

Reflection Graduation Project

**Dwelling with Interactive In-between
Space**

AR3AD131 Dwelling Graduation Studio: Dutch Housing
(2014-2015)

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1. Research Question of Design Studio

The **Dwelling Graduation Studio Dutch Housing** focuses on contemporary and future urban architecture on the scale of both the dwelling and the city. As a location, Amsterdam is the experimental field of our studio.

Living in metropolitan city with its diversity of both social and functional aspects together with the constant coming and going of people, makes dwelling there a worldwide experience, which is completely different from residing in the suburb. The question that rises is how to match the configurations of architecture to suit the demands of the dwellers, with changing patterns of everyday life? Meanwhile, the architectural form also has great changes compared with that of the past. The population of metropolitan city increases every year, leading to a problem that traditional low-rise buildings cannot meet the needs of high-density living style.

So the question arises, how to design a dwelling building that can **meet the needs** of large cities, such as Amsterdam and follow their urban context; and also can **solve the social issues** about alienated human relations brought by the changes of lifestyle and architectural forms.

Thus, the question of theme research is derived:

'What outdoor space and spatial elements can foster the positive communication between the residents of a dwelling complex?'

2. The relationship between the methodical line of approach of the studio and the method chosen.

The following methods has been chosen within the framework of Studio's method (comprised of three main modules: site analysis, theme research and design):

Site research:

Through field research, literature study, information gathering and data comparison, the conclusion of site analysis obtained from aspects: History, Future, Climate, Infrastructure & Accessibility, Functions, Architecture, Site morphology, Demographics and Atmosphere.

These notion of location history to transform the Oostenburg into a mixed use area of residential and offices, which is according to the housing corporation Stadgenoot, existing users and future vision of the area call for the need of a new residential project with high quality collective spaces.

Theme research:

The theme for our research is 'foster the positive communication', which can be approached in two ways.

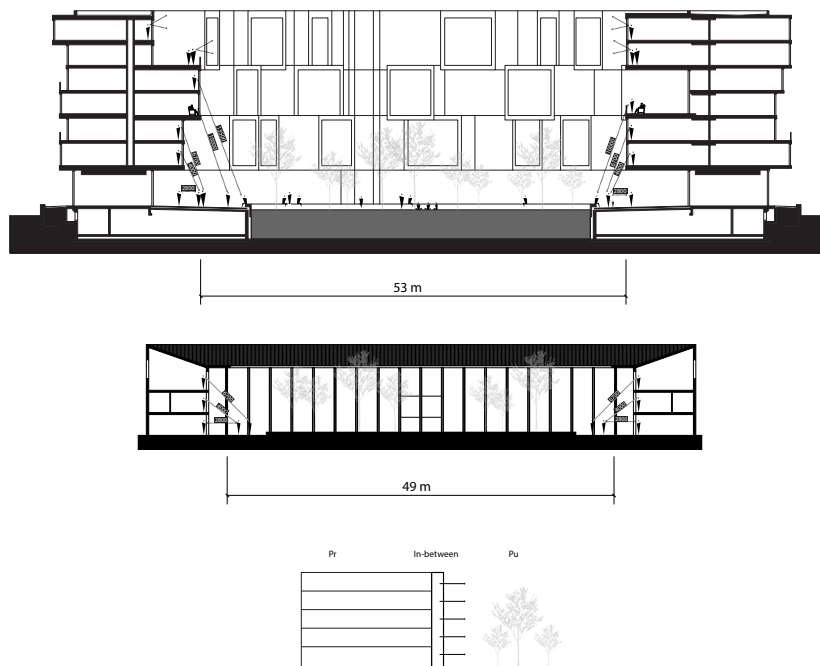
1. Through outdoor spaces typologies, defined by literatures as framework for building masses.
2. Through spatial elements, which support the essence of the outdoor spaces. These bring us to the following research question:
'What outdoor space and spatial elements can foster the positive communication between the residents of a dwelling complex?'

Research by design:

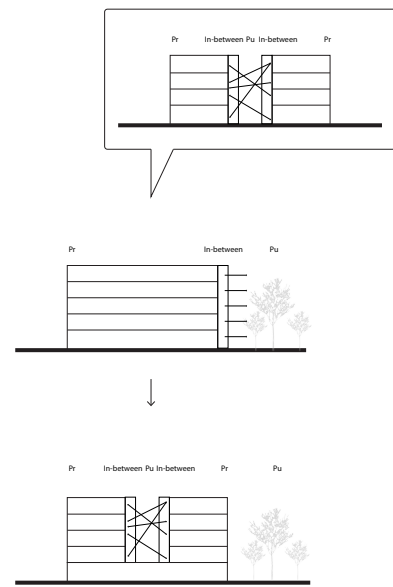
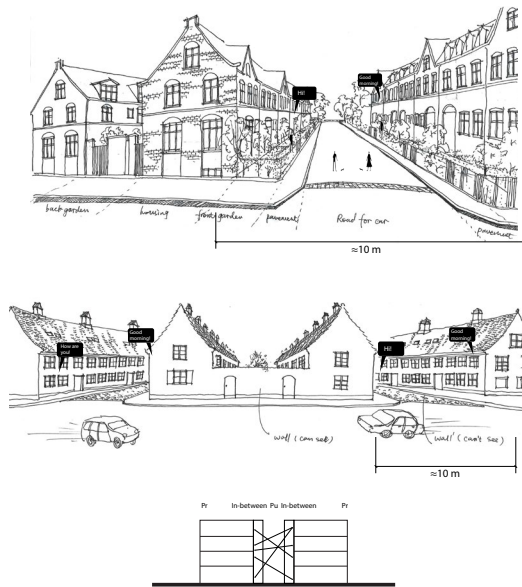
What spatial combinations and dimensions can be learned, to accommodate in strip residential building with increasing stories, which finally can foster communication between dwellers in the community?

3. The relationship between research and design

In the theme research, I found that many residential buildings are enclosed courtyard type to guarantee enough sunlight reaching the public space. The courtyards' dimensions usually range from 25 meters to 70 meters [These data come from our cases in theme research]. So that dwellers only have view contact with strangers on the ground floor. The large-scale courtyard separates the facing residential buildings. And it's very hard for dwellers to communicate with each other.



However, in many traditional communities in Europe [such as cases the Humleby and the Kartoffelraekkerne in Denmark], public space is usually a street with two private front gardens on both sides. And its dimension is not large, about 8-15 meters (including two front gardens). When people are staying in their front garden or balconies, they can see their neighbors across the small public space. They would have greetings and talks. So the real communication will happen between dwellers.



Research question :

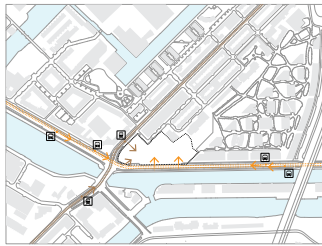
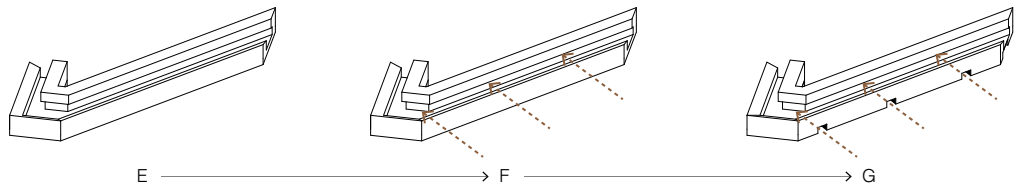
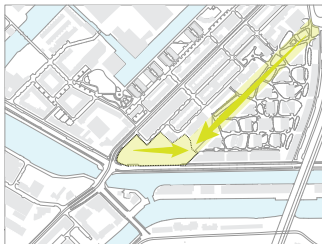
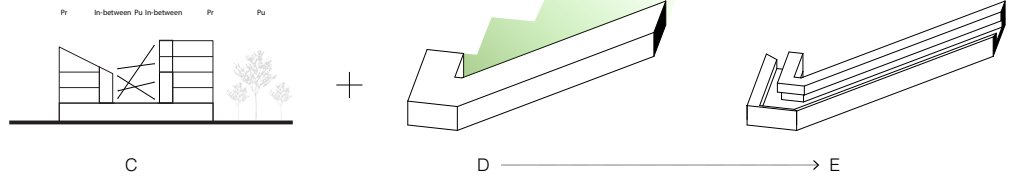
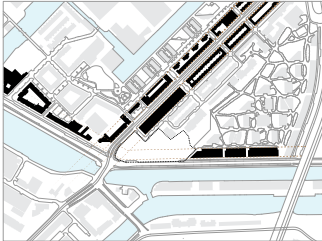
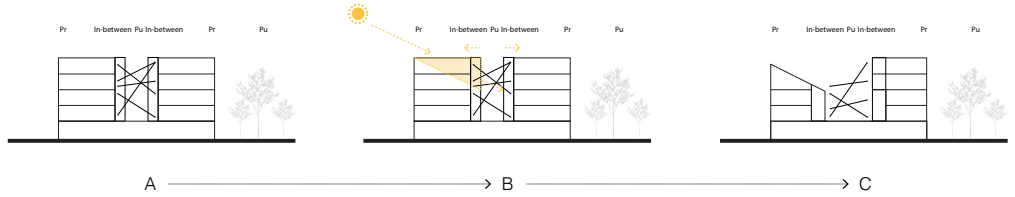
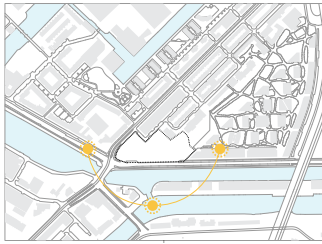
Whereas the spatial combinations and dimensions in traditional communities can be learned, is it possible to create a positive space that can foster communication between dwellers in a strip residential building with increasing stories?

Design assignment :

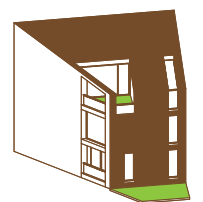
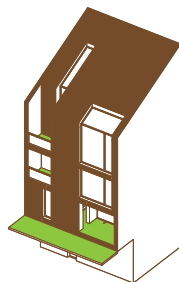
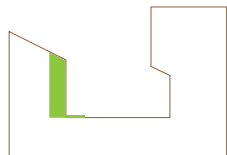
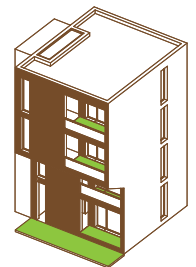
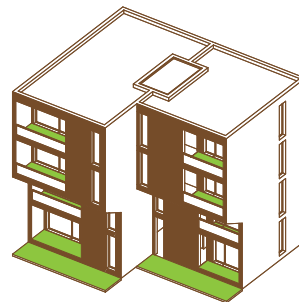
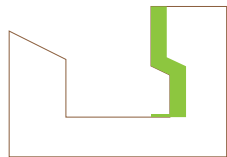
To create a community with interactive in-between space which has a variety of spatial layers to promote the communication between dwellers.

4. Design

After considering the sun direction, city context, greening distribution and places of buses and tram, the first design was gradually formed.



Interactive In-between Space



In the further step of the design, the architectural elements which have a positive impact on people's communication were taken out from the theme research and used in design. In the abstract concept - interactive in-between space, the use of four elements - front garden, deck, balcony, roof garden has made the concept more specific.



In the subsequent deepening of the design, in order to improve the original concept -interactive in-between space, the materials also has been made relevant considerations. On the facade facing to the street and courtyard, in order to highlight each family's identity, different colors of fiber cement panels has been chosen. In embody the concept of "internal street", the friendly wood is used, which is trying to create a warm community atmosphere. While under the timber, there's a layer of recycled aluminum, which makes the facade more dynamic and also increases the interaction with people.