

Amsterdam

# [ Tri ] Angles

## A Sustainable and Dynamic Flow City

Graduation Booklet - Yao Lu 4605675

Flowscape Graduation Studio | Mentors: Frits Van Loon, Maurice Harteveld





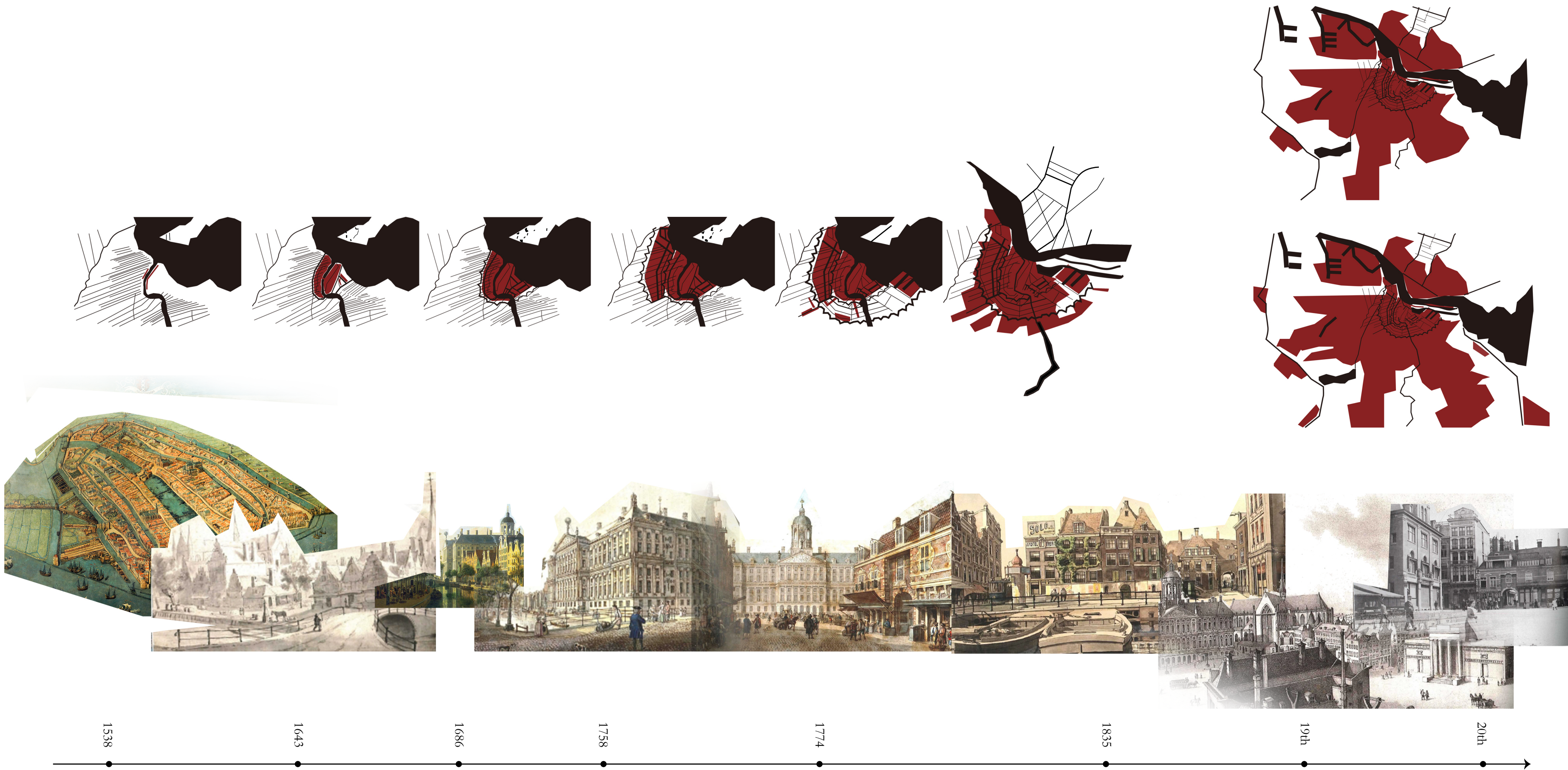


# 1. Introduction

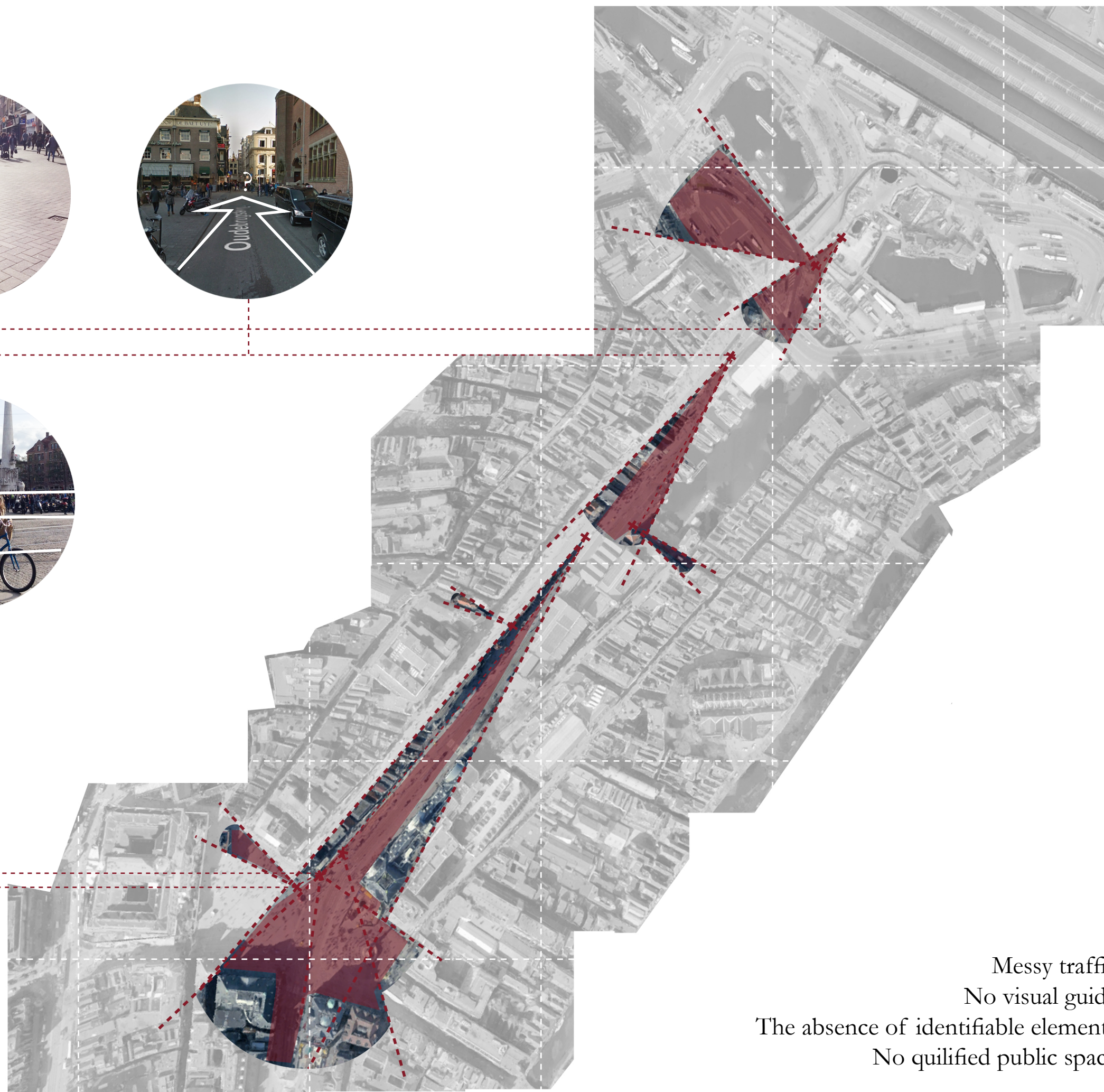
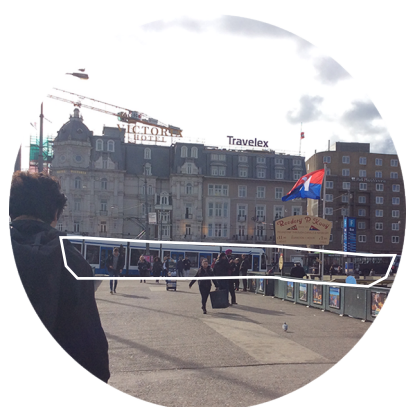
"The city, ancient or modern, has some characteristics that define it forever: the street, the square, the public buildings, the residences, have established between them, through a slow and uninterrupted process, laws of composition..."

Ellin, 1999

1.1 Motivation

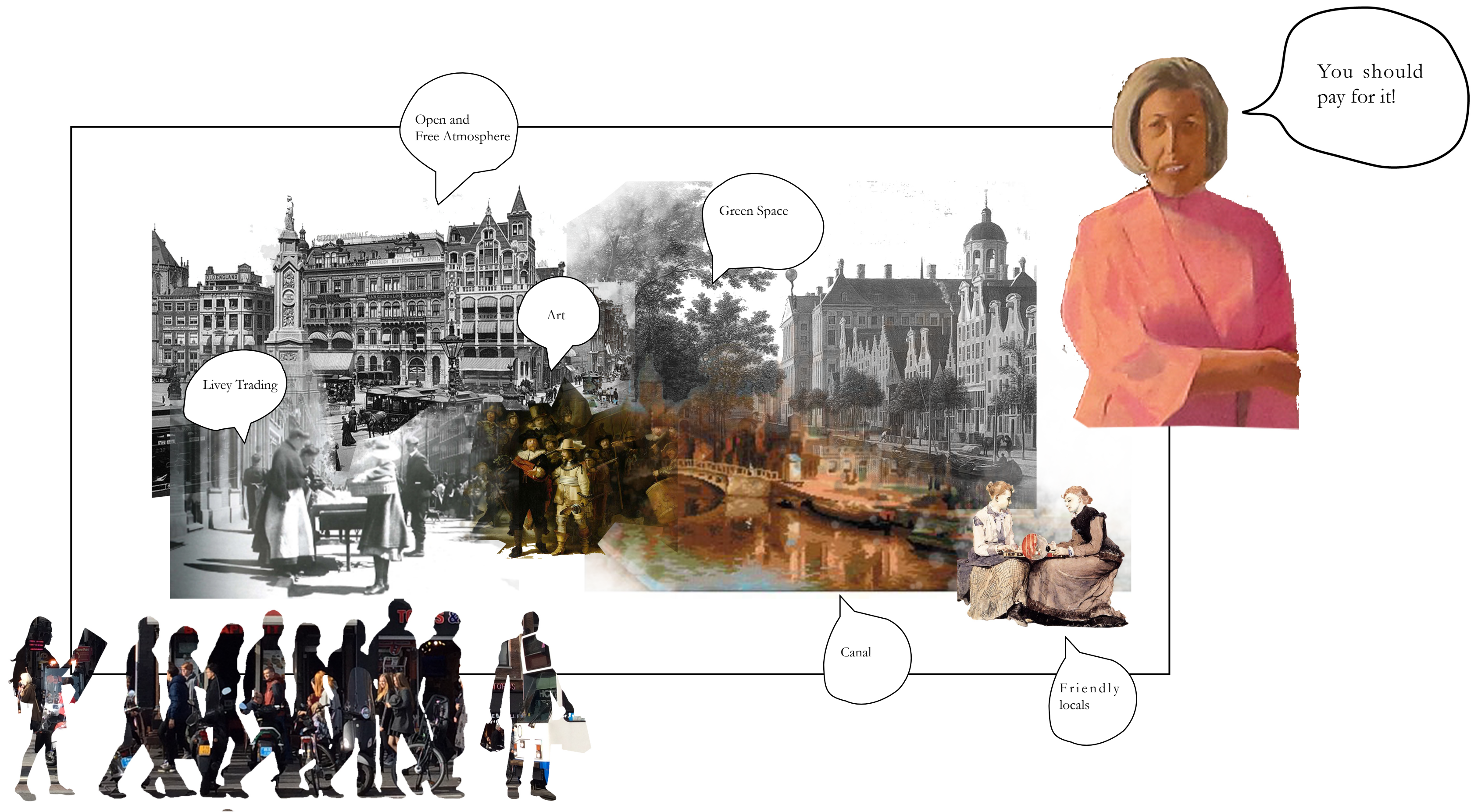






Messy traffic  
No visual guide  
The absence of identifiable elements  
No qualified public space







# 1.2 Problem Statement

## 'The city did not see the dangers in time'

Interview Professor Jan van der Borg Tourism also supplies a lot, says professor Jan van der Borg. But residents do not take advantage of that.

Miriam Remie April 12, 2016



## Amsterdam, tourism, the dirt and the full city

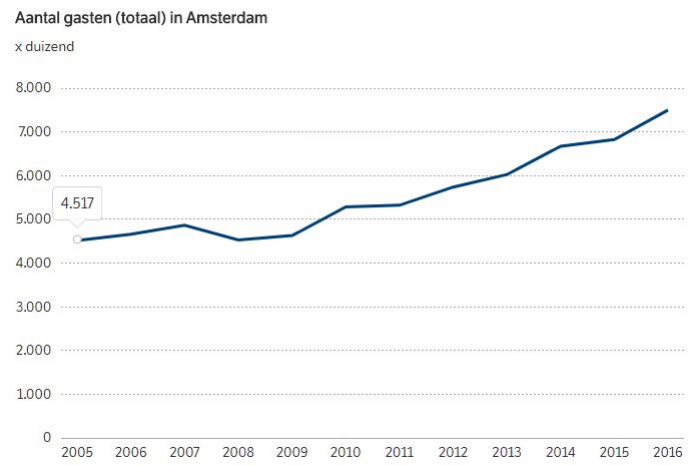
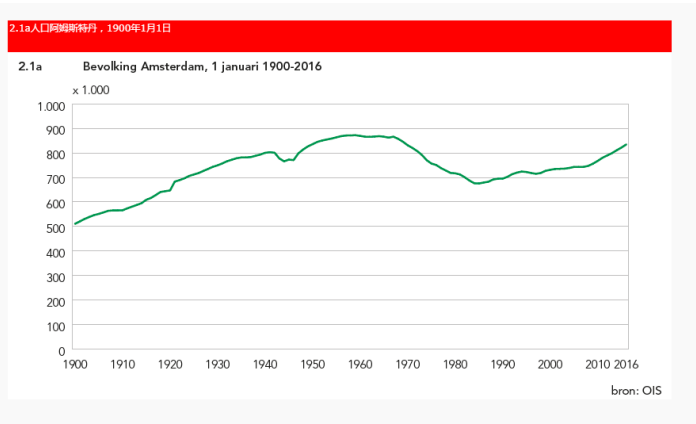
Amsterdam comes in its own filth. The new college must act quickly to prevent further slipping, "said Wim Pijbes.

Wim Pijbes August 1, 2014

This season, Amsterdam is the first time in full measure, meaning it is an attractive city for visitors from home and abroad. With the reopening of the museums, the city has nowadays an unprecedented attractive cultural infrastructure. Amsterdam benefits from world-wide cultural tourism.

The great numbers are hardly the reason to lean back, rather the opposite. But this success does not seem to be an undivided pleasure for all. Residents complain, drivers and agencies react, and so on, a new finger is pushed into the dike.

Amsterdam is at the forefront of making or hiring at the world's top international cities, or staving behind in the middle-class cities in the





Vison 2040

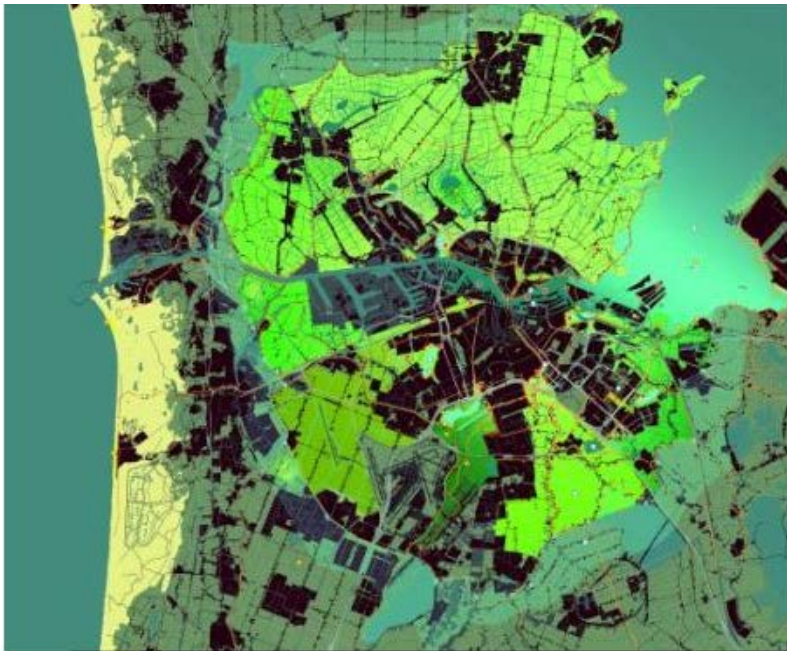


1. Rolling out city center

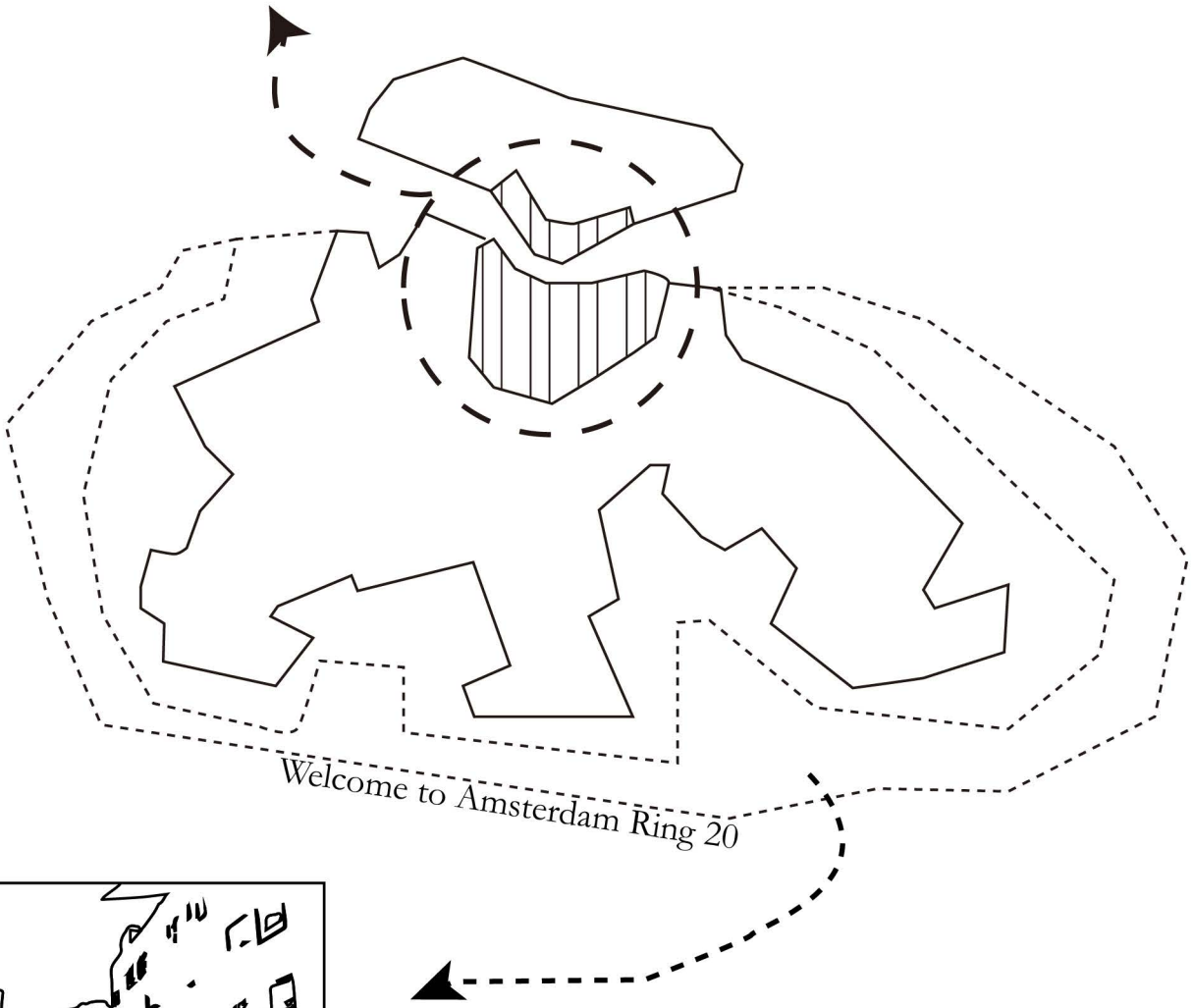
2. Interweaving the metropolitan landscape and the city

3. The rediscovery of the waterfront

4. Internationalization of the Southern Flank



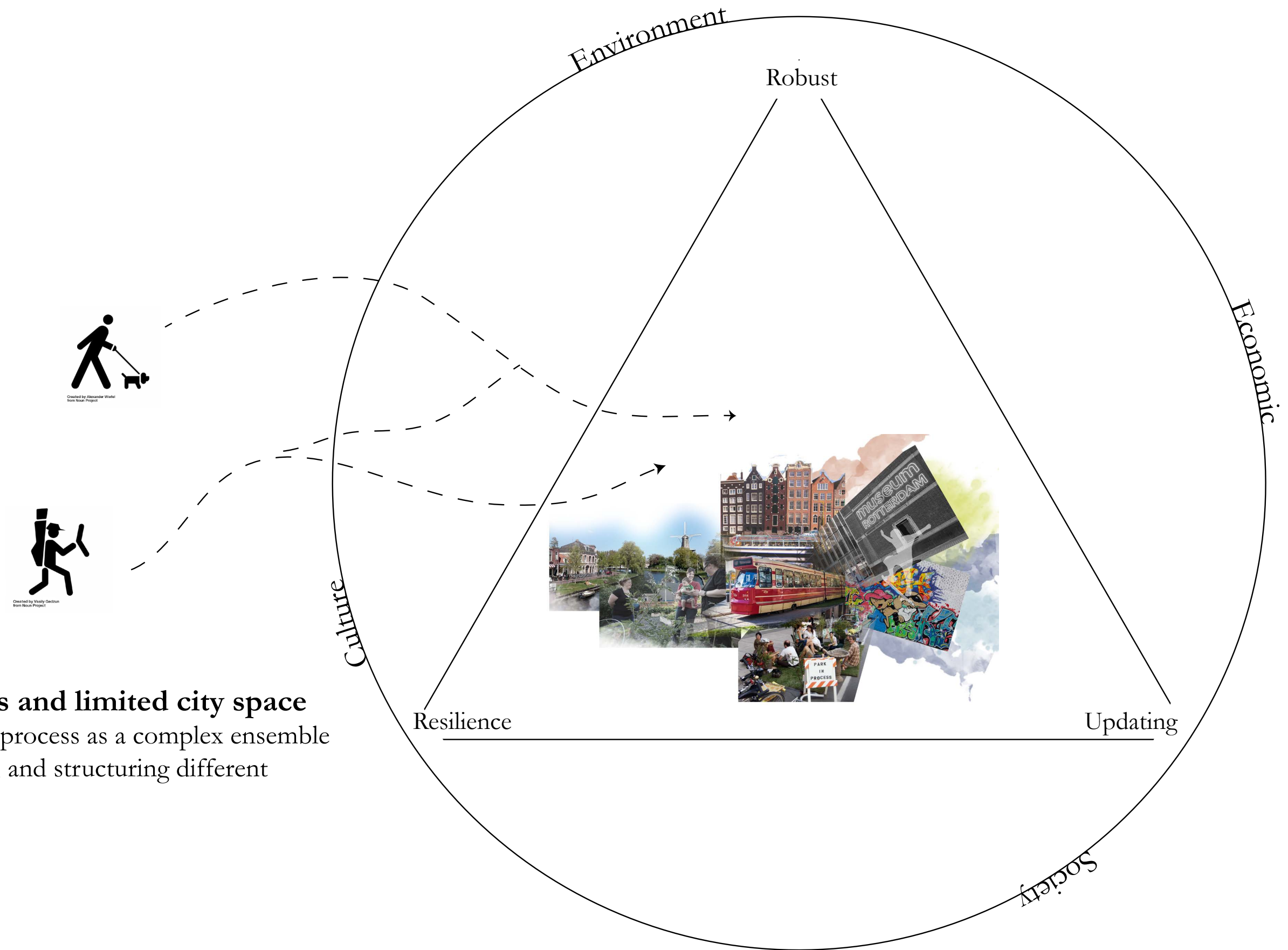
Amsterdam Theme Park



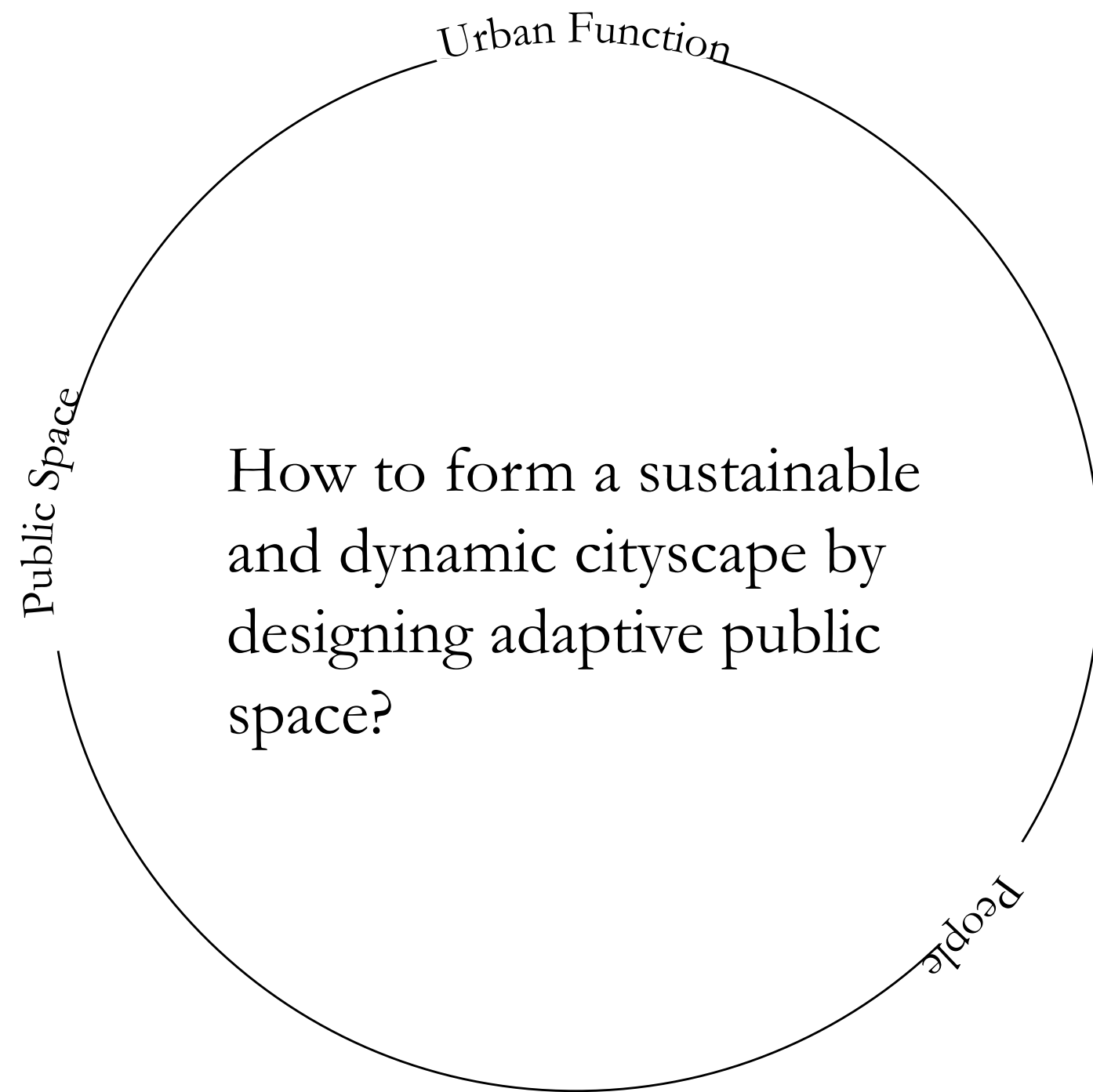


## 1.3 Research Objective

**Find a balance between crowds and limited city space**  
to enable the city continue on its own process as a complex ensemble  
with different flow, different elements, and structuring different  
orders to reveal its beauty



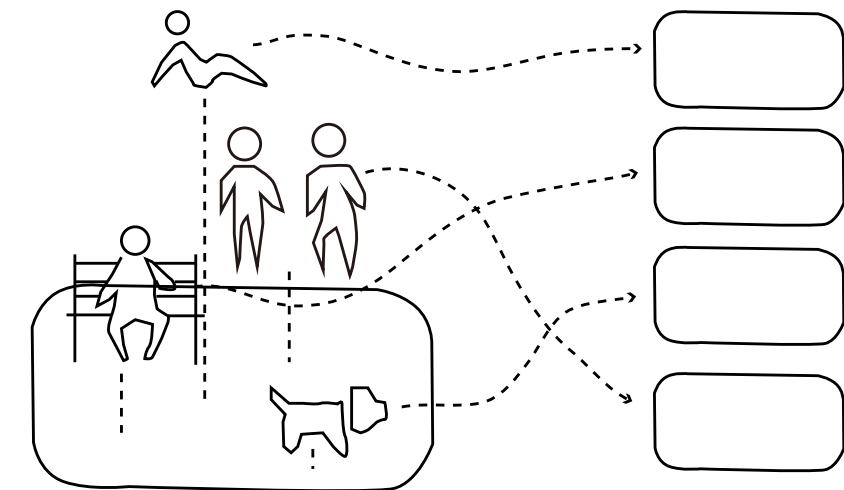
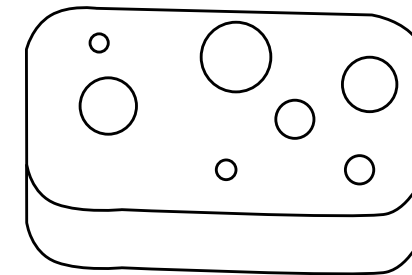
## 1.4 Research Question



Sustainable and Dynamic:

The sense of place is legible during the succession of cityscape.

Adaptive space:





## Basic Information

Where do people go in Amsterdam centre?

What should be the identity of Amsterdam centre?

What are the components of Amsterdam centre?

What may be the possible future for Amsterdam centre?

## Theoretical background

How to categorize the built environment and people?

What influences people's movement or social behavior?

What influence the sense of place perceived by people?

## Application

How can adaptive cityscape distribute people?

How can limited space provide legible sense of place?

## Reflection

How to make it feasible?



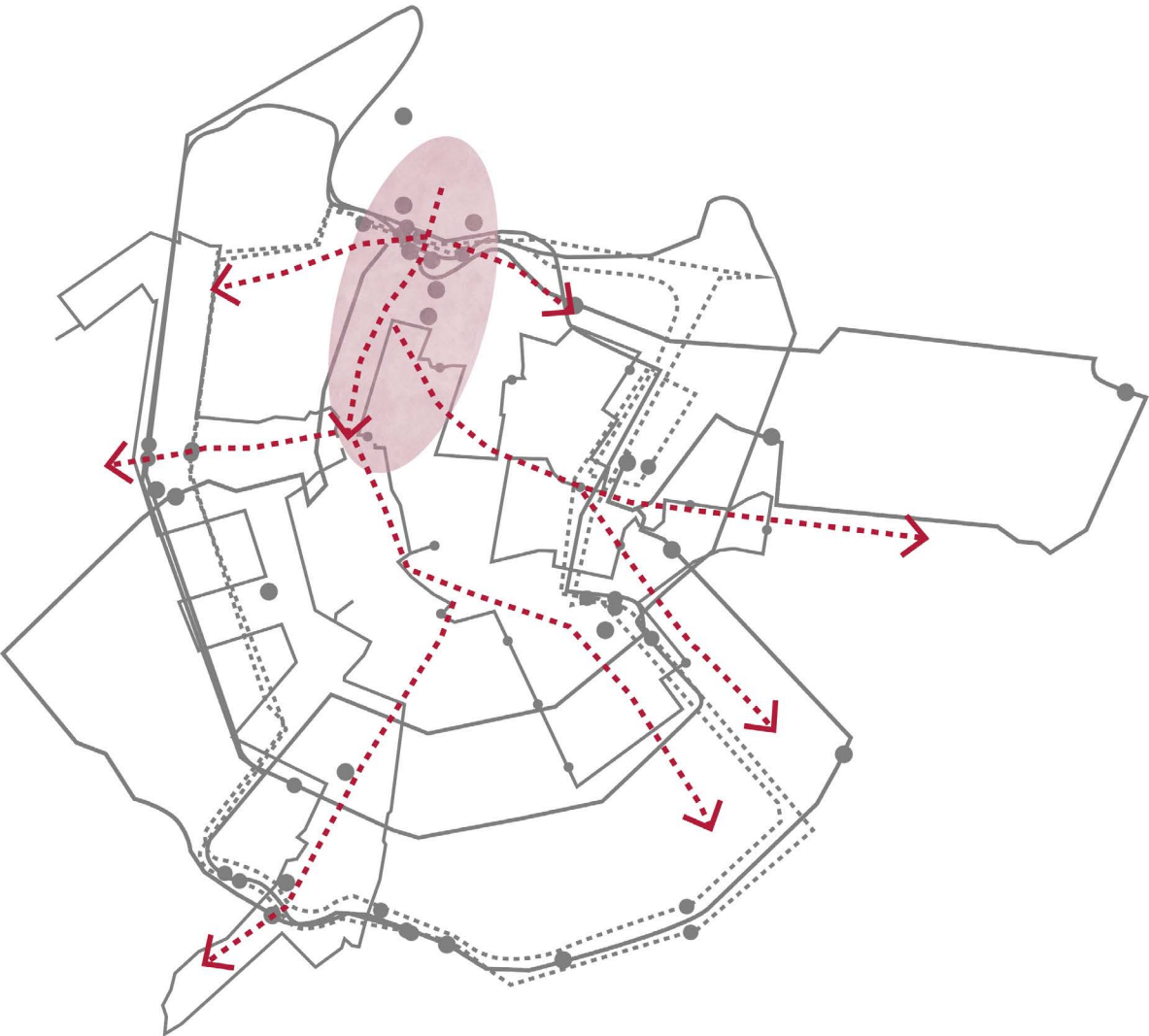
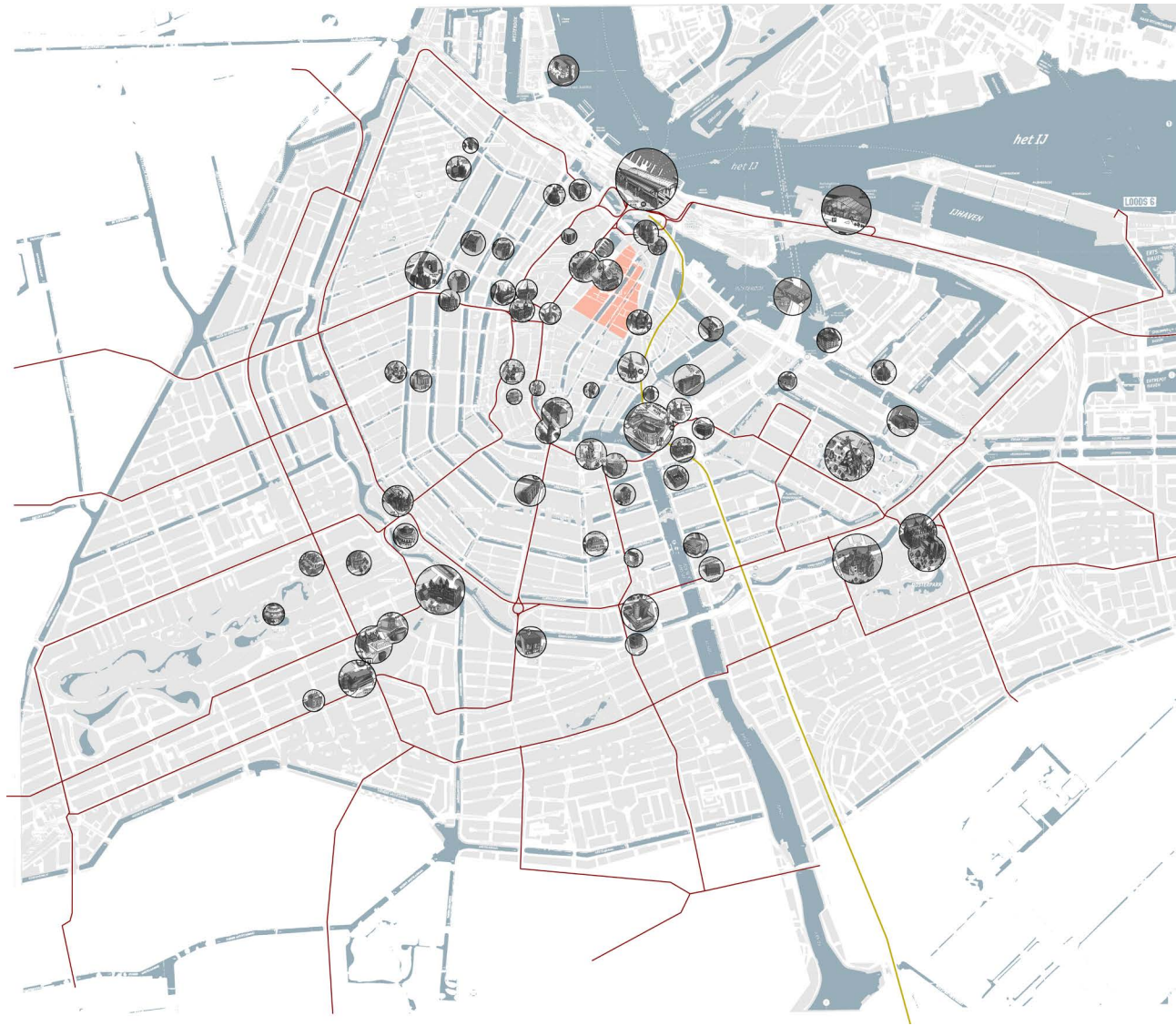
## 2. Large Scale Site Definition

## 2.1 Surrounding Connection

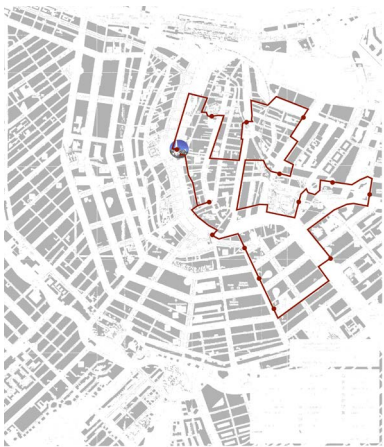




2.2 Problematic Site Located



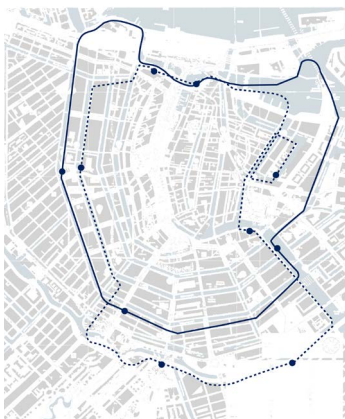
Bike trip in  
cannal area



Bike trip in  
old city



Hop-on hop-  
off boat



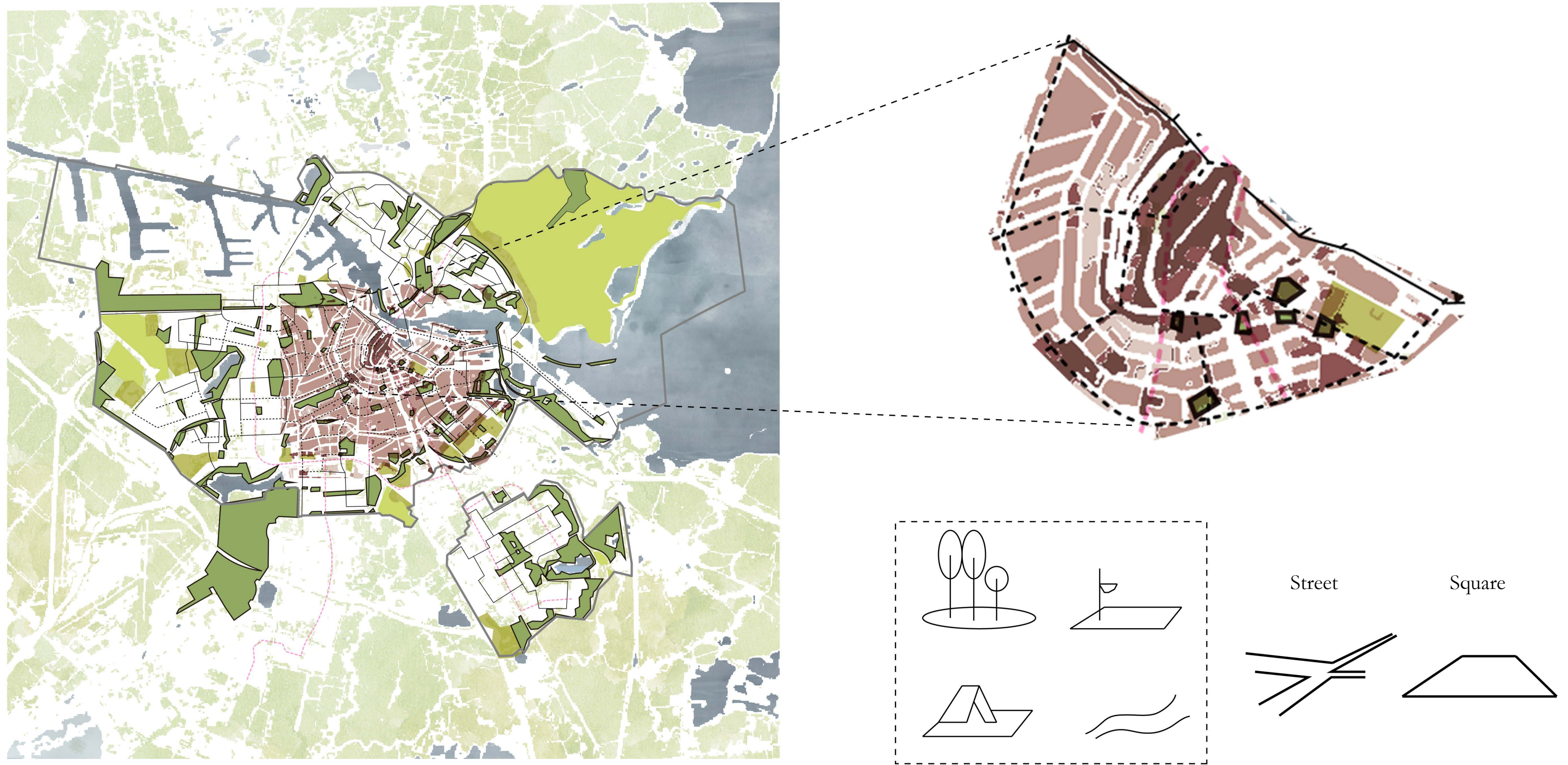
Cruise



Tour Bus



## 2.3 Land Use Analysis



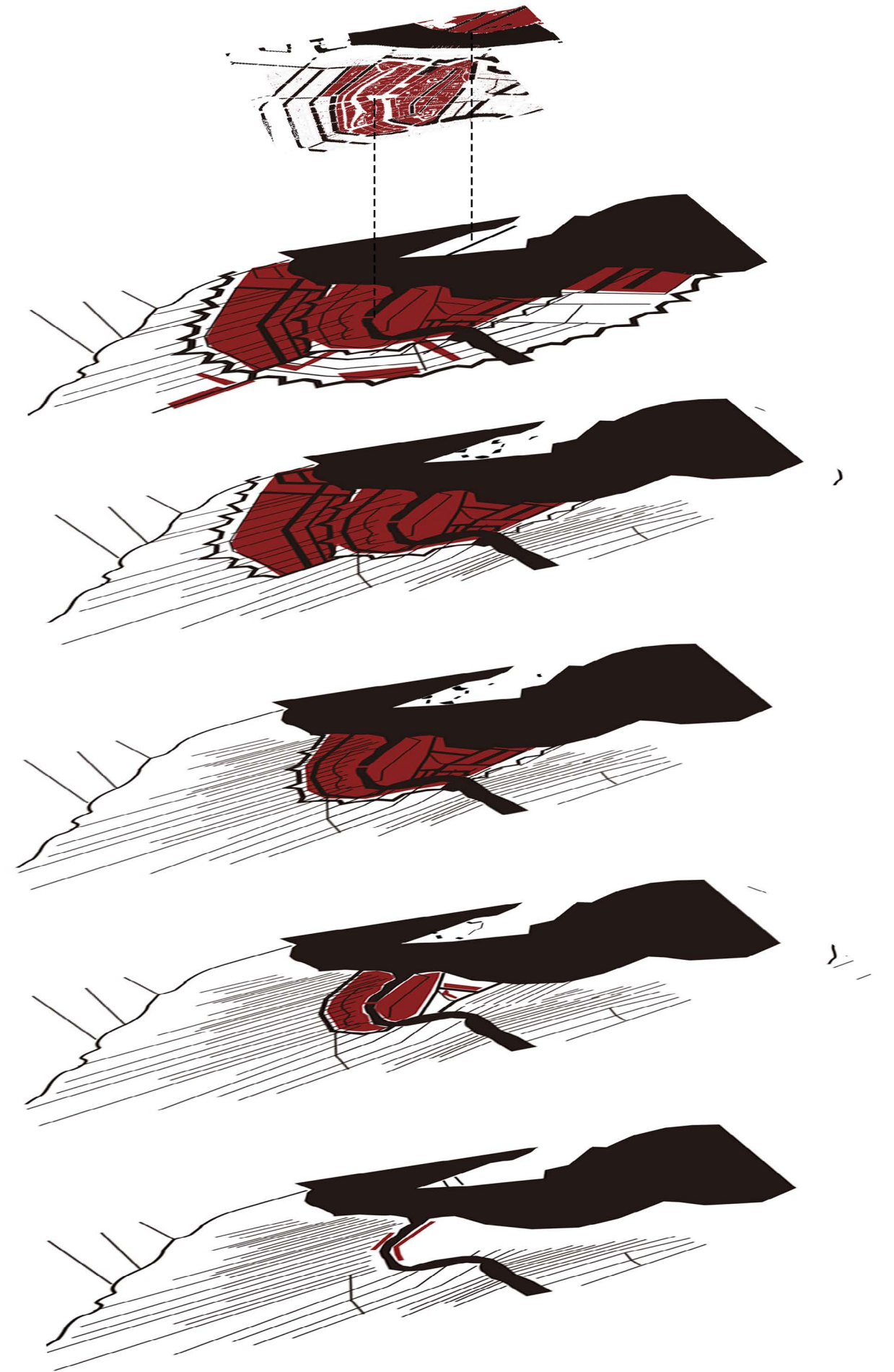




### 3. Urban Assemblies Analysis

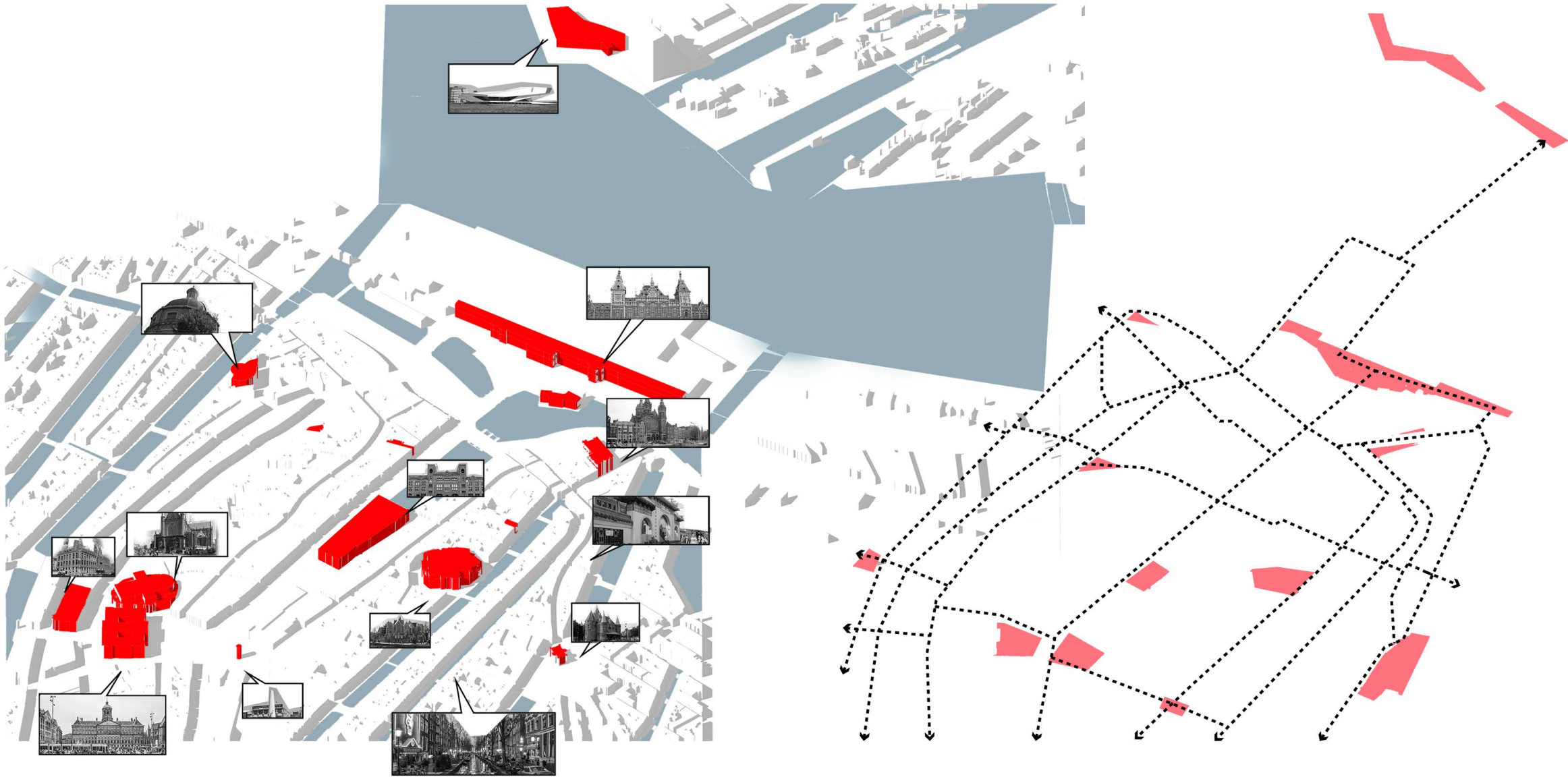
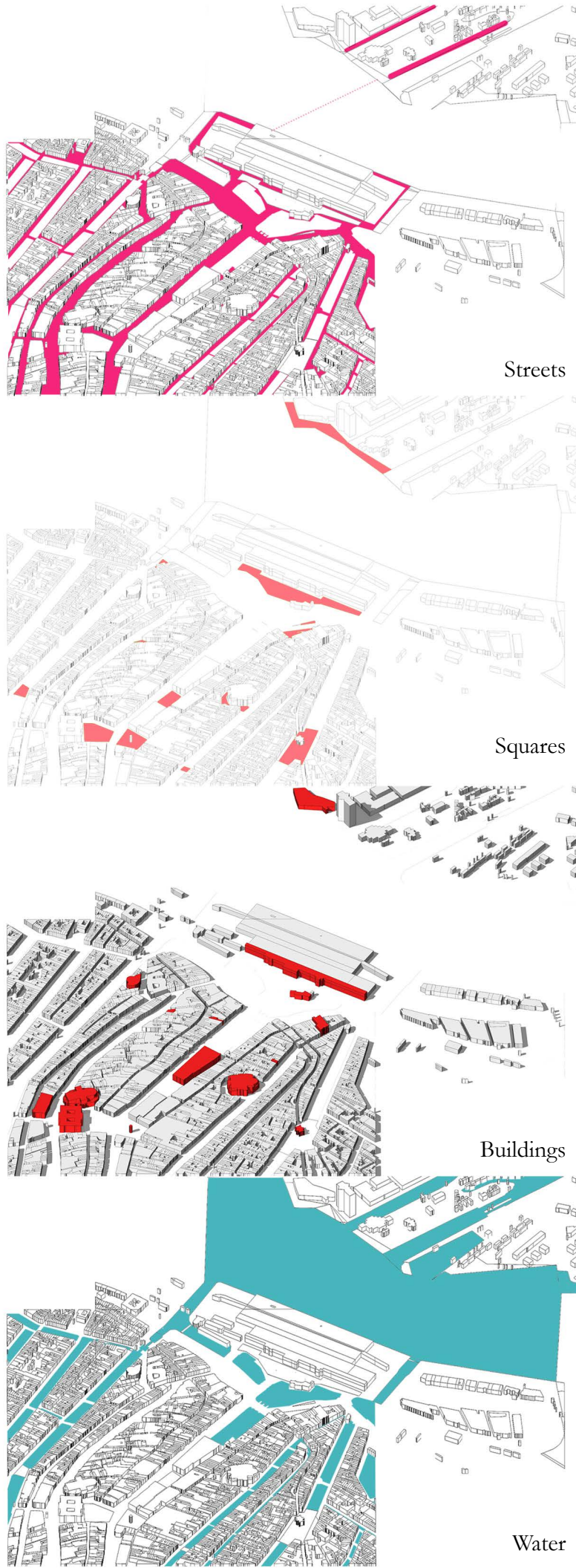


### 3.1 Layers during Urban Succession





3.2 Existing Assemblies



Buildings

Public Space

People Movement

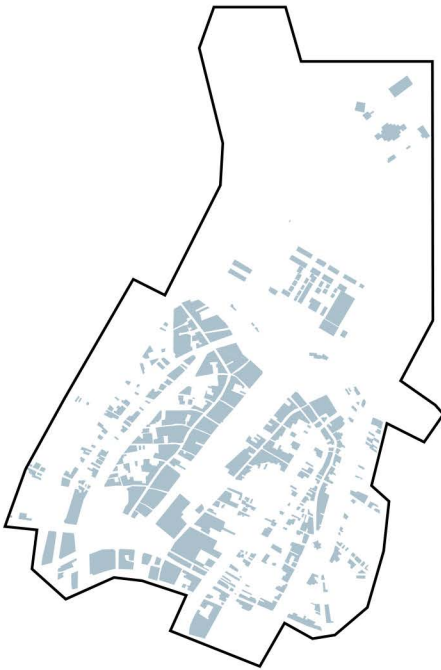
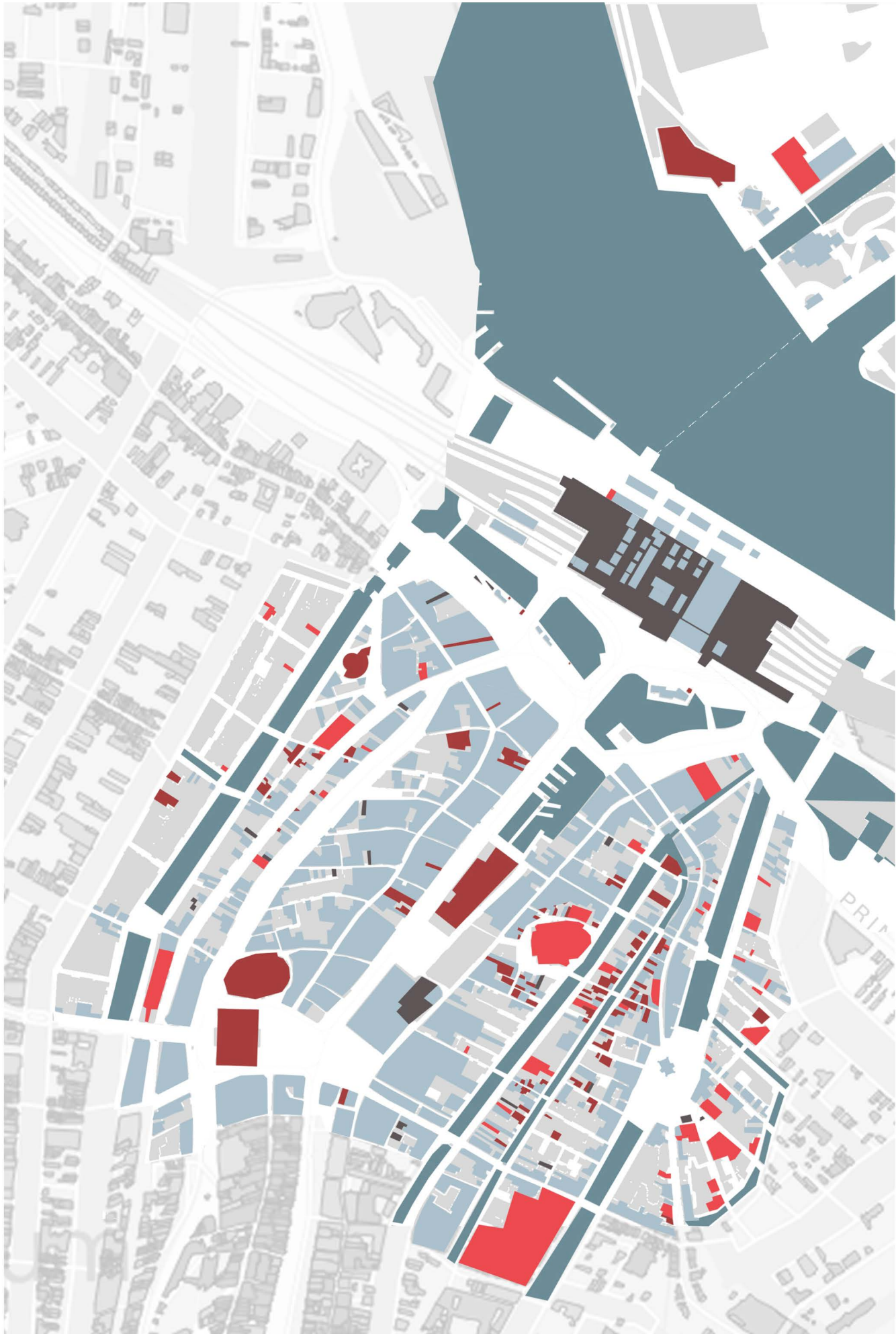


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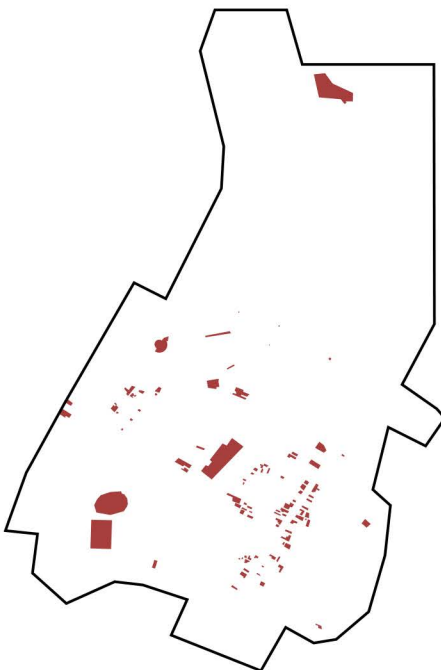
### 3.3 Buildings

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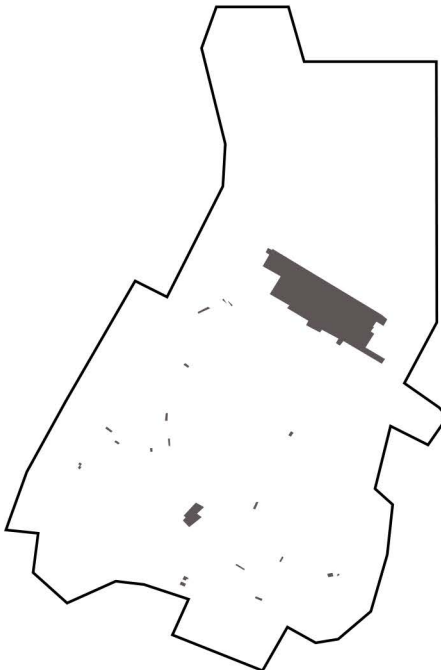
3.3 Typology of Building



Commercial Use



Activities



Public transportation

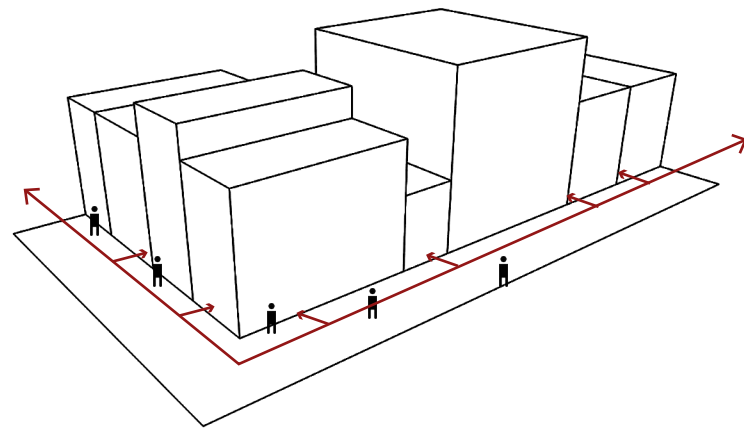


Religion/Education

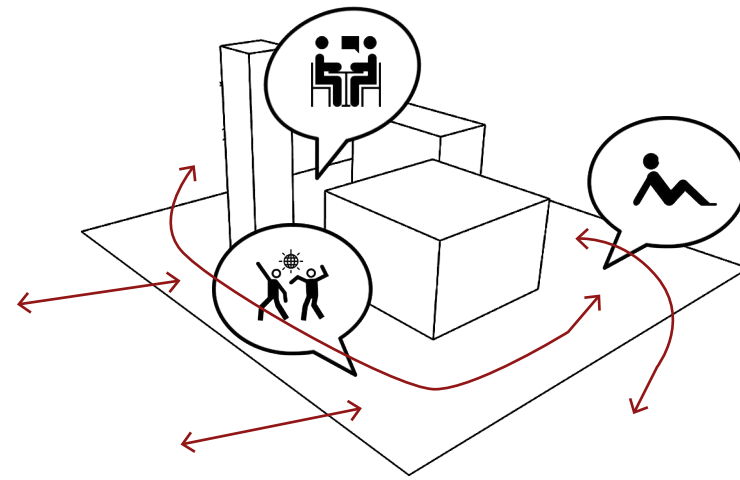


Residential Use

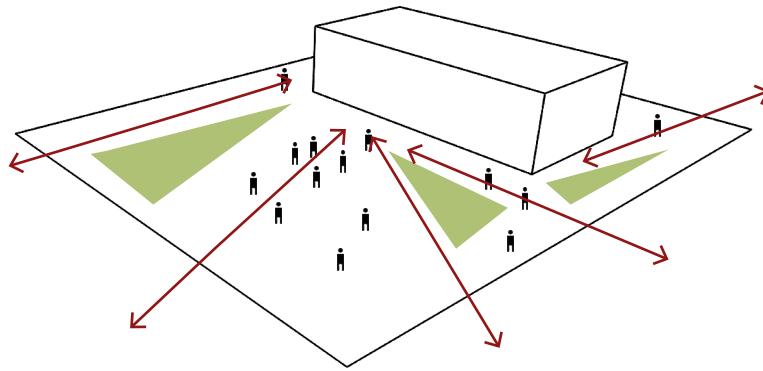




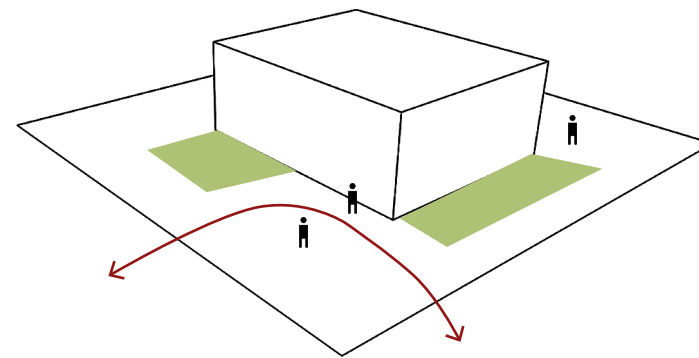
Commercial Use



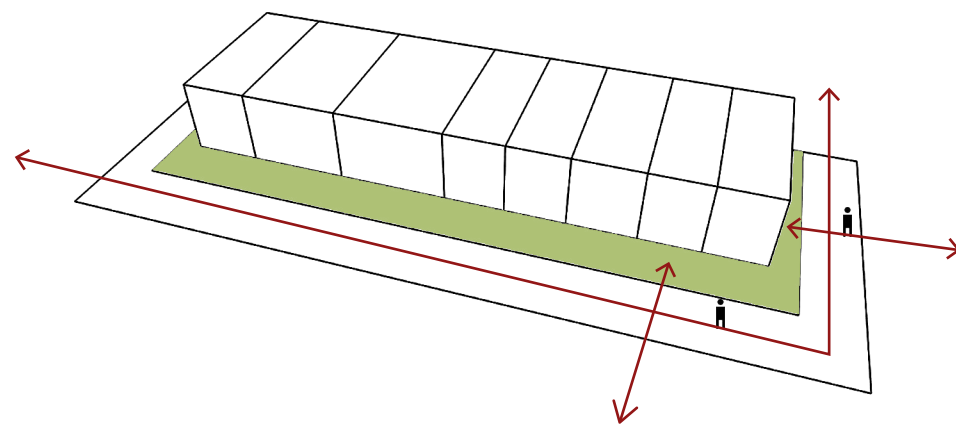
Activities



Public Transportation



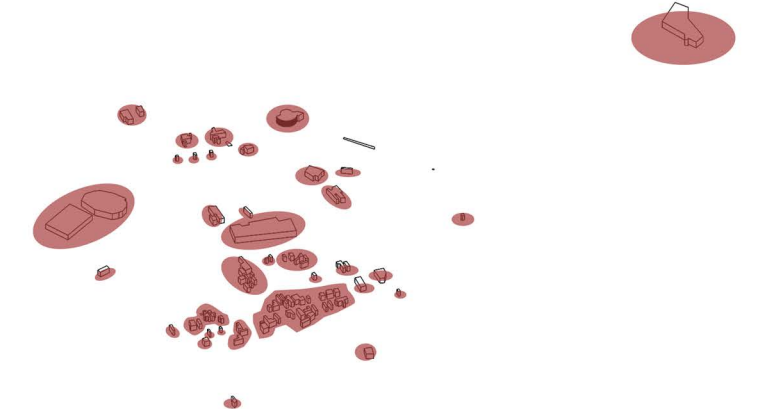
Religion/Education



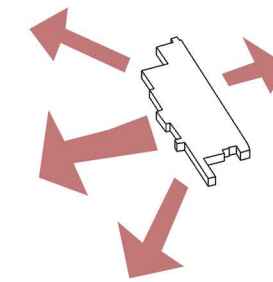
Residential Use



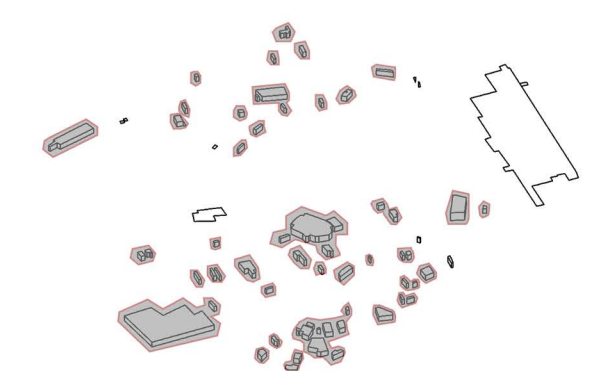
Commercial Use



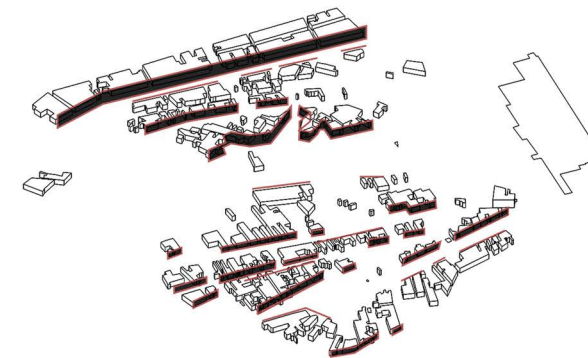
Activities



Public Transportation



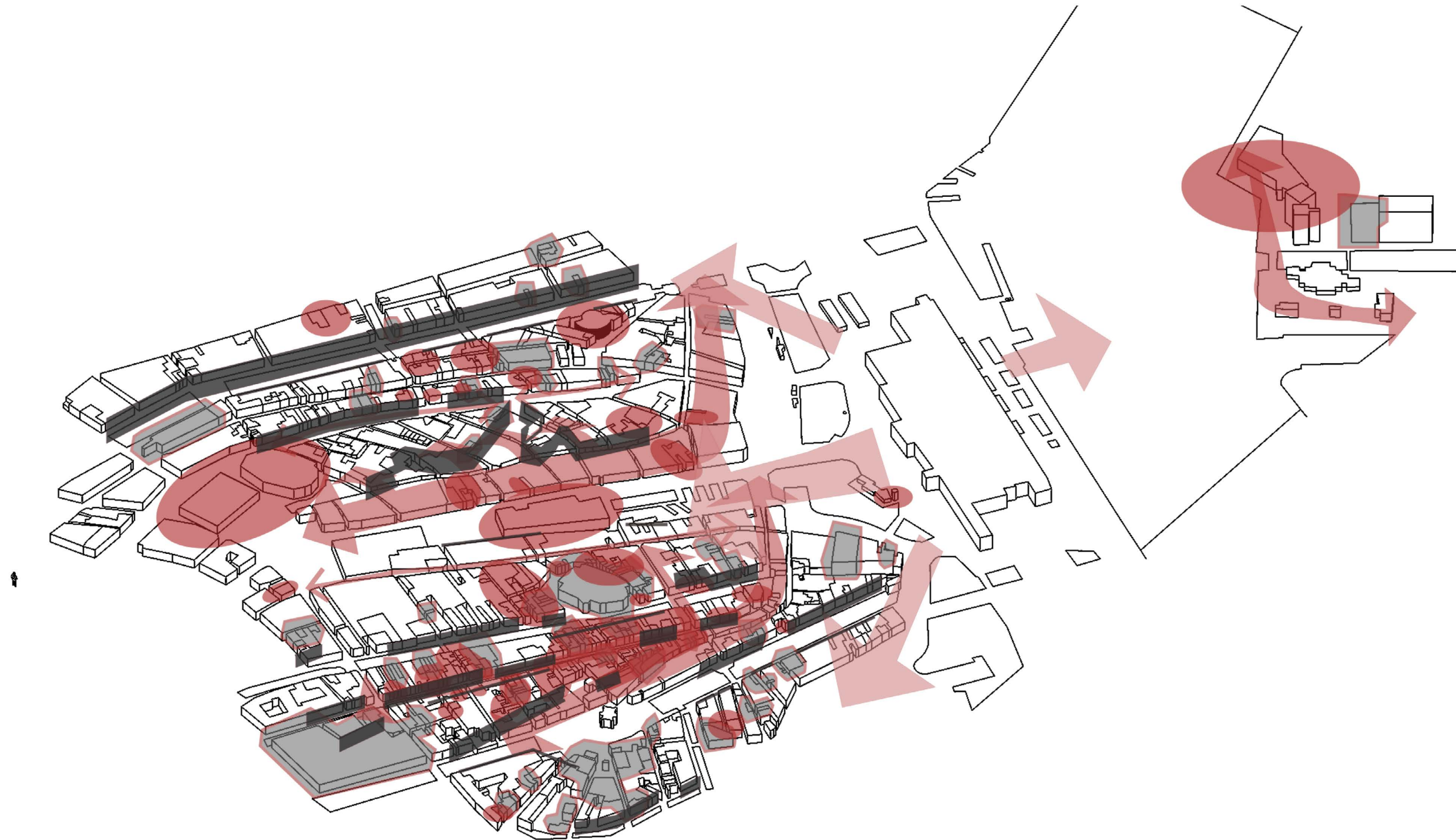
Religion/Education



Residential Use



# Conclusion



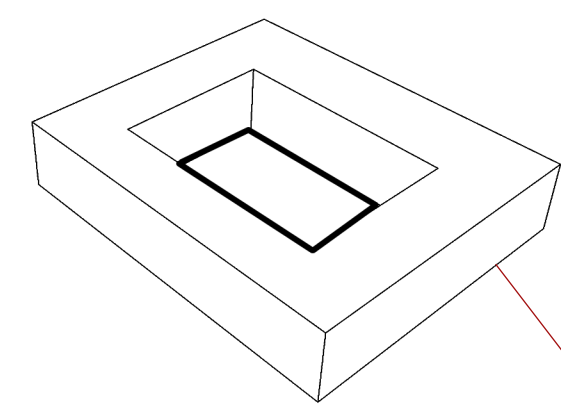


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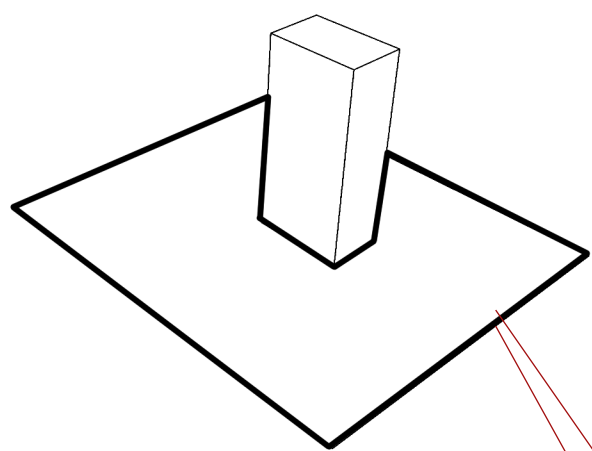
## 3.4 Squares

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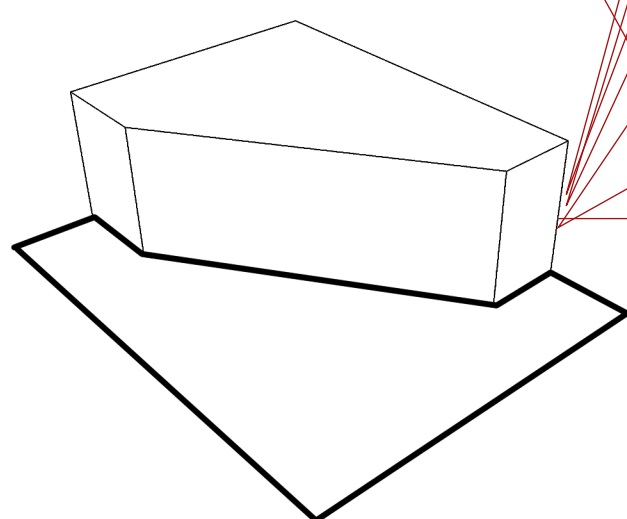
# 3.4 Typology of Square



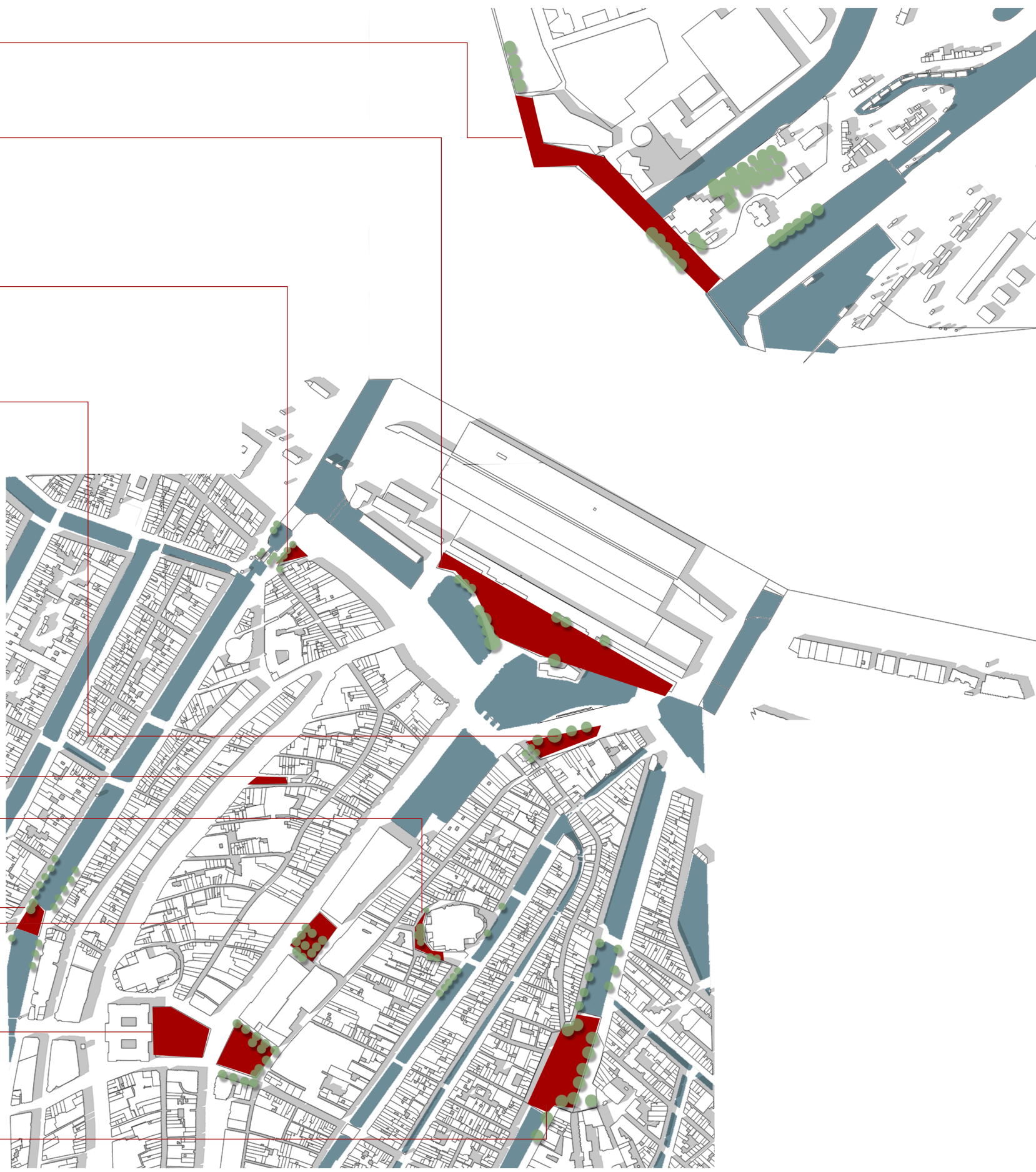
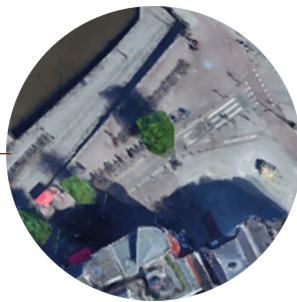
Enclosed Square



Dominated Square

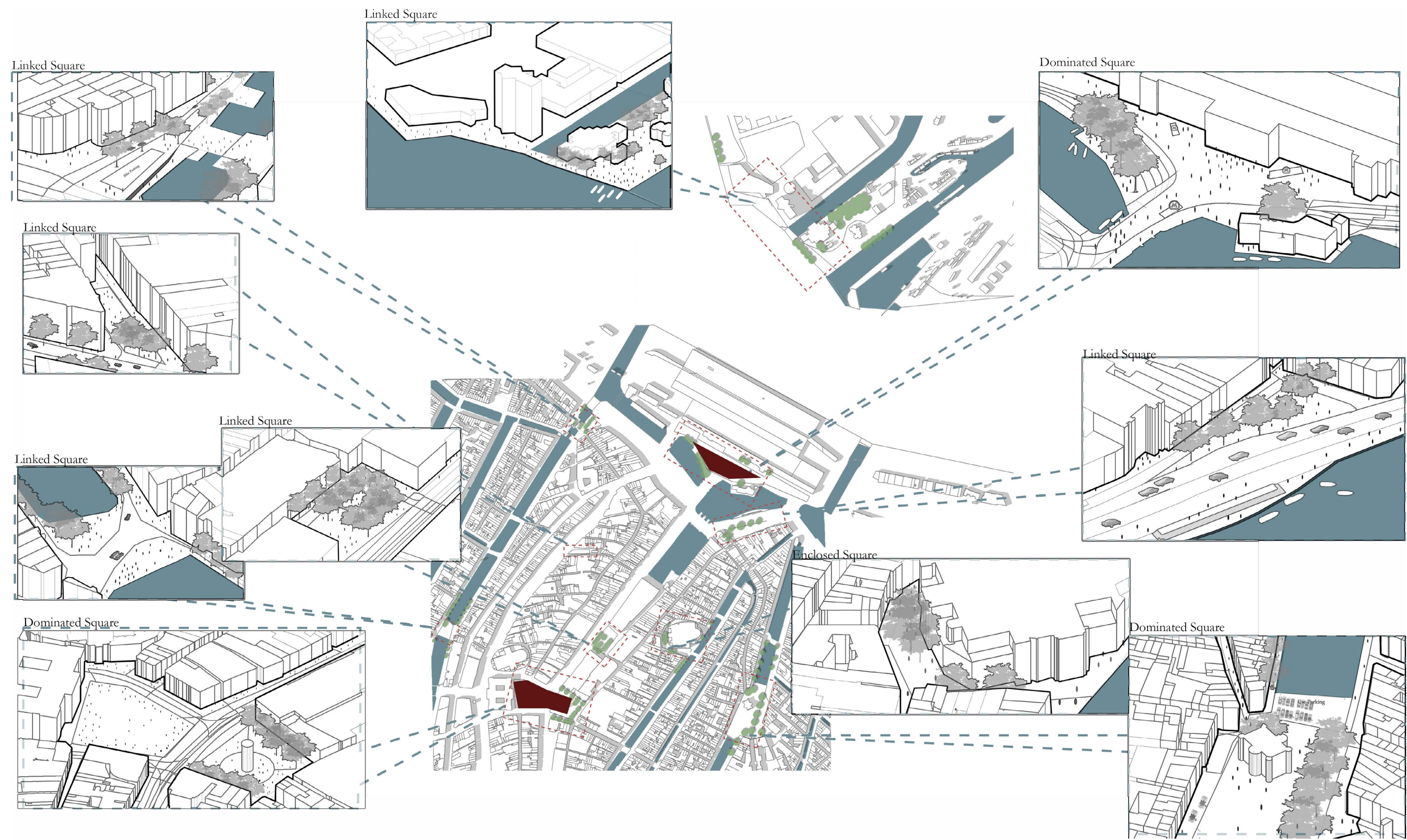


Linked Square





# Conclusion



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3.5 Street

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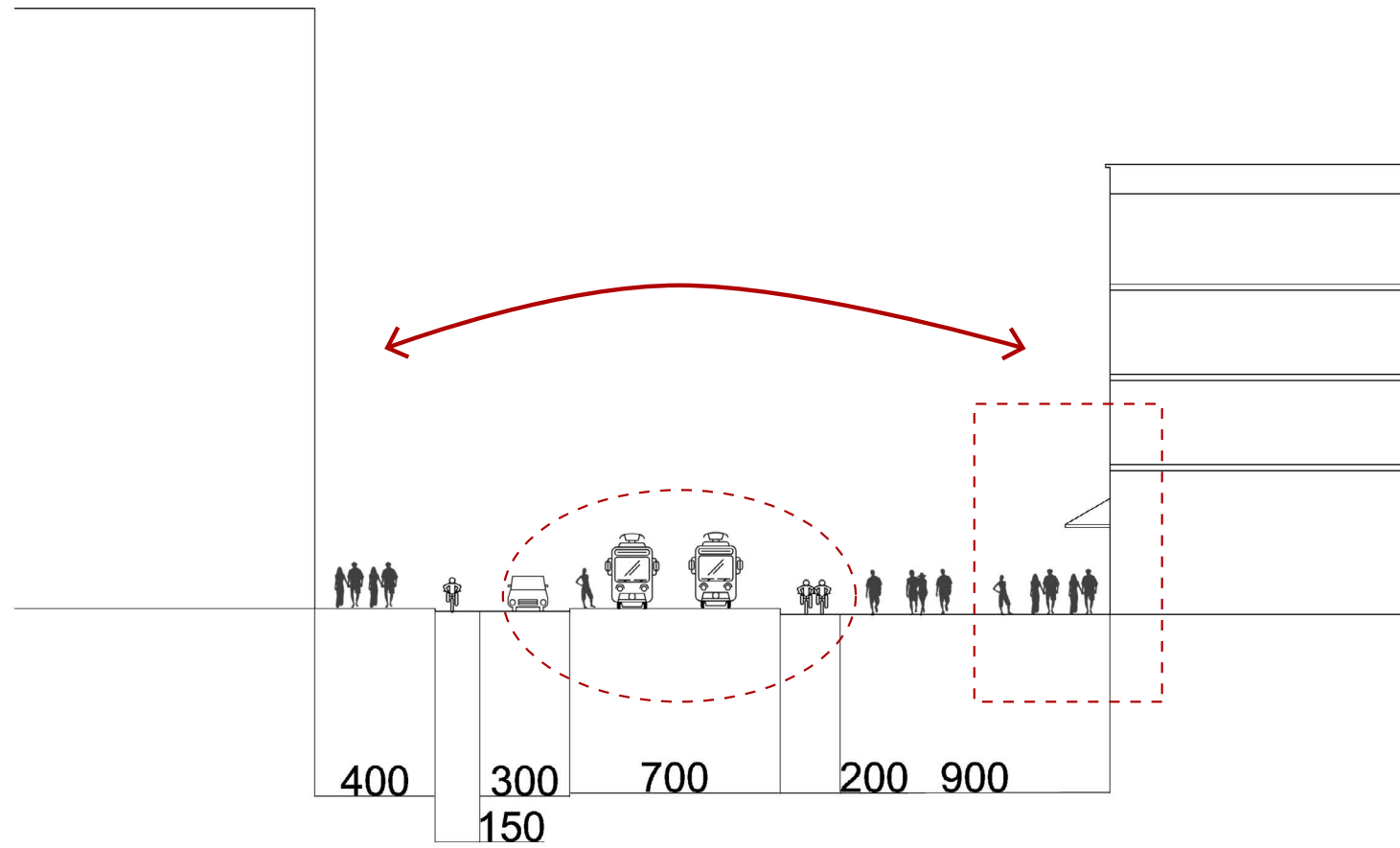
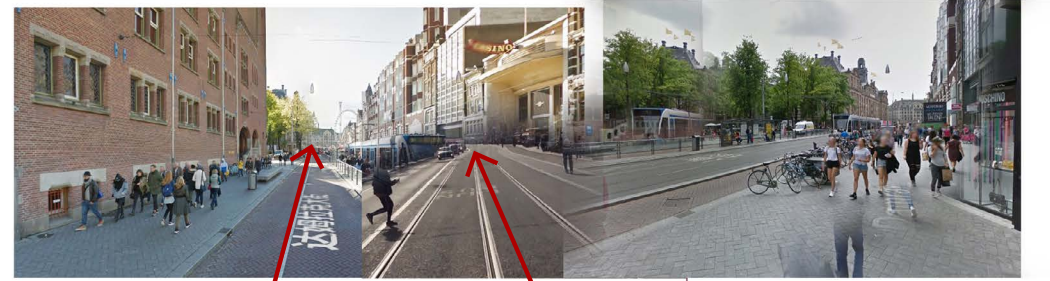
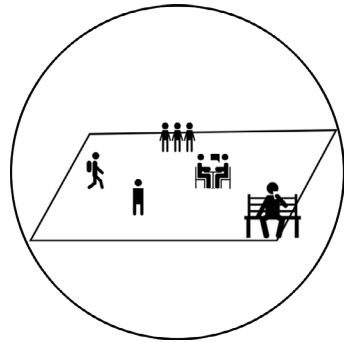
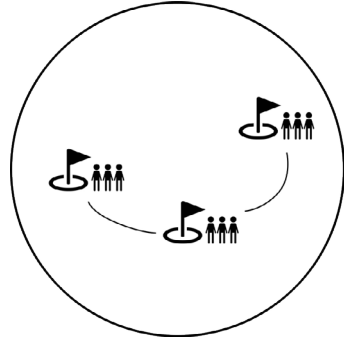
### 3.5.1 Street Structure





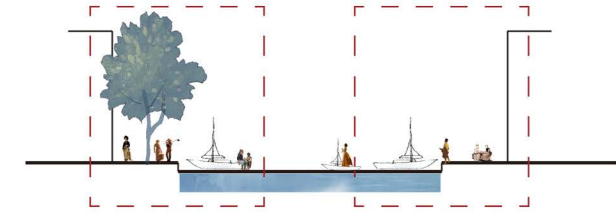
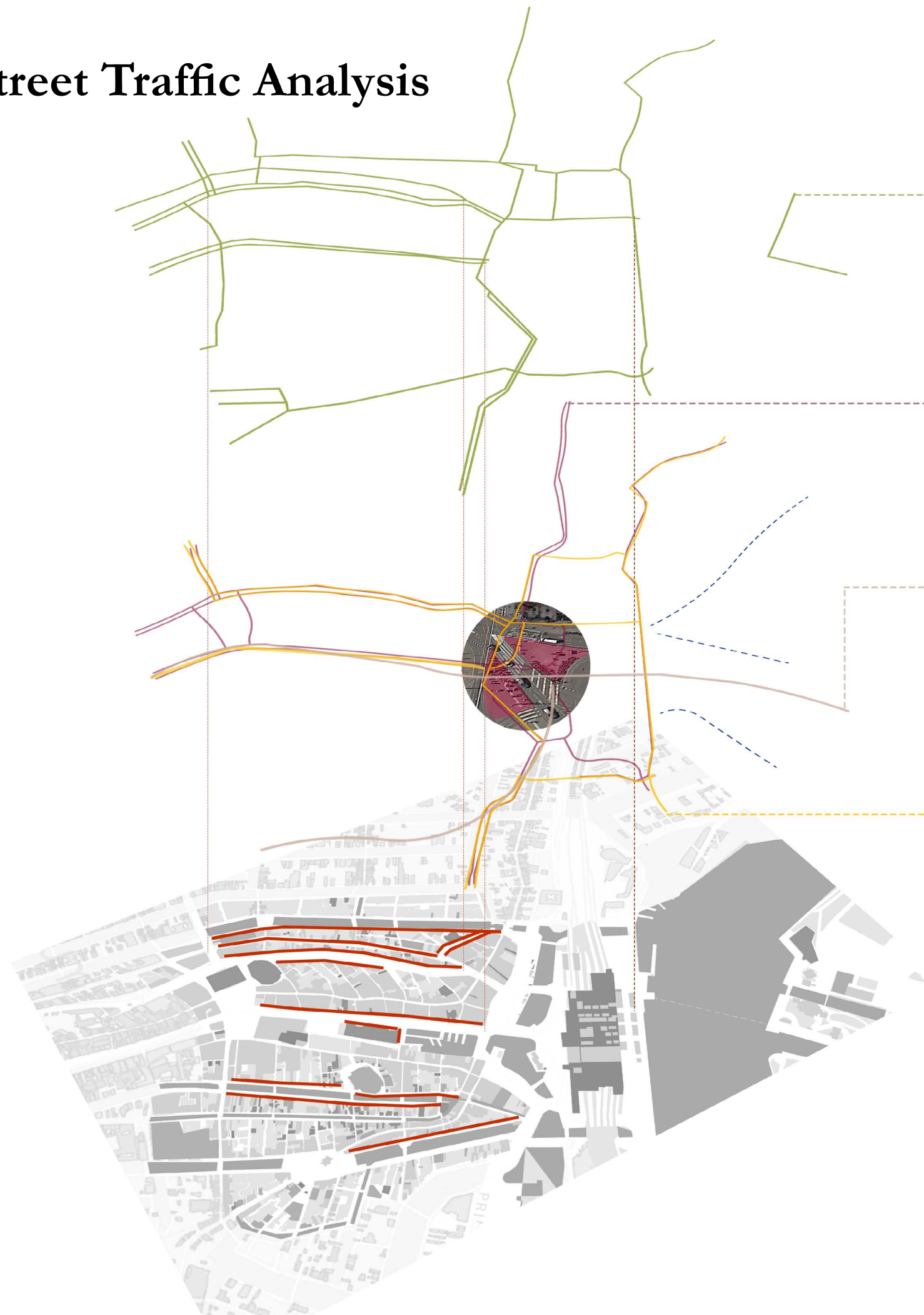








### 3.5.3 Street Traffic Analysis





3.5.4 Horizontal Alley Analysis



Residential are & Commercial area



Main Street & Local Street



Commercial area & Commercial area



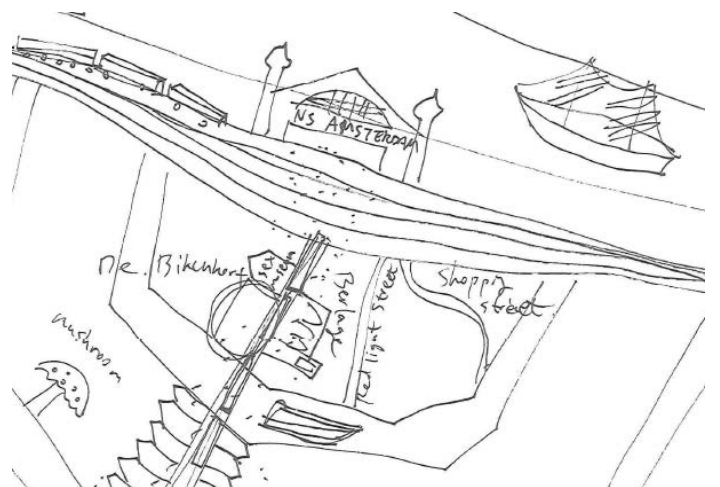
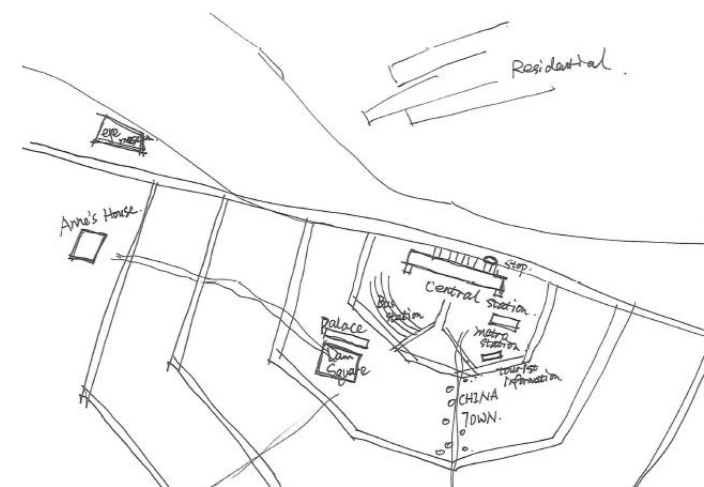
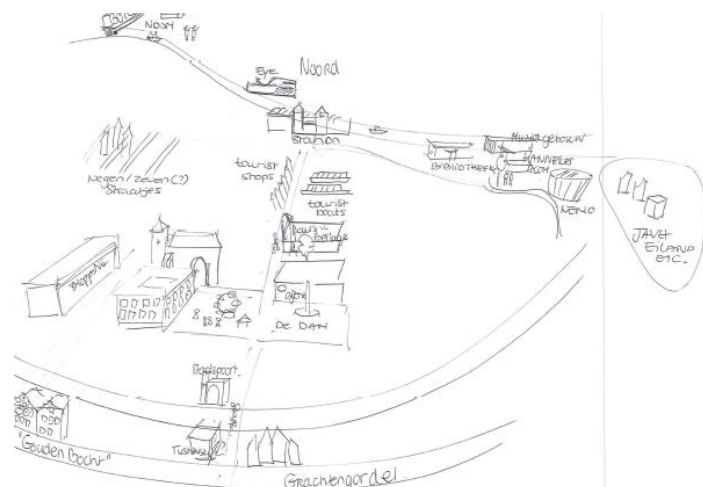
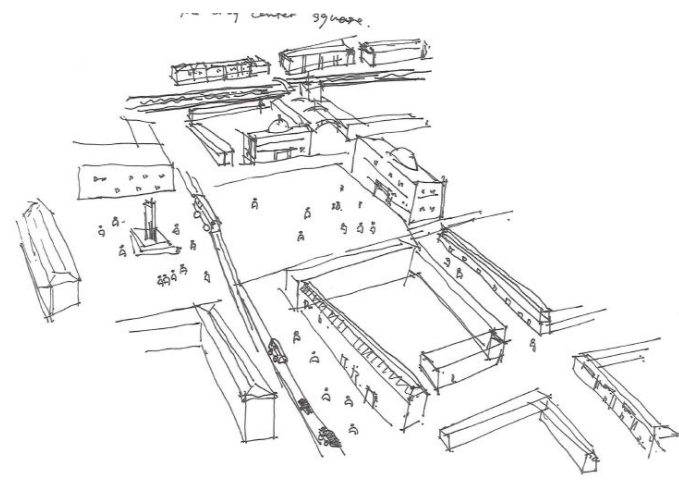
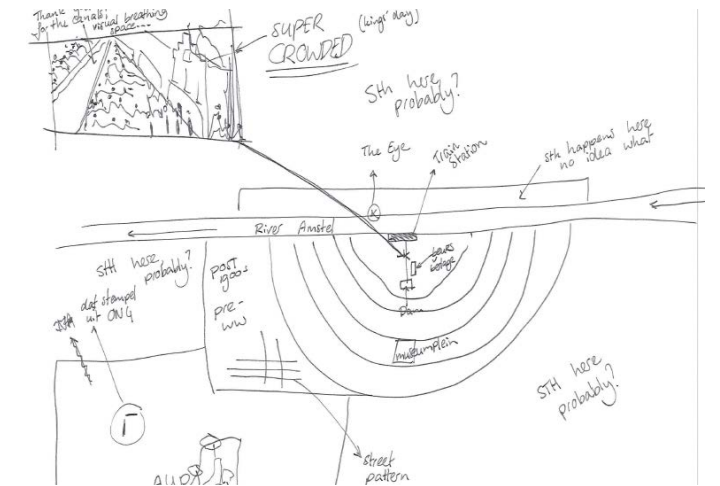
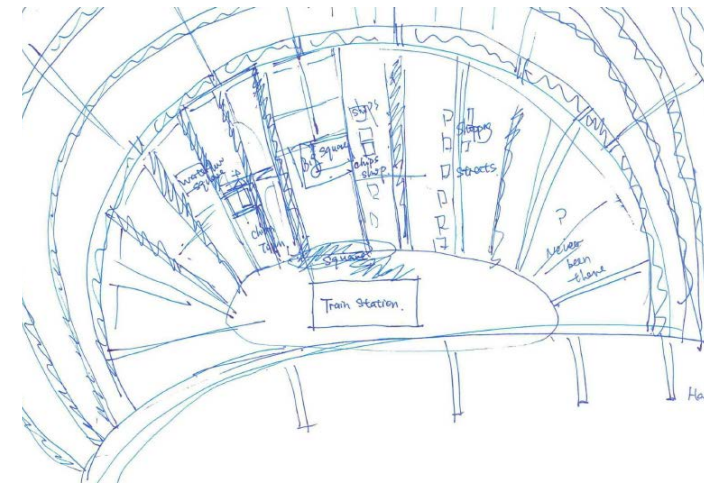
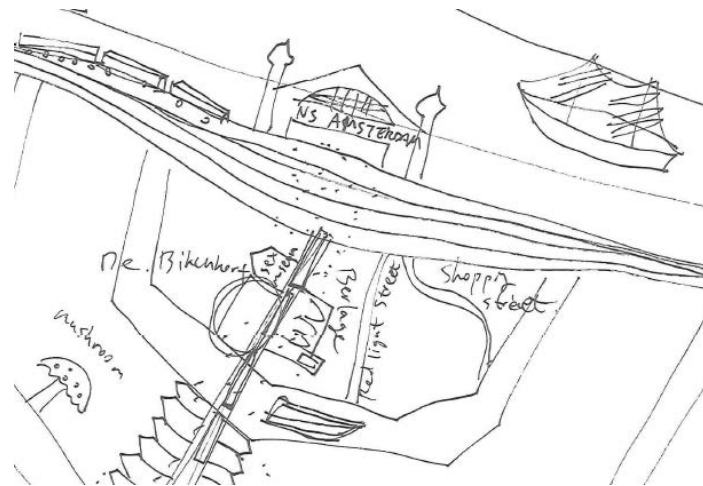
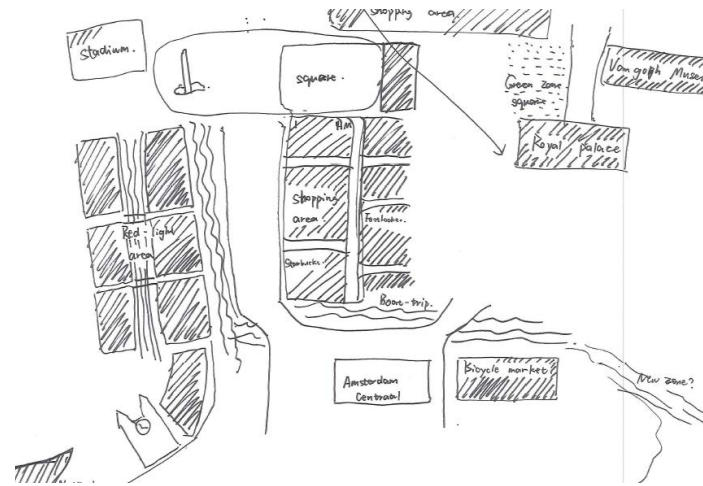
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## 3.6 Conclusion

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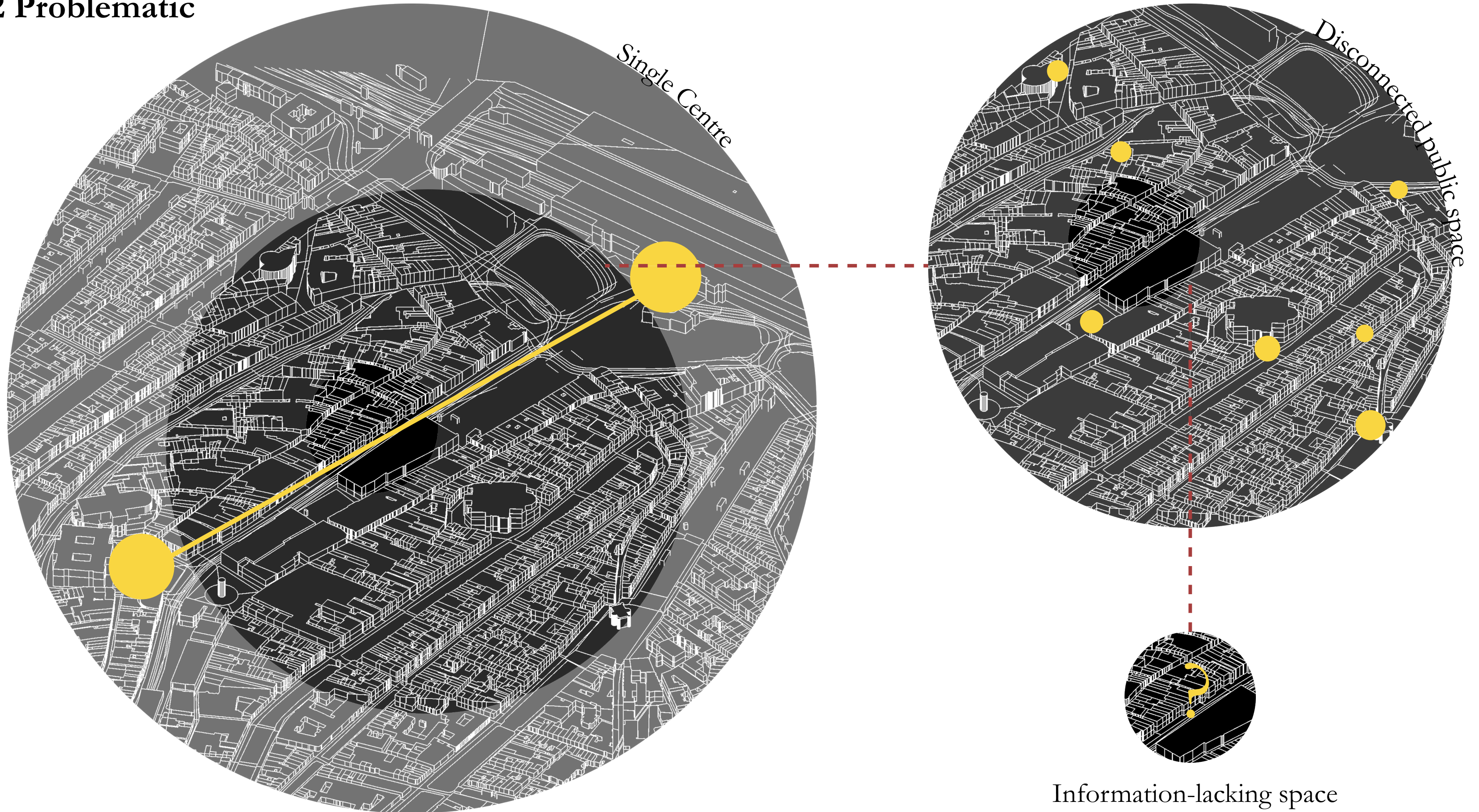


### 3.6.1 Mental Map





### 3.6.2 Problematic





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## 3.7 People Analysis

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## 4.1 Purposes

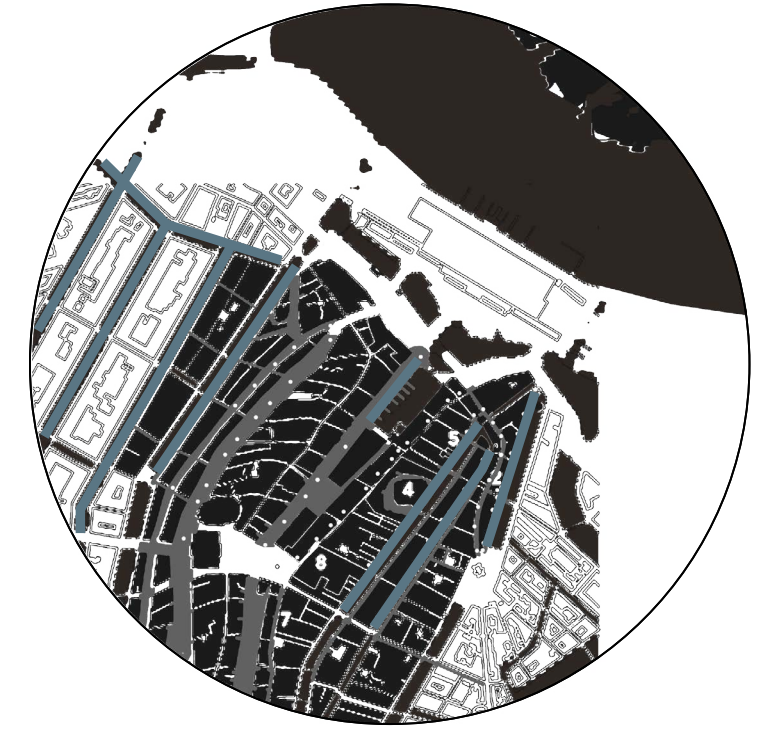
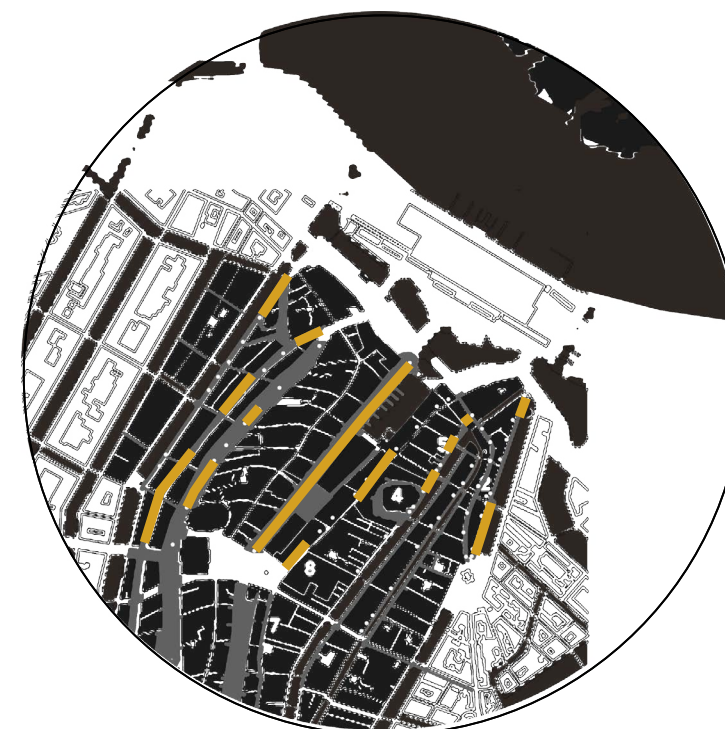
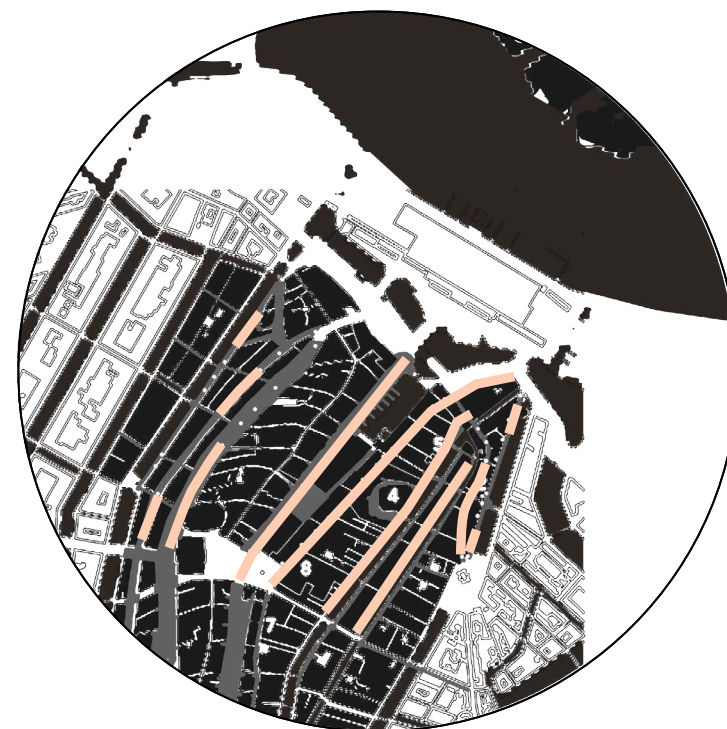
Architecture  
Canals  
landscape  
culture Events  
Diversity Museums  
People  
Museum  
Citylife Atmosphere Shops  
Liberalism  
Social Food  
Cannabis Water History  
Urban  
Concerts

What attracts you to go  
to Amsterdam?

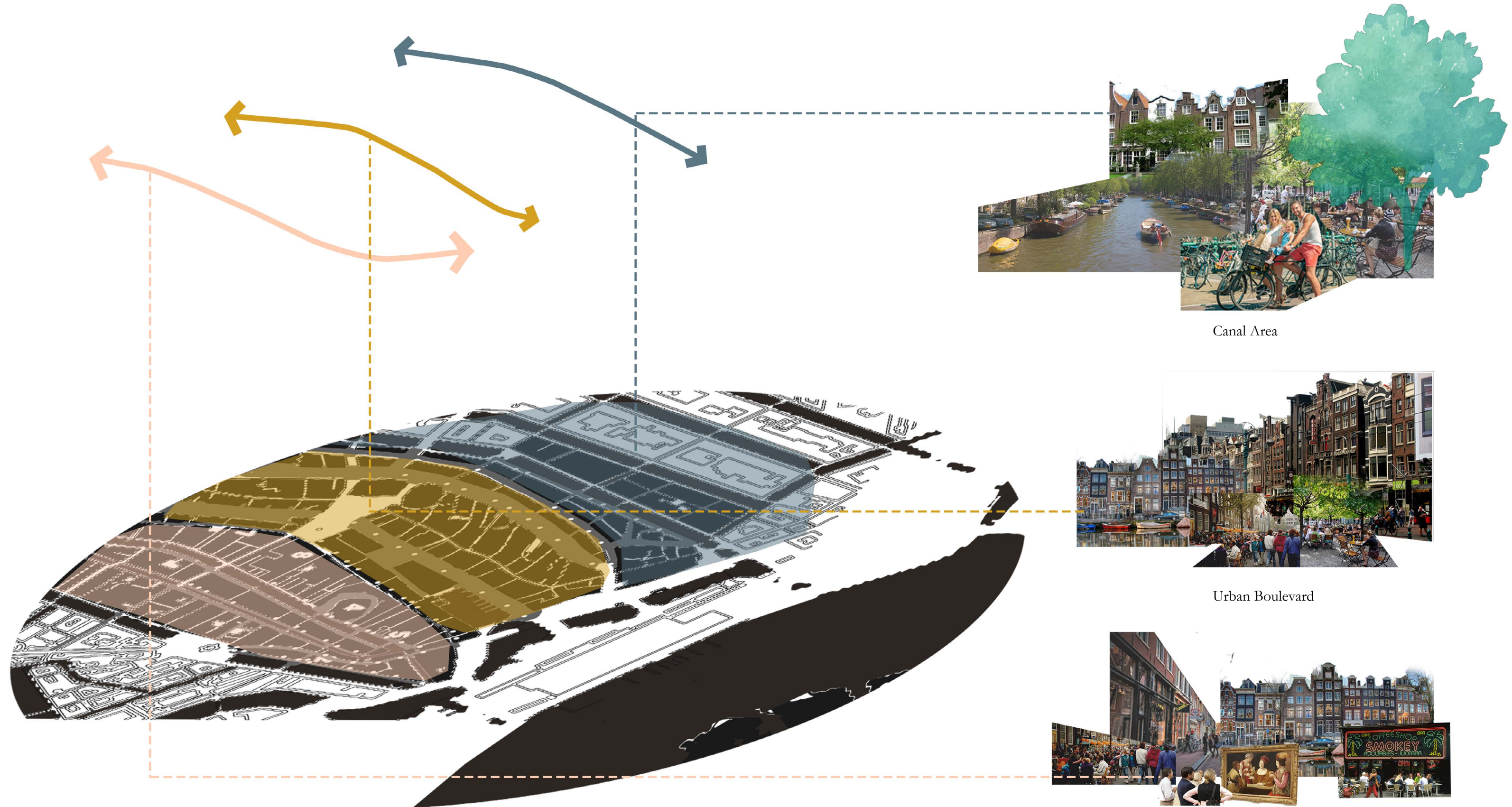




## 4.2 Urban Partition







Canal Area

Urban Boulevard

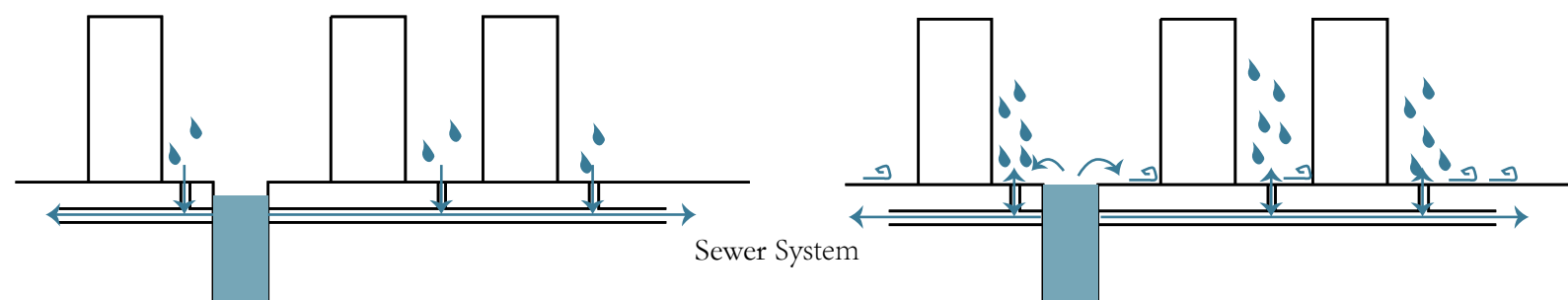
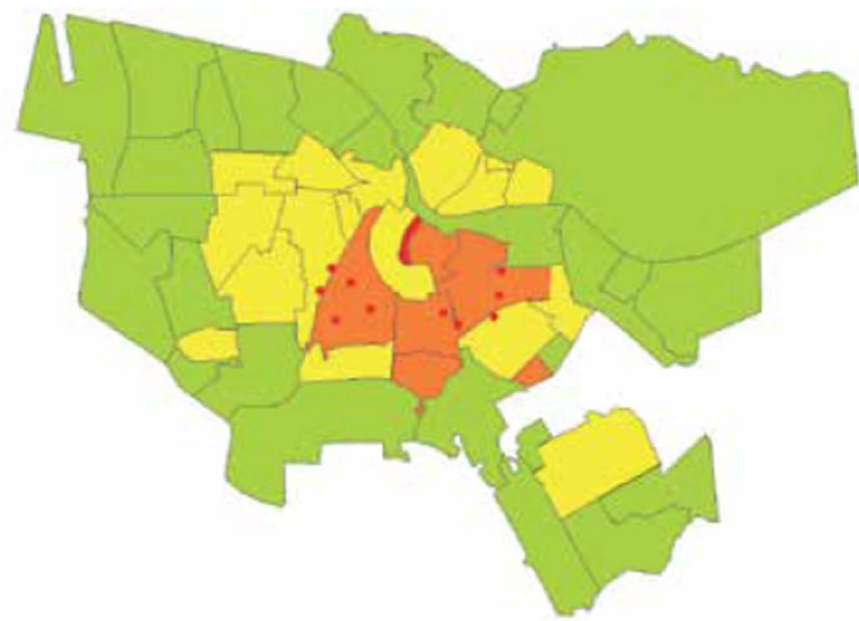
Old City



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## 3.8 Flood Risk Analysis









## 4. Structural Proposal



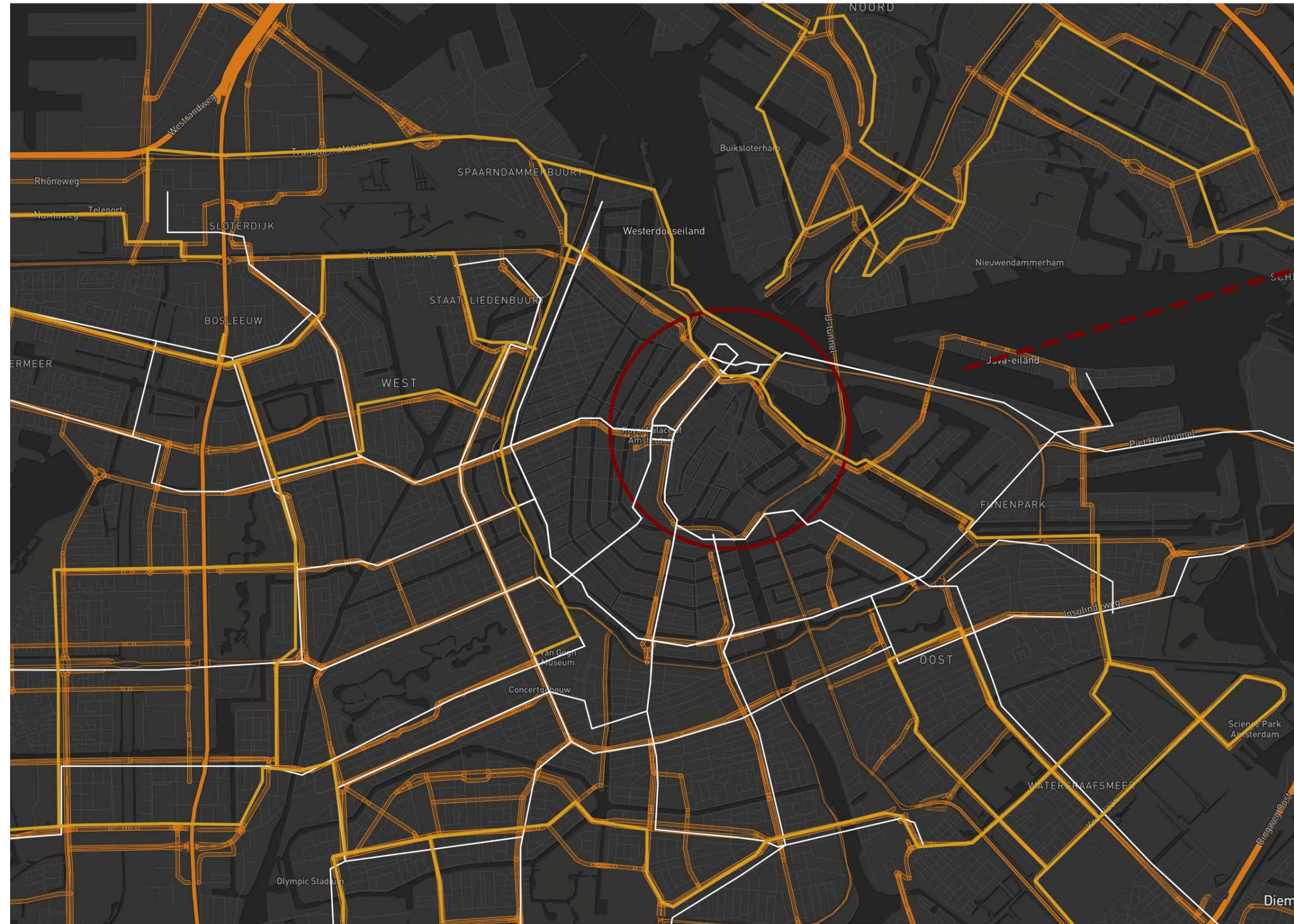
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## 4.1 The Flow of Traffic

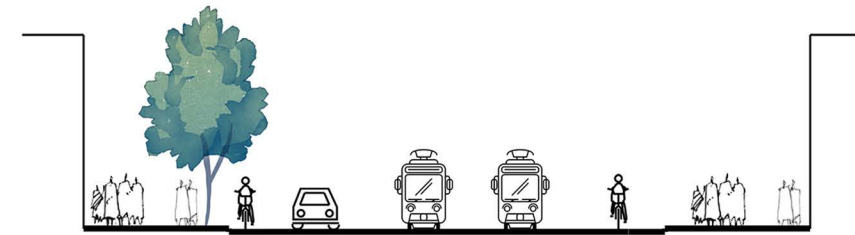
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## 4.1.1 Reorganize the public transportation









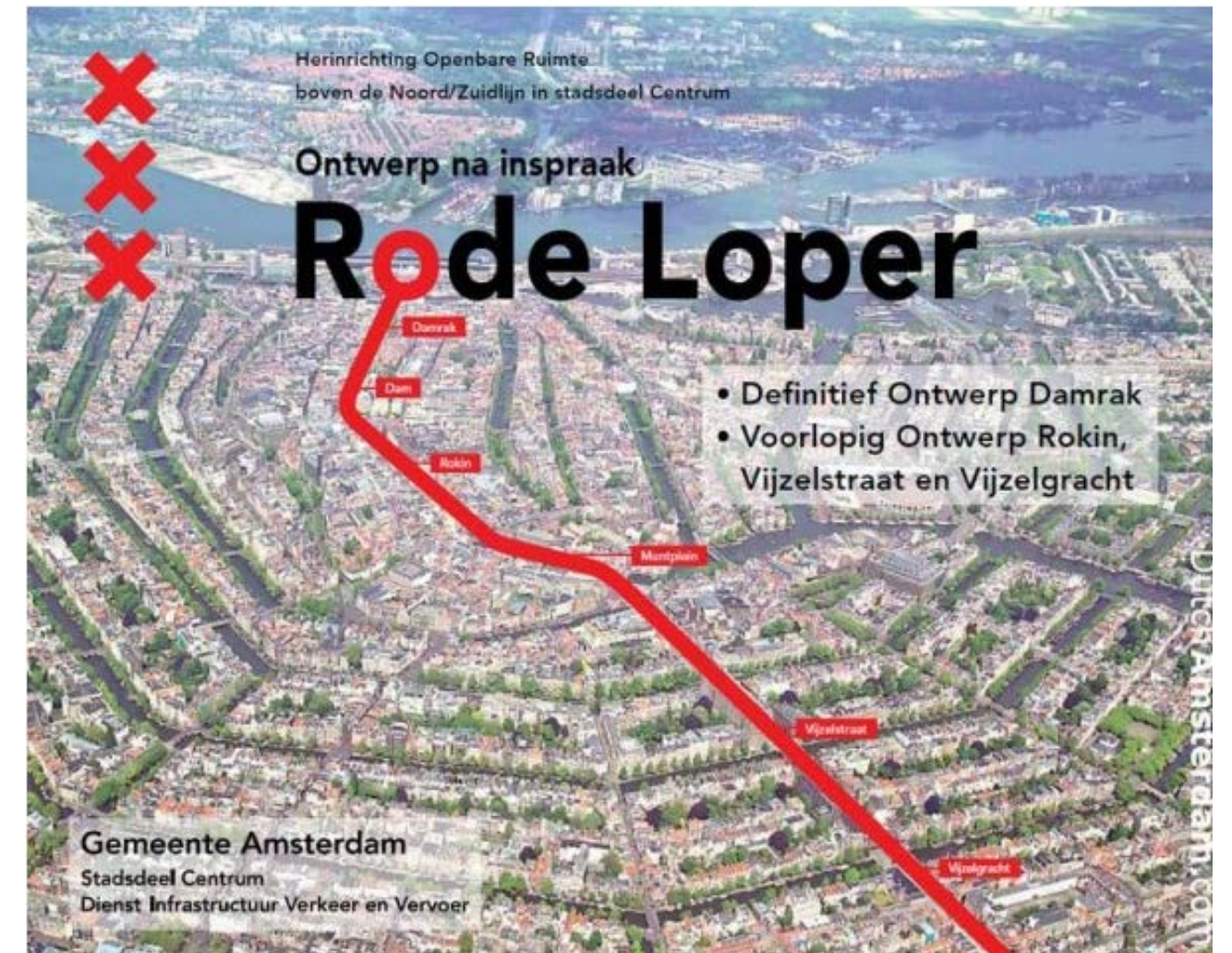
## 4.1.2.1 Red Carpet



Municipality of Amsterdam

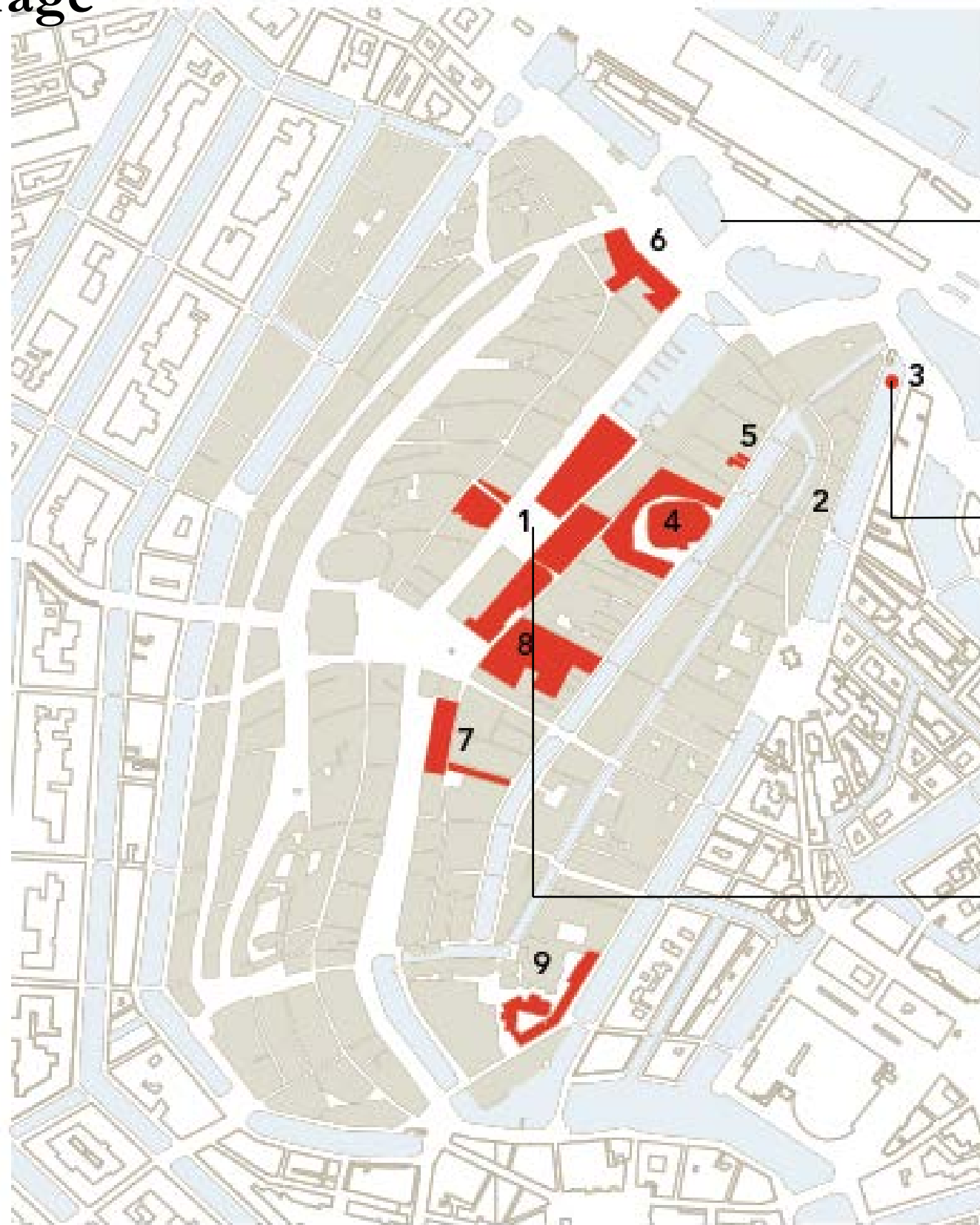
Project: Red Carpet

Source: <https://www.amsterdam.nl/projecten/rodeloper/>





## 4.1.2.2 Bike Storage



Nine key projects



Parking Garage



Underground Bike Parking

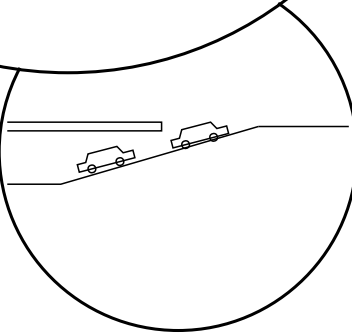
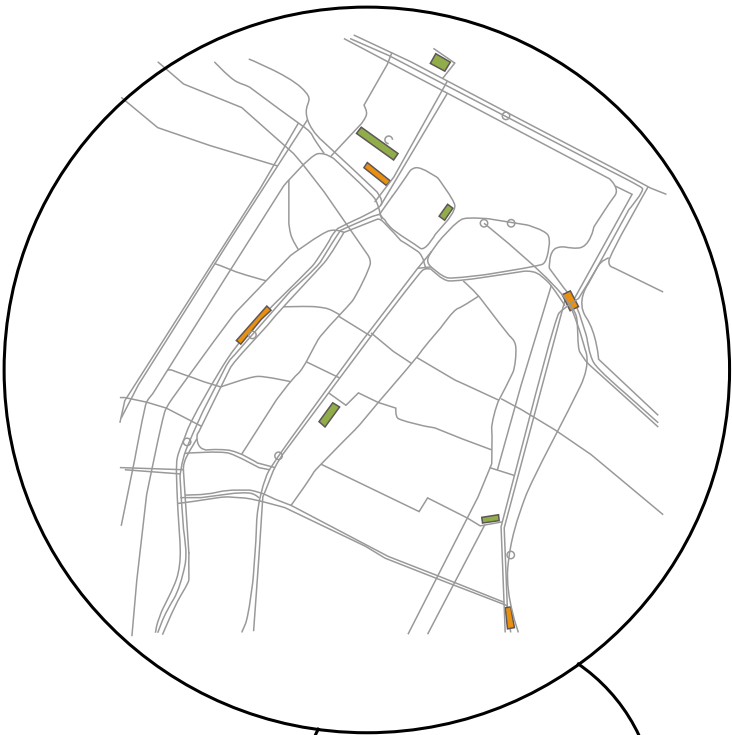
Municipality of Amsterdam

Project: Project 1020

Source: <https://www.amsterdam.nl/projecten/project-1012/>



4.1.3 TOD





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## 4.2 The Flow of People

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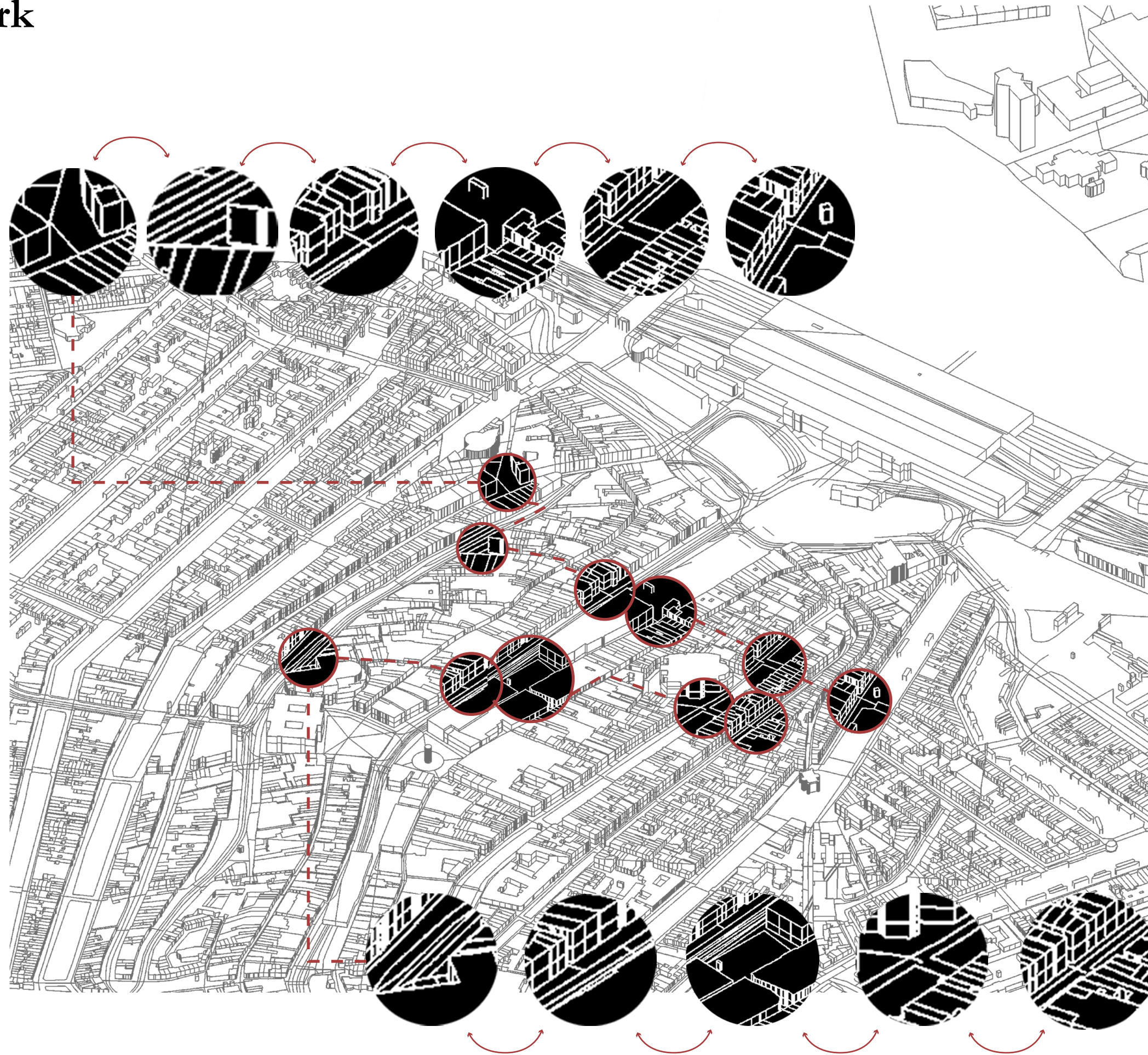


## 4.2.1 Internal Public Space



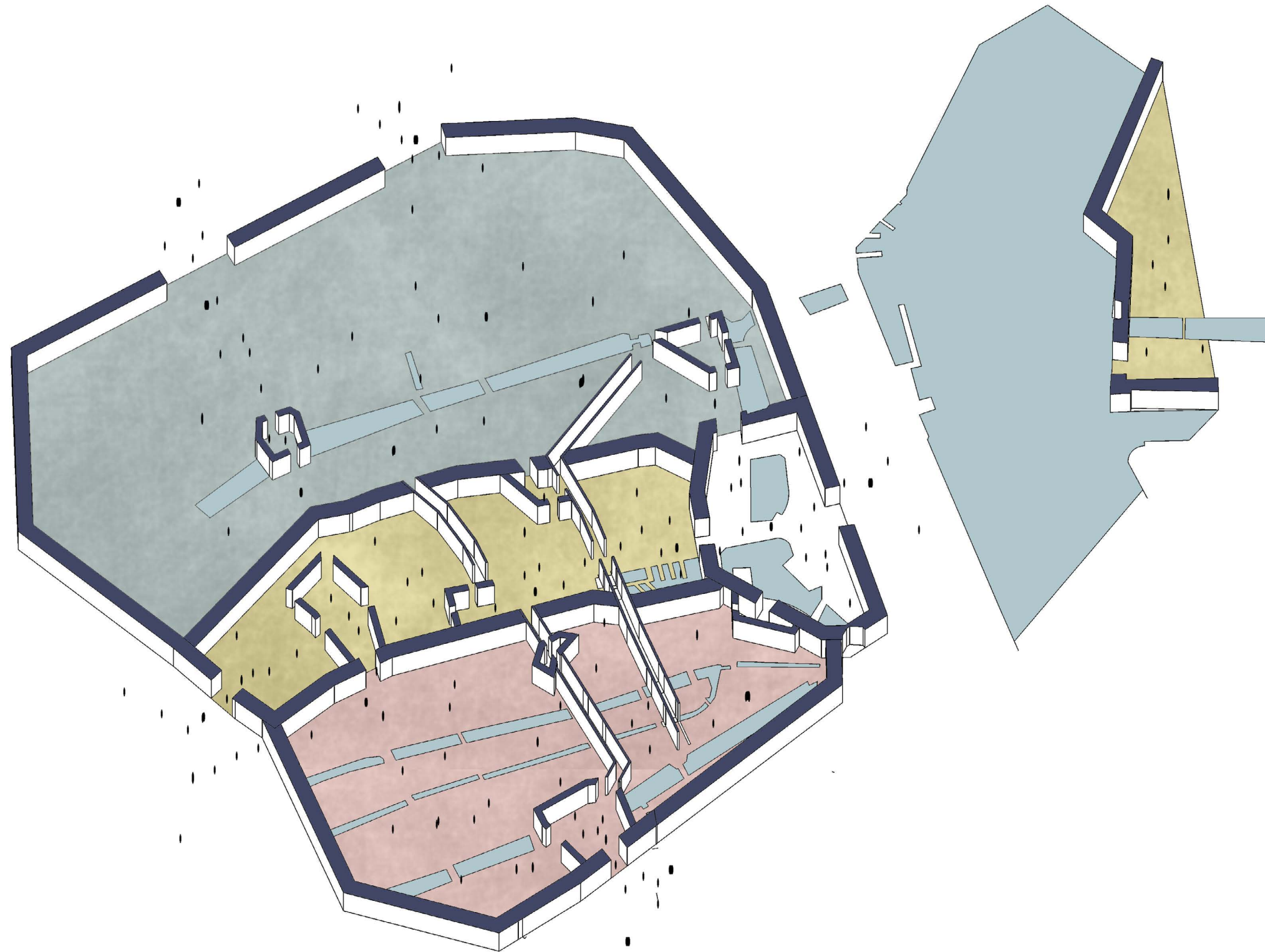


## 4.2.2 Internal Network





## 4.2.3 Pepople Movement Concept







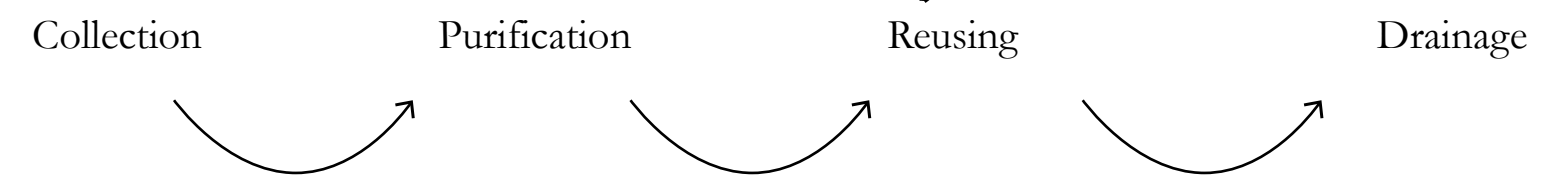
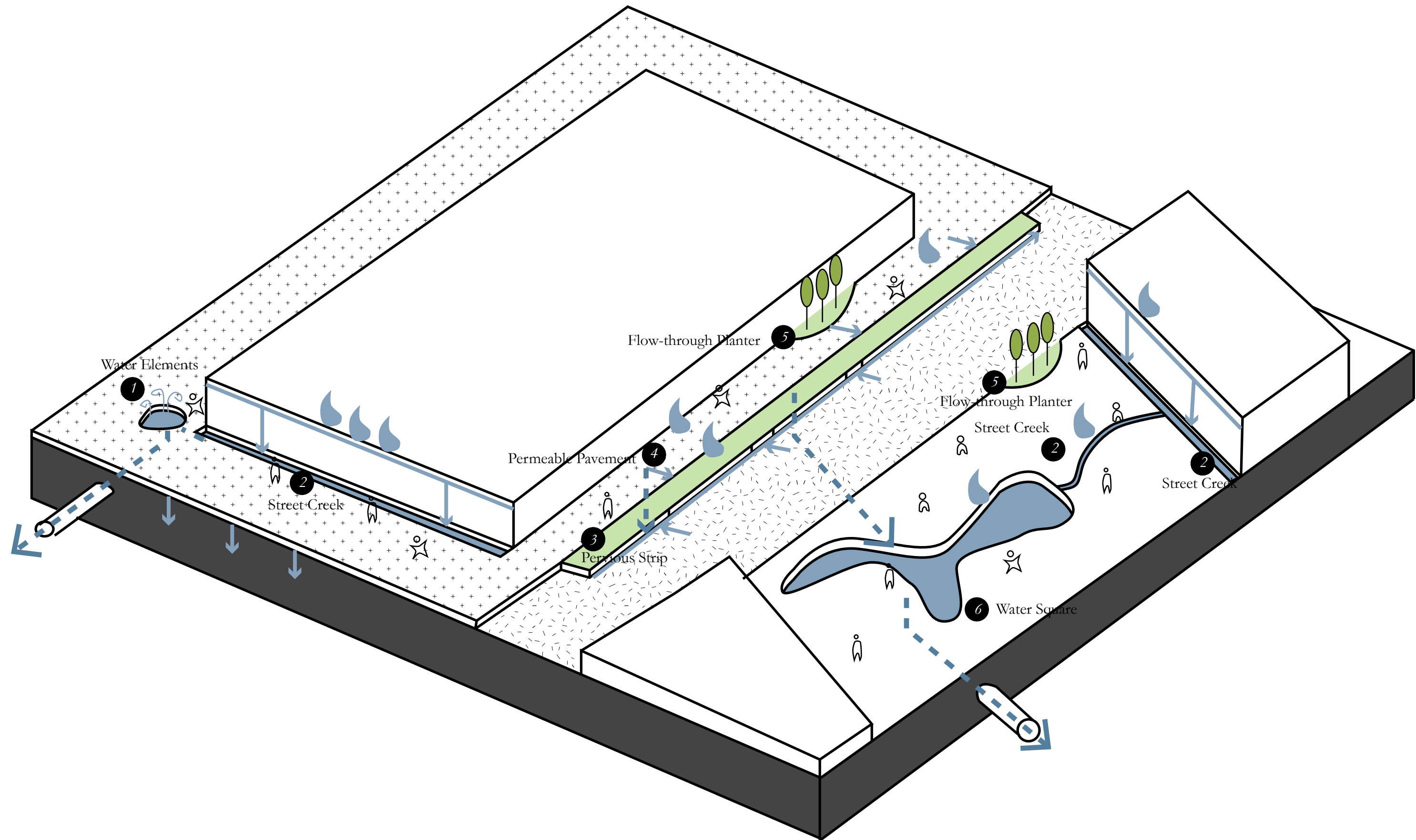


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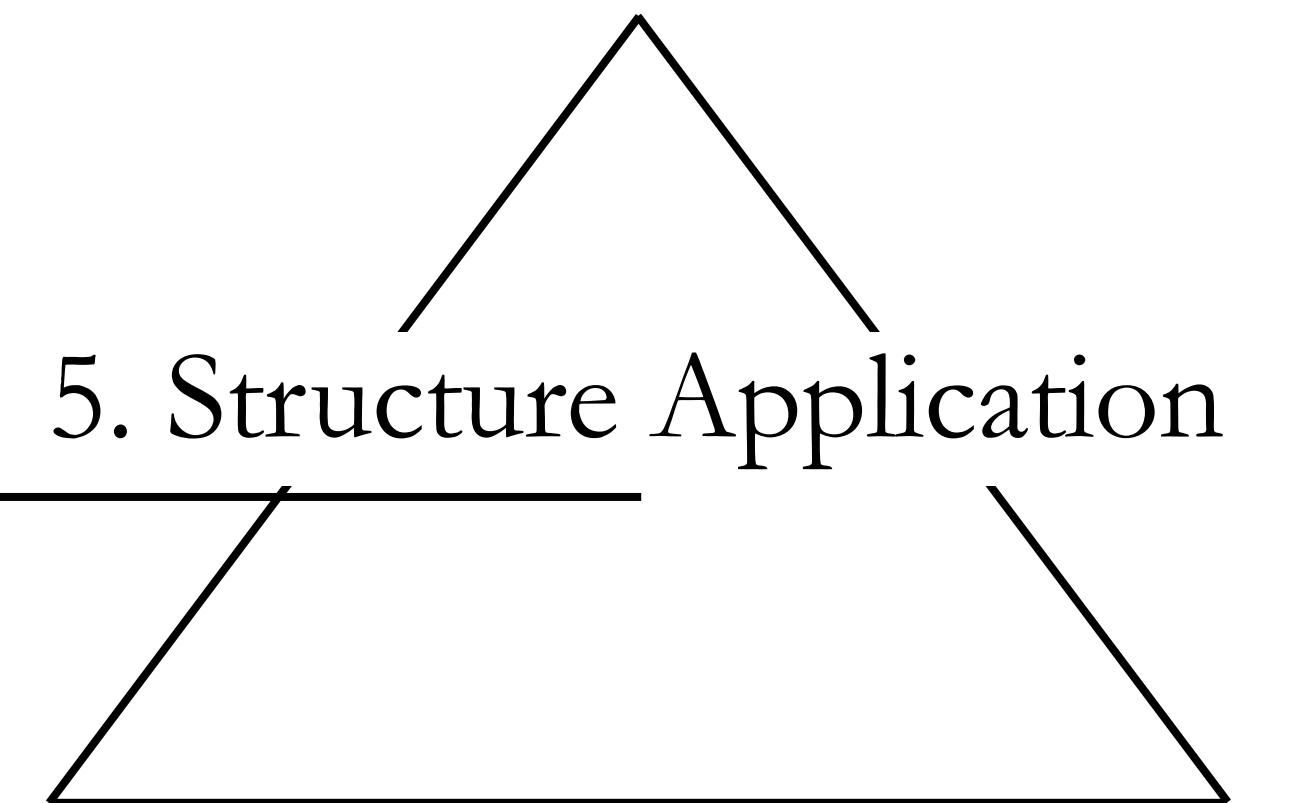
## 4.3 The Flow of Water

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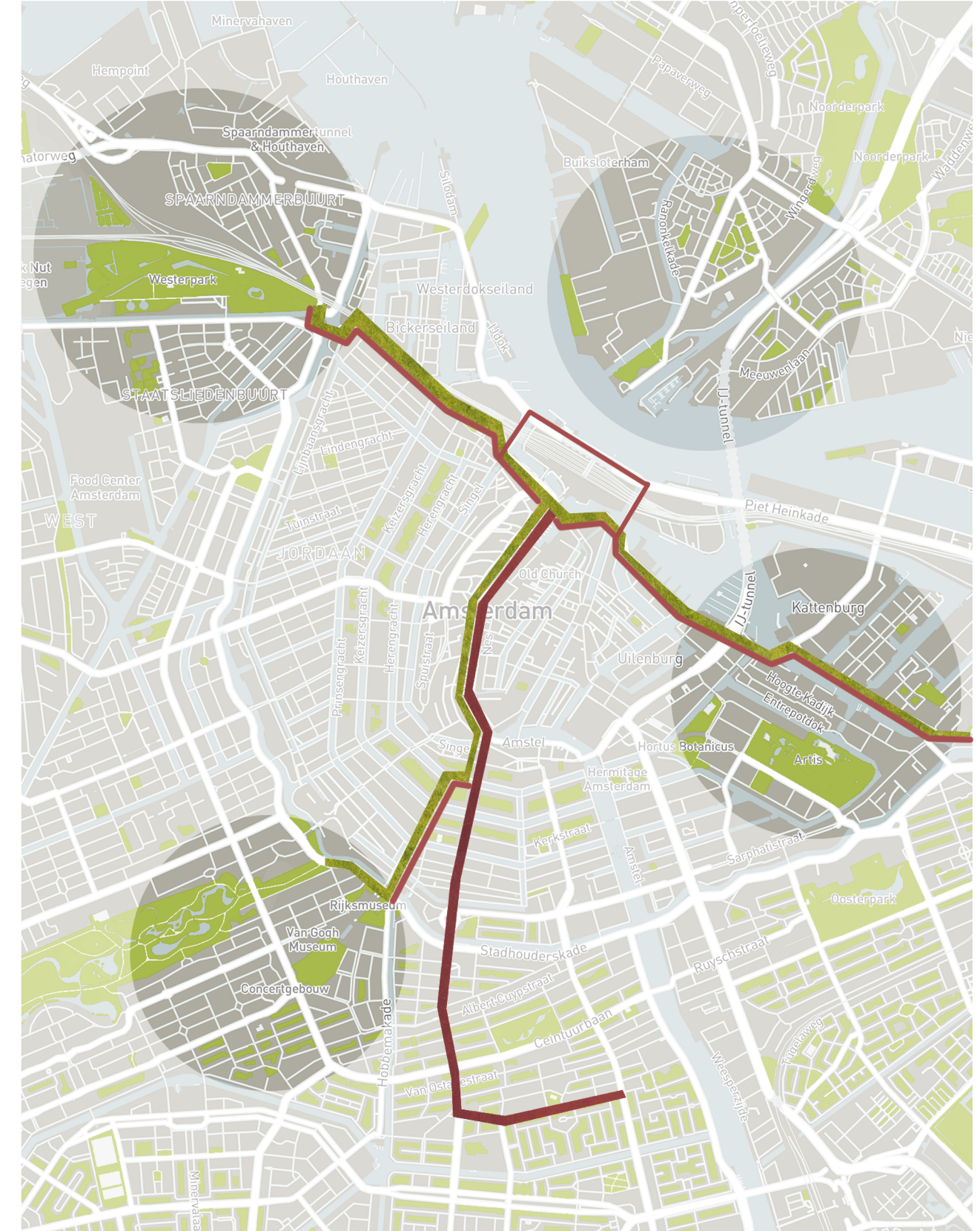
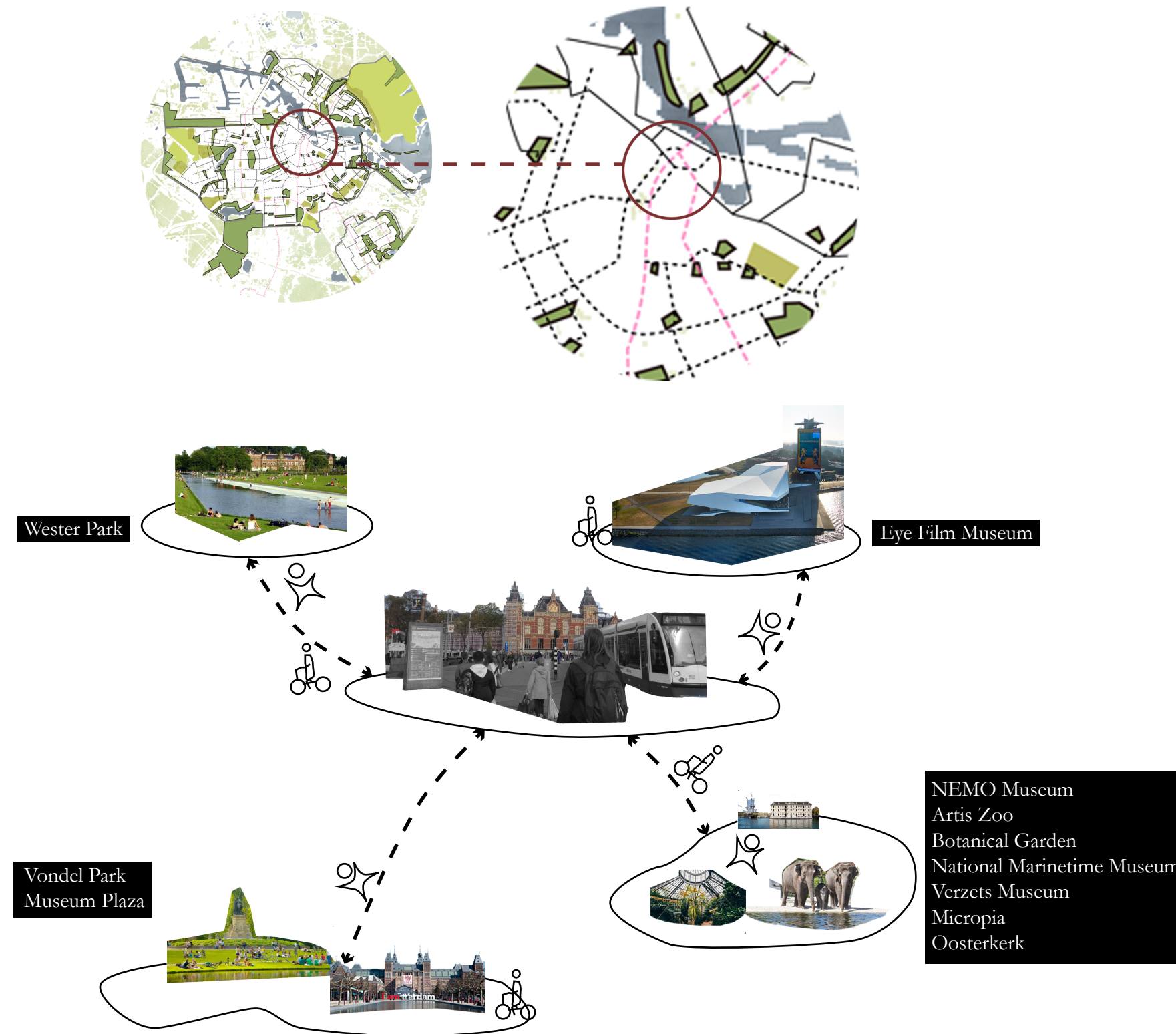






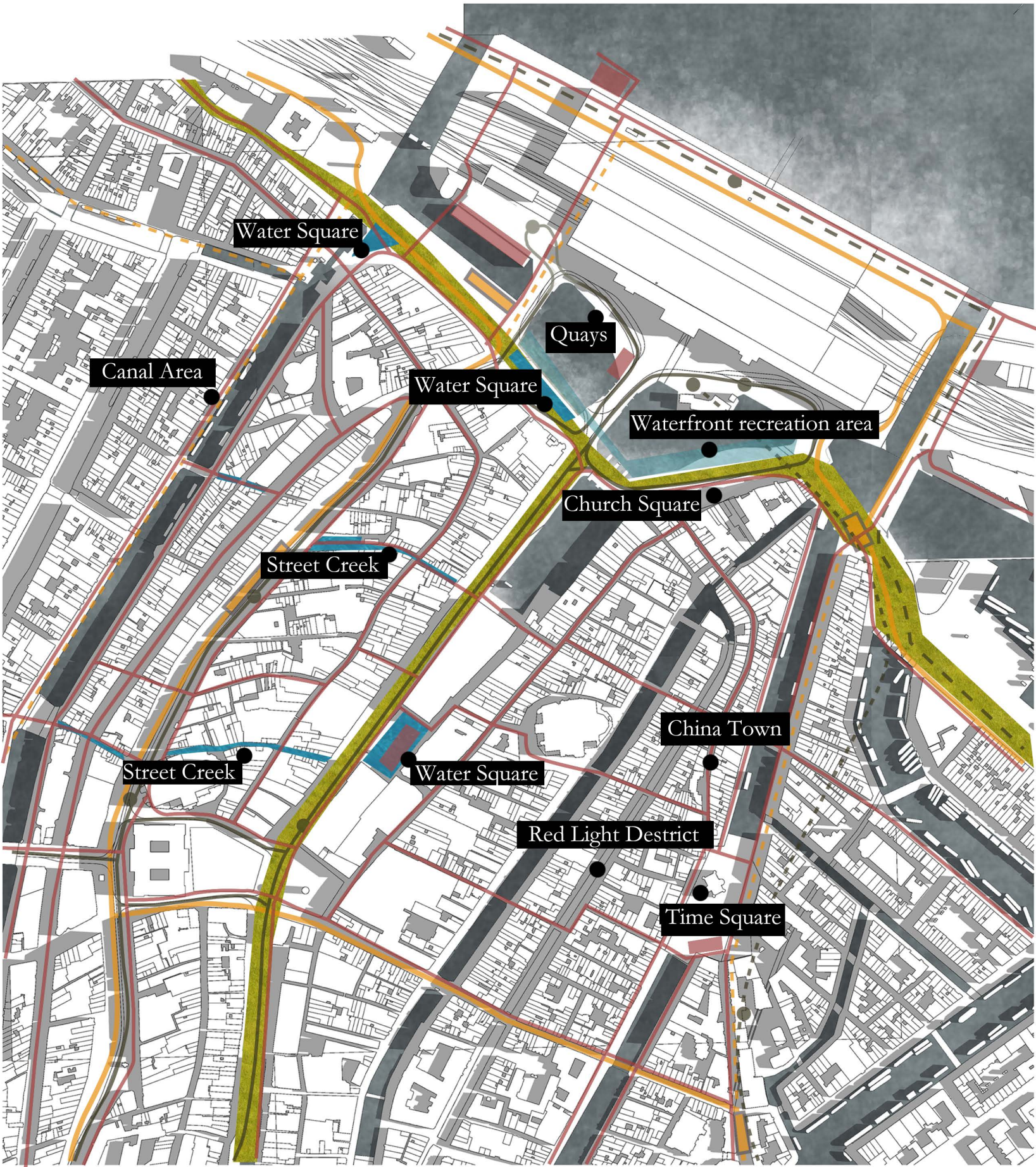
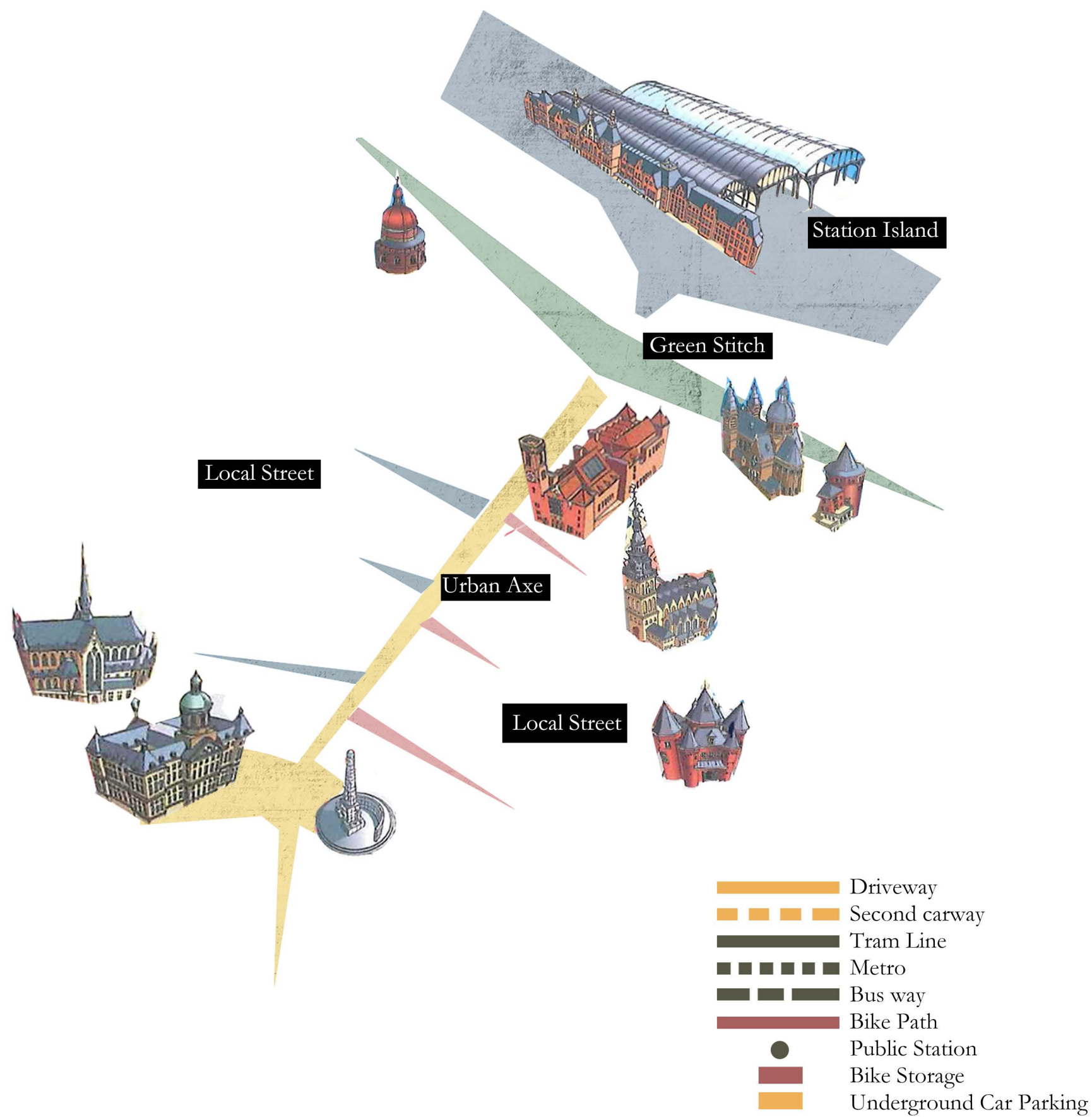


## 5.1 Large Scale



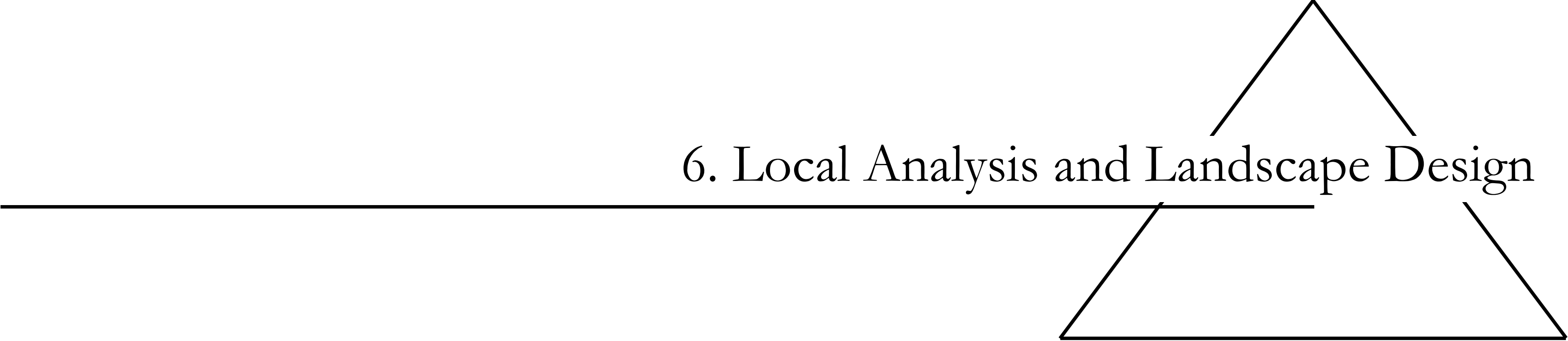


5.2 Medium Scale



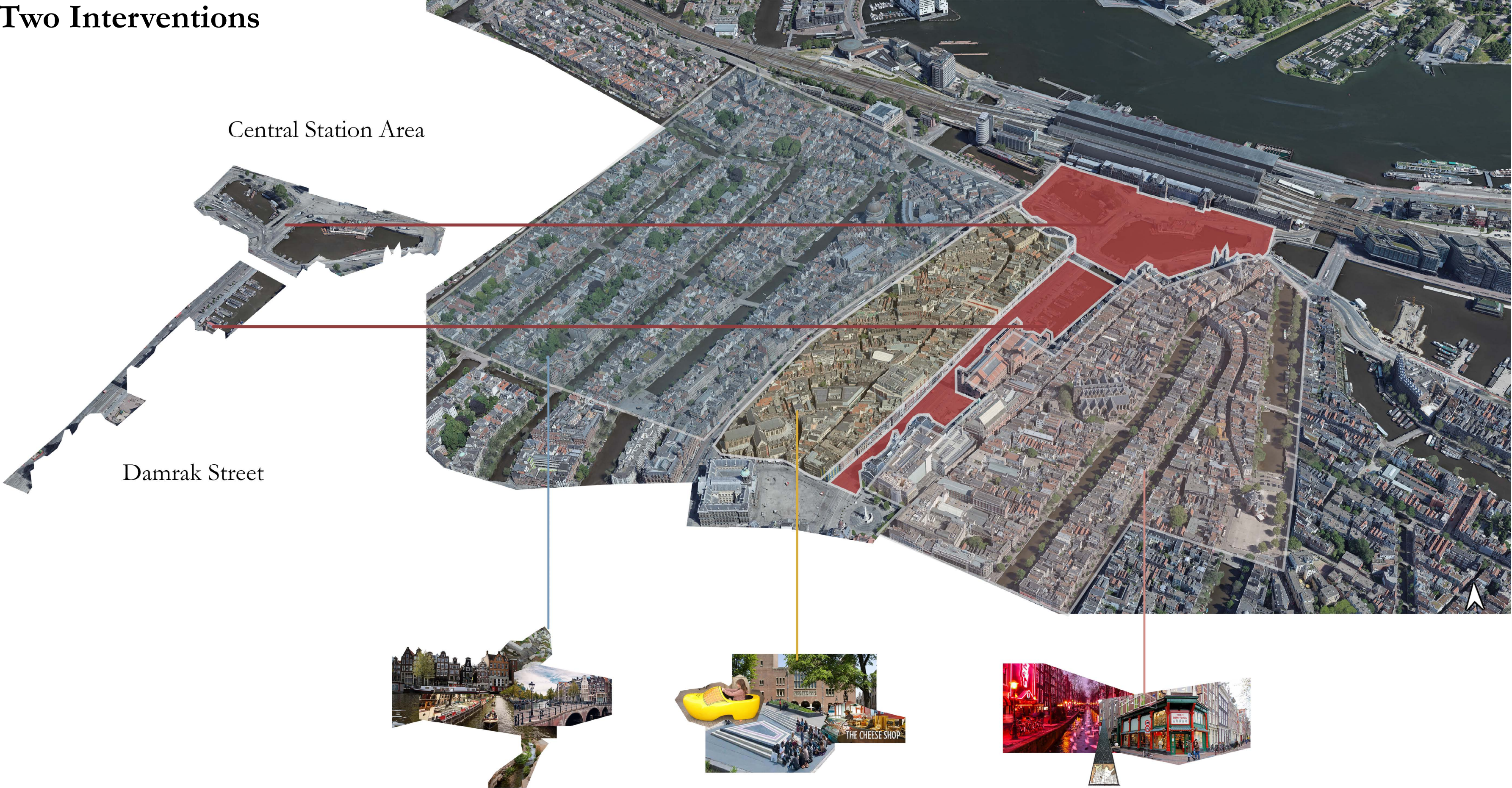


## 6. Local Analysis and Landscape Design





6.1 Two Interventions





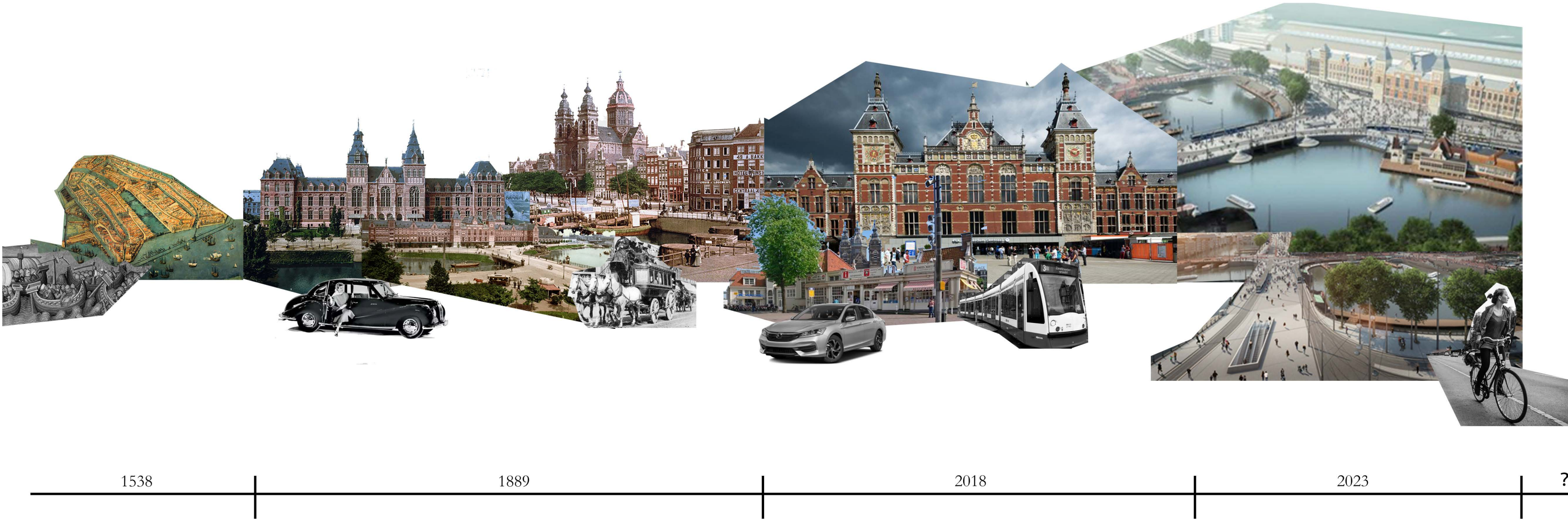
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## 6.2 Central Station Area

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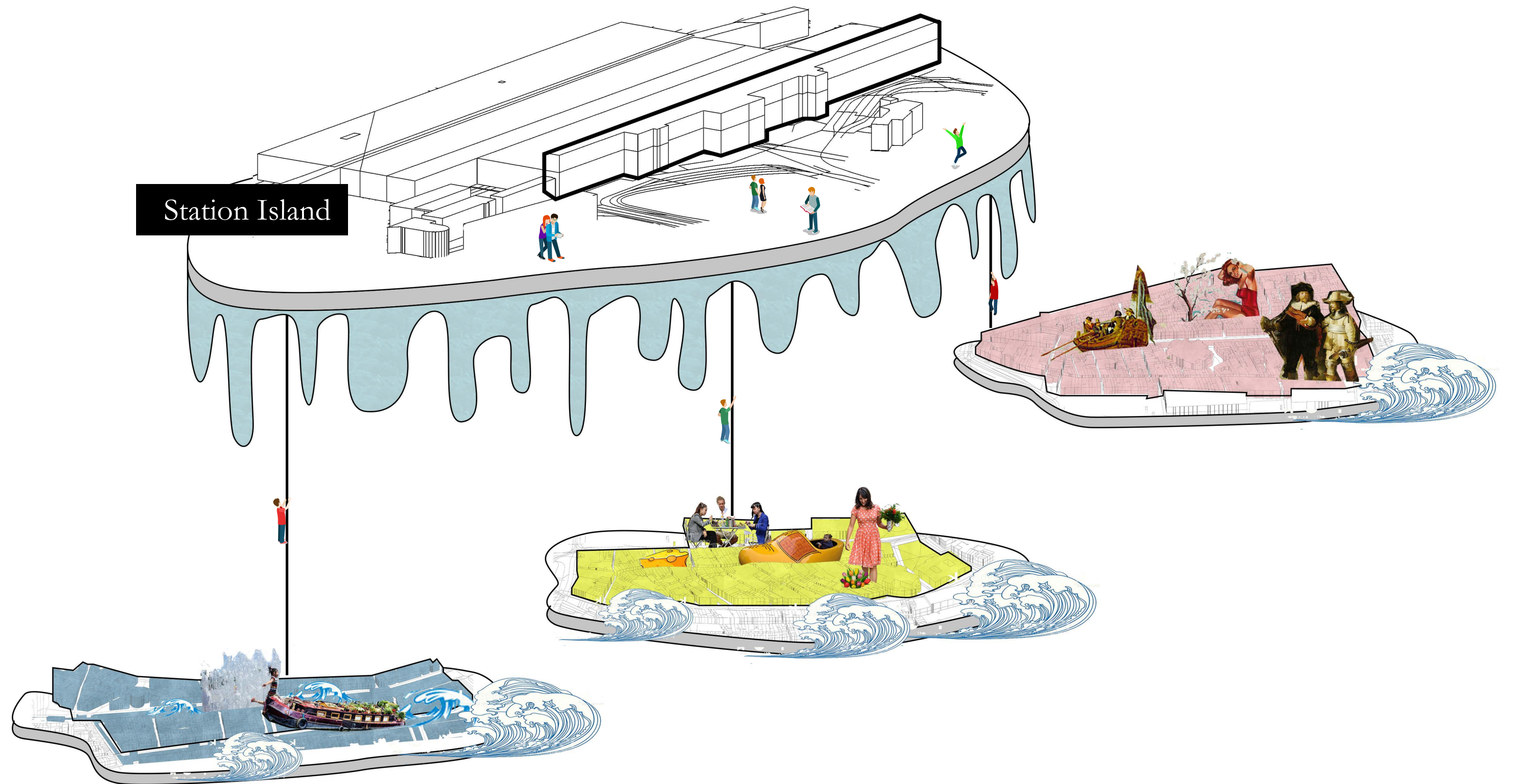


6.2.1 From History to Future



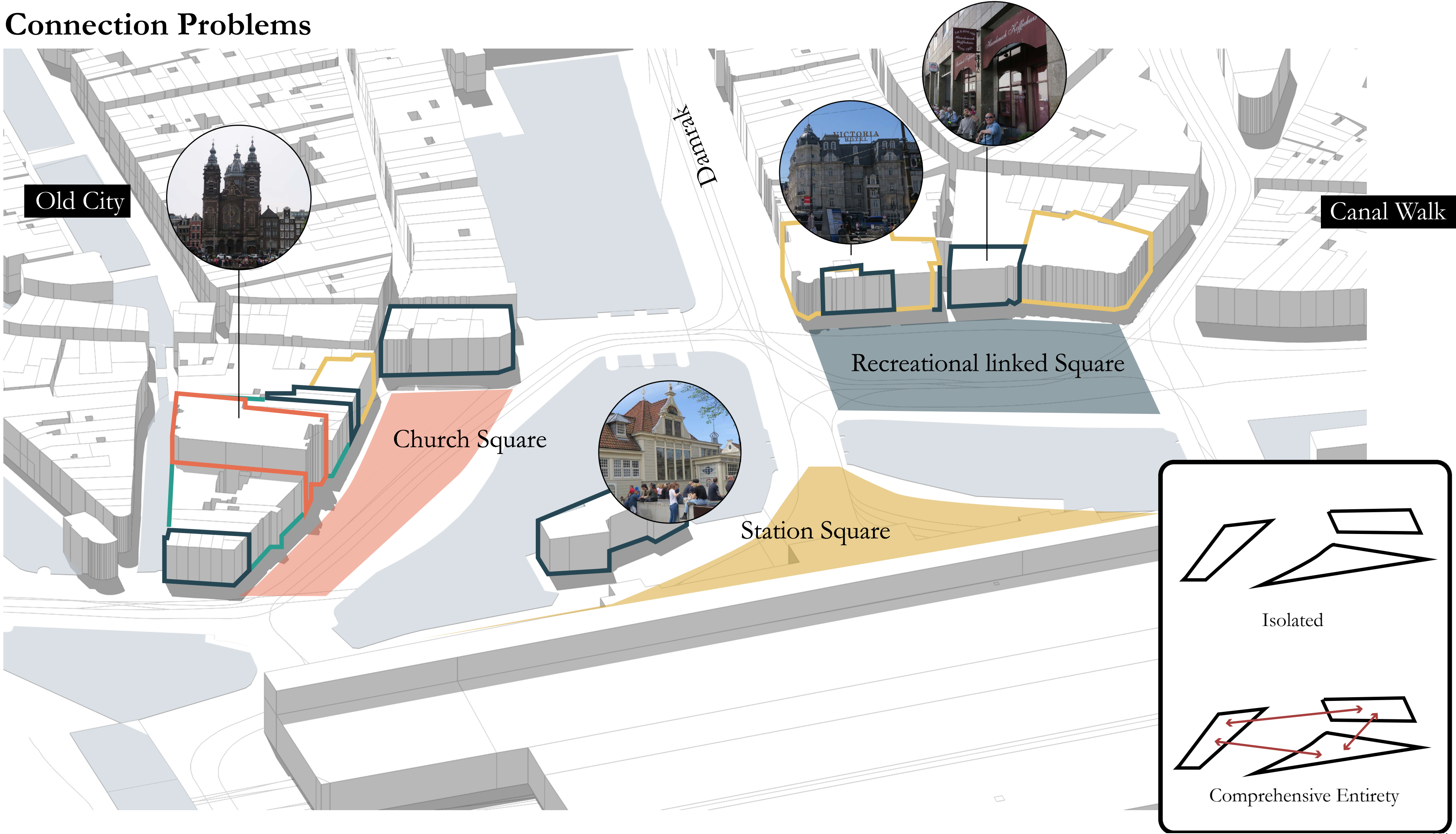


# Riding the Wave





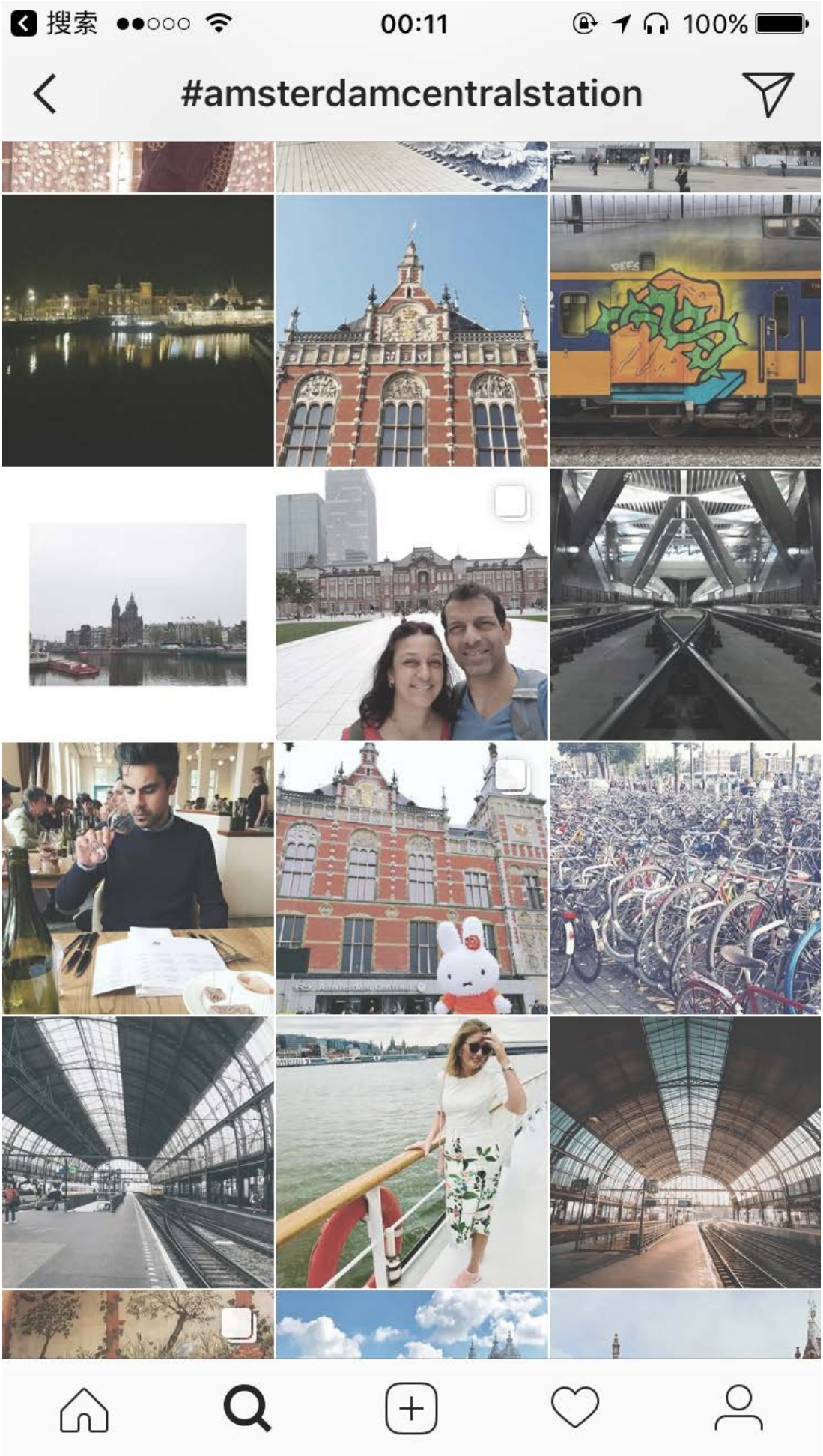
6.2.2 Connection Problems





For most human beings, the primary way of knowing the material world is through vision; the simple act of opening ones eyes and looking at an object, a scene, a horizon.

Harris and Fairchild Ruggles (2007)

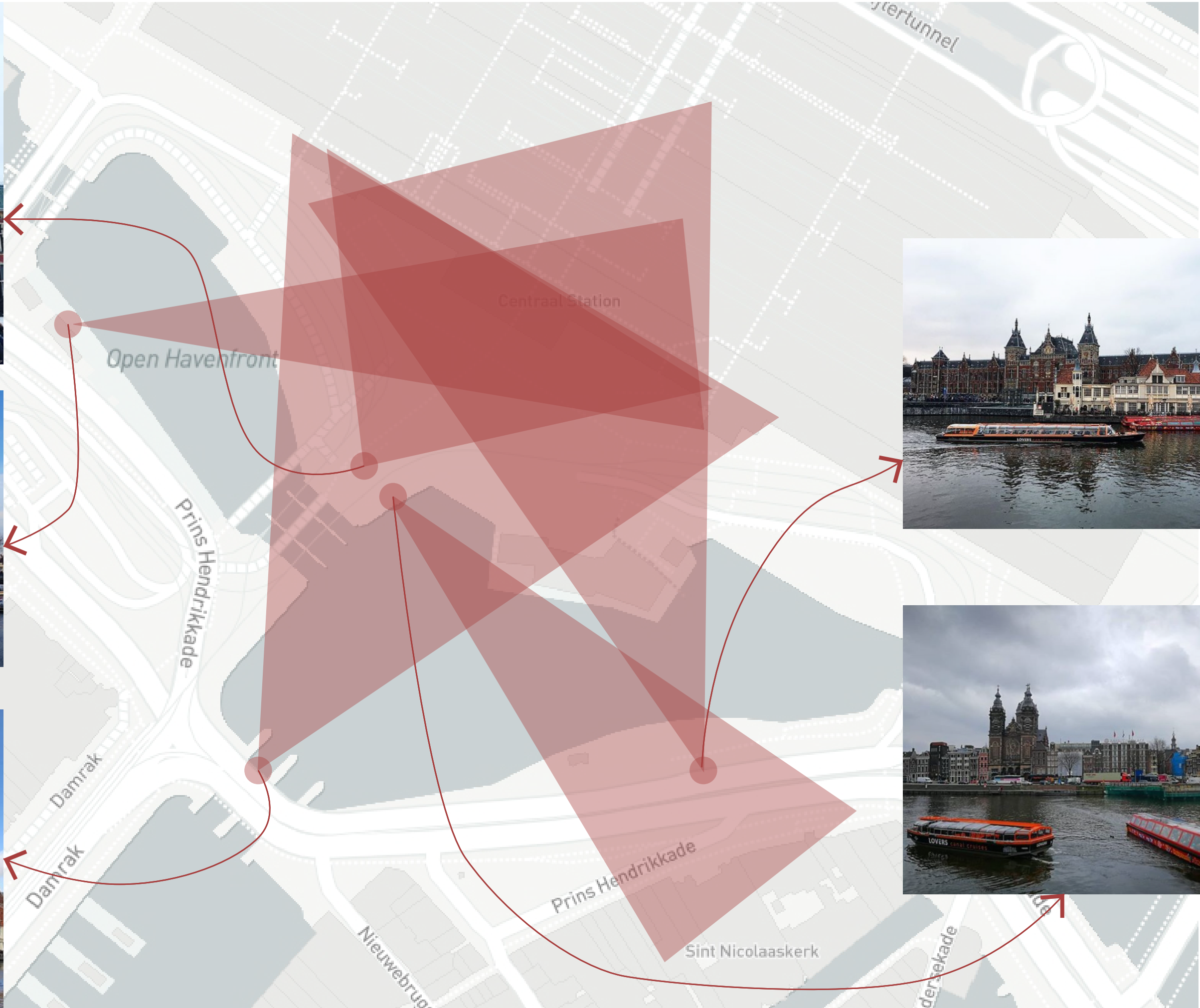




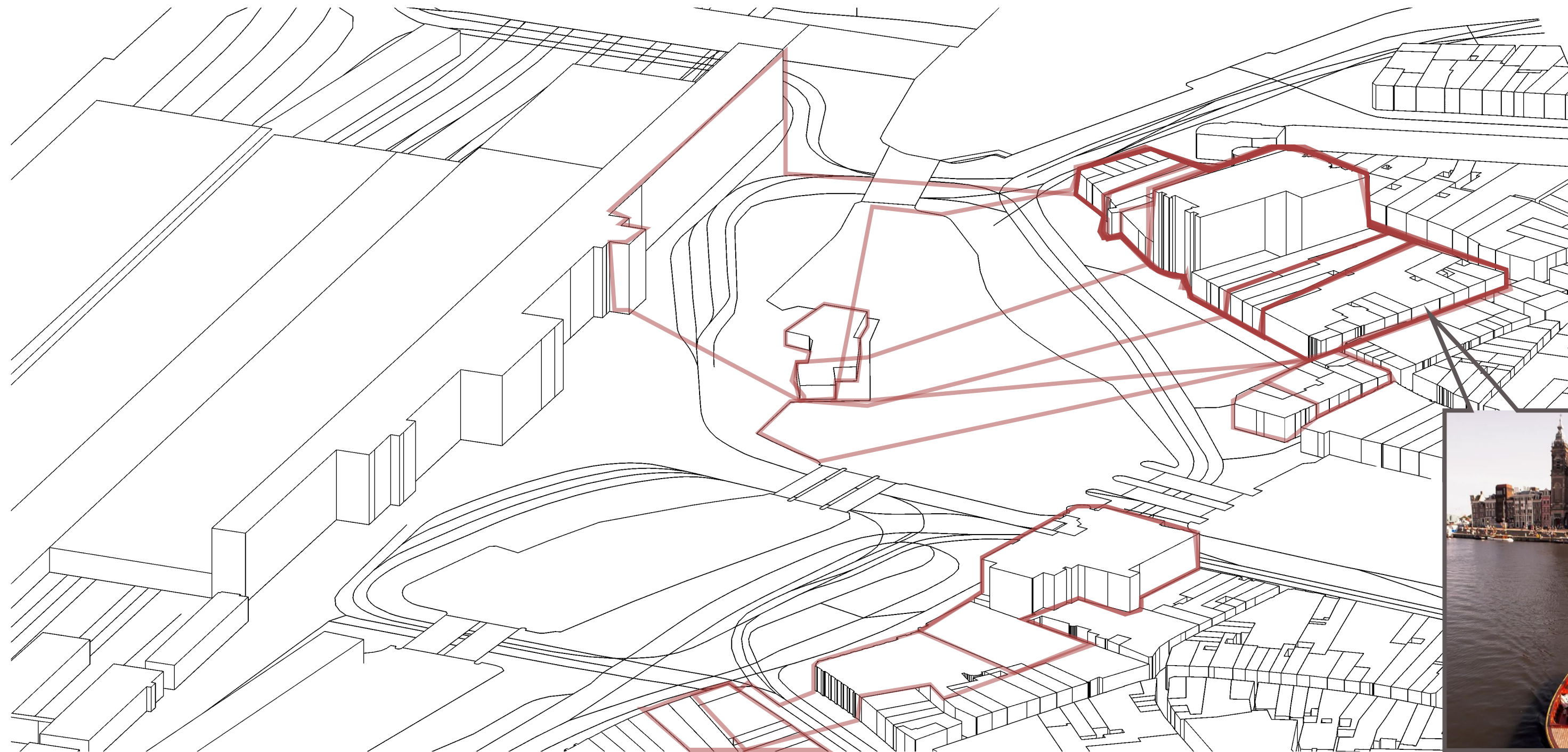
### 6.2.3 Vision Research











×14







× 24



× 10



× 17



× 1



× 1



× 1

Coherence

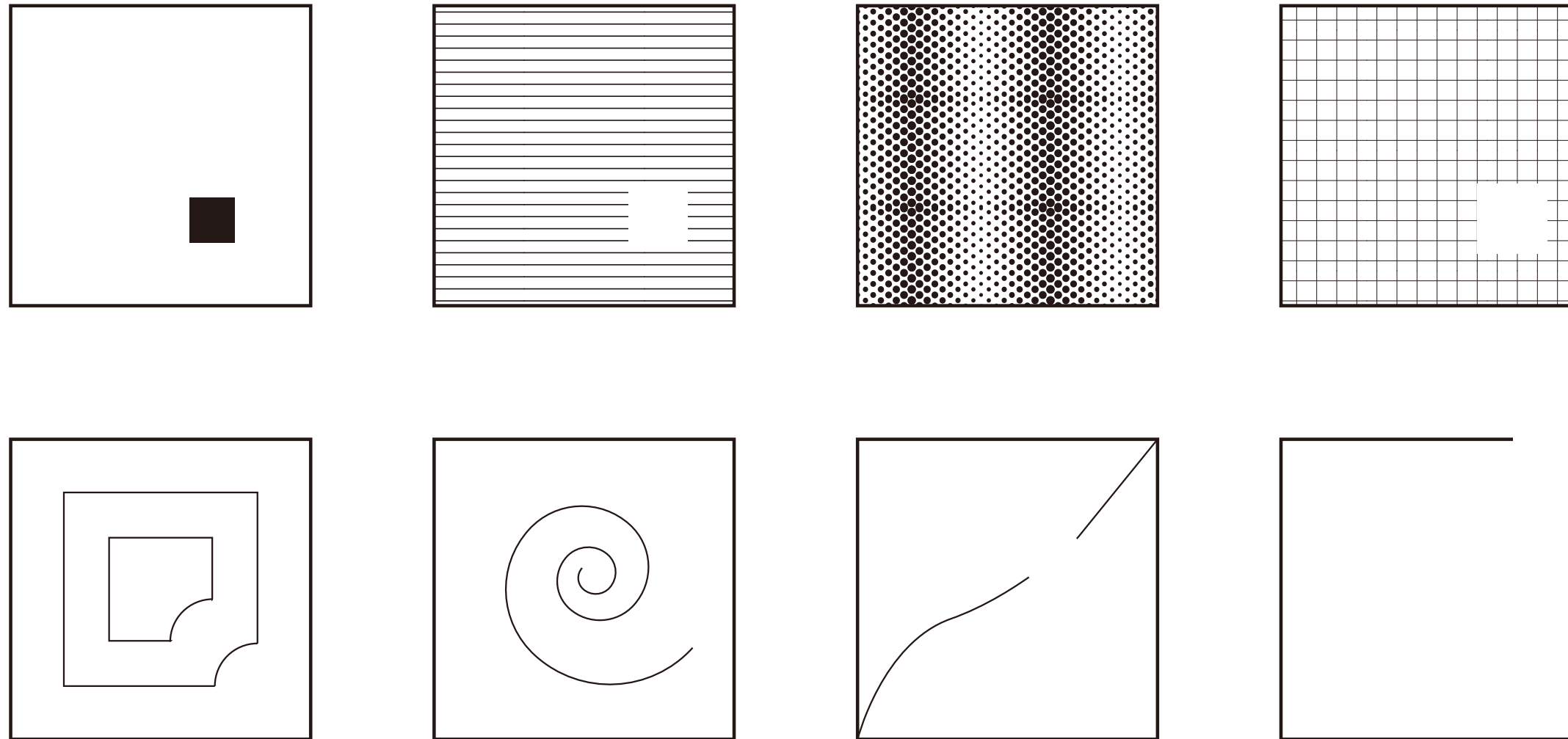
Legibility

Complexity

Mystery



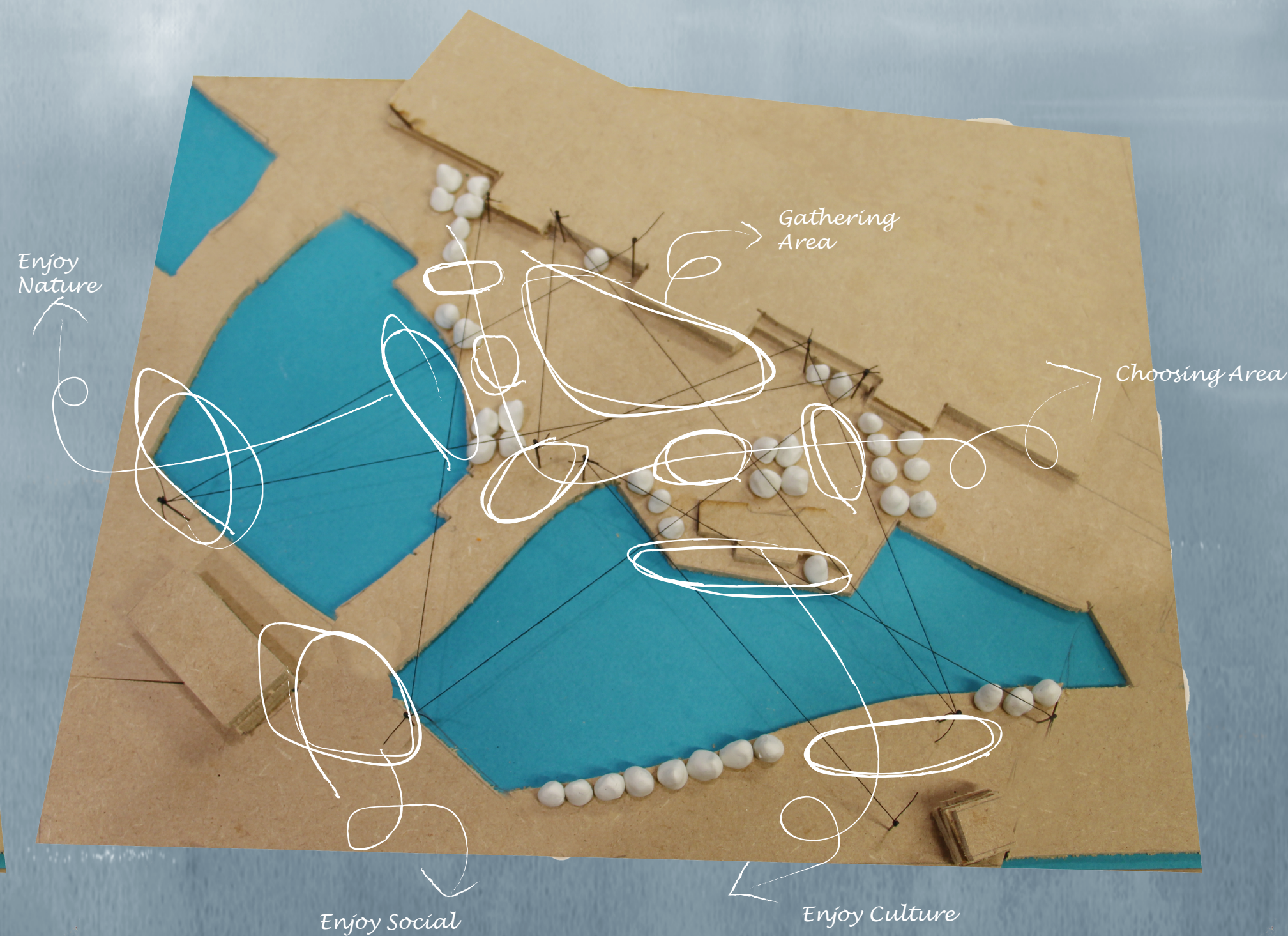
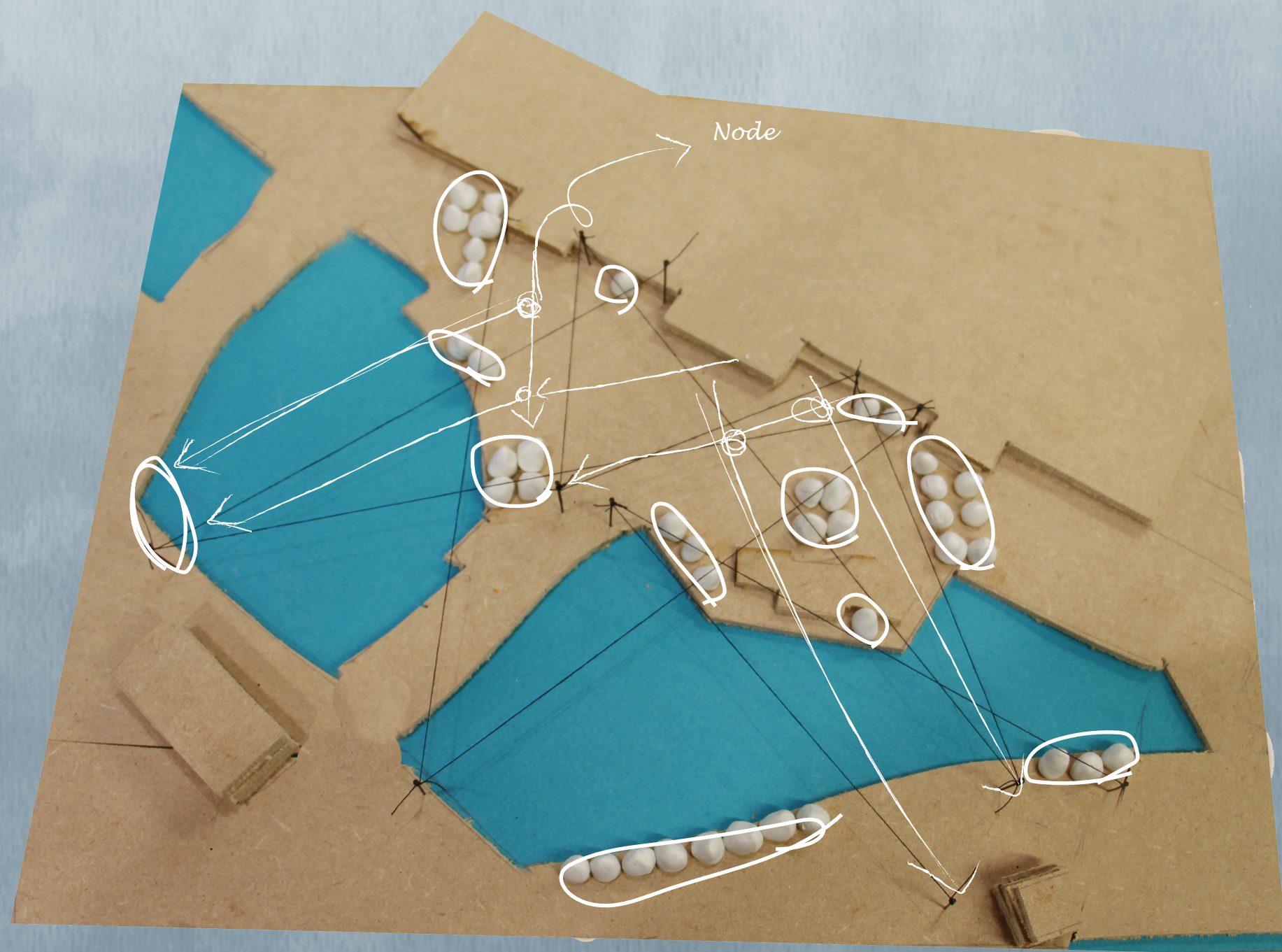
## 6.2.4 Visually Controlled Movement -- Focus





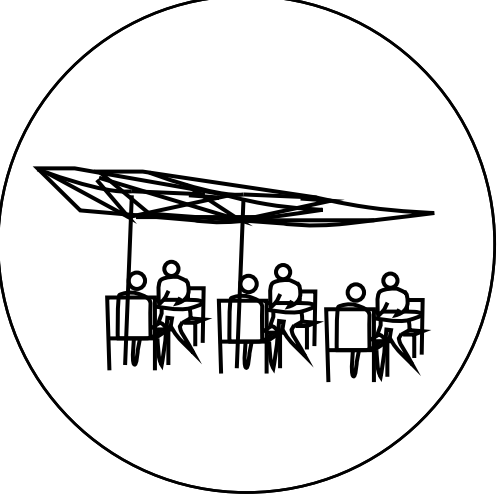
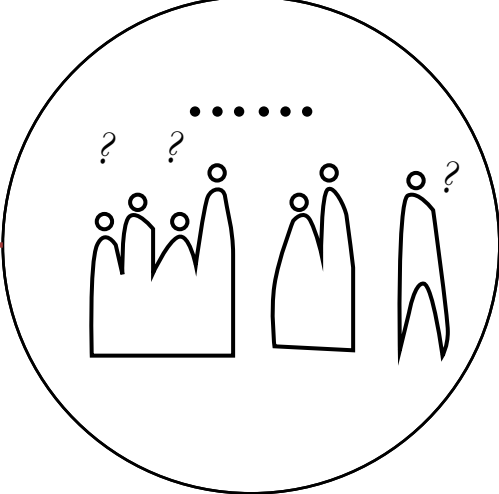
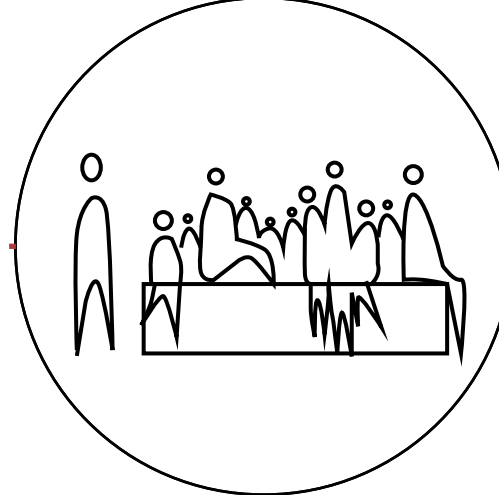
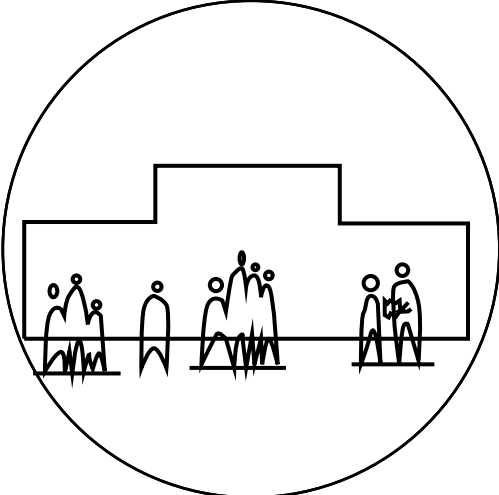
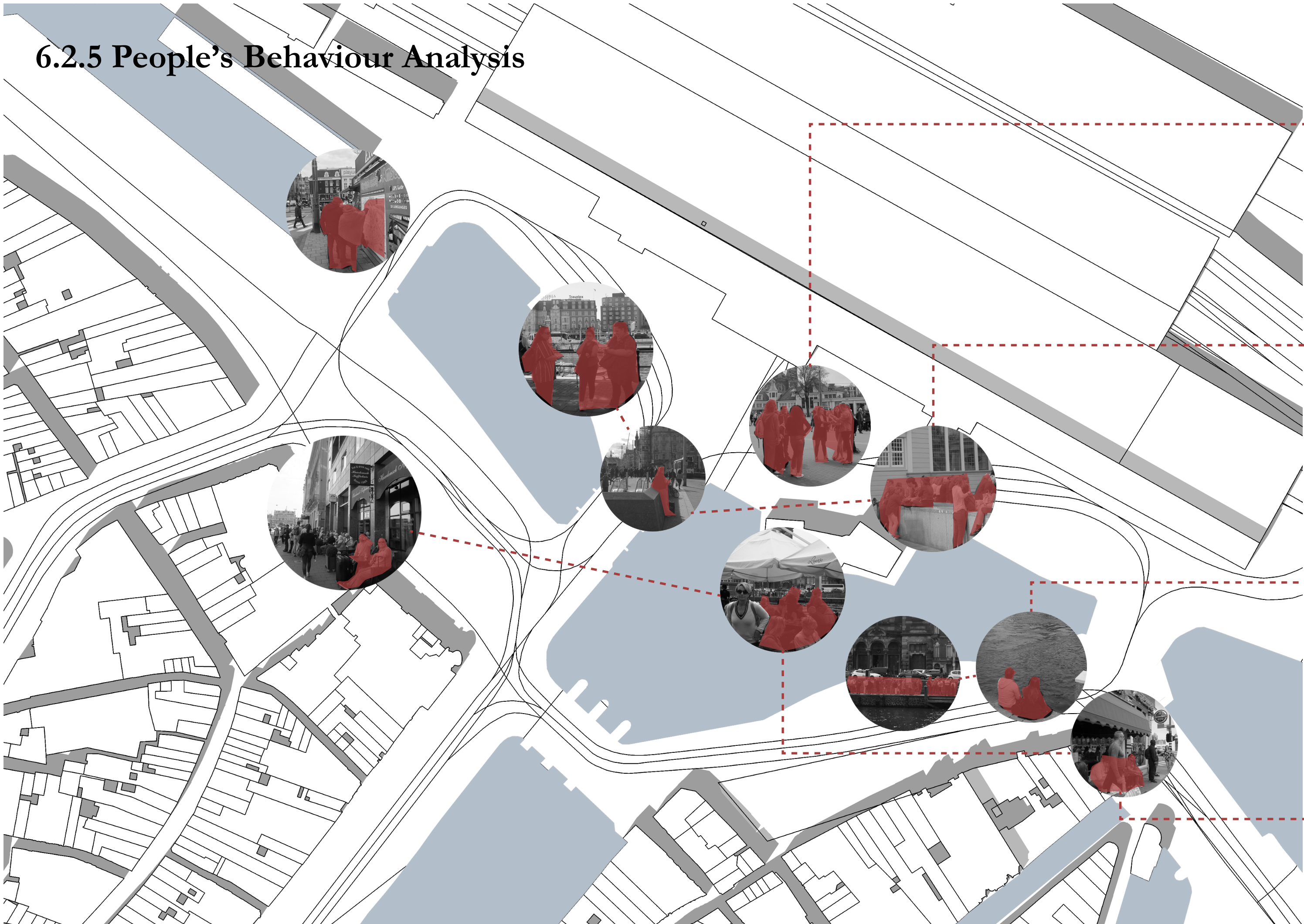






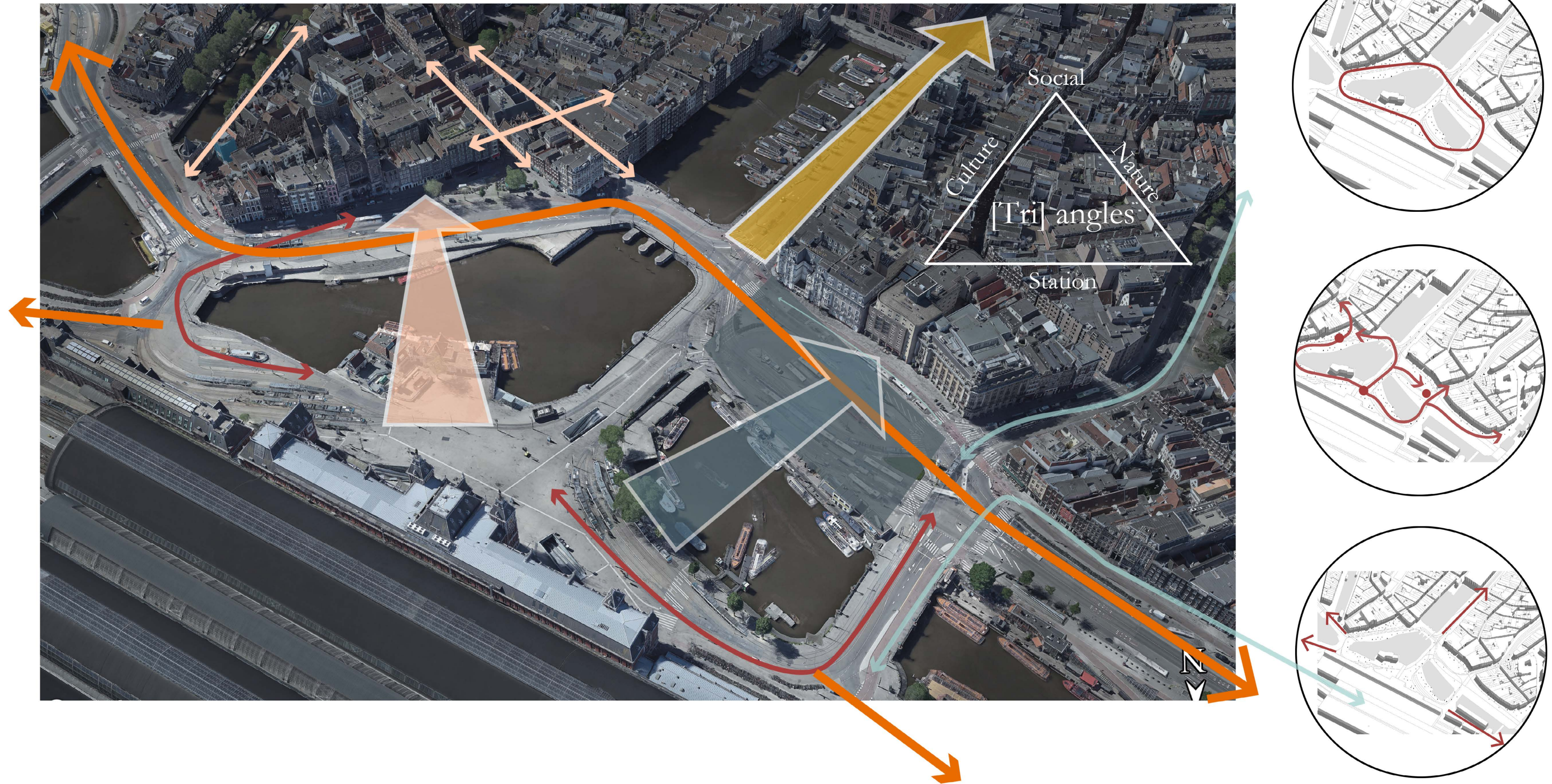


6.2.5 People's Behaviour Analysis





## 6.2.6 Tri-Angles





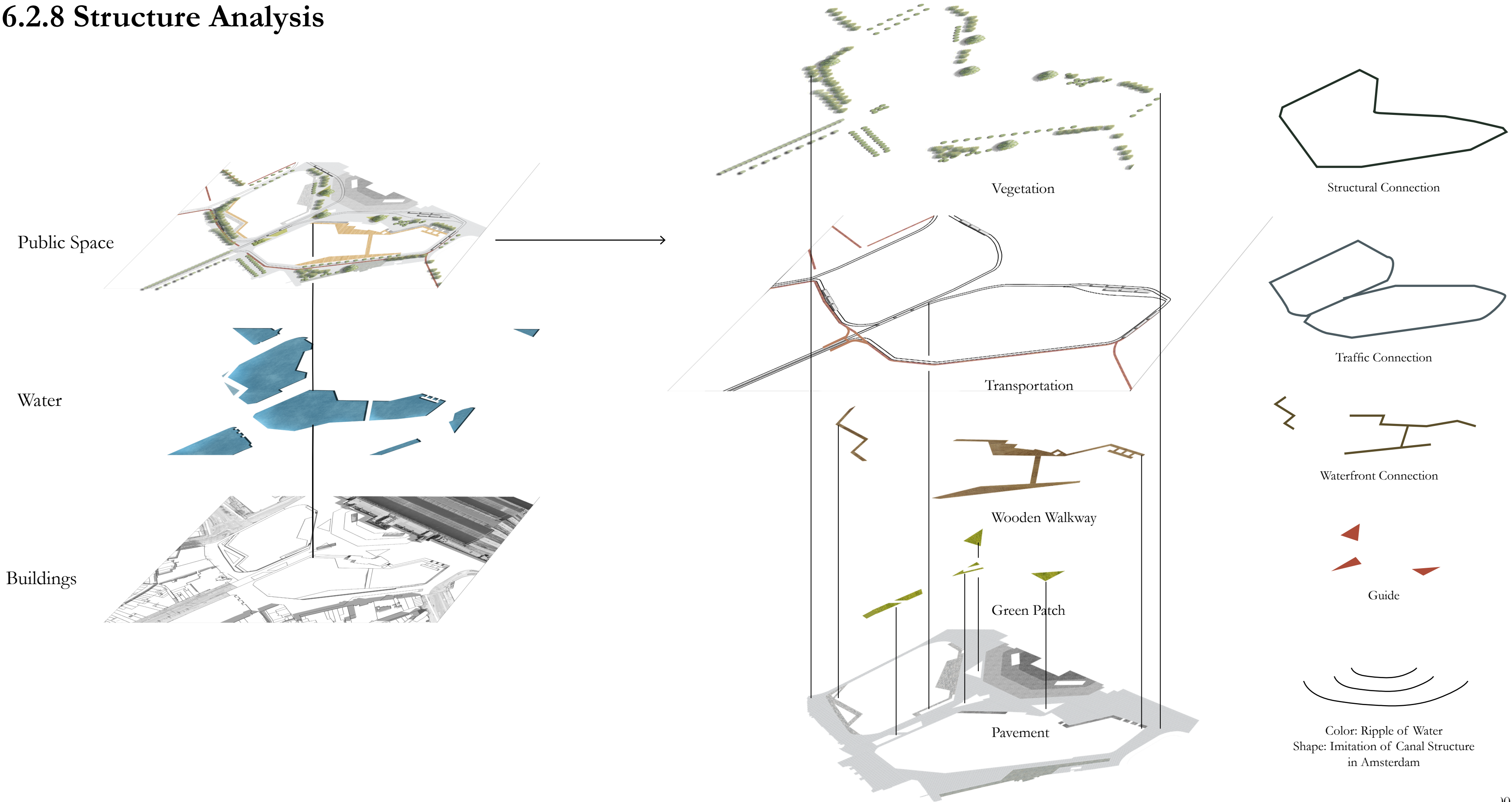
## 6.2.7 Master Plan



1. Amsterdam Centre Station
2. Station Square
3. Waterfront Plaze
4. Tourists Information Center
5. Outdoor Cafe
6. Wave Bridge
7. Waterfront wood platform
8. Understory Cafe
9. Church Square
10. The Nicolas Church
11. Fountain Plaza
12. Ulmus Avenue
13. Tram Station
14. Quay
15. Clycling Path
16. Underground Bike Storage

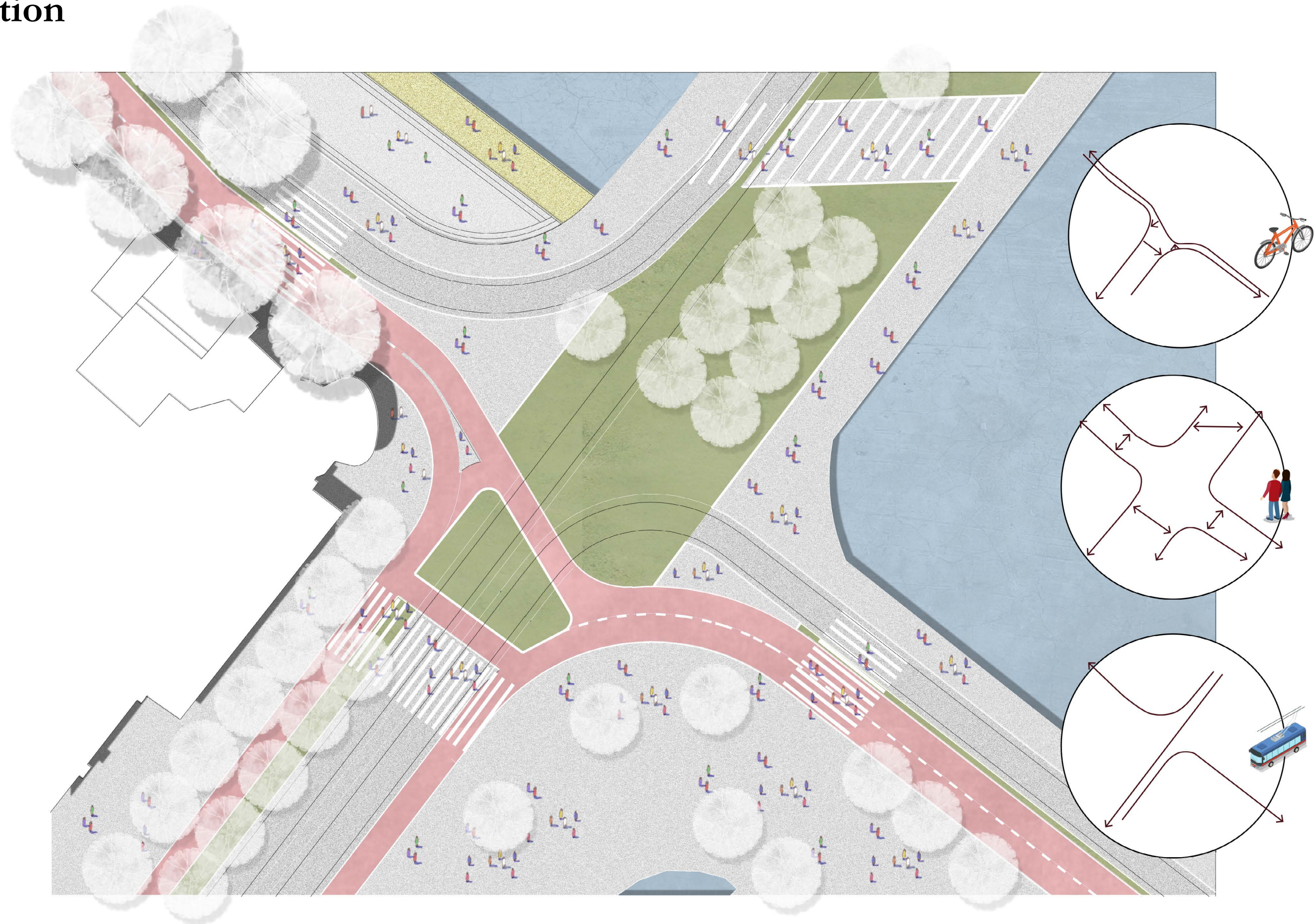


6.2.8 Structure Analysis



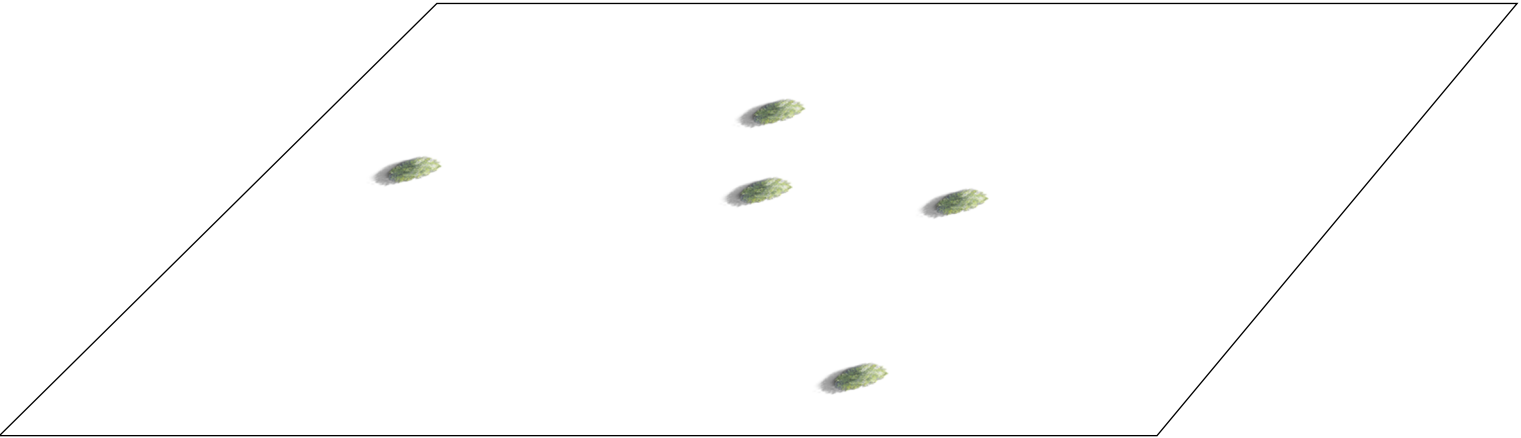
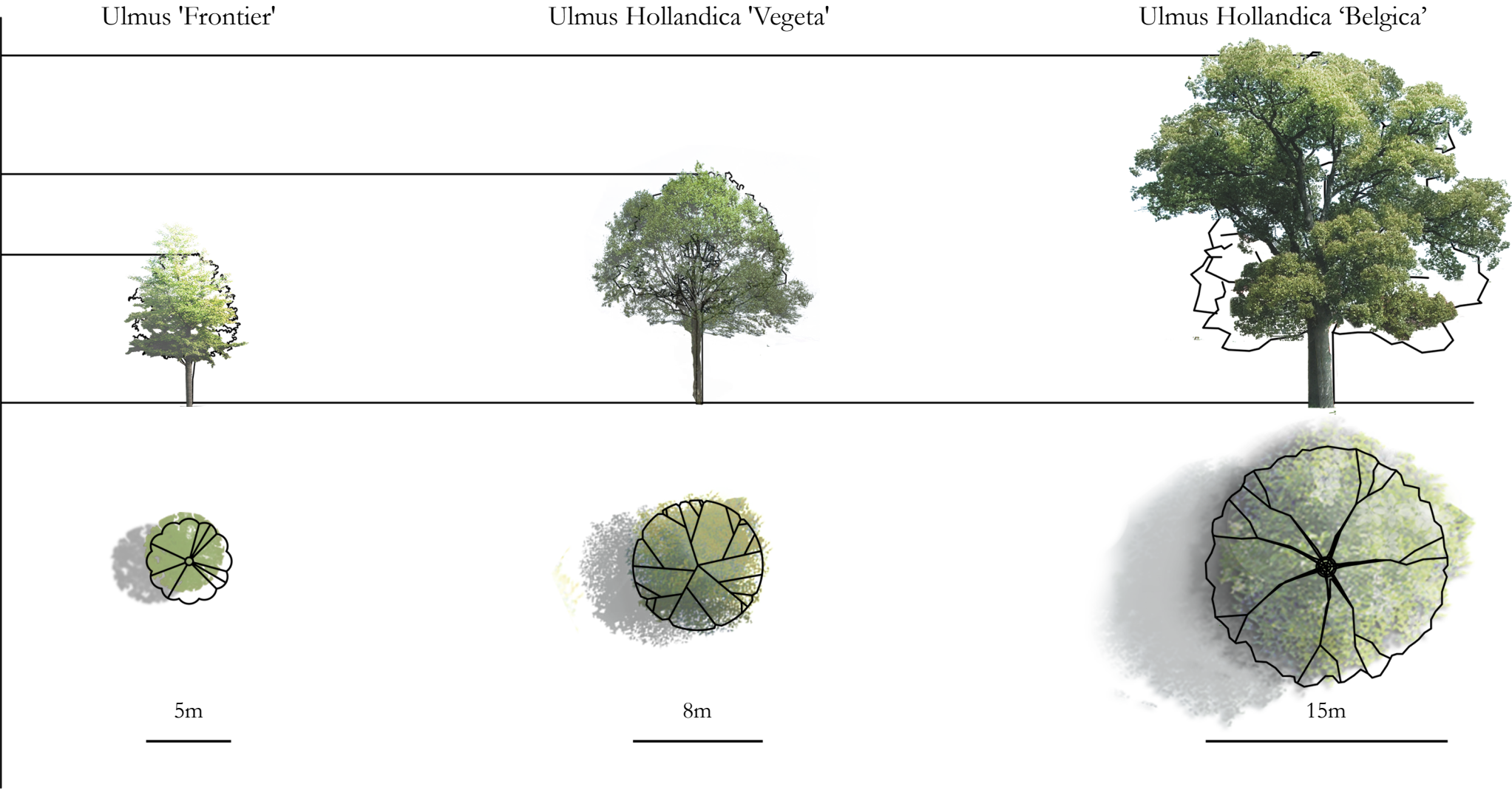


6.2.9 Traffic Junction





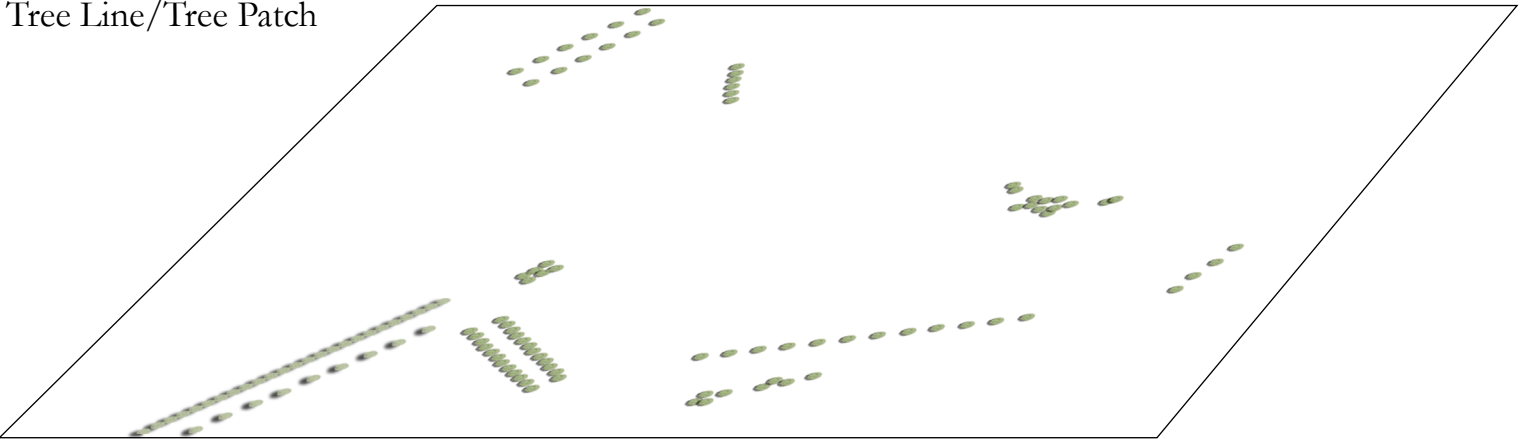
6.2.10 Tree Analysis



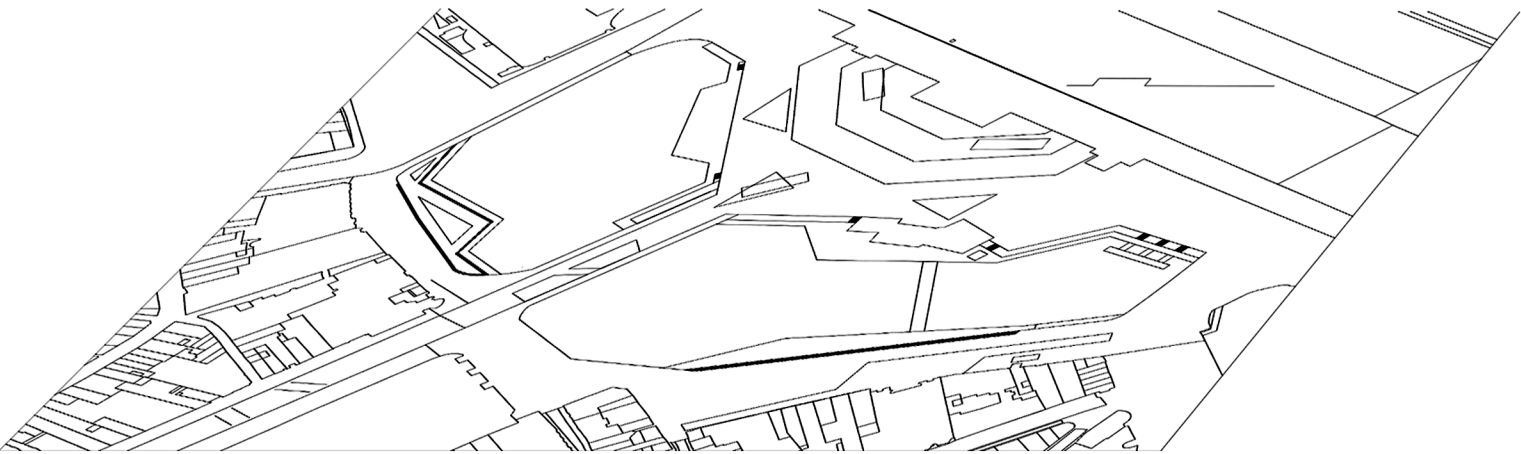
Solitary Tree



Tree Line/Tree Patch

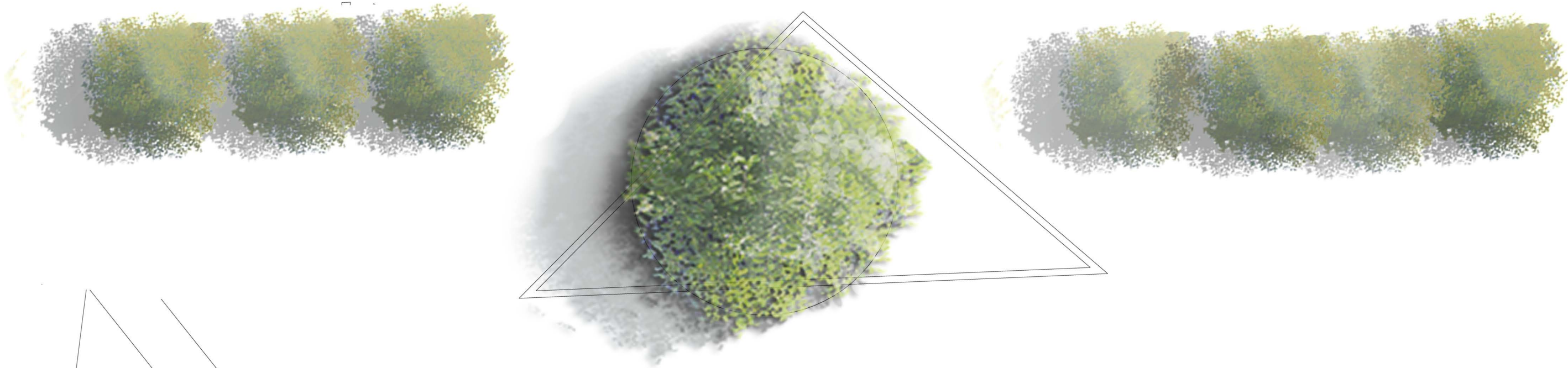
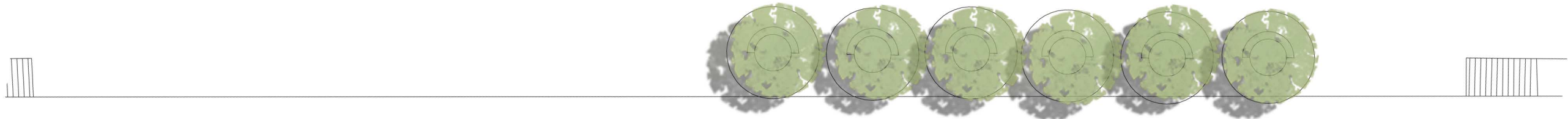


Tree Line/Tree Dot



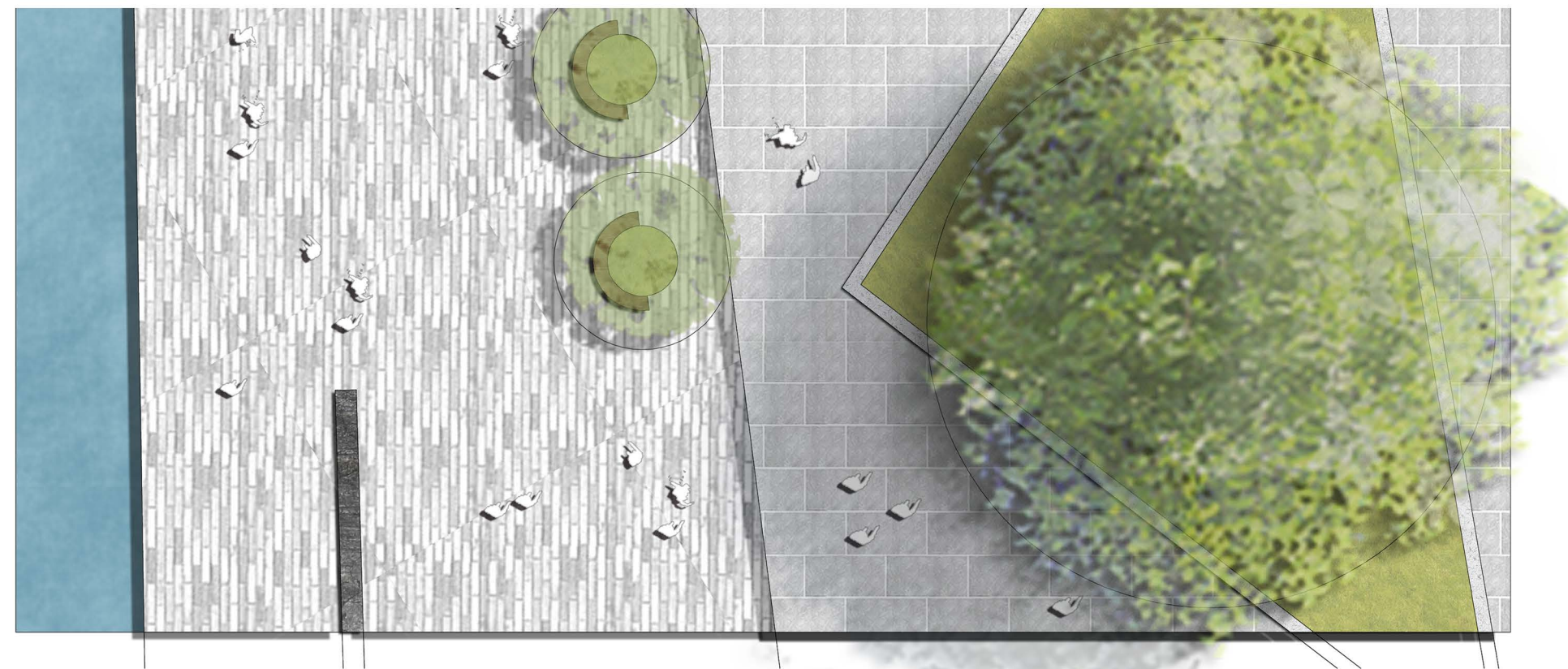
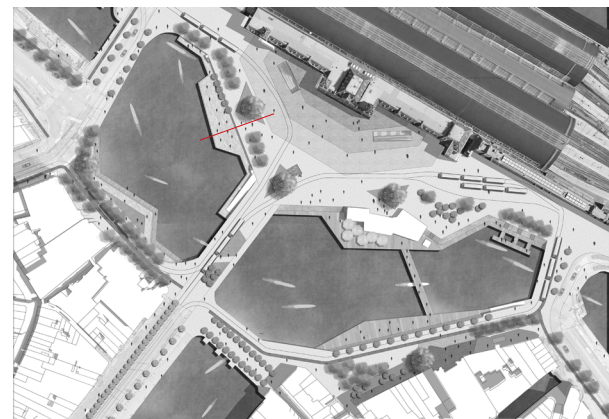


# 6.2.11 Tree Composition Section

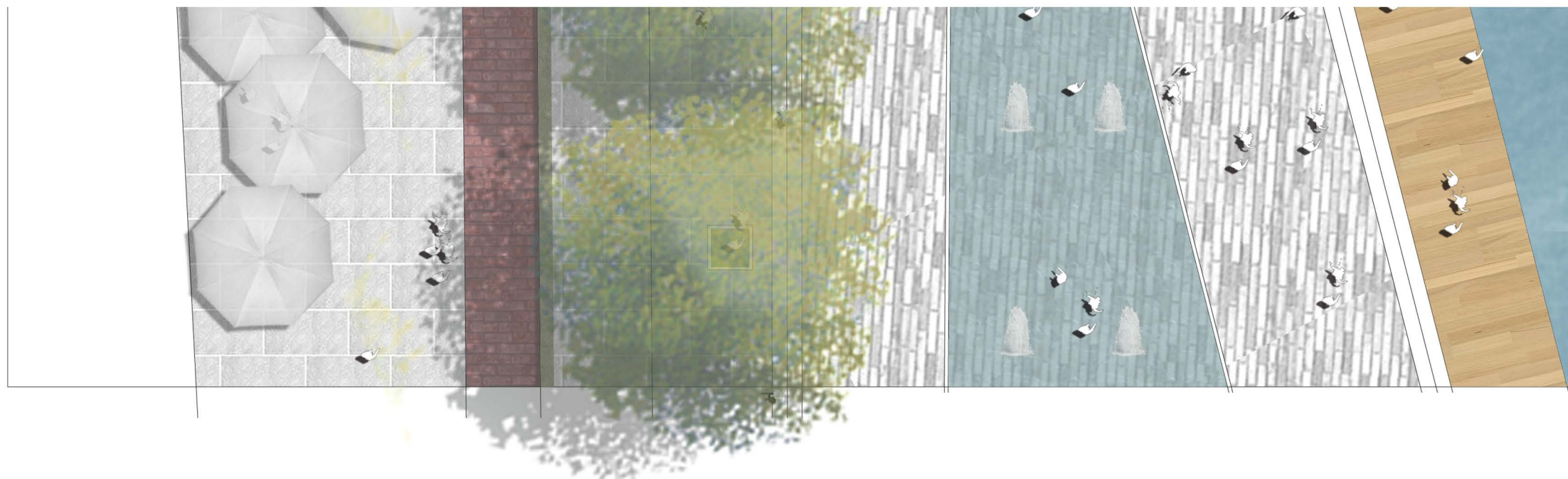
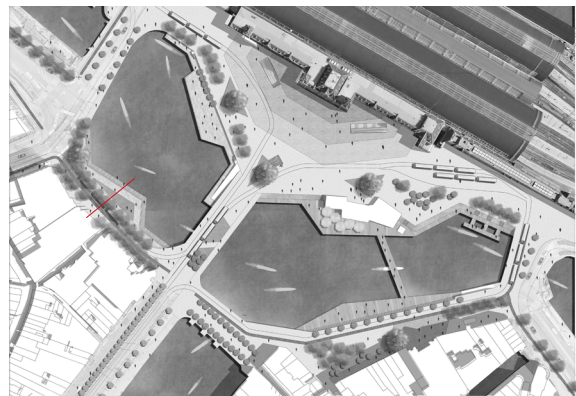




## 6.2.12 Waterfront Design



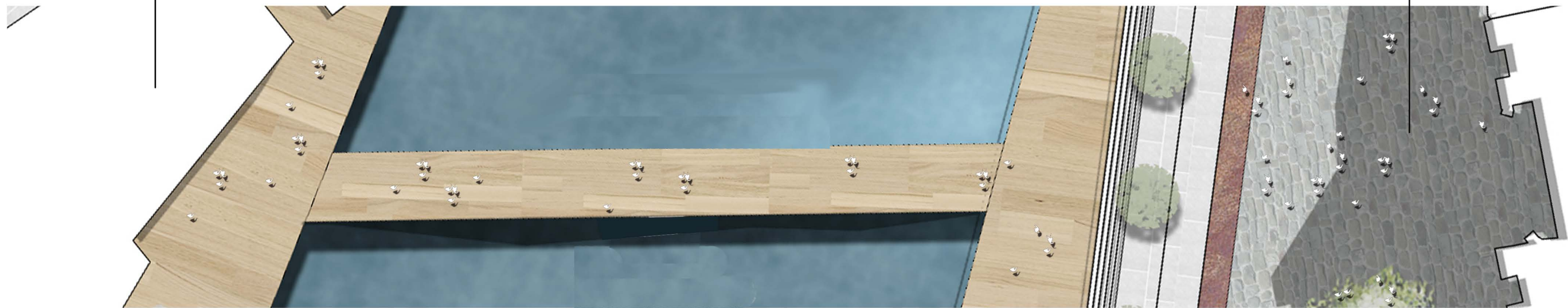
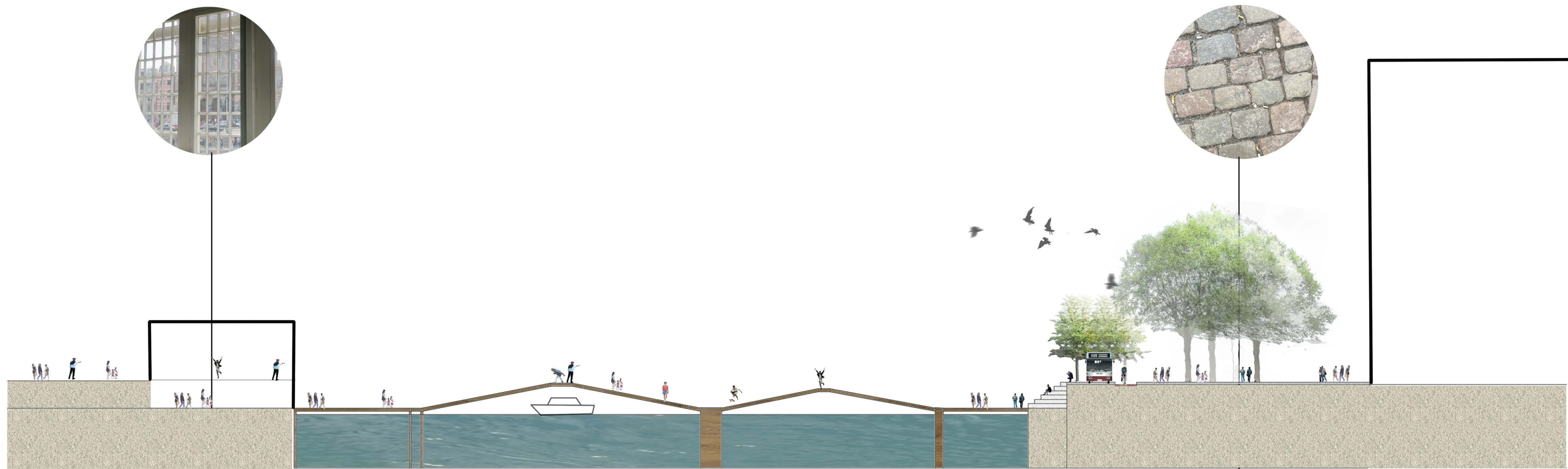




















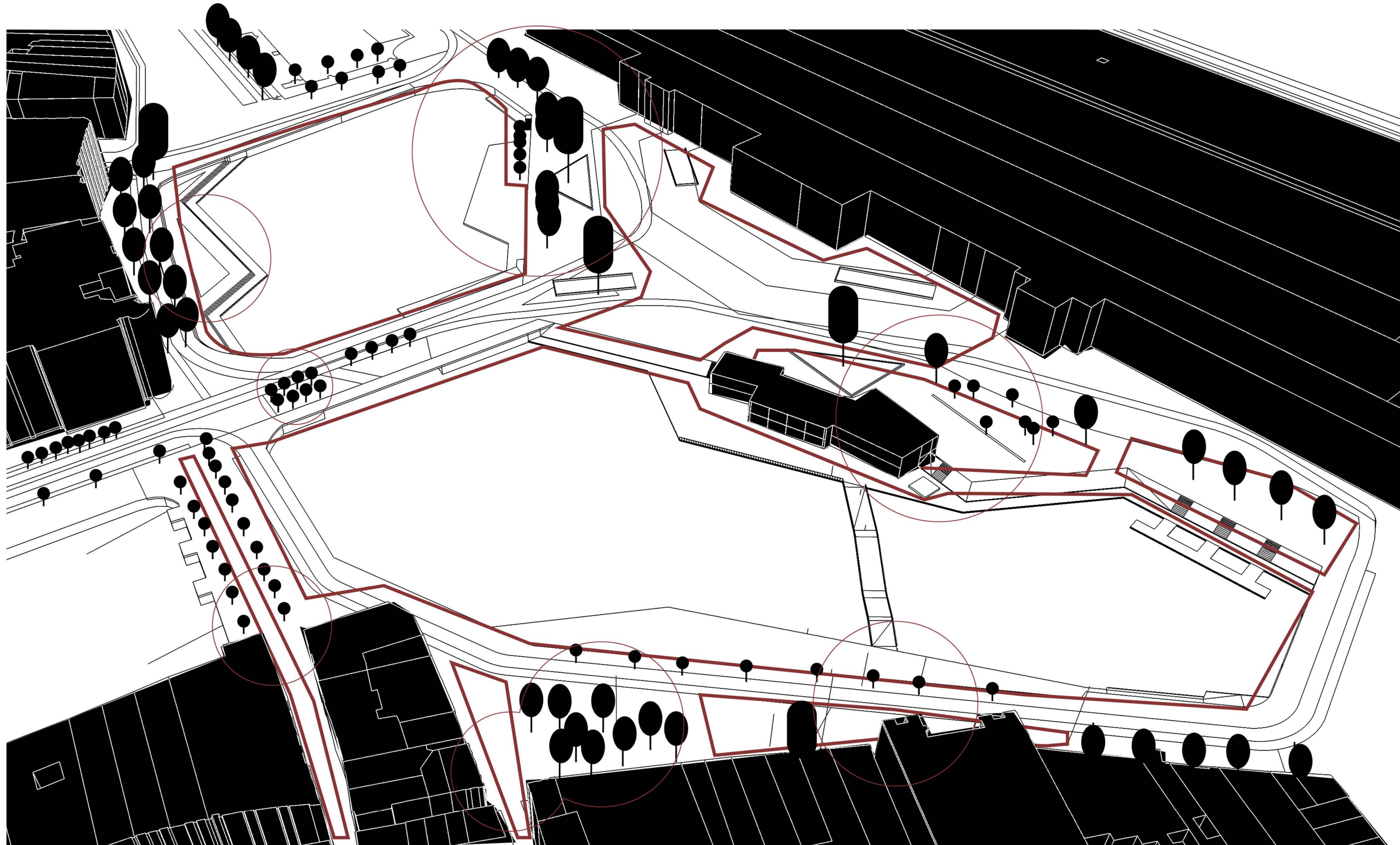


## 6.2.13 Bird View



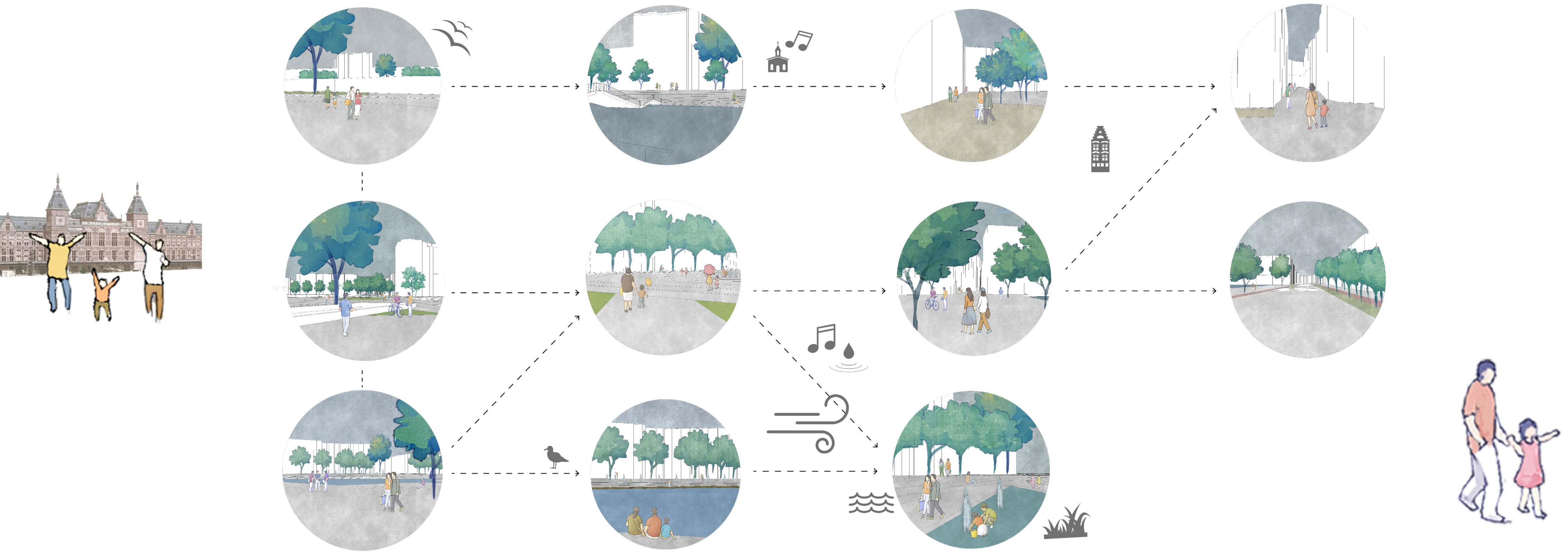


## 6.2.14 Structural Organization



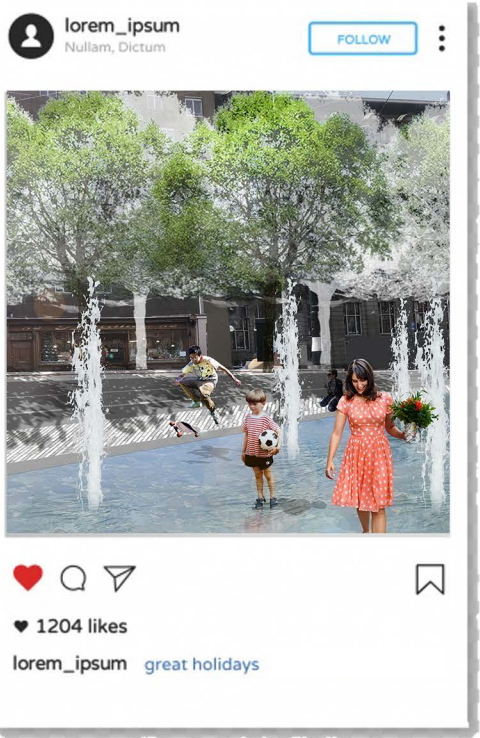
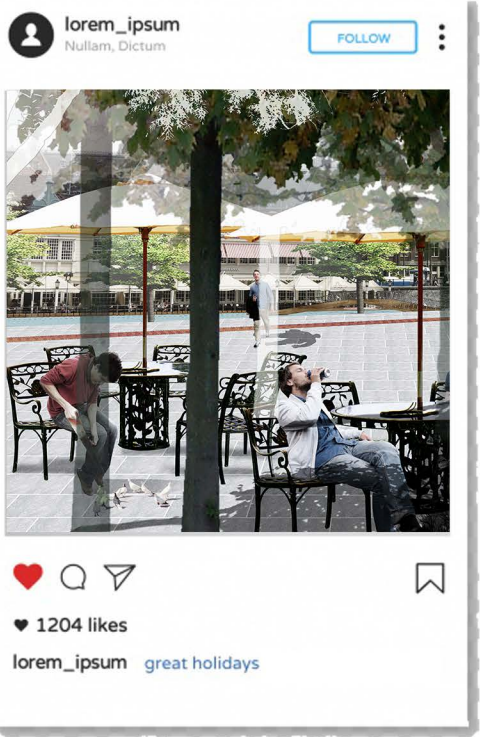
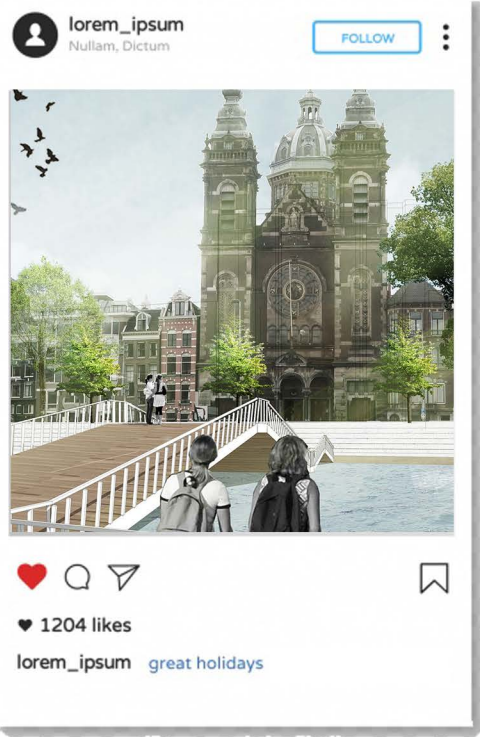
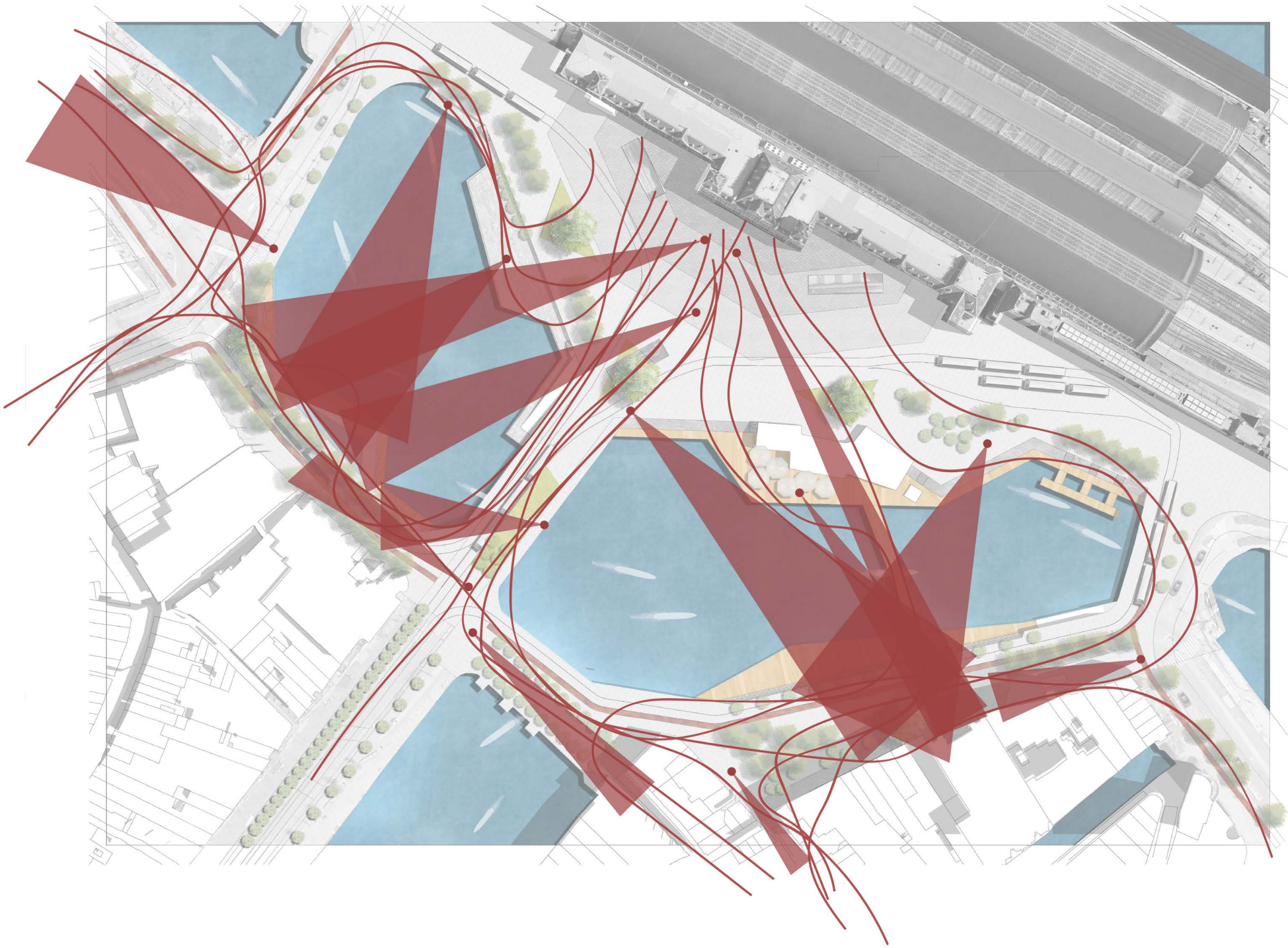


6.2.15 Visual Sequence





6.2.16 Predicted Future





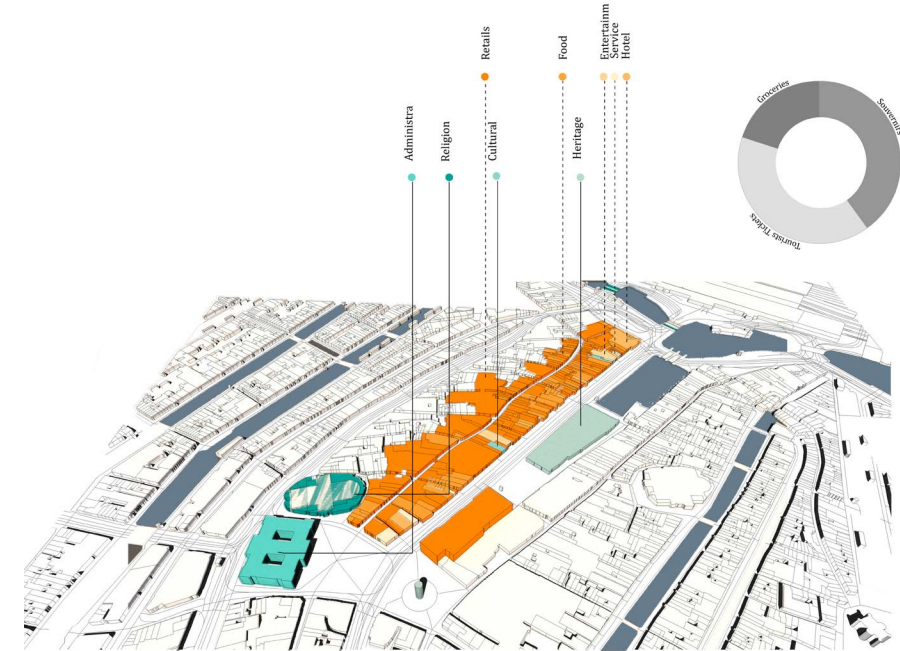
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## 6.3 Damrak Street

---



6.3.1 Structure





**linuschance** • Follow  
Amsterdam, Netherlands

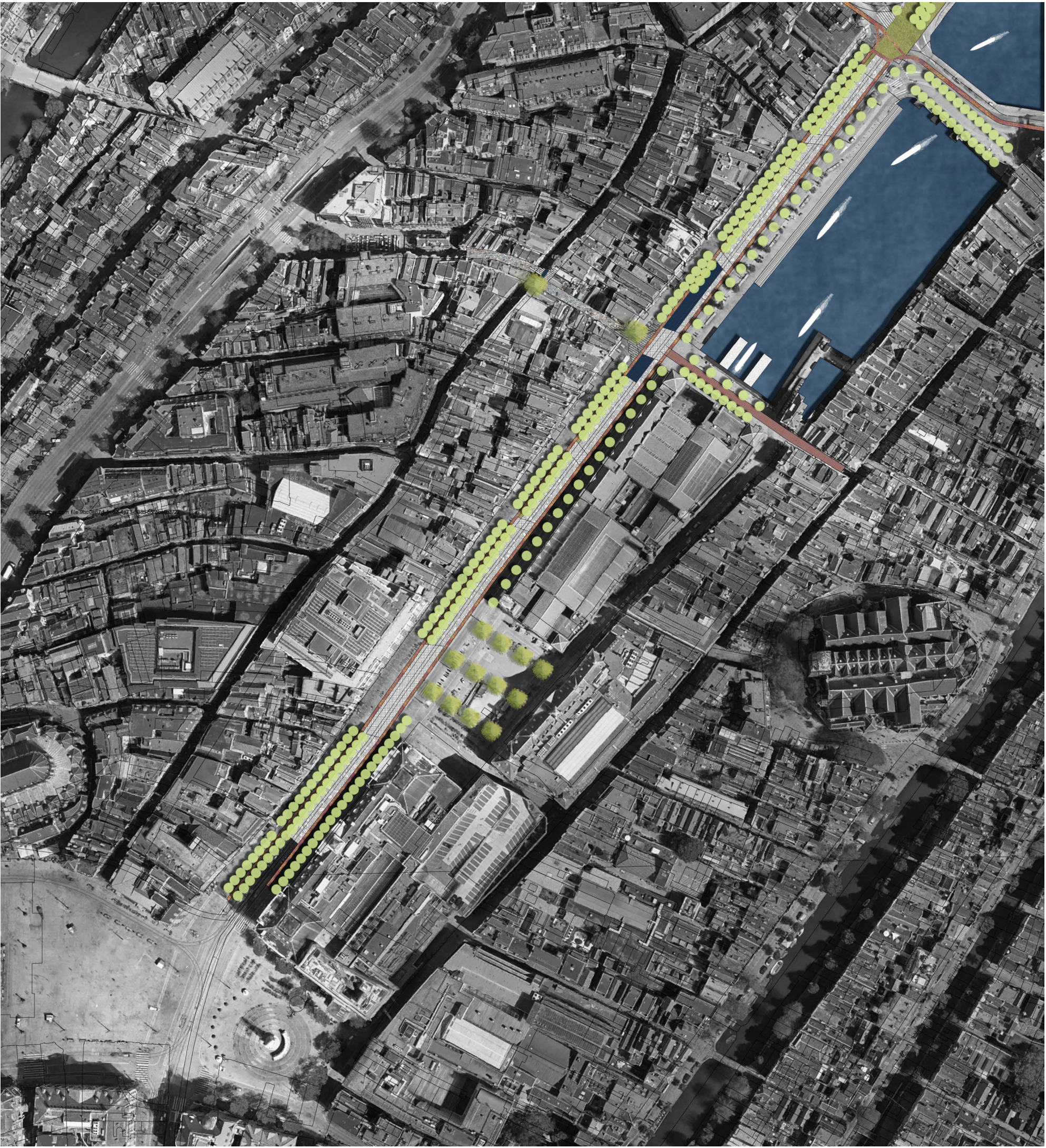
linuschance Still dreaming of waking up to this view everyday 🇳🇱 #amsterdam #damrak #canal #buildings #architecture #sunset #netherlands #holland #travel #holiday #wanderlust #spring chansoxo Wow this is damn unreal!!!! milnesyh I had a similar photo there! Ahha



82 likes  
1 DAY AGO

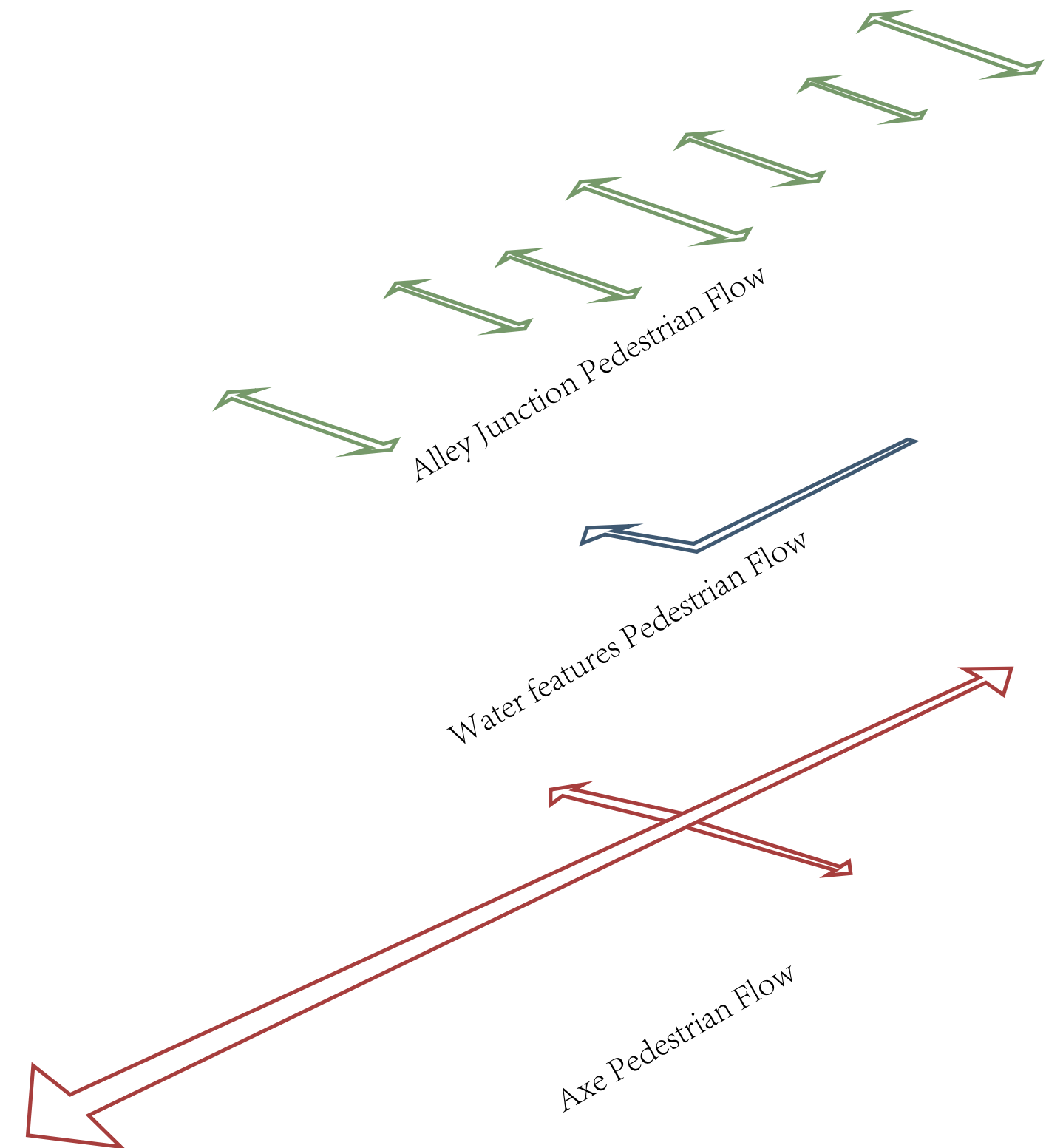
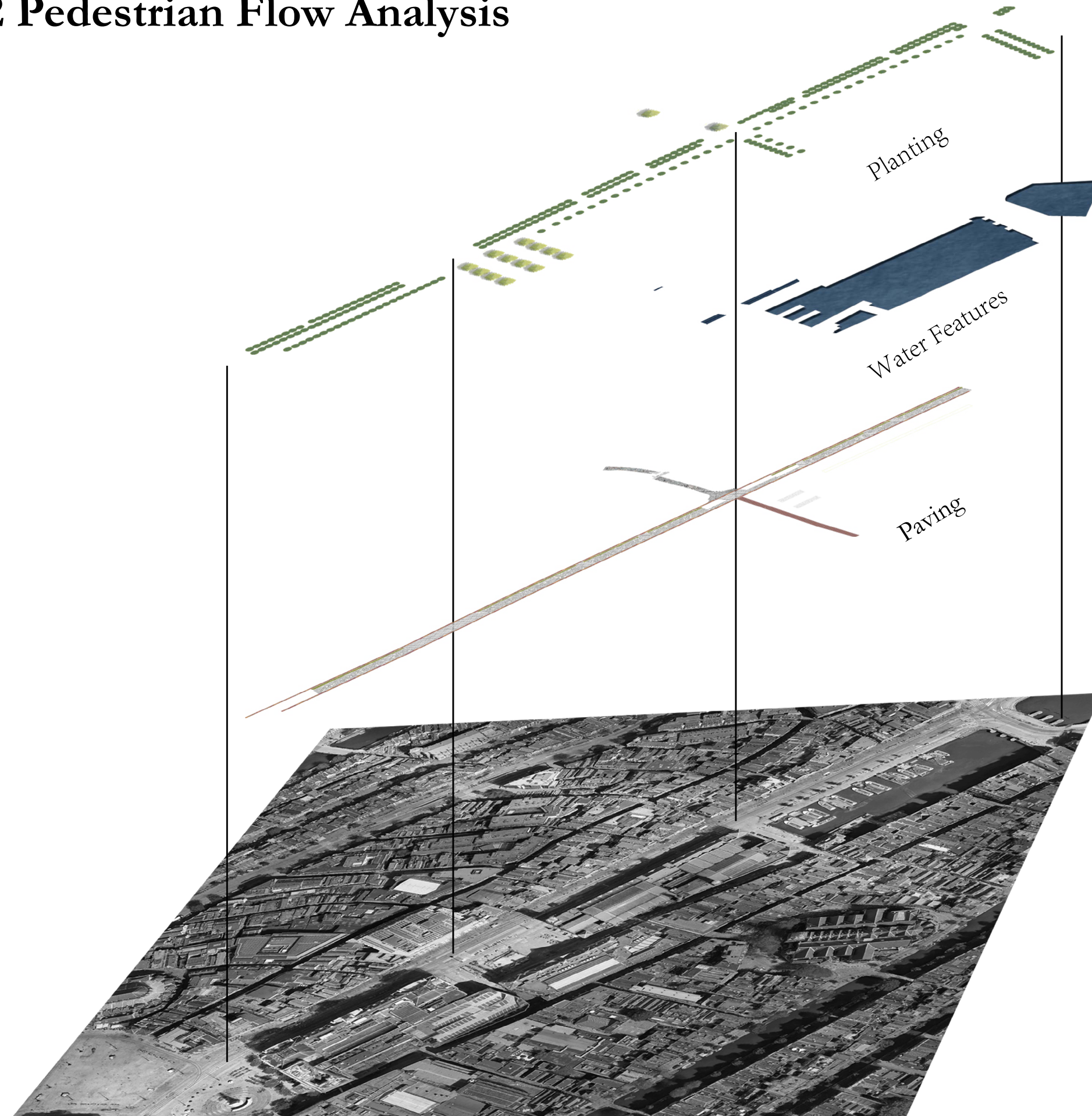








### 6.3.2 Pedestrian Flow Analysis



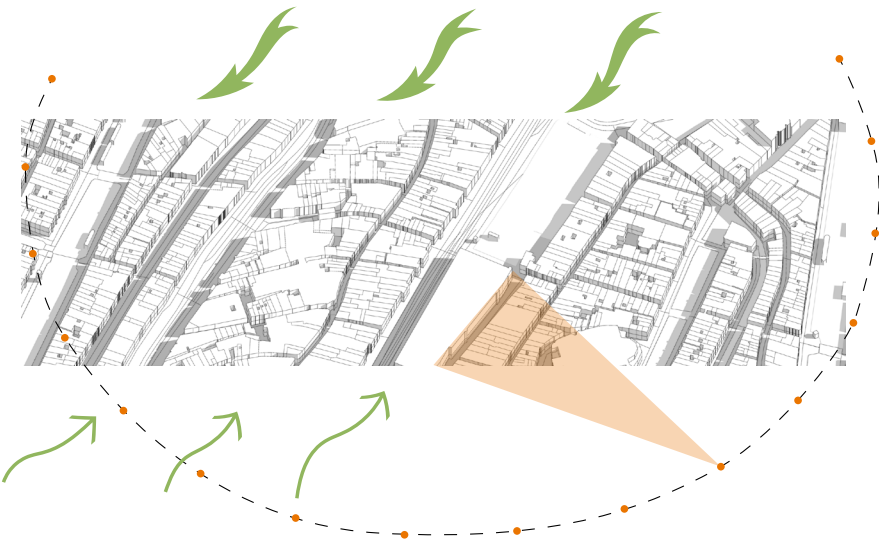
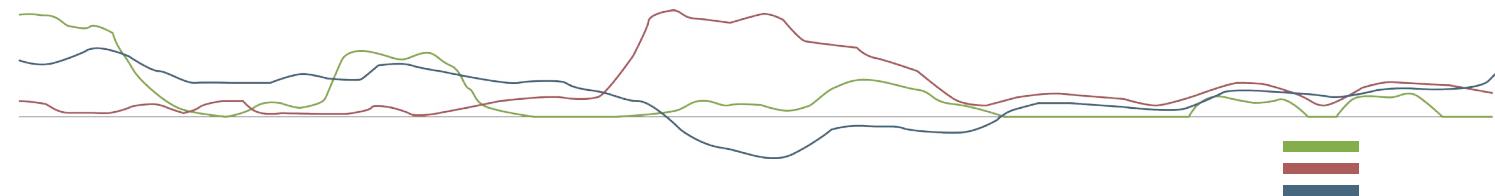
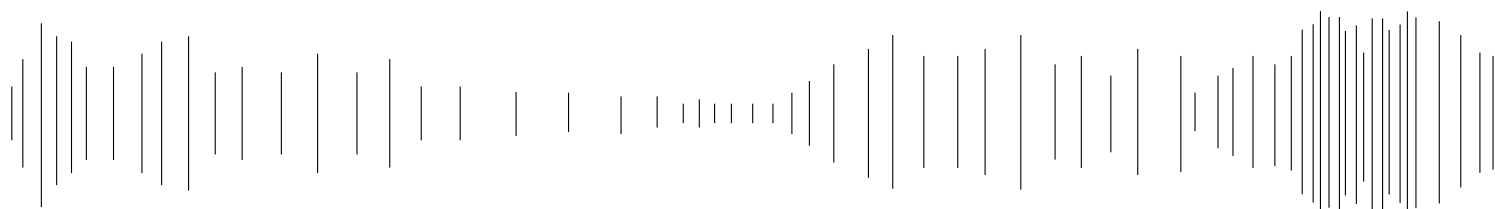
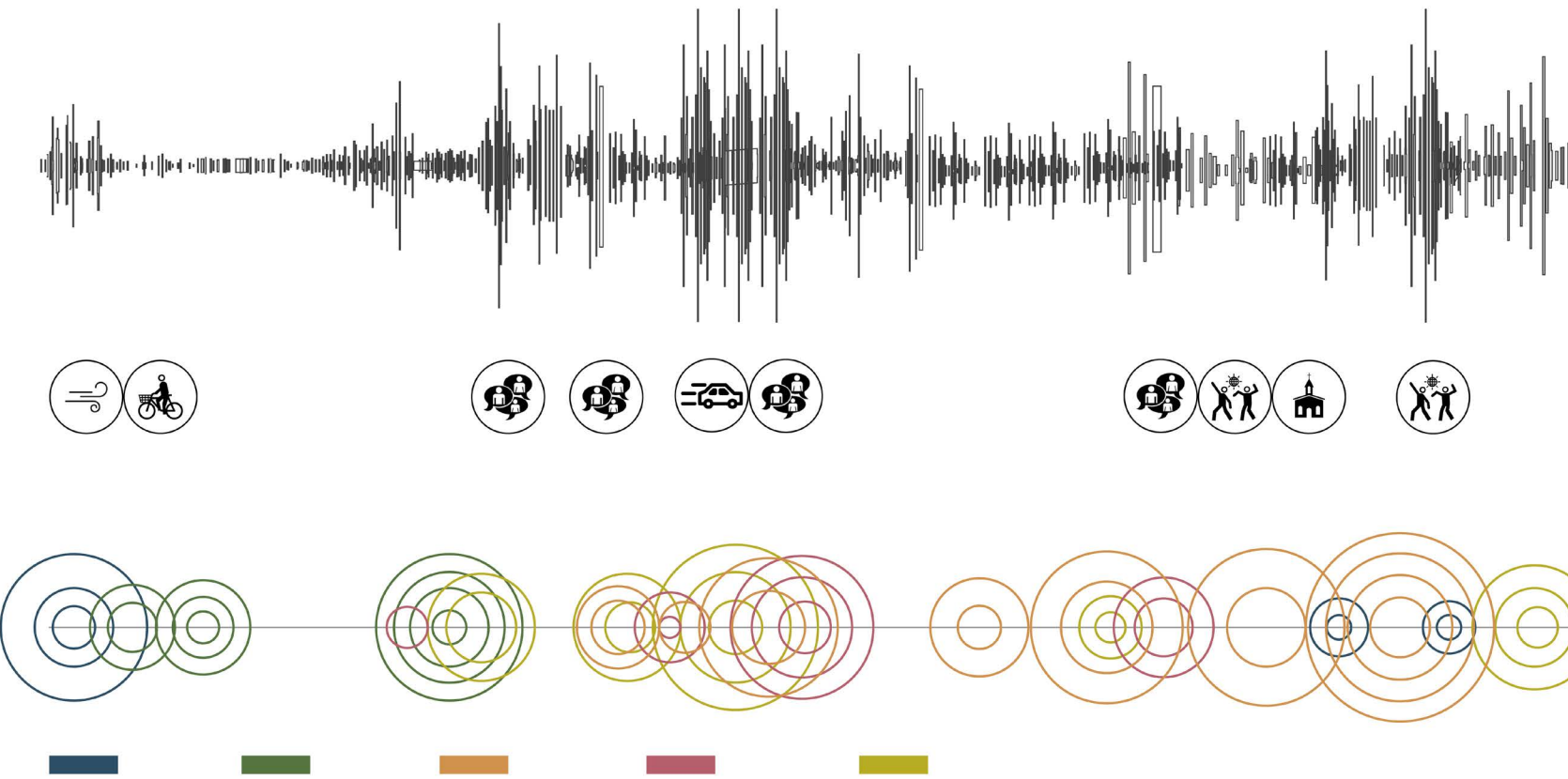


### 6.3.3 Water Management



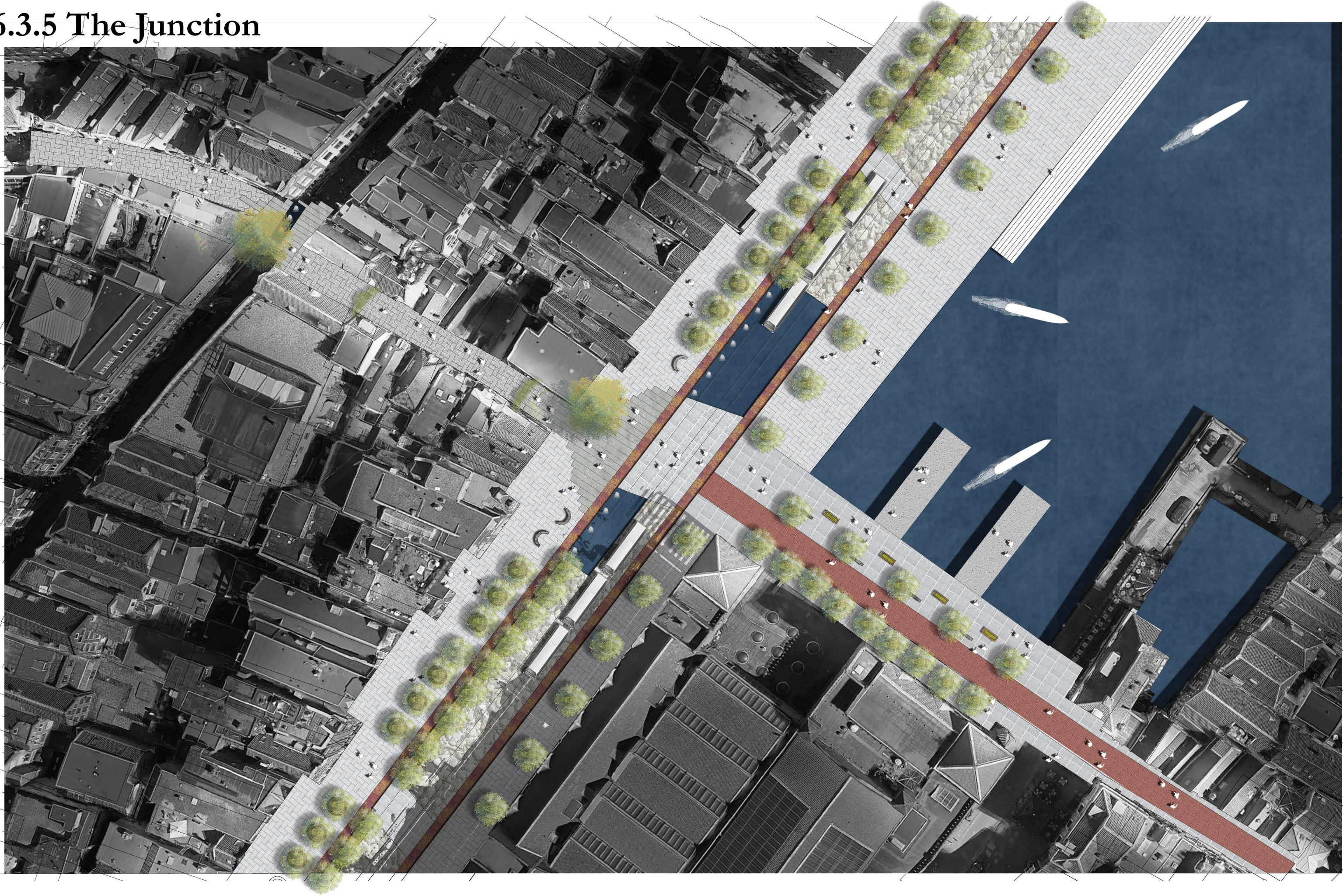


6.3.4 Horizontal Connection Analysis





6.3.5 The Junction















图例

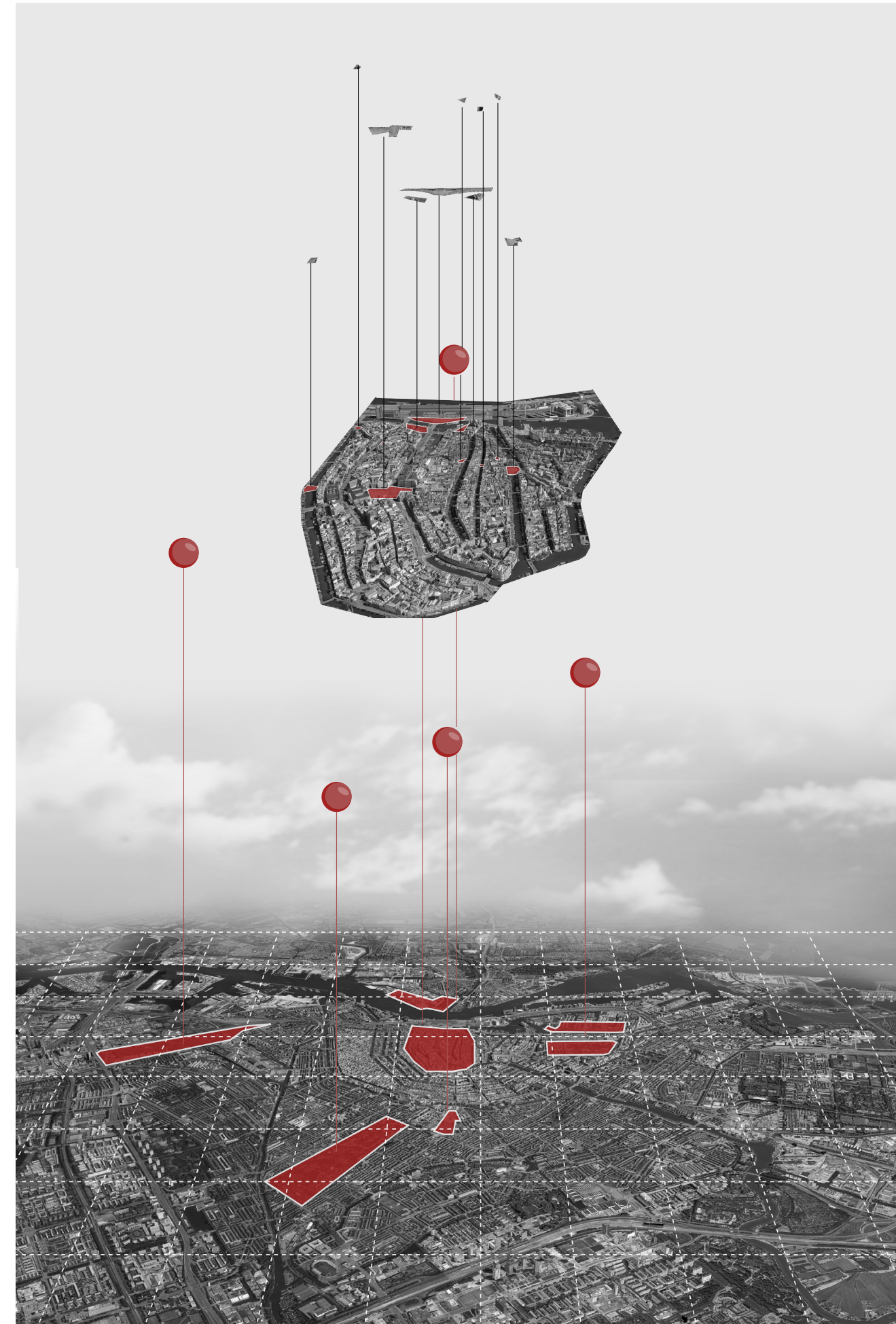
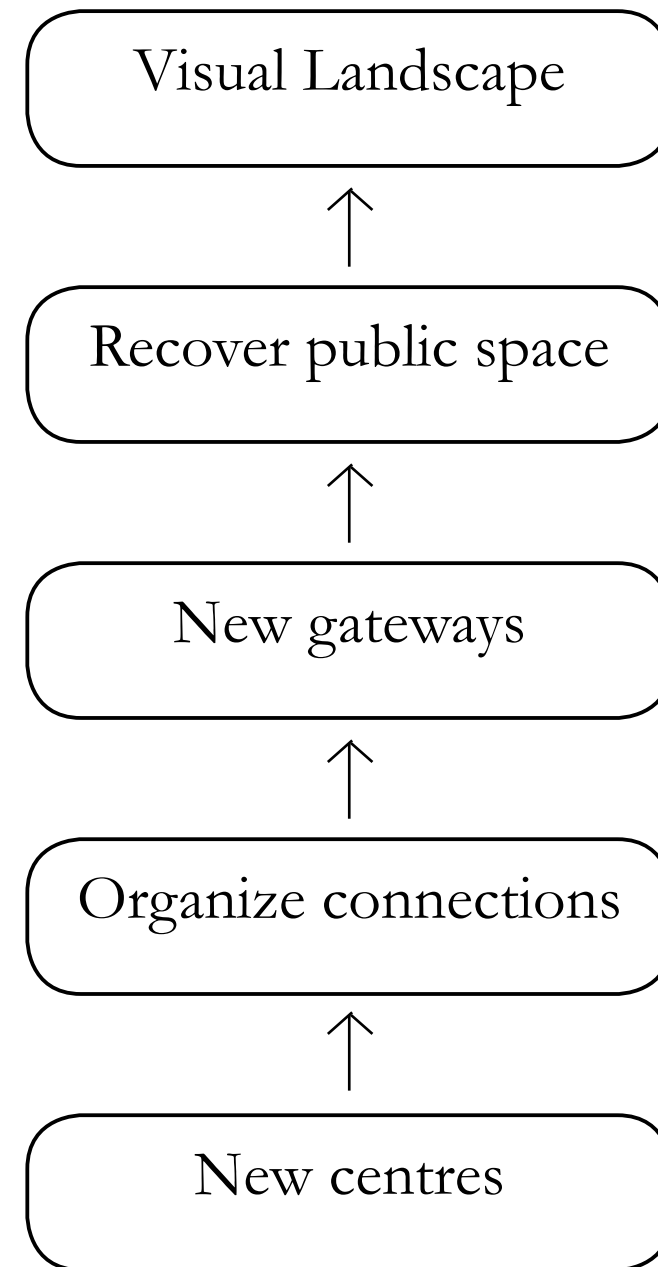




## 7. Conclusion



## 7.2 Applicable Principle





**Thank You!**