Aditya College of Architecture | Student Magazine

Volume II | December 2020

F.Y.I

FATHOM | YEARN | INNOVATE

RESILIENCE
REPURPOSE
READAPTATION

From Principal's Desk

"The oak fought the wind and was broken, the willow bent when it must and survived."
-Robert Jordan, The Fires of Heaven

As much as subjective success can be to everyone, this quote speaks louder to me, now more than ever, when I think of addressing my students, and the readers of the second edition of student magazine of Aditya College of architecture, FYI. It is hard to believe that it has been a year since we published the first volume of FYI already. This edition is special, being the very result of the student body, faculty and the alumni coming together in trying times supporting each other to carry on the legacy of ACA's student magazine. It would be impossible to call this anything less than a recurring success. I am hoping that you find this edition a pleasant read, and for that I extend my congratulations and appreciate everyone who went above and beyond to do whatever was necessary to add to our young but thriving culture of literature and creativity.

Preface

It gives the team immense pleasure to present the second volume of F.Y.I. [Fathom. Yearn. Innovate]. This issue includes students' articles, architectural design concepts, students' artworks, interviews of eminent architects, visual graphics and theses over the past year. Despite the virtual barrier and the fact that we couldn't meet physically to work on this issue, it was a different experience which was fun yet challenging. We decided on the theme of the three Rs which are resilience, readaptation and repurpose which we feel is relevant in the current context. In this era where the construction industry consumes resources and is a major contributor to global warming and pollution, the three R's become not only relevant but the need for the hour. On the behalf of the magazine's members; we would like to express our gratitude to the teachers and students who have contributed to bringing this magazine to life. We would also be pleased to receive any suggestions that could assist us with the upcoming editions.

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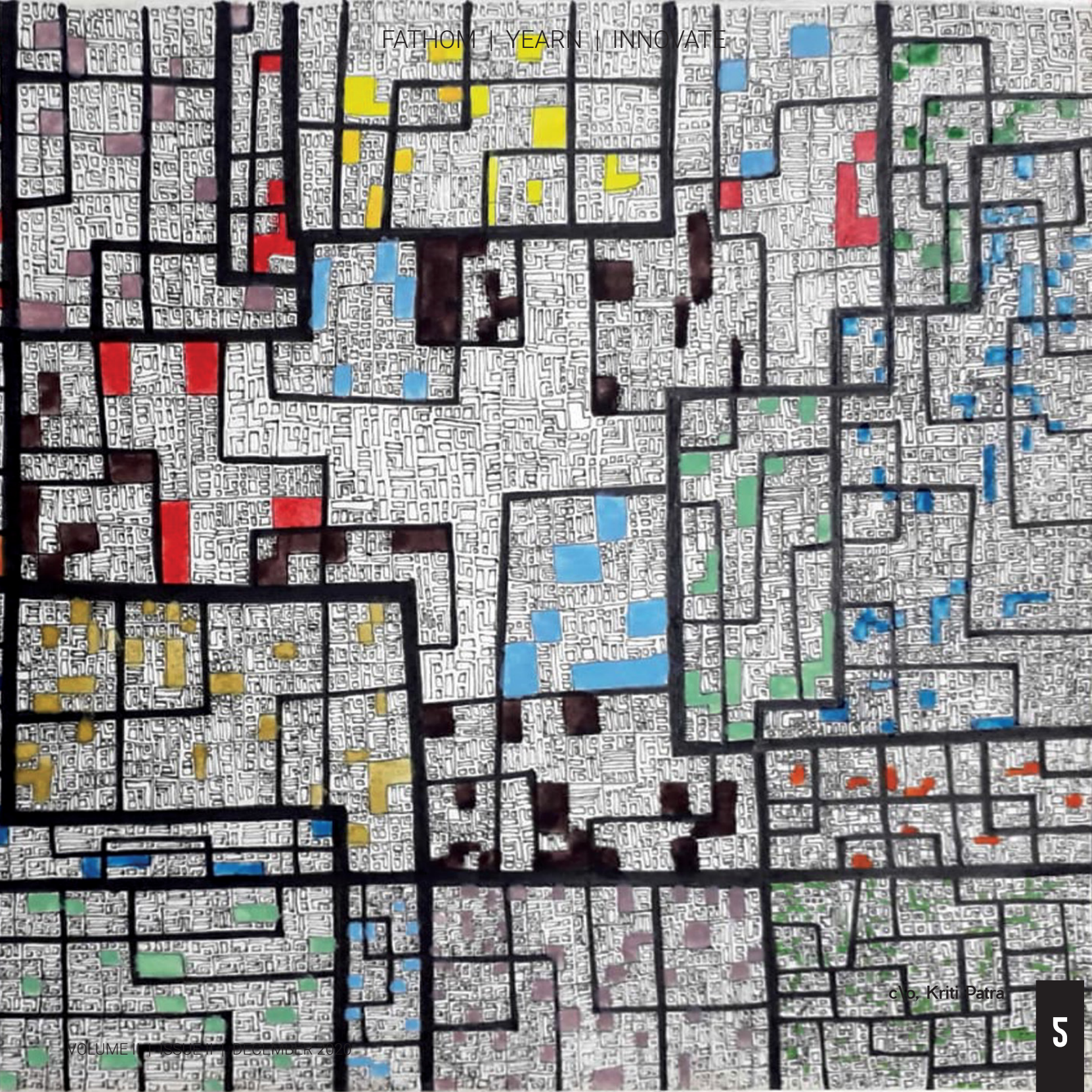

c\o, Kriti Patra

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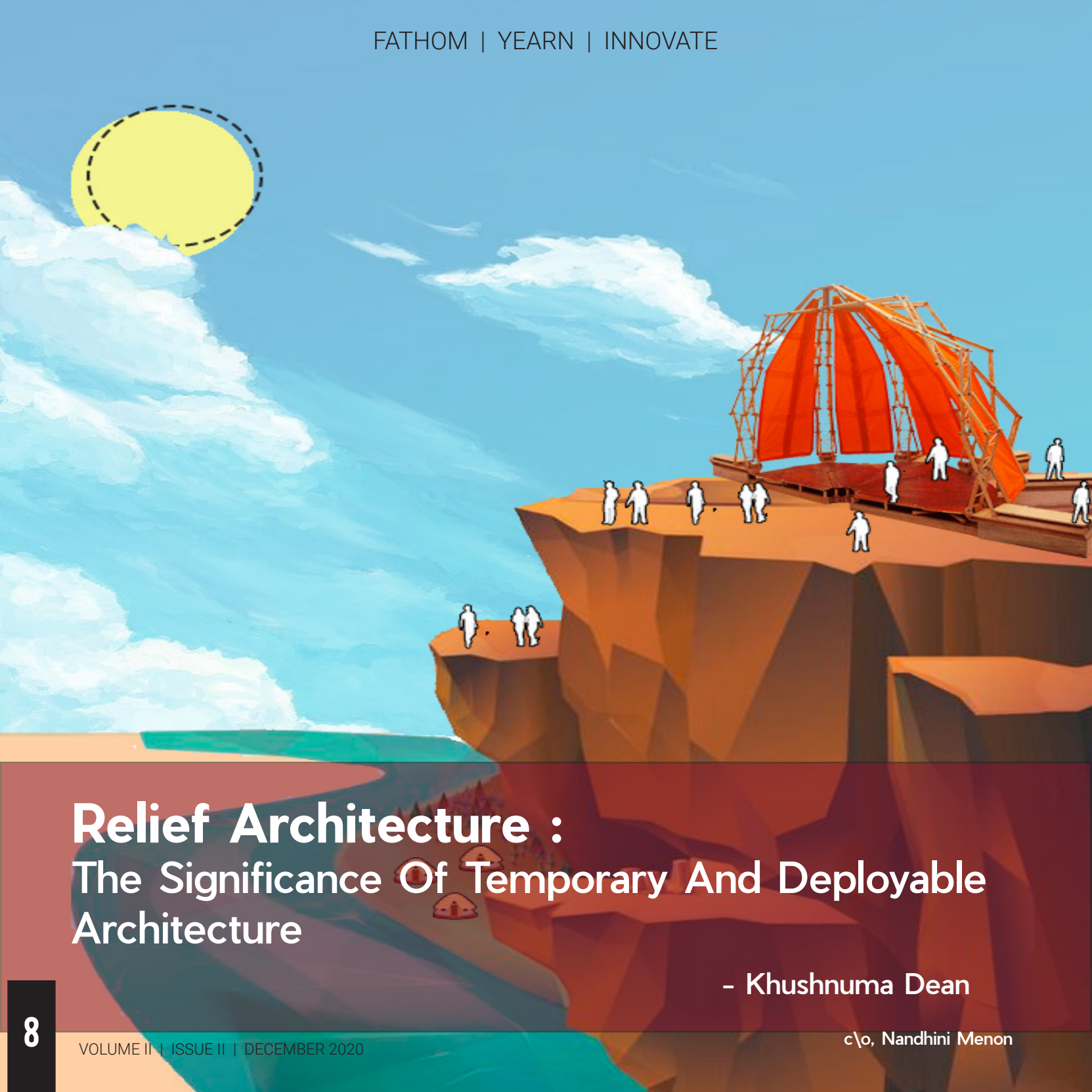
VOLUME II | ISSUE II | DECEMBER 2020

IN THIS ISSUSE



Relief Architecture :
The Significance Of Temporary And Deployable Architecture

- Khushnuma Dean

c\o, Nandhini Menon

The human state in the aftermath of a crisis is at its most vulnerable.The goal of the disaster relief committee is to evaluate the needs of the community, security, safety shelters and a level of comfort to rebuild their lives, by providing them with temporary but a bit more permanent and resilient when disaster hits in the upcoming time.

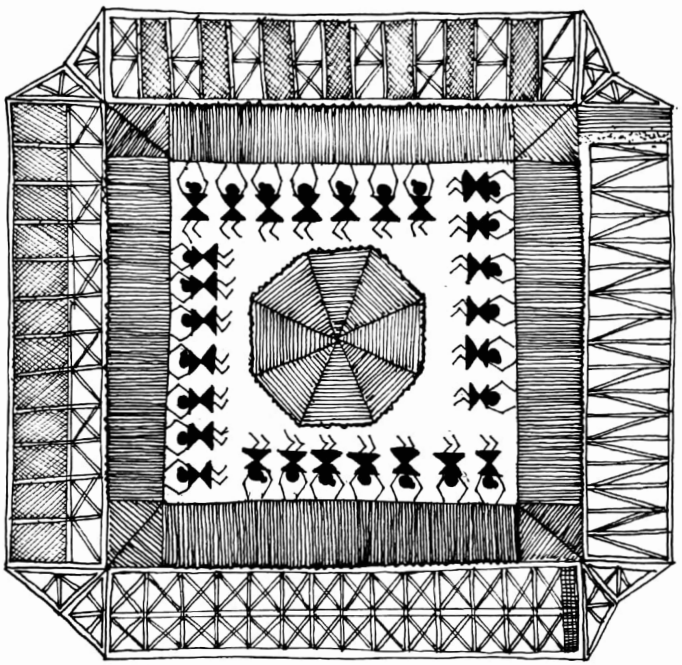
When it comes on how to provide solutions for relief architecture It gets divided into two parts where first is to create a temporary construction which is transformable, transportable and deployable. And the second is to create a more permanent solution without disturbing the context or destroying it. The structure to be built at the specific site does not allow a prefabricated other context structure because one structure fits all is not the case. Every site has its own demanding climate, surroundings, cultural traditions, material life and the new structure depends on these parameters. Architecture has the potential to regain the resiliency if the structure which has been destroyed.

Some criteria follow :

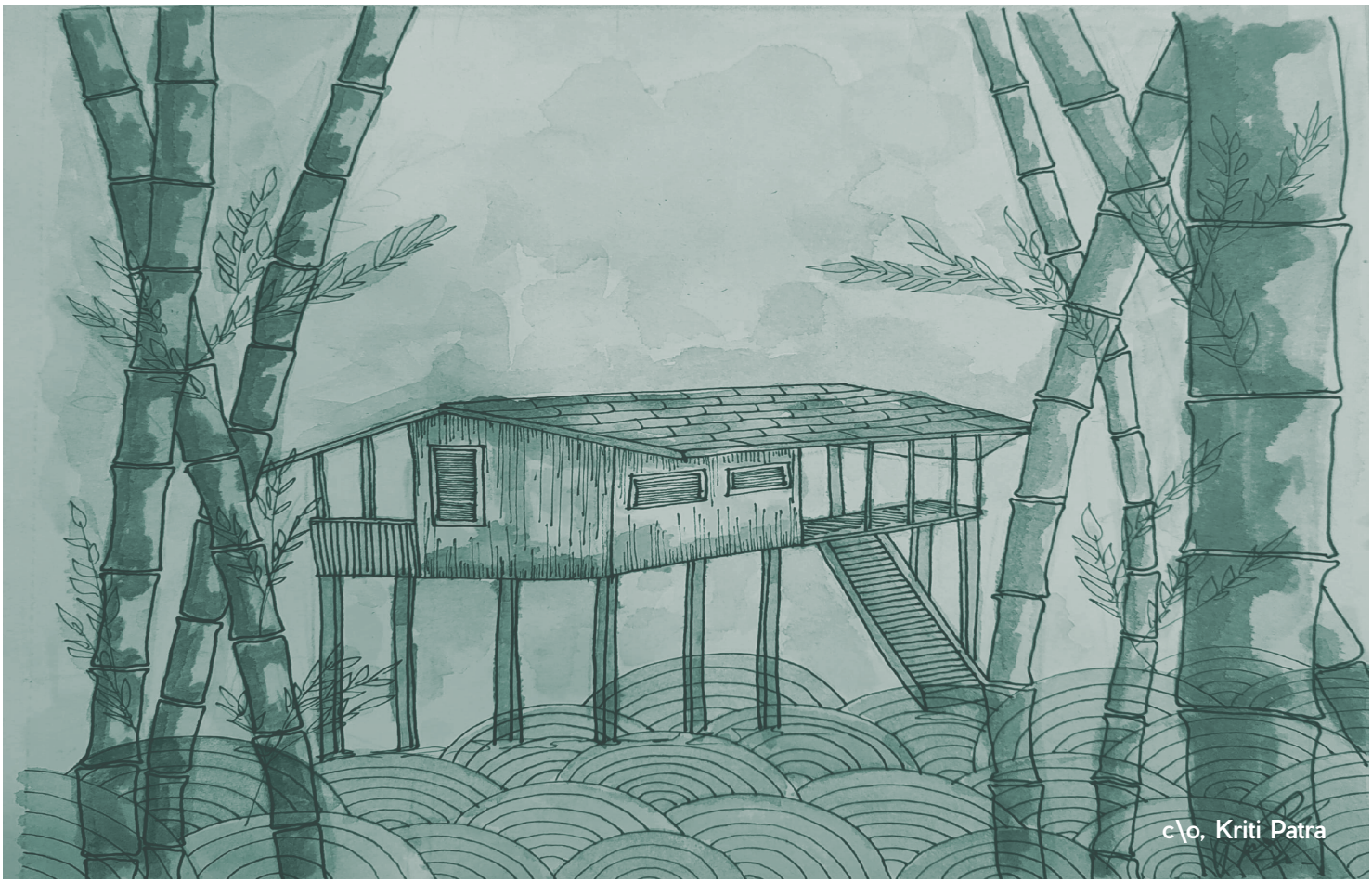
- *The creation of a universal solution which suffices the Many disasters are no longer a singular event, but hybrids of both natural and*
- *human-caused events, especially with the increasing effects of climate change. Taking*
- *into consideration the unprecedented situation of Covid-19, architects and engineers*
- *mobilize the creativity in the fight against it. As the healthcare infrastructure is*
- *becoming overwhelmed and hospitals around the world are reaching their capacities,*
- *new alternative possibilities are emerging, proposing flexible, fast simple assembling*
- *structures. local needs*
- *High-quality life of all the projects*
- *Use of sustainable materials which are locally available*

Giving back the almost normal cultural life of the communities To work towards resilience, not only do they need to provide physical aid, but they also need to help the community rebuild and create innovative long-term solutions. Again, the first phase of design is not focused on relieving the disaster at hand, but on creating an area for the organization.

Inspired by the ancient craft of paper folding creating unique patterns and shapeswhich fueled the deployable structure engineering. The primary objective of deployable shelters is to protect the people from the external environmental factors including air, water, and sunlight. Different types of deployable structural techniques include tentative, rapid deployment modules(RDM), recover shelter.



c\o, Kriti Patra

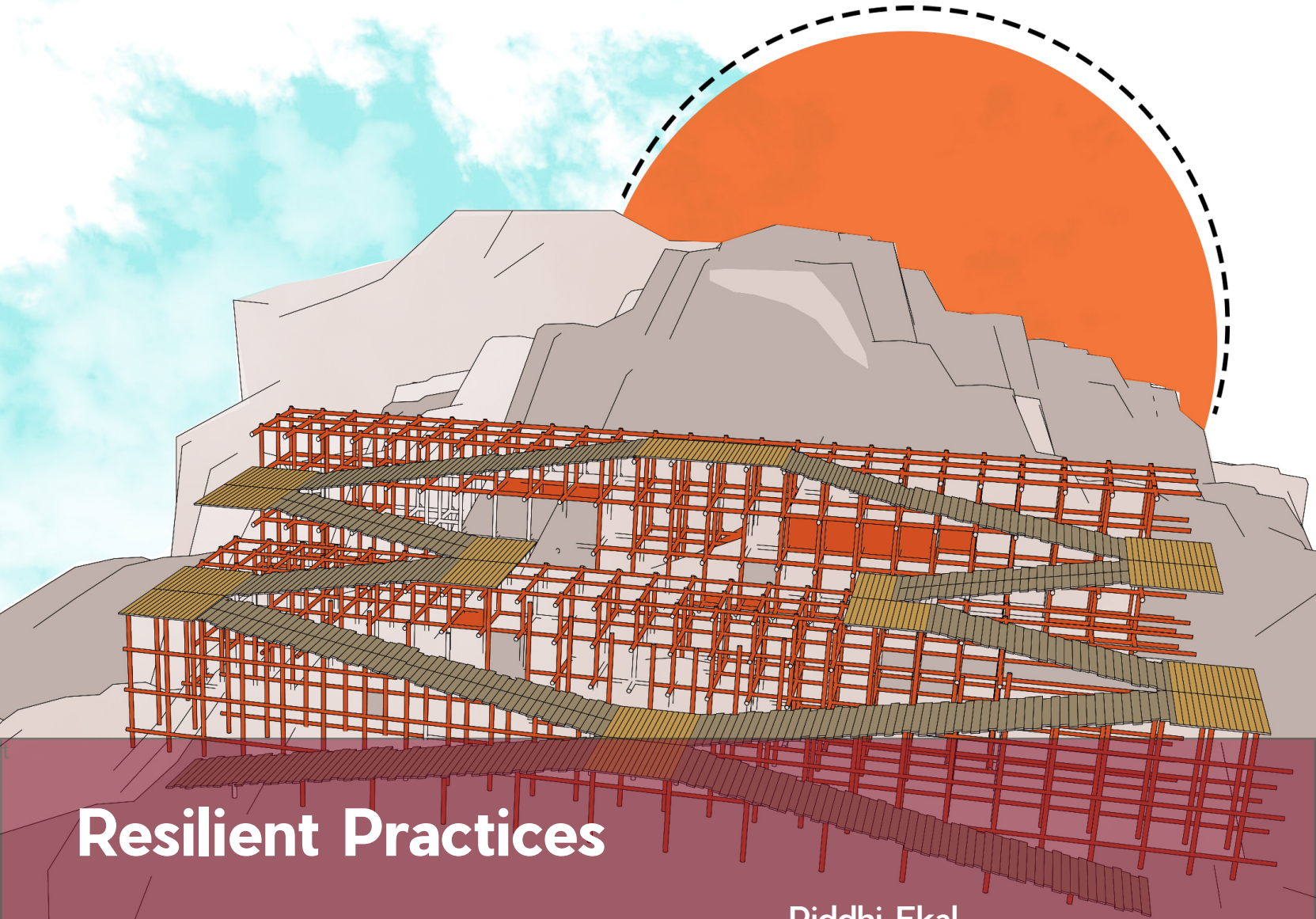


Care is taken regarding the sitting, building on firm soils; good building configuration, form, and shape in plan and elevation; location and size of major structural elements; number, location, size of openings; and connection details of non-structural elements with the main structural system. These houses are built by following simple laws and observations by local people.

The DFID-supported, Infrastructure for Climate Resilient Growth in India (ICRG) program, works for 22 districts in 3 Indian states, Bihar, Chhattisgarh, and Odisha. Functioning closely with locals, it trains over 10,000 people. The climate-resilient techniques are built by local communities.

What's evident from all these examples is the fact that effective techniques for resilient practices are under the thin veil of traditional vernacular typologies. If the traditional materials and details are observed at a minute scale, we can discover effective techniques.

c\o, Kriti Patra



Resilient Practices

- Riddhi Ekal

c\o, Vaibhav Kumar

According to experts, climate change will be the new constant in the coming times. By arriving on the 3rd position of worst-affected countries of the world and still not propagating resilient architecture enough, India puts 3% of its GDP at stake and 1/6th of the world's population IN danger. NBC indeed presents guidelines but their enforcement isn't inspected. Resilient practices are usually taken up after the damage has been caused. 8 mn hectares of land of India are affected by floods while 40 mn hectares is prone in total. 59% of the land is earthquake-prone while 8% of the coastline, which is home to 1/3rd of Indians, is disaster-prone.

Extreme cyclones and floods in remote areas of the Fishing village (Bakkhali, Sunderbans) and Mishing village (Majuli, Assam) damage the lives and properties of the people residing there. Learning from past experiences, the villagers along the time have framed their very own techniques and follow them religiously in building processes. Among numerous minute details, some are, the orientation of units to avoid summer winds, linear arrangement along the access road, avoidance of placement of openings near inner corners, etc. In Assam, 80 Bamboo houses got erected under SEEDS supervision. The NGO worked with architects and artisans to closely inspect the issue and studied the finer details and stability of structures.

Traditional vernacular practices were renewed for a solution to current problems. Stilts at a higher level help in conditions of annual flooding while a flexible joinery system helps in case of overflooding. It provides a privilege of a higher level for the floor while not exceeding the budget constraint.

The stilt bamboo columns got waterproofed with a rubber coating. Cross bracing was added among the members. Bamboo footings were deeply encased in concrete. Rattan and bamboo dowels were used for native tying fashion. All of this enabled resistance to lateral forces during floods and earthquakes were used. Sustainability in terms of local material usage was maintained by continuing using bamboo but in a more compatible way.Following the floods of 2018 in Kerala, an urgent need for climate-resilient architecture was acknowledged. Ar. Gopalan Shankar, a student of Lauri Baker, contributed significantly in designing and building of 250 disaster-resilient houses.

"Bamboo is a significant replacement for steel and would match its strength." he explains. Several prefab and elevated houses began cropping up. Pre-fabricated, pre-stressed technology for concrete panels was employed for its 30 times stronger property than traditional materials. Pillars were seen constructed with treated bamboo, mud, and concrete. Plastering was done by using mud tiles, coconut shells, and treated bamboo. Houses were erected over 1.2-meter high pillars and are made with sun steel, concrete panel, and non-asbestos roofing sheets, etc.

The strength of the bridges of Meghalaya is a virtue of the natural process that creates them. The roots of a species of an Indian rubber tree are utilized for their remarkable properties. Either by pulling, twisting, or tying, locals direct the roots in the right path. After a considerable period, an architectural structure is formed. The identification of the natural element and its learning was most crucial.

"The mother art is architecture. Without an architecture of our own we have no soul of our own civilization."
-Frank Lloyd Wright

One comes across 'Assam Type House' and 'Thatch House' throughout the North East. Bamboo wooden beam-column frame the simple rectangular form with another element of thatch. The connections are made rigid to make it a wholesome singular body.

The structures built cant is defined as temporary or permanent in some cases as for some people it became a secure structure for those who didn't have houses, to begin with. Shigeru Ban was commended for his approach to disaster relief architecture. His approach was told to be providing shelter, community centres and sacred spaces for the people who have suffered loss and devastation. Shigeru Ban is known for incorporating transient materials, such as cardboard tubes and beer crates and also using an unusual material: paper. Deployable structures made of paper tubes — and conceived for victims of tsunamis, earthquakes and other natural disasters. The Hex House prototype is customizable, with base interior finishes which can stand alone or can be combined for larger dwellings or communal clusters and be occupied for 20 years with sustainable techniques. Yasmeen Lari, Pakistan's first woman architect uses vernacular building techniques emphasizing locals involvement to a physical and material level. She worked with dispossessed families to rebuild their homes using mud, stone, lime and wood from the surrounding debris. Working with volunteers, she trained local people how to use whatever materials were to hand to rebuild in a better, safer way.

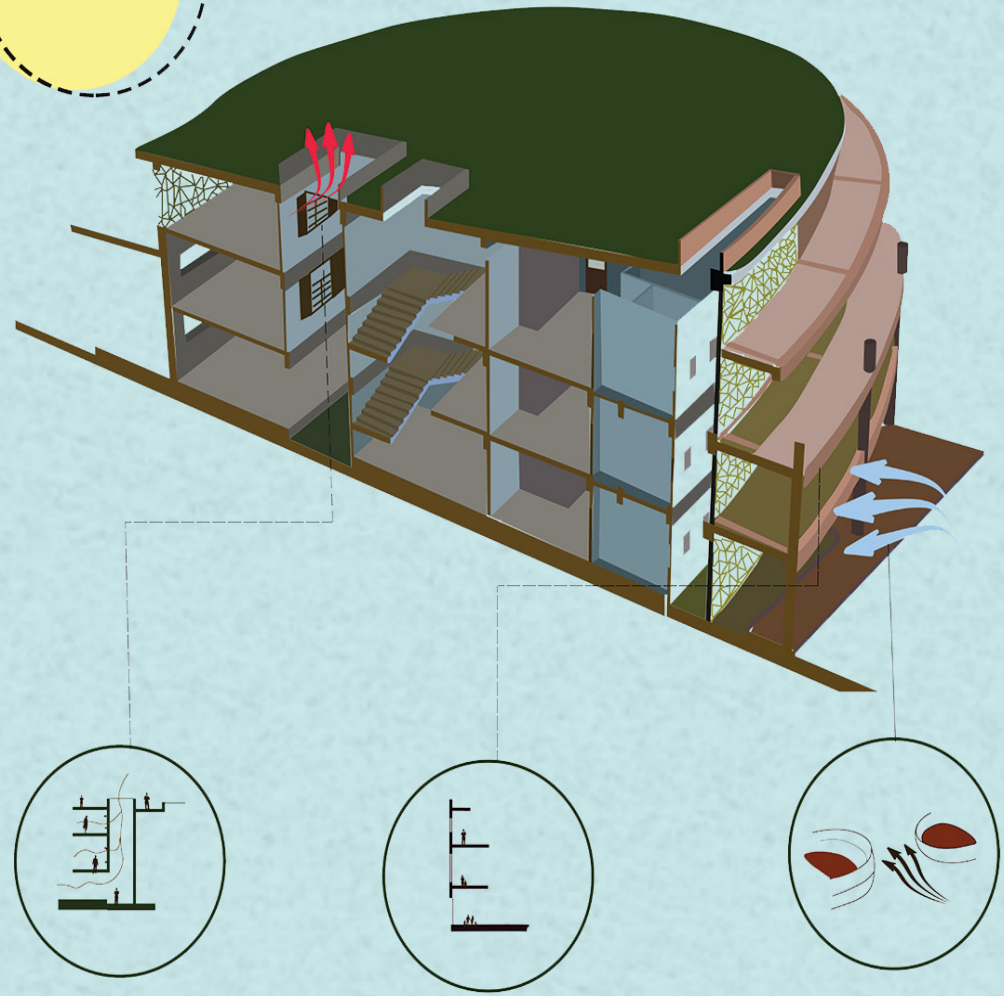
Many disasters are no longer a singular event, but hybrids of both natural and human-caused events, especially with the increasing effects of climate change. Taking into consideration the unprecedented situation of Covid-19, architects and engineers mobilize the creativity in the fight against it. As the healthcare infrastructure is becoming overwhelmed and hospitals around the world are reaching their capacities, new alternative possibilities are emerging, proposing flexible, fast simple assembling structures.

Carlo Ratti converted shipbuilding containers to into intensive-care pods of easily movable and quick mounting. WTA, repurposing one of their pavilions into a short-term relief space.

The temporary structures made from wood and plastic can be replicated anywhere in order to increase the capacity of hospitals. Also, converting buildings into different programs like offices, schools and convention centres. Through adaptability, prefabrication, optimization, rapidity, re- and up-cycling, as well as "updatability", Adapta is a spatial protocol based on resilience, creating a spatial solution that can be applied anywhere in the world, and in a matter of seconds, reducing the overhead of the human design process to almost zero. Assuming modular pre-existing units, which are ideal for emergency construction, 50 SuperReal designed a solution where all additional construction materials are sized to fit in the modular unit itself, in case the building needs to be packed down and moved to a new site.

The materials do not become relevant but it's about the pace that gets the relationship between structures and people and the dignified solution that reverberate. In these and all disaster events, not only are victims physical needs tremendous, but their non-physical needs are so powerful that they become tangible. However, architectural aid has the ability to create lasting solutions that not only provide physical resources but also provide healing for these non-physical needs.

c\o, Diya Heda



WIND AND LIGHT SHAFT FOR PROVIDING NATURAL VENTILATION IN KITCHEN AND STORES

OVERHANGS PROTECTING EXTERIOR WALLS AND REDUCING HEAT GAIN

CURVED WALLS CREATING FUNNEL EFFECT FOR SOUTH- WEST

Repurpose Architecture :
Waste In Construction Industry

- Ar. Mahak Jain

c\o, Kripa Sonpal

What is Sustainability? Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs. Do all structures have to be sustainable? Looking at the present condition of the world, sustainability has become the need of an hour. Hence, all factors of sustainability are considered while designing and constructing any structure.

The building industry has not only become a major consumer of materials but also a source of pollution. Reuse, Recycle and Repurposing building materials is a way of environment protection and sustainable development. There are many methods used to reduce waste and increase profits through salvage, reuse, and the recycling of construction waste. In order to meet the ever increasing demand for the energy-efficient building construction materials, there is a need to adopt cost effective, environmentally appropriate technologies and upgrade traditional techniques with available local materials. One such technique is Straw Bale construction. Globally, the construction of straw bale is rising. In many countries governments encourage the use of straw in the construction industry with local authorities being the biggest beneficiaries. Straw house can be one of the best alternatives for countries like India, where agriculture acts as the backbone of development.

Agricultural production leaves behind a considerable amount of agricultural waste, some of it is reused in agriculture as fertilizers but rest of it is burnt, leading to uncontrolled spread of pollution. The agro-industrial and other solid waste disposal is another serious issue of concern in developing countries. Straw is a healthy alternative to modern construction materials, being a natural material. The potential application of agro-waste materials, sustainable construction materials are evaluated for their properties, method of production and environmental impact. The rapid urbanization is creating a shortfall of conventional building construction materials due to limited availability of natural resources. The application of agro-waste in construction provides a solution which offers a reduction in natural resources use as well as energy. On the other hand, energy consumed for the production of conventional building construction materials pollutes air, water and land.

While prices of construction materials have increased in recent years, agricultural waste recycling presents a continuous challenge for the fields of engineering, attention being directed to the materials made from agricultural waste showing characteristics similar to the traditionally used materials without compromising affordability and quality. Straw Bale construction has shown good resistance against earthquake, hence it can be used for construction in earthquake prone areas as well.

Reuse, Recycle and Repurposing building materials is a way of environment protection and sustainable development.

In this emerging world where the rising need of housing is increasing day by day due to the tremendous growth of rural and urban population has been a pressuring issue. India being one of the largest country producing straw but most of it is considered as waste. So, profound research and awareness regarding straw bale construction should be enhanced in agriculture based countries like India, for effective implementation of straw bale house. If we can utilise them for construction then it would aid to maintain the quality of living standard of people because straw house fulfil serviceability and helps maintain the environmental quality.

YATIN PANDYA

ARCHITECT, FOOTPRINTS E.A.R.T.H

Interview | By : Divyanshu Jaiswal and Durva Kamat

What was the aim when you first started FOOTPRINTS E.A.R.T.H?

We started the practice which ended up being more than a typical architectural job. We thought of it as a journey, that will bring out certain values through design.
We believe there are five principles of architectural endeavour that we must try to fulfil.

- So, the first one is timeless aesthetics. Buildings have a longer lifespan than us, so whatever we do not only has to be relevant or agree`able for today's age but should also ensure the longevity of the building's structure.
- The second principle is the socio-cultural aptness.
- The third principle is the aspect of environmental sustainability. As an architect, we are triply responsible for the environment around us. We, as architects, always alter the landscape wherever we design buildings. In the process, so even our mistakes can perpetuate and the weight of the consequences falls upon the architect. Besides, the building industry is the largest consumer of resources as well as the creator of pollutants. Thus environmental sustainability is something we need to look at.
- The fourth principle is economic affordability because the spaces should at the end be viable for the users.

Architecture comprises entirely of these five principles. That's where FOOTPRINTS E.A.R.T.H. comes into the picture. E.A.R.T.H. is an acronym which stands for the evolutionary aspect of this is that its architecture, research, environment, technology and housing. The research bit is important because as I said, "to be able to be appropriate to the context, there's nothing like good or bad, it's always appropriate or inappropriate, appropriate to the place and people, to the context, to the time and milieu" So, for that, we have to evolve norms and standards which are responsive to the local conditions.

And it is per that, in our practise we have research that creates the basis fo application that is designed, and then we kind of share that as a generic principle, hence dissemination. So summarizing - research, application and dissemination.

What role does space play in narrating the vision of an architect or a project?

An architect in a way is the choreographer of the entire building so the responsibility falls upon them. But whatever the design maybe, there are six design decisions that you take, as I said those five concerns, if you evaluate them, it would be an informed design decision or responsive.

- the site and location,
- form and massing,
- movement and organization of structure,
- choice of appropriate elements,
- material and technique of construction, and then
- surface rendering and filigree.

Whether Good, bad or ugly buildings, you need to make those decisions. The point is to know how each of these decisions reacts in response to the context and with all those five concerns that you are kind of evaluating and taking.

How do small details regulate the entire project in achieving these spatially sound spaces?

As previously mentioned, concerning detailing, it is always a consistent affair. If I use Juhani Pallasma's quote, "The door handle is the handshake of the building," So it's the first introduction to the structure it's warm, it's friendly, and has a firm grip
So, every aspect communicates with each other. Design is a dialogue, an encoder of the messages we put in certain kinds of clues and as a perceiver, we decode that. Whether a structure is colourless or not also sends

a kind of a message. To keep it exposed is also a decision and it has a value. So, the detail is not just an outside embellishment. It's an integral extension of the interior.

What mental management construction is needed to approach towards sustainability? How did you achieve the same during your project Manav Sadhna?

Manav Sadhna project had actually taken two steps backwards, not during the construction but right at the conception stage itself. The project uses recycled waste.

We found that this settlement is a space where most young women are the sole bread earners of their homes by engaging in rag picking. Waste is something that they deal with and the same waste that they give away become a very first-hand material of the whole process of construction.
We almost make it like a collage of waste materials that can be put together, but it wasn't a random decision, there was a definite criterion as to what goes where, and what will work where. So, its design in every decision, and site management is how you use the local resources and in what manner, what is better done in situ, what is better done outside and brought it there an efficient way to work so you don't produce waste.
Site management also covers how you use these resources meaningfully and effectively. This is what management's creative resource brings out something very local. That's what is organic architecture. It's by the process, not the irregularity in the form.

What does holistic design mean to you as an architect?

I think, as I said, any design has to be holistic because then it is not egoistic. It's what the place, the programme wants to be. It is what the time demands, what the people or the user needs but in that you don't let go of your creativity, you let go of your ego. And ego is not creativity, it's a preconditioned idea. After all your study and analysis, you find that's what is right, that's what you always do. It is about being humble and understanding design not merely for your client, but also their neighbours and context. Even If the client demands a destructive design, it's our responsibility to make sure it doesn't inhibit the functions and working of the surroundings.

The restoration work of Kutch looked like a challenge to any architect. How did you manage to make the project cost effective?

Cost-effectiveness happens naturally when you take certain approaches. For example, we found out that bhungas in Kutch already had gone through certain processes to withstand the shock waves of the earthquakes in the past. After this, we scientifically analysed why they stood on and others did not. And that was when we figured out that some of the decisions for this house type ensured that they were earthquake resistant. And therefore, we applied it. Second, it has been appropriate to the lifestyle of the people because they have done it for themselves and it has perfected over time, so they knew what they wanted so there would be no discrepancy. So, we involved them in all of our key decisions from site development to provision of amenities, to the nature of the house and construction. In their case, they were ones who knew the soil better than anyone. They knew what binder to mix to create the stability of the block. Third, the design has evolved in pre-electricity days, they had to find the built form responsive to give them the fundamental comfort, not rely on AC or anything else to overcome nature. So, the first built form was through response, and in 45 degree or 50-degree desert, the interior of their houses was in the range of 30-degree to 32-degree.

Ar. Yatin Pandya's comment on the current scenario of Architecture in India:

I cannot foresee but I can comment on right now what is going on. Right now, things are in flux where

fundamental values are probably not prioritized. And therefore, we are being a bit more impressionist in what comes in our way and we have given a little more liberty to technology and gadgetry versus the pure space making, as a primary role as an architect we need to play. For example, what gave us a license to have a dark corridor in a hotel without a view, natural light or ventilation. What gave us the license to only give an exhaust fan for ventilating a toilet in a hotel room? Till about 15 years ago, any faculty would have failed that design, and the client wouldn't have accepted it. Where did that liberty come from? Just because there is technology available at our fingertips, do we take the easy way?

So, I think we are losing that connect with nature and other human beings. I think these two are a little dangerous to just let them slide. I believe that people even after suffering, the cycles always repeat. Adolescents always want to change things and it repeats with every generation. But currently, I think we need to be a little more judicious, slow down, pause and ponder and don't lose the things which we won't be able to bring back after a long time. I believe our existence is based around two fundamental equations: human to human, that is society and human to nature because that is the environment and you are a part of it. I think any professional, as long as we can maintain these balances, that's a fundamental goal or accomplishment.

Island City Crisis

- Nandhini Menon

c\o, Nandhini Menon

Mumbai, the now bustling megacity with a population of over 20 million people was once an archipelago of seven islands which were connected over the span of five centuries, home to predominantly fishing communities. These seven islands had lush green dense woods, and were dotted with 22 hills, with the Arabian Sea washing through them at high tide. Although the city has undergone immense progress from Bombay to Mumbai can she still hold her head high with the current statistics?

They say Mumbai never comes to a standstill, apart from a few glitches like the one on the dreadful 26th July of 2005. The tentacles of urbanization have already moved towards Vashi and Navi Mumbai, concrete jungles erected unabashedly in its path. Being a peninsula, Mumbai is at an inconvenience in terms of physical space. A stretch of 66 sq. km cushions the coastline and acts as a natural barrier against sea level rise and coastal flooding. Apart from this, mangroves also store large amounts of carbon, are habitats for many wildlife species, and provide crucial nursery areas for young fish and crustaceans that are vital for fisheries.

With a population so dense and an economy so advanced, one would assume that Mumbai has its waste disposal system in place, but alas, they are in for an unfortunate surprise.The city spews about 7500 MT of waste in just a single day. Based on these stats, we could have our own tower of shame made exclusively of waste. And where does all this waste go, one might ask. They are dumped into the mangroves, where they choke our ecosystem and irreversible damage is done. Disaster is inevitable, yet garbage disposal is only the tip of the iceberg. Circling back to the rapid urbanization of the once green peninsular city, urban planners and developers struggle to keep up with the pace of growth. It is true that we have entered the sphere of modernity and easily keep upwith the pace of growth.

It is true that we have entered the sphere of modernity and easily keep up with technological advancements, but at what cost? We've all experienced the heat wave that slaps us in the face when we enter a predominantly urban zone when we come from a greener, rural zone.

This is scientifically termed as the Urban Heat island effect (UHI), which shadows any urbanized metropolitan city with imminent climate change. This is specifically prevalent in the southern part of Mumbai, known as the island city due to lack of large forest areas. Increased daytime temperatures, reduced night time cooling, and higher air pollution levels are just a few of the long-term side effects of the UHI effect.

Mumbai is an oxymoron in itself, an amalgamation of not just the rich and poor but also the entire spectrum in between which leads to the imminent question about the quality of life.

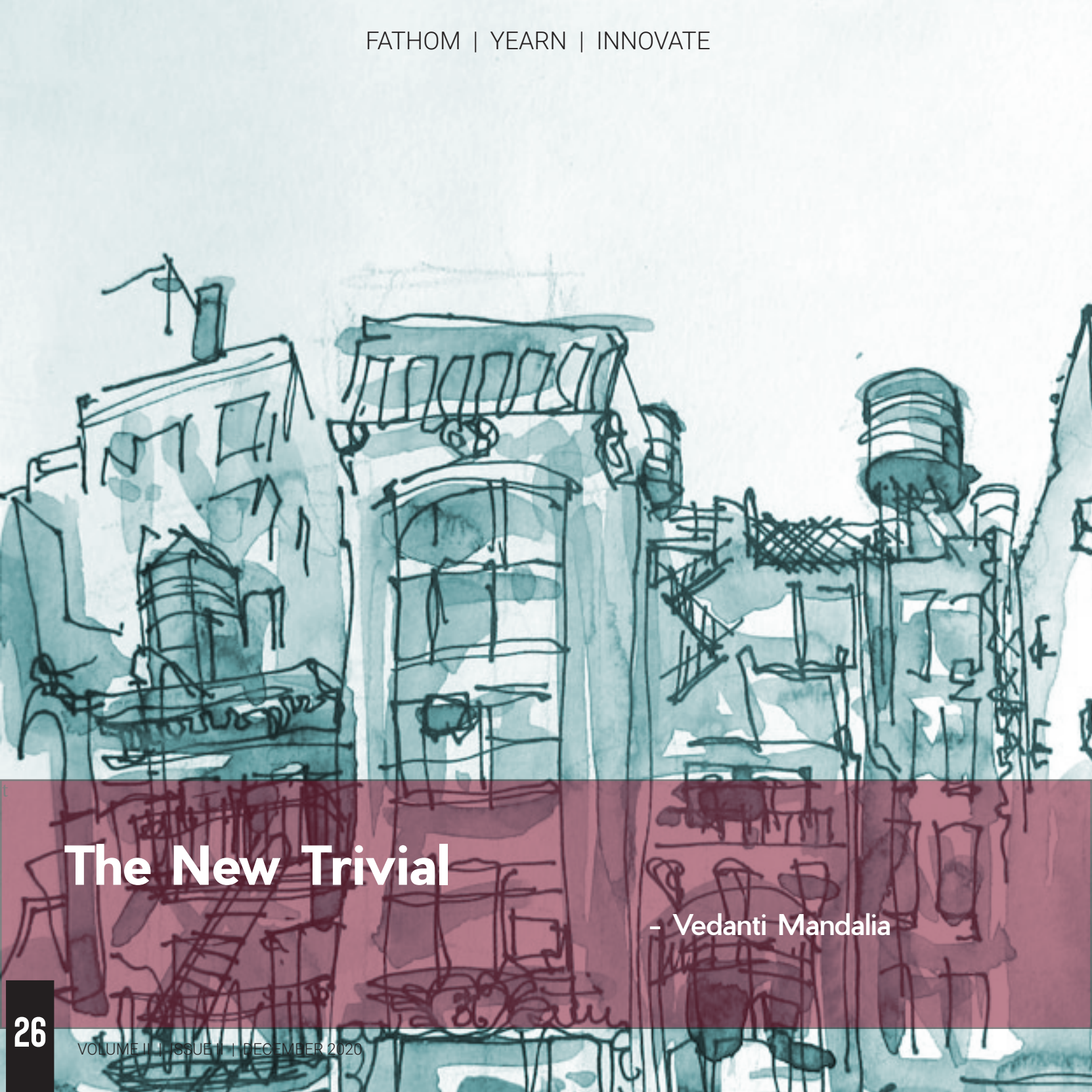
c\o, Sarvesh Bhosle

One would think with all the information we now possess; we'd switch to more green and sustainable projects, but the coastal road project is an example of the lack of concern displayed. The project is an under construction 8-lane, 29.2-km long freeway that would run along Mumbai's western coastline connecting Marine Lines in the South to Kandivali in the North. This project is set to destroy the mangroves, and reclaim 164 hectares of land for which five different petitions were filed and the cases are ongoing to this day. One of the petitions by a city-based architect, Shweta Wagh, states that ongoing reclamation is not only illegal, but will also irreversibly alter the coastal morphology, biodiversity and other ecological practices. The other petitions talk about the fishing communities fearing the loss of their livelihood stating that the maximum damage is expected to be on the oyster beds along the coast.

The tentacles of urbanization have already moved towards Vashi and Navi Mumbai, concrete jungles erected unabashedly in its path. Being a peninsula, Mumbai is at an inconvenience in terms of physical space. A stretch of 66 sq. km cushions the coastline and acts as a natural barrier against sea level rise and coastal flooding.

Keeping aside the nitty gritty details of the petitions, it should come as no surprise that the project will be a heavy blow to our already fragile ecosystem. The Mumbai City district has a detailed five-hundred-page district disaster management plan and of course the development control and promotional regulations for various departments, but ironic isn't it, how the bigger picture isn't being acknowledged? Change is inevitable, and so is self-destruction. Unless Mumbai gears up for redemption on more levels than one, this city of dreams, which is already sinking will end up submerged, gasping for a breath of clean air that it so casually pollutes each waking day.

c\o, Milan Mathew



The New Trivial

- Vedanti Mandalia

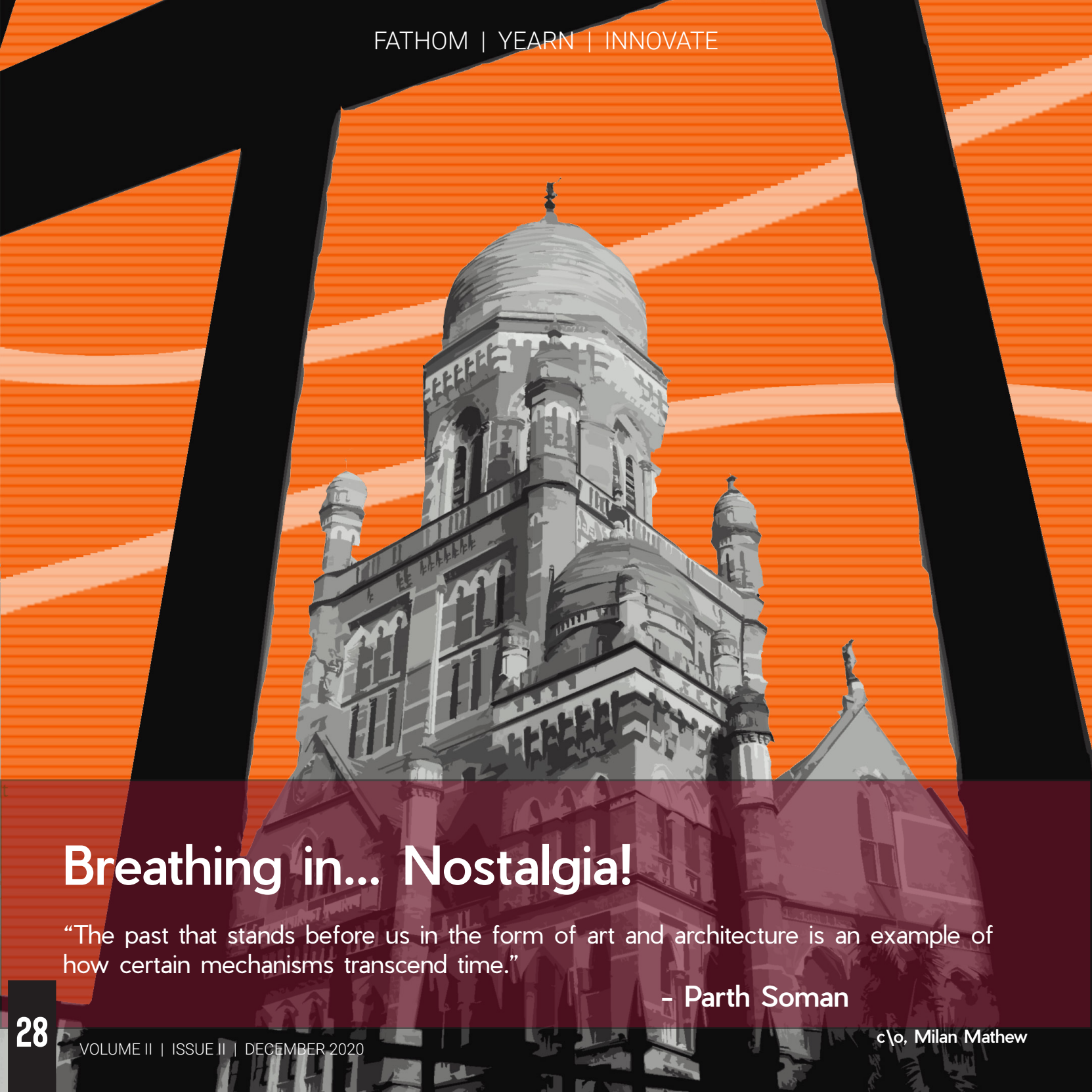
'Society is something that precedes human. Man cannot live alone.' Half the year in our nutshell made us realise that Aristotle was indeed right . Man is a social animal . After staying in for so long his own home would feel like cage. Even some people who tend to love being alone cannot escape their needs . Everyone needs to step out for their basic needs and mental health. Mankind has suffered a lot economically, physically as well as psychologically. This we have to embrace the new normal. Reforms are required to reduce the risk. This is where our hero -architects step in. They ensure various ways for re-emerging the public mobility space thoughtfully.

Fresh air and propels ventilation are essential for healthy environment. Gardens are ideal for such conditions. Gardens can be designed effectively In a maze pattern to keep people's mind occupied and in good health, it will also help with social interactions. Grocery shopping are mandatory due to which they tend to be crowded. For such places cross cross pattern can be decided which could ensure better outcomes and less virus spread. Enclosed dinners in open dinners are getting fame. They are aesthetically appealing as well as less crowding. Classrooms can get museum like makeover for better learning. Social distancing can be ensured in railways and bus stops by installing plants and creating visual barrier. These can also ensure limited entry of passengers. Movie theatres can also be started by placing soft lights on seats where people aren't supposed to sit . Malls can be opened by installing sanitary channels by UV rays and digital touch less body checkup systems. . These are done ways in which parameters can be redefined for public mobility space post pandemic.

Man is a social animal . After staying in for so long his own home would feel like cage. Even some people who tend to love being alone cannot escape we have to embrace the new normal. Reforms are required to reduce the risk. This is where our hero -architects step in.

Humans can survive anything. Embracing the new normal is possible by redefining few parameters of public mobility spaces. New techniques can play a huge role in making new rules for world with modernised facilities. Redefining is always necessary for greater good. As Albert Einstein rightly said,' You cannot use the old map to explore the new word.'

c\o, Kriti Patra



Breathing in... Nostalgia!

"The past that stands before us in the form of art and architecture is an example of how certain mechanisms transcend time."

– Parth Soman

c\o, Milan Mathew

How architecture can incorporate the myriad emotions of nostalgia?

It was walking down the streets of Churchgate, Mumbai on a Sunday morning. The vehicles were sparse and the heritage buildings were basking in the yellow daylight. No wonder that south Bombay stands out in this mix of styles observed in India's financial capital. There is something that draws the visitor to these erect edifices- Gothic architectural style, texture of the stone, distinct Victorian features and a swelling sense of 'nostalgia'.

We feel this exact sentiment while playing a board game or tuning in on some jazz blues straight out of the 30s. Being 'nostalgic' can simply be explained as the overt longing or a sense of belonging to the yesteryears. Initially, falsely dubbed as a disease; nostalgia now holds a significant position in packaging paraphernalia to the consumers. However, should art and architecture implement it?

Nostalgia- when glanced at in an atomistic manner may come off as a utopian daydream in contrast to the pragmatic solutions in design that is the need of the hour. This might be because past, that is filled with assorted memories is at times, cherry-picked to create an illusion that serves as a great theory on paper. The negative facets- flaws, vices, loopholes are overlooked to favour an imagined ideal in contrast to the parallel reality. However, the past that stands before us in the form of art and architecture is an example of how certain mechanisms transcend time. And looking at past, learning from mistakes and reviving some techniques is how Nostalgia can actually succeed.

Holistically, nostalgia can be a tangible solution to design spaces and commodities which are functional, durable and aesthetic. Some might position nostalgia as an antithesis to innovation. This might erupt debates of past versus future or nostalgia versus novelty; furthering a question of whether the design thus manifested is an authentic one or an inspired one.

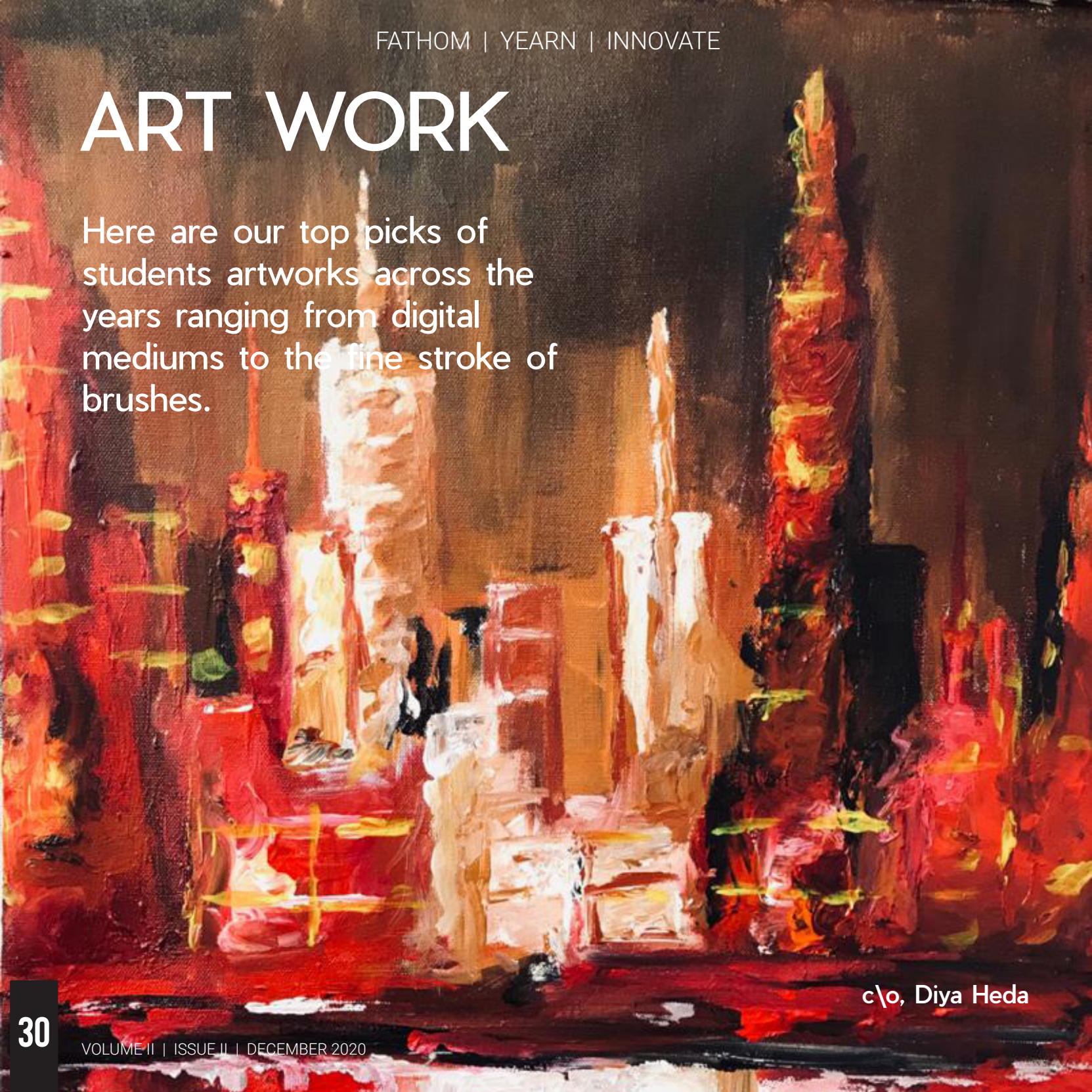
Holistically, nostalgia can be a tangible solution to design spaces and commodities which are functional, durable and aesthetic. Some mightposition nostalgia as an antithesis to innovation. This might erupt debates of past versus future or nostalgia versus novelty; furthering a question of whether the design thus manifested is an authentic one or an inspired one. However, the inspiration for a certain building or object is often the authentic paradigm with respect to geographical, cultural and historical parameters. If there is no 'then', how can we understand 'now'? This should not be a barrier for creating an artwork that is out of the box but should be fairly treated as a tried-and-tested Ilustration vis-à-vis context.The site as a whole and the people are forces that drive a design. For the user or the designer to feel akin to a certain style or colour- palette is human and thus contributes in forming a brand. Nostalgia can act as a catalyst- to feel a sense of attachment, to reflect the intangible emotions and memories in three-dimension- all in all making the product exclusive to the client.

Designing courtyards may trigger a childhood memory of lousing under the shade during hot summer afternoons. Making use of iconography might assert stories of folklore whereas using distinct features may talk about the timeline and the evolution in art and architecture. One of the effective ways applied today is to transform a heritage monument into an antique museum or a regal hotel or restaurant. This puts the vintage structures in the limelight both for admiration and the necessary conservation.

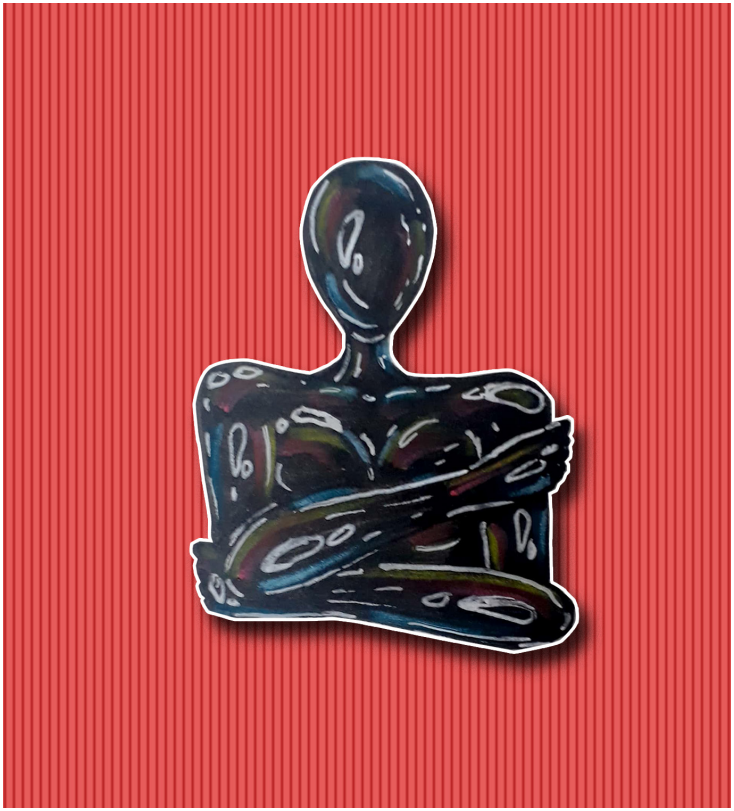
Indigenous art and architecture are the identity of a city, state and country as a whole. This is the distinguishing entity that defines culture. Moving forward in the age of science and technology is a boon. The issues of conservation and heritage preservation are important. The fight between nostalgia and novelty can be easily resolved with science. Nostalgia should not be limited to a 'feel-good' mechanism but an important tool as we head ahead.

ART WORK

Here are our top picks of students artworks across the years ranging from digital mediums to the fine stroke of brushes.

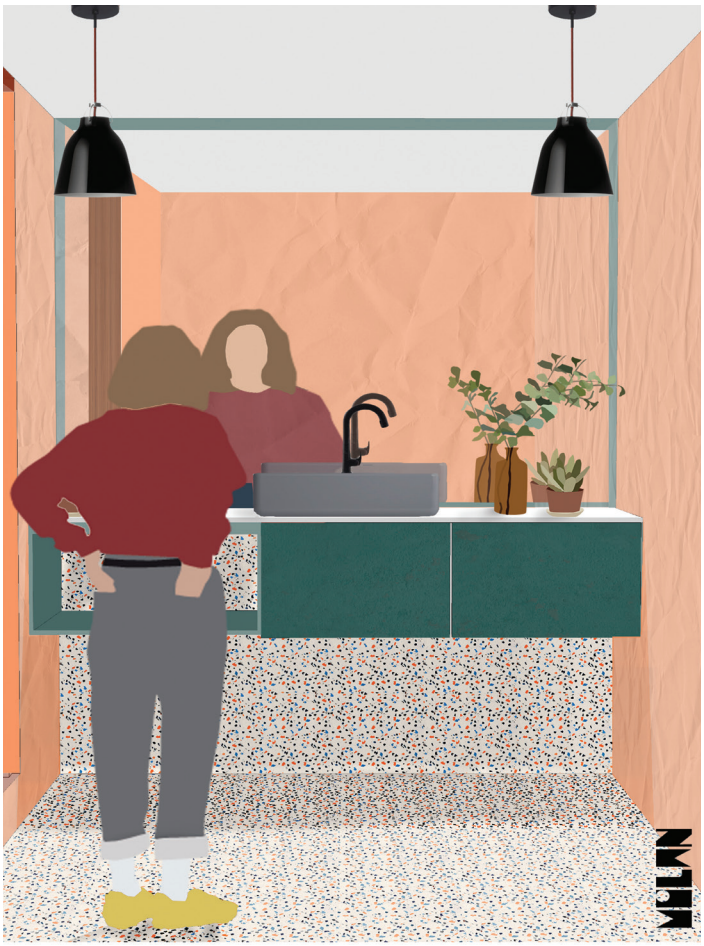


c\o, Diya Heda



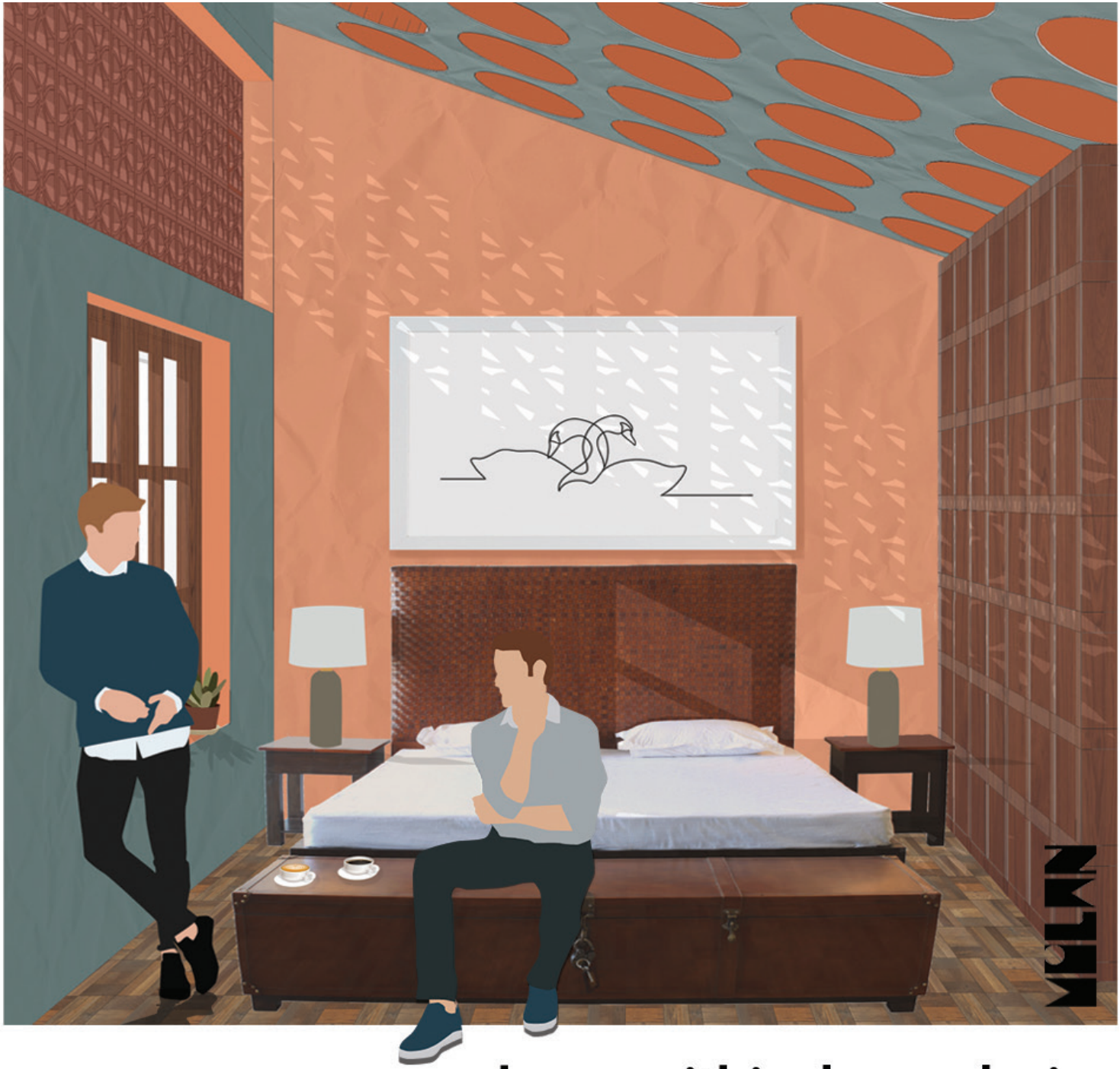
Still Motion

KRITI
PATRA



Melancholy Pastels

MILAN
MATHEW

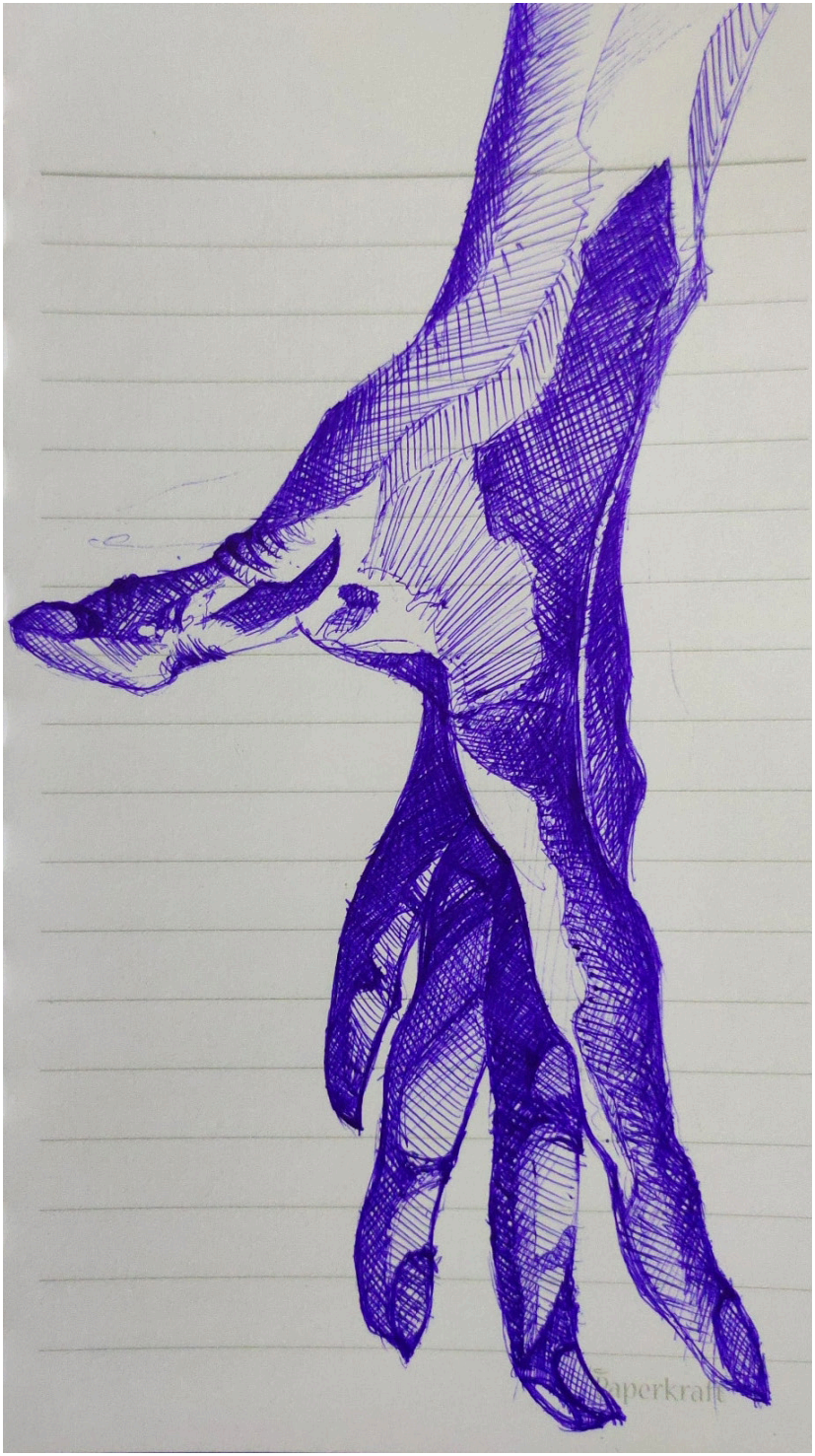


love within boundaries


PULP
FICTION

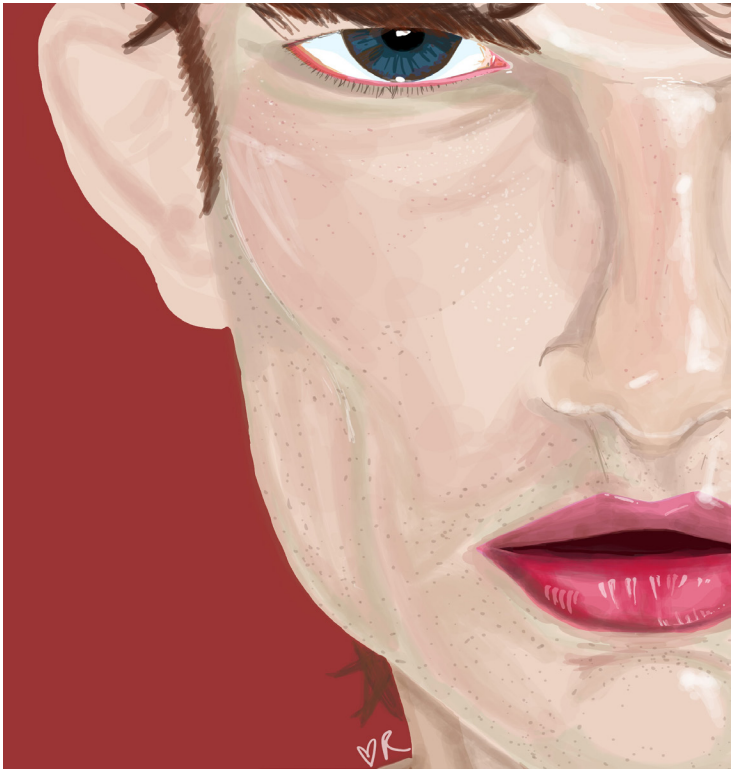
Is this the reel life ?
Is this just fanatasy?

VIRAJ
PADHIYAR



Intentional strokes

MRUNMAYEE
MAYEKAR



RHEA KURIAN

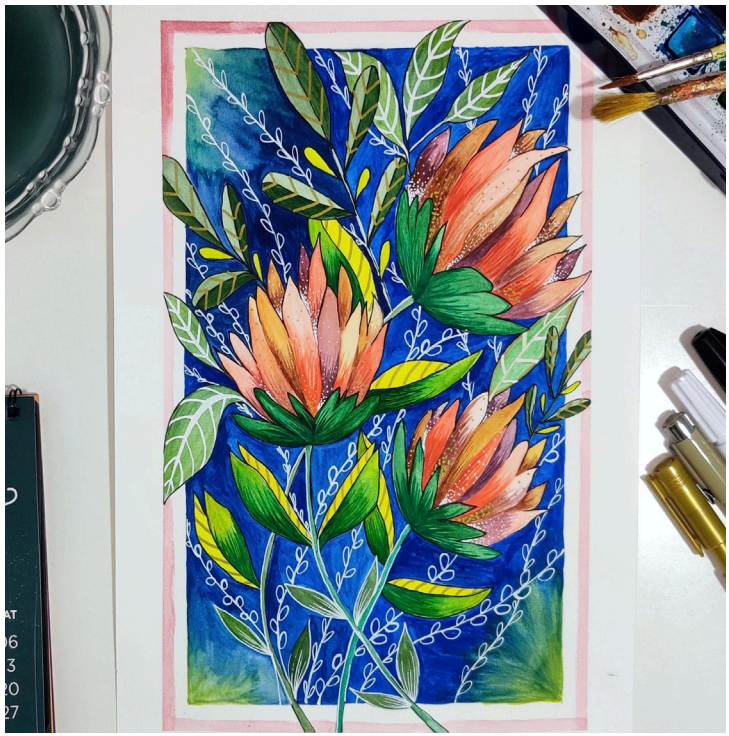
Fazed Faces

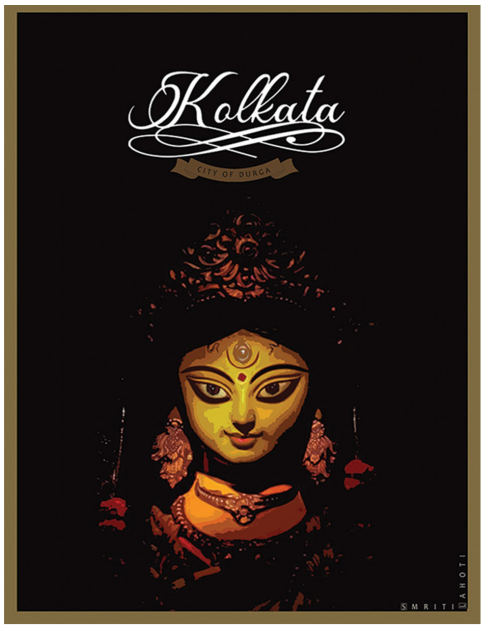


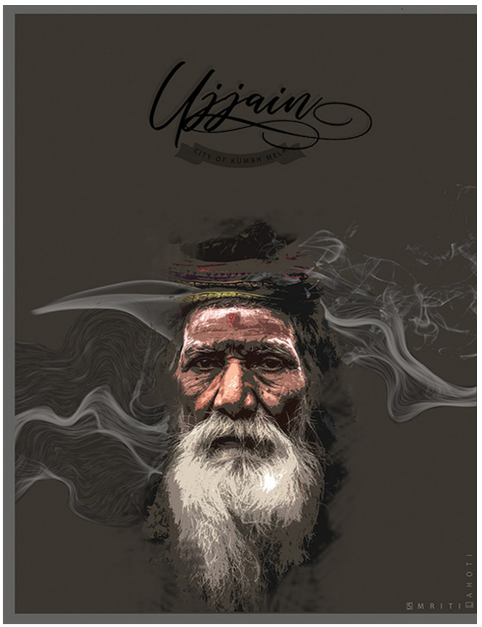


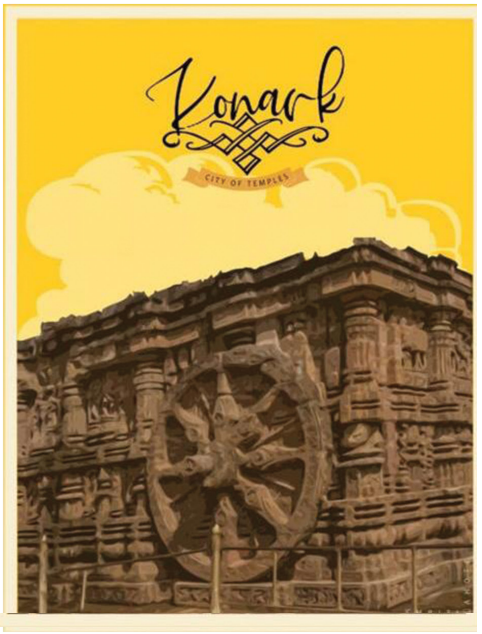

A glimpse of nature

MITSU
DALAL









Through at cultural lens

SMRITI
LAHOTI

Live in colour

RUTVIJ

MUNAGEKAR

NANDHINI

MENON

Quarantine insanity

LAXMAN THITE

CHAIRMAN, LAXMAN THITE CONSULTANTS Pvt. Ltd.

Interview | By : Ar. Minoti Mehta and Vedanti Ma

We have known that you are specially known for mass housing ...what about it are that you are attracted to ?

I think about the end user while designing. The person who is going to stay in that place for his lifetime or for many years, they are one of my main considerations and other things features of mass housing come later . This was because when I started working, this was the situation before me so it was not by choice but the situation.

BV Doshi's ARANYA housing in Ahmedabad, which is a vertical form of mass housing , study had found the people usually prefer this horizontal formation of housing instead of vertical because it keeps their community connected as well as their livelihood is courtyard dependent.

As people start earning more they tend to dwell into building because it is said their way of living is better so they are liable(?) to go to such vertical pattern, as I observed in Pune.

Yes, but in many slums like Dharavi and other areas people tend to be not give up their land because it's affordable . They tend to clutch to these areas because they have a sense of community and livelihood as well.

Yes , for cases like Dharavi it might be true because it is a huge economic centre but I think in smaller dwellings people would like to go for vertical pattern. Also when we go for slum rehabilitation their community as such doesn't break because neighbours and people remain the same.

On the similar lines, as you propose lots of mass housing strategies what do you think would be feasible for a place like Mumbai which a huge space crunch?

Nowadays, I have observed that the economy of mass housing in Mumbai and Pune is hampered due to two things one is the land prices and other is the rule regarding parking facilities, which is not required . The mass housing would turn out to be much more economical if the accessibility factor in designing is taken into account and also public transportation accessibility factors are taken into consideration. Due to scarcity of land we have no choice but to go for high rises. Going for increase in floors for purpose of parking is not economical. So during the preparation of development plan of Pune, I had proposed them to have mass housing projects on the outskirts of the city where it is possible to go horizontal which making it economically affordable. They can also improve the transportation facilities. But these are not really considered due to political constraints.

So you think that these political factors/influences restrains architects from designing more effectively and do you think architects should have a say as well?

Of course. there should be technical people in ministry and secretariat as no one in politics can understand.

Sustainability is very important for the planet and for any design to be successful. So what are the measures that you implement on your site so that design is effective and the cost is saved also the embodied energy is taken care of?

We have a very theoretical approach towards the sustainability. We draw lots of charts and sun paths but on the site working is very different. Yes they are proposed and all but just orienting the site to right direction isn't enough , there are various maintenance factors which are not really followed during the execution. For example, solar panels are good but they require maintenance. I have seen many site in which even STPs are not working. End user is much interested into saving money or are not really educated enough about the sustainability parameters..

What is the message you would like to give to future architects ?

It would like to tell them to gain more experience on site. After passing my graduation I worked in a furniture workshop I was actually handling the instruments. After that for one and half year I undertook a project on myself . right from appointing the labours to paying the wages, tenors and everything. These two experiences are proven to be very helpful as I became an architect. When I am standing on a site, I know the language of the labourers and their expectations. So as an architect they should be good with drawing board and everything, but they should be competent on the site as well. Understanding the subject is very much needed for the architects. The education system lacks the practical experience and needs to work on it more.

c\o, Ar. Neethu Mathew

Repercussions Of Pandemics

- Ar. Manasvi Patil

c\o, Nandhini Menon

A pandemic is a significant note in the book of a historian. It derails the current course of the world and sets it on a new path. The way human civilisation progresses, is by adapting or overcoming stimuli. In the fabric of a civilisation, the reactions happening at a microscale, influence the course of history just as much as national level decisions.

Architecture is a very contextual field. It adapts to not just the needs of civilisation, but also the whims of Nature. It branches out and evolves according to every different circumstance. The covid-19 pandemic has had a major impact on almost every part of the world, in a direct or indirect way. Be it in terms of immediate concerns such as employment and resource availability, or even an individual's approach to the world. Inevitably, the pandemic has also had an influence on architecture. Throughout history, one of the initial and effective changes made as a reaction to a pandemic, have been physical in nature.

The concept of quarantine, which began as a practice of forced isolation, sometimes executed with the help of a military, has now taken a more sophisticated turn. While the human civilisation has not yet surpassed the need for stringent law enforcement, the inhumane aspect of quarantine has been mitigated in most areas. Architecture to accommodate quarantine requirements started being developed in the 16th century, in the form of 'lazarettos', which were permanently docked ships, or isolated islands or structures dedicated for isolation. Over time, this concept evolved into the quarantine wards seen today.

A pandemic doesn't just affect tangible aspects in life. Everything one has worked on throughout their life comes to a test. Resources, employment, financial stability and quality of living all get affected simultaneously. The relevance of certain fields gets redefined. Since a pandemic is a medical crisis, saving a life biologically is of the utmost importance, while all the other aspects Throughout history, the privileged survive and the common people struggle to adjust with the changes in lifestyle and reductions in income. With more importance being given to health, the wellbeing and livelihood of an individual suffer. The psychological and financial repercussions of a pandemic go hand in hand, one often giving rise to the other.

The role of architecture during a pandemic is varying. The experience of the world during past pandemics contributed to the development of the medically essential architecture which was required during Covid-19.

This in turn will evolve into something more rounded for the benefit for future generations. In a pandemic, medically essential architecture is an immediate and obvious field of concern, but architecture also affects allied factors which cause an indirect but significant impact on the medical resources. From an urban scale to the design of an individual house, every factor somehow contributes. It is the responsibility of architects, while preparing for future pandemics, to not just develop the medical, but also incorporate a layer of precaution in every design.

Bhuj vs Tokyo

– Keerthi Kallanja

c\o, Sarvesh Bhosle

Bhuj and Tokyo. Two very different cities of different nations. However, the problem they face is the same: they both are situated on earthquake prone areas. These natural calamities have defined the way the people live and eventually the architecture and construction techniques of these regions.

Bhuj is a city located in the district of Kutch, a district rich with culture and history in the state of Gujarat, India. Kutch is popular for its association with the Indus Valley Civilization, having many sites pertaining to the great civilizations and also being mentioned in Greek writings during Alexander the Great. However, the place has also been devastated three times by intense earthquakes of magnitudes as high as 7.7.

To combat with the problem in hand, over the years the locals of the region have devised a traditional mud house called as 'bhonga'. A bhonga is a hut with a circular plan and cylindrical shaped walls which support a conical roof. Existing for several hundred years, they are quite durable and are also aesthetic. This type of housing is also known as "architecture without architects".

This type of housing has reportedly performed well in the infamous 2001 Bhuj earthquake, some of which collapsed due to usage of poor quality construction materials. However, the capital city of Japan, Tokyo has a rather a modern approach to the problem of earthquakes.

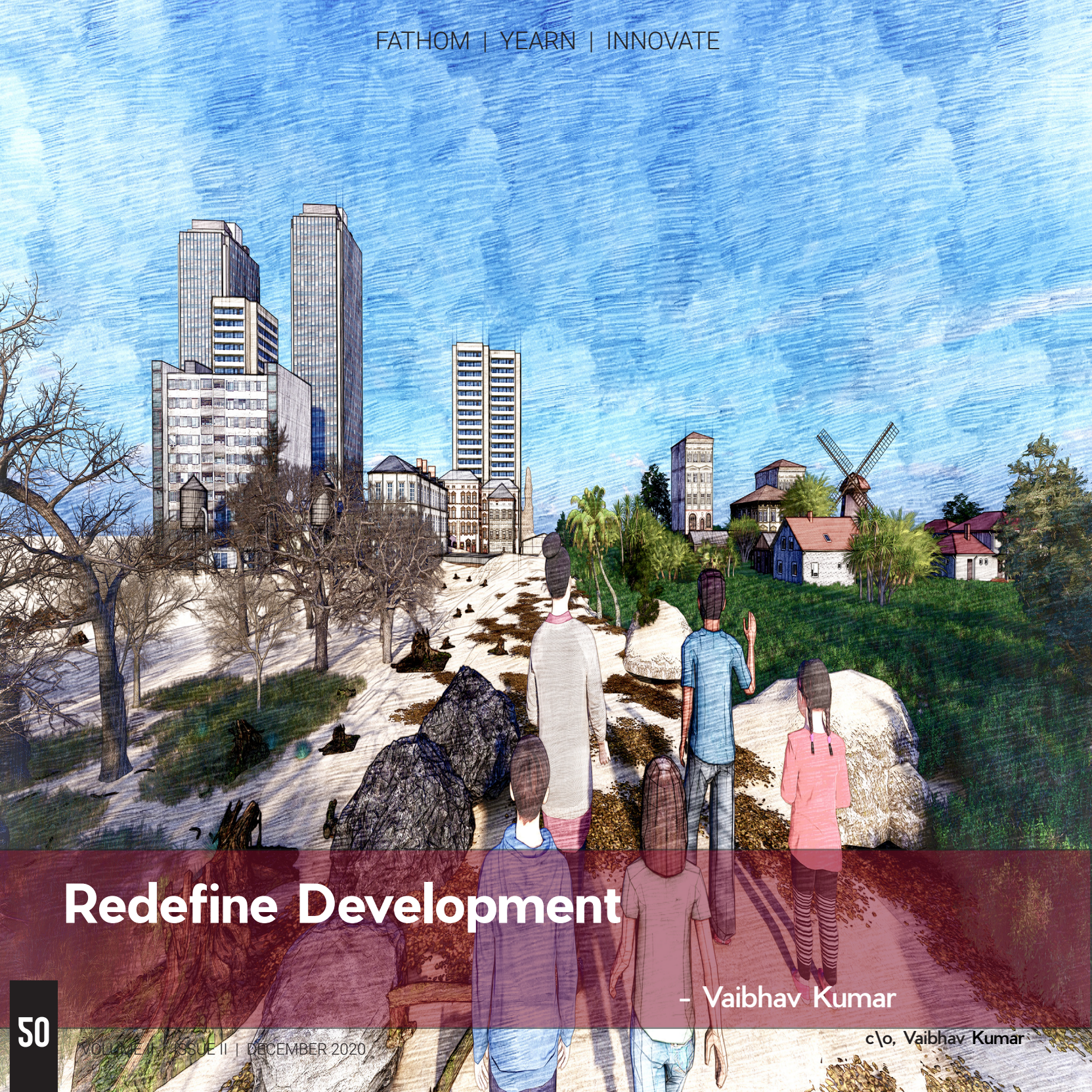
Due to the country's location on a joint of four tectonic plates, the country is considered to be seismically active, having being more frequently hit by earthquakes. Initially,

They used wooden houses designed for earthquake resistance, which failed due to many factors such as aging of the wood. So, a permanent solution was needed, for which they turned towards technology.

Japan being a technologically advanced country, was easily able to get help from technology. Through research of large earthquakes which have devasted lands over the years, the structural engineers have come up with seismic engineering using reinforced cement concrete and steel frame.

So the question which arises is this: which is better, vernacular construction methods or technology? One will certainly argue that its technology that will win anyways: due to years of research put behind it, many trials and practice runs, and what not. Technology, sure deserves to get a higher pedestal but one must never forget from where they come from: their vernacular roots.

Apart from being cost effective, they develop naturally over time and also tell us a lot about the past of the region, thus also handing down stories from time unkown.



Redefine Development

- Vaibhav Kumar

c\o, Vaibhav Kumar

Why are we different?

Are we different because we have more matured brains than other species or is this just curiosity which have made homo different from others! We question more than other set of genus and until we find the result or an answer to it ,we put our resources into it which have made us one of the most matured minds among all other lifes on earth.

We have developed from the discovery of fire to nuclear power, as always it was all about the humans needs to secure our future or say our community. We always try to change our surrounding which leave our existence or our mark and set our influence on earth so we never get extinct .

So let's see a larger frame and observe human, what are we doing in todays world? We are just trying to make our surrounding more adaptable as per humans comfort either than adapting nature as other species.

Due to which the world has entered an era of consequences of global warming. Most of the increase in global temperatures since 1950 has been caused by human activities like burning of fossil fuels,removing forest and trees to make space for other land uses,etc. Which is also the cause for the fact that 2020 has been the warmest year till date. The global temperatures has raised this century to 2°C.

We either change or come together as a group to make a larger impact on this environment and who successfully make an impact are get to called as brands.

We today need to think of our steps which we take in different fields be it medical research, engineering or about any aspect of human development .

What I feel till date , we have the authorities which see the upcoming developments as a development of human lifestyle and how to give humans a more comfortable environment, Like the MSRDC had allowed the flattening of over 1500 mangrove trees for the construction of versova-bandra sea link,but now our aim should be more towards 'how to evolve or develop the environment which we have degraded in past and which will be a true development for all life's on earth.'

Some initiative has been taken by the European union leaders who have agreed for cutting the greenhouse gas emissions upto 55% by 2030.

If we refine such a development on a large scale we will soon see that major businesses will change and thus a new generation with a different mindset of evolving environment will be found rather than those who want humans to grow , and hence eventually this will give us a great generation gap .

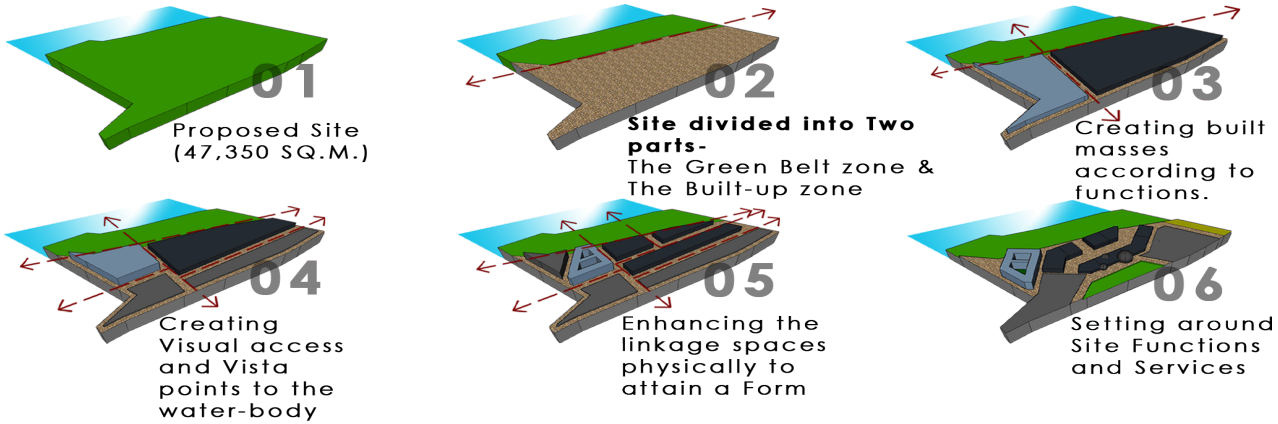
Digitial Knowledge Hub-Cum Experience Centre

- Ar. Chinmay Kamat

ABOUT THE PROJECT

Knowledge has always been such 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. Similarly, invention of Digital technologies like Print-media, Computers, Internet, Artificial intelligence, etc. which has proven to be essential achievements over time. However, Architecture in terms of the geometry, form, space, etc. has always played an integral part of the journey the whole time. Without architecture the essential experience of learning, may it be through an interactive workshop, or gamifying knowledge using such technology, or 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.

PROCESS

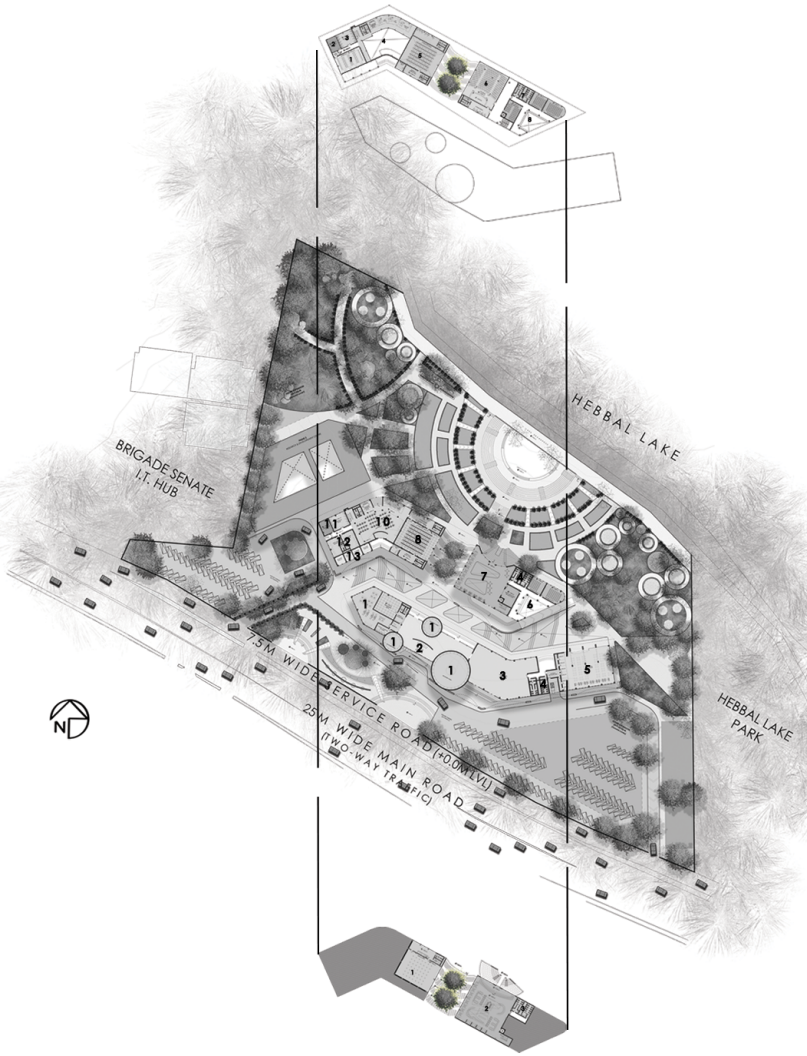


FUTURISTIC APPROACH

The Conceptual idea behind designing the project, is to have a Futuristic perspective when it comes to the amalgamation of Architecture and Technology, in order to optimize the Immersive experience of the user which can create the ease of learning.

01- Server Room
02- HVAC Room
03- Engineers' Office
04- Office Area
05- Hyper-reality Arena
06- Auditorium
07- Toilets
08- Teaching Facility

FIRST FLOOR PLAN

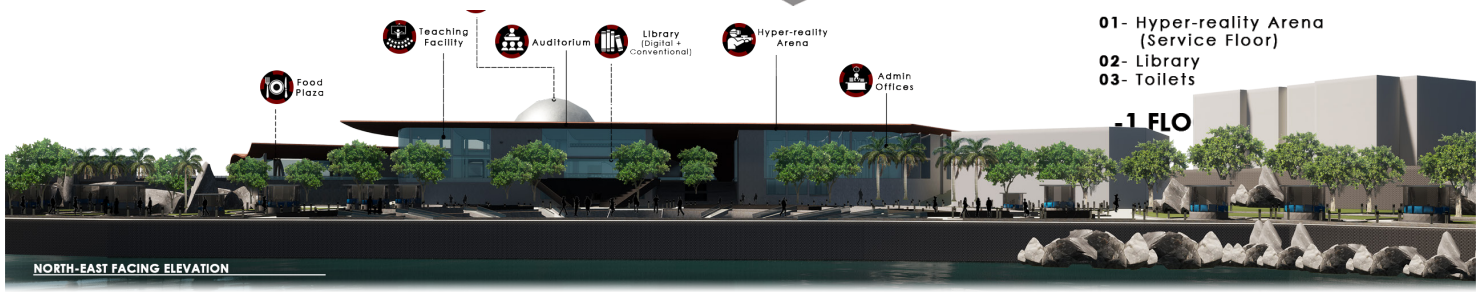


01- Virtual Reality Spaces
02- Enquiry Area
03- Expo/ Exhibition space
04- Toilets
05- Food Plaza
06- Teaching Facility
07- Library
08- Hyper-reality Arena
09- Office Area
10- Staff changing/ Locker room
11- HVAC Room
12- Souvenir Shops

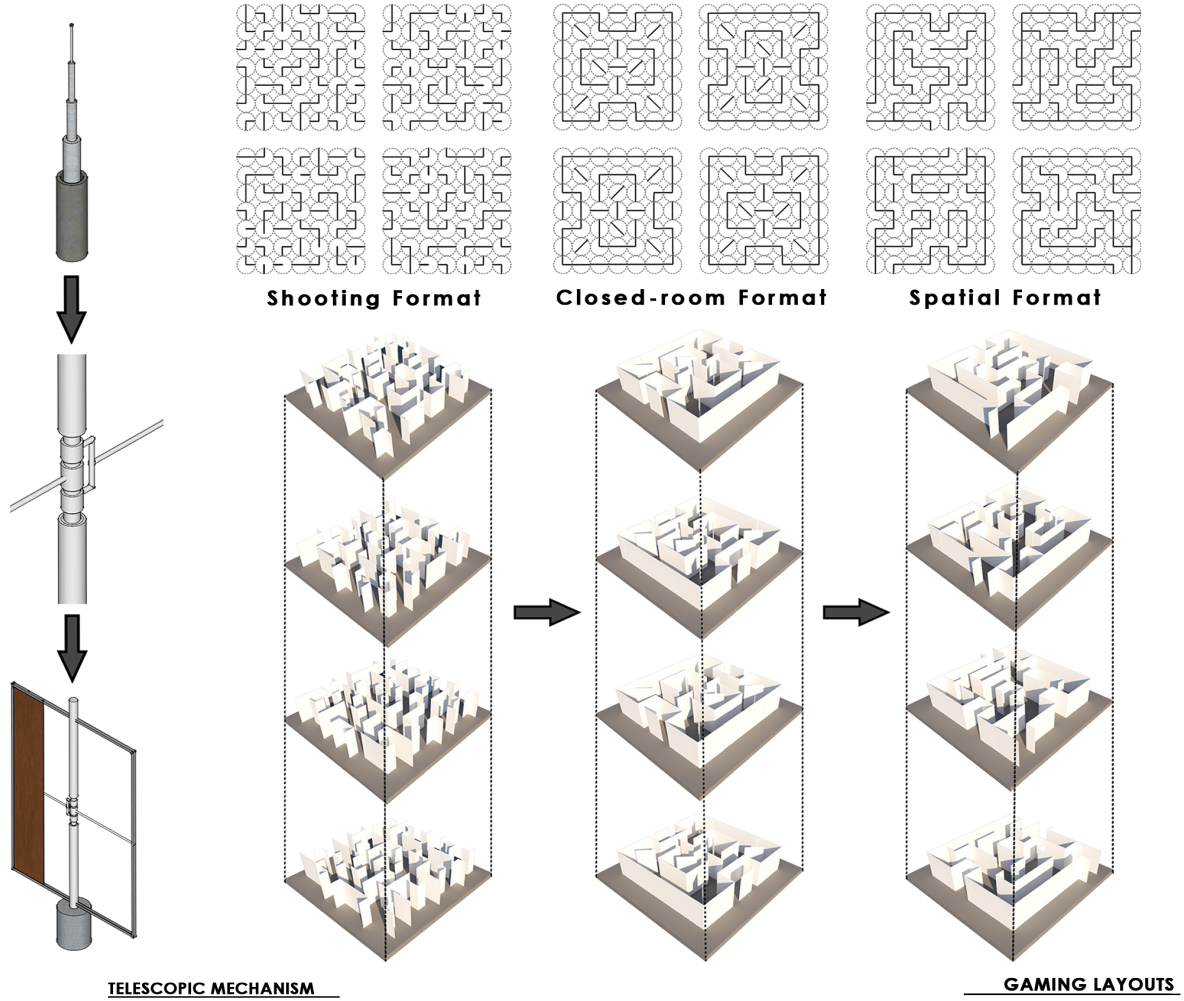
GROUND FLOOR PLAN

01- Hyper-reality Arena (Service Floor)
02- Library
03- Toilets

-1 FLO



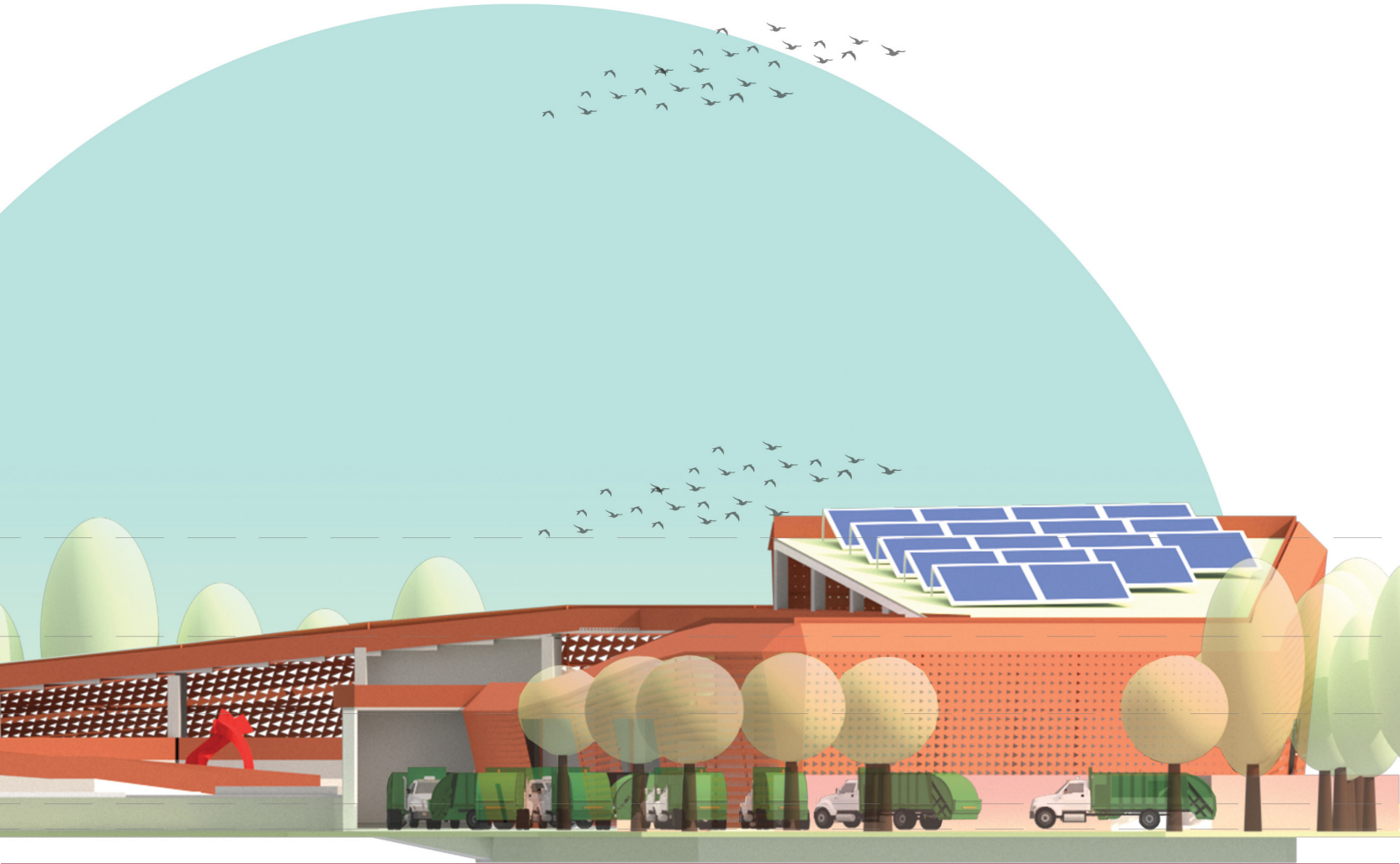
NORTH-EAST FACING ELEVATION



HYPER-REALITY ARENA FOR LEARNING

The gamification of learning is an educational approach to motivatestudents to learn by using video game design and game elements in learning environments. The goal is to maximize enjoyment andengagement through capturing the interest of learners and inspiring them to continue learning. The book "Theory of Fun" states that, gamifying enhances the ability to Recognize and Store visual information by creating patterns in the brain, in order to simply the information and register it in the brain for further processing.

Engaging the brain into quick Problem Analysis & Solving using Logistics, also known as, the ability of "Thinking on the toes". Helping the development of skills such as Multi-tasking, Decision making, Anticipation, Management, etc.



Waste Facility in an Urban Context

- Ar. Krutik Vapiwala

Introduction

This dissertation aims to target the benefits to positioning waste-treatment plants within urban environments. As designers we hold the key to making them more appealing, and thus welcome within communities. Such projects will expose the masses to new tools in the realm of technological and social correlations.

The idea is to engage with project stakeholders and point out key social concerns. Such treatment plants that area typically neglected, but can lead to new opportunities or help avoid problems that may manifest due to lack of awareness and sensitivity. Through the design, the idea is to address social and environmental dimensions, making them better with modern/technological solutions and innovative design. The design also aims to enhance and merge efficient waste-processing technologies with landscape design, recreation, and leisure. Certain aspects of waste treatment projects have much potential in correlating infrastructure with public spaces.

Existing Waste Management Facility

Waste segregation facility (Malad West).

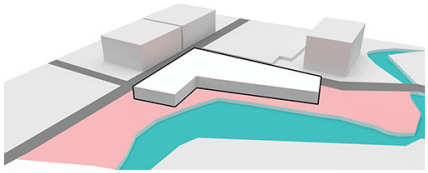
- Less than perfect working conditions.
- Run down structure.
- No storage areas.
- Not optimum usage of space.
- Not giving back to the community/ neighborhood.

Ideal Waste Management Facility

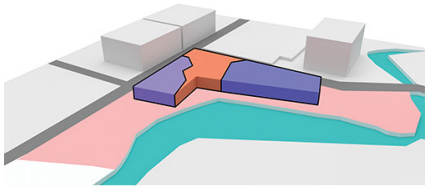
Seattle public, South Transfer station.

Seattle public utilities South Transfer station.

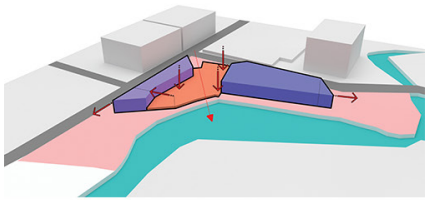
- Good working conditions.
- Well-designed structure with specified area for every function.
- Future proof with plenty of green spaces.
- Organizes awareness programs, school trips, etc.
- Gives back harvested rain water to the city.



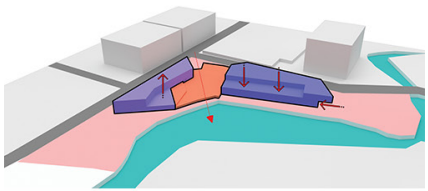
EXTRUDING THE BLOCK.



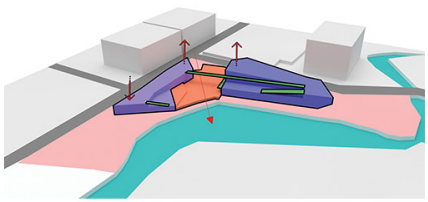
DIVIDING THE BLOCK INTO WASTE FACILITY, PUBLIC SPACES AND PLAZA.



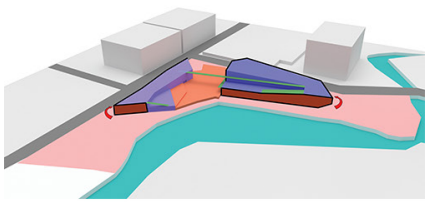
SHAPING THE BLOCKS AS PER SUN PATH AND WIND FLOW.



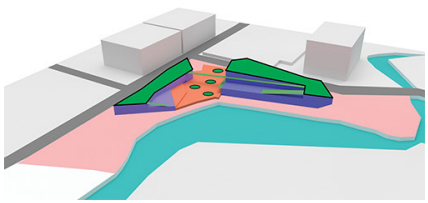
PLAZA WITH VIEW FROM THE STREET.



CHANGING HEIGHTS AS PER REQUIREMENTS OF MACHINES AND FUCNTIONS & CONNECTING VIA BRIDGE.



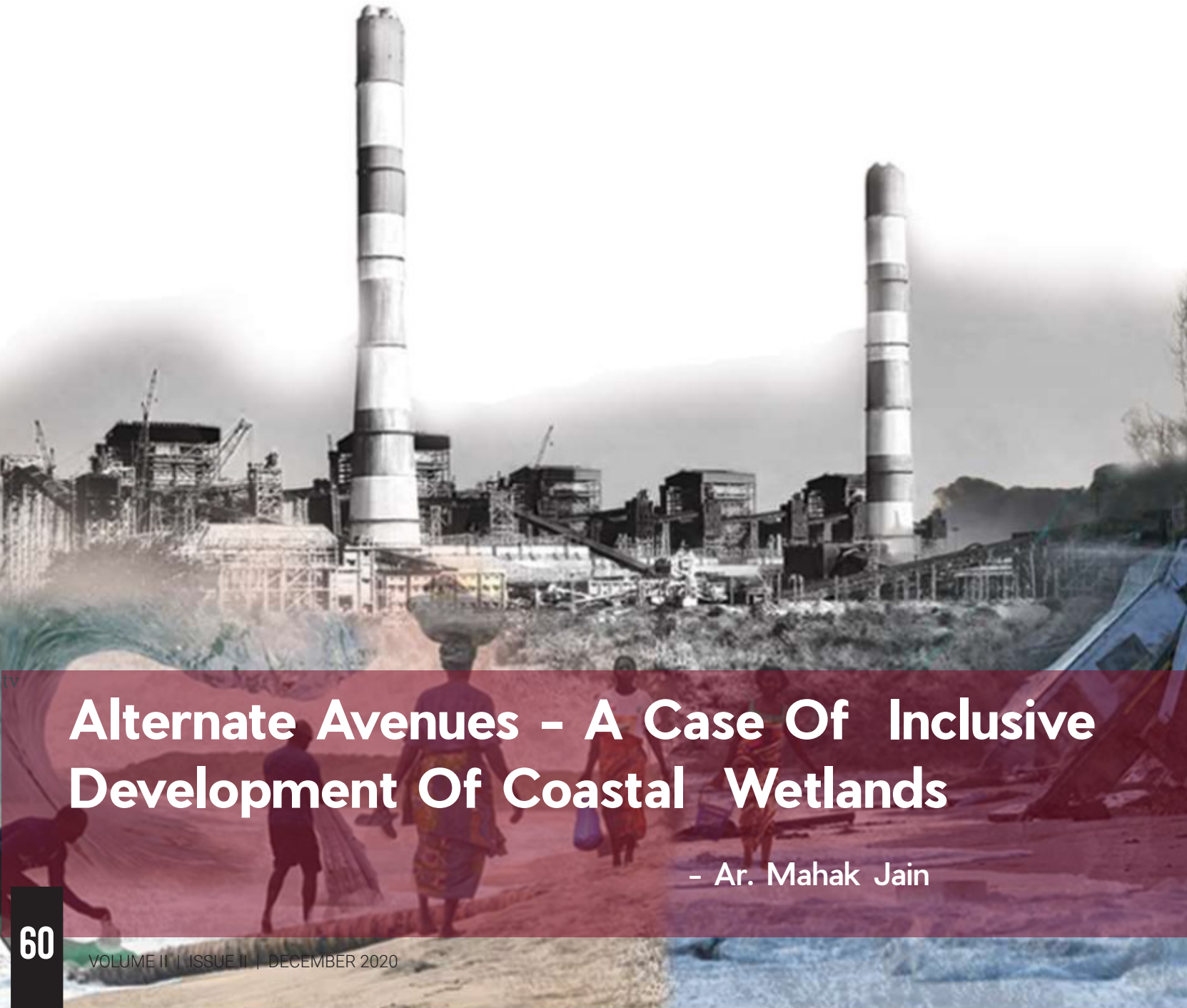
WRAPPING THE BUILDING IN A STEEL JAALI TO LET IN LIGHT AND WIND.



USING TERRACES AS ACCESSICBLE OPEN GREEN ROOFS.

Form Development & Form Option

- For designing a material recovery facility, it is of utmost importance to study the machine going to be used for the purpose.
- The form development began with studying the machine and various parts of it, so it can be used as an advantage for a more compact and aesthetic design, that is inviting to the masses
- Placing blocks with respect to function
- Started to derive some form that are more inviting, whilst taking into considering the light and shadows, blocking the harsh light from south and southwest sides and providing openings in the north façade.



Alternate Avenues – A Case Of Inclusive Development Of Coastal Wetlands

– Ar. Mahak Jain

In recent years lots of mangrove restoration programs are implemented but not considering the coastal communities have led to low success rate of these restoration. This thesis looks at mangrove management plans and issues leading to non-inclusiveness of coastal communities dependent on mangroves. Proposing eco-centric capacity building of coastal communities as well as creating awareness about the same.

To protect the coast from further exploitation Forest Department converted encroached mangroves of CRZ 1&2 to Mangrove Protected Areas. Over the years, coastal communities gave up their traditional livelihoods, shifted for employment but are still devoid of their forest rights due to access restrictions in MPAs. With increasing coastal development and improper benefits sharing in mangrove restoration, marginalized coastal communities lost their interests in restoration programs. Failing to understand that restoration would improve their lifestyle, communities are not willing to participate in the restoration until they are assured of their food and livelihood security.

My aim is to create a platform for capacity building of coastal communities dependent on mangroves. This intervention intends to resolve livelihood insecurity among coastal communities and create awareness about interdependence of coastal communities and wetlands forming a sustainable ecosystem.

With the help of Gujarat Ecology Commission, a survey was conducted understanding the benefits, issues faced due to mangrove restoration.
This survey helped in understanding that alternate livelihood of locals eventually became their primary source of income depriving them of their traditions and now they are even restricted to venture in mangroves because of access restrictions.
Two major gaps found were: Livelihood insecurity & Awareness about interdependence of coastal wetlands and communities.

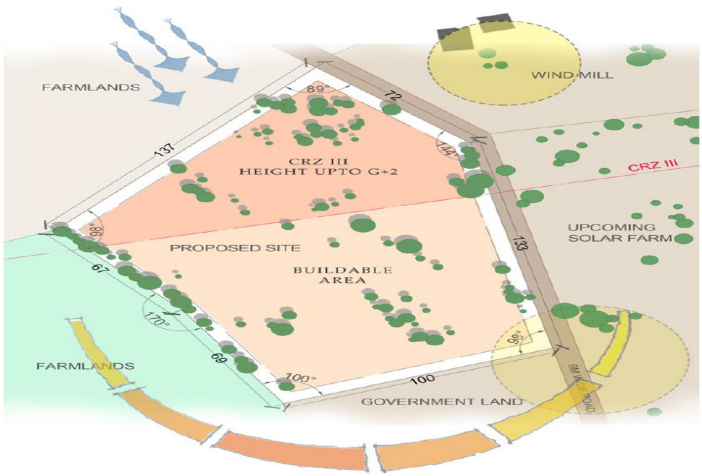
Gujarat

In Gulf of Khambat, ICZM is implemented by Gujarat Ecology Commission. Surveys are conducted regularly and one person elected by all villages act as mediator between them, helping them understand the importance of mangrove restoration. Though restoration is showing results here, inter state migration of Kharai camels from Kutch encroach their nurseries for food.
Mangroves of Gulf of Kutch are under Forest Department. Implementation of access restrictions have led to non-involvement of locals resulting in degradation of mangroves.

The site selected is in Gulf of Kutch as it shows major degradation and inter-state migration. Idea of having an prototype integrated built form over one particular coastal district with existing tourism will help in maximising awareness about the need of inclusive development along with restoration. Rajkot falls under Industrial tourism route hereby helping spread awareness in industrial sector too.

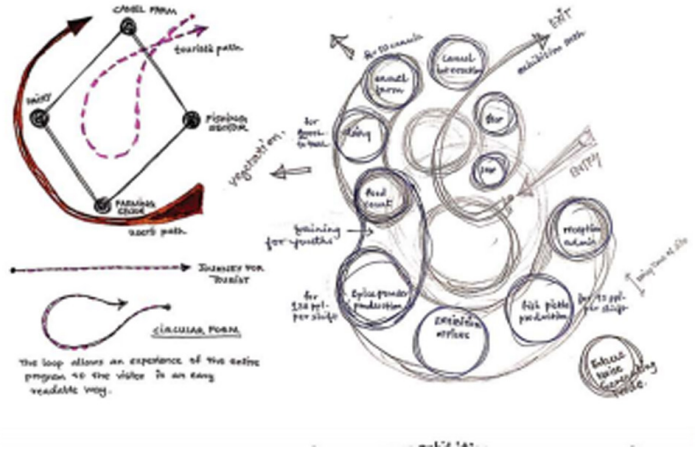
Site

The site study of these four villages show their present state of living, change of livelihood and unemployment. Varsamedi is full of migrants from Mundra, Lakhpat residing here since many years. Vavaniya being a birthplace of Shrimad Rajchandra is a religious pilgrimage drawing in more than 3000 people during Jain festivals.



Concept

The built form will cater to the needs and requirements of coastal communities as well as tourist people and help in establishing the otherwise least explored aspects of mangrove restoration. The key goal of this project is to make the proposal less formal, more eco-sensitive and fluid in its relationship with the context and its people.
Circular Planning allows an experience of the program to the visitors in an easy way. Sloping roof merges the building with its surrounding landscape. Natural backdrop is used for creating awareness about mangroves, living in harmony and development.



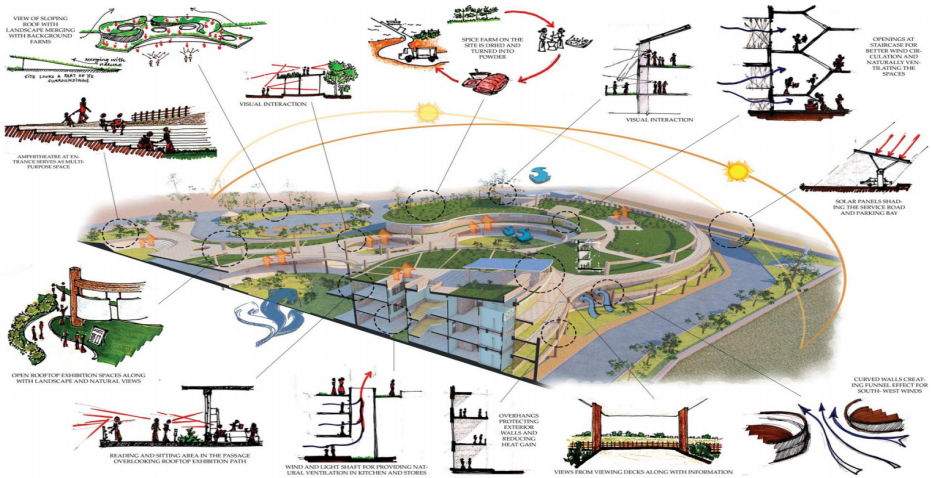
Planning

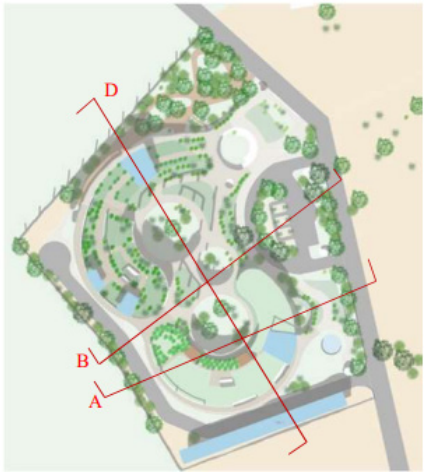
Separate entries for vehicular and pedestrians are designed. Service entry and Local user's entry is separate considering safety, privacy and peaceful wondering of users. These programs are placed on the southern and western side, acting as heat buffer for public spaces. The slope designed brings in east sun through the courtyards naturally lighting up the space. The openings, punctures direct the wind throughout the structure. Not using air conditioning strategies reduce air pollution.
As seen in nearby villages, each open space is used during festivals, social gatherings and playground for children. Similarly these sections show the multi-use of courtyards, amphitheatre and rooftop.

Preserving existing trees and growing native plants utilise less water and also protects structure from dust storms.

Solar and wind energy produced on site saves 41% of total required electricity. Camel farm and agricultural waste are used to produce bio-gas and manure. Manure is used in spice farm and bio-gas in kitchen. Sewage treatment plant is provided, which recycles 90% of flushing water. Groundwater is used for all functions not requiring filter water, thereby reducing water consumption.

Locally available materials are used for construction. The main structural construction type is RCC frame with isolated base bearings to make the structure earthquake resistant. Straw bale walls made out of agricultural waste and some walls are made through locally available bricks at a distance of 3km from site. The structure is finished with lime mortar to preserve it from saline winds. Crushed leftover of stones in quarry are used for pavements with lime mortar. Basalt trap rock is used as aggregate in roads. Bamboo railings cut down cost and preserves nearby trees, despite being at a distance of 200kms from the site.





The above sketch shows river side of a village, where some villagers are grazing their goats. Sitting area around the trees are where some villagers relax while their folk grazes.

The above sketch shows the street section near the temple. Due to lack of space for keeping animals, they usually sleep around the chowk.

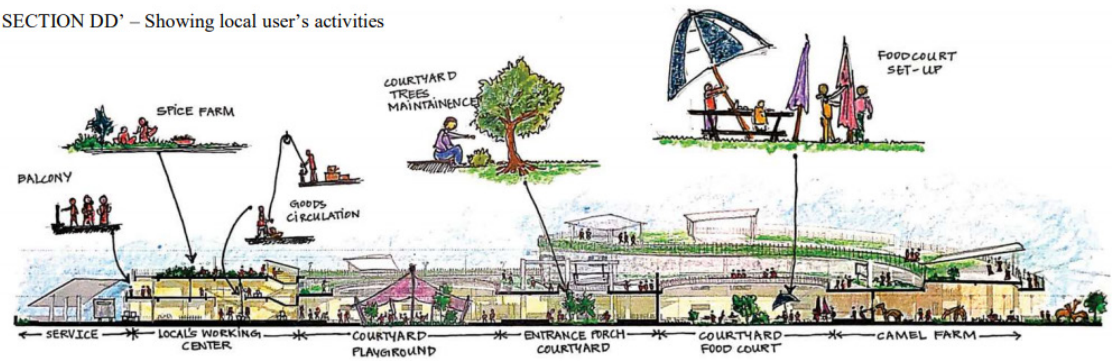
MULTI-USE SPACE
SCHOOL GROUND

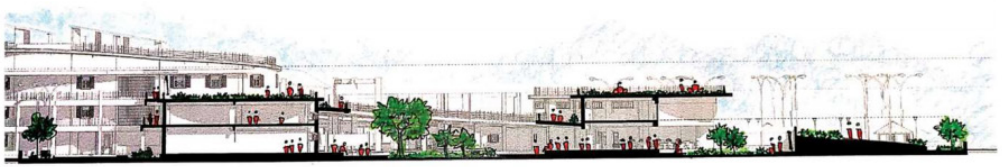
NORMAL DAYS- The ground is used by children for playing in the morning. Elders sit around the shelves created in compound walls.

WEEKENDS- The ground is used by adults for panchayat jilla meetings, often attended by trainers for alternate employment.

FESTIVE DAYS- The ground is decorated by all for celebrating festives together. At the time of festivals, schools suspend outdoor activities for

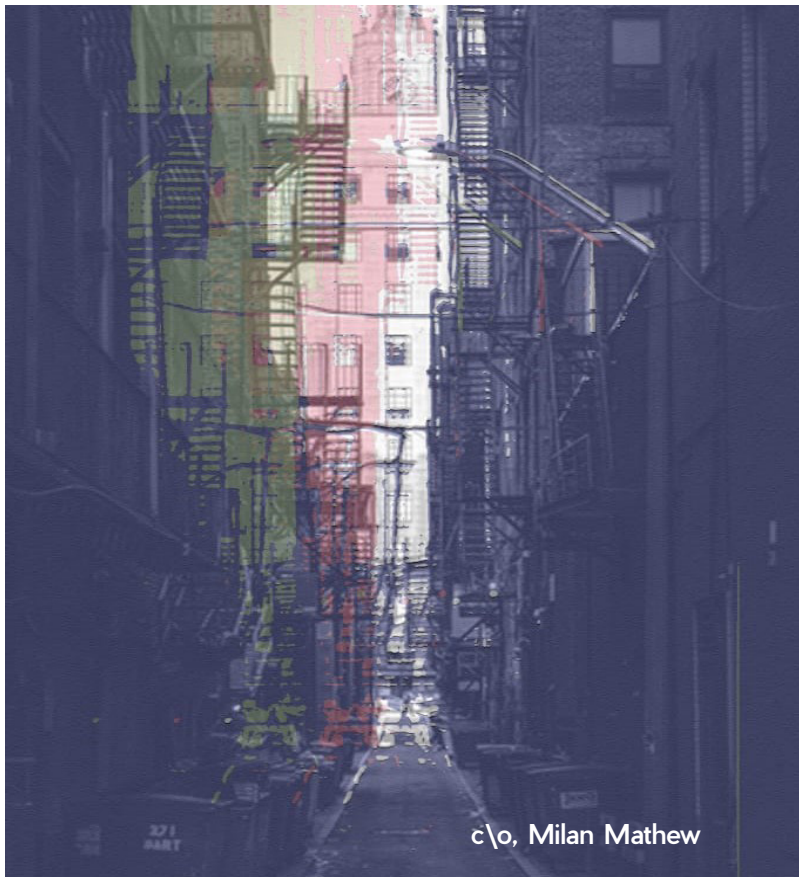
SECTION DD' – Showing local user's activities





SECTION AA'

SECTION BB'



LCA - Tools To Assess The Environmental Impact On Early-Stage Building Designs

Author : Ar. Urvashi Purohit, Assistant Professor; Ar. Varsha Swar, Assistant Professor; Ar. Jwalant Dave, Assistant Professor; Aditya College of Architecture, Mumbai.

The Life Cycle Assessment (LCA) is a cradle-to-grave or cradle-to-cradle analysis technique which is a method for calculating the environmental impact of a product or service. It addresses the growing concern about the direct and indirect environmental impact on the buildings during their lifetime. Design decisions opted during early stages of a building's design determine its environmental impact. However, architects need to make many decisions during these stages and typically lack insight on which decisions are most significant to such impact. As a result, architects often defer decisions to later stages of the design process. Life-cycle assessment (LCA) can be used to enable better early stage decision-making by providing feedback on the environmental impacts of design choices. This paper presents a case study for applying LCA to early stage decision-making to take informed decisions on the environmental impact of the design. The study will entail the parallel assessment of a standard dwelling unit constructed using local materials & a framed RCC structure, within hot & dry climatic zone. Sample study is located in Jodhpur, Rajasthan. The research indicates that the inclusion of LCA assessment can aid in the building design process by highlighting those early stage decisions that have significant impact on environment.


c\o, Kriti Patra

Sustainable Living Through Traditional Practices

Author : Ar. Gayatri Sorte, Assistant Professor; Aditya College of Architecture, Mumbai

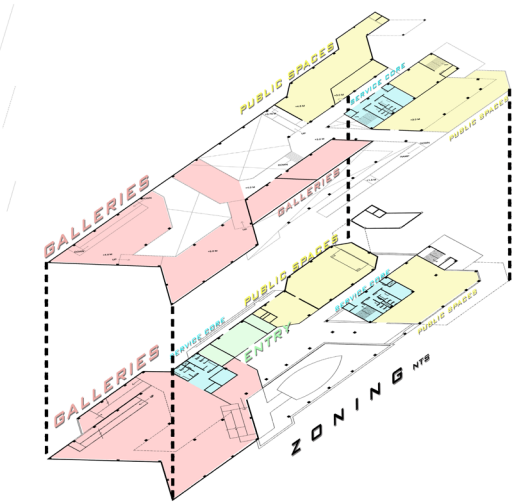
The impacts of urbanization are reflected on our aspirations, land cover, lifestyle (clothing and food) natural habitats, biodiversity and the ecosystem services that hold up human well-being. People from a small village named Hateri in Jawhar live a sustainable lifestyle. Since they are intrinsically dependent on the forest for their livelihood, they have an inherent respect for the forest and do not treat it only as a natural resource but recognize the larger local environment as a biologically diverse habitat shared by various species including human beings and even revere it as a higher spiritual entity that cares and provides. For example, the vernacular housing technologies adopted and still practiced by the communities in Hateri lead to very less or almost no carbon footprint. Furthermore, their consumption patterns are also cyclical and replenish the natural resources that are extracted from the environment that is their immediate surrounding and lies within a proximity of not more than 10 kms. The extent of extraction is also need driven and not greed driven. The purpose of this paper is to explore the relevance of their sustainable lifestyle as a model of traditional systems of resource management that demonstrate sustainable existence that can be adopted for other rural and urban communities

Maritime Museum : A Conceptual Approach

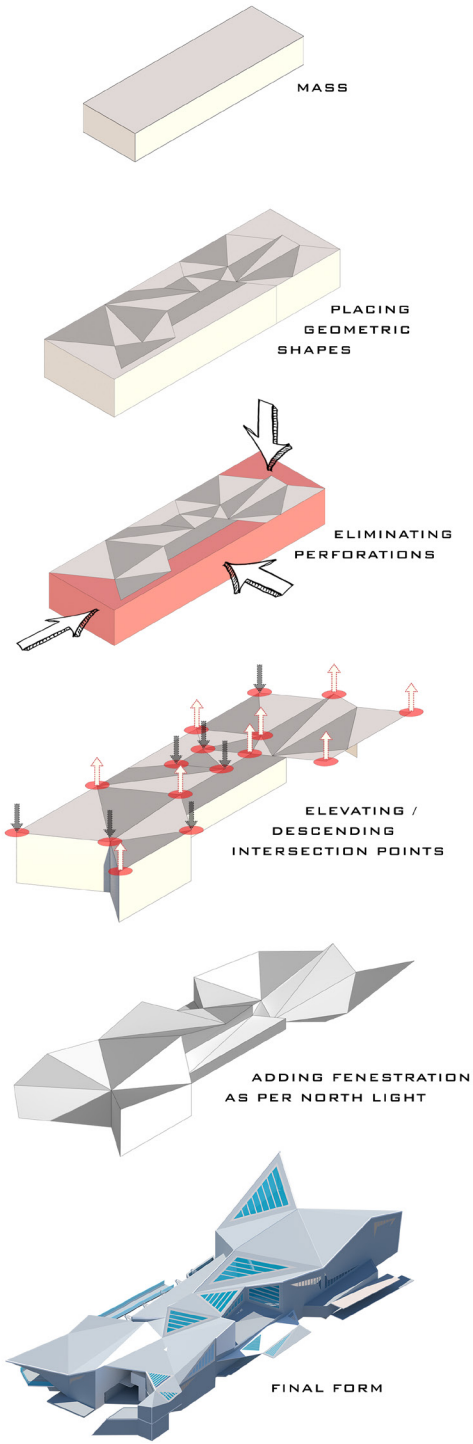
-Yaksh Rathod

CONCEPTUATION

Architecture is about how well each space and light is organised. It talks about how much impact a simple plane can make when it is orientated in a certain angle and how it improves the quality of the space. Of course design is subjective. It is the power of the organisation and disorganisation of such planes that gives it a perspective or a direction to travel and feel the built spaces. Maritime museum work on the same lines of unorganised, yet organised.



The form is derived from the water ripples, later it is evolved from the curved form to the edgey form. Zoning is divided into two main circuits, the service area and the main gallery.The openings are dealt with such a way that more of natural light is allowed to enter the structure.
As north lights are the best which transmits lowest heat. Therefore the openings are faced in the north, which will prevent the interior of the structre to get heated. So the structure is also environment friendly in that case.



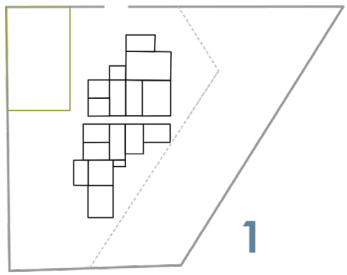
Maritime Museum : A Conceptual Approach

-Rahul Parmar

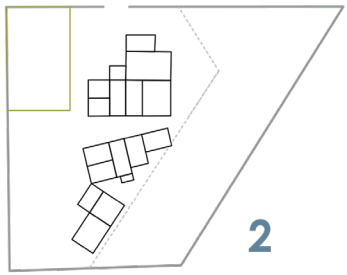
Conceptuation

The design of Maritime museum is given a touch of postmodern architecture which is characterized by unusual form and distortion. It also incorporates interlocking forms creating a vivid structure. The external form integrates the interior with interactive floor levels. Centrally divided axis creates a passage within the structure towards the plaza. It is organised in such a way that it provides maximum pleasure to the users.

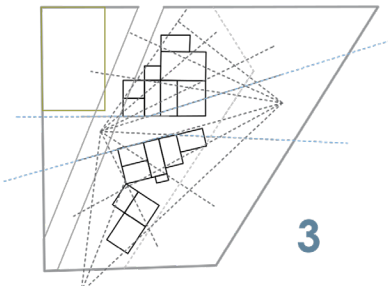
Form Development



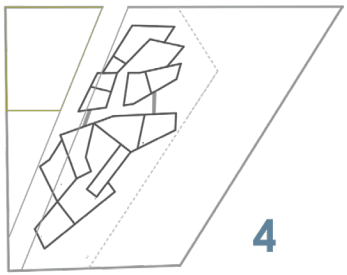
To create a layout with the concept of connections of various rooms with the necessary zoning requirements.



Modifying the layout further to incorporated a wide entrance and creating a tilt to allow for ground entrance.



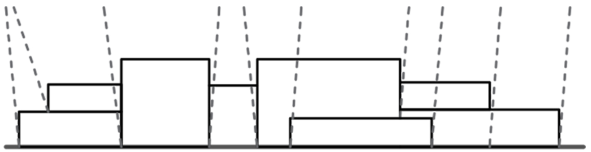
Creating a geometry from the centre lines extracted from the room layouts.

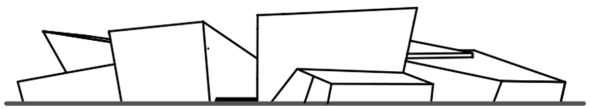


Further intersecting all the layers of the services with the geometry of the rooms.

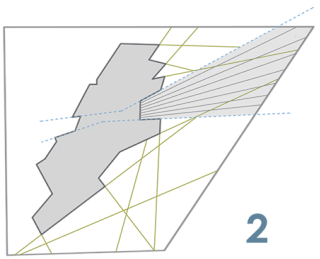
Elevation Development

Modifying the elevation from a simple form to giving it a deconstructive touch , it enhances the structure and gives a visual appearance of interesting layers and form to ones eye.





Elongating the peripheral edges which form the profile of the building to create a geometry of



To create the importance of the plaza, the path extruding from the exit of museum has been used as a central focus.

These geometrical lines have further been extended creating a deck space.

The intersections created by these lines allows to create various spaces together combines to form a landscaped plaza.

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