

Joël Swaab Delft University of Technology

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Research Report

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Author

Joël Swaab 4449150 J.M.Swaab@student.tudelft.nl

Tutors

Pierijn van der Putt Theo Kupers

ABSTRACT

This graduation project will focus on the dwelling design of the socalled 'fledglings': a specific type of starters on the housing market seeking to achieve an explorative lifestyle in their daily life. The current generation of starters in Rotterdam experience several issues in housing, like the raising buying and renting prices of 40% over the last few years and too few suitable homes for the changing lifestyle of the residents. In order to tackle problems like this, this graduation project will identify and investigate on the notion of how a shared living economy can contribute to the explorative lifestyle of a fledgling. Within this research several existing designs and scientific literature will be read and investigated to form a base for the design of an explorative living environment. Several case studies have been analyzed in this design process as well. Besides that, the concept of the Fun Palace by Cedric Price and Joan Littlewood has been used as an inspiration for the design for fledglings. It turns out that an explorative living environment should stimulate and facilitate the residents to do activities that range from a more leisure nature to a more educational or cultural nature. In the end, it is about developing yourself as an individual and achieving personal growth through both enjoying and learning at the same time.

Keywords

Architecture
Dwelling design
Fledglings
Explorative living environment
Rotterdam

Introduction

The lifestyle of different generations of starters has been changing through the decades, from a more settled life in the sixties of the previous century to an exploring lifestyle of the current generation of starters (Hoekman, 2019, p.8). This changing development of the lifestyle of starters results in a change in the way they desire to live and what needs they have for their homes. As a result from this, new concepts and ideas have to be developed in order to supply and maintain a sufficient amount of housing for starters.

Those new concepts and ideas for the living environment of starters could be the base of a next generation of housing where not only the dwelling is the main point of the design, but also the opportunity to fulfil the desires of an exploring lifestyle. An explorative living environment - as the concept might be called - could offer such dwelling and exploring desires, by stimulating individual and personal growth for example. tarters that have such desires to keep on exploring in their can be called a 'fledgling': young people that just left their natal home to live on themselves and try to keep on developing on many levels in life. The term 'fledgling' comes from a bird leaving its nest: "a young bird fledgled from the nest." This metaphor will further be used in this design assignment.

In order to design a suitable living environment for starters - and in this case specifically for fledglings - this research report will investigate and discuss several aspects of the life of this target group and how an explorative living environment might contribute to this lifestyle. Therefore, the main question that is discussed in this research report is as follows:

- "How can the design for an explorative living environment contribute to the exploring and sharing lifestyle of fledglings?"

As this research question shows, the notion of an explorative living environment is important for the development of the report. To properly continue designing on this concept, a solid base should be given first. Thus, a historical example project will be research and investigated, which is called 'The Fun Palace': a concept by Cedric Price and Joan Littlewood established in the 1960's to build an innovative and creative space where people could gather and celebrate many forms of arts, science, culture combined with leisure (Mathews, 2005, p.73). Prices and Littlewood their dream was to develop a place for people to enjoy their spare time and leisures in combination with different forms of educational activities. This is mainly done as a reaction on the political and societal developments in Britain for that time: after the Second World war and because of automated systems of working people had more time for themselves to enjoy and perform leisure activities.

However, having spare time was seen as a form of idleness so people did not exactly know what to do in the given time. By giving the folk such a place to enjoy and learn new acts, the Fun Palace had the potential to offer many opportunities to combine these two. However, the concept of the Fun Palace has actually never been realised, the only remains of the ideas of Price and Littlewood are smaller communal events throughout Britain organised since 2014.

Although never being realised, the Fun Palace gives great inspirations for further designs seeking to combine personal development combined with joy. Likewise, the design for fledglings will use the Fun Palace as an inspiration to fulfil the needs and desires of this target group to keep on exploring and developing themselves in their living environment.

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CHAPTER 1 RESEARCH PLAN

The inspiration I discovered for my design topic actually comes from fellow generation peers and how they might be going to live in the near future. The rate of people in the age of 20-30 years old finding suitable homes decreased in the last years. For instance, several newspapers state that dwellings for people under the age of 35 raised at least by 40% in the bigger cities of the Netherlands. The Dutch government wants to invest into 15.000 to 25.000 dwellings extra for starters to tackle problems like this (Rijksoverheid, 2020).

Besides that, the lifestyle of starters in the Netherlands keeps changing from generation to generation, resulting in unstable demand and supply rates in dwellings for starters (Hoekman, 2019). Hoekman states in his article that the current generation of starters, Generation Z, focuses more on a flexible lifestyle rather than being fixed in a specific dwelling for a long period in your life. Having a flexible lifestyle demands being flexible in where and how you live in your dwelling. A shared living economy tends to provide the flexible needs and wishes of starters having a flexible lifestyle. Within this group of starters a sub-group can be found with even more specific lifestyle preferences, the so-called 'fledglings' (Boterman et al, 2013).

Target group

Within the group of starters, I would like to focus more on the 'fledglings' in my design research. The term 'fledglings' comes from the phenomenon where a young bird leaves the nest and flies out to the wide open world; "a young bird fledged from its nest". Within this research this metaphor stands for an individual leaving his or her family/natal home or student house to discover the 'real' world. Usually this happens between graduation and finding a full time job.

Fledglings tend to focus more on a flexible lifestyle rather than being fixed at one location for a long time. This group therefore tries to explore and travel within the boundaries of their obligations, for example their job. A dwelling that might suit them is one where no big investments are required and from time to time share collective amenities with neighbours. However, some cases may occur where fledglings need the possibility to settle and grow in this specific house, because the person may have found a husband/wife or children are expected within a few years.

Problem Statement

As already stated before, people in the ages of 20-30, the so-called starters on the housing market, keep having increasing difficulties finding suitable dwellings. Two main reasons are discovered: on one hand from a financial perspective and on the other hand from a demand/supply-perspective. The latter one is something that has to do with suitable designs for dwellings for starters. Because of that, I would like to dive deeper into suitable dwellings for this target group. To be even more speci-

fic, I would like to dive deeper into suitable dwellings for fledglings, including their explorative and travelling lifestyle in my design.

Research questions

The explorative lifestyle of these fledglings make it important to further investigate on how a possible 'explorative living environment' might be suitable for this type of starters. Therefore, the main research question that will be discussed in this research report is as follows:

How can the design for an explorative living environment contribute to the exploring and sharing lifestyle of fledglings?

The sub questions that will support this research question are the following:

- What are the characteristics of the lifestyle of a fledgling?
- How can the concept of an explorative living environment best be described?
- What are the patterns of domestic use of people when they live in a shared living economy?

Relevance and position

Given the current developments in the housing market in the Netherlands, for example the stated goal of an extra 15.000 to 25.000 dwellings for starters, it is important to come up with new, suitable ideas for this specific type of residents. Besides that, since starters - and specifically in my case the 'fledglings' - have changing needs and wishes concerning their lifestyle, it is important to give answers to these wishes in the most recent architectural solutions. In order to do so, this graduation project will focus on this target group and will try to find the most suitable dwelling types for the fledglings to live in.

Source Analysis

To start understanding the needs and wishes of fledglings, as well as framing the notion of an explorative lifestyle, literature review will be a starting point in this research. In order to do so, two parts will be further described within this report, which are: the target group and the explorative lifestyle. Two separate chapters will be dedicated to each topic. The following two articles will be used for this:

- Hoekman, R.P. (2019). Research into housing preferences of starters on the housing market. Eindhoven: Eindhoven University of Technology
- Boterman, W.R., C. Hochstenbach, R. Ronald, M. Sleurink (2013). Sustainable Access for Starters on the Amsterdam Housing Market. Amsterdam: University of Amsterdam

These two articles give an overall view on some objective characteristics which apply to the life of fledglings and their living preferences. During the investigation of these two articles, it became clear that these kind of residents desire to have an explorative lifestyle rather than being fixed at one location for a long period of time.

After investigating the needs and wishes of the target group it is necessary to define what an explorative lifestyle exactly is. In order to do so, a historic project will be used as main inspiration for the dwelling design for fledglings. This historic project is called 'The Fun Palace', a design by architect Cedric Price and theatre director Joan Littlewood. These two initiators of the Fun Palace came up with a new way of thinking about the use of spare time activities and leisure in the 1960's. Since leisure emerged as a major political, economic, social and architectural issue in Britain after an era of World Wars, Littlewood and Price thought of the Fun Palace as a creative and constructive outlet for this windfall of leisure (Mathews, 2005). Although never actually realised, the ideas and concepts for the Fun Palace remain inspiring for future designs seeking to actively incorporate leisure as an exploring motive into the design. The following article is used as a base of the research into an explorative lifestyle:

- Mathews, S. (2015). The Fun Palace: Cedric Price's experiment in architecture and technology. *Technoetic Arts: A Journal of Speculative Research*, 3 (2), 73-91.

Methodology

The following four research methods will be used in order to examine the target group and their design wishes. As a result, a developed design can be created to give an answer to the stated research questions in this graduation trajectory.

Literature research

To understand the needs and wishes of the target group, it is important to start with reading and examining the current literature on this specific type of users. Scientific articles and journal papers will be read to give a first look on what to expect when designing for fledglings.

Historical research

The historical research will focus on two separate issues within the research: on one hand the development of the target group's lifestyle and dwelling wishes and on the other hand the Fun Palace - as stated in the source analysis paragraph.

The historical research on the target group will give information on how this specific type of residents developed through the years, starting at already a few decades ago. This is done to give a meaningful expectation on the future situation of living, by understanding the developments of needs and wishes in the past.

The investigation on the Fun Palace will be done to give a historical inspiration to the design project. I see the ideas of Cedric Price as a meaningful source of information for my specific design assignment because of his solutions in a period of time where people demanded new ways of communities and leisure. In the end, I might link this inspirational design to my own design assignment for an explorative lifestyle, where leisure is an important factor in the daily life as well.

Target group observations and interviews

In order to further specify the needs and wishes of the target group, it is necessary to understand how they want to live. As a result of this, I become familiar with the people who are going to live in the designed building and the specific design assignment will become more clear in the end.

However, I expect to find relevant information for the design assignment through literature of the target group and the study on the Fun Palace by Cedric Price in the early stages of the research. I will therefore hold interviews and surveys in the later stages of the research, at the point where the design becomes more concrete, for example in the second semester of the graduation period. In this way the interviews and surveys will be more valuable than doing them in the early stages of the research.

Plan analysis

During the plan analysis in this research report, four case-studies that are dedicated to a similar target group will be explored and investigated. This is done to see how existing buildings and designs solve comparable questions regarding the intended users of the project.

Topics within this plan analysis will focus on dwelling typology, circulation systems and the use of collective areas and activities. This will result in an overall view of living patterns in similar situations as the design for fledglings is intending to achieve. The four case-study projects that will be investigated are the following:

- Lucien Cornil Student Residence, Marseille
- Stepstone, Amsterdam
- Nordbro, Copenhagen
- Niu Co-living, Mexico City



CHAPTER 2 TARGET GROUP INVESTIGATION

Literature Review

As stated in the Research Plan, this report will focus on the design for fledglings - a specific group within starters on the housing market seeking to live an explorative lifestyle. To fully understand this group of fledglings, it is important to acknowledge the overarching type of residents, namely the general group of starters on the Dutch housing market. This part will focus on what their current housing situation is, discussing the (financial) issues they experience when finding a new home and mentioning the affordability of the desired homes. After that, a deeper investigation will be taken place to understand what a fledgling exactly is and how they differ from a 'general' starter on the housing market.

Starters in the Netherlands

Starters on the housing market don't form a monotonous group of people, since a 'starter' differs from others within the same group by (cultural) background, income and lifestyle. Therefore, the definition that will be used within this text is based on the fact how they live and what their dwelling patterns are. In that case, according to the government of the Netherlands, a starter is someone who moves to a house where this person is the main occupant and lives independently, while before moving in this person was living dependently (Rijksoverheid, 2019, p.85).

Usually starters find themselves within the ages of 20 and 30 years old. In this period of time, these people experience several changes in their lifestyle, such as graduating from their study or finding a partner where they are going to live with. Because of the graduation, starters often have (or are looking for) a full time job which means they have more means to find a home compared to students. However, some starters find themselves in a transition stage, where they don't have a full time job yet. So this proves again that the group of starters do not form a monotonous set of people.

While starters in the Netherlands are a wide and differing group of people, they have some significant common issues. For example the fact that nearly all of the starters experience problems when finding a suitable home. Two main reasons for these problems are pretty obvious, however still important to mention: too low supply of homes that are suitable for starters and too expensive homes.

The first problem mainly has to do with the fact that most starters are trying to stay in the same city they grew up in. They are looking for a job in that city and after all, their daily life and friends are all located in their natal neighbourhood and city. Because of this, the demand for homes in these cities becomes too big and the amount of available houses diminishes.

The second problem is shown through the current renting and buying prices of dwellings in the Netherlands and the lack of enough resources of starters trying to find a home. Although the interest for mortgages are at a relative low point at the moment, it is still hard for starters to qualify for a home of an average price of €333.000 (BNNVARA, 2020). This has to do with the fact that people have to add own money into the mortgage in order to get it. Since most starters do not obtain enough amount of money at the start of their career, they won't be able to get this mortgage. When trying to rent a home, comparable troubles are experienced. In the bigger cities apartments of only 30 m² are already being rented for €900 per month. As a result, the monthly costs for a single person becomes too high to afford.

The Dutch government is making plans to solve these issues for starters. As already stated before, plans are made to invest into 15.000 to 25.000 dwellings extra for starters to tackle problems like this (Rijksoverheid, 2020). Up until 2030 the government will reserve 100 million euros per year to realize the extra construction of these homes. Besides extra homes, the government wants to increase the financial stability of specifically starters by offering deals where they can make use of a decreased transfer tax ("overdrachtsbelasting" in Dutch) for purchased houses. Besides that, starters can get a decrease in renting prices. This will happen when it becomes clear that the renting price makes up such a big proportion of the income, usually happening at low-incomes. After all, these measures give the construction of homes more perspective when it comes down to affordable housing for starters.

Starters in Rotterdam

Given the fact that the graduation design project takes place in Rotterdam, it is wise to investigate the current housing situation for starters specifically in this city. While some issues are comparable to the national issues, there are problems in Rotterdam that exceed the national issues and are therefore interesting to discuss here.

In particular highly educated young people move to the bigger cities of Netherlands because of the diverse offer and high quality of job opportunities, leisure, culture and education (DeNederlandscheBank, 2017, p.8). Rotterdam belongs to one of these bigger cities, being the second biggest city of the country with 587.960 inhabitants (CBS, 2020). As a result of this constant increase of popularity of Rotterdam, the housing prices increased with at least 40% over the last seven years (ING, 2018). This asks for a well-developed plan to make Rotterdam accessible and affordable for starters again.

According to the municipality of Rotterdam, the city wants to tackle these issues by the following two plans: a starters loan and obligated self-occupation.

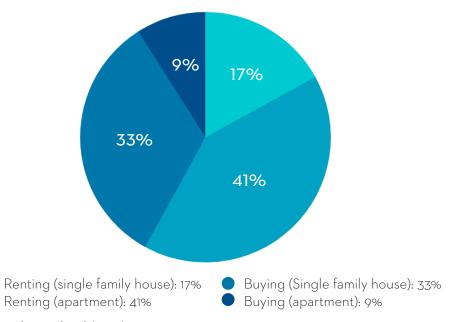
For the purchase of new constructed homes, the municipality of Rotterdam offers starters an extra amount of loaned money. In the Netherlands, the maximum amount of mortgage is limited to a specific proportion of the total income of a household, creating some situations where people come €20.000 short, for example. In this case, the city of Rotterdam wants to help starters by giving this €20.000 as an extra loan to stimulate people to buy the house they desire.

The second measure, where it is obligated to actually live in the house someone rents or purchased, prevents people to make financial advantages from something they do not live in. This measure applies to all new constructed buildings and existing houses on municipal ground.

Finances and affordability

In order to understand the affordability of starters it is wise to make an investigation on some general facts and figures about their current financial situation. This is done through some key numbers about the renting and buying position, as well as their wish in what kind of dwelling they would like to live.

Figure 1
Demand of starters looking for a home



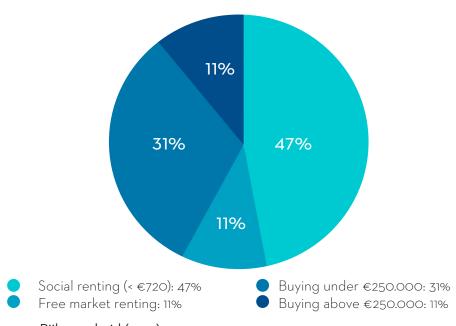
Source: Rijksoverheid (2019)

Obviously, a lot can be said about the financial situations of the current generation of starters. However, to prevent going into too detailed statistics and numbers, only a few general remarks will be made in order to understand the affordability of starters in the Netherlands.

Starters on the housing market mainly focus on renting an apartment or buying a single family house. In 2019, 41% of all the starters in the Netherlands were looking to rent an apartment, while 33% of the starters desired to purchase a single family house (see figure 1). This might show that the size of a dwelling influences the preference to either buy or rent a house: when a dwelling is bigger, starters prefer to purchase it, while they are more likely to rent it when it is smaller.

The next step is to see what prices go along with the decisions to either buy or rent a dwelling. Numbers from the Dutch government show that the two biggest groups of starters can rent within the prices of social housing and can buy houses up until €250.000 (see figure 2). This actually shows that most starters are not able to afford average housing prices of the Netherlands, since the average price when purchasing is around €333.000, as the news article of BNNVARA (2020) showed. only a small amount of starters (11%) might be able to afford average housing prices. The same amount of starters (11%) are able to afford free market renting, but it can

Figure 2
Type of ownership and affordability



Source: Rijksoverheid (2019)

be questioned whether or not starters might find suitable dwellings in this price range, since the same article of BNNVARA showed issues in free market renting. For example, where a lot of people pay around €900 for a dwelling of only 30 m².

Since starters form a wide range of people, it is hard to see this group of people as one. To give a look into some differences within the group of starters, some statistics will be discussed that focus on the affordability along with age (see figure 3). During the development of this research report, unfortunately statistics of this kind were not found of the situation in Rotterdam. However, renting prices along with age were found of the situation in Amsterdam, so these numbers are used to give a quick overview on how age might influence the renting affordability of starters. Around 65% of younger starters can afford cheap renting prices, while at the older segment of starters this amount decreased to 45%. The amount of starters that can pay for affordable housing increases: 20% of young starters and 35% of older starters. So we can actually see a development taking place here, where 20% of younger starters are shifting from low affordable financial situations to affordable renting prices in Amsterdam. Some of the starters are even able to afford semi-expensive and expensive renting prices: the total of these two groups increases through time from 12% to 21%.

Figure 3
Renting classes along with ages in Amsterdam



Historical development of starters

Buildings are not made for only a couple of years - the longer it functions, the better it is for the greater good. A building, and in this case a house, has to meet several housing preferences of generations over time. Young people who are still living at their natal home now, will be starters on the housing market in a few years. These future starters have to like the designs of houses which are made nowadays. Because of that, the overall trend in housing preferences through time and among different generations are investigated.

The next part of the research will focus on the characterics of starters and how these have changed through time, starting to investigate at already a few decades ago. In the end, a descriptive prediction will be given to sketch future demands of starters in the Netherlands. This is done to give extra support to the specific design assignment of the target group.

Four generations are to be found and further investigated in this research: the Babyboomers (1945 - 1960), Generation X (1961 - 1980), the Millennials (1981 - 1995) and the Generation Z (1995 - Now) (Hoekman, 2019, p.8). According to Hoekman (2019) each generation has its own specific characteristics and wishes, being developed over time based on economic and technological advancements. (This research uses the periods of time for the different generations as used in the article of Hoekman. Awareness of different divisions and names is present, but for a clear understanding, these years are used here.)

Past (1945 - 1995)

When looking at the first generation discussed here, it is noticed that 'Babyboomers' - born between 1945 and 1960 - preferred to possess an own home, instead of renting one, when they were younger. After a few years, this preference actually changed though, since they actually wanted to sell their house when the kids left the home. They replaced their purchased home by a rental home when they moved. They preferred this rental home to be close to restaurants, shops and leisure activities. This phenomenon is usually called an 'empty nest', where parents leave a bigger house and move to a smaller one when all the children have left the natal home.

The next generation that began to develop is called the 'Generation X'- born between 1960 and 1980. Compared to the generation before, Generation X tends to rent more instead of purchasing a house. This is because of the high renting prices of houses which make it harder for starters to save extra money to eventually buy an own house - an issue occurring nowadays as well. However, people in this generation did not rent more than purchasing only because they were not able to,

but also because in some cases they actually preferred to keep on renting for a longer period of time. This had to do with the fact that they desired a faster and fancier lifestyle, where a rental home made it possible for them to be more flexible. Next to that, starters from Generation X wanted to explore different job opportunities at different locations. After all, a purchased home would only be a burden in their financial situation.

The third generation is called the 'Millennials' - born between 1981 and 1995. The home ownership of this group of people has decreased at even a higher speed as the previous generation. According to the article of Hoekman (2019), nearly half of the Millenials would rather save money to spend on travelling than to put it towards buying a house. He also stated that the same amount of the Millenials would prefer renting a house if that would mean they could still afford small luxuries like going to a restaurant every now and then. To compare, one-third of the Generation X and only a quarter of the Babyboomers had this reason for renting a house instead of buying it. So an overall trend of Millenials is that they prefer a flexible and fancy lifestyle over having a fixed life in a purchased house. This is expressed in travelling and small luxuries like going to a fancy restaurant every now and then.

Within this generation of the Millennials, most people already left the stage of being a starter on the housing market. However, since the youngest people of the Millenials are still in their twenties, we currently find ourselves in a shifting era where the next generation of starters are already 'waking up' and starting some developments on the housing market. This currently shifting era is crucial in order to understand what is going to happen in the future of starters in the Netherlands.

Present (1995 - now)

The current generation of young people, called Generation Z, contains people born after 1995. The first people of this generation is already starting to become a starter on the housing market, but a considerable amount of the 'Gen Z' are still growing up. Therefore, what is going to be built now and in the near future will most likely be for these people.

The just mentioned shifting stage from having mostly Millennial starters into having the Generation Z starters becomes visible through the similar housing interest these two generations have. They prefer having a flexible and fancy lifestyle as well, but now flexibility is often expressed in having shared goods with other people. These shared goods range from having collective facilities in the dwelling blocks to sharing cars and other vehicles for example. On the other side, a travelling

and exploring lifestyle tends to be important for this new generation as well. So we actually see a mix here, where flexibility and exploring is going to become the standard.

It is noticeable that through these discussed generations, the flexibility within the lifestyles of the starters became more and more important. Besides that, exploring and travelling is something the new generations tend to do more than before, where renting a house is being preferred in order to accomplish this exploring lifestyle. Generation Z, the generation that is going to deliver most of the starters on the housing market, shares the values of flexibility and exploring, but they add that having shared goods is an important factor to accomplish their lifestyle desires and wishes as well. To meet such wishes, it is wise to consider this in the design for starters. A city like Rotterdam might offer great opportunities to share several amenities close to the starter's living location.

Near future

Based on the developments of generations through the decades, an overall growth in importance of flexibility can be seen. Most recently, this flexibility is expressed through the desire of an explorative lifestyle and sharing goods. This shows that starters in the near future will most likely try to benefit from this as well. As is expected for now, being a starter in the near future means being an individual who tries to keep on exploring and using shared goods and facilities to remain independent on several levels.

The development of generations starters through the decades

For the specific housing needs this might mean that this group of starters will not invest in purchasing a house. Instead, they will keep on renting for a longer period of time compared to other generations. For them it is important to have shared goods and facilities as well, since big investments are not desired.

As discovered during the research, Boterman (2013) called young individuals leaving their natal home a 'fledgling'. Although Boterman tried to focus more on younger starters when talking about a fledgling, an interesting notion can be made when talking about this group of 'fledglings'.

The word 'fledgling' comes from the phenomenon where a younger bird leaves its nest and flies out to the wide open world: "a young bird fledged from its nest." Usually, it may be very exciting for such a young bird to start flying and start exploring the open world. Through the process this bird might sometimes fall down or hurt itself, but that is all fine after all. Because in the end, it teaches itself to discover how to cope with all the challenges life has in store for the young bird.

I think this metaphor perfectly symbolizes the new generation of starters where exploring and discovering might be a new way of living for this group of young people. When young people leave their natal or family home, usually in their twenties, the wide open world lies in front of them. It is up to them to start exploring what life has in store for them. Their living environment can offer great opportunities to overcome such challenges and help them in discovering what they want to do in life. Therefore, my design project will focus on this new kind of starters: the fledglings.











1945 - 1960 Babyboomer

- Preferred to buy own house
- Empty nesting

1960 - 1980 Gen X

- More renting and flexibility
- Faster, fancier, exploring

1980 - 1995 Millennials

- More renting and small luxuries
- Rather exploring than settling

1995 - 2015 Gen Z

- Mainly renting to achieve explorative lifestyle
- Sharing and discovering

The Fledgling

Now that it is clear what a fledgling's position can be in this society, it is important to discover how they desire to live. In order to do so, some general notions on their lifestyle will be made. The investigation of their lifestyle and housing preferences for example, will eventually lead into a suitable living environment which can be used in the design project. The idea of 'Homo Ludens' - where play and spare time is seen as an important factor in the daily life of mankind - will be discussed here as well. Because of the importance of spare time activities for fledglings, such as their desire to keep on exploring, the idea of Homo Ludens can be interesting in a way to understand a fledgling's daily needs and wishes.

While most fledglings have a lot of things in common with most starters on the housing market, they differentiate themselves in the way they think about using spare time in relation to their professional career. Besides that, having an explorative lifestyle is something they fancy more than settling themselves at just one location for a longer period of time. To accomplish such an explorative lifestyle, it is desired to share daily goods and facilities. In this way, they prevent to spend a lot of money for some things they might not use in the end and therefore save some more money to do stuff they like to do in their spare time.

Start on the housing market

Fledglings find themselves in a shifting stage between graduation and obtaining a full-time job. Because of this, they are still in development of having a fixed lifestyle in a couple of years later, for example when they start a family and have settled with a husband or wife. Likewise, they are more likely to go for a rental home instead of a purchased. As has been found in the *finances and affordability chapter* of this report, most starters on the housing market can afford renting prices up until €720.

The main reason for starters to leave their natal home after graduation is that they just want a place for themselves to live in. From a survey by Rijnmond (2020), a regional broadcasting corporation that contains the city of Rotterdam, it turns out that fledglings do not necessarily need a fancy or luxury dwelling. They rather have at least the basics, like a seperate bedroom and a private toilet. Something that is called in the survey as "not too much to ask".

Explorative lifestyle

The fact that fledglings don't need fancy and luxury dwellings confirms the idea that life for them is more than just a fixed house. Because from the article of Hoekman (2019) it has been found that starters through the decades began to desire an

explorative lifestyle more and more as well. The amount of people in the ages of 18-29 years old living in the bigger cities in the Netherlands - including Rotterdam among others - keeps on increasing, as is seen in a study of De Nederlandsche Bank (2017, p. 28). In conversations with this age group, held by researchers within the study, it turned out that they desire to have a good distribution of their professional job career as well as time for leisure activities. A big city like Rotterdam can offer those opportunities. Eventually, fledglings try to seek what kind of divisions between job and leisure suits them best: they explore career opportunities in the given world and establish themselves into a settled professional having a job, but for the time being they still fancy some interesting leisure activities every now and then.

This notion of an explorative lifestyle can be very important for the further development of the design assignment, since living an explorative lifestyle can be quite an interesting design theme for the housing of fledglings. The metaphor of the young bird leaving its nest can be a good starting point for designing for fledglings. However, a statement has to be made about what architecture can do to accomplish an explorative lifestyle. In the end, an architectural design for fledglings has to be given in this graduation process. To accomplish this, the concept of The Fun Palace by Cedric Price will be used as an inspiration for the design. An elaborate investigation and some design guidelines from the Fun Palace will be given in the next chapter of his report.

Shared living economy

A shared living economy can contribute to several facets in the daily life of fledglings (Van den IJssel, 2018, p. 26). It has a positive impact on the financial situation, as well as the social freedom it can offer when sharing goods and facilities. For example, through the flexibility of renting contracts shared living usually comes along with: shared living offers accessible and affordable (social) housing, generally of good quality, to people who usually lack sufficient income or job experience to afford more expensive homes. Most fledglings will classify within this group of lower incomes. Besides that, the changing lifestyle patterns in both career and social field when living a "fledgling life" are taken care of when living in a shared economy. And to add to that, shared living can provide personal and social advantages among people living with each other, since an individual lives in a collective with several other people. In this way, people can develop social relationships, a community feeling and personal growth according to Van den IJssel. In the end, for fledglings it is all about developing themselves through an explorative lifestyle and a shared

living economy seems to offer them these opportunities. Recent generations are more interested in making experiences with other people instead of owning stuff for themselves. This can be seen in the way current fledglings think about connecting themselves in a global subculture as well (De Nederlandsche Bank, 2017, p.30). It turned out that 'cosmopolitan' young people like to live and work in a multicultural living environment. At first hand it was a common thought that only some global big cities like New York, London and Paris offered such a living environment. However, Dutch cities are becoming more popular to accomplish this desire, thanks to the growing globalization. Cities like Rotterdam and Amsterdam offer such a living environment thanks to its big variety of opportunities in the fields social, leisure and career.

The figure below shows how the life of a fledgling characterizes itself in comparison to its lifestyle before and after this period of being a starter. In general, it is a period between graduating and settling in a home with your family. A fledgling's lifestyle expresses itself through having an explorative lifestyle in order to develop yourself on many fields like social, career and leisure. Living in a shared economy can contribute to being an explorative individual by the many opportunities it offers when living collectively with other people.

The characteristics of a fledgling's life, compared to the period of studying and having a full time job

Studying	Starter	Full-time job
- Graduation - Living at natal home/ dorm	- Start on housing market - Explorative - Flexible lifestyle / shared living - Resist growing up	- Family - Settling - Working on professional career
←	"Fledgling"	>
20 years		30 years
	far Fro	dividuals leaving their mily/natal home. om: "a young bird dged from its nest"

CHAPTER 3 'FUN PALACE' BY CEDRIC PRICE AND JOAN LITTLEWOOD

Initiation and concept

The concept of the Fun Palace from 1961 can be an interesting inspiration for the design of a fledgling's explorative lifestyle. This has to do with the fact that Cedric Price and Joan Littlewood, respectively an architect and a theatre maverick and the initiators of the Fun Palace, wanted to create a place where people in a community could come together to celebrate arts, science and culture, on so many levels of a society (The Guardian, 2014). As their original manifesto quotes:

<u>Choose</u> what you want to do - or <u>watch</u> someone else doing it. <u>Learn</u> how to handle tools, paint, babies, machinery, or just <u>listen</u> to your favourite tune. Dance, talk or be lifted up to where you can see how other people make things work. <u>Sit out</u> over space with a drink and tune in to what's happening elsewhere in the city. <u>Try starting</u> a riot or beginning a painting - or just <u>lie back</u> and stare at the sky.

- Cedric Price and Joan Littlewood (From the Guardian, 2014)

This quote shows that Price and Littlewood tried to facilitate spaces where you choose what to do; from more intellectual nature to activities where you just relax. This stimulating and facilitating of personal choices within a given architectural environment inspires people to explore what kind of things they would like to do, for example learning a craft or having a drink with friends.

In the 1960s, after eras of war and political tensions, leisure emerged as a major political, economic, social and architectural issue in Britain (Mathews, 2005, p. 77). Politicians in Britain sought to channel spare time of the working class away from futility and other unacceptable forms of leisure -for example crime and alcoholism - towards new, constructive and useful activities. People should enjoy newly organized recreational and educational opportunities or consumental adventures during times where the rise of an automated workplace took place and the fear of 'over' spare time had increased. Leisure was then still confused with idleness and sin, so a changed mindset about spare had to be made. As a result, people questioned: "what do we have to do with all this spare time?"

Joan Littlewood thought that the Fun Palace could be a creative and constructive way of dealing with this expected windfall of leisure and she saw it as a way to open up Britain to new experiences. Besides that, it could be a possibility for lifelong education and discoveries. And this is where the collaboration between Price and Littlewood began.

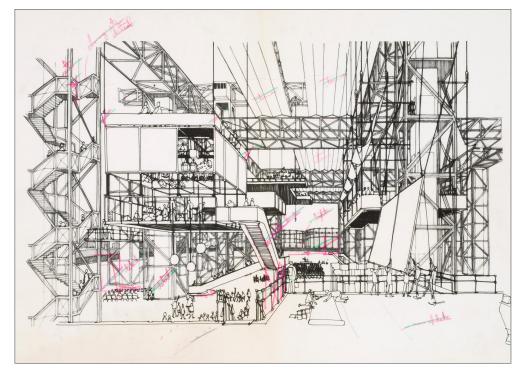


Figure 1 Perspective drawing of the Fun Palace as Cedric Price had it in mind Source: Lawther (2016)

"Automation is coming. More and more, machines do our work for us. There is going to be yet more time left over, yet more human energy unconsumed. We need, and we have a right, to enjoy the totality of our lives. We must start discovering now how to do so."

- Cedric Price (From Mathews, 2005)

The many drafts and ideas Price and Littlewood came up with expressed the intention of the Fun Palace to be a response to the social and economic developments Britain was facing in that era. The main focus here was on the way technique and other inventions were changing the division of work, education and leisure.

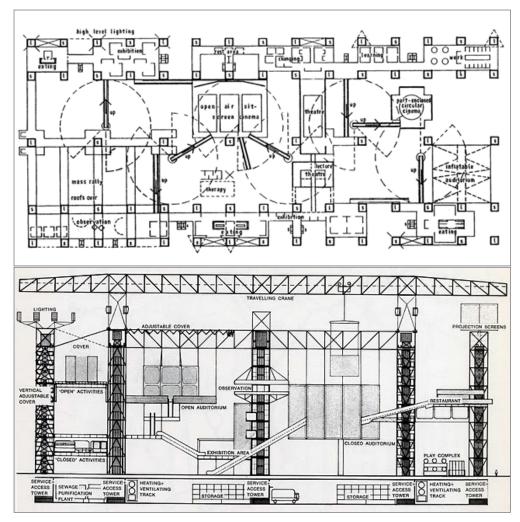


Figure 2 Plan view (above) and a section (below) of the initial ideas of Cedric Price. It shows the meandering pattern inside the row of towers as well as the fixed and open structure where flexible activities could be placed around.

Source (plan): Mathews (2005); Source (section): Mehta (2014) Cedric Price initiated the idea of a new kind of active and dynamic architecture that could allow several uses and would be able to adapt and change every now and then depending on the use (Mathews, 2005, p.79). As a result, there would be a building consisting of a network of events, which alternates between activities being held at perhaps the same time. The spaces here should be infinitely varying in size, shape, lighting and accessibility.

According to Mathews (2005) the designs described an improvisational architecture of constant activity, which found itself in a continuous process of construction, dismantling and (re)assembly. The building would contain a fixed framework where people could use their own educational and leisure environments, or where people could escape from daily routines, or begin an own adventure of new creative and personal insights - there would be so much to choose from. In the end it doesn't matter whether you learn something or not, it is about having fun and enjoying the time you spend there.

With his friend Frank Newby, a structural engineer, Price designed a constructional system of fourteen rows of service towers, all parallel placed along with each other. This resulted in a plan of meandering patterns with squares of different sizes (see figure 2). The plan shows a meandering grid where there is not one particular main entrance; people could enter at any point. The fixed and open structure allows activities to be placed flexibly around the place. There would be two overhead portal cranes as well, to travel the entire length of the structure and to move modular elements towards the correct place. Users of the project would be able to improve and move their own spaces, using the cranes to assemble prefabricated structures like walls, platforms, floors, stairs and ceilings. The circulation was designed as follows. In the center cores, pivoting stairs and escalators give access to the upper floors, while there were stair towers to the sides of the plan as well.

Overall, the plan was an open structure where people could wander around and do activities on many levels. The feeling of strolling in a park, looking at other people doing things, do activities for yourself or settling down for working by yourself are all sort of things that can be done in such a design. Therefore, the ideas of Cedric Price and Joan Littlewood to create explorative spaces for people trying to develop and at the same time enjoy themselves has been made clear through the design for the Fun Palace; it stimulates people to do activities which range from more cultural to a leisure level.

"It was not a museum, nor a school, theatre, or funfair, and yet it could be all of these things simultaneously or at different times. The Fun Palace was an environment continually interacting and responding to people."

(From Mathews, 2005)

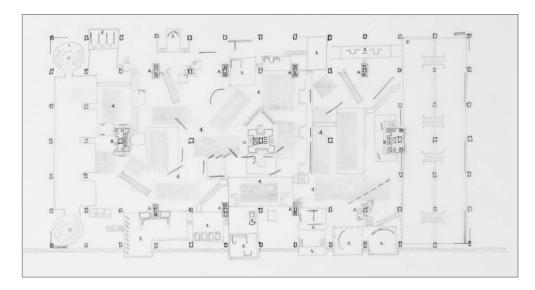
Inspiration for Design

Although the project was never realised, it gave many inspirations to further develop such ideas about giving people the opportunity to discover what the division between work and play meant to them. Much can be learnt for the design for the fledglings from this as well, since fledglings seek to achieve personal developments through leisure.

Given the cultural background of the ideas by Cedric Price, it can be seen that the demand of spending spare time useful increased through political and economic reasons. However, this is not entirely the case with the lifestyle of fledglings. They are mainly starters on the housing market and look for an interesting place to live, where the development of personal growth is accomplished through the collectiveness with others. Nevertheless, by living along and close to fellow peers, they can explore what kind of developments they are looking for. To stimulate and facilitate this, it is important that the direct surroundings and living environment offer them these opportunities. And this is where the plans of the Fun Palace can be very useful: Cedric Price came up with the idea to design an open structure where not one specific activity has a dedicated location or fixed function in the building. The plan of the Fun Palace was designed in such a way that functions did not exclude other functions, however it was a flexible network of functions placed around a fixed structure (see figure 3). The design interacted and responded to the different wishes of the user. It facilitated and stimulated people to go and discover what kind of activity they desired to do, where the educational level of that specific activity might be. In the end, it is about personal growth along with personal joy.

In order to achieve a suitable housing design, it is the task to discover how such an idea can go along with the function of a dwelling. In the end, it is a housing design for a specific type of residents. Through the process of the graduation design project that follows from this concept, it should become clear how and where such leisure functions suit the housing of fledglings best. For example, design decisions may be made where both functions are intertwined, mixed, seperated or anything in between. But in the end it should contribute to a common goal of personal growth in combination with leisure

An explorative living environment <u>facilitates and stimulates</u> people to do activities which range from more cultural to a leisure level. It is a place where you decide what kind of nature you would like to explore.



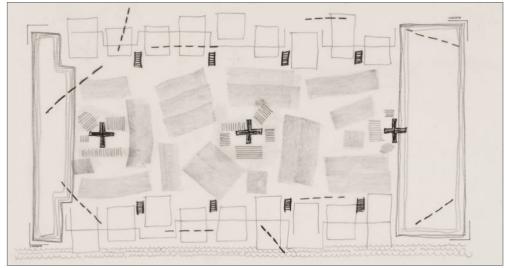


Figure 3
Schematics of organisation of several functions and activities in the Fun Palace.
Functions did not exclude eachother. However, it was a broad network of systems where activities strengthen the collaboration of personal growth and leisure.
Source: Mehta (2014)

Conclusive take-aways for the design assignment



Profile of a fledgling

Aged between 20-30 years old

Recently graduated

Developing themselves for professional career

Fledglings find themselves in the ages of 20 - 30 years old, where they are in a shifting stage of being a student to preparing for their full time job.



Finances and affordability

47% social housing rentals (until €720)

31% purchase under €250.000

Usually, starters on the housing market are not able to afford a lot for their home, since they do not have lots of money to invest. However, this is not necessarily a problem for them, since they do not really need a luxury home; they just want a place for themselves with at least a separate bedroom and a private toilet and bathroom.



Lifestyle

Start on housing market

Explorative

Shared living economy

The lifestyle of a fledgling is usually characterized by exploring in life, sharing several amenities with others.



Fun Palace

Developing through communities

Leisure combined with arts and sciences

Stimulate and facilitate exploring

The Fun Palace was a solution to fulfil the windfall of leisure and spare time in Britain. To give activities both education and pleasure, Cedric Price and Joan Littlewood accomplished to facilitate and stimulate people to keep on exploring and developing themselves in the given circumstances.

CHAPTER 4 CASE STUDIES

Housing for young adults and starters

Since it turned out that having a lifestyle of a fledgling is being in a period between graduation and a full time job, this broad spectrum between student and professional is represented in the four chosen case studies as well. In this chapter, four designs which range from student housing to starters dwellings will be discussed and analyzed. This will be done according to the following four themes.

Typical floor plan

The typical floor plans of the projects are being investigated to see how the layout for this target group is designed in general ways. As a result, some notions and conclusions could be drawn about how to set up dwellings plans in relation to the overall structure of the building.

Dwelling typology

After investigating the overall plans of the projects, the specific dwelling types will be further discussed. This is done to see how the target group might desire their functions in their own home, or even to see what kind of functions or spaces they do not actually need. Besides that, a view can be given about the way the dwelling sizes of fledglings and other starters influence the composition of the rooms and vice versa.

Circulation

The circulation and routing can give insights on how - and if - the dwellings are connected to other functions. Corridors, hallways, galleries and lobbies seem to be reasonable systems to go from one place to another, but by investigating how the case studies work with these circulation systems, some interesting inspirations might be concluded from this as well.

Collective activities

Finally, the collective spaces and functions are investigated to see what kind of activities are common for this specific target group. It can both work as an inspiration and a 'checklist' to decide what kind of spaces are required in such a building. In the end, fledglings tend to give value to a shared living and having collective facilities close to them to stimulate their explorative lifestyle.

The four buildings that are chosen for this case study are not strictly bound to a be in a specific location or country. It might even be very interesting to use projects from different countries and regions to see how regional regulations or culture might influence the design.

The four buildings that will be investigated in this case study are the following: Top Left: Lucien Cornil Student Residence, Marseille

Top Right: Nordbro, Copenhagen Bottom Left: Stepstone, Amsterdam Bottom Right: Niu Co-living, Mexico City









Lucien Cornil Student Residence





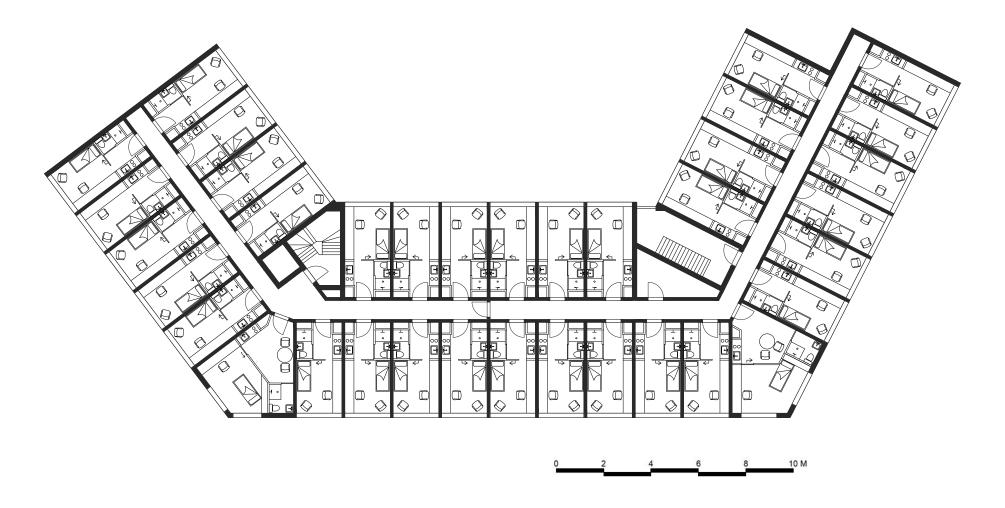
The Lucien Cornil Student Residence in Marseille is designed by A+ Architecture and is a student housing project for CROUS, a regional organisation for students providing activities, bursaries, residences and so on. While the project focuses on a suitable design for students by the use of collective rooms and spaces, the design is the result of an environmental approach where the main structure is mainly constructed in wood. As a result, this student residence finds itself in one of the highest wooden buildings in France.

Situated in a dense urban area, the design achieved to make several open and 'breathing' spaces in and on the building, for example the wide courtyard between the surrounding buildings and the high ground floor containing meeting rooms and an entrance lobby. Besides that, thanks to the use of two rooftop gardens, the dwellings on the upper floors can benefit from greenery as well.

The building consists of three wings all containing the student dorms of around 18 m^2 . At the points where the wings meet each other, slightly bigger dwellings are found of around 30 m^2 .

Factsheet

Location	Marseille, France
Architect	A+ Architecture
Number of dwellings	200
Completed in	2017
Collective / shared facilities include	reading room, roof garden



Typical floor plan

The dwellings are all distributed over the three wings of the building. The standard blueprint for the floorplans consists of two dorms with circulation area in between, which make up for the width of the wings. While half of the dwellings are directed towards the courtyard, the other half of the dwellings open up to the city on the 'outside' of the wings.

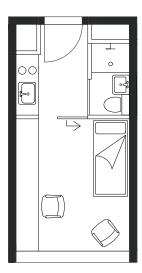
On the upper floors of the building, two rooftop gardens are found, one on the fourth floor and one on the fifth floor. Both have the size of three dwellings combined.



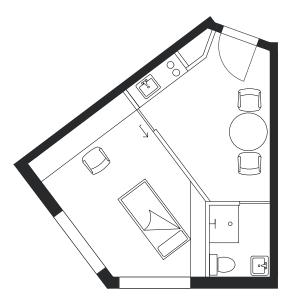
Dwelling typologies

The building contains one type of dwelling, a studio of 18 m². Where almost all the studios have the same kind of measurements, there is an exception in the corners of each floor plan. Here, the dwellings are around 30 m², in the shape of a pentagon.

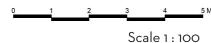
The dwellings are divided into two segments: a sleeping segment and a kitchen/bathroom segment. These two segments are separated with a sliding door. There is space for a desk in the sleeping area, giving the residents the opportunity to study in their own dwelling. However, the total space of this is rather small, so if the residents want to have more space while studying, they can go downstairs in the communal meeting and reading rooms.

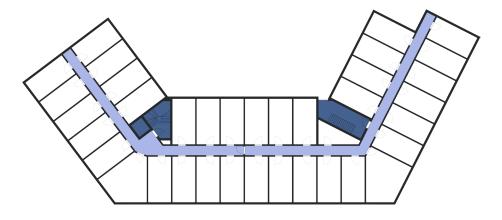


Studio (18 m²)

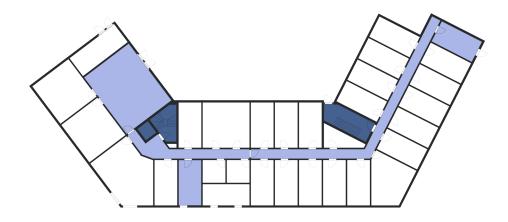


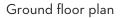
Pentagon studio (30 m²)





Typical floor plan



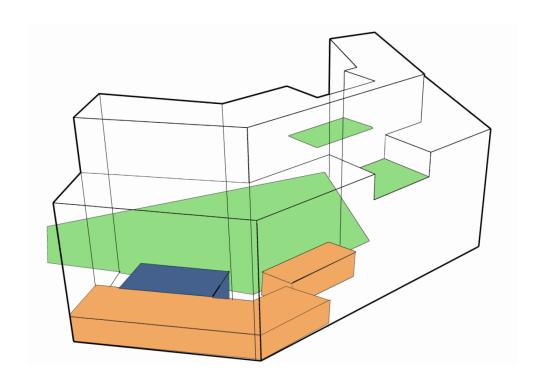


Scale 1:500



Circulation

The circulation is mainly characterized by a long corridor through the middle of the building and two staircases in the middle wing. On the ground floor, the building can be accessed at three points. The bigger entrance area on the north side functions as a lobby from which the residents could either access the meeting rooms or go to their dwelling. The corridor is at almost all points 1,3 meters wide.



Courtyard / roof garden Reading / meeting rooms Lobby

Collective activities

The building consists of four types of shared and collective spaces, being a courtyard, a roof garden, meeting/reading rooms and an entrance lobby. Most of these are placed on the ground floor, making the ground floor function as a mixing zone where several people can meet doing activities for themselves. This stimulates the pollination among all users of the building.

Nordbro



This project in Copenhagen, Denmark tries to represent the dynamic and mixed character of the neighbourhood by housing both residences and public functions in the design. By creating this dynamic image, the project becomes attractive for young people trying to contribute to a vibrant scene of living and community.

Nordbro contains around 500 social houses, mainly designed for students, but also suitable for young singles, couples or larger groups living collectively. The project consists of 6 dwelling-blocks and a 100-meter high tower rising up above the city. All these blocks and the tower are connectected by a plinth containing the entrances to the homes, parking and commercial spaces. This plinth creates an elevated courtyard on the second floor of the project, giving the residents an opportunity to meet fellow students and people in the same age group close to home.

The lower blocks of Nordbro are designed for students only. The levels are mostly divided into 8 or 10 housing units with a common living area and shared kitchen facilities. However, the dwellings do have a private kitchenette and bathroom.

The tower consists of dwellings for a bit more different kind of users, for example for student groups or couples and range in sizes from 36 m² to 115 m².



Factsheet

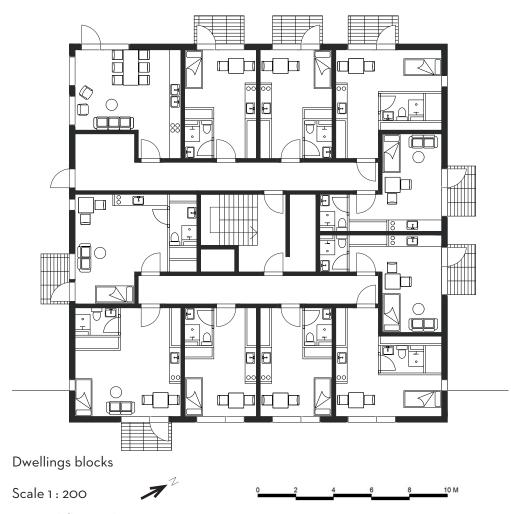
Location
Architect
Number of dwellings
Completed in
Collective / shared facilities include

Copenhagen, Denmark

Arkitema 516

2019

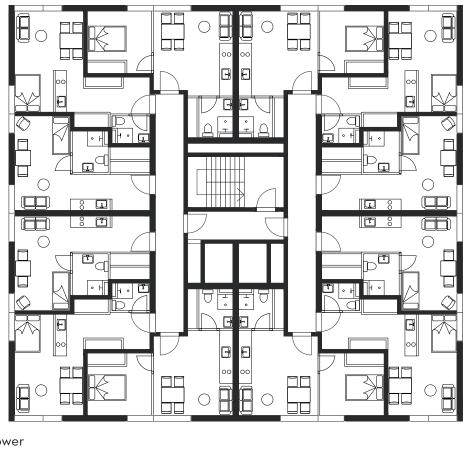
Living rooms, rooftop garden



Typical floor plans

The floor plans of the dwelling blocks are characterized by 8 or 10 small housing units for students and a communal living area. Not all dwellings have balconies or other forms of outside space, but this is compromised by the large elevated courtyard garden that is found on the second floor of the project. In this courtyard, the residents can meet people of other building blocks and gather around.

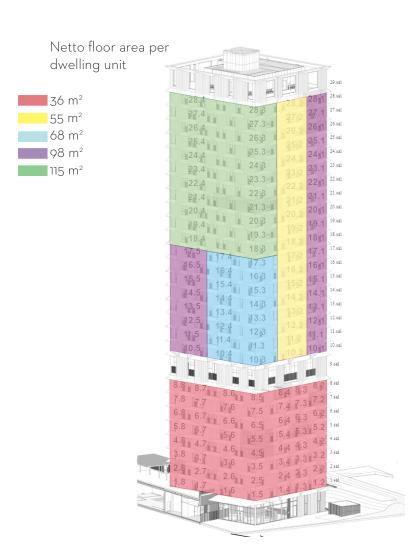
The tower contains a central core, where the vertical circulation takes place. The dwellings are located around this central core connected by a hallway. Although the houses vary in form and size, the main layouts are roughly the same throughout the whole height of the tower.



Tower

Scale 1: 200

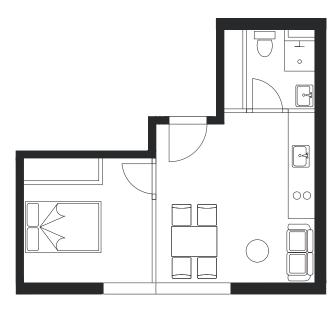




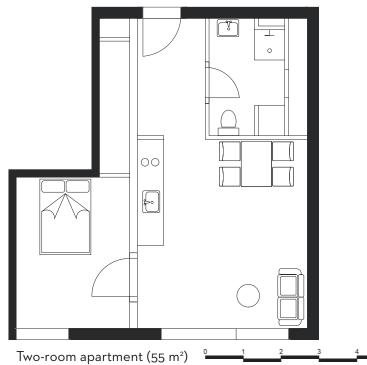
Dwelling typologies - Tower

In the lower part of the tower, the smaller dwellings of around 36m² are found. These apartments are suitable for one person-households and for couples. However, at least one person in these dwellings has to be a student, so only when you live here as a couple, one person could not be a student. The smaller dwellings differ in layout, but the main principle is that the houses have a separate bedroom and living room.

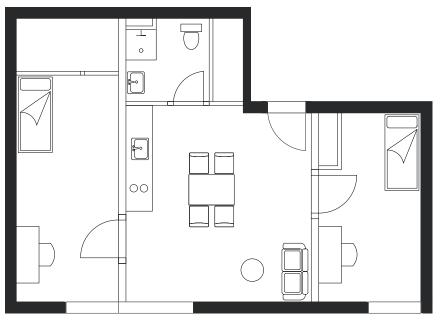
The upper parts of the tower has a wide mix of dwelling sizes, but the typology is roughly the same in all these houses. The main layout is to have a larger living room than the lower parts of the tower. Each time the dwelling size increases, a bedroom is added to the layout giving the opportunity to have three bedrooms in the largest dwelling.



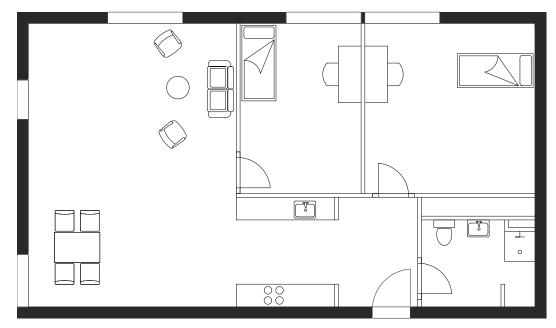
Two-room apartment (36 m²)



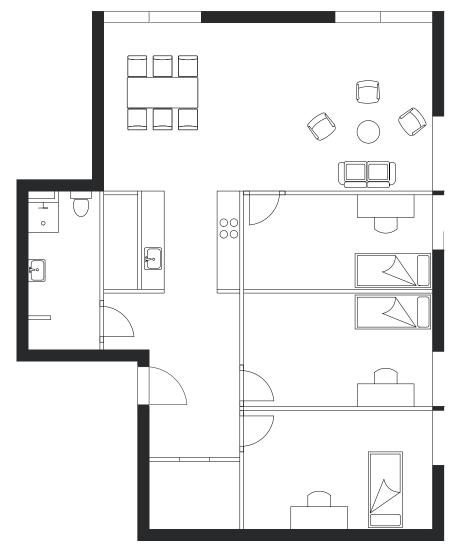
Scale 1 : 100



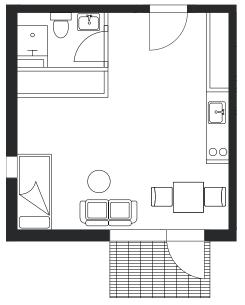
Three-room apartment (68 m²)

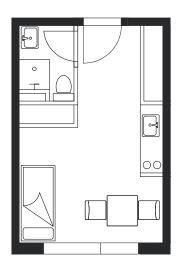


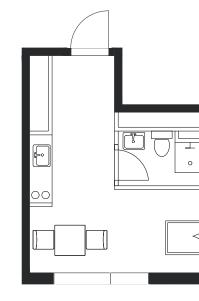
Three-room apartment (98 m²)



Four-room apartment (115 m²)







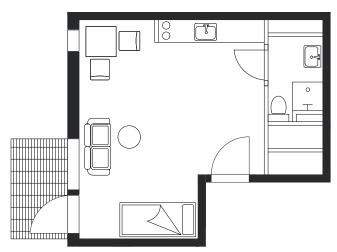
Studio with balcony (32 m²)

Studio without balcony (22 m²)

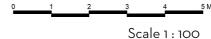
'Cornered' studio without balcony (27 m²)

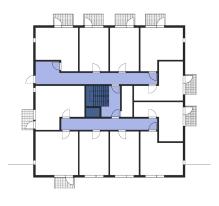
Dwelling typologies - dwelling blocks

The smaller dwellings of the project are found in the dwelling blocks, where the sizes range from 22 m² to 32 m². Similar to the project of Lucien Cornil, there is space for yourself to work in your own dwelling. However, these spaces are rather small, so opportunities are given to work in a communal living room. For these smaller houses it is important to create this feeling of a community, since the dwellings are rather small.

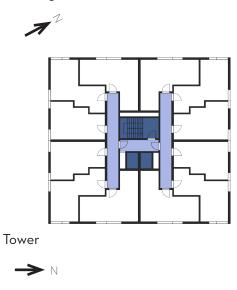


'Cornered' studio with balcony (27 m²)





Dwelling block

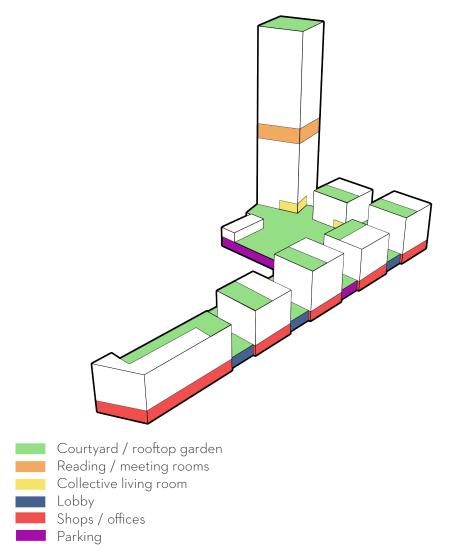


Scale 1:500

Circulation

The circulation in the tower and dwelling blocks are somewhat the same. The central cores house two elevators in the tower and one in the dwelling blocks. The stairways are found in these central cores as well.

Where the tower has mainly east-west direction of the hallways, the direction of the dwelling blocks are shifted to result in both a north-south and east-west direction of the hallways. The hallways are almost everywhere 1,5 meters wide.

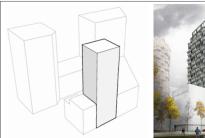


Collective activities

Given the dynamic and mixed character of the neighbourhood, the project tried to offer many different shared and collective functions throughout the building. The plinth is mainly used for the entrances to the houses and public functions like a shop or an office. Throughout the whole complex, several collective reading rooms and living rooms are found to contribute to the shared living of both students and young people living here.

Stepstone









Stepstone is part of a to-be-developed U-shaped building plot containing several towers and apartment blocks in Southern Amsterdam. This U-shape embraces a courtyard for the adjacent buildings and gives space to several outdoor activities dedicated for the residents here. While the projects are all placed close to each other and collaborate on several urban scales, each building has its own character to distinguish from each other.

Situated in the Zuidas of Amsterdam, where the general standard is to live in luxury homes, the design of Stepstone manages to create nice and affordable social housing in the middle of high end apartments. The project counts 216 social housing units for starters under the age of 28. The layout of the building gives space to dwellings ranging in sizes from 25 m 2 to 60 m 2 .

The building connects the street side with the courtyard by using a double-height ground floor. On this ground floor, a lobby feeling is creating by mixing several uses in and around the entrance area. For example, meeting rooms and bike parking can be found close to the entrance. On top of the building, a rooftop gym is located where the residents can perform sports.

Factsheet

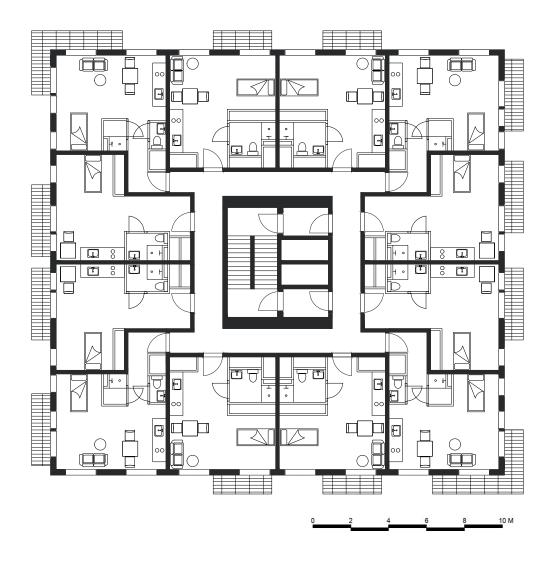
Location
Architect
Number of dwellings
In development
Collective / shared facilities include

Amsterdam, The Netherlands

Levs Architecten

216 2020 -

Rooftop gym, courtyard

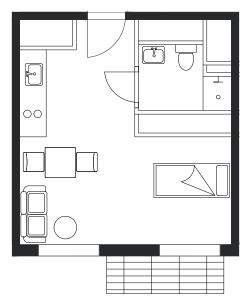


Typical floor plan

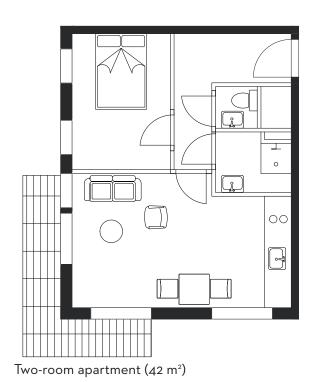
The tower contains a central core, where the vertical circulation takes place. The dwellings are located around this central, core connected by a circular hallway. Nearly all dwellings have access to an outdoor space, such as a loggia or a balcony.

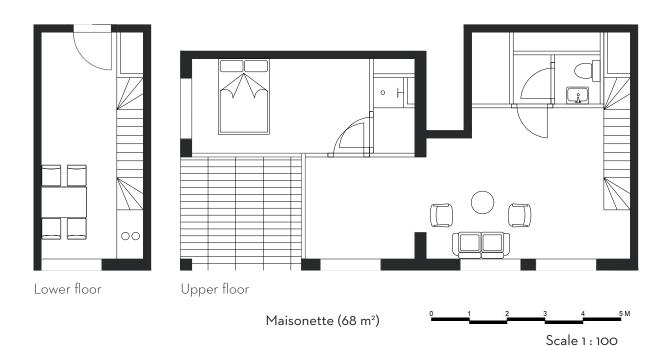
Dwelling typologies

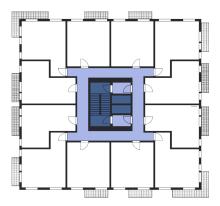
The building has studios, as well as two-room apartments and even some maisonettes in the top floors of the building. By mixing these types of dwellings in one building, the character of the tower is dynamic and this contributes to many different lifestyles. Thus, singles, couples and other young people are attracted to find a home in one of the dwellings.



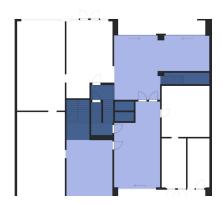
Studio (34 m²)







Typical floor plan



Ground floor plan

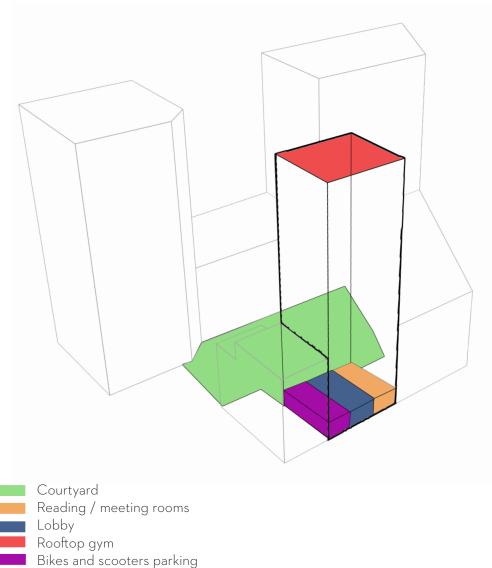


Scale 1:500

Circulation

The circulation in this tower is managed through a central core where two elevators are found and a helix-staircase to give two separate routes up and down. Around this central, a hallway is designed ranging from 1,3 meters to 1,5 meters wide.

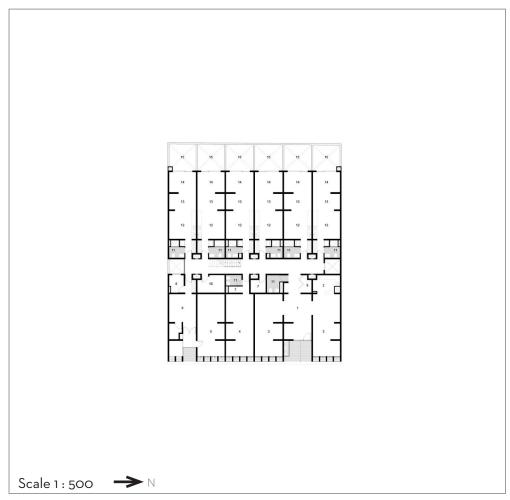
The entrance area is designed in a lobby character to give people the opportunity to choose where to go. They can either go to the courtyard behind the building, enter one of the reading rooms and so on.



Collective activities

Most of the collective spaces in the building are found on the first two floors and on the rooftop. By placing collective spaces on the first two floors, where at some point voids are placed between the ground floor and second floor, the connection with public life and outside is achieved. This gives the building extra dynamic in the daily life of the residents. The courtyard behind the building connects Stepstone with the surrounding projects.

Niu Co-living





The project Niu-coliving focuses on the concept of shared living and cohabitation for young people looking to develop themselves both socially and personally. By offering housing units along with several collective and shared activities the residents are stimulated and facilitated to create a communal feeling among eachother.

Situated in a former residential building from the 1960's, the project not only has the challenge of creating the communal feeling among residents, but also the fact that several construction aspects should be remained. By remaining the original longitudinal directions of the structure within the building, a plan of longitudinal dwellings resulted from this. The dwellings in the original situation were roughly 90 m² big, while in the new situation the dwellings are around 40 m²: the old homes are split up into two separate units of the same size.

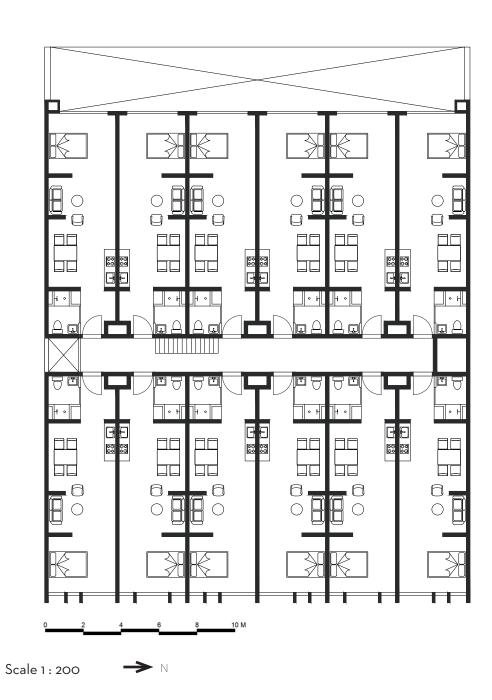
Niu responds to global sustainability issues by excluding parking spaces in the project for example. It prefers the use of shared means of transport; Niu tries to prove itself not only to be collective in the dwellings for people, but even on the level of their daily life like travel.

Factsheet

LocationMexico City, MexicoArchitectCraft Arquitectos

Number of dwellings 54
Completed in 2020

Collective / shared facilities include meeting rooms, roof garden, gym

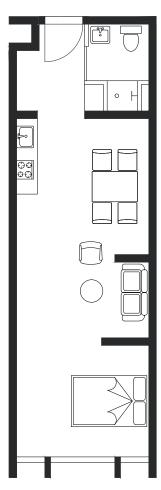


Typical floor plans

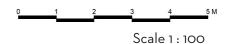
As mentioned before, the original longitudinal layout is remained in the project, creating a corridor in the middle of the plan where the dwellings are adjacent to. The dwellings have this longitudinal layout represented in them as well; the functions shift inside from entrance area, kitchen and dining, living to sleeping.

Dwelling typologies

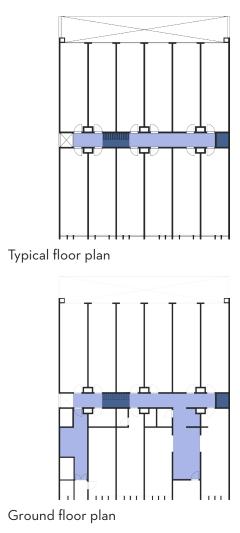
All dwellings in the project have the same layout in them; in fact they are all the same. Sleeping areas are placed towards the windows, while the bathroom is placed in the beginning of the dwelling, where it is the darkest. The units all contain sufficient space for several functions to be separated from each other through the structure that divides the plan.



Studio (40 m²)



42

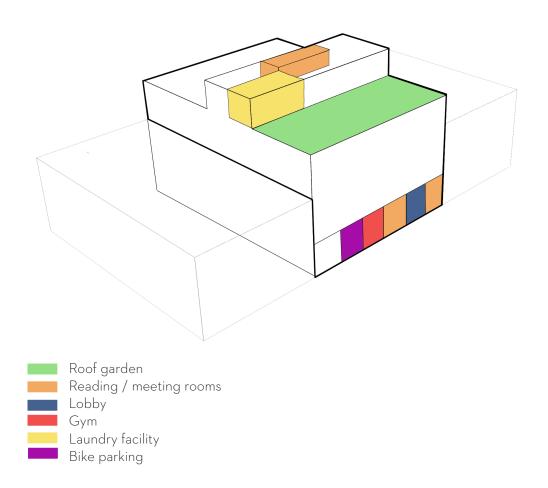


Scale 1 : 500 → N

Circulation

The corridor on the floors go from one side to the other, which connects all the dwellings by just one hallway. On one hand of the corridor an elevator is placed, while on the other hand a void is placed to give daylight access into this hallway.

On the ground floor, the building can be accessed at two spots. Where one entrance is directly next communal functions like meeting rooms, the other entrance is placed next to functional spaces like installation rooms. This gives the feeling that the entrance with communal functions might be more of a main entrance.



Collective activities

On the street side of the building, some indoor spaces on the ground floor are dedicated for communal functions and meeting areas. This makes the plinth more public for the residents.

On the top level of the building, both indoor and outdoor spaces are designed to give several options of activities, ranging from meeting people inside to having a chat outdoors on the rooftop garden.

Conclusive take-aways for the design



Composition of households

Single



Couple



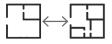
Group

The case studies made it clear that a project dedicated to starters - and in this case fledglings - should contain at least dwellings suitable for these three compositions of households.



Dwelling typologies and size

Studio (from 20 m² to 35 m²)



Multiple-room apartment (from 40 m² to 115 m²)



Maisonette (around 70 m²)

Lucien Cornil and Niu Co-living contained studios only, while Nordbro and Stepstone had a wide range of dwelling types like studios, apartments and maisonette. The bigger dwellings, for example 115 m² can only be suitable for groups.



Outdoor space

Balcony / Loggia



Roof garden



Courtyard

Several private and shared outdoor spaces were seen in the case studies, some bigger than the others. A mix is suitable too.



Circulation systems

Lobby



Central core



Corridor

The most common circulation system in the case studies seemed to be a central core with a circular hallway around it. This hallway connected the core with the dwelling entrances



Meeting and reading rooms

In all of the case studies investigated here, spaces were assigned for the use of group meetings or reading rooms. This shows that the desire for such rooms, where the residents can either work for themselves or in a group, is high among starters on the housing market.



Communal living room

Shared spaces were placed around the smaller dwellings of the projects. This is mainly done to compromise the small area inside each separate home. Besides that, adding communal areas will contribute to the notion of a collective living among the residents.





Gym

Although at first hand sport facilities might not be expected to be a necessary function around the housing for people, in two of the four case studies (Stepstone and Niu), rooms were assigned for doing sports.

Case Study-Images source

page 29

Lucien Cornil: Benoit Wehrlé Nordbro: Jens Lindhe Stepstone: Levs Architecten Niu Co-living: Carlos Figueroa

page 30

Situation plan: A+ Architecture Outdoor picture: Benoit Wehrlé Interior picture: Benoit Wehrlé

page 34

Situation plan: Arkitema Architects
Outdoor picture 1: Jens Lindhe
Outdoor picture 2: Arkitema Architects

page 40

Situation plan: Levs Architecten Outdoor picture: Levs Architecten Interior picture: Levs Architecten

page 44

Situation plan: Craft Arquitectos Outdoor picture: Jaime Navarro Interior picture: Carlos Figueroa

CHAPTER 5 DESIGN SITE

Rotterdam and M4H

The design plot of this graduation project is situated in the M4H-area in Rotterdam, a harbour area that will soon be transformed into a creative and innovative live-work environment. The municipality's goal is to mix creativity, innovativity and a communal feeling among the future inhabitants of this area.

The city of Rotterdam has a sufficient base for such a transition from harbour area to residential functions mixed with creativity and innovation. According to the municipality, the city has proven itself to give lots of young people the opportunity for cultural, educational and entrepreneurial growth. Besides that, Rotterdam houses Europe's biggest harbour and is home to many different multinationals and research institutes (Programmabureau Stadshavens Rotterdam, 2017, p.2). This combination makes the M4H-area so powerful, since a successful and innovative live-work environment arises from the collaboration between all these different parties of companies, residents and researchers.

The Makers District, as the city of Rotterdam wants to call the M4H-area in the future, will be a place where the transition from harbour becomes reality: starting entrepreneurs can develop themselves into an established company and young people become acquainted with technique and science. By making all these ideas practical and visible, the area will become an accessible neighbourhood for many different people and stakeholders.

Next to all the innovation and companies, there should be a place for dwelling, horeca and other urban functions. As a result, the area should become pleasing and attractive for both residents and companies: a dynamic atmosphere will be created. Where the former harbour and the location directly next to water will characterize the area, this dynamic atmosphere will be even more realised and maintained through the years. In the end, residential, business and leisure functions will all contribute to and profit from this.

Keilekwartier

The specific spot within the Makers District, where our design project is situated, is called the Keilekwartier. Within the studio group, all students had to work together to create an urban masterplan for the Keilekwartier. To do this, the Keilekwartier has been divided into four quarters of roughly the same size. The design for the fledglings is located in quarter A, on the north-east end of Keilekwartier.

Quarter A has a good potential to connect to the overall ideas of the M4Harea, given the existing buildings and companies that are here already. A selection of these buildings:

- Studio Roosegaarde, a design lab by artist and innovator Daan Roosegaarde;
- Soundport, a renovated industrial building now hosting creative media and music.

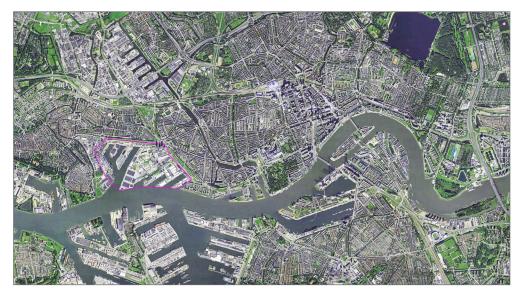


Figure 1 Map of Rotterdam with M4H-area highlighted in purple Source: DELVA Landscape Architecture & Urbanism

- Innovative, creative businesses and industries from start-up to established firm -, along with their necessary facilities;
- Employment in the broadest sense of the inhabitants of Rotterdam and its surroundings;
- An open innovative environment with a mix of companies, education and research;
- An urban living environment on and around the piers of the area;
- The makers district as an 'experimental garden' and 'showcase' for the future of circularity of city and harbour.

Rotterdam's vision and goals for the new M4H-area, as stated in their report of the Makers District (2017)

To create and accomplish a suitable urban environment for both the residents and business within the area, four bullet points are set up:

- Maintaining creative appearance
- Accommodate flexible workings spaces
- Formal hard edge vs creative soft edge
- Public space working as a catalyst in the daily life

As becomes visible through these four bullet points for quarter A, the focus is put on mixing the creative atmosphere of the M4H-area with facilities and urban interventions to make this former harbour area a successful project for all parties involved.

An urban regulation that is important for the character of the quarter focuses on the distinction of hard and soft edges. Where the Keileweg has to be an entrance place for the whole M4H-area, the decision has been made to create a hard edge of the building blocks adjacent to this street. The Keileweg has to be a place for many different users: pedestrians, bikes, cars and so on. On the other side of the quarter, a green area can be found. This public space has to work as a catalyst for many activities in the daily life of residents, workers and anyone that uses this place. Because of that, the edge of the buildings that connect to this open green space has to be designed in a 'soft' way. As a result, the public spaces on this side of the quarter remain accessible from many sides and becomes a spine of green.

To continue on this notion of accessible green, the public park will host many temporary artworks. This is done to contribute to the ideas of the municipality to design M4H as a showcase for different kinds of techniques and crafts. The open green space will therefore be a point where many different users can come together to enjoy different activities. The combination between the soft edges of the buildings and the different artworks in the open space makes this place an interesting and attractive location for everyone that is housed around: the residents, the companies and the young, creative artists developing their work here.

Most of the public plinth of the buildings should contain public functions, such as meeting areas, shops or working spaces. This is mainly done to create a buzzing place for visitors, as well as the opportunity for the residents to connect with people and activities from outside the area.

The building masses are designed in a way to create a flowing pattern of building volumes through the quarter (see figure 3). This results in two towers on each end of the quarter, while the buildings between these towers shift in height. The hard and soft edges as just has been described are kept in mind as well when designing these volumes.

The complete slides and drawings of the urban masterplan of quarter A can be found in the appendix of this report.

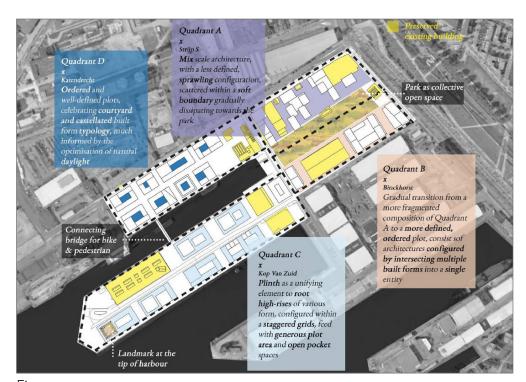


Figure 2 Masterplan of the Keilekwartier in Rotterdam, as intended during the group work Source: Made by Sharon Lim Yu Jung during group work for the masterplan (2020)

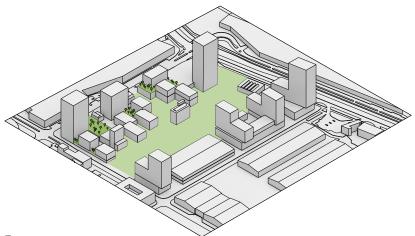


Figure 3

Quarter A and B according to the proposed building volumes

Source: Made by Daryna Chernyshova during group work for the urban plan (2020)

Design plot

The design for the fledglings is located on the eastern end of quarter A, where it functions as one of the two 'heading' towers: its an end of the flowing pattern by its height and volume. However, the soft side of the plot should connect properly to the open green space on its south.

Urban regulations that define the design plot:

- The north-west side of the plot should connect to the hard edged facades of the urban masterplan, while the south-east side should contain a 'soft edge' facade to connect to the public green spaces of the masterplan.
- The design plot contains a tower on the hard edged facade, which is part of the volume pattern of the quarter. This tower should be around 65 meters high.
- On the ground floor, spaces should be assigned to connect to the public life of M4H. This can be done through facilitating activities dedicated to one specific target group, or several different target groups for example.
- AVL Mundo is located directly next to the design plot, creating a courtyard between the warehouse of AVL Mundo and the design. AVL Mundo is a creative warehouse that focuses on designing of contemporary art and performance in The Netherlands.
- There should be a passageway between the courtyard and Keileweg, to maximize the connection of both the courtyard itself and the green open space behind it with Keileweg.

When putting this into the perspective of the design for fledglings, some interesting opportunities to accomplish an explorative lifestyle in the M4H-area arise.

First, the notion of a public plinth where activities should take place where people can gather or perform collectively is a good connection to the life of fledglings. Since fledglings seek to connect with other people in their daily life to fulfil both personal growth and leisuring needs, this might be an interesting thing to work out during the development of the design.

Besides that, fledglings could perform these kind of activities outdoors as well, since the design plot offers a courtyard and a soft connection with the public green spaces on the south. In the design this connection to outside might be further elaborated to see how these activities will be realised.

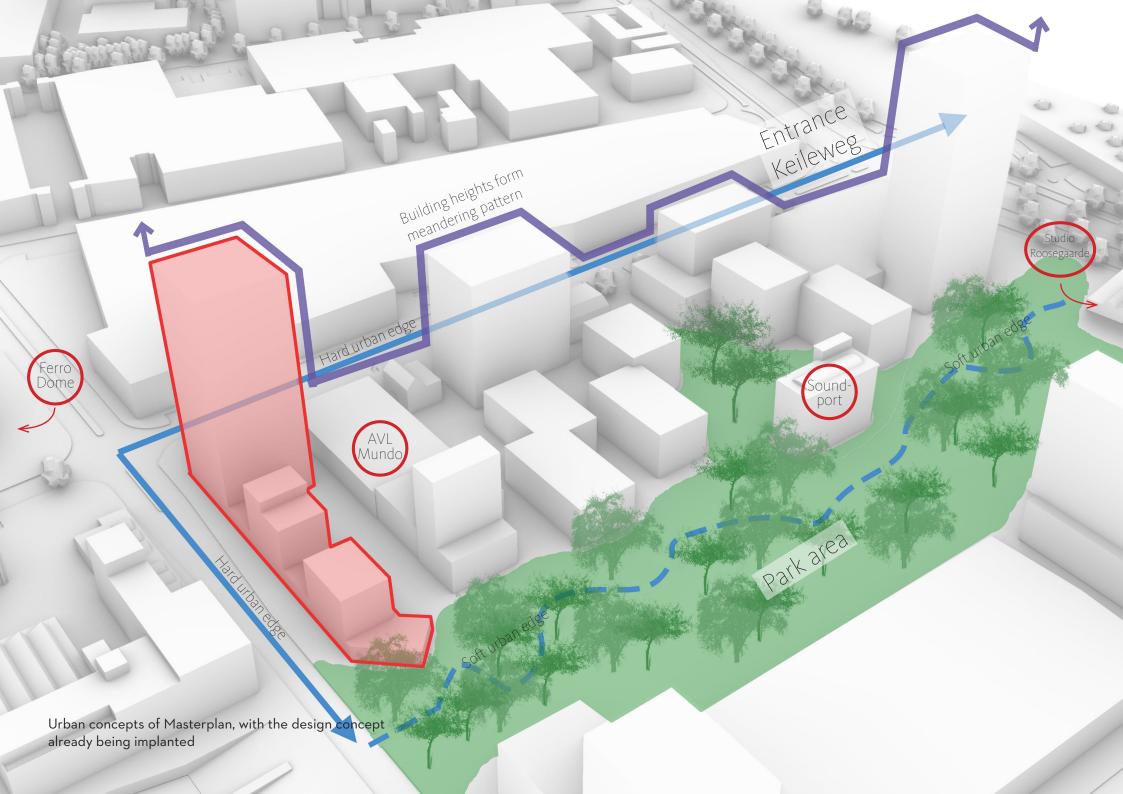
Finally, an interesting connection can be made with the AVL Mundo warehouse, since fledglings try to develop themselves on educational and cultural



Figure 4 Plot number 1 of Keilekwartier, highlighted in red Source: Made by Daryna Chernyshova during group work for the urban plan (2020)

level. By connecting with the AVL Mundo warehouse, such desires can be accomplished, for example by collaborating with some of the exhibitions that are usually held.

All in all, this specific design plot offers some interesting connections between the goals of the urban masterplan for M4H (and Keilekwartier) and the life of fledglings. Where fledglings seek to develop themselves on many levels in their daily life, the urban design gives them these opportunities by facilitating a varying mix of activities, users and spaces. While on the other hand, fledglings could contribute to this dense mix to fulfil the city's goal to establish a creative and innovative urban environment out of the harbour area.



CHAPTER 6 DESIGN CONCEPT

Design brief

Based on the two paragraphs of take-aways for the design, the following design brief is proposed. It focuses on the general outlines of the design, where the main goal is to achieve an explorative character. This has to do with the fact that the design should stimulate and facilitate the residents to perform actions that contribute to their desire for an explorative lifestyle.

Plot

Within the plot, two different building types should be realised:

- One tower of around 65 meters high
- Two dwelling blocks of around 15 20 meters high

The plinth of both types should contain public functions to properly connect with public life around the building.

Dwellings

Number of dwellings: 168 dwellings

Dwelling typology and size: Two-room apartments and maisonettes

~35 m², ~45 m²

Outdoor area per dwelling: Loggia and balcony

Collective functions

Meeting rooms

Communal living rooms

Reading rooms

Rooftop garden and community gardens

Public spaces

Courtyard

Lobby

Public Plinth containing functions that contribute to residents and visitors

Rooftop terraces

Facilities

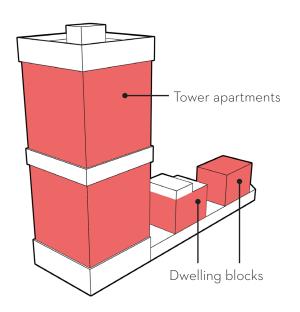
Bicycle and scooter parking

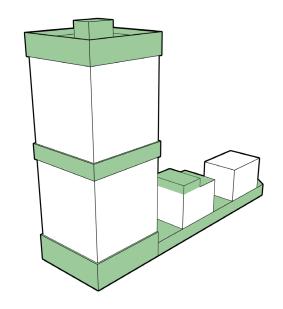
Storage space



Dwellings

The design houses two seperate types of dwellings: tower apartments and smaller dwellings in the two blocks containing shared living rooms and roof terraces. Since the dwellings in these blocks are smaller than in the tower, residents can use the shared spaces around their dwelling to extend their living area.



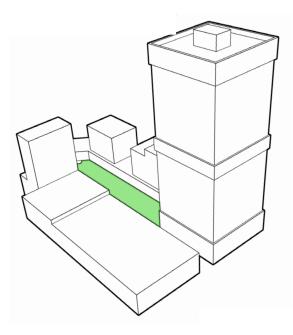


Activity areas

The whole plinth functions as an entrance area for the plot and gives space for different kinds of activities. In the activities-area, the residents can gather and perform crafts both intended for leisure and educational nature - as seen in the concept of The Fun Palace by Cedric Price. Scattered around the tower and the dwelling blocks, multiple floors give space to even more collective activities for the residents to perform.

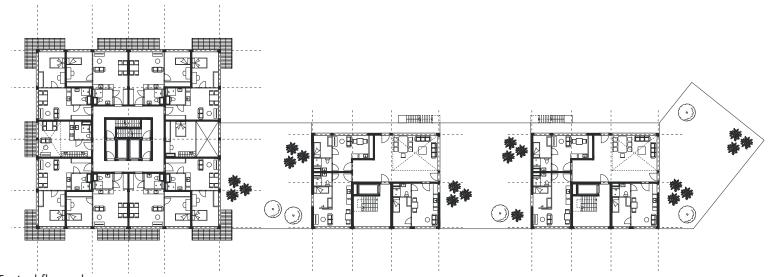
Courtyard

Between the AVI Mundo building and the design there is space for a courtyard, where even activities could more be performed. The AVL Mundo can be involved into the explorative living environment by housing cultural activities in the courtyard for example. Another option is extending the public functions taking place in the plinth of the building, where exhibitions could take place as well.

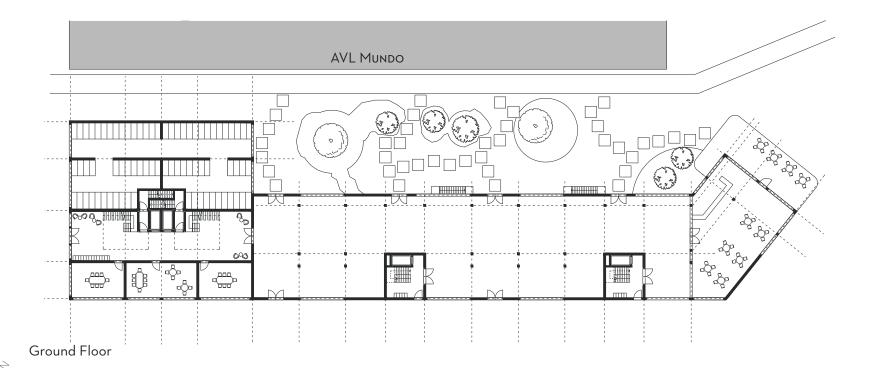


Main Circulation

The residents of the building use main circulation routes to enter their dwelling. In the tower, a central core is designed and the ground floor functions as both a lobby area and an entrance area. The dwelling blocks can be accessed by entrance hallways assigned for the specific block.

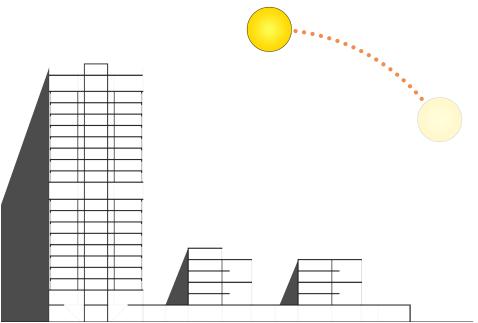


Typical floor plan

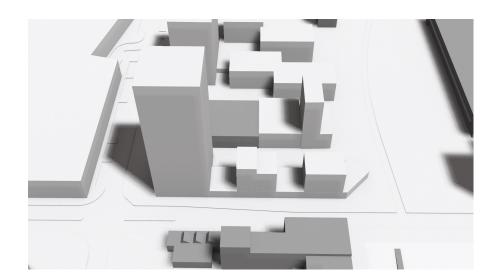


Floor plans \geq 1:500

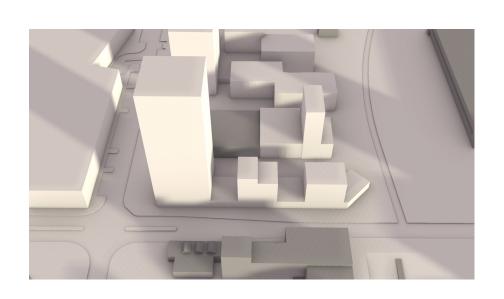




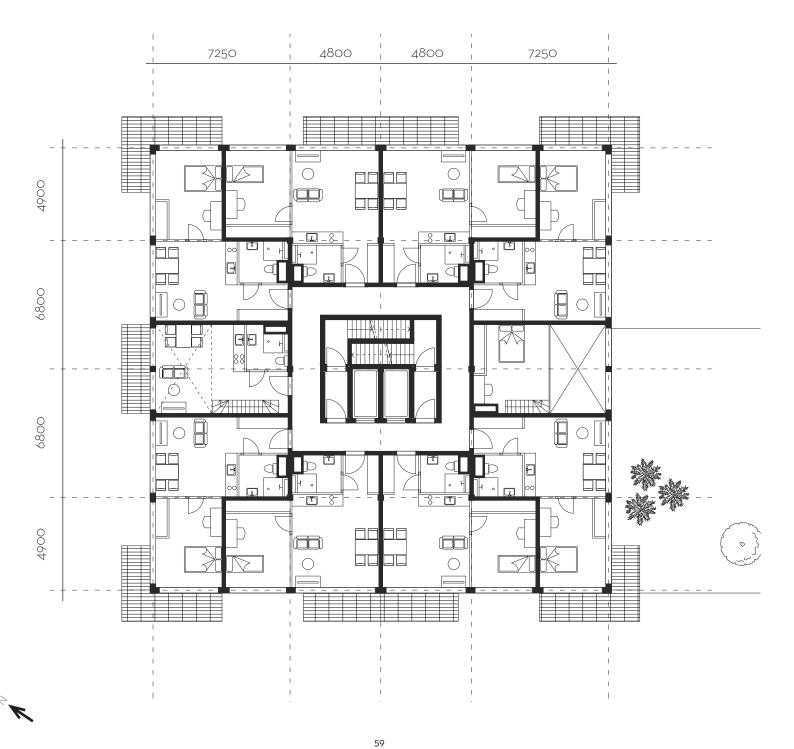
Summer solstice



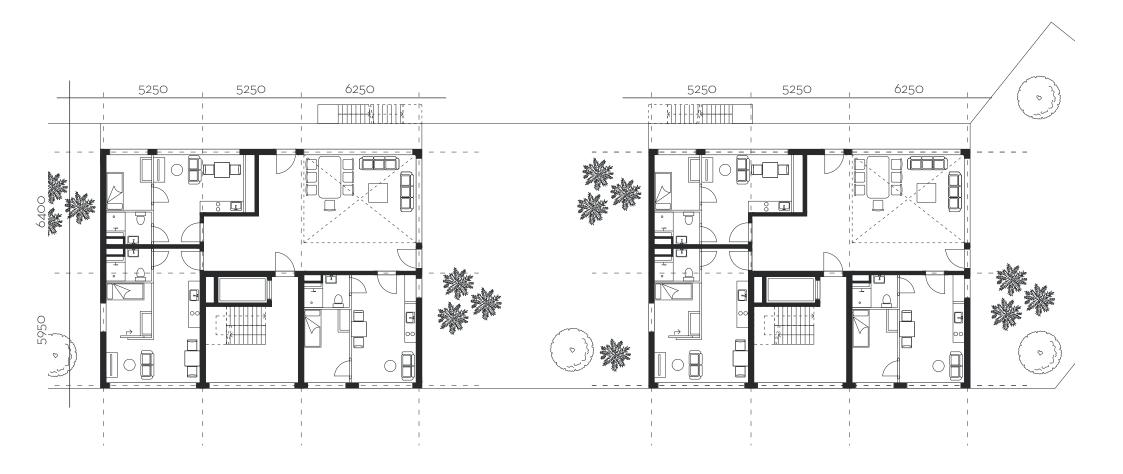
Winter solstice



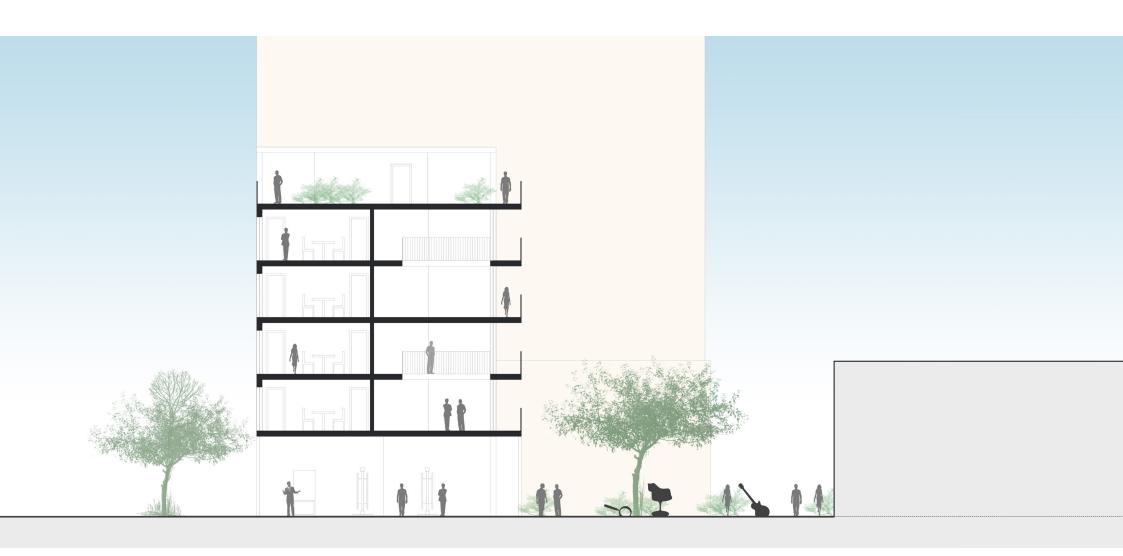
Sunlight/shadow diagram



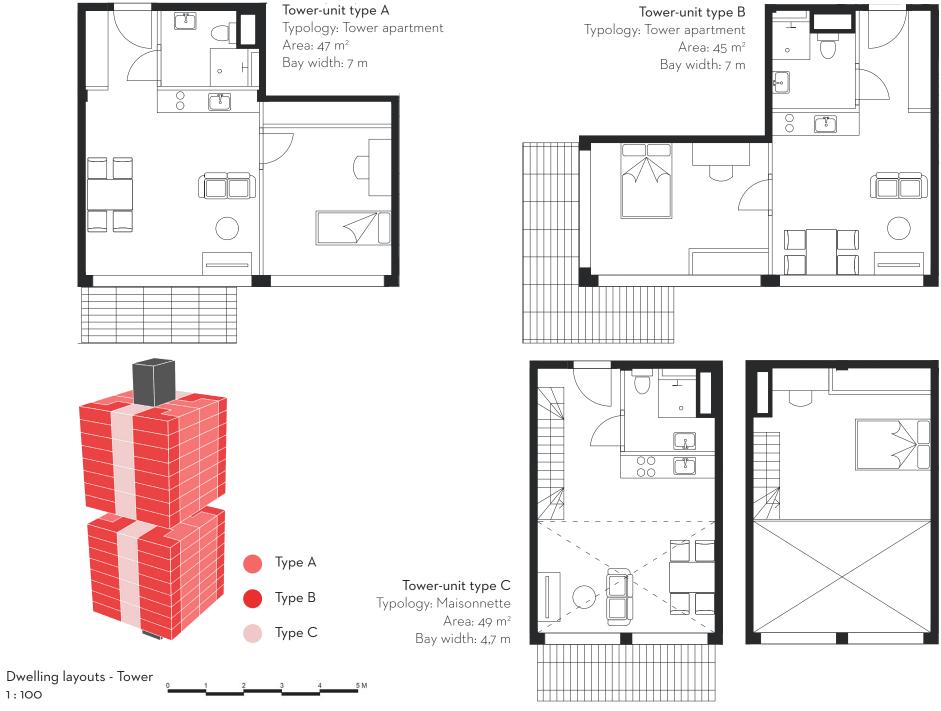
Tower plan 1:200







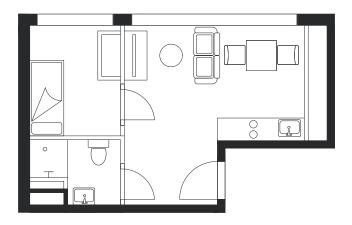
Section 2 - Through dwelling block 1: 200



1:100

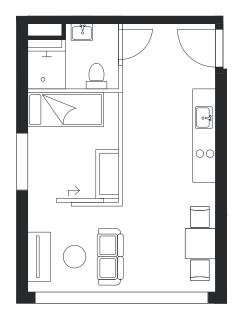
Dwelling block-unit type A

Typology: Apartment with common living room Area: 32 m² Bay width: 5 m



Dwelling block-unit type B

Typology: Apartment with common living room Area: 34 m² Bay width: 5 m



Type A Type B Type C Common living room



Dwelling block-unit type C

Typology: Apartment with common living room

Area: 33 m² Bay width: 6 m

Dwelling layouts - Dwelling blocks 1:100









CHAPTER 7 CONCLUSION & DISCUSSION

Through the investigations and research done on the lifestyle of a starter in the Netherlands - and specifically with the lifestyle of a fledgling - it becomes clear that they experience several issues when looking for an own home after leaving their natal home. Two main issues arose from this investigation: their financial shortcomings and the amount of available homes suitable for a fledgling. Both of them strengthen each other, since one does not exclude another: too few homes results in more expensive homes and vice versa. Besides that, the development of starters through the years resulted in a desire for a new concept of living: fledglings want to live in an environment where they can fulfil their needs of having an explorative lifestyle.

The main goal of this investigation was to find possible design solutions for the given problems. In essence, this meant that this research tried to find an answer on how the design for an explorative living environment could contribute to the exploring and sharing lifestyle of fledglings. In order to succeed in this, the research has been divided into three different parts which respectively focus on the life of a fledgling, how the concept of an explorative living environment can best be described and the patterns of domestic use of this target group.

The research into the general notions of the life of fledgling is done through the use of literature about this specific target group. Besides that, other groups of starters and the development of them are discussed. This resulted in a general view on this kind of people where the lifestyle can be described as follows. The life of a fledgling mainly takes place in their twenties, between graduating and finding a full time job to make career. Because of this, they have the desire to find a place for themselves and look for an own home. This home should contribute to their lifestyle in a way that they are stimulated to live collectively with others, while they also have opportunities to develop themselves both personally and professionally.

Next to that, the Fun Palace is used as an inspiration to define the design assignment of an explorative living environment. What makes the concept of the Fun Palace by Cedric Price and Joan Littlewood so useful for the design for fledglings is the way it facilitates and stimulates different activities for many kinds of natures, ranging from more relaxing to really educational acts. For the concept of an explorative living environment this could mean that next to the use of dwellings in a building, spaces should be designed for these kinds of acts for leisure, education, art or culture. In the end, an explorative living environment should stimulate and facilitate people to do activities which range from a more cultural level to a leisure level, it is a place where you explore in what kind of nature you would like to develop yourself.

Finally, four case studies have been analyzed to discover how existing designs handle similar assignments for this target group. This plan analysis showed

some useful design tools that the design for fledglings should contain. Three kinds of dwellings are mainly seen, which are a studio, a multiple-room apartment and a maisonette. Projects that focus on the housing of starters contain a range of the amount of people that are able to live in such a dwelling: singles and couples are able to live in a one bedroom apartment, while communal groups would require multiple rooms in an apartment or a shared living room where they can go and eat together. Besides that meeting rooms and spaces where the residents could work on their individual stuff, like reading a book, are necessary in a design for starters.

To reflect back on the initial intention of this report, a design concept has been proposed. This design is located in the M4H-area, a soon-to-be developed harbour in the western districts of Rotterdam. The proposed design tried to keep the take aways in mind, which have been the result of the different parts of this research report. The design concept discussed here is a dynamic place for fledglings where they will meet the needs of their explorative lifestyle. This is done by combining both dwelling and activities for leisure and personal development throughout a tower and two dwelling blocks.

For future research into similar target groups it might be interesting to see whether or not specific regional or national regulations might influence the way this report defines the lifestyle of 'fledglings'. While this term can be broadly interpreted and is subject to a wide array of people, only the Dutch housing market has been discussed. I would be very curious to see how other countries will handle the changing needs of starters and to find out how those differences in perspective might collaborate at some point.

Besides that, having used the Fun Palace as an inspiration for dwelling design, it might turn out that such a concept will not work for combining dwellings with activities for leisure and personal development. This has to do with the fact that the Fun Palace was intended to be a public space for communal events and not necessarily for the housing of people. Since the design for the graduation project is still in a somewhat starting stage, underlying problems might not be discovered yet. However, I am still very curious to find out how this concept can be integrated into the design in the M4H-area in Rotterdam.

Finally, only four case studies have been investigated and analyzed. This might lead into a rather limited view on existing designs for this target group. In order to broaden the scope of current design plans and existing buildings, it can be useful to investigate even more case studies. Nevertheless, while writing this report, one main goal has been leading and that is contributing to suitable and successful designs for starters who desire to keep on exploring in life and fulfil their needs of developing themselves.

CHAPTER 8 LITERATURE

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EPILOGUE

Choose what you want to do - or watch someone else doing it. Learn how to handle tools, paint, babies, machinery, or just listen to your favourite tune. Dance, talk or be lifted up to where you can see how other people make things work. Sit out over space with a drink and tune in to what's happening elsewhere in the city. Try starting a riot or beginning a painting - or just lie back and stare at the sky.

- Cedric Price and Joan Littlewood

The quote above inspires me to investigate and discover how people are able to choose what they would like to do in any given circumstances. Because in the end, it is not about achieving or winning something;. It is about enjoying the ride and having fun while it lasts; it is about learning something you would like to learn; it is about being satisfied with the things you have done, no matter how big or small the contribution is to something. Actually the only thing this satisfaction should contribute to is personal growth and joy.

Hopefully both my research and design will contribute to a successful development of what might be a new concept of living: the explorative living environment.

CHAPTER 9 APPENDIX

Appendix 1: Presentation slides of urban masterplan for quarter A

This presentation is made by: Daryna Chernyshova, Joël Swaab, Tom Koekkoek, Yuchen Li

