TOD Urban Integration, Community and Value Creation

8 Urban Design Strategies

通过TOD实现天津城市一体化发展及社区和价值创造

TOD城市设计8项战略

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TOD Challenges and opportunities in China

中国TOD发展的挑战和机会
Urban Design Strategies

1. Imageability
2. Enclosure
3. Human Scale
4. Transparency
5. Complexity
6. Coherence
7. Legibility
8. Linkage
1. **Imageability** is the quality of a place that makes it distinct

Imageability plays to the innate human ability to see and remember patterns: a place whose elements are easily identifiable and grouped into an overall pattern:

- Landmarks (singularity and location)
- Sense of place: a characteristic visual theme

Right: King’s Cross new concourse is designed as an enclosed civic plaza
IMAGEABILITY
GREEN TRIANGLE
Serge Salat Architect
An iconic green tower

-Landmark (singularity and location)
-Sense of place: a characteristic visual theme
2. **Enclosure** refers to the degree to which streets and other public spaces are visually defined by buildings, walls, trees, and other vertical elements. Spaces where the height of vertical elements is proportionately related to the width of the space between them have a room-like quality.
In an urban setting, enclosure is formed by lining the street or plaza with unbroken building fronts of roughly equal height. The buildings become the “walls” of the outdoor room. The street and sidewalks become the “floor”; and if the buildings are roughly equal height, the sky projects as an invisible ceiling. The total width of the street, building to building, should not exceed the building heights in order to maintain a feeling of enclosure. Visual termination points also contribute to a sense of enclosure.

Tallin and Malmö (Turning Torso Tower)
ENCLOSURE AND EFFICIENT LAND USE
GREEN TRIANGLE
Serge Salat Architect
Perimeter block development reaches a FAR of 4 with medium rise buildings and 50% of land for inside green civic space.
**GREEN TRIANGLE**

Serge Salat Architect

A green preserved island in a highly dense neighborhood

Preserve Green Space entirely: after project more green space than before thanks to suspended gardens, green roofs and terraced gardens. 50% of the park is preserved at ground level; More than 50% is recreated in the form of elevated gardens.
GREEN CIVIC SPACE

Green Plaza
and green amphitheater
are astounding civic places

Serge Salat, Architect.
Enclosure is eroded by breaks in the continuity of the street wall, that is breaks in the vertical elements, such as buildings or tree rows that line the street. Breaks in continuity that are occupied by non active uses create dead spaces that further erode enclosure; vacant lots, parking lots, driveways, and other uses that do not generate human activity and presence are all considered dead space. Large building setbacks are another source of dead space.

Top: Madrid Plaza Major is enclosed by an arcade system that defines a perfect rectangle
Bottom: Nanchang Ba Yi Square is circled by curved arterials that destroy any sense of enclosure
Madrid major civic space: Plaza Mayor
A 122 x 91 m well defined perfect rectangle, the size of an urban block

Nanchang major civic space: Ba Yi Square
(515 x 255 m, the size of a Chinese superblock) lacks definition and enclosure
Madrid Plaza Mayor and Ba Yi Square at the same scale in a 800 m x 800 m

Plaza Mayor is carved in a complex fabric of coherent and well defined small urban blocks

Ba Yi square fails to give a coherent order to oversized roads and buildings
TOD Mixed use building on top of Ba Yi Square subway station creates a well defined east edge to Ba Yi Square. It improves definition and enclosure, mediates with highly active commercial Zhong Shan Lu. It adds pedestrian covered galleries to public space.
3. Human Scale refers to size, texture, articulation of physical elements that match the size and proportions of humans and, equally important, correspond to the speed at which humans walk. Building details, pavement texture, street trees and street furniture are all physical elements contributing to human scale.

Moderate-sized buildings, narrow streets, and small spaces create an intimate environment; the opposite is true for large buildings, wide streets, and open spaces.

Today too many things are built to accommodate the bulk and rapid speed of the automobile: we are designing for 100 km/h. For pedestrians the information field should be scaled for offering a rich and coherent information at 5 km/h.

These distances and speeds set the limits of human scale. The most highly regarded public squares in Europe are almost all smaller than 10,000 square meters; most are smaller than 8,000 square meters.
DIVERSITY, VARIETY and Human Scale with a series of small scale buildings and an iconic tower and façade gardens

Top: Tianjin Green Triangle
Serge Salat Architect
Right: REAP Rotterdam
4. **Transparency** refers to the degree people can see or perceive what lies beyond the edge of a street or other public space and, more specifically, the degree to which people can see or perceive human activity beyond the edge of a street or other public space. Physical elements that influence transparency include walls; windows, doors, fences, landscaping, and openings into midblock spaces.
5. Complexity refers to the visual richness of a place. The complexity of a place depends on the variety of the physical environment, specifically the number and kinds of buildings, architectural diversity and ornamentation, landscape elements, street furniture, signage and human activity.
People can see what lies beyond the edge of streets and public spaces
Complexity Eroded

Narrow buildings in varying arrangements add to complexity, whereas wide buildings subtract.
6. Coherence refers to a sense of visual order

The degree of coherence is influenced by consistency and complementarity in the scale, character, and arrangement of building, landscaping, street furniture, paving materials, and other physical elements.
COHERENCE: Rhythm of street edge
GREEN TRIANGLE
Serge Salat Architect

Medium rise buildings line the street providing a coherent and vibrant streetscape
Legibility refers to the ease with which the spatial structure of a place can be understood and navigated as a whole. The legibility of a place is improved by a street or pedestrian network that provides travelers with a sense of orientation, and relative location and by physical elements that serve as reference points.
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LINKAGE: A continuous green promenade for pedestrians on the green triangle roofs links all spaces (inside and outside) with elevated gardens and bridges sloping gently up and down from street level to the tower.
8. **Linkage** refers to physical and visual connections from building to street, building to building, space to space, or one side of the street to the other – that tend to unify disparate elements. Tree lines, building projections, and marked crossings all create linkage. Linkage can occur longitudinally along a street or laterally across a street.
Linkage: Green elevated Gardens
Tianjin Green Triangle
Serge Salat Architect
and Varenna, Como Lake
LINKAGE refers to physical and visual connections from building to street, building to building, space to space, or one side of the street to the other – that tend to unify urban space.

Top: Varenna, Como Lake
Bottom: Tianjin Green Triangle, Serge Salat Architect
Linkage: Recreating vibrant street edges
Above: source ITDP. Bottom: Serge Salat, Architect.
Thank you for your attention

感謝諸位的時間

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