INTRODUCING

Volume II of Student Magazine

F.Y.I

Fathom | Yearn | Innovate

Literature Team

ADITYA
COLLEGE OF ARCHITECTURE
ACA
MUMBAI - INDIA
ISO 9001-2015 CERTIFIED

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RESILIENCE
REPURPOSE
READAPTATION

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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.

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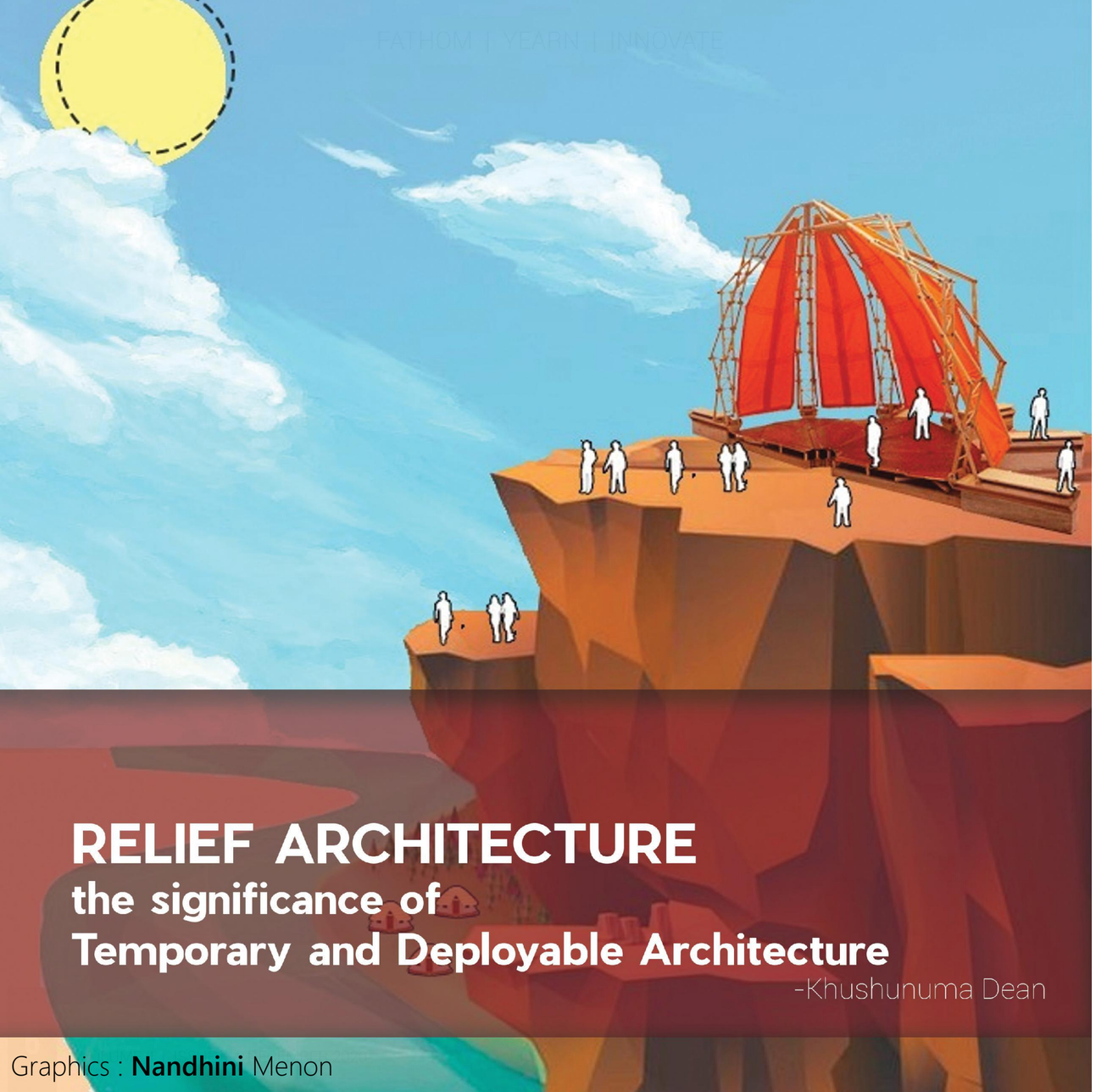
PREFACE

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.

RESILIENCE
REPURPOSE
READPATATION

IN THIS ISSUE



RELIEF ARCHITECTURE

the significance of Temporary and Deployable Architecture

-Khushunuma Dean

Graphics : **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*
- *Empower the community*
- *To teach the local communities the architecture*

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.

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.

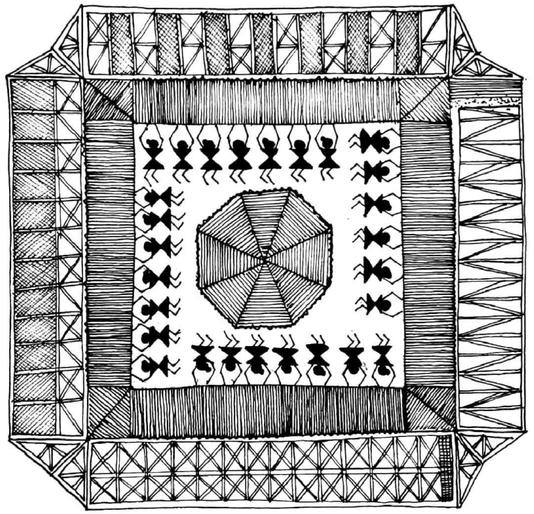
The Hex House prototype is customizable, with base interior finishes which can stand alone or can be combined for larger dwellings or communal clusters and be occupied for 20 years with sustainable techniques. Yasmeen Lari, Pakistan's first woman architect uses vernacular building techniques emphasizing 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.

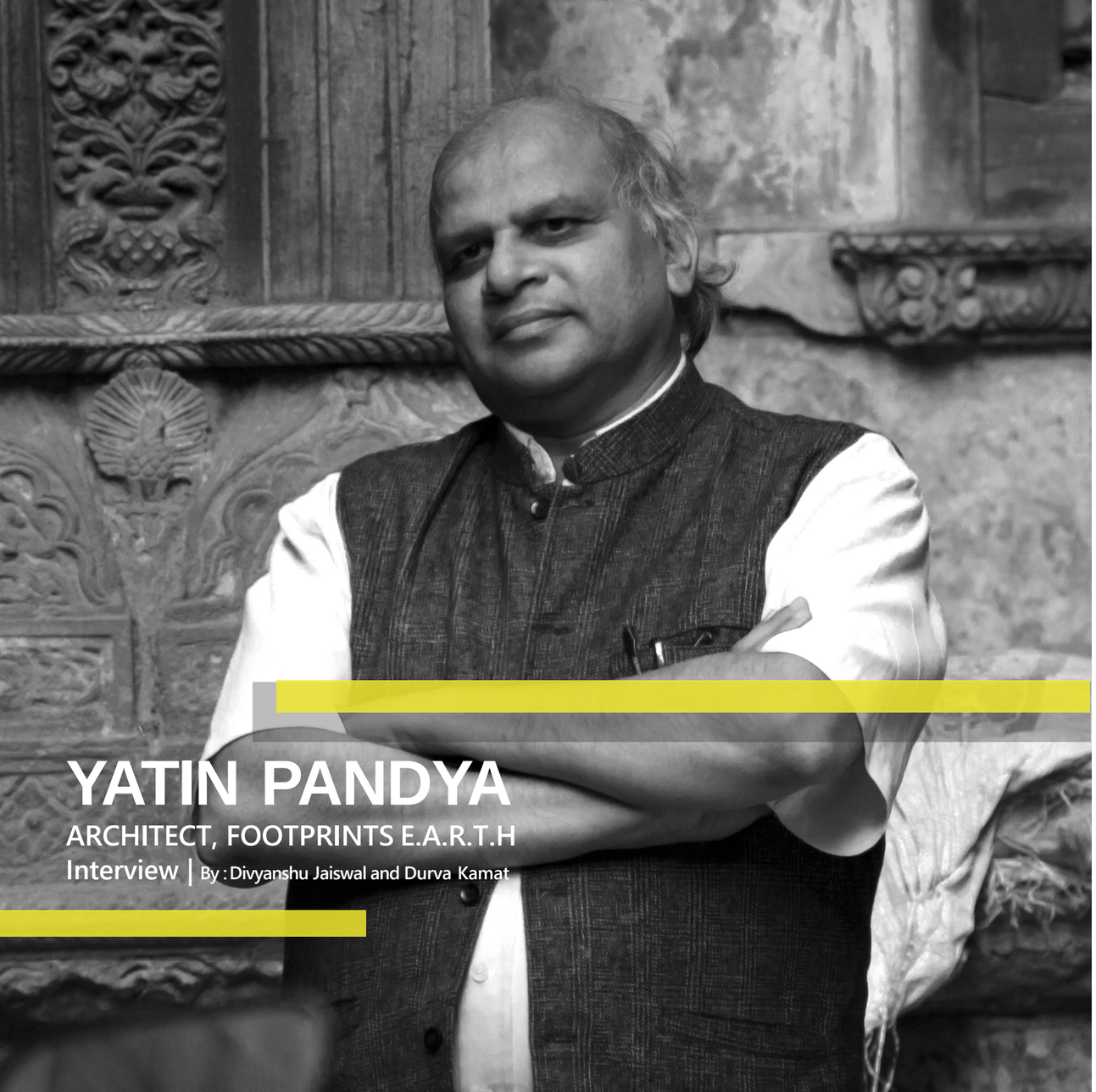
Through adaptability, prefabrication, optimization, rapidity, re- and up-cycling, as well as "updatability", Adapta is a spatial protocol based on resilience, creating a spatial solution that can be applied anywhere in the world, and in a matter of seconds, reducing the overhead of the human design process 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.



Graphics : **Kriti** Patra

Graphics : **Divya** Heda

c\o. DIya Heda



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 agreeable 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.

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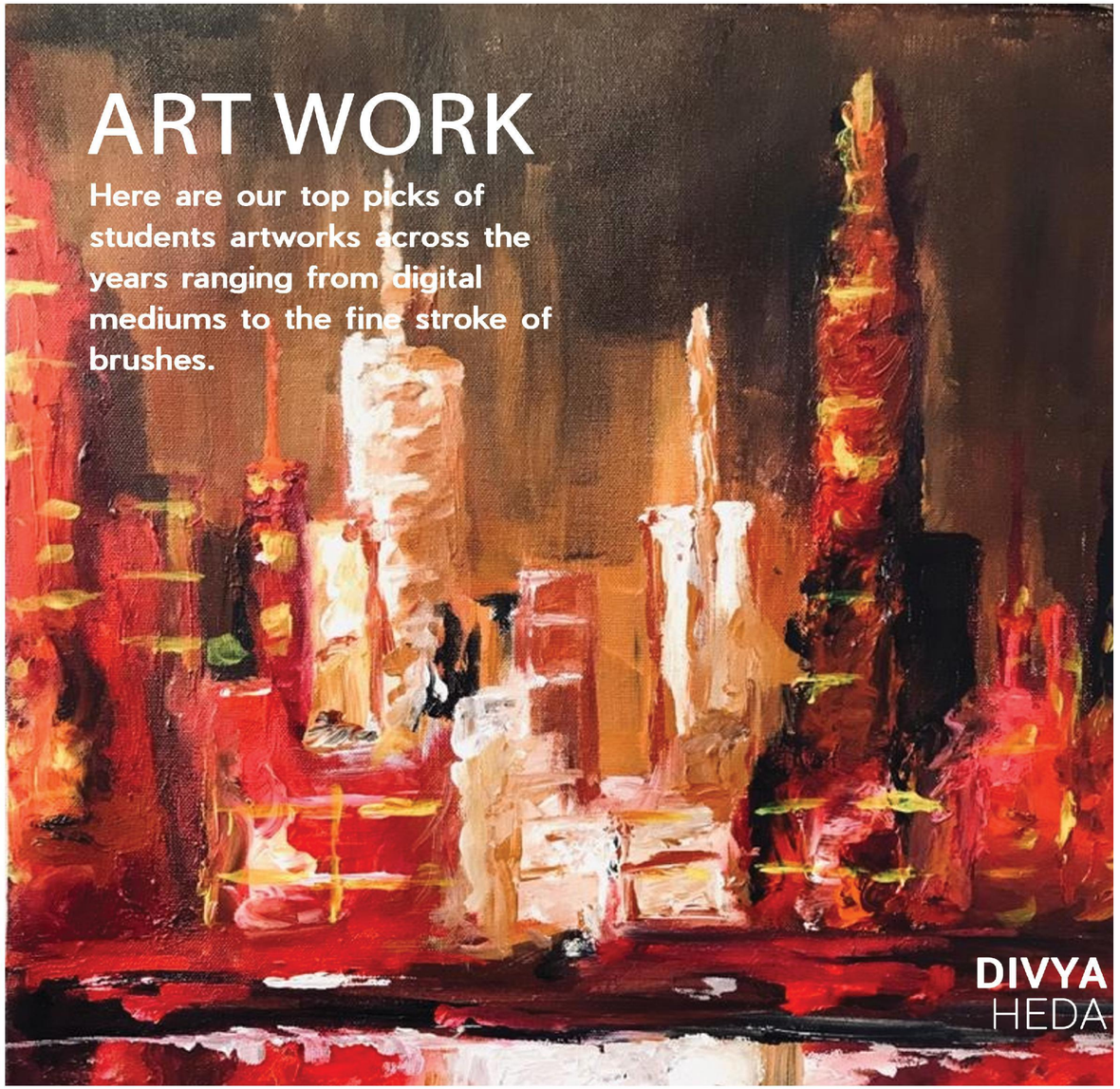
ART WORK

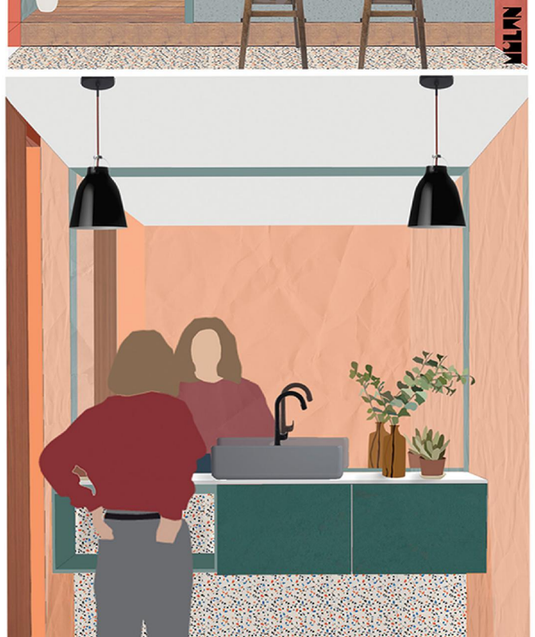
Here are our top picks of students artworks across the years ranging from digital mediums to the fine stroke of brushes.



DIVYA
HEDA

Law & Anarchy

MILAN
MATHEW



Melancholy pastels

MILAN
MATHEW

love within boundaries

Is this the reel life?
Is this just fantasy?

VIRAJ
PADHIYAR

Intentional strokes

MRUNMAYEE
MAYEKAR

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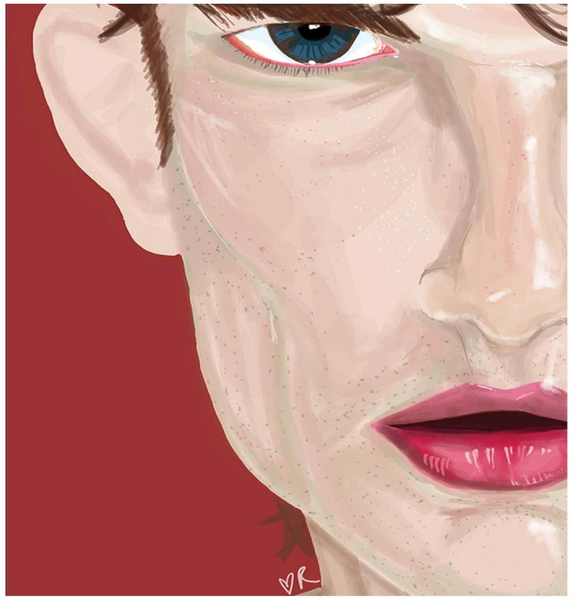


RHEA
KURAIN

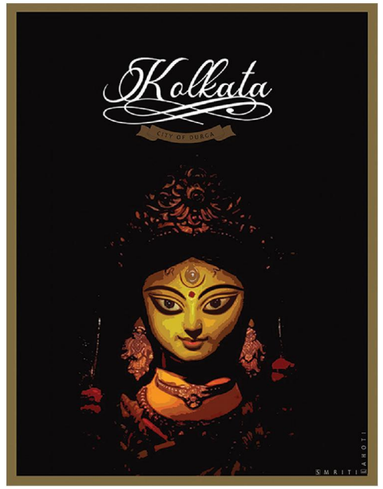
Fazed Faces

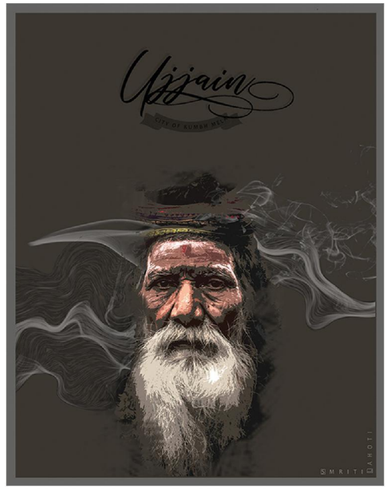


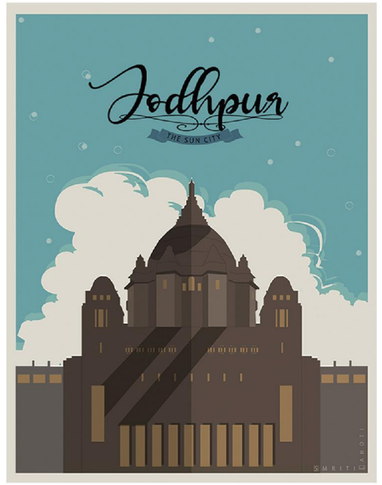


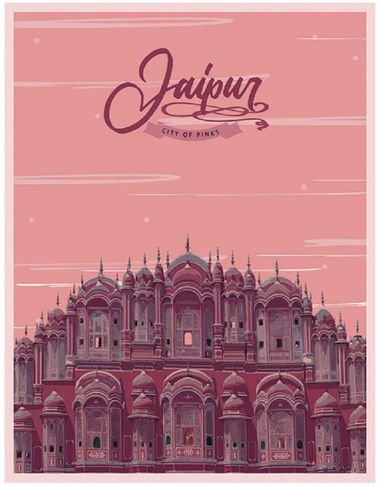

A glimpse of nature

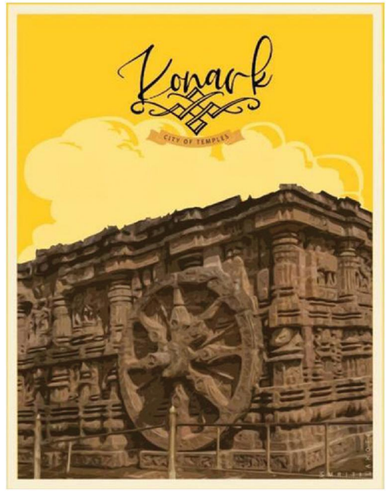
MITSU DALAL









Through a cultural lens

SMRITI LAHOTI

Live in colour

RUTVIJ MUNAGEKAR

NANDINI MENON

Quarantine insanity

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Thank you,

ACA, principal, mentors,
alumni, & friends

FYI – Fathom | Yearn | Innovate

Volume II

STUDENT TEAM

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Kriti Patra - layout and graphics
Nandhini Menon – editing and graphics
Vedanti Mandalia - transcripts
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Mrunmayee Mayekar – creative ideas

Cover page : **Milan** Mathew