

CURATOR'S STATEMENT

展览策划陈述

How to improve people's living conditions without exhausting the very resources needed to sustain a better life?

The Urban Challenge

Urbanization can be seen as a means to improve people's living conditions. In this respect, the achievements during the past decades in China are unparalleled in the history of human civilization. Due to radical economic reforms and massive urban development, about 400 million Chinese people were lifted out of extreme poverty during the period between 1980 and 2001, which account for roughly three quarters of the total number worldwide. ¹

However, while living conditions are greatly improved at one level they

are seriously challenged at another. The current processes of rapid and extensive urbanization (and modernization) in China vastly increase the consumption of natural resources like land, water, forestry and minerals, thus putting tremendous pressure on the local environments.

Increased energy and resource consumption in China can be felt around the globe in the form of shortages of construction materials, rising oil prices and unstable power supply. In China it can be further experienced as deteriorated environments plagued by smog and poor air quality, lack of green space, disrupted eco-systems and polluted water systems.

The long term consequences

of this development may obviously be even more detrimental. Thus, to improve living conditions, both in the short and the long term, there is an urgent need for new and more sustainable models of urban development.

Chinese and Western Models of Urban Development

There is, without a doubt, much that can be learned about sustainable urban development from the traditional Chinese city model, but it remains unclear whether this model, which was developed for a relative static society, can be adapted to a global market economy, individualized lifestyles and massive urban migration. The modernist Western model may be better suited for this, but it is far from a perfect solution. Urban development based on mono-functional zoning necessitates vast areas of land and extensive transportation systems. Because the individual zones are only active during specific time frames, this results in an excess of energy production and underutilized infrastructure.

If the modernist Western model is employed to accommodate massive urban migration in China - within the next 20 years, some 400 million Chinese people are expected to move to the cities ² - it may have enormous and unpredictable environmental consequences not only for China, but for the world at large.

Today, the World's total ecological footprint is already 1.2 times bigger than its biocapacity ³, but with continuous economic growth combined with shortsighted urban planning we may quickly reach a point where we would actually need two planets to support the population of one.

Sustainable Development

With 16 out of the 20 most polluted cities in the World ⁴ and projections of unparalleled resource consumption, the need for sustainable urban development is probably more acute in China than anywhere else. And with almost 50% of all new floor areas in the world being constructed in China ⁵ it

is also the obvious testing ground for such development.



But sustainability is not only about corrupted environments, pollution and resource exhaustion. The model of uneven economic development in China has dramatically increased social disparities, especially between rural and urban populations, also within the cities themselves in the form of new urban poverty exemplified by the so-called floating population of migrant workers accounting for up to 25% of the total population in some of the major cities.



Furthermore, the extreme speed and the enormous scale of urban development in China is putting much of the nation's invaluable cultural

heritage in jeopardy.

Ultimately, the economic miracle of China is itself being put at risk. The Central Chinese Government is very well aware of this. Thus, the newly released 11th five-year plan is remarkable in the way that it for the first time advocates to "earnestly shift socio-economic development onto the track of all-round coordinated and sustainable development". ⁶

Holistic Solutions

It is often argued, that sustainable economic, environmental and social solutions contradict each other. But is that really true? An example to the contrary could be the windmill industry in Denmark. This industry was basically created by a few individual pioneers who used their skills as steelsmiths etc. to refine existing technologies and put them into new use. Later the development of this industry was supported by stricter environmental policies favouring renewable energy over other forms of energy. Today, more than half of all new windmills in the world are produced by

a Danish company and this industry is not only making significant contributions to a cleaner environment, it is also providing job opportunities, innovation and economic growth for the entire country.



The creation of sustainable urban development not only requires new technologies, but also new policies which integrate economic, environmental, social and cultural concerns, and which take into consideration individual and local conditions. Without such a holistic approach to planning, real sustainable solutions are not likely to occur. But we are not only in need of new solutions. More than anything else, there is a need for creativity and imagination to set the spark for new visions for sustainable urban development.

The Collaboration
Sustainable urban development is a global

issue. Not only in the geographical sense, whereby we all depend on the same resources and are affected by the same pollution, but also in the professional sense in that no single discipline can solve these problems alone. Thus, sustainable urban development must be thought out in collaboration between various peoples and disciplines.

To meet global challenges we need international and interdisciplinary collaboration.

From March to August 2006 four offices, representing some of the most promising young Danish architects, have worked together with professors, PhD and postgraduate students from four of the most prestigious Chinese Universities. The project teams, each consisting of one Danish office and one Chinese university, have developed proposals for sustainable urban development in the four Chinese cities of Beijing, Chongqing, Shanghai and Xi'an. They have been advised by and received consultancy services from the Danish

engineering company Carl Bro and they have held workshops in both China (twice) and in Denmark (once). In addition, the Chinese professors have lectured at the two schools of architecture in Denmark and a Danish professor has lectured at the four Chinese universities.



The four projects, developed by the four teams, confront a wide variety of economic, environmental, social and cultural issues related to rapid and extensive urbanization in China. Furthermore, they can be said to cover a broad spectrum of urban situations as they describe a cross-section through "urban China" – from its historic center in Xi'an, to the new CBD across the river from the existing downtown in Chongqing, to the postindustrial periphery between the 4th and 5th ring road of Beijing and beyond to the postmodern suburb 30 km outside of Shanghai.

The Projects

Title: Citywall
Team: TRANSFORM and XAUAT
City: Xi'an
Location: CENTER
The project attempts to explore the economic potentials of mass tourism as a means of supporting the preservation of historical sites, without the tourists destroying those sites and the local environment. It does so by proposing a "meta-wall" around the historic city wall of Xi'an. A continuously differentiated perimeter structure intended to concentrate tourist accommodation, but also to provide public facilities for both the tourists and the local population. In addition, the project offers an environmentally friendly transportation system located in a green buffer zone between the two "walls".



Title: Magic Mountains
Team: COBE and Chongqing University
City: Chongqing
Location: INTERMEDIARY
The project sets out to explore the image of Chongqing as a mountainous city in relation to the creation of a new "green CBD", located at the confluence of the Yangtze and the Jialing rivers. A number of so-called "5 minutes cities", accommodating approximately 10,000 inhabitants each, are spread across the sloping site facing the existing downtown of Chongqing. These programmatically mixed mini-cities are shaped like mountains to reduce energy consumption by supporting passive cooling in summer and passive heating in winter time. They are interconnected by an intricate system of bicycle and pedestrian paths, and a well-functioning public transport system to reduce the need for car transportation.



Title: Performative Urbanism
Team: CEBRA and Tsinghua University
City: Beijing
Location: PERIPHERY
The project has set itself the task of transforming a 6 km² industrial site, located between the 4th and 5th ring road in Beijing, into a green living environment for various social segments of Beijing's fast growing population. The project is concerned with the treatment of 10,000,000 m³ of contaminated soil left behind by the huge industrial complex which previously occupied the site; the implementation of Transit Oriented Development, water recycling and mixed housing for this new postindustrial city.



Title: Shanghai Subcity
Team: EFFEKT and Tongji University
City: Shanghai
Location: BEYOND
The project attempts to reinvigorate Shanghai's decade old strategy of reducing the population density within the city core. It does so by proposing a combination of "super-nature" and "super-urbanity" in the suburban district of Jiading, located 30 km outside of Shanghai. Thus changing the image of this postmodern themepark-like city, which already includes a Formula One race track, several major car manufacturers, and both a "German" and an "English" town, to give it a broad appeal for a metropolitan population. The project taps into the existing but largely unused infrastructure and proposes a large infotainment park about sustainable transportation.



The Results
CO-EVOLUTION ⁷ has primarily been a learning process. One of the things we have learned is that there is no simple or single answer to the question of "how to improve people's living conditions without exhausting the very resources needed to sustain a better life?". But that there is an almost infinite number of possible solutions.

The collaboration has enabled the exchange of different experiences, ideas and knowledge between the participants, thus helping to develop individual competences and mutual understanding. But the collaboration has also posed its own challenges in the form of different cultural values, working methods and professional interests. These differences can be seen as the source of problems, but they can also be seen as the fuel of creativity. We need to acknowledge and take advantage of these differences if we are to create a sustainable future for all.

The four projects are the results of how each project

team managed these differences and how they managed to combine local knowledge and low-tech solutions with cutting edge expertise and future technology.

This collaboration has formed the basis for long-term relationships between the participants. Thus, it is our hope that the exhibition is not merely the end product, but part of an on-going process, in effect a starting point for further collaboration.

The curator team, 2006

1. UNDP China 2005
2. Henk Bekedam, WHO representative China 2006
3. Global Footprint Network 2005
4. World Bank 2005
5. Qiu Baoxing, Chinese Vice Minister of Construction February 16 2006
6. People's Daily Online, October 10 2005
7. In Biology, Co-evolution is the mutual evolutionary influence between two species that become dependent on each other. (Wikipedia)