TU Delft

# RESTORATIVE RUINE

Master Thesis Landscape Architecture
Flowscapes Urban Forest Places

P5 - 19/01/2023
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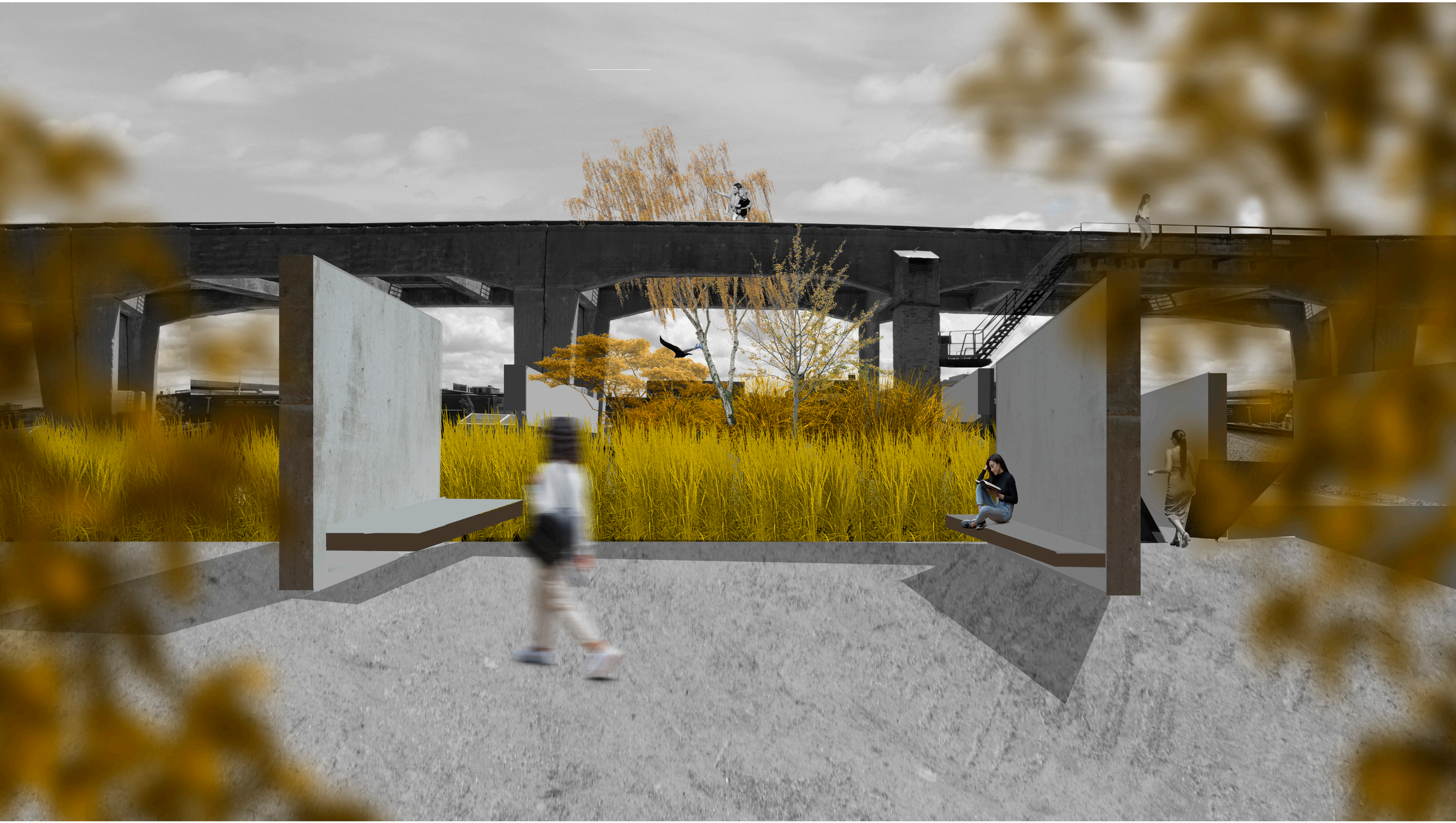
Second Mentor: Machiel van Dorst

FIGEE
bam



# INDEX

1. Location & Topic
2. Conclusion & Concept
3. Design

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3. Design

# **Design location** ‘Concrete forest’

# Spatial exceptionality

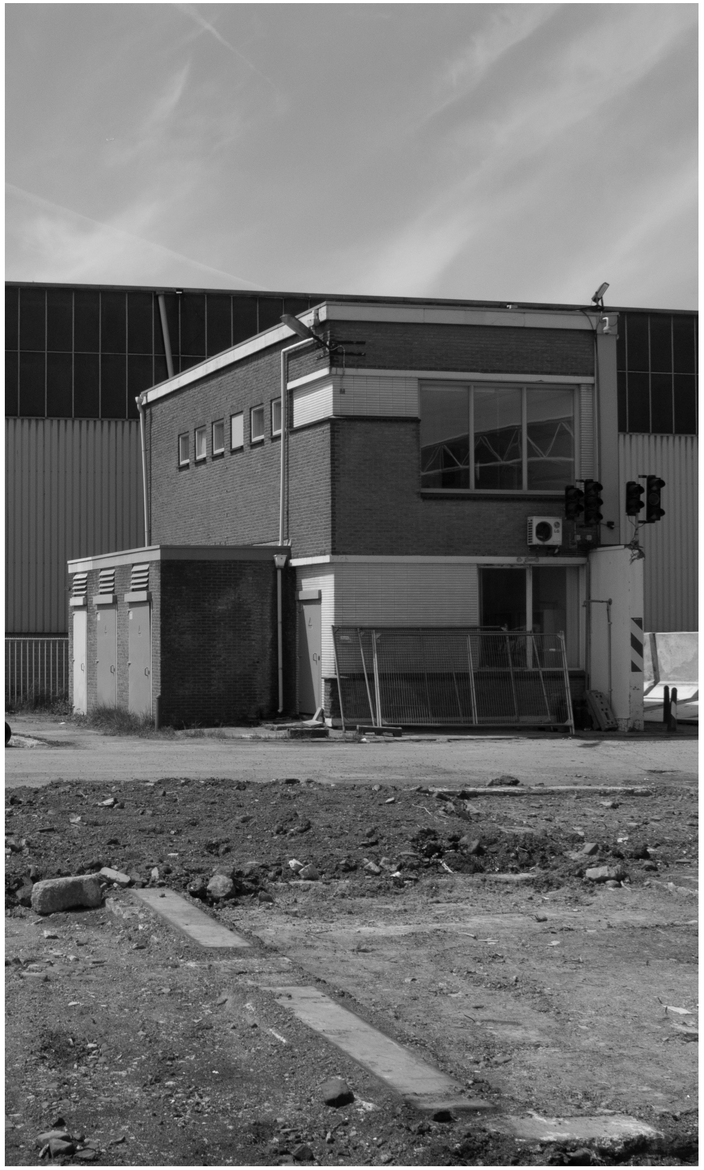
Spatial exceptionality

Depth of access/functionality

Spatial exceptionality

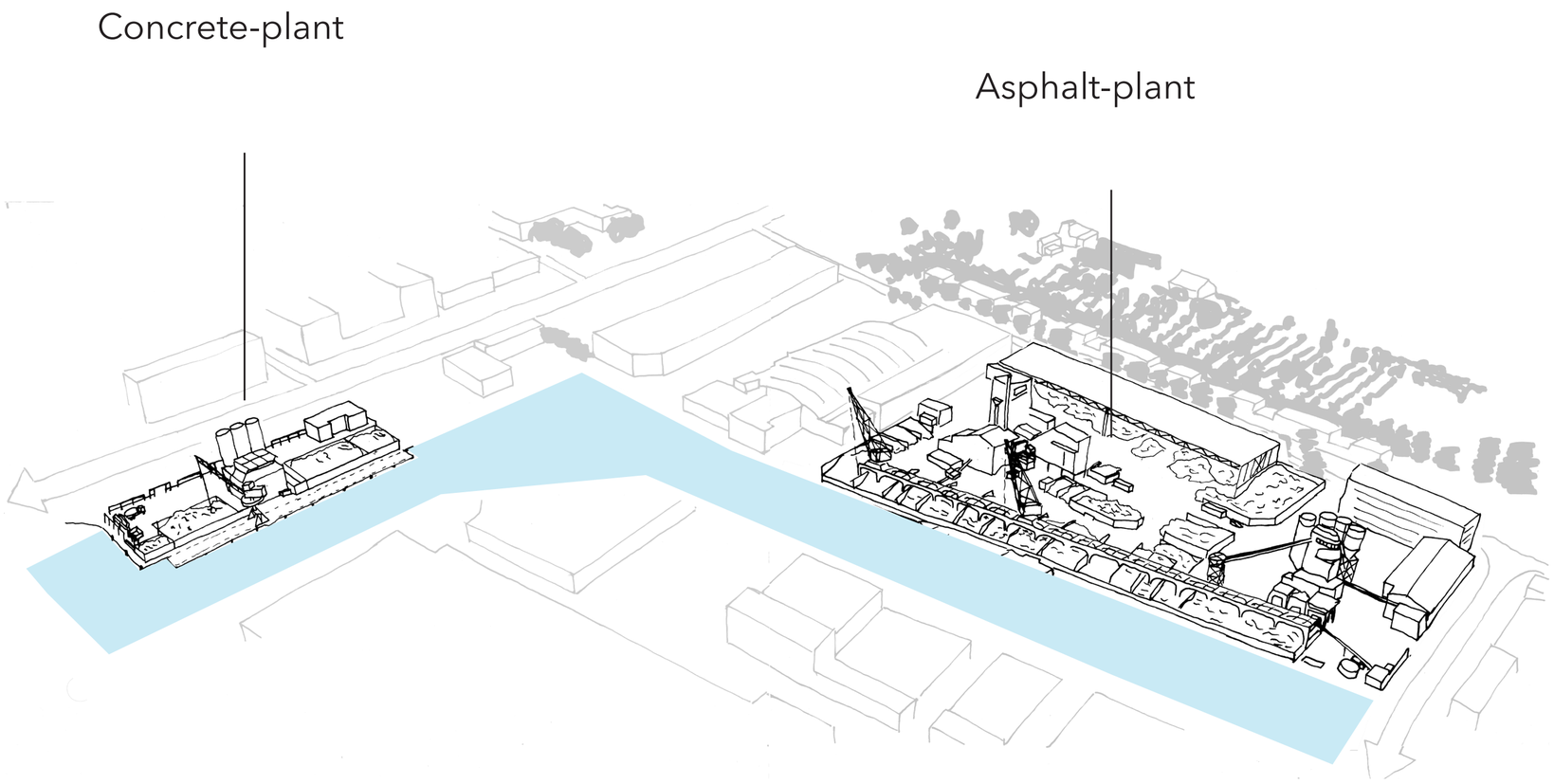
Depth of access/functionality

Imperfection

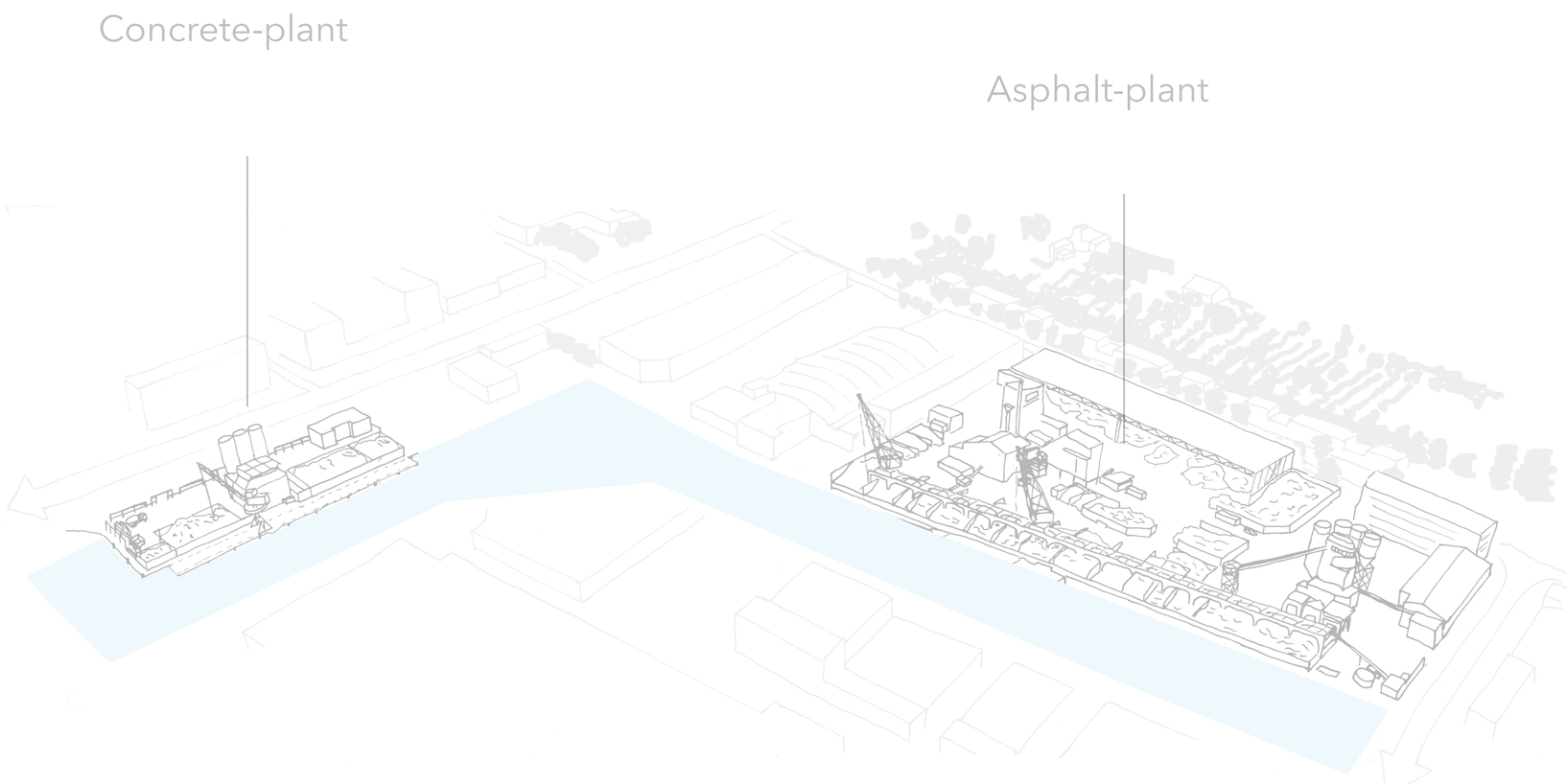


**Brownfields** Shut down industrial facilities, such as factories or harbours

# Design location



# Design location



*“How could brownfields be valued to their potential?”*

# Brownfield-urban forest

GRADUATION LAB TOPIC:

# Urban forestry

# Wide scope

## SCALES OF THE URBAN FOREST

individual trees; streets, parks & woodlands;
urban ensembles, urban patterns; green systems

| DIMENSIONS OF THE URBAN FOREST | element | feature | area | territory |
|---|---|---|---|---|
| environmental | [ microclimate regulation, carbon sequestration, water regulation, air pollution reduction ] | | | |
| ecological | [ individual, community, ecosystem, bio-region ] | | | |
| socio-cultural | [ identity, health & recreation, aethetics, place-making ] | | | |
| economic | [ employment, wood production, food, leisure ] | | | |

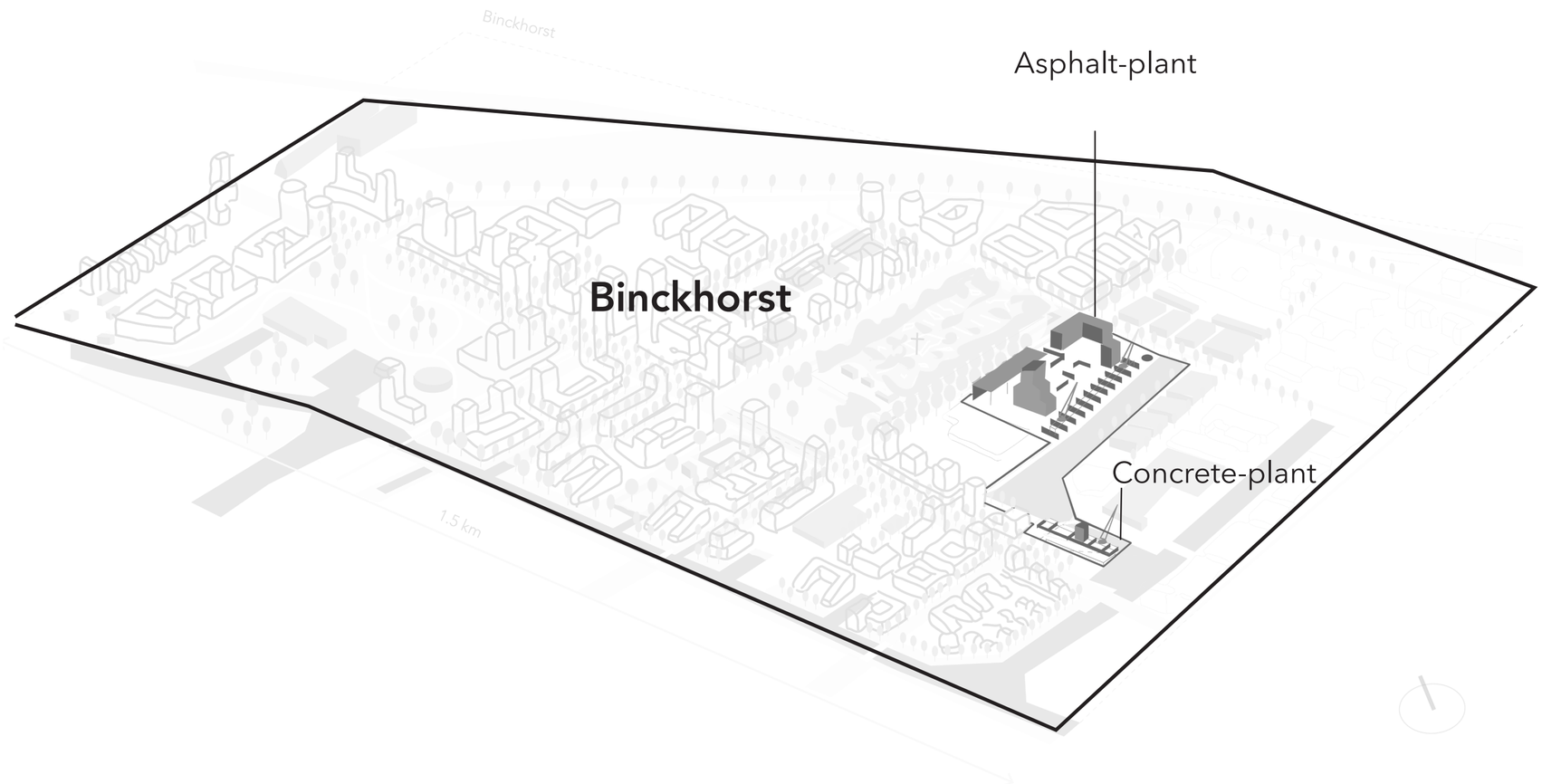
Dimensions thesis:

# Restorative qualities for human nature

# Binckhorst, The Hague

Area in transition

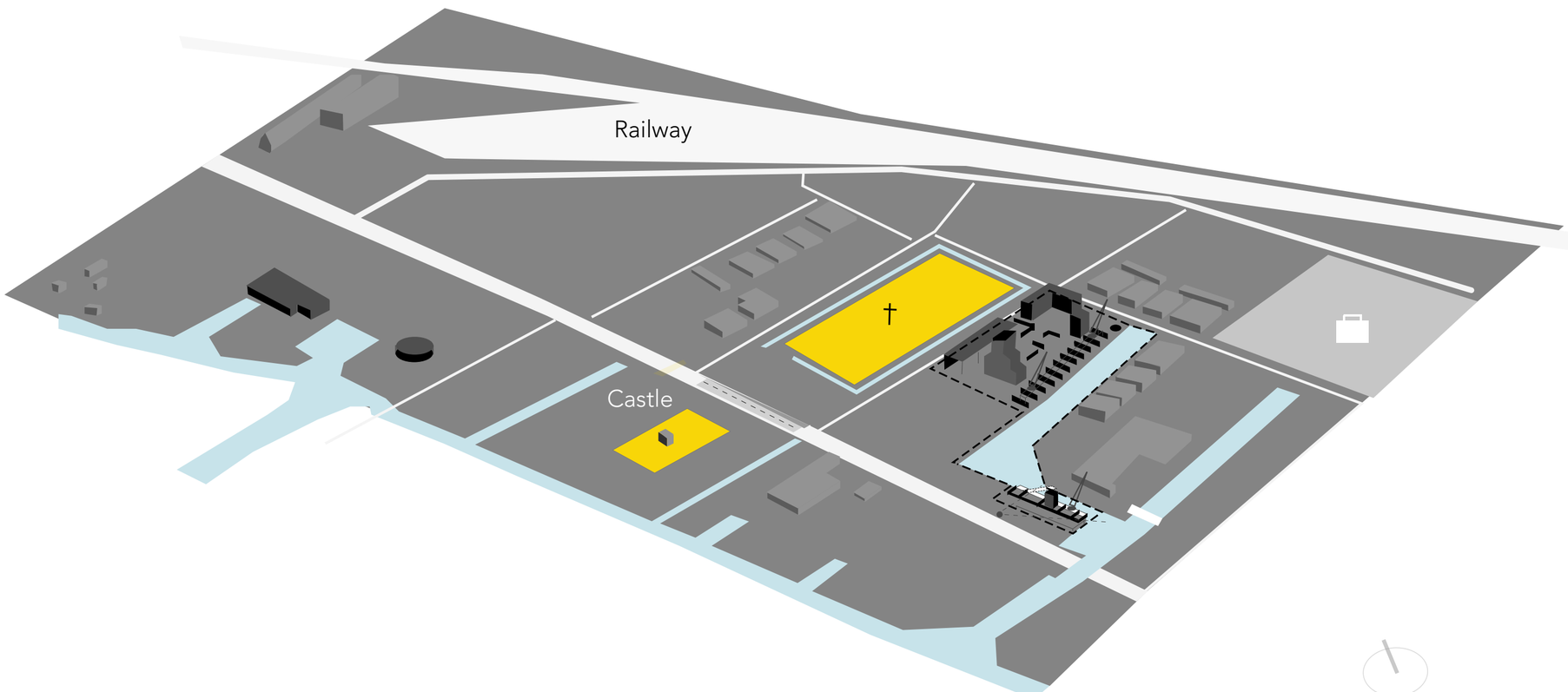
# Context of design location



Binckhorst (1920-1930)

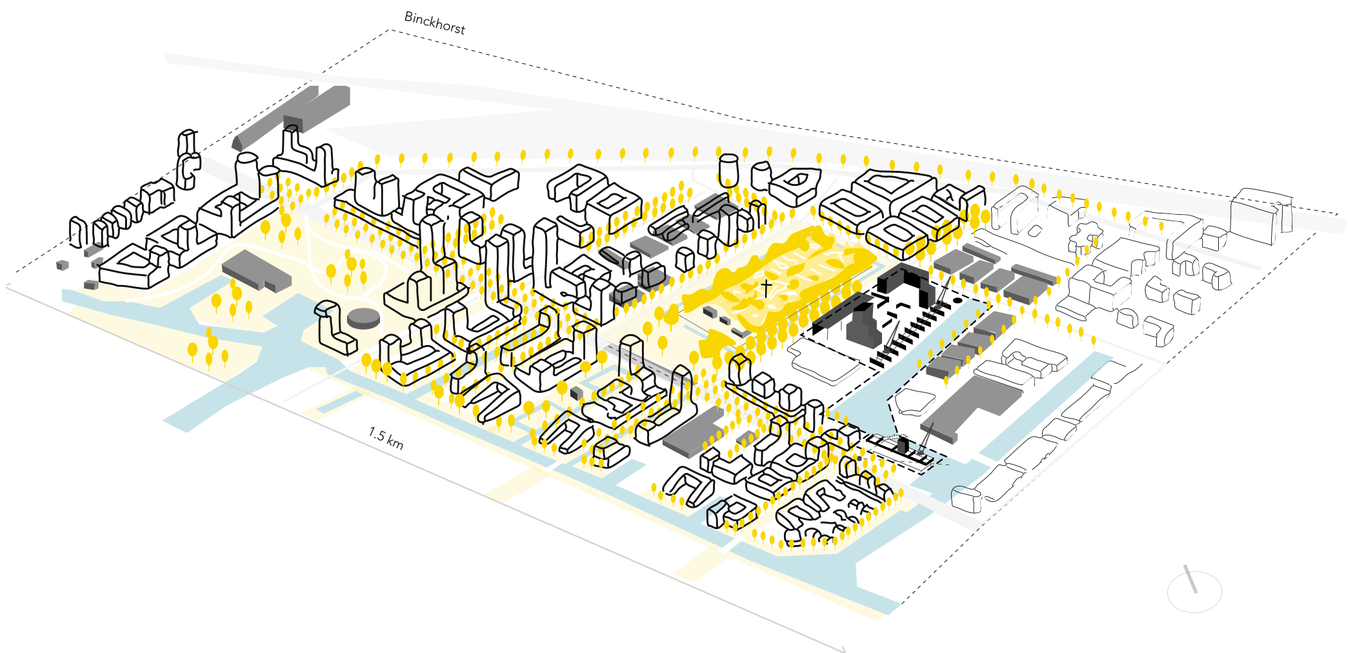
# Century of forest suppression

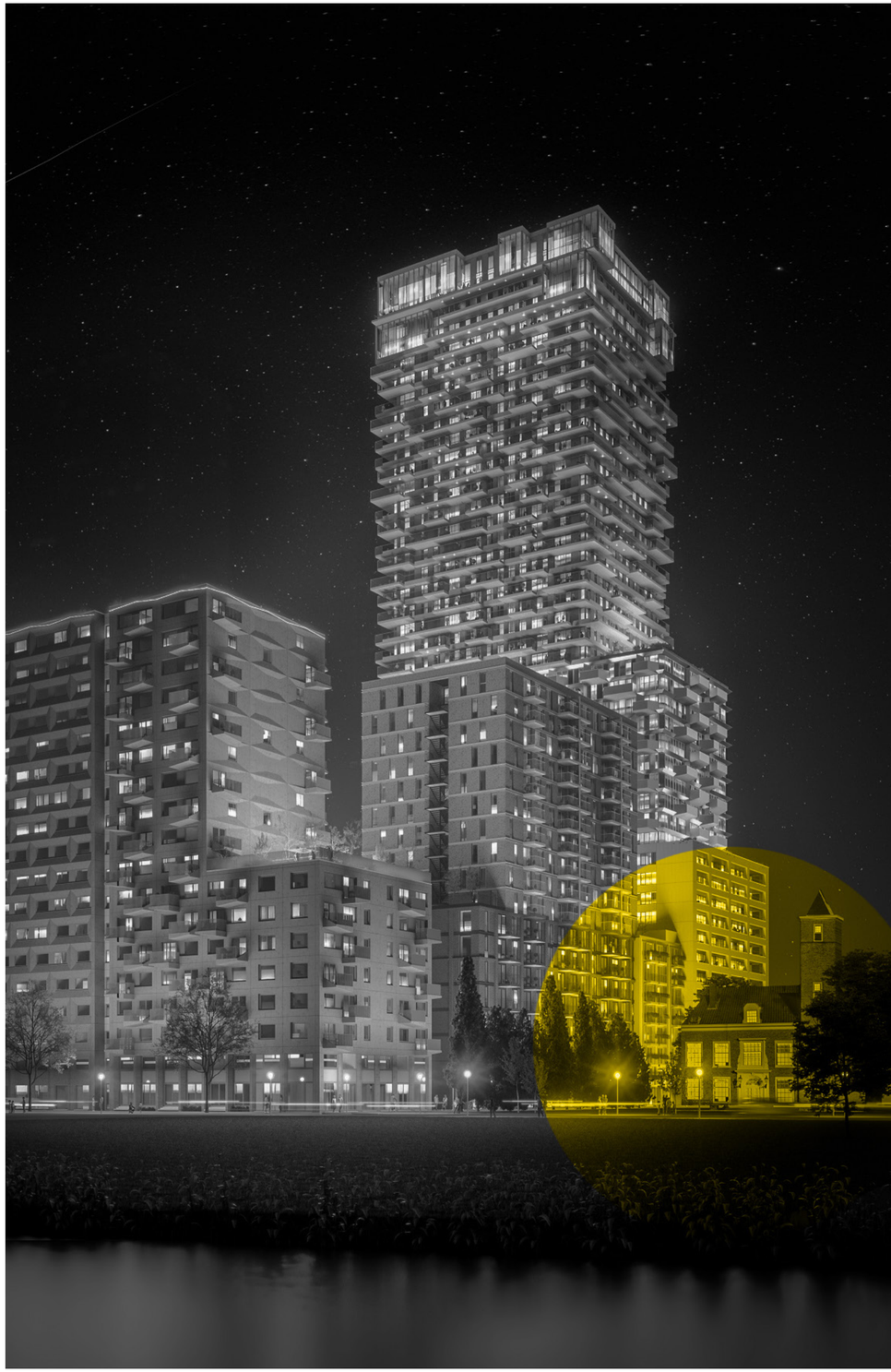
Binckhorst in 2021.



# Residential future (2025-2030)

Plans of PosadMaxwan (n.d.)



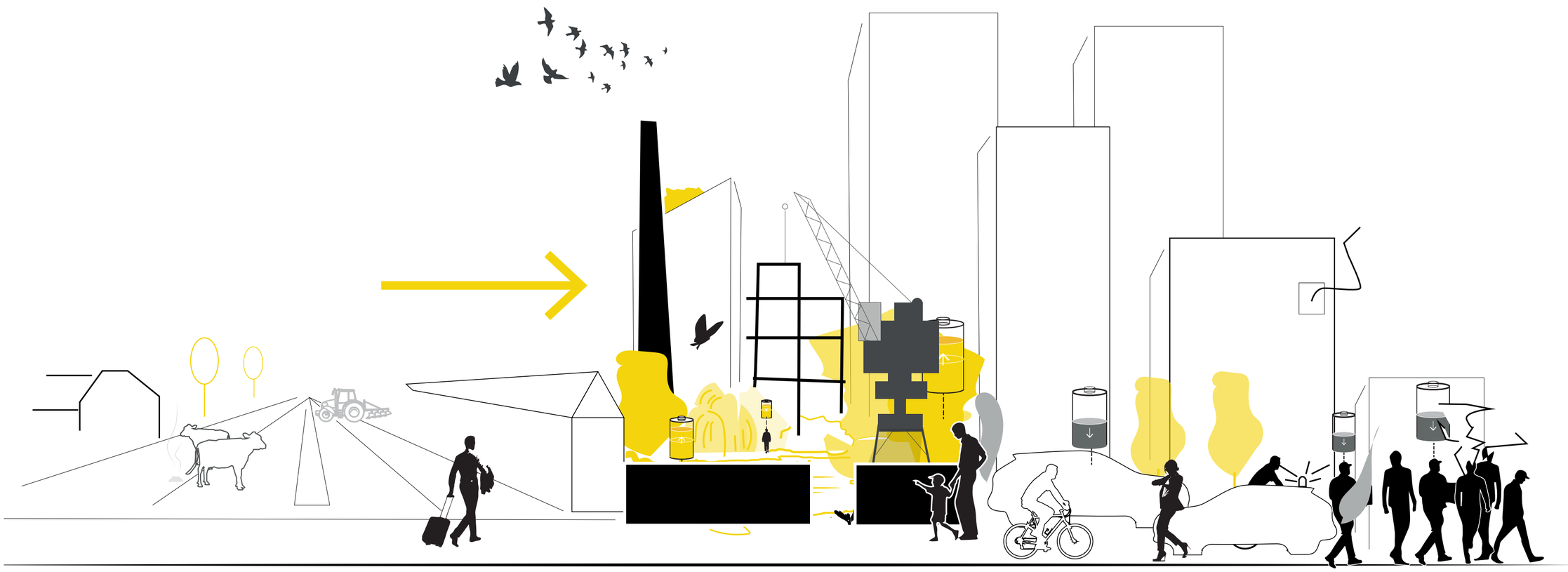
# 1. Moving industries: ecological restoration

# 2. Urban densification: need for cognitive restoration of humans

distractions:
- crowding
- noise disturbance
- danger (e.g. traffic)

duty:
- social obligations
- work

# Brownfield-urban forest > restorative qualities?



# Research Question:

How can the landscape architectural components of the **brownfield-urban forest** bring forward **restorative qualities** for **human nature?**

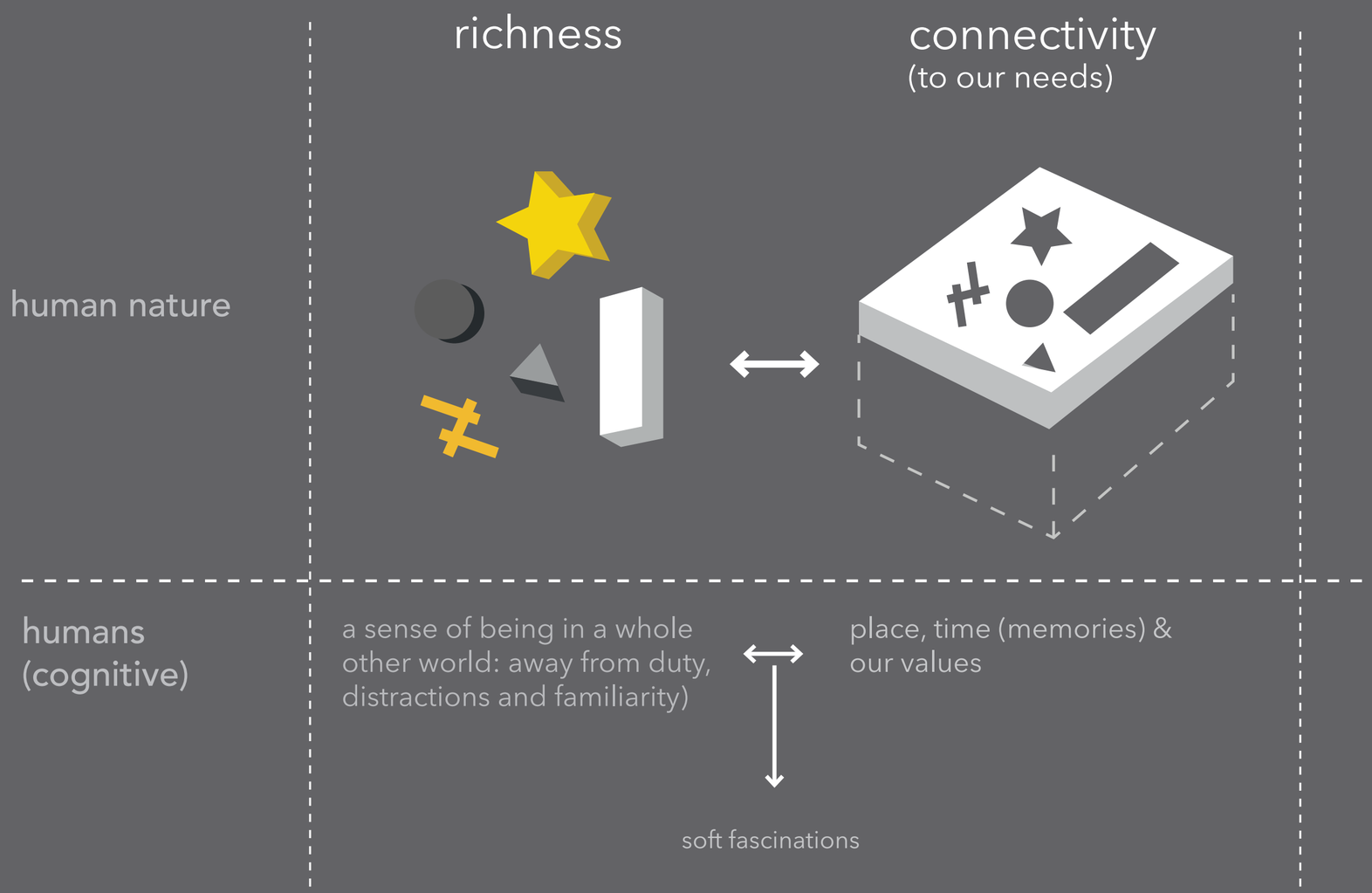
1. Location & Topic

**2. Conclusion & Concept**

3. Design

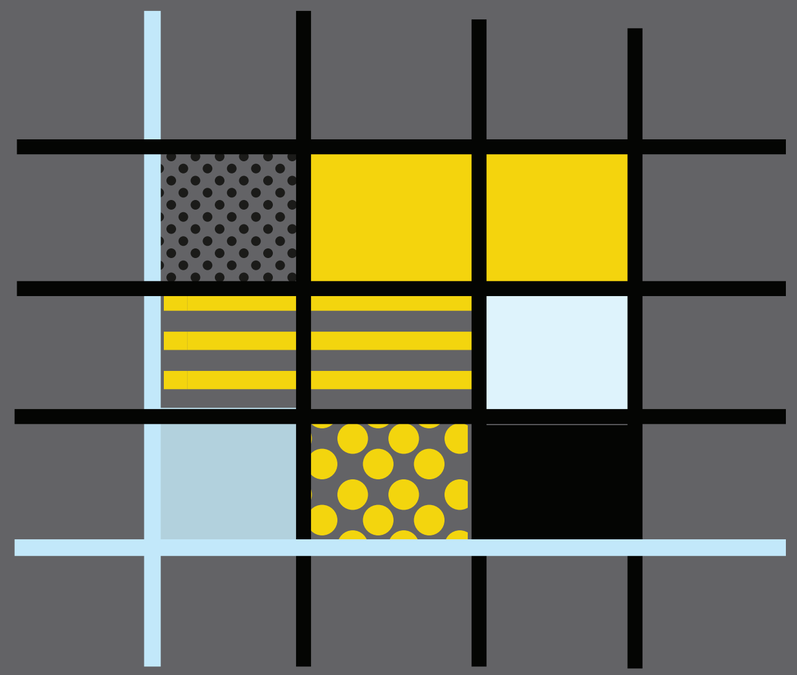
# Conclusion

# **Conclusion** human nature restoration

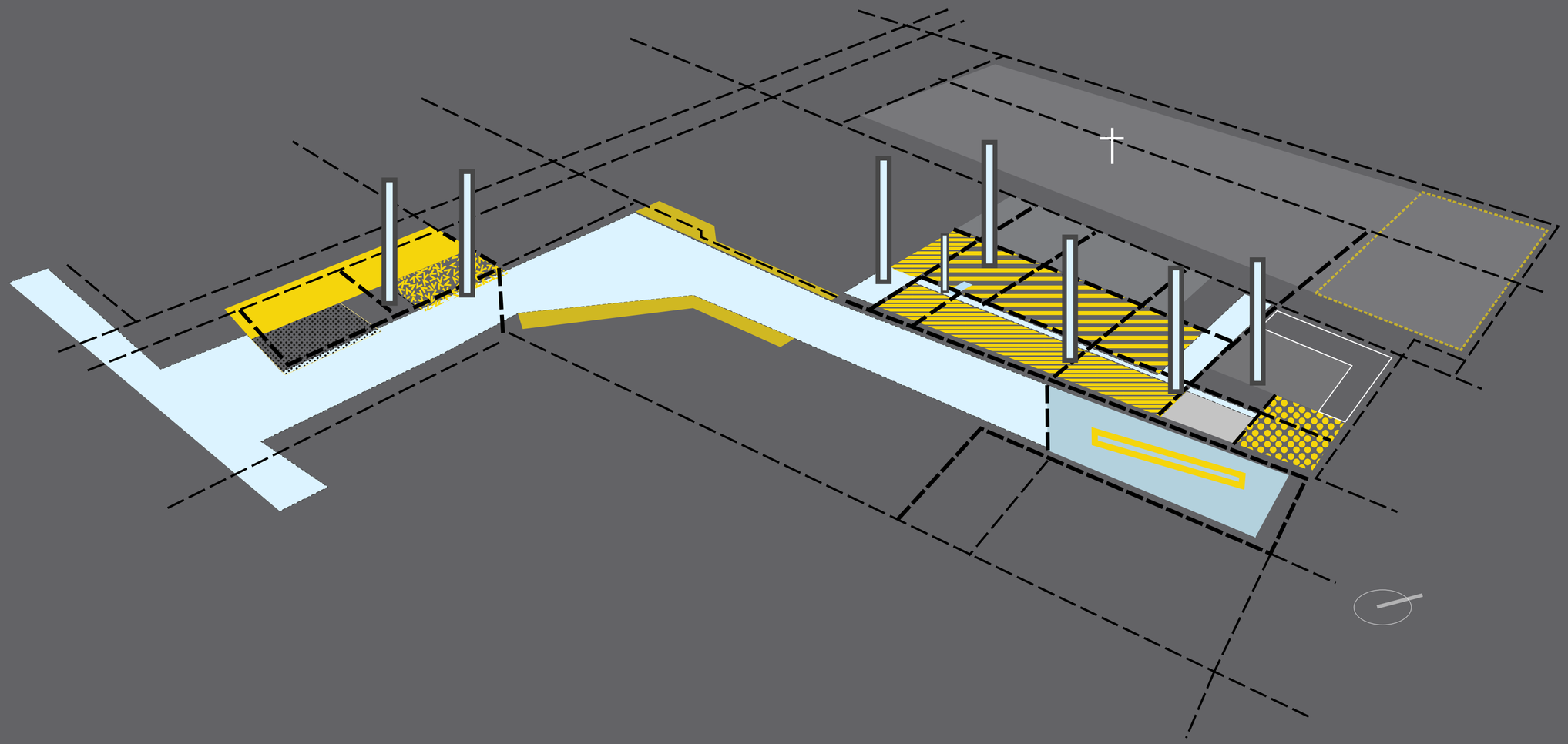


**Concept** Patchwork Oasis

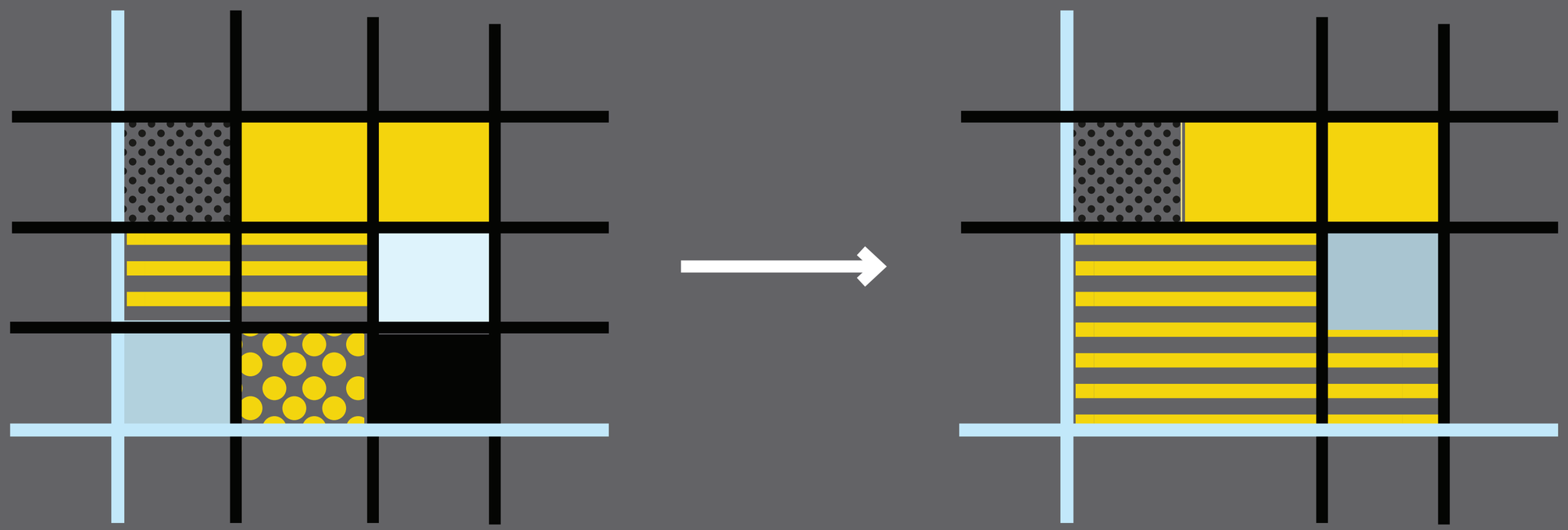
# **Concept diagram** Patchwork Oasis



# **Spatial concept** Patchwork Oasis



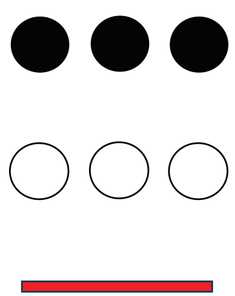
# Dynamic patchwork



1. Location & Topic
2. Conclusion & Concept
**3. Design**

# **Design** models & serial vision

# Serial vision: 3 walks



| | |
|---|---|
| Early days | (-5 years) |
| Maturity | (30 years) |
| Collapse as quality | (50+ years) |

# 1

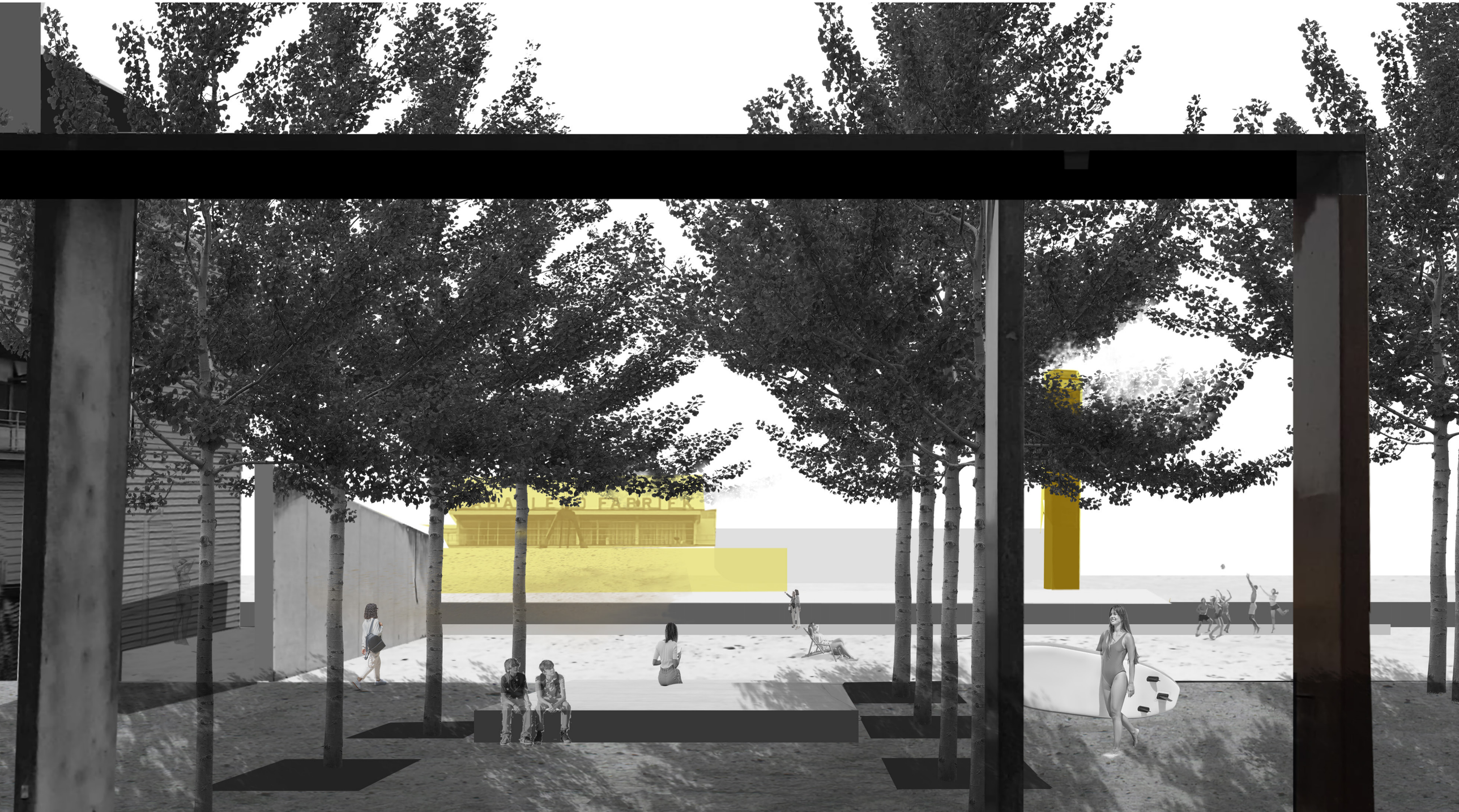
## Early Days

0-5 years

# 1 Edge of residential area

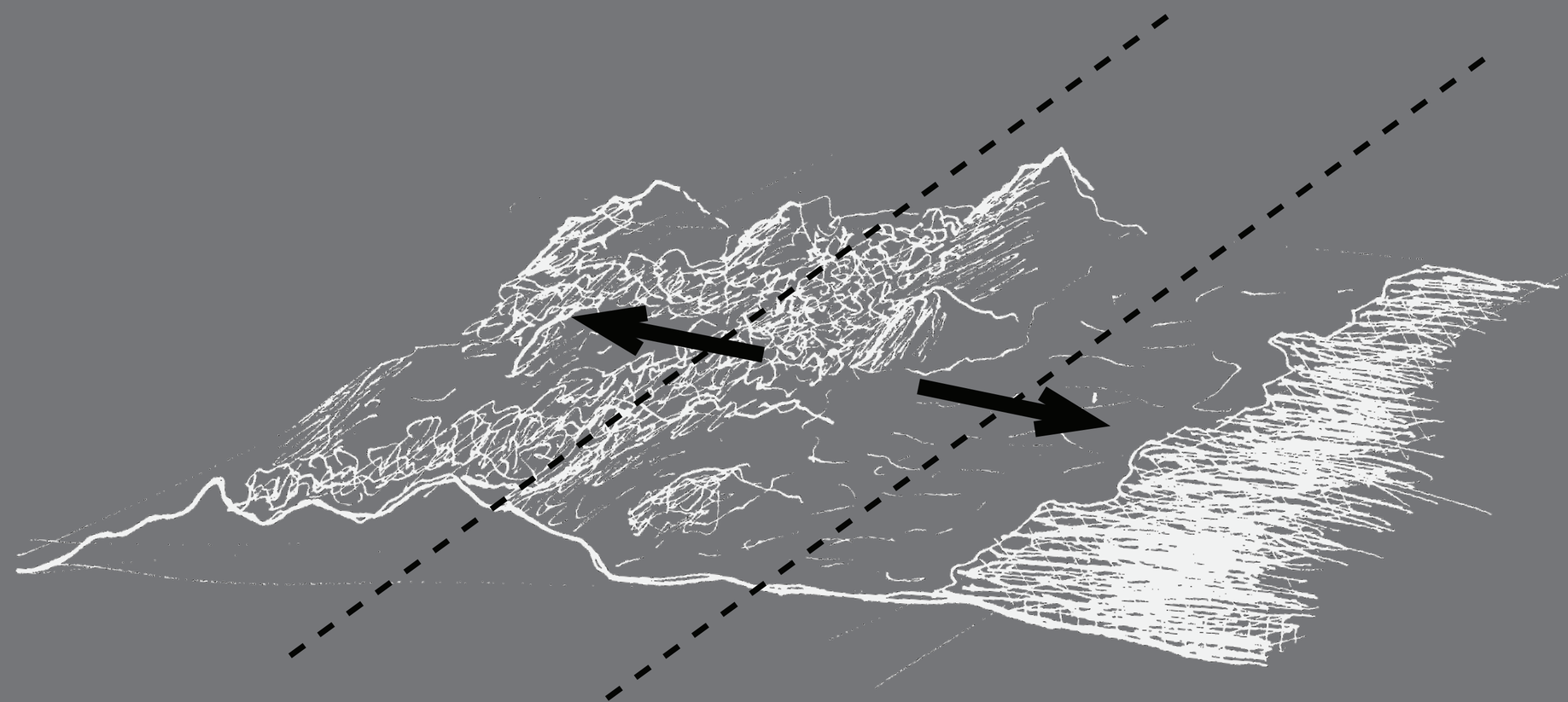
# 1 Edge of residential area

# 2 Silo Shores

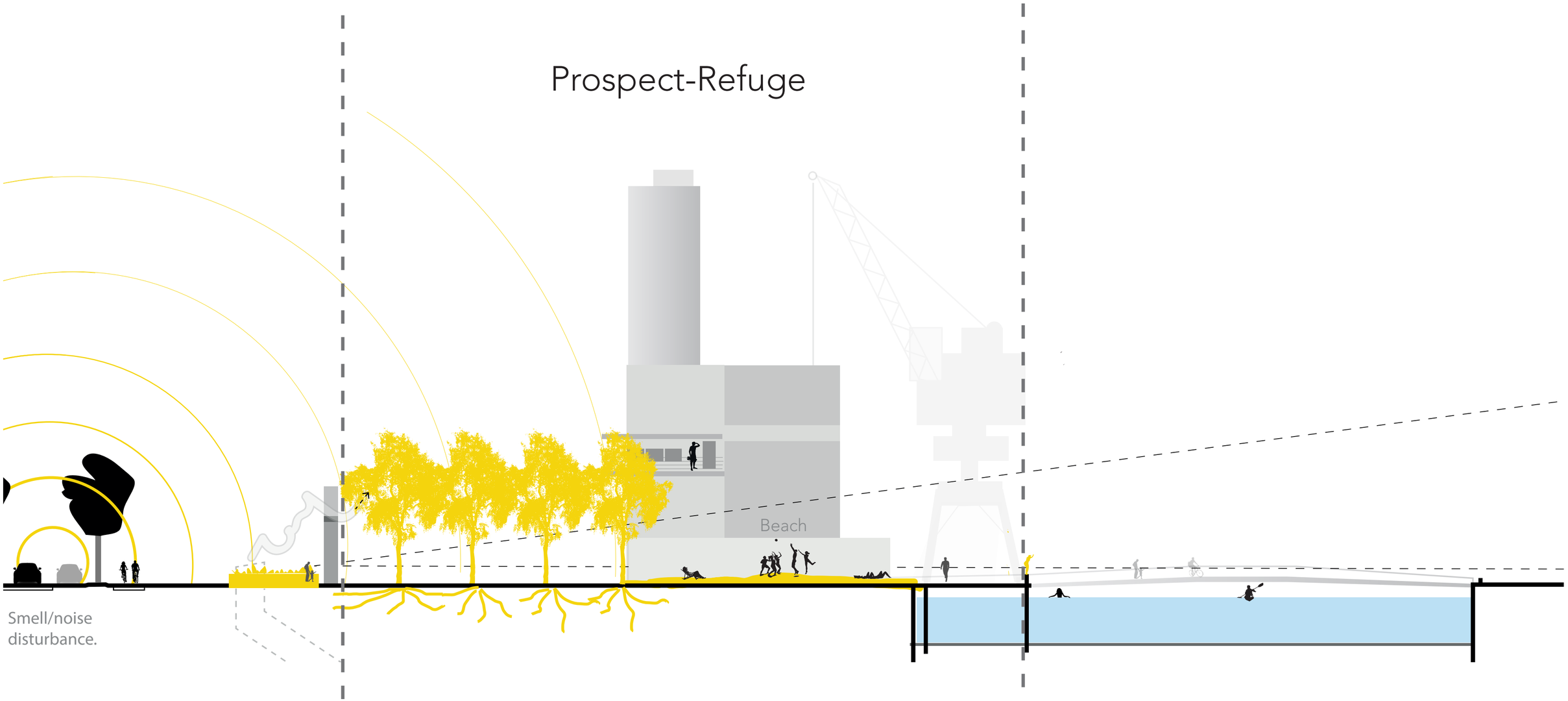


# Theory: Prospect-Refuge

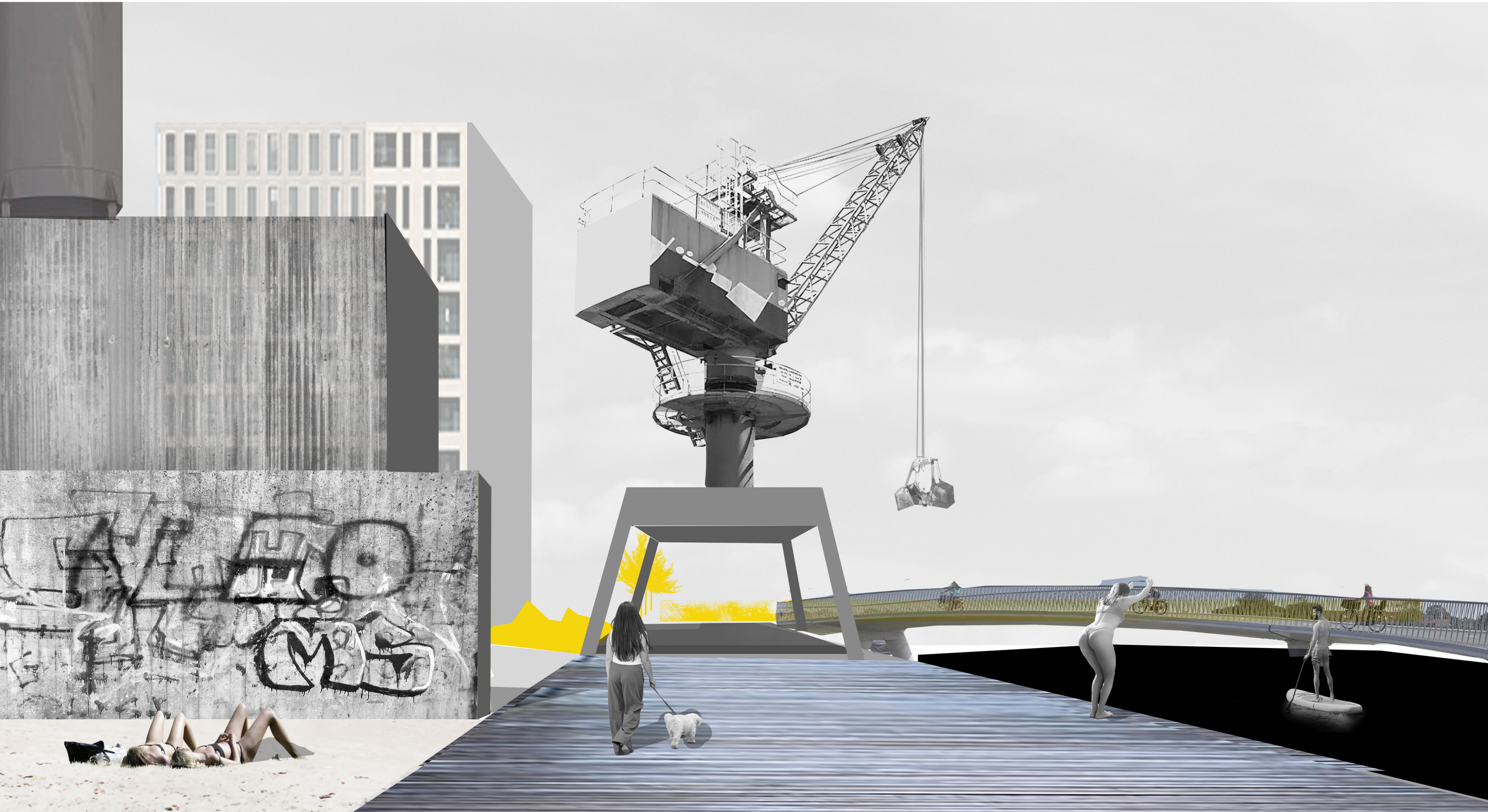
Sea shore



# Silo Shores: Beach



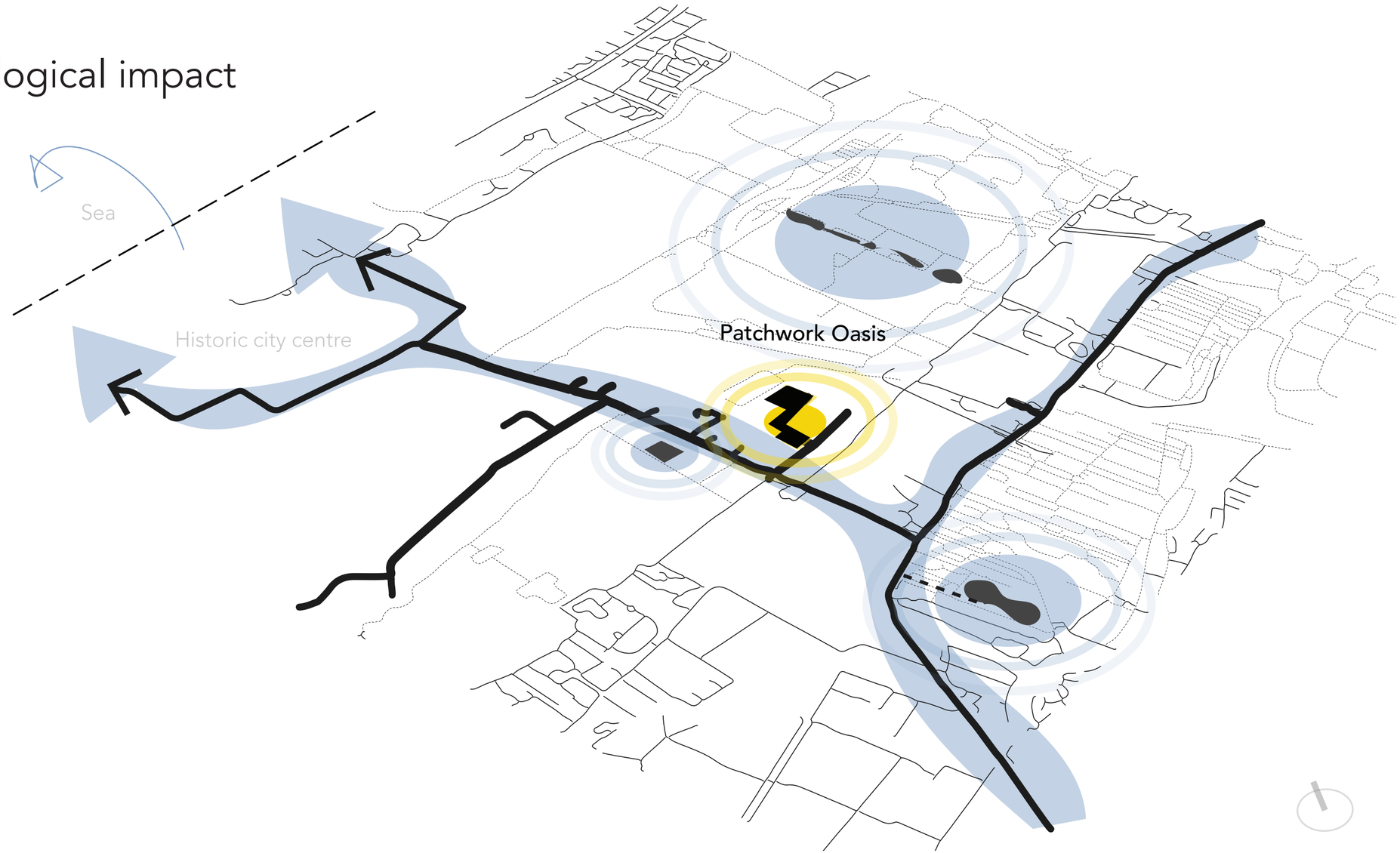
# 3 Silo Shores: boulevard



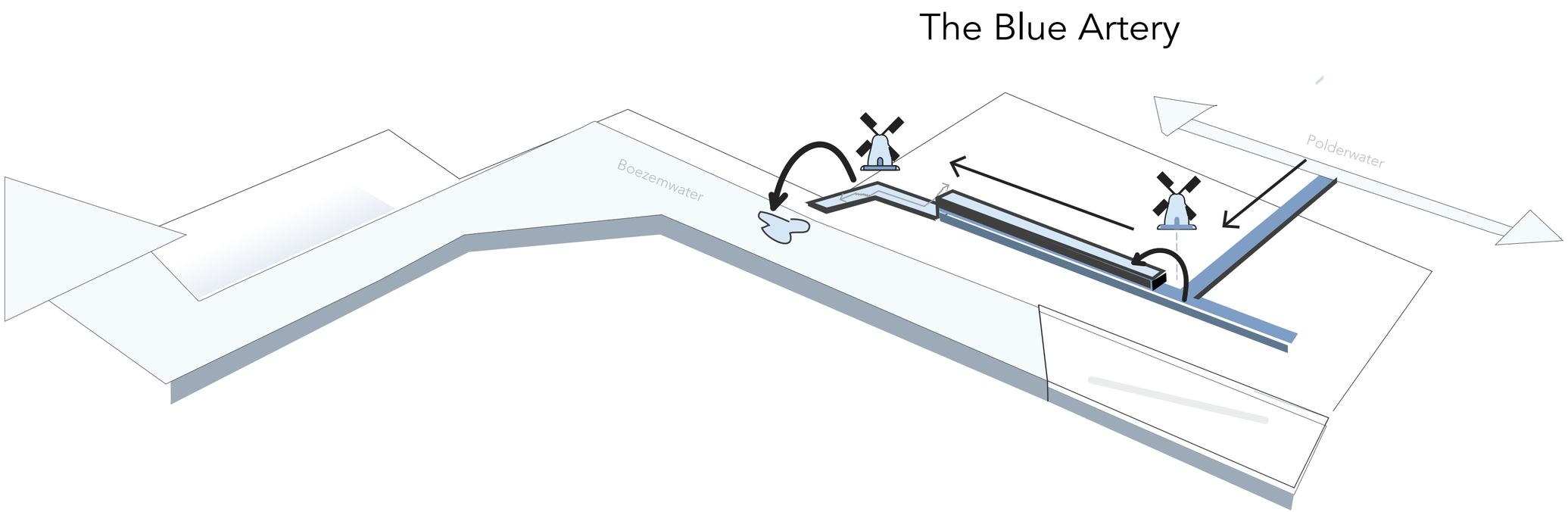
# 4 Ruderal connection

# Waterproblems: The Hague.

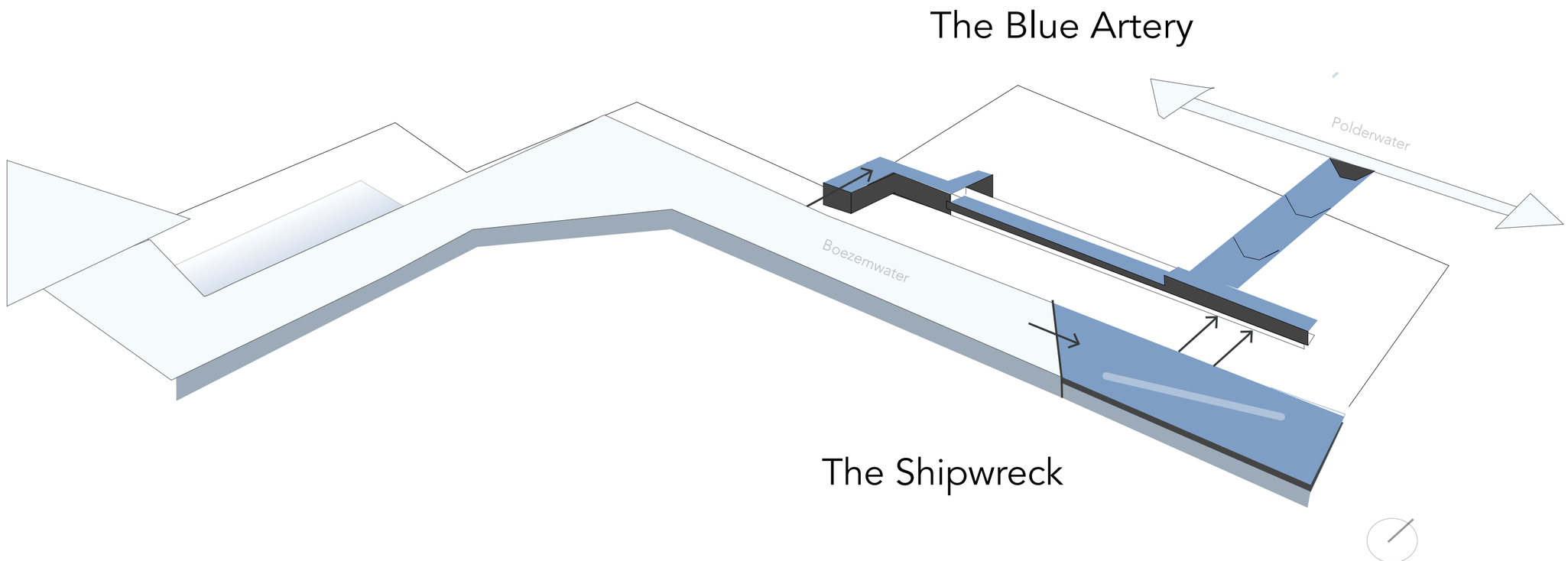
- waterquality: ecological impact
- buffercapacity



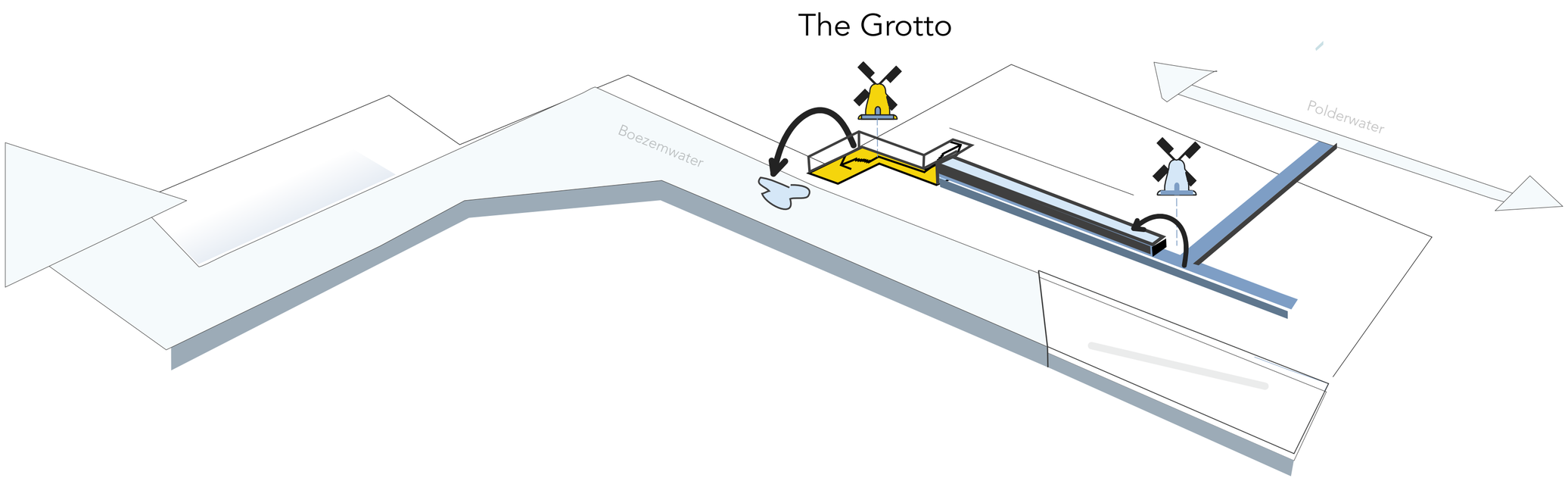
# **Waterfactory** clean water source



# **Waterfactory** extreme weather waterstorage



# **Design** Waterfactory: Design 1:50.

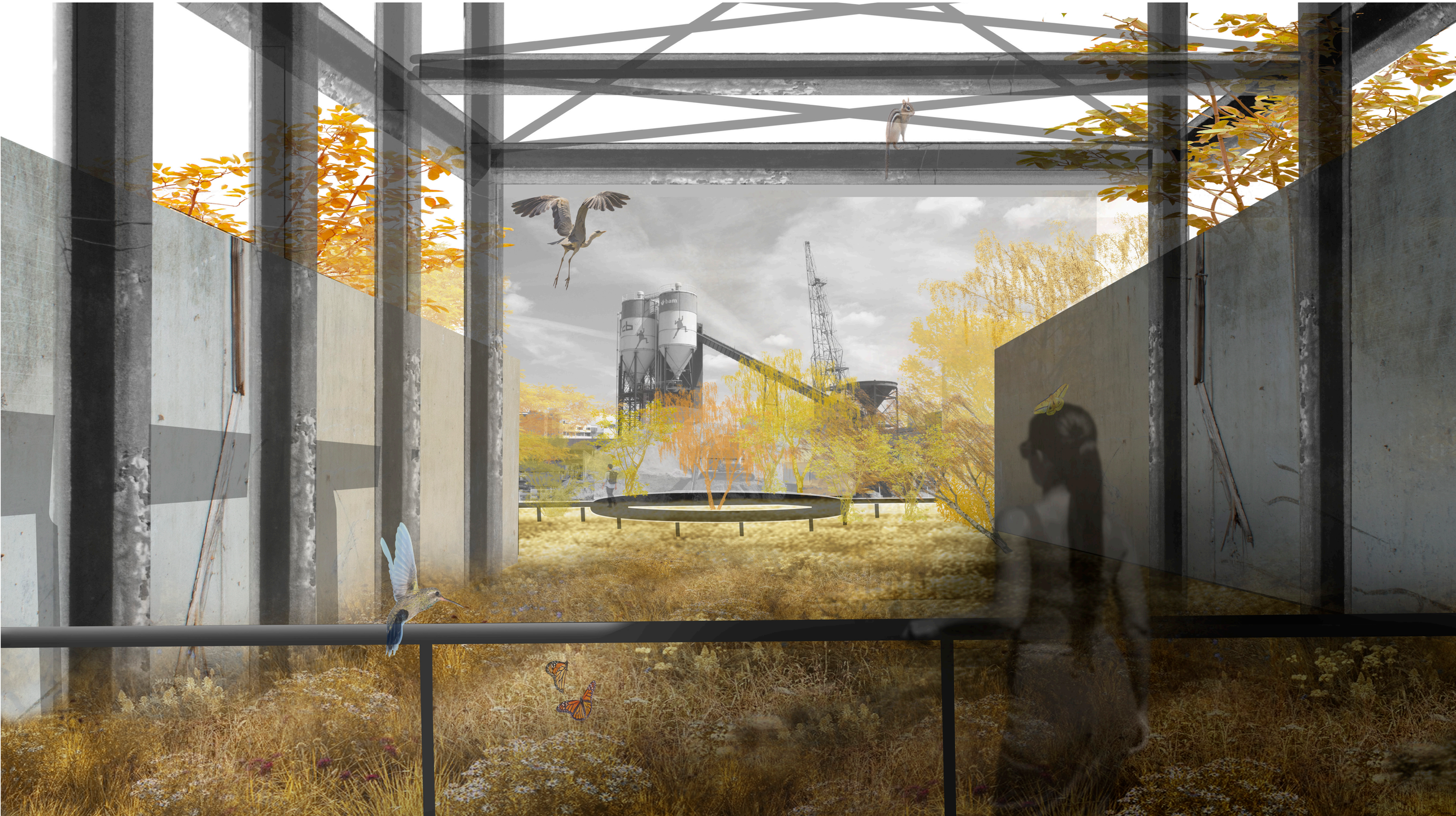


# 5 Grotto: entrance

# 6 Grotto: immersed

# 7 Grotto: under the tree

# 8 Nature's Estate



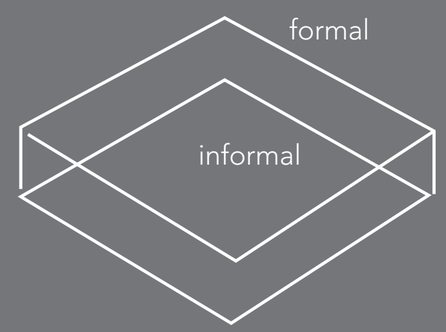
Richness

Connectivity

Restorative
Wilderness

Wilderness

+

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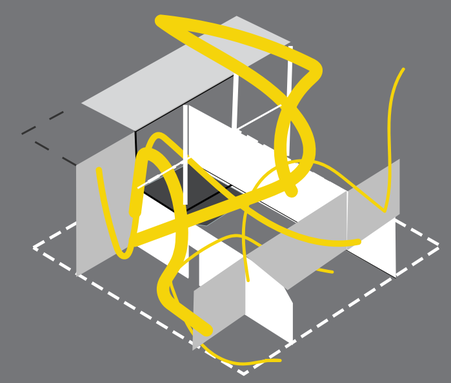
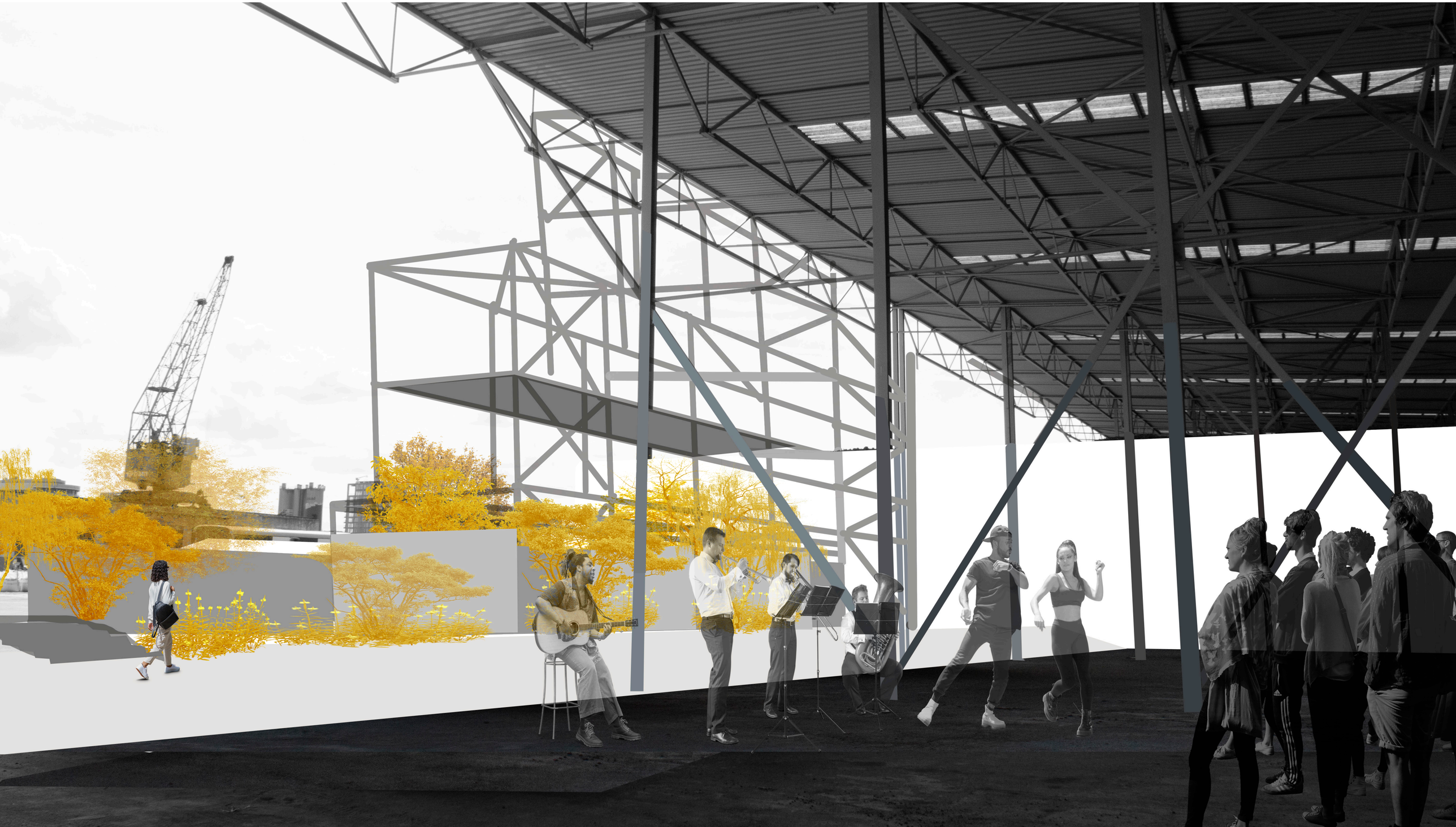


# 9 The Event



# Depth of social spaces

**Pluralistic**

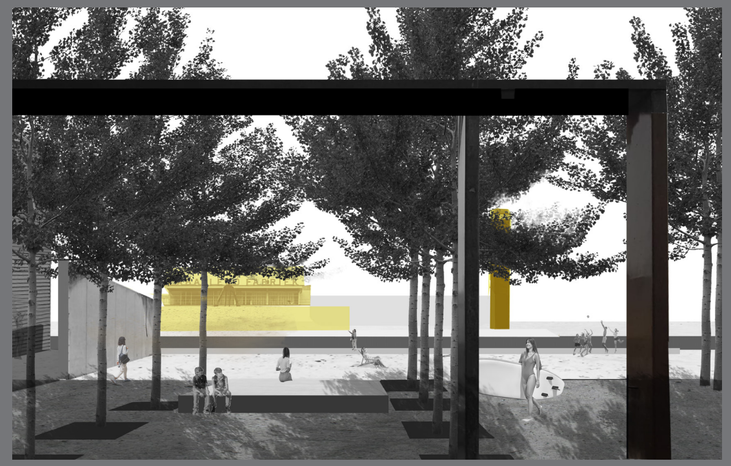
Spaces for all: compromis

# Depth of social spaces **personalizable park**

Introversion

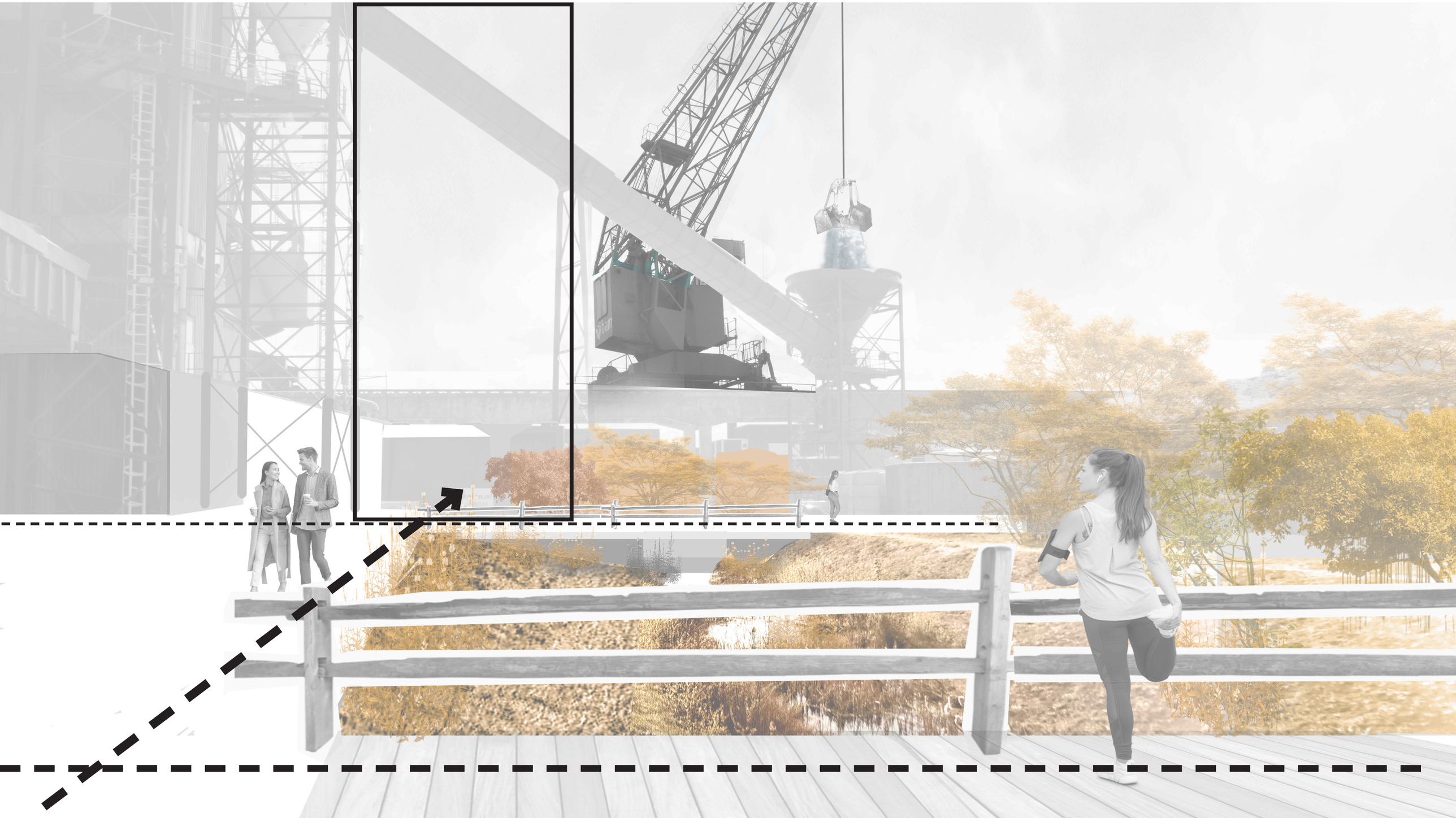
Extroversion

**Individualistic**
reflective / away



**Pluralistic**
Spaces for all: compromis

**Communal**
social / together (like-minded)



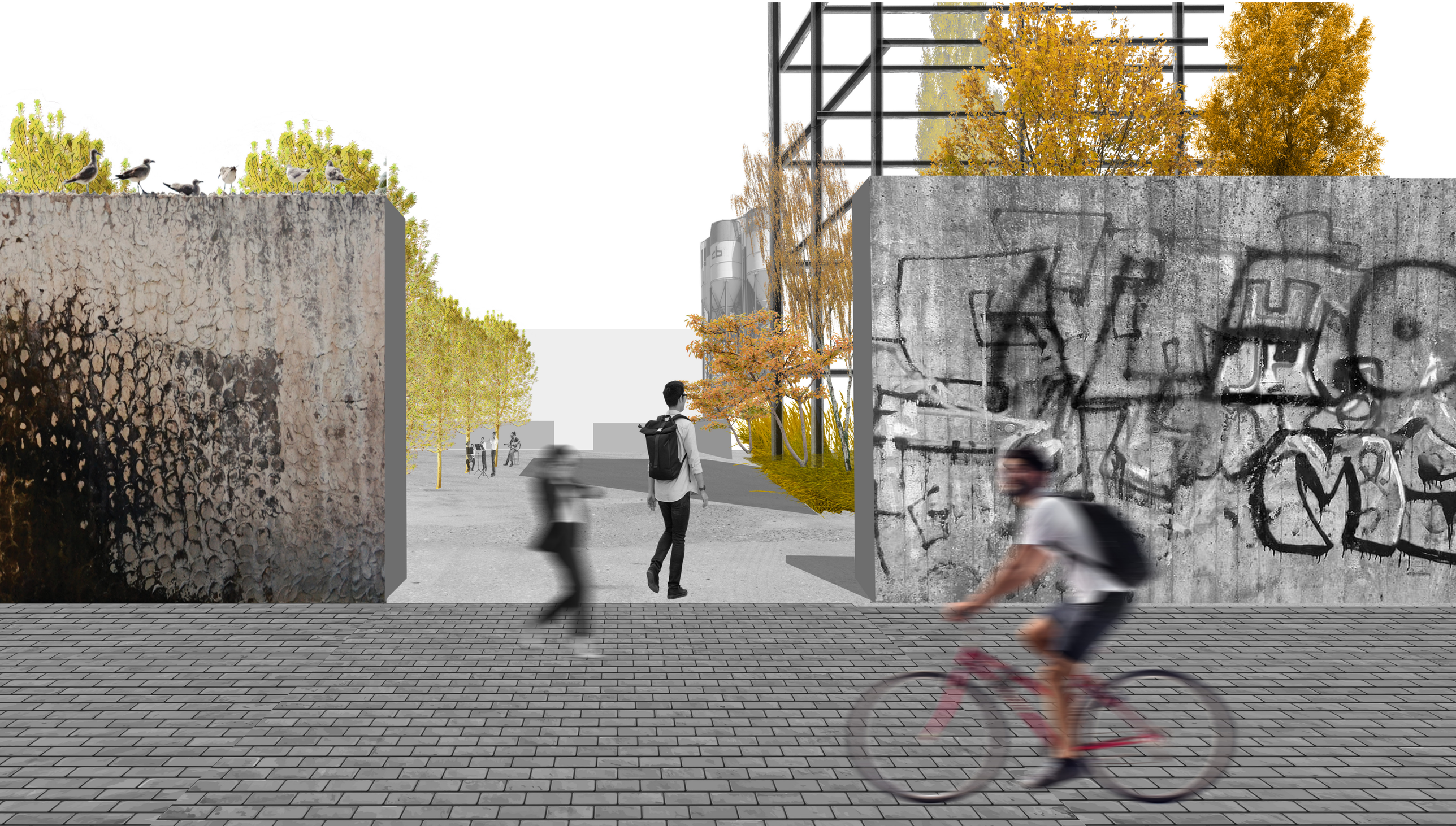
HARTING

# 2. Maturity

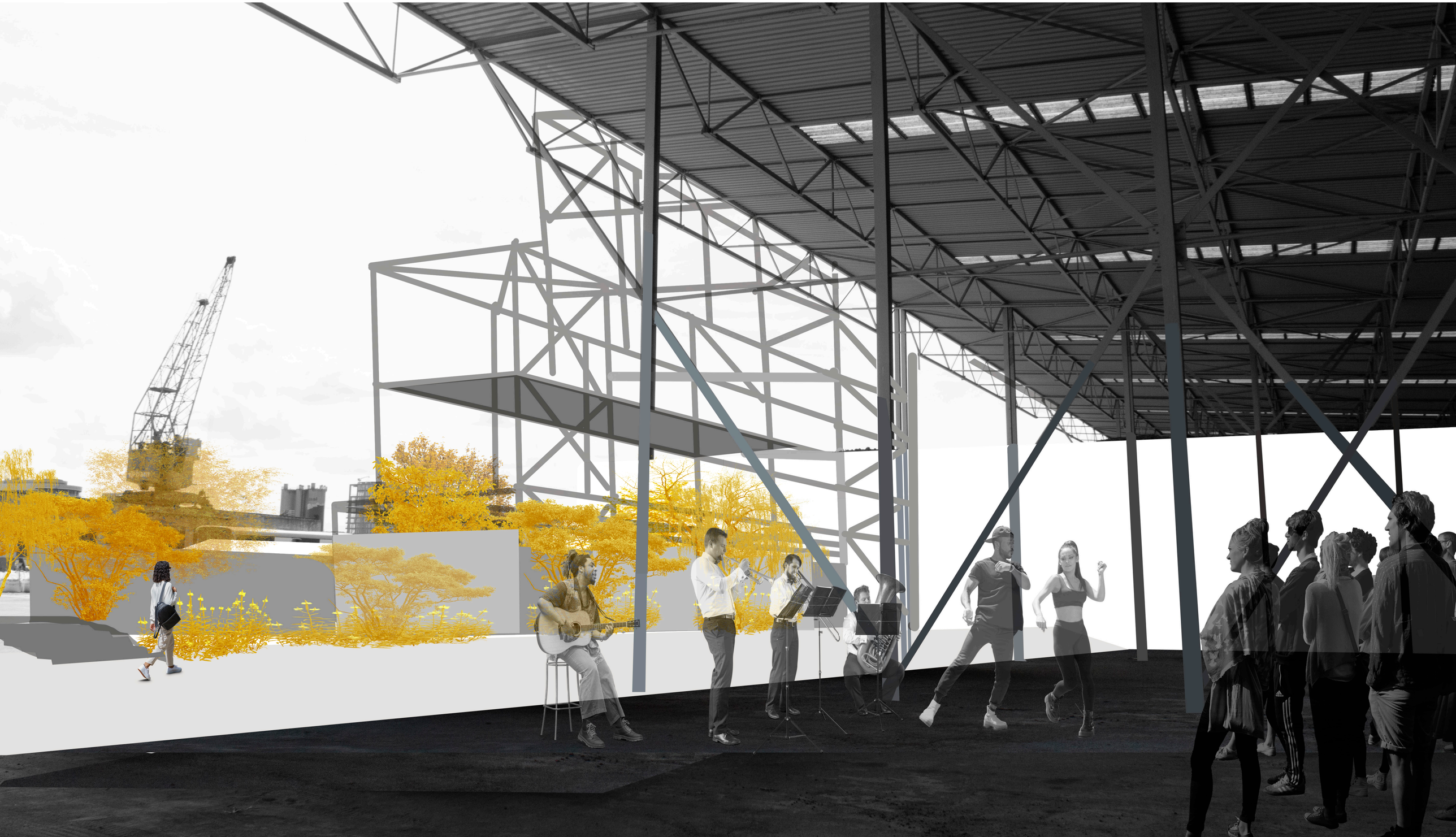
30 years

# 1 Through the wall

30 years

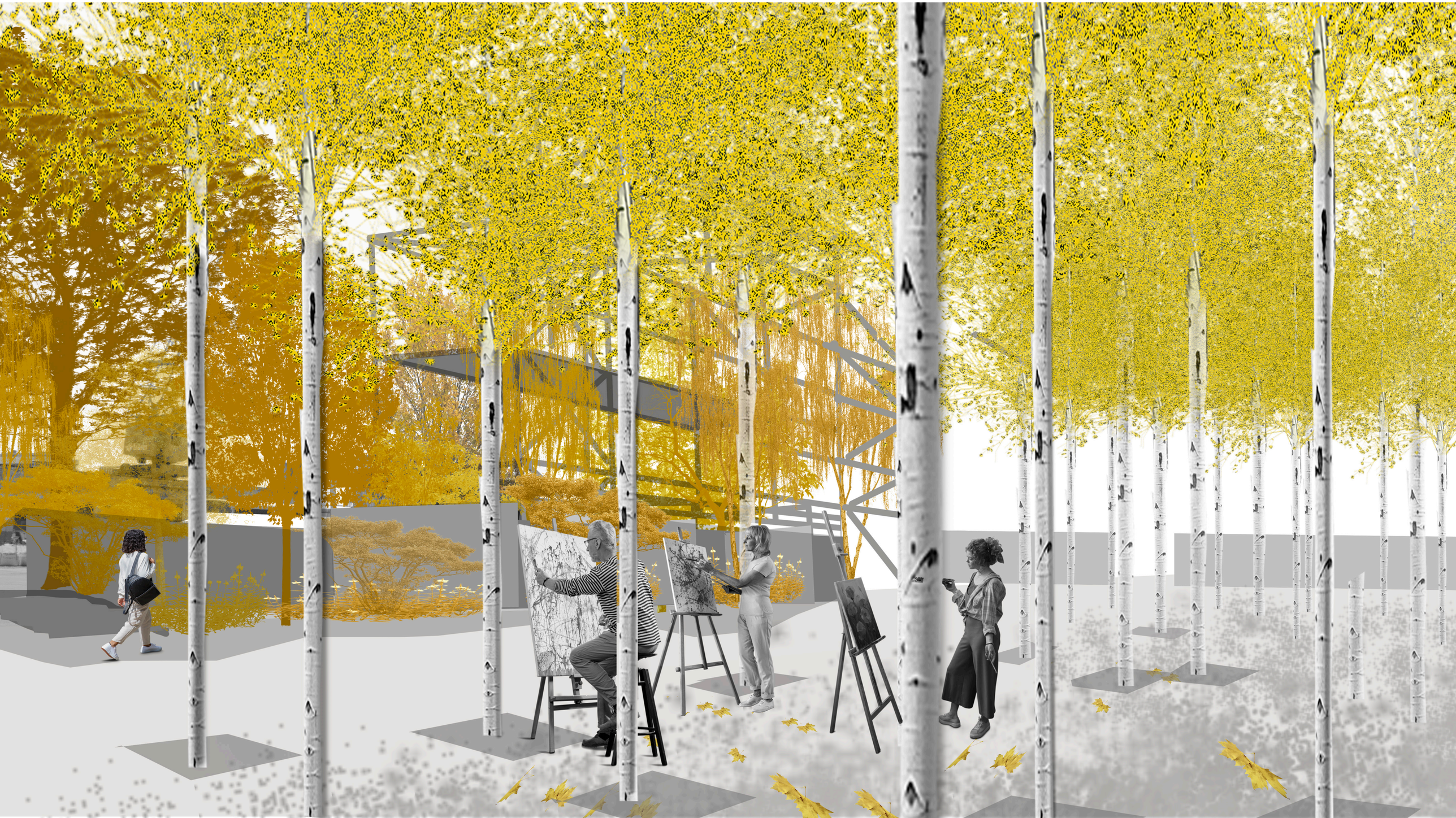


# 9 The Event

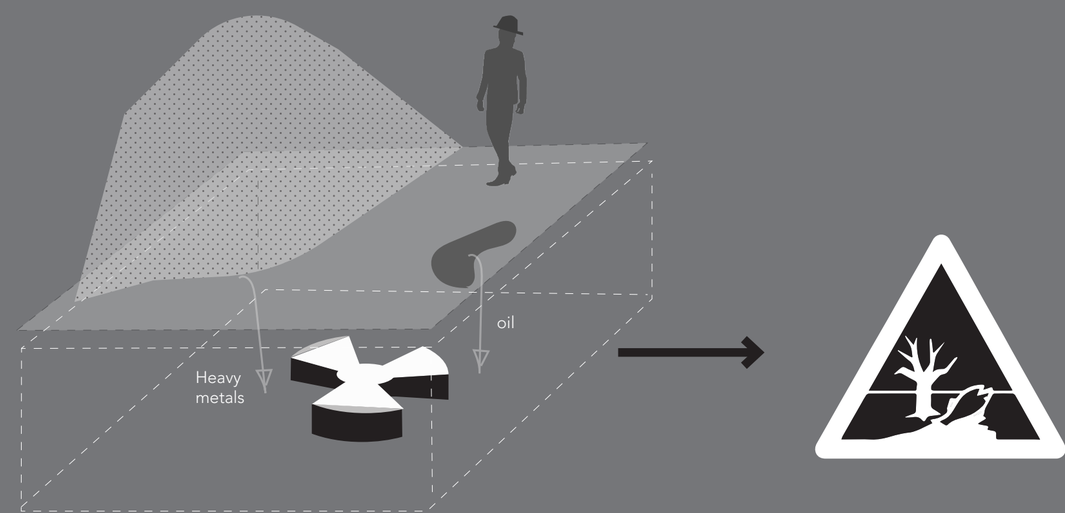


# 2 The Event

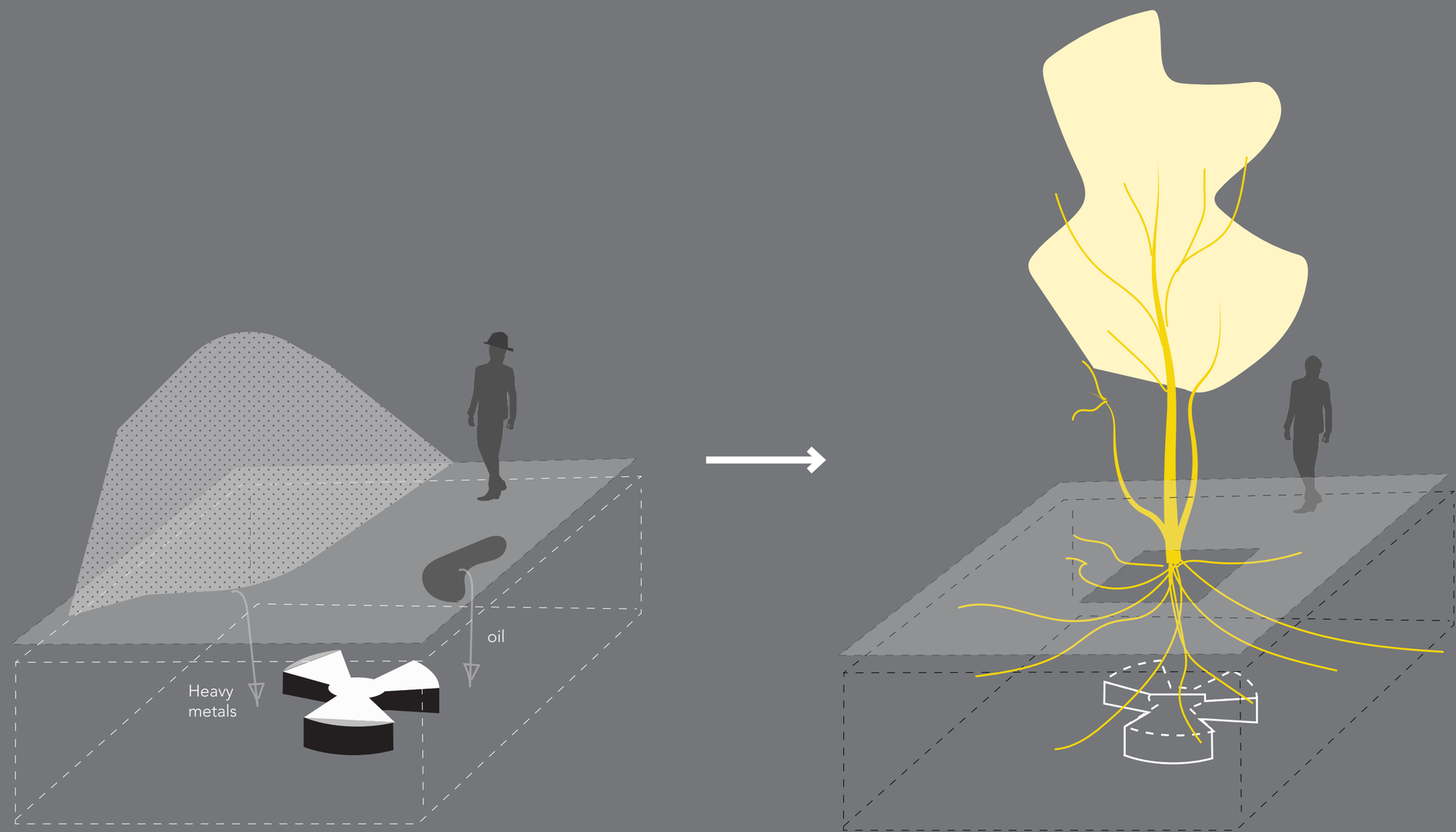




# Industrial Program: soil contamination

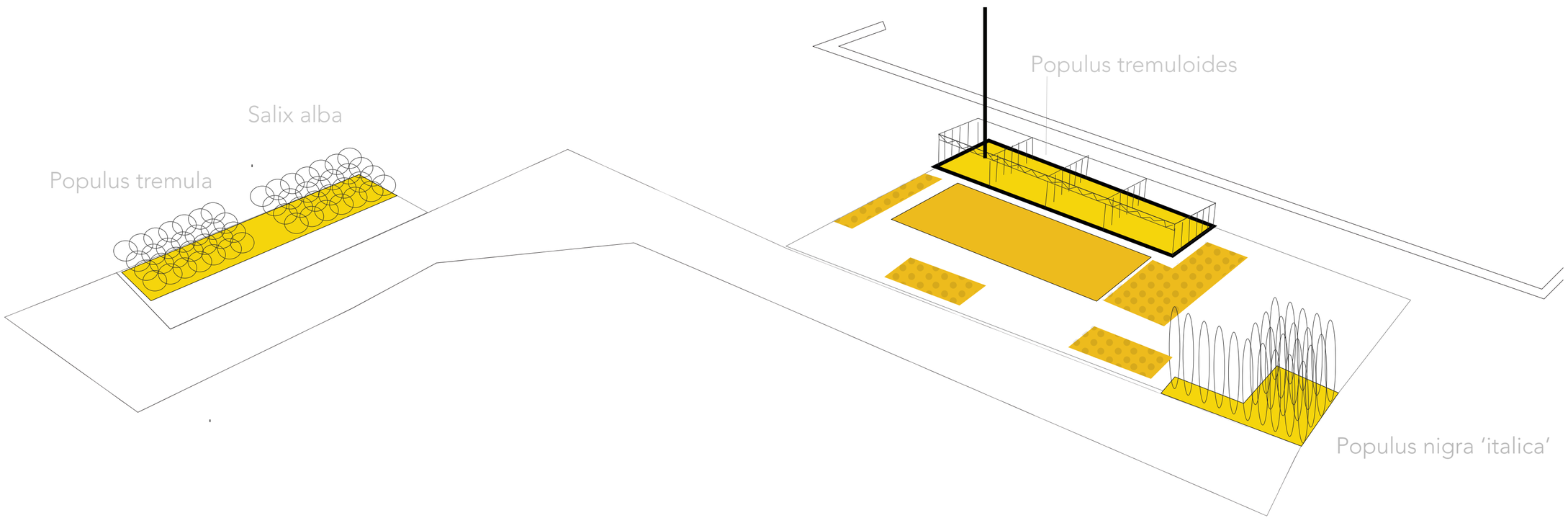


# Phytoremedation (decades)



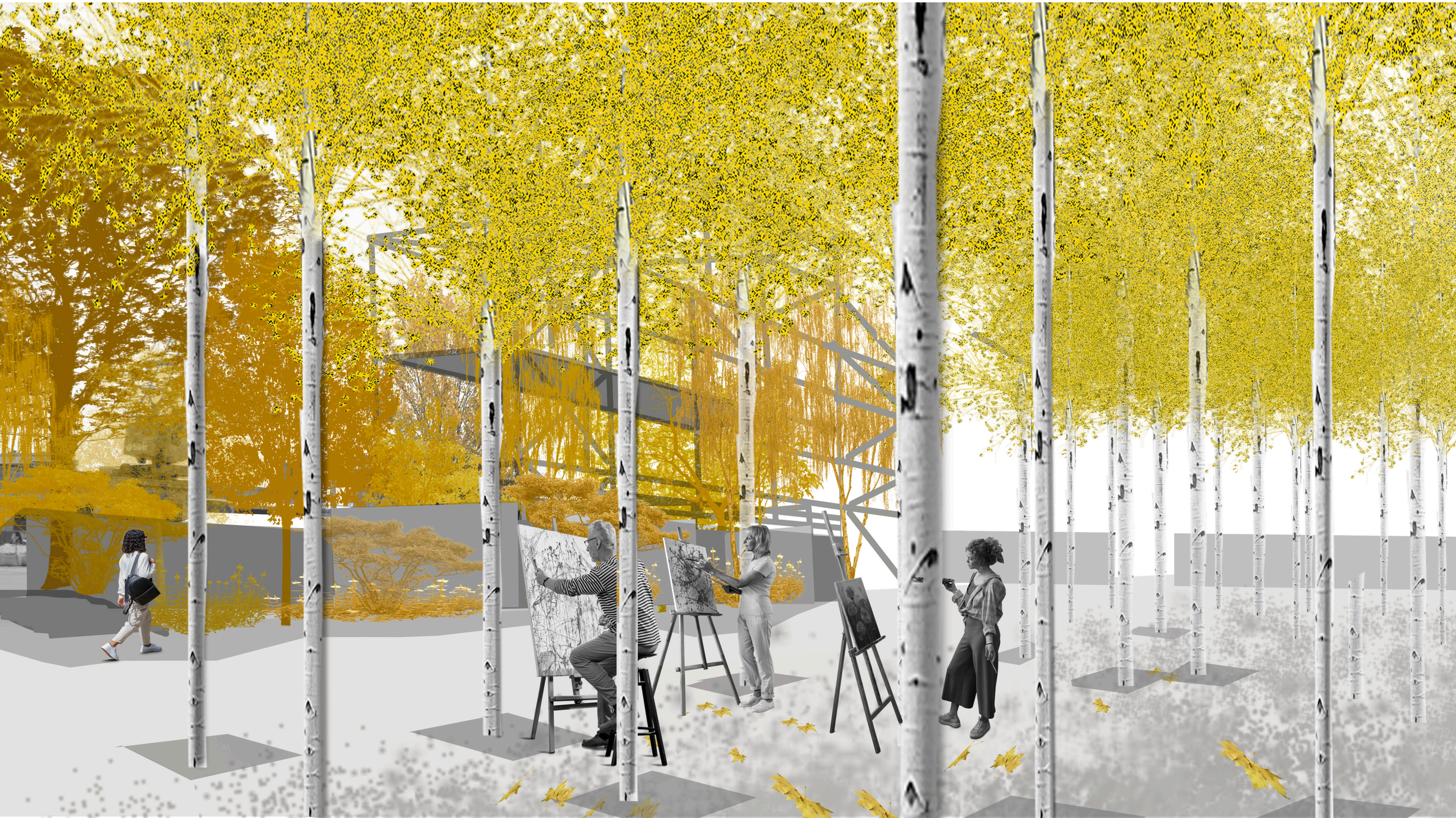
# Industrial forest

## The Event



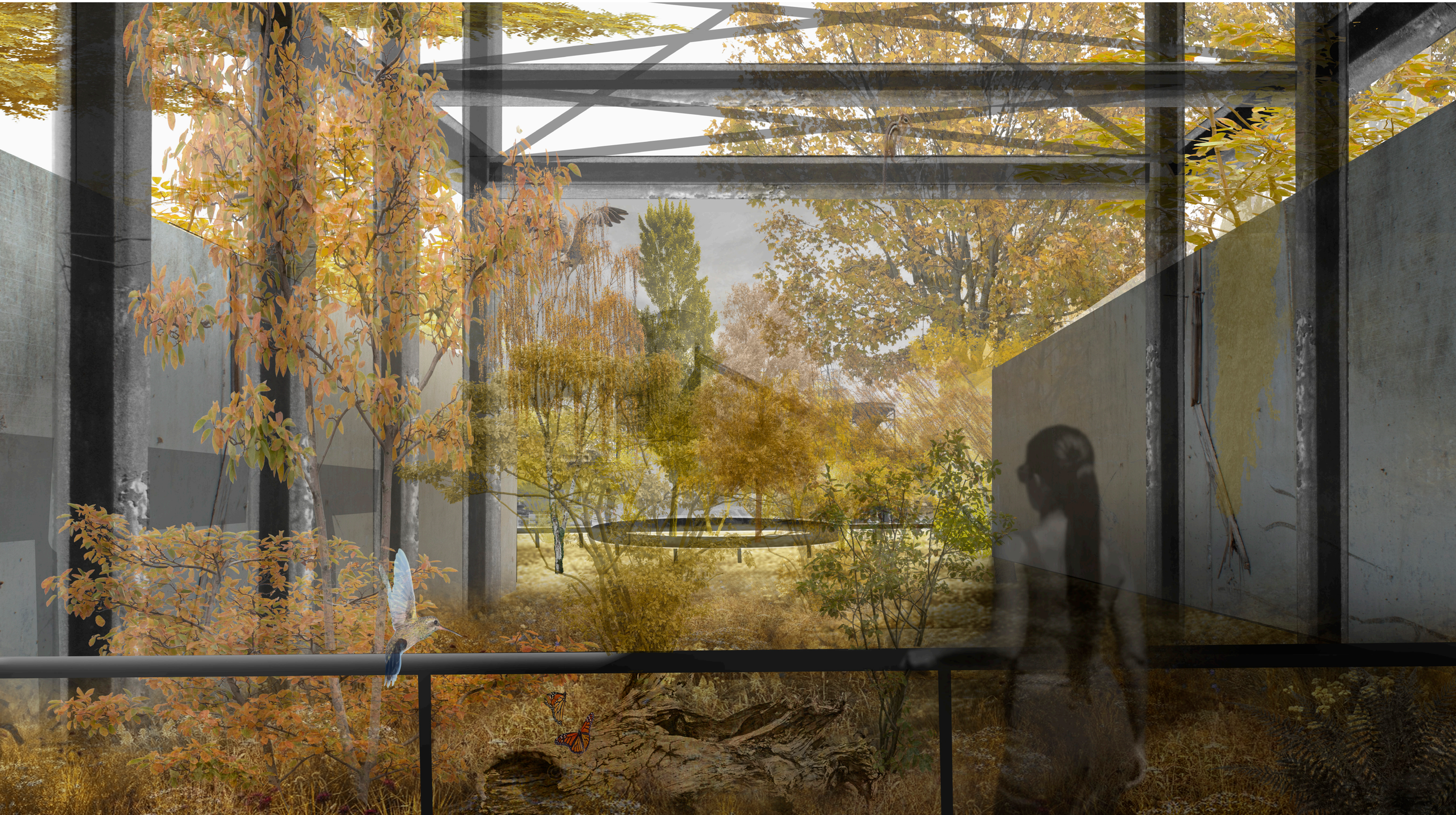
# 2 The Event





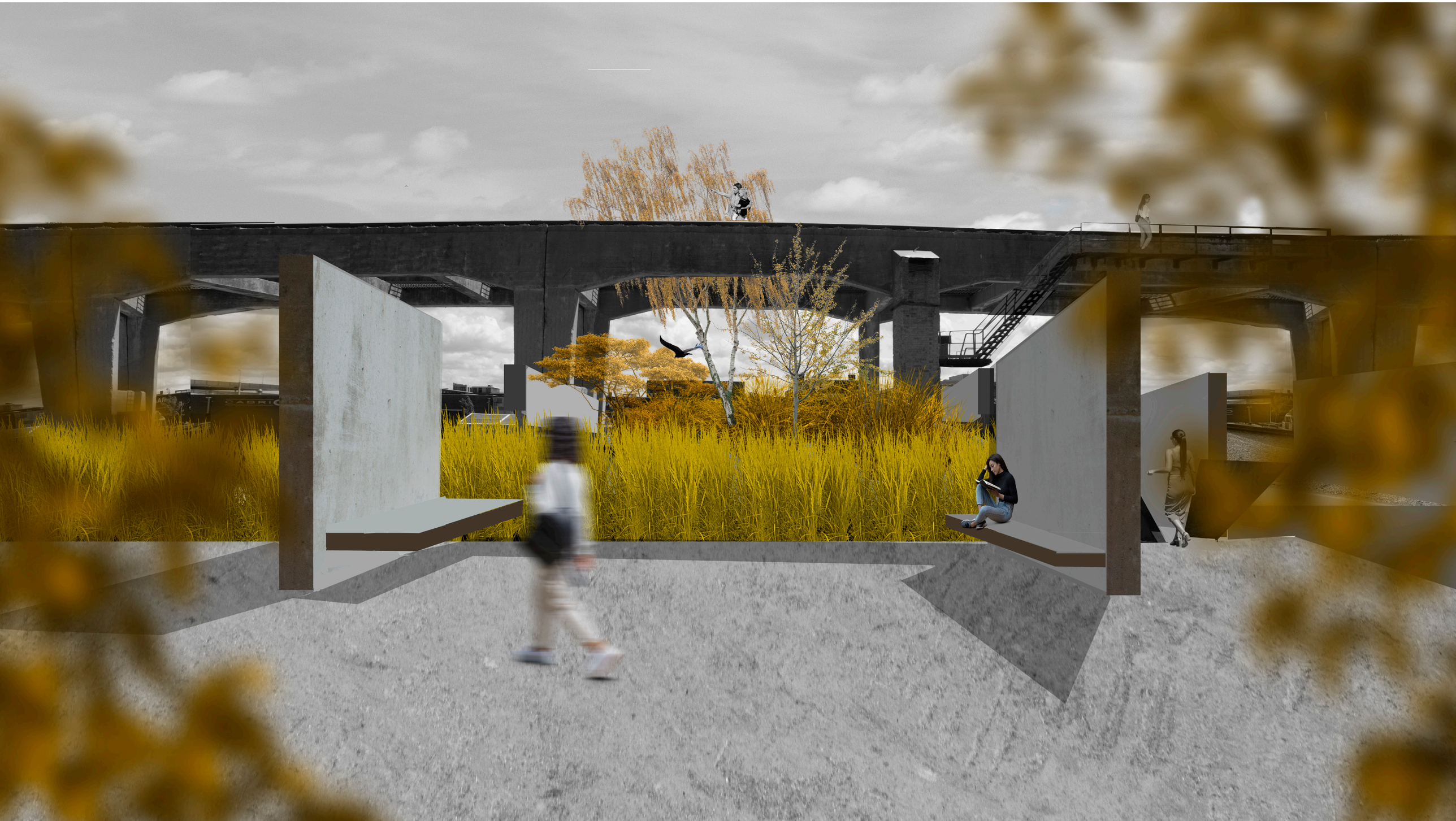
# 3 Nature's Estate

30 years



# 4 Toxic Gardens: wall hideouts

30 years



# 5 Toxic Gardens: Fern garden

30 years

Peat (soil), shaded (space), ferns planted (maintained), intimate route : valley (access)

# 6 Toxic Gardens: Railway route

30 years

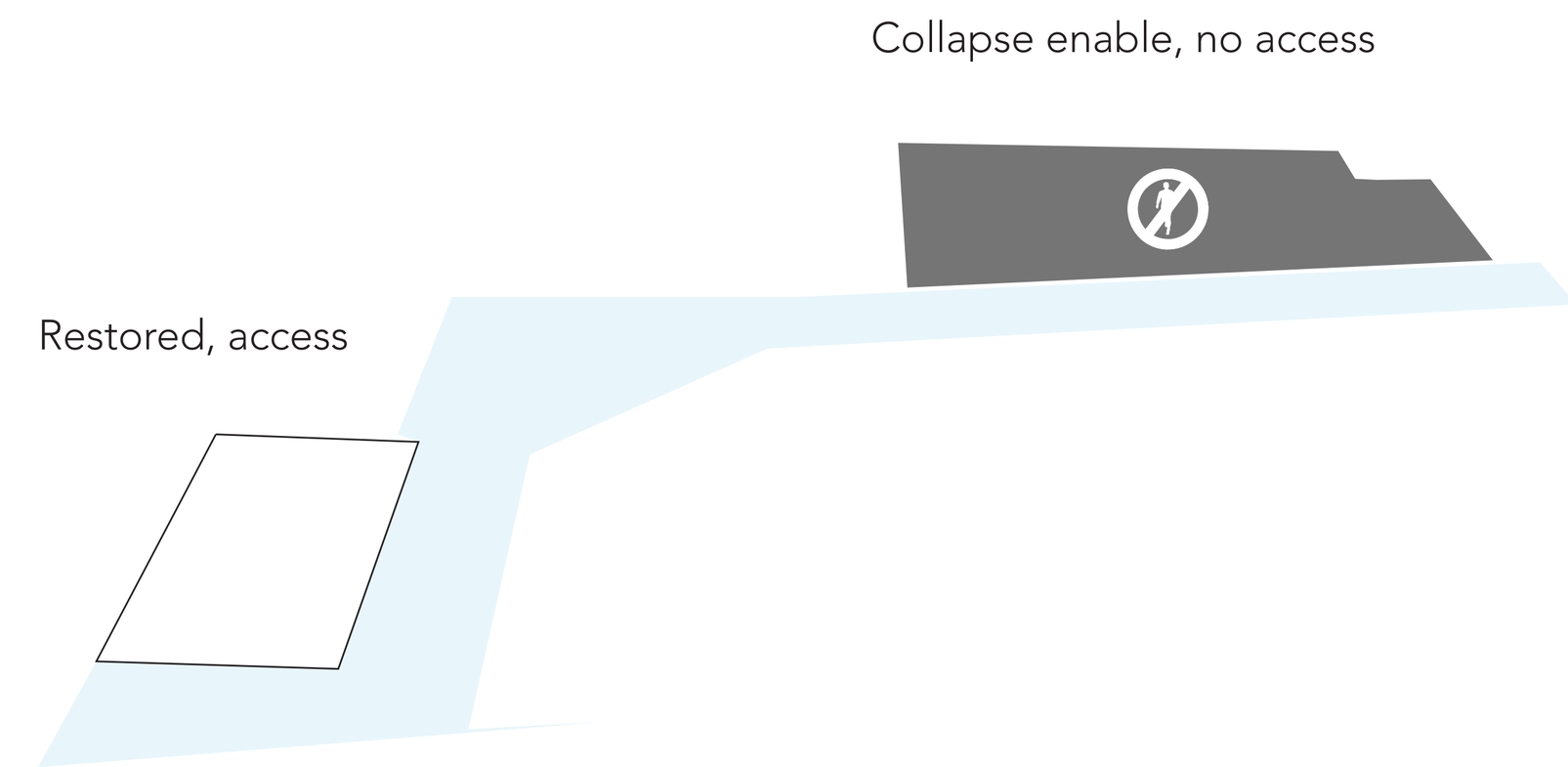
# 7 Toxic Gardens: Playpark

30 years

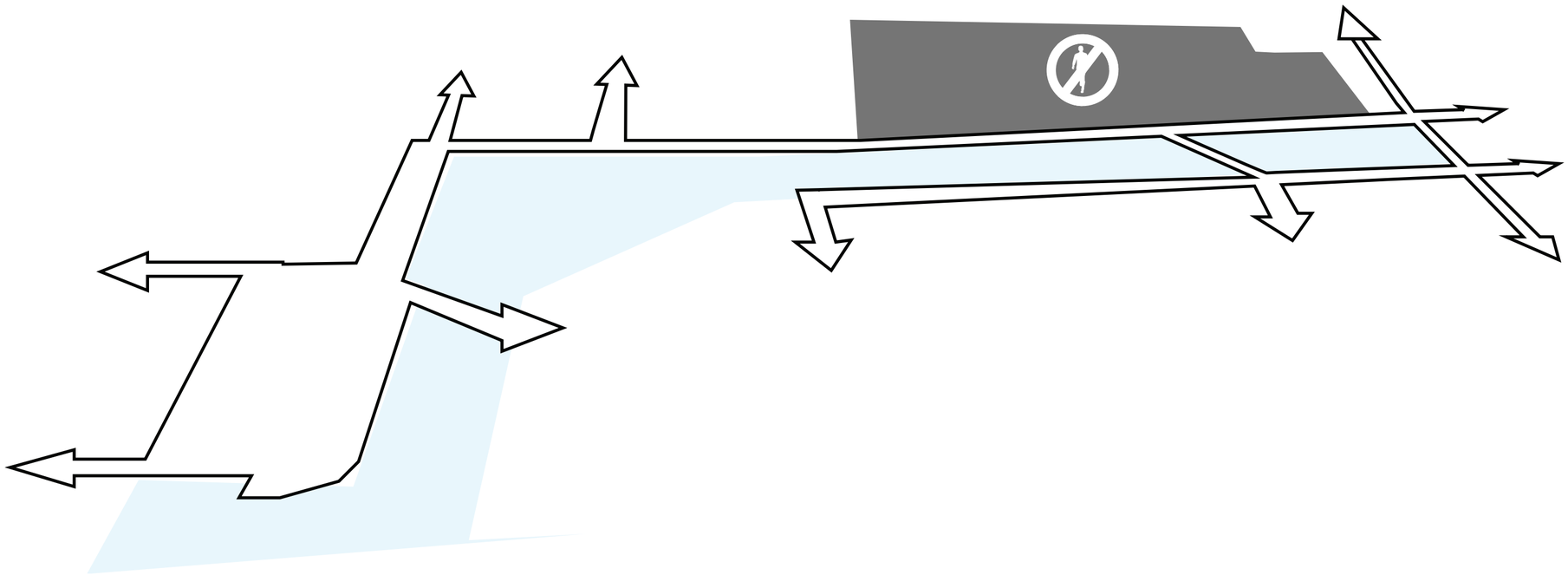
# 3. Collapse as quality

(50+ years)

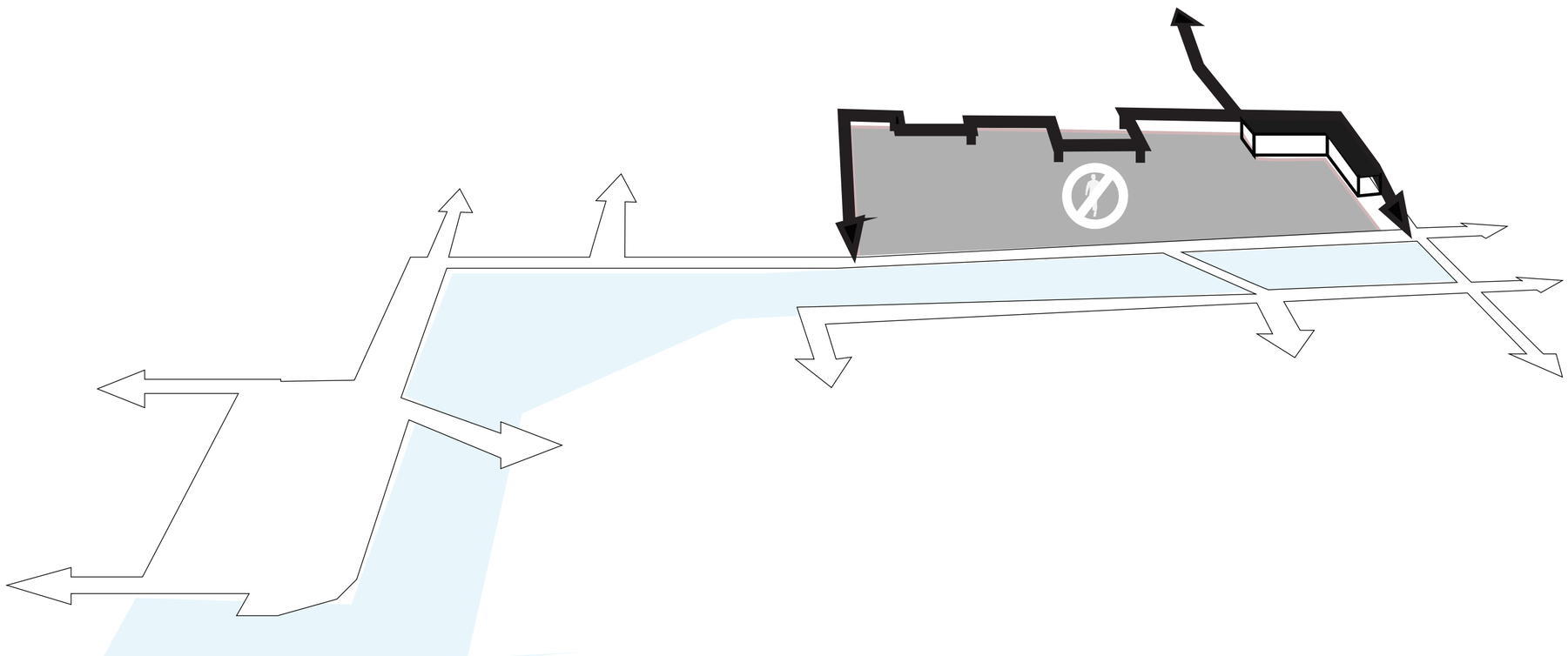
# Divirging access



Boulevard connectivity



# Exceptions



# 1 Cemetery-park

50+ years

# 2 Visitors centre viewpoint

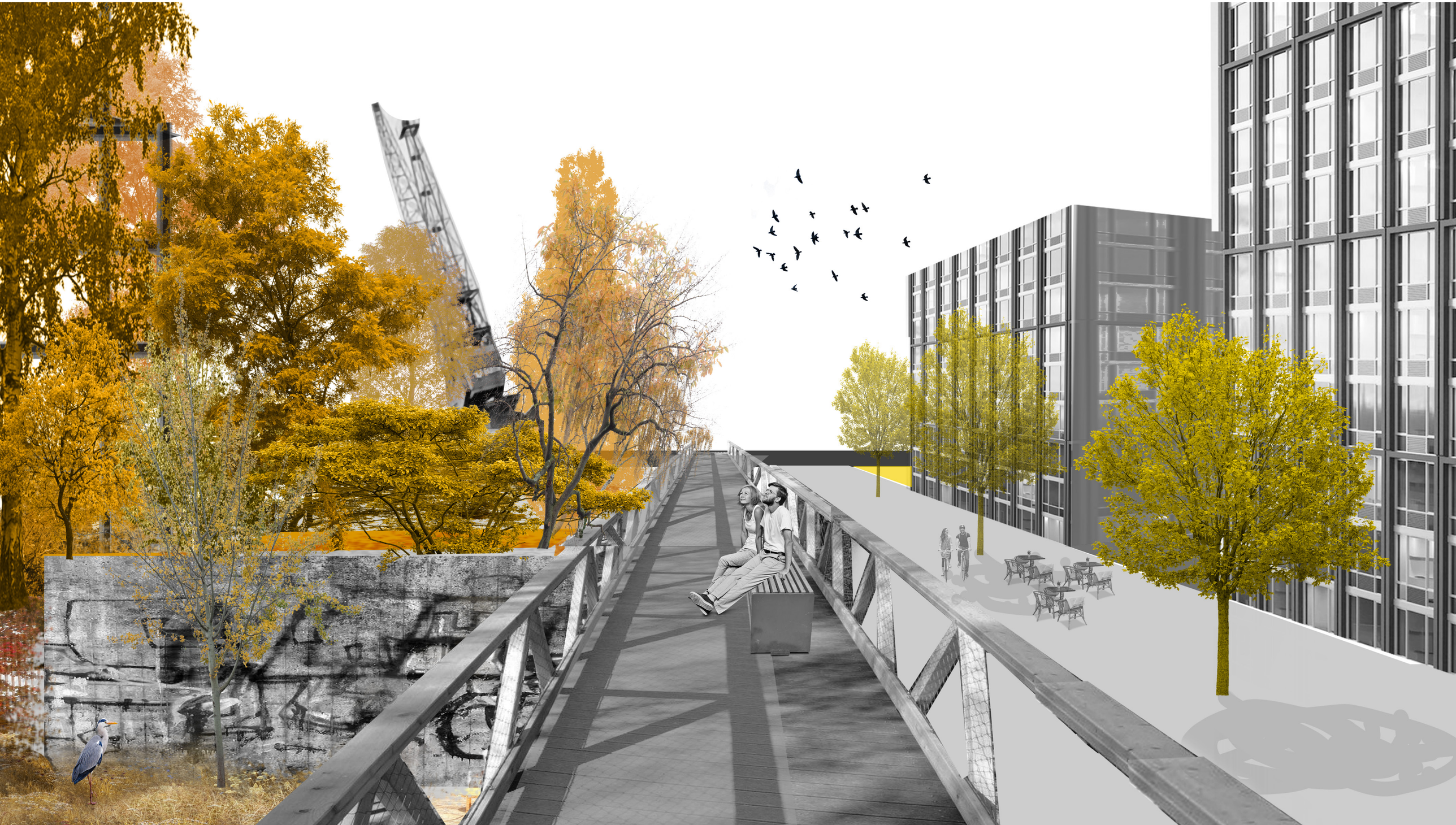
50+ years

# 3 Tree top walk (former Event)

50+ years

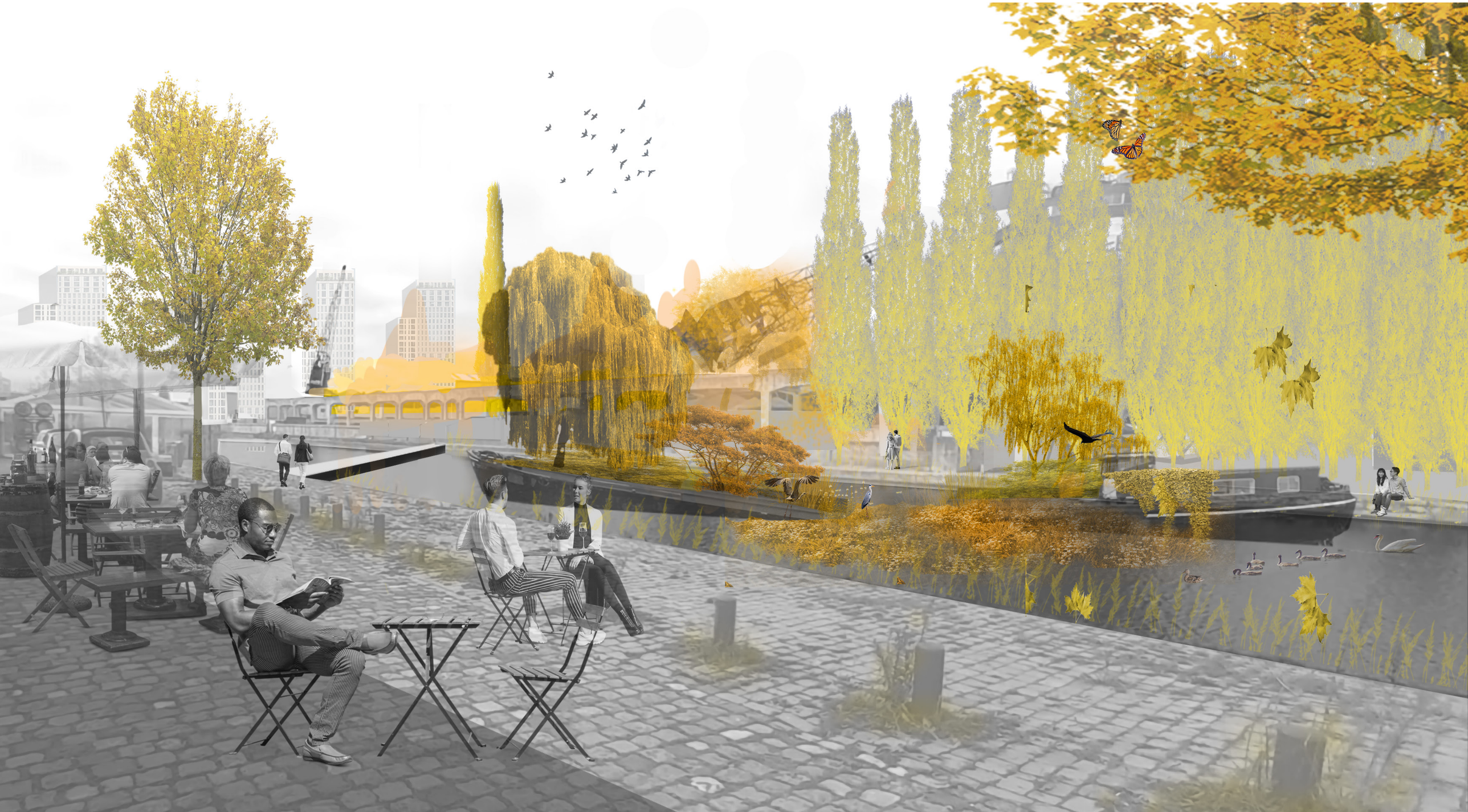
# 4 Contrast

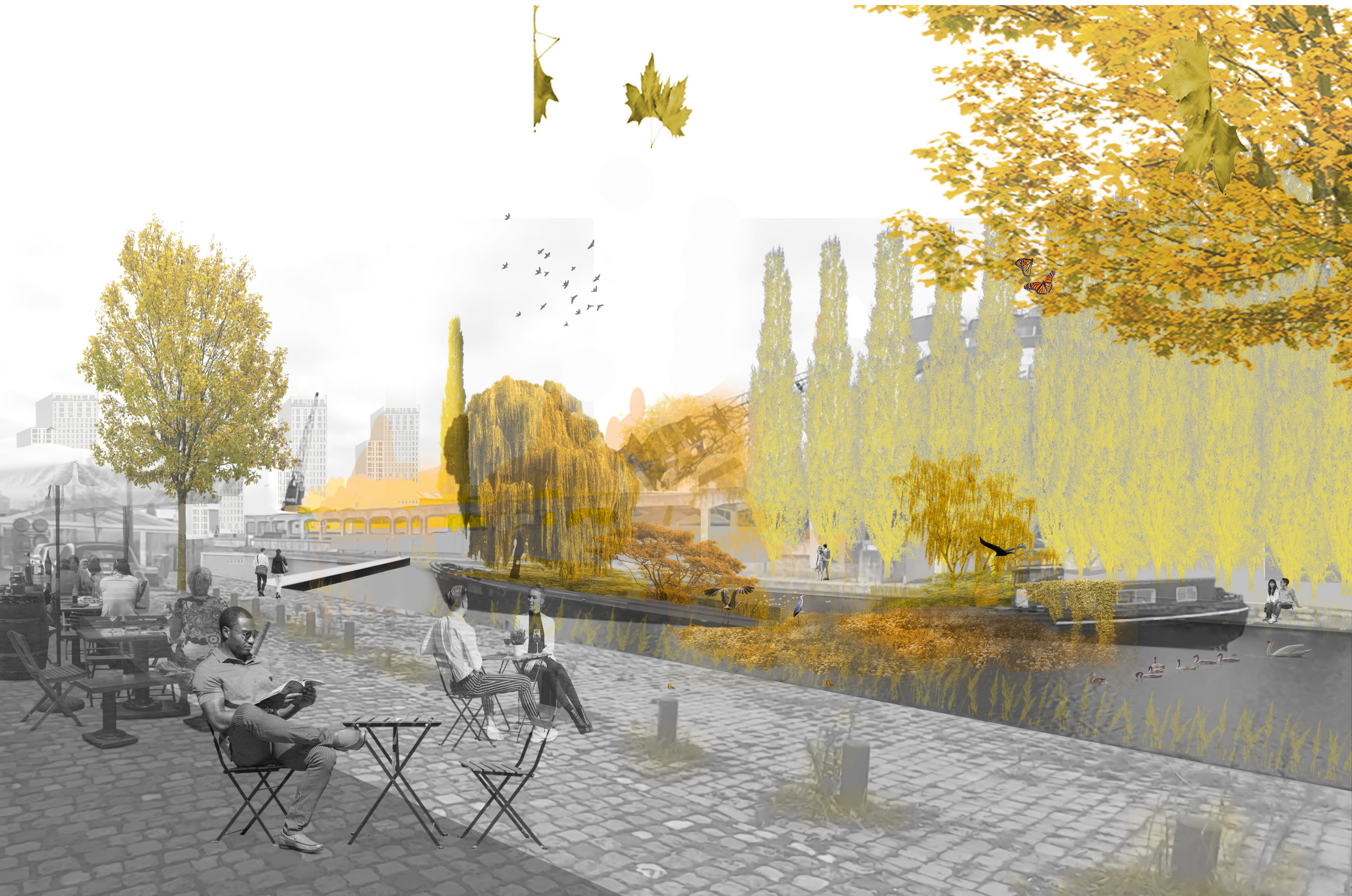
50+ years

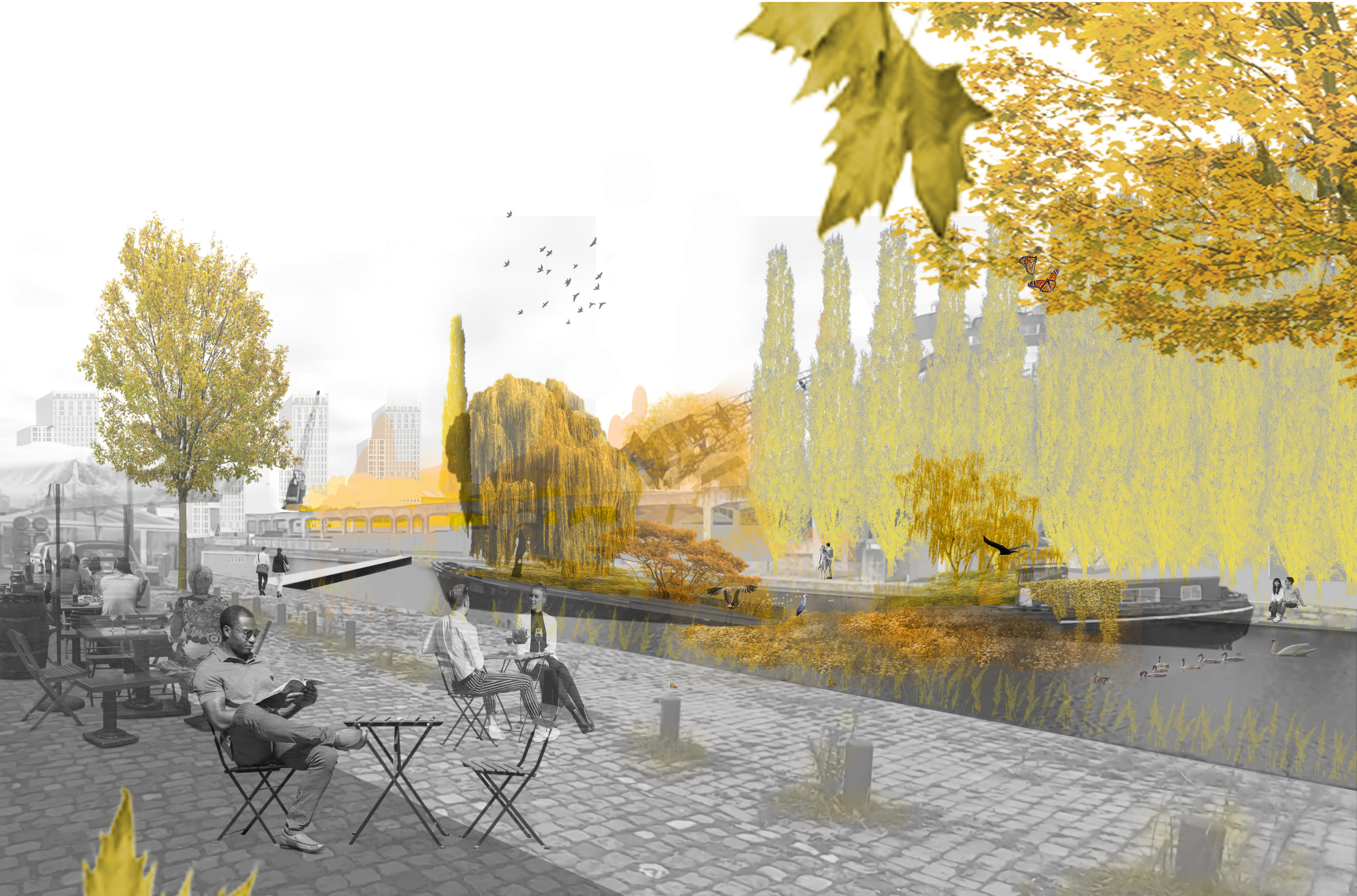


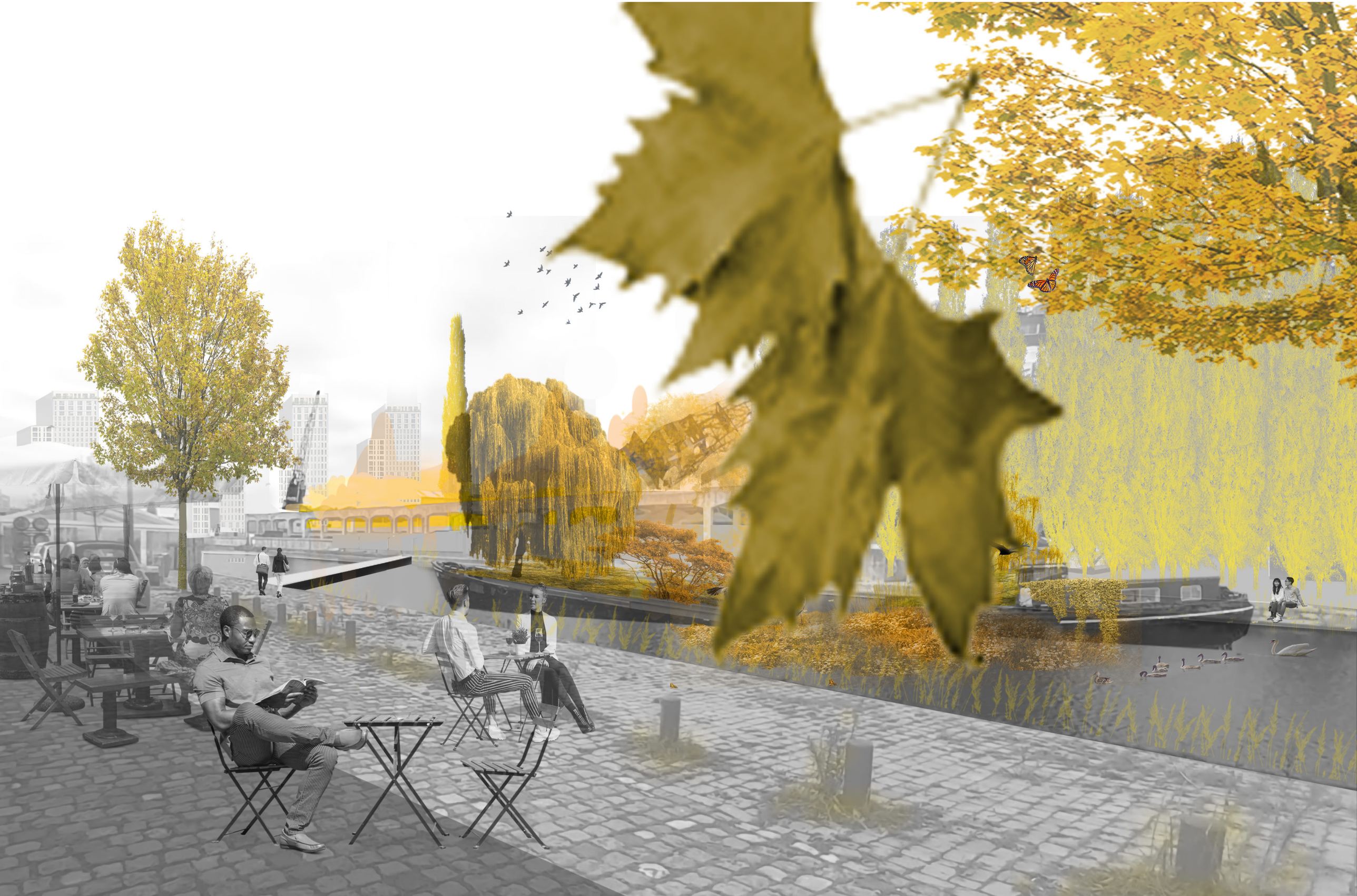
# 5 The Shipwreck

50+ years









Thank you for your attention.

RESTORATIVE
RUINS

TU Delft

# RESTORATIVE RUINE