# The Chinese River City

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# INTRODUCTION

Taipei is known as the capital of Taiwan, one of the most important cities and the international trading due to its technology and social growing. However, as the city and industrial mentality grows, the nature surrounding its dying.

Now, we are in a part of the history where environment is way degraded and we cannot avoid it any more. So, it's possible to make a city solution that allow the people development, while recover the forgotten landscape and environment.

This project wants to be the starting point of this global solution. Building a new sustainable city and develop a new city design mentality is its main goal.



# COSMOPOLITICAL CONTEXT DESCRIPTION

# DEMOGRAPHY, LOCATION, ENVIRONMENT MAIN FEATURES...

The project takes place in Taipei (Taiwan), especially in the meeting point of the Danshui and Keelong rivers.

Taipei is the main city of Taiwan and on the most important in the international trading, due its advance technology. But nowadays, the technology has had a relevant impact on the environment and the relation with the tradition and the nature is lost.

We can distinguish three city generations to explain its history.

In the first generation, the place was dependent on the natural environment. The river was the main source of transportation and it provided the main food to the citizens: fish, clamps, crab etc.

The land developed a relevant rice farming culture, that was based on man-made flooding, imitating the behaviour of the river. Also, tea farming was developing as well.

In the next years, we enter in the second generation. Taipei economy grew up considerably and at the end of the 19<sup>th</sup> century and due to its relationship with Japan, Taipei became an important industrial city. Industry made tea and rice production more productive, but at one cost.

The river of the industrial Taipei turned rapidly into an industrial sewage and the fish, clamps, crab etc. moved away.



The river smelled bad and it was flooding. So, the solution made was the building of high walls and cut the river off from the urban landscape. So, in this part of the history, the relation between the human life and nature was lost forever. Like two different worlds.

And this all of this, we ended in our current situation: the government has the need to expand the city. But to do this, it must occupy the last natural environment of the city: the Guandu Plain. The pollution made a worry increase of amount of arsenic and lead that are damaging the last agricultural rice soil.



So, we can say now there is a third generation in Taipei. And

people is asking how can be it? There is the need to solve the problem of the future urban expansion, but we can no longer do that like in the past years, because as the industry grows, the environment dies.

So, we need to find a solution where these two worlds (the city and the environment) can work together again. The solution is not just going to the past and get rid of all the industry. We need to continue growing as a society, but without forget about the nature coexists.

## IMPLICATED POPULATION

The project takes place in an urban context. So, we can suppose that all the citizens are implicated: local people, governors, authorities...

But the project emphasizes the narrative and relationship with the environment. Sentences like:" in the future architecture will be designed by writers" and "The third-generation Taipei must have a drama" means that social and humanity careers will have a great impact in the future design of the streets. We can see at great change from our current society, because the knowledge of these people is often forbidden in the city design, as this relays specially on engineers and architects.

Also, we need to take environmentalists in account when we need to design the new city.



#### SOCIAL PROBLEMS AND EXISTENT CONTROVERSY.

The main controversy found in the city is the governor's mentality. The first thing that come to their minds are money. They are still attached to the environment era and only support economical viable solutions.

The existent problems have to do more with environmental problems than social. The industry made money and health, but made also pollution and the social forgetfulness of the city farming tradition.

## STRATEGIES DESCRIPTIONS

Strategies are based on make the city of Guandú find a way to live with nature, giving continuity to the urban agriculture that had been the essential economy in Taipei and still many people continue doing at their houses.

If we think about the concept of ruin, we can understand as the moment when the man becomes in part of nature. In this way, it is intended to "ruin" the city using nature, including human nature, which will give rise to the city of the third generation: the modern city as part of nature.

The project starts with the natural restoration of the river and the fluvial engineering as fundamental parts of the future of the city. These elements will be grow the city using the local knowledge which continuous with the first generation.

#### EVENTS ORDER

First, a new artificial river is created across the 7.2km long Guandú plain that provides clean water to residents. This water will be taken from the Keelong river, which water is polluted, and from the

steams of the surrounding mountains. This river will act as a biologic filter with different layers of vegetation and filtration that will purify the water for residential use.



The end of the river will have recreational purposes with a beach and a holiday area.

Second, the plain of Guandú is divided by the existing higway. In order to give the plain and unifies ecological area, the road is transferred to a tunnel under the plain and it is restored for use in urban agriculture and biomass production.

To connect the different areas of Guandú, and elevated train is proposed to connect new areas with existing areas and improve routes for bicycles and pedestrians.



All the project is based in free flooding, so there won't be floodwalls. That's way the architectural and infrastructural solution

## INTERVENTION LEVELS

Guandu Plain will be connected with the surround mountains with eco-friendly corridors.

Urban agriculture will be an essential part of the new water-based city. There will be community gardens around the whole constructed place.

Biomass will be the main source of energy, as it's renewable. So, it's production is a positive factor to its climate.

Nowadays, wetlands and mangroves are protected. As a result, all the Guandu parts that were degraded will be naturally restored.



## DIFFICULTIES

Although the project focuses in Taipei, it expects to be a global solution to other industrialized cities, but depending on the case could work or not. In the case of Guandú it works because the city still conserved the traditional thought of farming and many people continue to have crops in their own houses, but in cities where the industrialization has settled more and the traditional roots of the crops have been forgotten these solutions cannot make a connection with citizens.

Another difficulty could be the costs and the environmental impact that can be generated meanwhile the road under the plain is building due this affects to a natural area and if, as is often many times, the works are left half due to a lack of budget would make a strong visual and environmental impact on the plain.

## SUCCESS AND FAILURES

The success of this project is to demonstrate that we can move away from the solutions that the industrialization brought and use the traditional knowledge to give a modern solution and make a new urbanism where there isn't separation between nature and city.



## AGENTS INVOLVED

Humans:

- Local people: the city takes place in an urban context, so local people are the most important human part, as they suffer the problems and enjoy the future city.
  - O Farmers
  - O Workers
  - O Citizens.
- Environmentalist: they are an important collective of people, as they are going to help to engineers to develop the new city.
- Sociologists: Similarly, they are needed to guarantee the new city will have a social impact.

Non-humans:

- River: the main protagonist. The new city is going to grow and be based on the shape and properties of the river.
- Plants: they function both a filter to reduce water pollution and a place to develop the new rice and tea farming.
- Farmings.
- Pollution.

# CONCLUSIONS

Guandu has the potential to be an example of an eco-friendly sustainable water-based urbanism. The urban solutions that will be tested in Guandu will benefit the Taipei ecological recovery.

However, a new methodology around the Guandu case must be developed in Round Tables. Also, there must be an active participative planning to start growing the next knowledge of the incoming Taipei three generation.

Industrial solutions like in the past centuries no longer can be done in the new city, as the industry mentality has caused the forgotten of the ancient relationship with the environment that characterised the old city, and the city hidden narrative has been lost too.

So, the future solutions of urban planning must have all the ancient knowledge and the traditional landscape in mind not only to preserve the environment, but also the city identity.



# **KEY WORDS**

River, Knowledge traditions, City narrative, Relation city-environment, Natural intervention, Landscape learning, Farming economy.