ASPECT 1

THE RELATIONSHIP BETWEEN RESEARCH AND DESIGN.

It is worth to say that, in an architectural project, the design is a result of the research, which can become either a solution or a critical reflection towards the issue. That is why the relationship between these two processes is explicit. In order to find the best possible answer to the problem it is necessary to have a clear understanding of the context.

At the beginning, as a foreign student, I found it very challenging to work with a context of India, which is very dissimilar from my own. Different climate, culture, social and economic patterns of inhabitation, morphological and typological characteristics of housing settlements, all these aspects need to be understood. With the help of the Global Housing studio and a set of research methods, I acquired a very good base for the further research. The case study section of the research process helped me to draw a general picture of the existing situation, which was clarified and studied deeply during the site trip. The creation of the "Book of Patterns" was useful in understanding and analyzing the everyday practices of Indian neighborhood. By elaborating on a set of drawings related to such categories as social spaces, borders, income generation activities, techniques and domesticity I defined drawbacks as well as specific elements that could be turned into the benefits for the design.

Due to the research, I understood that a solution that works in one context could be totally utopian in another, also the weaknesses of one project could be the advantages of another. In addition to my initial views of affordable dwelling typology, where the privacy and security took the first place, I also discovered the importance of social spaces and an ability for income generation as well as space appropriation.

Concluding, I could say that the research process is shaping future solutions or approaches toward the design part. Every, even small, aspects of the investigation can set a new direction in the project. Therefore, I believe that these two aspects are closely related and influence each other.

ASPECT 2

THE RELATIONSHIP BETWEEN THE PROJECT, AFFORDABLE HOUSING IN MUMBAI AND ARCHITECTURE

The name of the graduation project is coincides with the name of Jan Gehl's book "Life Between Buildings". While investigating, it became clear, that in the context of India, the outdoor space is as important as the indoor, if not more. Life between buildings does not have literal meaning. "Between" is everywhere – a square, a street, a courtyard and even a stoop in front of your house. This is the space, where community is born and people are spending most of their time. The role of the outdoor space of existing Nalasopara is difficult to overestimate because of the current lack of them. Due to the high demand for housing in this area (forty minutes by train from Mumbai Cental) and developer's economic interest, people were deprived of it. The absence of transitional area turns residents into anonymous lodgers, who do not care about anything beyond the thresholds of their houses.

In original old villages of India, the outdoor space played an important role for the community. It was a place of acquaintance, where residents were meeting each other, helping each other and interacting on a daily basis. "In the Indian's village environment, there is always space to meet and talk, to cook, to wash clothes. There is always a place for the children to play", said Charles Correa. According to him dwelling is a concept also linked to participation of the inhabitants in the society. Formation of communities on different levels is one of the main goals of the project. This aspect is very important in relation to Affordable Housing in Mumbai.

However, it is not only about socializing. Existing schemes like 'Handshake' chawls are also affordable for newcomers, but they fail to meet the necessities of the urban poor, providing only a shelter, nothing more. As it has been said, people, who are coming to Mumbai, are not looking for housing; they are looking for a job. "The urban poor have to support themselves or augment their uncertain incomes with small scale business enterprises – most often home based due to the lack of resources." Professor Anindita Ghosh used the term 'income shelter' to describe the outdoor space sacrified for earning opportunities. Such spaces are an opportunity for community cooperation and income generation, which play an important role in the informal economy.

It took me a while to understand the importance of these spaces. At the initial stages of the project, they appeared, as 'leftovers' of buildings composition. While thinking only about dwelling typology and inner organization, the outdoor spaces stayed undeveloped. The feedback I received after my P2 presentation, which was mainly related to the abovementioned issues, made me rethink the concept of indoor and outdoor relation. All comments made by my mentors and Delegate of the Board of Examiners were very useful. Taking them into consideration made me think about the courtyards as an integral part of my project development, which, I believe, added a lot of value to its architectural side.

ASPECT 3

ELABORATION ON RESEARCH METHOD AND APPROACH CHOSEN BY THE STUDENT IN RELATION TO THE GRADUATION STUDIO METHODICAL LINE OF INQUIRY, REFLECTING THEREBY UPON THE SCIENTIFIC RELEVANCE OF THE WORK.

The analysis and translation of data assumes systematically searching, arranging, and categorizing all the collected materials. After the fieldwork that was based on a micro ethnographic study of an urban community where a range of live interactions, interviews, notes, sketches and photos were undertaken, the process of analysis began. The chair of Architecture and Dwelling studies inhabitation typologies, practices and patterns of cohabitation of different groups by means of contextualization through a visual ethnographic and typological method. These methods were very helpful in defining and understanding dwelling types and elements that may be incorporated into the design. The variety of applied methods was very helpful for versatility of investigation.

It was very important to understand the way people use and appropriate the space of their dwelling. As useful as the creation of the "Book of Patterns", mentioned before, was the book "In the name of Housing. A study of 11 projects in Mumbai" by Sameep Padora. Aside from just studying projects, the author highlighted adjustments and encroachments made by families for their own comfort. Such projects change your views towards many things related to design. Being able to make something flexible, which is easy for residents to modify or appropriate without the help of developer or constructor is crucial for the architect.

Since the outdoor space plays such an important role in the lives of the urban poor, and the intention of the studio is to achieve density that is competitive with that of developers, the connection between the ground floor and the whole building was crucial. That is where the book "Cities for People" of Jan Gehl was very useful. Trying to find the solution of transferring the social performance from the plinth to the upper floors was another aim of the project.

In conclusion, I want to say that different research methods can be very useful for investigation. However, it is deceptive to refer to only one technique. To minimize the possible margin of error and maximize objectivity of research it is necessary to introduce an additional method or methods, which could complement each other and reinforce or refute the idea of your design.

ASPECT 4

ELABORATION ON THE RELATIONSHIP BETWEEN THE GRADUATION PROJECT AND THE WIDER SOCIAL, PROFESSIONAL AND SCIENTIFIC FRAMEWORK, TOUCHING UPON THE TRANSFERABILITY OF THE PROJECT RESULTS.

The relationship between the project and wider social framework can be traced through several documents and agendas, set by different organizations, towards improving life conditions of the urban poor. Chaotic mass of monotonous buildings placed extremely close to each other, poor infrastructure, which causes illnesses due to the lack of daylight, insubstantial hygienic conditions absence of natural ventilation and impossibility of community and informal economy are not acceptable in the 21st century. The existing, market led approach, which provides people with shelters instead of adequate housing is a contradiction to the 17 goals of the sustainable development 2030 of the UN habitat commission.

According to Goal 8 of the UN agenda for sustainable development, decent work in economic world are considered crucial in the achieving sustainability. This objective is highly important for the economic growth of Mumbai. Providing people with jobs or at least an opportunity for work is necessary to correspond to the growth of the working age population in the World.

Goal 11 "Make cities inclusive, safe, resilient and sustainable" is highlighting the importance of availability of adequate spaces, services and amenities. The development plan for Greater Mumbai 2014-2034 also stresses the need to recognize all patterns and types of livelihoods to recreate them in the city. Creation and existence of such spaces is not enough, they should also be accessible for public. Since most of the time, these services are reachable only for the higher income group (HIG), middle and low-income groups, taking up around 80% of the population of Mumbai, are staying aside from it. Therefore, taking into consideration these aspects and responding to them with the design is highly important.

My project aims to become a reflection upon these issues. An opportunity of work and open spaces, that gather people, enhance the feeling of community. Elements, described in both agendas should be re-considered as a part of the neighborhood, not as separate elements.

ASPECT 5

DISCUSS THE ETHICAL ISSUES AND DILEMMAS YOU MAY HAVE ENCOUNTERED IN DOING THE RESEARCH, ELABORATING THE DESIGN AND POTENTIAL APPLICATIONS OF THE RESULTS IN PRACTICE.

Working with in the context that is dissimilar to your own is always challenging. This was the first time during the last eight years, when I was studying architecture, that I have had to face circumstances which are completely different from the ones I am accustomed to. Social, cultural and spatial practices of India are dissimilar to any other and it is impossible to avoid dealing with them when designing a dwelling project. Being in this position requires rethinking and accepting of many things.

It is not possible to use the same approach towards design in a climate, where the average temperature is almost twice higher than Ukrainian and precipitation, the amount of which during the monsoon season is four times higher than the annual one in the Netherlands. Building materials and techniques in this case are also different from the one we are used to using, as well the attitude towards facade system and so on. All these aspects are greatly influencing daily habits and patterns of space usage and that is also something that makes the context so interesting and instructive. Without any doubt, these experiences are enriching for any architect as a craft professional. However, it seems difficult to experience and handle everything in such a limited amount of time.

It is of great importance to be efficient and well prepared before the short dive into the new context and starting your research. That is where the creation of the 'Book of Patterns' was very useful. Practicing this research methodology sometime before in the Netherlands, I was aware of what to do and how to behave while gathering information. However, unlike the previous experience, Indian people turned out to be even more open and interested in the research participation. The fact that they would share the smallest details of their daily routine and let us visit their dwellings was more than just helpful for us as for foreign students. To see the way people transform and appropriate their houses, in my mind, was one of the most important aspects of the whole research process. The 'Book of Patterns" helped us to collect and later to analyze social and spatial practices. It also became a directive in many aspects for the design solution.

It is difficult to talk about potential application of the whole project in practice, since the scale of it is quite generous. One should also be aware of the land ownership and regulation system of Nalasopara, which is very complicated. The process of the redevelopment might take years or even decades. However, it is necessary to take actions towards housing issues of the Global South. I believe that principles, highlighted in my project can become a starting point of rethinking of the existing redevelopment schemes. Being conscious of the importance of the open space within the redevelopment strategy, that is something we should strive towards.