GRADUATION STUDIO/ MSc
3/4 PUBLIC BUILDING/ PUBLIC REALM
SEASON/ 2010/2011
LOCATION/ ROTTERDAM
BUILDING/ ART & TECHNOLOGY CENTRE
STUDENT/ Rasa Anaityte
MENTORS/ Susanne Komossa, Nicola Marzot, Jelke D. Fokkinga

Faculty of Architecture, Delft University of Technology
RESEARCH LOCATION/ ROTTERDAM

DESIGN TASK: RESTRUCTURING URBAN BLOCK

- INNER CORE WILL BE DEMOLISHED
- PRESERVE BUILDING CURTAIN OF THE EXISTING BLOCK
- ATTRACT CREATIVE CLASS
- INCLUDE SOCIAL-CULTURAL FACILITIES
- INNOVATIVE CONCEPTS
- ACTIVATING PUBLIC REALM ON DISTRICT/ LOCAL SCALE
ARCHIPELAGO CITY

EXISTING STRUCTURE

archipelago city

stitching

PROPOSED STRATEGIC CONCEPT

NEW POCKET SQUARE - A PART OF PUBLIC AXIS
FUNCTIONS ALONG THE STREETS IN SURROUNDINGS

### USE OF FUNCTIONS DURING THE DAY HOURS

<table>
<thead>
<tr>
<th>Time</th>
<th>用途</th>
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<tbody>
<tr>
<td>8.30-9.30</td>
<td>FUNCTION USE/ WEDNESDAY</td>
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<tr>
<td>10.30-11.30</td>
<td>12.30-13.30</td>
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<td>15.00-16.00</td>
<td>17.00-18.00</td>
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<td>22.00-23.00</td>
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COMPARISON: WITTE DE WITHSTRAAT vs. LIJNBAAN

- DIFFERENT SCALE
- DIFFERENCE IN FUNCTIONAL DIVERSITY
• in the 1970’s Rotterdam was still a city with an identity crisis
• by 2000 Rotterdam had the image of the most metropolitan Dutch city
• in the 1980’s a group of artists and other cultural practitioners (today referred to as creative class) were the first to advance this metropolitan vision
SECTORS OF CREATIVE CLASS

1 professional creative class

2 prime creative class

3 medium creative class
CONFIGURATION OF URBAN BLOCK: CREATING ACTIVE INNER FACADES

NEW FUNCTIONAL PARTS OF THE BLOCK

Visual and Applied Arts
- 00: Storage and installations, Exhibition, helpdesk, backoffice, lockerroom, stage
- 01: Cafe, private workspaces, materials/bookshop, auditorium 1
- 02: Auditorium 2, open/flexible workspaces, machineroom, terrace
- 03: Computer rooms, flex workspaces, lounge
- 04: Writing studio
- 05: Study room, photography studio, drawing studios
- 06: Cooking studios, supply/storage for cooking, restaurant/stage for fashion, fashion studios
- 07: Art hotel, roof terrace with bar

Performing Arts
- 01: Music boxes and storage
- 00: Workshop, reception, + small office, music boxes
- 01: Theater, foyer, terrace, practice floor, open stage (towards plaza), music boxes
- 02: Dance studios, music boxes
- 03: Office, dance studios, cafe, music boxes
- 04: Public terrace, art hotel

Art & Technology Centre
- 00: Square, multifunctional space
- 01: Restaurant/gallery, commerce, reception, library, gallery
- 02: Terrace, workshop, library, auditorium, studios
- 03: Studios, workshop
- 04: Studios, terrace
- 05: Studios
- 06: Roof terrace

Public Functions
- Exhibitions
- Restaurant
- Bar
- Commerce
- Auditoriums
- Libraries
- Theater
- Public Terraces

ART AND TECHNOLOGY CENTRE

- SOCIAL INTERACTION
- INTERACTION BETWEEN ART AND HUMAN (INTERACTIVE ART)
- INTERACTION BETWEEN ARTISTS AND TECHNOLOGISTS (CREATIVE COMMUNITIES)
INTERACTIVE ARTS

Interaction

Consequently his kinetic sculptural compositions were able to parallel the work of Warren McCulloch and his adaptation of cybernetics in formulating a creative epistemology concerned with the self-communication within an observer's psyche and between the psyche and the surrounding environment. This is the primary usefulness of cybernetics in studying the supposed subject/object polarity in terms of artistic experience.

Roosgaarde about the future: Now it is only interactive escalators, doors and traffic lights that reflect on the public. Within five years I am going to create a building that opens up to you, wherever you want to enter. Walls that sense by movement detection, like man's face of architecture.

Source
http://www.studioroosegaarde.net/

• INTERACTIVE ARTS PROVOKE OBSERVER’S SELF-AWARENESS
• INTERACTIVE ARTS PROVOKE EXPLORATION OF SURROUNDING ENVIRONMENT
• WE ARE PART OF INTERACTIVE ENVIRONMENTS
TARGET GROUP: YOUTH

Education

JUAN CARLOS DE MENA
high school teacher/ Arduino The Documentary (2010)

First to get them to learn that the consumer side
-is not the only one; that it is possible to understand what's inside and get the control back.

Because now all these kids have a huge amount of gadgets which they have no idea how they work at all.

- KIDS GET TO KNOW TECHNOLOGY BY BEING CONSUMERS (PLAYING WITH GADGETS)
- BUT THEY HAVE NO IDEA HOW IT WORKS
- IT IS IMPORTANT TO LEARN ABOUT TECHNOLOGY AND GET CONTROL OVER IT

• Kids get to know technology by being consumers (playing with gadgets)
• But they have no idea how it works
• It is important to learn about technology and get control over it
ART + TECHNOLOGY

• ONE TO ONE COLLABORATION, EQUAL REPRESENTATION

• EXCHANGE OF KNOWLEDGE ESTABLISHES PATTERN OF EXPLORATION/DEVELOPMENT/INNOVATION

MAIN GROUPS OF FUNCTIONS


COMMERCIAL
RESTAURANT/GALLERY
RECEPTION/NET-LIBRARY
GALLERY
WORKSHOP
LIBRARY
AUDITORIUM
STUDIOS
TERRACE
WC
CIRCULATION

COMMERCIAL
PUBLIC BUILDING/
PUBLIC REALM
STUDENT/RES.
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GRADUATION STUDY/ MSc 3/4
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SEMINAR/ Rasa Analyte

FACULTY OF ARCHITECTURE, DELFT UNIVERSITY OF TECHNOLOGY
URBAN DESIGN CONCEPT: POSITION IN THE BLOCK

- Maximum space of inner pocket (square)
- Accessibility/ free transition
- Main entrance to the pocket/ 'filter'
- Horizontality of the building
- Building elevated from the street level by 4 meters
- Open access for service
- Visual accessibility to the inner space build environment
- Transparency of creative processes

MASTER PLAN

GRADUATION STUDIO/ MSc 3/4 PUBLIC BUILDING/ PUBLIC REALM  SEMESTER/ 2010/2011  LOCATION/ ROTTERDAM  BUILDING/ ART & TECHNOLOGY CENTRE  STUDENT/ Rosa Anahyde  MENTORS/ Susanne Komossa, Nicola Marzol, Jelke D. Fokkinga  Faculty of Architecture, Delft University of Technology
SPATIAL PROBLEMATIC OF ARCHITECTURE IN ROTTERDAM CENTRE

• PUBLIC SPACE : HOW BUILDINGS ARE FORMING PUBLIC SPACE
• HUMAN SCALE
• IDENTITY
• URBAN COMPOSITION
• HIGH-RISE BUILDINGS DO NOT BY DEFAULT CREATE IDENTITY OR PUBLIC SPACE

"The Generic City is on its way from horizontality to verticality. The skyscraper looks as if it will be the final, definitive typology. It has swallowed everything else. It can exist anywhere: in a rice field, or downtown - it makes no difference anymore. The towers no longer stand together; they are spaced so that they don't interact. Density in isolation is the ideal."
Rem Koolhaas - Generic City

• CULTURAL HISTORY COULD BE THE REFERENCE POINT FOR URBAN COMPOSITION

"for example that the city centre is a valuable post-war reconstruction area, and that cultural history should play an active role in urban development."

"Now that high-rise development is filling the centre of Rotterdam, the utterly unique urban typology of the Lijnbaan ensemble can provide legibility and clarity."

Lijnbaan R.I.P.
18 January 2007 / Michelle Provoost en Wouter Vanstiphout
ARCHITECTURE, URBAN DESIGN
NEW BUILDING IS SUBDIVIDED INTO SEPARATE VOLUMES

VIEW TOWARDS NEW BUILDING

POCKET (SQUARE) SUN STUDY

SECONDARY ENTRANCE FROM THE POCKET (SQUARE)

ARRANGEMENT OF THE FUNCTIONS

FIRST FLOOR
- studio
- circulation
- wc
- terrace
- workshop
- library
- auditorium
- studio
- circulation
- wc
- restaurant/galley
- commerce
- reception/net-library
- gallery
- circulation
- wc
- restaurant kitchen

SECOND FLOOR
- studio
- circulation
- wc
- terrace
- workshop
- library
- auditorium
- studio
- circulation
- wc

THIRD FLOOR
- studio
- circulation
- wc
- terrace
- workshop
- library
- auditorium
- studio
- circulation
- wc

FOURTH FLOOR
- studio
- circulation
- wc
- terrace
- workshop
- library
- auditorium
- studio
- circulation
- wc

FIFTH FLOOR
- studio
- circulation
- wc

GROUND FLOOR
- multifunctional space
- square

ARRANGEMENT OF THE FUNCTIONS:

- STUDENT: Rasa Analute
- MENTORS: Susanne Komossa, Nicola Manzo, Jelte D. Fokkinga
- Faculty of Architecture, Delft University of Technology.
PROGRAM AND SPATIAL CONCEPT

FLEXIBLE SPACE
• STUDIOS
• WORKSHOP SPACES
• COMMERCE
• LIBRARY

FIXED/ EXCEPTIONAL VOLUMES
• EXHIBITION SPACES,
• AUDITORIUM
OPEN WORKING SPACES ARE PHYSICAL PLACES WHERE PEOPLE CAN MEET TO LEARN, SOCIALIZE AND COLLABORATE ON PROJECTS.

SLENDER BUILDING FORM GIVES POSSIBILITY FOR LIGHT.

USING GRID THE ARRANGEMENT OF THE PLAN COULD BE MADE INTO SMALLER SPACES.

POSSIBILITY FOR DIFFERENT SIZES OF WORKING ENVIRONMENTS.

WHITE ARCHITECTS/ STOCKHOLM

Potential to divide spaces using grid the arrangement of the plan could be made into smaller spaces.
VOIDS

- Possibility for light into main entrance, pavilion terrace.
- Visual connection towards street, pavilion terrace.
- Possibility for light into pocket (square).
- Main building highest visual point.
- Possibility for light into surrounding building.
- Visual and spacial transparence for surrounding building.
- Visual connection towards pocket (square), main buildings of urban block inner space.

WORKSHOP TERRACE/ SEMI-PUBLIC SPACE

- Possibility for light into main entrance, pavilion terrace.
- Visual connection towards street, pavilion terrace.

CREATIVE STUDIOS TERRACE/ COLLECTIVE SPACE

- Possibility for light into pocket (square).
- Main building highest visual point.

CREATIVE STUDIOS TERRACE

- Possibility for light into surrounding building.
- Visual and spacial transparence for surrounding building.

ENTRANCE TO MAIN BUILDING

JUNCTION OF PUBLIC AND SEMI-PUBLIC FUNCTIONS

PUBLIC AND SEMI-PUBLIC FUNCTIONS TERRACE

- Visual connection towards pocket (square), main buildings of urban block inner space.

SPACIAL TRANSPARENCE FOR SECONDARY ENTRANCE, SURROUNDING BUILDING
FIXED, EXCEPTIONAL VOLUMES/

• entrance, filter
• emphasizes building in the formed square
• connection to the public street
• continuity of the public space
• interactive space
• multifunctional
• introvert volume
• volume itself interactive
• plan could be arranged to the needs
• fifth facade

EXHIBITION SPACE
- dominant of the square
- forming main entrance from the square
- connecting to other functions
- screening surface
ELEMENTS OF GROUND FLOOR - MAIN BUILDING

- Connection with existing building through open space.
- Possibility for free movement.
- Free expedition space.
- Possibilities to accommodate various events.

VISUAL RELATIONS

GLASS FLOOR

SPACE TRANSFORMATION

EVERYDAY LIGHTING

CEILING

LIGHTING FOR SPECIAL EVENTS

IMPRESSION OF EVENT USING SPACE UNDER MAIN BUILDING

GROUND FLOOR AS FUNCTIONAL PART OF THE BUILDING: FLEXIBLE SPACE

EVERYONE CAN HAVE A PIECE OF SQUARE

COMMUNITIES CREATING THEIR OWN IDENTITIES
POCKET (square) GRID

The surface of the pocket is segmented using graphical (material-tiles) grid structure.

Flexible space for future transformations.

Filling of grid forms different spatial experiences.

Different materialities.

Possibility for transformations according to the seasons.

Creating different clusters.

Ice rink.

Easy replaceable tiles.

Different heights grid fostering different functions.

Main entrance from underground parking into the pocket.

Interactive art.

Small scale pavilions.

Play grounds.

**TYPICAL SECTION**

- bubble deck: a lightweight made-in-situ slab

**AUDITORIUM SECTION**

- iron mesh for stability
- pre-stressed hollow core concrete slabs
- pre-stressed hollow core concrete slabs
- iron mesh for stability

**SECTION cc1**
S1: 50

**SECTION bb1**
S1: 50
- terrace: oak planks
- flat roof

- beam with a shelf

- epoxidic floor coating
- floor heating

- automatically controlled window blinds

- polyvinyl roof coating
- bubble deck

- lightweight cellular blocks for walls
- perforated wooden panels for acoustics

DETAILING

HVAC SYSTEM

- recuperation system would bring warm air from the cavity to inside of the building in winter

1 internal double glazing
2 second glass layer
main HVAC system

- working with double facade

autonomous HVAC system

- allows to regulate inner climate independently from the main part of the building

autonomous HVAC system

- allows to regulate inner climate independently from the main part of the building
THANK YOU!

... SO WHAT DO YOU THINK?