

# 2021 RIBA International Students Competition

## Reimagining Cities and Towns post-COVID





# Middle East & Africa Region

RCTMEA2



# CASCADING PLANES

Accessibility, health, walkability, safety, multifunction, permeability, infiltration, learning, micro-mobility, light to the city **RCTM EA2**

**Issue:** Since the outbreak of the COVID-19 pandemic, people all over the world have been grappling with a lack of interaction and a sense of isolation. Some people tried to make up for this by spending more time in public venues in their neighborhoods. In Egypt, hard structural developments are taking place. To mitigate an ever-increasing traffic problem in many cities, new flyovers are being built and/or existing roadways are being widened. However, inhabitants have become disconnected from their neighborhoods because of these developments, as roads have taken the place of sidewalks, resulting in increased noise, traffic, and solar radiation. Consequently, many residents have felt estranged from their surroundings.



Existing street

**Goal:** We propose the alteration of this now existing system by reconfiguring and weaving it into the new flyover, highway and new business activities. We start by diverting cars to underground tunnels at the junction of the newly constructed flyover for a safer environment for pedestrians. Afterward, we created open, well-ventilated, and safe outdoor areas for activities by utilizing rooftop, vacant flat urban balconies, elevated walkways, and walkways and parking areas. We also created green spaces and outdoor venues on street level and beneath the bridge. We also invited green spaces and outdoor venues on street level and beneath the bridge. We also invited green spaces and outdoor venues on street level and beneath the bridge. We also invited green spaces and outdoor venues on street level and beneath the bridge.



Directly call to existing road block



Intervening outdoor areas with indoor interventions



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Cascading planes on different levels for different activities



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Making use of vacant flats in buildings, empty plots and underground parking



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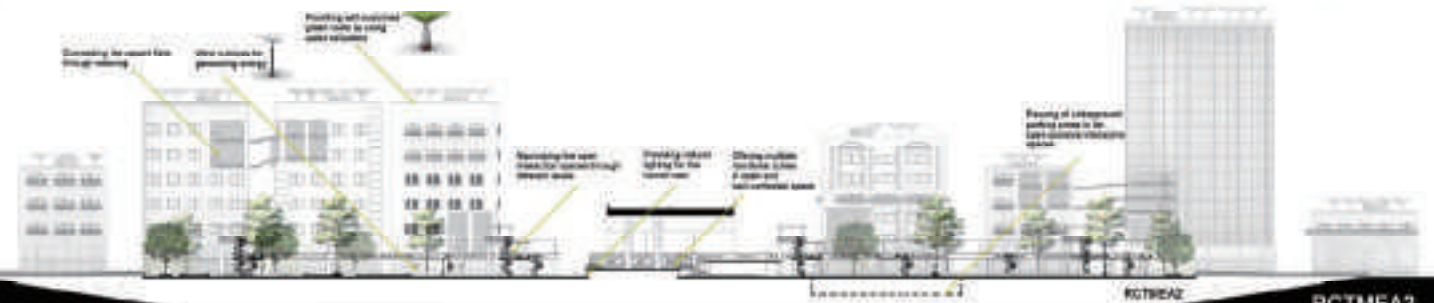


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Street level activities linking users to their neighborhood



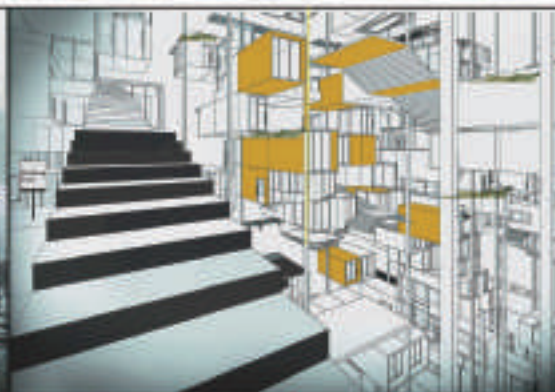
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RCTMEA4







# RCTAM4

Metamorphic City



Our lives in the recent years have been upended over. As we look henceforward some of us started to experience a call back into our workplaces, doubtlessly life as we knew will never be the same. While some people speculate "Do we even need cities?.. How will cities differ if we continue to live in this digital era that grew after the pandemic?"

Managing to cope with the existing situation, he packed his essentials heading to the "Metamorphic city" he heard about. Even in one of the hardest periods of human life, he is trying to fight his social-isolation wondering if the robotically controlled life is the answer to our problem or, do we seek the human interaction?

He finally arrived at a clearing for the first time he saw the huge metamorphic structure, a third-place city where there is a balance between physically and remote-working, that summates into a new hybrid model "The metamorphic city". A message appeared on one of the digital billboards "Customize your own third place". He instantly downloaded the app and started to preorder his unit. Using one of the moving docking platforms, he reached his unit where he started to figure out that everything he needs can be reached through delivery elevators, "I've got all I need" he whispered.

A city that embraces each individual's independence and activity. Each individual can customize the space to fulfill the functions needed. Also, these units meet with the neighbor's space and can be opened, as walls can be dismantled.

Although they cannot physically contact each other, they experience a 'cognitive sharing' that we are in one space doing the same activity together through 'indirect' contact using all five senses.

"Now both ends meet a city where there is a balance between physical and remote working"....

RCTMEA6

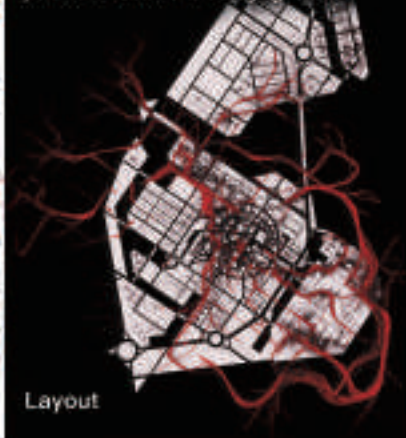
RCTMEA6

# THE DISRUPTIVE RHYTHM

*A Prototype Port City*



Can architecture evolve and interchange life in the future? It is a rhetorical question that captivates everyone's attention. Since COVID\_19, the world deglobalized the integration of nations and began to adapt to the new normal. Globally, the pandemic disrupted the movement of people, goods, and capital. As a result, the cancellation of exports decreased the global supply chain. Although, the world was trying hard to thrive and overcome this crisis, challenges were encountered. The universal Lockdown and quarantine blocked the flow of goods between countries, leading to a financial crisis. However, due to innovative technology, architecture ramified and supplied the world through interconnected infinite pipes. Today in 2090, the world is lacking barriers and joined through a nervous system of loops. The system fully operates the global supply chain process. Firstly, it delivers raw materials to factories, then to markets, and lastly to households. This technology modernized the way of living and advanced the transportation and exchange of goods. Consequently, this system evaded the world from facing the phenomena of disengagement.



Layout





RCTMEA8

RCTMEAS

# INFORMALITY TO URBANITY A MARKET RENOVATION

ENTERTAINING  
PEDESTRIAN BRIDGE

GREENER ENVIRONMENT

BETTER ACCESSIBILITY

IMPROVED AIR QUALITY

TOKTOK LANES

BIKE LANES

UNCONDENSED WALKWAY

UNPOLLUTED ENVIRONMENT

SAFER MARKET EXPERIENCE

GATHERING AREA

BREATHABLE WALKWAY

ECONOMIC DIVERSITY





# RCTAM8

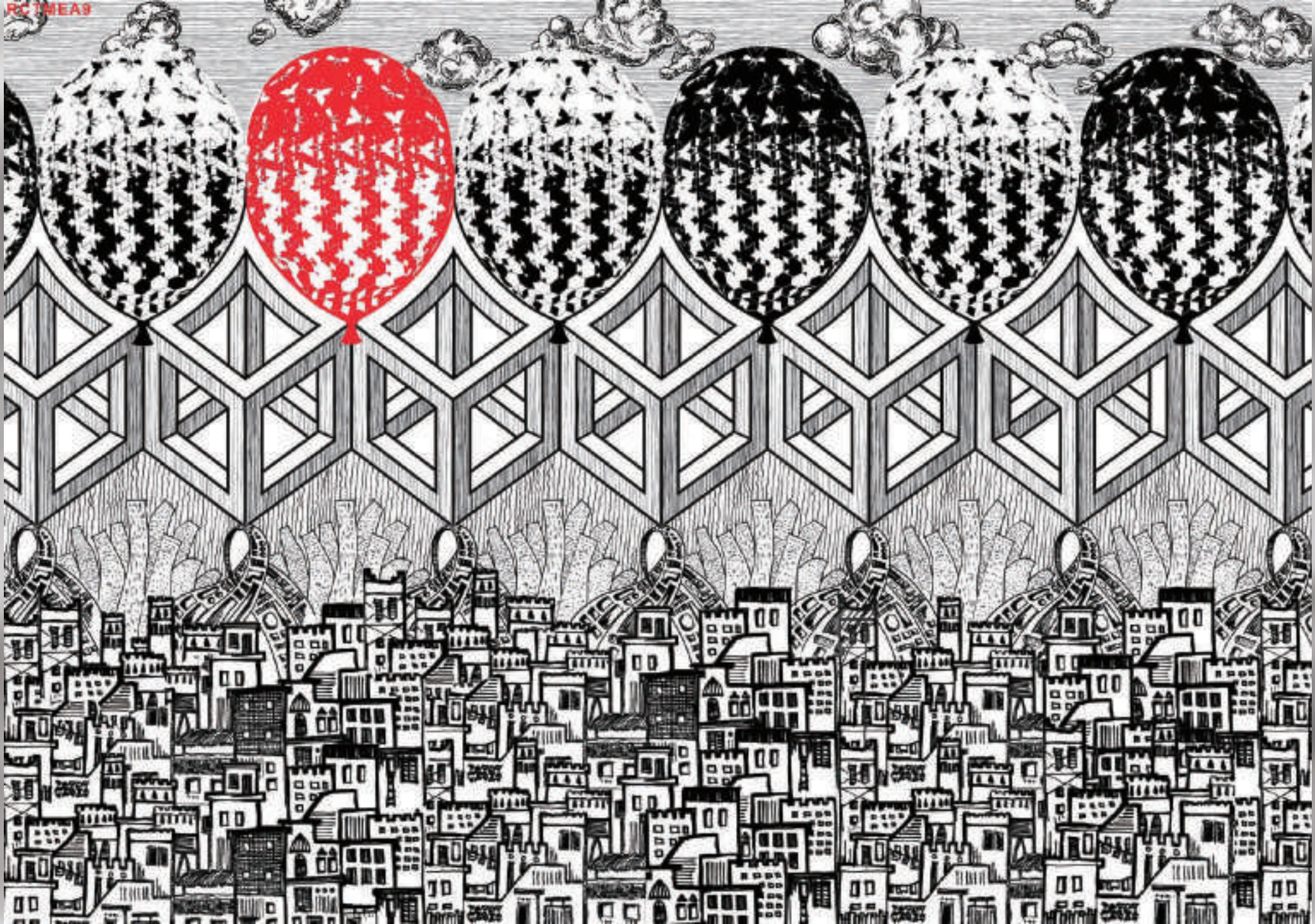
## Informality to Urbanity A market renovation

So often do people become accustomed to their toxic and disorderly environments, yet their habituation doesn't render them deserving of such living quality. Mandara market is as rowdy, but is this unruly liveliness a collateral beauty, or is it mere chaos? With the spread of Covid-19, cities stopped working. But that wasn't the case with urban informalities. Our choice to redesign an informal market, Souq El-Mandara, was due to its vulnerability and feasibility in disease transmission. This proposal presents an enhanced and distributed rearrangement of the open air market while preserving its character. The users' movement was studied and regulated, an allowable 16% of the original market's area was paved for tuktoks and bikes, and underground dustbins were installed to further decrease bacteria growth. Contrary to its prior state, wet and dry areas were separated by adding gathering zones that allowed controlled communication, and served as an accessible entrance and exit. The vegetable and fruit kiosks were designed in a pentagon shaped module that was repeated through the length of the market with colorful umbrellas inspired from the market's vibrant character. The kiosks, designed effectively to allow suitable spacing between buyers gave space to storage units below the displayed goods, exploiting 44% of the average display area. For better accessibility, movable display units were made available for the elderly and sick. Also, exploiting the train beside the market facilitated transport of goods, while adjacent stores were transferred to the enhanced pedestrian bridge for better train safety precautions. This revived the pedestrian bridge and served as a more entertaining waiting station. As for the commercials in the ground floor of neighboring buildings, an extra open air display area was provided to maintain a safer, less compact environment, as well as cypress trees were added to further purify the air.



RCTMEA9







# RCTAM9

Title: The reveling city

The death of our cities, our urban jungles as we know it, has taken a step back, people surviving in isolation, both physically and mentally. In this time of madness, we need to take a pause to recover. Throughout time cities have been shaped by people, people who share differences, create experiences, and make a difference. These spaces that we call a city is a result of an organic growth, strengthened by the foundation of the past. Paying homage to these influential spaces helps us create a better tomorrow where the past, the present and the future can co-exist in harmony while retaining the values and culture of the people. Celebration has always brought people together, giving them a stage to celebrate life. Over the years, the faces of the cities, the facades, streets and how they interact have evolved, maybe for the worse. Outbreak of the Covid-19 pandemic has left cities in a scramble. Chaos and fear massively impacted urban collectives and the masses. Cities have been rattled to their cores, with the existing infrastructure and systems being put through loads they were not designed for, overloading the system, causing it to fail in certain cases. Throughout these events, a constant life-raft for people are their celebratory moments, in the form of traditional rituals and events. The medium in which these events take place may have shifted to a digital realm, but their essence reserved. The balloons that uplift the new cities, are a symbol of the people and their celebrations transforming spaces into places, spaces that become an event, an event that celebrates life. The boxes, structures that symbolize the city warp and evolve with these events. These cities give back to the people, bringing them together for the better. We dream of a city that becomes a canvas that expresses the colors and textures of those who live within.



RCTMEA10





# RCTAM10

Future offices: bringing the outdoors in.

There is no doubt that Pandemic Covid-19 effect directly on our daily life. The effects of Covid-19 are not only on our home, transports, restaurants and public places but also on our works that's because the design of the building isn't designed on spacing. There are also many closed places.... etc.. The administrative buildings are generally based on HVAC System for ventilation also it is depended on finger print for entering and leaving. The employee come and sit in groups as a team work to achieve the best results. There is no safe distance between them and it is against the situation of Pandemic which we pass now a days. However, In Pandemic Covid-19 there are constructed different rules for designing building .They discovered that works through Working remotely is not the best solutions for example we can use sensor for fingerprints as a substitute of figure prints and UVGI&DOAS for filter ,insulation in terminal units and natural ventilation. We can also rearrange the positions of the offices to make safe distances within persons or put screen between them. The space for each person becomes 61 per meter instead of 20per meter. Also, the way of entrance is different from the way of Exit. In the end, Sometimes When Any Pandemic such Covid-19 appears, the world takes shocks to relive again the system of works because there are a lot of challenges after and before the Pandemic. They will be concentrated on open area, biophilic design, natural light and natural ventilation to let the environment without Pandemic.



RCTMEA11





# RCTAM11

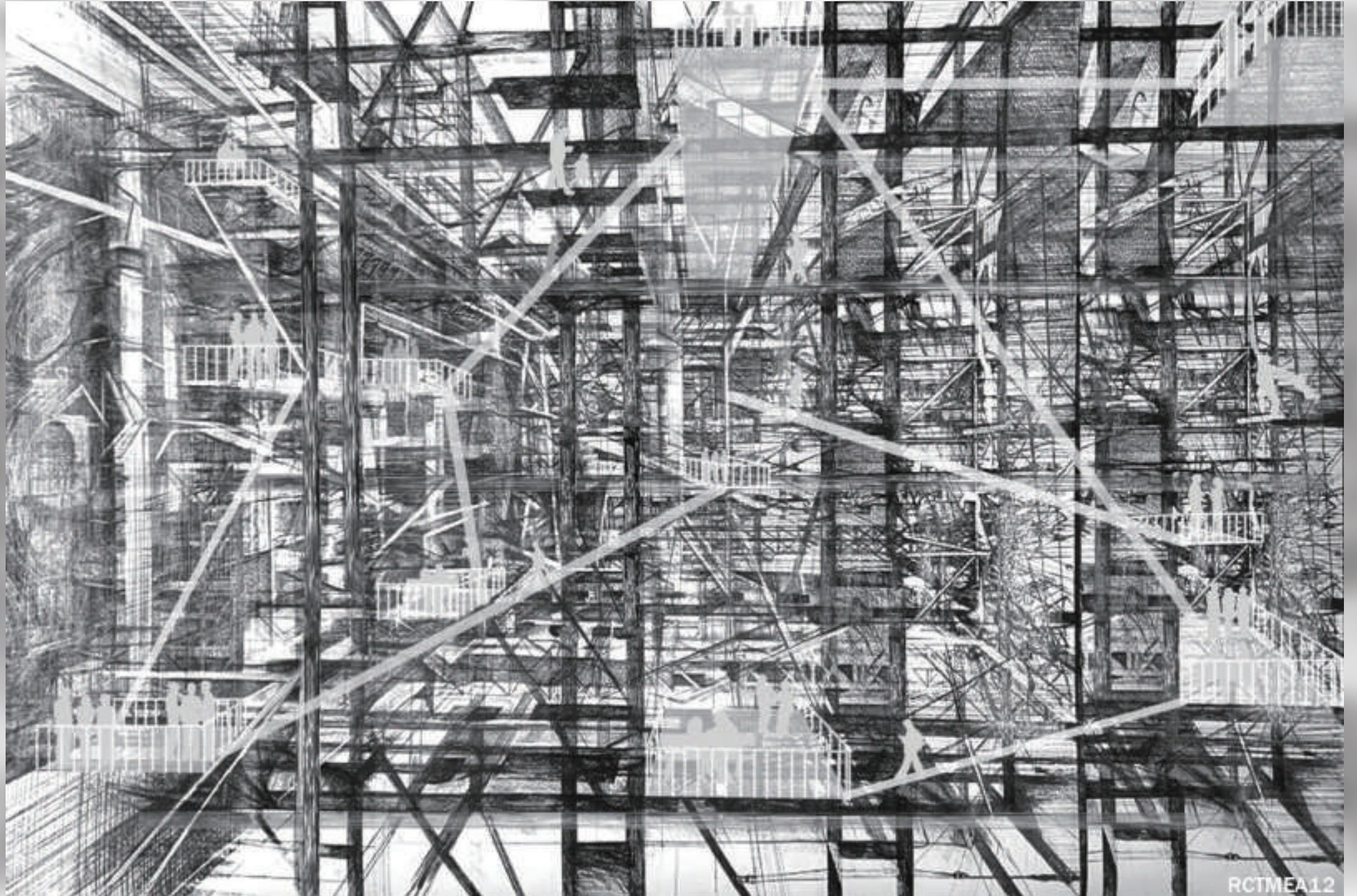
Title: Self-care to become aware

The balance between private and public space is important for the health of our cities. The pandemic provided us with the opportunity to reconsider how we experience space by using them to their fullest extent. We discovered that many spaces are inefficient and do not provide many of the functions that we require. Our residences became cages as we didn't feel there were avenues in which we could reach out, even though many pushed our spaces to their very limits. The pandemic also made us realize how many have been neglecting the inner self and our buildings seem to reflect that as seen by the focus purely on the facade/exterior and the interior being treated as an after-thought. We have focused so much on the form we forgot to realize the importance of users of the buildings, the experience, there is no such thing as a lifestyle inside these buildings and everything seems so formal to the point that it almost feels suffocating. The solution is to redefine the private and the public spaces; private being the places to rest and relax, and public spaces that promote socialization that is very fluid and not rigid. This is possible to be in one building keeping every flow naturally, by embedding nature into a built space, very forgotten but the value it holds in our growth of as cities as it is human nature to feel calm when looking at nature, to pause and reflect on self, and to be able to socialize easily with others. Our homes should be more than just a place to put furniture or a pretty facade; they should be a place to facilitate healthy interactions in a non-rigid format, as a practice of selfcare and to experience these spaces differently now.



RCTMEA12







# RCTAM12

Title: Pause to Change

Can we look back to those days when we used to live together with our loved ones under one roof? Those days when we always had someone to talk to and never get bored? That realistic world was an emotion once which later became a burden and tiring part of our lives. As time streamed, we became more selfish and ran behind to make 'my house', 'my room' and 'my space'. We got used to the virtual society where the world started to revolve around our gadgets. This system made us forget about our family, friends, and neighbors. In a flash, an unexpected outbreak changed everything. We started creating our own bubbles which we were comfortable with for the first few months. But later we developed a feeling of loneliness and emotional insecurity as well as anxiety and depression. Day by day our daily routine became boring, and our expressions were forced to be covered by masks. Gradually we then realized that it is impossible to get through the battle unless we stick together as one. We were not prepared for this situation hence it is our duty to groom our future to fight any major disasters that may come their way. This could start by creating an opportunity to go back to that real world where unity is power. The only way to achieve this is by giving a pause to all the negative and self-centered thoughts. "OUR space, OUR society and OUR world", creating a space where we foster unity, take care of each other, and connect with our door-to-door neighbors. Commencing it by connecting balconies between different houses that creates visual and physical community.



RCTMEA13







# RCTAM13

Title: Shattering Societal Harness

Throughout history women have been expected to be the primary caretakers of the home and children. Typically, after marriage, a woman gives up on her aspirations to take care of the children and the family therefore putting a pause in their lives, preventing them from achieving the dreams they want to achieve. In some cultures, women were not allowed to sit in the presence of men, and they were muted when they showed courage by speaking up for themselves or voicing their opinion. During the pandemic, with the rise of social media, opportunities grew and women broke free from society's harnesses. With the new age of working from home, women took this opportunity to delve into homegrown firms and entrepreneurships. The vision for future cities focusing on female inclusivity lies in creating multifunctional homes that house an efficient space for women to strike a work-life balance. This illustration – 'PAUSE TO PASSION', has drawn inspiration from traditional Indian mural paintings from the state of Kerala, where women were perceived in a divine nature, resembling goddesses, and somewhere along the line we lost this aspect of our women. The threads in this illustration portray women weaving the future to mold them to be more inclusive. The green knotted cloth is symbolic of the strength garnered when women come together and interact as a community during instances like when they would weave baskets together, collect water in pots from the river for their family, as seen above the knot. The tall buildings are symbols of opportunity with women helping each other to climb up and achieve their dreams. Elephants form herds help care for each other's children. Similarly, women support other women to conquer their aspirations. This shows how females regardless of the kind usually stick together.



RCTMEA14





# RCTAM14

## Desire Lines

‘The moment as something old is dying before something new has been born’ – Anonymous In the past as populations grew, we saw a transition from natural to concrete jungles. Mass construction has altered landscapes and threatened biodiversity. During the pandemic, we saw how the lack of human intervention allowed nature to co-exist momentarily. The imbalance between the environment and structures caused us to imagine a place where more importance and opportunity is given to places of pause in consideration with nature around. This process has inspired the rebirth of cities, where in the biodiversity and wildlife are given the opportunity to co-exist. Our main inspiration for our work is based on solar-punk, which is the complete opposite of cyberpunk, wherein cyberpunk would look at the negative aspects of the future such as continuing climate change and pollution. Solarpunk looks at the more positive future where nature completely takes over and govern how humans would live. These pause places are evident in these outdoor functions such as the elevated parks, outdoor concert stages, theatres, cafes, and bridges etc. Most of the buildings in the forefront is being built upon trees and nature and not vice versa, which shows how we start building around nature instead of destroying it for our convenience. The same is evident in the developed buildings in the background, which has hollow empty spaces that allows nature to pop out and surrounding the structure. We also included a section to show that this pause is evident in our daily lives as well, how ecological dominance becomes a normal and more sustainable way of life. Future designs will require to aim for everything with similar characteristics to coexist and evolve independently in multiple environments and work towards a more long-lasting sustainable future.

RCTMEA16

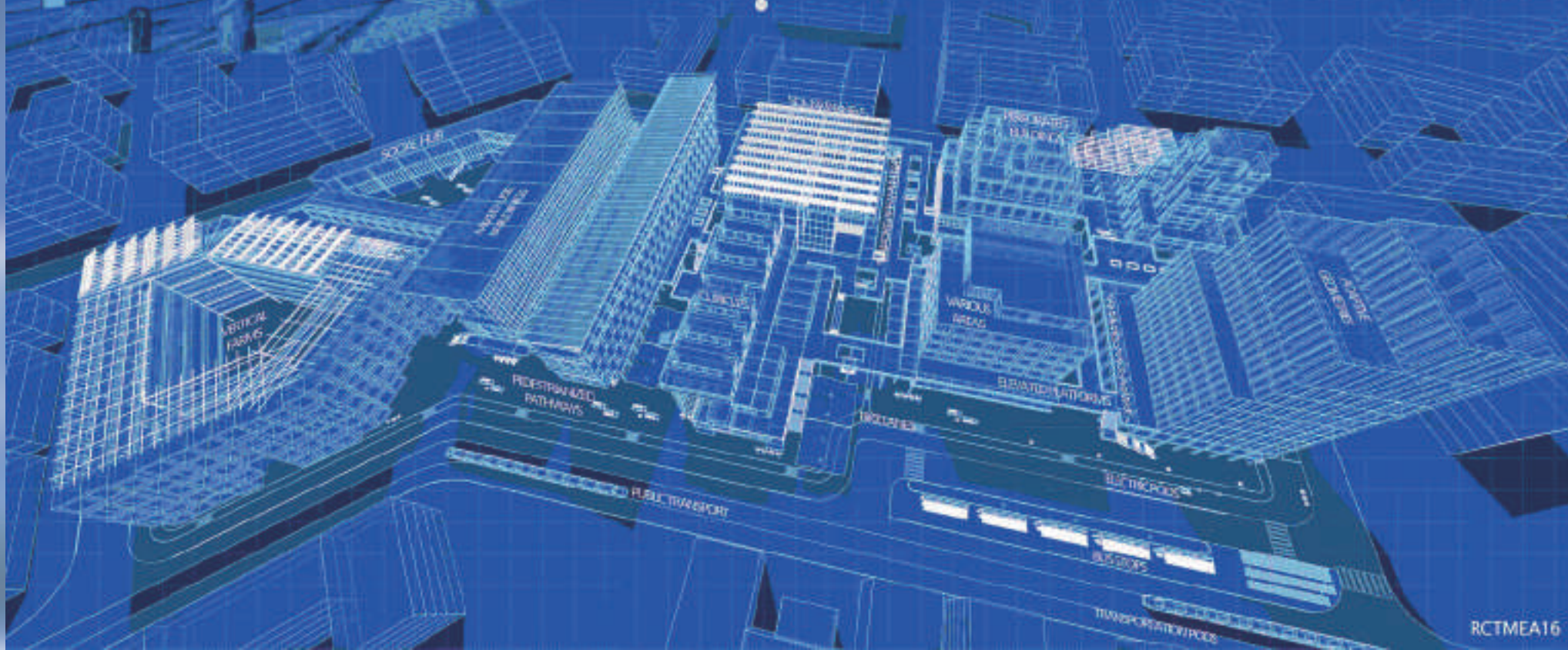


# WALKABLE TOWNS IN POST-COVID TIMES



Sustainability measures were believed to be based on environmental and renewable perspectives. However, experiencing a pandemic redefined the perspective of sustainability altogether. The COVID-19 introduced a new wave of big ideas, bigger consequences. Based on the narrative, the quality of life in rural environments differs drastically from urban ones, one cannot substitute the other, but a middle ground is an approach that needs to be reconsidered. Cities that are bound by time cannot forbid future challenges, be it another pandemic, natural ones, sea-pollution growth, or whatever that the ongoing climate change. Urban spaces that lack human presence are considered dead zones. For architects, therefore, public spaces designed to be resilient can be a vital part of the solution. Concepts often around the world, specifically in the Middle East, one country can have weather, mountains, topographic, deserts, and still have a walkable town. The goal is to bring the best of the built environment with latest concepts can lead to the best

of both worlds, where needs are met without the disregard of the current or future surrounding context. Peer review approaches to reach an inclusive design that has members of society contribute to making design decisions is critical, as sustainability lies in the infrastructure of city-towns, and the most vital infrastructure is the people. Using parametric urbanism when the exploration of probable solutions. Designing buildings that are proven to morphological changes, but also healthy, green, accessible paths that surround these buildings. Getting an example by designing a prototype that provides outdoor thermal comfort, pedestrianized mobility, and reduce cooling loads, all embedded in the design that stimulates multiple strategies. Dependence on various of forms that are localized to minimize dependency and go back to walkability. Maximizing an interesting urban experience and providing an existing indoor-outdoor relationship.





Thank you