

Heritage >

« Dwelling



Redesign the Floor Plan

In the first of the series of interdisciplinary workshops in the visiting professor program of Anne Lacaton, students have made redesigns for existing apartments in order to study dwelling typologies, develop a vision on quality of living, find new notions of quality and design a good plan.

During two days they worked in teams on the assignment, produced their redesign based on a set case and brief and present it by a fixed format.

Teams of 2 or 3 students (mix heritage-dwelling) collectively worked on one case. They studied the plan and analysed existing and missing qualities. Subsequently they designed an improved plan. General points of attention were:

- Size of the apartment
- Size, position, layout of bathroom, toilet, kitchen
- Size, position, quality of outdoor space
- Size, layout, quality of living room
- Daylight
- Quality of transitions between inside and outside
- Relation between rooms
- Entrance and routing

All teams worked with the following set of design rules:

- Changes should have a clear reason and an improved result
- Extensions are allowed (if for a good reason and result)
- Merging apartments is allowed (if for a good reason and result)
- Load bearing structure and shafts stays unchanged

Students worked on several generic housing typologies, that have been built in The Netherlands in the postwar period. These multi-story apartment blocks generally are not perceived as high quality housing. But the vast amount, the inhabited state and the need for a circular economy make renovation very relevant.

When studying these typologies, students discovered some elements of good quality and developed designs that use these qualities in a new context or use.

The Intervam building system is a post-war housing system of prefab concrete slabs, developed in the 1950's and 1960's. The design case in this workshop is a single-oriented apartment that stretches along the façade. The full width of the apartment can't be experienced because the apartment is rigidly divided in three parts by two load-bearing walls.

The Elvira flat was designed in 1960 by architects Van den Broek and Bakema. Opposite to most of the system-flats developed at that time, this building is based on split levels, where communal corridor occurs only every three floors. The spatial quality of this split level however, is not experienced in the present situation.

The apartment type 'Algemeen Belang', designed in 1940, was a repeated block that was implemented over several sites all over Rotterdam in prewar and postwar years. The design is by architect Van den Broek and is an example of 'the existenz minimum', an efficient and optimised plan and building system. As in many modern housing estates the urban space and garden are large and green, which is an opportunity.

Intervam

Batista Lopes

Niels Timmer

Yuan Chen

The ambition we had for this apartment was to create some kind of enfilade, a common feature in architecture from the Baroque period. Rooms are formally aligned with each other. The openings to enter each room are aligned along a single axis, providing a view through the entire suite of rooms. A nice side-effect is that circulation space is incorporated in the rooms. The apartment keeps its quality of rigid division in three different rooms, the full width can be experienced and the living spaces can be bigger and feel more spacious because of the view through the openings provide through the entire apartment.





Elvira Apartments

Roel Kusters

Jan Ksiazek

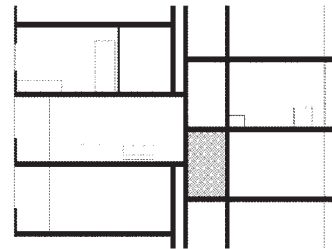
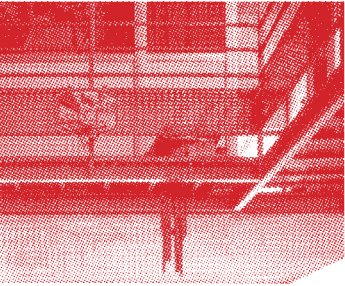
Zheng Xiangyu

In our design open stairs become the leading element inside the dwelling. Vertical movement creates transition between spaces rather than the former sequence of 'leaving room'-'stair'-'entering room'. New quality of overlooking the living room from the kitchen enriches the spatial experience of the users. Unique existing layout of the flat makes it possible to link two parts situated above each other into double height apartment. This intervention emphasises the openness and common space in the apartment. It also brings an opportunity for external extension to accommodate more residents.

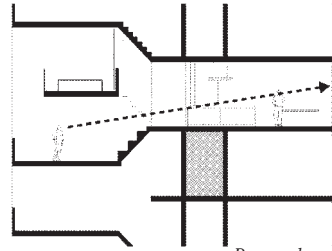


Flexible layout,
possible extensions
and additional communication
(easy to assemble spiral staircase)

Double height and
visual connection between



Existing

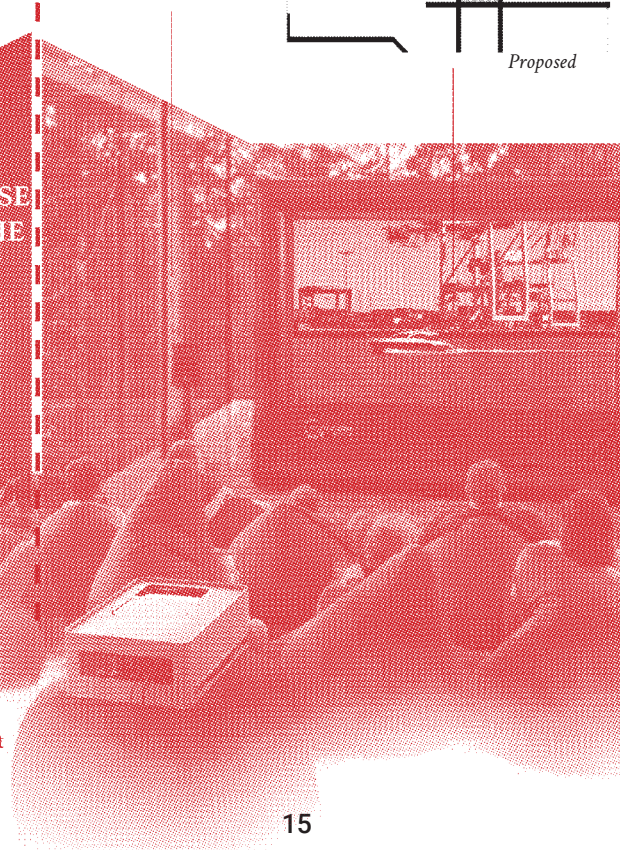


Proposed

OPEN STAIRCASE
REDEFINES THE
APARTMENT

apartment,
between spaces

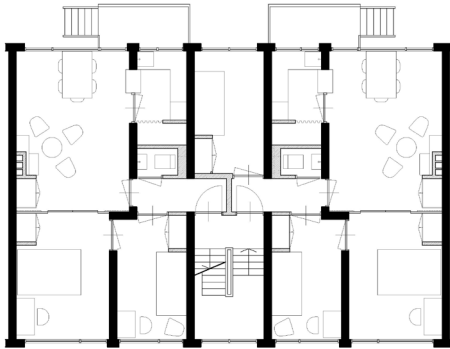
Open gathering space,
missing in the existing apartment



Algemeen Belang

Bronya Meredith

Josh Stevenson



Existing Floor Plan



Proposed T02

The repeated plan in the existing situation offers only two variations in apartment layouts.

The plans were designed to allow maximum flexibility in orientation by allow for the staircase and third bedroom to swap position depending on the orientation. This means that sometimes balconies overlook the garden but sometimes they overlook the street, meaning that extending outwards is not always an option.

We were interested in looking at updating the plan to offer a variety of apartments for different households. Furthermore we intend to relate apartments to a collective garden by balconies and stairs and to create new collective satellite spaces surrounded by trees.

Image showing improved relation between apartment and garden, by enlarged balconies and satellite spaces in the vast collective garden

