

Capturing wishes

Translating personal housing requirements into affordable housing for young adolescents in Rotterdam Zuid

Reflection



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Reflection

a graduation research and design **reflection**
for the Master of Science (MSc) degree
in Architecture, Urbanism and Building
Sciences, by

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01 May 2022
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Image: Pexels.com (2021)

7 Reflection

"CHANGE IS THE END RESULT OF ALL TRUE LEARNING." - Leo Buscaglia (n.d.)

This project contains a co-housing project focused at young adults (18-27 years old) living in the Tarwewijk in Rotterdam Zuid. The research question, thus, was:

What are the housing needs of young people (age 18 to 27) with a low income, planning to live in the Tarwewijk in Rotterdam and how can affordable housing include these needs?

The design principles resulting from this research are based on literary research, reference projects, fieldwork and workshops held for students familiar with the design location. Topics that are touched upon in the research are affordability, co-housing principles and the living wishes of young adults wishing to live in Rotterdam Zuid. Within the building, different types of housing are realised: both private (family-)apartments and cluster-apartments where a kitchen is shared with three housemates. Furthermore, the building contains several shared facilities as well as a public courtyard in the middle. The ground floor contains several office- and store-spaces which can be rented out to people living in the neighbourhood. On the North-East side of the building, a community-hub is realised, where several neighbourhood-facilities can be found, serving all the people living in the area.

Relevance to the Faculty of Architecture and the Built Environment

Through the Veldacademie, it is recommended to create an architectural design which is as close and relevant to the target group as possible. In this studio, the development of an innovative building project that uses design as a means to deal with social and spatial challenges encountered in the built environment, is one of the main focuses. This closely relates to the educational goals of the master programme Architecture, Urbanism and Building Sciences.

The Veldacademie is known for their knowledge and experience in conducting fieldwork research. Through this studio, students were encouraged to get into the field and speak to stakeholders in order to gain a better understanding of the socio-spatial context and the issues at hand. Thus, two workshops were held with students who were familiar with the location and would (soon) be the target group of this project.

Research methods

The young adults were asked about the most important requirements for a rental property. The questions were divided into three categories and include questions that focus on current situation, wanted accommodation and (desired) co-residency and participation (both in cohabitation form and in normal living form). The workshop contained a drawing exercise, a questionnaire, a collective exercise in which questions were asked using drawn out design principles, after which the students voted for their preferred option and a discussion was held and finally an exercise in which students created their own design brief.

Not every exercise was carried out as successfully, mainly because the group size on the day of the workshop was four times the anticipated size. Yet the discussions held with the students lead to important insights, which were involved in the final design brief.

Besides this field work, literary research into housing affordability and co-housing principles was done, as well as the analysis of three reference projects. This desk research further scientifically substantiated the resulting design brief.

It must be noted, however, that the research done for this project is partly globally orientated and partly oriented towards the design location, the Tarwewijk. The design brief that resulted from this, involves both perspectives and has dealt with any contradistinctions, even though there were few. By including different research methods in the thesis, all design decisions are argued through different perspectives and thus hold more scientific relevance.

Research and design

Research and design are very closely related to each other in this design project, as the results of the research are combined into a coherent design brief. This design brief contains all the knowledge gathered through both qualitative and quantitative research, in the form of literary research, the study of reference projects and the organisation of two workshops for young adults well acquainted with the area. The design brief then forms the starting point from which to design a co-housing project on a location in the Tarwewijk. While some aspect of the design brief are still relatively vague and undetermined, such as the functions in the plinth, a general proposal for the design and a lot of knowledge about the most important subjects, being housing affordability, co-housing principles and the housing wishes of the target group, has been generated through the research done.

Relevance to socio-spatial context

This design project focuses on a quite specific target group consisting of young adults with a lower income who are planning to live in the Tarwewijk. This group is quite ethnically diverse, yet research has shown that ethnic background does not have a big influence on the living wishes of an individual. Thus, the design brief could be relevant for different target groups in a similar age range as well.

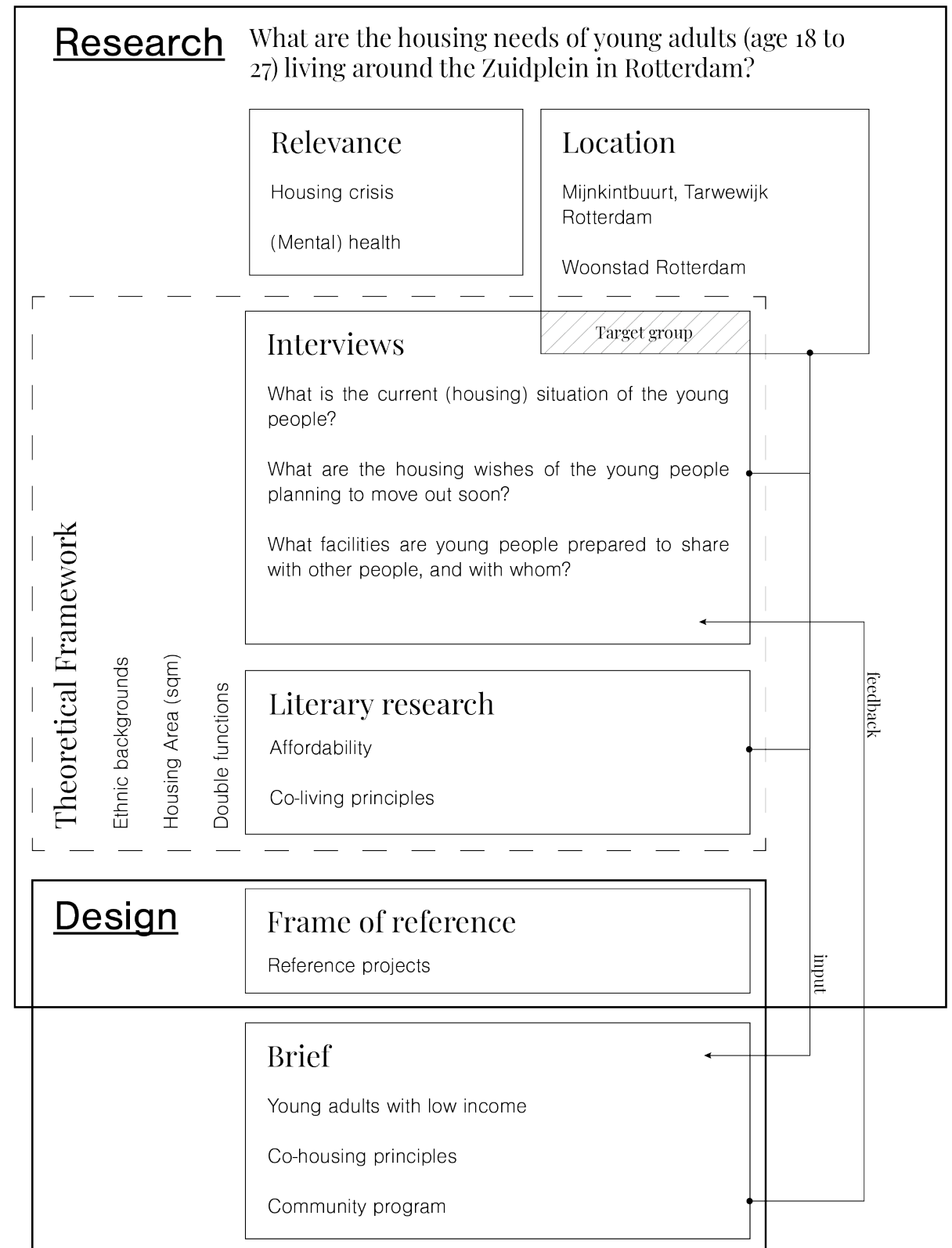
The results specifically of the workshop are very location-bound, and thus might be difficult to implement in other locations, where different socio-cultural issues are at play and have to be resolved than on this specific location. Therefore, the data conducted through the workshops can form the basis of further research, yet should not be taken as globally implementable truths. For this specific design brief, however, the results weigh heavily on the final brief. In a wider social contacts, the results gained from the workshops should be removed from the design brief in order for the brief to be used.

The final design is based largely on the living wishes of citizens already familiar with or even living in the area, as well as on the socio-spatial problems the specific neighbourhood is facing. While the main structure of the building could be placed in other surroundings, the specific functions added to this design were focused on the context of the area. Thus, the general design could be used as a starting point for similar projects, yet the implementation of the design could and probably should be different.

Ethical considerations and dilemma's

While the design brief that resulted from the research formed a useful starting point for the design, it did not cover all (ethical) considerations and decisions that still had to be made.

The most important and constantly re-occurring theme that influenced every design decision in this process, is the theme of affordability. This project is aimed at young adults with a low income, meaning that rental prices should be kept as low as possible. This has greatly impacted the design, in every possible way. Some important interventions are the design tiny housing units, of only 10 square metres, where each room has built-in furniture to maximise the usable space. These units are copied and pasted several times in a row, to minimise the variations and thus the building



complexity, meaning that the entire building can be built much faster. For this exact reason, the design is also entirely built out of CLT and timber, as these materials prove to be quite quick and easy to build and assemble on site. Furthermore, passive climate principles are integrated where possible and the building will produce its own energy and heating through PVT-panels.

Affordability is a very broad theme and has probably made this design project more complex than it would have been without this limitation. But besides limiting the design possibilities, it also offered a great direction to follow throughout the process. Each decision made in this design is based on its affordability, from the type of railing on the outdoor galleries to the overall construction, and from the configuration of cluster-apartments to the function and usage of the community-hub.

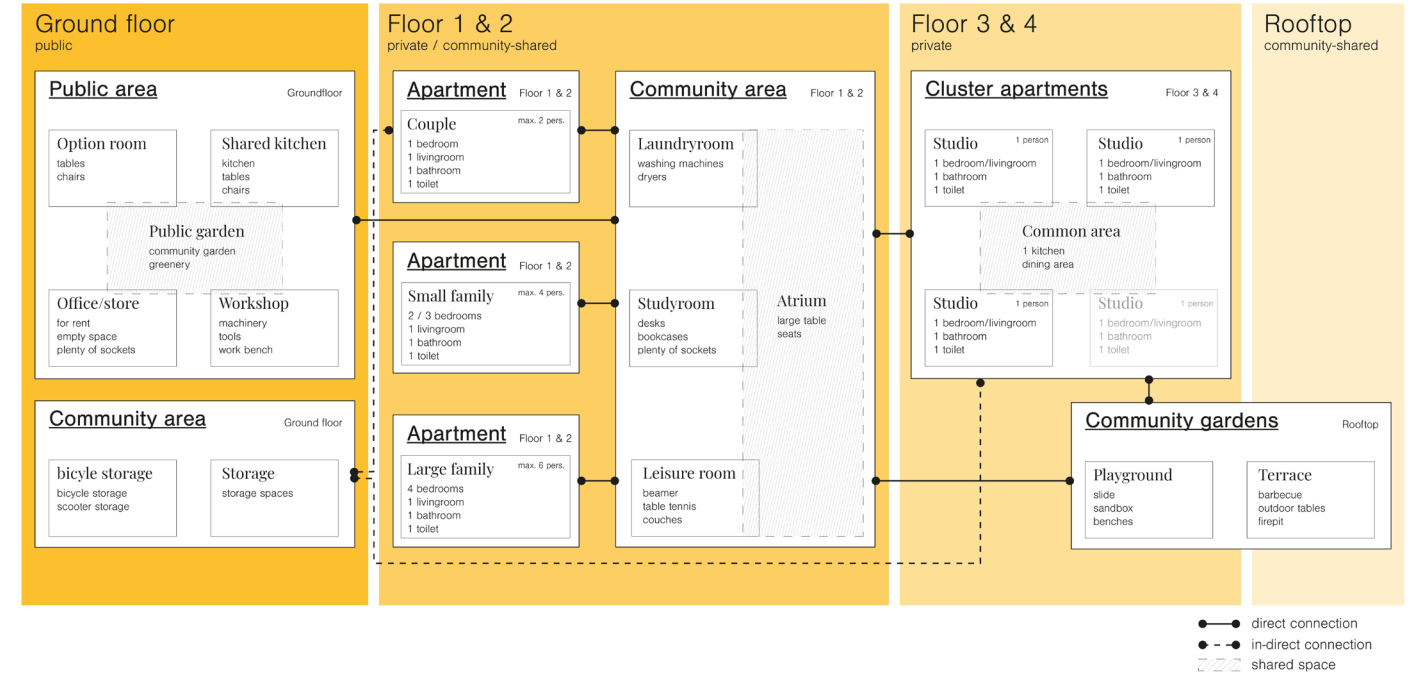
This community-hub, however, posed me with another ethical dilemma. The hub, located on the North-East side of the building, facing the current playground association, should function as a meeting space for both residents of the building and visitors living in the neighbourhood. This in the beginning was limited by the fenced playground, which did not create a very welcoming environment for meeting new people. By removing the fence and opening up the park to the public, a first invitation to more interaction was made. Removing the playground-association building entirely was at one point also considered. However, after much consideration it was concluded that this would probably not be appreciated by the locals, as this is a building which represents pride and community to them. Instead, the new community-hub will interact with the playground-building, creating a bigger and even more inviting space, right in the middle of the neighbourhood.

Personal reflection

The approach in this project, being first interviewing the target group and then basing a design of this, has so far been quite fruitful. While not all results of the workshop were as useful as initially anticipated, the conversations with students definitely helped me gain a better understanding for which elements in housing the target group deems important. Furthermore, talking to different stakeholders and professionals, such as employees at housing corporations and PhD candidates specialised in relevant topics such as affordability, much helped me to form a basic understanding of the important elements involved in designing affordable co-housing.

During the design process, however, it became clear to me that a lot of further research still needed to be done. Mainly into the socio-spatial context and the problems in the Tarnewijk. Before starting on the research, I already realised that a design by research approach would be needed in this project, as many new problems would only occur once the design process was started. Thus, the research done is far from complete and will continue to be conducted throughout the further design process.

Especially my tutors have helped me realise that the research is never over and more information can almost always be gathered in order to further develop a coherent design. Their constant focus on unfinished elements and unanswered questions have helped me come further in this design process on several occasions and I look forward to even more critical and constructive feedback on the design, in order to learn even more about the wide variety of aspects of this design assignment.



Final design brief. (own illustrations, 2022)