

# 2021 RIBA International Students Competition

## Reimagining Cities and Towns post-COVID



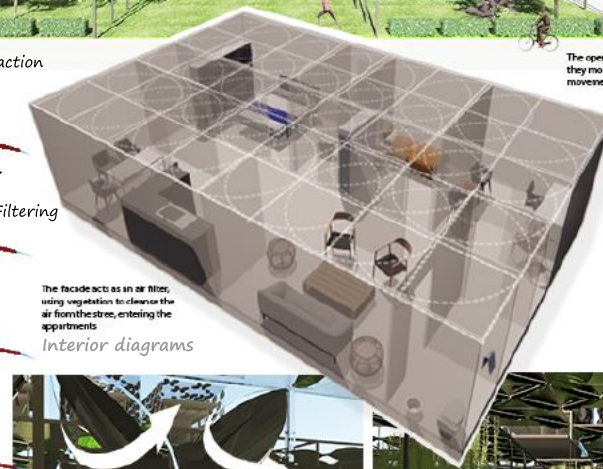
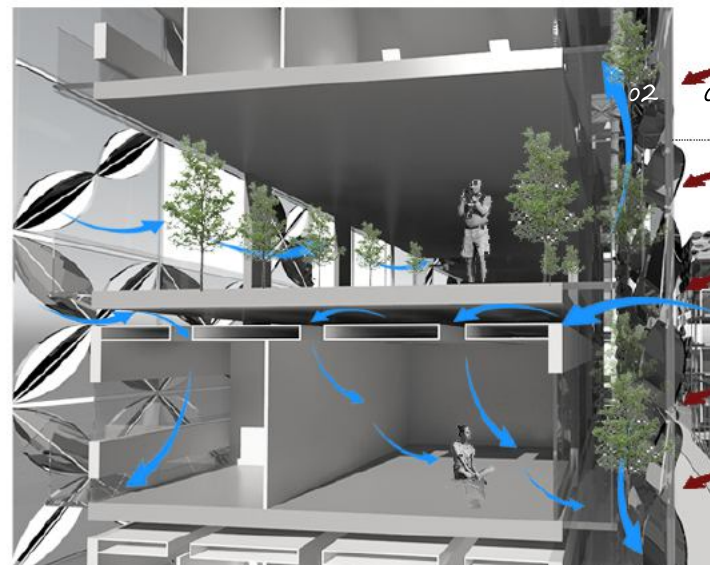


# Europe Region

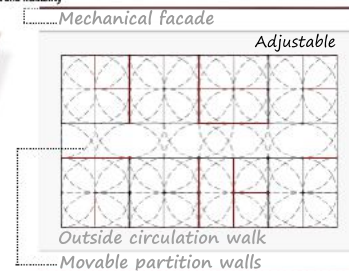


# RCTEU1

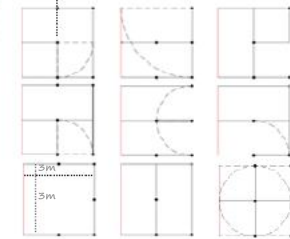




The openings of the facade are inspired by the pattern the partition walls create on the plan as they move. We used this pattern to the exterior of the buildings as part of the facade to embrace movement and flexibility



modular





# RCTEU1

## POST COVID CITY

### O<sub>2</sub>xygen

Our vision for a post-pandemic era is based on flexible spaces and a well-ventilated urban environment.

We aspire to use **sustainable materials** such as wood and incorporate indigenous **greenery** that will stimulate the senses of the city's residents. **Flexibility** in the interior spaces comes from a modular, **adjustable plan** with wooden partition walls. The apartments are created by 3 x 3 square **modules** with **lightweight movable** walls that allow endless possibilities in transforming the apartment's space according to the inhabitant's needs. A circulation corridor circulates every apartment. In our vision, the apartments of the dense urban environment integrate a **climate responsive facade** that opens mechanically according to the ventilation needs of every apartment. Specially designed space accommodates **air-cleansing vegetation** that filters the air before coming into the apartments. In order to ventilate all spaces that the adjustable walls could create, there is a **double ceiling** with a 40cm gap that is open to the ventilating facade.

In order to enhance community spirit within the apartment's blocks we propose the creation of various voids within the building, landscaped and/or with uses that allows people of all ages to use them. These voids create a new semiprivate exterior pocket that can be used by the residents for social interaction as well as leisure activities such as gardening. This new semi- private urban realm will extend on the roof of the apartments where activities that require more space could take place such as sports and a cinema. Finally, our proposition requests for smaller, pedestrian-friendly streets and larger green spaces with energy-generating canopies and public display artwork that will create a more sustainable, flexible, and stimulating future in the dense urban fabric.

# RCTEU2





## Recovery of the old Bucharest cores as premises for activating the town and community



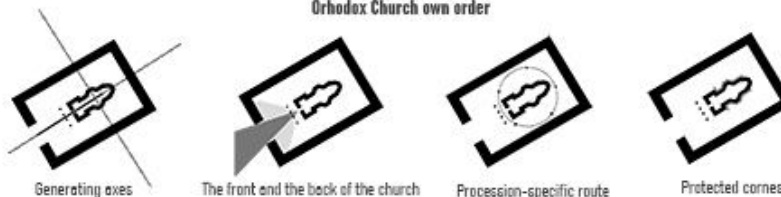
The experiment started here have a clear purpose, by acupuncture gestures we can recover the continuity and activate the community to a larger scale of the city making it more resilient in front of future crises such as current pandemic that alienated the people.

The project has as assignment the highlighting of the church space, as a defining element of the Calea Măgurei area in the historical Bucharest. The spaces around churches are resilient and works as a tenet, a series of fixed points that structure the cityscape, from the 19th century until now. From the cores around which the parishes coagulate, then the city, we reach crippled urban voids free of action. The return of the church with its back to the city represents the erasure of the Romanian Orthodox ecclesiastical space, thereby is ignored the ideal church type which works freely in space like a cell, with firm contours.

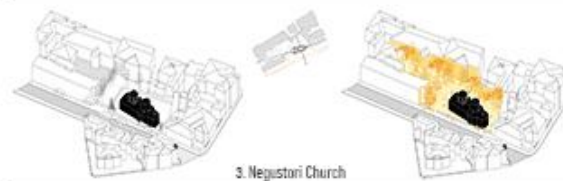
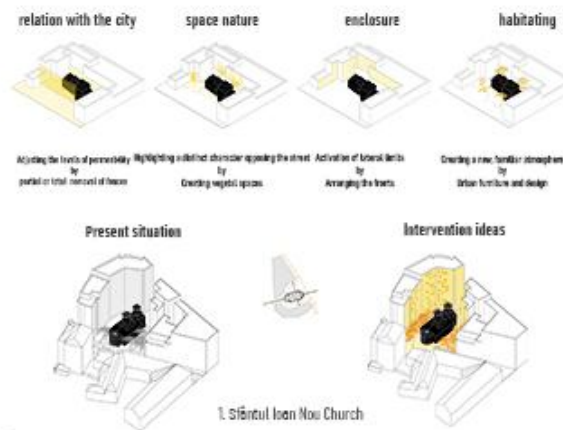
The goal is an ideal negotiation between the churchyard that radiates to the city and the city that grows towards the church. The belief ingrains the place where it sits a given order of axes and it has a front and a back, the city instead has islands, alignments. The project follows two spatial categories each approached specifically. We have the introverted model, "Church in the Close", located inside the urban island, with an inactive enclosure, which the city turns its back. The proposed method is recovering these places focuses on maintaining the introverted character. On the other side is the extroverted model, "The Church in the Open", located between the urban islands, at the intersection of at least two streets, larger in size, with fronts that open to it but are inactive, our goal stands for amplifying the extroverted character.

The strategy is divided into four levels embodied in specific sustainable gestures. First of all, we talk about the relationship with the city and its boundary. Another level follows the type of interior space of the close and how it can differentiate or create continuity in the case of the introvert and the extrovert. The third level follows the built edges of the enclosure, and the last level comes as an echo of what the pandemic showed us, how face to face communication can not be replaced by the virtual ones, thus creating a friendly atmosphere that invites people from the city to the public space, which remains crucial.

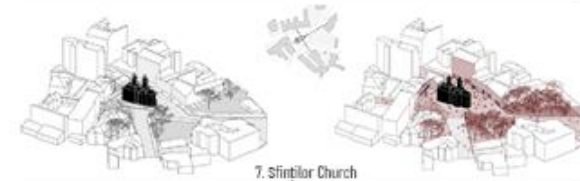
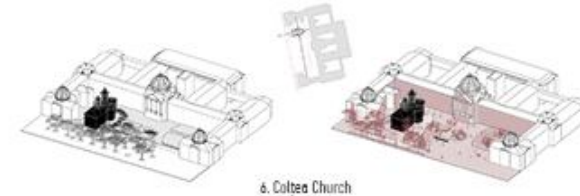
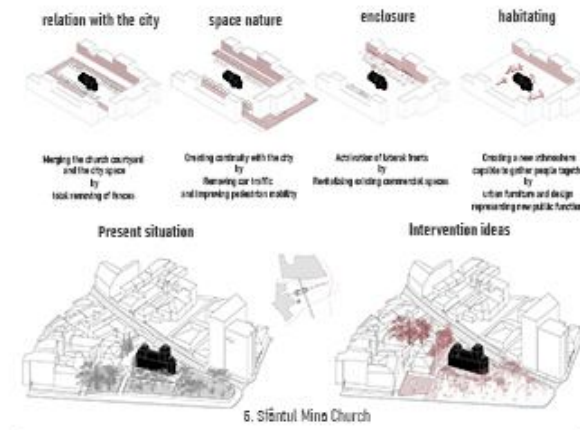
### Orthodox Church own order



### Introverted model: Church in the close Strategy scope: keeping the introvert perception



### Extroverted model: Church in the open Strategy scope: Improving the open character in relation with entire city



# RCTEU3



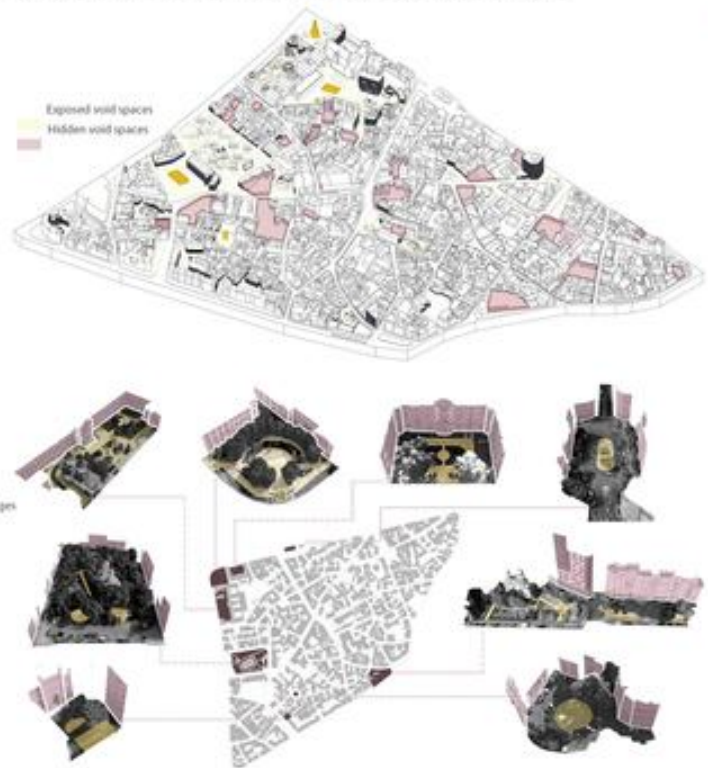
## The revitalization of void spaces in the Bucharest city fabric by inserting public gathering spaces

The project sought to revitalize the historic center of Bucharest in a post-pandemic scenario by solving a series of problems at the urban level that are rooted in the initial design of the capital. The city is composed of a cluster of different overlaid historic plans. We chose to approach a series of spaces with different character, the public square as an extroverted space bordered by urban islands and the urban rooms as introverted spaces located in the heart of the urban island.

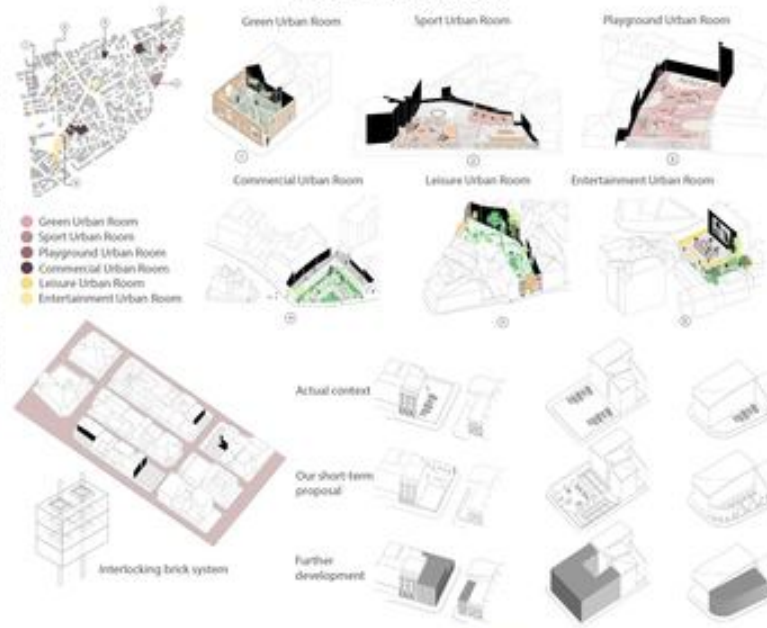
The public square has the potential to become a space with more pedestrian utility. The approach has the intention to bring the component of a classic public square specific to Western European cities, in which the square is the space dug in the built mass of the urban tissue, being bordered on all sides by well-defined built fronts.

The design took into account the topography of the site as follows: the slope gathers, by gravitational force, the energies towards a stable equilibrium area, which is a center of interest, the goal being to create a main area of influence that radiates to the ends of the square. The intervention is based on the idea of collecting water through the fountain which is bordered by urban furniture on two sides and fades into the slope and is concentrated towards the equilibrium point. The urban rooms are spaces inserted in certain problematic areas usually located inside the urban islands and neighboring blind walls. Their purpose is to complete the built background and to reconfigure these dysfunctional areas, but also to encourage inter-community relations and to revitalize the entire area.

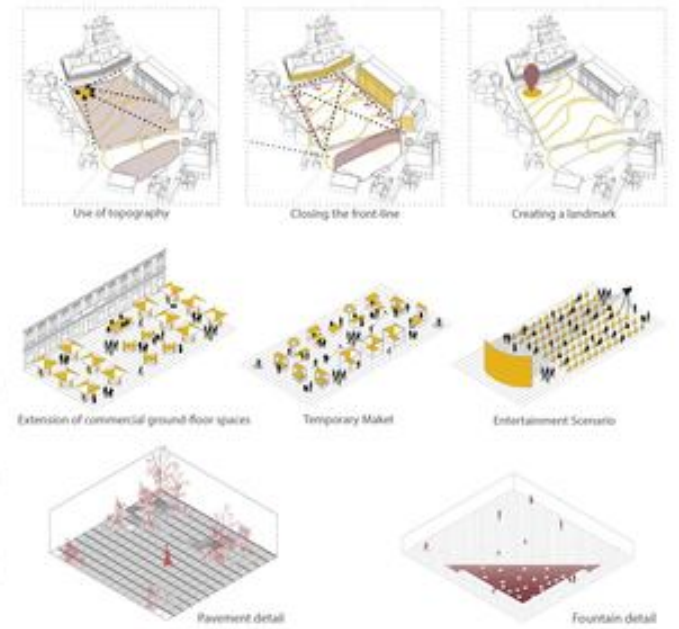
The concept is sustained by 3 scenarios based on which these plots will be developed later. The current state reflects the lack of parking spaces in Bucharest, which are formed on free plots. Our intervention takes into account the economic and sustainable component, being a temporary one. Using this gesture we foresaw possible future developments of permanent construction, meanwhile exploiting the maximum potential of the plots. The constructive system was chosen in the same sustainable way, represented by a dry masonry system joined by removable reinforcements. This construction system allows an easy relocation and completion of another dysfunctional space.



## Hidden Void Spaces



## Exposed Void Spaces



# RCTEU4



# THE DIAGONALS

The project proposes the layout for an **outdoor space** covered by a metal structure that transforms the north and south banks of the Dambovita river into a **public square** perceived as a whole. The structure brings a reviving point on the river's journey through Bucharest city.

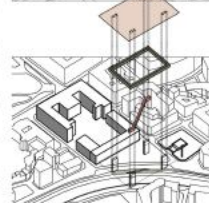
Also, it is a place of attraction for organising different **outdoor activities** or simply a **leisure place** for the inhabitants of the city, a type of place that has proven to be much needed during the Covid pandemic and will be appreciated in the future.

The **cover** is formed by metal elements that cast a thin shadow on the ground, creating a geometric pattern. Under this cover are **two suspended walkways** that physically connect the two waterfronts.

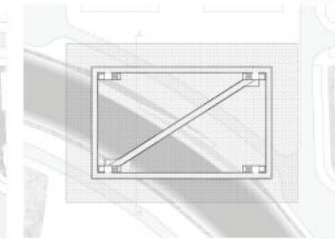
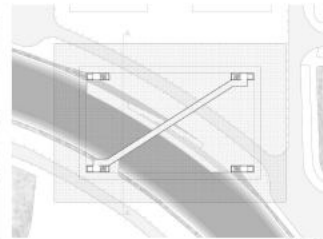
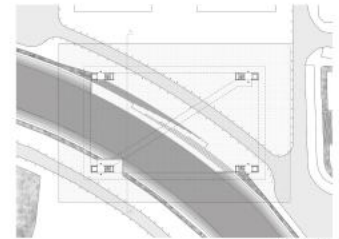
The first one is a **perimeter route** at 1125 meters high that offers the passerby an experience alongside vegetation.

The second route, at 750 meters high, is a **diagonal path** that directly connects the two banks.

At the street level, the north riverbank materialises the **second diagonal** of the square, offering the pedestrians a close encounter with the water.



SITE PLAN



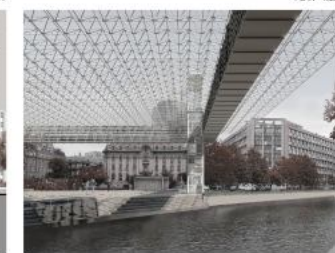
PLAN 1:1000

PLAN 1:1000

PLAN 1:1000



SECTION A-A



RCTEU4



RCTEU5

# A S P O T

DIFFERENT KIND OF

## URBAN CONTEXT

Located in the heart of Bishkek, the 3250 m<sup>2</sup> site consists in a big parking lot next to the Holocaust Memorial, surrounded by office and residential buildings. The site provides a central urban context, as it is strongly connected with Damchaba River, the Old City Center and to a couple of parks. The proposal seeks to dislocate the intense throughway traffic by the river, aiming to create a direct connection with the water, that has lost over time.



## POST COVID FUTURE NEEDS

In the times we are living in, we need to acknowledge that technology is not the only part of our lives, becoming more and more so in isolation, making us living most of our lives inside a virtual world. This is why we need to continuously take a step back and disconnect from the online world and connect with the real one.

In order to do this, the city must provide us a common ground that will allow us to feel safe, to improve human relationships and increase community relationships.



## ARCHITECTURAL CONCEPT

The concept that I am proposing is a HQ Tech space that will improve communication, relaxation, creativity and community. Nature and with the people, making it will allow introspection and detachment from the urban rush. It will be a place where technology lovers can base for the personal technological goods are provided in the project.

By expanding to the future needs, the urban public space and a creating a better relationship between nature and urban development.



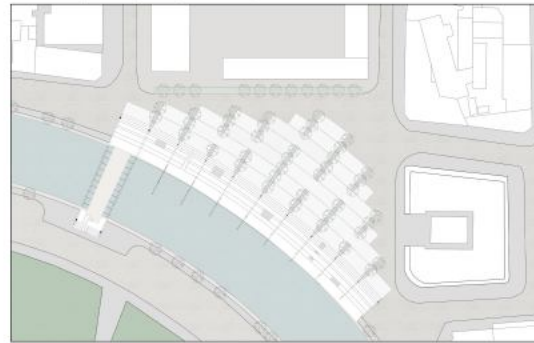
# RCTEU6



## Reunited with our River

The main goal of this project is to restore the **vital relationship** between the Bucharest's inhabitants and the **Dambovită River**. We all know that looking at water and hearing the sounds of a moving water makes the human being feel more relaxed. That is the sensation I want to share with the visitors who spend time in this place.

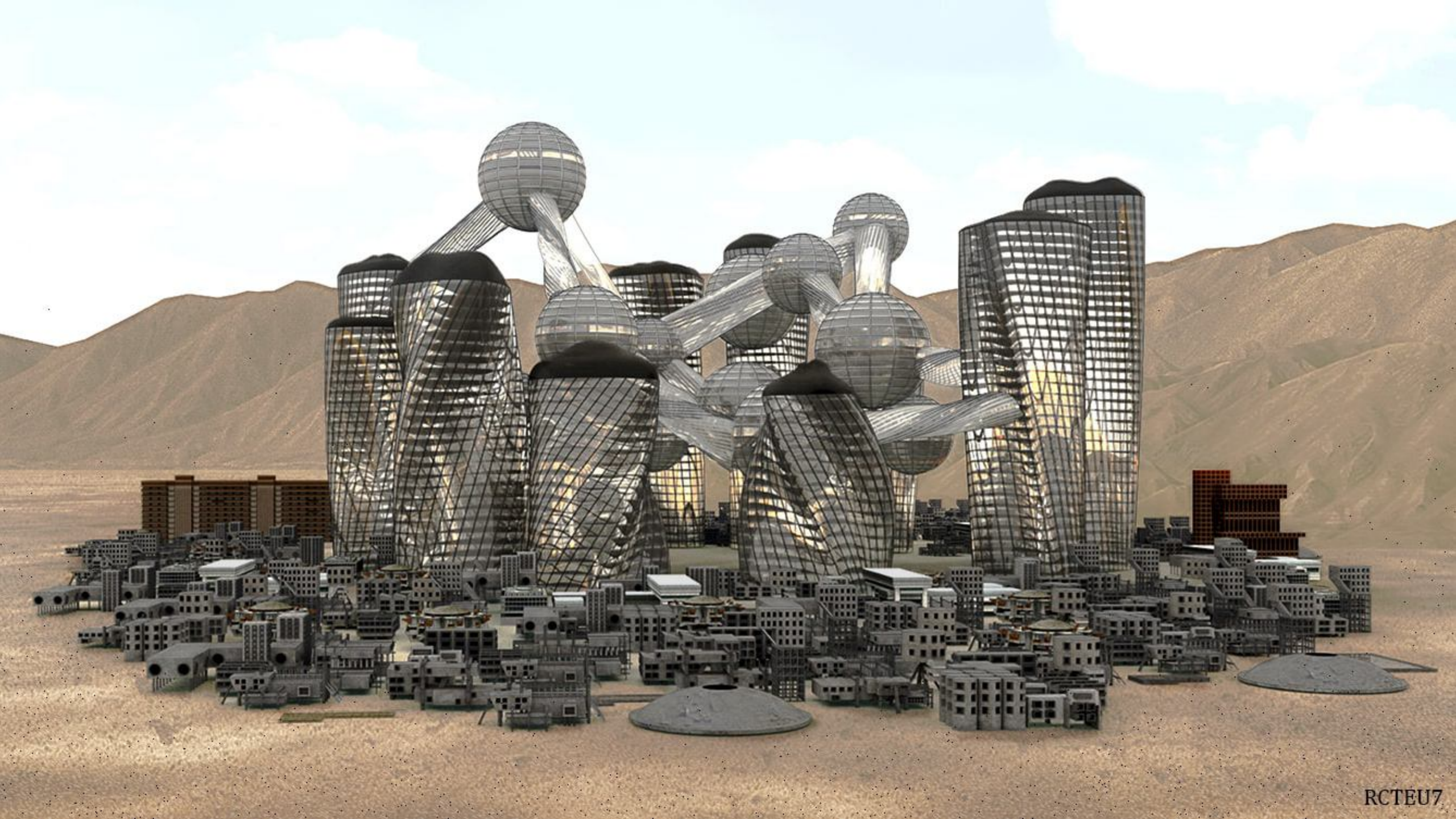
This is an **open public space** meant to attract people from all over the city, a place where they can enjoy water activities like: fishing, bird watching, toy boat racing or simply enjoying the sun and the nature while reading a good book. Also, a **pedestrian bridge** was added as part of the project because a connection between the banks of the river is absolutely necessary in this part of the city.







RCTEU7



# RCTEU7

## Regenesis

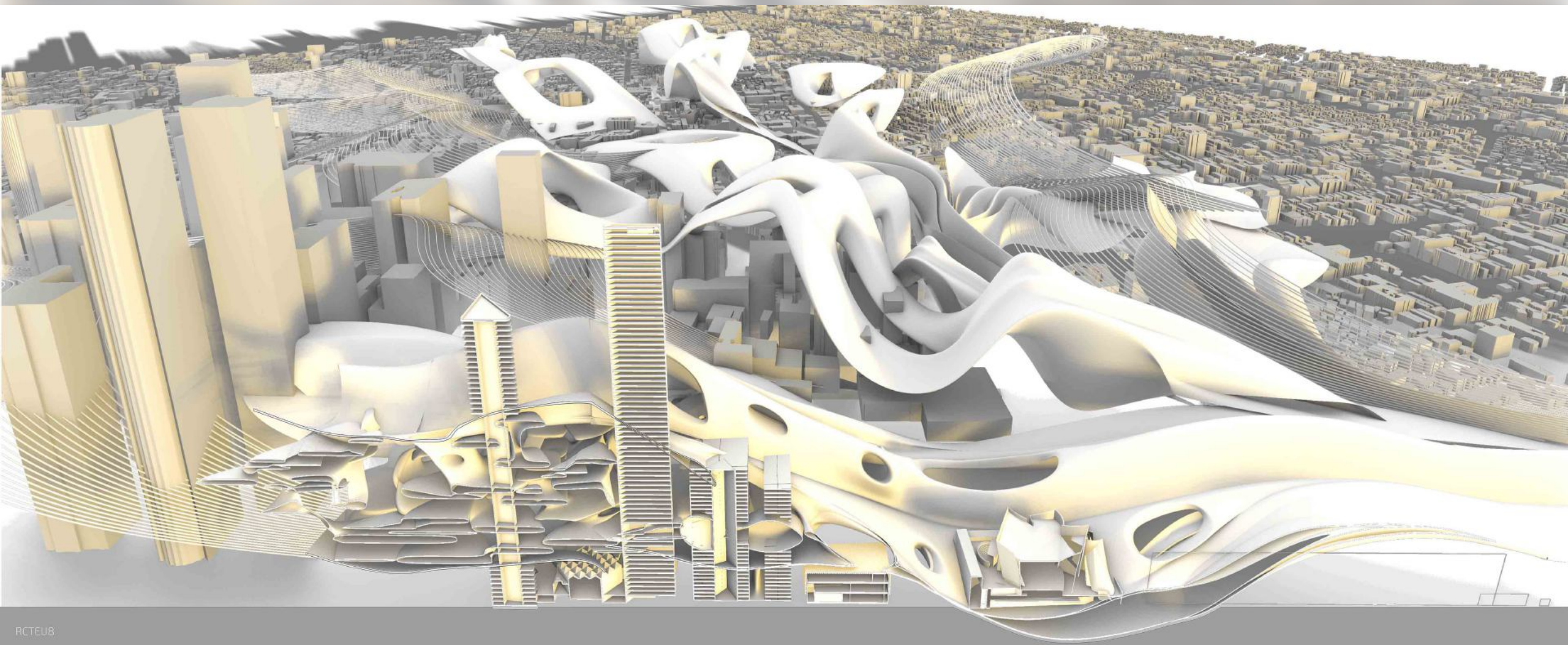
The COVID-19 pandemic has made people realise how fragile humanity is and how essential habits and activities are not always going to be accessible. The global vulnerabilities and inequalities strengthened by the pandemic help reflect how a city should adapt and mutate depending on new circumstances, in order to benefit its users. Climate change and health crises should not be taken for granted.

In the post-apocalyptic scenario depicted in the image, climate change has taken over the planet, water has dried up, the land has desertified, and natural resources are no longer accessible. The human footprint on the earth has gotten out of control, and humanity had to disappear for the earth to repair itself. People are co-living within a manufactured enclosed ecosystem, which minimises the interactions with the outer world. The city is fully eco-sustainable and multifunctional. The towers, along with the attached buildings, reflect the fundamental symbolism of religion and psychoanalysis. The analogy with the structure of the psyche creates a strong subdivision between the three specific interventions in the design. The brutalist architecture features the lower strata (Id). In this layer, the inhabitants have no restraints. The basic human necessities take place in these spaces. The underground level is featured by artificial forests, which provide food and oxygen for the city and by extracting water from the groundwater basins. The middle layer (Ego) is represented by twelve twisted towers which function as accommodation for the inhabitants of the building. The high-rise architecture provides support for the top layer. This layer (Superego) is characterised by interconnected spherical structures which overlook the city and its surroundings, operating as the central management of the city.



# RCTEU8





# RCTEU8

## “Let us cultivate our gardens”

This project takes place in 2035 in decaying Los Angeles. After the Covid pandemic, people have slowly begun to leave the city, seeking the green countryside. The dilapidated city is reconstructed through this intervention that seeks to explore and regenerate the existing urban fabric using emotions as resources.

The city serves as a memory landscape, while the new design symbolises how hope and kindness can be regenerated and made tangible in this new version of society. The utopic idealism of a sustainable city is palpable as the design sits in balance with the context using it to support itself and repurpose the deteriorated spaces.

The juxtaposition of these two urban fabrics represents the possible utopic quality of cities, while the existing context is a reminder of the harmful human effect on our built environment.

The tectonics of this design intertwine with the existing context, in many cases latching onto existing buildings or fully merging with them. These plates are thin but can thicken to provide various functionalities. This helps eradicate the idea of building blocks in a city, replacing them with pathways and spaces that are multifunctional, varying from housing to public spaces, thus creating flexibility in response to the needs of the city.

The organic shape of this project mimics natural growth systems providing possibilities for expansion depending on the user's needs. The design strategy is derived from biomimicry, through the study of coral growth systems and their mode of expansion.

This proposal seeks to provide a way to re-imagine our existing cities against the inevitability of time. Using interventions as a continuous process to regenerate them, while using them as landscapes of memory.



# RCTEU9







# URN: RCTEU9

Location: Los Angeles, California

Title: Parasitic Interchanges

299 Words

I am imagining towns that create a bridge between the real and the virtual, drastically reducing distances in the real and increasing the reach of the Virtual.

In my scenario, these structures have formed all over Los Angeles. Each one is located on one of the freeway intersections, the structure constantly adapting to its inhabitants' different specialisations.

The basis of life within the structure relies on a hybrid existence between the real and the virtual. Reducing the distance between the amenities needed for a comfortable life in the real and making the Virtual world most accessible. This includes many garden terraces, restaurants, health centres and other entertainment spaces. My structure aims to provide a sense of community. All types of people should meet in the real, irrespective of their occupation and interests in the virtual.

The structure would grow organically in response to population and activity changes within it. Each building is made up of smaller building blocks that are produced underneath it. These are blocks, that make up one apartment, research space or any public amenity. Each apartment is individually created to suit the needs of its inhabitant.

Fully immersive Virtual Reality technology needs a large broadband connection and expensive infrastructure, which is why my structures are to be created across the world to provide this technology to ordinary people with subscription-based services. I am also imagining that a large range of virtual servers would exist, allowing people from across the world to partake in the many entertainment programmes and connect. These servers could also host many jobs that can be executed through the Virtual. Companies could, instead of having an office, own a server that is specifically designed for its workers and could change shape anytime. The location of workers would no longer be an employment criterion.



# RCTEU10





# RCTEU10

## Mirage Beyond Salten

In a post-pandemic world, modern citizens reluctantly get used to being confined in a room and dwelling in a virtual world consisting of the Internet, computers, cell phones, VR and so on. The longer they stay in the virtual world, the more they lose contact with the real world, and finally the more they get lost within themselves.

It is time to consider embracing nature to find self. This way was advocated and executed by Henry David Thoreau who moved to live in Walden, and sought the meaning of life and self through exploring the natural environment surrounding Walden.

The project aims to turn salty Salton into witty Walden. Based on the 2D texture of the abandoned Salton city, a 3D network is created, dividing the city into different areas. At key nodes in the network, small climate stations are installed, creating different microclimates which maintain the potential energy difference between heterogeneous climates through a closed circulation. The different climates help citizens gain first-hand feelings which help them find true self. In this way, a summer person may find himself loving winter even more.

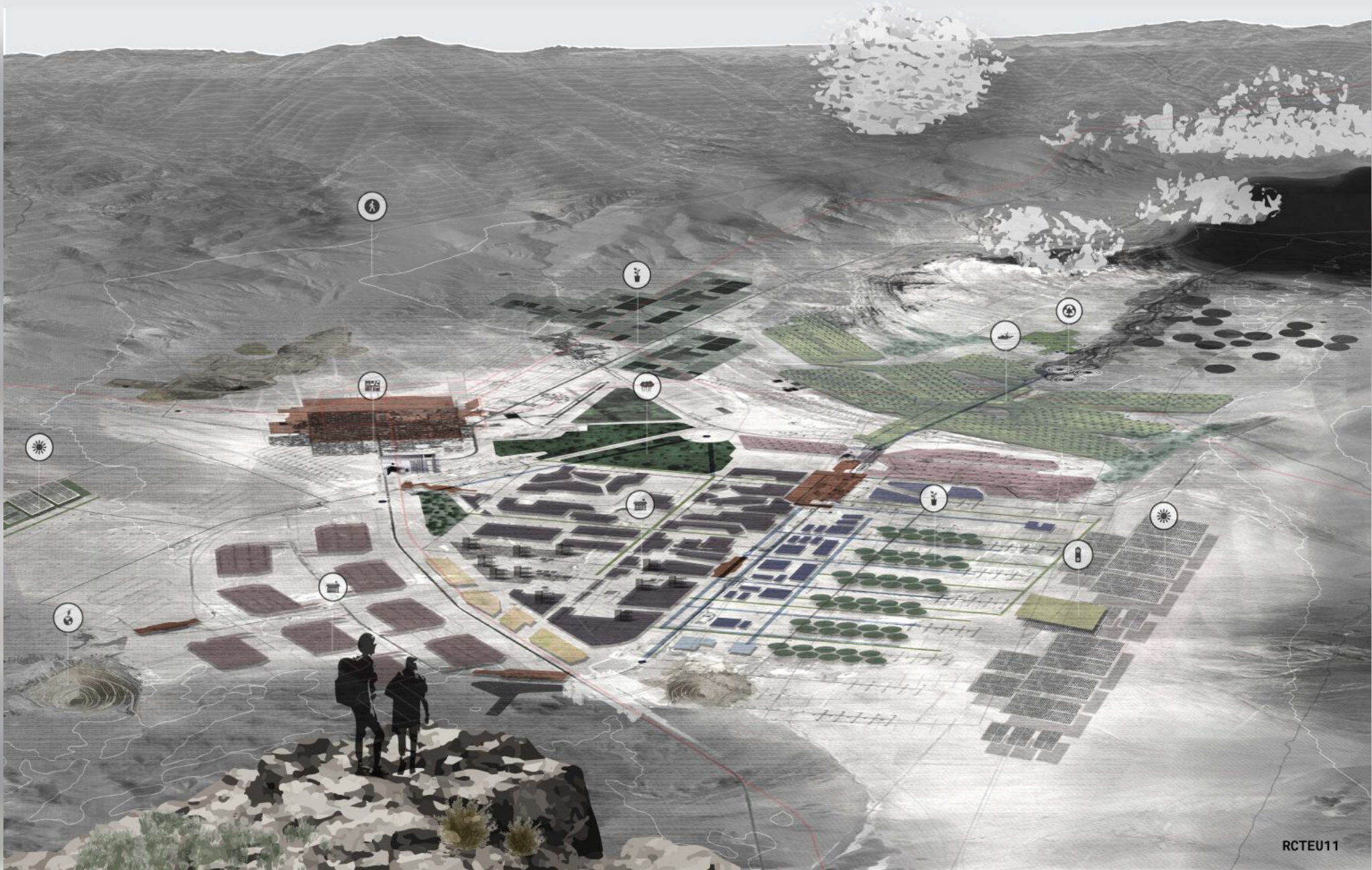
A city may be abandoned for its inherited rigidity in adjusting itself to meet its citizens' changed needs. The network of the project endows the city with great adaptability and changeability through its room climate control functions which may extend its longevity.

On the other hand, the project tends to protect nature. It develops the lifeless desert into a salubrious living area therefore addressing the humans' need to wrest space from nature. It also reduces carbon dioxide emission. Carbon dioxide in this area is collected to produce starch which will be transformed into starch plastic, as a building and furniture material and as a source of organic starch food.





# RCTEU11



# RCTEU11

Finding Hawthorne Station - 2072  
Mineral county, Nevada.

Once considered the climax of Man's conquest of the land, Los Angeles spread people into a gigantic agglomeration, into a place of deprived natural resources across landscapes. LA embodied a system of large-scale centralized exploitation, which has come to the end of its life cycle. A problem arises from LA's difficulties to cope with change and lack of authoritative response, so solutions must come from individuals and their communities. In addition, an environmental crisis, combined with socio-economic turbulence and poor living conditions, has led to an outward sprawl. Could the scarcity of vital resources like water become critical to a point where it is no longer accessible to all?

This exposes the vulnerability of a significant part of society to such mutations. Their response is a network of autonomous settlements originating at a transportation hub. Located 500 km north of LA, in a deserted canyon, the chosen site brings with it only the infrastructure that initially grew from Hawthorne, Nevada's artillery depot. This new settlement begins at the intersection of several transport routes bringing people and material into Hawthorne.

The formation of this urban condition relies on creating pockets of dense lands, once considered remote. The station initiates the start of a new cycle, one that relates closely to its natural site. In its early stages, this new territory relies on extracting materials in-situ. However, as it develops its connections with other settlements, it gains the ability to collaborate and exchange with them. In its finality, it shelters about 100,000 inhabitants.

Its residents may create their own autonomous system to contribute to construction phases, operating activities and local production. Nonetheless, other groups of travelers and remote workers can contribute to the economy while separating themselves from the asphyxiation of LA.



# Thank you