Casablanca

Infrastructural paths: the segregated city seams
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26th June 2015
The segregated city seams

It is a matter of fact that infrastructure was and always been a major artery of every developing country, it moves economic, culture and social resources to where they are needed or where they wanted to be. The network of roads are the one of the primary structures of urban design, the cities depend on the infrastructures.

However, as Lambert (2015) stated that the infrastructures e.g. highways, rails and trams always have the double contradictory role of maximizing the movement of a selected population — one that owns a vehicle — while simultaneously constituting a significant obstacle to all movement perpendicular to its own, thus acting as a form of wall.

“The ability for infrastructure , while facilitating some means of communications, to greatly prevents movement in the ‘perpendicularity’ of its axes. Urban highways are thus exemplary of how the infrastructural means of maximizing a movement between the city and its suburbs, simultaneously minimize the movement internal to the same city.”

The urban populations, in particular the lowest social classes that do not necessarily own a car, find themselves detached from the the city they live in, trapped by these axes of segregation cutting the urban fabric like canyons. (fig.1)

This is also a case in Casablanca. Since 1962, the 948 km Marrakech - Casablanca - Kenitra - Fes - Oujda line became known as Chemins de fer strategiques du Maroc and the branch lines diverting from the line as Chemins de fer de penetration du Maroc. These lines were built during the period of 1921 - 1925. The map (fig.2) shows Casablanca’s former state when the only main infrastructure line and main roads, the patches of different urban morphologies were scattered around evenly.

In 2014, Casablanca started operating its own tram lines, which is the second city of Morocco that adopted them in order to connect people all over the city. There are two existing lines that run from the east to south right through its city center which undoubtedly create social interaction opportunities for different kind of people. However, the infrastructural elements also cut the urban tissue by difference in hardness, speed, scale, shape and etcetera which negatively effected the surrounding neighborhoods. As clearly seen in fig.3, the city turns its back at the infrastructural tracks, leaving behind the opportunities
fig. 1  Leopold Lambert, Infrastructural urban canyon: the axes of segregation
A metaphotical collage showing how the infrastructure divided the cities apart
to sewn back the disconnecting urban fabric. The city grew along the road networks but did not follow along the rail lines, supporting what Lambert said that the urban canyon morphological effect. The condition does not only happened in the States, but also here in the northern country of African territory, Casablanca.

The phenomenon will become even more apparent by 2030, when the construction of new lines and some existings' extension will be finished. Casablanca would have in total 8 urban seams cutting through, dividing their city more into unconnected patches.

Therefore, it is interesting to also study how architects or urbanists have been dealing with overcoming the segregation effect of the infrastructures.

“A topic that many cities have been dealing with for a long time is the dividing effect of motorways and railways tracks; the placement of these infrastructure stems from the fact that, up until the 1970s, the need for mobility trumped overall urban development.”

Almost every European country is currently experiencing a process of constant urban transformation. Even more than newly constructed buildings, the new trend of renewing urban infrastructures intervenes strategically with the existing urban structure while at the same time opening up enough spaces for previously unthought-of opportunities for creating new uses, meeting places and social interactions.

“A central issue is how new functional claims and conversions can bring about a successful reintegration of these structures into the urban environment.”

In later chapters, analysis on case studies will be elaborated further, focussing on the existing condition and how the infrastructures act to their neighborhoods, how the architects or urbanists came to change the once neglected island into new public spaces or even more a new centrality where social interactions happen.
fig. 2  Casablanca in 1962
A map showing urban morphology compared with infrastructural lines
Notes


2. Feireiss, Kristin, and Oliver G Hamm. 2015.
A map showing urban morphology compared with infrastructural lines
The walled society

By 2030, Casablanca will have potential for total 8 transportation hubs serving both tram and train lines (fig. 4). Of all the area, only Place des Nations Unies tram stop can be truly called the real centrality of Casablanca. The tram lines cut through the colonial part of the city, along with the newly redesign plaza. While the other cases are not comparable to the predecessor stops.

The far west end stop of the T2 is where people can reach Casablanca’s beach and the nearest one to Le Corniche, the stop is called called Ain Dhab Plage. Its surrounding contexts are mostly residential with detached houses that are all walled off from the public street and the infrastructure line itself (fig. 5). Once people get off from the tram, they would find themselves surrounded by series of walls that run parallel to the tracks and roads. There are no sign of an in-between space that people could linger on or sit and wait for the tram to come, and the only notion that tell you where to go is by following the street down. Finally you end up on the junction where there are no sign of life, unoccupied buildings, a few lanes of roads and the beach (fig. 7).

While another problematic area caused by infrastructural seams is Le Oasis train station and tram line T1 stop. This area is situated on the southern part of Casablanca, where the only train that runs between Casaport and Casablanca’s airport always pass. Not only that, it is also an area where people can switch from one mode of transportation to the other; both tram and train pass the place (fig. 6).

Looking at its existing urban morphology, it is clearly seen that yet again, the neighborhoods turn their back on the infrastructural seam by constructing walls completely around their private allotment. Moreover, once people get off the tram stop, they would found themselves standing in the middle of nowhere. In front of you is the vast unoccupied area and behind you is looks like the longest lines of wall you can imagine. There are no sign that indicates where the train station is, the wall itself only lead you either left or right and out of the blue, you would find a tunnel that takes you to the other side of the wall, the other side of the world. This is where the same atmosphere occur, the entire neighborhoods of walls.
fig. 4  Casablanca new centralities
Networks: Nodes and Connections
fig. 5  Ain Dhab Plage

A map showing infrastructural seams and city segregation around the area
fig. 6  Le Oasis

A map showing infrastructural seams and city segregation around the area
fig. 7  Ain Dhab Plage

A collage showing surrounding urban fabrics and its neighborhoods
fig. 8  
Le Oasis

A collage showing surrounding urban fabrics and its neighborhoods
Case study: A8ERNA

Koog aan de Zaan was a little old town near Amsterdam, the Netherlands before a motorway was constructed at the beginning of the 1970s. The A8 motorway crosses the Zaan river sitting on 7 meters high columns (Fig. 9). The rows of columns together with the elevated motorway create a strange monumental that distantly recalls an elongated cathedral that no ones went to.

In 2003, The Zaandam city itself, NL Architects and Carve (skatepark designer) and the residents worked together to bring forward the idea of how to reunite the two parts of the town that had been separated by the motorway (Fig. 10) and how to breathe life into the unused space underneath it.

One now finds a multi-purpose zone that has since become the new city center. The area is provided with a skatepark, a playground, a breakdance stage, a soccer field, a basketball court, a graffiti wall, parking spaces, a supermarket, a flower shop, a fish shop, a sculptural bus stop, a mini port and a panoramic deck (Fig. 11). Not only the once neglected space underneath, the square in front of the church adjacent to the motorway has been redesigned as a public living space.
fig. 9  Zaandam
A map showing infrastructural seams and the city center
fig. 10  Zaandam before the intervention

A diagram showing surrounding urban fabrics and the infrastructural seam
A diagram showing the intervention implemented on the area.
Case study: Park am Gleisdreieck

Park am Gleisdreieck is located in the middle of Berlin, Germany. Just over a kilometre south of Potsdamer Platz, an extensive triangular-shaped area of waste ground once separated the neighbourhoods of Kreuzberg to the east and Schöneberg to the west (Fig. 12). Known as Gleisdreieck, meaning ‘triangle of rails’, the area was formed by the intersection of different railway lines that had entered Berlin from the south since the mid-nineteenth century.

As the infrastructure gradually ceased to be used, the whole Gleisdreieck area became increasingly run down and neglected, as seen in Fig. 13. Meanwhile, vegetation took over, turning it into a surprising natural enclave in the middle of the city. The closeness of the Berlin Wall also contributed to the fact that Gleisdreieck was for decades clearly identified as a no-man’s-land.

After 2006, the Berlin city put forward the proposal of converting Gleisdreieck into a large urban park. The problematic, decades-long disconnectedness now had an opportunity for joining the southern area of Potsdamer Platz with Kreuzberg and Schöneberg.

The project as a whole was planned around a large existing central meadow, crossed from east to west by a concrete footpath and from north to south by a pair of railway lines. Once a month, a train slowly crosses these lines, travelling from its shed to the German Museum of Technology. The concrete footpath, which is a continuation of one of the main Kreuzberg boulevards, starts in the east, clearing the four metres difference in height of the platform by means of a stairway, and suddenly ends in the west on reaching the U-Bahn lines. The overall plans include spaces with and without vegetation, protected and predominantly lively spaces, quiet areas and areas of recreation uses.
fig. 12  Berlin

A map showing infrastructural seams and the city center
fig. 13  Gleisdreieck

A diagram showing surrounding urban fabrics and the infrastructural seam
fig. 14  Gleisdreieck

diagram showing the intervention implemented on the area
Converting urban infrastructures

Almost every European country is also currently experiencing a constant transformation process. The renewal of urban infrastructures intervenes decisively with the city structure which opening up spaces for previously unthought-of possibilities of new uses, meeting places and interactions, even more than the newly constructed building projects.

From the two case studies, there are two design strategies that were used in reconnecting the infrastructural realm with the urban realm. The first strategy like in A8ERNA case is by ‘injecting’ life or suitable public functions underneath the elevated seam and turn the area into a new centrality. While in the Gleisdreieck park, the layering of landscape has come into action with and without vegetation. A series of pathways and nature together act as an in-between space between the rail tracks and surrounding city.
fig. 15  *Converting urban infrastructures*

A diagram showing design strategies mitigating between infrastructural seams and city; injecting and layering
Imagining new centrality: Le Oasis

How would the city could be molded together more when there are such a strong seam that cut through its fabric.

How to overcome urban barriers is a key topic in the conversion of the walled infrastructure area and their use for new facilities that serve the neighborhood on both levels.

And this is when the strategic intervention comes in.
fig. 16  *Le Oasis segregation*

A map showing infrastructural seams and city segregation around the area
The charging wall

The first thing that worth our attention is the bipolarity character between the city and infrastructure. It consists of two realms on two different natures: the spatial-formal realm of infrastructure and the relational realm of human society. They are areas that must be held clearly distinct if one is to relate to one another. Each realm has its own autonomy.

However, there is indeed a connection between the two realms in the sense of interaction. How can this interaction be brought about? The dualities which, if there is any reasonably harmonious existence, must not be split apart and separated but mutually reconciled.

“The method readiest to hand for reconciling spatial polarities is to establish an ‘in-between’, a place where they can be made to interact. It is the place where a meeting between two realms take shape, the place where two regions that retain their full individual integrity overlap, where they are simultaneously present.”

This strategy can be applied by the one of the most simplest architectural elements, the wall. Traditionally the wall has been seen as a dividing tool, nevertheless there are several architects that tried to charge it with an unconventional thoughts changing its sole function into different perspective; the wall as a tool to articulate and as a tool to inhabit (fig. 17).

The Sonsbeek pavillion is a series of parallel walls - six solid walls enclosing five narrow (2.30 meters wide), parallel galeries, shown in fig. 18. The visitors having entered between these walls would found themselves in an entirely different space, a space that unfolded in to a swirl of streets, open spaces, corners, alleys, gateways and towers. By implimenting simple geometric forms of straight line, circle and half circle, he created a maze of straight and round, convex and concave, intersected by bends and diagonal venues. But whether solitary or social, they all felt as inhabitant of the small city.

What is interesting is that the Sonsbeek pavillion is designed in such a way that it held out an invitation to wander. A visitor who set his mind on following systematic route, for example by taking one street at a time, would later on find himself continually diverted from this plan not only by the spatial twists and shifts, but also by the sculpture itself, which occupied at several intersections and repeatedly pointed the visitor in a new direction (fig. 20).
fig. 17  The wall as tools

Diagrams showing traditional and unconventional ways of the wall as tools for dividing, articulating and inhabiting
fig. 18  Aldo van Eyck, Sonsbeek pavillion

The wall as an articulating tool
fig. 19  Louis Kahn, Unitarian church  
The wall as an inhabiting tool
fig. 20  Unconventional ways of charging walls

Diagrams showing different circulation behaviour of users with the two walls
fig. 21  The charging walls strategy

Diagrams showing design strategy to deal with the city seam caused by infrastructures
While in case of Louis Kahn’s version of unconventional use of wall; as an inhabit tool. He was known for his interest in Scottish Castles, by which he elaborated the distinction between ‘served’ and ‘servant spaces’, with great central living halls and auxiliary spaces nestled into thick outside walls. The castles were a strong inspiration for later works such as the Unitarian Church in Rochester (fig. 19).

“When looking onto the constructive elements, the “wall” plays a definitive role, acquiring in both cases a gigantic dimension. The Wall understood as the interface layer with an outer face touching the exterior and an inner one related to the main space. Between these two faces, it is where the highest density of human activity takes place.”

The windows of the classrooms surrounding the sanctuary are so deeply recessed as to be unnoticed when viewed from an angle, and the indented corners have no windows at all. All of this makes it possible to perceive the sanctuary as a large room surrounded by massive and rugged walls, the ‘inhabited walls’ of the church school. As Kahn said, “the school became the walls which surrounded the question”.

From the two strategies, there is a great chance that instead of a clear distinct separation between the infrastructural seam and the urban fabric. Ones could create an in-betwen space by incorporating the articulating walls to slow down the speed of people and create diverse route. While the most intensed inhabited wall can act as the last layer in between the two realms.

Notes
