urban public space design to enhance the city interaction and develop a sustainable living environment

MENGTING JIANG
4297979
FASCINATION

Landscape has two things. Firstly, it brings nature to us. Secondly, on the basis of it, we practice or try to practice our dream of the world. Use the power of landscape to influence urban organization, function and development and get the balance of urban itself.
RESEARCH GOAL
The goal is to use landscape as infrastructure of urban public space to enhance the interaction of Petrzalka by transform the site from mono-function dormitory area to a vital part of Bratislava and creat high-quality living environment.
SITE READING
SITE LOCATION
Slovakia
Bratislava is the capital of Slovakia and, with a population of about 500,000, the country’s largest city.

Population: 411,228 (2011)
Elevation: 134 m
Area: 367.6 km²
Activity

- Park: buffer zone for flooding; recreation
- Grassland: traffic; walking the dog
- Pond: fishing
- Small square: traffic; walking the dog
PROBLEM STATEMENT

1. Poor quality of public space

2. Poor infrastructure system

3. Limited space
Poor quality of public space (green space)
With only one public park along the bank of River Danube, the rest green public space of Petržalka simply consists of empty grassland and a few trees which looks empty and untidy.
Poor infrastructure system
Cycling, walking, jogging and other activities share the same thiny path without any other infrastructure.
PROBLEM STATEMENT

Poor infrastructure system
Platform without any facilities makes the space useless.
Poor infrastructure system
Fragmentized and limited cycle network brings inconvenience to bicycle riders, and hence increase the difficulty to promote cycle as a public transport.
Limited space
As a new city area of Bratislava, Petržalka is blocked by country boundary lines of Austria, Slovakia and the River Danube. The urban area of Petržalka is fixed and limited. The current urban land use structure cannot meet the future development.
Country boundary blocks the development.

Mt. Strimina blocks the development.

Bridges link the two parts.

The Danube cut through urban area.

Bratislava urban area

Farmlands

Industry area
Layer approach will be used throughout the whole planning process. The basic problem of Petržalka is disordered infrastructure network, to solve it, new layer approach will be used to analysis the current context and help to develop organize the network and fine situation for further function.
RESEARCH METHODOLOGY: LAYER APPROACH

Abiotic Layer
- Geography
  - Soil
  - Wind
  - Sun

Network Layer
- Water System
- Green Space
- Traffic

Cultural Layer
- Landuse

New Network

New Plan
Jaroslava, Specifics of urban soils (Technosols) survey and mapping
ABIOTIC LAYER
wind

35m
15m
6m
3m
1.2m
ABBIOTIC LAYER

sun

shadow range of Mar. 21th

shadow range of Jun. 21th

shadow range of Sept. 21th

shadow range of Dec. 21th
RURAL GREEN SPACE: 42.61%
PARK GREEN SPACE: 1.95%
ATTACHED GREEN SPACE: 3.93%
ROAD GREEN SPACE: 3.93%
RESIDENCE GREEN SPACE: 3.93%
C: CROSSING SPOT
L: LOSTING SPOT
P: PARALLELING SPOT
I: INTERUP SPOT
What makes a place great?

Basedmap from Petržalka Masterplan | Bratislava Slovakia | Marko&Placemakers + GutGut + LABAK
PLACE MAKING
PPS

Project for Public Spaces (PPS) is the central hub of the global Placemaking movement, connecting people to ideas, expertise, and partners who share a passion for creating vital places.
Cities fail and succeed at the scale of human interaction.

- Ethan Kent
PLACE MAKING

interaction

City

Neighbourhood → important spot

Family
PLACE MAKING

To enhance human interaction in Petrzalka, best to start from the centre.

Site Reading

• City Centre – Spatially, and has potential to be real city centre in the future.

Area: 330ha (3.3km²)
Length of Canal: 4007m
Population: around 14553 people (Population Density: 4410people/km²)
Families: around 4851 families (3 people/family)
Regular Parking: around 4851 cars

• Next to railway station and city council proposed to construct a tram line along the canal and connect Bratislava in the north.

• Contains typical building forms and community types in Petrzalka.

• Including water and continuous open spaces which has potential to be a recreation centre and core of open space network.
PLACE MAKING

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Site Reading
• More convenient for people to stores.
• Survey: keep nature and more space
  More types of recreation for people with landscape architecture.
• Take advantage of current spacial mode.
PLACE ONE
the beginning of canal

PLACE TWO
a turn of river leaves water room and closing to train station makes it a new meeting spot

PLACE FOUR
green space in neighbourhoods

PLACE THREE
located by pond and with good sunshine condition, lacking recreation spots around, the end of canal

open concert
platform
extreme sports
children's garden
water garden
bird watching
SITE DESIGN PLACE MAKING

PLACE ONE

Potential interaction

MAIN STREET

store
SITE DESIGN PLACE MAKING
SITE DESIGN PLACE MAKING

PLACE TWO

Potential interaction
SITE DESIGN PLACE MAKING

PLACE THREE

MAIN ROAD
SITE DESIGN PLACE MAKING

quiet

nature

culture

vivid
SITE DESIGN PLACE MAKING

yard

SPACIAL CONTRAST
SITE DESIGN PLACE MAKING

- Quiet
- Vivid
- Nature
- Culture
- Grove
- Rest Corner
- Garden
- Playground
SITE DESIGN PLACE MAKING

vivid  bright  lively
friends  games

quiet  alone  insight oneself
trees and shadow  breath
TOWARDS SMART NETS
THE END