Eco-Friendly Interface Metropolitan Campus Ecology Interface Design

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Abstract

Three hundred years ago, Taiwan Taipei City was still a wetland. So in essence it is supposed to be a promising candidate for becoming an eco-city. Yet, as a result of long-term development and expansion of man-made environment, inflexible urban space of frantic routines has made ecology a distant possibility. Constructing an eco-environment of water and greens in order to call back diverse species has become the earnest hope of citizens of Taipei. On the brinks of Zhongxiao East Road, NTUT campus is cornered by the road, buildings and walls. An unfriendly fence exists between the campus and the city, and numerous scooters are parked along the Zhongxiao East Road fence of the campus. The fences knocked off, the abandoned space is utilized to create an eco-river, to construct an eco-environment of water and greens in an attempt to callback diverse species, shape a very friendly campus-city interface, and ceremoniously declare that the open space of a city can be a friendly eco-interface, from which we can build an eco-campus within and disperse eco-spots in other open spaces without. Through the linkages in between, we can lay the foundation of an eco-city. The 80-meter-plus fence along Zhongxiao East Road is taken down to transform the original “sidewalk-fence” image into one of “pedestrian strolling and eco-waterscape.” On the strange land outside the original fence, an eco-street is built to demonstrate the image of water ecology and express goodwill to pedestrians via the eco-interface. A swirling waterway is constructed among the existing trees along the side walk to introduce the urban wind corridor into the sidewalk, to caress the surface of the river and bring cool air to the campus. The interface between the campus and the city changes into a visually penetrable communication place, which not only beautifies urban landscape, but encourages ecological species to perch here, adding rich landscapes and diverse ecological features to the strolling pedestrians.

Keywords:

Ecological, Ecological Campus, Ecological Environmental Design, Interface

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1 INTRODUCTION

Three hundred years ago, Taipei City was still a wetland. So in essence it is supposed to be a promising candidate for becoming an eco-city. Yet, as a result of long-term development and expansion of man-made environment, inflexible urban space of frantic routines has made ecology a distant possibility. Constructing an eco-environment of water and greens in order to call back diverse species has become the earnest hope of citizens of Taipei. On the brinks of Zhongxiao East Road, NTUT situated at the heart of downtown Taipei and the nucleus, of the transportation network, NTUT is surrounded, with major arteries, near MRT Zhongxiao-Xinsheng Station, it is where MRT Banqiao Line, MRT Muzha Line and MRT Xinzhuang Line meet. Located near the northwest corner of the campus, Guanghua Mall is an important information technology outlet in Taipei City. With Hua-shan Special District for Arts and Jianguo Brewery around, NTUT has become a typical urban campus, a technological, educational and cultural center of the city that demonstrates features of educational and academic endeavors. On otherwise, NTUT campus is cornered by the road, buildings and walls. An unfriendly fence exists between the campus and the city, and numerous scooters are parked along the Zhongxiao East Road fence of the campus. There for we used the abandoned space is utilized to create an eco-river, to construct an eco-environment of water and greens in an attempt to callback diverse species, shape a very friendly, campus-city interface, and ceremoniously declare that, the open space of a city can be a friendly eco-interface, from which we can build an eco-campus within and, disperse eco-spots in other open spaces without. Through the linkages in between, we can lay the foundation of an eco-city.

2 NTUT AND TAIPEI HISTORICAL CONTEXT

HYDROLOGICAL

Back to 1736 A.D., in the first year of Guo Xi-Liu moved his family north and settled near Zhonglun, beginning to cultivate around. (nowadays Shung Shen, Da An and Chung Sheng districts, Taipei City). To solve irrigation problems, he organized the farmers to create new waterways. He discovered that the untilled land near Zhongshan Districts today was of development potential. Following survey, he in the fifth year of 1740 A.D. began to dig ditches to draw the water of Qingtan Stream. He also cut trenches, pits guided by the bridge north and south trend creek confluence of water, the water conservation engineering make abundant of water-network in Taipei City. 1970 A.D. the urbanization environmental change make the water conservation facilities failed, and the historical waterways spaces that used to be visible everywhere have been appropriated and turned into public facilities or trenches, or covered or filled. Behind Liugongjun and development of Taipei City, there was a tangle of historical events. Recovered historical waterways are similar to rivers in ecological function and cultural landscape. In comparison with rivers beyond the embankment, planned recovery of the waterways gives urban residents better waterfront experience, ecological environment and landscape. Therefore, urban development must return to the issue of urban eco-environment order.

Fig.1: Situated at the heart of downtown Taipei and the Green line of nucleus

Fig.2: NTUT is surrounded, with major arteries, west near to Taipei station and east to MRT Zhongxiao-Xinsheng Station, it is where 5 transportation intersection place. Located near the northwest corner of the campus, Huashand gallery section and Guanghua Mall in Taipei City.

Fig.3: Three hundred years to the historical context showing Taipei hydrological context of industrial

Fig.4 Chung Xiao river friendly Eco-interface sketch image