

# THESIS REFLECTION

**STUDIO TOPIC**  
CHANGE IN MIDTOWN

**THESIS TOPIC**  
MOBILITY HUB FOR NEW TRANSISTIONS

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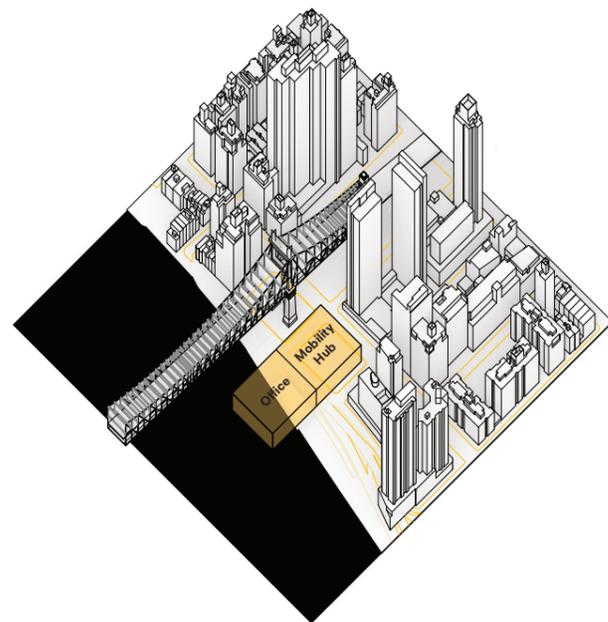
# Project description

The traffic network of Midtown is under an enormous pressure, with a subway system that has deteriorated to such a dismal state that nearly all available funds go into maintenance and overhaul. Since Manhattan is an island and there are a limited number of access points, these connections are even more congested. For commuting to and from the island the subway has always been the most used mode of transport, but the poor conditions have recently led to a decline in the usage and has stimulated the rapid growth of ride-hail and carsharing services e.g. Uber, VIA Van & Lyft.

Especially the underserved, East and West areas of Midtown which are overpassed by the connection, benefit from the expansion of this new extended transport network. On the other hand Midtown keeps on developing and growing. With more and more homes being built, which is leading to more

inhabitants whom all need to move within the city. This leads to the question: "How can the entry points of Midtown contribute to a greater mobility of the city?" The project investigates the way new and old transport modes can be connected.

The project is a 45,000 m2 mobility hub and Tesla city headquarters showcasing a new type of mobility hub in Midtown connecting rideshare, ride-hailing, the subway and Tesla's future mobility ideas. The building consist of two main components, the Tesla offices and a parking and charging places for over 800 cars. The project is located near the busiest bridge (Ed Koch Queensborough Bridge) to Manhattan, the Frank D. Roosevelt Highway, The East river and the N,R,W subway lines. The project researches the new connections between the aspects mentioned above.



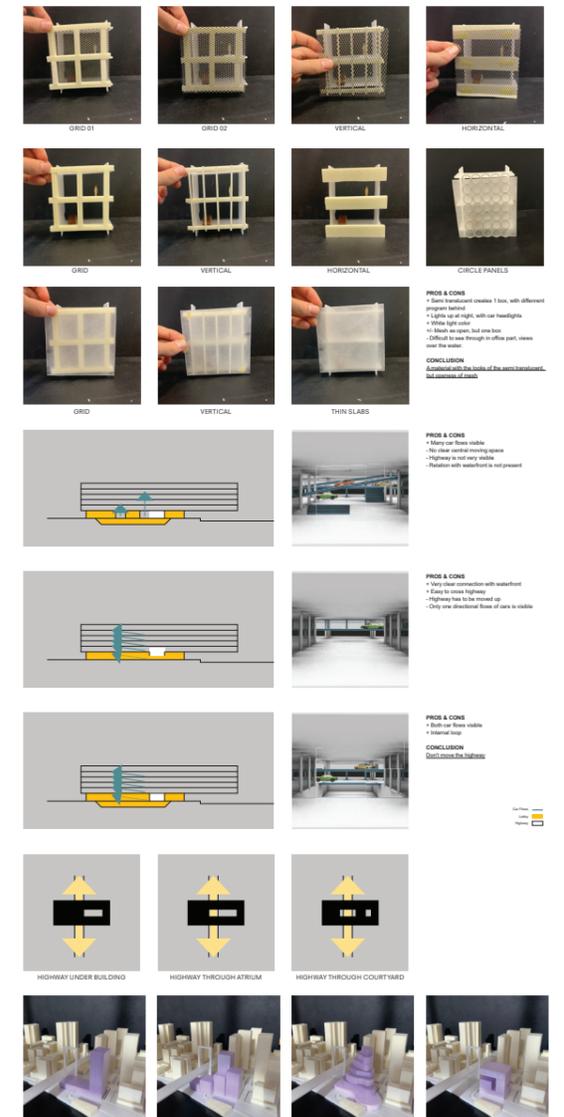
Project location

## Relationship between research and design

In architecture the line between research and design is always a thin one. How often have we found ourselves as an architect or student balancing between designing, analysing the site, comparing projects by element or program. All these factors together form a framework for the design. The design is then informed by knowledge gained during research. In the Complex Graduation studio the focus lies on a research based approach. Where wider socio economic forces and changes are a starting point for research on the urban context on a specific location, in this case Midtown New York. The research allows the architect to collect evidence on a specific topic and the design can use this evidence and is then interpreted by the designer into a design.

The starting point of our studio was the change within Midtown, from a monofunctional area, with special districts for leisure, like the Broadway theatres, but mainly offices to a more diverse area where more and more people would start to live. This potential shift could have a big impact on how Midtown works. By mapping, drawing, observing and talking, we as a group and later individually researched Midtown as a whole and what its relation is to other areas.

From this point we as students start to develop solutions for the raised questions and problems. This is where Complex projects often dives into design and forgets research the already existing buildings. During the design process I have tried to find the balance between researching the existing, by element and designing the collage of all these elements. This heuristic approach enables us to deconstruct and analyse the knowledge. The design is then divided into very specific elements creating a complex puzzles.

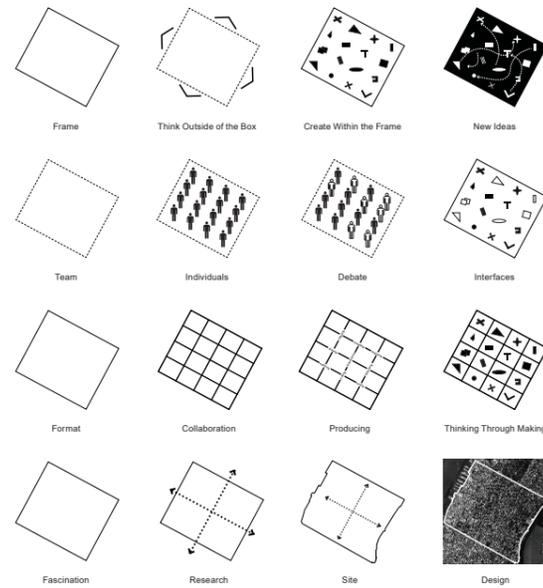


Research examples

## Relationship between graduation topic and the studio topic

The Complex Projects graduation studio has Midtown New York as the site area. Midtown is known for some of NY's most iconic buildings, including the Empire State Building, the Seagram tower and the Chrysler Building. Still today, by being the largest business district in the world, Midtown remains the corporate center of Manhattan. Midtown is also known among the most expensive pieces of real estate. However, Midtown is recently facing big changes offices are moving out, large scale residential developments are taking place and the transport network is in decay. The studio theme is a result of this change and tries to research how Midtown will develop in the coming years.

As mentioned above the thesis topic is based on the observation of the falling numbers of transport riders and the rise of the ride-hailing and ride sharing services. This shift in mode of transport is part of the change from a commuter place to a mix of residential and offices. The assumption that even more people need to make use of all transport networks is based on the growing city and the need for more freedom of movement. Therefore the need to investigate a new transport node on the edges of Midtown are in line with the studios vision. In relation to the Master of Architecture track the studio addresses a large scale urban problem, which results into research question followed by a masterplan and design brief. This problem solving attitude is very much in line with the thought of a Technical University and the studio view the research approach from social, economic, environmental perspectives but also align with the practicality and technical background of the university.



Studio structure

## Research method and approach

The Complex projects studio projects are often driven by a research based approach. The hard-data phase of collecting and mapping information to build a story-line, leading to a narrative for the design. The research focusses on the change in mobility in Midtown. In later phases this is combined with a context led approach. According to Lucas, "allowing the context to take the lead in your research process is one way of establishing the primary importance of the physical, social or historical setting."<sup>2</sup> The methodology and theory aims to understand and analyze the context, in this case Midtown.

On the other hand transport and mobility is not a static phenomenon. The constant movement of people, flows are difficult to research by just mapping therefore Klaske Havik describes the spatial narrative as a method of research and should be seen as an addition to the more common methods in architectural research like typological research and mapping, which are often image based. The method described by her can contribute to the very meaning of architecture, but notes that it is hard to describe in purely factual terms. Like Klaske mentions the spatial narrative adds another layer next to the more factual terms. The spatial narrative works really well with the topic of transport nodes in the city, since a large group of people is constantly moving through, utilizing the space, perceiving the space in different ways and very much so have an opinion about the space, which is often not a

positive one. During the field trip walking in the city made me realize and perceive the often underground spaces of the subway. The perception of the spaces should be laid next to the mapping and hard-data analysis. This is also what Kevin Lynch describes in his book *The Image of the City*<sup>3</sup>.

Therefore I would position myself behind Kevin Lynch who suggests a hybrid form of research method, where he acknowledges that mapping on its own is not a way to fully research the city. He states that image analysis often by-passes the deeper rooted problems<sup>3</sup> and therefore needs to be accompanied by another method. I particularly mention the hybrid and that these methods coexist next to each other to address that this is slightly contradictory to the Complex Project graduation studio, where hard data mapping is often taken for granted and we make many assumptions, by for example looking at the city from above. The complex studio describes it as research-by-design, which makes it visible how the research led to the narrative, and how this in turn is translated in design.<sup>4</sup> So the narrative itself is not seen as a research method, but as a result of research.

<sup>1</sup> SYLLABUS 19 FALL SEMESTER, Delft University of Technology, Department of Architecture

<sup>2</sup> Lucas, R. *Research Methods for Architecture*, Laurence King Publishing, 2016

<sup>3</sup> Kevin Lynch, *The image of the city*, (Cambridge, The MIT Press, 1960), 155

<sup>4</sup> Triggianese, M. (2019). Retrieved from <https://www.tudelft.nl/en/education/programmes/masters/architecture-urbanism-and-building-sciences/msc-architecture-urbanism-and-building-sciences/master-tracks/architecture/programme/studios/complex-projects/>

## Relationship between the graduation project and the wider social, professional and scientific framework

Manhattan and Midtown are known for its skyscrapers, but also for Grand Central station, Penn station and the subway network. Other traffic landmarks are Brooklyn bridge, the yellow cabs and the one world Trade Center station are icons. The just mentioned landmarks which are part of a bigger underlying network are in decay. The economy of New York is constantly growing, but as a closed system, the area that has to be serviced stays the same. Resulting in a transport network that is under an enormous pressure. Especially the recent large scale residential developments are contributing to this pressure. This trend is not just happening in New York but is part of a worldwide trend of people moving to the cities and the urge to live in inner-city areas.

During the group visit to New York, Eran Chen, founder of ODA architecture office, said "New York is a test bed, almost everything will work here." There must be a reason for this optimism. What is often said about New York that "Form Follows Finance" and since the economy of the city is so booming almost everything can work as long as finance is a driver for it. The city will go into a grid lock if nothing is done to the mobility of the city and therefore a transport hub can be a catalyst for a certain area. So the transport network drives the finance sector to places where profit can be made and therefore has dominant position in the whole planning of the city. Since Manhattan is an island it has a maximum area that can be built, resulting in the movement of economic zones to the less developed areas, but not without the expansion of the transport network. If a network can be extended by the meeting of different modes of transport on a smaller scale than Grand Central station the city gets breathing space for the new development. This is something many other cities can benefit from as well.

## Ethical issues and dilemmas

Designing with/ for cars in a world where we should drive less and especially in inner city areas is a very complex matter. But if in any country in the world the car will not be quickly be banned out of the cityscape it if the United States of America. The car is so imbedded in its culture that the project seeks to find a balance between public transport and the usage of the car and that this transition between car sharing and other networks of transport can be so smooth that the individualism of the car can be extended by the collective usage of the public transport. This can even be pushed further when we the car is not an individual object anymore but is owned or shared by multiple people. This will lead to fewer cars owned, produced and demolished.

To stimulate this change going from privately owned to co-ownership and even sharing rides Elon Musk owner of Tesla can be a good catalyst for this process. Therefore adding the electrical cars of Tesla, which in the future can be shared and automatedly be driven and shared, makes the narrative more plausible and feasible to implement such an expensive structure on the borders of Midtown.