Light plan - space for people

a public space strategy towards 24 hour vitality and a socio-spatial integrated inner city for Brussels

June 26th 2012
Berlage 1 - faculty of Architecture

MSc. Graduation Presentation

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fascination

Light plan - space for people

a public space strategy towards 24 hour vitality and a socio-spatial integrated inner city for Brussels
context

crisis of European inner cities

mobility

functionality

5pm flight
re-discovering public space by lighting festivals
light as the facilitator of the night scape of our cities
How can lighting be used in the design of public spaces to encourage 24/7 urban vitality?
structure

public lighting & urbanism

literature research
comparison study
good practice

Brussels

vision & strategy
local intervention
conclusion
public lighting in Urbanism
24/7 vitality - creating places

DIVERSITY, VITALITY, STREET LIFE, PEOPLES, WATCHING, CAFE, CULTURE, EVENTS & LOCAL TRADITIONS/PASTIMES, OPENING HOURS, FLOW, ATTRACTIONS, TRANSACTION BASE, FINE GRAIN ECONOMY

Symbiosis, Memory, Imageability & Legibility, Sensory Experience, Associations, Knowledgeability, Receptivity, Psychological Access, Cosmopolitan Sophistication, Fear

Activity: Image, Form, Place

Form

Activity

Place

8h30-16h30
9-17h
5h20-22h
17-9h
24h

Winter time

Summer time

(9-22h)
<table>
<thead>
<tr>
<th>image</th>
<th>activity</th>
<th>form</th>
</tr>
</thead>
<tbody>
<tr>
<td>safety, decoration</td>
<td>safety, orientation</td>
<td>orientation</td>
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*place-making related to purposes of lighting in public space*

<table>
<thead>
<tr>
<th>Quality of the physical environment</th>
<th>Poor</th>
<th>Good</th>
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<tbody>
<tr>
<td>Necessary activities</td>
<td><img src="image1.png" alt="image" /></td>
<td><img src="image2.png" alt="image" /></td>
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<tr>
<td>Optional activities</td>
<td><img src="image3.png" alt="image" /></td>
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<tr>
<td>“Resultant” activities (Social activities)</td>
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**literature**
comparison study - Ghent, Belgium
comparison study - Ghent, Belgium

1. city vision + public space strategy
2. local light plan for the city

urban design

implementation process
24 hour use of public space
- public safety
- local participation
- sphere

users of public space
- staying/go ing through
- commuters’ city
- urban vitality
- ownership
- spatial policies

actual space
- soico-spatial fragmentation
- local assets
- spatial configuration
- spatial patterns
Fatih Mosque, Eindhoven

long-term consequences
public lighting in Urbanism

light plan

readability
orientation
ownership

night-scape

physical form

local and global functions
facts & figures

- Brussels Capital Region
- Flanders
- Walloon

**Facts & Figures**

- **Area**: 161.38 km²
- **Population**: 1,136,920 (2011)
- **Ethnic Origin**: 46.3% non-Belgian origin (2006)
- **Immigrant Population**: 26.8% non-Belgian immigrant (2006)
- **Average Income**: €11,987.82 (2006)
- **Localities**: 19 municipalities
- **Government**: 1 government + ministries
job migrations

714,110 jobs available

371,700

4,750

61,140
inner city fragments
balance the inner city
implementation possible today and anticipation on future political changes

vision
inner city strategy
Overlay readability patterns with local centres of Brussels' inner city
local situation global attractors

Slaughterhouse site of Anderlecht and Kuregem

core of the neighbourhood

Brussels South/Midi
Slaughterhouse site of Anderlecht and Kuregem no global attractor

core of the neighbourhood does not relate anymore to higher scale movements

Brussels South/Midi focussed on the centre

local situation fragmentation
Day pattern and readability

Evening / Night pattern and readability

fragmentation in day and night
integrated strategy

Natural movement theory scheme as explained by Hillier (1993)

scheme on the relation between activity and the quality of the physical environment, Gehl (1987)

global movements taking a break

Quality of the physical environment

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Configuration

activity

movement
centre focussed
fragmentation
commuters’ city
24/7 vitality

light plan

readability
orientation
ownership

night-scape

functions

local
and
global

physical form

lighting in Brussels
approach

Inner city Strategy

Design Implementation

light plan

local and global functions

local Strategy

physical form
local strategy
integration of Kuregem to the inner city of Brussels
upgrading and opening-up of Slaughterhouse site to global attractor

direct connection between station and slaughterhouse site generating natural movement
linking the through movement to the local context

strengthening by local program along the route; ‘rooms along the line’

stage 2
the connection extends more into the urban tissue of Kuregem

upgrading of the veterinary school to a more global attractor

the network becomes more integrated

stage 3
Global and local are integrated

Connections and relations of movements on the different scales

stage 4
3. beautification

2. activity

1. network & sequence of places

0. strategy

support

requirement
local intervention
local intervention
several ‘places’

disconnected to the neighbourhood structure and each other

direct comfortable relation between centre - station - slaughterhouse is lacking

public space current situation
design approach

day
connect layers
walk through
local: outgoing

evening/night
local entity
orientation towards global
local: inwards

15 minutes walk
3 metro stops
1 km
‘places’ have their own purpose and identity

connecting to the neighbourhood structure and each other

direct comfortable relation between centre - station - slaughterhouse for slow users is sustained

public space proposed situation
proposed design intervention *day-time situation*
proposed design intervention evening/night-time situation
0. strategy

1. network & sequence of places

2. activity

3. beautification
Midi station area

- Midi station
- Inner city ringroad
- Direction towards the centre
- Midi station area
- Library cafe
- Shops
- Metro entrance
- Metro entrance
- Accessible green space
- Community gardens
- Small local enterprises
- Market
- City furniture

Legend:
- Existing building block
- Existing individual building
- Extended hour function
- Canal/water
- Bus lane
- Public road
- Public space
- Smaller public space entity
- Shared space city entrance
- Glasshouse frame structure
- Metro entrance

Important functions along the connection, enhancing activity:
- station square with local functions
- +0.5m bus platform and tram stop
- Visible and reachable metro stop
- Dramatic entrance
- Shared space human scale
- Tram slope down bus lane
- 2nd pedestrian route towards the neighbourhood
3. beautification

- elaborate the entrance function towards city centre, station and the neighbourhood
- introduce human scale
- direct movement

2. activities

- neighbourhood benefits from the presence of the station
- targeted functions to the passengers and locals

1. network & sequence places

- clarify the identity and aim of each connection around the station area
- orientation within bigger city networks
- connect and direct to other global attractors

0. concept
Midi station area
station square starts the connection towards neighbourhood and further

bus station as transitzone

connection to the otherside of the traintracks

station - centre entrance slow users shared space

boulevard for cars and other fast traffic

bara square as neighbourhood square and entrance
1. network & sequence of places
1. network & sequence of places

Midi tower as point of orientation

Guiding boulevard

Connection to the otherside of the traintracks
2. activities
2. activities

station entrance and other side of the transit zone

transit zone
3. beautification
3. beautification

blind wall of the traintracks direct and possibly interact

smaller spots bring back human scale and direct movement possibly integrated in furniture

trees enhance the boulevard
current situation station entrance
square shape keeps the direction towards station and slaughterhouse; focus remains

square incorporating through movement and actively taking part in it

small scale green open views possible

rue de fiennes
0. concept

1. network & sequence places
   - open-up the direct connection between Rue de Fiennes and the station
   - switch the orientation of the square by materialisation

2. activities
   - interaction between public and private
   - link visually and functionally with activities

3. beautification
   - by adding green and city furniture
small park as inbetween space

square integrates through movement by shape

continuation of the connection towards slaughterhouse

rue de fiennes
current situation rue de fiennes
change in direction by materialisation and green hill
functions strengthen this

metro square
open view to the slaughterhouse

metro stop as a remarkable object towards all directions
3. beautification

- the green structures
- the furniture for staying and navigation

2. activities

- the active frontages where the movements take place
- enhance activity by policy and neighbourhood participation

1. network & sequence places

- the lay-out of the square directs the movement on the route

0. concept
change in direction supported by the shape of the square

metro entrance splits movement and encloses movement on both sides

metro clemenceau
current situation metro clemenceau
zoom Slaughterhouse

open-up the site towards possible future riverfront developments

small scale workshops and enterprise opportunities

covered market related functions

market related functions

side entrances opening up the enclosed site

open-up the site towards the other functions surrounding it

green space for locals

first main entrance

small scale workshops and enterprise opportunities

second main entrance

legend

- existing building block
- existing individual building
- extended hour function
- canal/water
- buslane
- public road
- public space
- smaller public space entity
- shared space city entrance
- glasshouse frame structure
- metro entrance
- accessible green space
- community gardens
- small local enterprises
- market
- city furniture
3. beautification

- structural elements of green and city furniture

2. activities

- divers activities to become a global attractor and involve the locals
- additional small scale enterprises, flexible to any kind of use

1. network & sequence places

- open-up to the public domain on a permanent basis, with clear entrances
- the materialisation sustains the coherency and defines the space

0. concept
slaughterhouse site

possible connection to Hogeschool site

possible connection to future canal developments

main entrance

2nd main entrance connection towards the station

encloser of smaller entities within the public space

side entrances
1. network & sequence of places
1. network & sequence of places

direction by continues elements of recognition

slaughtercouse structure as element of orientation within the urban tissue
2. activities
2. activities

functions of the slaughterhouse and small scale enterprises divide space in functionality and illuminate the public domain simultaneously
3. beautification
3. beautification

green structures
direct movement
and orientation

blind walls can be
activated and integrated
with the purpose and
direction of the space

direction by
continues elements
of recognition
How can lighting be used in the design of public spaces to encourage 24/7 urban vitality?
centrefocussed
fragmentation
commuters’city
24/7vitality

readability
orientation
ownership

night-scape

light plan

functions

local
and
global

physical form
4. gentrification & integration

3. Beautification

2. Activities

1. Network & sequence of places

0. Inner city strategy
places + network + time
places + network + time
thank you