

## **Reflection Paper P4**

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MSc.4 Reflection Paper

## Introduction

The aim of this paper is a critical personal reflection on the final graduation thesis. This provides an overview of the outcomes of both the design and research phases of the project. The reflection step is important to gain knowledge of the research-methodological aspects encountered while working on this thesis topic. It will lead to a broader understanding of its relevance and social value and implementation. The thesis topic is about the public building of the railway station that is subject to constant change which influences the architectural needs.

The test case for this thesis is the studios chosen location of research, New York Midtown Manhattan. Manhattan houses two major Railway stations, Grand Central Station and Penn Station. The latter is by a multiplication of two the largest operating station in the city and in the northern hemisphere. The average daily user counts exceed the three busiest airports in the world combined, and it is continuing the grow ever further.<sup>1</sup>

There is one major difference between the two stations in New York. The original Penn Station with its Beaux-Arts style decoration of the 1910s was completely demolished in the mid-60s. Due to the decline in travellers and the shift to personalised vehicles. The result became a total utilitarian station, where every square foot was programmed to gain profit. The creation of the arena Madison Square Garden on top of the station was the result of the land sale that housed the station prior. As mentioned, the station is in rapid growth of the number of travellers and the current situation cannot keep up with the amount. Because of this, there are many challenges in the station to solve. The congestion and crowdedness of the station is by far a pleasant public space to pass through.<sup>2</sup>

To understand how architecture can be of relevance for the station the following research question was formulated: How can the arche-type of the railway station continue to exist in dense urban environments?

This graduation project shows how two programs, normally situated on each own plot, can be working together as one single building. The expansion of the railway station is desperately needing more space. Due to the creation of multi-million dollar arena Madison Square Garden on top, it became a hard-to-navigate underground drama. By researching both programs needs and their common grounds, the building could potentially function as one building. The current program situated on ground floor is lifted up to the 1<sup>st</sup> floor. This allows direct access and wayfinding to the station. By leaving the ground floor-connection of this program at ground level, a sculptural form emerges. This negative effect is transposed into a positive one by making it the attraction of the station. Here people can orient themselves to and it provides a point of reference.

<sup>1</sup> Department of Transportation, Mobility Report 2019, (New York City: 2019)

<sup>2</sup> Eric J. Plosky, The Fall and Rise of Pennsylvania Station, (Cambridge: MIT Press, 1999)

## **Aspect 1: The relationship between research and design**

How and where is knowledge created, where does it come from? Basically, all the things we don't know, start in the form of a question. It is the start of knowledge being created. Architects are often questioned how they received their knowledge or how they decide on things. Some say, "design must be intuitive", while others then rationally ask why things have been done like they are.

To understand the vast complex nature of the built environment of New York city, the studio focussed on a group site work and condensed the research to an area of roughly 3km<sup>2</sup>. The research is focussed on the studio topic and personal chosen topics. The group research has been done to gain an extensive amount of knowledge of the context of the site and its position in the city of New York. The individual projects are a manifestation of interests one had at that point. The research is being conducted by gaining knowledge from hard data about the site, in a variety of topics throughout time. The conclusions were mainly challenges and possibilities that the site could use to gain potential.

Research and design are utterly connected through a feedback loop to gain knowledge at every state in the process. It cannot be set apart; otherwise ungrounded decisions are made and are open to debate. This process is not linear and needs to happen at all times.

How much time you do your research, what are the criteria you use to test the design and how many options or variation do you make? These are all useful parameters that influence the design. This knowledge is used to formulate individual topics that all include challenges for new buildings. Research can be done in a variety of ways, all with different outcomes. To understand the relevance of the conclusions is

## **Aspect 2: The relationship between graduation topic, the studio topic and the master architecture track**

While visiting and researching Midtown Manhattan it became clearer how the corporate centre of the two financial districts (Financial district and Midtown) are places where only the rich are living. The area is therefore host of the most expensive pieces of real estate in the world.<sup>3</sup> The studio is focusing on this business district and the changes currently happening in the area. One of these changes is the movement of offices into other parts of the island. One prime example is the movement of Deutsche Bank from financial district towards the newly created Hudson Yards.<sup>4</sup> A bank moving away from financial district. These changes will result in urban relocation and questions for architects how to respond to this and where this will lead to.

<sup>3</sup> SYLLABUS 19 FALL SEMESTER, Delft University of Technology, Department of Architecture

<sup>4</sup> Deutsche Bank to move NY headquarters from Wall Street, Reuters, May 4th 2018

This contributes to the changes happening around the local transportation network, with vast growths to be seen. The research question for the thesis therefore asks: How will the archetypal type of the railway station continue to exist in dense and market driven environments? This is a graduation project and test case for the title of

Master of Science at Delft Technical University where one needs to show adequate knowledge of a heuristic methodological approach in researching and designing and to look critically at the results that lead into the design tools for the architect.

### **Aspect 3: Research Method and approach chosen by the student in relation to the graduation studio.**

The studio Complex Projects houses strong motives for a research-based design approach. To gain the knowledge and tools to design the world of tomorrow, we first need to completely understand the urban realm as it is today. This research is being done through different scales and throughout time, to understand how things have been changed and the way they are today. From bigger urban plans through details or history are steps made to gain a broader picture to design.

It is not implied that this method of researching must be the only one used throughout the project. However, in the first phase of the graduation year the aim is to collect this “hard data” on a wide scale, without knowledge where to look for specifically. This method flows into a practice-based research and design where carefully and critically other projects are researched and how they perform. The complex nature of this thesis topic with, a station combined with an arena on the same plot, is one where not many examples are out there to relate to. However, the essential of this thesis project is about accessibility and the way people can enter and find their way inside a building, this time in a different multi-purpose building programmed with two ordinary functions.

In the design phase more methods are getting used and different ways of researching, sketching, making models, drawing and evaluating these steps from the beginning phase. Although the doing of research was never a clearly defined approach and neither planned beforehand. That’s why I struggled a lot during this phase, where there was no defined path to walk and the vast and growing number of parameters almost impossible to comprehend. Research by doing and thinking by doing and to show something on the paper is essential to gain knowledge of what is thought about would work. This creates multiple, possibly endless options to on each critically reflect and base the arguments on. However, this way of researching, done by practicing architectural design, is the other side of the production and consumption of literature-based research. Therefore, the rational approach doesn’t include the intangible aspects of the design, those that are not measurable in numbers.

Critically reflect on what approach this project needed, the framework and the way of working was posed to show one way of approach. This was needed to reflect on it and critically conclude that from this approach there are values that are learned and knowledge how to do it different another time. That's is why a reflection is important, to understand and critically look back to the methods used. One thing I would approach different is, critically assess the studios desired products. These were described in set scales and planning workflows. Due to the large scale of the project, other levels of scale were needed at certain times to gain more. This would lead in and work in a more top down approach.

#### **Aspect 4: Relationship between the graduation project and the wider social, professional and scientific relevance.**

Railway travel is a daily commodity of people's lives and is used on a daily basis. While the movement away from the car mobility has shown in the car ownership rates, which could be one of the factors that railway transportation is growing again.<sup>5</sup> It had its resonance in the build environment by the transformation of Penn Station from a glorious historical building towards a market driven approach, where value was measured in square meters of rentable space. Another transformation, made later, is the movement to a retail-based economy where the retail hugely benefitted from the daily railway commuters. All not in the intent of the user, Penn Station shows an example of a station that was unable to cope with these changes.

The project is stating the question of the current changes of the mobility and the reflection it has on architecture. For the building to change so rapidly of form and function, asks for a more sustainable approach and as these large and "bigness" of buildings are going into a new realm the question rises; not will, but when will be the next phase for the building. Penn Station was able to change, quite radically, and prone to change again. The adaptability and change that is needed for these buildings need to be taken in the decision for a new design of these massive public buildings. Especially if they are located in the city's densest areas, which are to be in growing numbers.

<sup>5</sup> Department of Transportation, Mobility Report 2019, (New York City: 2019)

#### **Aspect 5: Ethical issues and dilemmas**

The thesis project Penn Garden tries to stand critical to transformations of public domains. The value of space and the possibility for expansion should be not be neglected. While at the other side, possible removal of Madison Square Garden was, in this thesis, always consumed as outrageous.<sup>6</sup> The arena might be outdated and not capable of housing x amount of people, or do or not qualify for FIFA world standards for stations. The most spoken about relocation of the arena is utterly

farfetched. To recreate the same building, same function, a half a mile further is prone to become yet another newspaper article about the burning of tax-payers money. The thesis shows that, combining the two projects in one building, it could be more capable of doing what it supposed to do best. Combining the people flow of the arena with the already overmentioned flow-space of the station. Careful planning is necessary though, to refrain major collisions from happening, like rush hours and the ending of a concert.

Manhattan is very expensive and will continue to rise in this regard. Its public buildings are limited. To create a public building, it must be as accessible as possible and uses the money from the functions it houses to make it more valuable. Although the station can be seen as yet another transformation to increase Manhattans density and stimulates the capitalized motor of this area alone.

The underground project is a forecast to expensive renovation costs, structure, climate and daylight still are common problems in these kinds of projects. For instance, daylight is used to enter the building, it is not penetrating into the depths of the station. The proposal is an improvement to the station but the relevant question remains if these costs are willing to be made up for the benefit of the people. New York has a tendency to spent a bare minimum amount of money on the wellbeing of the public space, but rather on the business side. This project could funnel right into that same culture. Hence, there might be another public uprising to be happening in the future, like the one that resulted into the zoning laws, this to give back more space to the inhabitant.

Personally, I look back to a very fruitful year, coming back from being out of academia for a while, this year led to an inspiring final part of the studies Architecture, Urbanism and Building Sciences. I've become more developed and confident as a young designer. Besides motivating me for future events in this era of discipline, this course taught me two things majorly. I've become more aware of the integral design process that intertwines the disciplines architecture, engineering, physics etc. The other being the constant scaling of the part where I was working on. From urban level to detail, from meta understanding to climate. These I believe are both essential in the further development of my profession as an architect.

<sup>6</sup> The Editorial Board, "Transplanting Madison Square Garden", (New York Times: March 2013)