THE PRESSURE OF SHANGHAI'S 22 MILLION PEOPLE

Site: Shanghai 2010 World Expo, areas D & E

There are 4 distinct and separate grids that define the spatial organization of the site. Each grid is at a different scale. The incoherent grids suggest different deployments of future programs. The larger the scale, the less coherent the organizational structure and the greater flexibility and opportunity for large scale operations and programmatic possibilities.

Furthermore, where the varying grids converge a condition of spatial logistics occurs. The intention of future proposals is to capitalize on the "urban thickening" of these areas that permit a dialogue between them and requires mediation across scales.

Site: Talking Road

The organizational unit of Talking Road is a small scale and a choral grid. The traditional grid pattern has been broken and re-purposed to integrate high and retail, residential and small galleries into the existing urban fabric. The grid grid is not a rigid grid of conventional streets but a network of small streets and promenades.

There is a unique layering of indices and outdoor spaces. Numerous overlap and contributes to the richness of the grid system. Although designed from the ground up, the three layered grid works to define the spaces and forms.

M-50: The Duhongqiao Art District

M-50 is the Duhongqiao Art District along the Suzhou Creek. The creek is a natural waterway lined with factories and industrial operations. The city has spent billions of dollars clearing the river and building a network. The M-50 is composed of old factories that produced goods up through the 1950s.

Currently the area is in a moment of flux. Its urban character and material conditions are open and evolving.

The material conditions, spatial conditions and organization structure of this liminal space between M-50 and the designed River Walk is the subject of this study.

[THE CONVERGENCE OF 4 GRIDS - CONFLATED SCALES]

[1] Grid 1: is the convergence of three small grids. Organically there is high degree of crossover and hybridity.

[2] Grid 2: is a course gained grid. Taking on a linear nature with secondary elements running perpendicular the central spine. The horizontality and void space is significant.

[3] Grid 3: is also a course gained grid with a high degree of vertical differentiation. There exists a degree of elevation from the repurposed shipping docks and the elevated walkway.

[4] Grid 4: is the largest scale and highest degree of indeterminate horizontal surface. The covered overhangs of the large scale buildings begin to our public private spaces.
The IMMENSE GROWTH and POPULATION INCREASE of Shanghai makes the argument that the 2010 Expo site should move forward as a TERRITORY OF PRODUCTION serving the citizens of Shanghai. It would be a squandered opportunity if the city simply created another development of standard consumption levels. The demand for housing and living density prompts innovative spatial distributions and design that integrates the production of goods, materials, technological innovation, critical thought, education, ecological propagation, potable water, and food.

The TERRITORY OF PRODUCTION employs a flexible methodology within a very specific and mechanized framework of land distribution. The site is divided into Long Banded Program that run perpendicular to the Huangpu River. Every program and user has access to the river. Rising each "Band of Program" lots are divided based on a specific metric appropriate for the desired program. For example the Developer Driven Housing program has a lot size of 500' x 300' and 100' x 100' and 50' x 50'. The repeating bands of program types are meant to foster radical innovations of uses.

Two landscape infrastructures traverse the site, cutting through the banding programs along the river and along an existing boulevard. The programs of these transects are 1) An urban wetland system and tree canopy producing clean water and air for the site and 2) Urban agriculture that spans three vertical levels along an undevelopable street median.

These two distinct spatial organizations (the banding and the transects) create a condition of program and spatial logic that facilitate the process which hybridizes urban elements traditionally kept separate. For example, the TERRITORY OF PRODUCTION is to have an industrial character yet a residential character. This is to be highly connected and economically advanced yet be a functional water based ecosystem.

The adjacencies created will allow for a HIGH DEGREE OF FLEXIBILITY in the urban environment yet the division land will facilitate HIGHLY EFFICIENT MODES OF PRODUCTION.

PRECEDENT: Long-Lives Along the Mississippi River
Gary's work illustrates how these Long-Lives are separated from the user. These Long-Lives are actually very close to the river and are a mixture of urban agriculture and productive agriculture. This is a part of their discussion of the river and how it can be a living organism.
site plan
regulation[1.4] CHOREOGRAPHING territory of production

REGULATORY MECHANISMS

PHASE 1  PHASE 2  PHASE 3

FABRICATION
- 10% C/R TO REQUIREMENT
- 20% DP TO REQUIREMENT
- 100% MECHANICAL VENTS will be provided
- 20% UP TO REQUIREMENT
- 100% MECHANICAL VENTS will be provided
- 20% UP TO REQUIREMENT

RESOURCE / ENERGY
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN

HI - TECH INDUSTRY
- 30% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN

DEVELOPER DRIVEN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN

TRADE-SCHOOL / UNIVERSITY
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN

URBAN AGRICULTURE
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN

ECOLOGICAL COMMUNITY
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN
- 20% OF BOSSES MUST BE WITHIN 50 M WIN

FORMAL REGULATION / BUILDING TYPOLOGY

PHASED RELEASE OF LAND

PHASE 1  PHASE 2  PHASE 3