REFLECTION
Bhavana Vaddadi- 4513762

This reflection aims to throw light upon the process and the outcomes of the project, its relevance to the graduation studio and the social relevance followed by exploring the challenges and weakness faced during the project.

Autonomous Shared Mobility in today’s context is still at its technological development state and against the background of urban implications is still an underexamined field of research which proved to be quite a challenge for this project. To predict the future development of cities hand in hand with the technology, this graduation project aims at dealing with a futuristic phenomenon with the help of scenarios. It intends to understand the possible impact of the technology on the urban form of the city. To gain this understanding, the methodology of the project was designed to obtain a strong research and planning basis accompanied by design illustrations or spatial translations of the conclusion derived.

In order to gain the knowledge of the impact of the technology on the urban form of the city, questions were raised on why is there a need for it and what really is the technology. The first couple of months of the project were spent solely in understanding and finding answers to these questions. The second half of the project aimed at developing scenarios and through them a strategic goals and actions to reach a design stage with the use of an approach guide.

The graduation research group, Complex cities aims to understand how planning and design resolves territorial conflicts and how urbanism addresses poverty, extreme environmental threats, weak governance, or urban emergencies in neighborhoods, cities and regions around the world. Their mission focusses on interdisciplinary approach/integral thinking, Internationalization/understanding differences: Institutional context/developing a critical perspective: Planning methods and tools/manage change and the Decision-making and participation process.

In for this project, it was of utmost necessity that an integral thinking approach and the concept of internationalization and understanding differences is considered and used at different stages thoroughly. Through this research group a thorough understanding of the planning process was gained for such projects. Although it was encouraged that, the project should also consider actors and institutions involved, for an uncertain technological concept such as autonomous mobility, it was quite difficult to carry this step forward. But it is important to note that this should be considered as a weakness of the project and efforts could be made to formulate a strong stakeholder analysis in the future. The strategic vision for Amsterdam was drafted with the help of combining the various opportunities the city had to offer for this project. Although the goals and actions are
suggested, the weakness might lie in the real-life implementation of these goals and actions due to the involvement of various actors in the project. Hence, understanding the involvement of various institutions and the citizens themselves could have given a better insight into the strategic vision and made it more plausible.

The technology of Autonomous mobility not only impacts the change in urban form, it will have a significant impact on the citizens as well. This new technology will provide easy and quick mobility for different types of citizens and will also permit living in remote areas. It will also play an important role in reducing the time spent looking for parking spaces in and around the city limits saving valuable time. Additional benefit is the safety factor which also provides reason to research the benefits of this technology and regulate the way it develops to reap maximum benefits in future.

A considerable time was spent in the initial stage of the project dealing with the concept of scenario building. There were three major challenges that were faced at this stage. One, for such a futuristic technology, the most suitable tool to speculate its consequences is to build scenarios based on the certain factors, some constant and some varying. This proved to be quite difficult due to the involvement of various factors with the autonomous technology and narrowing them down to three core factors was a difficult decision to take as there were greater chances of important factors being left out. After many mentoring sessions, it was understood that due to the time constraints of the project, if the factors were not concise the conclusion to the project would not be reached.

The second challenge that was faced at this stage was designing the scenarios which would be the best match for the city of Amsterdam. On a personal note, the best part of working on this project with Amsterdam in mind was that, it offered a wide range of opportunities in terms of projects, strategies, and initiatives to integrate with the technology and the project strategy as well. These opportunities also played a great role in designing the scenarios. Research projects for the same from the Faculty of Civil Engineering and Geosciences and Ministry of Infrastructure and Environment proved to be the best inspiration at this stage. The pitfall in the scenario designing process is that, the proactive scenarios of multimodality and mobility on demand that are chosen to formulate the strategy is quite utopian. There are many disadvantages that come along with both these concepts. This project makes the choice of considering the advantages over the disadvantages that it can cause. One of the challenges was the acquisition of origin destination studies for the city of Amsterdam for better reasoning for the construction of scenarios. Due to the lack of this information, the scenarios lean more towards being qualitative than quantitative.

The next challenge lied in the spatial translation of the strategic vision i.e. to incorporate the actions of the vision on both large and small scale. According to the thought process, it was assumed that the spatial translation would be achieved through design which was an incorrect assumption. Coming from an urban planning
background, the challenge also lies in understanding and translating the research and derived strategy into design. During the mentoring sessions, it became clearer that a step in between must be taken in order to achieve the design stage. This intermediate stage is to formulate certain tools or an approach guide that will facilitate the actions to take place orderly. The weakness of the project here is that due to the way the methodology was developed, the approach guide initially consisted of both tools and heavy concepts that can be achieved through more tools in a generalized manner derived from the scenarios that were developed.

To solve this flaw in the approach guide, the tools were categorized into four greater concepts. During the designing process, it was realized that there are many other tools that could be used to develop the city and its urban form. Hence, the approach guide has been under constant upgradation ever since its conception. In the designing process, the weakness lies in the way it has been illustrated. Better quality of visual aids like picture renderings and collages could have been used extensively to convey their importance of the design to not only urbanists and planners but to multidisciplinary audience and citizens alike. This would also help in visualizing the strategy goal on a larger scale. As discussed above, the scenario designing process had a major weakness. The scenarios chosen are expected to have quite a lot of disadvantages and their advantages could have been strongly proven through mathematical modelling to overcome the pitfalls and develop strong reasoning.

Overall the project has many other faucets that are yet to be researched and explored in detail to achieve better results and this is where the future scope of the project lies. With inspiring and educational mentoring sessions and a supportive city like Amsterdam for testing, the project aims to contribute in any way possible to the larger concept of Smart Mobility in the cities of tomorrow.