REHABILITATION CENTER ROTTERDAM

In/Ex Terior

*BETWEEN THE HOUSE/THE INSTITUTION AND THE CITY*
CONTENTS OF THE PRESENTATION

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ASSIGNMENT OF THE GRADUATION DESIGN
To design a physical rehabilitation clinic
What is a physical rehabilitation center?
Treatment - core of rehabilitation
Private and secluded areas - patient wards
Collective and more public spaces
Healing environment - light, connection with nature
The patients have a daily routine (living, working = treatment, leisure) just as we do, but with one significant difference: everything happens in one place.
What is contemporary rehabilitation center like?
Groot Klimmendaal, Arnhem
Beatrixoord clinic, Haren
Rijndam clinic, Rotterdam
Research findings:

1) The goal of the rehabilitation is to return patients as much as possible back to the society. Current buildings, nevertheless, rather seclude patient during the rehabilitation process.

2) Contemporary healthcare system rather focuses on restoring person to the status quo, it is not that concerned with the process of healing and the healing environment - nature, daylight, etc.

3) While there is vast amount of research about the typology of a hospital, little is known about the typology of the healthcare center.
The goals for the graduation design
Make the building an integrated part of the city while respecting a need of privacy of the patients.

Redefine !!!!!!
Create a healing environment with a plenty of space without losing comforting scale for an individual.
The issue of a rehabilitation clinic is that it is often conceived as a variation of a hospital, its distinct features being overlooked: the rehabilitation clinic does not have its own identity.
How can we translate these goals in terms of architecture and program respectively?
THE THEME IN/EXTERIOR

'The City' Urban intervention

The Building and the Interior
‘THE CITY’ - URBAN INTERVENTION
Where?
Current situation Westersingel

- Westersingel
- Pump station
- Rijndam clinic
- Maasdam building
- Bakema tower
- Museumpark
- Row hoses
- Westersingel
Atmosphere of the site

Urban character - Westersingel

VS

Park environment - Museumpark

Atmosphere of the site
The Site
Elements forming the urban proposal

Museumpark

New connection City Center - Museumpark

Level difference of the site

Elements forming the urban proposal
Building volume reacts on different elements of the urban context.
New connection City Center - Museumpark

Views towards the park
Layering of spaces
Courtyard typology
- inner courtyard with the garden - a place for relaxation and contemplation

Highrise typology
- Rotterdam character, views over Rotterdam

Typology / Form - Building as a small urban block
THE BRIEF:

120 beds in 4 departments and their facilities

- Amputation

- Spinal cord and brain injury

- Chronic pain

- Children department

- Polyclinic

- And number of more or less public functions such as sports hall, swimming pool, restaurant, etc.

- Each part of the program - different needs which are being reflected in the plan by different layouts
IN/EX TERNOR

From the architectural perspective connection between indoor and outdoor spaces was primary architectural concern.
Inner courtyard as an organizing element for more public functions
A place for withdrawal from a noise of Rotterdam

The treatment and living areas interwoven with meeting and waiting areas - places with spatial quality connecting interior with exterior
The inner courtyard
Secluded garden - place for withdrawal, and contemplation
Inner garth- being in the exterior, while being at the protected environment of the clinic
Ground floor, inner garth and more public functions
Sports hall with the view towards garth
Entrance hall, cafe with the view towards courtyard
Section model with the restaurant and courtyard
Section model with the restaurant and courtyard
Spatial interweave
The treatment and living areas interwove with meeting and waiting areas - places with spatial quality connecting interior with exterior.

The ‘cuts’ allow daylight to penetrate the interior and allow patients to have direct visual contact with the exterior.
Spatial organization - sequence of experiences
The dimensions of these waiting and meeting spaces differ in relation to the importance of the particular space.
The cuts’ patient department
This spatial organization influences the composition of the facade and vis-a-vis
The building is conceived as a sculpture with carved pieces which differ both in spatial quality and materiality on the facade.
Foto model meeting of two types of the facade
- Aluminium window Schüco AWS 75 BS HI, color anthracite

- Aluminium profile, powder coating color anthracite, RAL 9011

- Wooden profile 150/40 mm

- Stainless steel grating

- Anchoring of the stone cladding

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- Natural stone cladding: gaunder travertine, 30 mm
- Air cavity 50 mm
- Thermal insulation, mineral fibres 100 mm
- Light-weighted concrete blocks 400/300/200 mm
- Wooden supporting planks
- Wooden cladding - white paintwork

- Dimensions: 30, 60, 100, 300, 30
SPATIAL ORGANIZATION - PATIENTS, TREATMENT
CONCLUSION
THANK YOU FOR LISTENING... QUESTIONS?