Reflection paper
Studio: Dwelling, Dutch Housing
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Reflection on research and design for community living with people interested in sustainability in the center of Amsterdam
This paper is intended as a reflection on my research and design for my graduation project at the chair of Architecture & Dwelling at the Apple Market in the center of Amsterdam. The paper consists out of four aspects. First the relationship between the project and the wider social context. Secondly the relationship between research and design. Thirdly the relationship between the theme of the graduation studio and the subject/case study chosen by the student. Finally, the relationship between the methodical line of approach of the graduation studio and the chosen method.

The relationship between the project and the wider social context
Due to the increase of population in Amsterdam in 2040, 40.000 more dwellings are expected to be needed. This prime location, at the Apple Market, is currently unused. The baby-boom in the Netherlands lead to a huge generation which nowadays is turning old. This generation of people are facing an aging peak in the year 2040. Due to the changes in health care, the elderly should stay longer independently. If the elderly stay healthy, they can live independently with relatively little care. But if they get health problems, custom homes or extra care may be needed. (Young) elderly people are increasingly thinking about how they can live comfortably and independently.
The generation of now, must deal differently with the consequences of aging. For example, in the form of self-organized care, informal care. Living in a common living environment with like-minded people of different ages offers an outcome.

The relationship between research and design
Initially, the research was conducted into the social position of elderly and the representation of this architecture. After the P2, the research has focused more on cohousing and projects with a sustainable character. The question: ‘How can architecture enhance people living together with the same interest in sustainability & food at the Apple Market in Amsterdam?’ Common living is a form of living with each household having an independent home and sharing common facilities and spaces. Common living is not limited to people of a certain generation. For example, in the German concept of the mehrgenerationenenaus (multi-generation house). This concept is investigated. I made an analysis of several projects in Germany, I choose them for the scale and the differentiation of the inhabitants. Unfortunately, not all the projects were very inspiring in their presence. I discovered that most of the projects have a kind of enclosure, like a ‘hofje’, and several dwelling typologies and sizes. In my plan, I made an enclosed environment for the inhabitants, but also with views providing outside/inside the building volume. I discovered and read in a research from Verwey Jonker about communal living at age and that there should be a balance between the sort of inhabitants. In my plan, I made a division in dwelling typologies for one third younger families and starters, one third elderly and one third single and couples. The goals for this concept are living together with activation of neighbours help and community work. It prevents social isolation and distinction. A collective residential building has several advantages like, sharing goods, services and facilities makes use more efficient. Sharing materials, space, services and facilities can reduce living costs. It increases social cohesion between neighbours and give residents a strong common identity. The identity of the building and inhabitants of my plan relies on sustainability, food and green. The residents can learn from each other, help each other when needed and organize joint activities. Through this form of
society, older people can actively participate in life. They do not feel tucked away, quite the contrary, because the house is in the middle of the community. It’s important to have a choice, privacy is one of them. The ability to choose requires a built environment that is both flexible and diverse. Privacy in the living environment is a matter of boundaries. Due to the position of physical and architectural elements, spaces can be created with different degrees of protection to create the most comfortable environment for each individual user. The desired level of privacy varies by activity.

Gradations from private to public on a building level

Sustainability is another facet in my project, this is the bounding element for the people who wants to live here. I asked the question: ‘Which aspects of sustainability can be used in the project and is this visible in the architecture?’ I analysed three projects, de Waterspin, ReGen Villages and UF de Schilde. The Waterspin is a community living which reuses the water with wetlands. I want to use this principle and make it visible outside the building. ReGen Villages is all about reconnecting people with nature and consumption with production. It is a model for the development of off-grid, integrated and resilient eco-villages that can power and feed self-reliant families around the world. This system works well on a bigger scale. But elements from the concept can be used. Especially on food production, this led me to a further investigation in aquaponics. Aquaponics is the combination of two industries: aquaculture (fish farming) and hydroponics (growing plants without soil). It is a circular process were the wasted nutrients from fish farms are reused as fertilizer for plants. The plants can clean the water for reusing in the fish farming. The Urban Farmers movement has already realized two projects, one of them is UF de Schilde, a greenhouse is placed on top of a former office building. I analyzed the floor plans and have been on location with the goal to make an urban farm on top of the parking garage were well-willing inhabitants can work or volunteer.
The groundfloor is mainly commercial and gives program back to the city. The program is focused on food. The restaurant is a part of it, this restaurant makes dishes with the vegetables and fish what the urban farm will produce.

The relationship between the theme of the graduation studio and the subject/case study
The main design assignment is to make a proposal for the challenging site at the corner of Marnixstraat and Elandsgracht. With questions like ‘how do we want to live in the future?’ Some limits are set. First, the Apple Market should be developed into an area that combines dwelling with work. Especially, in the beginning a lot of dwelling typologies of work/home combinations were investigated. It turned out that there are a lot of different gradations for a work/home. For example, working on a kitchen table with a laptop or have a store in front. The people who wants to live in this proposal have an interest in sustainability and food. They can maintain a collective vegetable garden.

Secondly there is the question how to deal with the existing parking garage. This parking garage could obviously be used for the inhabitants of the project, because it isn’t always occupied. On top of the parking garage a greenhouse is placed which produces food. This is done with aquaponics and a circular process. In this way, there is a link between work and living, but not especially inside the dwelling.

The relationship between the methodical line of approach of the graduation studio and the method
The research can be divided in three subjects: analysis of case studies and projects, literature research and the most importantly is research by design. As I mentioned the research question has changed after the P2, the focus is shifted from one target group of elderly to a diverse group of like-minded people. I found out that we are not going to make only elderly housing, but involve them more in society. With research by design it is important to keep in mind to zoom in and zoom out and reflect on the qualities that I want to achieve. It brought me new insights and I often changed the circulation and entrance. This costed me a lot of time in the beginning, this happened probably to the fixed size of the building and that I had to redefine my starting points. Research by design is done on the scale of the site, the building and the dwelling typologies. I started with making physical models at the site and the building volume. Later in the process I was making more models digitally.