Walkscapes

Redefining the path network in Emscher Landscape Park

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P5 Presentation

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Key words

Ruhrgebiet
Park system
Path network
Walking experience
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The restrained feet

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Step into the garden

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Wandering in Ruhr

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A new walking paradise

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Introduction

The restrained feet
A trip to Ruhr Area, Germany
Confusing cities at eye level
Ruhr: a region defined by industry

Industrialization  Infrastructure  Structural change in post industrial era

Coal production  Steel production

1800  1850  1900  1950  2000  2050

Colonge-Minden Railway  Great Depression  Steel Crisis  European Capital of Culture

Rhine-Herne Canal  Ruhr University in Bochum
Ruhr from helicopter view

Fragmentated landscape
Fragmentation caused by infrastructure
Problems with fragmentation

Locomotive perspective

Pedestrian perspective

Difficulty in cognition

Degradation of habitats

Adapted from Designing Greenways

Adapted from Landscape Ecology Principles
Emscher Landscape Park vs. fragmentation
Ambiguous ‘park’ from pedestrian perspective
Problem statement

Missing links from pedestrian perspective in a park system
Aim & Focus

Walking experience → Path → Park system → Fragmentation → Livability
Research Questions

How can we design paths through pedestrian perspective?

Why leisure walking is important for urban dwellers?  
What are the components of pleasant walking experience?  
What kind of space contribute to pleasant walking experience?
Experiment site: Oberhausen

A city made by industry
Research

Step into the garden
Why we take a walk?

Walking for non-utilitarian purposes is a tradition shaped by culture
Two types of experience

Visual

Tactile
Why paths ‘fail’?
Records of experience in motion

- Rich experience
- No specific scores for walking

Drawings by Lynch, K. & Appleyard, D.
A comparison among 3 paths

Vondelpark, Amsterdam

Pedestrian trials, selected site in Oberhausen
The walking experience
Characteristics of a favored path

Repetition

Variation
The making of repetition & variation

Repetition

Variation
Site Analysis

Wandering in Ruhr
How does a park system function as a system?
Lessons learned from precedent park systems

- Continuous green space with recreational & ecological value
- Integrated with other structures (water systems, transportation, etc)
Emscher Landscape Park in Oberhausen

Current: ambiguous park land with multiple land uses

Proposal: park land with recreational & ecological value
Emscher Landscape Park in Oberhausen

Paths as the framework for park system
Taking advantage of water systems

Green space
Green + traffic network
Green + cultural landmarks
Green + planned trails
Existing theme trails in Emscher Landscape Park

- Emscher Island Tour
- Industrial Culture Route
Existing theme trials in Emscher Landscape Park

Missing spatial quality from pedestrian perspective
Zoom in: trails in sampled area
3 types of experience

Route as destinations

Route for & as destinations

Route for destinations
Positioning the experience in a park system
Design

A new walking paradise
Typology of routes

- Backbone routes
- Destination routes
- Connector routes
Typology in the context of Emscher Landscape Park

Backbone

Destination

Connector
Backbone routes: underlying landscape
Potential backbone routes
Design principle: repetition & variation
Standard segment

Paved lanes
- Cycling lane
  - Width: 3~4m
  - Asphalt with signs
- Walking lane
  - Width: 2~3m
  - Macadam

Facilities
- Seating object
  - White concrete
- Bike racks
  - Steel
- Light post
- Trash bin

Signage
- Sign posts
- Maps & story boards

Trees
- Alnus
- Carya cordiformis
- Fraxinus excelsior
- Carpinus betulus
Variations on sections

Separate lanes

Lanes on different heights

Combine with streets
Variations according to features in landscape

Features in landscape

Composition elements
Patterns for different features

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Recommended materials & vegetation

Steel grids
Cordon steel
Asphalt
White concrete
Gabion
Cement bricks
Quercus robur
Prunus padus
Robinia pseudoacacia
Crataegus monogyna
Cornus
Salix
Pyrus
Betula
Connector routes
Design principle: repetition & variation
Standard segment for connector routes

Paved lanes

Shared lane for cyclists and pedestrians
Width: 3~4m
Asphalt

Facilities

Light post
Trash bin

Signage

Sign posts
Patterns for strategic points

Access points

Narrowing

Opening

Marking
Patterns for strategic points

Access points

Narrowing

Opening

Marking

Tunnel

Widening

Lighting

Art

Detour

Softening

Foci
Positioning the paths

Experiment site: Osterfeld, Oberhausen
Positioning the paths

- Backbone route
- Connector route
- Destination route
- Railways/highways
- Water
- Parks
Detailing the paths
Scheme of design
Detail 1: when 'connector' meets 'backbone'
Detail 2: Highlight on ‘backbone’
Detail 2: Varied backbone
Paths in the eyes of different user groups

Local people

Tourists
Conclusions

Looking back to the labyrinth
Research & design as a response to site-specific problems
Limitations of the qualitative approach

How much is enough?
Thank you!