PLANNING A SELF ORGANIZED CITY

Flexible planning and design for a durable urban regeneration

MASTER THESIS: TIM RUIJS
CONTENT | P4 PRESENTATION

- PROBLEM FIELD
- AIM
- THEORY
- CASE STUDY
- CONCEPT
- DESIGN STATEMENT
- SCENARIO
- CONCLUSIONS
PROBLEM | WHY SELF ORGANIZATION?
PROBLEM | HOW TO BUILD THE FUTURE?

WHEN GOVERNMENTS, COMMERCIAL DEVELOPERS AND FINANCIERS DON’T KNOW HOW..
PROBLEM | PATERNALISTIC GOVERNMENT

HANS ALDERS:
I KNOW HOW THE DUTCH PEOPLE SHOULD LIVE AND WHAT CITIES SHOULD LOOK LIKE!

VROM

VINEX
PROBLEM | TOP DOWN PLANNING

LARGE PUBLIC INVESTMENTS

FEW PRIVATE PARTNERS

BLUE PRINT PLANNING

BUILDING BOOM

PATERNALISTIC APPROACH TOWARDS URBAN RENEWAL
PROBLEM | PROFIT ORIENTED DEVELOPMENT

NEPROM:
WE KNOW THE WISHES OF OUR CLIENTS!

* NEPROM = DUTCH NATIONAL ASSOCIATION OF PROJECT DEVELOPERS
PROBLEM | MONOTONOUS NEIGHBORHOODS

IV

PRODUCTION OF PROFIT ORIENTED HOUSING

MONOTONOUS TYPE, FUNCTION AND USER

URBAN SPRAWL INTO COUNTRYSIDE
PROBLEM | VACANCY

GENERAL DISCONNECTION SUPPLY - DEMAND
REGENERATION IS FINANCIALLY UNAPPEALING

AMSTERDAM:
VACANCY IN OFFICES: 2,200,000 M2 (17%)
VACANT BUSINESS PARK: 2,200 HA (30%)
PROBLEM | PRIVATE AND PUBLIC DEPT

BANKERS:
I KNOW WHERE YOUR SHOULD INVEST IN!
PROBLEM | CRISIS

EURO CRISIS

CREDIT CRISIS

MORTGAGE CRISIS
AIM OF THIS THESIS
AIM | IN SEARCH OF A SOLUTION

DISTANCE BETWEEN GOVERNMENT + MARKET AND USER

EMPOWERMENT OF THE BUILDER

USER ORIENTED DEVELOPMENT

A FORM OF URBANISM THAT INSPIRES

SELF ORGANIZING DEVELOPMENTS
AIM | MAIN FOCUS OF THESIS

DISCOVER WHAT THE EMPOWERMENT OF THE BUILDER MEANS IN URBAN TRANSFORMATION AND RENEWAL

OPERATIONALIZED THIS EMPOWERMENT IN A DESIGN..
THEORY | AIM OF THEORY

RESEARCH THEORY ON USER ORIENTED DEVELOPMENT

RESEARCH BOTH OLDER AND MODERN THEORIES

DISCOVER GENERIC VALUES AND LEADING PRINCIPLES

REDEFINING SELF ORGANIZATION OR USER GENERATED URBANISM
THEORY | VALUES AND PRINCIPLES: PRELUDE

36 VALUE AND PRINCIPLES FOR SELF ORGANIZATION

ALDO VAN EYCK: HUMANISM AND URBANISM

JANE JACOBS: WALKABILITY AND SMALL SCALE

KEVIN LYNCH: HUMAN PERCEPTION LEGIBILITY

CAREL WEEBER: LIBERALISM AND URBANISM

CHRISTOPHER ALEXANDER: THE CITY IS A SEMI-LATTICE, NOT A TREE, COMPLEXITY AND URBANISM
THEORY | VALUES AND PRINCIPLES

138 VALUE AND PRINCIPLES FOR SELF ORGANIZATION

LUUK BOELENS: ORGANIZE AND ENROL ACTORS

PETER CALTHORPE: WALKABILITY AND COMPACT URBANISM

GERT URHAHN: IS THERE A PLANNING MODEL THAT CREATE FREEDOM INSTEAD OF RESTRICTING IT?

JUVAL PORTUGALI: THE INTER-REPRESENTATION NETWORK CITY BASED ON INTERPRATIVE SOCIOLOGY
THEORY | 10 CONCLUSIONS ON THEORY

1. A CLEAR DEFINED FRAMEWORK (COLLECTIVE)

2. FLEXIBLE INFILL OF ALLOTMENT (PRIVATE)

3. FUNCTIONAL FREEDOM

4. FLEXIBLE PUBLIC SPACE

5. PUBLIC TRANSPORT AS CARRIER

6. HISTORICAL AND LOCAL CONTEXT AS GUIDING INSTRUMENT (GENIUS LOCI)

7. HIGH DENSITY

8. COMPACT URBANISM

9. STIMULATE DIVERSITY

10. CREATE CLEAR REGULATIONS
CASE STUDY | AND SELF ORGANIZATION
CASE STUDY | ROOMBEEK, ENSCHEDE

REGULATIONS
CASE STUDY | NEW LEYDEN, LEIDEN

TYPOLOGY
CASE STUDY | PLANT-JE-VLAG NIJMEGEN

IMAGE CONTROLE + COMMUNICATION
CONCEPT | POSITION OVERAMSTEL

Planning a self organized city
CONCEPT | POSITION OVERAMSTEL
CONCEPT | PROGRAMATIC BALANCE

CURRENT PROGRAMATIC BALANCE

Desirable programmatic balance of Overamstel

- Housing: 40%
- Working: Office & production: 10%
- Working: Creative business & live-work: 10%
- Amenities: Horeca and facilities: 20%
- Amenities: Retail: 10%

Desirable programmatic balance of Overamstel

- Housing: 40%
- Working: Office & production: 10%
- Working: Creative business & live-work: 10%
- Amenities: Horeca and facilities: 20%
- Amenities: Retail: 10%

CURRENT PROGRAMATIC BALANCE

Current programmatic balance of Overamstel

- Housing: 8%
- Working: Office & production: 3%
- Working: Creative business & live-work: 15%
- Amenities: Horeca and facilities: 85%
- Amenities: Retail: 15%
CONCEPT | CONCEPTUAL MODEL

SCHEMATIZATION NEW URBANISM MODEL

SCHEMATIZATION OVERAMSTEL MODEL

Planning a self organized city
CONCEPT | 12 INTERVENTIONS

Main design features

Create clear framework
The development of a clear frame allows maximum accessibility and optimal building blocks.

Main design features

Improve internal connection
Crossing former ownership boundaries and framing the internal road network.

Main design features

New tram connection
Extending existing tram lines and connecting to the metro network.

Main design features

Urban vocal point
Concentration point of density, functions and activities.

Main design features

River route
Natural and recreational route on the Amstel banks and Weesper trekvaart.

Main design features

Improving external connection
Crossing infrastructural and natural barriers.

Main design features

New tram connection
Extenting existing tram lines and connecting to the metro network.
CONCEPT | 12 INTERVENTIONS

Main design features

Usage of water
Transform harbour from barrier to quality open space

Leisure and recreation
Strengthening existing leisure and sports facilities on the Amstel banks to create a recreational zone

Main design features

Diagonal
Fast walkable internal connections

Nature and recreation
Create conditions to let the Amstelscheg penetrate Overamstel to the Southern gas factory park

Main design features

New East-west connection
Improvement the internal and external East-West access of Overamstel

Maximize developmental area
Optimize all non natural or recreation space for the development of a high density urban area

Main design features

Leisure and recreation
Strengthening existing leisure and sports facilities on the Amstel banks to create a recreational zone

Main design features

Nature and recreation
Create conditions to let the Amstelscheg penetrate Overamstel to the Southern gas factory park

Main design features

Maximize developmental area
Optimize all non natural or recreation space for the development of a high density urban area
DESIGN DEVELOPMENT FRAMEWORK
CONCEPT | VOLUME STUDY
INTRODUCTION MASTER PLAN

- MASTER PLAN REGULATION
- BLOCK PASSPORT
- ALLOTMENT REGULATION
- MASTER PLAN DESIGN
DESIGN STATEMENT | REGULATION = DESIGN

Masterplan regulation

Fabric / neighborhood

Block passport

Island / urban block

Allotment regulation

Allotment / building
AIM: WORK WITH HISTORICAL AND LOCAL CONTEXT
AIM: ROBUST BOULEVARDS AND NEIGHBORHOODS IN HUMAN PROPORTIONS
AIM: CONCENTRATION IN CENTRE AND AROUND METRO, LOW DENSITY RIVER BANKS
AIM: RETAIL CENTRE, RECREATIONAL RIVER BANKS, STRENGTHENING OF EXISTING BUSINESS DISTRICTS
Design Statement | Development Type

Master Plan Regulation

**AIM: PRESERVATION AND TRANSFORMATION OF LOCAL CONTEXT**

Legend:
- Urban renewal
  - Mixed grain
  - Institutional actors
  - Normal complexity
- Urban regeneration
  - Large grain
  - Institutional actors
  - High complexity
- Urban preservation
  - Institutional actors
  - High complexity
- Urban assimilation
  - Private actors
  - Low complexity

Subarea 1: Amstel banks North
- Gross: 171,800 m²
- Net: 133,900 m²

Subarea 2: Southern gas factory
- Gross: 145,500 m²
- Net: 116,400 m²

Subarea 3: Whole sale area
- Gross: 64,450 m²
- Net: 55,500 m²

Subarea 4: Amstel business park
- Gross: 107,300 m²
- Net: 70,200 m²

Subarea 5: Amstel harbor
- Gross: 148,200 m²
- Net: 73,100 m²

Subarea 6: Rowing club central
- Gross: 22,270 m²
- 3 clubs, 1400 members

Subarea 7: Amstel natural zone
- Gross: 92,900 m²

Subarea 8: Amstel glorie
- Gross: 209,900 m²
- 440 gardens (each 275 m²)
AIM: TRANSFORMATION BY EXPERTS AND PROTECTION OF INDIVIDUAL DEVELOPMENTS
DESIGN STATEMENT | REGULATION = DESIGN

Masterplan regulation
Fabric / neighborhood

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Allotment regulation
Allotment / building

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Planning a self organized city
DESIGN STATEMENT | BUILDING BLOCK PRINCIPLE

BLOCK PASSPORT

The flexible block of Overamstel

Variation of allotments within the building block

Minimum plot width ≥ 7.5 m
Maximum plot width ≥ 15 m
Depth of the plot ≥ 7.5 m
Left over space ≥ 7.5 m

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DESIGN STATEMENT | GROWTH PRINCIPLE

BLOCK PASSPORT

Growth concept, fase 0: Year 0
First investment in public space

Growth concept, fase 1: Year 0 - 2,5
Lettable space for temporary uses: garden, playground, sport
First buildings and temporary uses

Growth concept, fase 2: Year 2,5 - 5
No leftover space (minimum width 7,5 m)
First buildings and temporary uses

Growth concept, fase 3: Year 5 - 10
Full development scenario
**DESIGN STATEMENT | REGULATION OF BLOCK 23**

**BLOCK PASSPORT**

- **Building height**
  - 30 meter restriction of secondary road
  - 19 restriction of tertiary road
  - Transition zone, depending on plots size

- **Building alignment**
  - Strict building alignment line on the corner
  - Flexible building alignment zone
  - Portals and passages on private ground
  - Interconnected facades create urban block

**Live - work area: medium density**

1. Grain size: small / medium
2. Centrality: medium
3. Mix: Focus: housing / working
4. FAR: > 1.3
5. OSR: 0.75 - 0.34
6. Ration is measure per individual allotment
7. Green roofs can employ OSR dispensation

**Live - work area: functional diversity**

1. Housing: Yes
2. Offices: Yes
3. Services: Yes
4. Businesses: Yes (cat. 1 & 2)
5. Social services: No
6. Culture: No
7. Leisure: Yes (max. 250m²)
8. Retail: Yes (max. 1000m²)
9. Horeca: Yes

- Minimum build surface
- Margin of build surface
- Minimum requirement of open space
- 9 different functional possibilities
- Focus on Live - work combination
- Size limitation for retail and leisure
- Required active plinth / ground floor
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**DESIGN STATEMENT | DISPENSATION REGULATION**

**BLOCK PASSPORT**

- Dispensation on building height will be provided when the new sustainability categories of BREAM are incorporated.
- Maximum height with dispensation 19m.
- Maximum height without dispensation 13m.
- Dispensation for parking space will be provided when a collective of home owners associations needs more parking space.
- Dispensation for parking space will be provided when the development cost of the association of home owners is mirrored to the public space.

PLANNING A SELF ORGANIZED CITY
DESIGN STATEMENT | REGULATION = DESIGN

Masterplan regulation
Fabric / neighborhood

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Allotment / building
Planning a self organized city
**DESIGN STATEMENT | REPETITION OF REGULATION**

**ALLOTMENT REGULATION**

- **Build volume of block 23**
  - Design of volume association of blocks

- **Building height of block 23**
  - Tool for the allowance of sunlight and density control
  - Maximum building height
  - Minimum building height
  - Build volume

- **Parking solutions of block 23**
  - Private and collective organisation of parking solutions
  - Underground parking facilities up to two layers
  - Parking spaces on backside / courtyard
  - Extra parking facilities in the public space of the neighbourhood
  - Collective central parking corridor

- **Function possibilities of block 23**
  - Merger of owners in association of clients
  - Masterplan function recommendation
    - Yes
    - Yes (cat. 1 & 2)
    - No
    - Yes (max. 250m²)
    - Yes (max. 1000m²)
  - 1. Housing
  - 2. Offices
  - 3. Services
  - 4. Businesses
  - 5. Social services
  - 6. Culture
  - 7. Leisure
  - 8. Retail
  - 9. Horeca

- **Side facade**
  - Build volume
  - Interconnecting facades of the building
  - Side facades need to acknowledge the possibility of future developments
  - No openings or functional spaces

- **Building alignment of block 23**
  - Alignment zone of internal plots of block 23

**All OT mEnT REgUl ATIOn dESIgn STAtEmEnT**

**REPETITION OF REGULATION**

**Planning a self organized city**
DESIGN STATEMENT | GROWTH OF AN ALLOTMENT

ALLOTMENT REGULATION

Ground surface of allotment
Determining the width and depth of the lot.

Maximum build volume
Maximum build volume on the specific allotment

Opening of reservation
Reservation of space on ground level by the owner.

Third reservation
New apartments in various shapes and sizes

Fourth reservation
New reservations of apartments and lofts

Final reservation
Merges of existing apartments of clients

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DESIGN STATEMENT | COLLECTIVE OWNERSHIP

ALLOTMENT REGULATION

Collective casco
Collective organisation and planning of casco
Collective stair care of plot 1
Build volume of plot 2
Build volume of plot 1
Collective stair care of plot 2

Collective staircase and plumbing
Plan collective elements with the association of clients

Collective stair case
Collective cables and piping
Build volume
Connection to collective cable duct in street profile

Collective boiler / collective heating
Connection to district heating
Green roof

Environmental collectivity
Integral approach water management and energy

OSR: < 0.20
OSR: 0.50 - 0.34

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Collective organization and management
Private organization and management in different scales of development

- Collective assembly of capital
- Gathering future owners during subscription period
- Transformation of individual needs to collective program and plans
- Signage of declaration of intend

- Collective development
- Organization of owners in ‘association of clients’
- Collective planning on allotment
- Collective planning on blocklevel

- Collective management
- Organization in ‘association of home owners’
- Collective management of real estate

Design Statement | Organisational Growth

Allocation Regulation
I AM to work
I AM about
I AM master plan
I AM home

I overAMstel
build your own future

Very excited! I just bought an apartment slot on block 23. We can start building in 3 months!! pictures will follow soon.. :)

Overamstel welcomes its first restaurant. ‘Amstel zicht’ will open its doors to the public soon. Come and taste the flavour of Overamstel.

A very productive business session. A lot of interest in the Overamstel collective business building. Next session will be 25 mei 2012.

Very excited! I just bought an apartment slot on block 23. We can start building in 3 months!! pictures will follow soon.. :)

Overamstel welcomes its first restaurant. ‘Amstel zicht’ will open its doors to the public soon. Come and taste the flavour of Overamstel.

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DESIGN STATEMENT | GETTING PEOPLE TOGETHER

I AM business I AM housing

I AM community

I AM housing

I AM community

I AM to work

I AM home

I AM about

I AM master plan

I overAMstel build your own future

Very excited! I just bought an apartment slot on block 23. We can start building more...

Overamstel welcomes its first restaurant. 'Amstel zicht' will open its doors to the public...
DESIGN STATEMENT | SELECTING YOUR PLACE

ALLOTMENT REGULATION

I AM home I AM about I AM master plan I AM to work
build your own future
I AM business I AM housing
I AM to work

Explore the neighbourhood here. Check the availability of the plots and discover the communities that are there!

Download the masterplan here.
Download the allotment plan here.
Download the regulations here.
Download the image control plan here.
Check available plots here.
Need advice? Get a consultant here.
Find existing communities here.
Start a fresh community here.

Explore the Amstel Banks here.
Explore the Southern gas factory here.
Explore the Amstel business park here.

Planning a self organized city 58
Planning a self organized city
AIM: INTERLINKING PUBLIC TRANSPORT SYSTEMS
AIM: FLEXIBLE ORGANIZATION OF SUBTERRANEAN SYSTEMS
AIM: CREATE PUBLIC, PRIVATE AND COMMERCIAL CAPACITY
AIM: STIMULATING ACTIVITY ON BLOCK AND MASTER PLAN LEVEL
AIM: SELF ORGANIZATION IN PUBLIC SPACE?
Localizing the developing of public space

**Project office Overamstel**
- Municipality
- Inhabitants representative
- Businesses representative

**Project office advisory board**
- Urbanist
- Communication support
- Technical support

local tax return

Municipality (metropolis)

Local tax or service charge

Constructor

Planning a self organized city
AIM: PUBLIC, PRIVATE AND COMMERCIAL INFLUENCE

DESIGN OF PUBLIC SPACE
We would like to see an active and safe square for all ages. With trees, benches, bicycle stands and a playground for children. A place where shopping meets relaxation.

The municipality supports the private initiative and manages the collective needs. Safety, public access and coherence to the master plan will be our main concern.
SCENARIO | WHAT IF..
SCENARIO | WHAT IF..

SCENARIO 1:

WHAT IF.. ONLY A FEW NUMBER OF PLOTS WILL BE SOLD?
WILL THE MASTER PLAN PROVIDE ENOUGH QUALITY IN AN ‘INCOMPLETE’ SITUATION?
SCENARIO | WHAT IF.. ONLY A FEW NUMBER OF PLOTS WILL BE SOLD?

FULLY DEVELOPED
SCENARIO | WHAT IF.. ONLY A FEW NUMBER OF PLOTS WILL BE SOLD?

PARTIAL DEVELOPMENT
SCENARIO | WHAT IF.. ONLY A FEW NUMBER OF PLOTS WILL BE SOLD?

LITTLE DEVELOPMENT
WHAT IF.. ONLY LARGE SCALE DEVELOPMENTS ARE REALIZED?

WILL A LARGE SCALE URBAN ENVIRONMENT PROVIDE THE SAME QUALITY AS THE INTENDED SMALL SCALE?
SCENARIO | WHAT IF.. ONLY LARGE SCALE DEVELOPMENTS ARE REALIZED?

SMALL SCALE
SCENARIO | WHAT IF.. ONLY LARGE SCALE DEVELOPMENTS ARE REALIZED?

LARGE SCALE
SCENARIO | WHAT IF..

SCENARIO 3:

WHAT IF.. THE INTENDED MIX OF FUNCTIONS WILL NOT BE REALIZED?

WILL A MONOFUNCTIONAL URBAN AREA FUNCTION PROPERLY IN THIS MASTER PLAN?
SCENARIO | WHAT IF.. THE INTENDED MIX OF FUNCTIONS WILL NOT BE REALIZED?

MAXIMAL HOUSING

Planning a self organized city
SCENARIO | WHAT IF.. THE INTENDED MIX OF FUNCTIONS WILL NOT BE REALIZED?

MAXIMAL BUSINESSES
DESIGN | PHASE 0

AIM: START WITH THE FIRST AVAILABLE AREAS
AIM: BALANCE BETWEEN ISSUING PLOTS AND UPGRADE OF PUBLIC DOMAIN
AIM: DEVELOP PRIMARY FACILITIES IN AN EARLY STAGE
AIM: EMPLOY EXISTING QUALITIES FOR THE DEVELOPMENT OF THE NEW
AIM: COMBINE LARGE PUBLIC COST WITH LARGE NEW DEVELOPMENT
AIM: KEEP SUCCESSFUL ASSETS AS LONG AS POSSIBLE
AIM: USE NEIGHBORING QUALITIES AS IN SUPPORT OF OVERAMSTEL
CONCLUSION | RELEVANCE OF SELF ORGANIZATION
CONCLUSION | FINAL REMARKS

- SELF ORGANIZATION SHOULD BE STATE OF MIND,

THEORETICAL CONCEPTS - PRACTICAL INPUT

COLLECTIVE - INDIVIDUAL INTEREST

LARGE SCALE STRUCTURES - SMALL SCALE DEVELOPMENTS

BOTTOM-UP OPPORTUNITIES - TOP-DOWN REGULATION

- NOT A NEW METHOD, STATE-DRIVEN URBANISM IS THE ANOMALY

- TRADITIONAL URBANIST BECOME URBAN EXPERT

- DESIGN IS A COMMUNICATION TOOL, NOT A GOAL

- SUCCESFULL METHOD OF EMPOWERING INDIVIDUAL BUILDERS
CONCLUSION | QUESTIONS?