

LIVE CIRCULAR - ROUTE TO A COMPOST FUTURE

Introduction

Design of Compost experience center

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MEMORY OF THE HABITAT

In our memory, the coexistence of nature and man is the traditional mode of survival. The HABITAT is the only homeland for both mankind and nature.

SEPRATION OF URBAN AND NATURE CYCLES

Since the industrial age, more people live in the city and we start to have our urban cycles. However, the urban cycle and nature cycle is separated, which led to a lot of conflicts between human and the natural resources, as well as between human ourselves. As we could assume, only if human and nature synergy cycles together, then we can have a sustainable future.

URBAN HABITAT

Therefore, compared with the concept of HABITAT, we create URBAN HABITAT, which provide a common living environment for both mankind and the nature, and on the other hand, it put those two things back to one cycle. Urban habitat is not a new concept, but it is a necessary common memory that we need to find back in this postindustrial era.

COMMON LINK OF CYCLES : WASTE & FOOD

In the series of cycles, waste and food are two important common links between man and nature. Compost is an ecological way to turn the waste of human into the food of soil, create the biological synergy between human and nature from the microbe scale.

THE WASTE CYCLES IN HAARLEM

In Haarlem, it is worth to mention that the application of waste classification and recycle is working effectively, but only 20% of the citizens understand that kitchen waste can be composted¹. Every year, there are a lot of kitchen waste as energy source would be wasted. In order to raise the awareness of kitchen composting, the establishment of the composting experience center (CEC) is clearly necessary. The experience center, is going to be expected as the Kick-starter for the establishment of a whole new urban ecosystem from different aspects such as food, energy and society.

CHOSEN OF THE LOCATION

The former industrial area Spaarenkade is chosen to be the location for CEC. The neighborhood of CEC has already been transformed into creative cultural areas and clean residential areas. The city bike lane is going through this neighborhood in the future. The CEC is located opposite the city's waste disposal company, which will later become a demonstration area for its ecological waste disposal.

The old industrial plant here are vacant for decades and being considered as urban waste since it doesn't match the protection level of heritage. However, it has the great potential be transferred into the CEC which fit and can bring strong "waste is good" experience. The brick, the arch form, the steel frame and the wild landscape surrounded are the unique quality of Sparrenkade.

HYPOTHESIS & MAIN DESIGN QUESTION

We believe that **by transforming the abounded Sparrenkade into CEC, Spaarenkade could become the kick-starter of the urban ecosystem by creating the biological synergy between human and nature from compost.** For the design of the compost experience center, the main question is - **how to transfer an abounded industrial area into an impressive space where people could get an intensive experience of the process and outcome of compost, therefore enhance the awareness of "kitchen waste is resources" .**

GENERAL LAYERS

To give the new life to this urban waste, the existing building is going to be the corn part of the CEC. For the overall site, the industrial composting process form the base layout. Steps further, various spaces and volumes have been adjusted and added, to create a variety of scenes. Not only the interior and exterior architectural space, but also the different micro climates and landscapes are parts of this experience.

These experiences spaces are places to be explored, based on the original material of the existing building - brick. The steel based route goes through all the scenes and link up them together. However, as a new element insert into the old environment, it is somehow also detached from all this scenes and keep itself independent.

ROUTE - STRATEGY OF DRAMA

With the experience route, visitors would see different scenes from the whole story. Here I am referring to the drama to deal with this experience route. Drama is one of the most intensive forms of artistic expression of emotional conflict. Compared with drama, the CEC could be organized also with opening, rising, conflicting, climax and ending. Therefore, the visitors could in an limited time and space get the strongest awareness of waste is resource.

SPACE - STROY TELLING

As the montage space

The varies of spaces surrounding this route is the storyline of this drama, telling the story of compost. The entire streamline goes through various open and closed, bright and dark, hot and cold spaces. Sometimes you could feel yourself inside an entire space, sometimes you feel yourself in between spaces. All this variations helps to create an dramatic experience for the visitors.

MONTAGE- SCENES

Opening - entrance as a ceremony

The main entrance works as the opening of this drama. Human and waste go into CEC from the same side. With the leading elements, the staircase directly goes to the first floor, providing the journey a ritual sense.

Rising - The shocking fact of waste

After taking the buffering corridor, you will find yourself surrounded by different wastes, which is what we would produce in our daily life. The rubbish behind huge windows makes you shocked by the amount of rubbish we produced every day.

Conflicting - Different ways to deal with waste disposal

When you are still in this shocking mood, you suddenly come to a closed and dark space, which is a space for thought. At this point you need to make a choice. The conflicting feeling arises: Left, middle and right show the status of several garbage disposals. Left- don't do anything; Right - burn the waste. Both routes have no way out, so you are forced to go back to the thought space, while the middle door leads to the green future. Here the routes themselves become space.

End of conflicting - The preview space of a compost future

Going through the middle door, the route leads you to the water and goes into the landscape. You will feel that you are floating in the shrubs and reeds. By looking around, you can see the intensive fruit trees, as well as people in the hot springs. This is the future which composting could bring you. And it raises your curiosity to continue to explore the story behind this green future.

Climax - Micro Climates created by the main fermentation space

When you are entering the building, you are brought back to the essence of composting, which is a traditional way that human and the natural co-exist to each other. Having been through a series of fundamental spaces level up and up, you are approaching to the peak of the entire design, at where all of your senses would be stimulated.

First of all, the noise coming from the mixing machine would attract your attention. And then right after entering the gate, you would feel a lot of warm air in no second because of the heat generated by the fermentation process. If you look ahead, there is a fall made of waste but not water. If you look down, you would find a lot of climbing vines should be existing in tropical

weather. All of sudden, you will realize you are within a very strange micro climate. Look through the original arch windows, kids are busy with experiments on composting. By looking down, you would find the basement, and there is also another scene, various kinds of fern are trying to get the sun as much as possible, which is also leading you to the basement, where is full of mushrooms and microbial. The surrounding is cold and humid, so it helps a lot of fungus and moss grow at a fast speed. This unique space is actually made by the micro climates created by the fermentation process and the landscape suited in this environment .

Renovation details - Old and New

As mentioned above, this space is transformed from an old building. The existing structure of brick column are preserved. The truss is added to hold the new roof which is made by polycarbonate hollow sheet. This material give enough sunlight into the room, however, prevent the direct sun light. For better draining of water, an concrete block is added to the right column to from the sloop. The steel corridor is the materialization of this experience route. The corridor is made of grill to keep the contact with other layers of the corridors. To let the visitors focus more on the environment, the detail of the corridor is simple and clean. To create different layers of landscape on the existing wall, different "plants grow boxes" are insert at different height of the wall.

After- climax - Food tower and the community canteen

At the end of the corridor, through the huge vegetable tower which go through the tree floor space, you get shocked by the rich results of composting again, while on the other side is the three-story community restaurant where you can join the people from the neighborhood cooking and eating the vegetables planted with the compost.

Decline - Micro climate - The relaxed botanic environment

You leave the basement through a brick staircase and enter the botanical garden. With the original steel column structure, a greenhouse environment is created here with water landscape. The heat generated during composting and the water purified by aquatic plants make the hot springs. This is the relaxed environment. The excited and intense mood declines.

Ending - the compost garden

In the composting garden you could participate in household scale composting which again reminds you the feasibility of turning kitchen waste into resource in different scales. After visiting the last two industrial process, you finally go back to the main entrance through the fruit garden, which is the end of the journey.

SOCIAL SIGNIFICANCE

The significance of the composting experience center is not limited to industrial and educational visits. This tryout provides a "wild" way to turn urban wasted buildings into treasure.

The composting landscape and the composting grove on the water front allow the bike lane users to feel the concept of composting without entering the main building of the CEC.

By sharing the kitchen, collective garden and the public green for the surrounding community, CEC provides a meeting place for the neighborhoods. On the other hand, the experience of composting will be speeded to the surrounding communities, so that the brown and green could continue, as the new start of an urban ecosystem of Haarlem.

ⁱ <http://www.slideshare.net/NatashaNicolai/presentatie-startbijeenkomst-100-100-100-haarlem>