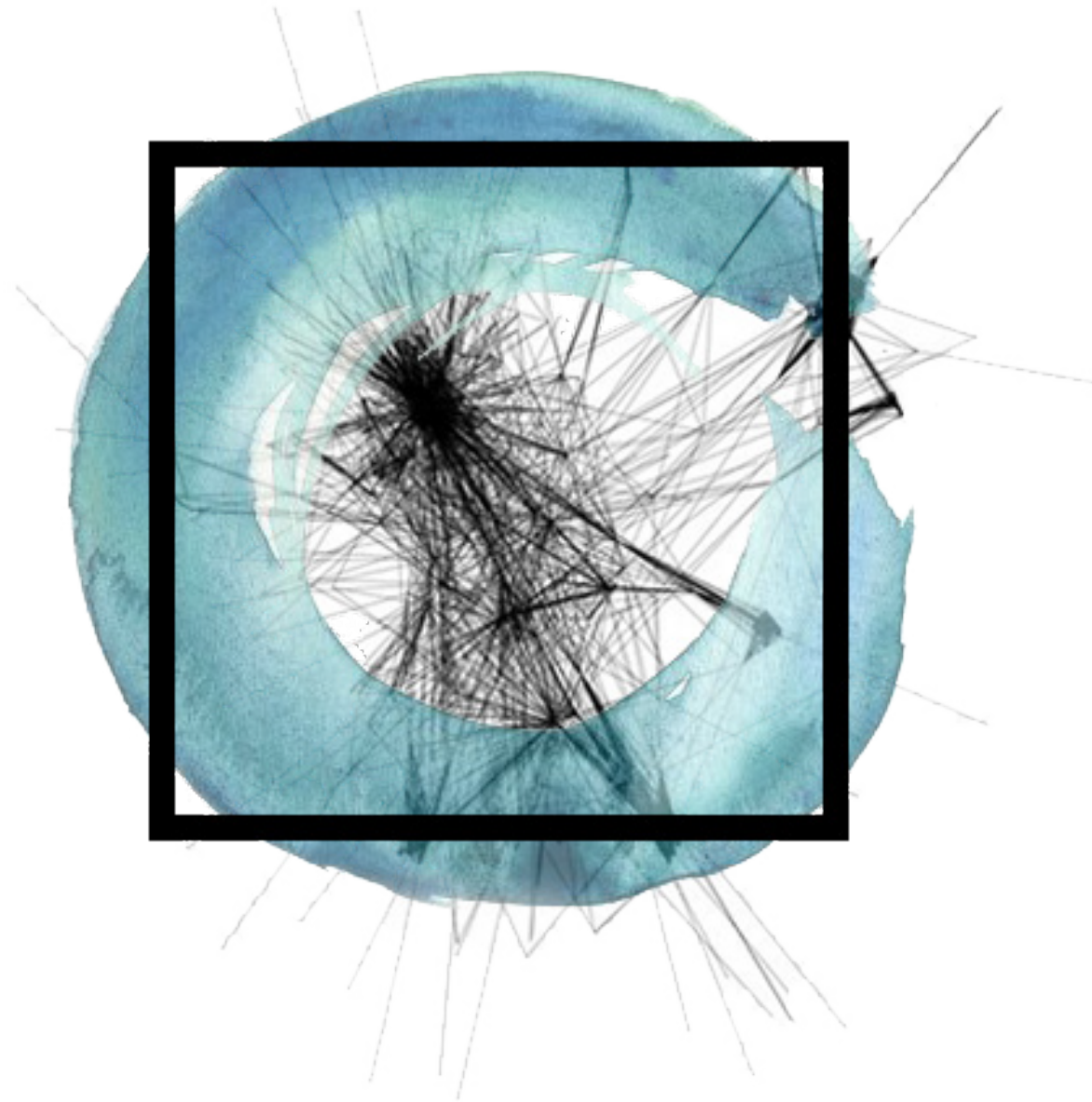


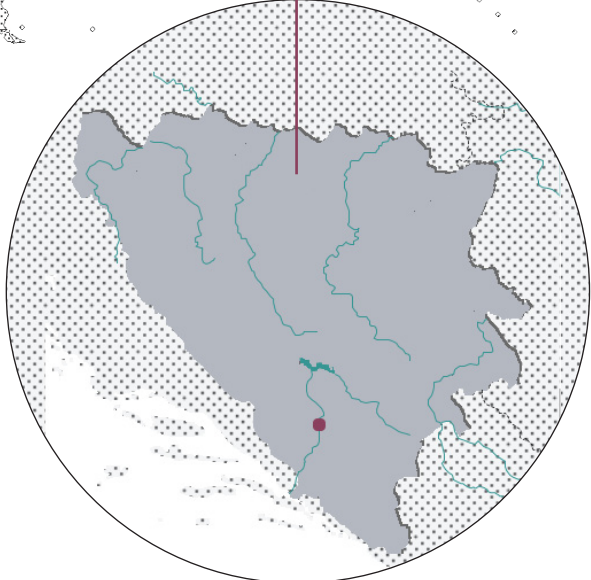
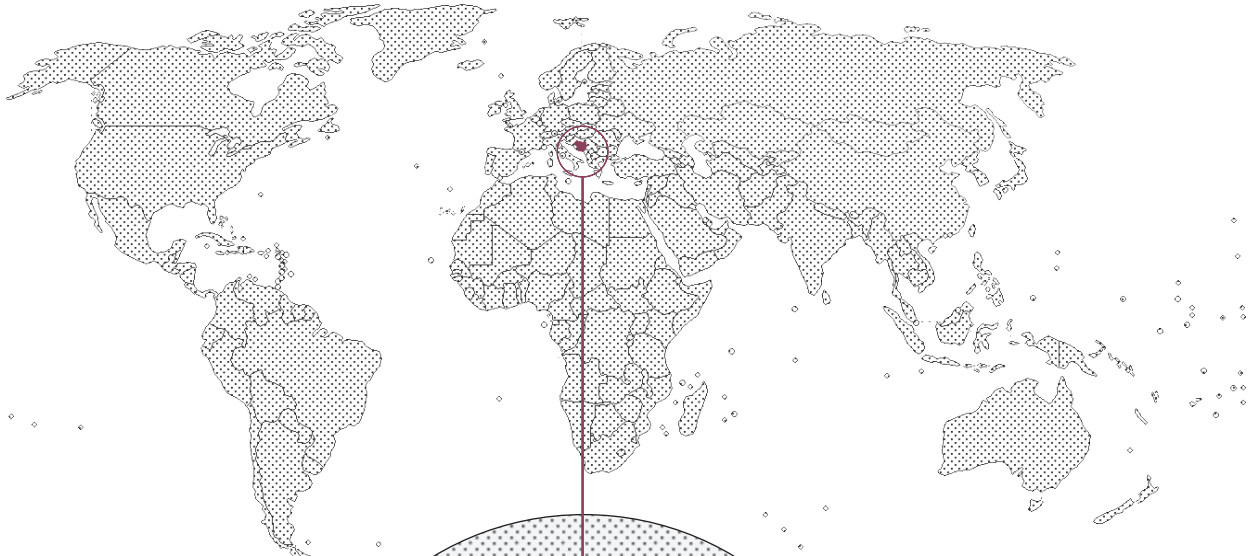
# Bordering Chaos

*Reinforcing productive relationships in ERODING territories*

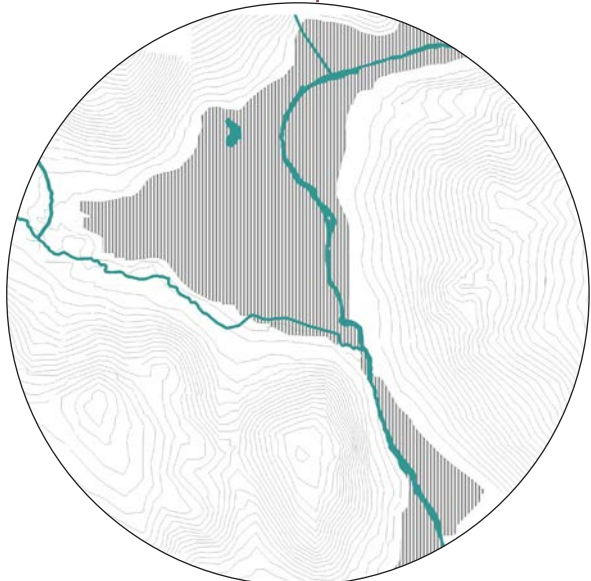


By Purvika Awasthi

# Location



Mostar, Bosnia & Herzegovina



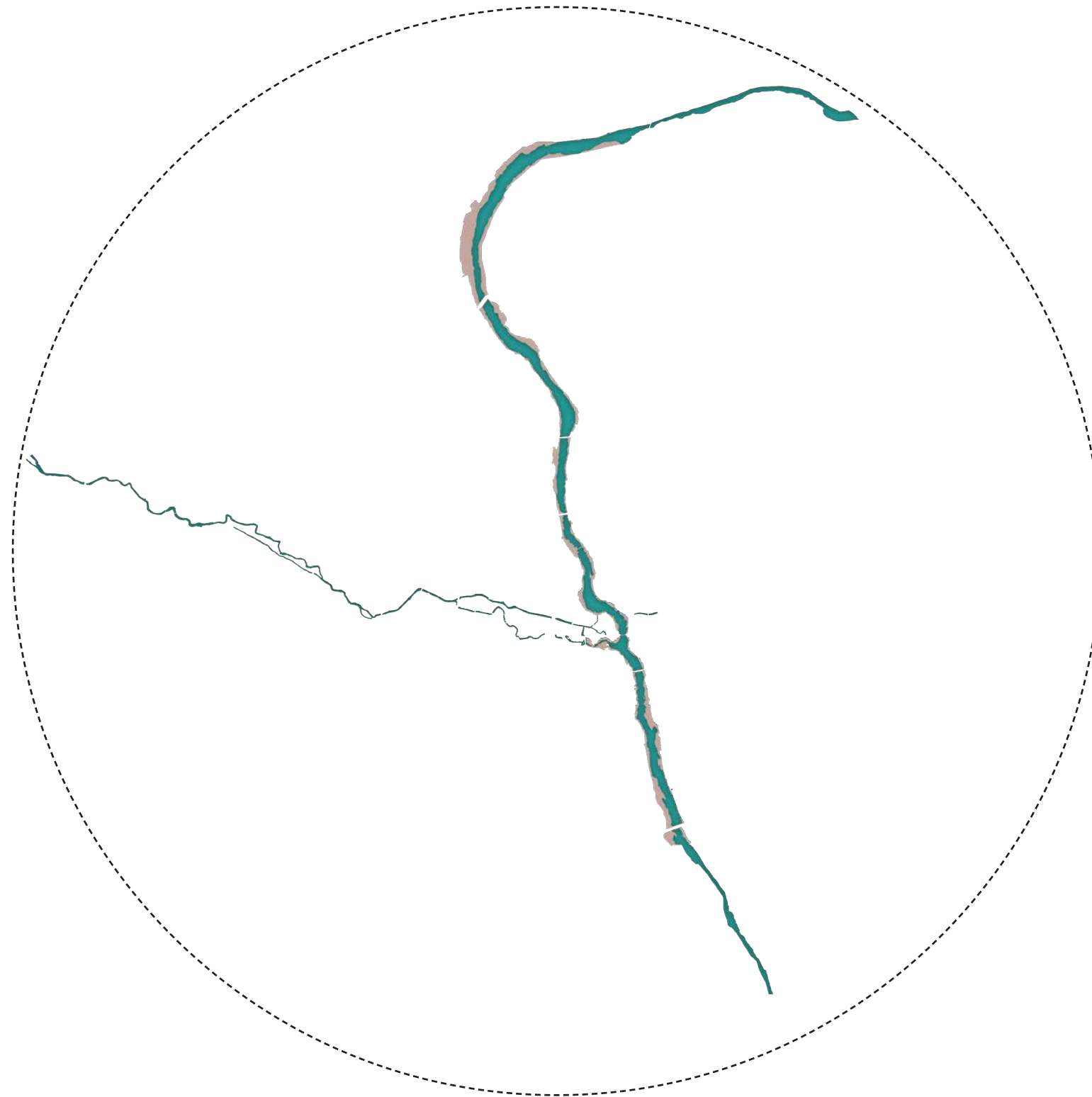
Neretva Valley & the city

# Fascination

Ganges in Kanpur, India



# Why Neretva?







# Entangled affects of Mostar

Urban and social transformations affecting Neretva

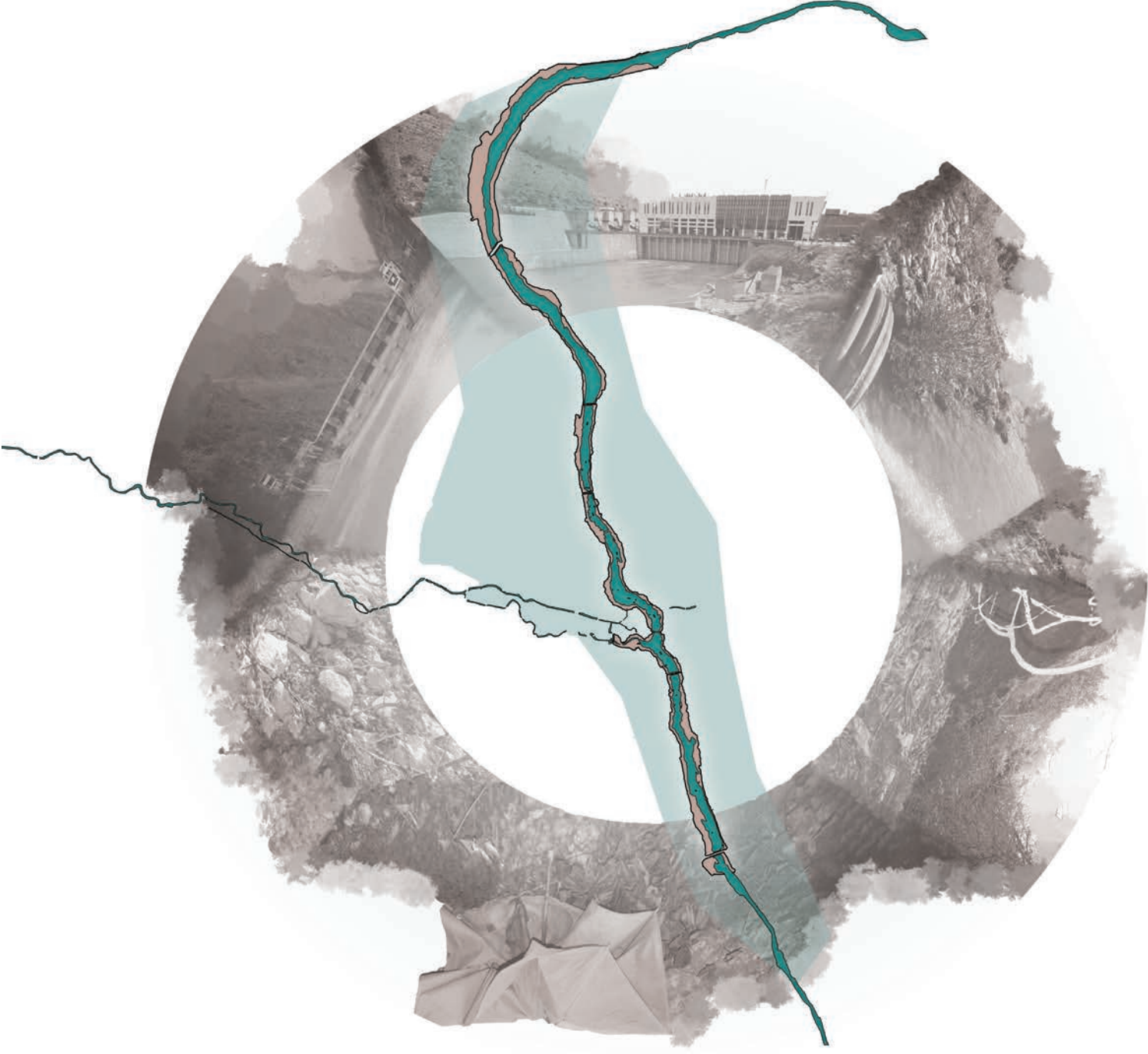


Energy generation source

Landscape of waste

Mental divide

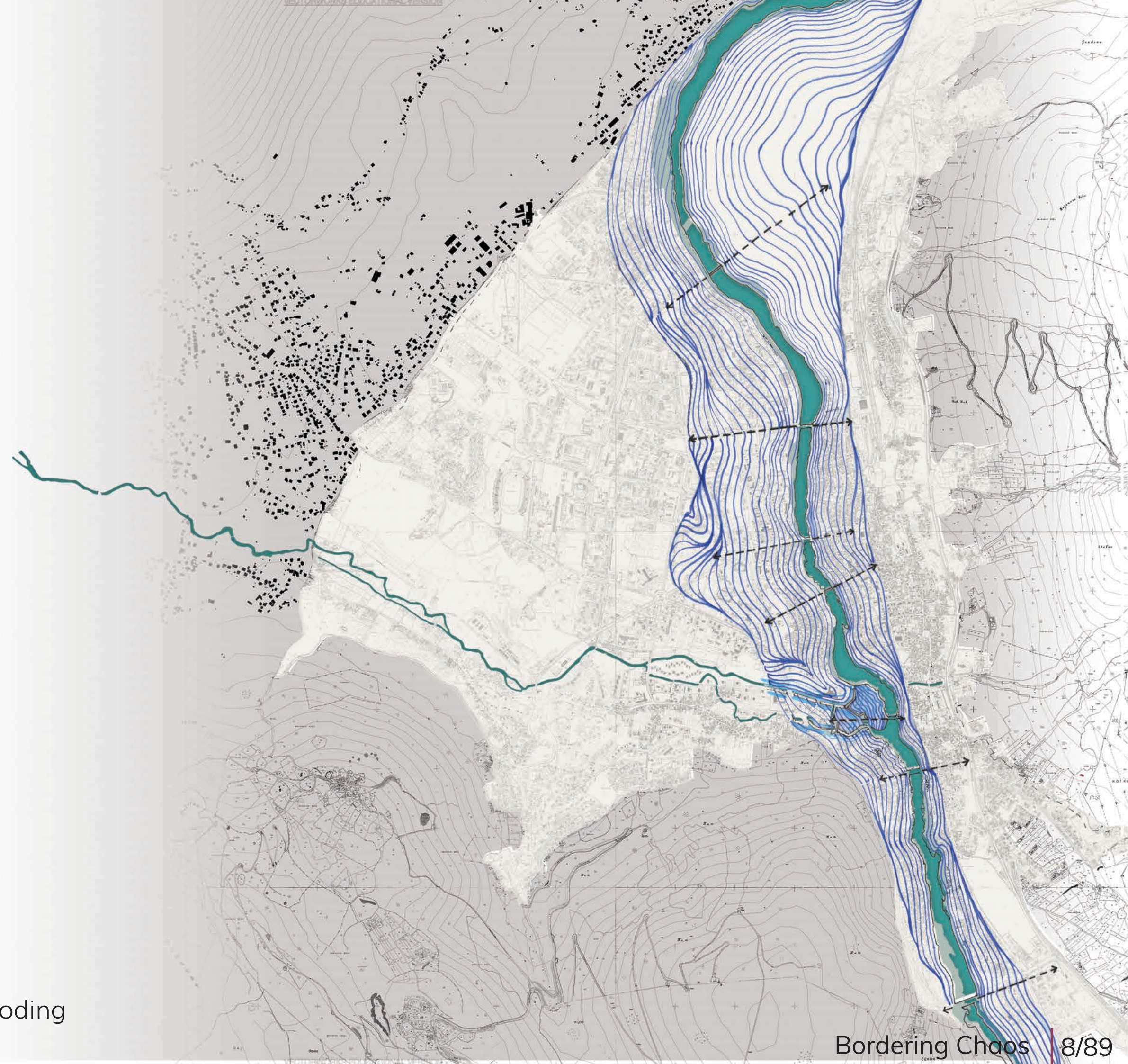
Natural transformations of Neretva







Flooding

Erosion





Legend

-  Neretva and Radobolja
-  Riverbank
-  Floodplain of Neretva
-  Floodplain of Radobolja

-----> Direction and range



Floodplains and range of flooding



1953



1980



1999



2010



Legend

Neretva and Radobolja

Riverbank

Floodplain of Neretva

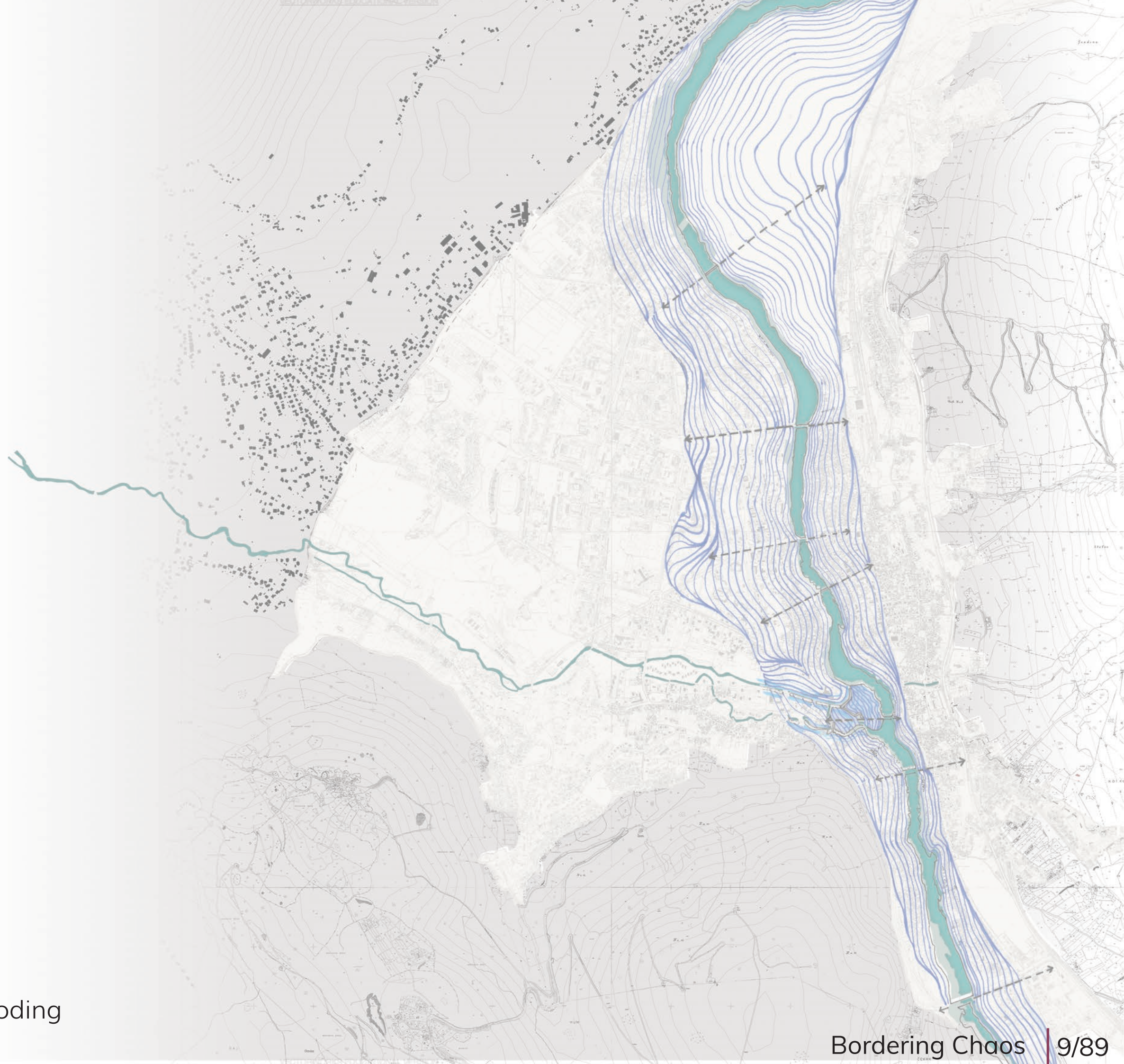
Floodplain of Radobolja



Direction and range

N

Floodplains and range of flooding







2006



2011



2013



2016



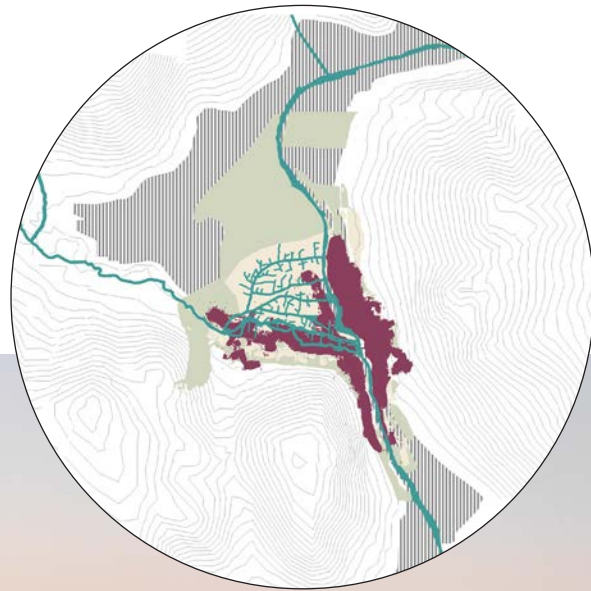
2017



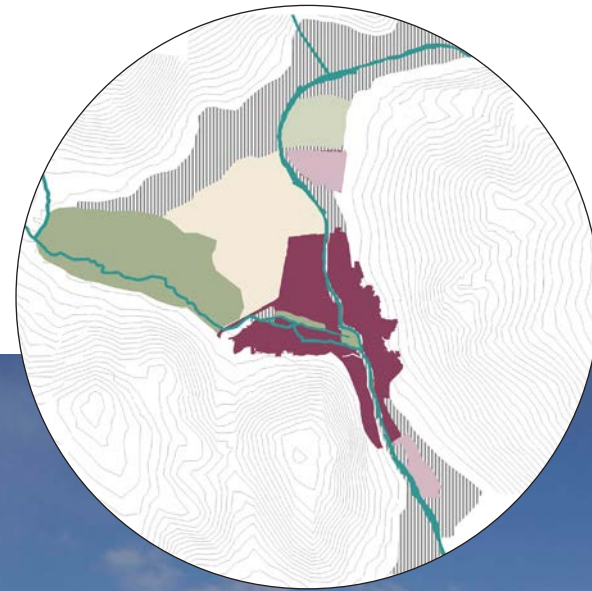
2018



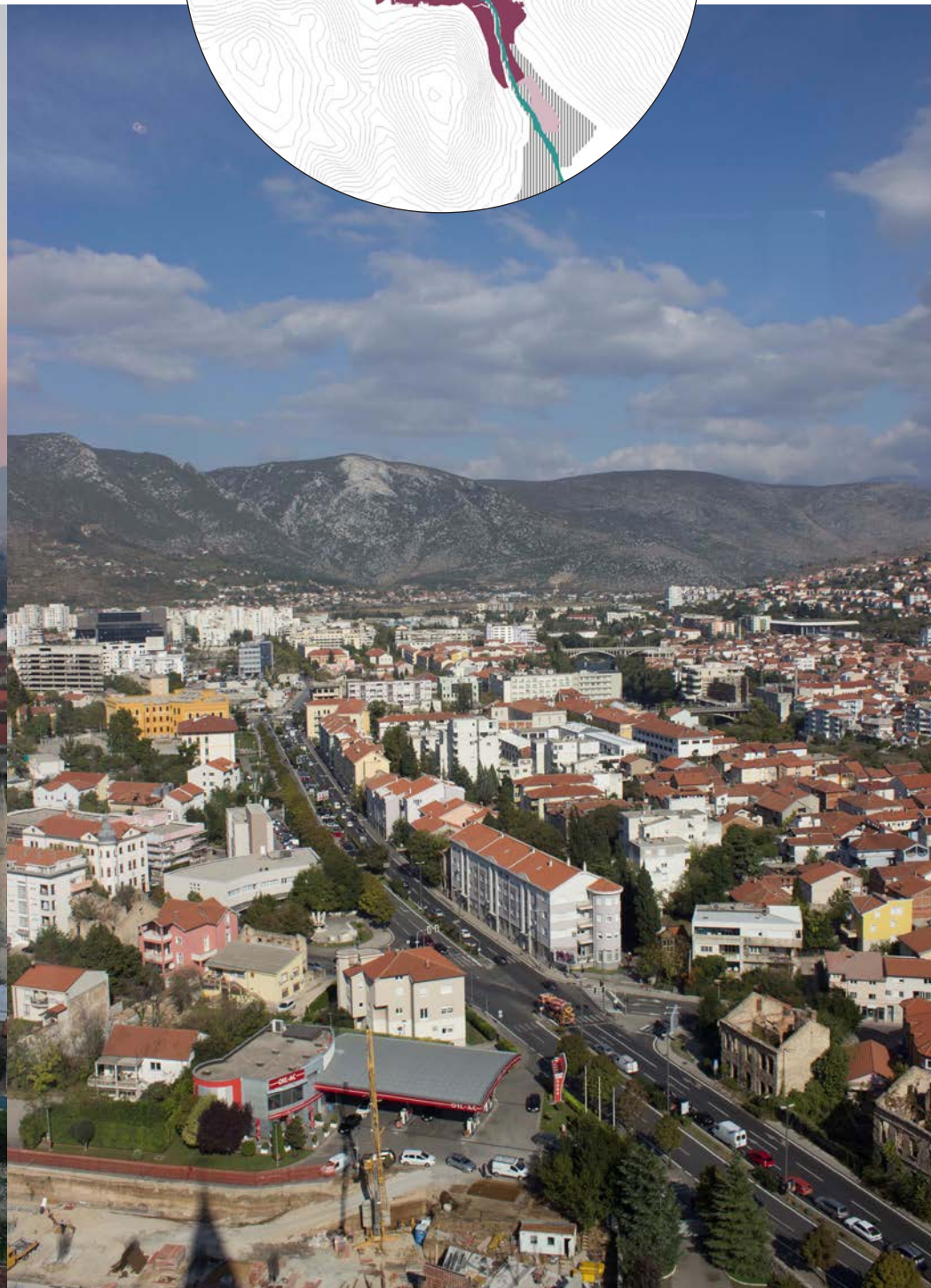
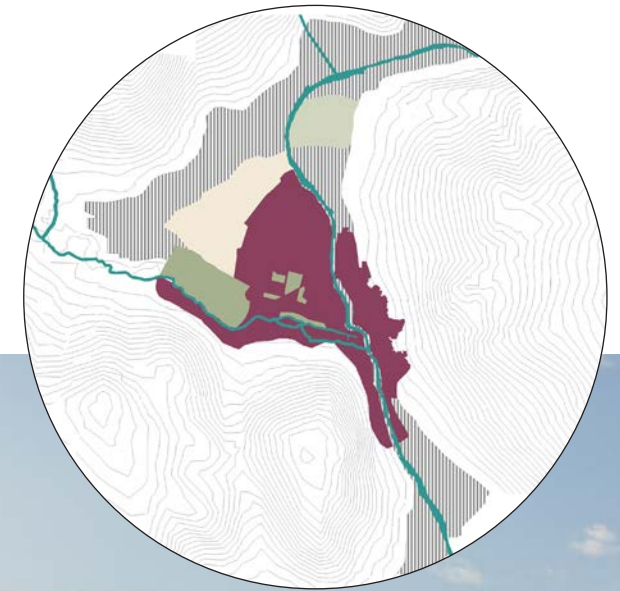
Ottoman Period (1468-1878)



Austro - Hungarian Period (1878-1918)

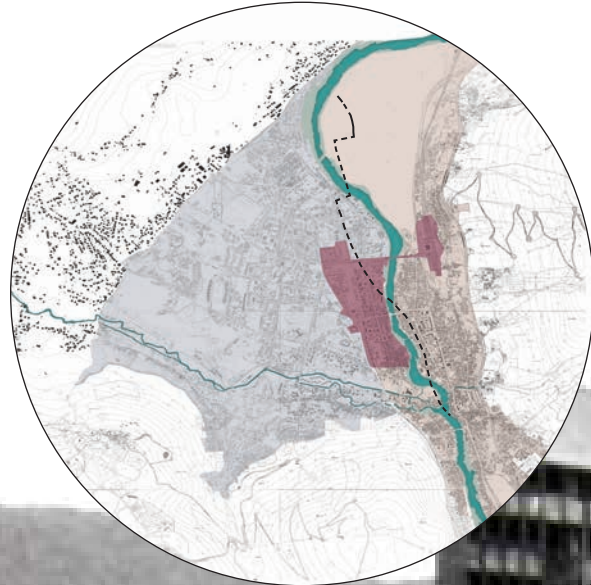


Yugoslavian Period





Bosnian War, 1992 - 1994



- Neretva and Radobolja
- River banks
- Bosnian side
- Croatian side
- Buffer zone
- Former line front line



The psychological targets were the structures with which people identified themselves and their culture. When the facades of a city are destroyed, its face lies beyond recognition, but when the cultural, historical and public spaces are targeted, **It deprives the city of its legibility**, disconnecting the inhabitants from their surroundings.  
- Arna Mackic (Mortal Cities, Forgotten Monuments)





Heterogeneous Urban Pattern





Heterogeneous Urban Pattern

Decaying Social Space



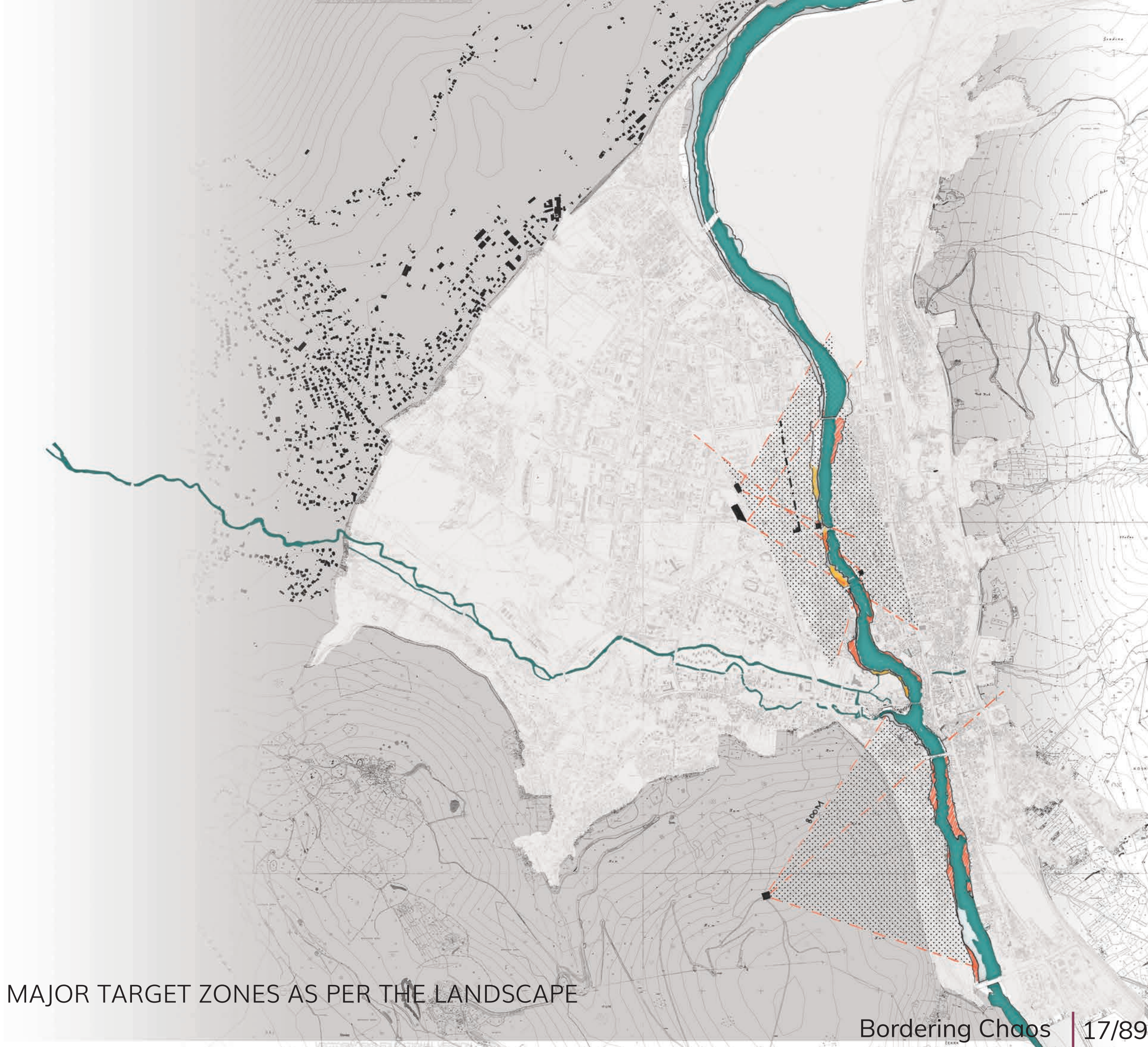


Heterogeneous Urban Pattern

Decaying Social Space

A Landscape of Waste





Legend

- Neretva and Radobolja
- Sniper location
- Target zones
- Safer spaces - hiding
- Range - 800 M

0 50 200 500 M



SNIPER LOCATIONS AND MAJOR TARGET ZONES AS PER THE LANDSCAPE



# Entangled affects of Mostar

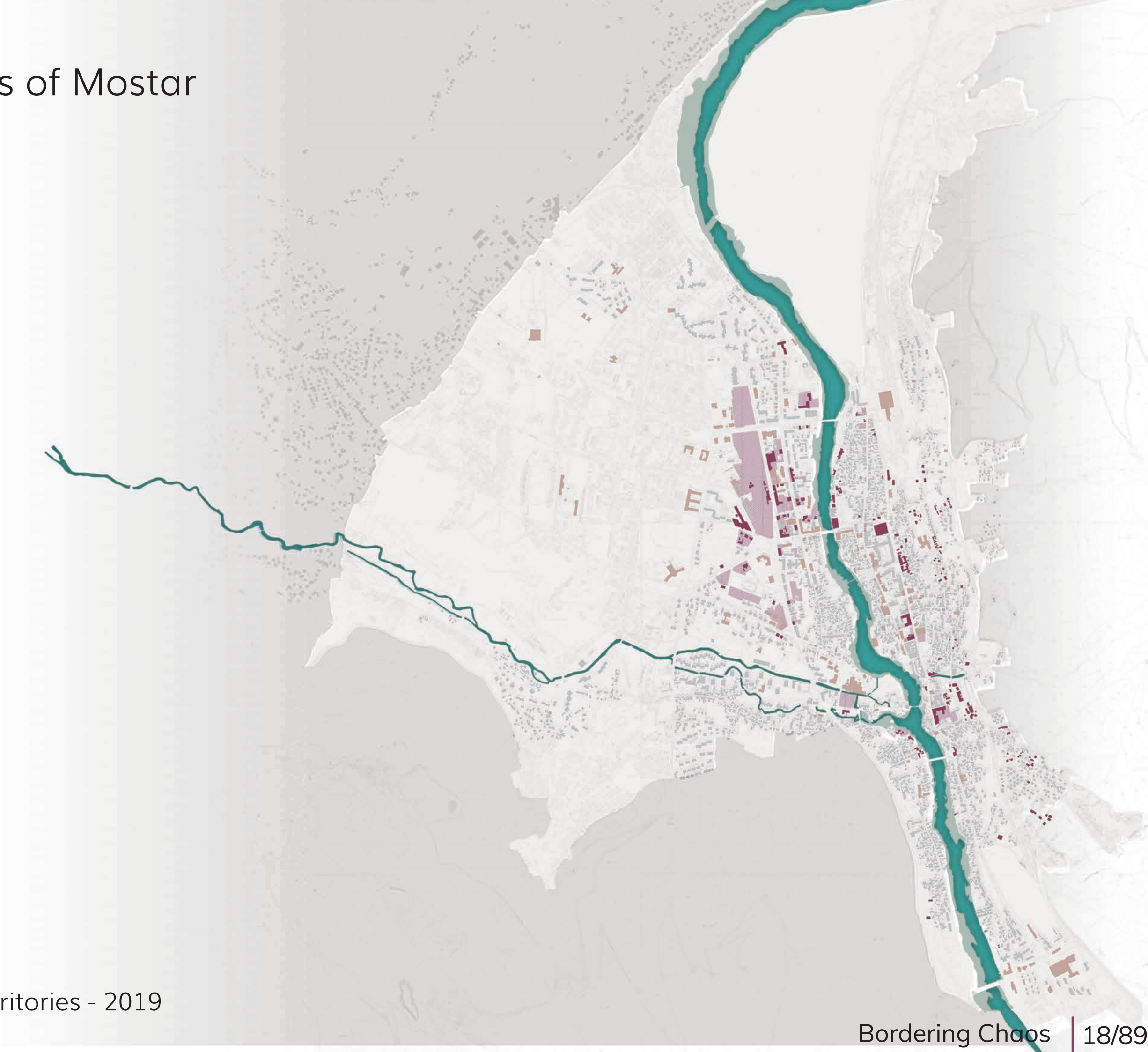
Legend

- Neretva and Radobolja
- Riverbank
- Public buildings
- Ruins
- Abandoned buildings

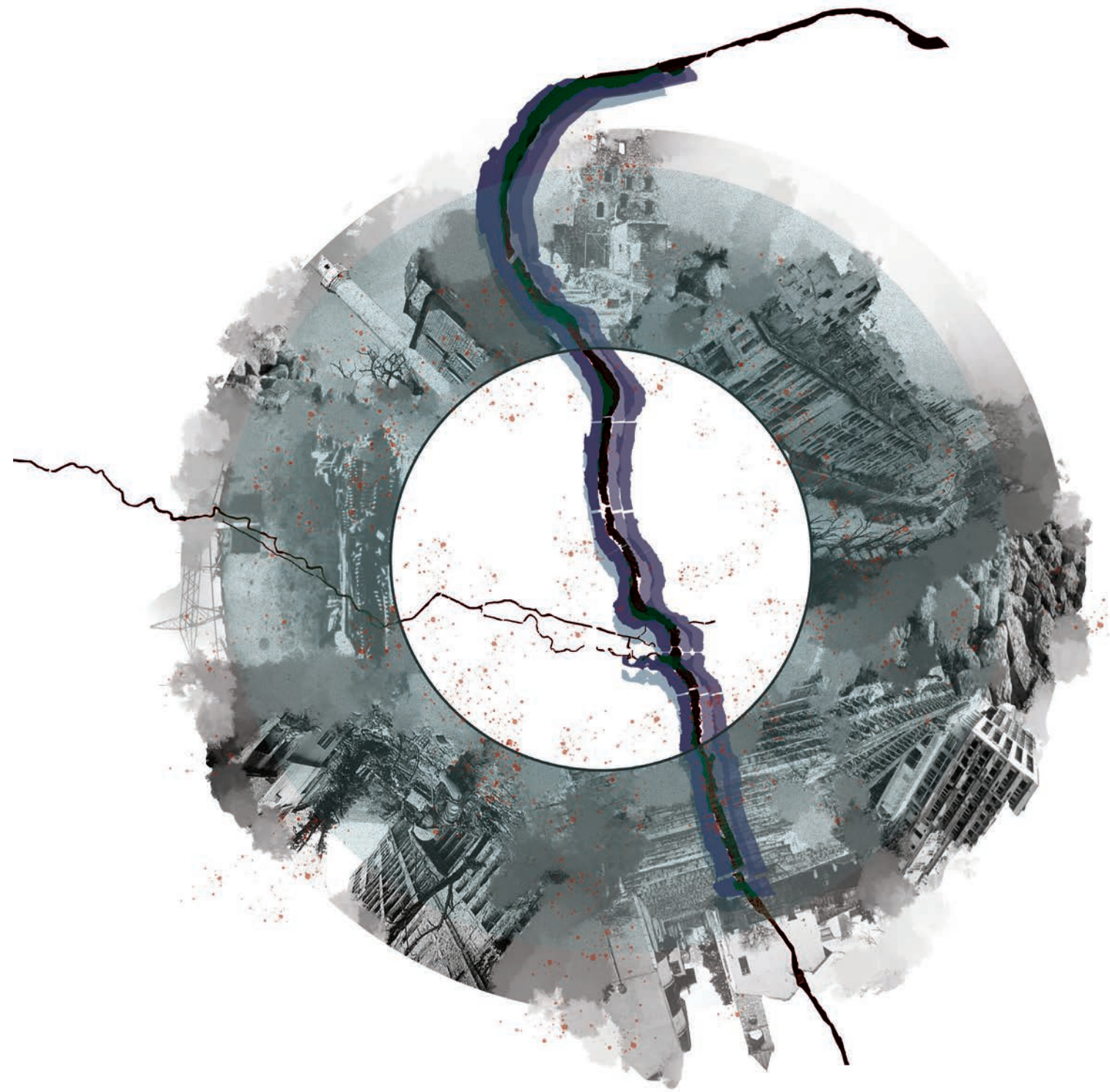
0 50 200 500 M



Ruins and abandoned territories - 2019

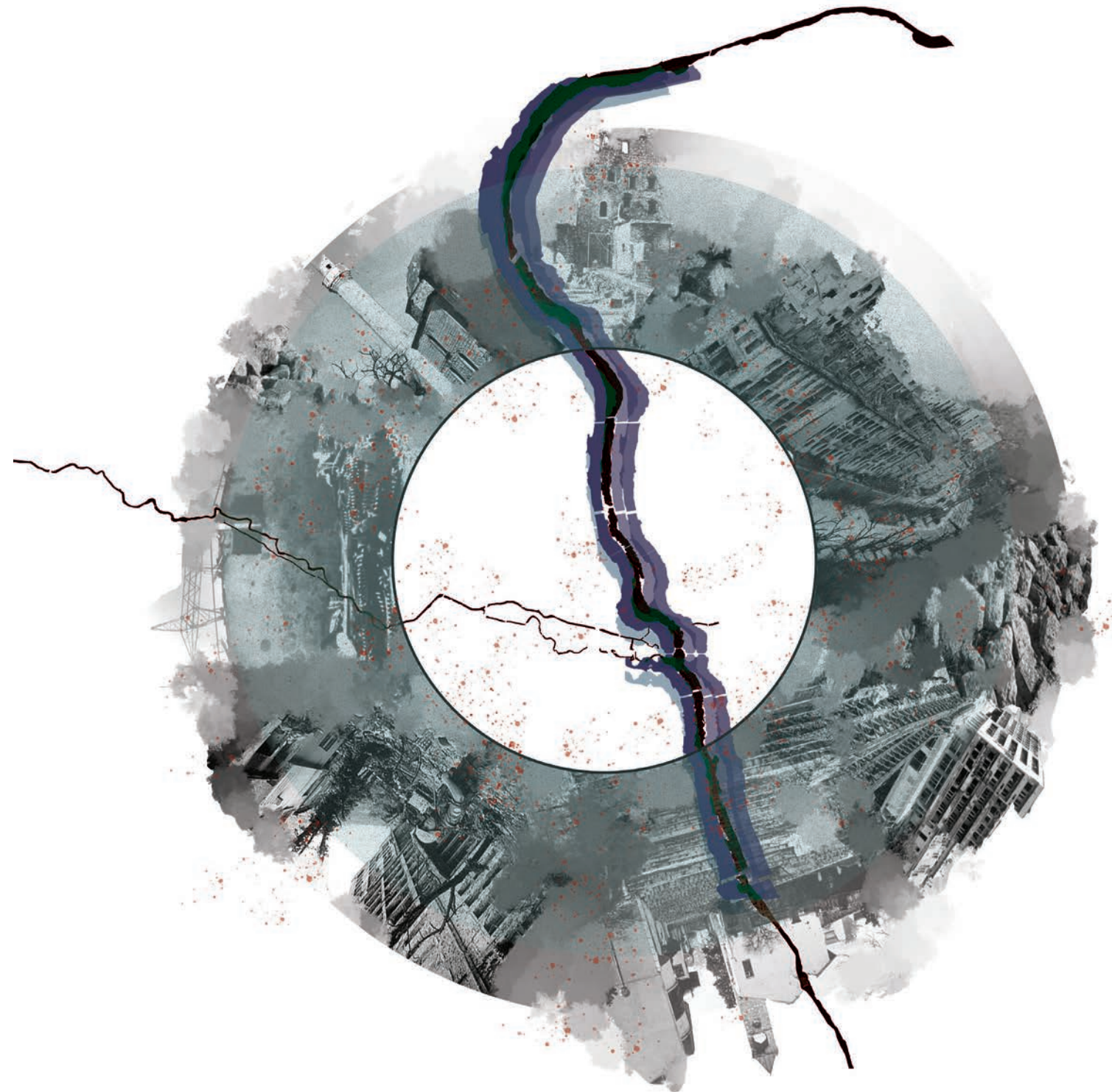






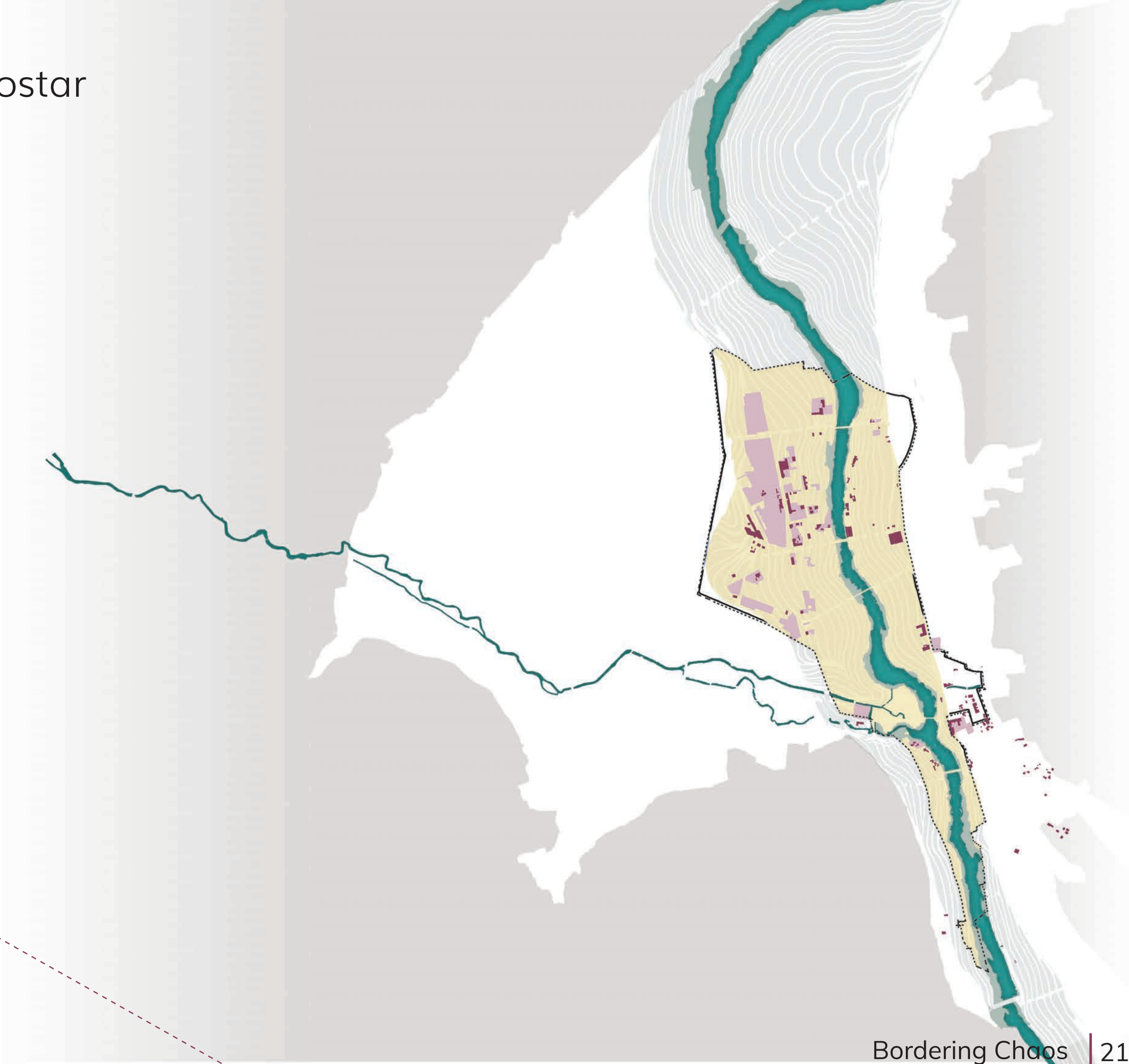


## River is War, War is River



When any phenomenon goes beyond control the damage or addition it does can be compared in both the cases, **the war in the past and the river currently are producing similar affects.**

# Neretva and Mostar



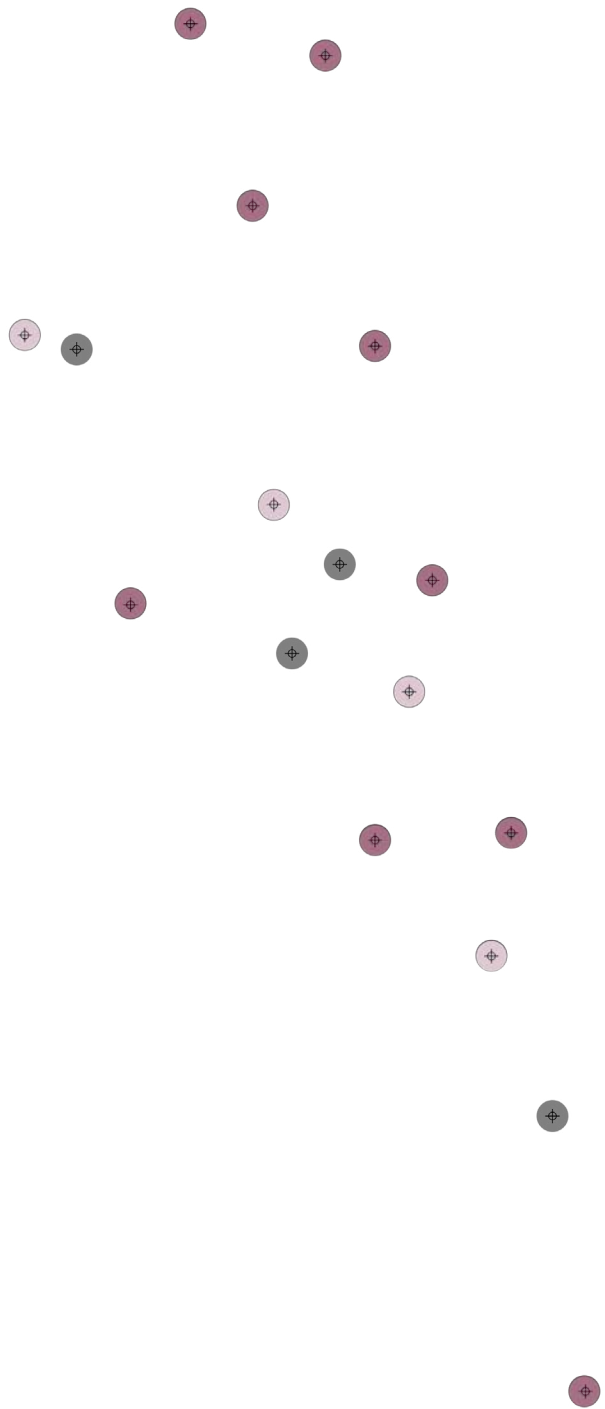
Legend

- Neretva and Radobolja
- Riverbank
- Public buildings
- Ruins
- Abandoned buildings
- Abandoned buildings
- Floodplains of selected area
- Phase 01 boundary
- ⊕ Former public spaces

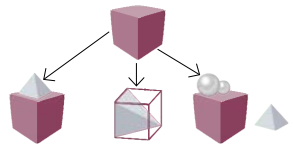
0 50 200 500 M



## Conclusion Map



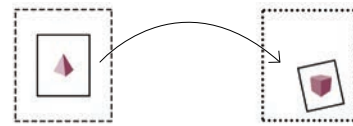
## a. THEORIES



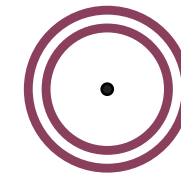
1. Theory of Affordances



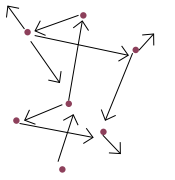
2. Chaos, Milieu and Territory



3. Territorialisation and De-territorialisation



4. Desire



5. Rhizome

## b. STRATEGIES

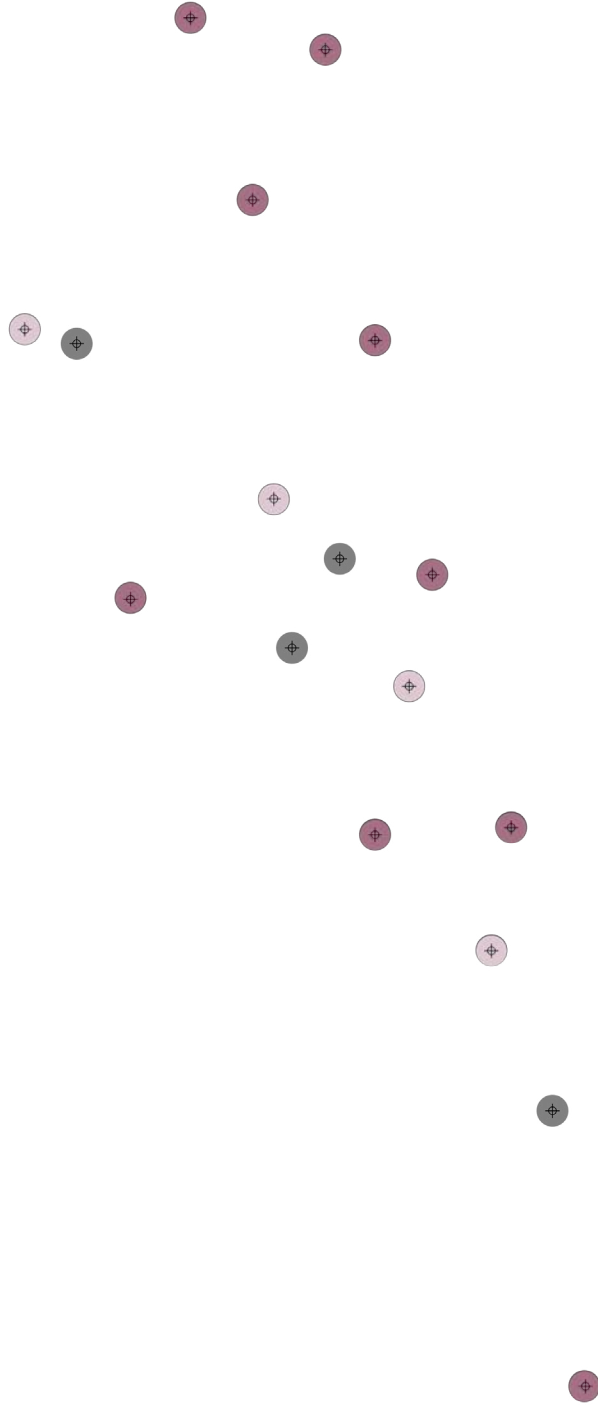
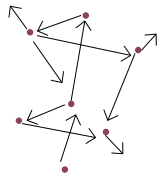
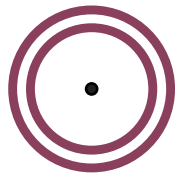
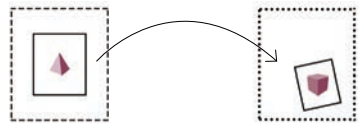
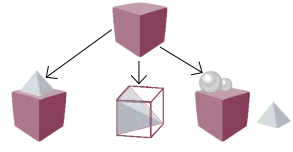


1. Urban Acupuncture

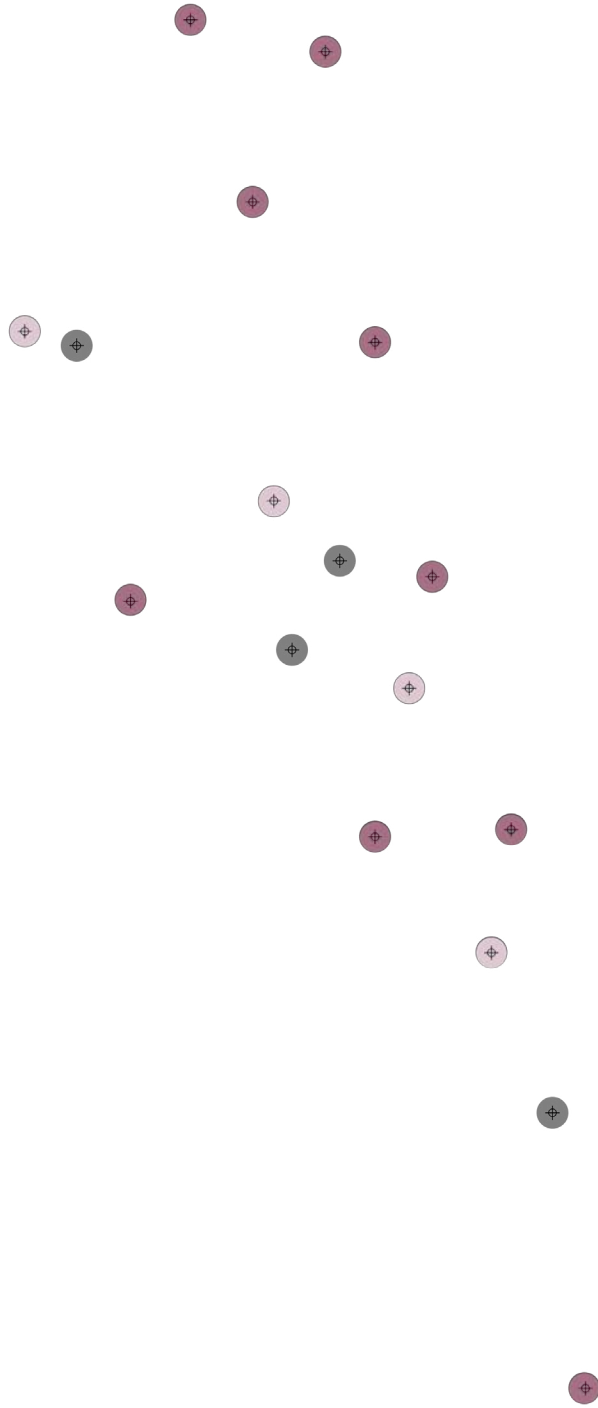
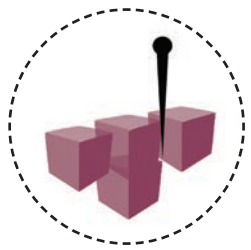
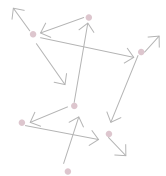
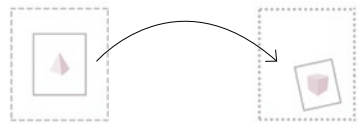
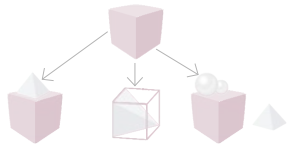


2. Temporality of Landscape

# Theoretical Framework

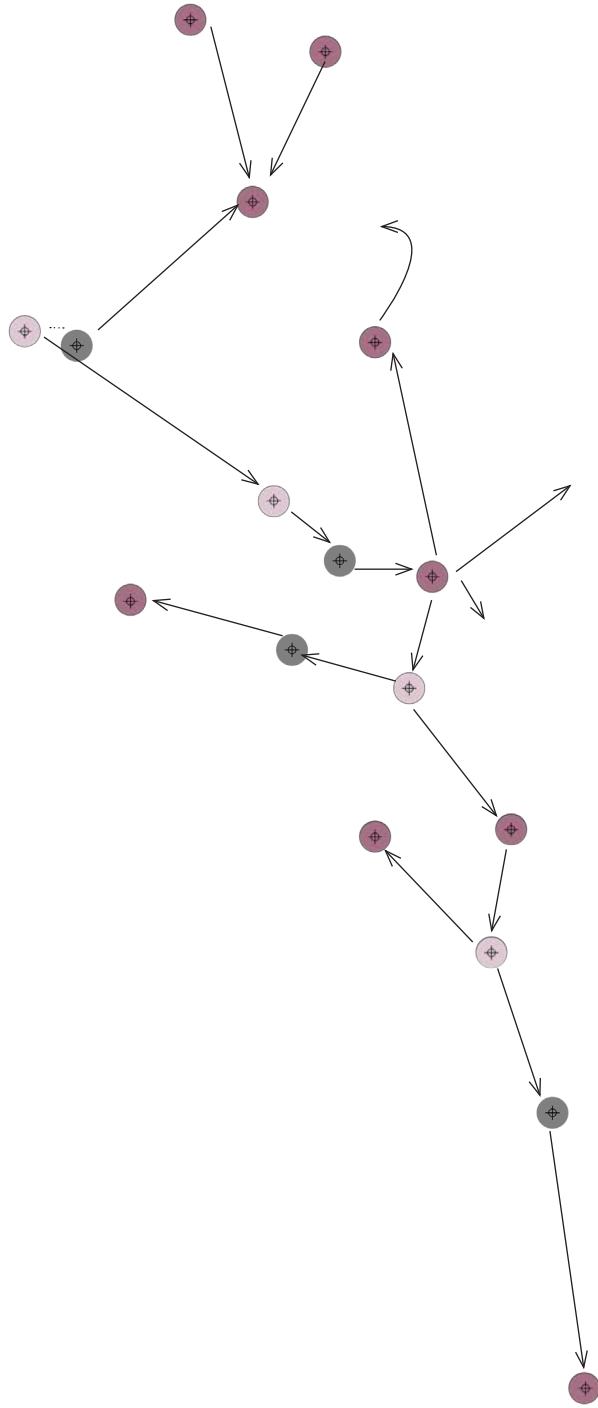
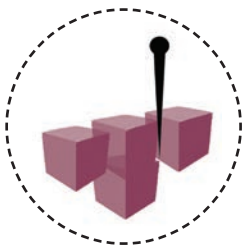
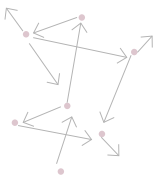
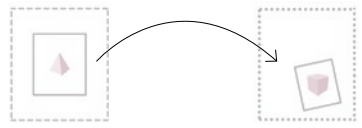
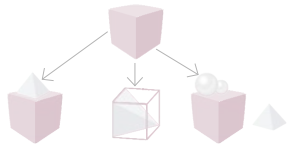


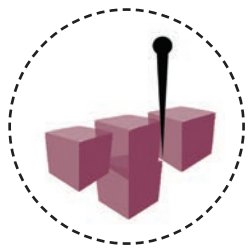
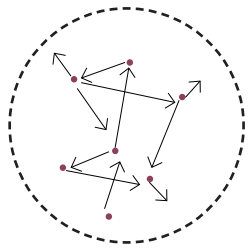
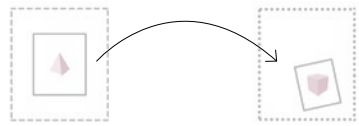
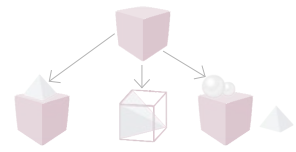




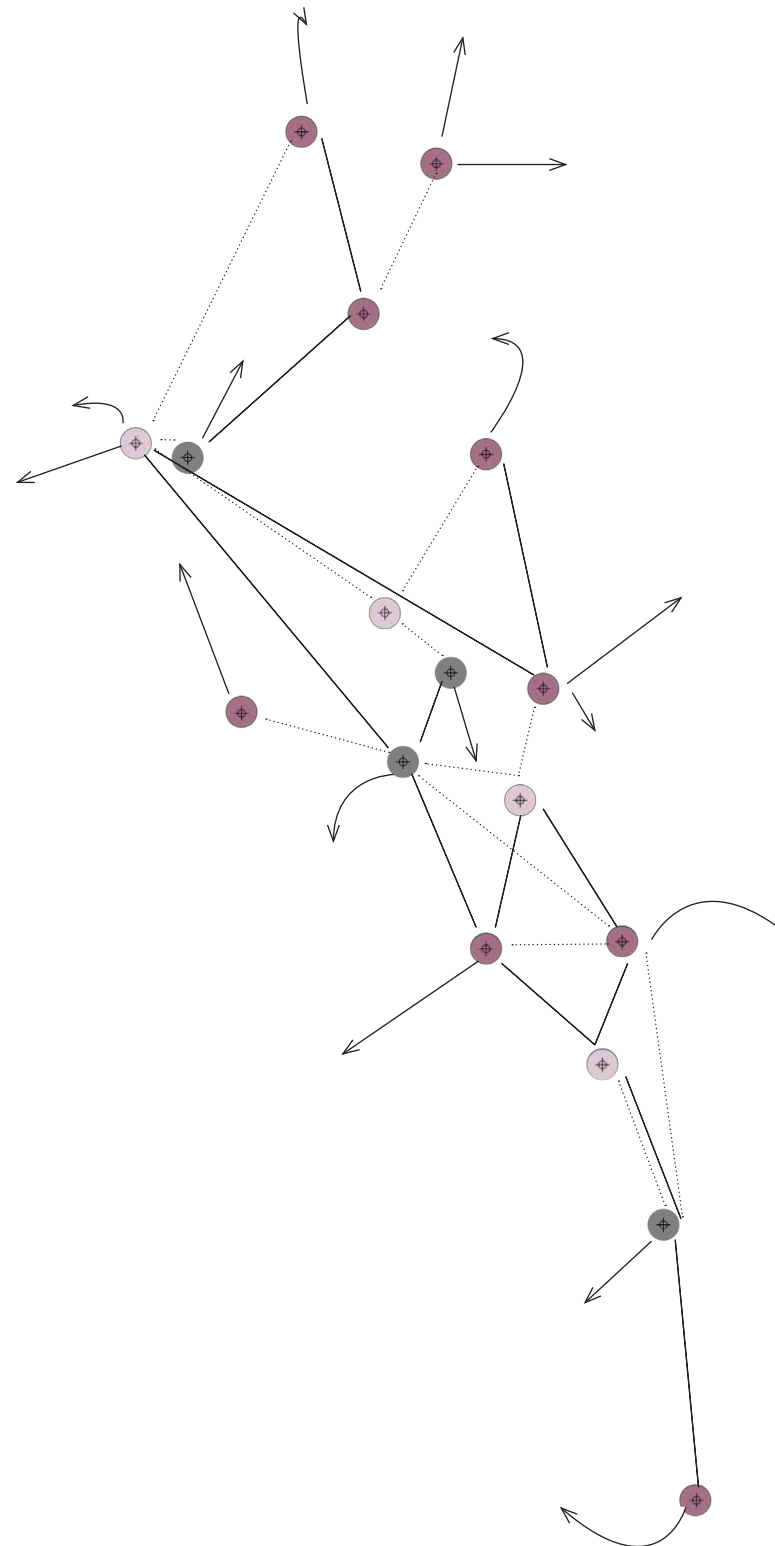
**Urban Acupuncture** is an urban environmentalism theory which combines urban design with traditional Chinese medical theory of acupuncture.  
- Casagrande

- small-scale interventions to transform the larger urban context.
- small-scale but socially catalytic interventions into the urban fabric.





## Rhizomatic Network



All the points - interventions are equally important in this network.

No fixed routing

No beginning or end of this network and can grow in whichever direction

All these acupuncture spots can be identified as a part of a larger system by experiential qualities.

The project aims to create a **network of social spaces** in the city, which enforces social cohesion and stimulates inhabitants to read and write their city.

# Research Questions

CAN LANDSCAPE ARCHITECTURE PROVOKE PRODUCTIVE AFFORDANCES IN 'CHAOTIC' HETEROGENEOUS TERRITORIES?

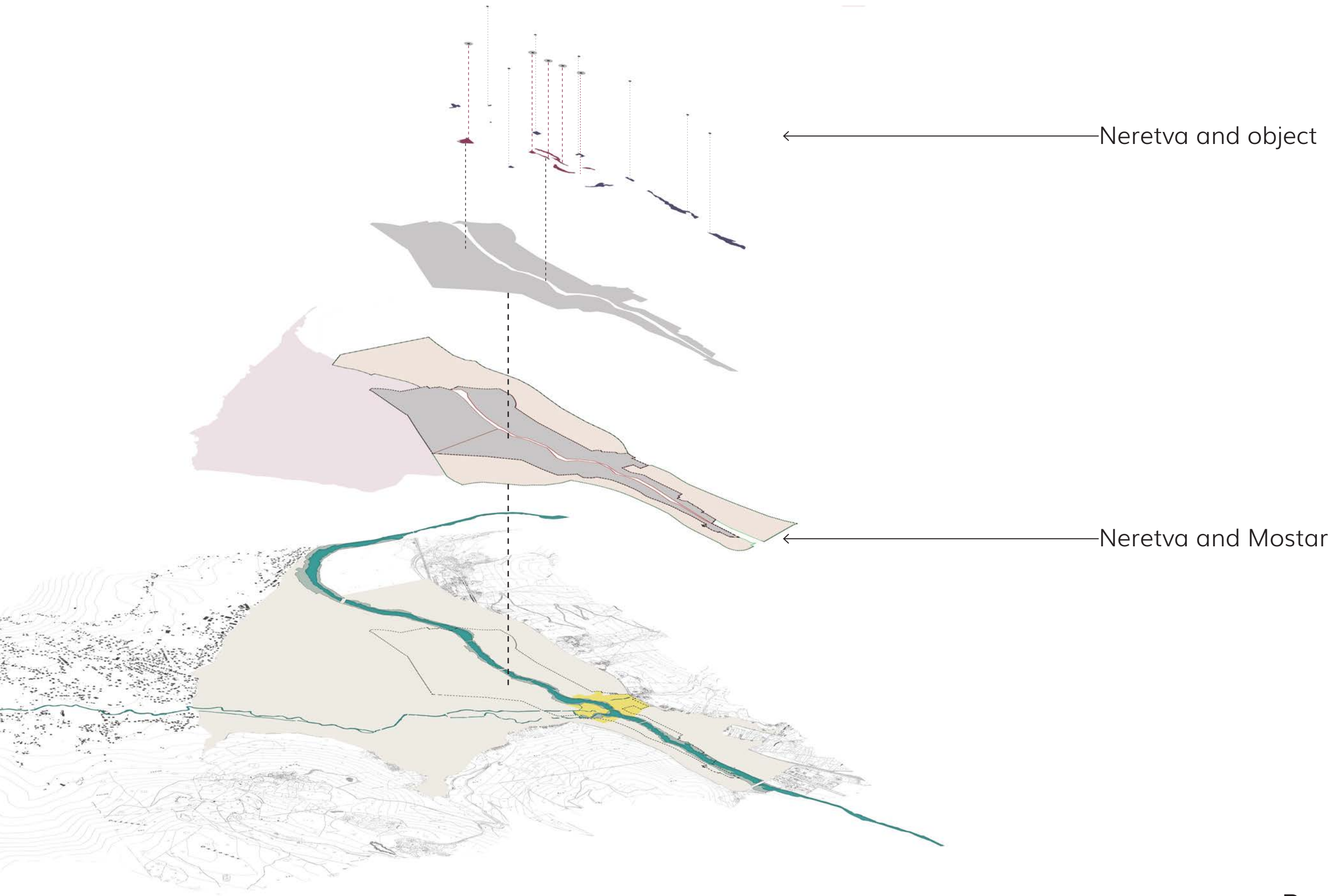




Sub questions :

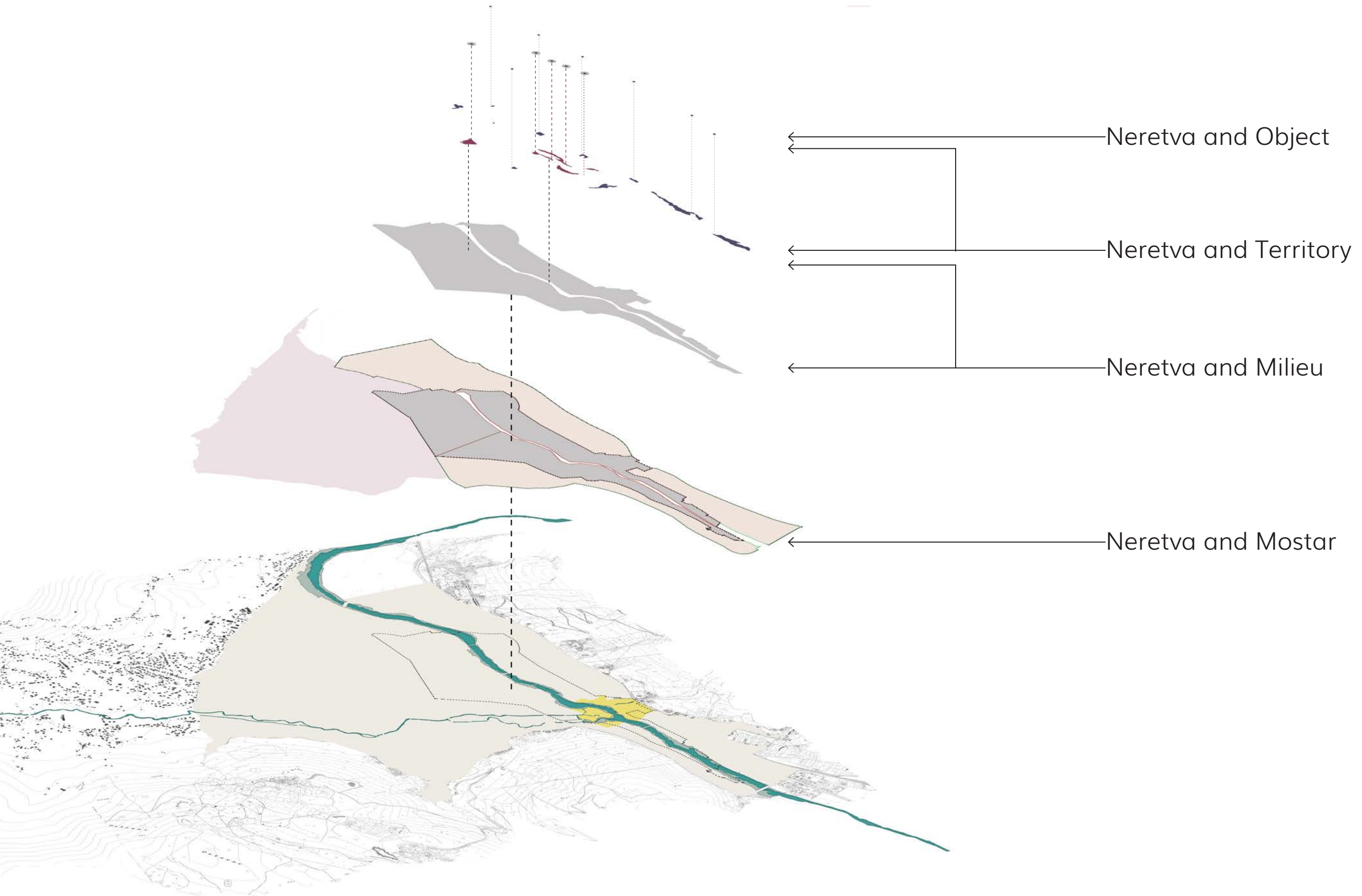
1. How can **social formation**(infrastructure – affordances) reconfigure the concept of **'desire'**.
2. How can the **'degree of power'** (what it 'can do') of abandoned or not defined elements can be exhumed through design.
3. How can the **temporality of landscape** like erosion & flooding be interpreted productively through to create adaptive landscapes. What strategies can be adopted for the same?
4. Does limiting or being **selective about affordances** empowers a territory? How can more productive affordances be identified and highlighted through design?
5. How can a **rhizomatic network** be created by using the concept of **territorialisation** and **de-territorialisation**.
6. How to contribute to the perspective of the city which overlaps with the idea of various **stake-holders** like war survivors, migrants, tourist and children?

# Scales - Chaos, Milieu, Territory and Object

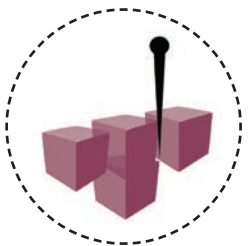
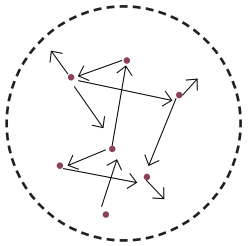
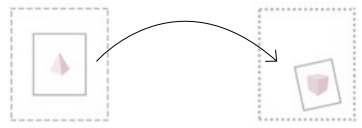
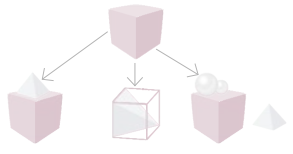




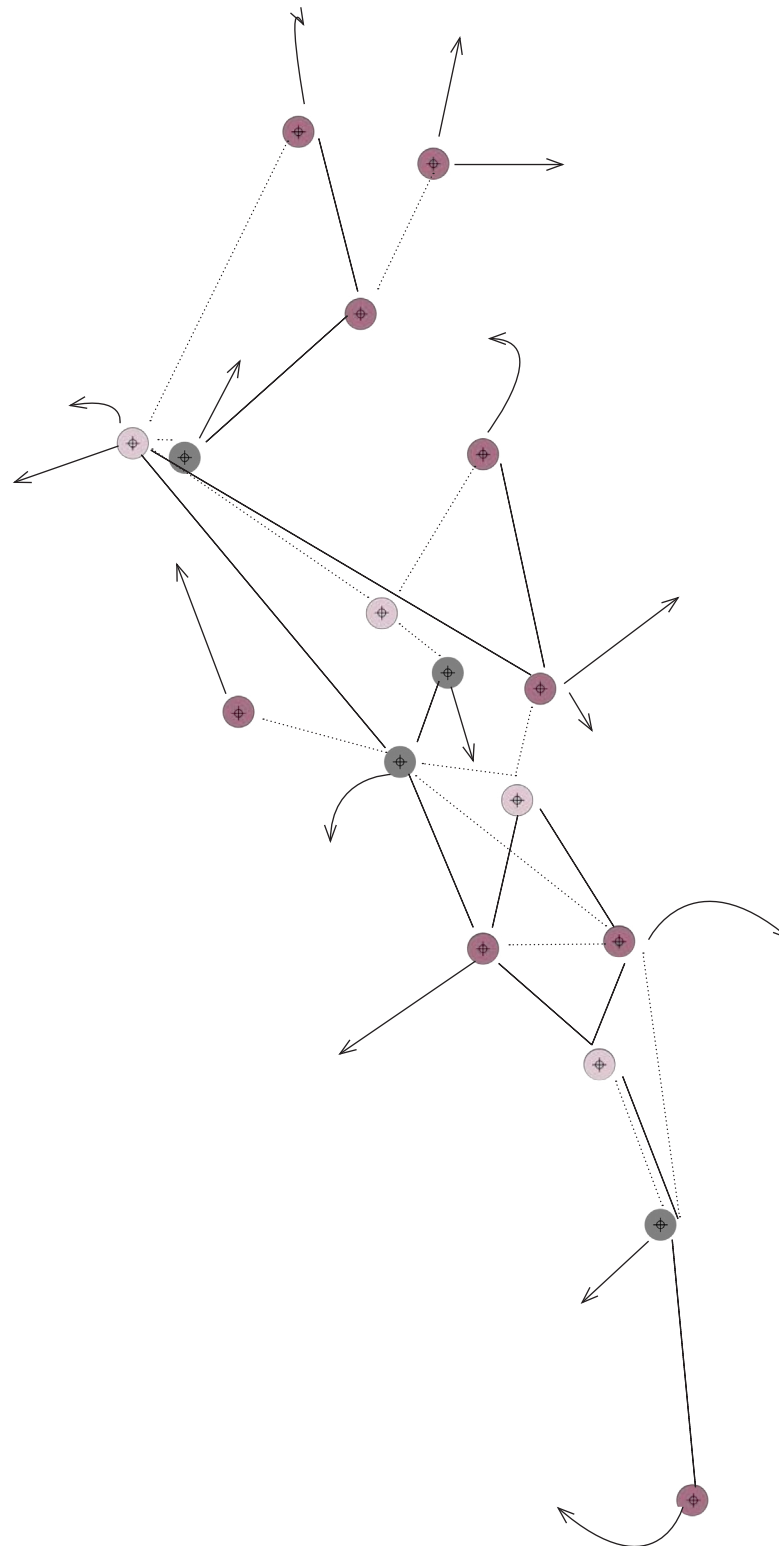
# Scales - Chaos, Milieu, Territory and Object





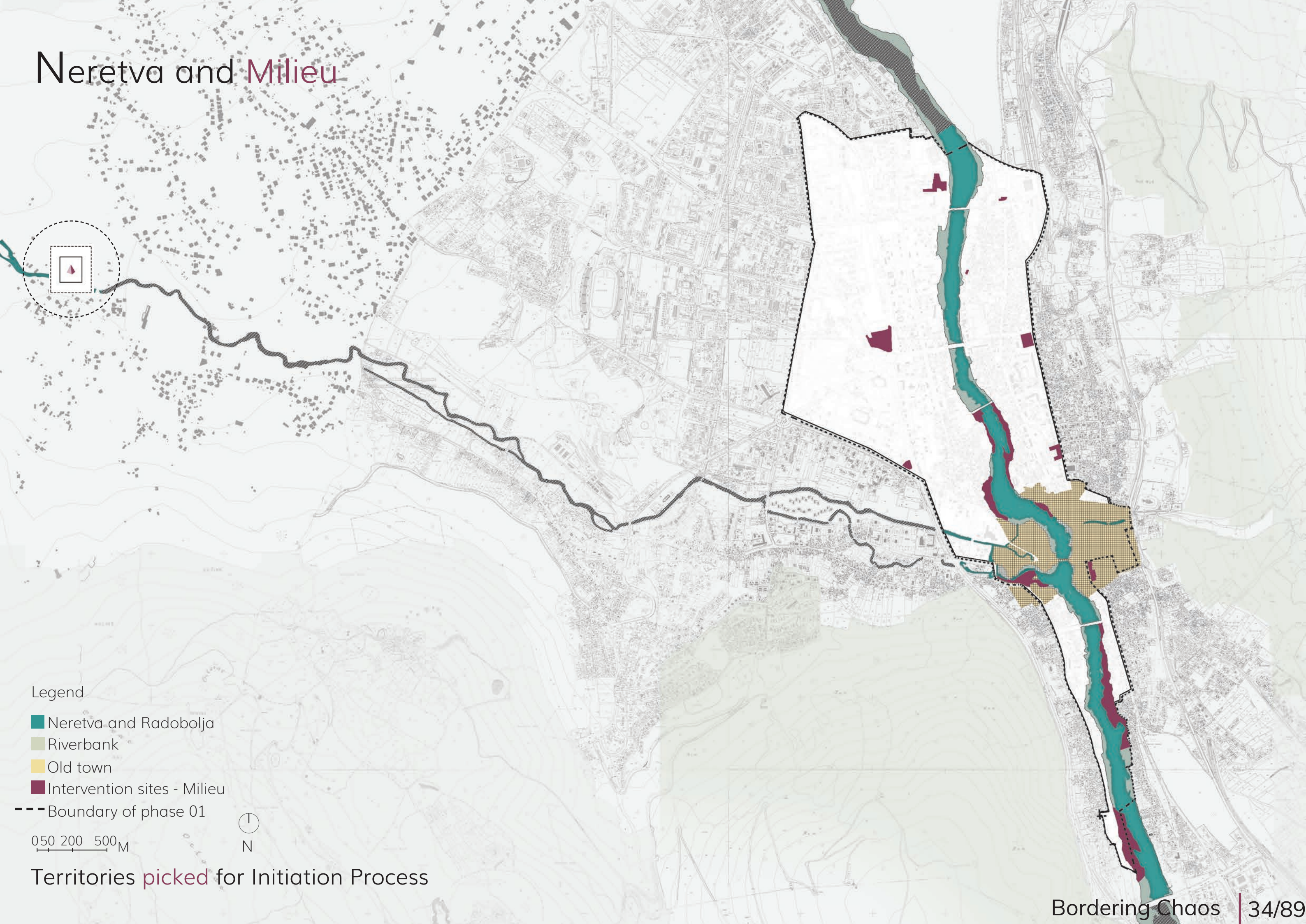


# Rhizomatic Network





# Neretva and Milieu



Legend

- Neretva and Radobolja
- Riverbank
- Old town
- Intervention sites - Milieu

--- Boundary of phase 01

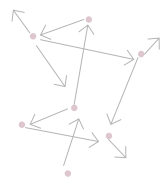
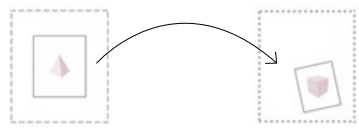
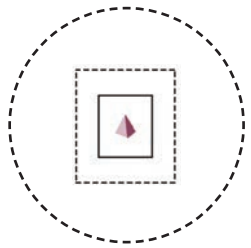
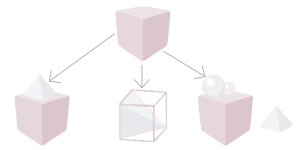


0 50 200 500 M

Territories **picked** for Initiation Process

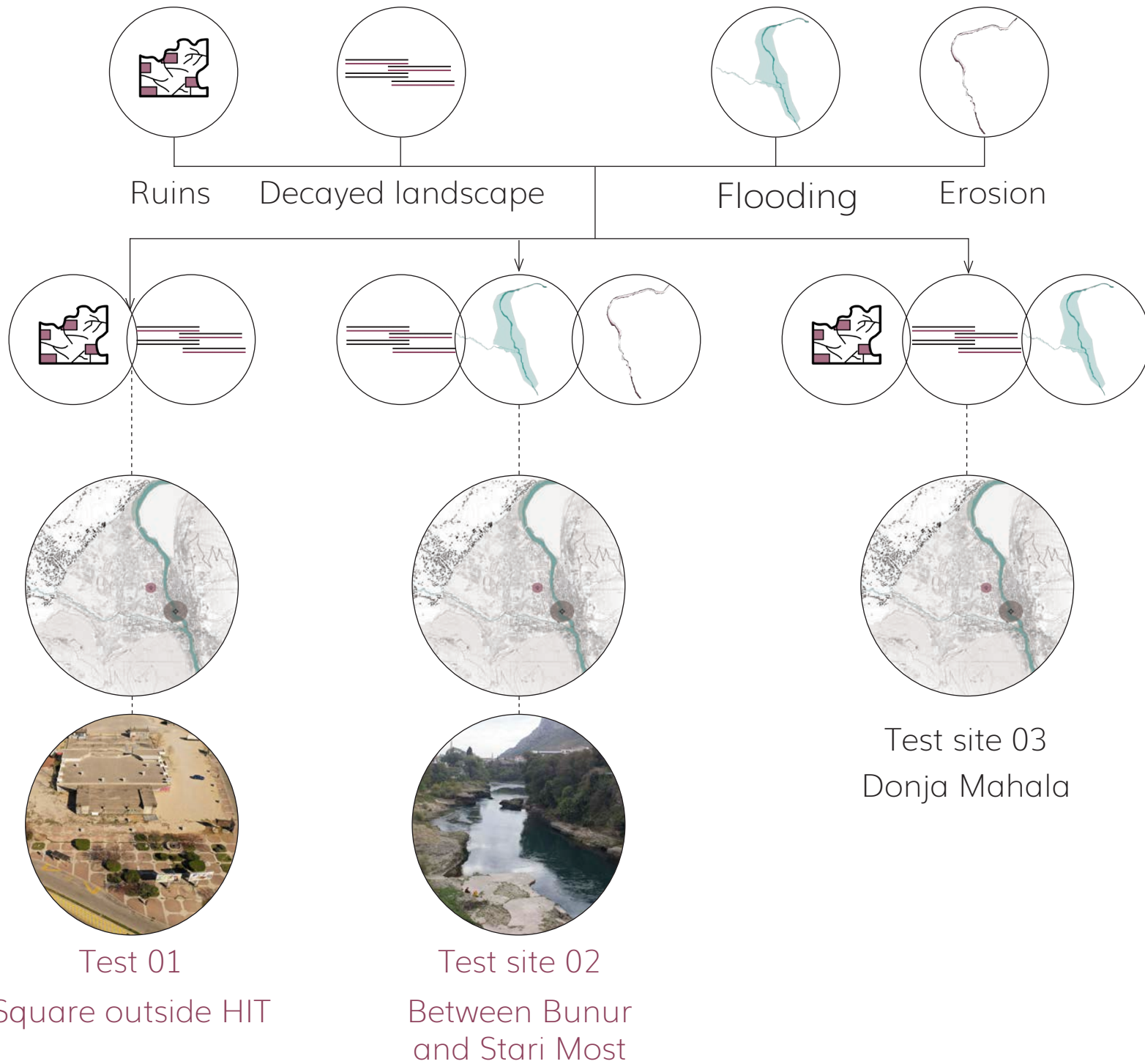


# Neretva and Milieu



## Decayed Territories

## River & it's affects





Legend

▮ Riverbank

▮ Stari Most

■ Test sites

- - - Boundary of phase 01

0 50 200 500 M



Location of Test Sites

Square outside HIT

Between Bunur and Stari Most

Bunur

Stari Most



# Neretva and Territory

Along Neretva - Between Bunur and Stari Most





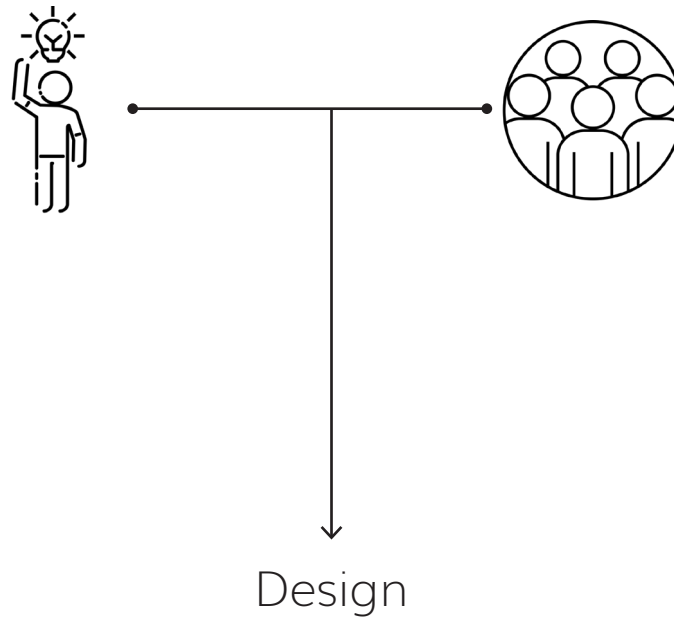


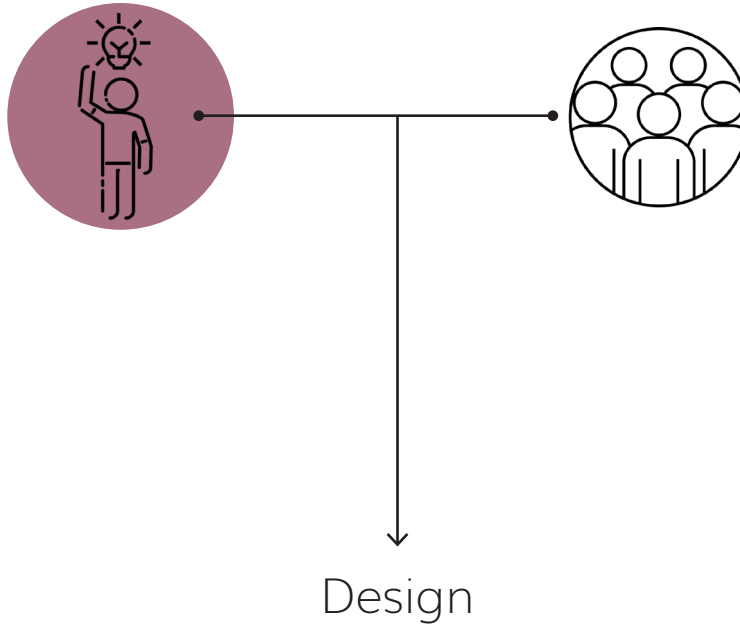
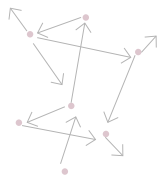
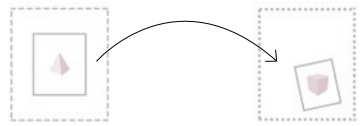
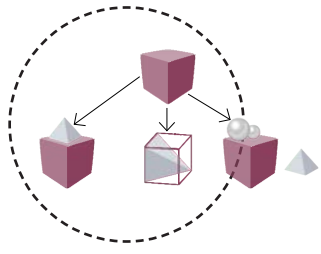
1994



1970

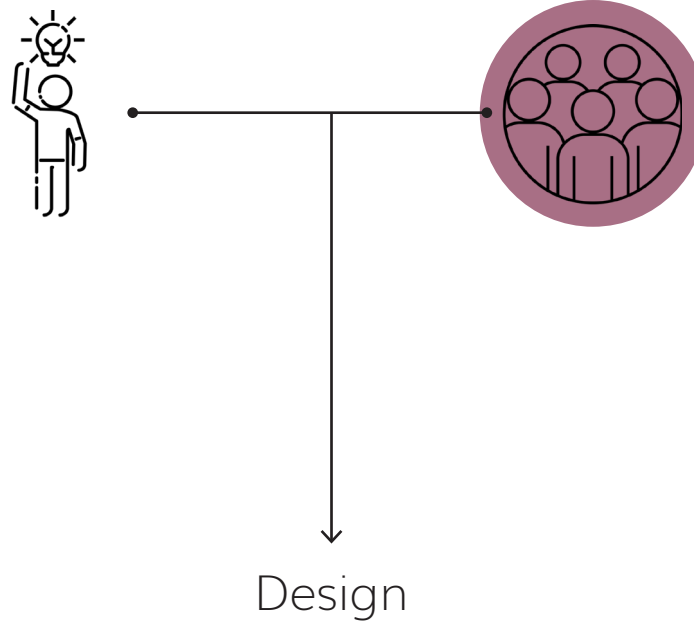
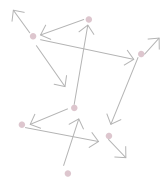
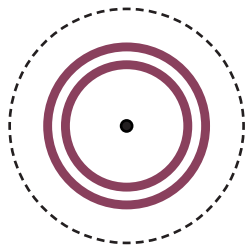
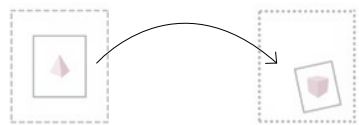
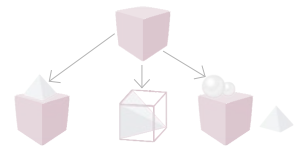






"The affordances of the environment are **what it offers the animal**, what it provides or furnishes, either for good or ill" - Gibson, 1979





“**Desire**” - refers to the state of our unconscious drives and inclinations. - Deleuze

“What can I do, what am I capable of doing” - Jun & Smith



# Spatial Analysis

Translating and demarcating desires or feelings as per existing spatial and natural conditions on site

Legend

- Permanent
- Temporary
- Neretva



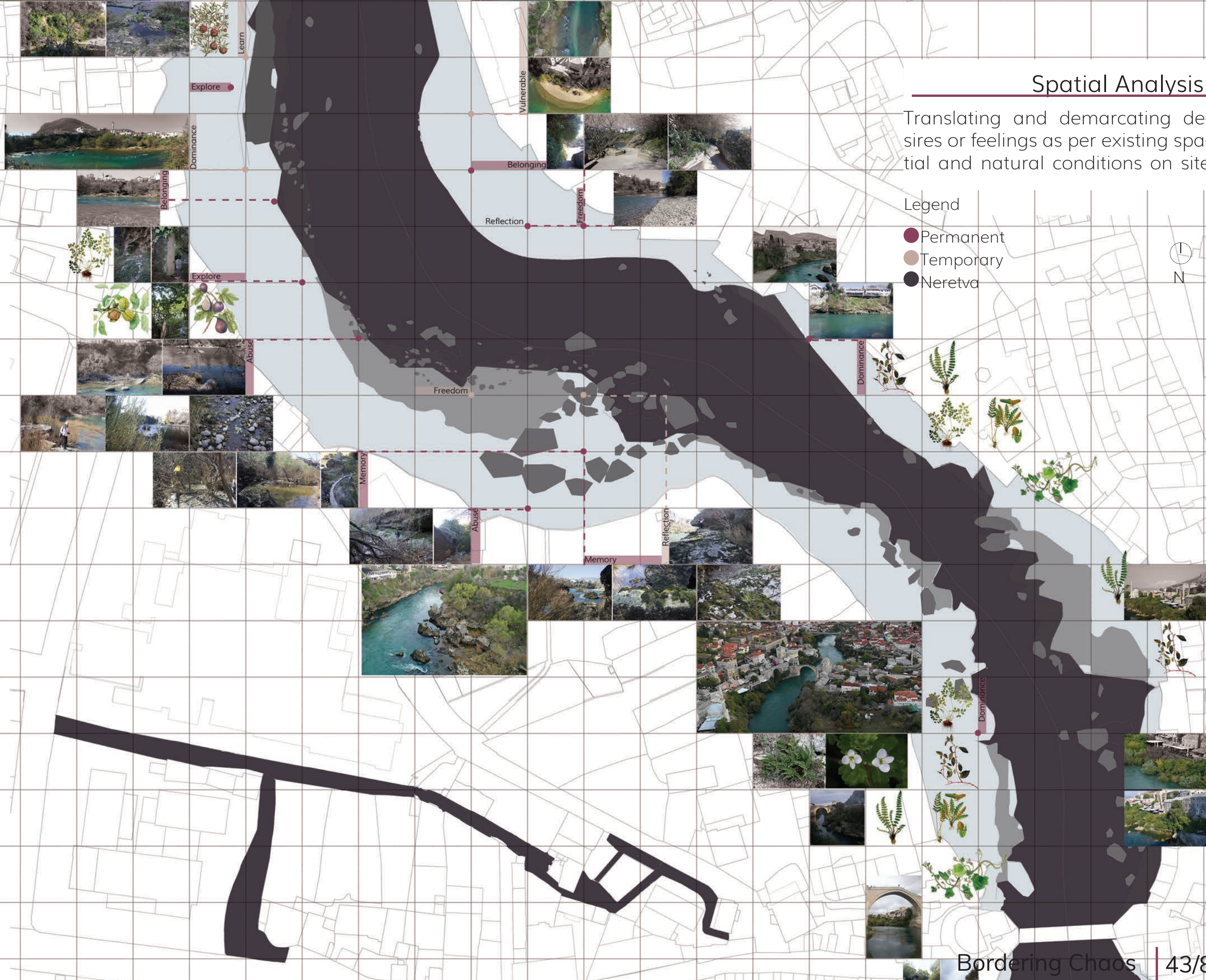
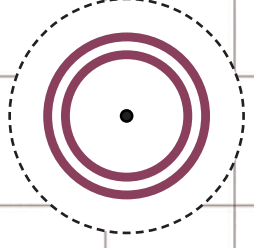
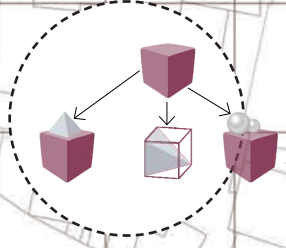


# Spatial Analysis

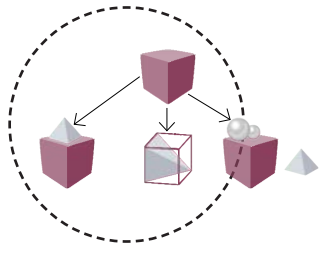
Translating and demarcating desires or feelings as per existing spatial and natural conditions on site

## Legend

- Permanent
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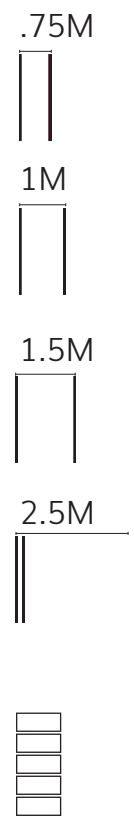




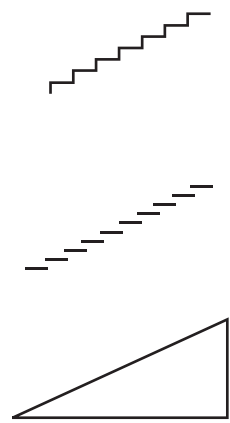
## Design Tools

Combination of these elements and objects are used to create an environment that is a combination of Affordance and Desire

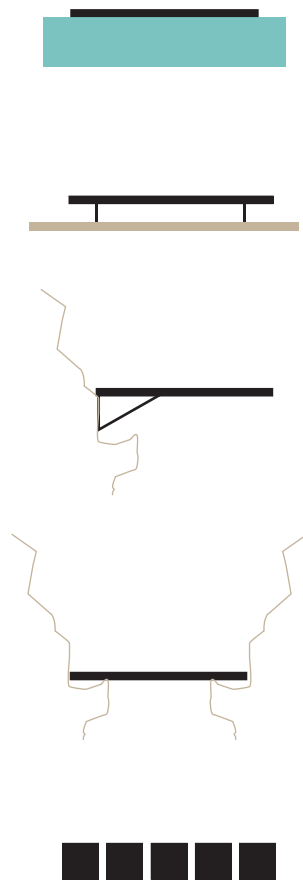
### Path



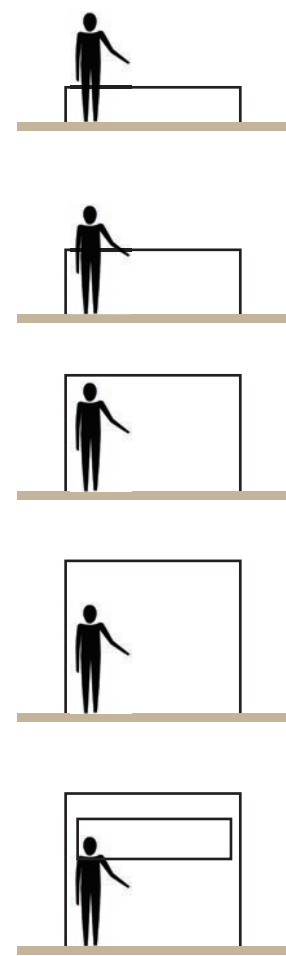
### Staircase/Ramp



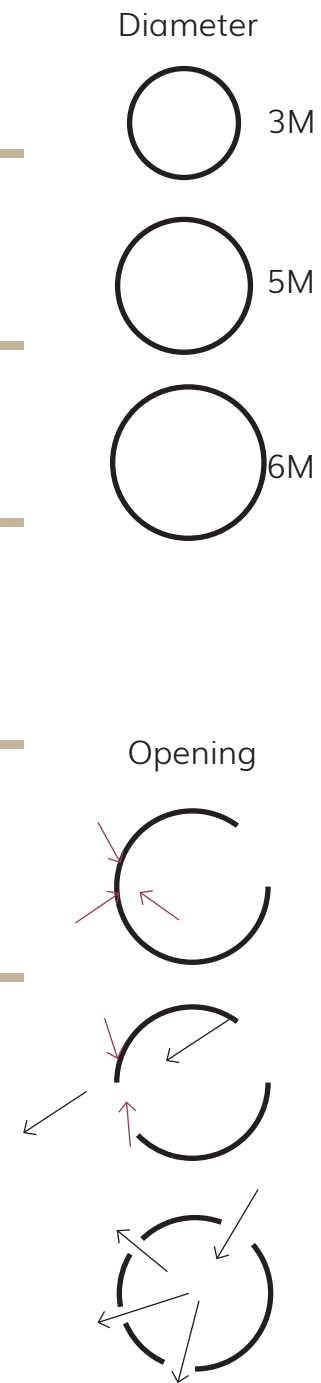
### Platform



### Wall



### Volume



### Pole



### Material

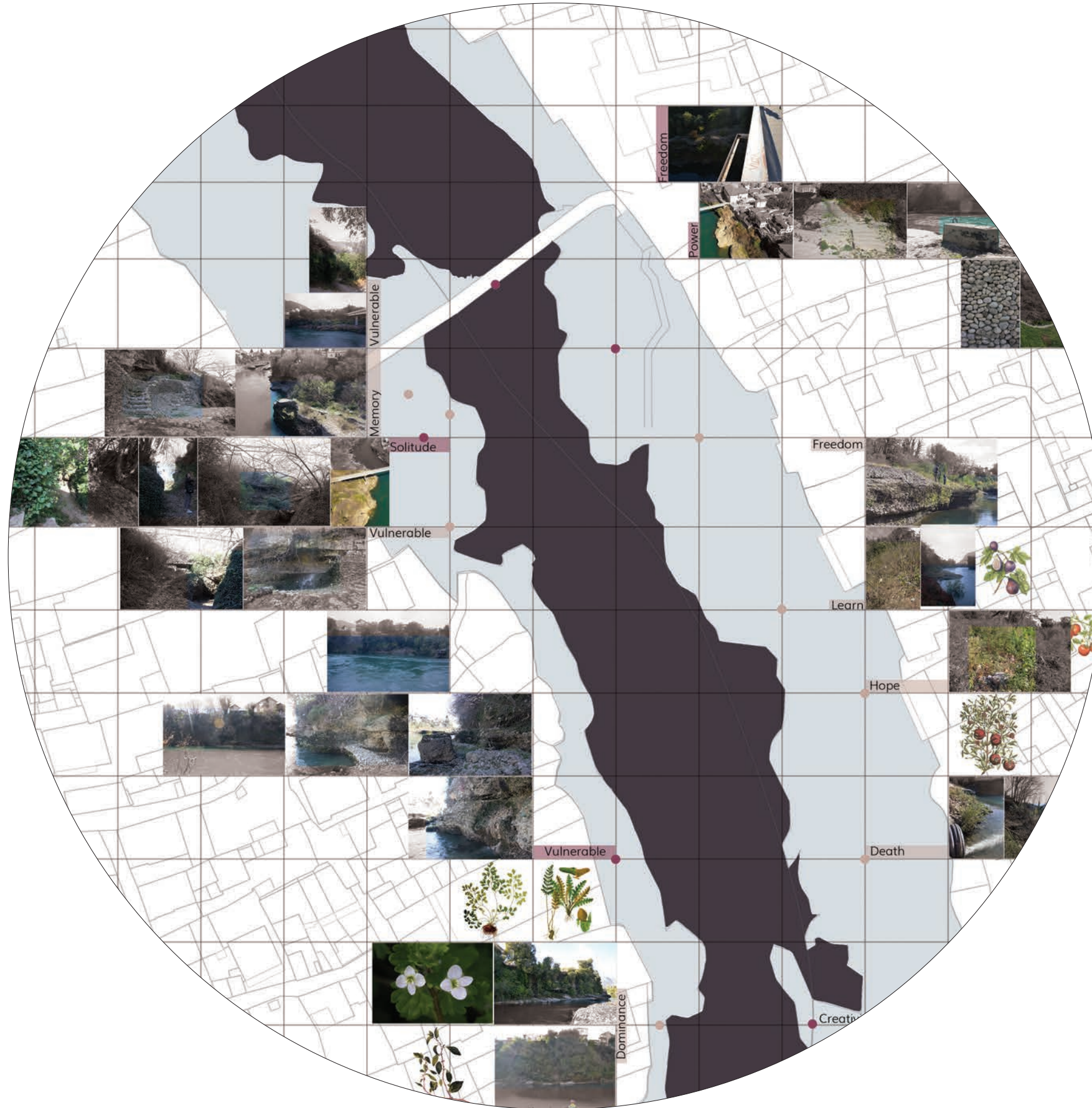
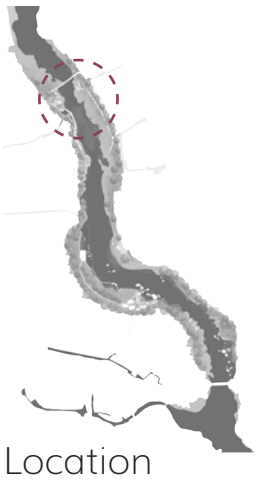


### Vegetation

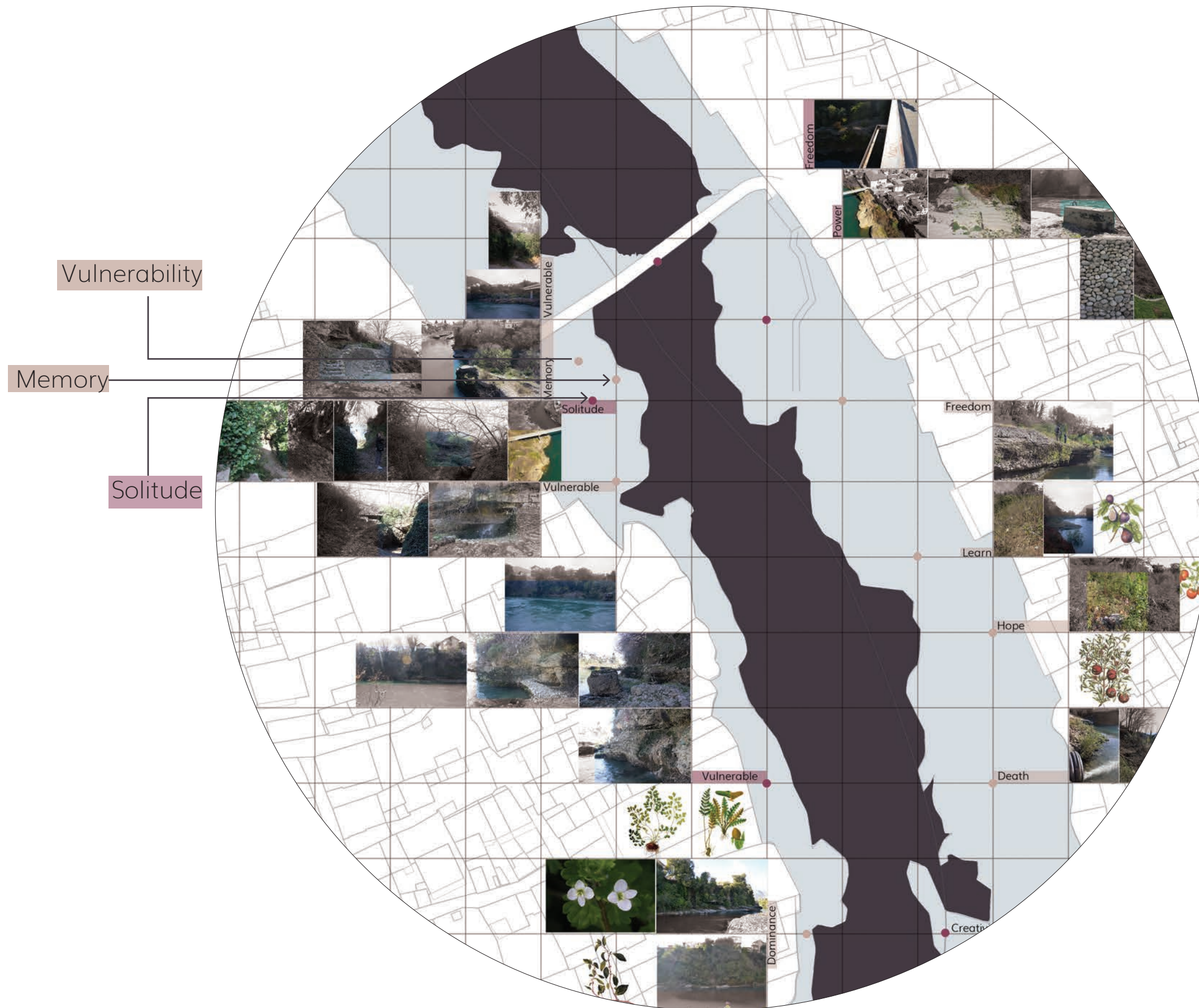
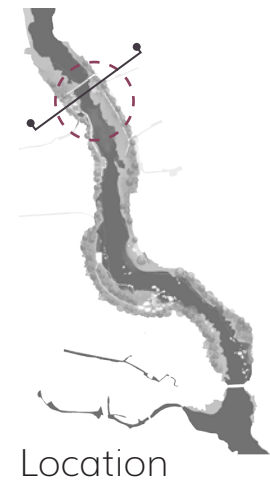




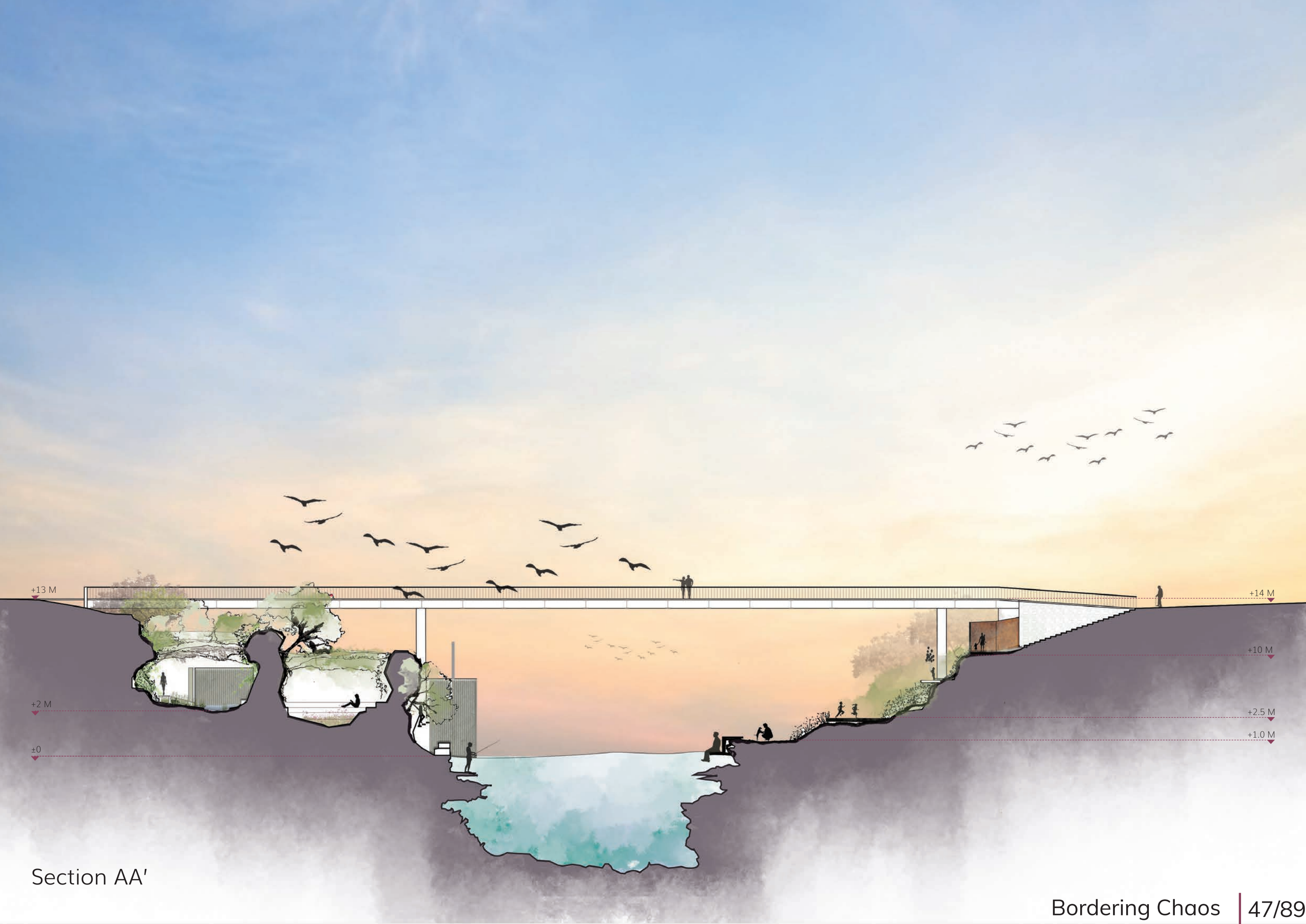
# Neretva and Object







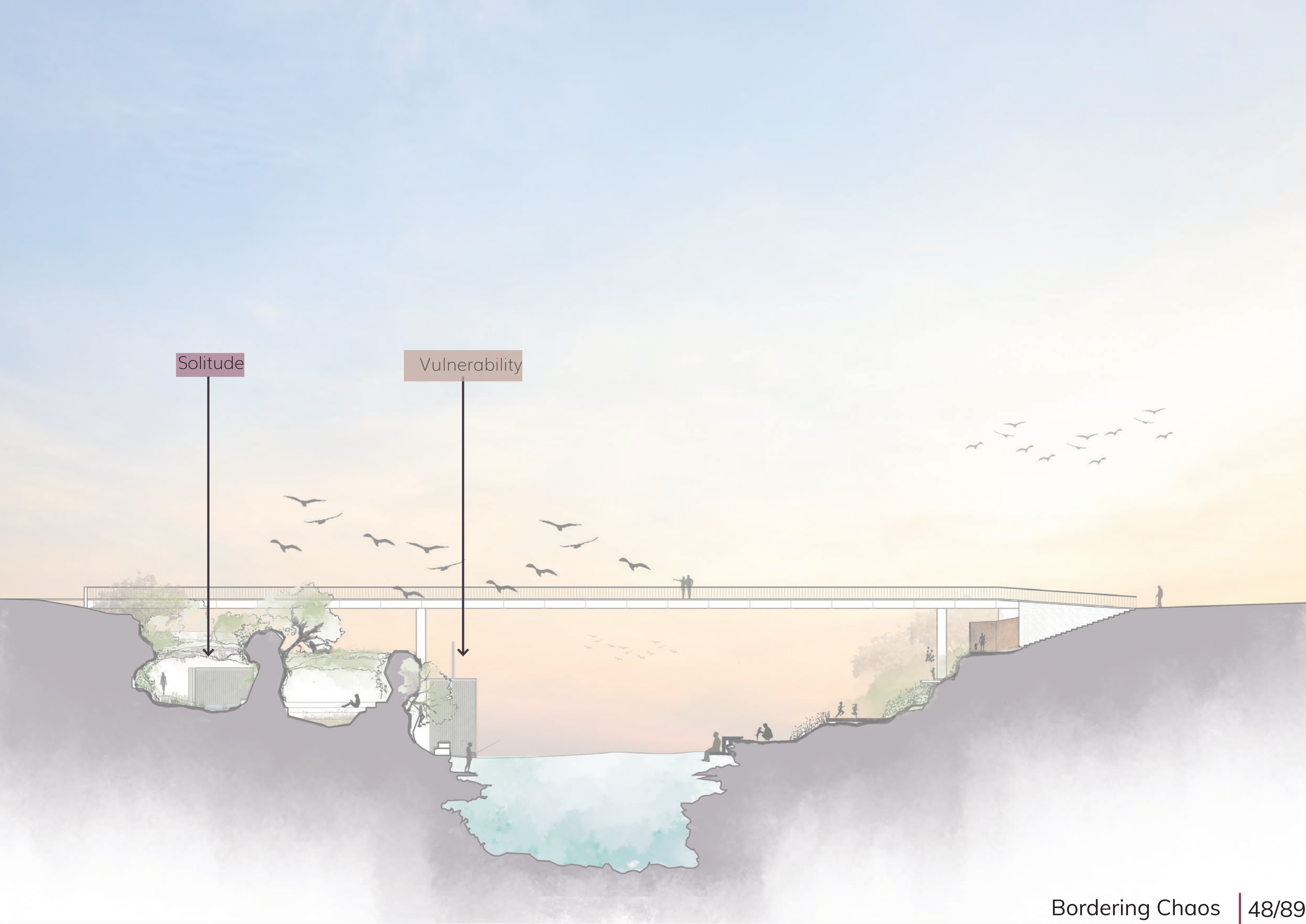




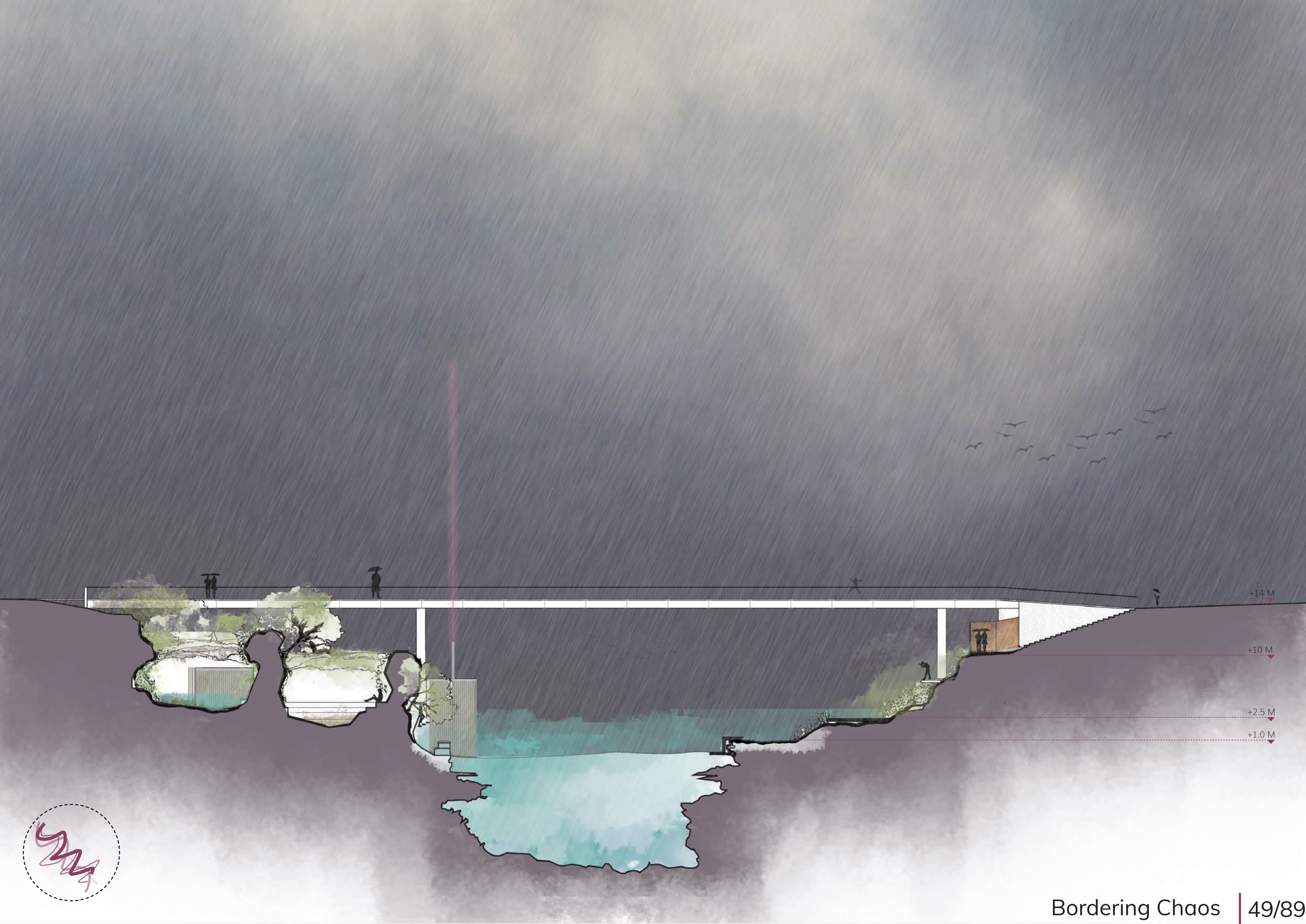
Section AA'

Solitude

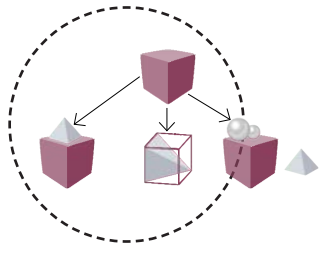
Vulnerability



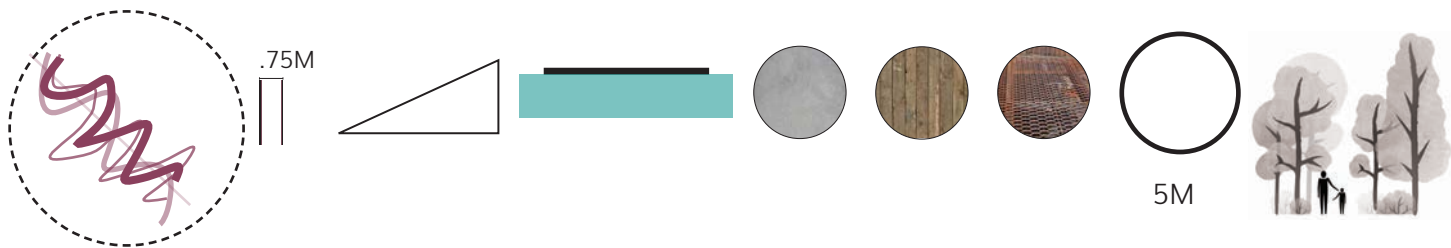




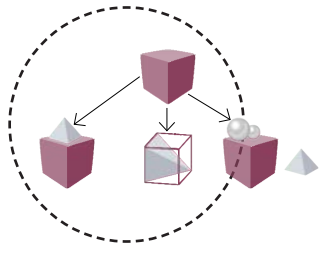




Solitude



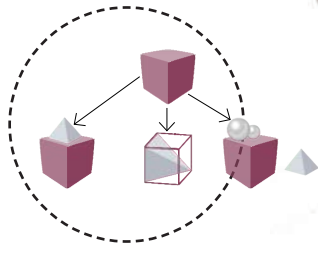




Solitude











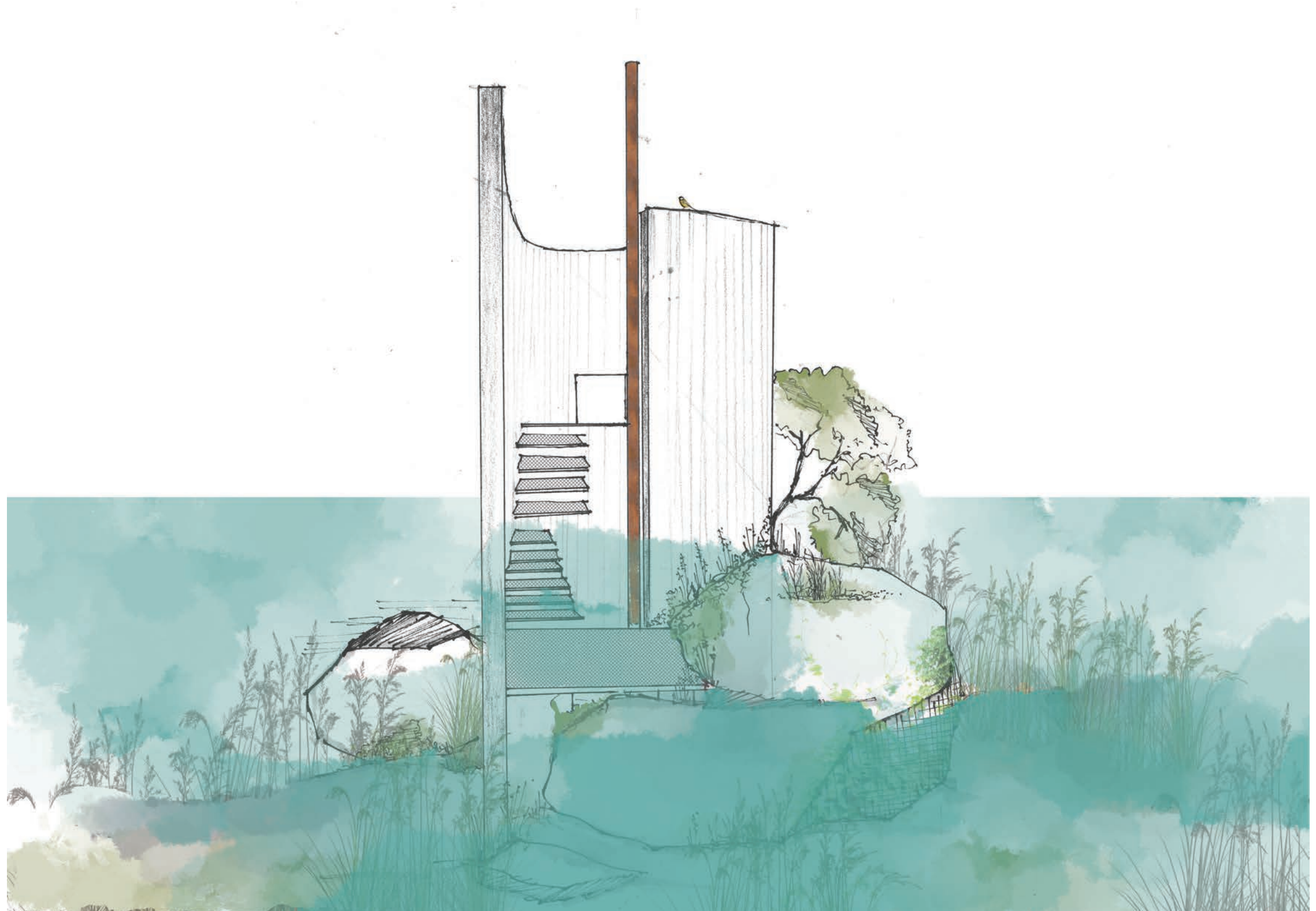


Vulnerability



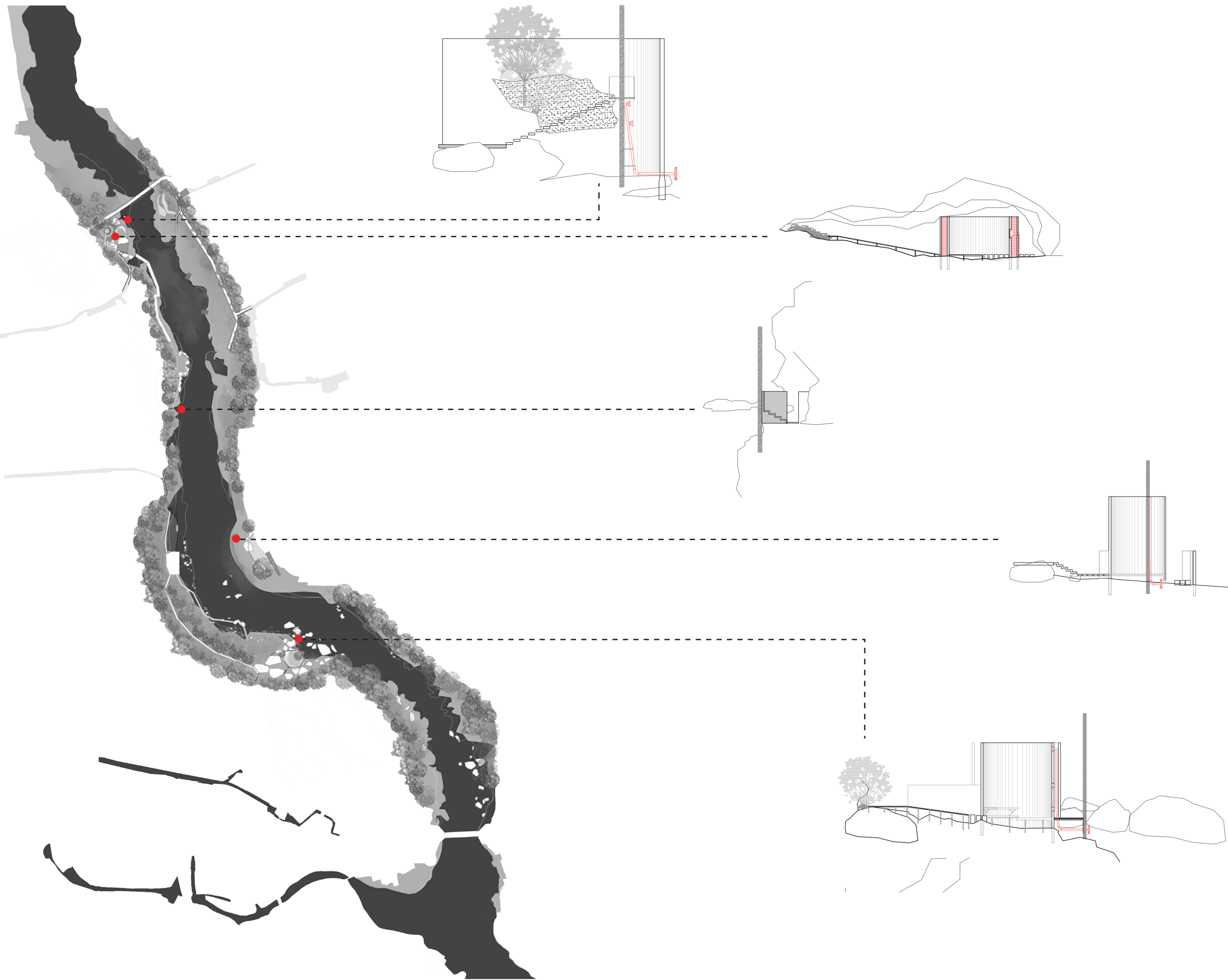


Vulnerability

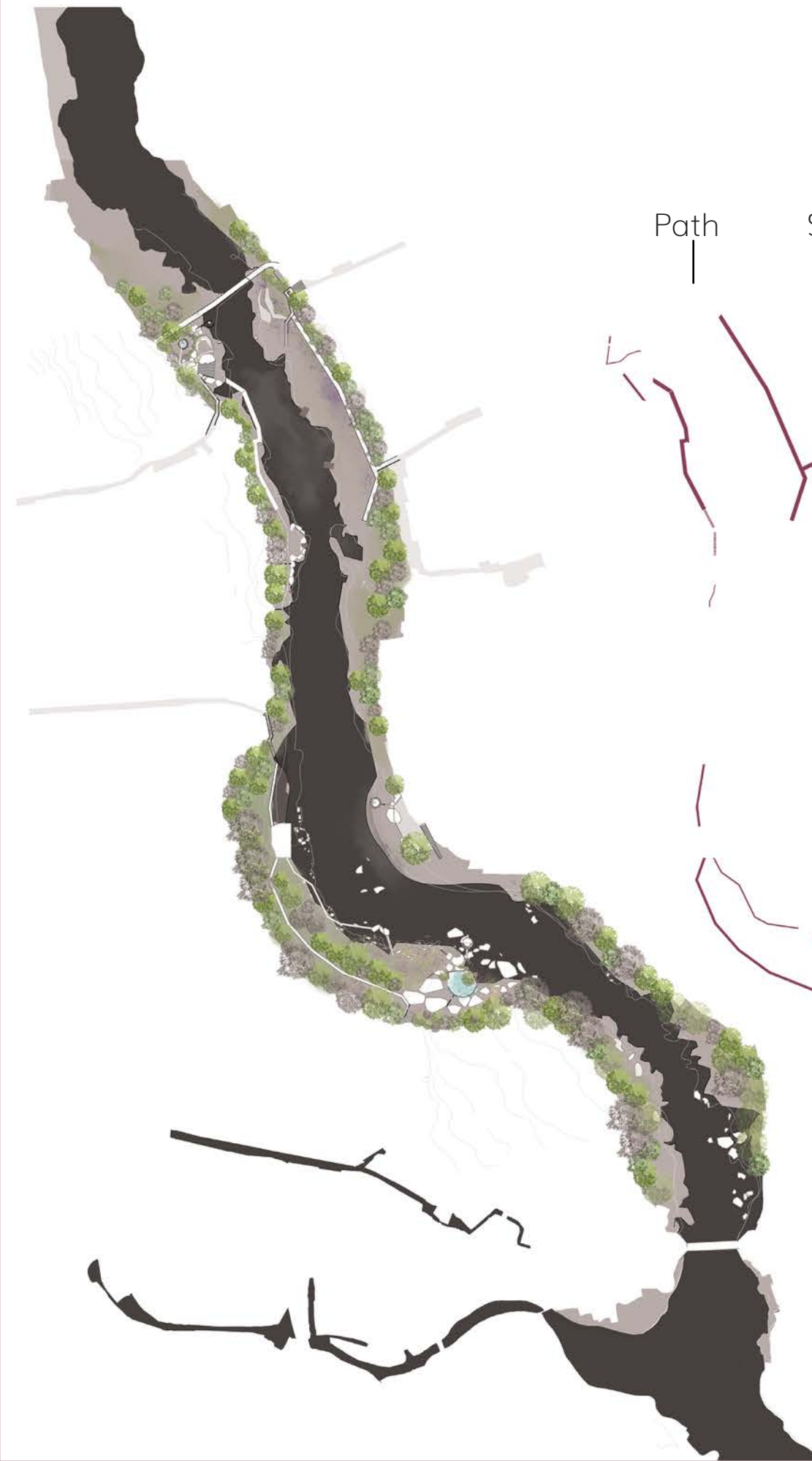




# Neretva and Territory







Path

Staircase / Ramp

Platform

Wall

Volume

Pole

Erosion management

Legend

■ Path

■ Staircase / Ramp

■ Platform

■ Wall

■ Volume/enclosure

■ Poles

■ Erosion management





Legend

- Neretva and Radobolja
- Riverbank
- Platforms - Corton steel
- Pathways
- Access roads

0 10 30 50 100 M



Layout at Test site 01 - Bunur to Stari Most



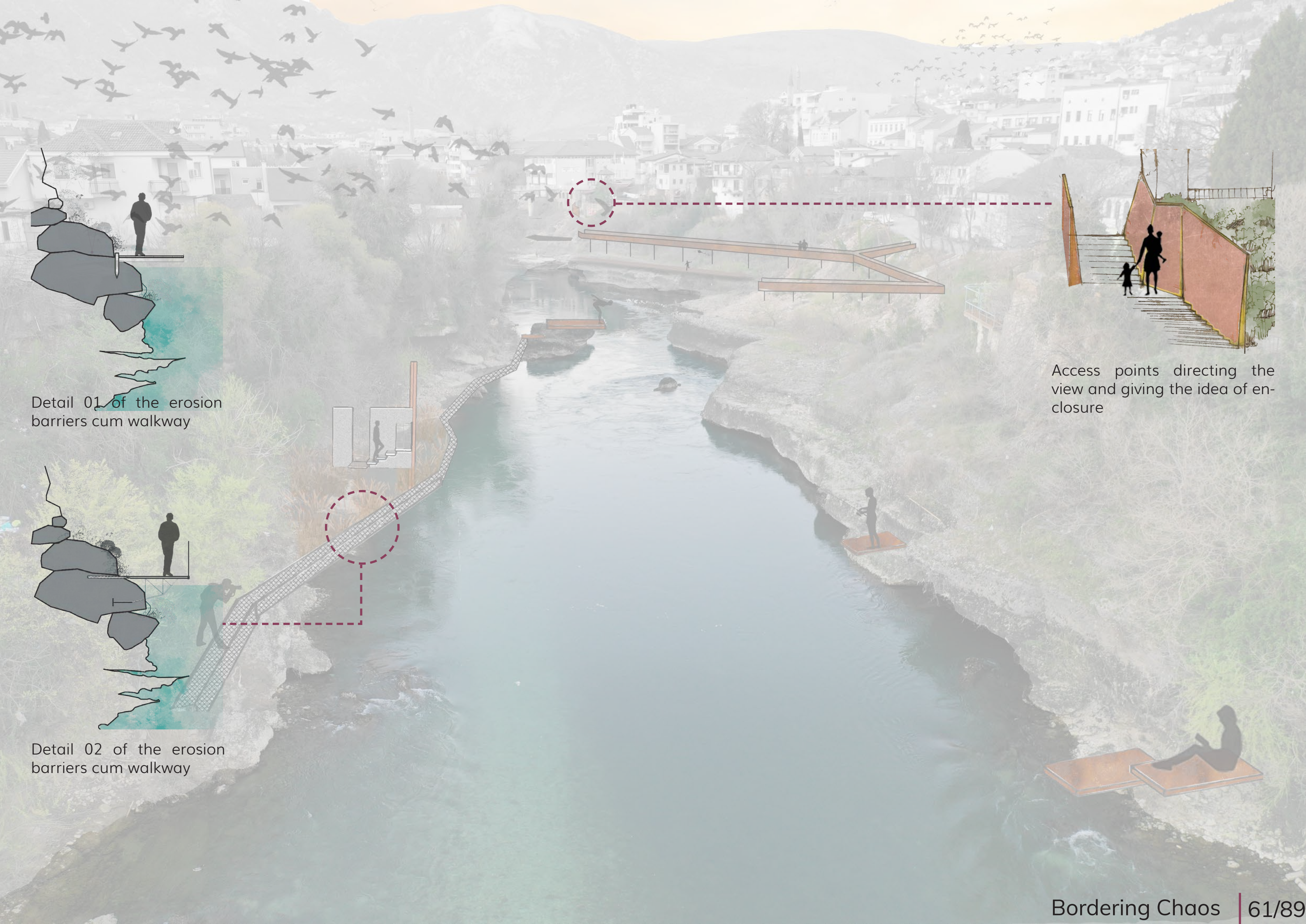












Detail 01 of the erosion barriers cum walkway

Detail 02 of the erosion barriers cum walkway

Access points directing the view and giving the idea of enclosure













Legend

▮ Riverbank

▮ Stari Most

■ Test sites

- - - Boundary of phase 01

0 50 200 500 M



Location of Test Sites

Square outside HIT

Between Bunur and Stari Most

Bunur

Stari Most



# Neretva and Territory

Square outside HIT







1994

WW



1970

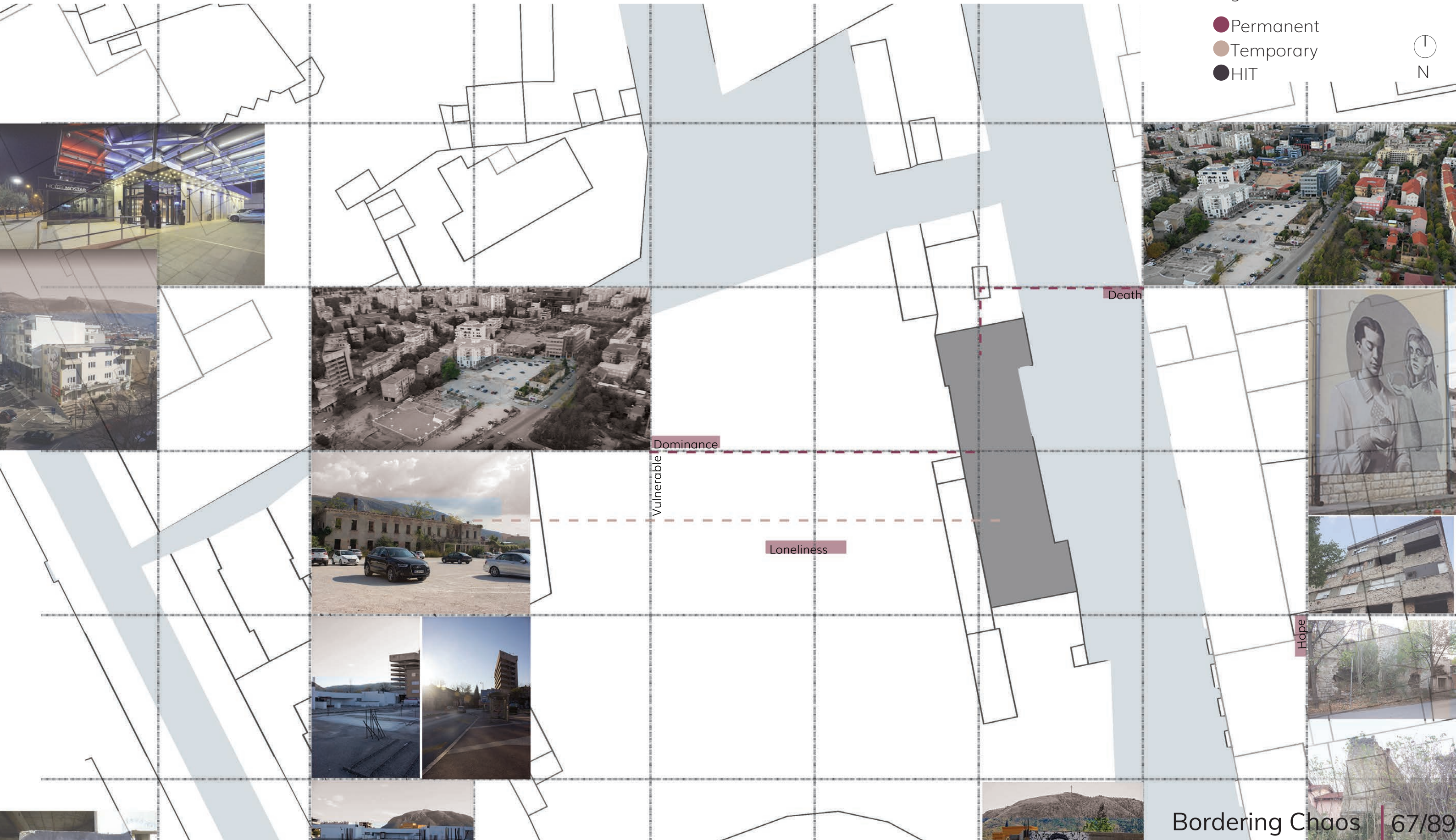


# Spatial Analysis

Translating and demarcating desires or feelings as per existing spatial and natural conditions on site and surroundings

Legend

- Permanent
- Temporary
- HIT



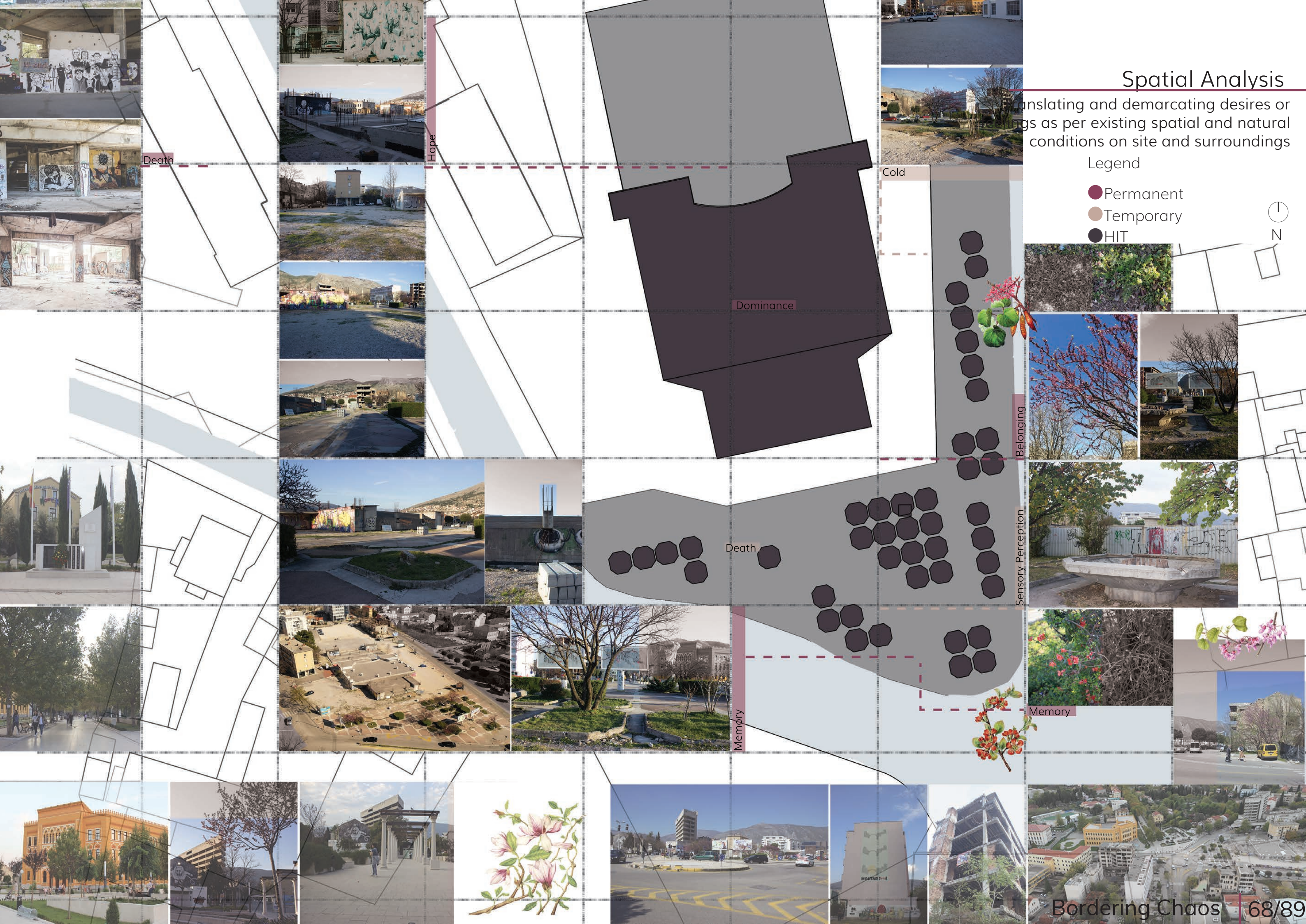


# Spatial Analysis

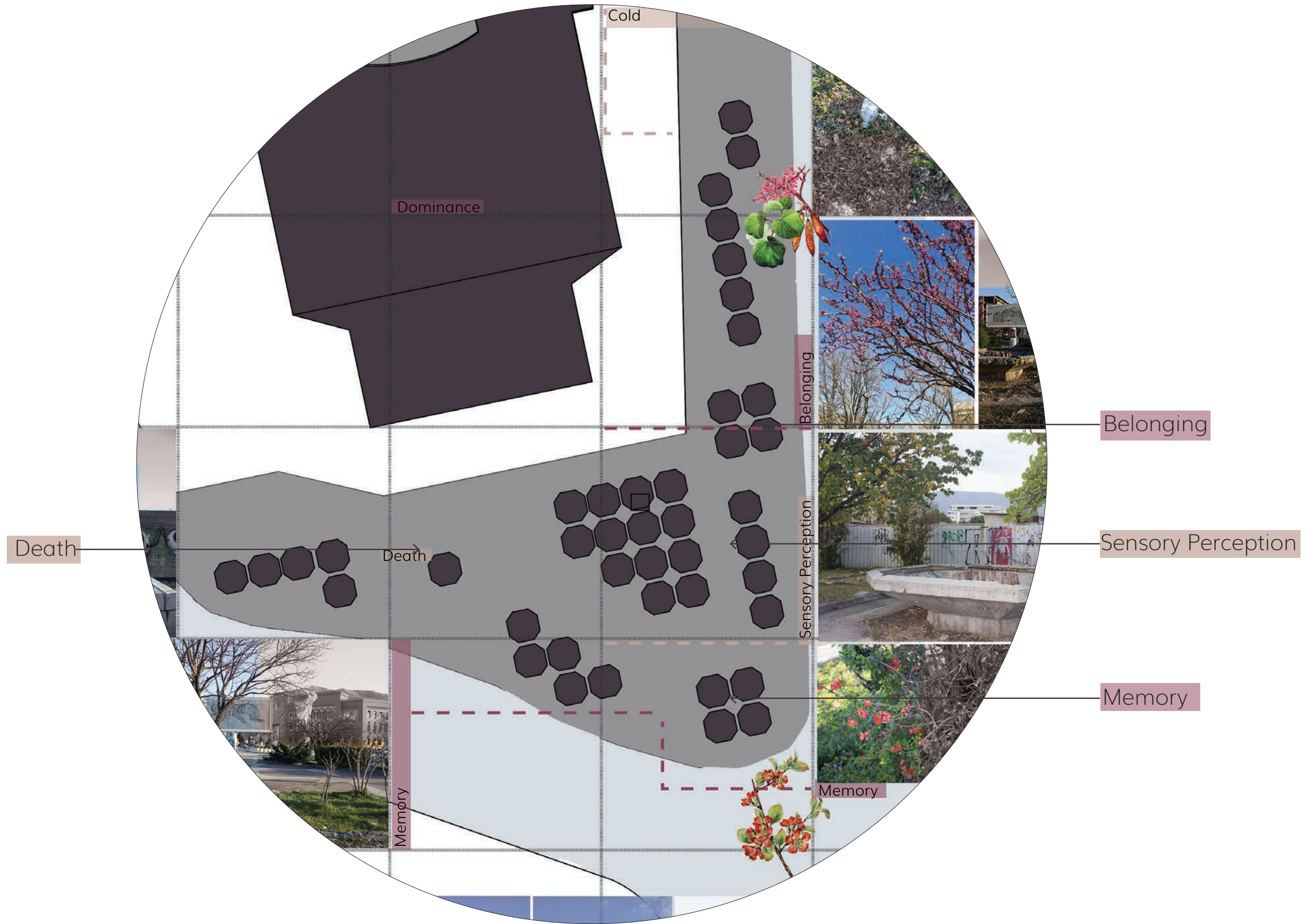
Translating and demarcating desires or feelings as per existing spatial and natural conditions on site and surroundings

Legend

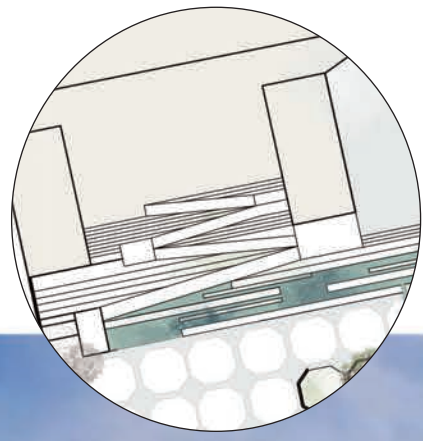
- Permanent
- Temporary
- HIT







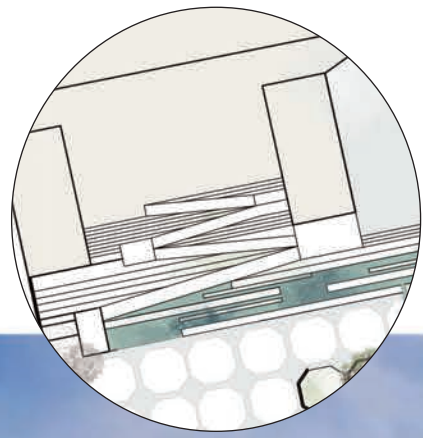




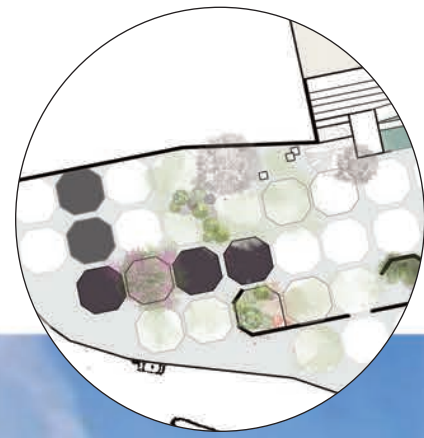
1. Continuation and adaptation  
of incomplete staircase and rain-  
water garden







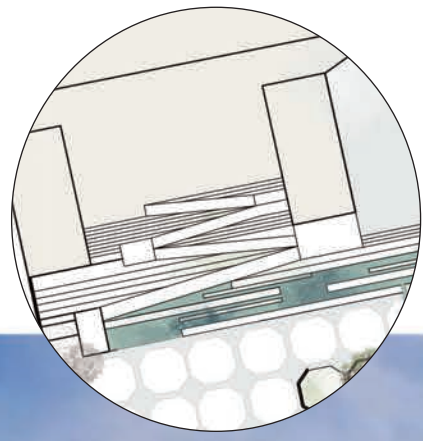
1. Continuation and adaptation of incomplete staircase and rain-water garden



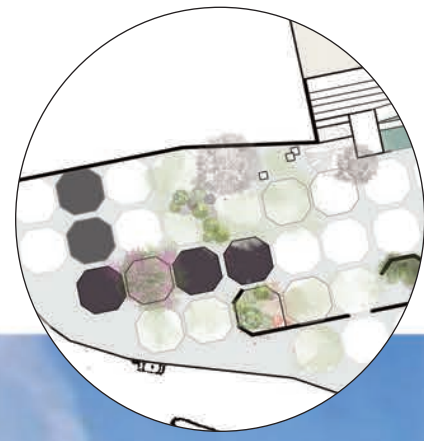
2. New planting scheme to differentiate the old and new. Also, adding smaller elements.



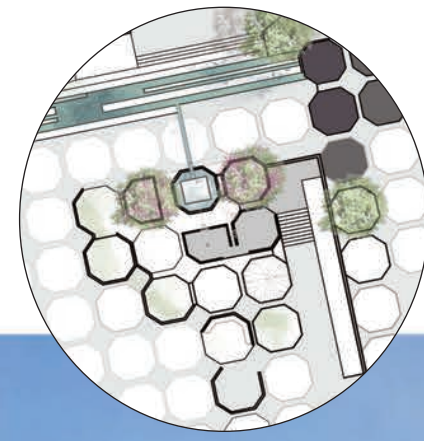




1. Continuation and adaptation of incomplete staircase and rain-water garden



2. New planting scheme to differentiate the old and new. Also, adding smaller elements.



3. Manipulating levels and sensory marker







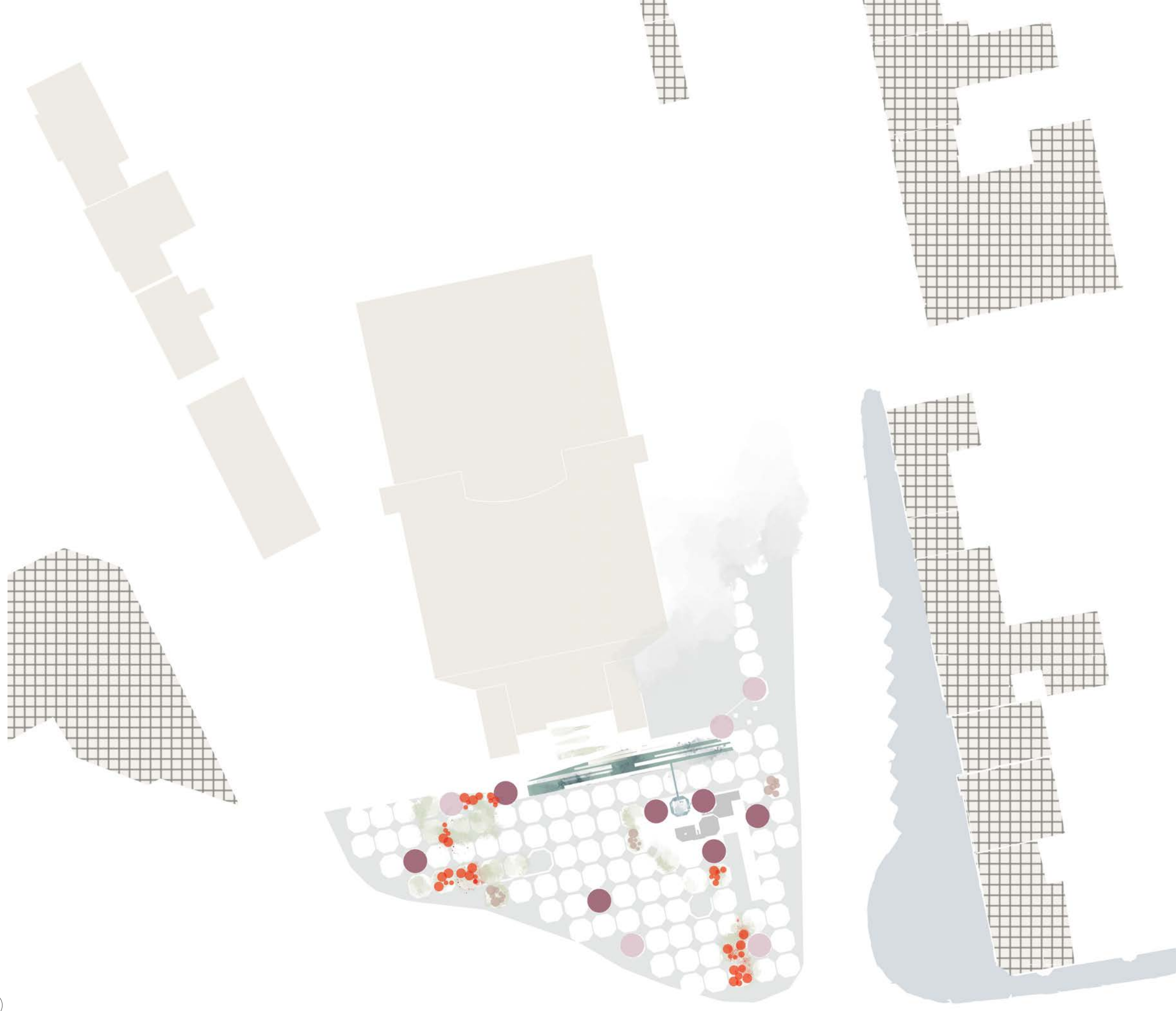
Legend  
■ Croatian Theatre (Former HIT)  
■ Ruins/ Abandoned spaces

0 3 10 30 60M



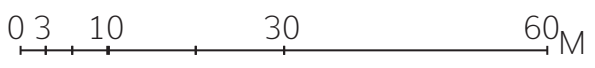
Layout of test site 02 - Square outside HIT





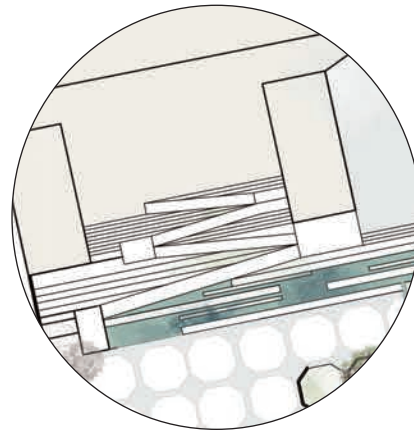
Legend

- *Cercis siliquastrum*
- *Prunus cerasifera*
- *Chaenomeles japonica*
- *Veronica cymbalaria*
- Croatian Theatre (Former HIT)
- Ruins/ Abandoned spaces



Planting Scheme

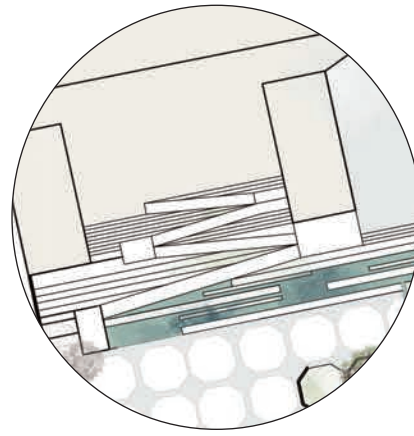




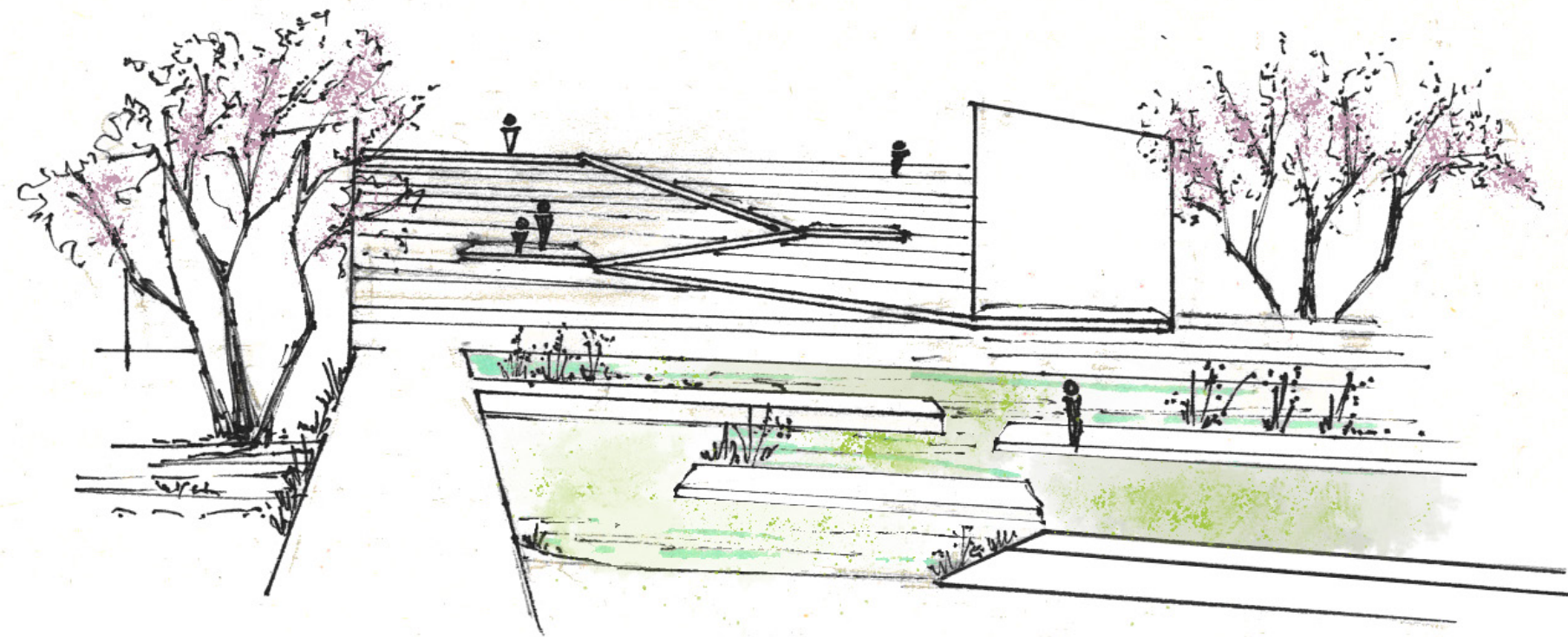
1. Continuation and adaptation of incomplete staircase and rain-water garden





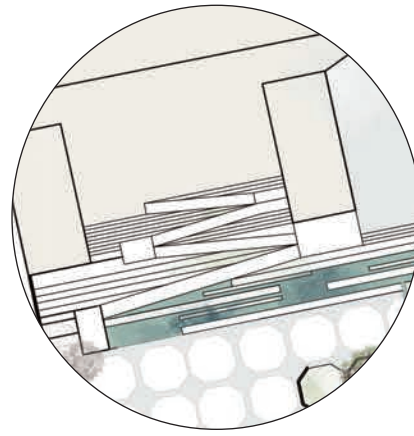


1. Continuation and adaptation of incomplete staircase and rainwater garden

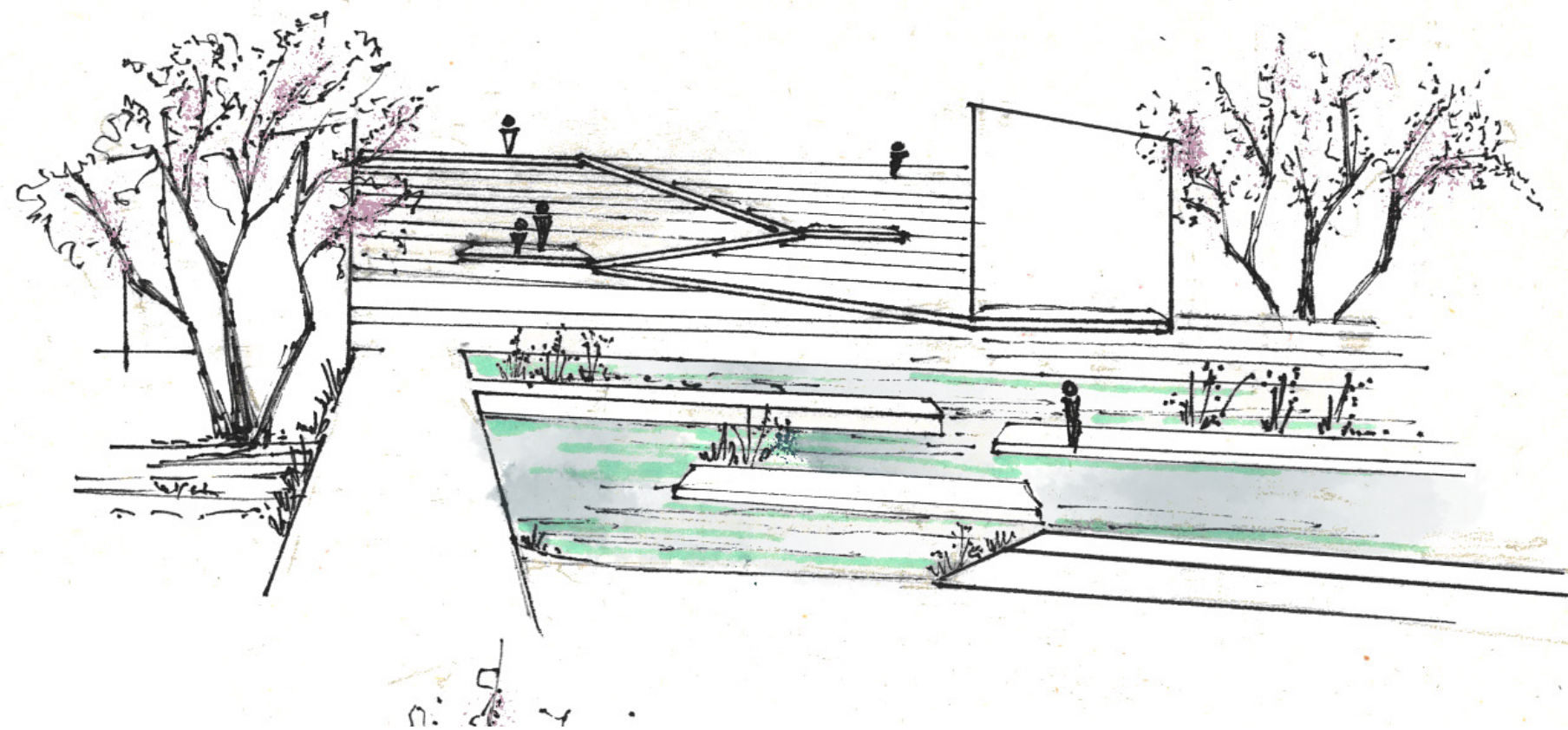


The staircase is adapted to an amphitheater and during the dry months it can serve as an activity space for open air shows or even just sitting under the trees.



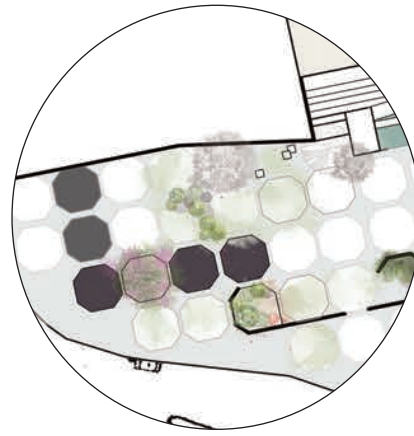


1. Continuation and adaptation of incomplete staircase and rainwater garden



During the rainy season, this works as a rainwater pool with a depth of 600 mm and replicates the feeling of watching the river from the high banks.

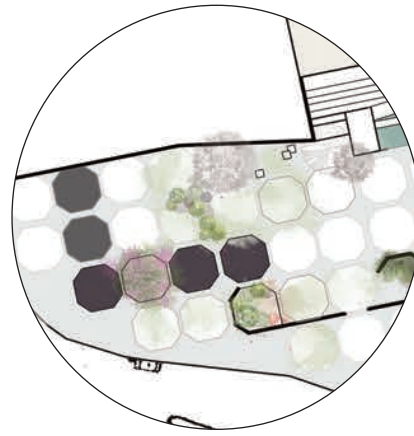
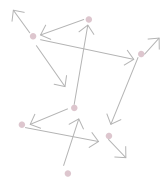
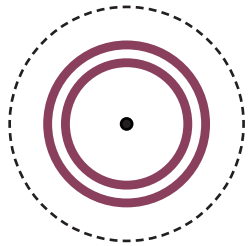
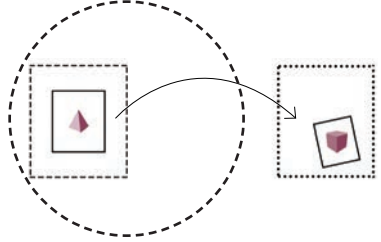
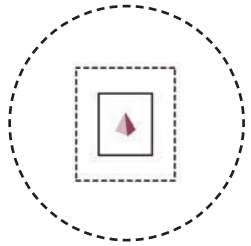
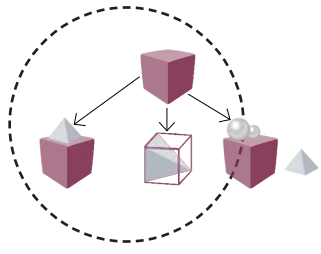




2. New planting scheme to differentiate the old and new. Also, adding smaller elements.







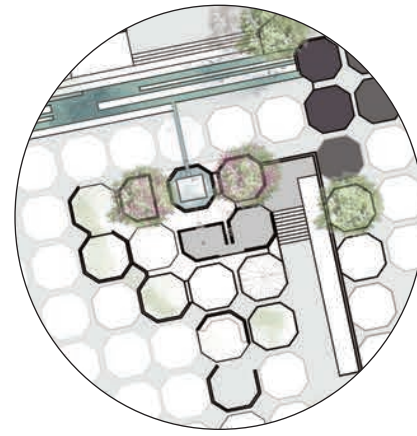
2. New planting scheme to differentiate the old and new. Also, adding smaller elements.



Small elements like concrete blocks are added which serve as multifunction spaces. *Chaenomeles japonica* is introduced in this part of the site and it can later on develop into a wild spring garden.



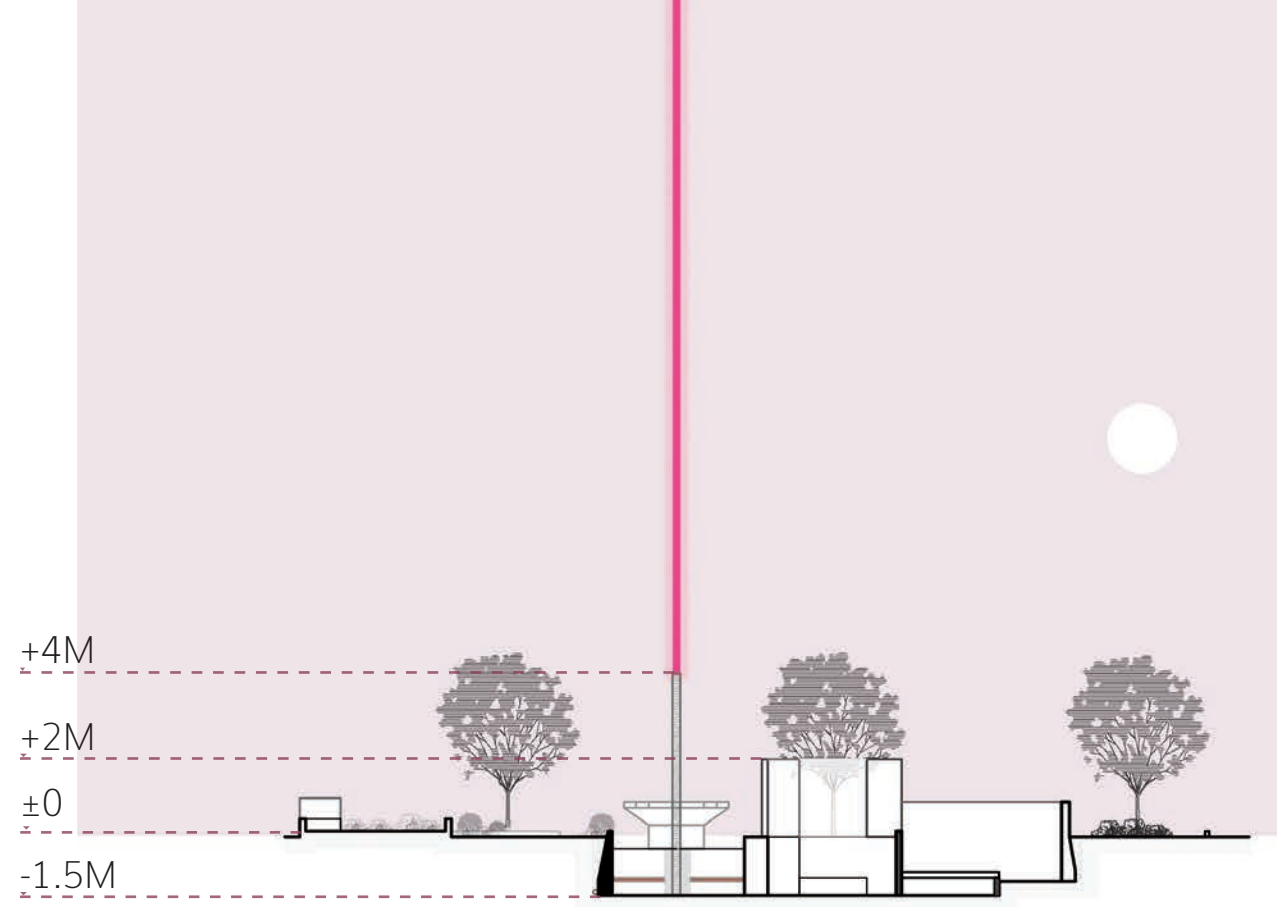
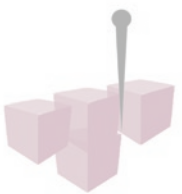
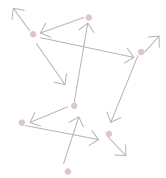
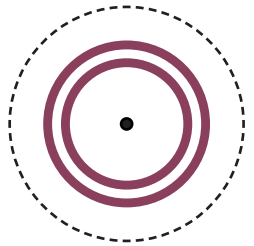
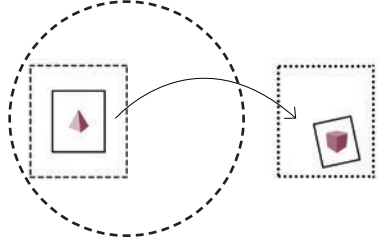
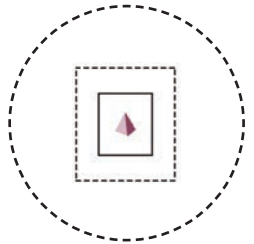
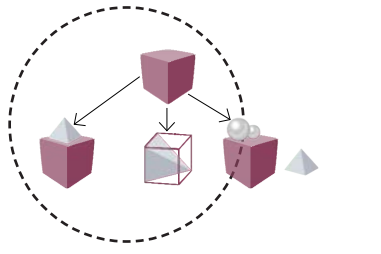
# Neretva and Object



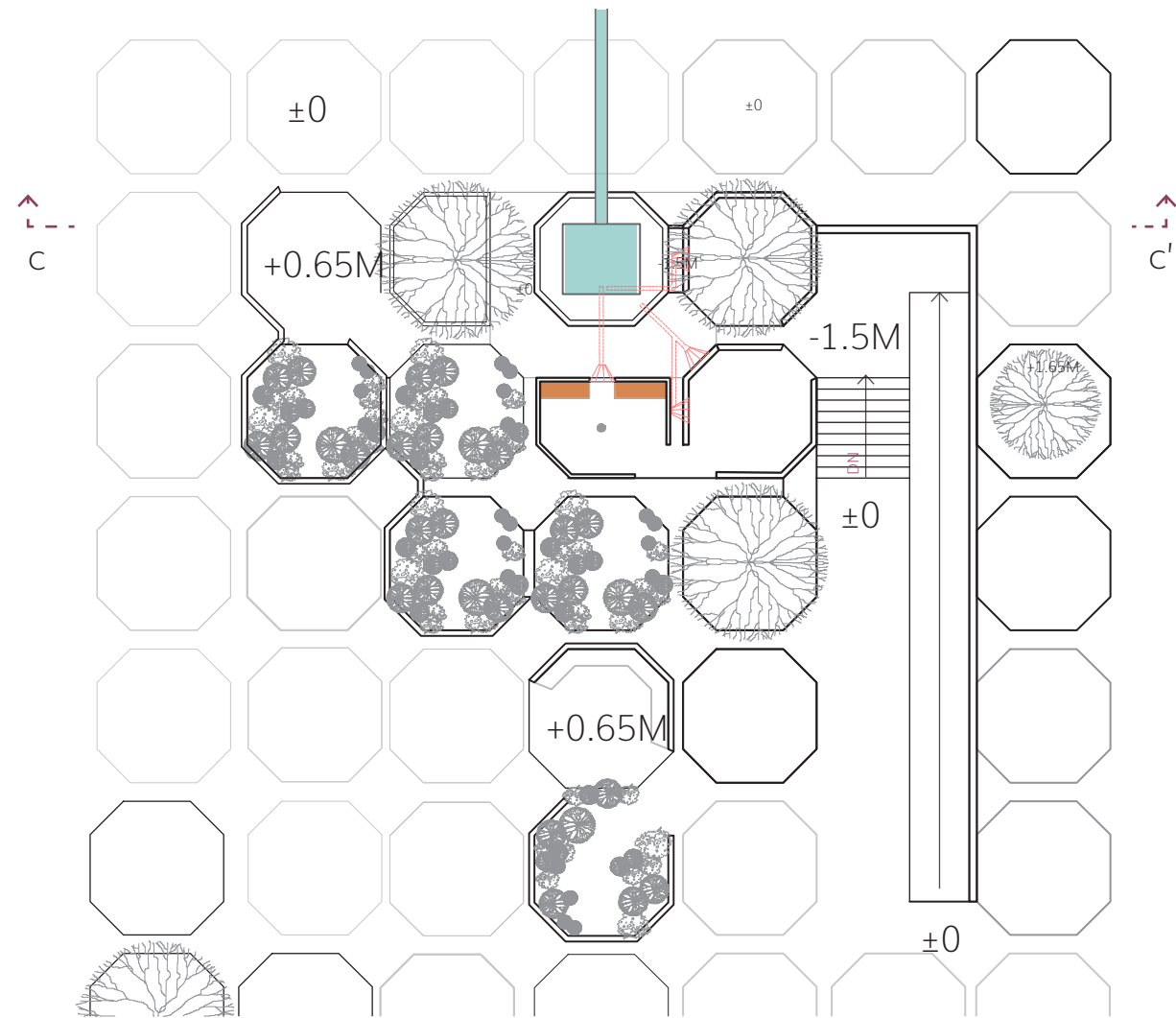
3. Manipulating levels and sensory marker





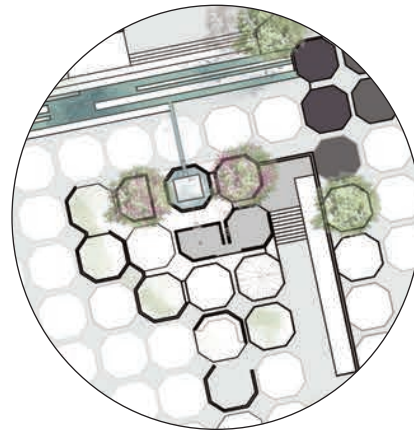


Section CC' - acoustic spaces and the garden with different levels

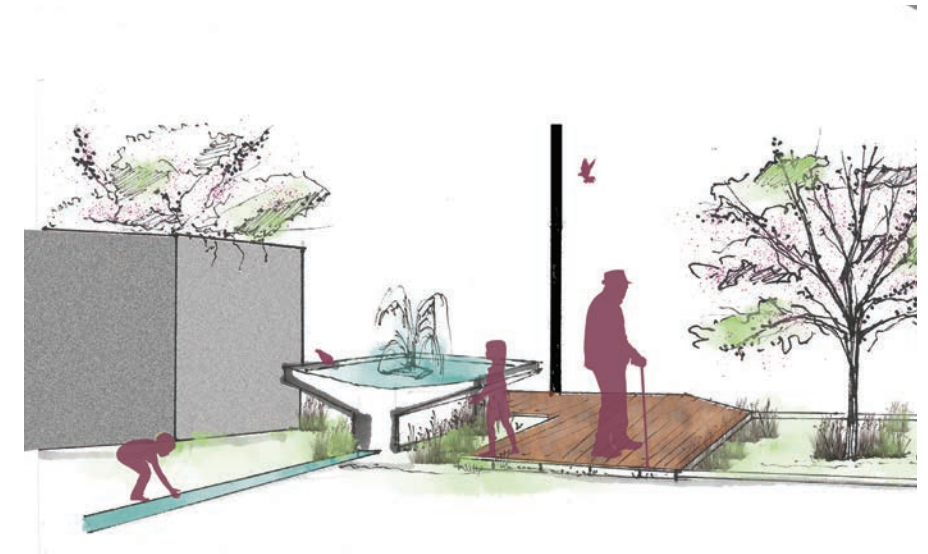
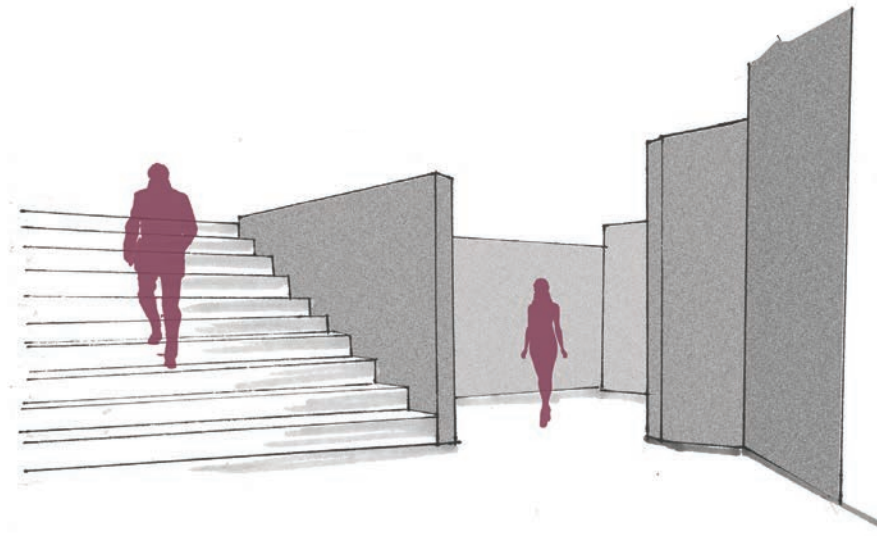
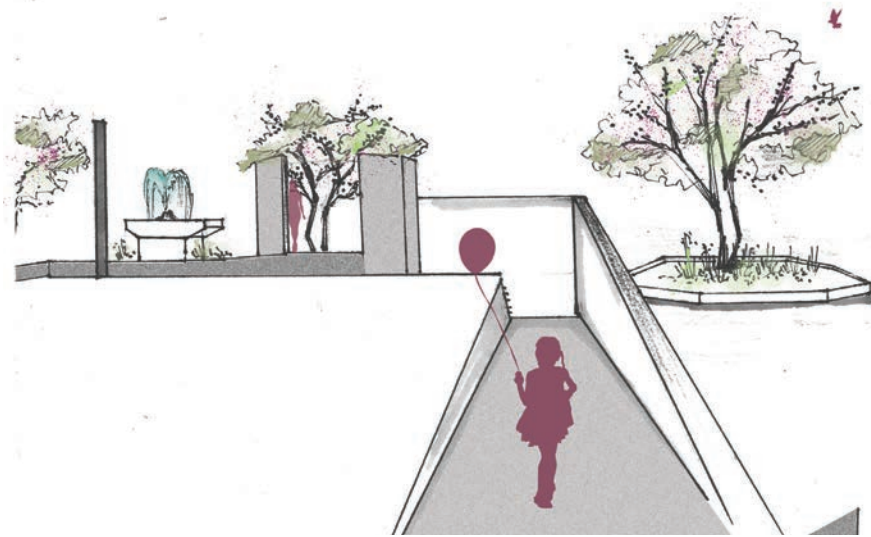


Layout of the sensory garden with the pre-war fountain and flooring





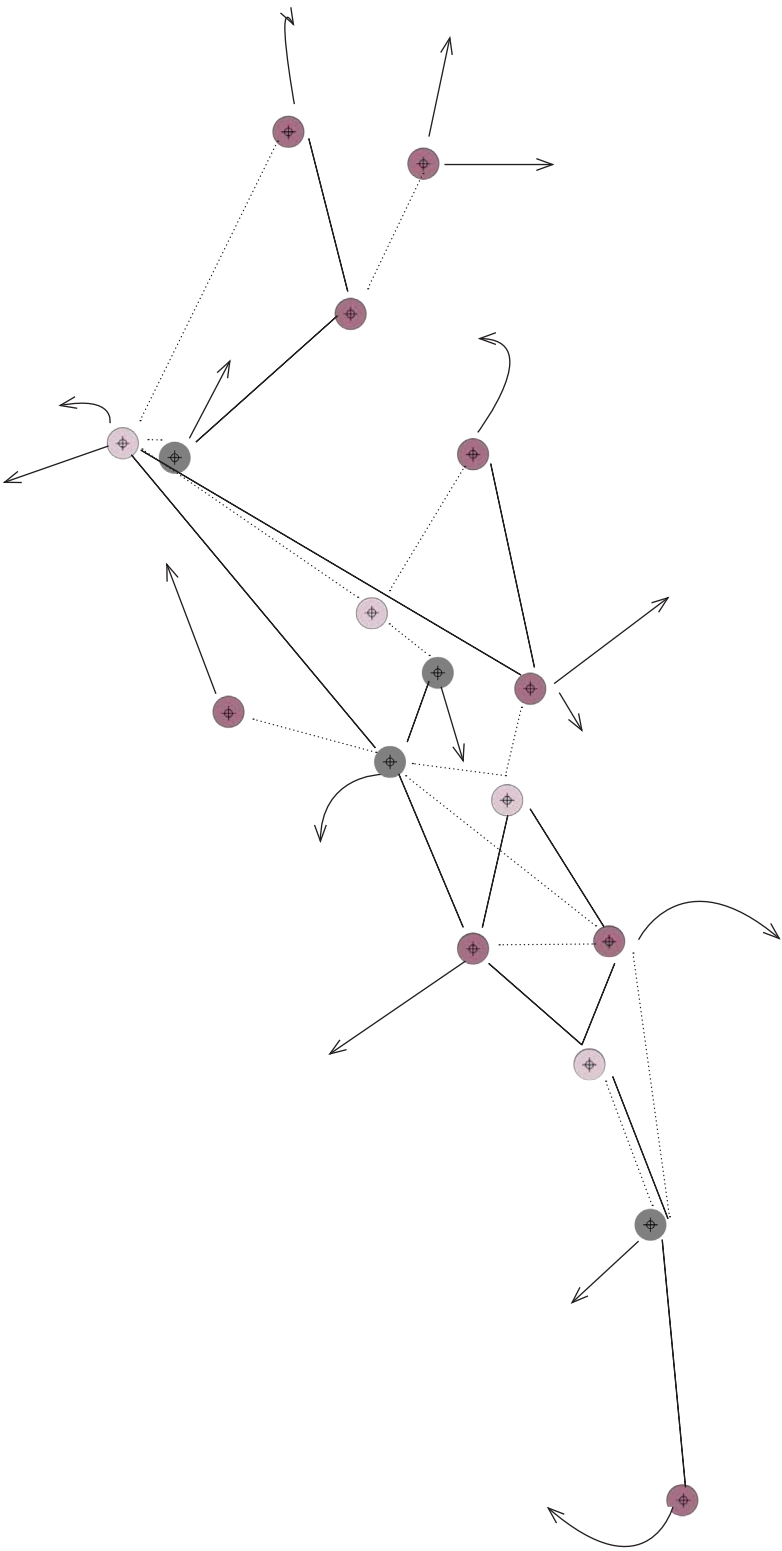
3. Manipulating levels and sensory marker



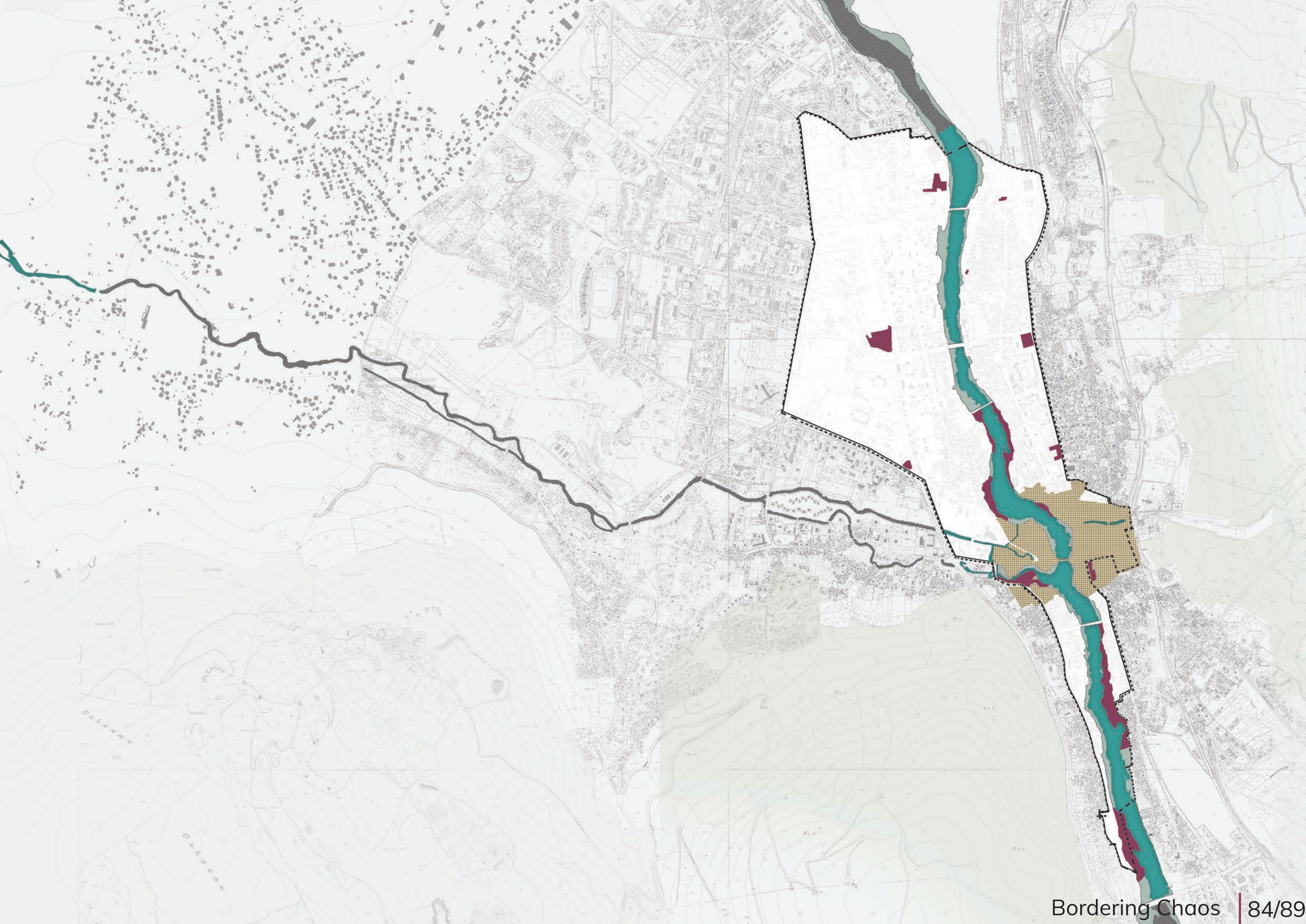


# Neretva and Mostar

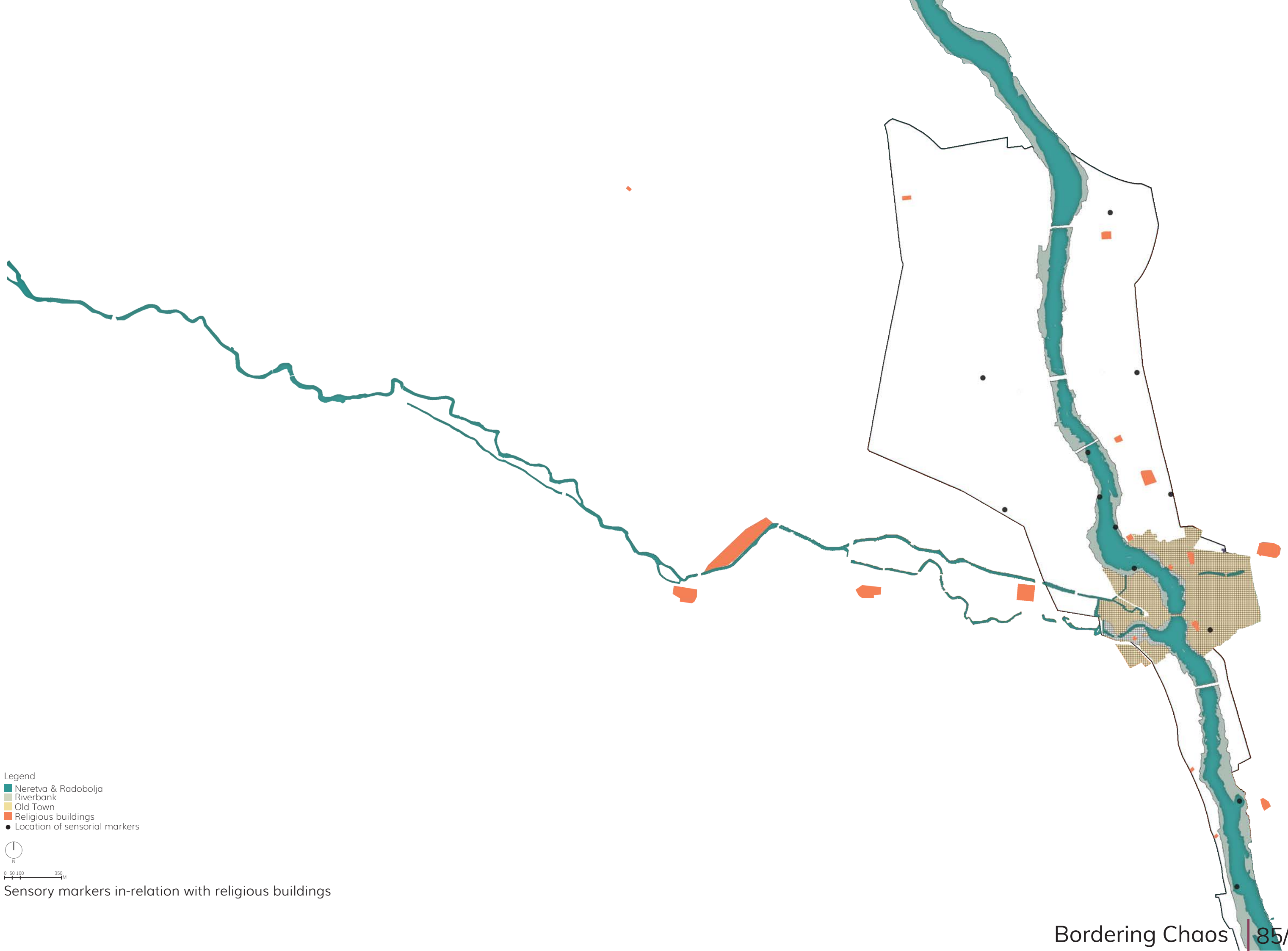
Rhizomatic Network





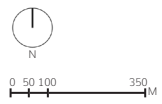






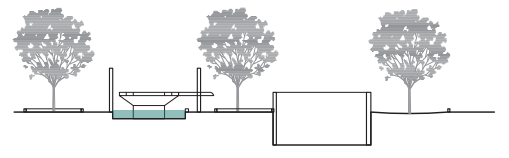
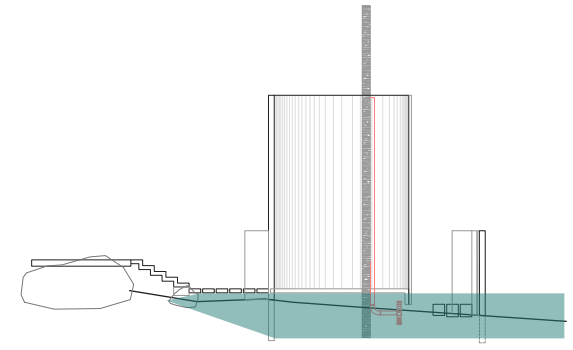
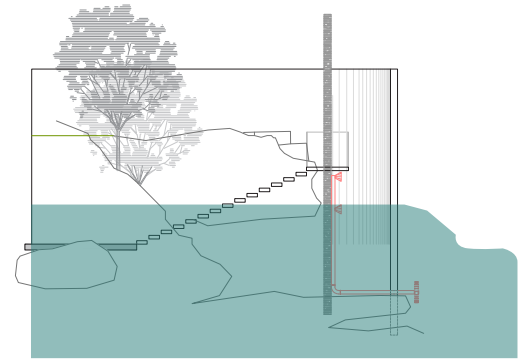
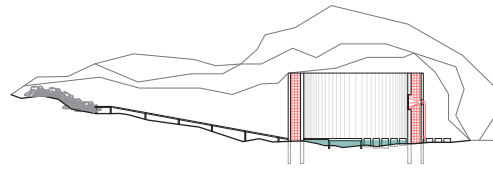
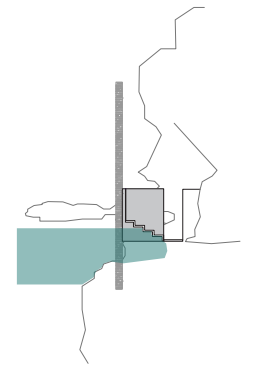
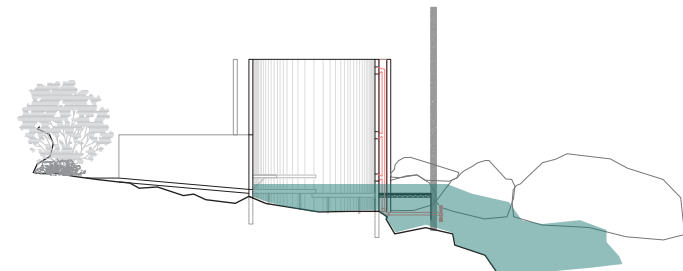
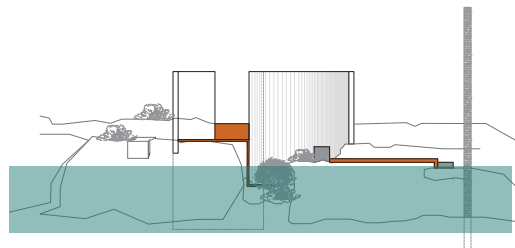
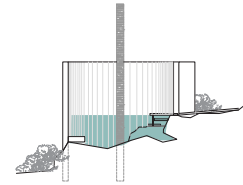
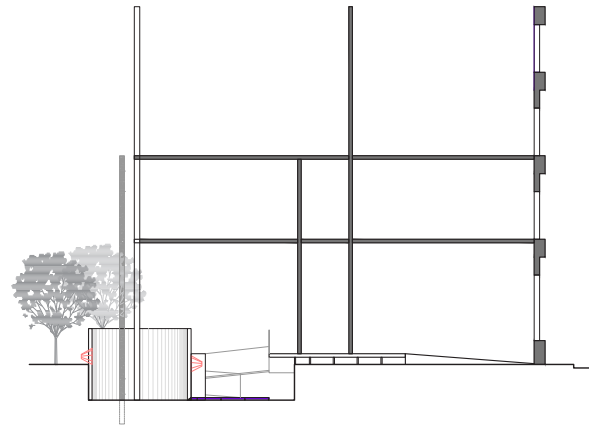
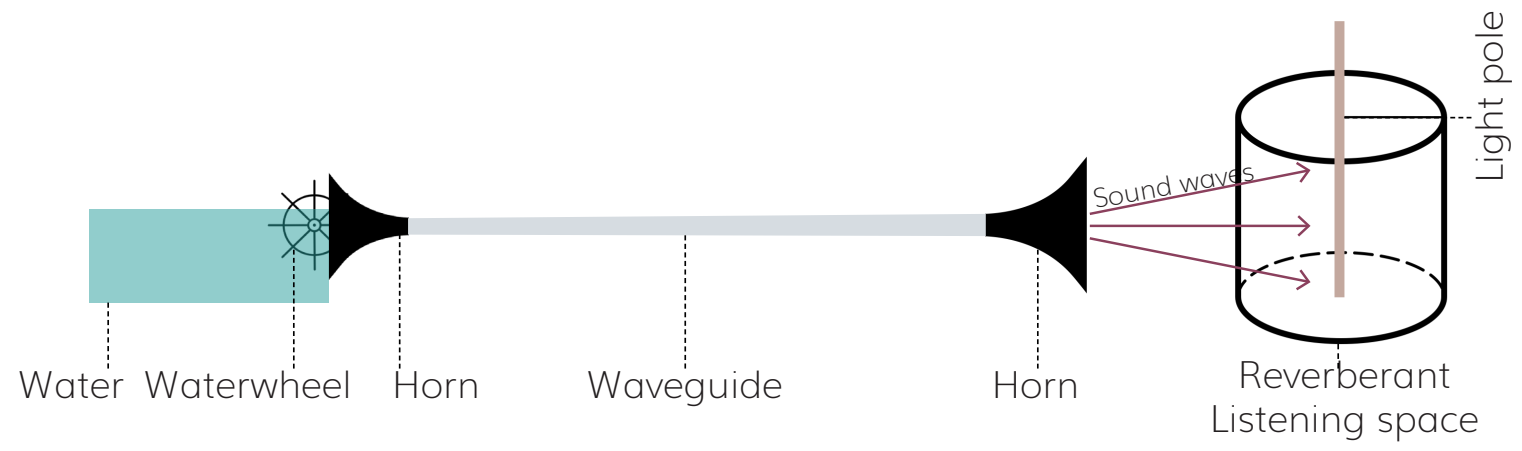
Legend

- Neretva & Radobolja
- Riverbank
- Old Town
- Religious buildings
- Location of sensorial markers

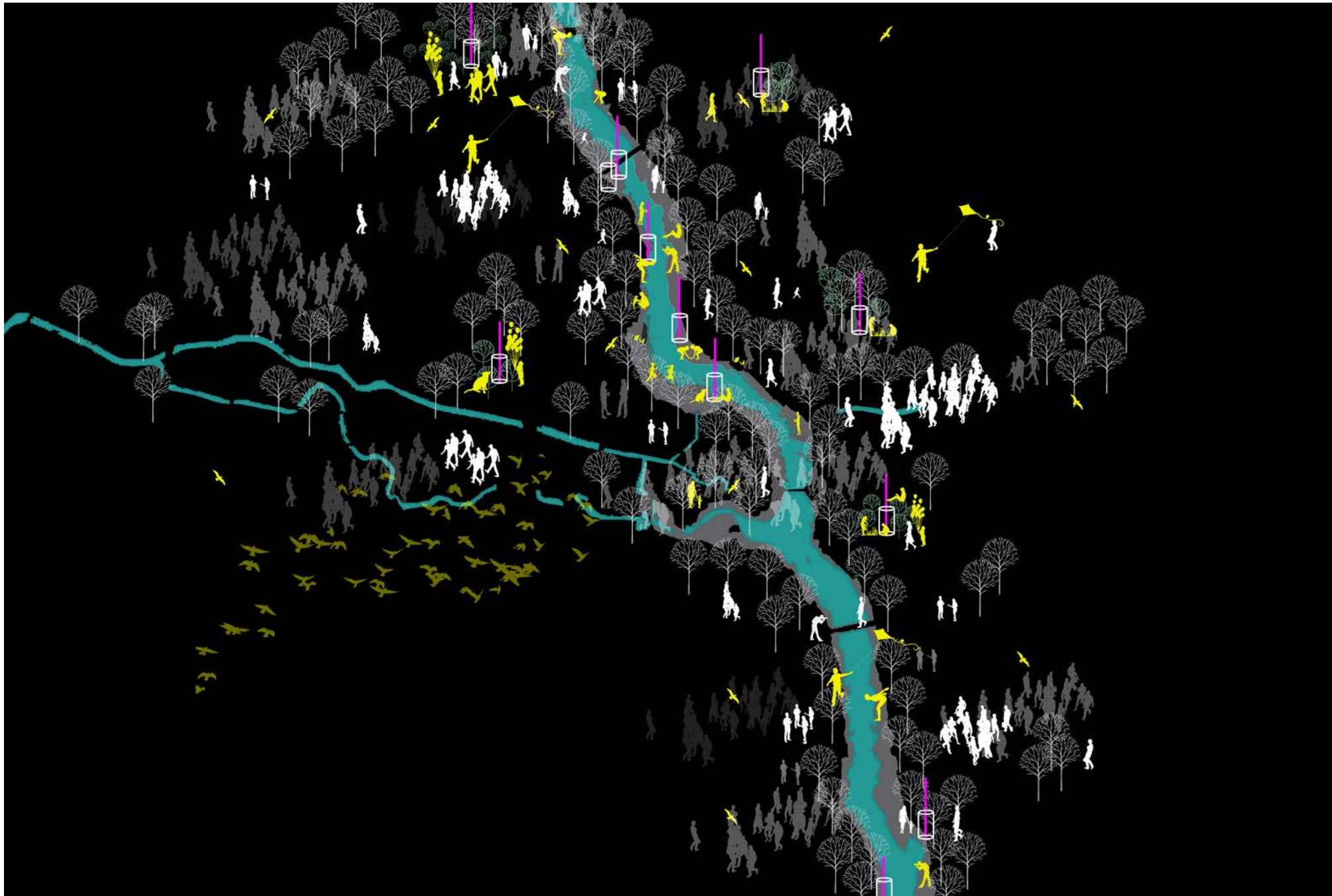


Sensory markers in-relation with religious buildings



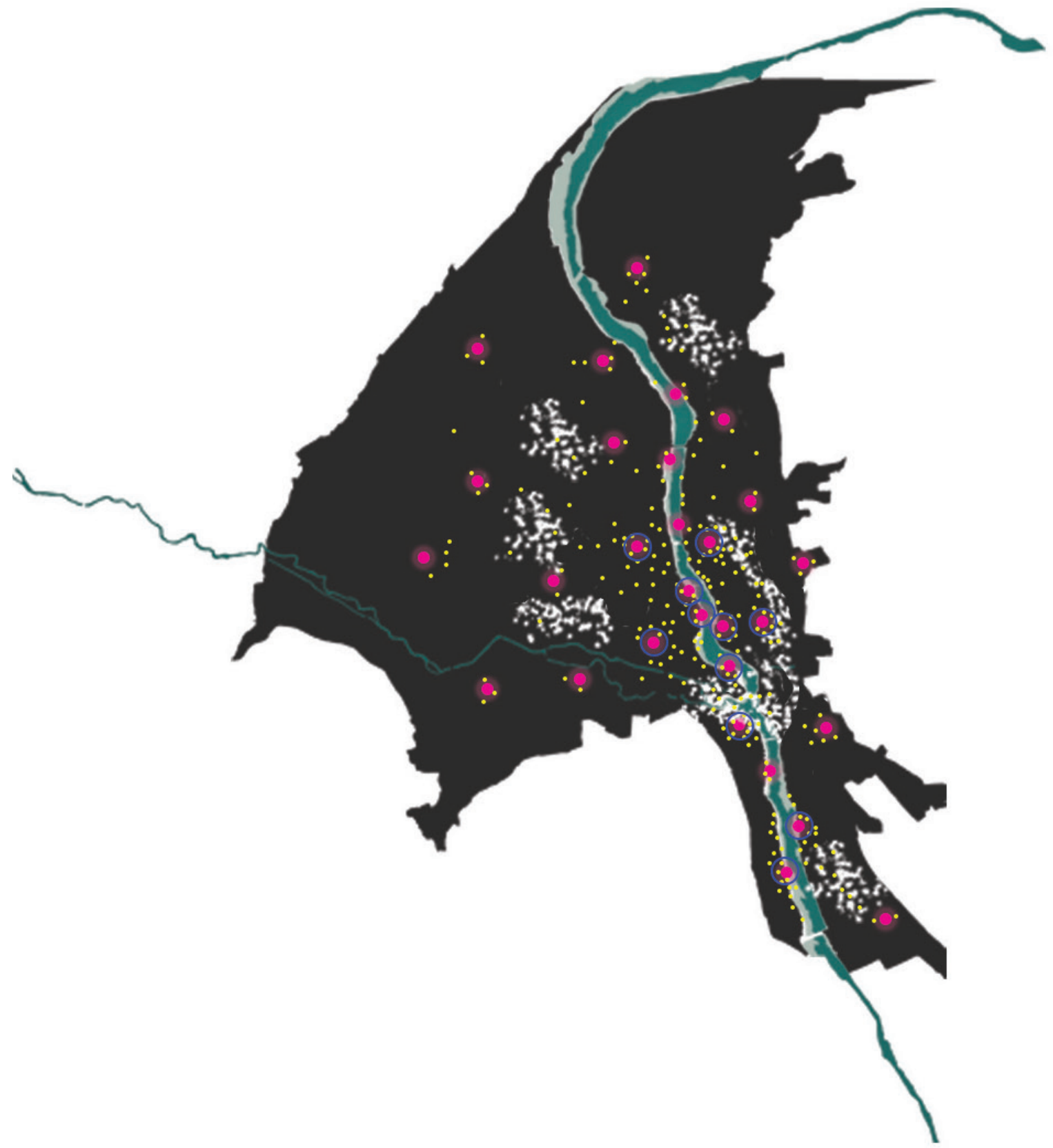






Video for time planning and involvement of inhabitants





- Legend
- Neretva
  - Riverbank
  - City footprint
  - Light poles
  - Major public concentration
  - Interested stakeholders
  - Pathways and connections
  - Acoustic space
- N

Probable scenario after 10-15 years



