COLLECTIVE RE-USE

A REINTERPRETATION OF THE PORTIEK DWELLING

P5 presentation: Master of Architecture TU Delft
July 3rd, 2014
Saskia Hesselink 4010655
Committee: Lidwine Spoormans, Pieter Graaff, Wido Quist, Esther Gramsbergen
CONTENTS

1. Introduction
2. The Vogelbuurt
3. Problem statement
4. Portiek housing
5. Collective housing
6. Target groups
7. Design principles
8. Design
9. Relevance for portiek
10. Conclusion
RMIT Graduation Studio:
Transforming Housing Heritage Rotterdam Carnisse
THE VOGELBUURT
THE VOGELBUURT

Rotterdam Central Station

Carnisse

Vermeer Neighborhood

Vogelbuurt
The Vogelbuurt
THE VOGELBUURT
Other collectives

Vereniging van Elgenaars (VVE)

co-housing

CPO

Housing Cooperative

Gestippeld wonen
Historical significance
700.00 portiek flat dwellings were built in NL between 1945 and 1975:

10% of the total housing stock
29% in the city of Rotterdam
73% in Carnisse

Bron: BR5
Bewerking: dS-V/Verg/Geo-info
Peildatum 2009
Juli 2009
ref.: P102b_Woningtypologie
Projectnr.: 502
"VULNURABLE" HOUSING

Vulnerable apartment housing:

Floor area of less than 75 m² and book value of under 130,000

Bron: COS
Bewerking: dS+V/Verg/Geo-info
Peildatum: 1-1-2008
juli 2009

ref.: P17b kwetsb voor meer gez
Projectnr.: 502
The Portiek as unit
The Portiek as unit
“How can the post-war portiek flat dwelling be reinterpreted to accommodate collective living to advance the regeneration of the post war neighborhood?”
PORTIEK

RESEARCH SUBCATEGORIES

COLLECTIVE

TARGET GROUPS

Research Subcategories
“De zoektocht van de functionalistisch georiënteerde architecten naar helderheid en repetitie, leidde tot een nieuw verticaal ontsluittinstype, de zogenaamde moderne portiek. Een gemeenschappelijke voordeur geeft toegang tot een collectieve trap die in twee halve steken twee appartementen per verdieping ontsluit. De plaats van de entree is op iedere verdieping gelijk en diep in de woning gelegen, wat de gevel vrijhoudt voor verblijfsruimten.”

(Leupen & Mooij, 2008 p. 144)
THE PORTIEK

Section
Added value of collective housing:

1. Financial
2. Social
3. Physical
Collective Housing

- Large groups split into clusters
- Separation of public and private
- Separation of public and private
- Hierarchy of space
Traditional cohousing demographics are not the demographics of the area.
TARGET GROUPS

Migrant workers

Senior Citizens

Single Parents
TARGET GROUPS

- Migrant workers
- Senior Citizens
- Single Parents
TARGET GROUPS

Migrant Workers

Senior Citizens

Single Parents
TARGET GROUPS

- Migrant Workers
- Senior Citizens
- Single Parents
Design principles

Preserve clarity and repetition in facade.

Use existing features as inspiration.
Widen space between load bearing walls to create open and flexible space.

Open up cramped stairwell
High efficiency insulation at the inside of the front facade with thicker insulation at the outside of the rear facade.
1. Efficiency versus comfort

2. Conforms to standards set up by advocacy group Flexwonen voor Arbeidsmigranten.
1. All areas wheelchair and handicap accessible.
2. Social network close to home.
3. Apartments still independant living space.
1. Sharing chores while retaining family autonomy.

2. Adaptable for the different stages of growing up from babies to teenagers.
Ground floor plan, migrant workers
WIDENING SPACE
Detail 1: outside insulation

Detail 2: inside insulation

Section A·A'
Upgrading efficiency

Climate concept diagram

- Fresh air into living areas
- Exhaust sucked from kitchen and bathrooms
- Prewarm air underground
- Exhaust air

UPGRADING EFFICIENCY
Differences

Front facades

Rear facades
Migrant workers

basement
Migrant workers

1st and 2nd floor
Migrant Workers

attic
Senior Citizens

2nd floor
Single Parents

basement
Single Parents

ground floor
Single Parents

1st and 2nd floor
Rear facade: Varicolored slate shingles
Additions: Dark slate tiles with oak batten infill
Additions
Implications

Canneburglaan

Moerweg III

Haveltestraat

Moerweg IV
Implications:

- Canneburglaan
- Moerweg III
- Haveltestraat
- Moerweg IV
Implications

Canneburglaan

Moerweg III

Haveltestraat

Moerweg IV
Implications

Canneburglaan

Moerweg III

Haveltestraat

Moerweg IV
Between a singly family house and gallery flat:

Both an opportunity and a limiting factor.
Central stairwell for accesses all areas:

Shared stairwell was a liability for the autonomy of individual apartments but becomes an asset by collective.
Narrow spaces separated by load bearing walls:

Especially the kink which is characteristic of this housing type forms a limiting factor in the flexibility of the space.
Most research has focused on individual apartments.

Examining dwelling as a unit opens up new possibilities.
Special thanks to:
Lidwine Spoormans
Wido Quist
Pieter Graaff
for their guidance and advice over the past year.