

MORE WITH LESS

A redesign of 1960's Dutch social Housing

Fascination

At the start of my graduation project, I aimed to contribute to solutions for societal challenges such as climate change and the housing crisis. At the same time, I was engaged with the theory of Degrowth and its potential for the field of architecture. A key objective of Degrowth is to minimize consumption and production—thereby reducing exploitation—and to transition from an economy driven by growth to one based on circular principles. Crucially, this shift should enable social and ecological values to flourish, rather than deteriorate.

Objective

Evidently, my project needed to focus on transformation—limiting consumption by reusing existing buildings. At the same time, it was important that the project be representative of a wider range of similar buildings, so that the proposed interventions could be applied on a broader scale. Lastly, the potential for residential densification was a key criteria for the choice of the project.

The main objective of the project is to enhance living quality and social values while minimizing material consumption—achieved through designing for sufficiency and incorporating reused materials.

Case Study Context

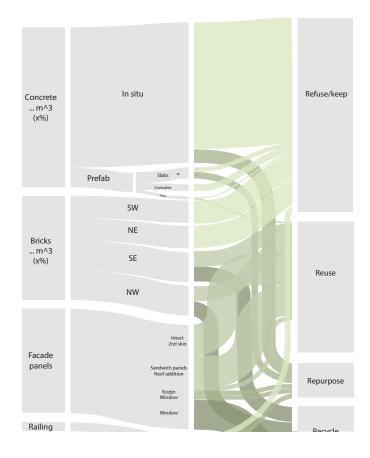
The chosen case study is the Klipperbuurt neighborhood in Amsterdam Noord. This area consists of 11 similar building blocks and 577 gallery-access dwellings, built in the 1960s. The physical condition of the buildings, combined with weakened social cohesion, make it a vulnerable neighborhood. The urgent need for renovation, poor living quality, and fragile social fabric make Klipperbuurt a compelling and relevant focus for my graduation project.

Research Methodology:

The graduation research focused on a material inventory of the existing building, aiming to assess the quality, methods of disassembly, and potential for reuse of the materials present.

First, archival drawings were used to remodel the building and to quantify the materials present. Secondly, the material quality was assessed based on existing literature. Finally, the methods of disassembly and the potential for material reuse were examined.

This research served as a foundation for the design process. By applying the R-strategies, informed decisions about material reuse could be made throughout the design phase. Combined with a design approach based on sufficiency—prioritizing what is necessary over excess—the project aims to reuse as many of the building's original materials as possible and limit consumption.



Design

The aim of the design was not only to limit production by reusing existing materials as much and as efficiently as possible—following the R-strategies—but also to rethink the needs of contemporary living and the possibilities of sharing. A sufficiency-based approach results in smaller, yet flexible, multifunctional, and socially oriented spaces. Through shared living arrangements, the consumption of space, materials, and appliances can be significantly reduced. At the same time, shared spaces foster a stronger sense of responsibility, community, and belonging among residents.

As the concrete structure of the building is still of good quality, it even allows adding new layers on top, the design started by finding ways of reconfiguring the dwellings in the existing rigid structure. This eventually lead to a coliving design where every 4 dwellings were linked to a shared space. This shared space is highly addaptable for new configurations as each of these dwellings could intergrate or give a room of/to the shared space.

This co-living configuration is quite progressive and may not suit everyone. Given the scale of the neighborhood, a mix of dwelling types is therefore desirable. This led to the development of two additional dwelling configurations, each incorporating a smaller degree of shared space.

The first configuration consists of dwellings that share a single room with their neighbors, as well as a 'voorportaal' (communal entrance hall) shared among five units. The shared room is flexible in function—it can serve as a hobby room, dining room, guest room, or be temporarily integrated into one of the adjacent dwellings.

The final configuration features a more traditional layout, with individual dwellings and a shared space on each floor. This space promotes sufficiency while also functioning as a social meeting area for residents

Reflection

During the design phase, I often found myself conflicted—on one hand, I wanted to design as much as possible and create a 'new' building; on the other, I aimed to limit interventions to reduce material consumption. I was torn between pursuing an idealistic vision and staying grounded in realistic, practical solutions.

I'm curious how the project might have turned out had I chosen to focus solely on idealism or realism, or approached them sequentially rather than trying to balance both throughout the process. As it stands, the project seems to float somewhere between the two. Some aspects are inherently idealistic, while others are firmly rooted in reality. I'm satisfied with the result, although at times it feels as though the project is neither fully idealistic nor fully realistic. Perhaps, this may simply reflect a different way of looking at the tension—rather than a flaw, it could be seen as a deliberate balance or even a strength of the project.

In terms of planning, there are certainly things I could have done differently. I devoted a relatively large amount of time to transforming the existing floors, and comparatively little time to developing new elements—such as the character of the ground floor and the design of the added layers. This imbalance could be seen as a flaw, but perhaps it also reflects a logical focus, given the nature and priorities of a transformation project.

