# **Reflection Paper**

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#### Aim

The motivation of the research comes from the proposal of new 'boundary' - 2001 Operational Plan for Historic Centre, which is a conceptual boundary aiming for urban regeneration of the old town in Genoa.

Traditionally, city develops under the demarcation of boundaries. As entities, city wall, moat, or natural barrier all serve to protect the city and defend against enemies. It is no exception in Genoa. Confronting with sea while backing the mountain, the historic centre of Genoa has the significance in the geographic location and its defensive role. From original centralized, physically demarcated urban structure, to nowadays divergent old town fabric, the border condition of the historic centre has changed significantly. The defensive walls and fortress gradually opened up, allowing new city to merge into original urban fabric of historic centre. Only from dispersed city walls scattering in the city, we could trace earlier boundary of the historic centre.

The Operational Plan aims to retrieve the social and economic vitality of the historic centre. It is neither simply an overlap of one original boundary, nor the collective of old urban fabric of historic centre, creating ambiguities in-between the old town and new city. Under the trend of urban regeneration, the historic centre accumulate conflicts with external city on the fringe area over time, which represents as a complex and active edge condition. Among such transformations, the change in the port area is particularly significant. With the industrial structure moves westwards, originally functioned as the industrial base of the historic centre, the waterfront has become a multi-identity interface where museum, public square, maritime activities coexist. Different scenes shared the exchange surface provided on the border and could easily transform into new scenario according to reprogramming or trans-programming. Although it is located on the border of the historic centre, relying on the industrial restructuring of the waterfront, the whole city shows a new look that is tourism and entertainment oriented. This relates to the background of urban regeneration. In the Italian context, Genoa is one of the significant cases that overcame the industrial economy with major urban transformations, under very well-organised public policies1. Instead of directly renovating the city centre, the strategy is to set the new urban public activities on the border through interventions and reconstructions. By enhancing the connection between the cultural heritage in the inner city and public activities, those events become the incision cutting in and activate the inner city.

After the Operational Plan appeared in 2001, such transformation became more significant. In the waterfront, the *Galata Museo Del Mare* museum built for 2004 Genoa European Capital of City, together with *Biosfera*, have now become a major source of attracting tourists. Similarly, the *Poor's Hotel* on the mountain side, is ongoing the reprogramming process to the the *Faculty of Law and Political Sciences*, which also facilitates it barren surroundings into educational facility. Although the Operational Plan aims for the historic centre as a protective and regeneration plan, the self-renewal, reprogramming and reconstruction on the border provides more flexible opportunities for the center.

<sup>1</sup> Francesco Gastaldi, Event-based urban regeneration and gentrification in the historic centre of Genoa

# **Boundary - Border**

Ignasi de Solà-Morales Rubió has mentioned the style change of urban experience in the 20th century photography. From photomontage of architectonic objects to urban narratives, urban experience observers gradually turn their focus on 'space as internal to the city yet external to its everyday use', defined as 'terrain vague'<sup>2</sup>. The shift indicates the urban experience perception is not the juxtaposition and accumulation of structuring fragments, instead, it should be signified by the manifestation of its physical surroundings. When we re-read Paul Citroen's photomontage - Metropolis, once the city is longer seen as an absolute unity, boundary doesn't exist. On the contrary, blanks among buildings and infrastructures intertwine indeterminate urban fabric. Norihiko Dan proposed a kind of order at the fringe - *separation, assimilation or mediation*<sup>3</sup>, which means diverse fields coexist at the edge will generate forces and conflicts. So the mediation among different zones become crucial.

The Edge have two basic forms, related to Richard Sennett's contention that 'the boundary is an edge where things end; while the border is an edge where groups interact'<sup>4</sup>. If we look into the fringe condition of historic centre in Genoa, great shift from the notion of 'boundary' to 'border' has taken place. Ancient 'boundary' as defensive city walls and natural land-water interface has transformed into a porous 'border' due to the functional mediation on the fringe. Set waterfront as the example, docks, quays and piers are usually the essential physical structures or by-products of ports. As the continuous extension of land, they are not only infrastructures that 'mark the water, but also incorporate the territory of the water by creating harbour spaces'<sup>5</sup>, shifting the waterfront from a natural boundary to a controlled border.

From the demarcation line of Operation Plan and the urban layout of Genoa, we could notice that the city composes of two parts. The inner territory with a high urban density, is the cultural centre of Genoa, including a World Heritage Site. While in the fringe area of the city centre, there are a lot of vacant space, or we called 'terrain vague'. It is due to the industrial transformation of the city led to the obvious degradation of industrial infrastructures, especially the abandoned railways. Fifty percent railways has disappeared in past 20 years. Moreover, based on the urban plan of the city, the leftover exposed on the ground will be taken placed by tunnels in following years. A larger amount of industrial structures would be abandoned and occupy the fringe area of historic centre.

The buffer zone in-between these two territories are mostly ambiguous to some extend. They are both separated but also connected by different types of infrastructures and grounds. The reorganization of different levels of circulation generates a vertical diversity in the buffer zone. Infrastructures played an important roles especially in Genoa. Due to the complicated ground condition and city's ambitious plan, it cuts the mountain, the city, the building, providing efficiency while leading to a fragmented urban layout in the fringe area. Those connections in-between two zones become the negotiation among different various infrastructural objects variated in types: water, pedestrian, automobile, mechanized. They are overlapped, superimposed, combined, subdivided, cut through...creating segregations and uncontinuous development around the historic centre. Even though different levels of infrastructure accumulates in the vertical direction, they are isolated, like the way how sopraelevata and railway cutting city while creating a parallel city in the upper level. The historic center sacrificed

<sup>&</sup>lt;sup>2</sup> Ignasi de Solà-Morales Rubió

<sup>&</sup>lt;sup>3</sup> Norihiko Dan

<sup>&</sup>lt;sup>4</sup> Richard Sennett, *The Open City*, p.8

<sup>&</sup>lt;sup>5</sup> Lauren Jacobi, *Territoriality, Fortifications and Port Cities in Early Modern, MIT press*, p.6

lands on the border for its industrial ambition. But learnt from Genoa's urban regeneration, once these infrastructures are abandoned, they become the potential incision as well as the backbone for their surroundings.

## **Spatial Strategy**

As we have seen, the regeneration of the historic centre in Genova, highly connects to the external territory and buffer zone surround it. New development found space in the border while small interventions happened in the core of historic centre. Besides that, And these connections are mostly influenced by topographic condition among different medium, as well as various infrastructural objects, generating complexity in the types of infrastructure, from which we could study the spatial strategy in dealing with spatial complexity.

The wharf, is a structure on the shore of a harbour or on the bank of a river or canal where ships may dock to load and unload cargo or passengers. It is the extension of the land. By prolonging and amplifying the boundary of coastline, providing the waterfront the exchange surface from the water to the land. The way we design wharf, determines how vessel connect to the land. In the port near the historic center, with the expansion of wharf, the wharf is not only the exchange surface for vessel, but also attach to a variety of public activities which shifts the waterfront more like a 'formal public realm'.

The retaining wall, originally used to reinforce earth slopes or stone slopes, it is used by Genoese to deal with the topographical condition and create connection between mountains and the sea. On one side it provides ground on the top and extends it bidimensionally, while on the other side it creates an almost vertical wall towards the valley. And it is typical in Genoa that this vertical wall has a thickness which could accommodate staircases and even large volume. So sometimes it appears as double wall with vertical circulation inside, sometimes it shows as both facade and retaining wall, which give the ambiguity to the depth of it.

The second element is aqueduct. Genoa's historic aqueduct is an impressive structure supplying the city with water at the start of the 1200s. The aqueduct starts from the water at the far end of the mountain, passing through the city, and shows a variety of combination with the landform. From tunnel, gallery to viaduct, well, it finally goes underneath the road leading to cisterns in the city centre. It is considered, together with roads, to achieve the goal of transportation and connection. So they usually share the same structure, superimposed and accumulated in the vertical direction, and creating two ground conditions for water and people respectively. Most of the time, the connection in-between is invisible. But it happens to meet when there is an incision on the ground or the wall.

### **Reclaim**

The *Sliding, Folding, Swing door* is an good case to show the idea of reclaim. The entrance was initially designed for a garage, and later turned into a temporary exhibition space. The space has the characteristics of being discernible from original gateway, with new built entrance revealing new identity and scale of visitors. By reclaiming the space, the functionality of the door will not change with time, it is still an interface of interior and exterior, but partly redefined by adding new gesture of unfolding and swing. It is a mediation between past and present simultaneously where cars and individuals transit converge, instead of merely erasing built form for transprogramming. For vacant space on the border that is experiencing degradation, reclaiming

the land through reprogramming might become a turning point for both historic center and its neighbourhood.

## Barcode - 'Served' and 'Servant'

A barcode is an optical representation of data. The data usually describes something about the object that carries the barcode. Traditional barcodes systematically represent data by varying the widths and spacings of parallel lines. It usually represents as graphical black lines. While practically, it relies on the white intervals to make the information to be resolved. The interesting opposition in-between the invisible and the functionality hidden inside the barcode, is also reflected on the 'served zones' and 'servant zones' in Louis Kahn's theory. In the work of Aires Mateus, The main spaces are the 'served zones' or the primary areas, such as living rooms, bedrooms, etc., whereas the auxiliary spaces are the 'servant zones' or secondary areas, such as kitchens, storerooms, closets, etc. He used the black spaces to present the 'servant zones'. In terms of the historic center in Genoa, the border area is its servant zone.