

# CRISSCROSSING INFRASTRUCTURES

## A potential for urban development



Elaborating strategies for the design of cities assumes greater significance as the world becomes more urban. Who is in charge of this task of prime importance? One could think that it is the architects, but actually as infrastructure planning was left over to engineers, the latter have a greater impact on the shape of cities. Looking at history, infrastructure is indeed the most powerful tool to found a new settlement and to regulate urban sprawl.

The present demarcation between architects and engineers led to a division of the architectural and infrastructural interventions. On the one hand the position of architecture in our society is intricate as it is considered by the media as piece of art but has only a small impact in the built environment. On the other hand infrastructures are designed solely for efficiency following principles of pure function and generally not taking the surrounding environment into account.

If we look closer at transport infrastructures, they allow cities to be connected to territorial and international networks but on the other hand they separate different parts of a city and require many bridges and tunnels to restore a subterfuge of connectivity. These artifacts are usually unattractive and potentially hazardous places isolating districts from one another. Transforming them into connecting elements would create more homogeneous cities and integrate isolated areas into an attractive urban life.

### INFRASTRUCTURE AS A PARADOXICAL ELEMENT, CONNECTING WHILE DIVIDING

Without infrastructure there is neither architecture nor urbanism. Infrastructures are prerequisite that make it possible to establish a settlement. Traffic and infrastructure have shaped the city of Basel since its early origins. Positioned at a major intersection of European highways and railways and the only port of Switzerland, Basel is an important logistical center. The surrounding geography turns it into a bottleneck with all the traffic roads being squeezed in or nearby the city. The railway tracks have acted as motors of industrialization and development in the area of metropolitan Basel although it now encircles the city and segregate as walls once did.

The connectivity of transport infrastructures is only in one direction and as much as they are linking two points, infrastructures are also dividing the two areas placed on each side of its linear direction. The conditions of these two areas can be heavily impacted by this separation and lead to inequalities. There is a great need of considering infrastructures as part of our environment, thus needing attention and design.

Turning barriers into connectors

Traffic infrastructures are inherently acting on different scales; they link territories by running through communities. In urban areas, there is a need to bring back the smaller scale together with the presence of territorial infrastructures and these infrastructures represent rightly an opportunity to tight the city together. Weaving the city together could be achieved by doing some precise urban stitching using connecting elements in places where it is most needed.

Cities are made out of transitions, articulations and relations and cannot suffer the divisions and sidelining of whole districts. It is of prime importance to allow movement to cross infrastructures. Taking flow managing as a starting point, the model would develop strategies to support and facilitate the displacement of people, goods, energy and information.

Rethinking the relationship between architects and engineers would not only acknowledge the dependence of architecture on infrastructure but would also unlock the creative potential of infrastructure. Seeing infrastructure beyond engineering, beyond its pure function, leads us directly to the urban potential laying in infrastructure.

### THE LATENT URBAN POTENTIAL OF TRAFFIC INFRASTRUCTURE

To allow urbanization and demographical growth to expand we need to find strategies of development for our cities. Territories being not infinite, the density in cities will have to increase. Why not investigate the voids of the city like the space above rail tracks? The old Postreitergebäude in Basel is in such a situation. It separates the district of St-Alban and Gundeldingen and its particular position nearby the main train station gives it a lot of potential. Urban stitching would connect previously separated areas but could also provide additional functions making these connectors attractive elements in the urban landscape. Besides being a connection, it would also become a destination in itself.

If we go back at the original definition of the word "infrastructure", it designated the railway fundament opposed to the idea of "superstructure" which regrouped all the railway equipment above the ground. A "superstructure" is exactly what we could do to bridge over traffic infrastructure. The managing of flows and movement would be laid as a basis of the design, to which could be added more programmatic richness. A new urban typology could emerge, the so called "superstructure bridge", providing connection but also new spaces for apartments, offices, public institutions, recreations areas and parks. A close relationship and interdependence between architecture and infrastructure would be engaged and fostered.

### HOW TO MAKE A SPACE FROM A STREET?

Public good is served not only through the provision of needed infrastructure but also through the provision of public space. We can see examples of such designed public spaces in some urban roadways as the Henry Hudson Parkway in New York or the Cinturón in Barcelona. In order to create a space and a feeling of location out of a connecting element, it is important to bring an added value and a richness of situations. The structural authority of the unbuilt environment will be acknowledged and squares would be considered as rooms. The public spaces will form a structural sequence. Pedestrians, making the city through walking, will regain power over the mechanization of cities. Walking will be considered as an everyday act profoundly constitutive of the urban fabric.

The superstructure bridge is bringing together various activities at various speeds; the railway, the cars, the travelers going to the train station and the pedestrians strolling around. The public space will allow looking at these various movements, the architecture being the framework of this complex ballet. The space will also open towards the city and provide an exclusive view of the urban landscape.

Presenting various situations of public squares, the project aims to fulfill the varied desires of the urban dweller, be it of socialization or of emphasizing the individual forms of personal existence. With its particular position nearby the train station, the project at Peter Merian-Brücke will also provide a wide break into the open after the confinement that characterizes train travel and train stations. It will provide spaces for the anticipation before a journey and for the reunion at the return.

### DEVELOPING A PILOT SCHEME

Traffic infrastructure have always been shaping cities but without a large consideration of their separating characteristic. Linking areas that are currently divided by railway or highways could enhance development and make these areas more attractive. Moreover, to the action of connecting could be added more functions and programs, turning the connecting element itself into a destination. A new superstructure bridge would act as a motor of urban development and create a new network of relations in the city.

The project in Peter Merian-Brücke aims to be seen as a pilot scheme that could be repeated and adapted to other crucial points in Basel such as the Badischer Bahnhof or the connection Birsfelden - Hardwald. Therefore it is designed by simple rules reflecting a stance on enhancing urban development by crisscrossing infrastructures. The model could eventually be exported in other cities of western countries and advocate for highlighting the potential of development of traffic infrastructure in urban areas.



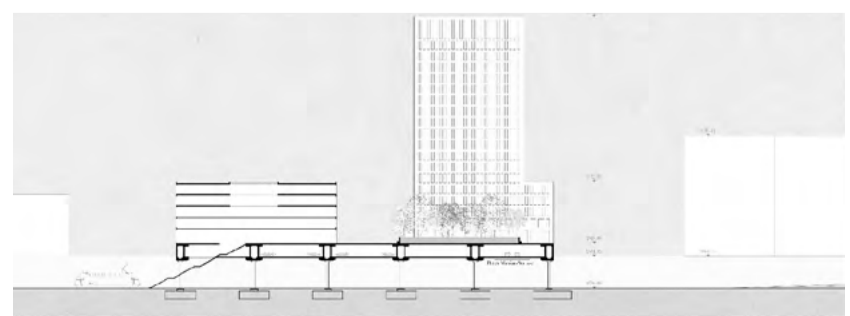
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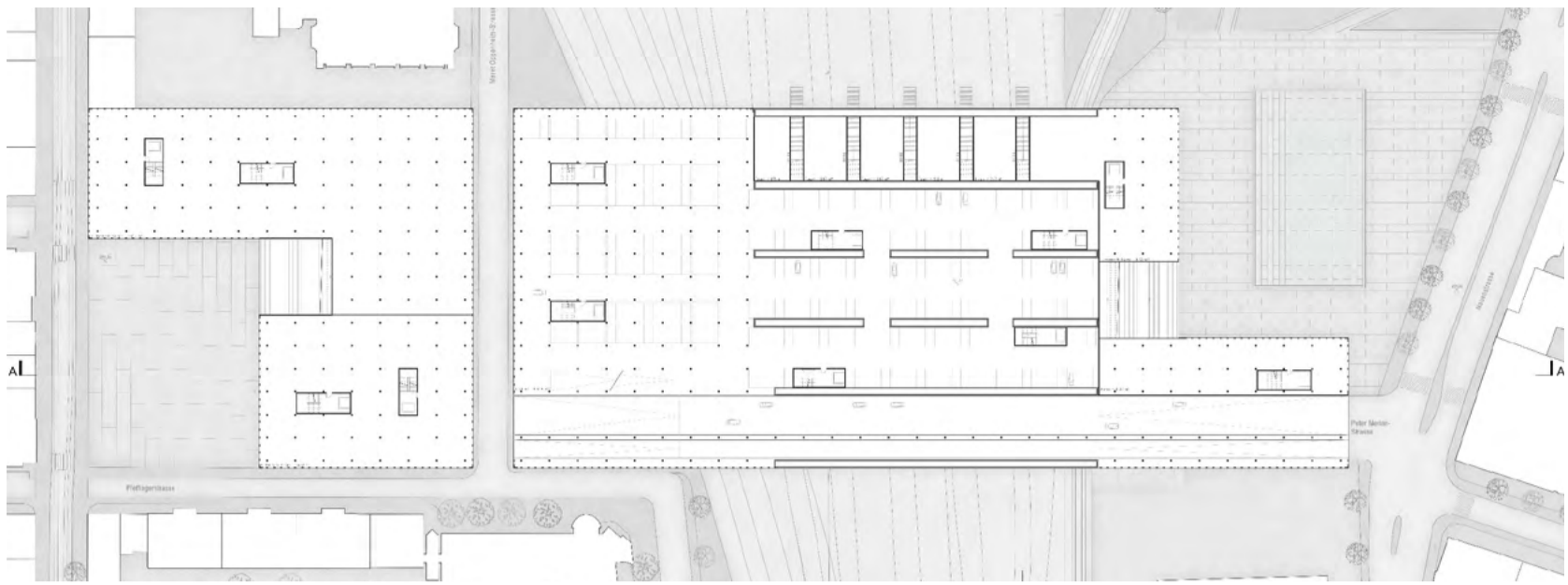
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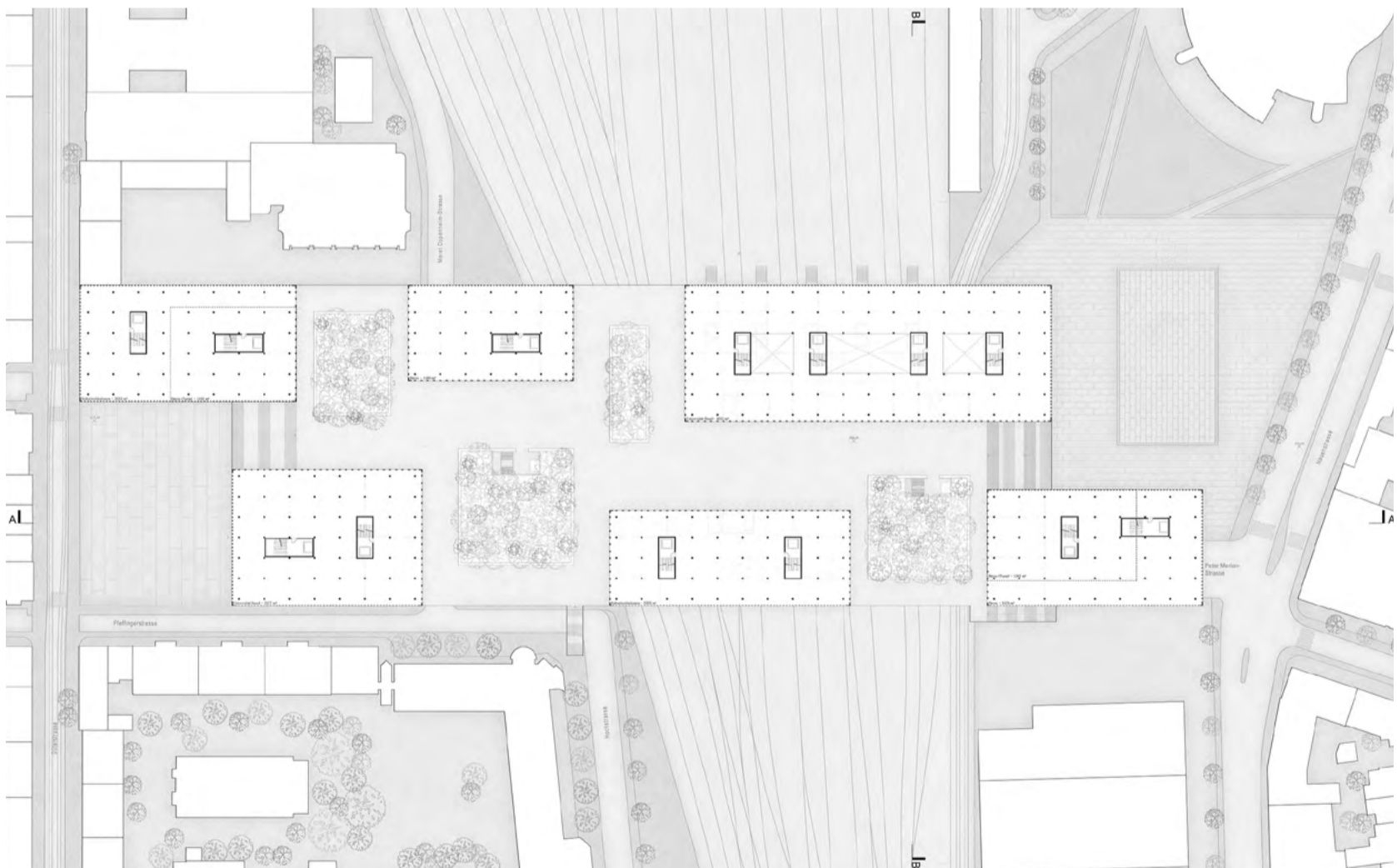
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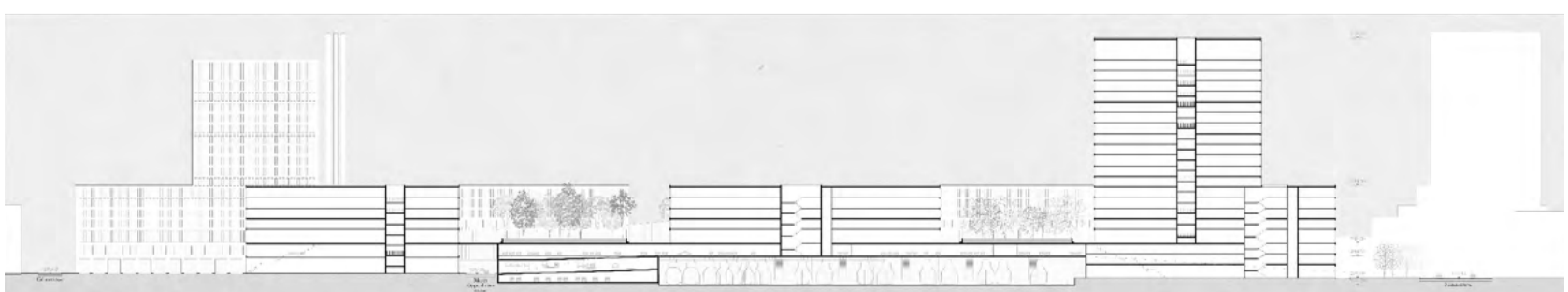
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