

P4 reflection

Anna Wójcik, student number 4255364

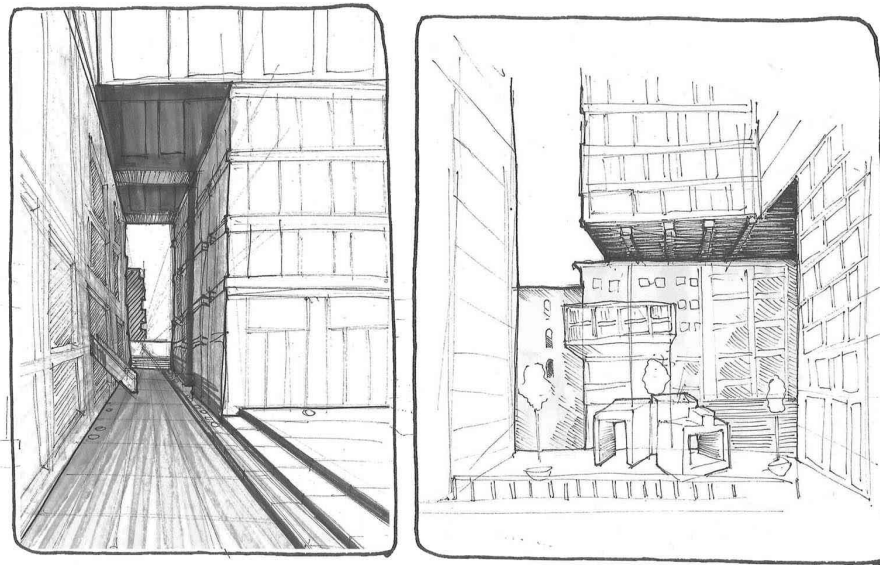
graduation Studio: Chair of Architecture and Dwelling

tutors: Birgit Jurgenhake, Paul Kuitenbrouwer

theme: At home in the city of Amsterdam. How can the last remaining vacant site along Oostelijke Handelskade be the first statement for a Housing Hybrid of the 21st century?

title of the graduation project: *To save the Last Gap. How to fill the last empty spot in the rigid neighborhood with new dwellings while leaving it open to serve the whole community as a high quality public space.*

From the beginning of my research on the last empty spot in the attractive waterfront location on Oostelijke Handelskade in Amsterdam, I had a subjective feeling to save it as an open space. Site, called further The Last Gap is currently a place, where people express their need for socializing by temporary gardening, creating a playground for kids, etc. My research involved different gaps in the urban tissue, their development/ lack of development, conducted under many different factors. It seems that in each case study the most important goal was to achieve a balance and harmony between newly created space and old pattern of the city. 'Gaps' in the urban tissue create a lot of discussion, because they are rare and valuable. Very inspiring read during the research process was for me R. Trancik's book *'Finding lost space'*, which treats about the "broken, disjointed and disorienting" spaces, just like the Last Gap. The Last Gap is the precious land with a big potential so design for that site should be thoughtfully considered. They can turn from the 'lost spaces' into new attractive spots that meet the needs of many people and improve the quality of life of the whole neighborhood.



Phenomenological sketches of in-between spaces made during site -research

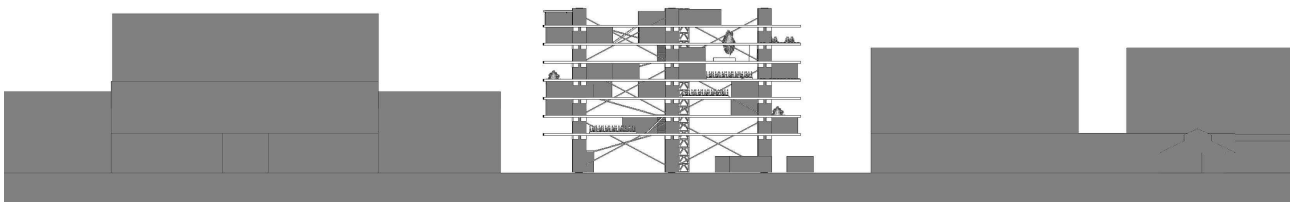
Site research shows that all the other in-between spaces of the Oostelijke Handelskade are not inviting, narrow passing-by corridors and neighborhood is missing quality public spaces. According to social surveys in the district, promenade which is currently very poorly developed - has huge potential to become an attractive point on the map of Amsterdam. Investigating development of similar gaps localized in Netherlands and factors that led to "closing" the spots or leaving them open, let me answer an important questions: how to fill/partly fill/leave open a gap in urban tissue to satisfy different parties involved: inhabitants, neighbors, developers.

Research question: Which factors determine the development of an urban gap? And how much influence do these factors have on the development? How can the Last Gap provide new type of dwellings and an inviting public space while keeping the transparency characteristic for 'a Gap'? Supported by my research, **the goal** remained the same: *To save the Last Gap!*

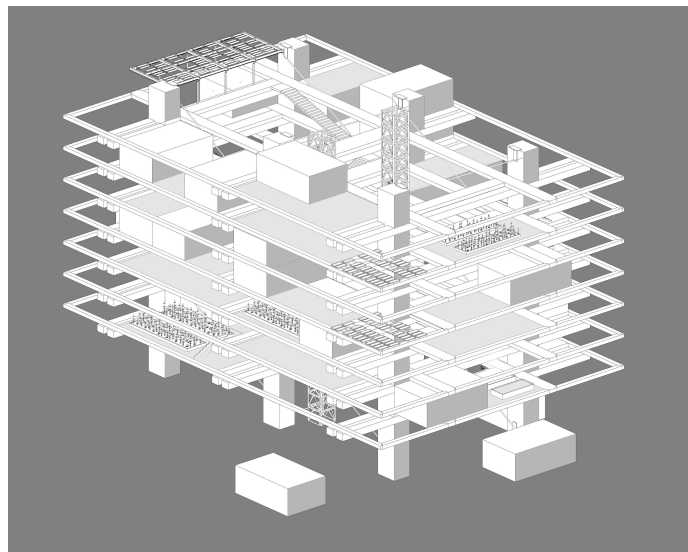
Research → design

As an outcome of my research and studies, intention was to leave the „Last Gap” open, with the idea of openness developed in several aspects:

- functional- the site remains open in the ground level for the whole neighborhood. As the last open waterfront site in the neighborhood, it will remain accessible for everybody as a quality meeting place with new facilities
- formal - currently, the gap connects waterfront with the rest of the city. It should remain an open plot in the urban scale and become an inviting „gate”. Dwellings were raised above the ground level on columns - shafts and created a vertical city.



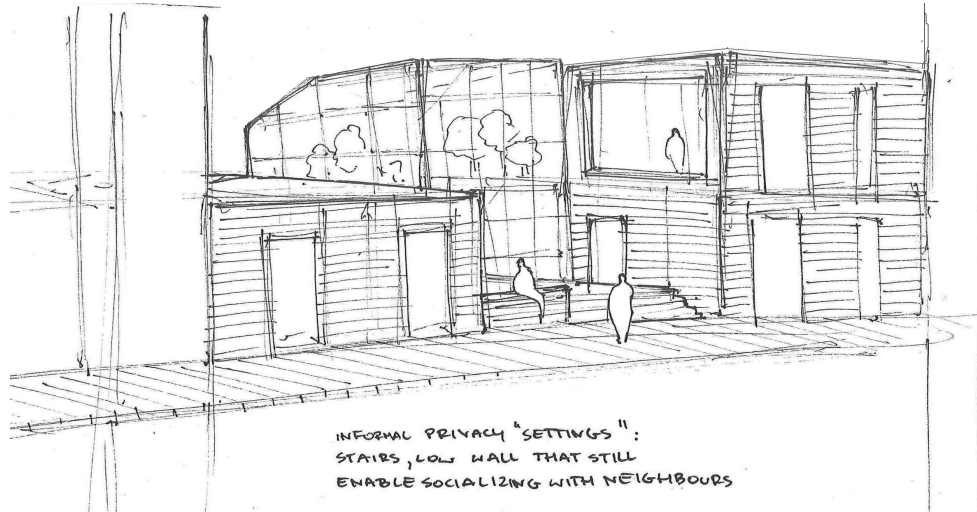
- On architectural scale - dwellings themselves will be also "saving the gap": superstructure they are placed on will be filled in principle to max of 66% per floor. This will happen on the level of one storey of vertical city (as semi - public spaces occupying some of terraces) and within individual dwelling terrace, where some of the modules remain transparent:



- "ideological" openness. Finally, the tree house-like dwelling is a temporary structure. All the structural elements are made of wood, which can be disassembled (due to use of low - impact wood joints, inspired by traditional timber framing techniques). Cycle of material life can be repeated, when the building is not needed any more. During my process I was putting a lot attention to the possibilities of sustainable building process: production (trees harvesting, biological insulations etc.), transport (using excellent location of the site, directly by the waterfront, construction and maintenance of the building which also can be kept in the environmentally- friendly way. Due to modular idea of dwellings, they can be changed/removed when owners/their needs changes. Because structural shafts have a minimal footprint, ground level can be developing independently (greenery, facilities), and remain undisturbed, even if the building would be dismantled. The site can become a „full time” gap again.

Studio theme

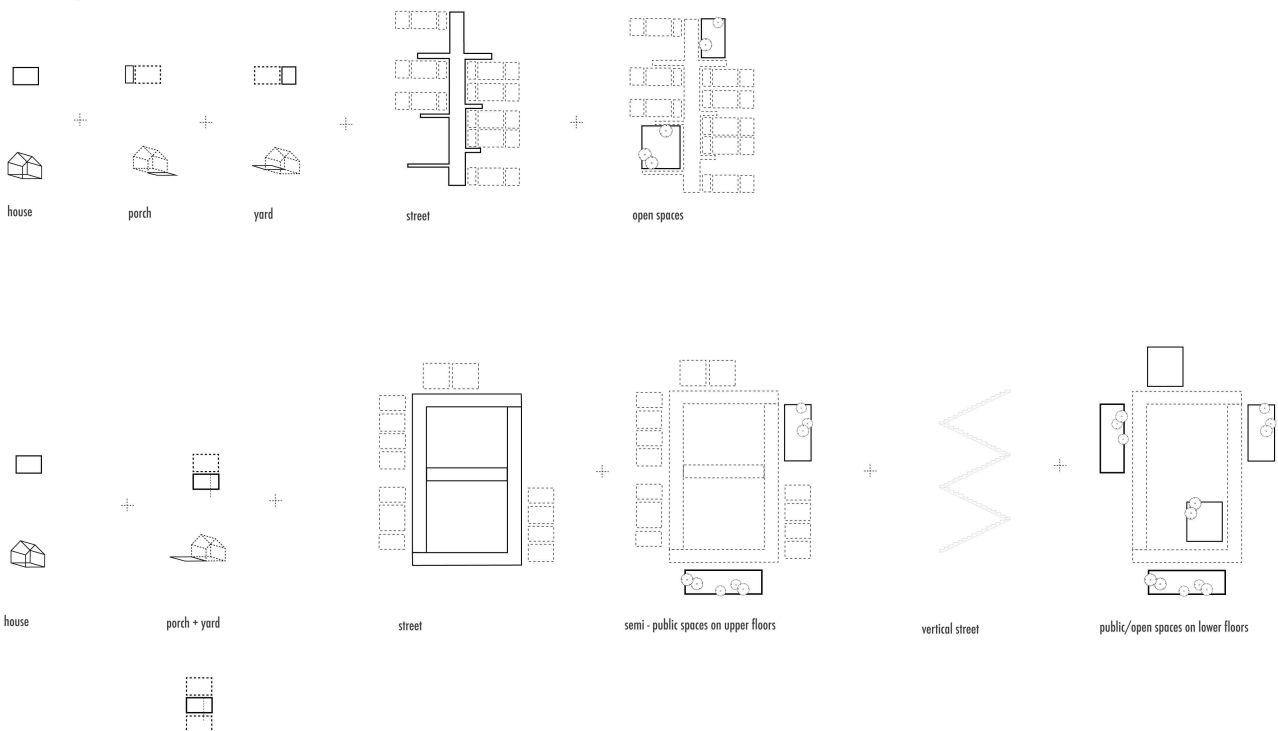
Main design assignment is to create the new housing program with additional functions (services, work places etc). Ground floor serves for everybody, but functions can reach also higher levels, mix with dwellings. Upper levels are also accessible - visitor can have a walk along the vertical city, see the semi - public spaces, have a peek into the private terraces, if owners have their "privacy settings" that allow it. That private settings allow also interactions with neighbors by creating the meeting spaces:



"Housing Hybrid of the 21century" as stated in the theme on the studio, is in my case a plug-in city: the city that can grow in a natural way, according to current needs of its inhabitants. It creates a single - house way of living, with small streets, plazas and private gardens in the centre of Amsterdam. Open for everybody ground floor, where urban farms, cafe/ waterfront leisure facilities are located, blend in with the housing part through open atrium.

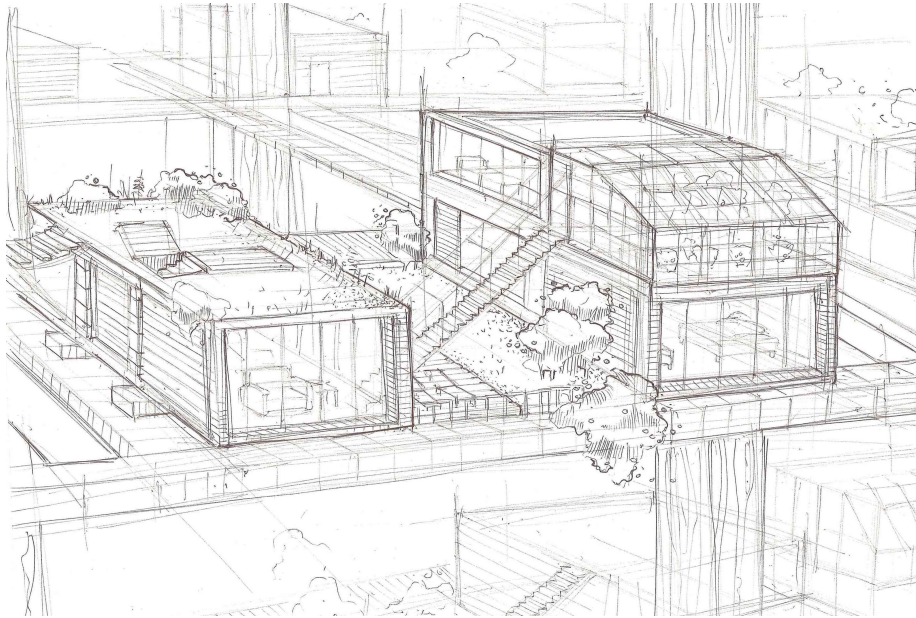
Traditional dwellings pattern and vertical city concept:

New living pattern - vertical city



Modularity – Freedom & Guidelines

Dwellings are created individually from the modules. Inhabitants can create their own living space, depending on the size of the family, needs and preferences. This freedom of creation is limited by a number of developed by me Design Guidelines, which keep the integrity of the design idea for vertical city and Climate Guidelines, depending on the orientation of each dwelling, to keep the sustainable performance of the whole vertical city.



Methods

Site research including social surveys and phenomenological studies, experiencing the spaces in Oostelijke Handelskade →

theme research about gaps in urban tissue in Netherlands →

studies of the **Plug-in City** ideas, which is brought back to life from time to time by different architects, starting from conceptual visions of Plug-in city of Archigram to Nakagin Capsule Tower in Tokio. Most of the modern are visions that stay on the level of experiment. I was using these references, especially the existing ones, I learned from their fails and successes. →

design phase → **Structural design and calculations.** Project required some extra attention for developing the Superstructure, which supports all the dwellings. →

As the next step I focused on **modular dwelling** that will be placed on the Superstructure.

Modularity of the dwellings was achieved by modification of traditional timber framing method (platform frame). During that process I followed Dutch Building Code regulations. →

Climate statement: passive dwelling using maximum of natural conditions, sun wind and rain, heated and ventilated naturally when possible, constructed using recyclable materials.

There is also global aspect of the project, which is expressed mostly in it's technical/structural execution, especially by used material: timber. I would like my project to have from the beginning to the end a Process-Centred Approach: from the responsibly harvested wood, through transportation, construction, use of the dwellings, and eventual complete or partial dismantlement. In the end of the lifecycle product will be collected by the constructor. Life Cycle Analysis (LCA) can be used to keep a track of environmental footprint of the building during the manufacturing, use and dismantling.