TOWARDS AN OLYMPIC LEGACY FOR ALL

regeneration oriented design principles
for olympic legacy
enhancing the social sustainability of the host city

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MSC GRADUATION PRESENTATION
THE EVENT
“SPORT AND EFFORT TO INCREASE THE STANDARDS OF HUMANKIND”
involved actors DURING the event

the best games ever

best image of the city

IOC

HOST-CITY

CITIZENS
involved actors AFTER the event

IOC

improve city redevelopment

HOST-CITY

improve my daily life

CITIZENS
the mega-event syndrome


OVERPROMISING OF BENEFITS
overestimating positive effects of
mega-events
(by IOC & host-city)

UNDERESTIMATION OF COSTS
Actual-Budget is bigger than
planned budget
(by host-city)

EVENT TAKEOVER
Event priorities become planning
priorities
(by host-city)

PUBLIC RISK TAKING
Public takes risk for private
benefits
(by host-city & citizens)

RULE OF EXCEPTION
Suspension of regular rule of law
(by host-city)

ELITE CAPTURE
Inequitable distribution of
resources
(by host-city & citizens)

EVENT FIX
Mega-events become seemingly
quick fixes for major planning
challenges
(by host-city)

- Misallocation of resources
- Loss of trust with citizenry

- Misallocation of resources
- Profiteering
- Subpar construction quality
- Budget shortfalls

- Events needs displace
infrastructure needs
- Oversized infrastructure
- Unfinished infrastructure

- Public funds for limited or no
public benefits
- Profiteering

- Displacement
- Reduced public oversight
- Limited public participation

- Spatially uneven urban
landscape
- Gentrification

- Event determines national
priority for funding
- Bypassing of regular planning
process
- Waste of resources on event as
leverage for urban development

Spatial issue
Social issue
Financial issue
image before the Olympic Games
decreased interest in organising the Olympic Games

Bid procedure documents for the Games Olympiad, retrieved from https://stillmed.olympic.org/
my solution to the problem

CITIZEN FIRST
towards enhancing the citizen - towards sustainability

- education
- employement
- health & safety
- housing & environment
- identity

within mega-event planning

- location
- construction projects
- impact
overall aim for the Olympic Games

current situation

desired situation
To define **A SET OF DESIGN PRINCIPLES THAT ENABLE OLYMPIC LEGACY TO ENHANCE THE SOCIAL SUSTAINABILITY** for regeneration of the host-city.
“How can spatial design principles aiming for urban regeneration within Olympic legacy planning and design enhance the social sustainability of the city?”

1. - How can Olympic planning and design enhance urban regeneration?

2. - How does urban regeneration enhance social sustainability?

3. - How can social sustainability of the host city be enhanced in olympic planning and design?
Method to the project

1. RESEARCH AND FRAMING
   - LITERATURE TO urban regeneration by mega-event planning and Olympic legacy
   - 2nd subquestion: LITERATURE TO social sustainability in urban regeneration and spatial measurements
   - 3rd subquestion: CASE STUDY to social sustainability in London 2012 Olympic Games

2. DESIGN PROJECT
   - 3rd subquestion: ANALYSIS to setting of social sustainability in Rotterdam South
   - VISION: aim for the Olympic Games in Rotterdam South
   - FRAMING: Olympic programme to be implemented in Rotterdam South

3. EVALUATION
   - main question: COMPARISON between proposed interventions of research and framing and design project
   - RECOMMENDATIONS for planning and design for social sustainability in Olympic legacy
     - DESIGN: Vignet Varkenoord - North to future Feyenoord City
     - STRATEGY: Seven strategic proposals for Olympic programme across Rotterdam South
place for a next Olympic Games in the Netherlands
spatial analysis to Amsterdam and Rotterdam

Amsterdam

Socio-economic situation
- Unemployment
- Weight (obesitas)
- Vacancy
- Problematic neighborhoods

Occupation of space
- Urban parks
- Industrial areas
- Sport facilities

Accessibility
- Unemployment
- Weight (obesitas)
- Vacancy
- Problematic neighborhoods

Possible place for Olympics
Taking in account the availability of a socio-economic goal, space and good accessibility

Rotterdam
Rotterdam Zuid
Focuspoints of socio-economic problems

Researched data-sets
- social index
- safety index
- physical index
- buurtmonitor (municipality Rotterdam)
- leefbarometer
- topotijdreis (national government)

Severe ethnical differences
- Bad social environment
- Very old building stock
- Very unattractive living environment
- Low state of education

Lack of participation
- Severe state of education
- Lack of daily provisions
- Very old building stock

Bad social environment
- Overall feel of unsafety
- Cheap quality housing

Lack of participation
- Bad state of public space
- Low state of education

Order of (un)livability (200*200 m grid)
- Bold of worst performing areas
- River Maas
- Design locations
All development plans for Rotterdam South

Regeneration projects
- Nationaal programma Rotterdam Zuid
  - Hart van Zuid
  - Feyenoord City
  - Plan Zuiderpark

LEGEND
A0: 1:5000

City development
Environmental targets
Living along the river
Living in the city
Living relaxed
Transformation area’s

Focus areas
Regional commercial cluster
Priority employment clusters
Riverfront
Green corridors

Key-projects
Intercity station
Metroline
Hart van Zuid
OMA - new Kuip
Trouble areas NPRZ
North-South axis
Diversification park
Olympic goal for Rotterdam South
Olympic strategy for Rotterdam South
Olympic design for Varkenoord North
(Post Game situation)
Overview of the Olympic park
(Beijing Olympic Park)

- Sport stadiums
- Sport halls
- Sport complexes
- Olympic village
- Observation tower
- Olympic axis
- Media center
- Data center

Total Olympic program
799 ha.
programmatic mismatch
Requested program to available space

REQUESTED OLYMPIC PROGRAM
734 ha.

AVAILABLE SPACE
138 ha.

UNUSABLE DESIGN SPACE
5% = 35 ha.
PARK & SQUARES
304 ha.
PARKING
142 ha.
PUBLIC TRANSPORT
22.5 ha.
OLYMPIC VILLAGE
24 ha.
STADIUMS & COMPLEXES
206.5 ha.

ZUIDER PARK
68.8 ha.
VARKENOORD
69.2 ha.
keep all local attached and hard to replace program within Zuiderpark and Varkenoord
use open space, existing sport venues and industrial areas within Zuiderpark and Varkenoord
## Space demand

### Olympic Games - Program of requirements

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## Space offer

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olympic program in the Netherlands
olympic program in Rotterdam
Programmatic match
Requested program to available space

REQUESTED OLYMPIC PROGRAM
185,4 ha.

AVAILABLE SPACE
190,2 ha.

- UNUSABLE DESIGN SPACE: 9,4 ha.
- PARK & SQUARES: 56 ha.
- PARKING: 24,6 ha.
- PUBLIC TRANSPORT: 12,5 ha.
- OLYMPIC VILLAGE: 16 ha.
- STADIUMS & COMPLEXES: 67,5 ha.

- ZUIJDERPARK: 72,0 ha.
- VARKENOORD: 118,2 ha.
Programme of Requirements
For the Olympic Games in Rotterdam South

- Relocation of all industrial buildings on both Olympic sites

- Olympic village - average 12 stories high

- Solve 48.4 hectare parking space elsewhere

- Reduce space for railway by 20%

- Reduce space for several sportcomplexes by 20%
Social legacy is a future for every Olympic venue
A position in the new CTO Metropool
A destination for every Olympic venue

**Olympic programme permanent**
- Olympic stadium
- Hockey stadium
- Ahoy Multisport Hall
- Ahoy existing halls

**Olympic programme converted from the inside**
- Olympic hall
- Broadcast centre
- Olympic village
- Media village

**Olympic programme converted from the outside**
- Taekwondo hall
- Aquatics centre
- Kuip stadium

**Temporary programme to leisure opportunity**
- Climbing hall
- Skating hall
- Olympic plazas
- Training areas

**Temporary venue to landscape structure**
- Archery range
- Logistic pavilions
- Boxing hall
- Fencing hall
- Karate hall
Social legacy is an infrastructural supergrid
Advantages of a supergrid

- Increased connectivity by adding transport modes at a node
- Less foreign cars in the urban structure
- More profit for local stores by guided visitor flows
- Reduction of car lane width to benefit slow traffic
- Offering more transport possibilities to the inhabitants
Required configurations to the current infrastructural network
Social legacy is a superb routing without obstacles
Improved environment around Zuidplein
Increased accessibility by redesign crossings
Social legacy is an improvement of the neighbourhood physical landscapes
Increased identity and environment of Zuiderpark

- Quercus coccinea splenden
- Prunus cerasifera nigra
- Prunus cerasifera nigra
- Prunus yedoensis
- Salix abla

Acer zoeschense annae
Prunus yedoensis
Configuration of the mainstreets
Configuration of the mainstreets
Configuration of the mainstreets
Social legacy are initiatives to start moving in the neighbourhood public space.
A set of playscapes with different intensities

Showcase and multi-functional spaces

Educational and encouraging spaces

Allround sport spaces

Relaxed and motivating spaces
A view of Zuiderpark in 30 minutes
Social legacy is a transformation from commercial to social
Three important employment clusters

- Employment axis around railway
- Shopping and educational district
- Local shops and connective nodes
Social legacy is a future re-development for all Olympic sites
situation prior to the Olympic Games
(London Olympic Park)

Stratford railway depot & industrial park
Developement of the Olympic park
(London Olympic Park)

London 2012 Olympic Park
Post-Olympic planning
(London Olympic Park)

Queen Elizabeth Olympic Park redevelopment
A future identity for both Olympic sites

Overview of all vignettes
The social Olympic strategy for Rotterdam South
Example of development zone vignet
(Varkenoord North)
A future for all Olympic venues

- OLYMPIC HALL - converted
- SERVICE COMPLEXES - temporary
- OLYMPIC STADIUM - permanent
- TRAINING FACILITIES - temporary
- OLYMPIC VILLAGE - converted
- VILLAGE PARK - permanent
- KUIP STADIUM - converted
- SPONSOR ZONE - converted
A permanent occupation of the stadium
Switch from athletes to inhabitants
An infrastructural supergrid
A superb routing

- Smooth transition between tunnel and Lange Hille Dijk
- Urban bridge between stadium and neighborhoods entrance to train station and bridge to bus/tram/metro
- New crossing to Olympic Hall
- New crossing to Olympic Park and Sport Boulevard
- Transformation of existing crossing
- New crossing between Olympic village and Sportdorp
Urban bridge as multi-transport node
Urban bridge as neighborhood connection
Neighbourhood physical landscapes

- Extension of park through a patchwork of trees
- Extension of Veranda Boulevard
- Transformation of existing park to Olympic Park
- Olympic Park forms link in urban and green structure
- New park for sport boulevard, forms second part Olympic Park
Motivating initiatives in public space

- Around Olympic Hall - PlayScapes
- Olympic Square - Different Stages for Multiple Sports
- Veranda Boulevard - Intensive Sport Lane
- New Sportive School Square
- Olympic Park - Small Activating Constructions
- Park Olympic Village - All-Round Sport Facilities
Continuous occupation of the Olympic square
A square full of opportunities
A post-games re-development
2032: The Olympics
2040: The legacy of the Olympics
Conclusion of the project - a collection of encountered design principles (collected in a separate book)

**TOWARDS AN OLYMPIC LEGACY FOR ALL**

**REGENERATION ORIENTED DESIGN PRINCIPLES FOR OLYMPIC LEGACY**
**ENHANCING THE SOCIAL SUSTAINABILITY OF THE HOST CITY**

**Description of a social problem in the spatial Olympic program**

**Proposition of a intervention in the spatial Olympic program**

**Social legacy potential of the proposed design intervention**
TOWARDS AN OLYMPIC LEGACY FOR ALL

QUESTIONS?