**project approach**
working through scales

---

**research & design scales**
- city
- waterfront
- local

**additional research scales**
- delta
- metropolitan region

Design on finer scale generates research questions for greater scale and *vice versa*.
context

city of riga

overview

riga

coastal city in north eastern europe

located in daugava delta

country capital

concentrates

• 1/2 of country GDP
• 1/3 of country population

/700 thsd/

port city

• passenger port
• cargo port

/largest in the country/

well connected

• highways - all region
• air connections - europe & CIS
• railway - CIS
• ferry - northern europe, germany
context

city of riga metropolitan region

riga

center of metropolitan region for
- work
- study
- entertainment

travel time riga-satellite
- 20min - 2h
- bus//train/

for recreation people go to
- jurmala
  - 20min - 1h
- sigulda
  - 1h05min - 1h15min
- coastal villages in the west
  - 25min - 35min
context

city of riga

problem - shrinkage

preconditions

dissolution of Soviet Union > service sector economy

15 years of relative economic decline /1990s, early 2000s/

admission to EU in 2004 /European funds, loans > fake economic growth/

financial crisis on 2009

numbers

2 waves of emigration /after 2004, 2009/

200 thsd. economic migrants /in 8 years, expert evaluation/

1/4 from the city of riga

more than 60% before going abroad were employed /country looses tax-payers/
**place quality criteria with spatial implications**

- sport facilities
- recreational areas
- cafes
- restaurants
- shopping
- public and semi-public spaces
- /3rd spaces/
- well-developed public transport
- pedestrian
- cyclist infrastructure

- architecture
- urban parks
- heritage

- natural | wild places
- environmental quality
- reuse of industrial sites

- crime figures
- /safe urban environment/

**place quality criteria**

- diversity
- specific amenities
- liveliness
- technology
- talent
- creativity
- tolerance
- openness
- aesthetics
- environment
- sustainability
- safety

**context | framework | problem statement | city scale | waterfront scale | local scale | reflection |**

**spatial relevance**

- location choice
- spatial quality

**what can we do as urban planners?**

- people are attracted to places with high place quality
- /city branding/

- place quality notion has a spatial component

- spatial component has urbanism related assets

*based on trip, 2007; brown, mecynski, 2009; lorenzen, 2010;*
reduce resident emigration and attract new residents

by creating favourable living conditions

top 10 creative cities in US have extensive recreation facilities 
/see creative class theory - Florida/
cities with no high-tech component attract people via high place quality 
/see experience economy and cities - Lorentzen, Lorentzen/
city branding works 
/see branding in Turin - Vanolo/
spatial quality

current situation

strength & weakness

City Centre River Islands

- (1) Zakusala (above)
- (2) Lucavsala (below)

Nature Areas

- (3) RER Factory Industrial Site (above)
- (4) Brownfield Site at Hanzas Street (below)

Strengths

1. Large recreational areas
   - Lakes
   - Forests
   - Beach at city periphery
     - 15.7% blue/ 28.0% green
2. Green river islands in city centre

Weaknesses

1. Areas with poor spatial quality
   - Industrial sites
   - Brownfield sites around city centre
     - Developed along railway lines/ late 19th early 20th c
2. Infrastructure barriers
   - Modernist planning approach
Spatial quality

Future situation

Threat

City development plan

Aimed to improve spatial quality

[1] Built up vacant brownfield sites

[2] Densify loosely built industrial sites & turn them into mixed use areas

[3] Built up city centre river islands

[4] Create new infrastructure connections


Problem statement

City scale | Waterfront scale | Local scale | Reflection

Context | Framework | Problem statement | City scale | Waterfront scale | Local scale | Reflection

Development proposals by
(2) Spacegroup (2006, above) and (3) ARHIS (2006, below)

(1) Riga development plan

2006-2012

Nature areas

Industrial sites

Who is going to use new office, retail, residential spaces?
context | framework | problem statement | city scale | waterfront scale | local scale | reflection |

spatial quality

future situation

opportunity

instead of
new built space development
new recreational space development

place quality spatial components

create recreational areas
with sport facilities

create public-semi-public spaces

improve public transport network

improve create
pedestrian-cyclist network

connect natural wild places

reuse industrial sites

reduce crime figures
/create safe environment/

(1,2) example of Brooklyn Bridge Park by MVVA (2003 - ongoing)

(3,4) example of Emscher Park, Ruhr Valley

nature areas

industrial sites

create

public semi-public spaces

improve

public transport network

improve create

pedestrian cyclist network

connect natural wild places

reuse industrial sites

reduce crime figures
/create safe environment/

context | framework | problem statement | city scale | waterfront scale | local scale | reflection |
**city scale**

**problem statement analysis conclusions**

**fragmentation & barriers**

**recreational spaces**

- Functional levels:
  - large weekly use peripheral spaces
  - no small daily use local spaces

- Coherence:
  - fragmentation
  - interruption by infrastructure

- Accessibility:
  - linear barriers - infrastructure
  - spatial barriers - industrial sites

- Facilities & Safety

**centralities & amenities**

- Cyclist paths, planned
- Island park, planned
Riga needs a recreational space network which simultaneously provides residents with daily use local recreational spaces.

[2] Connects residents to weekly use peripheral recreational spaces via cyclist|pedestrian paths

[3] Connects all recreational spaces into one system

[4] Improves spatial quality of the city

Direct benefits:

- [1] Provides residents with daily use local recreational spaces
- [2] Connects residents to weekly use peripheral recreational spaces via cyclist|pedestrian paths
- [3] Connects all recreational spaces into one system
- [4] Improves spatial quality of the city

Indirect benefits:

- [1] Improves image of the city
- /According to human capital theory/
- [3] Attracts new businesses that follow human capital
- [4] Improves spatial quality of the city

Relation to place quality spatial components:

- Create recreational areas with sport facilities
- Create public|semi-public spaces
- Improve public transport network
- Improve|Create pedestrian|cyclist network
- Connect natural|wild places
- Reuse industrial sites
- Reduce crime figures
- Create safe environment/
**city scale**

**vision**

green corridors

**vision detailed** |

for further elaboration

3 most important corridors selected

[1] metropolitan regional corridor
• connects Riga to satellite towns & nature reserves

[2] city corridor
• connects Riga & satellite towns to the sea and the beach

[3] waterfront corridor
• connects city centre to neighbourhoods
  • connects neighbourhoods to the riverside
city scale

vision

concept

city center recreational area

(2,3) example of ada ciganlija island, belgrade

redeveloped industrial site

(5) example of emscher park, ruhr valley
upgrade existing recreational areas

new facilities, entrances, paths, sport fields, street furniture, etc.
**fill-in spaces in-between**

- no relocation of existing functions
- recreational | public spaces and pedestrian | cyclist paths are in-between the buildings
- corridors go through loosely built sites

**city scale vision**

- fill-in spaces

- green industrial sites
  - (1) Emscher Park, Ruhr Valley

- green residential areas
  - (2) Dockside Green, Victoria

- green mixed use areas
  - (3) Downtown, Portland

- some areas left as they are
  - (4) Central Market, Riga
add new traffic nodes & train stops

for better connection between the neighbourhoods and recreational spaces

taking into consideration current and future centralities
add linear and spatial links

where it is not possible to make a corridor
- dense neighbourhoods
- natural barriers

linear links - pedestrian | cyclist friendly streets
spatial links - tiny public spaces integrated into open spaces with other functions
waterfront scale

motivation

why?

waterfront corridor

[1] space on the edge of green-blue landscapes

/mutual benefits/

[2] connects city centre to neighbourhoods

[3] connects neighbourhoods to the riverside

[4] space where most people live and work

[5] politically easier to develop as a flagship project

context| framework| problem statement| city scale| waterfront scale| local scale| reflection

flexible use

green\open space

shade

overflow

green\open +
water =
mutual benefits

coolness

water landscape

flooding

breeze

number of employees

number of residents

number of employees

number of residents

18

18

number of employees

number of residents

18

18
waterfront scale
historical development
city - river detachment

/used to be integrated with the city > city market + port

car traffic development + bridges > detachment/

untill 1860s - defence |
river - source of danger > fortification walls facing the waterfront

from 1860s to 1930s - integration |
important functions at the waterfront
• port
• city market
no bridges > lively boat traffic

from 1930s to 1980s - ignorance |
port & city market relocated
new bridges > cars instead of boats

from 1980s - neglect |
bridge + land reclamation > busy highway along the waterfront
current situation
barriers & quality
fieldwork results

- key problem - accessibility
- busy highway
- distance between crossings up to 3 km

- no access to the water
- no pedestrian crossing
- easy/hard get on/off the bridge
- easy/hard go under the bridge
waterfront scale

scenarios

what to do

with the highway?

[1] slow traffic road
[2.1] high-speed tunnel
[2.2] high-speed tunnel public transport on surface
[3] high-speed tunnel slow traffic road on surface
waterfront scale
most efficient scenario 2.2
- tunnel, park & public transport
local scale

location choice

why?

transitional space:
- old town
- central train station
- city market

low quality space:
- intersected by traffic > air & noise pollution
- no facilities
- no places to stay

space, with landscaping potential:
- city channel
  /interrupted by a shopping mall/
- city channel park
  /possible continuation/
- riverside

most difficult location:
- traffic & pedestrian flows
- centralities
(1) old town

(2) city market

(3) central station

(4) creative quarter

context | framework | problem statement | city scale | waterfront scale | local scale | reflection

local scale

current situation

centralities & flows

5 centralities come together
• old town
• city market
• central train station
• creative quarter (future)
• city

traffic & functional node

traffic and pedestrian flows come together
• public transport stops
• public transport end stops > return loops
• commuter, visitor, worker, tourist flows

pedestrian flows and centralities are interrupted and separated by highways
waterfront scale

historical reconstruction

growth of barriers

1900 1915 1930

(1) city harbour 1900
(2) railway bridges 1930
(3) 13 january street 1930

(1) city harbour 1900

(2) railway bridges 1930

(3) 13 january street 1930

(2) 13 january street 1930

(3) 13 january street 1960
local scale
strategy
eliminate the barriers
park & new connections

phasing

[1.1] high speed tunnel

[1.2] waterfront promenade

[2.1] relocation of the bus terminal, the shopping mall & the cinema

[2.2] opening the channel & closing the park ring

[3.1] attractions - water access places, etc.

[3.2] public transport & pedestrian links

relation to city strategy

[1] elimination of barriers - infrastructure

[2] recreational spaces with double function
  • attraction
  • link between other attractions
**local scale**

**design**

**masterplan**

**relation to place quality spatial components**

- create recreational areas with sport facilities
- create public | semi-public spaces
- improve public transport network
- improve | create pedestrian | cyclist connections
- connect natural | wild places
- reuse industrial sites
- reduce crime figures / create safe environment/
local scale

design

traffic flows

car & bus

car traffic

redirected

car-free zone

bus traffic

redirected

new stops added
- to facilitate access to city market
- to avoid return loops
local scale
design
traffic flows

/redovelop trolleybus traffic in a similar way/

trolleybus traffic

redirected

new stops added
• to facilitate access to city market
• to avoid return loops

tram traffic

significantly redirected
• to cut the area as little as possible
• to ‘define’ the market area

new stops added
• to facilitate access to city market
• to avoid return loops
local scale

design
pedestrian flows

new bridges - new shortcuts

compared to existing situation

- pedestrian routs are shorter
- all pedestrians - on the surface /before, in underground tunnels/
- suitable for people with disabilities
- efficient access to most popular market pavilions

/2 out of 5 groups are shown here/
local scale
design
landscapes |
vegetation & paving character

channel park
(1) city channel park, riga

slope
(2) parc de la marina, viladecans

waterfront promenade
(3) battery park, new york

waterfront terraces
hafencity, hamburg
local scale

design

design edges

relationship with the water

<table>
<thead>
<tr>
<th>high urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) battery park, new york</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>smooth slope</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2) brooklyn bridge park, new york</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>terrace</th>
</tr>
</thead>
<tbody>
<tr>
<td>(3) 21st c waterfront park, chattanooga</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>low urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4) kalvebod waves, jds architects</td>
</tr>
</tbody>
</table>
local scale
design squares

through traffic
(2) bailey plaza, ithaca

market
(3) central market, riga

staying
(4) pioneer courthouse square, portland

semi-private
(5) berga bazars, riga

size comparison study
to existing successful squares /Copenhagen, Portland/
local scale
design
buildings

- **pavilions**
  - bring unity to waterfront promenade
  - and house important functions (sport equipment rent, etc.)

- **museum**
  - challenges neglected spaces (symbolic)

- **stage**
  - open air performances (summer opera festival, etc.)

- **marine center**
  - located by the water - flood-proof design
context | framework | problem statement | city scale | waterfront scale | local scale | reflection

local scale

design
topography

designed based on existing
Riga - a Green Capital of Europe

create recreational areas with sport facilities;
create public | semi-public spaces;
improve public transport network;
improve pedestrian | cyclist network;
connect natural | wild places;
reuse industrial sites;
reduce crime figures;
create safe environment/

context

reflection

contribution

all scales

city spatial quality improvement

towards a green metropolis: designing a waterfront in Riga

problem statement

city scale

waterfront scale

local scale

reflection

network of recreational spaces

every neighbourhood has access to high quality recreational spaces of different functional levels

people can move through the city by bike | on foot

accessible & attractive riverside

most popular recreational and entertainment venue of the city

a ‘trademark’ of the city

local scale

/a manifestation of the previous two/
an urban park

which is a recreational space in itself and a connector between the centralities
photo sources

p.3

p.4
(1) jurmalaphoto.wordpress.com / Gubumakonis
(2) www.travelnews.lv / Ilze Vanaga (KNPA)

p.5
(2) balticreports.com / Arturs Budahs
(3) Field Workers / www.anglobaltanicnews.co.uk from September 15, 2011

p.7
(1) en.wikipedia.org / Stephane D’Alu
(2) South San Diego Beaches / www.oceanfront-hotels.net

p.8
(1) www.panoramio.com / vipe
(2) lv.wikipedia.org / ScAvanger
(3) www.panoramio.com / valentin0
(4) Hanzas Street / maps.google.com (street view)

p.9
(2) Zakusala / www.spacegroup.no
(3) Daudzstavu dzīvojamās ekas jaunību Riga, Lucavsala / www.arhis.lv
(4) www.panoramio.com / valentin0
(5) New Hanza City / www.schallarchitecten.com

p.10
(1) Two Stunning Examples of Urban Waterfront Renewal / www.fastcodesign.com
(2) Pier 1 Brooklyn Bridge Park / www.mwainc.com
(3) When Factories Close Down / supersustainable.org
(4) www.essen-fuer-das-ruhrgebiet.ruhr2010.de / Maier-Jantzen (RVR)

p.14
(1) lv.wikipedia.org / ScAvanger
(2) Venue Information / www.belgraderowing2012.rs
(3) Daily Life In Belgrade: Fun For The Whole Family At Ada Ciganlija / www.ambassador-serbia.com from May 10, 2010
(4) www.panoramio.com / valentin0
(5) www.flickr.com / dysturb

p. 15
(1) www.panoramio.com / Renars
(2) www.panoramio.com / alinco_fan
(3) Top Five Community Gardens / www.radicalmontreal.com from June 1, 2011
(4) www.urbaninc.com / Randy A. Simes

p. 16
(1) www.flickr.com / dysturb
(2) Sustainability / Ecology / www.docksidegreen.com
(3) Portland MAX Downtown / light-rail-big.blogspot.nl from June 20, 2009
(4) www.panoramio.com / Davis Klavins

p. 18
(1) A Look at Cycling in Malmo, Sweden / walkaglerock.wordpress.com from October 8, 2010
(2) stpavementtoparks.stplanning.org

p. 20
(1) MUNSTER S. 1575. Cosmographia Universalis.
(2) www.letonika.lv / ©Tilde, 1998 - 2012
(3) www.rigasvesture.lv
(4) www.russkie.lv
(5) www.zuduslatvija.lv

p. 25
maps.google.com (satellite view)

p. 26
(1) lv.wikipedia.org / Digital 1
(2) www.panoramio.com / Davis Klavins
(3) lv.wikipedia.org / Janis Vīnins
(4) spikeri.lv

p. 27
(1) Par Uzņemumu / Vesture / www.ruterminal.lv
(2) www.rigasvesture.lv