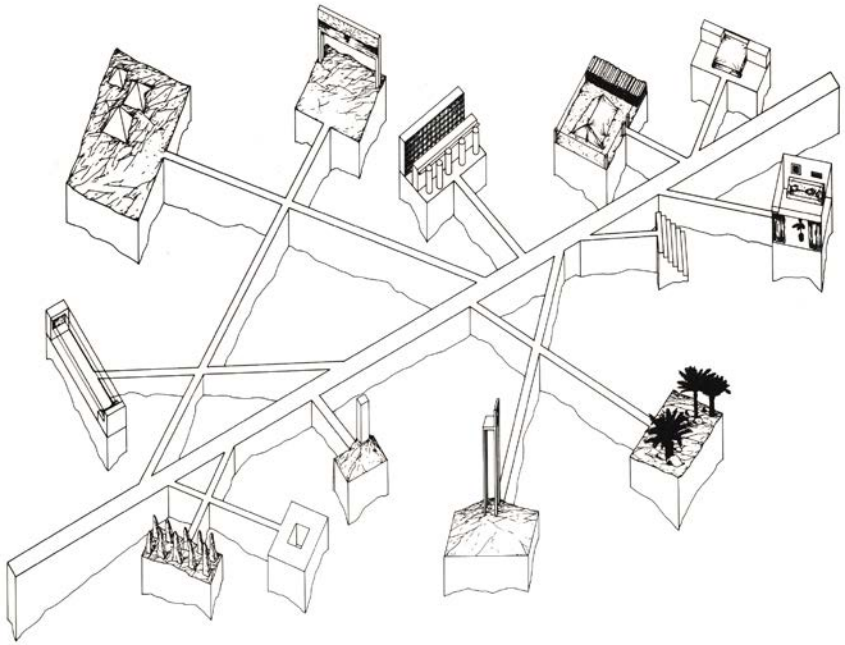
Walkscapes

Redefining the path network in Emscher Landscape Park



Boya Zhang

2016.6.28
P5 Presentation

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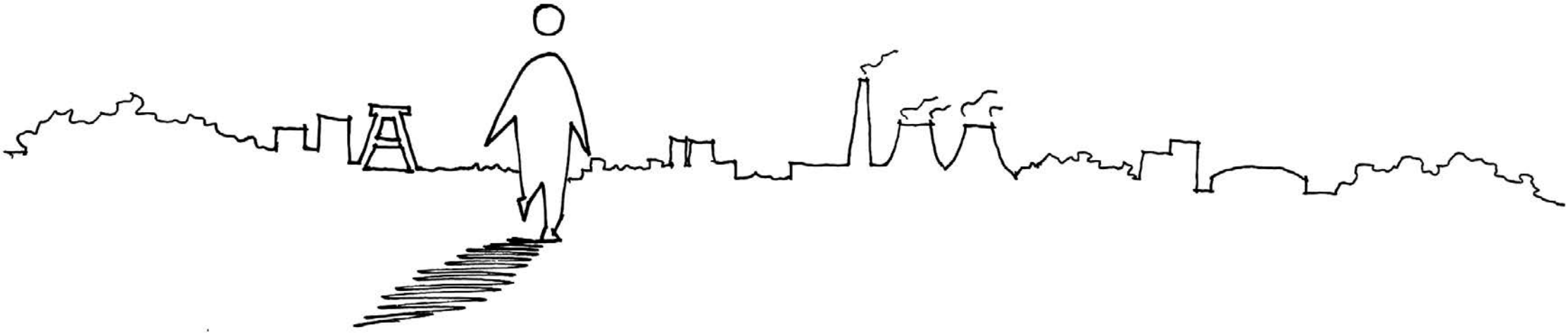
Key words

Ruhrgebiet
Park system
Path network
Walking experience



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A new walking paradise

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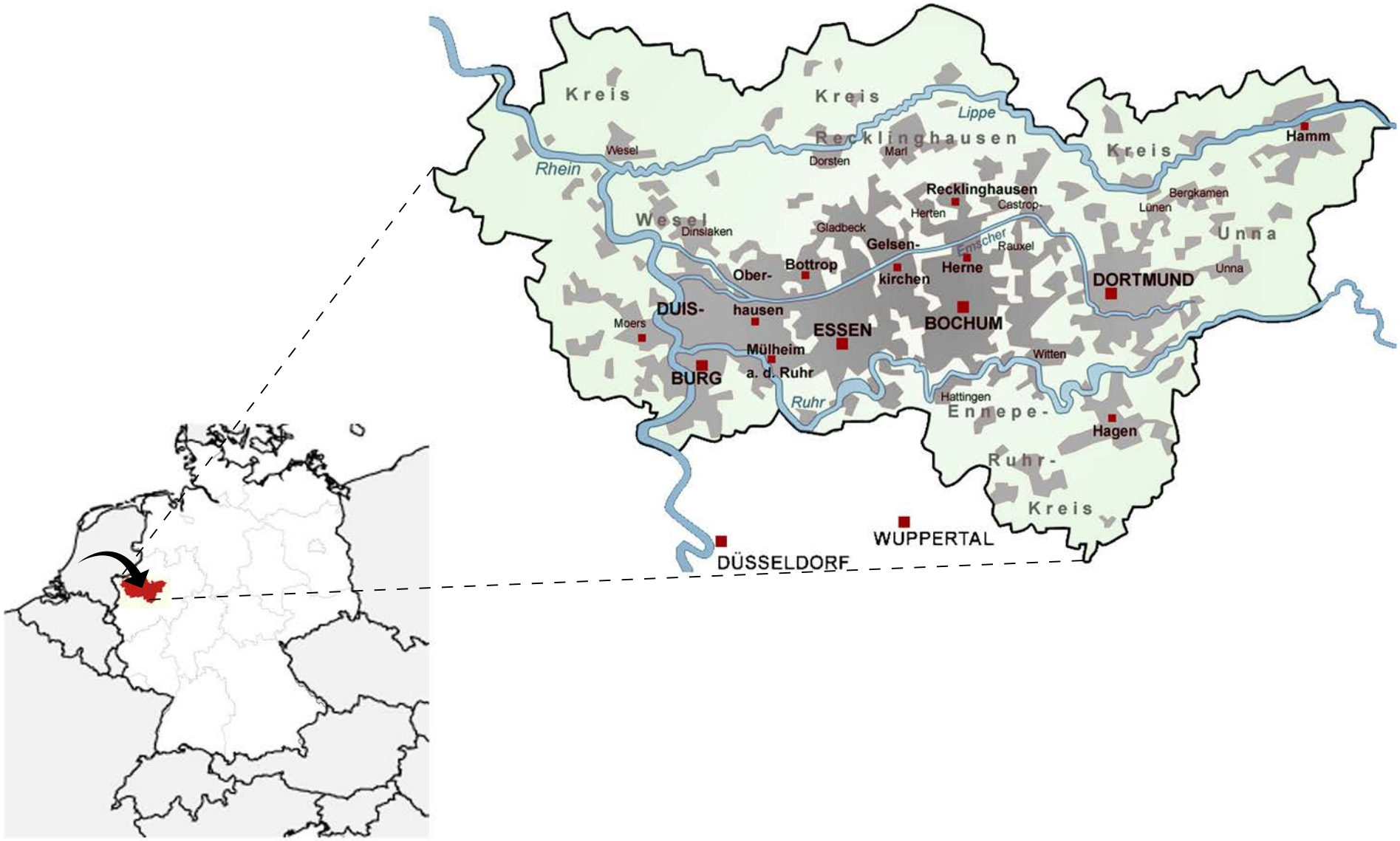
Look back to the labyrinth

Introduction

The restrained feet

A trip to Ruhr Area, Germany



Confusing cities at eye level

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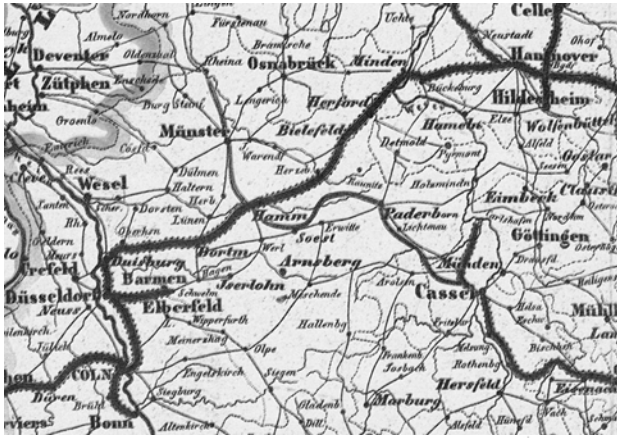
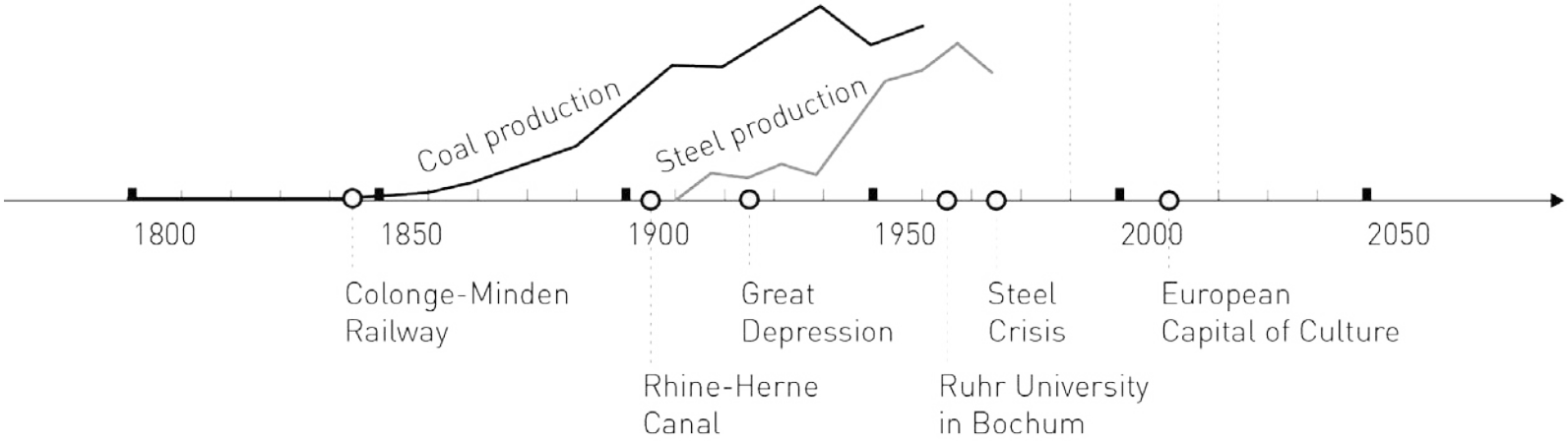
Ruhr: a region defined by industry

Industrialization

Infrastructure



Structural change
in post industrial era



Ruhr from helicopter view

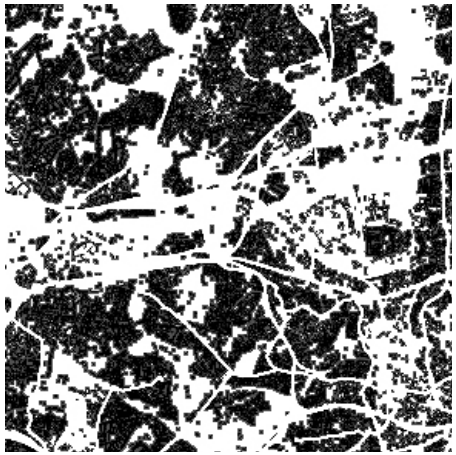
Fragmentated landscape

Fragmentation caused by infrastructure

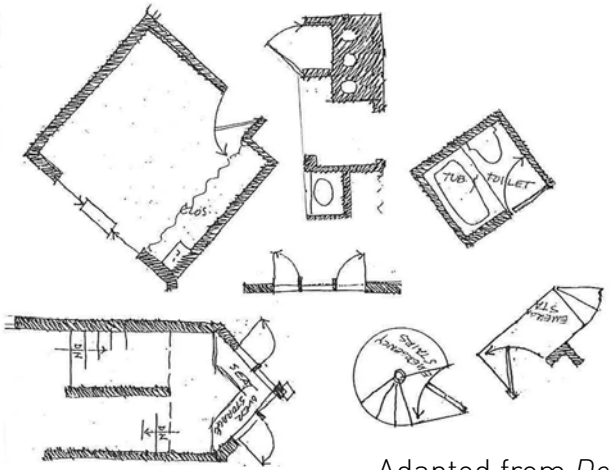
Problems with fragmentation

Locomotive perspective

Pedestrian perspective

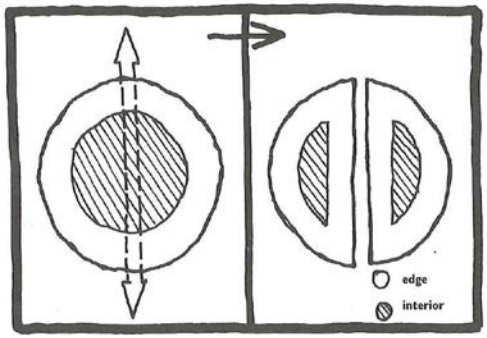


Difficulty in cognition



Adapted from *Designing Greenways*

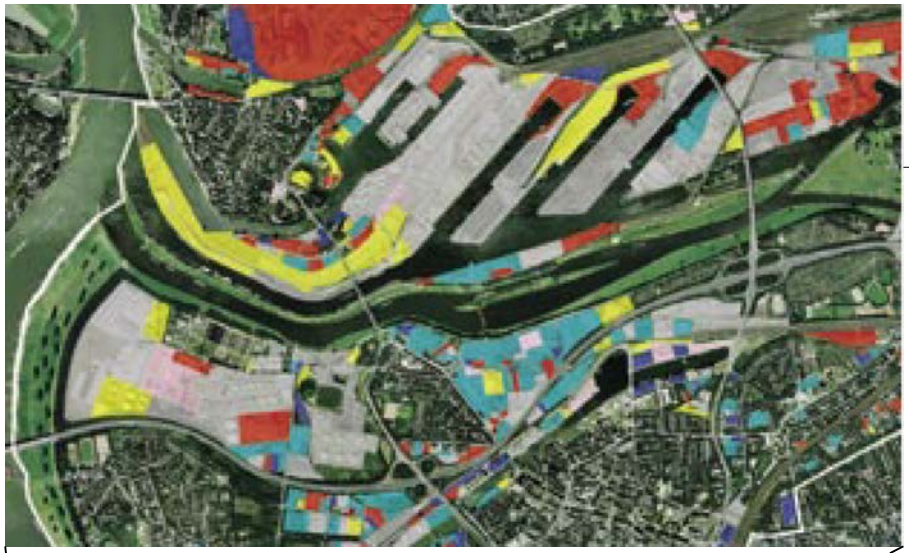
Degradation of habitats



Adapted from *Landscape Ecology Principles*

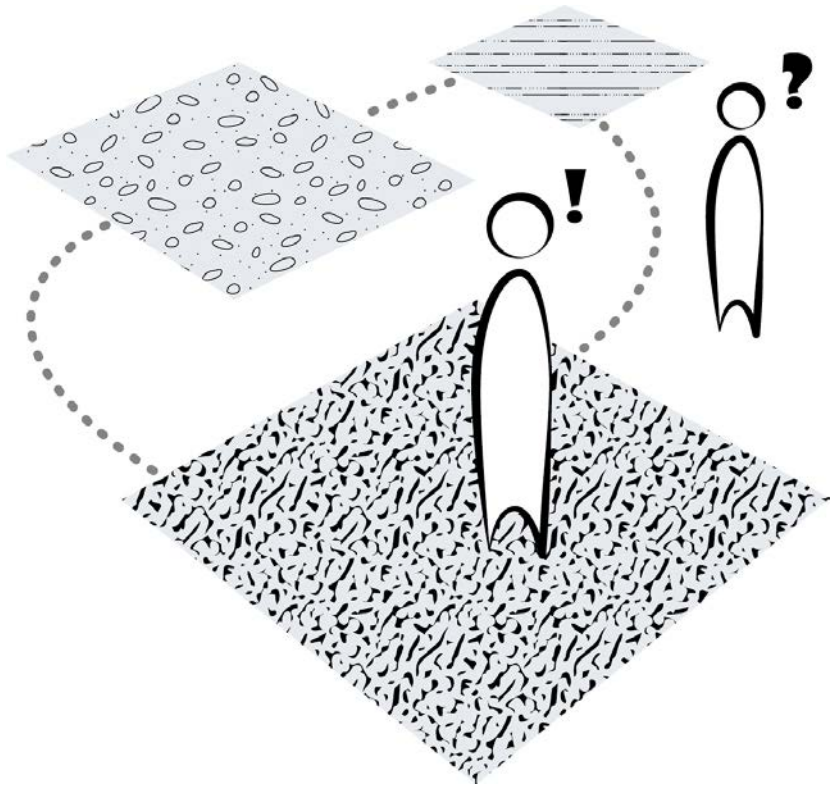
Emscher Landscape Park vs. fragmentation

Ambiguous ‘park’ from pedestrian perspective



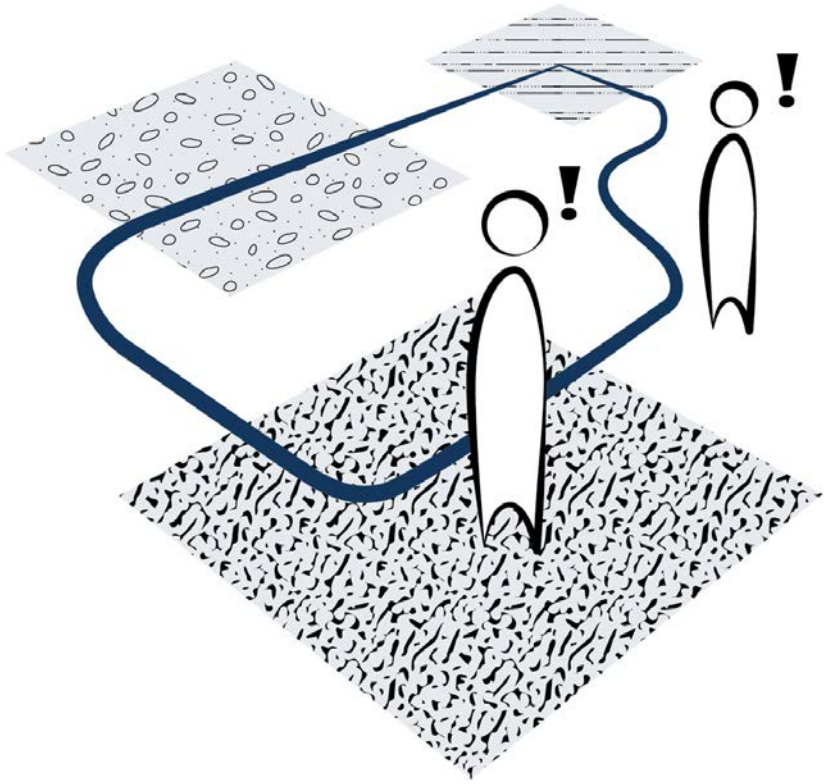
Problem statement

Missing links from pedestrian perspective in a park system



Aim & Focus

Walking experience → Path → Park system → Fragmentation → Livability



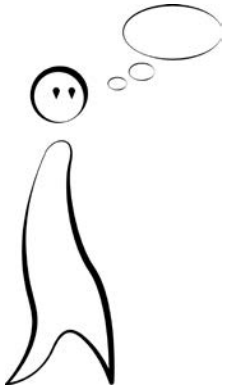
Research Questions

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’?

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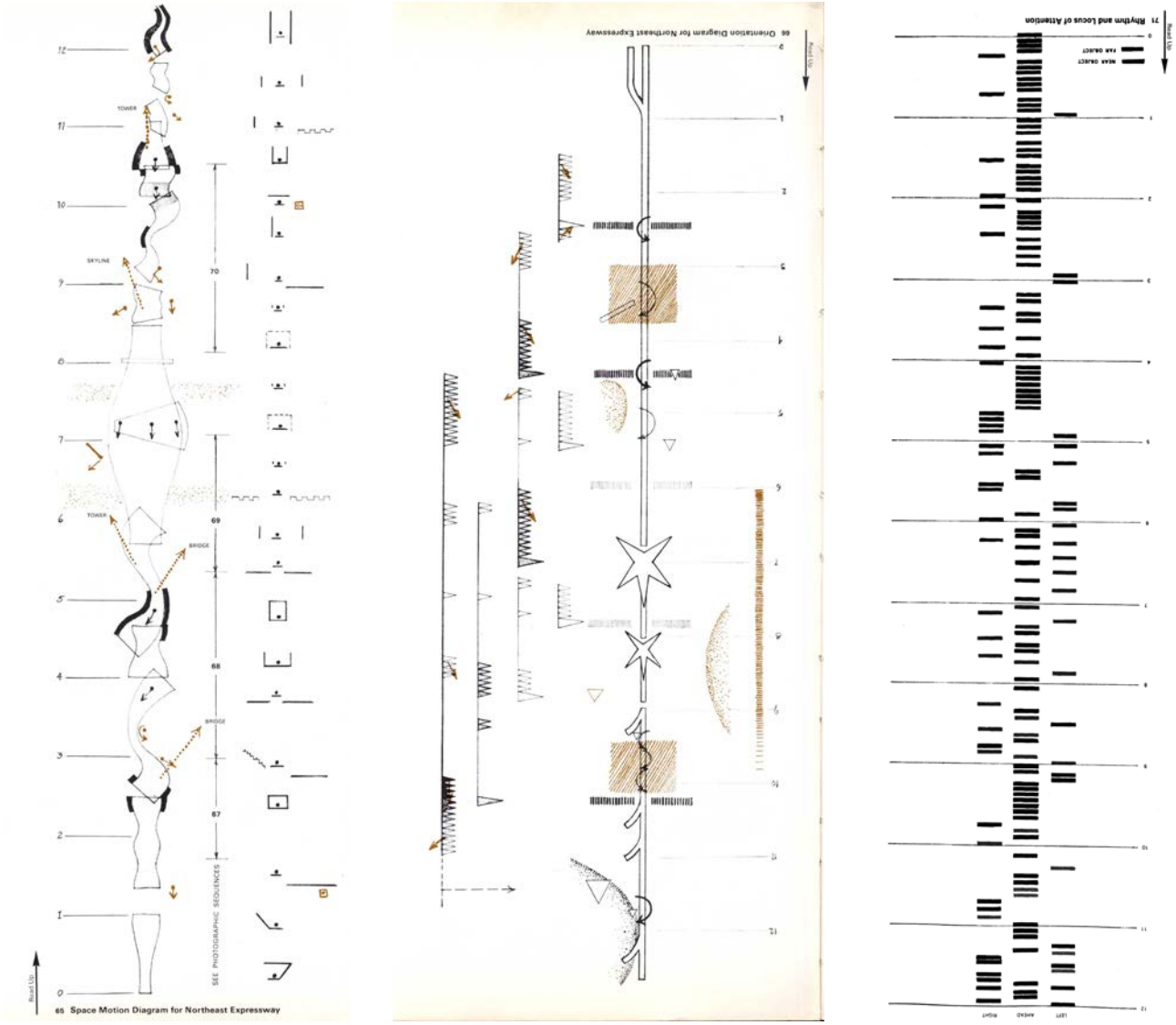
Records of experience in motion

- Rich experience
- No specific scores for walking



Drawings by Lynch, K. & Appleyard, D.

A comparison among 3 paths

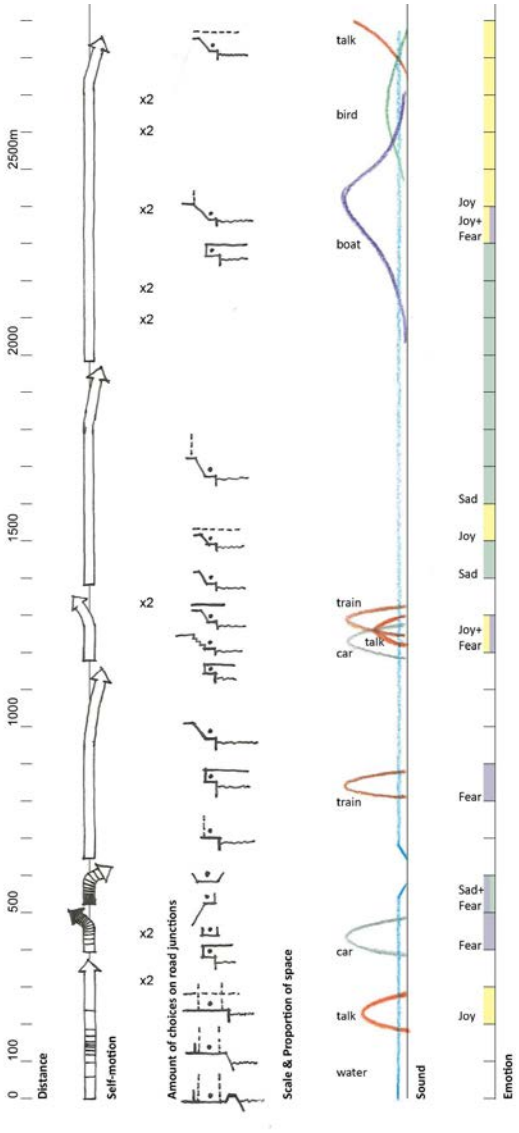
Vondelpark, Amsterdam

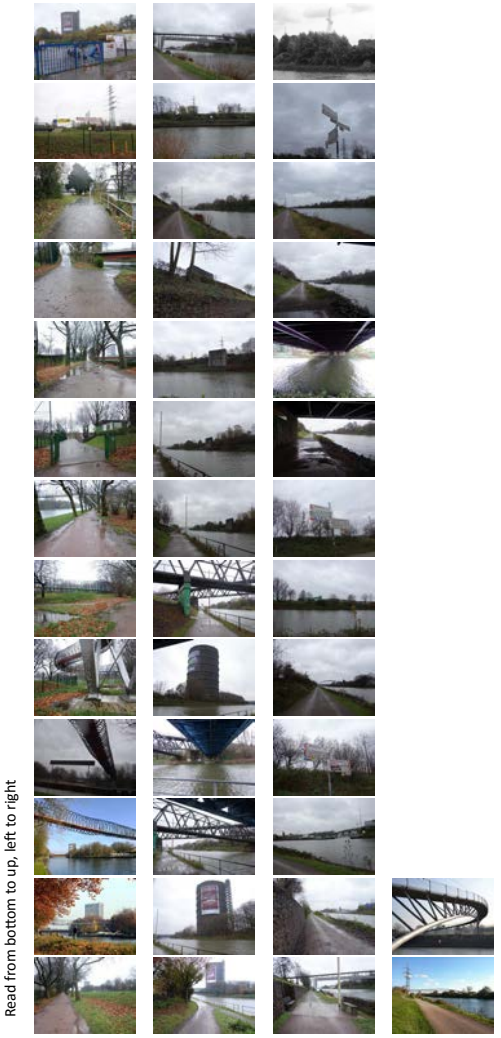
Pedestrian trials, selected site in Oberhausen

The walking experience

Appendix

Route 3





Read from bottom to up, left to right

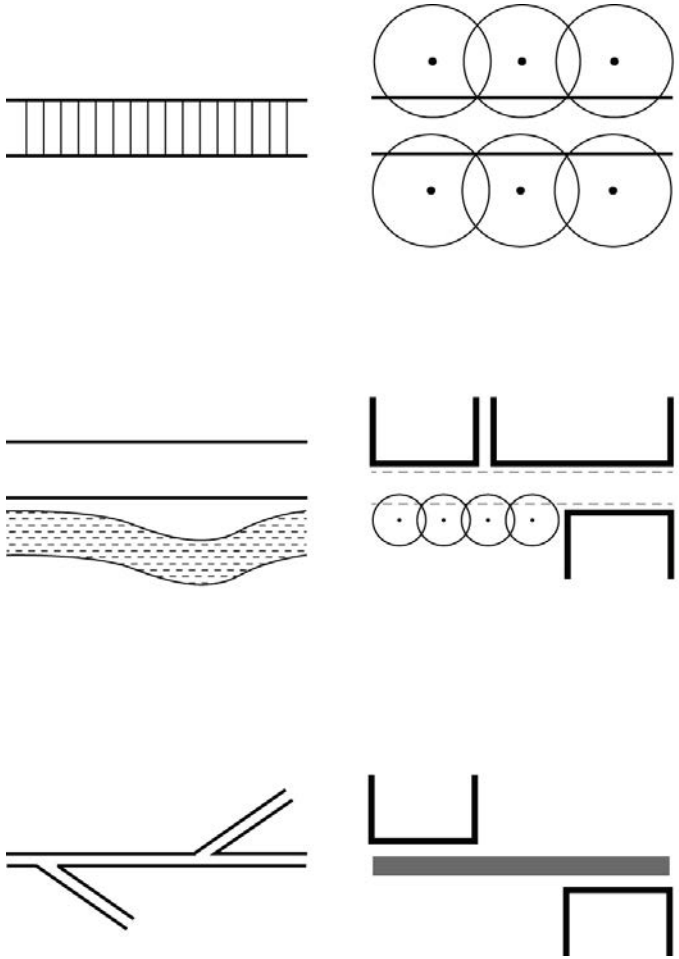
Characteristics of a favored path

Repetition

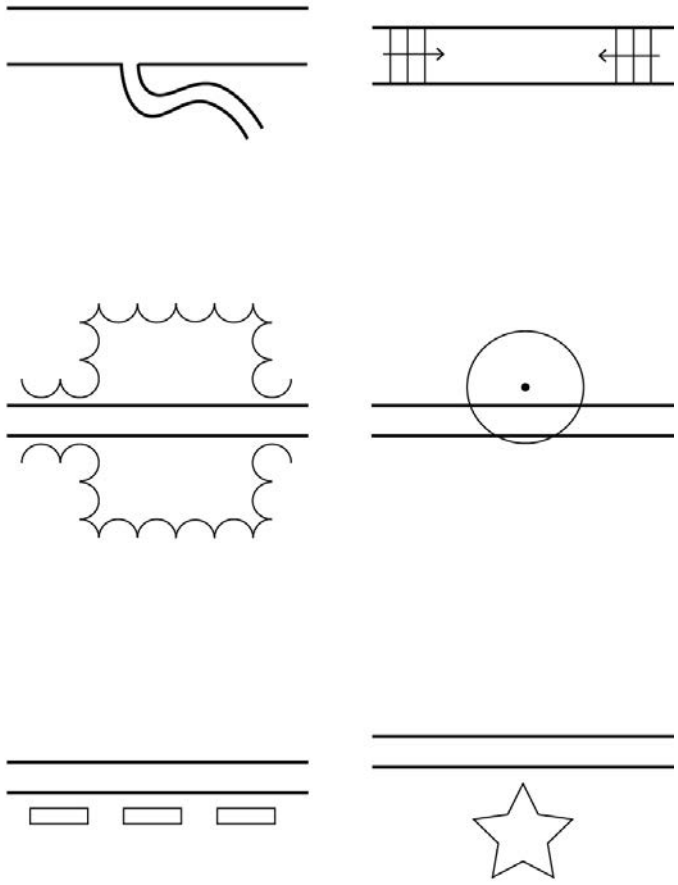
Variation

The making of repetition & variation

Repetition



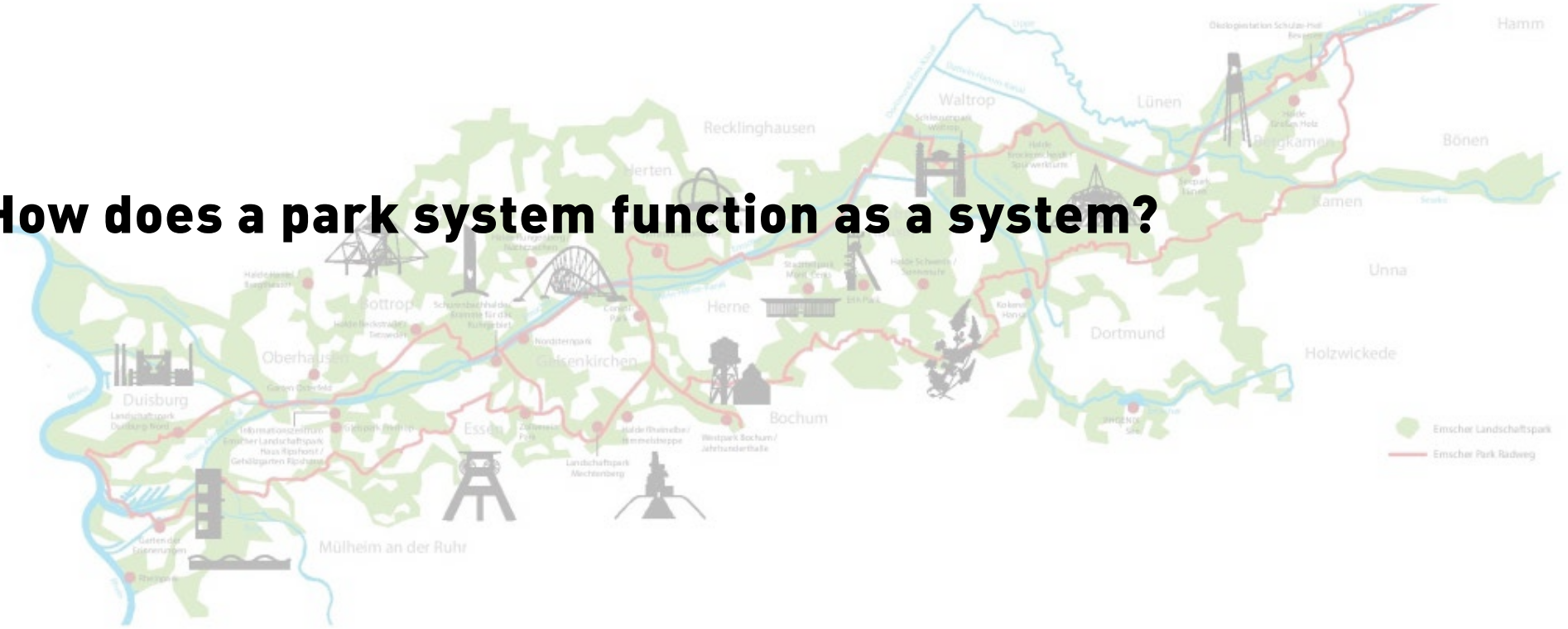
Variation



Site Analysis

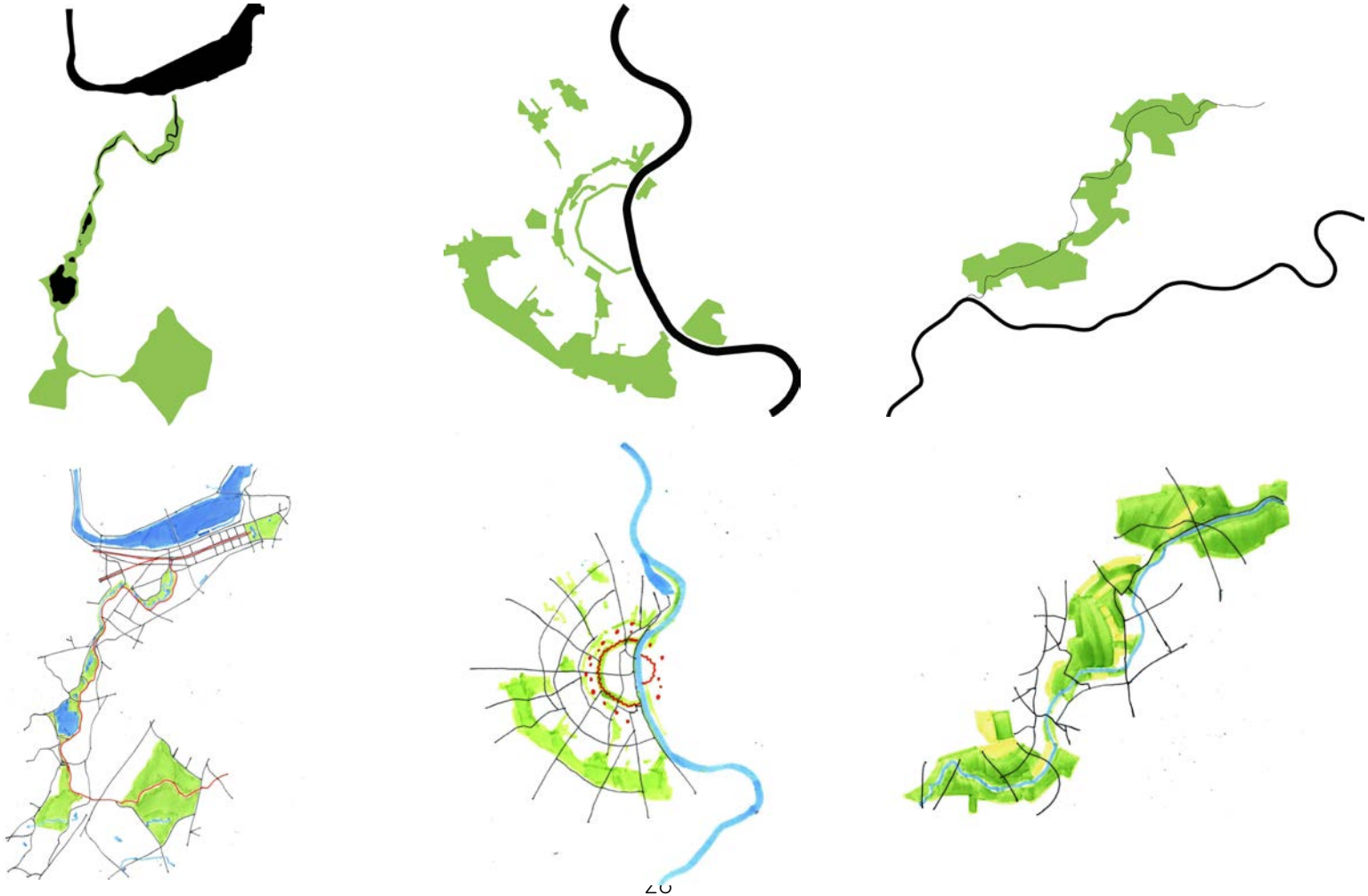
Wandering in Ruhr

How does a park system function as a system?



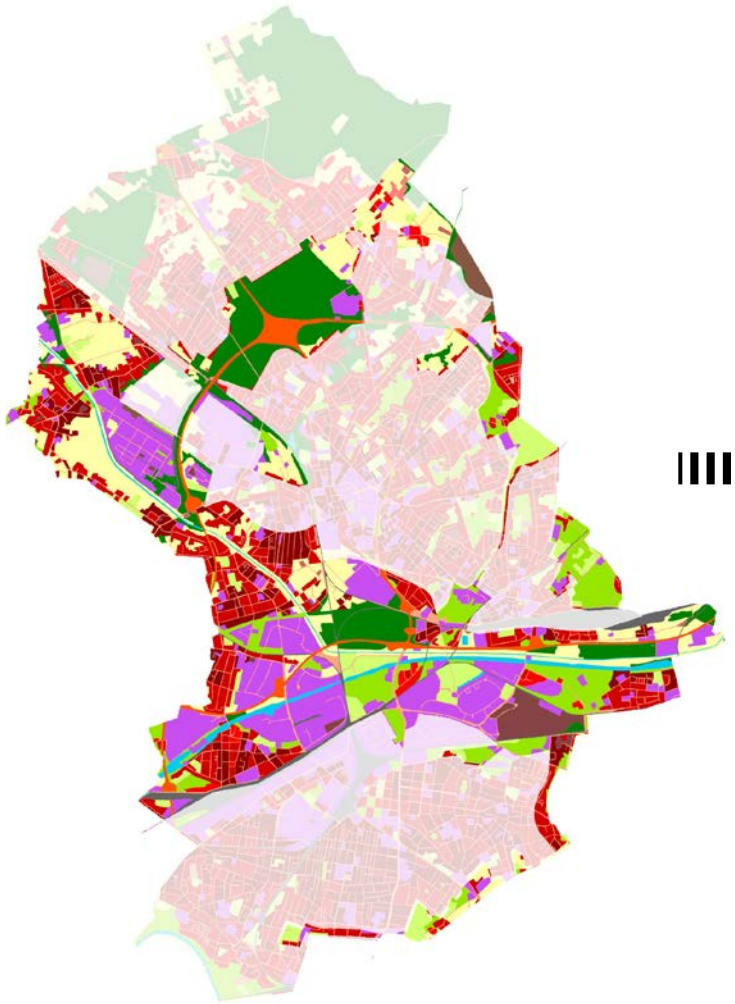
Lessons learned from precedent park systems

- 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

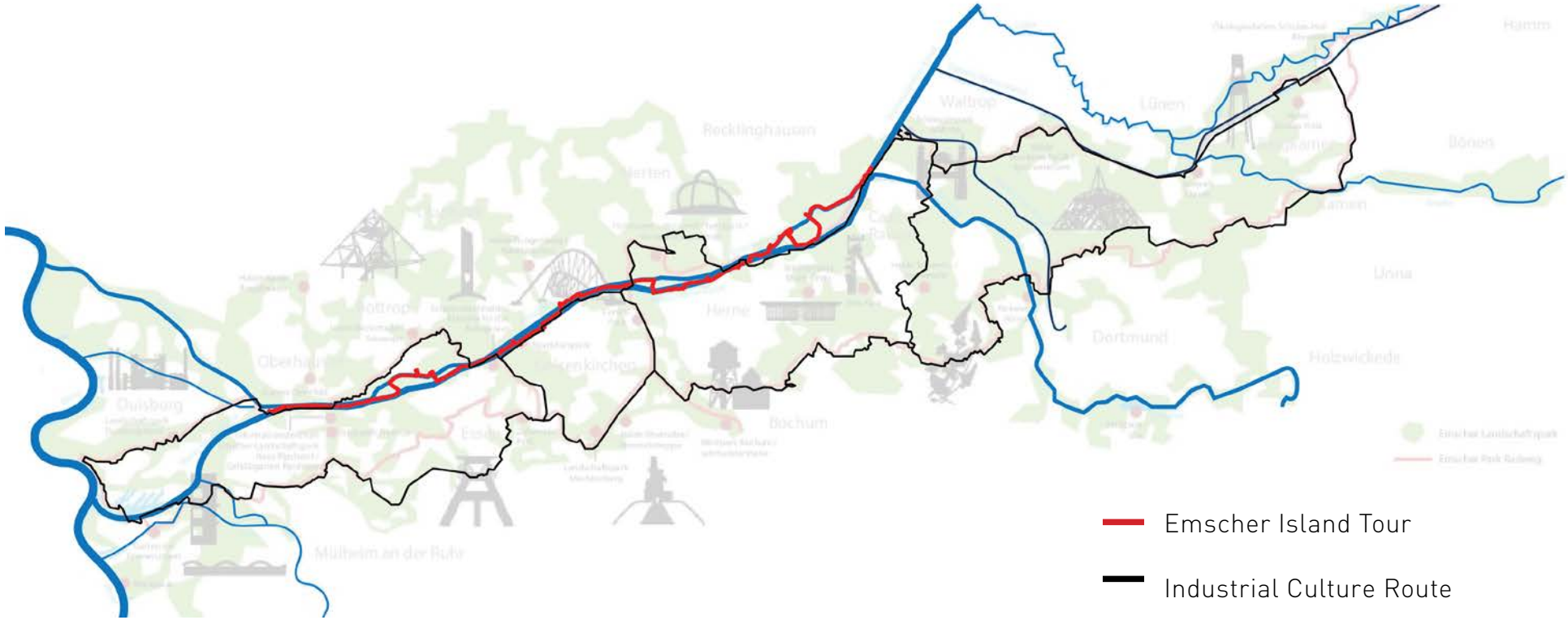
Green space

Green + traffic network

Green + cultural landmarks

Green + planned trails

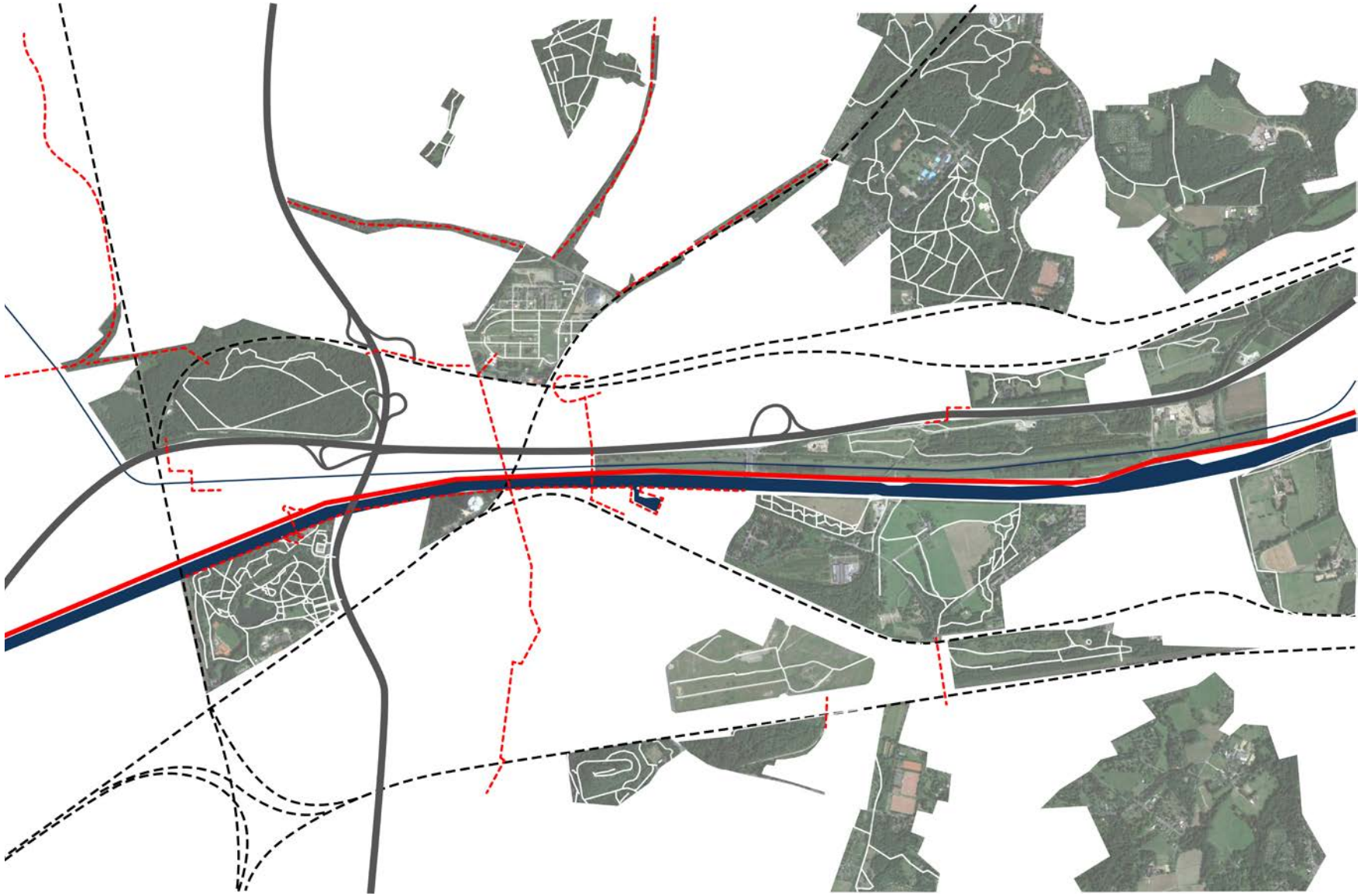
Existing theme trails in Emscher Landscape Park



Existing theme trials in Emscher Landscape Park

Missing spatial quality from pedestrian perspective

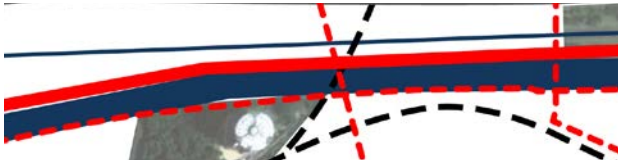
Zoom in: trails in sampled area



3 types of experience

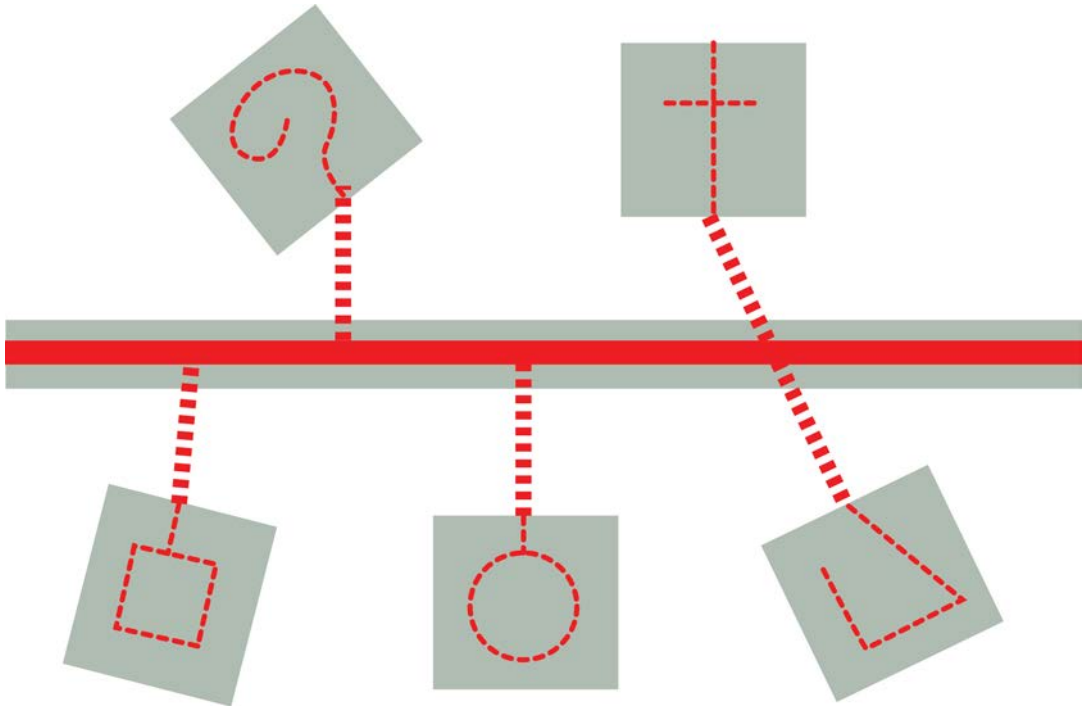
Route as destinations

Route for & as destinations



Route for destinations

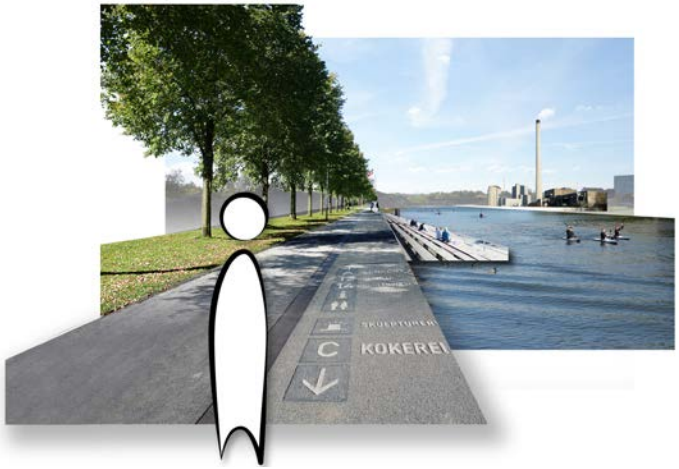
Positioning the experience in a park system



Design

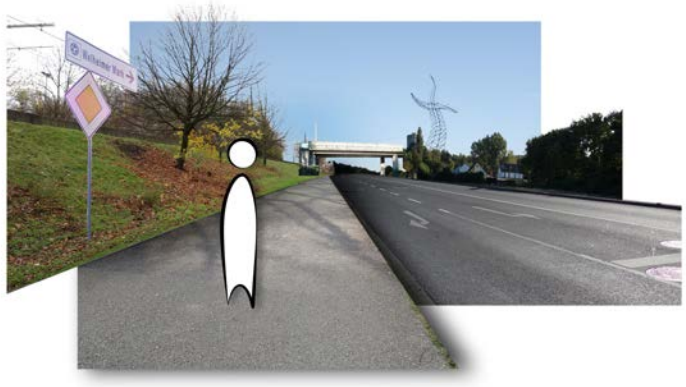
A new walking paradise

Typology of routes



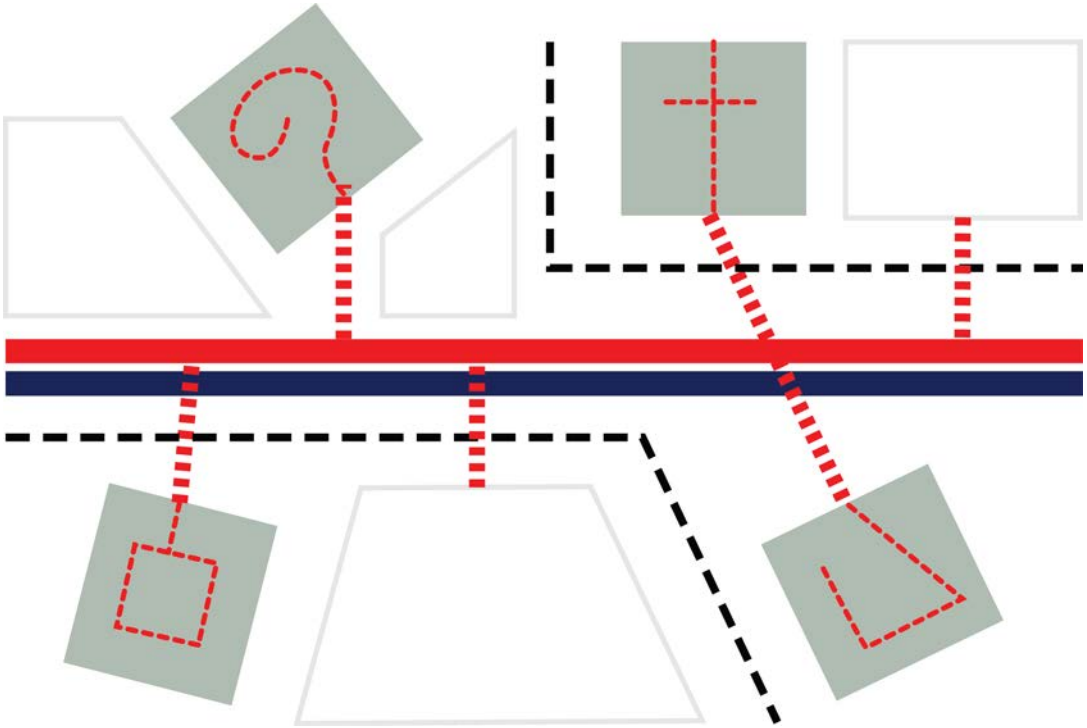
Backbone routes

Destination routes

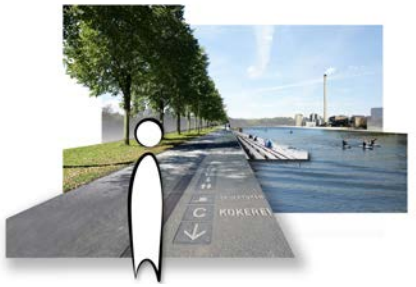


Connector routes

Typology in the context of Emscher Landscape Park



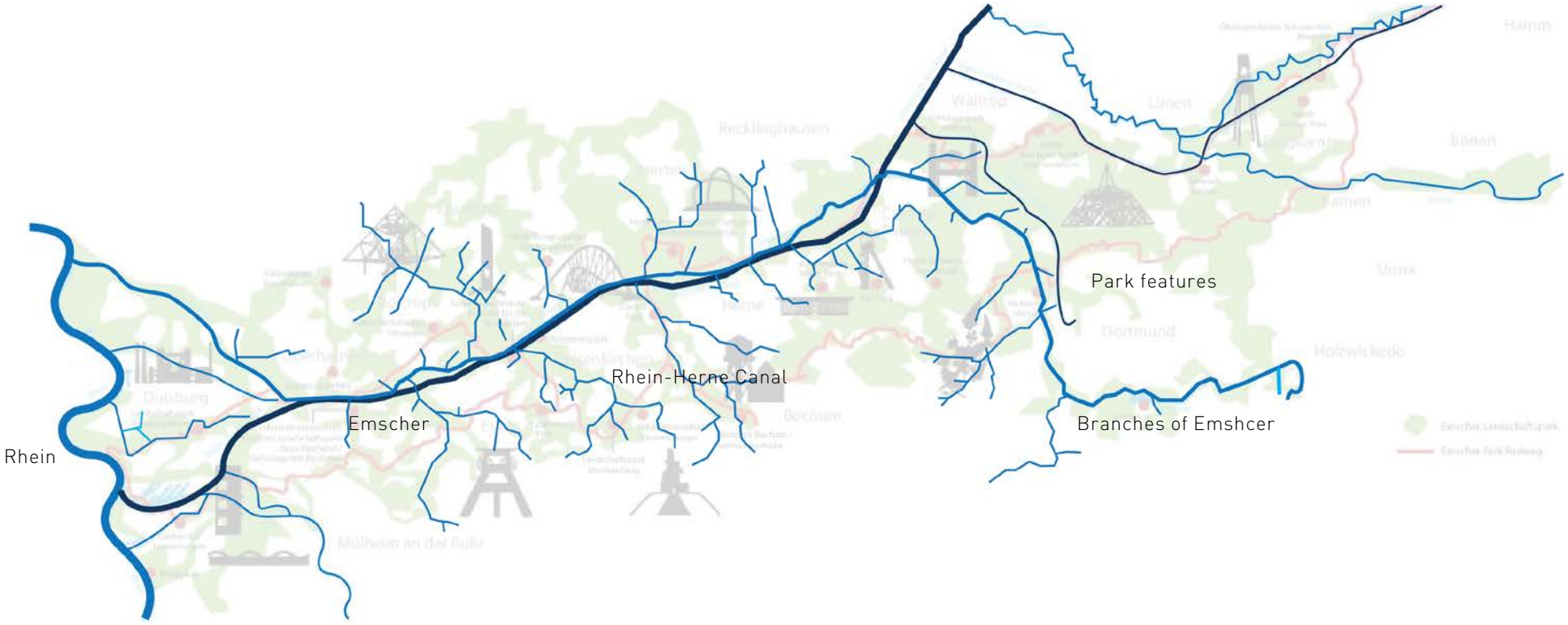
Backbone



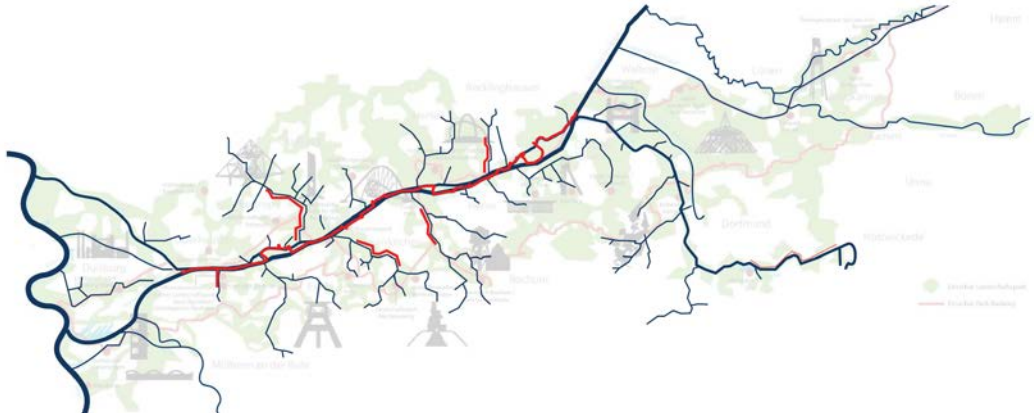
Destination

Connector

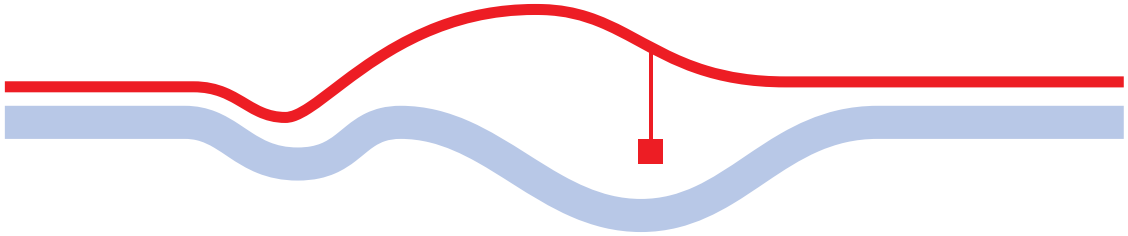
Backbone routes: underlying landscape



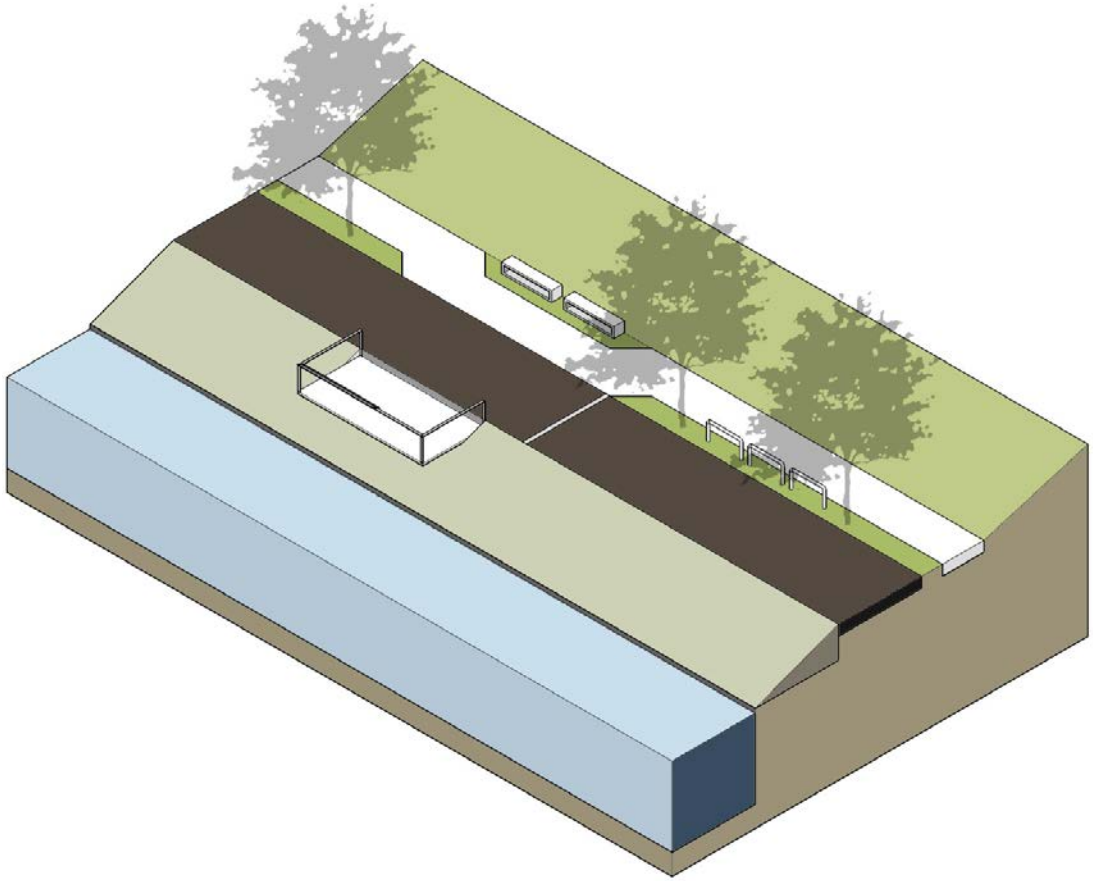
Potential backbone routes



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

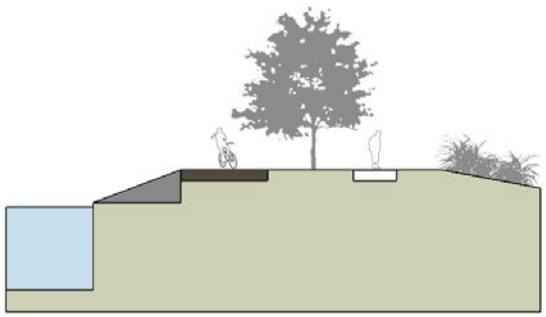
Carya cordiformis

Fraxinus excelsior

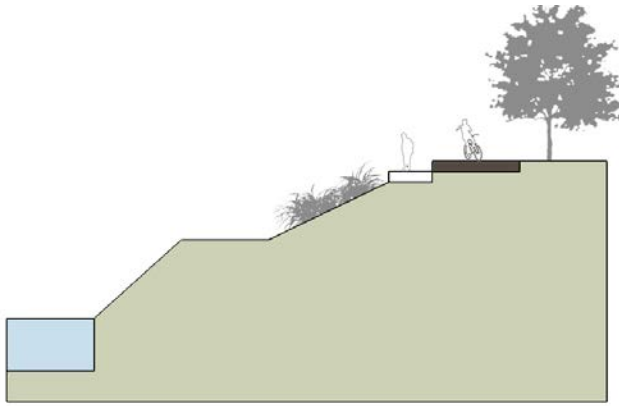
Carpinus betulus

Variations on sections

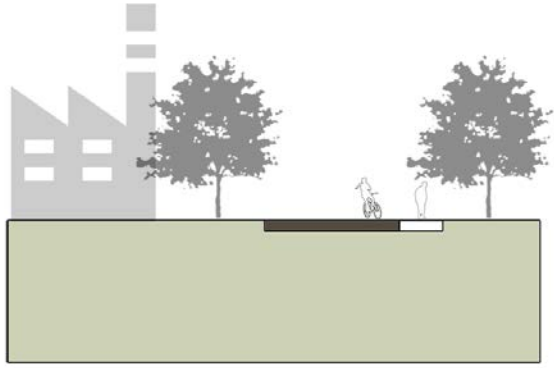
Separate lanes



Lanes on different heights

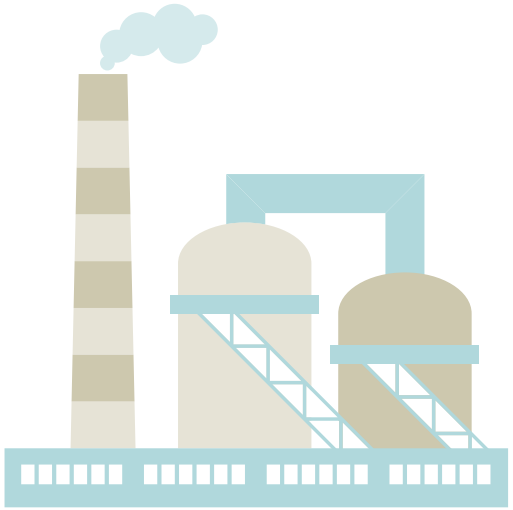


Combine with streets

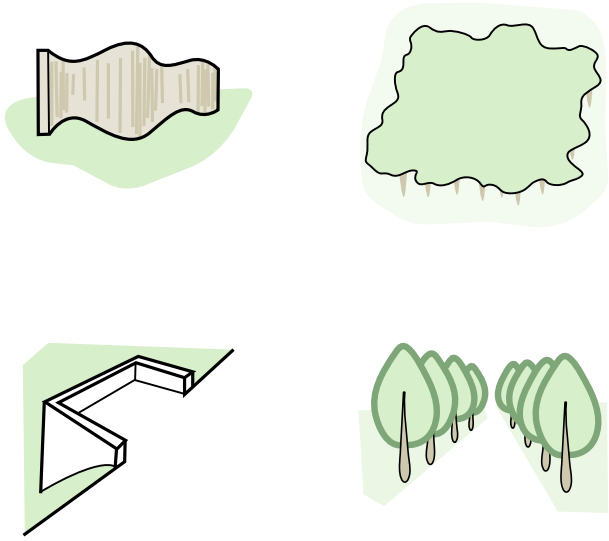


Variations according to features in landscape

Features in landscape



Composition elements



Patterns for different features

	Amphitheatre For events	Plateau Provides an overview	Ravine Limit the access	Terrace Point out a beautiful view	Stairs Leads to features on different heights	Extra path Alternatives for nearby features	Beveldere Adds a landmark/ provides a view	Benches Place to rest and stay	Boathouse For water sports	Pavilion Frames a scene	Bridge A landmark/a playful way	Gate Highlight the transition/limit the access	Sculpture Mark a spot/ provides foci	Playful wall A soft separation	Lawn Event fields/ self-defined activities	Flower meadow Beautify the view	Clear Creates enclosures	Clumps A soft separation	Alley Define a linear space	Solitary tree A naturalistic foci	Notch A shelter	Border Beautify boundaries	Pergola A shelter	Fountain A foci/ for air exchange in water	Cascade For interchange of water courses	Rill For events	Cafe A staying place with a view
Sports fields	●		●					●	●			●		●	●	●			●								●
Emscher		●		●	●	●	●	●		●	●					●		●	●		●				●	●	
R-H Canal	●			●	●		●	●	●	●		●	●		●	●			●	●	●	●	●				●
Art Installation				●	●	●	●	●		●																	
Neighborhoods			●					●		●		●		●			●	●	●		●	●	●				
Bridges				●				●																			●
Parks	●	●	●	●	●	●	●	●	●	●		●	●		●	●	●	●	●				●			●	●
Open fields		●		●			●	●		●							●		●	●	●						
Factories				●			●					●	●	●				●	●								
Forest					●	●		●	●	●		●	●			●	●				●					●	
Slag hill	●			●	●	●	●	●							●				●		●						

Recommended materials & vegetation

Steel grids

White concrete

Cordon steel

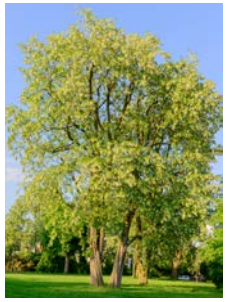
Gabion

Asphalt

Cement bricks

Quercus robur

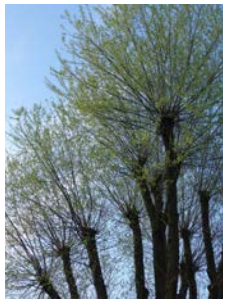
Prunus padus



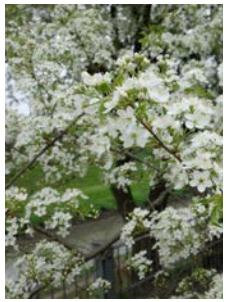
Robinia pseudoacacia

Crataegus monogyna

Cornus



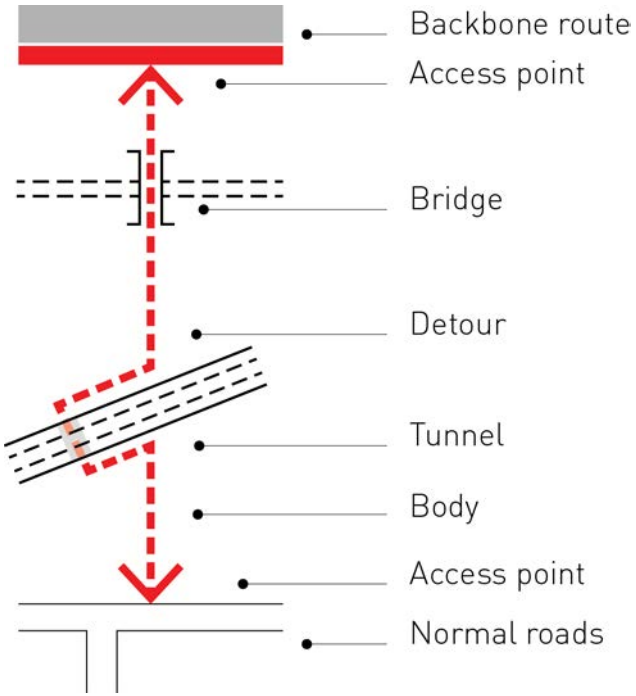
Salix

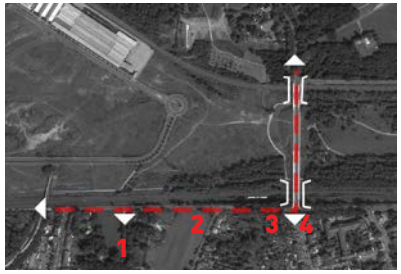


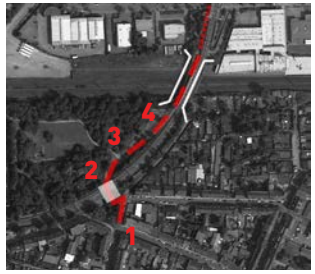
Pyrus

Betula

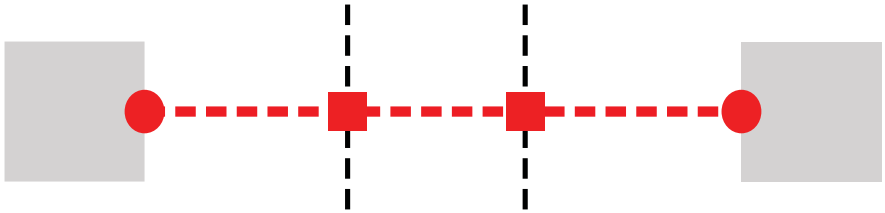
Connector routes



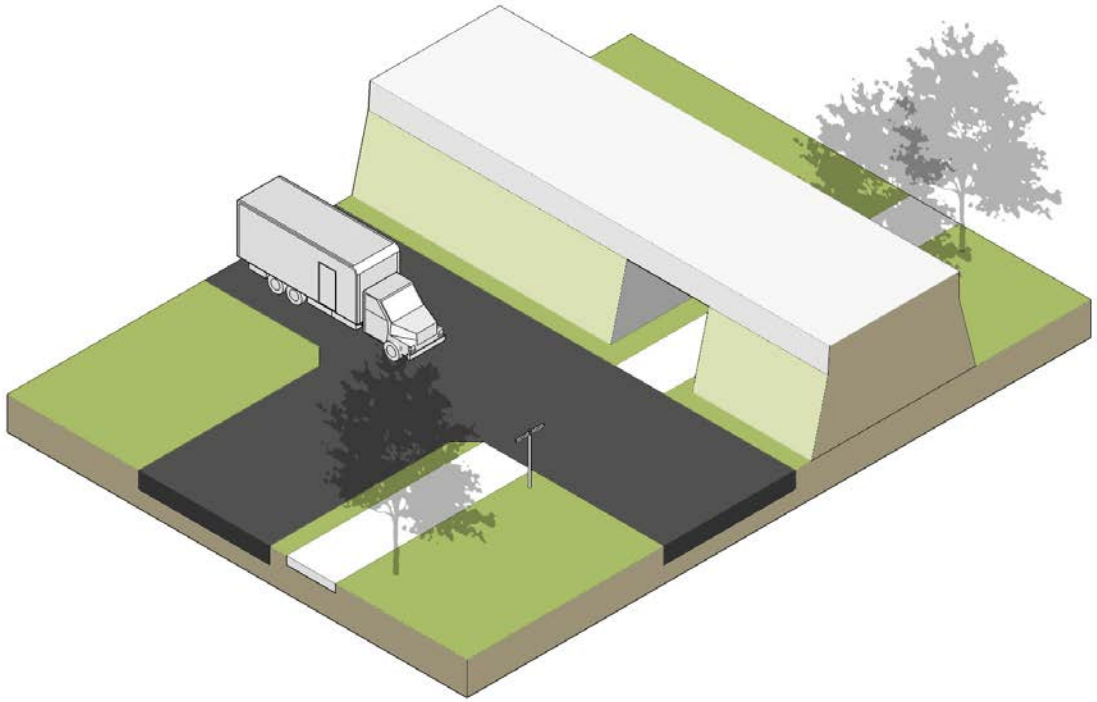




Design principle: repetition & variation



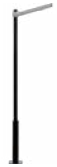
Standard segment for connector routes



Paved lanes

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

Facilities



Light post

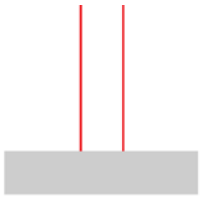
Trash bin

Signage

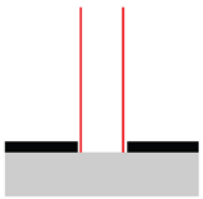
Sign posts

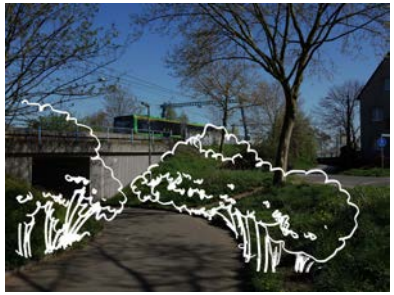
Patterns for strategic points

Access points

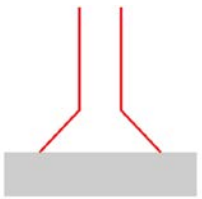


Narrowing

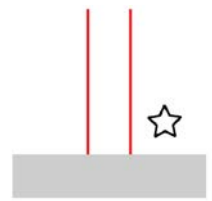




Opening



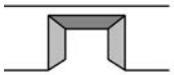
Marking



Patterns for strategic points

Access points

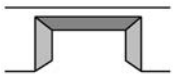
Tunnel



Detour

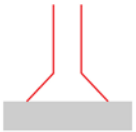
Narrowing

Widdening

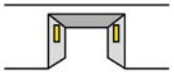


Softening

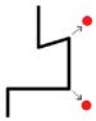
Opening



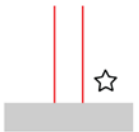
Lighting



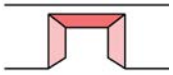
Foci



Marking

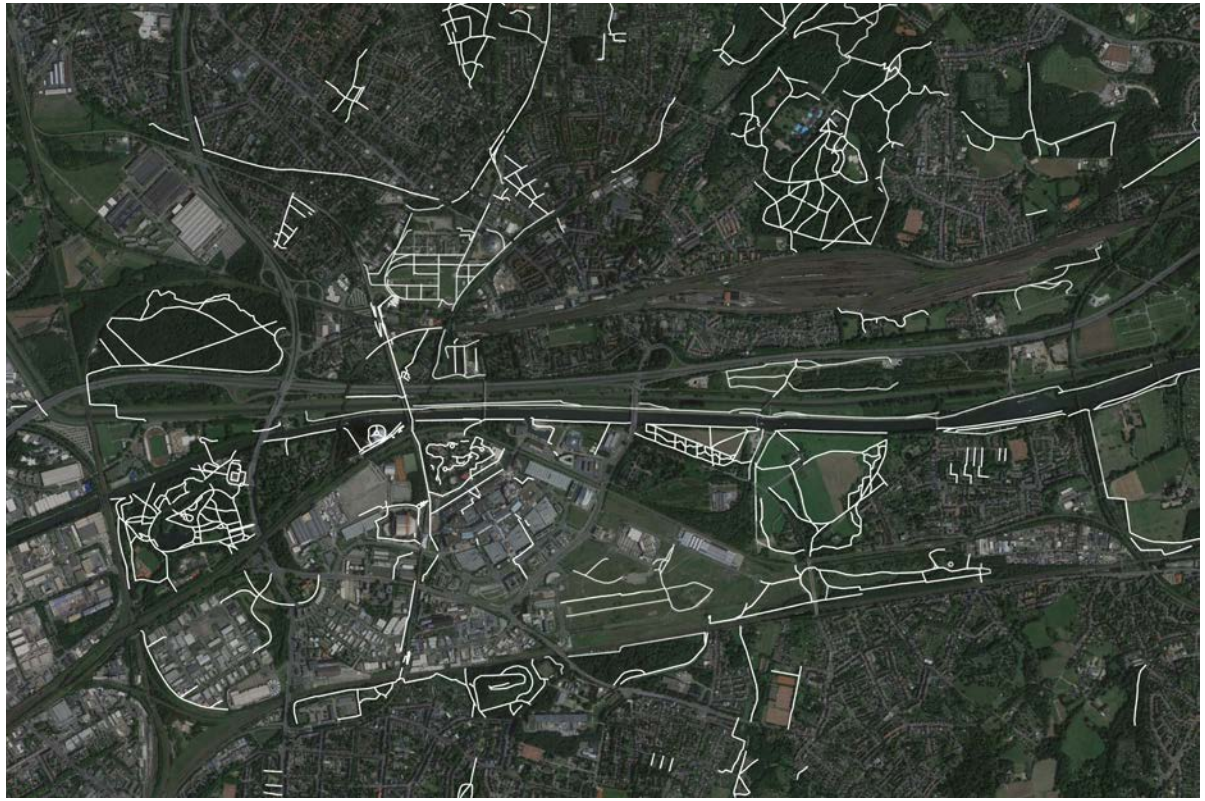


Art

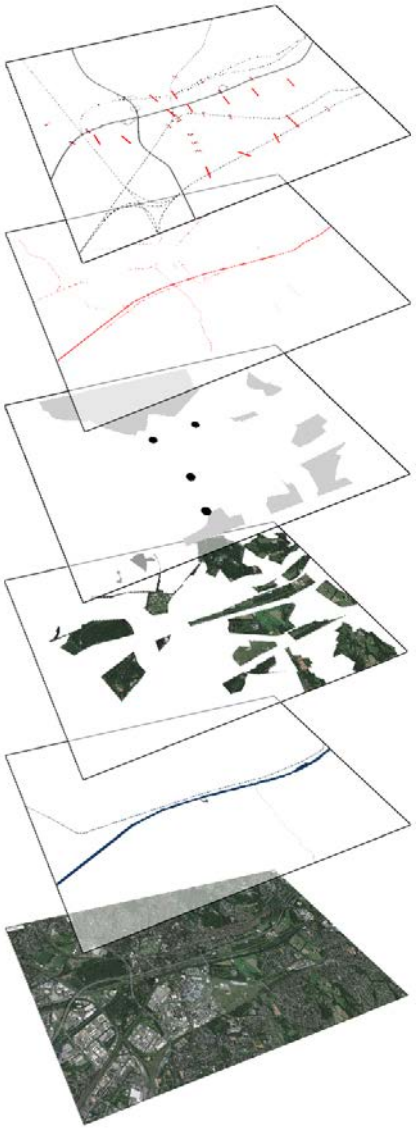


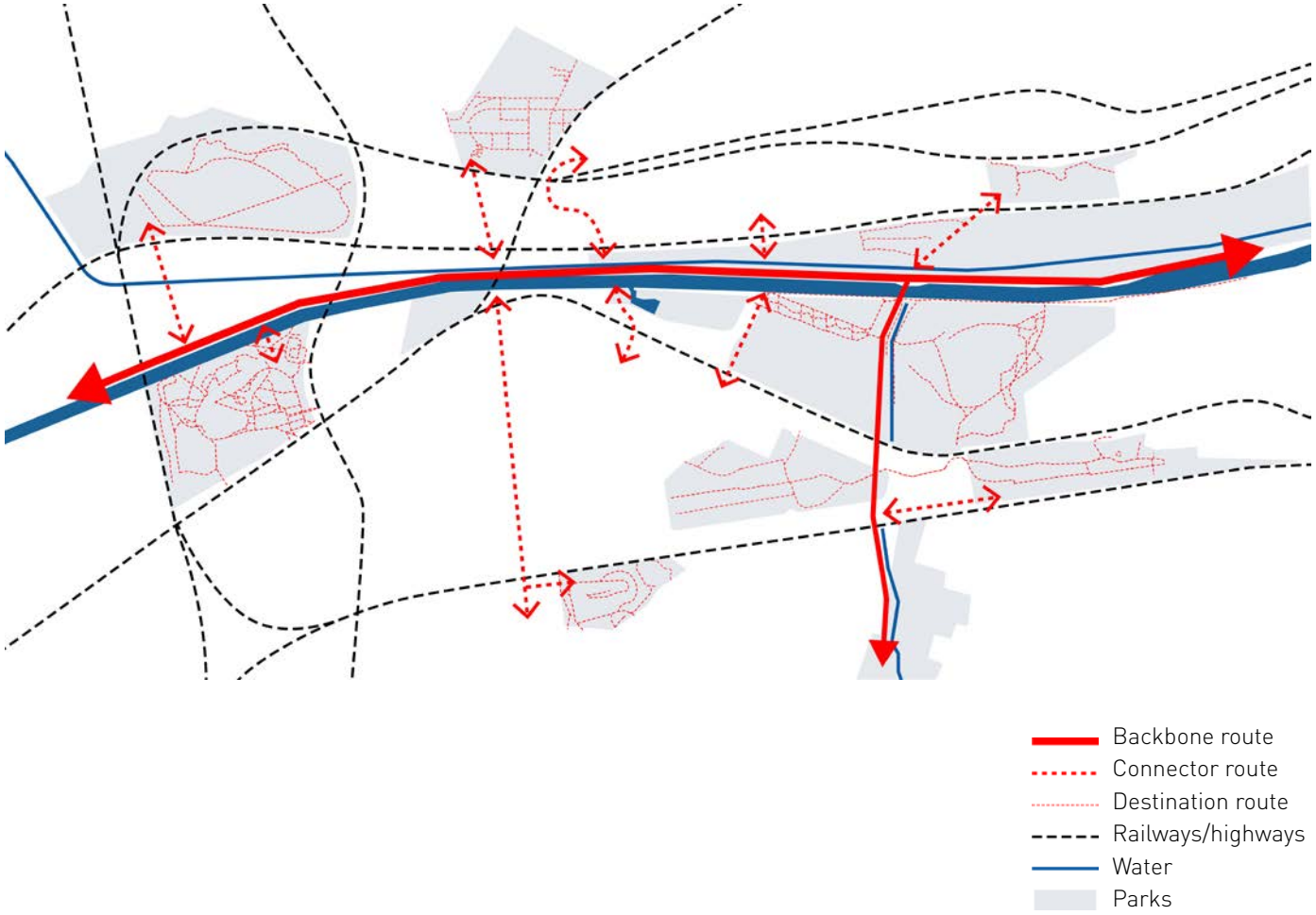
Positioning the paths

Experiment site: Osterfeld, Oberhausen

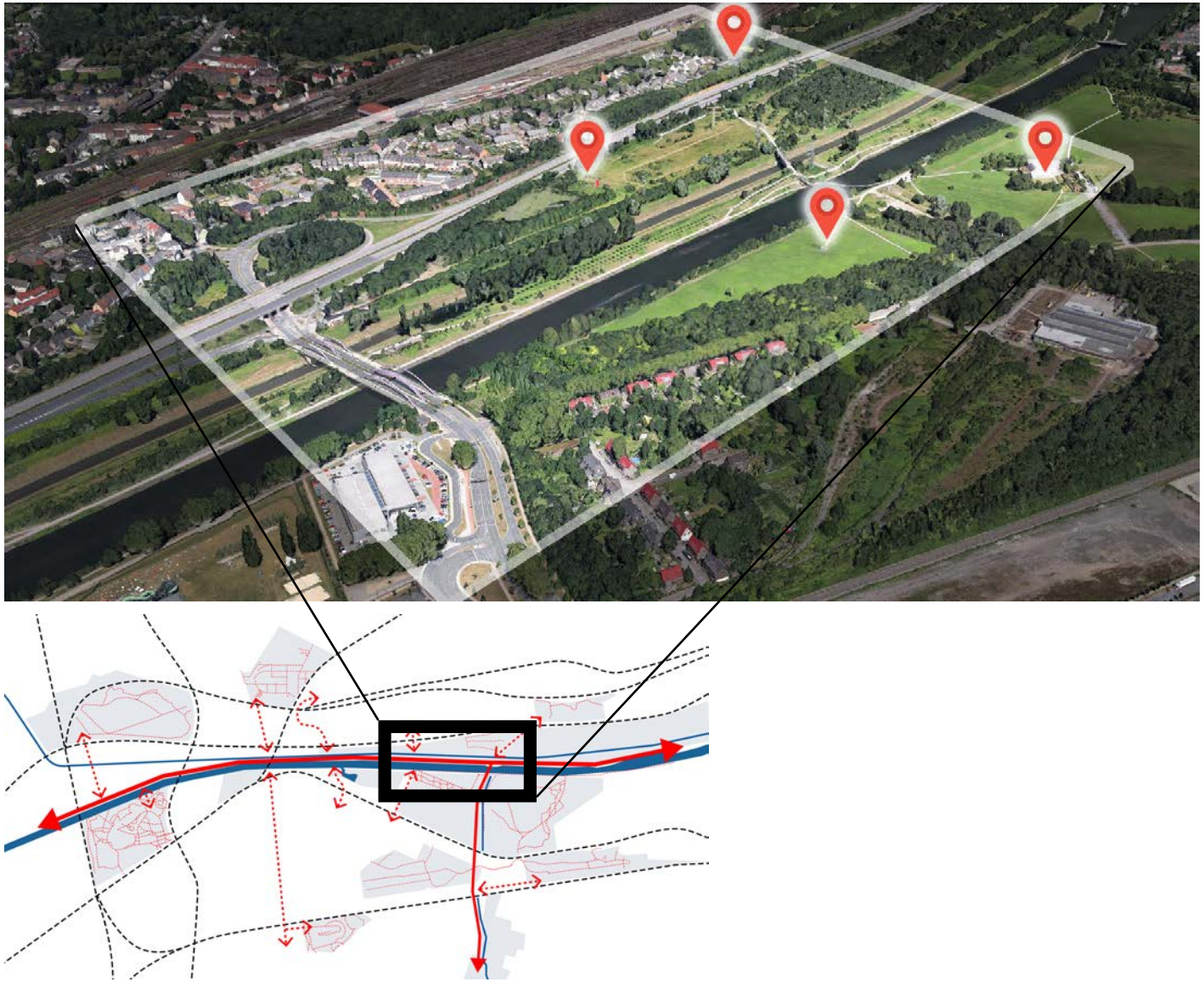


Positioning the paths

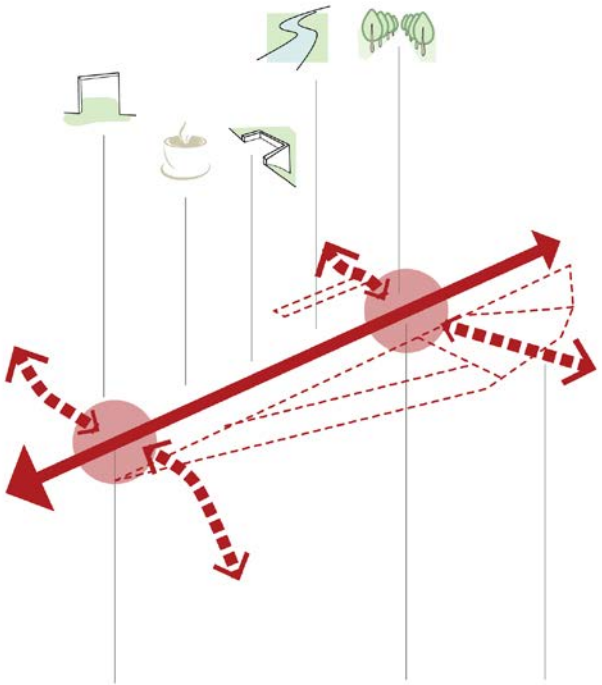




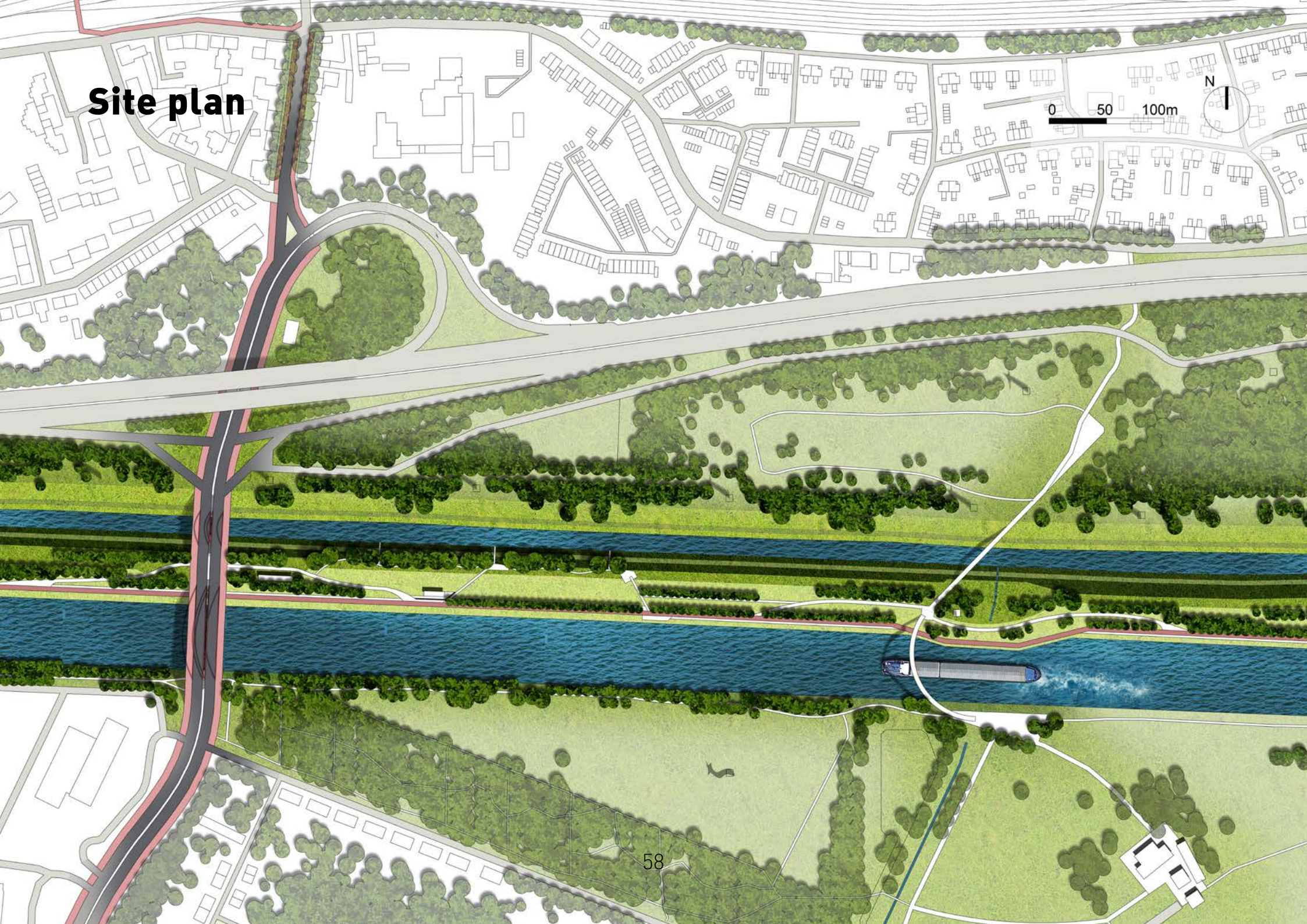
Detailing the paths



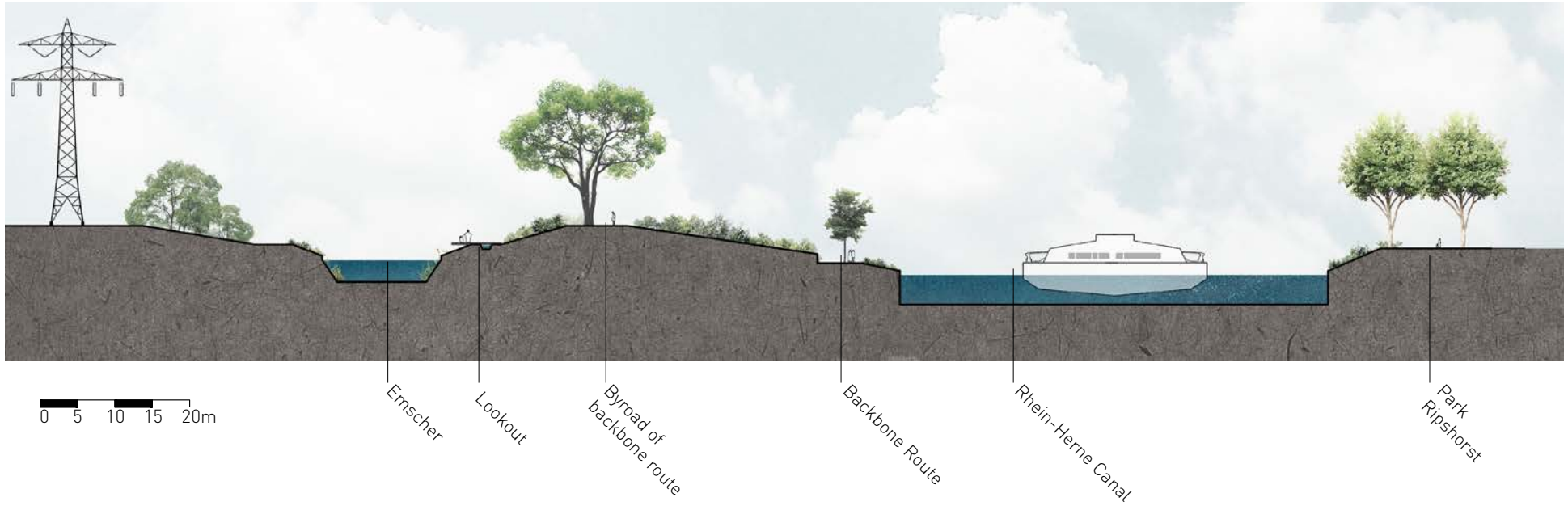
Scheme of design



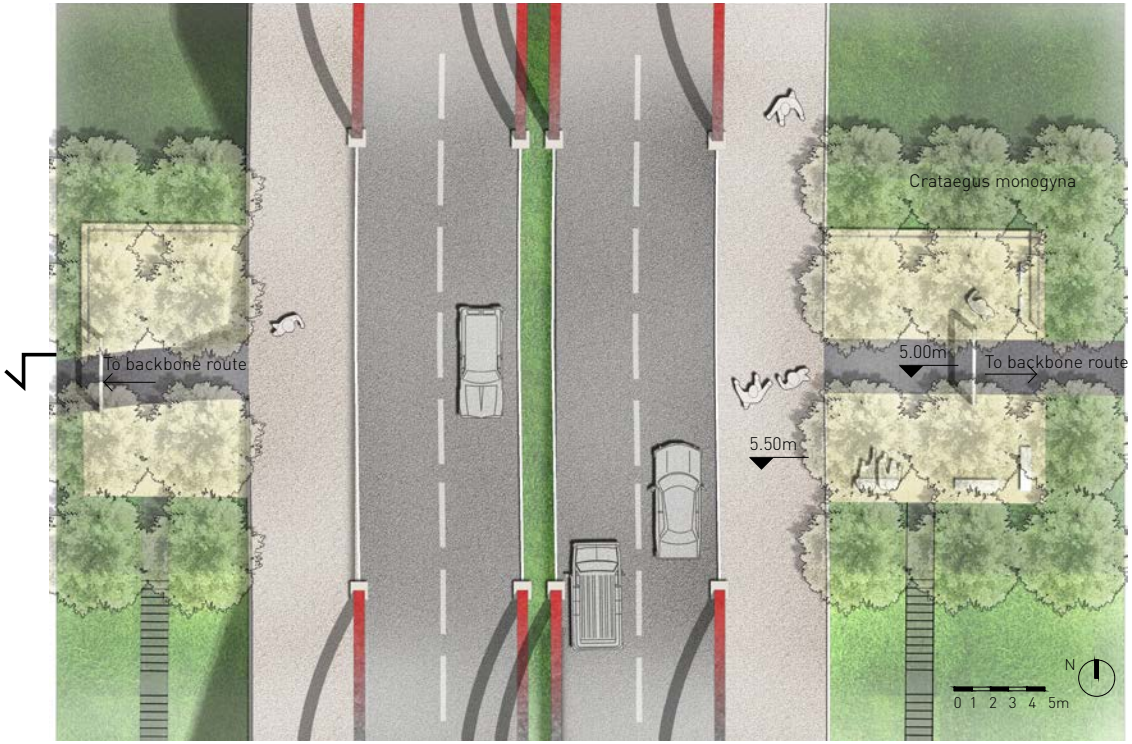
Site plan

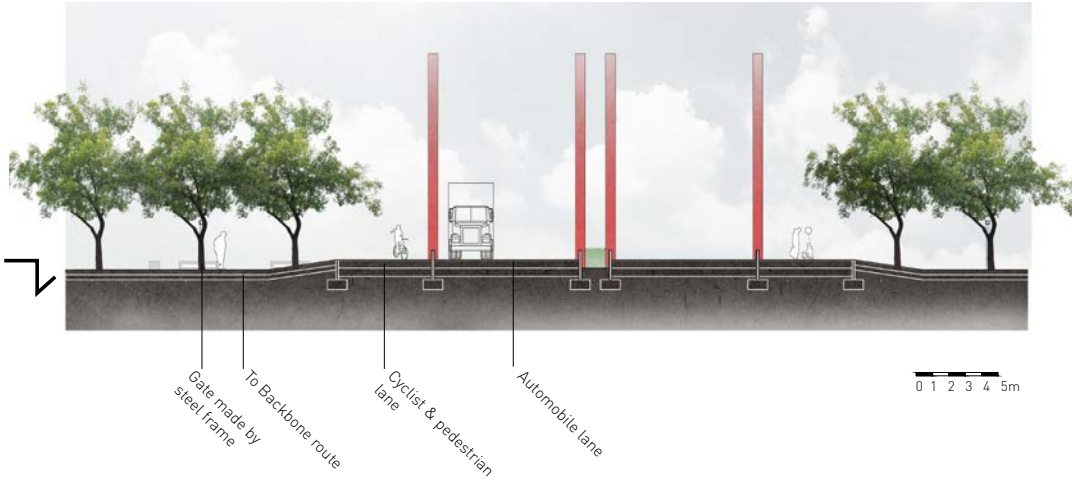


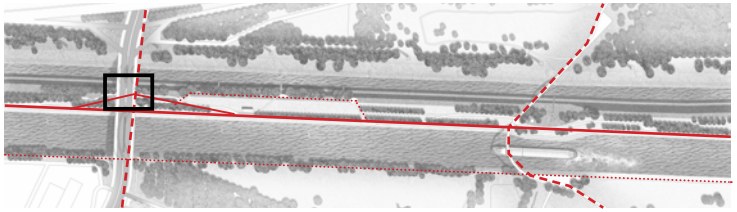
Section


0 5 10 15 20m
Emscher
Lookout
Byroad of backbone route
Backbone Route
Rhein-Herne Canal
Park Ripshorst

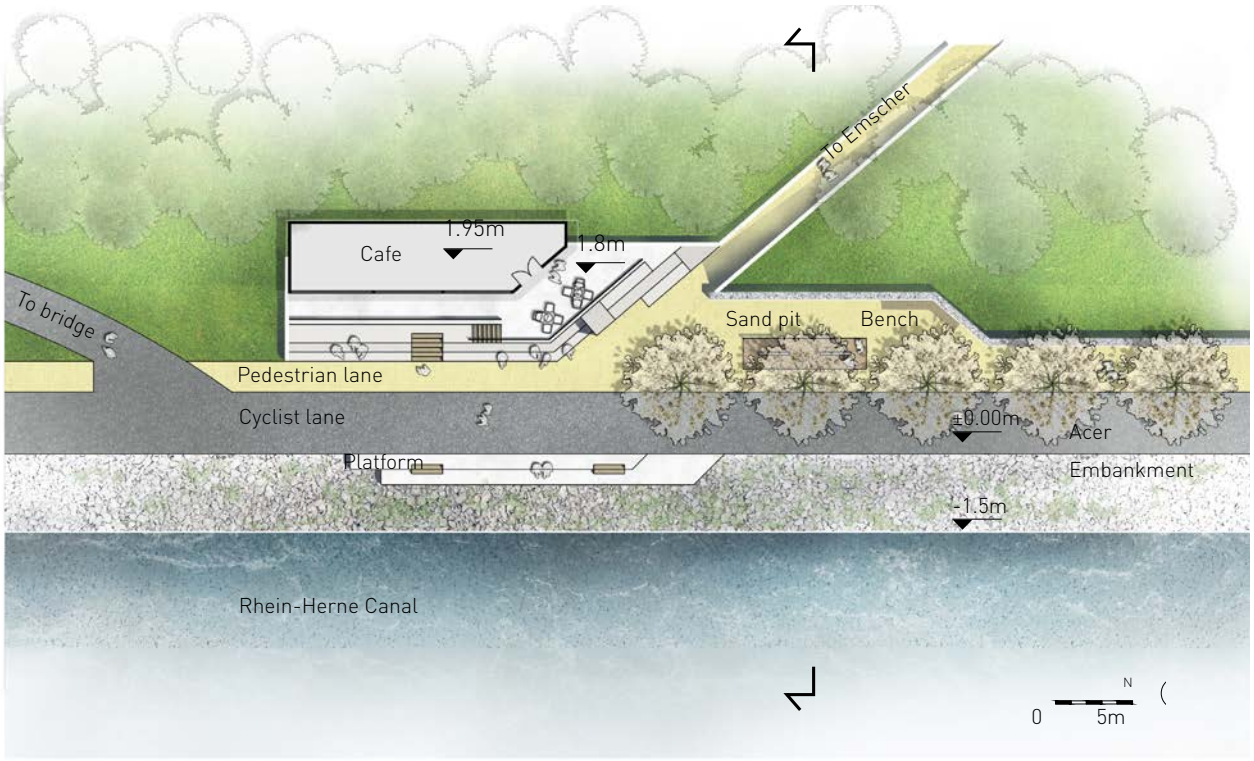
Detail 1: when ‘connector’ meets ‘backbone’

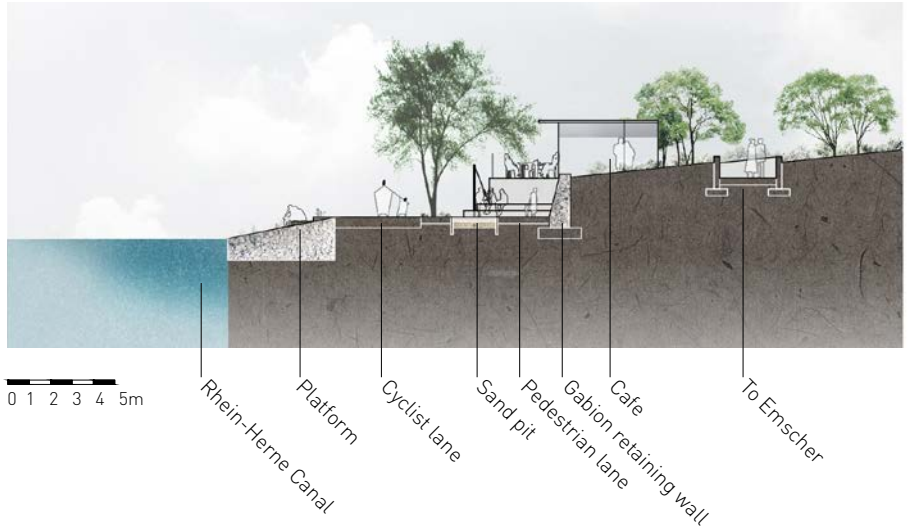


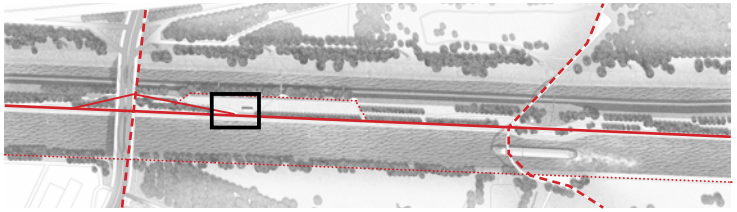




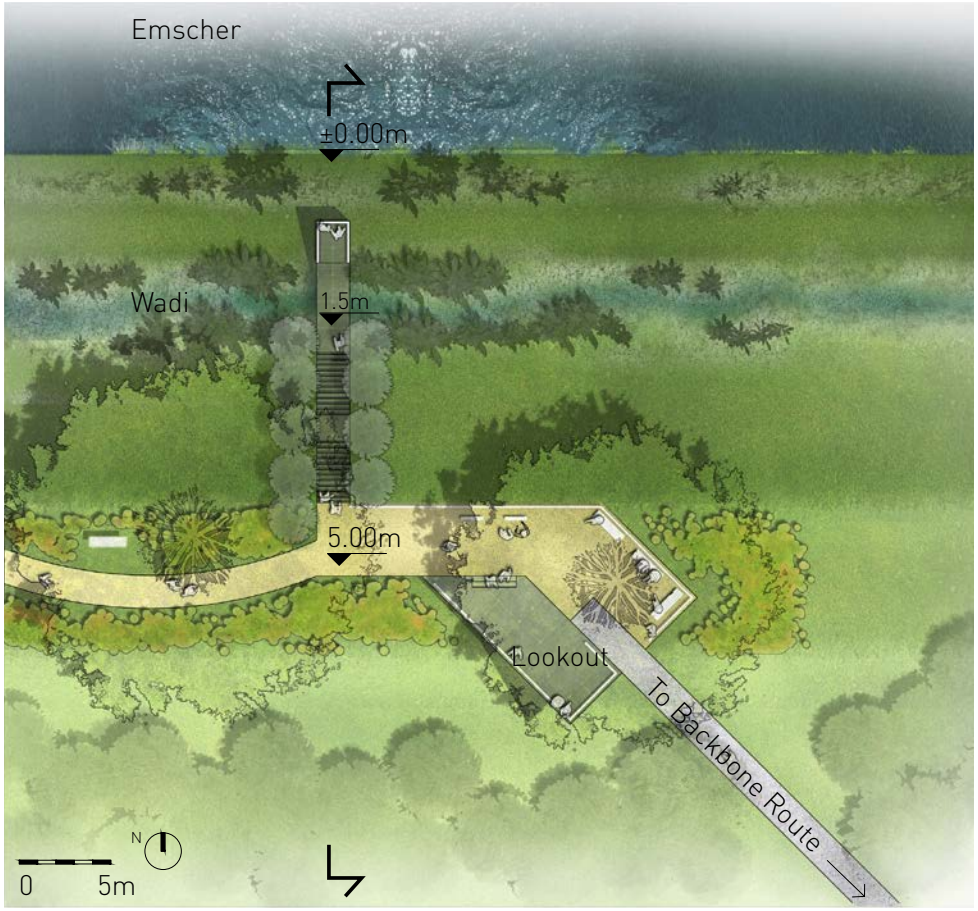
Detail 2: Highlight on ‘backbone’

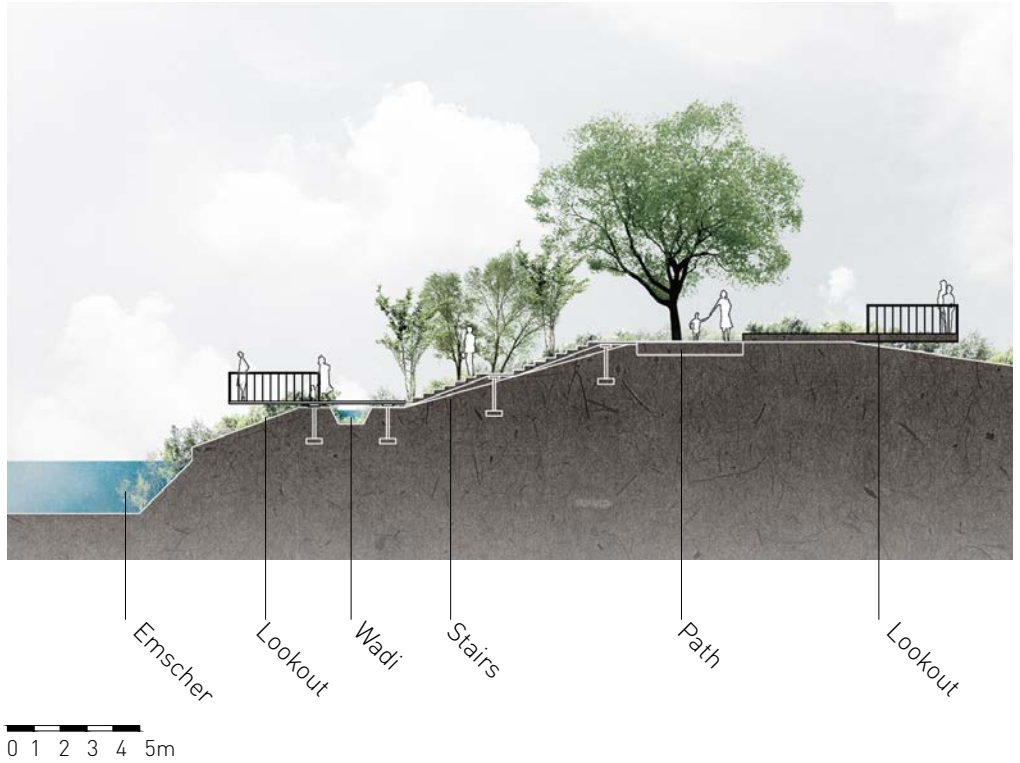


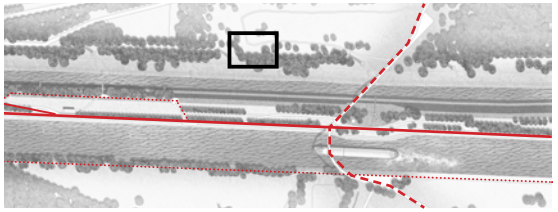




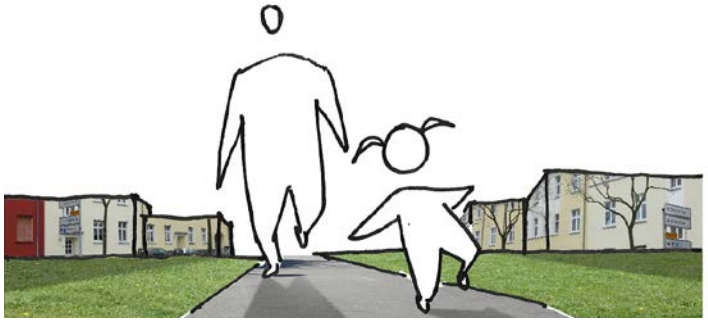
Detail 2: Varied backbone





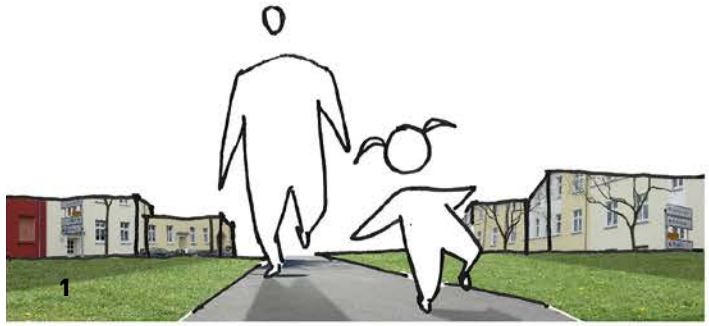


Paths in the eyes of different user groups



Local people

Tourists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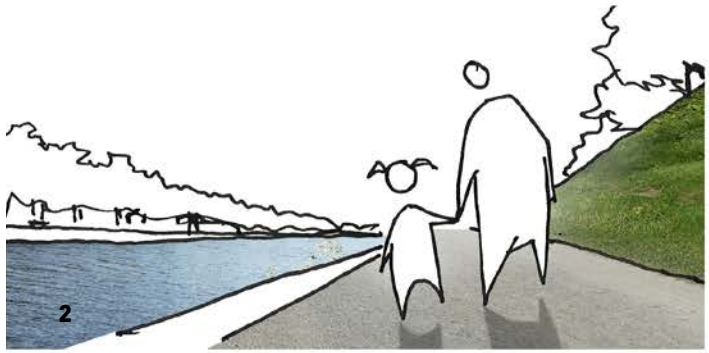
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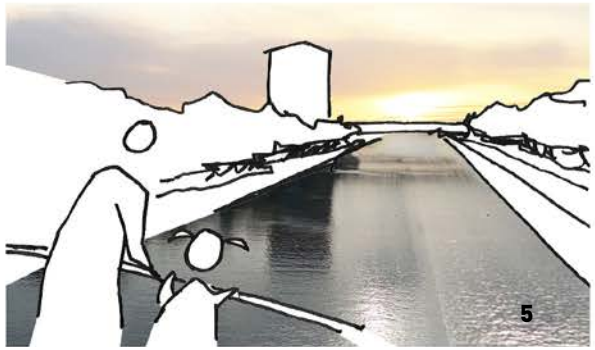
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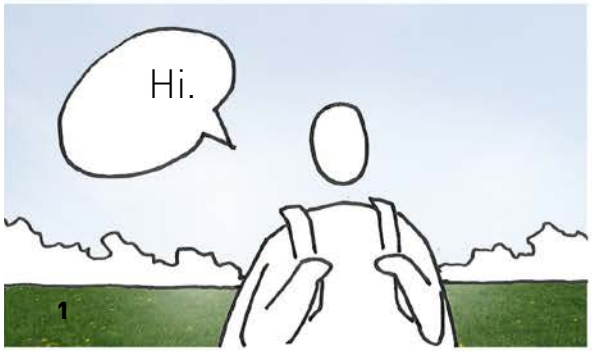
Hi.
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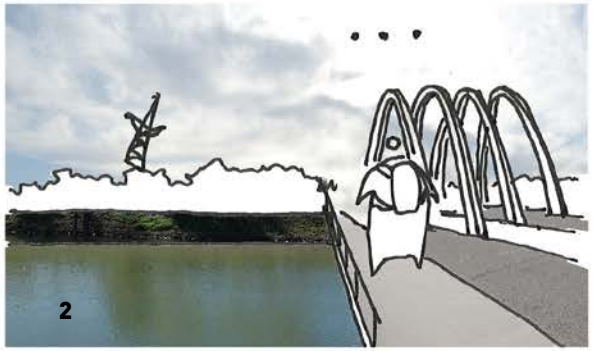
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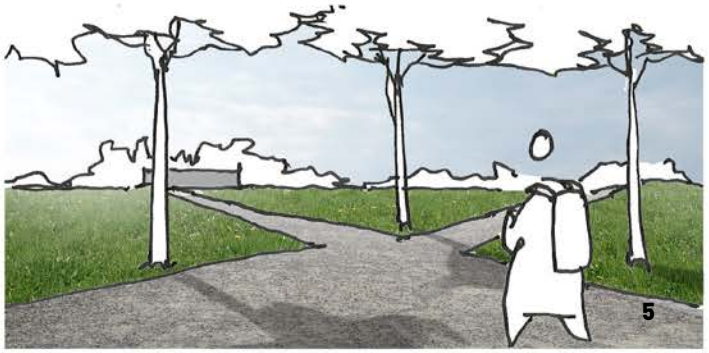
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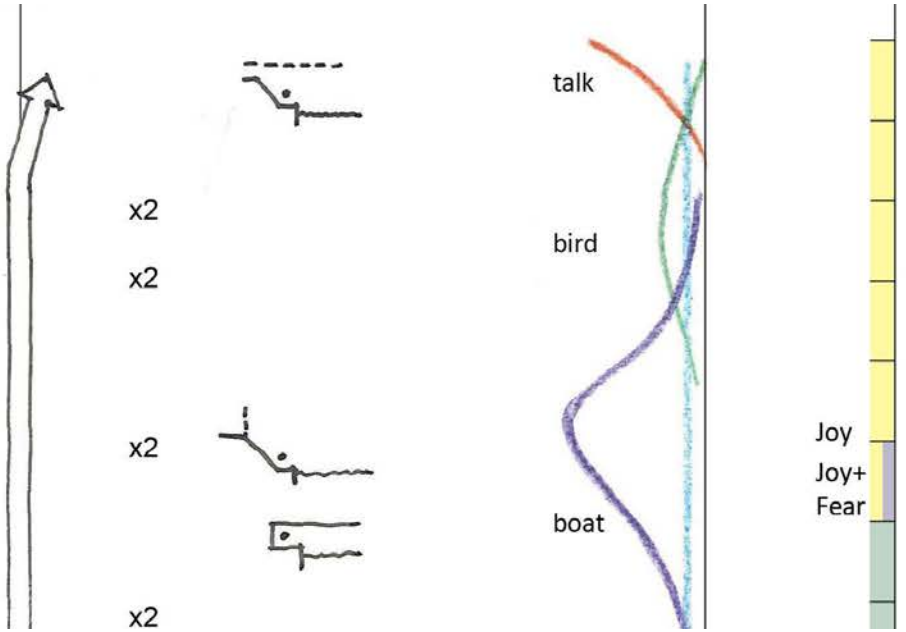
Nice
6

Conclusions

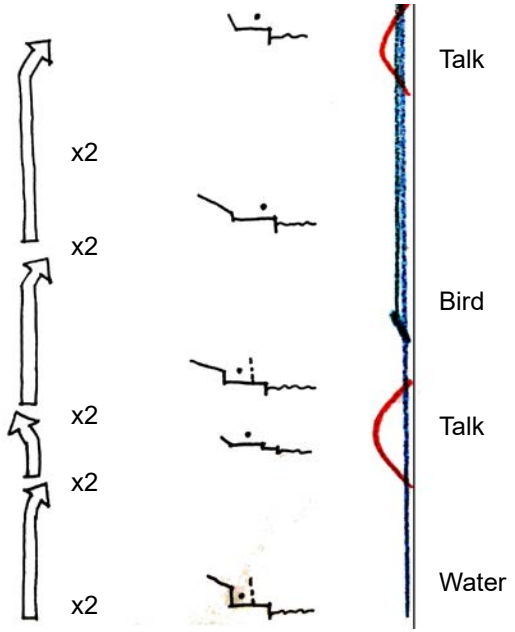
Looking back to the labyrinth

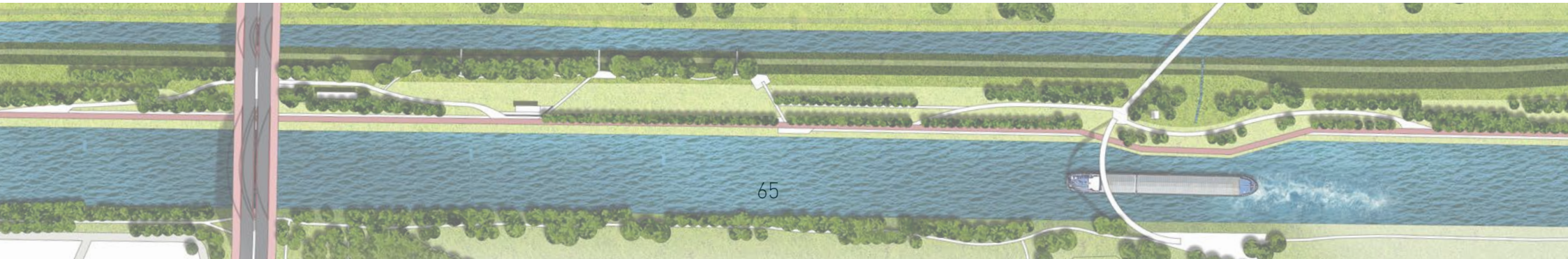
Research & design as a response to site-specific problems

Before

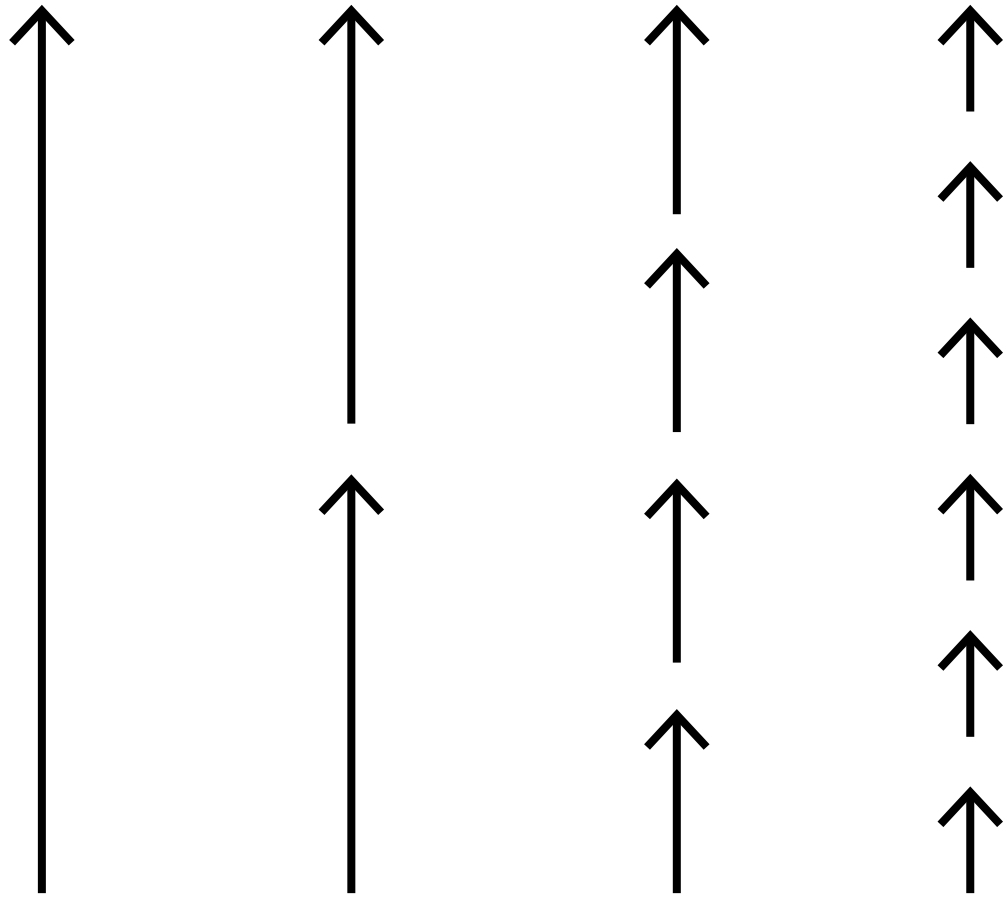


After





Limitations of the qualitative approach



How much is enough?

Thank you!