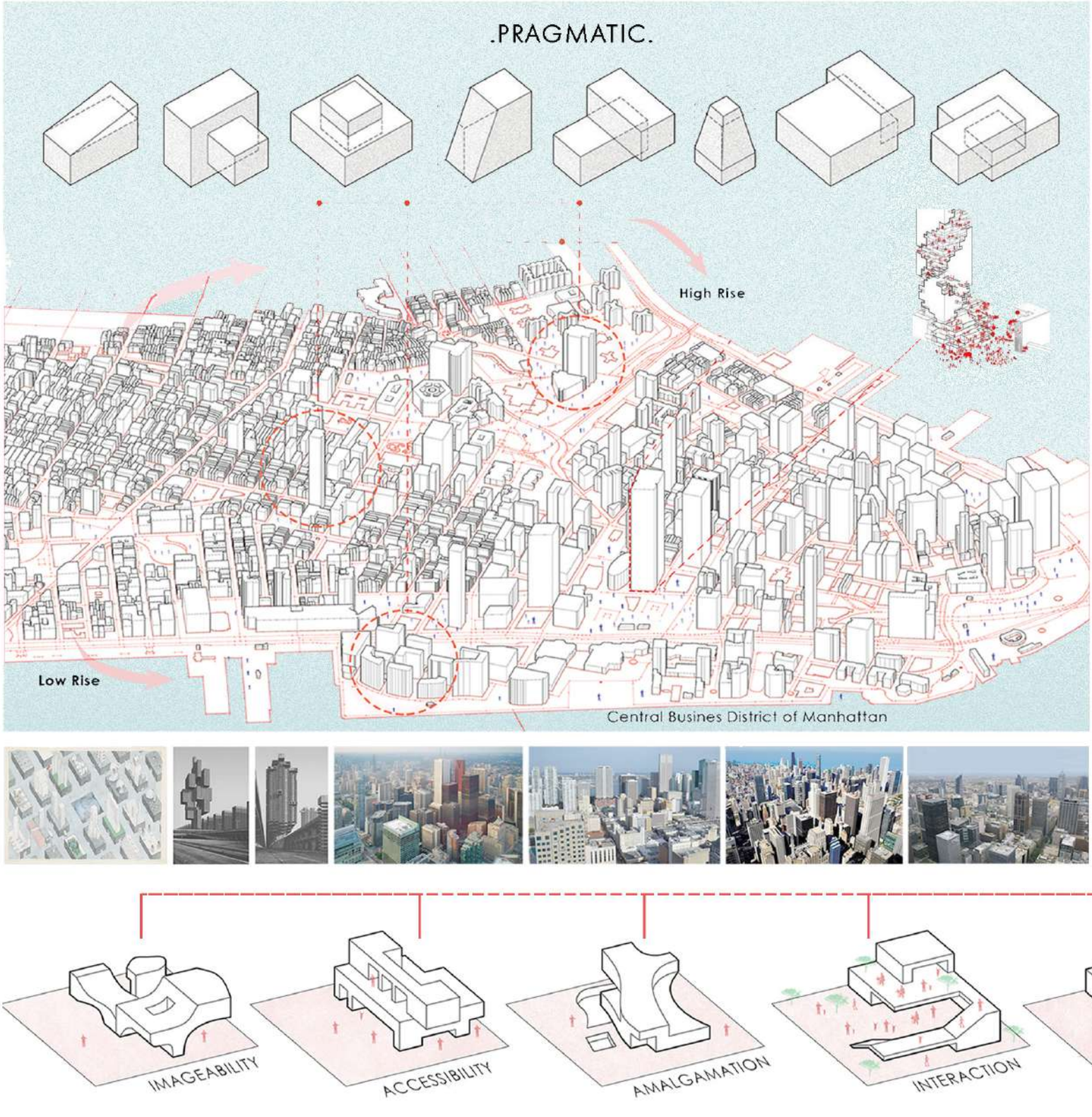
Whatever be the future, or our perception of it, these works certainly warn us of the factors that might culminate to these dystopian realities. While plutocracy of neoSeoul or the totalitarianism of George Orwell's classic 1984 are more visible in their visual frames, several other dystopic futures that have been envisioned are more subtle to be caught in a glimpse. Modern dystopian fiction continues to reflect an increasing number of anxieties like government control, climate change, biological warfare and global epidemics. However the presence of this critique itself is a good sign as perhaps the only fine line that separates our imperfect societies from true inescapable dystopias is that of critical thinking. Though enacting on this critique might be the most noble action one can take in favour of a societal progress.

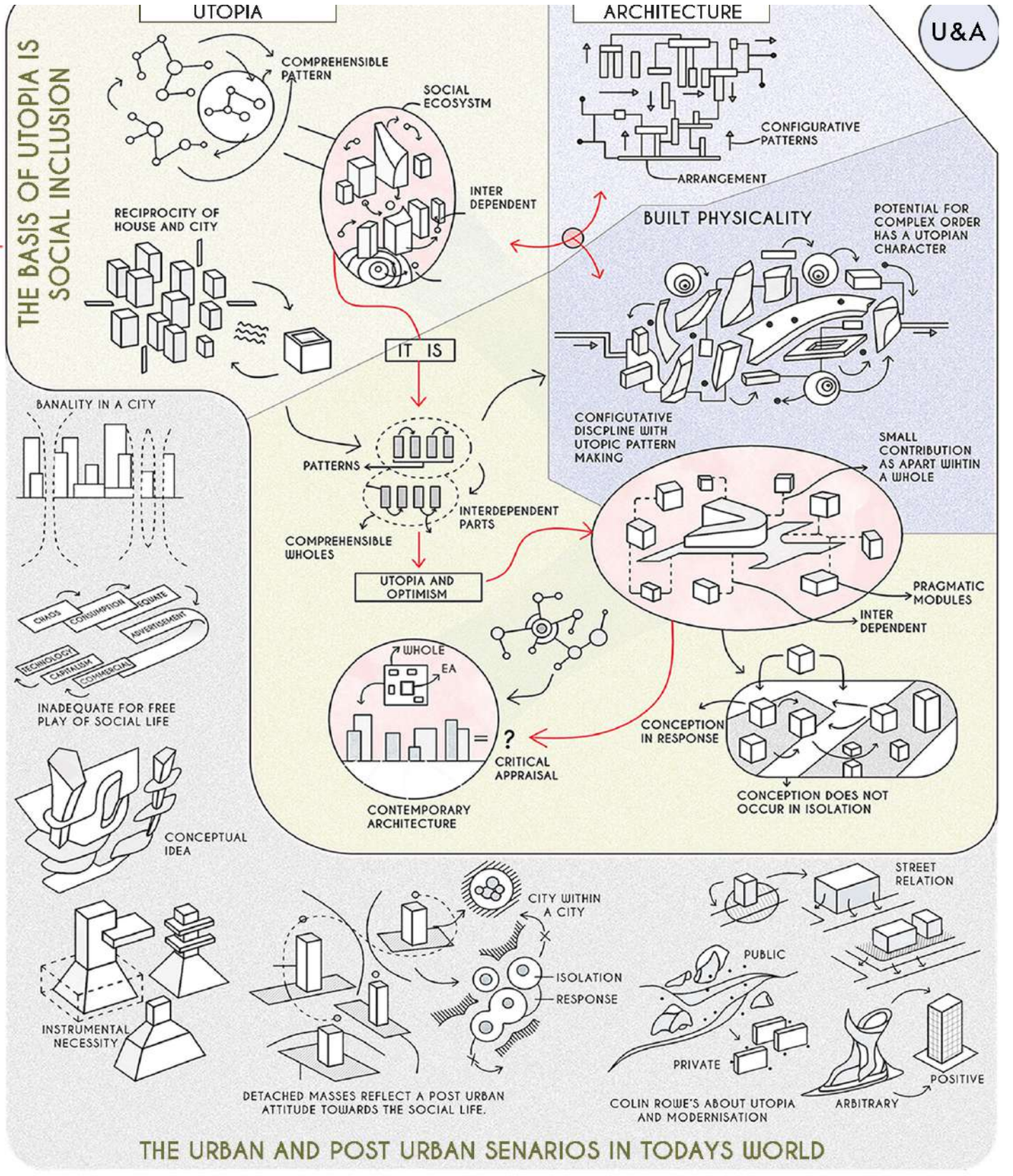
PRAGMATIC UTOPIANISM

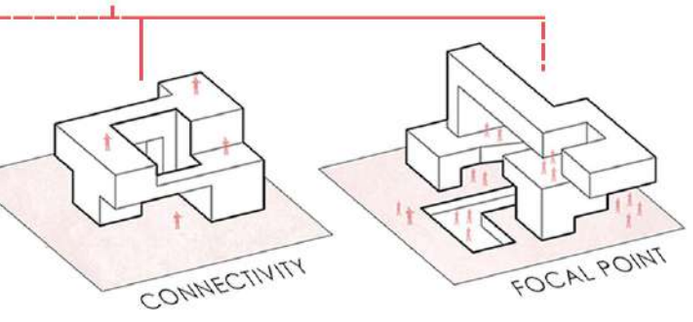
- Shyam Samani

"There are historically two fronts in architecture, one side there is this Avant Garde(wild and progressive ideas) detached from the reality that they fail to become, something other than eccentric curiosities thinking about the extremeness of the design, and on the other hand there are these well-organised corporate consultants that build predictable boring boxes of high standards. Architecture here seems to be entrenched between these two equally fronts: either naively utopian or petrifyingly pragmatic."

-Bjarke Ingles




UTOPIA
ARCHITECTURE
U&A
THE BASIS OF UTOPIA IS SOCIAL INCLUSION
COMPREHENSIBLE PATTERN
SOCIAL ECOSYSTM
INTER DEPENDENT
RECIPROCITY OF HOUSE AND CITY
CONFIGURATIVE PATTERNS
ARRANGEMENT
BUILT PHYSICALITY
POTENTIAL FOR COMPLEX ORDER HAS A UTOPIAN CHARACTER
IT IS
BANALITY IN A CITY
PATTERNS
INTERDEPENDENT PARTS
COMPREHENSIBLE WHOLES
CONFIGUTATIVE DISCPLINE WITH UTOPIC PATTERN MAKING
SMALL CONTRIBUTION AS APART WIHTIN A WHOLE
UTOPIA AND OPTIMISM
PRAGMATIC MODULES
INTER DEPENDENT
CHAOS
CONSUMPTION
EQUATE
ADVERTISEMENT
TECHNOLOGY
CAPITALISM
COMMERCIAL
INADEQUATE FOR FREE PLAY OF SOCIAL LIFE
WHOLE
EA
CRITICAL APPRAISAL
CONTEMPORARY ARCHITECTURE
CONCEPTION IN RESPONSE
CONCEPTION DOES NOT OCCUR IN ISOLATION
CONCEPTUAL IDEA
CITY WITHIN A CITY
ISOLATION
RESPONSE
STREET RELATION
PUBLIC
PRIVATE
POSITIVE
ARBITRARY
INSTRUMENTAL NECESSITY
DETACHED MASSES REFLECT A POST URBAN ATTITUDE TOWARDS THE SOCIAL LIFE.
COLIN ROWE'S ABOUT UTOPIA AND MODERNISATION
THE URBAN AND POST URBAN SENARIOS IN TODAYS WORLD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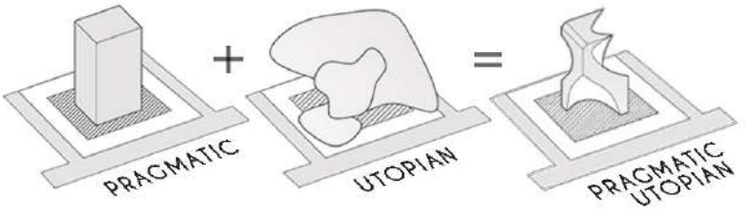
PRAGMATIC
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PRAGMATIC UTOPIAN

SPACES FOR HIGHER LEARNING: INSIGHTS INTO CAMPUS PLANNING

-Ar. Swati Ray

The design of an educational campus reflects the institute's image, its culture and its future. In essence it portrays its pride and soul, what it stands for and the ideals it wishes to impart to successive generations. A campus should evolve around a good urban community where people live a common life for a noble end.

Thomas Jefferson once described an educational campus as an "Academic Village". Since higher learning is an intensely personal enterprise, students should be encouraged to interact at group levels and be able to introspect, when so, the time demands. For most students the period spent in academic pursuit on campus forms not only an integral part of the process of maturing but is also marked by heightened creative abilities, powers of reasoning, ethical delineations and political inclinations. The architecture must support this transformation that students undergo from adolescence to adult hood.

As an architect, to be entrusted to conceive, design and build such a centre of learning would indeed be one of the most gratifying moments of his or her career. While the planning must be efficient, it is equally important to develop a common thread that weaves itself through the architecture, cognizant of social and environmental exigencies as well as prospects for future expansion. The built environs and the landscape design must complement each other in a cohesive response to the surroundings in which the building sits. The campus must be an emotion and an experience; a residue that is left over after one has meandered through it.

"When we are planning for posterity, we ought to remember that virtue is not hereditary."
-Thomas Paine

Courtesy: Shabbir Raza

I believe, the real success of the design, however, lies in what Vitruvius wrote nearly two thousand years ago that architecture should provide "firmness, commodity and delight". It is the last requirement that is often the dialectic, the hardest to define. As architects we endeavour to impart that 'delight' by the juxtaposition of the buildings, scale, proportion, the spaces and the use of materials. However, it is often hidden in the elements of surprise, the touches of the whimsy and the wit in the architectural abstractions. It is these details that create eternal imprints in a student's memory and what they fondly in later life recall as part of their 'student days'.

Another facet of campus design and which is very often the case, is the development of a Brownfield campus. This may involve the augmenting of the existing facilities, adding new structures, renovating the old ones and possible adaptive reuses for others. In this case an architect's job is far more enduring.

He or she will also have to evaluate the prevailing context and create architecture that enhances the existing spaces. The use of the architectural vocabulary, whether to blend with the existing context or stand out with a more contemporary rhetoric would be the major decision.

While designing such a campus in Rajasthan, I realized that one of the most important criteria the architect must consider besides his or her vision are the sentiments of the users who have been associated with it for a large part of their lives and who are "wary" of any change. The challenge is first to convince them that the design proposed will not affect the everyday functioning of the campus and their nostalgic 'connect' with the campus shall remain.

The phasing of the project also plays a crucial role in the development of a logistical challenge for the architect. It is here that the architect must closely work with the faculty and project management team to develop the design and realistic timelines for it.

In conclusion, I feel that a successful campus is one that unfolds young minds by broadening their horizons and stimulating their senses. As the poet Schiller once said- "A really good poem is the soft click of a well made box when it is been closed." A great campus ought to infuse the same kind of satisfaction.

STAKE-LESS

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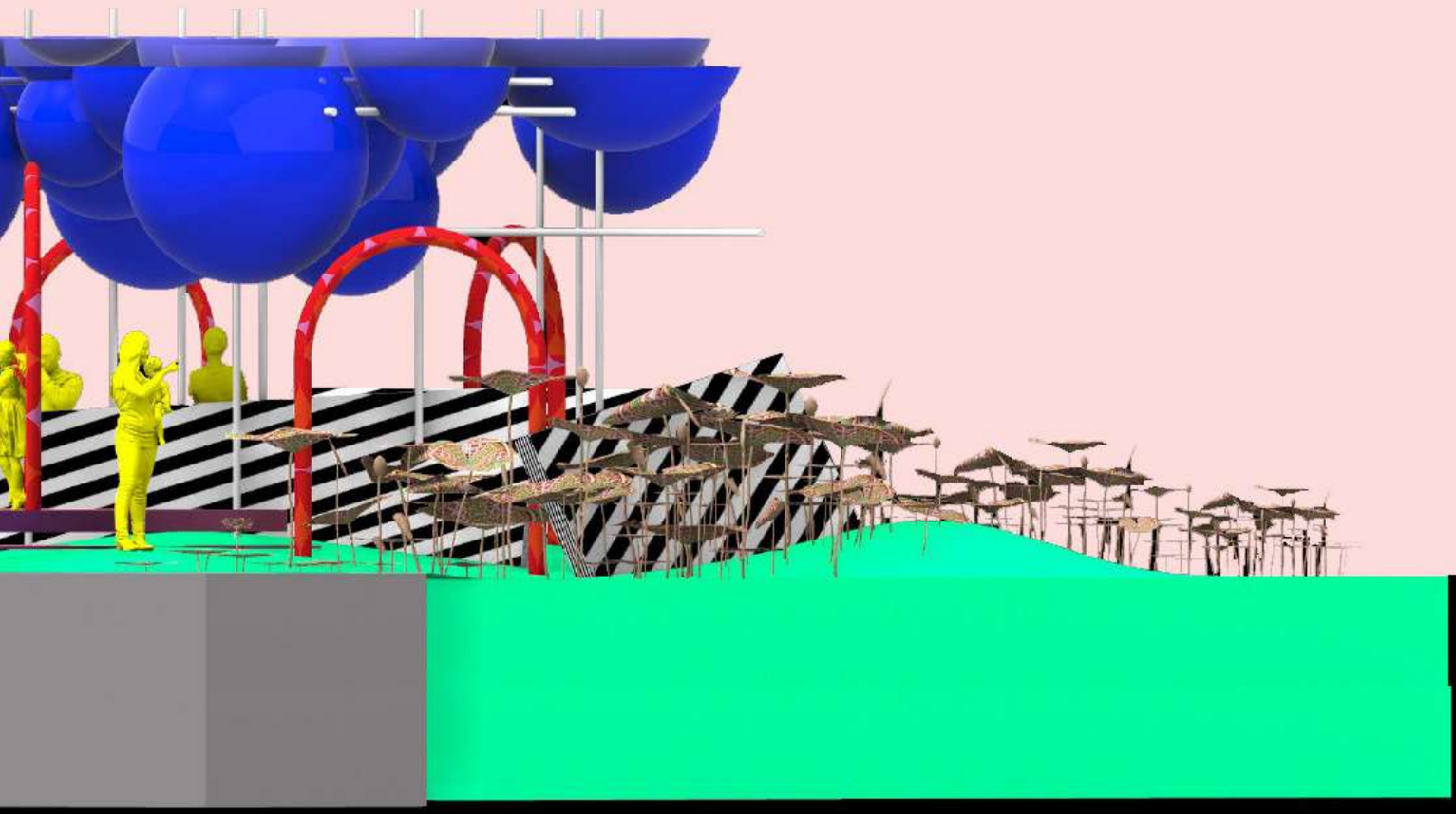

Courtesy: Jaimam Jain

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