Regenerating Rotterdam South

Improving socio-economic diversity and spatial quality in problem areas dealing with selective migration

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Introduction

Problem areas in Rotterdam South: negative livability

(Leefbarometer 2010)
Introduction

Situation in these problem areas:

• Negative livability
• Lacking spatial quality
• Development of a criminal activities
• Unfeasible for economical diversity
• Social risers move away
• Growing polarization
Introduction

Research Question

How can urban regeneration improve the spatial quality and socio-economic diversity in problem areas dealing with a negative selective migration?
Introduction

Aim: regeneration without stimulating ‘Waterbed effect’
Introduction

Methodology

**Introduction**

**Theoretical Framework**

- Literature study
- Literature study/Case study

**Research Methodology**

- Applied research methodology on Rotterdam South
- (Spatial) recommendations

**Design**

- Masterplan for Rotterdam South
- Design hart of Rotterdam South

**How can urban regeneration improve the spatial quality and socio-economic diversity in problem areas dealing with a negative selective migration?**

- What is Spatial quality?
- What is Socio-economic diversity?
Theoretical framework

*What is Spatial Quality?*

(Montgomery 1998)
### Theoretical framework

*From theory to research methodology*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Form</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Necessary activities</td>
<td>• Housing density</td>
<td>• Livability</td>
</tr>
<tr>
<td>• Optional activities</td>
<td>• Housing variety</td>
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<td>• Population density</td>
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<td>• Population variety</td>
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<td>• Fine grain economy</td>
<td>• Parking solutions</td>
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<td>• Green</td>
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<td></td>
<td>• Public transport</td>
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</tbody>
</table>
Theoretical framework applied on Rotterdam South

*Location area for applying research methodology*
Theoretical framework applied on Rotterdam South

*Explain research by pre war neighborhood Tarwewijk*
Theoretical framework applied on Rotterdam South

*Explain research by pre war neighborhood Tarwewijk*

**Activity**
- Necessary activities
- Optional activities
- Population density
- Population variety
- Fine grain economy

**Form**
- Housing density
- Housing variety
- Transparancy
- Connectivity, flows and permeability
- Parking solutions
- Green
- Public transport

**Image**
- Livability
- Safety
- Attractiveness
Theoretical framework applied on Rotterdam South

*Little necessary activities in Tarwewijk*
Theoretical framework applied on Rotterdam South

*Little population variety*

48% low incomes  
6% high incomes

Percentage low incomes Rotterdam total is 17% (max income €9,249)

(CBS 2010)
Theoretical framework applied on Rotterdam South

Unsafe parking solutions
Theoretical framework applied on Rotterdam South

*Little green*
Een duurzaam leefbare woonomgeving vormen kan de leefbaarheid van een wijk achteruitgaan zonder dat er feitelijk iets voor de bewoner verandert. Op het moment dat de buren wel naar een betere wijk kunnen verhuizen, daalt mogelijk de waardering voor de eigen woning door de achterblijvers (Gifford 1997, Nathan and Marans 1998).

Terugkijkend op de definities en betekenissen van leefbaarheid, kan worden vastgesteld dat de kennelijke leefbaarheid niet is in te perken tot de woonomgeving, daar te veel facetten niet ruimtelijk begrensd zijn of ruimtelijk onafhankelijk zijn. De veronderstelde leefbaarheid geeft omgevingskenmerken die van invloed kunnen zijn, maar deze kunnen het beste beschouwd worden in combinatie met de waardering van bewoners.

Maar deze gepercipieerde leefbaarheid wordt niet alleen beïnvloed door de omgevingskenmerken, maar ook door persoonskenmerken of een sociaal-culturele context (Gifford

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Theoretical framework applied on Rotterdam South

*Negative image*

Appreciation

Support

Good match

Attractiveness

(street interview, 3+ 3-)

Livability

(leefbaarometer)
Theoretical framework applied on Rotterdam South

Results research methodology applied on Tarwewijk

Activity	Form	Image

Positive	Average	Negative
Theoretical framework applied on Rotterdam South

**Intervention scheme Tarwewijk: it is a social problem**

**Problem analysis**
- Little necessary activities
- Large private owned stock in deterioration
- Little diversity population 48% low income
- Little green
- Unsafe parking solutions
- Negative image

**Indirect interventions**
- Subsidies Private owner Retrofitting housing
- Municipality buys up housing
- Ownership stimulation subsidies > till 67% rent
- Simplify splitting regulations
- Phase development plan
- Flexible landuse plan
- Invest in Re enters
- Invest in Education
- PPP
- City Branding
- Neighborhood branding
- Participation residents

**Direct interventions**
- Extend gardens, public gardens
- Thinning neighborhood densify around
- Green veins
- Renovation housing merge/ cut dwellings
- Water storage
- New plots Maas shore 50.000m2 inc. Infra
- Work& living dwellings
- Angle parking parking on plot
- Commercial & businesses along veins
- Link urban structure to bloemhof, zuidplein
- 300 owner occupied dwelling to reach average
- Building for students, households with kids households without kids elderly

Regenerating Rotterdam South
Creating socio-economic diversity: attracting more affluent people

- Direct interventions: add new residence
- Indirect interventions: ownership stimulation, simplify regulation
- Market led: gentrification
Theoretical framework applied on Rotterdam South

*Gentrification in the Pijp (Amsterdam)*
Theoretical framework applied on Rotterdam South

Possible interventions Tarwewijk
Theoretical framework applied on Rotterdam South

*Possible interventions Tarwewijk*
Theoretical framework applied on Rotterdam South

*Possible interventions Tarwewijk*
Where to start regeneration?

Regenerating Rotterdam South

Strategy

Commercial
Culture
Events

Kop van Zuid
Centre

Afrikaanderwijk

Pendrecht
Zuidwijk

Schiedam

Erasmus university

Feijnoord stadium

Semmerda
Culture

Sawatz

25
Regenerating Rotterdam South

Where to start regeneration?

- 2 modalities: metro, busstation
- Shopping mall (440 m long)
- Ikazia hospital
- Event centre Ahoy
- Theatre Zuidplein
- Swimmingpool
- Businesses
Zuidplein: Parking solutions
Zuidplein: transparancy
Zuidplein: infrastructure barriers
Zuidplein: Large scale
Masterplan

*Improve form of Zuidplein; a new heart on Rotterdam South*

**A** Activity
- Necessary activities
- Optional activities
- Population density
- Population variety
- Fine grain economy

**F** Form
- Housing density
- Housing variety
- Transparancy
- Connectivity, flows and permeability
- Parking solutions
- Green
- Public transport

**i** Image
- Livability
- Safety
- Attractiveness
Regenerating Rotterdam South

Masterplan

- New build blocks
- Pavilions
- Existing blocks
- Pavement for walking
- Infrastructure
- Metro
- Bicycle path
- Tram
- Water
- Tree
Masterplan

Public transportation: regional connectivity
Masterplan

Public transportation: from 2 to 3 modalities

- Metro
- Bus
- Metro
- Bus extended
- Tram
Masterplan

Public transportation: from 2 to 3 modalities

Regenerating Rotterdam South
Masterplan

*Public transportation: from 2 to 3 modalities*
Masterplan

Connectivity flows and permeability: regional connectivity

Regenerating Rotterdam South
Masterplan

Connectivity flows and permeability: new structure
Masterplan

*Connectivity flows and permeability: increase permeability*

- **Shoppingmall**
- **High permeability**
- **Low permeability**

440m
Masterplan

*Connectivity flows and permeability: increase permeability*

Activity along line (pre war)

Activity in a box (post war)

Open up the box
Masterplan

Connectivity flows and permeability: new situation

Regenerating Rotterdam South
Masterplan

*Connectivity flows and permeability: higher integrated streets*

Old situation in Space Syntax

New situation in Space Syntax (cars)

New situation in Space Syntax (bikes)
Masterplan

Transparency

Zuidplein inside out

(Shopping Mall Leyweg, The Hague)
Masterplan

‘Open the box’
Masterplan

*Stimulating population diversity: adding new residence*

(Java eiland Amsterdam)
Masterplan

Stimulating population diversity: adding new residence
Masterplan

Parking solutions
Masterplan

Parking solutions: old situation
Masterplan

Parking solutions: new situation
Masterplan

*New public space*
Heart of Rotterdam South
A new entrance for the heart of South

- Pedestrian flows
- Breakline
- Atmospheres
- Pavilions

Culture
Commercial
Event
Heart of Rotterdam South

Atmosphere culture square
Heart of Rotterdam South

Atmosphere culture square
Heart of Rotterdam South

*Culture square*
Heart of Rotterdam South
Atmosphere commercial square
Heart of Rotterdam South

Commercial square
Heart of Rotterdam South

Atmosphere  event square
Heart of Rotterdam South

Atmosphere  event square
Heart of Rotterdam South

*Event square*
Heart of Rotterdam South

Conclusions: improving spatial quality

- Interventions in form lead to better the activity on street and image of Zuidplein
- Interventions on Zuidplein improve the entrance of Rotterdam south
- Catalyst development surrounding neighborhoods
Heart of Rotterdam South

Conclusions: socio-economic diversity

1. [Diagram 1]
2. [Diagram 2]
3. [Diagram 3]
4. [Diagram 4]
5. [Diagram 5]

- ‘Waterbed effect’ decreased by intensification Zuidplein and phased development.
- New living attractions can attract more affluent people.
Heart of Rotterdam South

Recommendations

• Methodology as direction for problem solving

• Methodology research is generic for innercity problem areas it is applied on Rotterdam South
The End