

# *Memorial Benchscape:*

*The fusion and collision between memory and its physical expression*

Jingxuan Tu | 5561442

First Mentor: Saskia de Wit  
Second Mentor: Machiel van Dorst  
Examiner: Reinout Kleinhans

23/06/2023

*THE HISTORICAL SHELTER  
IN DEN HELDER*



*THE WOODEN BENCHTOWER  
IN DEN HELDER*



*WHAT IS A BENCHSCAPE?*

*“Benches are key players in these landscapes.”*



*“Benches are perspective-sharers.”*

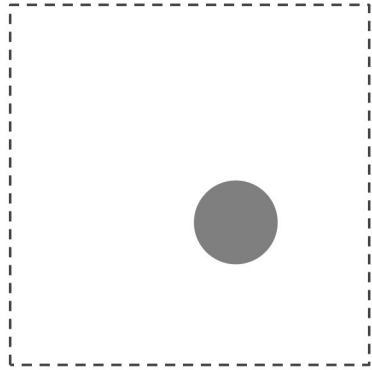


*“Benches have their own life story.”*



# “THREE-FRAME CONCEPT”

FRAMED



FRAME



FRAMING



# PERCEIVED BENCHSCAPE



*Bench  
+ External surrounding landscape*



*Bench  
+ Outward landscape*



*Bench's  
Internal micro-landscape*

# CONCEIVED *BENCHSCAPE*

?

*URBAN PUBLIC SPACE*  
(dune park)

+





# “FOUR-RELATION MODEL”

**MATERIAL**  
RELATION

**VISUAL**  
RELATION

**FUNCTIONAL**  
RELATION

**ROUTING**  
RELATION

# ROLES OF *BENCH* IN *BENCHSCAPE*

## A. LANDMARK

A-1

Exaggerated  
Dimensions



A-2

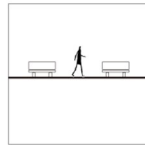
High  
Topography



## B. LINKAGE

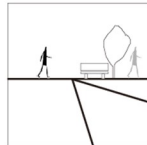
B-1

Rest Point



B-2

Way-finding



## C. SPECIAL ELEMENT

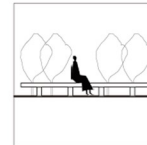
C-1

Memorial  
Bench



C-2

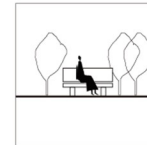
Symbolic  
Transformation



## D. COMMON ELEMENT

D-1

Rest Point



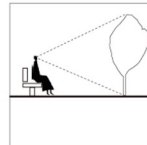
D-2

Social Place



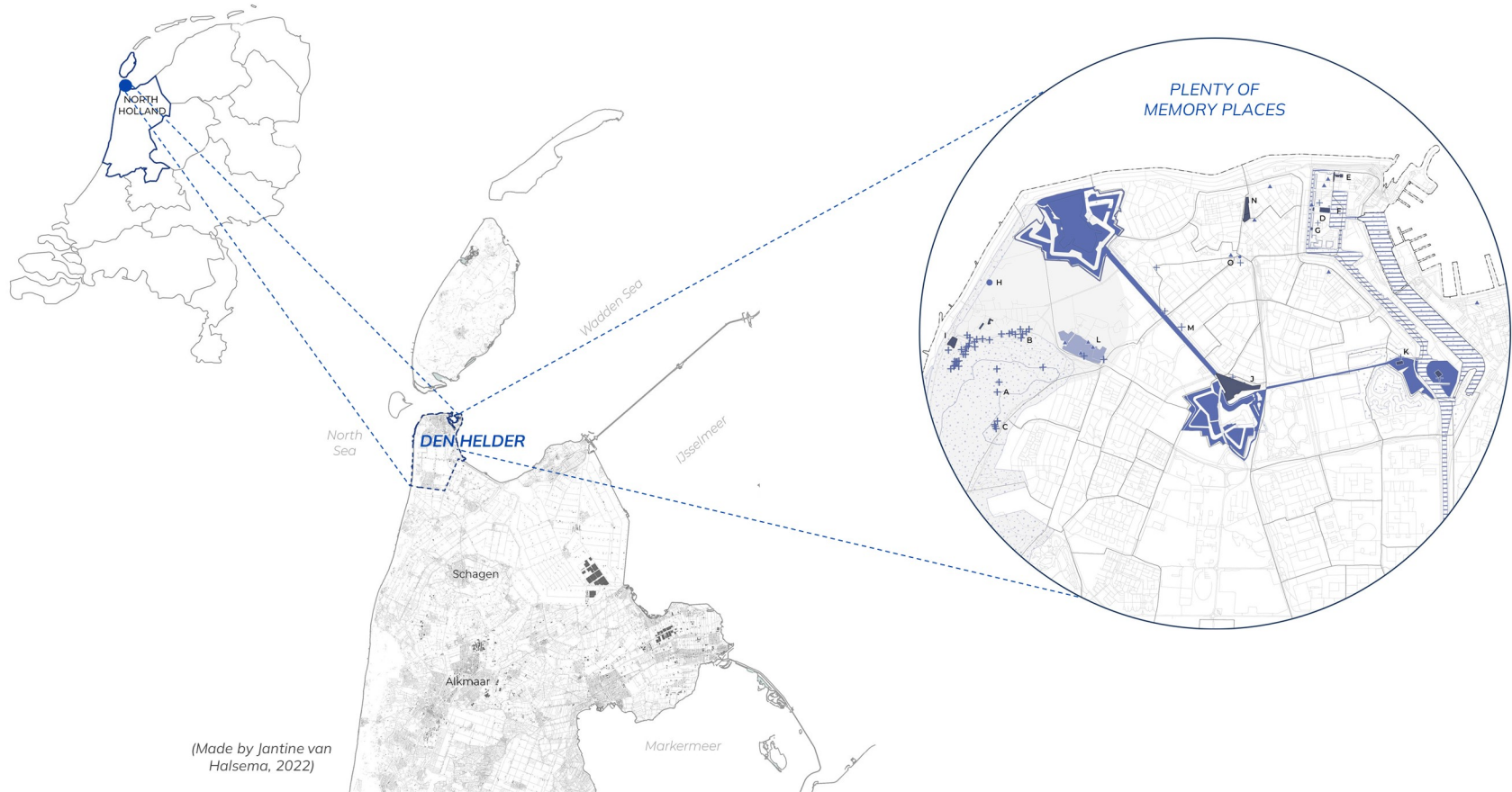
D-3

Leading  
a View



*WHY* A MEMORIAL BENCHSCAPE?

# DEN HELDER, NETHERLANDS



(Made by Jantine van Halsema, 2022)

# CITY MEMORY

## FLOOD

1570

**All Saints' Flood**  
*a fishing village*



1700

**Growing Port City**

## PORT



1795-1813

**French Occupation**  
*The Defense Line and a ring of forts were commissioned by Napoleon.*

## WAR



1939-1945

**World War II**  
*From 1943, the whole town was declared a Sperrgebiet.*

2000

**21st Century**



1600

1700

1800

**Noordhollandsch Kanaal**  
*Trade grew rapidly*  
1829 - 1878

1900

**WWI**  
1914 - 1918

**Reconstruction & Expansion**  
1945-1980s



# CITY MEMORY'S PHYSICALITY

?



*Remnants + Monuments*



*Museums*

# LOSING CITY IDENTITY



*Stopover for Texel*  
(By istock, 2013)

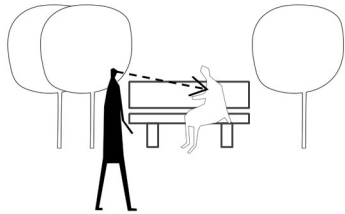
# BENCH AS AN OPPORTUNITY



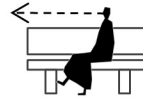
*A LIVING MEMORIAL  
(more accessible, readable and touchable)*



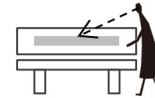
# BENCH & MEMORY



*VEHICLE*  
(story on/around a bench)



*OBJECT*  
(outward story)



*ENTITY*  
(story in a bench)

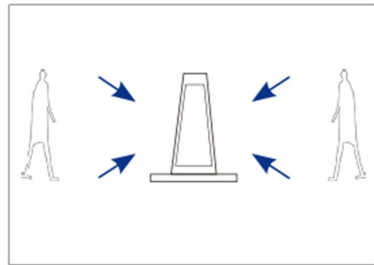


## RESEARCH QUESTION

“ How can **MEMORY AND ITS PHYSICALITY** be situated in and expressed through **BENCHSCAPES** to enhance **Public Awareness of City Identity** and help create **Personal Significance**? ”

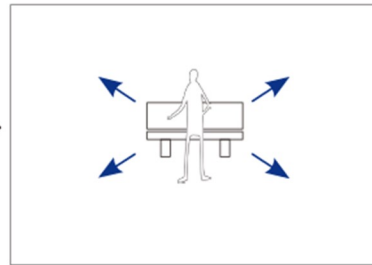
*HOW* TO DESIGN MEMORIAL BENCHSCAPES?

# DESIGN CONCEPT



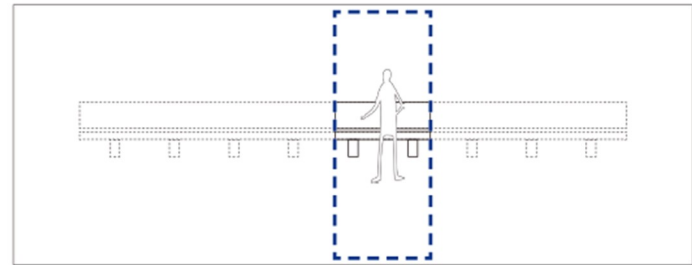
*most of common memorials:  
centripetal orientation*

## 1) LOOKING OUT



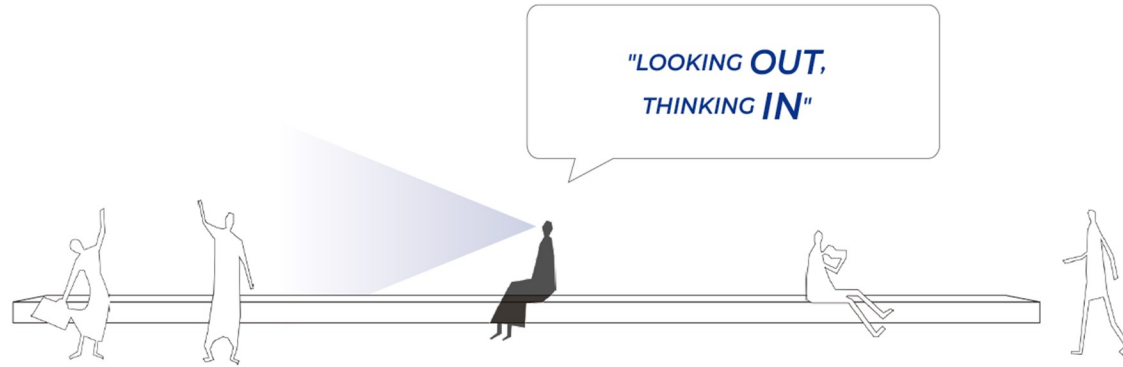
*bench as an informal memorial:  
centrifugal rays*

## 2) THINKING IN



*occupy and enjoy a personal space  
in a public space*

# DESIGN CONCEPT



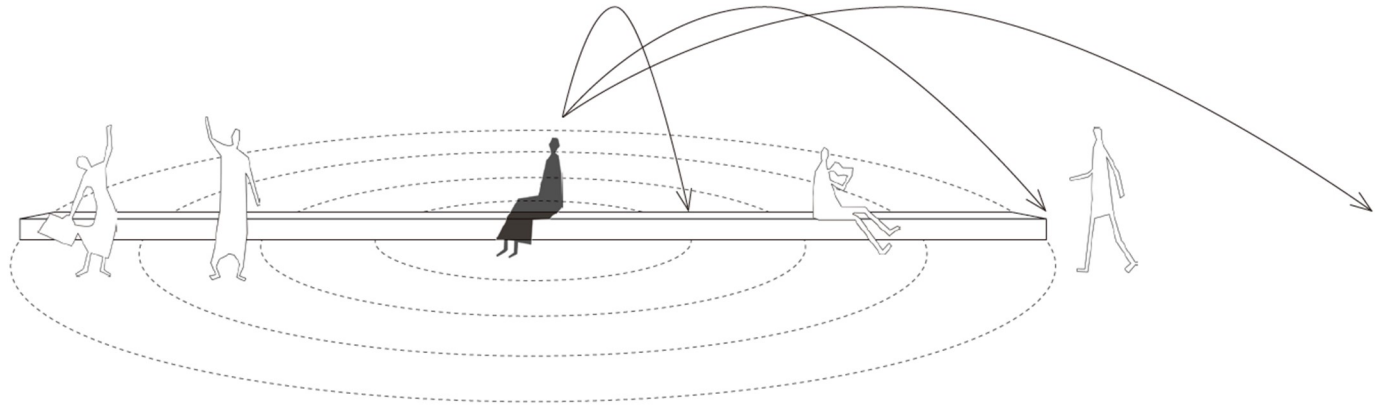
# “THIRD EMOTIONAL SPACE” (Avril Maddrell, 2013)

= To Place Individual Memory in Public Space

Non-present Emotional Space

1. Less-located

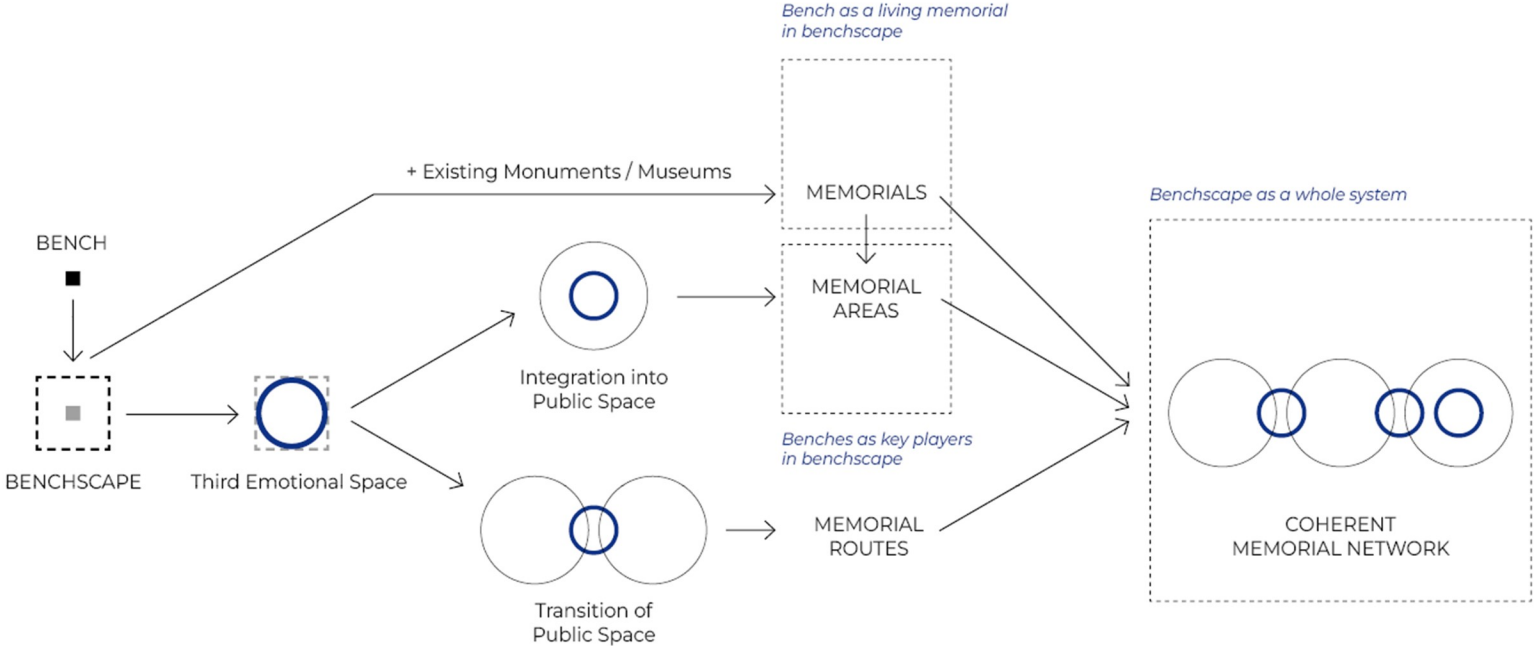
2. Specific Locations to Help Think Inwards



Interpersonal Distance

Edward T. Hall's personal reaction bubbles  
(1966)

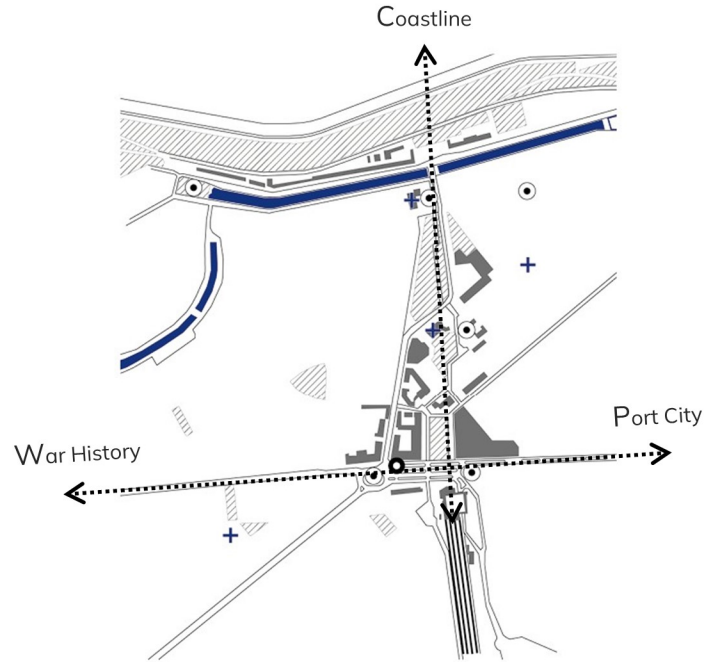
# DESIGN FRAMEWORK



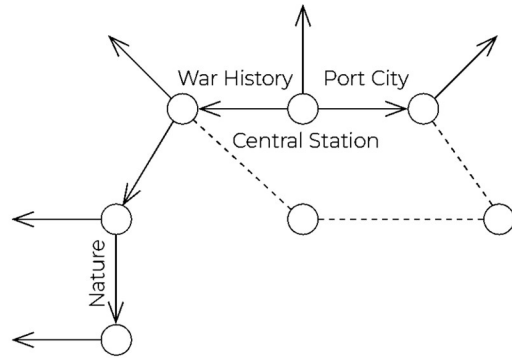
*BENCHSCAPE  
AS A  
WHOLE SYSTEM*



# HIDDEN CENTRAL AXES



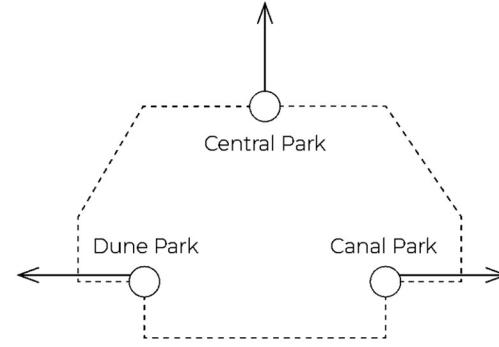
# TWO MAIN MEMORIAL STRUCTURE



*Memorial Structure A*



VISITOR

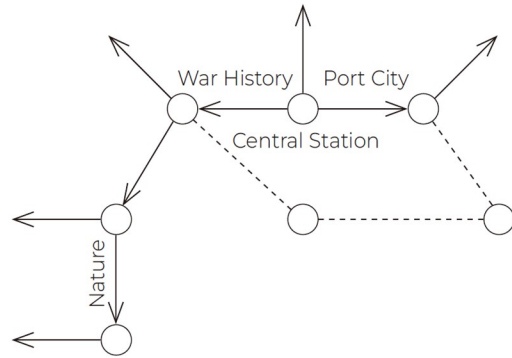


*Memorial Structure B*

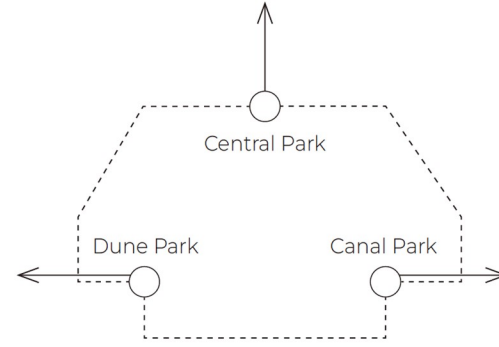


RESIDENT

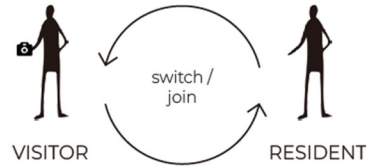
# TWO MAIN MEMORIAL STRUCTURE



Memorial Structure A

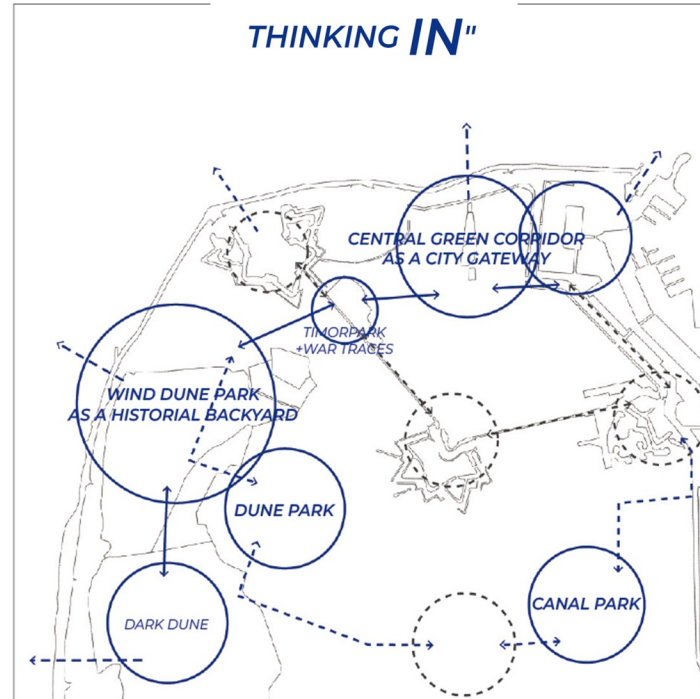


Memorial Structure B



# INTEGRATED MEMORIAL STRUCTURE

"LOOKING OUT,  
THINKING IN"



# PROPOSED MEMORIAL NETWORK

## Memorial Benchscape Family

### LEGEND

#### Memorial

- memorial area
- ⊕ remnant
- △ monument
- ▣ memorial building

#### Memorial Route

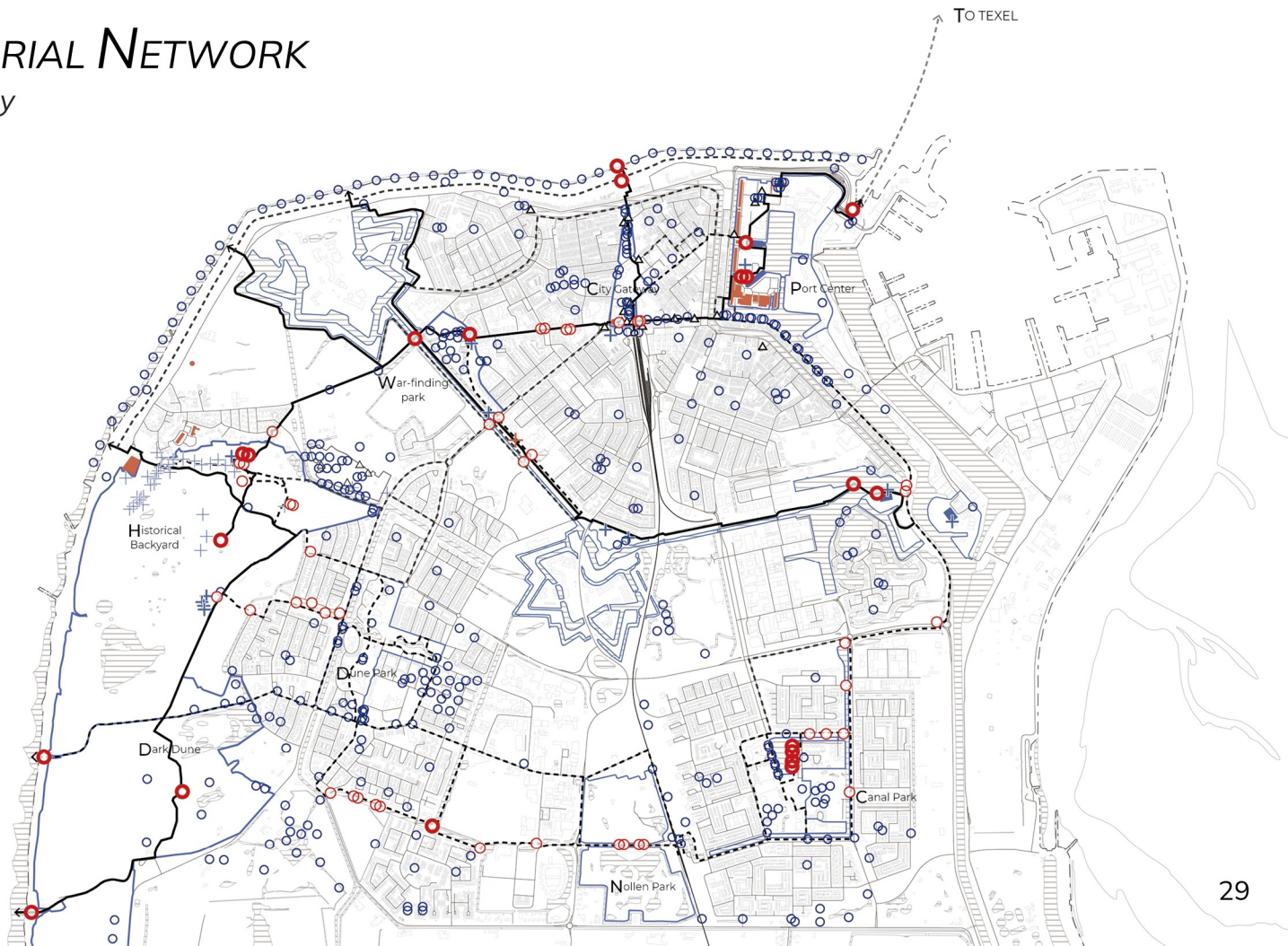
- primary memorial route
- - - secondary memorial route

#### Bench

- existing ordinary bench
- new ordinary bench
- new special bench

#### Other Elements

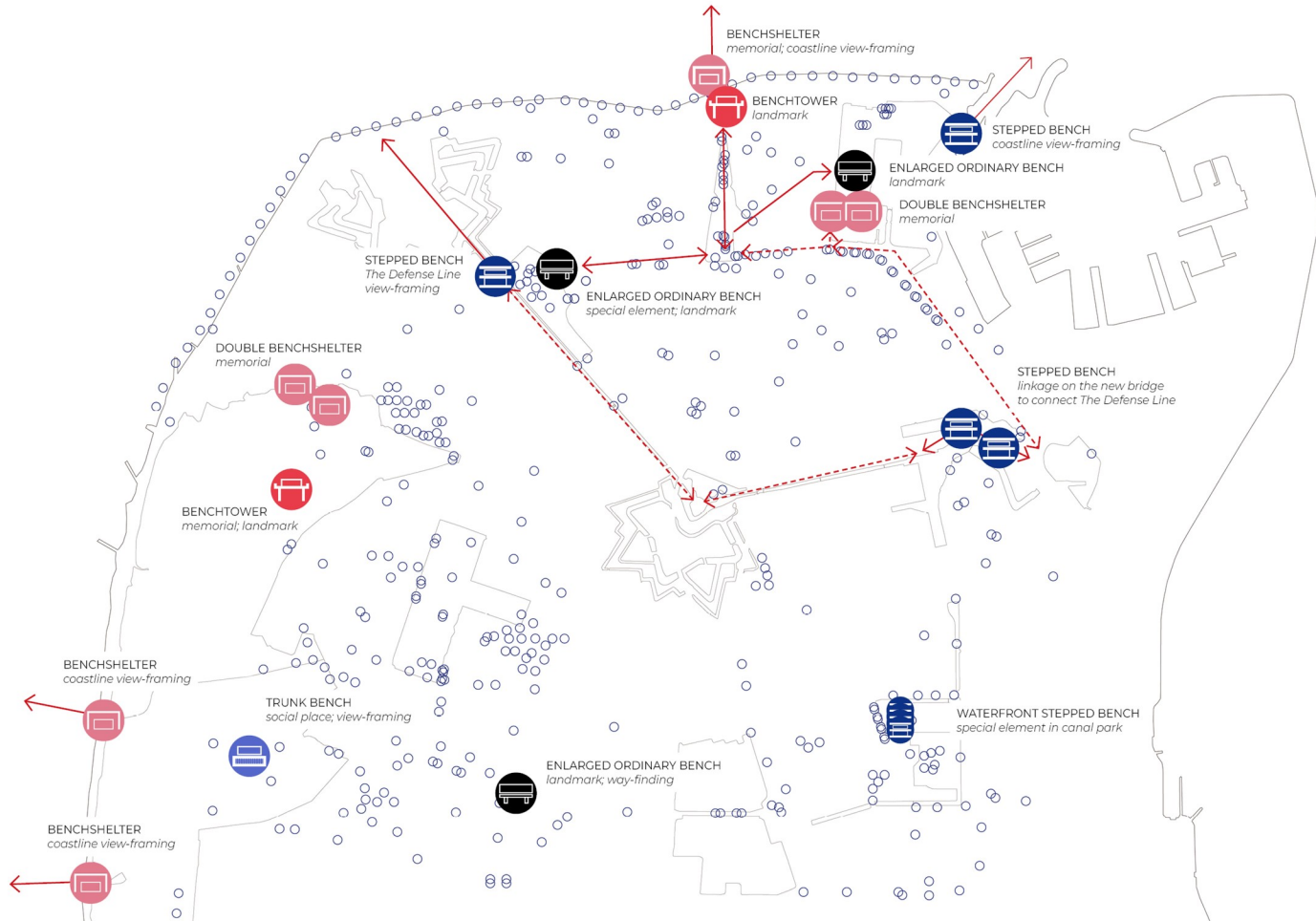
- ▭ buildings
- city roads
- railways



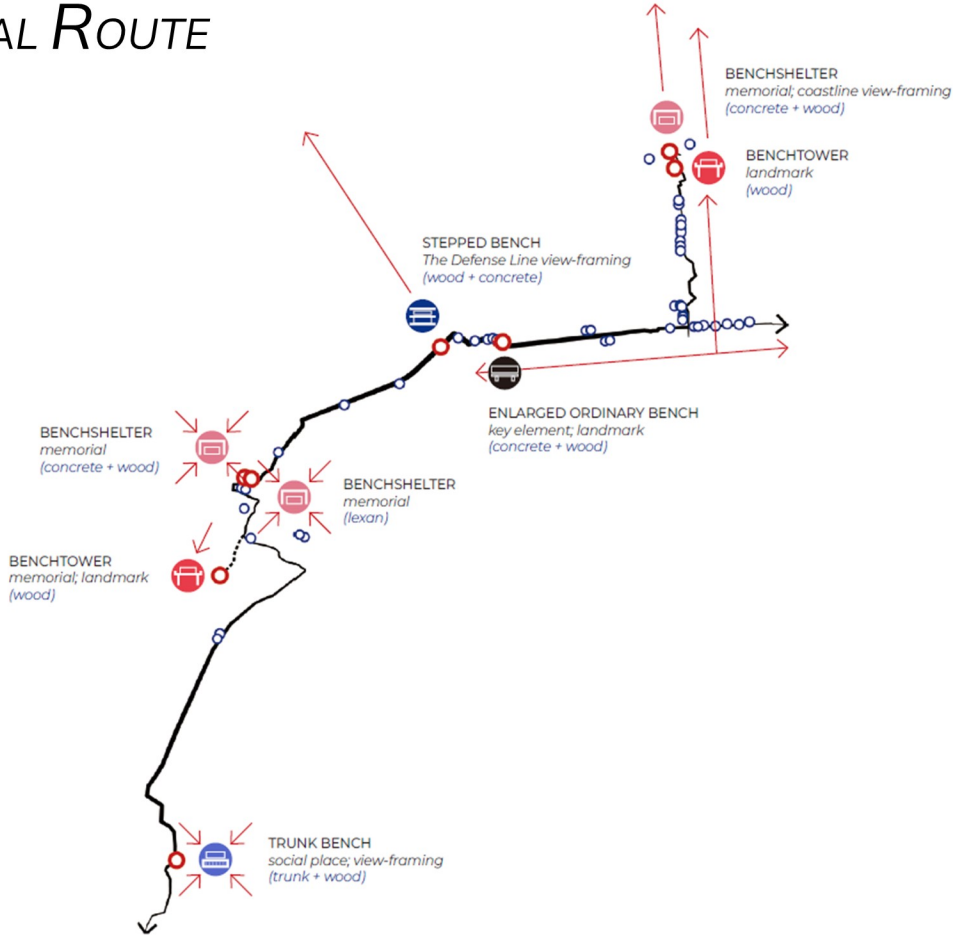
# SIX TYPES OF BENCHES

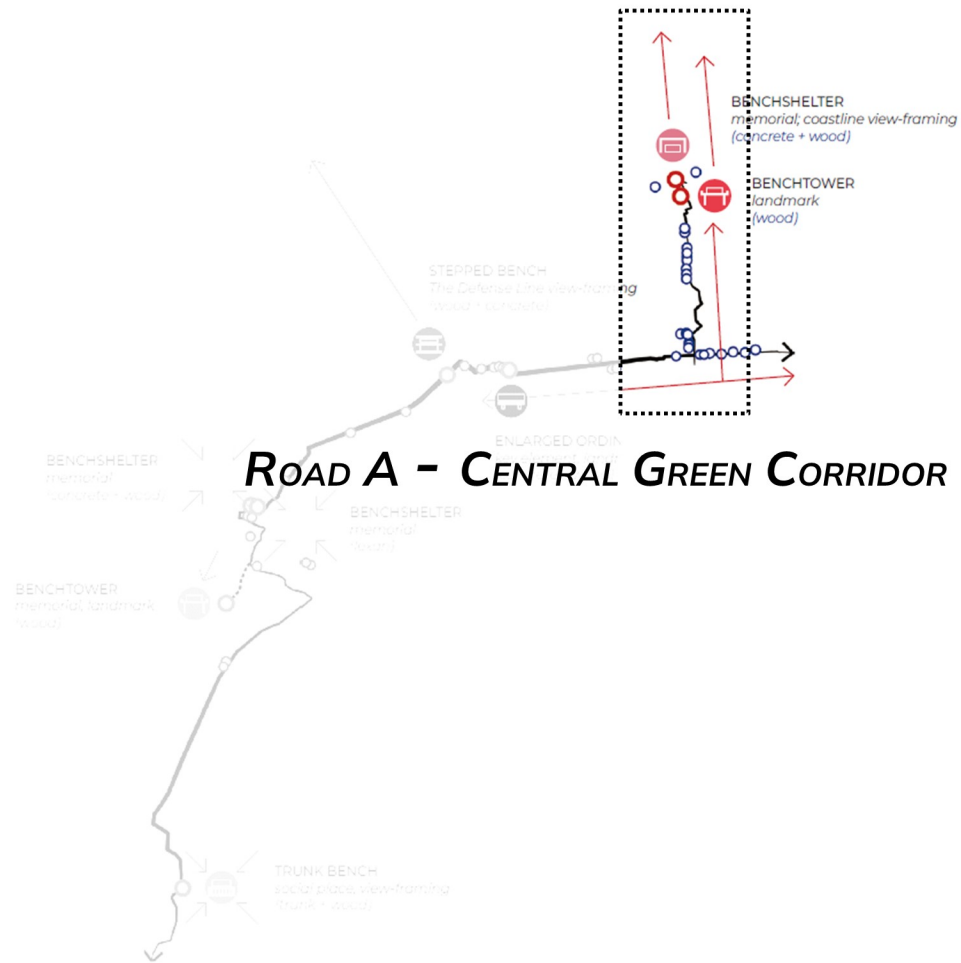
## LEGEND

-  ordinary bench
-  enlarged ordinary bench
-  benchtower
-  stepped bench
-  benchshelter
-  trunk bench

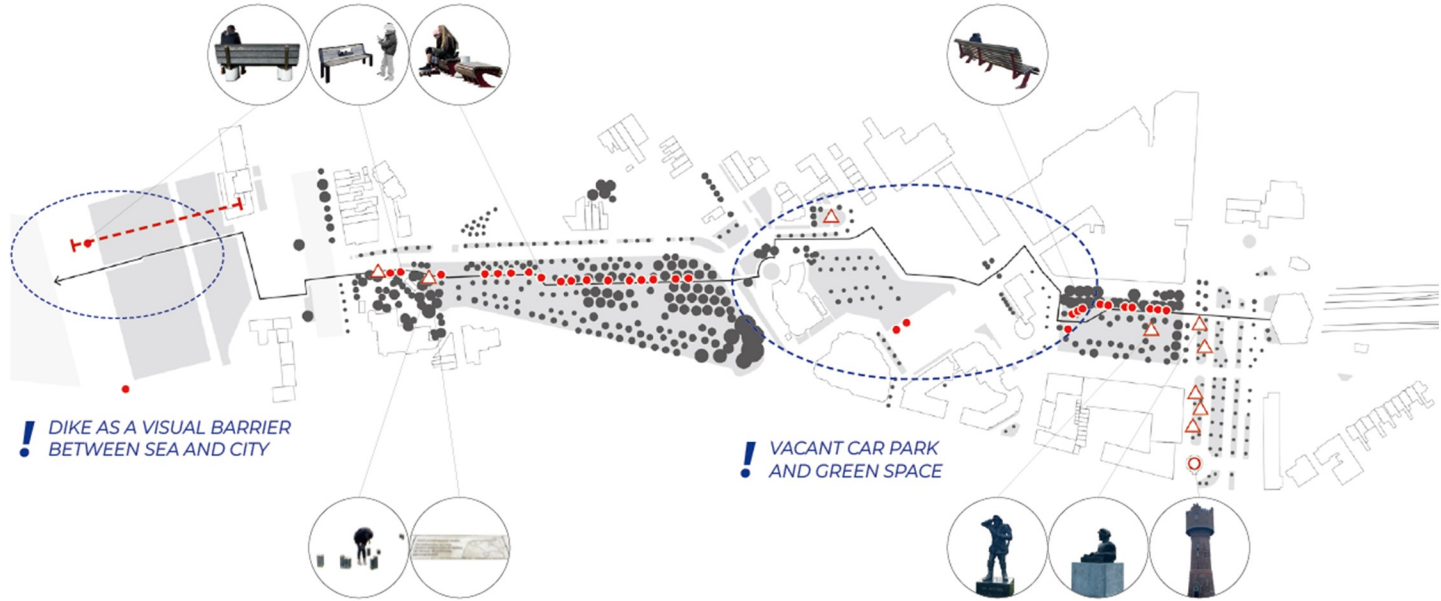


# PRIMARY MEMORIAL ROUTE





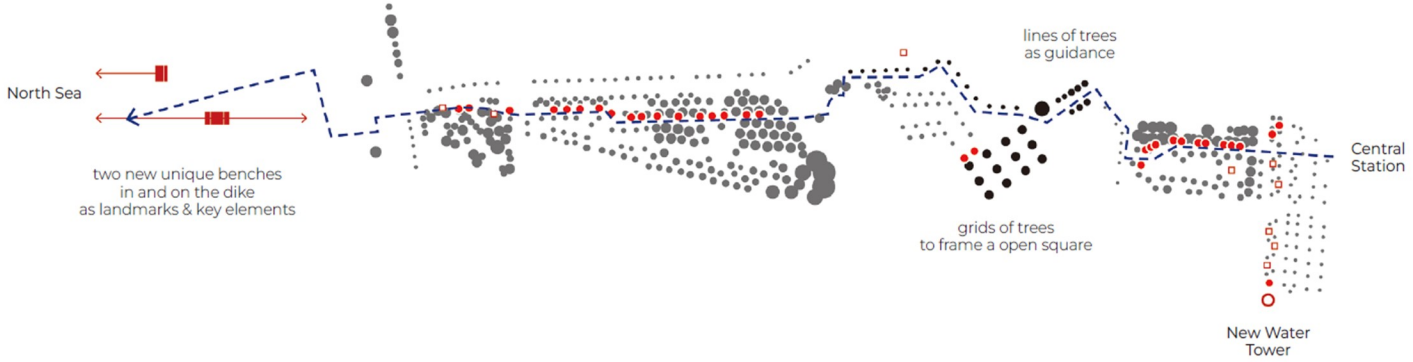




! DIKE AS A VISUAL BARRIER  
• BETWEEN SEA AND CITY

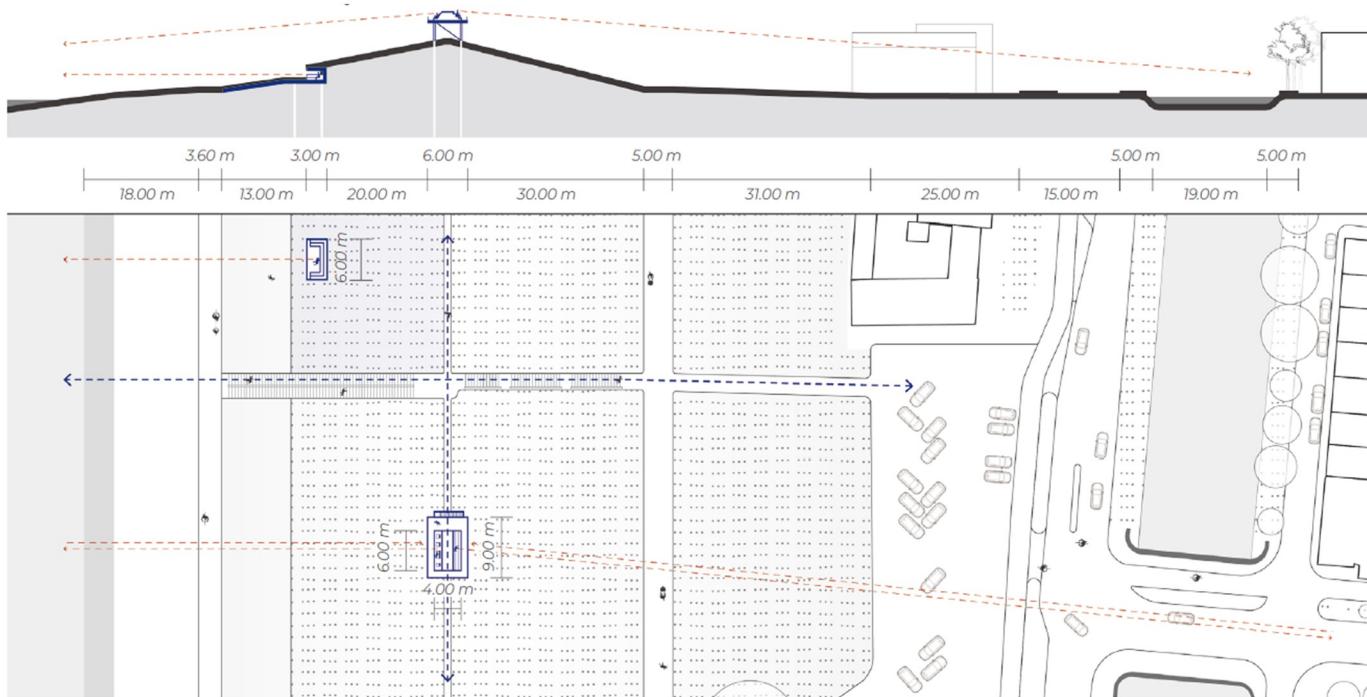
! VACANT CAR PARK  
• AND GREEN SPACE

TO IMPROVE  
THE PHYSICAL & VISUAL  
CONNECTION OF THE  
SOUTH-NORTH CITY AXIS

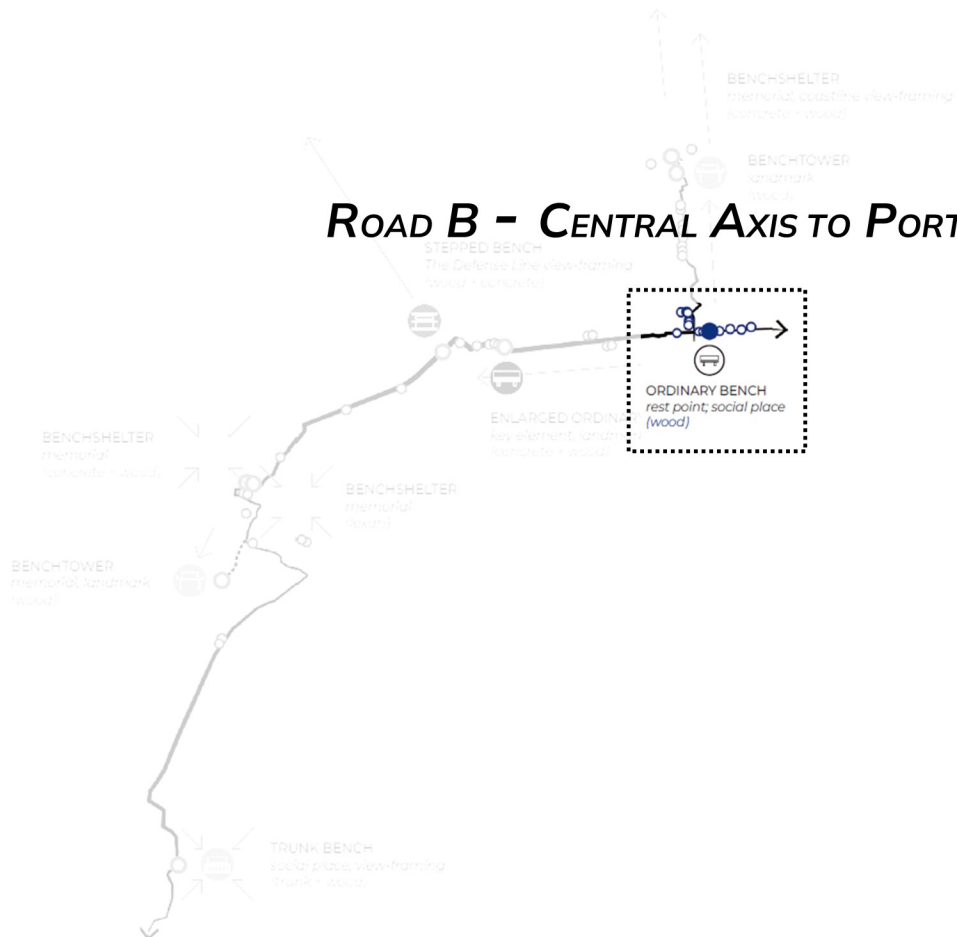


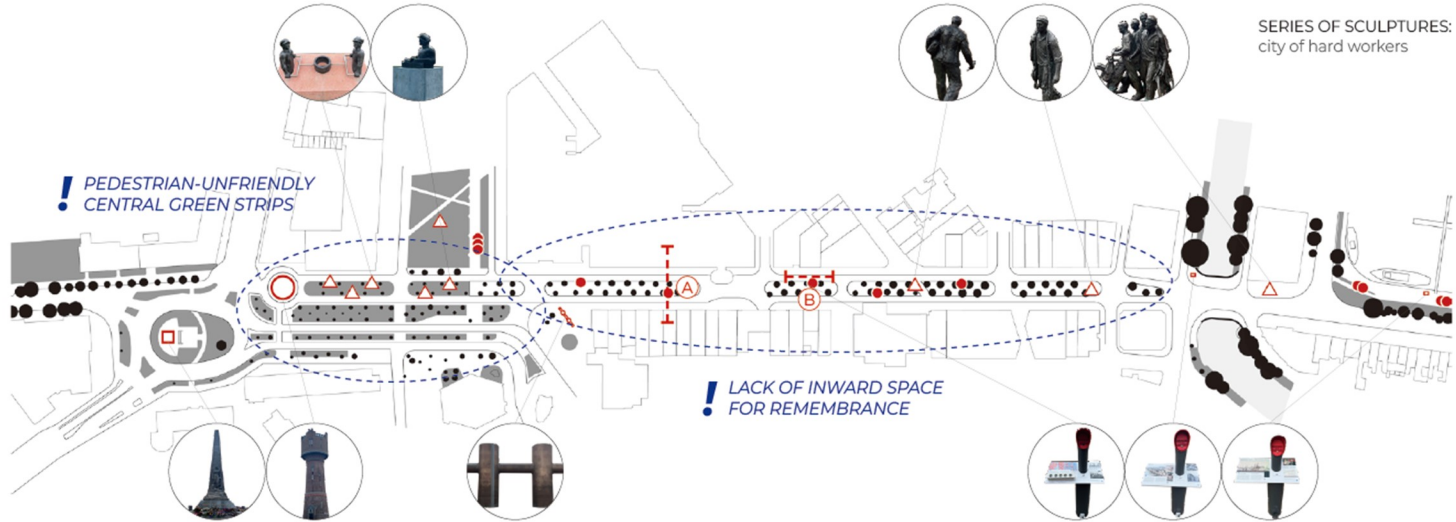
**BENCHSHELTER**  
*memorial; coastline view-framing*  
(concrete + wood)

**BENCHTOWER**  
*landmark*  
(wood)

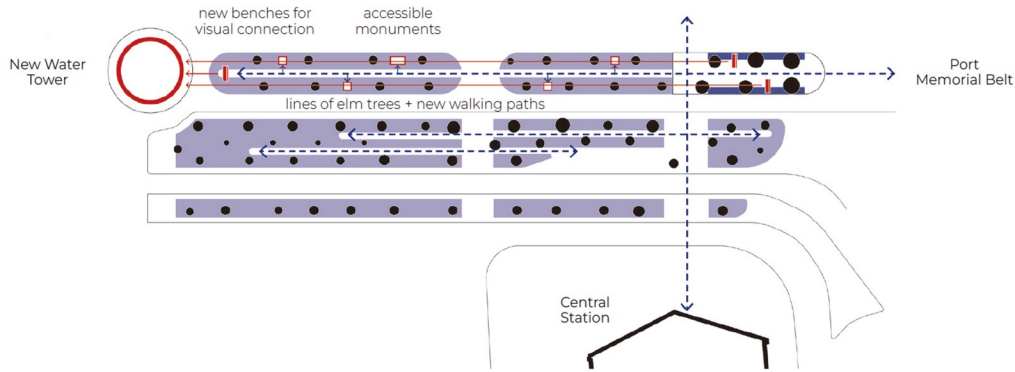


# ROAD B - CENTRAL AXIS TO PORT

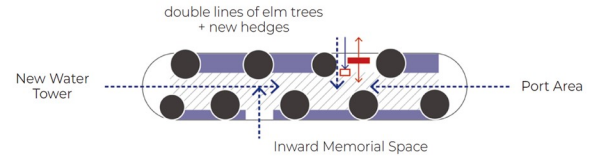


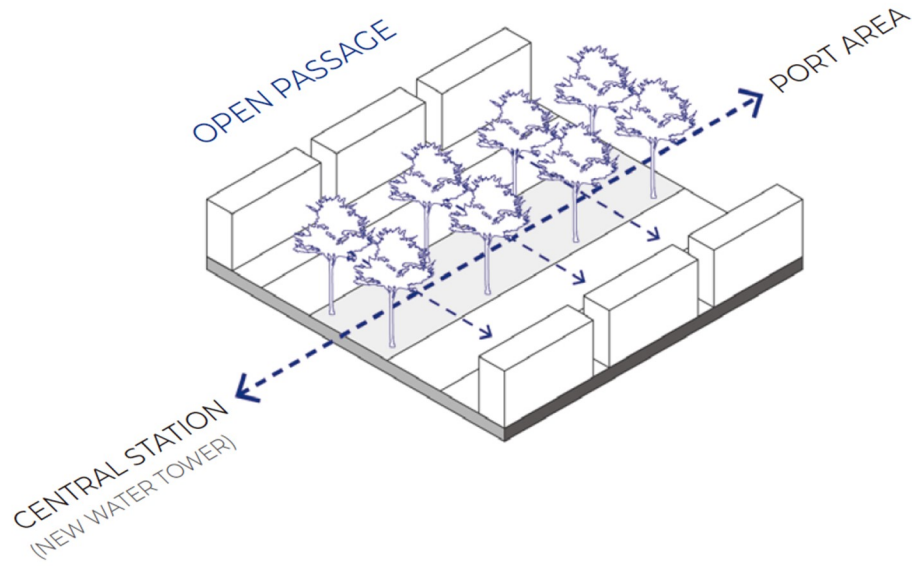


← →  
TO ENHANCE  
THE EAST-WEST CITY AXIS

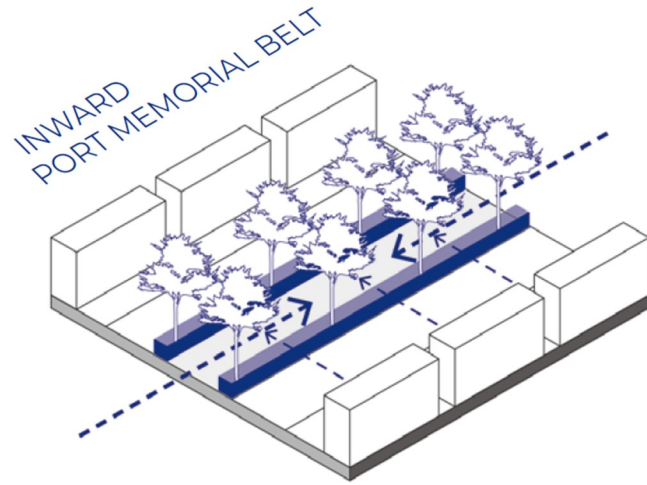


→ ←  
TO FRAME THE  
PORT MEMORIAL BELT



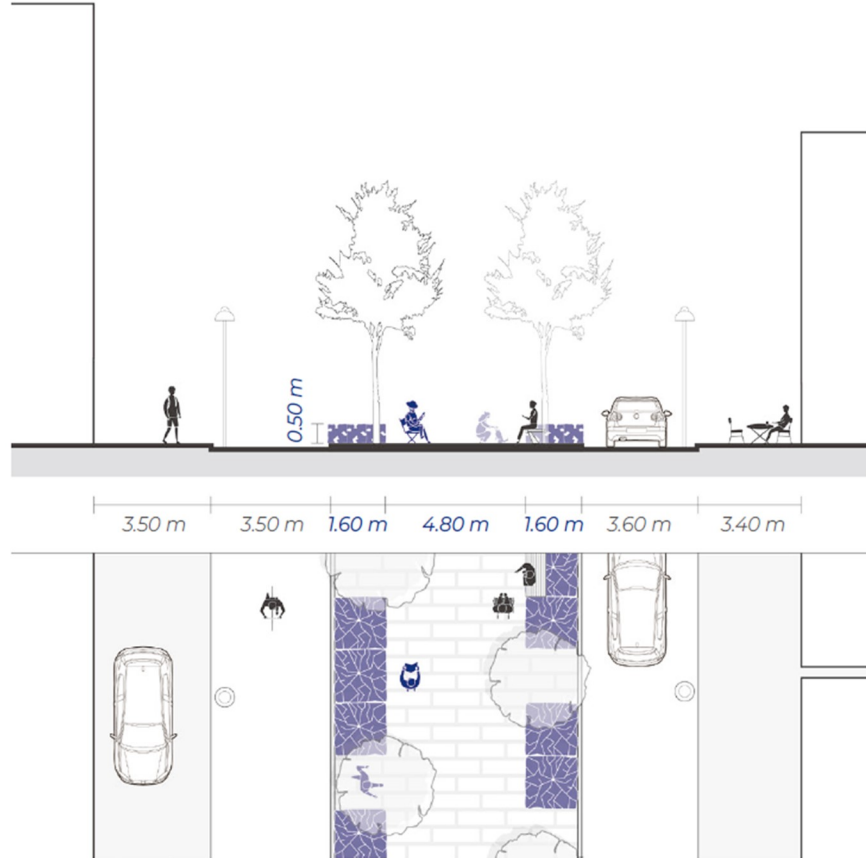


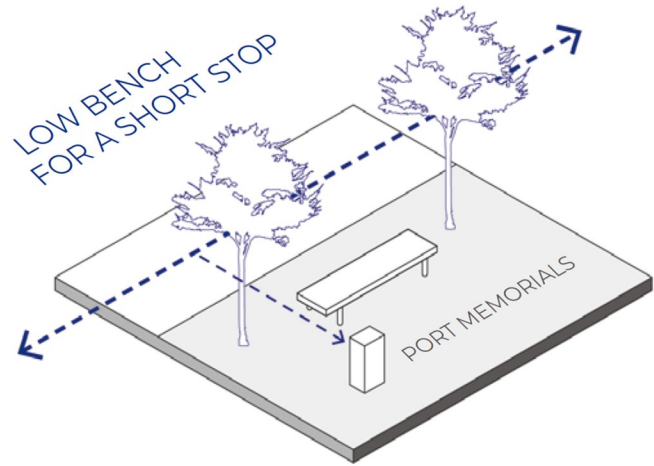
AFTER



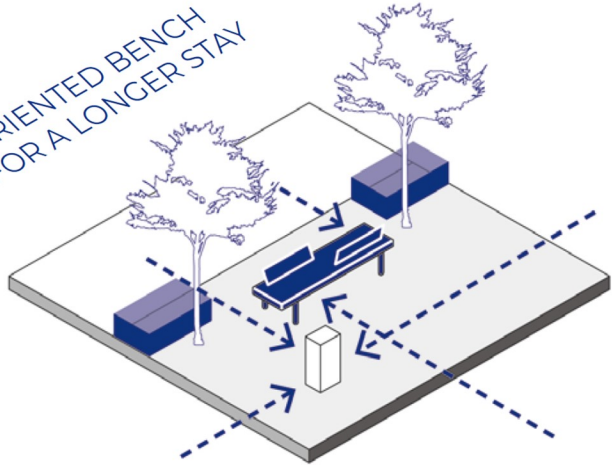


AFTER



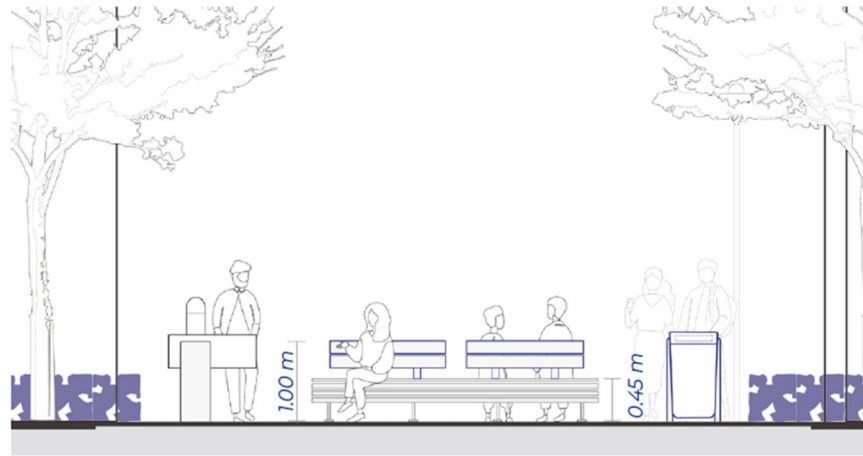


ORIENTED BENCH  
FOR A LONGER STAY

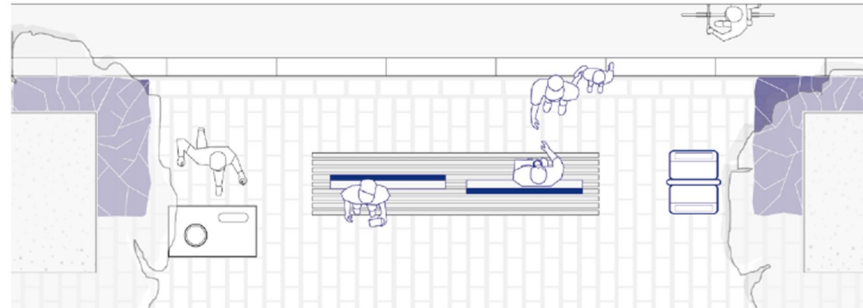




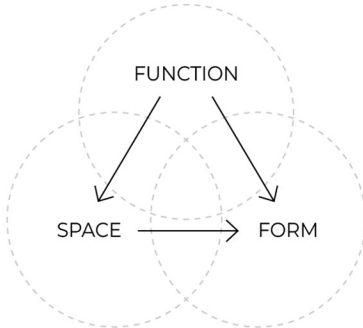
**ORDINARY BENCH**  
*rest point; social place  
(wood)*



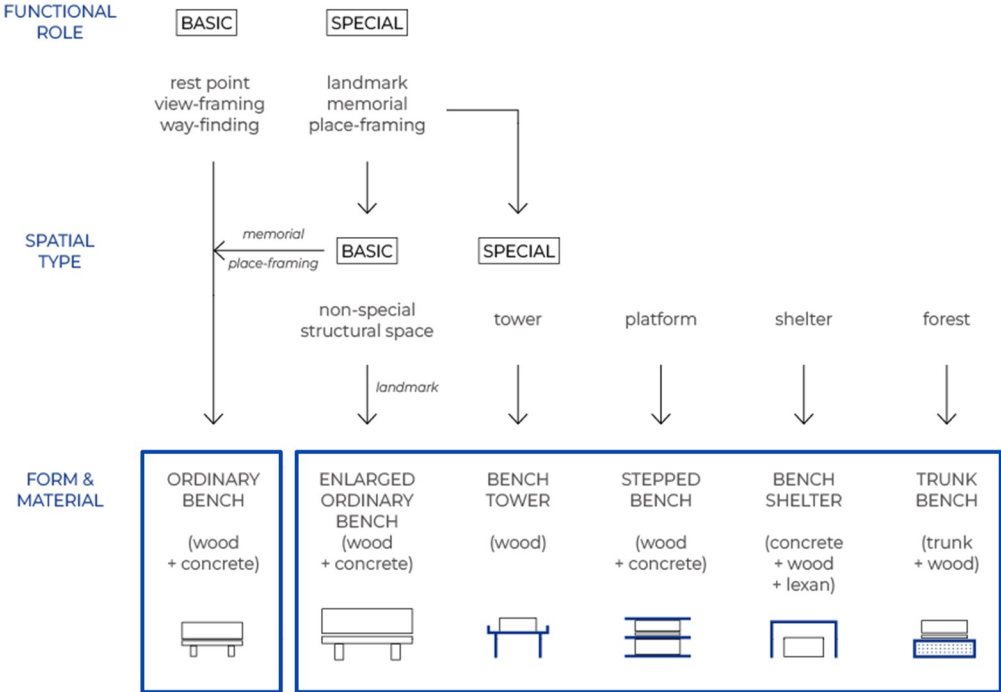
0.80 m 1.00 m 0.60 m 2.80 m 0.65 m 0.70 m 1.00 m



# BENCH DESIGN PRINCIPLE



Triangular Model of Bench Design

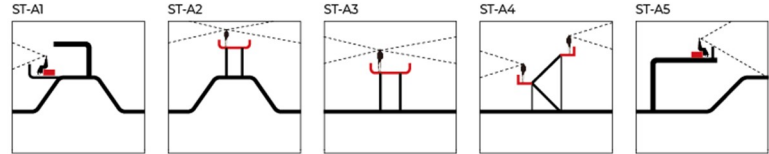
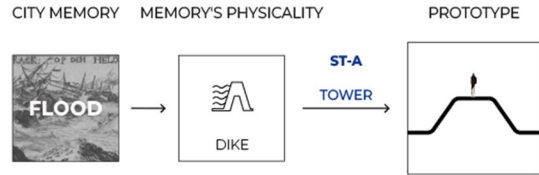


ORDINARY BENCH

SPECIAL BENCH

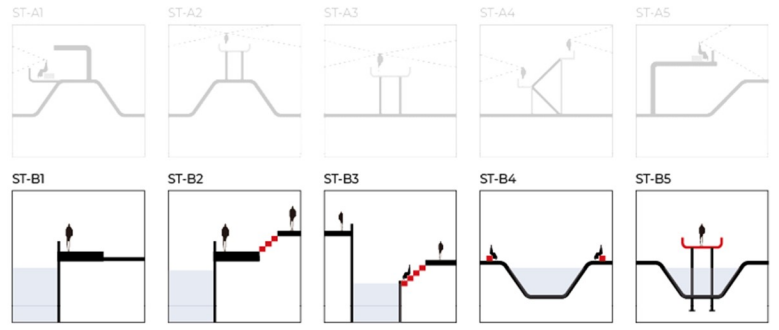
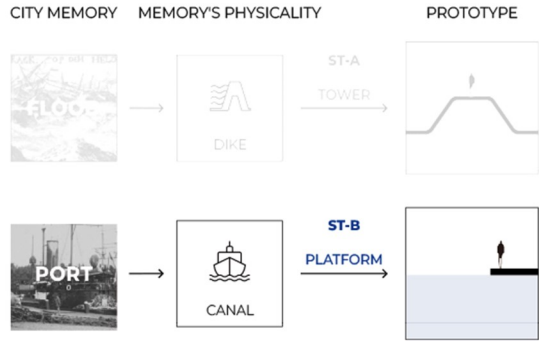


# BENCHTOWER



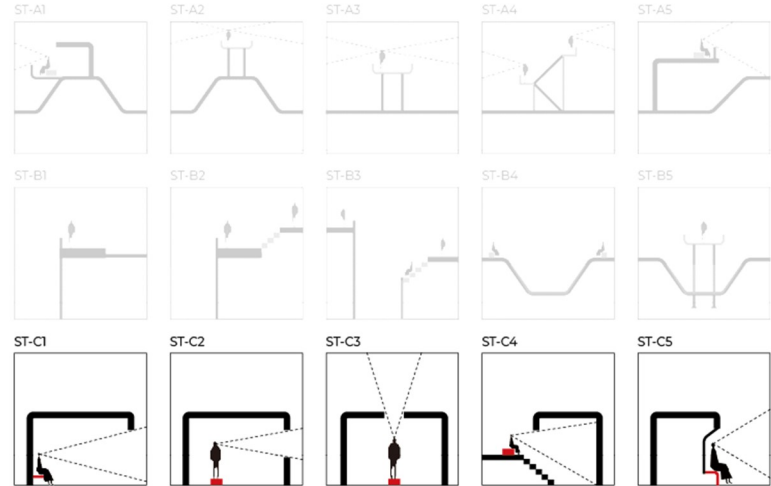
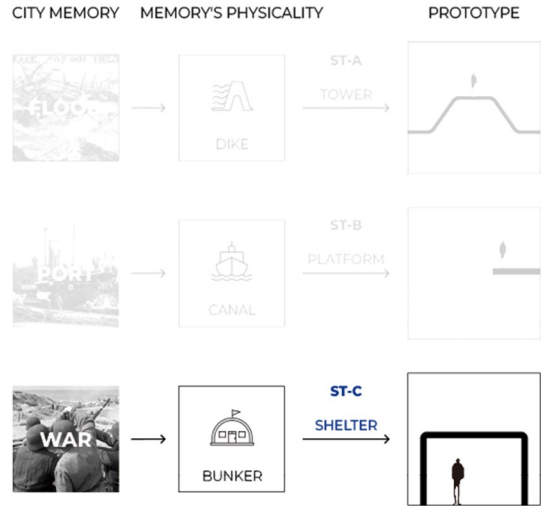


# STEPPED BENCH





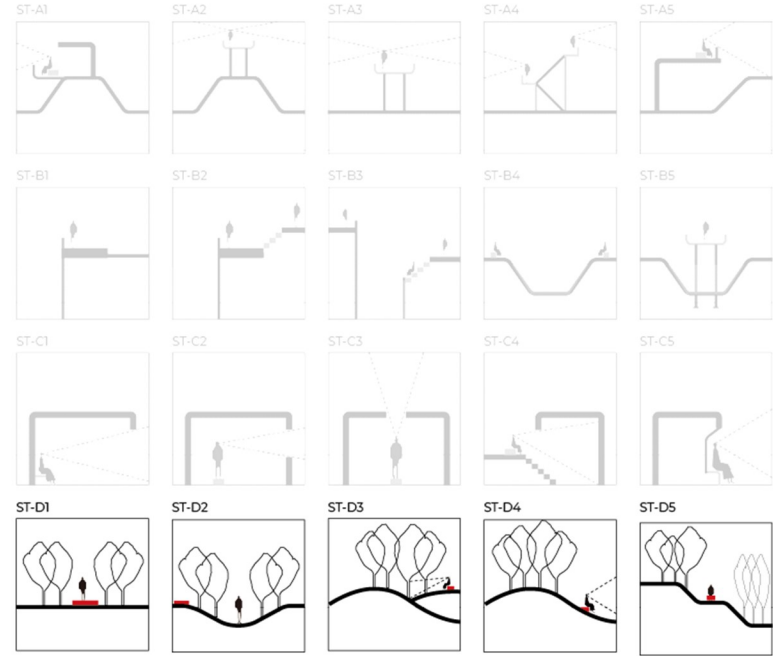
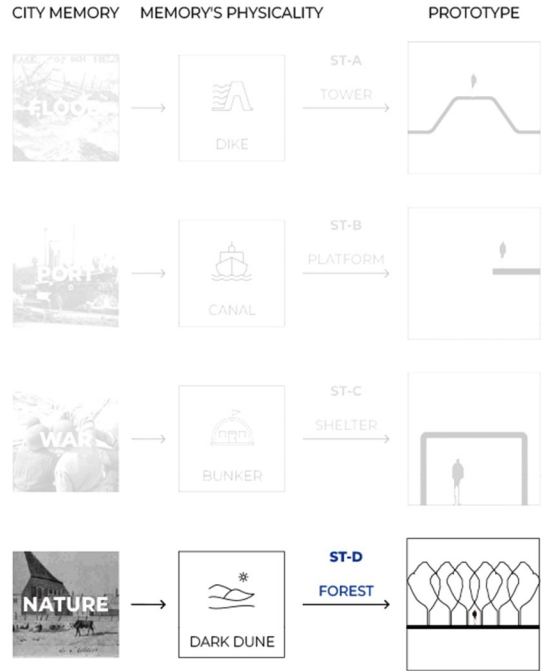
# BENCHSHELTER





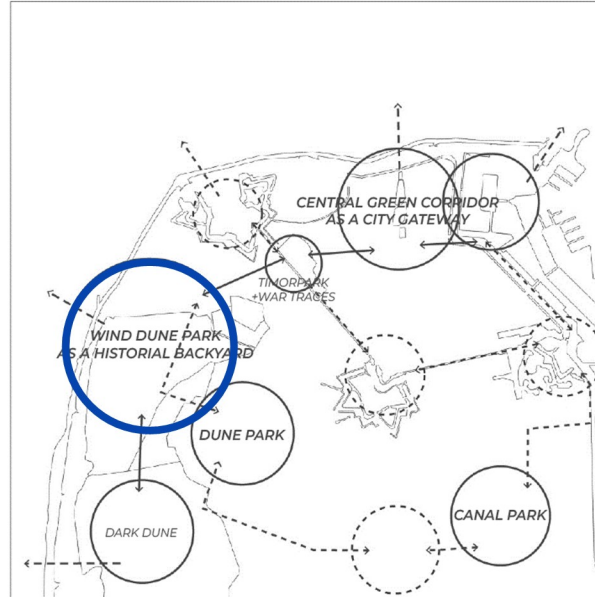


# TRUNK BENCH



*BENCHES AS  
KEY PLAYERS  
IN BENCHSCAPE*

## Wild Dune Park



# DUNE MEMORY



1878  
Water Extraction



1945  
Military Use



2006  
Protected Nature Reserve

# *DUNE MEMORY'S PHYSICALITY*



*Abundant Biodiversity*  
(By Daniel Mulder, 2021)



*Cultural Ruins*

# INTERTWINED *M*EMORY'S *P*HYSICALITIES



*Abundant Biodiversity*

*Cultural Ruins*

# INTERTWINED *M*EMORY'S *P*HYSICALITIES

BEFORE

*Water Extraction*



*Bomb Crater*



*Historical Bunker*



AFTER

*Ditch Trace on Dune*



*Ecological Pool*

(By Kata Karáth, 2017)



*Sand Accumulation*

+

*Human Interaction*



# PROPOSAL: HISTORICAL BACKYARD

## LEGEND

### Memorial

- memorial area
- ⊕ remnant
- ▲ monument
- ⊞ memorial building

### Memorial Route

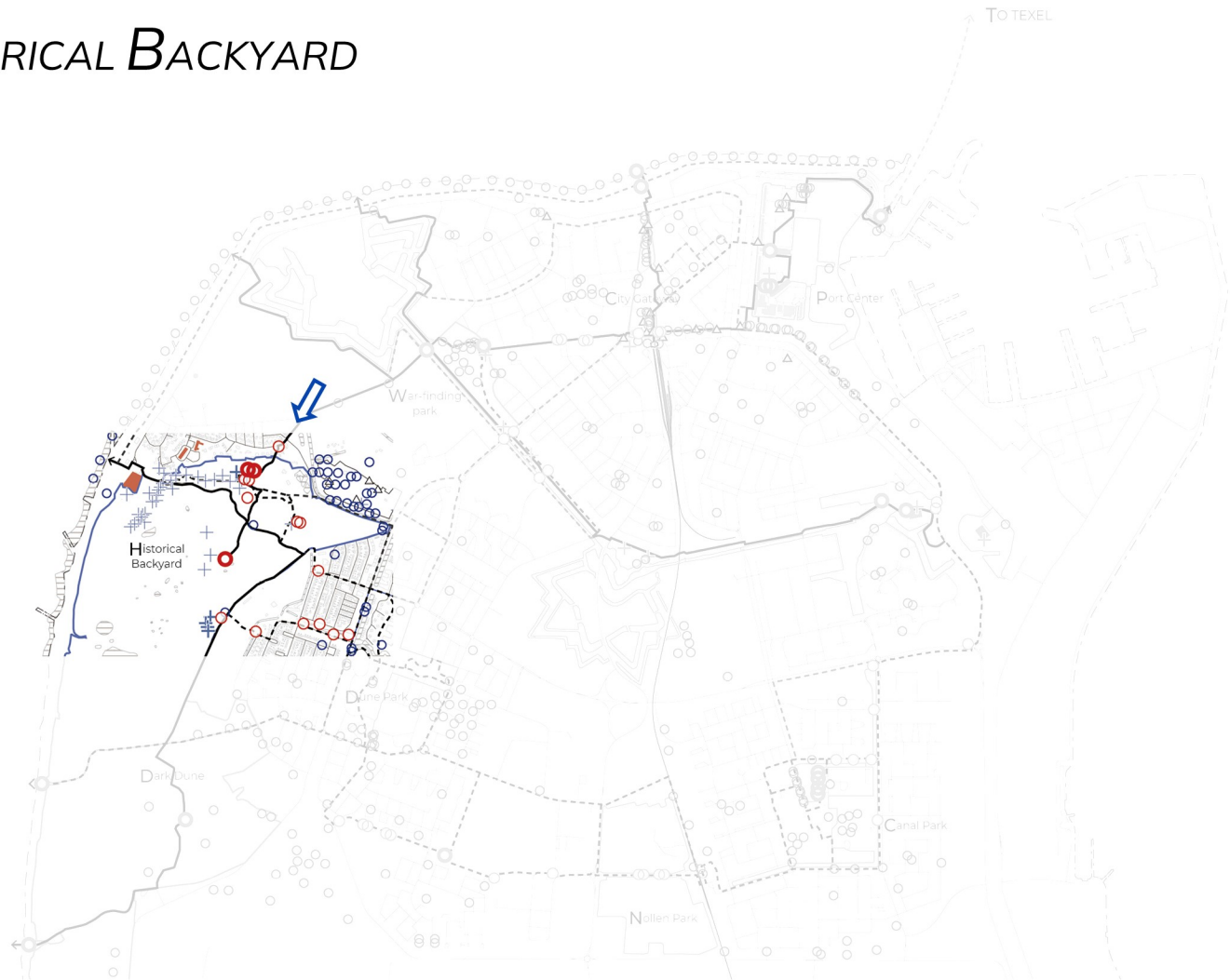
- primary memorial route
- - - secondary memorial route

### Bench

- existing ordinary bench
- new ordinary bench
- new special bench

### Other Elements

- buildings
- city roads
- railways





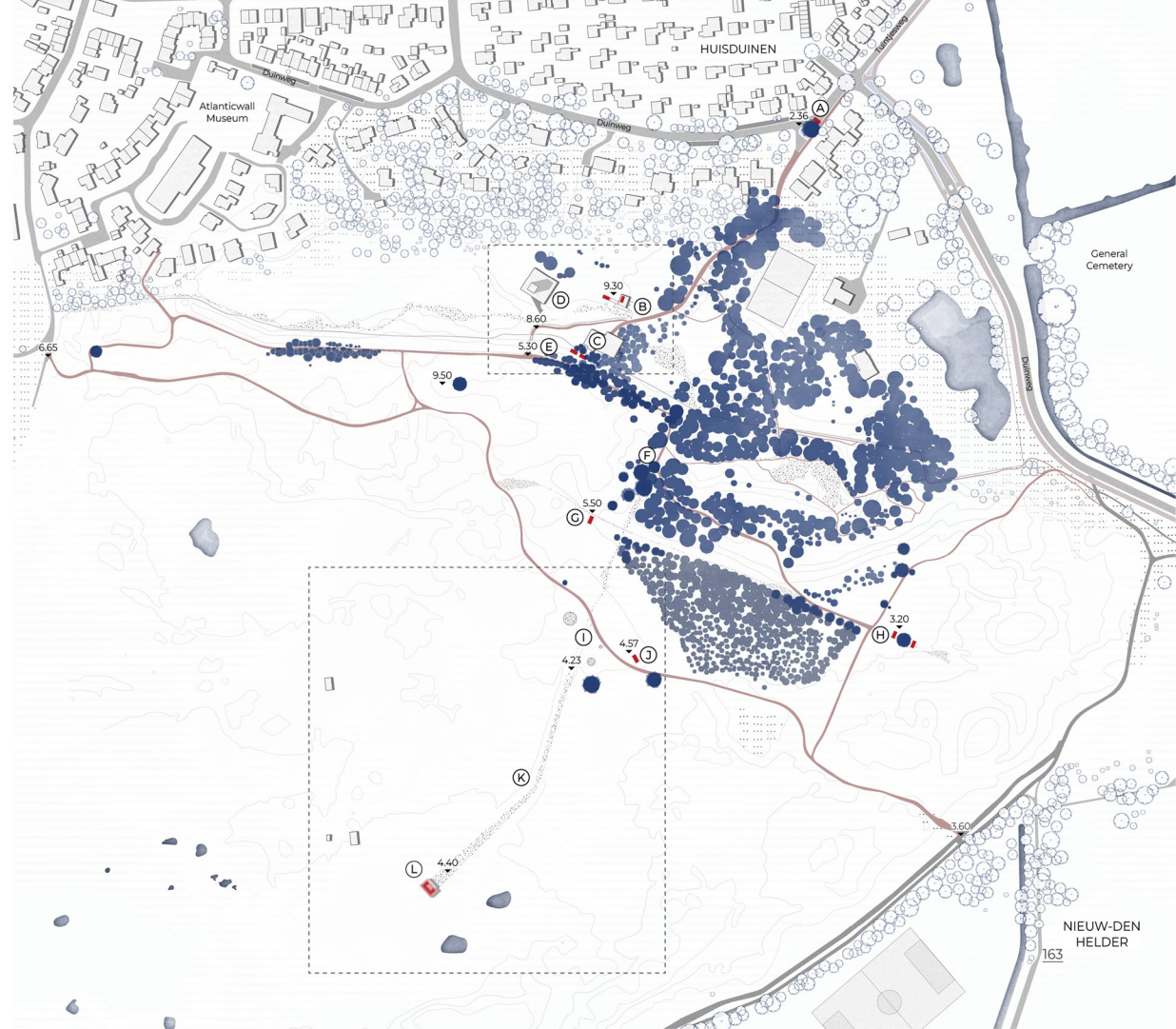
# OVERVIEW OF HISTORICAL BACKYARD

## NODE LEGEND

- A pine tree guide
- B historical shelter
- C concrete rooftop
- D Kroontjesbunker
- E downstairs tree gate
- F open intersection
- G highpoint bench
- H two lowpoint benches
- I artificial bomb crater
- J old bench
- K greenery ditch trace
- L wooden benchtower

## ELEMENT LEGEND

- bench
- new tree
- existing tree
- outside tree
- building
- water
- city road
- walking path (dune)
- walking path
- sandy path
- contour line (2m)

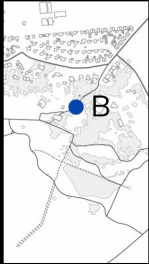


NIEUW-DEN  
HELDER

163

*WALK* INTO  
*THE HISTORICAL BACKYARD  
IN DEN HELDER*

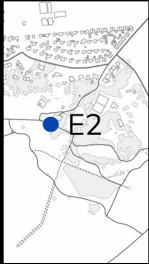


















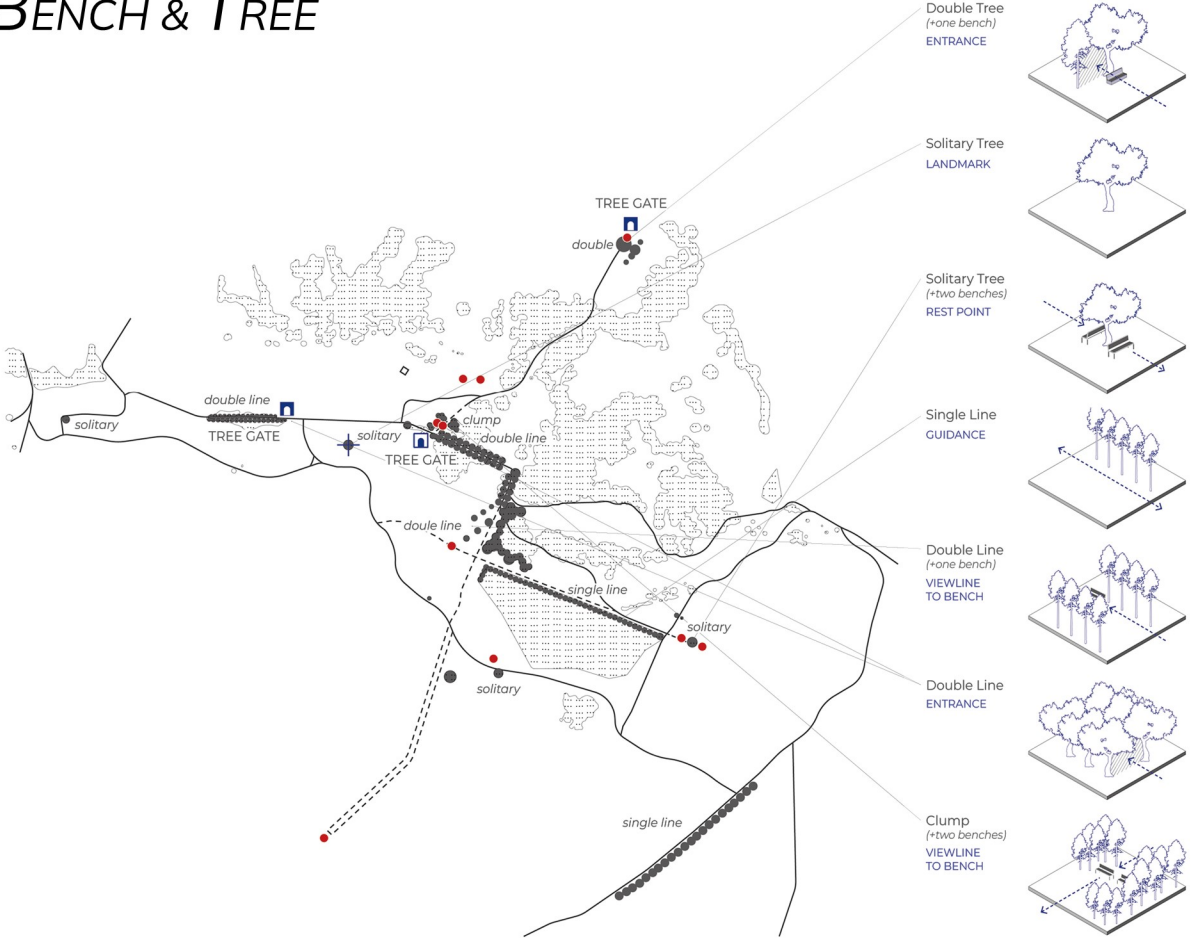








# COMPOSITION: *BENCH & TREE*



**LEGEND**

- bench
- tree
- walking path
- sandy path
- tree groups
- tree gate

*Can Everyone Perceive This Conceived Benchscape?  
What benchstory will happen here?*



MAINTAINERS



VISITORS



EXPLORERS



TEENAGERS



# PERCEIVED BENCHSCAPE

## Node F – Open Intersection



Maintainer



Visitor



Explorer



Teenager

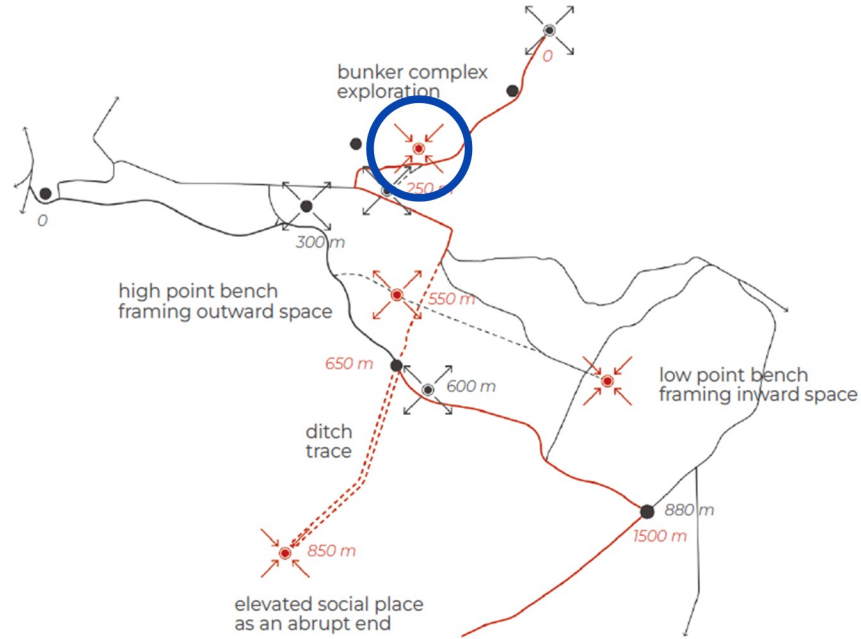
*BENCH AS  
A LIVING MEMORIAL  
IN BENCHSCAPE*

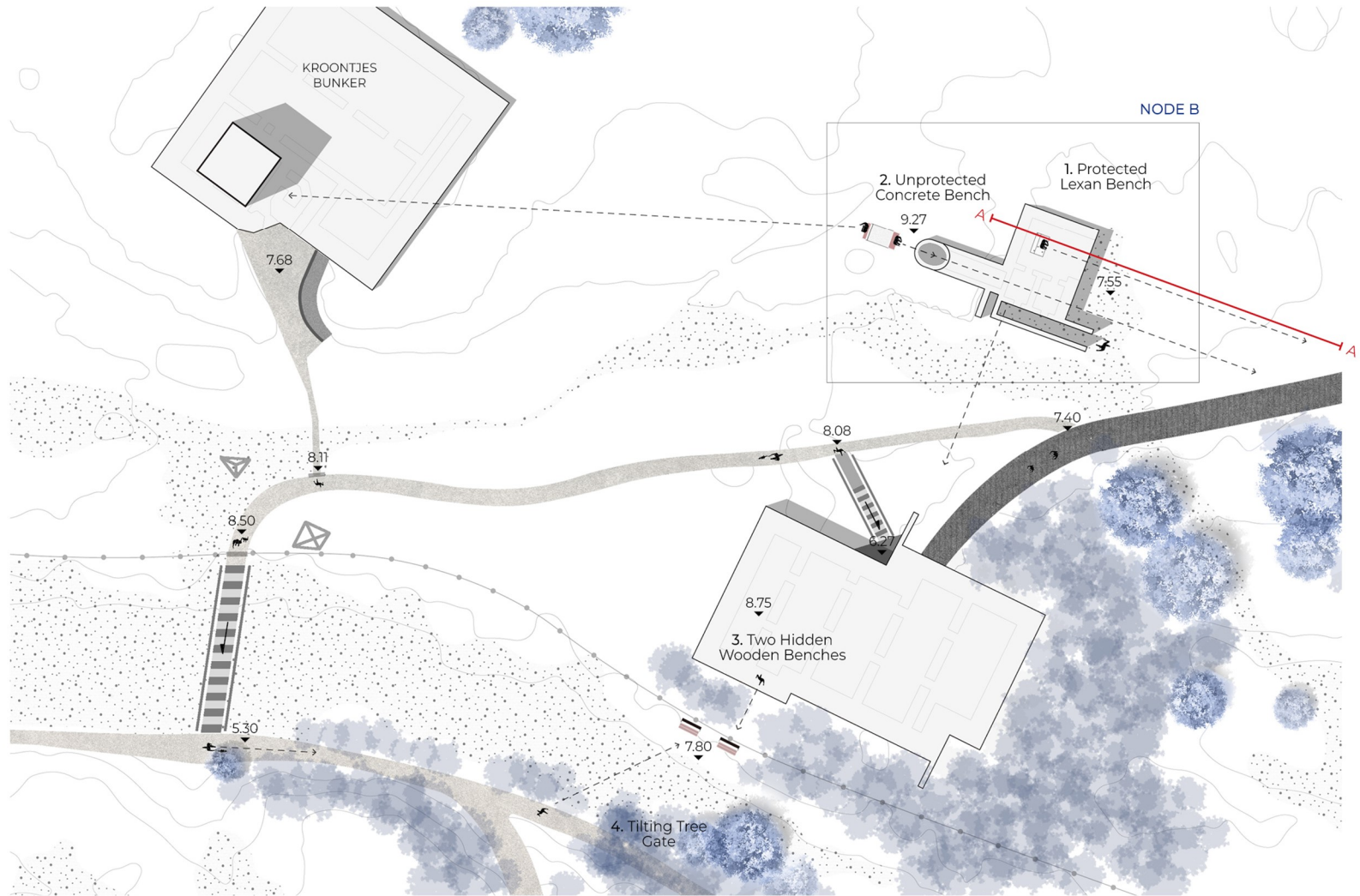
## NODE B - *Historical Shelter*



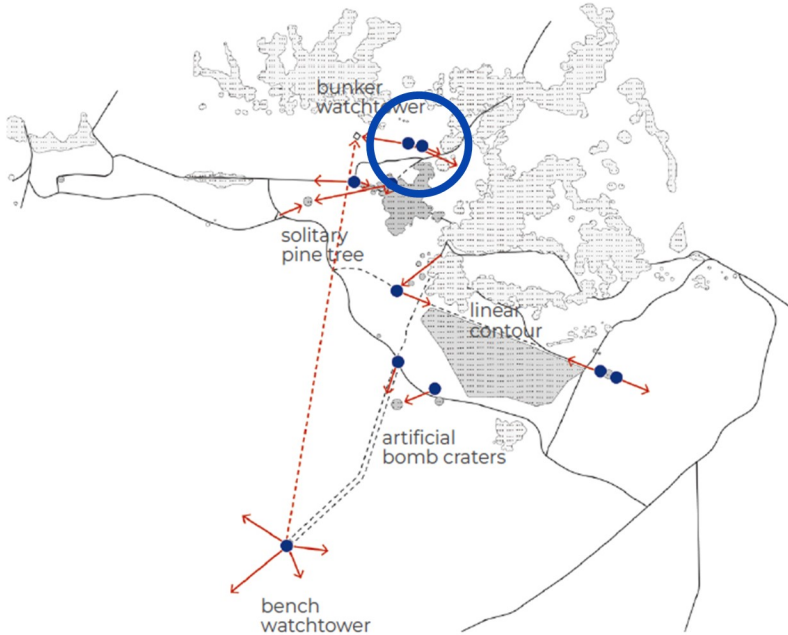
# ROUTING RELATION

Moving, Stopping, Staying

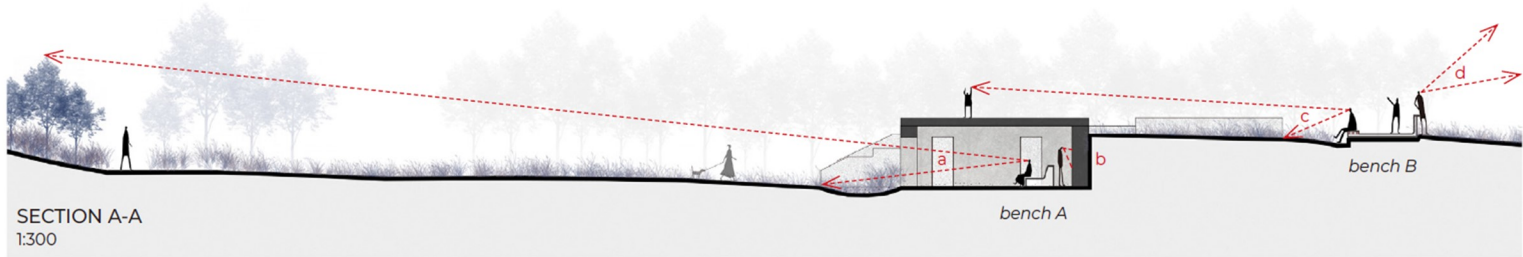




# VISUAL RELATION



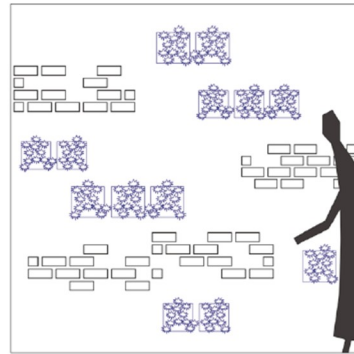
- viewing point
- walking path
- - sandy path
- ... memorial route
- viewline



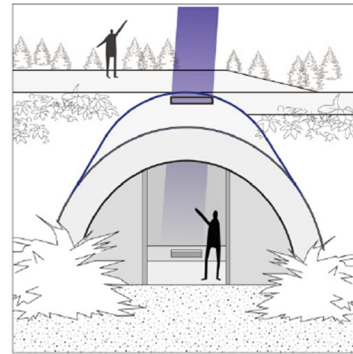
FRAME a - Wild Dune Landscape



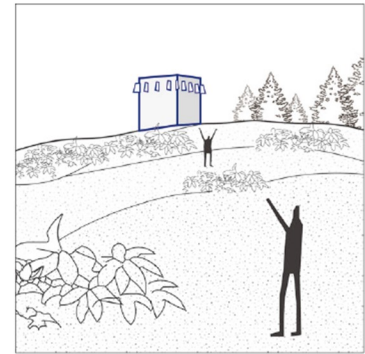
FRAME b - Dilapidated Walls



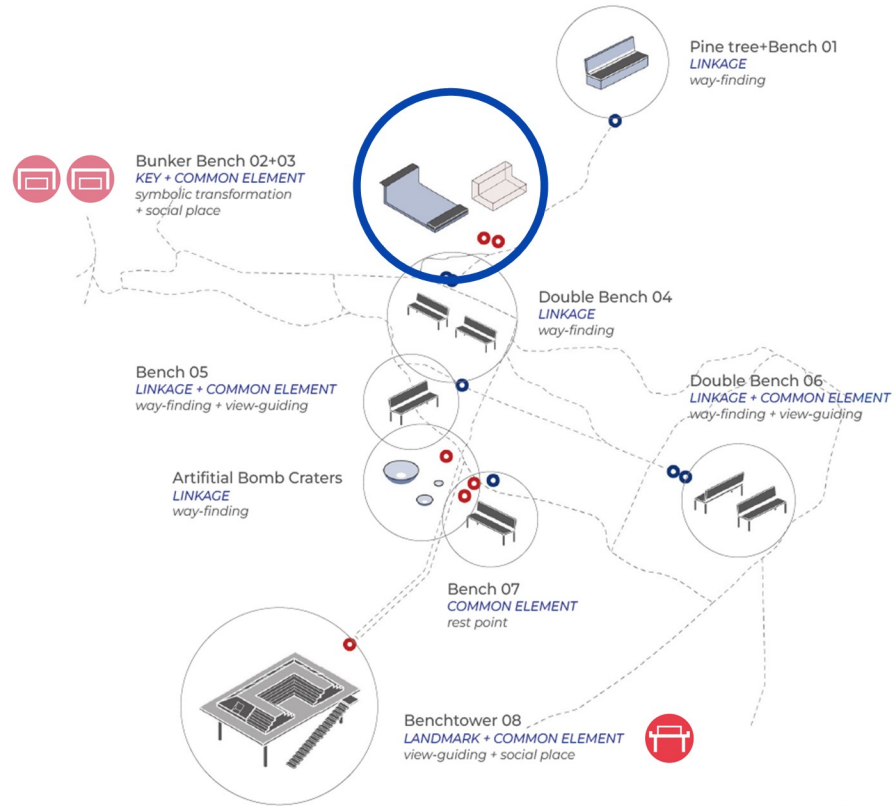
FRAME c - Historical Well



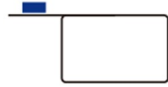
FRAME d - Crown Bunker



# FUNCTIONAL RELATION



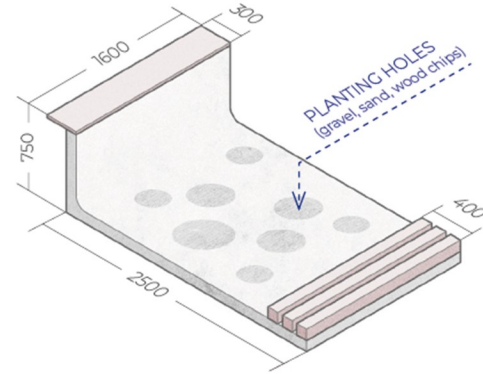




Bench A - outside(roof)

**UNPROTECTED**

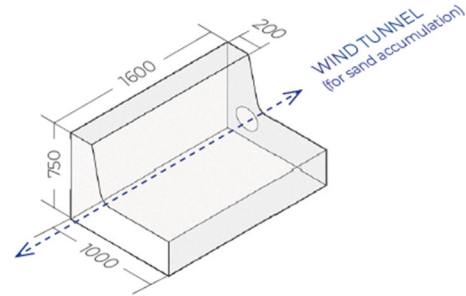
Made of rough concrete and wood  
Shape like a piece of the bunker



Bench B - inside bunker

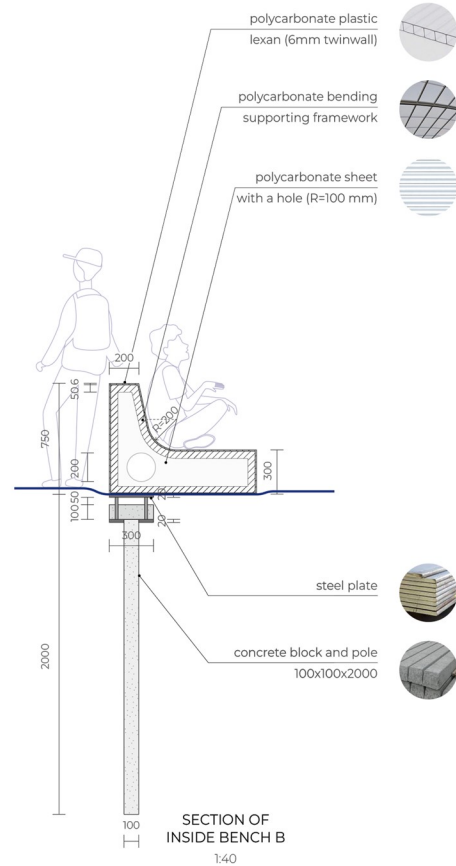
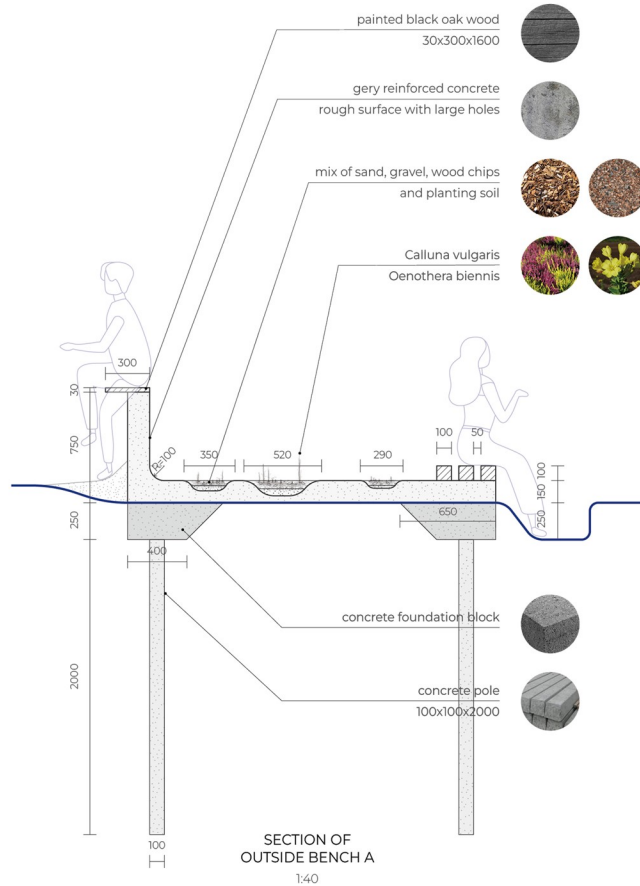
**PROTECTED**

Made of transparent lexan  
Stay with sand accumulation



# MATERIAL RELATION





FRAMED



FRAME



*FRAMING*



*BENCH AS A LIVING MEMORIAL  
THROUGH TIME*

# LEXAN BENCH INSIDE BUNKER

2023



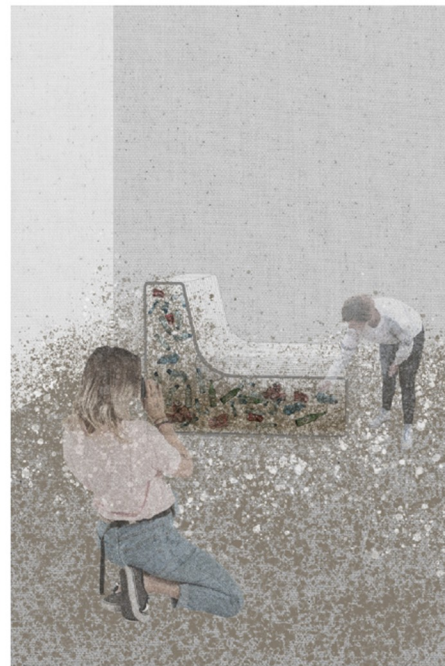
Now - After Bench Installation

2024



One year later - Sand Accumulation

2025



Two years later - Bench as a Container



# CONCRETE *BENCH* OUTSIDE *BUNKER*

2023



Now - After Bench Installation

2024



One year later - Growing Plants

2025

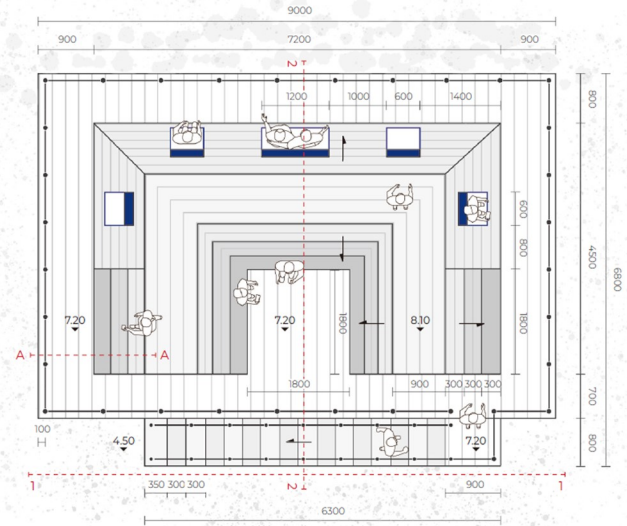


Two years later - Covered by Colorful Flowers

## NODE L - *Wooden Benchtower*

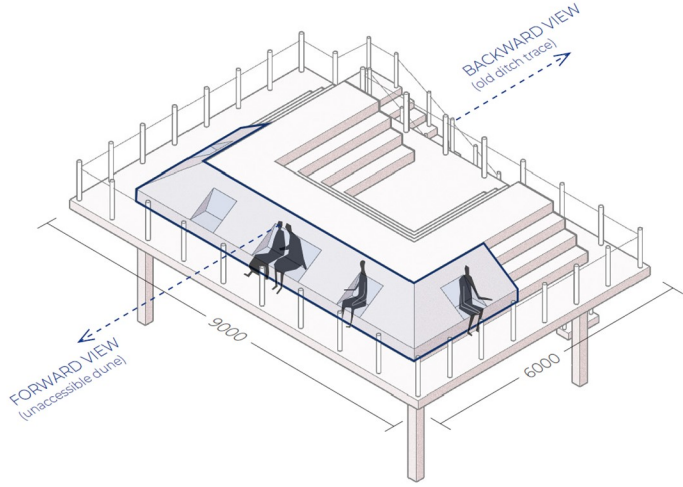


# HIDDEN PATH TO BENCHTOWER



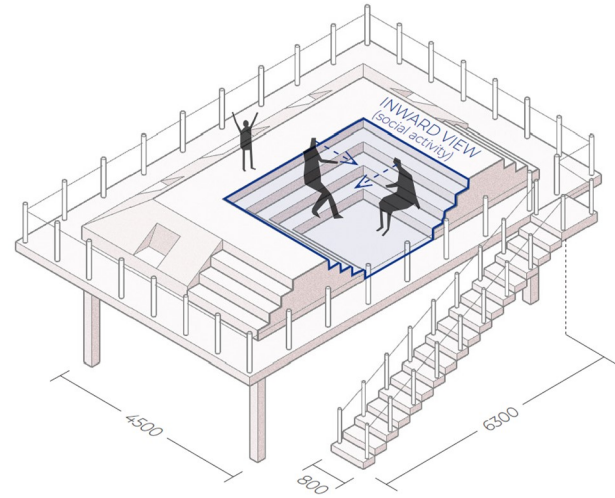
PLAN OF  
ROOF FLOOR  
1:90

# U-SHAPED BENCHTOWER



Outward Personal Space

+



Inward Social Space

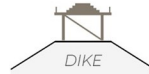
*BENCH AS A LIVING MEMORIAL  
THROUGH SHAPE*

View to Ecological Pools

*Walking through the artificial concrete pits to this benchtower, it is the first time that I noticed that the ecological pools are transformed from the historical bomb craters.*



Reminder of Benchtower on the Dike

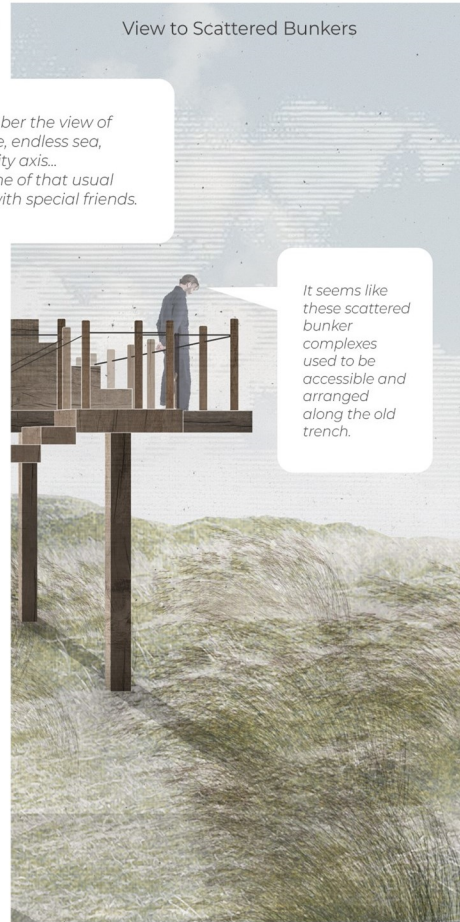


*I still remember the view of the coastline, endless sea, the inland city axis... It reminds me of that usual sunny day with special friends.*



View to Scattered Bunkers

*It seems like these scattered bunker complexes used to be accessible and arranged along the old trench.*



08:00 AM



12:00 PM



20:00 PM



# *CONCLUSION & REFLECTION*

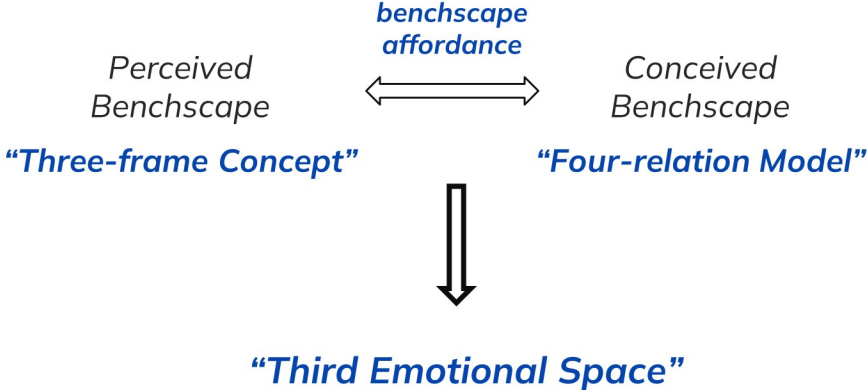


# CONCLUSION

BENCH

*Inconspicuous element*

BENCHSCAPE



MEMORIAL  
BENCHSCAPE

# CONCLUSION

BENCH

*Inconspicuous element*

BENCHSCAPE

*Perceived  
Benchscape*



*Conceived  
Benchscape*

***“Three-frame Concept”***

***“Four-relation Model”***



MEMORIAL  
BENCHSCAPE

***“Third Emotional Space”***

*Framed by Benchscape  
in **Partly Defined** Memorial Places  
(for city + individuals)*

# REFLECTION

General lesson from *MEMORIAL BENCHSCAPE*



INCONSPICUOUS  
ELEMENT LIKE A BENCH



NEW PERSPECTIVES  
OF LANDSCAPE



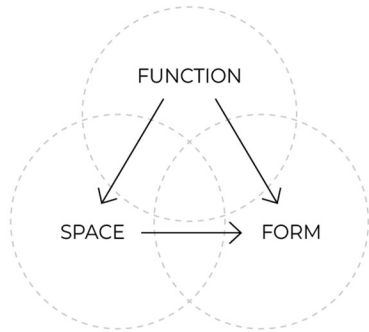
SCALE CONTINUUM  
OF BENCHSCAPE



WIDER  
INTERPRETATION OF  
MEMORIALS

# REFLECTION

General lesson for *OTHER CITIES*



*Triangular Model of Bench Design*

?

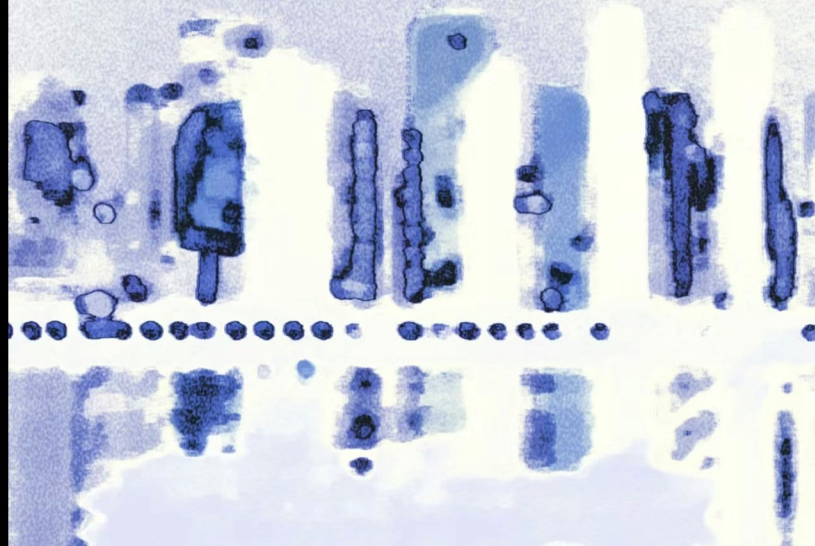
**D**IFFERENT  
INTERPRETATION OF  
MEMORIALS

*What do you see when you are walking on the streets of the city?  
Is it the buildings?  
Or the cars on the road?  
Or a street tree?*

*Every element of the city is a point, large or small, a component of our living environment.*

*Do you realize that many tiny landscape elements are so commonplace that their aesthetics and value are overlooked?*

***BENCH** is one of them.*



*Thanks for Your Attention!*