

# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



## Graduation Plan: All tracks

<b>Personal information</b>		
Name	Mihaela Tomova	
Student number	5091985	
<b>Studio</b>		
Name / Theme	Advanced Housing Design Graduation Studio/M4H for modern households - Rotterdam	
Main mentor	Pierijn van der Putt Theo Kupers	Architecture Architecture
Argumentation of choice of the studio	<p>I chose the studio mainly because of my interests towards residential architecture and the importance that it plays in everyday life. Moreover, the studio will help me to develop skills which I will need in my future career. Nowadays, considering the pandemics, our homes play even more important role in our lives since it serves not only as a place where we spend our evenings and nights but also as a place where we work. Therefore, as the meaning of "Home" changes, I believe that we as architects need to learn how to design dwellings which serve perfectly the needs of the target group.</p>	
<b>Graduation project</b>		
Title of the graduation project	<p><b>THE CITY - PLACE FOR ALL</b> Exploring the possibilities to attract families back in the city through the case of the Expat families</p>	
<b>Goal</b>		
Location:	M4H, Rotterdam	
The posed problem,	<p>In the recent decades the economies become more dependent on knowledge - based activities - scientific research, technology, trade, finance. Therefore, the industries strive to be competitive in these categories on global level. In order to achieve that, they need an international recognition which also means attracting international knowledge workers (expats). Many cities try to become an urban knowledge capital by providing opportunities for the expats - carrier and urban facilities. In the Netherlands, Rotterdam is one of the most popular destinations among expats. (Dispatches, 2019) The international companies attract knowledge workers which enjoy the lively and international atmosphere in the city. However, finding suitable housing especially for the expat families in the city is a difficult task for the new residents. There is a lack of suitable housing for families in the city of Rotterdam which forced middle class families to move out of the city. (Karsten, 2003) Therefore, the municipality of Rotterdam implemented programs on the scale of the city, neighbourhood and residential buildings to attract the middle - class families and transform the city of Rotterdam into a child - friendly city by 2030. The transformation of Rotterdam also coincides with the need of 1 million homes by 2030 announced by the government due to the housing shortage in the Netherlands. Considering this, it can be stated that the cities in the Netherlands need a suitable housing which meet the needs of the modern household and the dual - earning family.</p> <p>The research focuses on the problem of the expat families which is two-fold because they are categorized both as internationals and as a family facing two different types of problems when arriving in the Netherlands. First, considering them as an expat they face the difficulties concerned with moving to a new country which include isolation, difficulties in adaptation, the language barrier, loss of identity and self - esteem and frustrations dealing with the new culture. The stress factors mentioned are in general</p>	

	<p>common among all expatriates (singles, couples, and families). However, in the case of the family, there is an additional problem with the adaptation of the traveling spouse and the child/children. Therefore, the family also needs to make sure that there will be a good school where the child needs to feel comfortable and adapt quickly. Moreover, the family needs to consider the neighbourhood which also needs to be child-friendly. Here, they face the problem of the family and their place in the city. Since the design location is in Rotterdam, the research explores the problems of the families in the city and the ongoing gentrification process, which is a strategy used by the municipality to bring middle-class families in the city of Rotterdam. The expat family is a perfect match with the target group of the municipality - highly - educated parents with a high income. From the point of view of the family, Rotterdam is suitable because it is considered to be the best Expat city for 2019 and is home of 16200 expats (Bleker, 2019). There is a strong expat community, which makes communication and adaptation easier. Moreover, most expats during interviews mentioned that the language barrier in Rotterdam doesn't exist and they feel comfortable in speaking in English. Even though Rotterdam provides comfort to the expat to adapt faster, the family feels that the city is not suitable for raising their children. The freedom of the child is sacrificed in the city because of the lack of suitable housing, lack of safety on the street and parks, too much noise and traffic. Therefore, the expat family is confronted with the dilemma if they should stay in the city of Rotterdam where they feel more comfortable since they are among internationals and saves them time in travelling to work or they should move to the suburbs where their child can have more freedom.</p>
<p>research questions and</p>	<p>Main research questions:          What benefits does living in the city bring to expatriate families?          What design solutions will enhance social interaction between residents and provide a safe and child-friendly neighbourhood?</p> <p>Sub-questions:          -What are the characteristics of the expat family?          -How the expatriate migration appeared and what is the migration history in the Netherlands?          -Why is it important for expats to raise children in the city and why is it important for the city of Rotterdam to attract young families?          -Why do families consider the cities unsuitable for raising a child and how child-friendly design approaches are slowly reversing the process of sub urbanization?          -What are the housing needs of the target group "Expat family" in terms of dwelling typology, location preferences and shared spaces?          -What are the design decisions that enhance the feeling of community, increase safety, and create a place for social interaction?          -What are the children's needs in terms of housing on neighbourhood level?</p>
<p>design assignment in which these result.</p>	<p>The research resulted in a design assignment which aims to create a child – friendly environment and family suitable dwellings. The design of the building will combine the aspects of green and collectiveness in order to provide safe environment for the children and a good place for communication for the expat families. Based on the needs of the target group, different common spaces will be part of the building – playground, working space, common kitchen, green areas and private outside areas. Coming from the research, the dwellings themselves need to be bigger than 85 m<sup>2</sup> and have one bedroom for each child. The building is part of Quadrant D in MH4 and has site 14.</p>

## Process

### Method description

The research uses several methods to identify and determine the problems and to find design-based solutions for the target group. In order to create a suitable design I conducted literature research, interviews and questionnaire, which are followed by analysis of reference project (research plan) and location analysis. (Fig.1) Since the problem of the expat families is complex and there is not enough literature on the topic, the interviews and questionnaire gave a better overview of the problems that the expat families face in the Netherlands. The process of interviewing was parallel to the process of literature research. This is how the choice of literature was justified. The created match between literature and opinions from interviews shows that expats also manage to describe the problems they face in a way that is applicable for all of them. Of course, the analysis of the results was made with the conscious and the understanding that the opinions depend on many personal factors. The process resulted in a questionnaire that was spread among family expats. The reason that the questionnaire came after is that it was made with the intention to check if opinions and international literature is applicable to the situation in the Netherlands.

In addition to that a plan analysis is added which looks into four different reference project which are suitable for the target group. My main focus was solutions of shared spaces, public and private zones and dwelling typologies.

Based on the literature research, interviews/ questionnaire, research plan and location analysis a concept design is created which has the aim to stimulate social interactions and to create a child-friendly environment. It is important to mention that all of the mentioned methods were used simultaneously with a focus on the target group.

### Literature and general practical preference

Main Literature used:

The main articles used in identifying the stress factors among expats are "Determinants of effective coping with cultural transition among expatriate children and adolescents, Anxiety, Stress,& Coping" by Karen I. Van Der Zee, Anees J. Ali, and Iris Haaksma and "Dominant stressors on expatriate couples during international assignments" by Robert J. Brown.

On the topic of family gentrification and raising children in the city (in the Netherlands) research by Lia Karsten was used ("Children in the City: Reclaiming the Street. Children, Youth and Environments" and "Family Gentrifiers: Challenging the City as a Place Simultaneously to Build a Career and to Raise Children"). The papers helped in identifying the problems that families face in the Dutch cities. Moreover, they discuss the need for a change in the urban structure that would reverse the process of family sub urbanization.

In the research about Rotterdam and the strategy of gentrification, a research paper by Marguerite van den Berg was used. The paper "City Children and Genderified Neighbourhoods: The New Generation as Urban Regeneration Strategy" analyses the case of gentrification in Rotterdam and the plans of the municipality to create a child-friendly city in order to attract the middle - class family back to the city.

Literature used for the design includes research by Joanna Williams on co-housing ("Designing Neighbourhoods for Social Interaction: The Case of Cohousing"), "Cities Alive: Designing for Urban Childhoods. Children, Youth and Environments" by Adrian Voce, "Designing and Dreaming a Child Friendly Neighbourhood for Brooks Reach, Dapto" by Karen Malone and others. There is a lot of literature available on the topic of designing for social interaction and child-friendly environment. The literature was chosen based on the ideas and intentions that the design should follow.

The full literature list can be found in chapter Bibliography.

### Reflection

1. My graduation studio matches my master program and master track (Architecture). It is a bit different than the studios that I have done before - The Why factory (The green dip) and Architecture and Urban design. However, I find it interesting and practical as it has a real – life assignment.
2. Big cities in the Netherlands fail to provide suitable housing for families. This is the reason families prefer to live in the suburbs but for the expat family this is not desirable since they see the city as a place for communication. The process of family gentrification has already begun which means that suitable dwellings for families should be built in order the process to continue. Cities in the Netherlands prefer young (dual – earning) families since they contribute to the economy and keep the amenities affordable. Rotterdam is one of the cities which has already started a program to attract families also on residential scale. Therefore, with my graduation work, I would like to show and explore

the possibilities to create a family housing in the city of Rotterdam. In my design, I would like to use aspects of cohousing in order to provide place for communication for the expats but to use these aspects in a new way so it doesn't interfere with privacy. With my project, I would like to create a place for the children to feel free in their games, while being in a safe – environment (something that is often missing in the cities).