

# Reflection

## Graduation thesis

MSc Architecture, Urbanism and Building Sciences  
Studio Architectural design crossovers

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### Introduction

My graduation project started with a fascination for the underground metro system of Madrid and Richard Sennett's argument for an open city. In order to better understand the city's public transport infrastructure the research started with an investigation of the assemblage of public transportation infrastructure that is part of the city.

### 1. Master track and programme

In my Master's in Architecture, Urbanism and Building Sciences, I have followed courses from the Architecture and Urbanism tracks. While I am graduating in the Architecture track, I have aimed to create crossovers between these tracks in my graduation project. This has been both exciting and challenging. The integral approach of my transformation of a public transport station makes the result more embedded and valid, but is also a complex exercise. Both designing the urban strategy and the central building in the urban context create a lot of interdependencies that have to be attuned. Furthermore, the large scale and limited time make it difficult to create a project that works on all scales.

The crossover between different tracks also strongly relates to my graduation studio. The studio's approach of uncovering and transforming systems that interact with cities is reflected in my analysis of the relationship between the city and the public transport system. This relation is investigated from the neighbourhood scale up to the scale of Europe.

### 2. Research and design

My design and research output have developed in tandem. My initial fascination started with the public transport system of Madrid, using assemblage theory to understand it. This was complemented by my idea of fitting the public transport hub into the concept of the open city. My research plan described the aim of uncovering the city's public transportation assemblage and using this to inform my design for an open public transport hub. The research has been guiding in the selection of a site and site analysis. Moreover, it has guided the strategic plan for the urban context of the station that I presented in the P2 presentation.

The complex and seemingly all-encompassing concept of assemblage proved difficult to inform my design. With the help of my tutors, I managed to sharpen my approach to focus on the influence of boundaries created by mobility infrastructure. My final research paper has also shifted more towards repairing these boundaries by employing the open city concept. It uses the concept of the open city as a guideline to transform a public transport hub and embed it in the existing urban fabric. Research and design are happening side by side: The design principles that follow from the research are employed in the design, while issues that have arisen during the design steer the development of my research.

### 3. Methodology/approach

Starting with the entire city of Madrid as a site of investigation has been a challenge because of the very open research direction. Narrowing down towards a design project has proven especially difficult. The

writing of a research plan has helped to define a trajectory, however, it was also very fleeting in the way that my approach and focus were constantly reshaped. After the presentation of the research plan at P1, my testing ground was set to be a current station, which narrowed down the potential options. This helped me select a set of different stations in the city to visit during the excursion to Madrid. However, there was not enough time to look at the various stations in depth. In hindsight, it would have been better to have a more narrowed down list of potential sites to be able to spend more time doing thorough site investigations.

After my site selection, the transition from research to design has felt a bit sudden. Narrowing down from the scale of Madrid to a building leaves many choices in between that have to be substantiated. In the limited time available, I felt that I was often lacking a proper basis of research and analysis for my design.

#### **4. Academic and societal value**

The outcome of the graduation project contributes to the discourse about the concept of the open city and its application to the public transport hub. It also provides an example of a way to remove boundaries between neighbourhoods created by mobility infrastructure.

The societal value of the project can mainly be assessed in two ways: its effect on our mobility patterns and its use as public space. Changing our mobility patterns to less carbon-intensive alternatives is an important step in reducing the effects of climate change. This transformation of a public transport hub makes sustainable mobility more accessible, efficient and pleasant. The transformation also improves the liveability of the surrounding neighbourhoods by using the hub as a point of confluence and a concentration of functions. This can contribute to a more polycentric city that gives more people access to day-to-day services and creates a sense of identity around the public transport stations.

#### **5. Transferability of outcomes**

The research paper has a more widely applicable conclusion. It extracts design principles from literature and tests these through the use of three distinctive case studies. These design principles can be easily translated to different site conditions.

The design project specifically looks at the station of Méndez Álvaro in Madrid. Whilst the project can be an example for other public transport hubs, the design cannot be translated easily to other places. This is caused by the unique site conditions such as the proximity of large infrastructural bundles, the relation of the station compared to the entire public transport network and the character of the surrounding neighbourhood.

#### **6. The project as an example for the rest of Madrid**

Madrid has a large public transport network with various hubs. The entire network is really focused on the efficient transport of people and not so much on its integration with the surrounding neighbourhood. The architecture of the stations is very generic and has little connection with the neighbourhood it's in. The name of the studio 'Madrid: the expanded city' hints at the large urban sprawl that has occurred in the last decades on the fringes of the city. During my site visits, I also visited several hubs that were situated in these newer neighbourhoods, and I noticed there was very little going on in these neighbourhoods. They have mainly residential functions and are directed towards the city centre, lacking a central space where people can come together casually. By transforming these stations into central public spaces for these neighbourhoods and moving towards a more polycentric city, I believe Madrid can become a more open city.

#### **7. Directions for further research**

The application of the open city to a public transport station has been tested in this design project. My attempt at translating the open city to a public transport hub was complicated by the fact that a public transport hub is a building complex instead of a part of the city. This means the open forms Sennett proposes cannot be directly applied to public transport hubs. My research has attempted to extract the prerequisites for buildings to achieve an open city, however, this should be further investigated.

Furthermore, the open city calls for buildings and spaces that are embedded in their context. This project is directed to the specific conditions of the station Méndez Álvaro. Therefore, for the open city to be applied to other hubs, factors such as its size, its location in the city, its relation to the transport network and the mix of functions around the hub have to be taken into account. In order for a more complete set of principles for an open public transport hub, the concept has to be applied to a larger variety of stations.