

1 • The relationship between research and design Aspect

The transformation of cities and buildings is one of the main emergent themes in contemporary architecture. Finding an appropriate balance between the old and the new is of fundamental interest for contemporary architectural design. The Heritage & Architecture Section (formerly RMIT) is concerned with preservation and renewal in existing architecture. The research by design conducted in this specialisation focuses on the architectural and technical aspects involved in the conservation and transformation of buildings, including those of cultural significance. Heritage & Architecture brings together the fields of cultural history, technology, and architectural design in a single holistic approach.

This studio focuses on dutch post-war housing. In my case: the district of Ommoord, Rotterdam. Ommoord is a post war neighborhood designed by Urban designer: Lotte Stam-Beese in the 1960's. The site was built during the period of the 'wederopbouw'. During this period many modernist suburban neighborhood were realized in The Netherlands, some of them more successful than others. Till this day Ommoord is still considered a successful neighborhood (Damen,1993). Today, we are facing a major transformation challenge as the ERA apartment buildings no longer meet the current energy standard that is required today. Before we start this challenge, it is important to know the architectural and spacial values of a site. During the design process, research has been conducted on this site, to formulate the cultural value of the place. The formulated values were the starting point for the design. Next to the cultural value assessment, other research has been conducted in a later stage of my design process. This secondary research focused on how the ERA system could facilitate in creating 'age-proof' housing. Meaning, not just the adjustment of one single apartment but also looking for other ways of living for the elderly. I can now say that the combination of the cultural value research and the second research process helped me to give the project more focus and led me to my final design.

2 • the relationship between the theme of the graduation lab and the subject/case study chosen by the student within this framework (location/object) Aspect

As stated before, the studio focussed on the renovation of post-war housing. As stated before, most of these houses do now not meet the energy requirements of today. Renovation of those houses should result in designs that do meet those requirements. During my graduation I focussed on other relevant topics such as health and well being.

Post-war neighborhoods were built in a time of optimism. After World War Two we were dealing with enormous war damage in our cities and a tremendous birth wave. As a result, the best urban designers, architects and developers came together to create neighborhoods with conditions which would allow us to live healthy and happy. Health and urban planning and architecture have never been two separate domains. The way in which we have been building our cities, has always been very closely related to our health and well being. The 'woningwet' (1901,woningwet) for example, has been a direct respons to that. Around the 1960s we entered a culture of rapid expansion of the Dutch cities, the Wederopbouw. The majority of houses in The Netherlands have been constructed in this period, about 73 percent of our current stock is post-war housing' (CBS, 2017). And this makes the topic very interesting and relevant today. The design principles of many of these post-war neighborhoods are based on a very specific societal image and ideology. Those neighborhood really reflected the zeitgeist and optimistic views of that time. A society that believed in 'de maakbare samenleving'. The way we were back then and the way we wanted to live, was directly reflected in the spacial lay-out of the post way neighborhoods, and is still recognizable today. Aspects that had influence on design decisions were for example, the role of the church, the homogeneous society, big families with more that two kids, a strong welfare state (verzorgingsstaat) and prosperity (Vreeze, 2015).

Today, we see that not only our society has changed but also our views on society. Everything has changed except for our houses. We are also facing one of the biggest transformation challenges in which we have to adjust our cities to the way we live and the way we want to live.

Now we have arrived in a period of time where the new borns from the birth wave after the war have grown older. When looking at the statistics we can conclude that in about twenty years, almost one third of our Dutch population will be older than 65. Society has gotten older and so has our care system. More an more pressure is put on mantelzorg and care facilities show signs of vacancy. The questions about health and well being that we were asking ourselves in the wederopbouw period are now arising again. Not on how we should build healthy cities, but on how we should transform the excisting to reflect the way we want to live now. Almost three fourth of our current housing stock is 'post-war'. In my project I try to find solutions for how we should deal with this stock, the answer does not only lie in improving energy efficiency but includes the theme of care and health.

3 • the relationship between the methodical line of approach of the graduation lab and the method chosen by the student in this framework Aspect

After the first semester it became clear to me that I was dealing with a post-war district which was quite successful. This is remarkable when compared with other known examples of areas consisting of only high-rise apartment buildings such as the Bijlmermeer or the Banlieu. Ommoord seems more appreciated compared to other districts due to a combination of factors such as economics, social problem, demographics, residential program, location, technology and implementation etc. However, I would also like to state that part of Ommoord's succes comes from it's spacial qualities, which were carefully designed and thought of by the designer, Lotte Stam-Beese. It was hard for me to fault it. This has also been the main struggle in finding a good graduation assignment for myself. How can you improve something which is already great? After a couple more visits to Ommoord I was confronted with a social issue which was clearly visible in Ommoord but an issue which is of national concern. The majority of residents in Ommoord is 65+ and loneliness is a common by-product. This issue provided me with a starting point: Looking for new living forms for elderly to combat loneliness.

The second part focused on how the ERA-system could facilitate these new living forms. The ERA-system in Ommoord has characteristics of John Habraken's ideology. In the early 1960s, he published the "Open Build" concept in which carrier and non-loadbearing elements are separated. The goal is to give more choice and control to residents of mass housing constructions. Residents can be responsible for the design of their homes, and there is a greater degree of flexibility in housing plans. Reflecting on this I can say that the ERA-system and its flexibility is still relevant today as it gives possibilities for transformation. What I can conclude is that it was difficult for me to find a graduation assignment which would improve something which is already 'good'. But after the secondary research I took pleasure in making something 'good' even better.

4 • the relationship between the project and the wider social context

The relevance of the project lies in facilitation new way of living together.

The Netherlands is changing. Not just in demographics but also in policy. We are dealing with an aging society, in about 20 years about one third of the population will be older than 65+. Next to this we live longer and we want to be independent for as long as possible. Three quarters of our current housing stock is unsuitable for the current housing demand. Many post-war districts have been built with a very specific societal image in mind. Most houses in these districts have been made for big families. While nowadays almost 40 percent of the population is occupied by single households.

Sustainability has largely overlooked this part of the housing stock. In these neighborhood the problem is not just sustainability and it is more than just adjustments of houses. There is a need for space for new care concepts and forms of society that cater to all age groups and new generations. Designing the public

space of these neighborhoods is important for strengthening social cohesion. Transformation of the urban environment should increase the freedom of movement of the elderly and vulnerable groups. In short, in terms of viability, sustainability, spatial quality and social cohesion, there is a lot to be gained from a fundamental refurbishment of the post-war neighborhoods. With as the main question: how to best shape the changes in care and support in the neighbourhoods.

The Netherlands count about 11,000 gallery flats, all built in systems similar to the ERA-system. They provide lots of flexibility and can give an answer to this new innovative ideas that make residential areas of The Netherlands future-proof.