

# FROM CONCRETE

# T.O. CANOPY

*Creating a Framework for Restorative Forest Typologies in Paris*



# Fascinations

*Forests*



*Living conditions in  
Metropolitan cities*



*Mental Health*







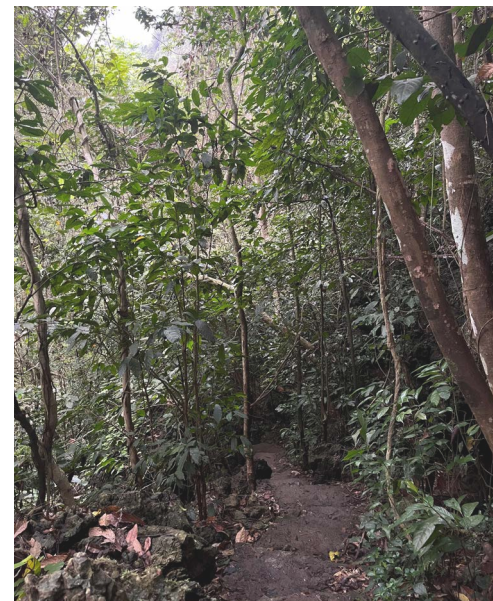
Gopeng, Malaysia



Prokopské a Dalejské údolí, Czechia



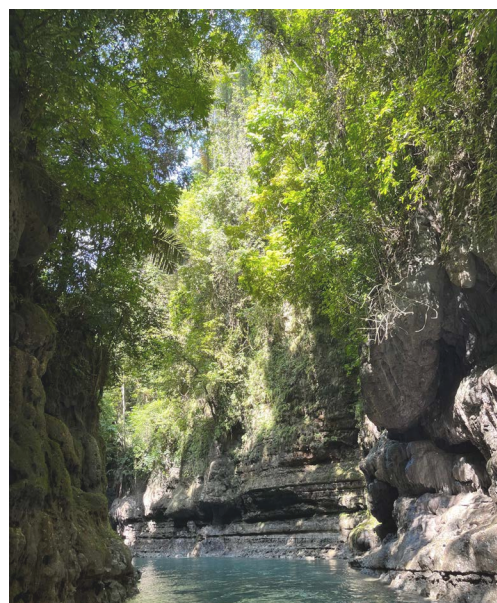
Barchem, Netherlands



Cat Ba, Vietnam



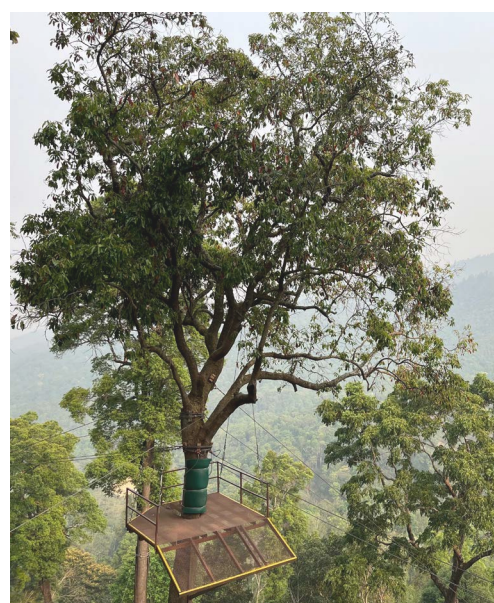
Cat Ba, Vietnam



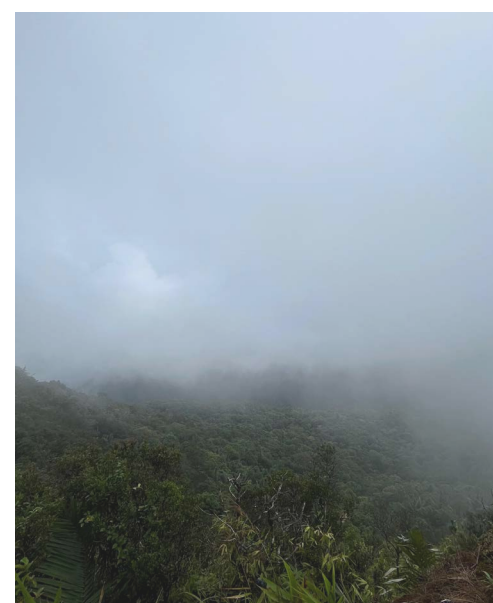
Cimerak, Java



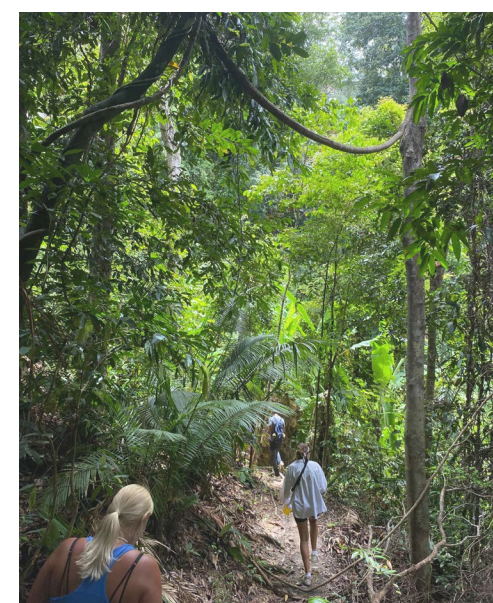
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Soi Saket, Thailand



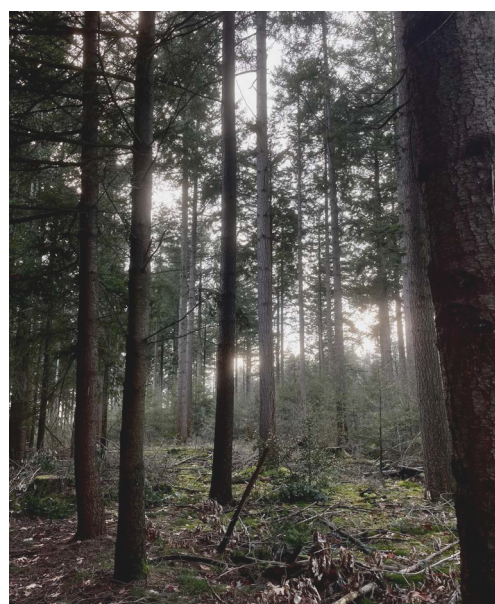
Tuek Chhou, Cambodia



Ko Lanta, Thailand



Tanah Rata, Malaysia



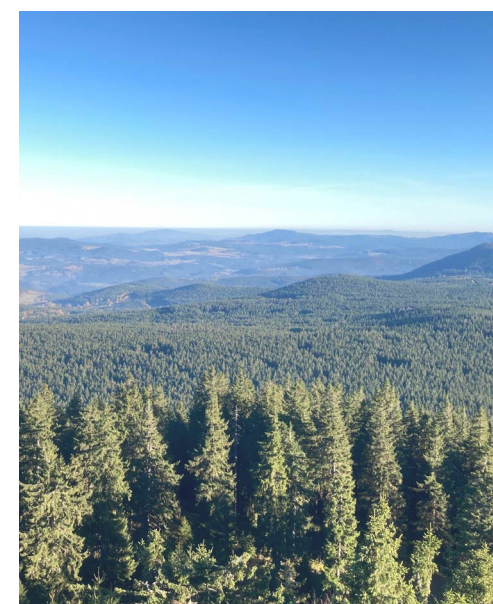
Lochem, Netherlands



Khlong Sok, Thailand



Madeira, Portugal



Buk, Czechia





Paris, France



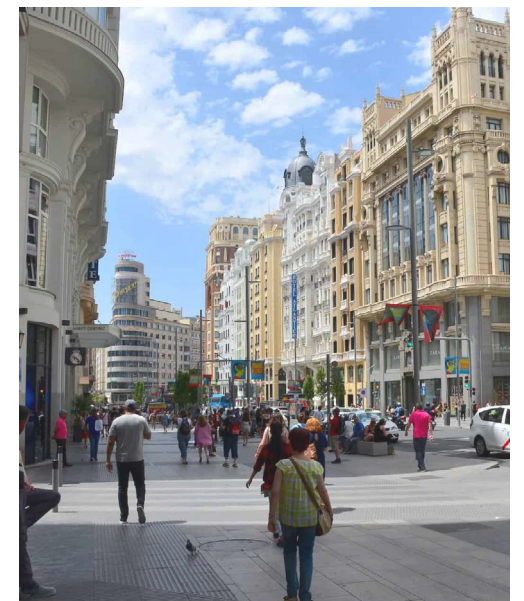
Athene, Greece



Istanbul, Turkey



Napels, Italy



Madrid, Spain



Marseille, France



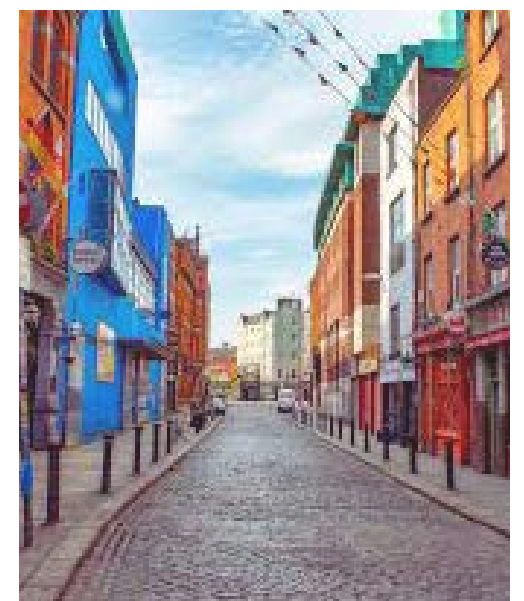
Sofia, Bulgaria



Bucharest, Roemenia



Skopje, Noord Macedonia



Dublin, UK



London, UK



Manchester, UK



Lille, France



le Havre, France



Delft, Netherlands







# Problematisation

- **Rising** urban stress & mental health issues
- Trees planted mainly for **climate & aesthetics**
- Psychological restoration not a **design priority**
- **No tools** for emotion-driven green design
- **Little research** on how different forest types impact mental well-being



# Research Questions

## *Main Research Question*

*“How can a **theory-driven typological framework** for urban forests be designed and implemented in the city of Paris to optimize residents’ **psychological restoration**, while also supporting the city’s **ongoing greening efforts** and contributing to the **reinvention of Paris** as a sustainable, evolving urban space?”*

### **Forest:**

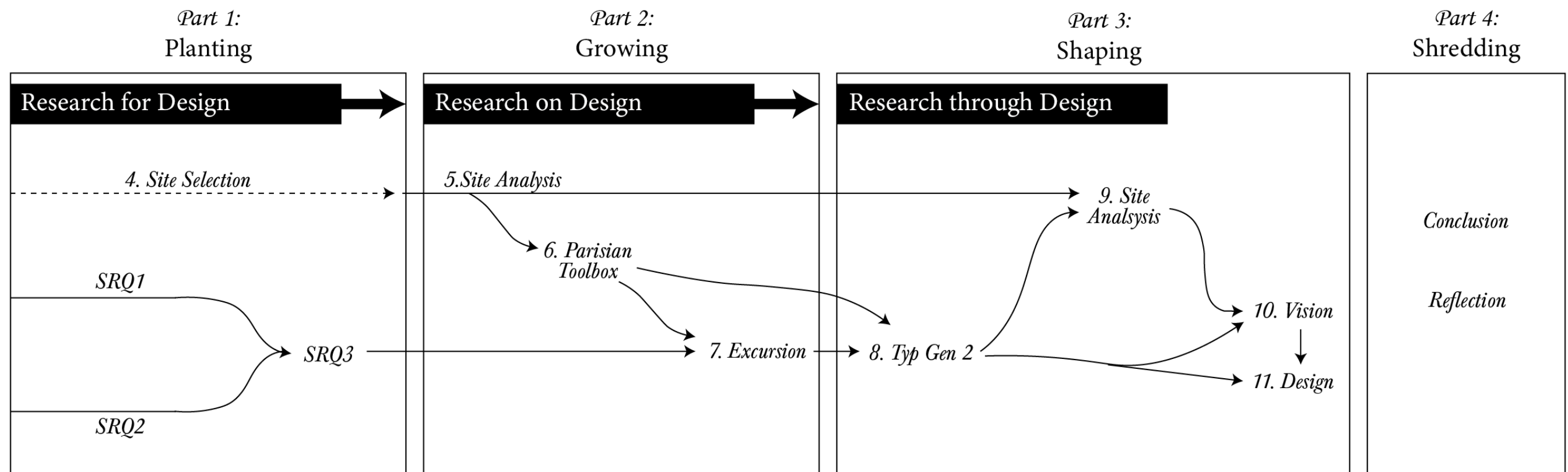
*The concept of ‘forest’ in this thesis refers to a **system** characterized by the **presence of trees**, ranging from dense woodlands to linear formations and individual trees, all of which contribute to a larger (urban) forest. While this system does **not constitute a ‘natural’ forest**, it seeks to **emulate** the ecological, sensory, and psychological benefits typically associated with forests, integrating these qualities into the **urban context**.*

### **Psychological Restoration:**

*The process through which mental and emotional capacities—such as attention, mood, and cognitive clarity, **recover** after being taxed, leading to a more balanced and functional **psychological state**.*

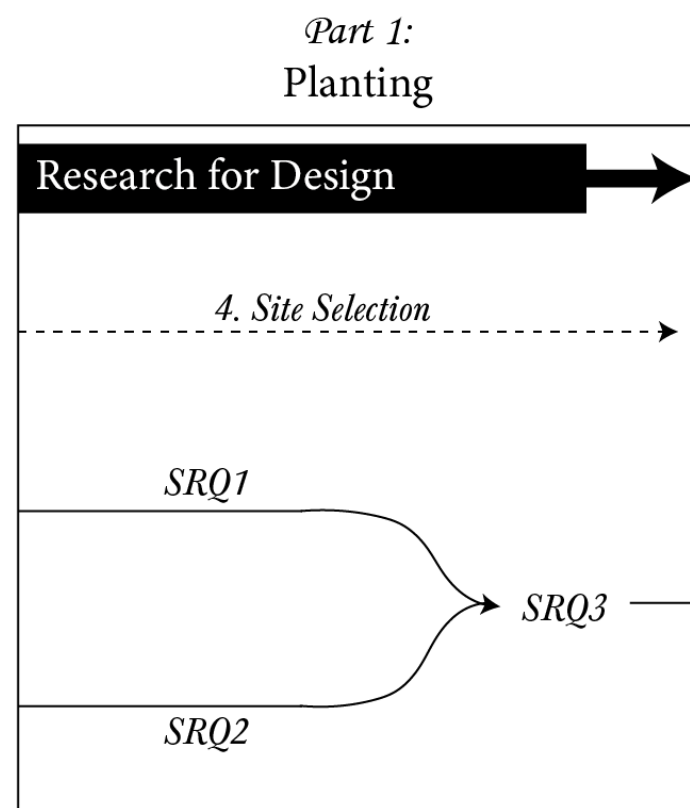


# Method & Progress *Diagram*



# Planting

## *Part 1: Research for Design*



1. *How can the integration of nature, through elements like trees, within urban landscapes support human mental health, foster emotional recovery, and strengthen the connection between people and the natural world (in cities)?*

2. *What role do urban forests play in shaping mental health outcomes, and how can their design be tailored to address specific psychological and emotional challenges within urban environments?*

3. *How can a framework for urban forest typologies be developed, based on relevant theories and precedent studies, to address the psychological needs of city residents and create restorative spaces?*



# Theoretical Framework

*Shinrin-Yoku*

2.

**the japan times**

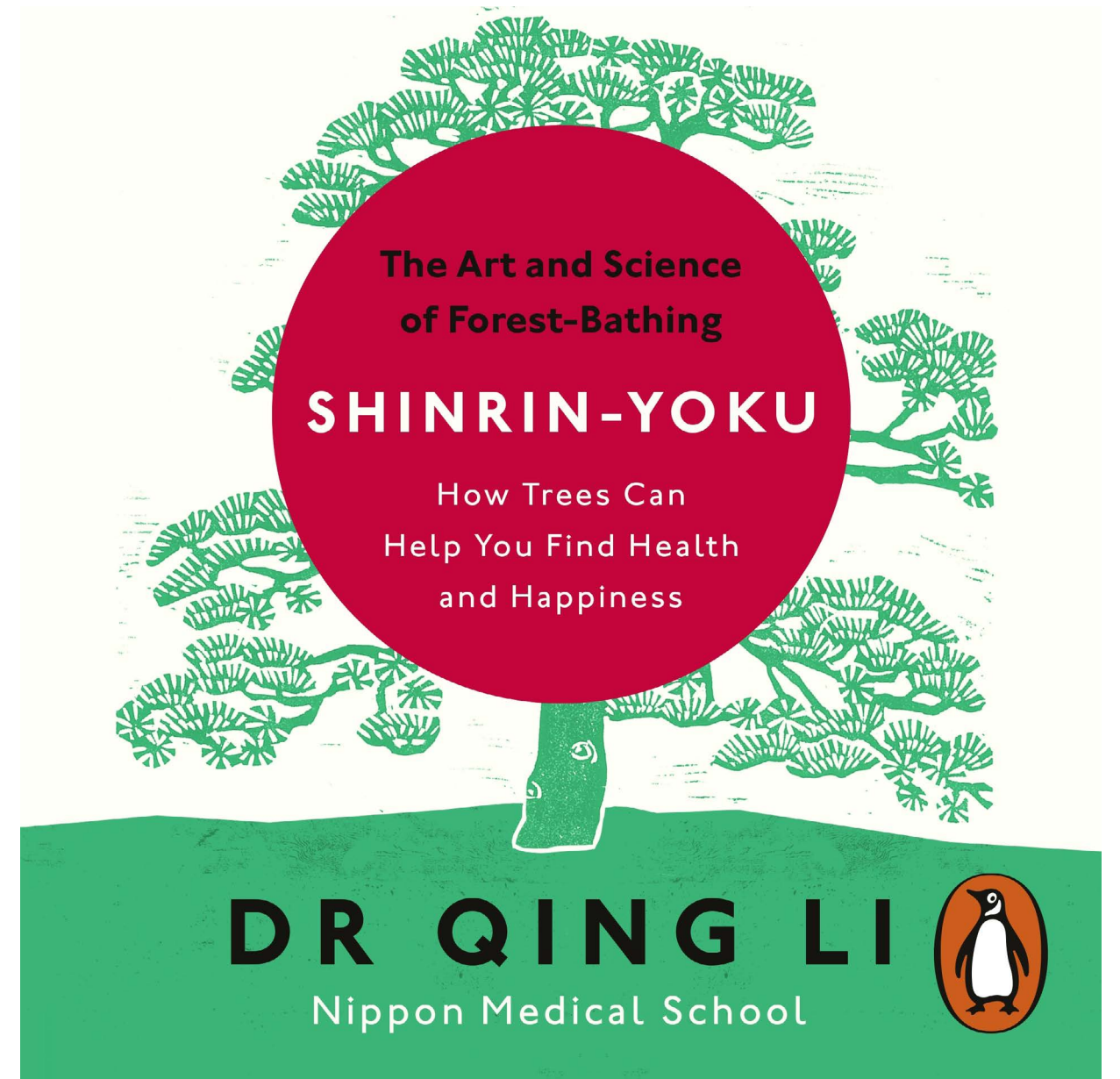
THE INDEPENDENT VOICE IN ASIA

COMMUNITY / OUR LIVES / TELLING LIVES

## Stressed out? Bathing in the woods is just what the doctor ordered



3.





# Theoretical Framework

*Shinrin - Yoku*

4.



De Horsten, Wassenaar



# Theoretical Framework

## *Shinrin-Yoku*

- ① welcome at parking place
- ② asking for guidance and welcome
- ③ reduce our speed / wandering
- ④ senses meditation
- ③ green meditation
- ⑥ tree meditation
- ⑦ reflective meditation
- ③
- ⑧ saying goodbye & thanks
- ⑨ Tea



*We wandered.  
Not to arrive, but to be.  
To feel the bark's texture under fingertips,  
to inhale the earthy breath of the forest,  
to catch light dancing on water under a mossy bridge.*



# Theoretical Framework

*Shinrin-Yoku*

*And yet—*

*I felt a tension.*

*Must we pay to remember how to be with the forest?*

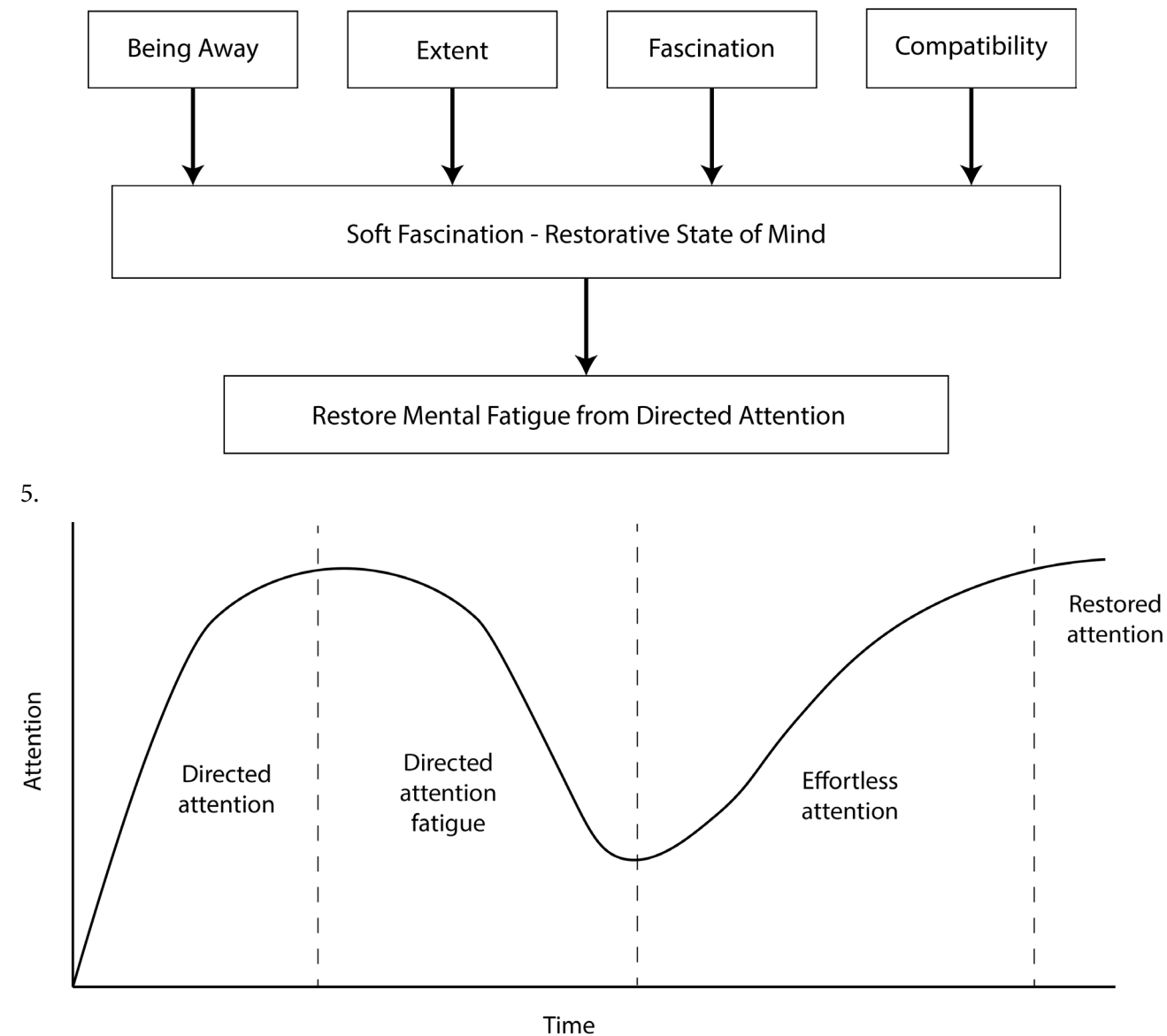
*Can something ancient and shared be packaged and sold?*



# Theoretical Framework

## *Attention Restoration Theory & Stress Reduction Theory*

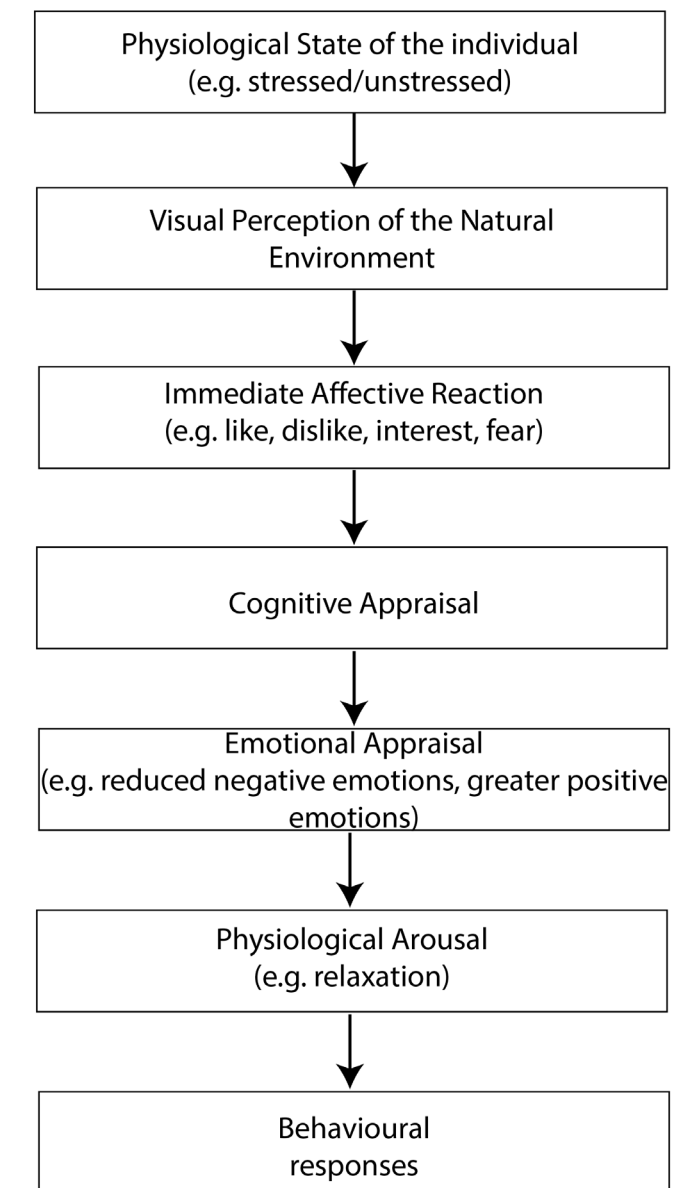
### Attention Restoration Theory (Kaplan, 1989, 1995)



*“Natural environments abound with ‘soft fascinations’ such as clouds moving across the sky, leaves rustling in a breeze or water bubbling over rocks in a stream...”*

(Kaplan & Kaplan, 1989)

### Stress Reduction Theory (Ulrich, 1991)



*“Exposure to nature settings has been shown to enhance positive emotions, reduce physiological arousal such as blood pressure and heart rate, and promote faster recovery from stress.”*

(Ulrich, 1993)

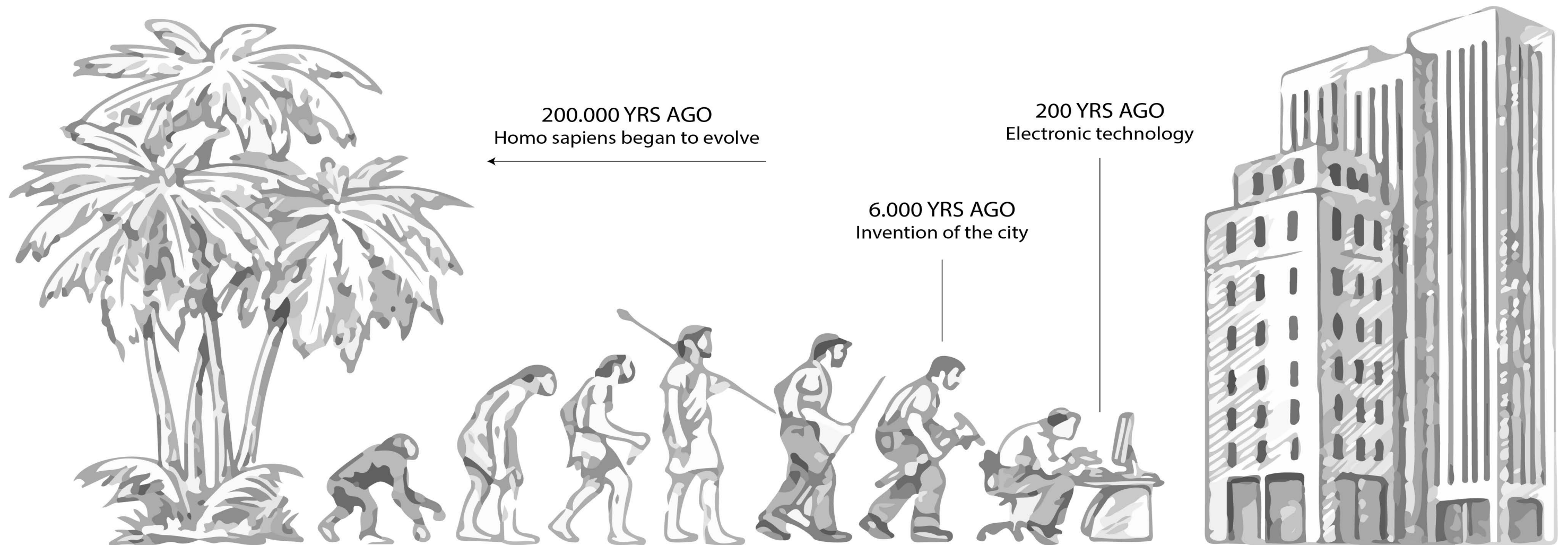


# Theoretical Framework

## *Biophilia*

*“Nature holds the key to our aesthetic, intellectual, cognitive and even spiritual satisfaction.”*

(E.O. Wilson (1984), Biophilia)



Biophilia  
(Edward O. Wilson, 1984)

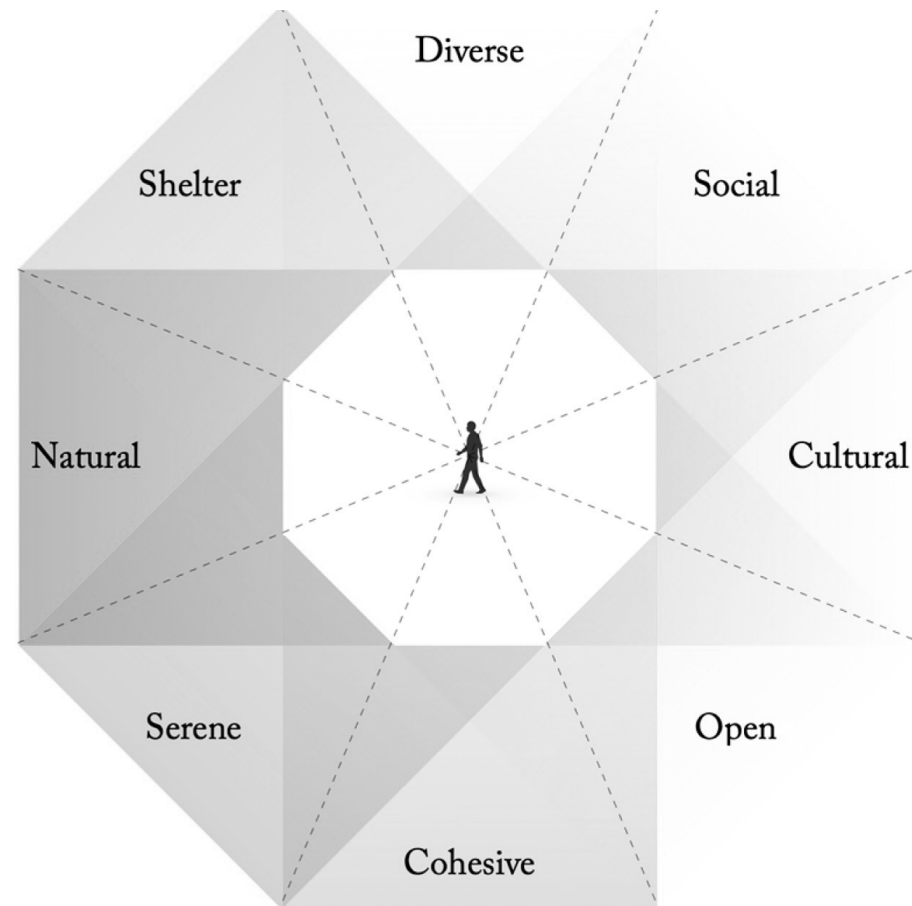


# Precedent Studies

## *Perceived Sensory Dimensions*

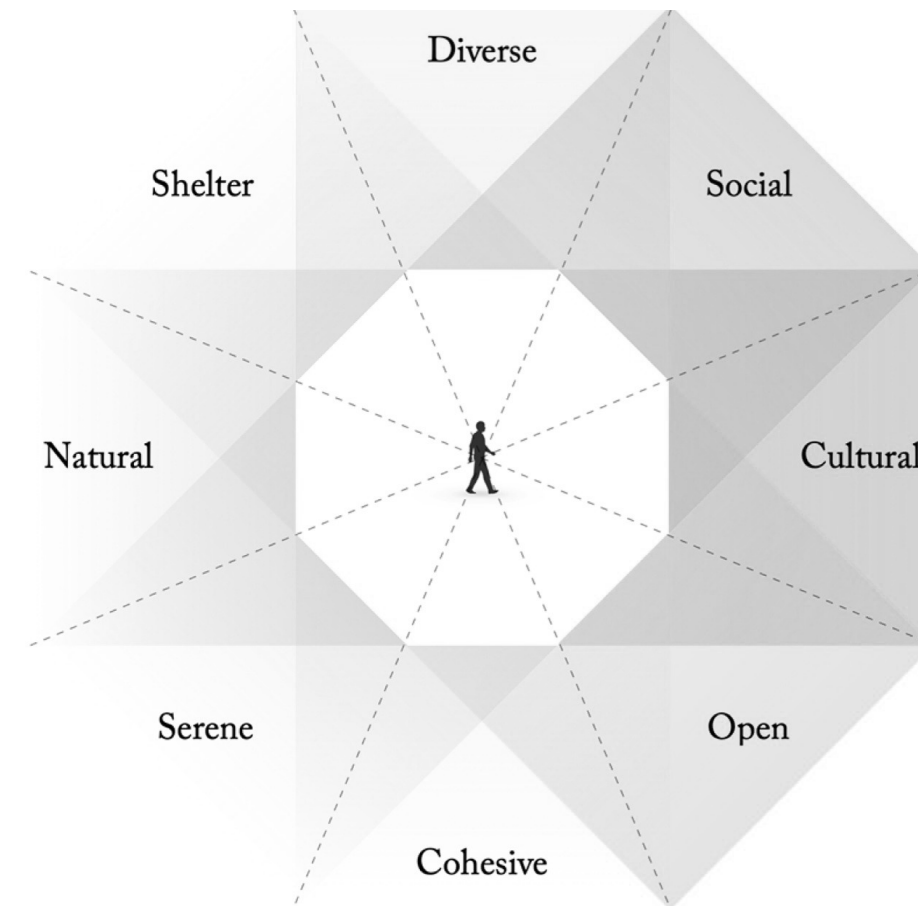
(Berggren-Bärring Grahn, 1995)

Restorative



(Jonathan Stoltz, Patrik  
Grahn, 2021)

Stimulating





# Precedent Studies

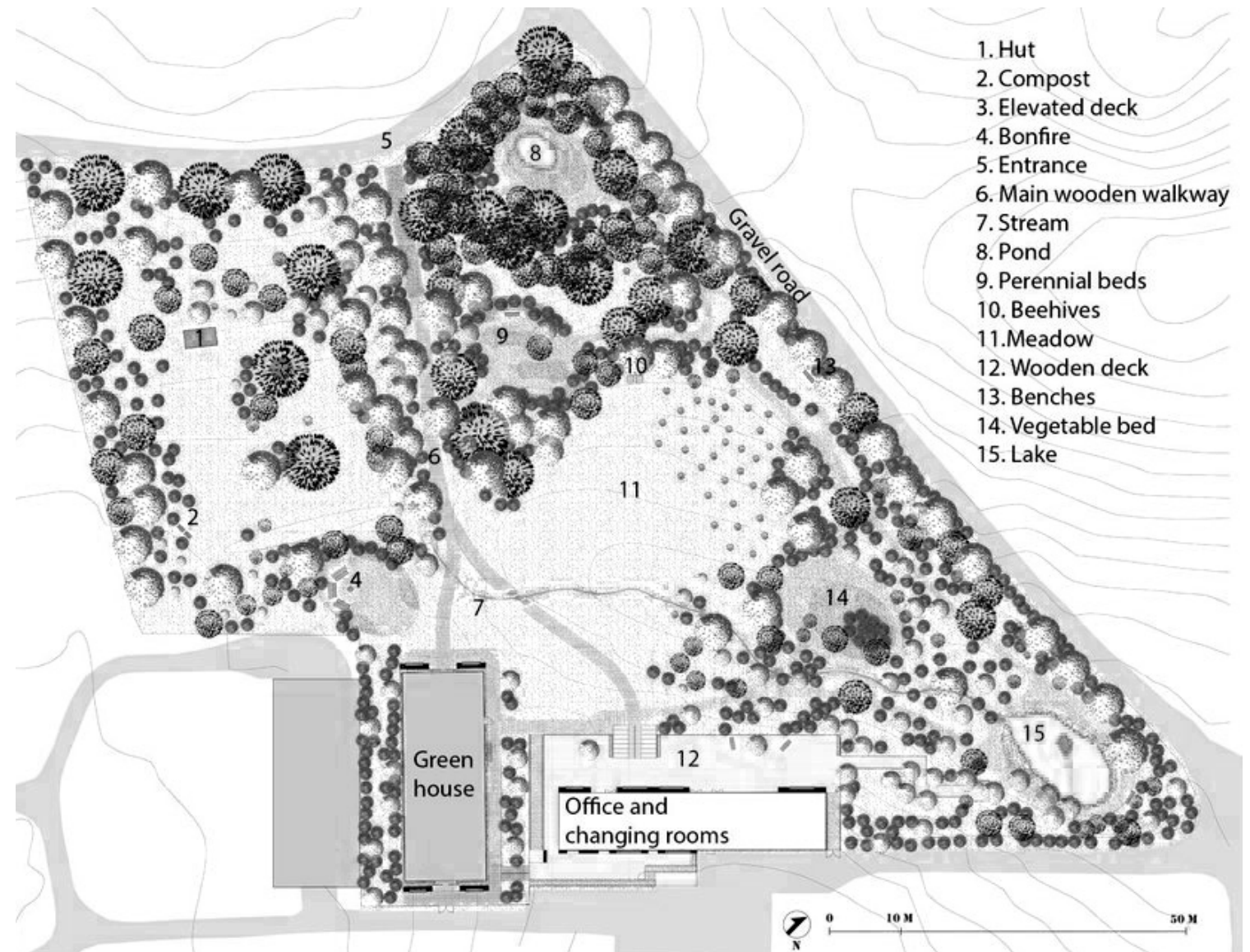
## *Octovia & Nacadia*

### *The Health Forest Octovia*



(Stigsdotter et al., 2016)

### *Forest Therapy Garden Nacadia*



(Stigsdotter et al., 2010)

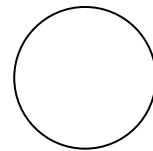


# Research & Precedent Studies

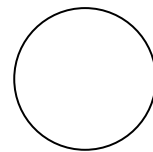
## *Design Elements*

### ART

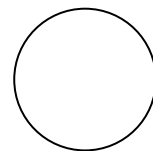
*Fascination -> support soft  
effortless attention -> movement,  
filtered views, depth*



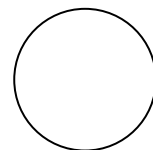
*Extent -> create immersion and  
continuity -> immersion, visual  
continuity*



*Being Away -> encourage men-  
tal escape -> escape, transition*

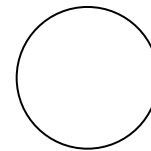


*Compatibility -> match the users  
needs and support freedom of  
action -> freedom, open space,  
legibility*

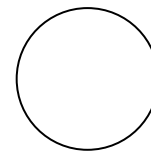


### SRT

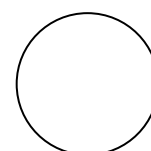
*Physiological restoration through  
calm and soft environments ->  
water features, soft planting,  
low stimulus zones*



*Low pressure shared spaces to  
reduce social stress -> shared  
spaces, open paths*

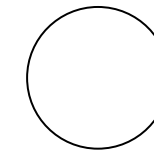


*Reduce stress through enclosure  
and safety -> sheltered seating,  
enclosure, quiet zones*

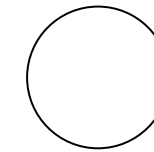


### Biophilia

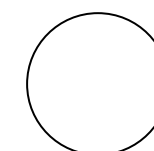
*Restoration through natural  
sensory richness -> scented zones,  
seasonal planting*



*Social interaction through  
shared experience in nature  
-> communitiy garden, shared  
green space*



*People are drawn to signs of life  
and growth -> wildlife traces,  
natural materials*

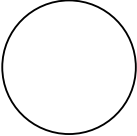
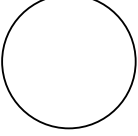

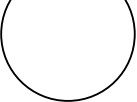
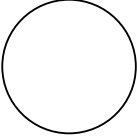
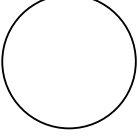
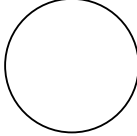
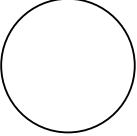
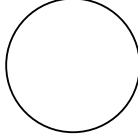
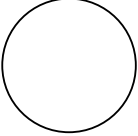
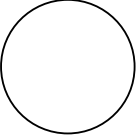
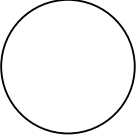
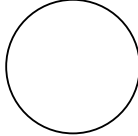
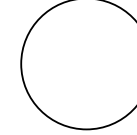
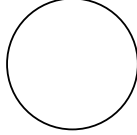
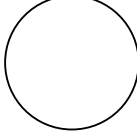




# Research & Precedent Studies

## Design Elements

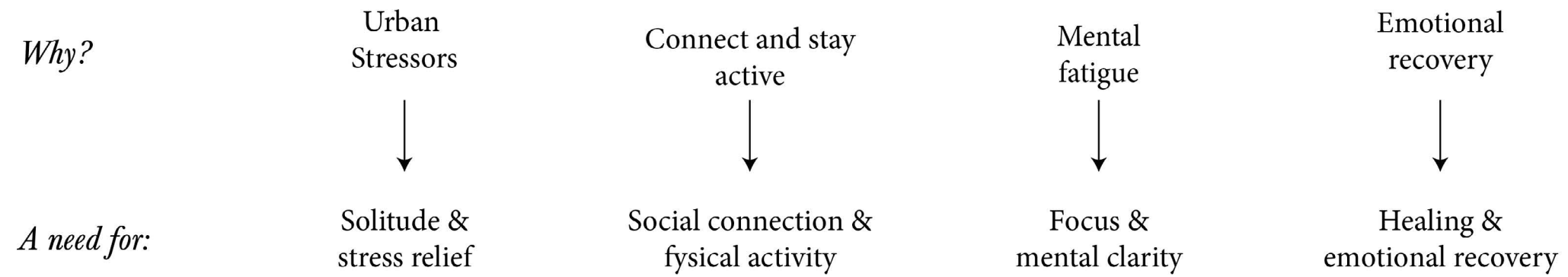
## PSD's

Shinrin-Yoku			Nacadia		PSD's	
<i>Restoration through multisensory immersion in nature -&gt; scent, stilness, water</i>			<i>Reflection and therapy through structure and rhythm -&gt; quiet rooms, sequential layout</i>		<i>Serene -&gt; calm, stable environment, reduve arousel -&gt; still water, gentle movement</i>	<i>Shelter -&gt; enclosure provides safety -&gt; canopy, vegetated buffers</i>
						
<i>Safety and calm via enclosure and subtle stimuli -&gt; shaded areas, enclosure, framed paths</i>			<i>Gentle sensory experience for psychological healing -&gt; immersive planting, minimal stimuli</i>		<i>Natural -&gt; signals of wilderness, ecological function -&gt; spontaneous vegetation, wild</i>	<i>Cohesive -&gt; coherence creates clarity and order -&gt; repeated structure, consistent materials</i>
						
<i>Psychological safety through buffer and withdrawal -&gt; retreat zones, woodland pockets</i>			<i>Engagement through (low-key) shared activity -&gt; flexible edges, active zones</i>		<i>Open -&gt; spaciousness supports overview and informal use -&gt; clearings, sightlines</i>	<i>Cultural -&gt; connecting to meaning and memory enhances comfort -&gt; art, symbols</i>
						
<i>Right setting at the right time -&gt; Intuitive movement -&gt; emotional alignment zoning</i>					<i>Social -&gt; environments for social interaction -&gt; benches, gathering nodes</i>	<i>Diverse -&gt; Variation supports exploration and engagement -&gt; variety</i>
						
					<i>Rich in species -&gt; biodiverisy signals health and vitality -&gt; mixed planting, flora and fauna</i>	
						



# Research to Typologies

## *The Conceptual Framework*

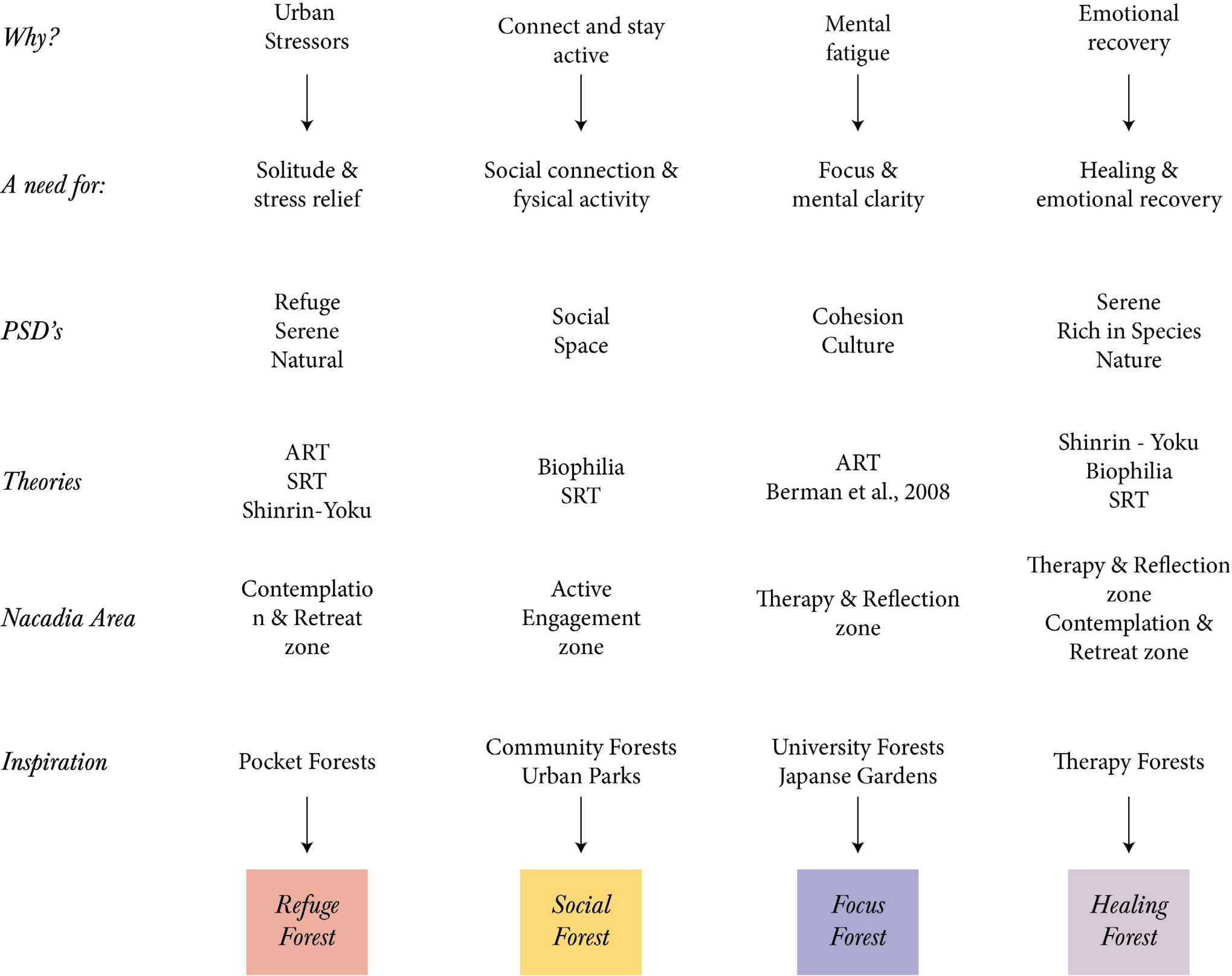


5.



# Research to Typologies

*The Conceptual Framework*

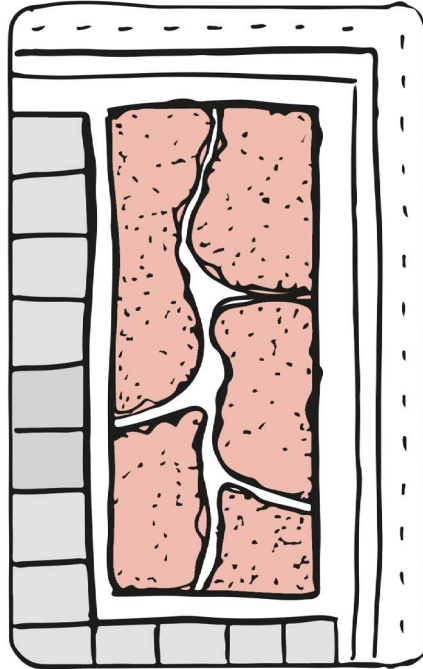




# Research to Typologies

## *The Four Typologies*

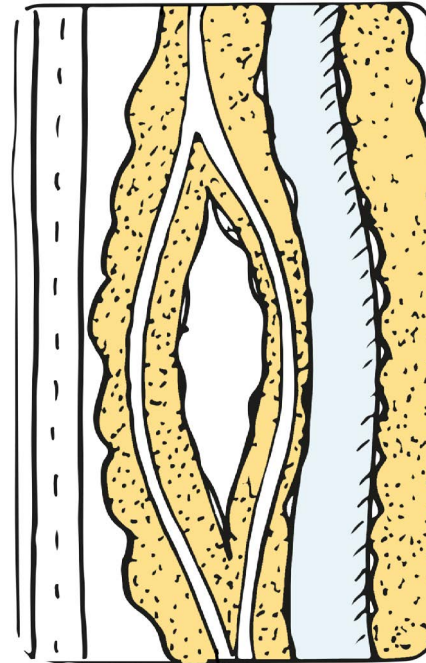
*Refuge Forest*



*In the midst of a dense urban jungle, the Refuge Forest offers a **peaceful sanctuary**, where the noise fades, and the soul finds solace in the quiet embrace of nature.*



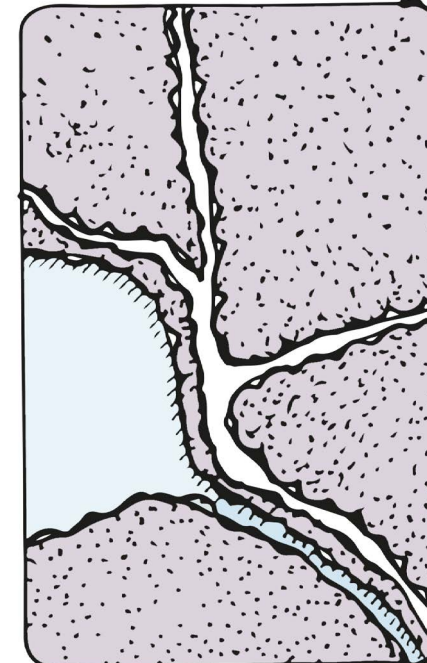
*Social Forest*



*The Social Forest sparks **spontaneous connections**, drawing people into a space where movement, laughter, and shared experiences flow freely beneath the canopy of trees.*



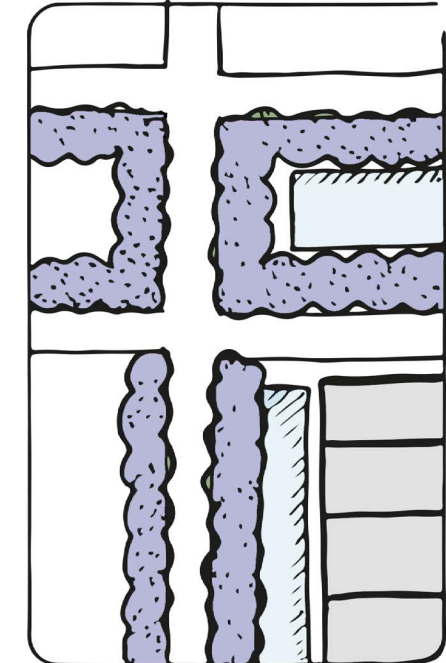
*Healing Forest*



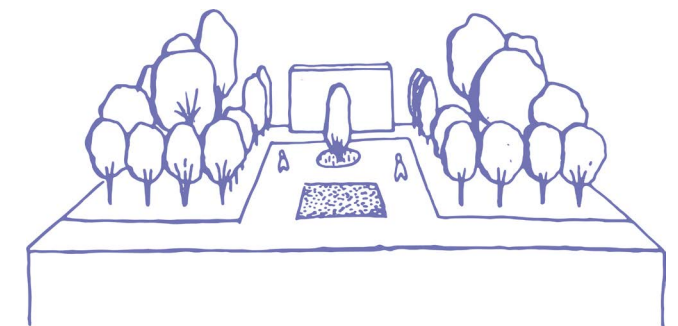
*The Healing Forest is an **immersive haven**, where the soul slowly surrenders to the therapeutic rhythm of nature, offering a deep, **restorative retreat** from the pressure of the outside world.*



*Focus Forest*



*The Focus Forest invites the mind to **find clarity**, where every step and every leaf whispers a quiet call to creativity, restoring both attention and calm.*





# Research to Typologies

## *The Four Typologies*

*Refuge*



*Social*



*Healing*



*Focus*

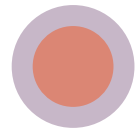




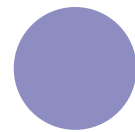
# Research to Typologies

## Design Elements from Theoretical Framework

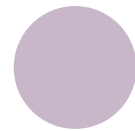
*Fascination -> support soft  
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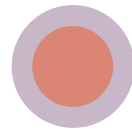
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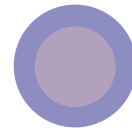
*Low pressure shared spaces to  
reduce social stress -> shared  
spaces, open paths*



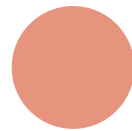
*Being Away -> encourage mental  
escape -> escape, transition*



*Compatibility -> match the users  
needs and support freedom of  
action -> freedom, open space,  
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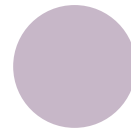
*Reduce stress through enclosure  
and safety -> sheltered seating,  
enclosure, quiet zones*



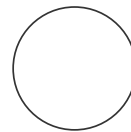
*Restoration through multisenso-  
ry immersion in nature -> scent,  
stillness, water*



*Restoration through natural  
sensory richness -> scented zones,  
seasonal planting*



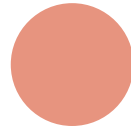
*People are drawn to signs of life  
and growth -> wildlife traces,  
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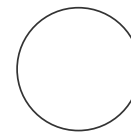
*Reflection and therapy through  
structure and rhythm -> quiet  
rooms, sequential layout*



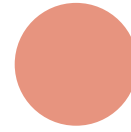
*Psychological safety through  
buffer and withdrawal -> retreat  
zones, woodland pockets*



*Right setting at the right time ->  
Intuitive movement -> emotional  
alignment zoning*



*Safety and calm via enclosure  
and subtle stimuli -> shaded  
areas, enclosure, framed paths*



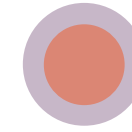
*Gentle sensory experience for psy-  
chological healing -> immersive  
planting, minimal stimuli*



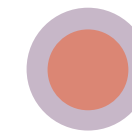
*Engagement through (low-key)  
shared activity -> flexible edges,  
active zones*



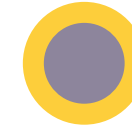
*Serene -> calm, stable environ-  
ment, reduce arousal -> still  
water, gentle movement*



*Natural -> signals of wilderness,  
ecological function -> spontani-  
ous vegetation, wild*



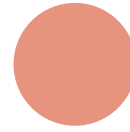
*Open -> spaciousness supports  
overview and informal use ->  
clearings, sightlines*



*Social -> environments for social  
interaction -> benches, gathering  
nodes*



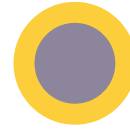
*Shelter -> enclosure provides safe-  
ty -> canopy, vegetated buffers*



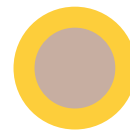
*Cohesive -> coherence creates  
clarity and order -> repeated  
structure, consistent materials*



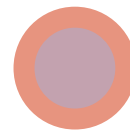
*Cultural -> connecting to  
meaning and memory enhances  
comfort -> art, symbols*



*Diverse -> Variation supports  
exploration and engagement ->  
variety*



*Rich in species -> biodiversity sig-  
nals health and vitality -> mixed  
planting, flora and fauna*





# Test Case

*What are the conditions in nearby cities regarding tree coverage, mental health, and living environment, and which city would make a strong candidate for the application of this urban forest framework?*

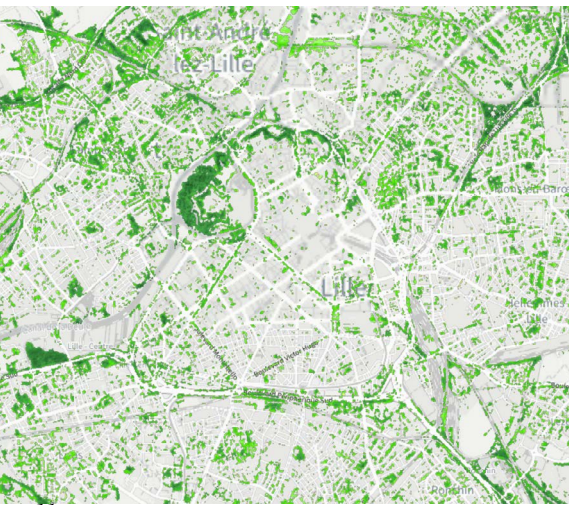




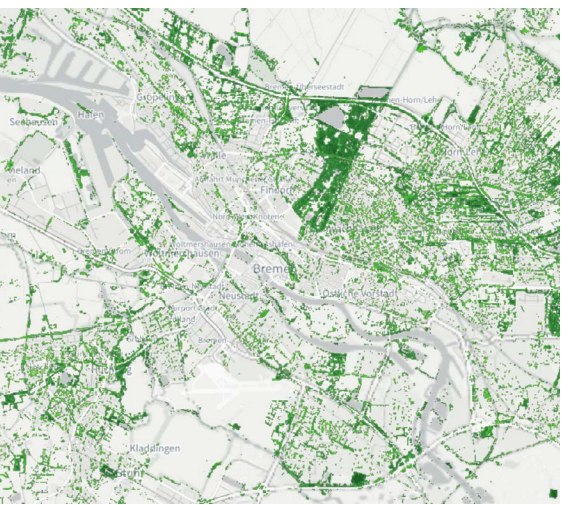
Dortmund



Rouen



Lille



Bremen



Birmingham



Caen



Antwerpen



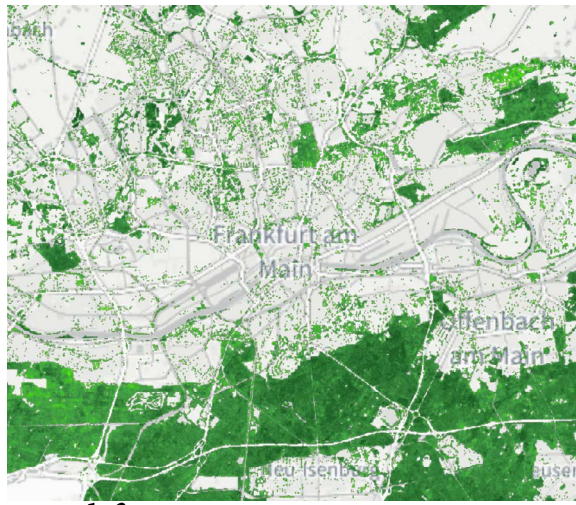
Brussel



Essen



Hamburg



Frankfurt



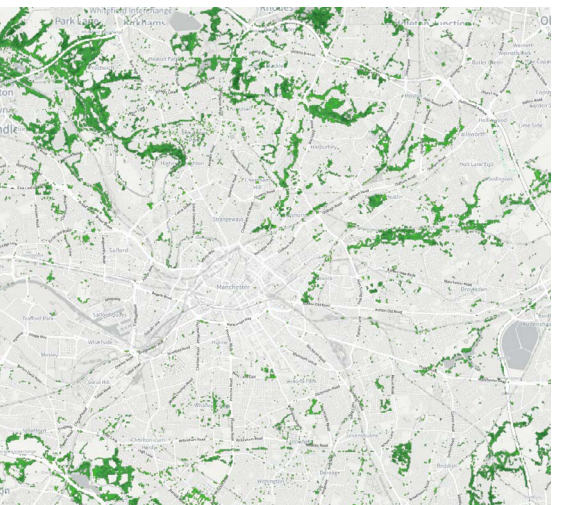
Le Havre



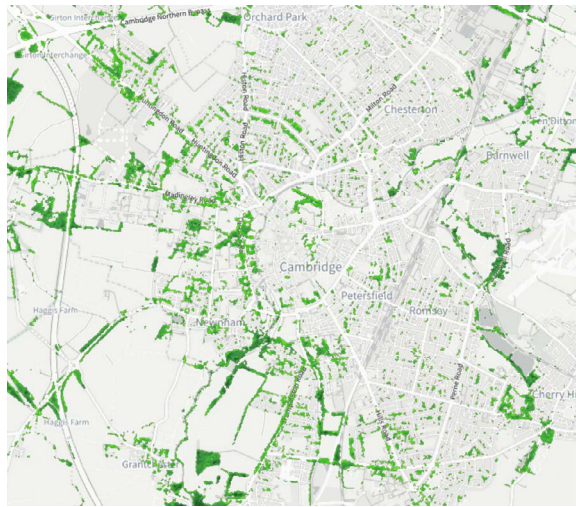
London



Paris



Manchester



Cambridge



Luik



Koln



Bristol



Dusseldorf





Dortmund



Rouen



Lille



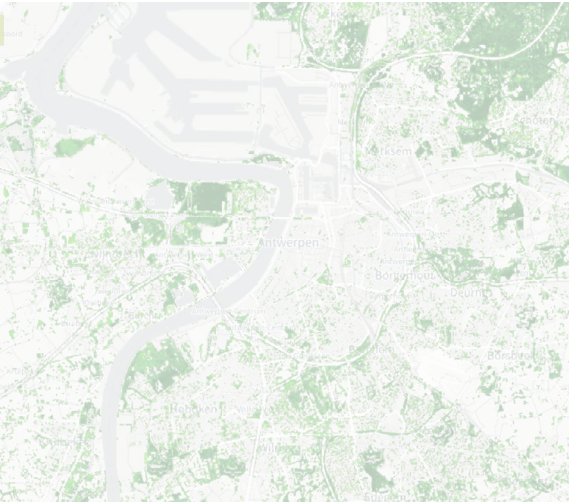
Bremen



Birmingham



Caen



Antwerpen



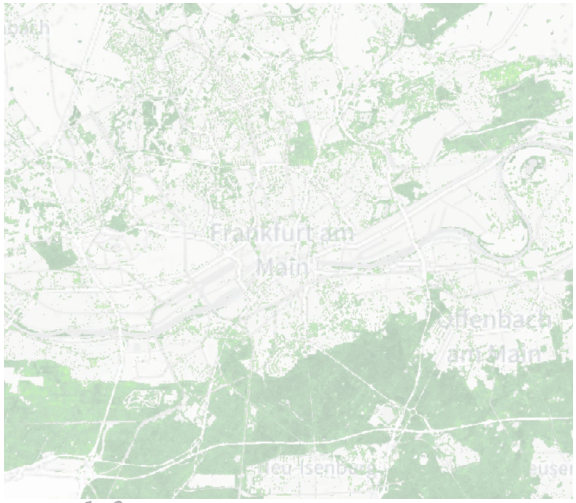
Brussel



Essen



Hamburg



Frankfurt



Le Havre



London



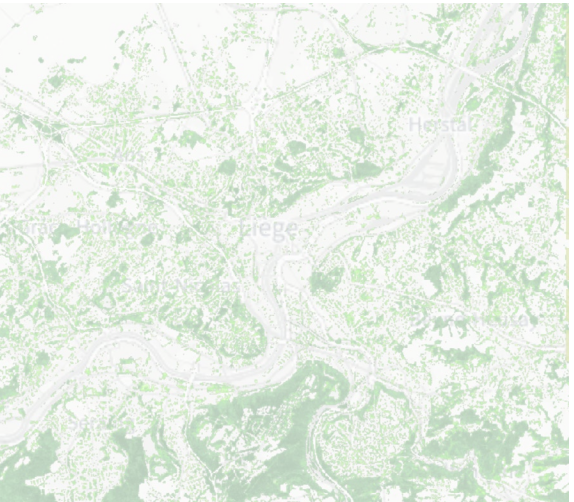
Paris



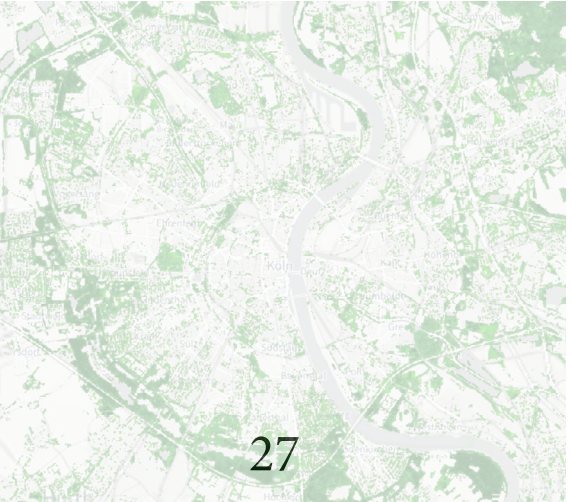
Manchester



Cambridge



Luik



Koln



Bristol

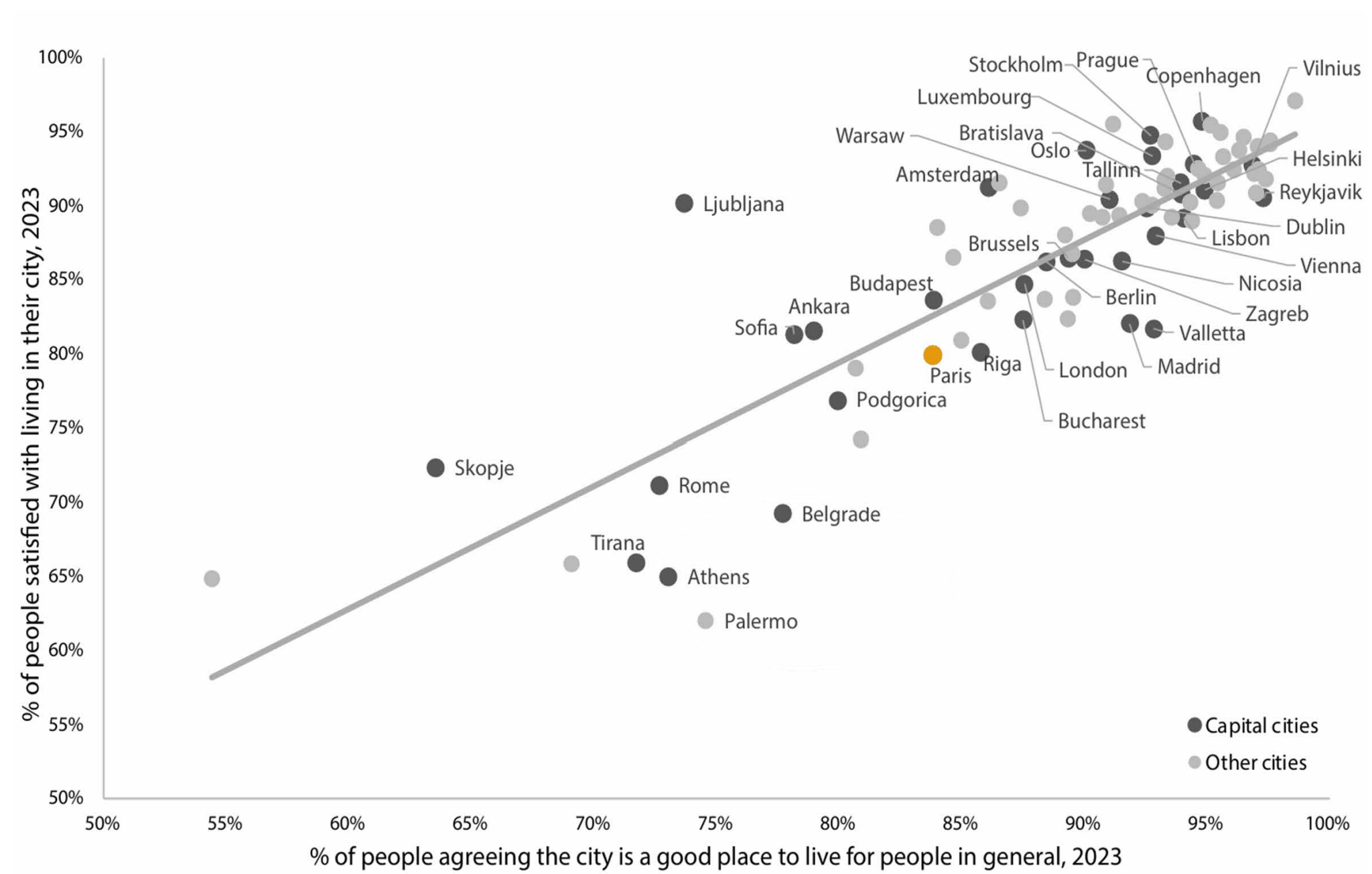


Dusseldorf



# Test Case

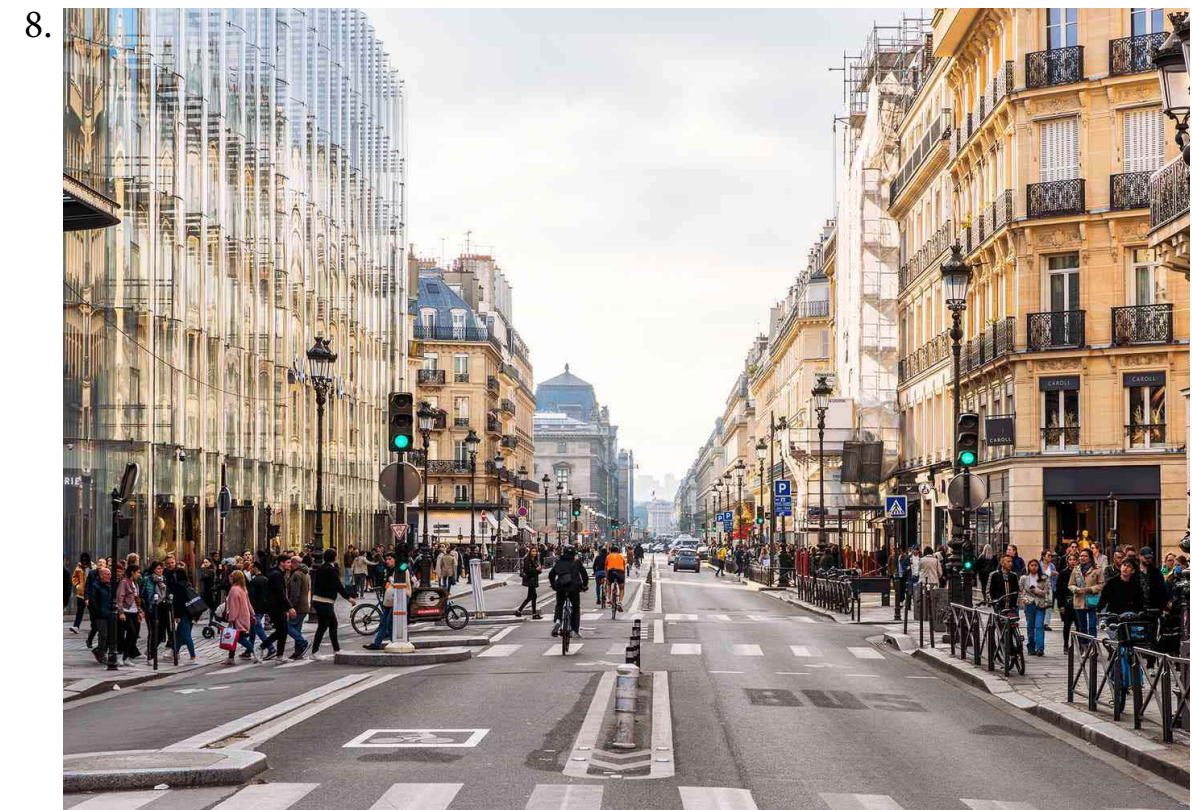
## *Quality of Life Documents*



(European Comission, 2023)



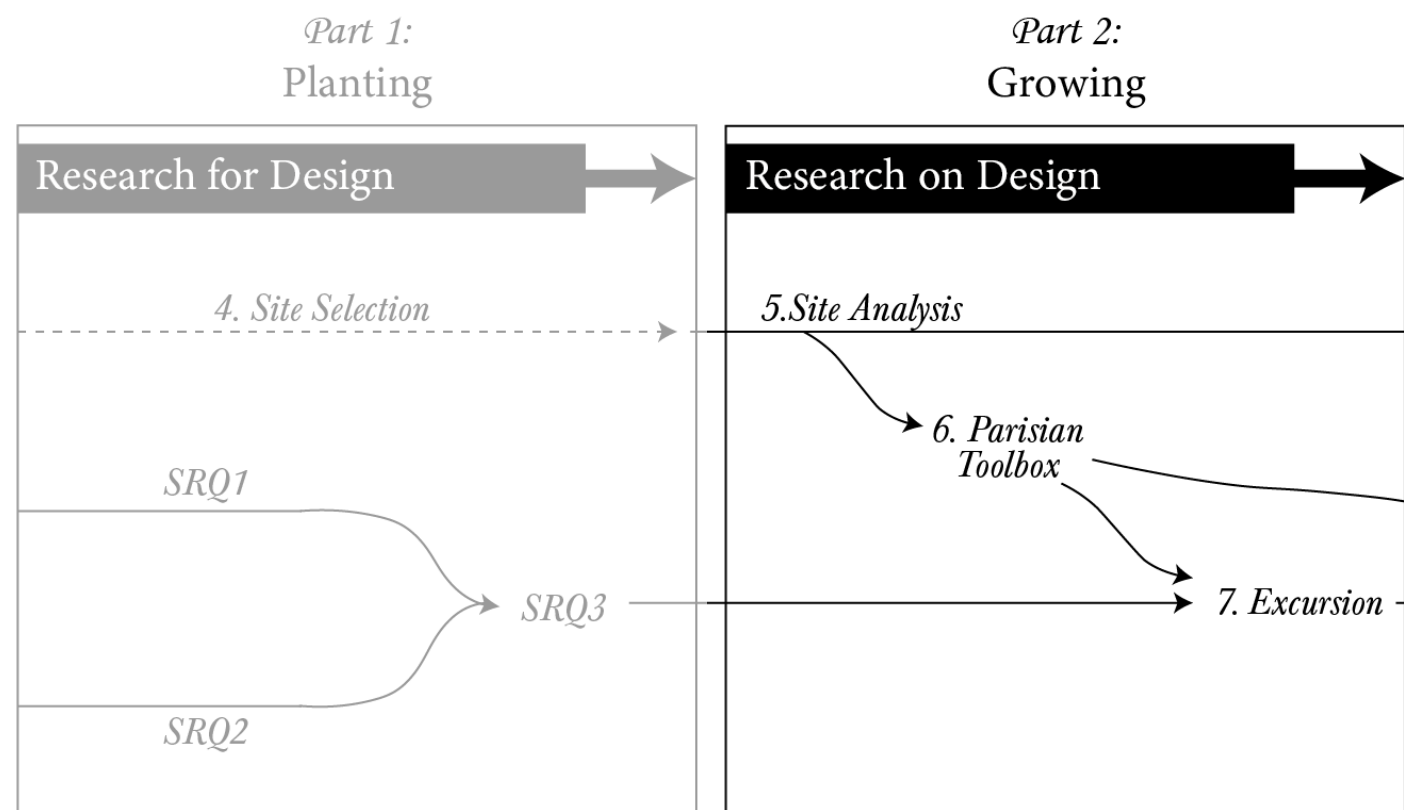
# Test Case: Paris





# Growing

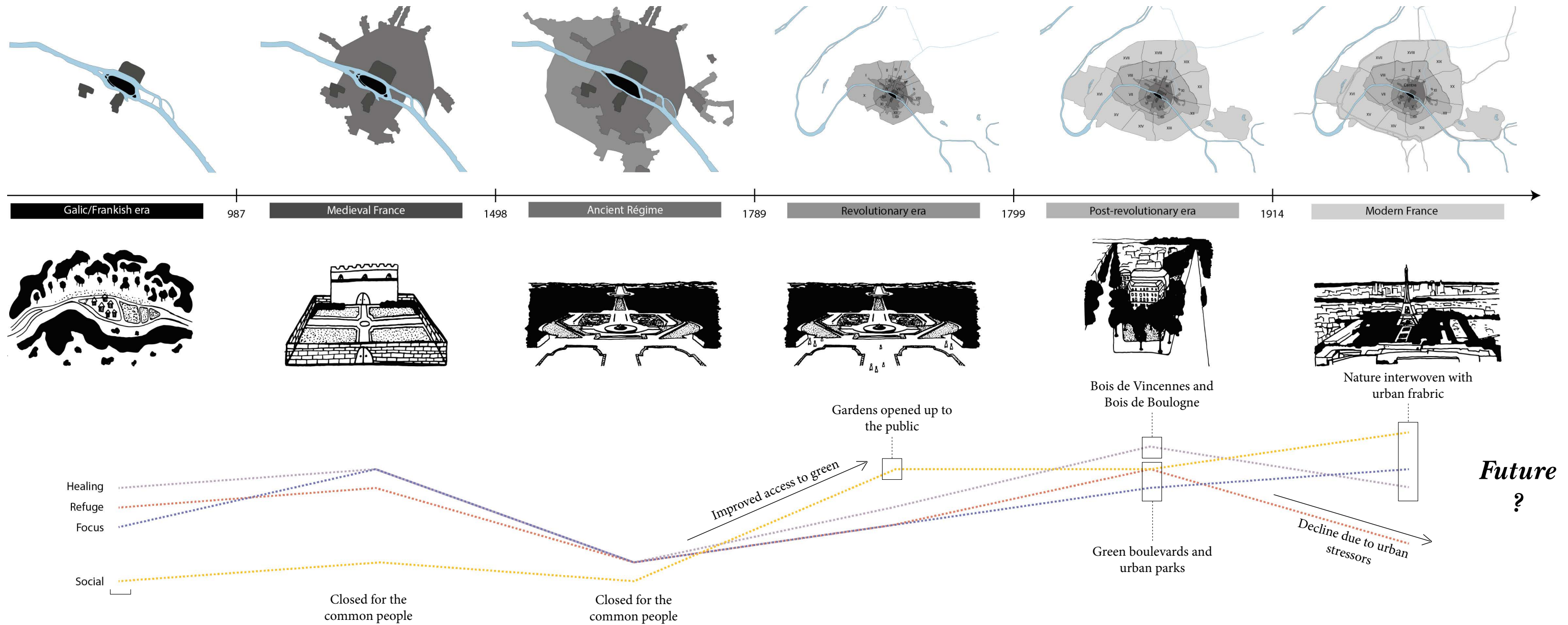
## *Part 2: Research on Design*





# Analysis

## *Historical*





# Analysis

## *Recent Plans & Projects*

10.





# Analysis

## *Recent Plans & Projects*

5. Transformation of the Champs-Élysées



1. Plan Canopée



2. Rue de Rivoli Transformation



4. Green Buffer along the Périphérique



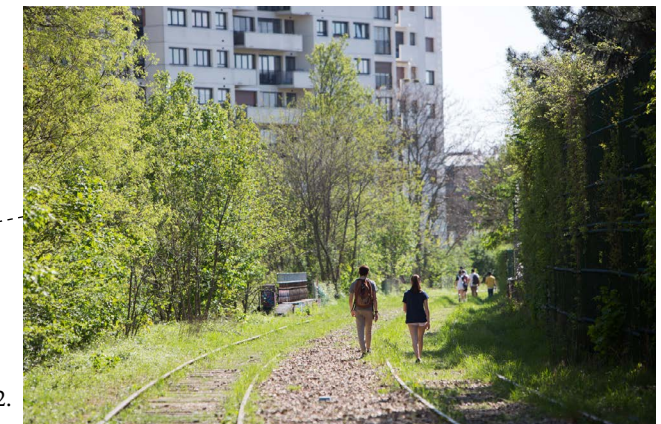
6. Hôtel de Ville Forecourt Transformation



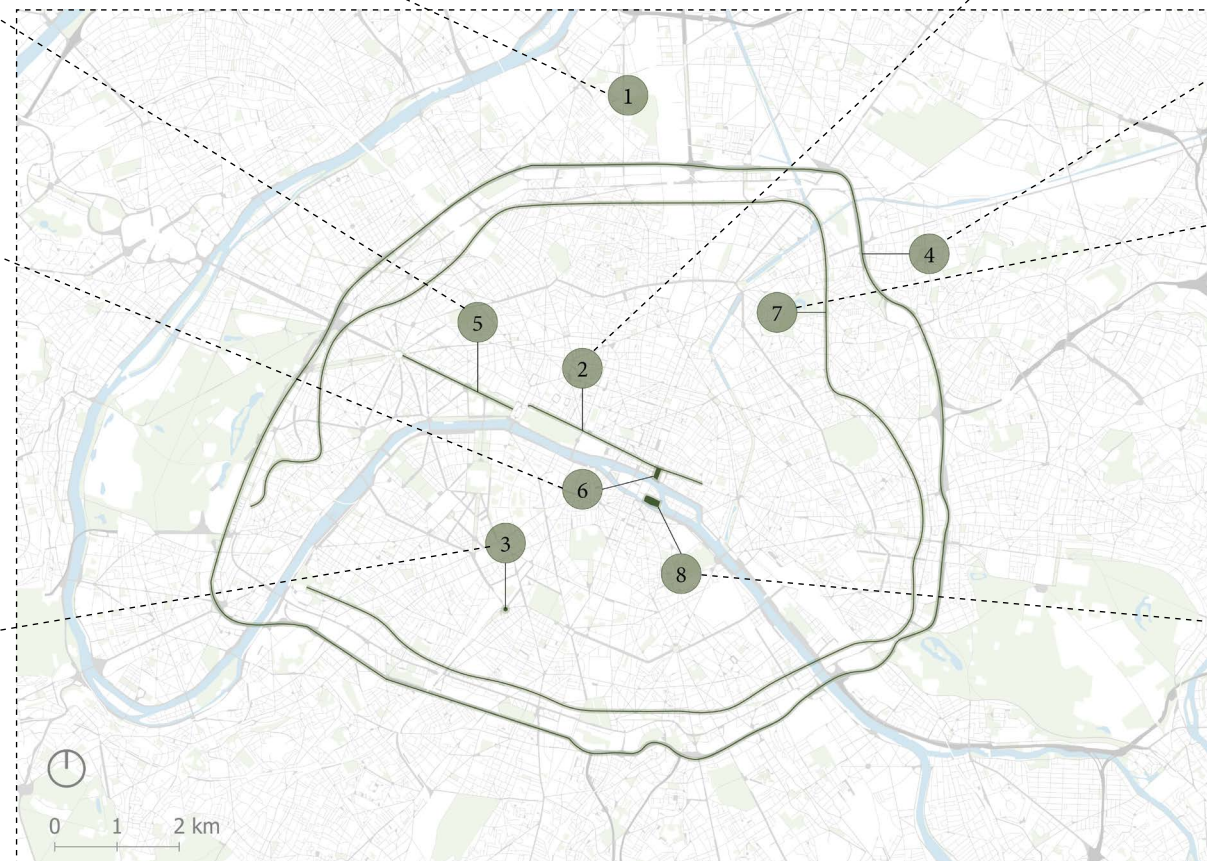
3. Urban Forest at Place de Catalogne



7. Petite Ceinture Rewilding



8. Notre-Dame Revitalization





# Analysis

## *Recent Plans & Projects*

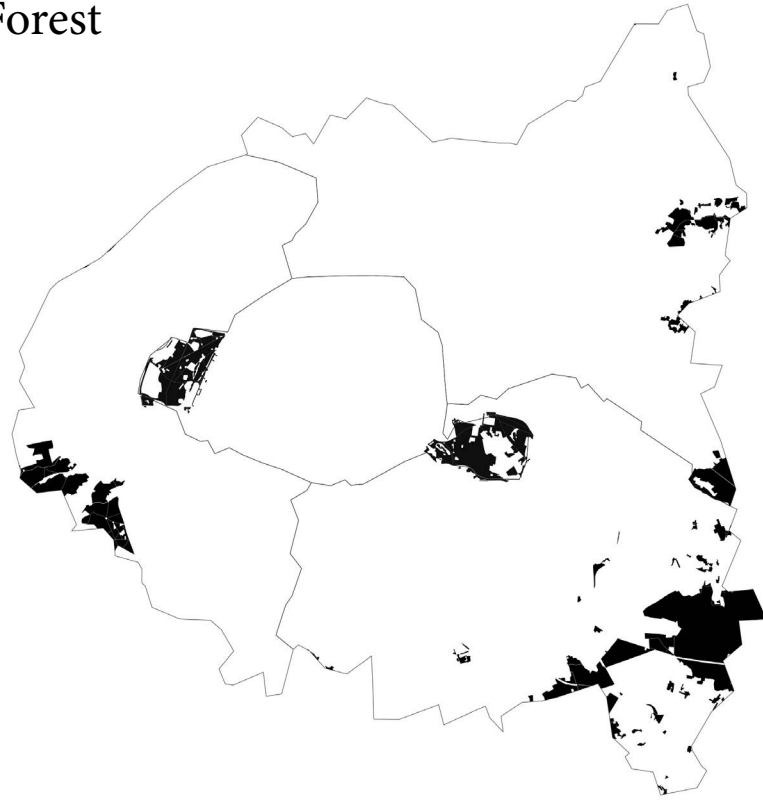
- **Focus** on climate adaptation and visual greening
- **Little emphasis** on psychological impact
- **No approach** to match forest with emotional needs
- **Restorative qualities underused**
- Mental health **rarely** a design or planning objective



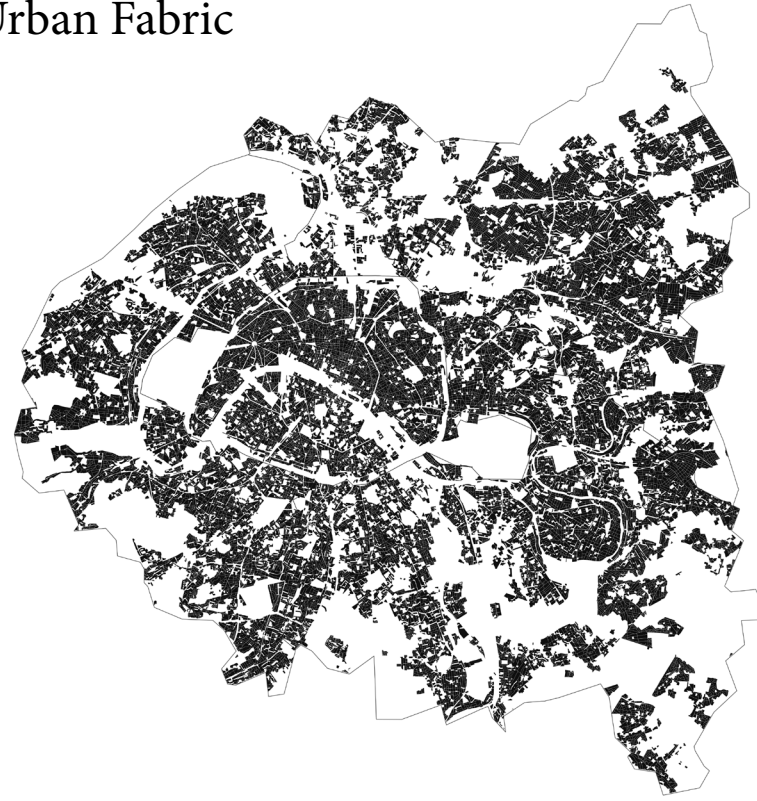
# Analysis

## *The Layered Landscape*

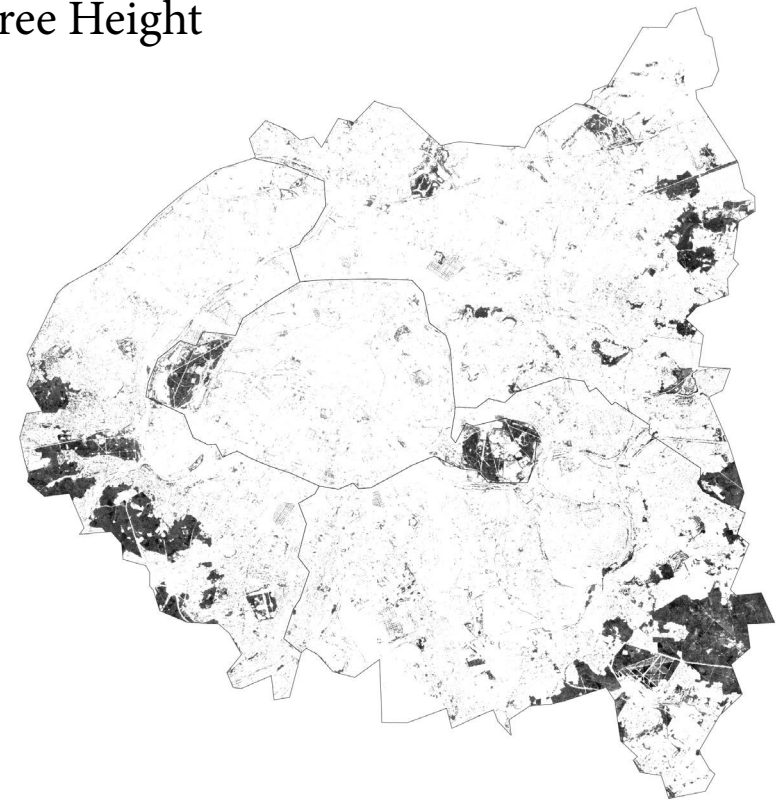
Forest



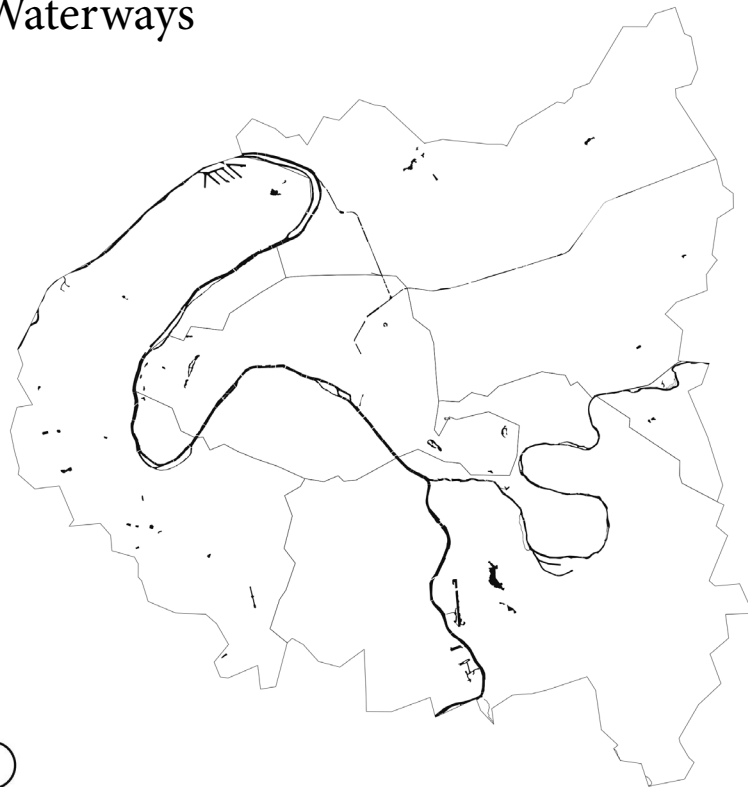
Urban Fabric



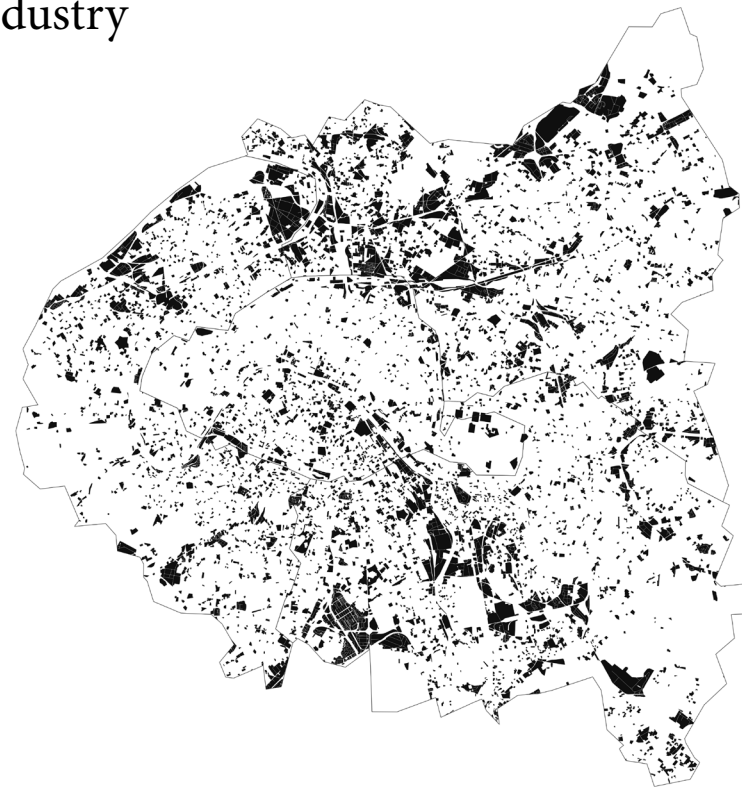
Tree Height



Waterways



Industry



Infrastructure

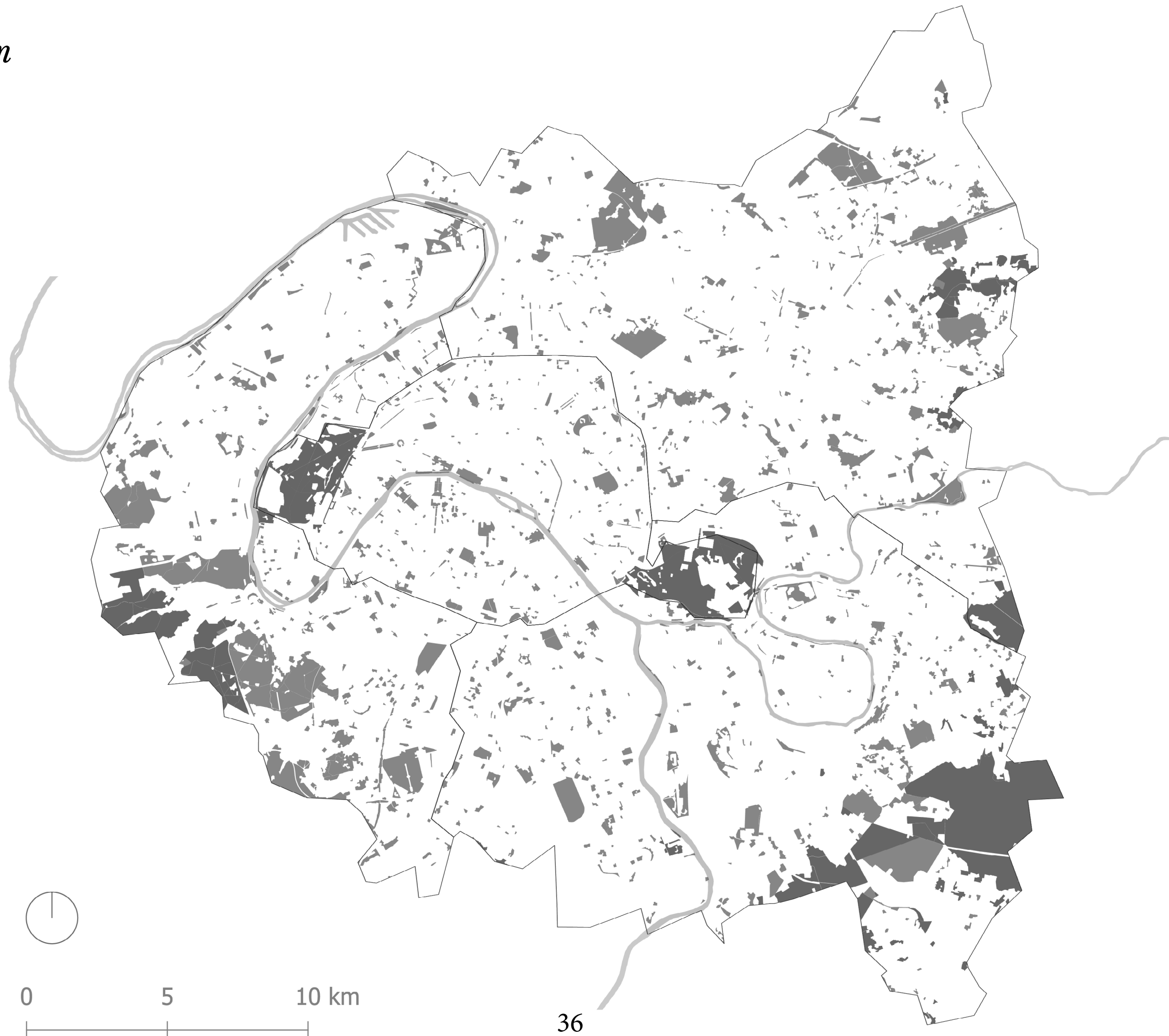


0 5 10 km



# Analysis

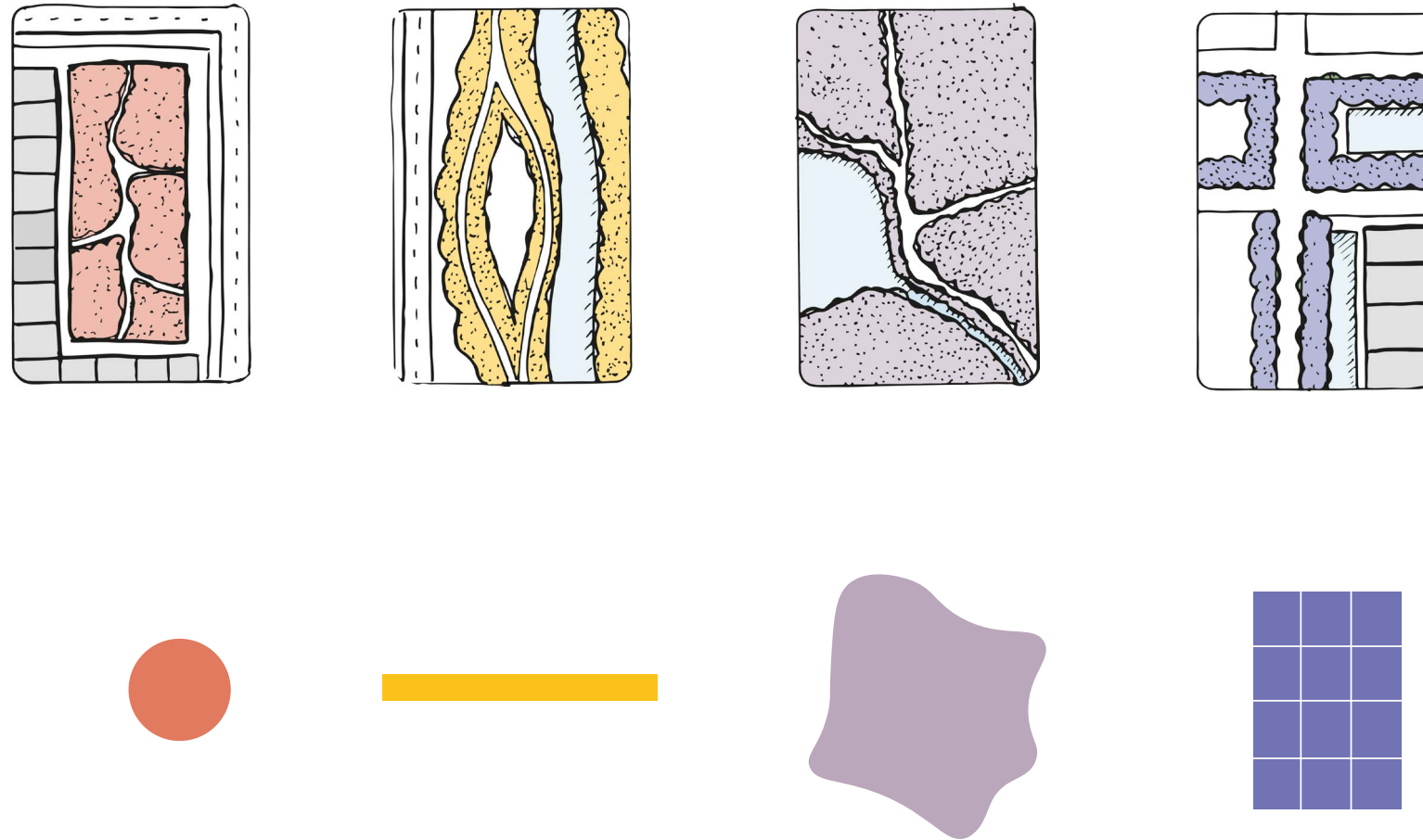
## *Urban Green*





# Analysis

## *Urban Green Hypothesis*

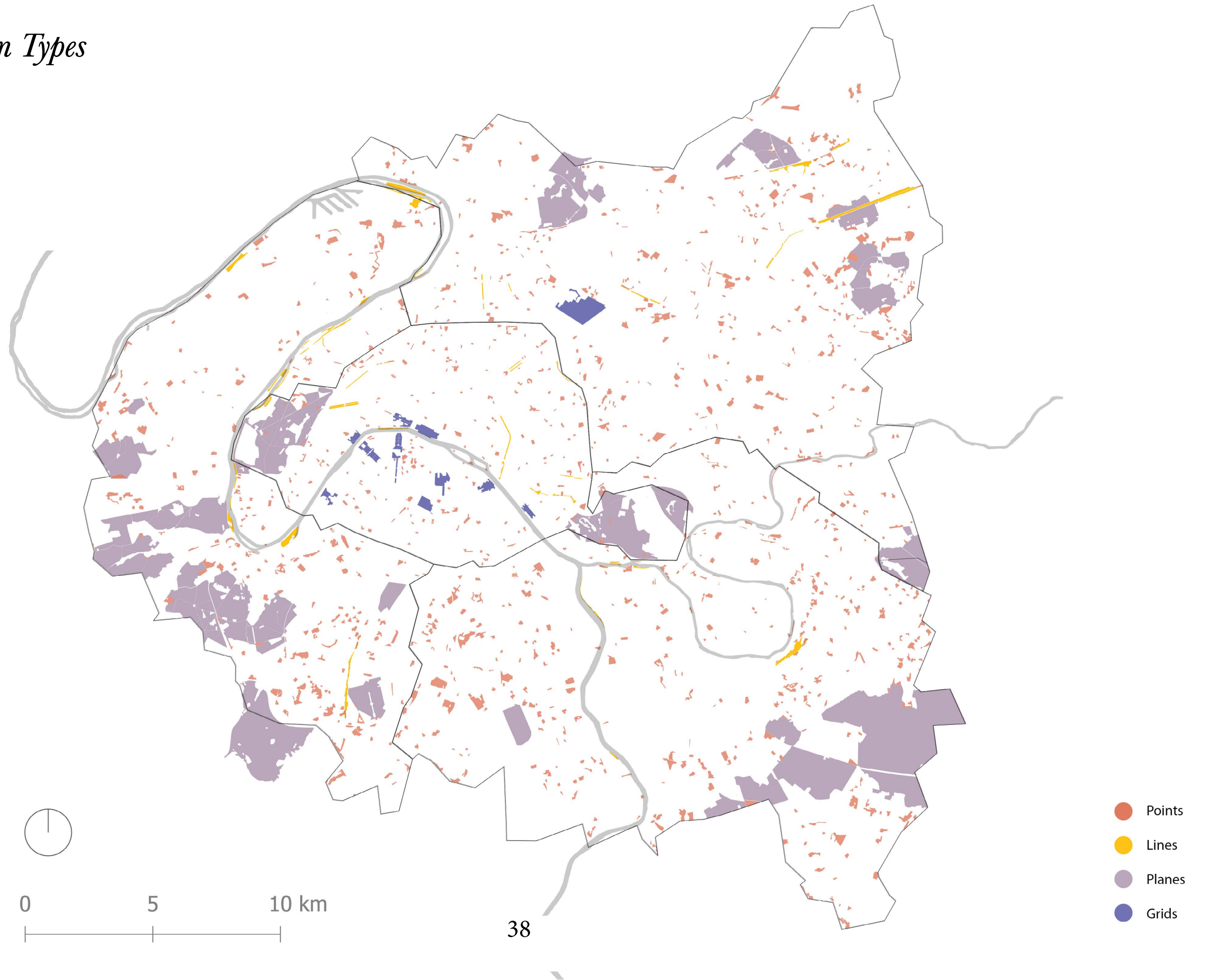


*“The four forest typologies—Refuge Forest, Healing Forest, Social Forest, and Focus Forest—are predominantly represented in Paris as points, planes, lines, and grids.”*



# Analysis

## *Urban Green Types*



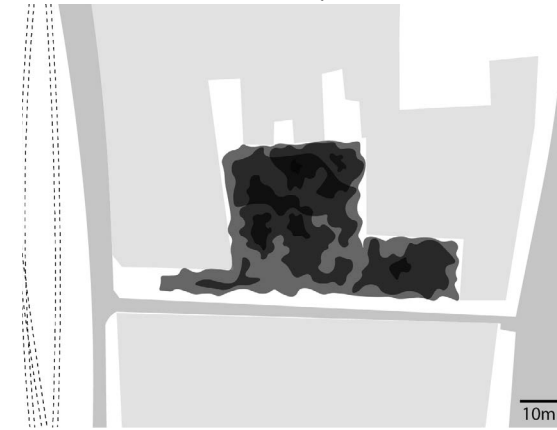


# Analysis

## *Points - Refuge*

1

1. Le Bois Dormoy



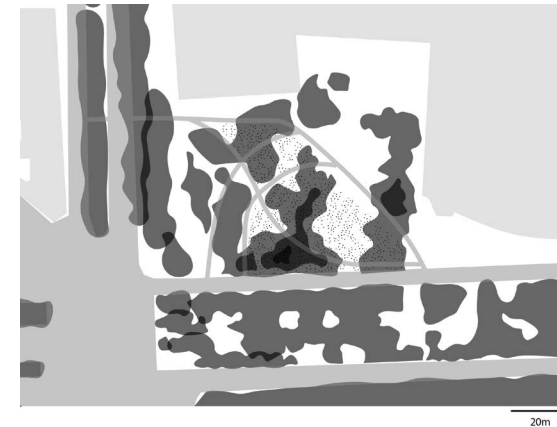
2

2. Square des Batignolles



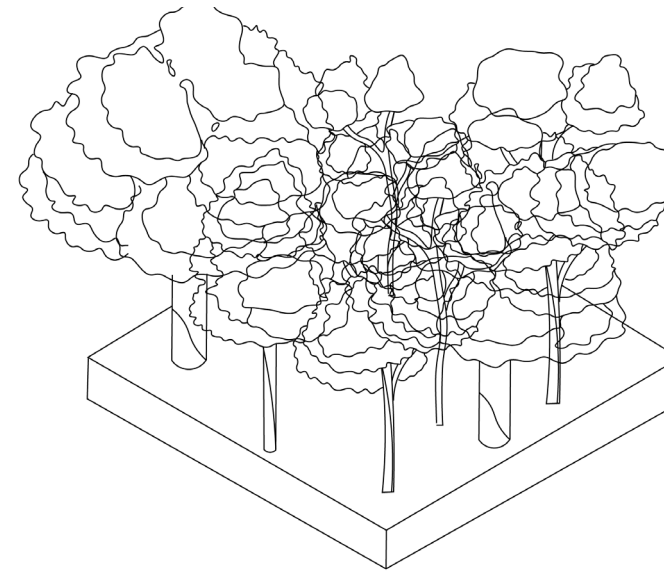
3

3. Jardin de la Nouvelle

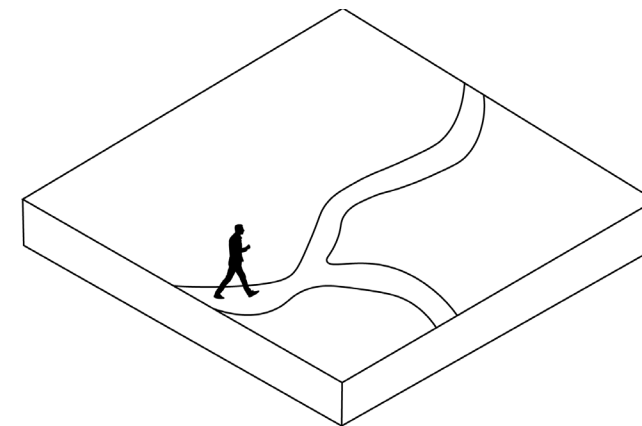


4

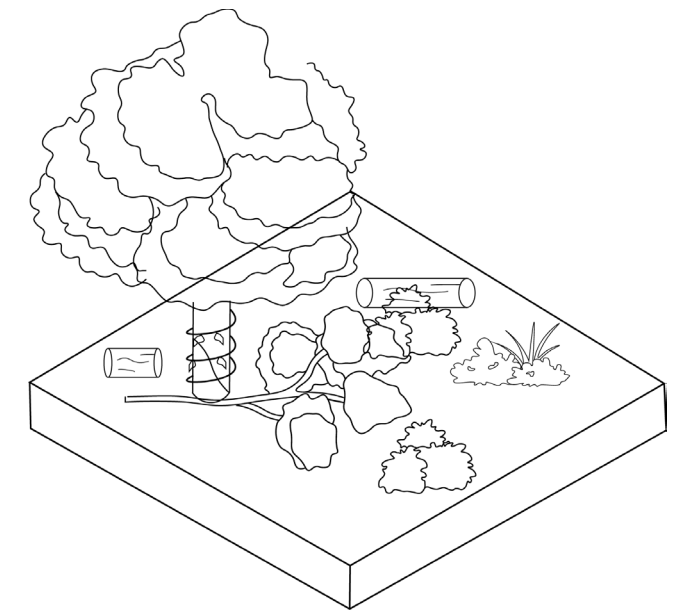
4. Porte des Lilas Pocket Forest



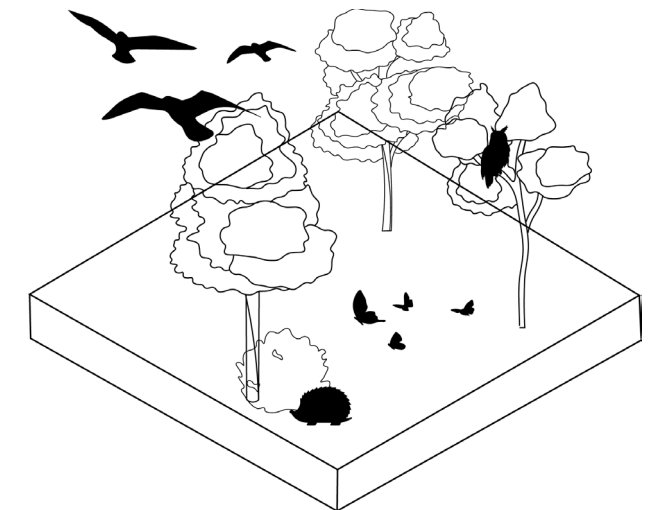
*Dense tree canopy cover*



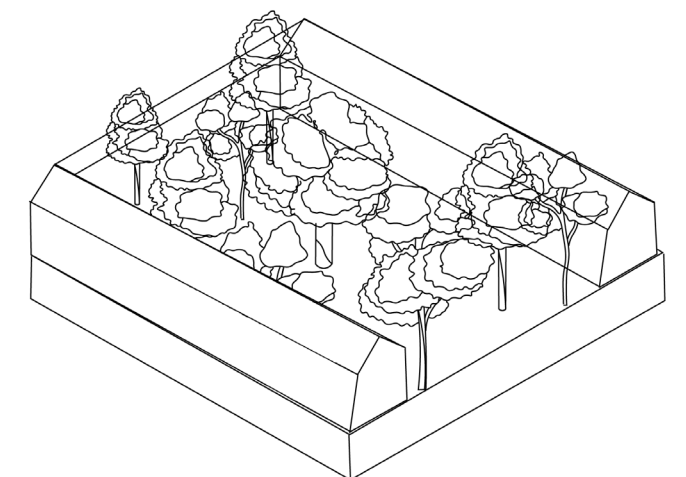
*Winding paths*



*Wild*



*Biodiversity*



*Dense Urban Context*



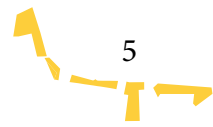
*Jardin de la Nouvelle*



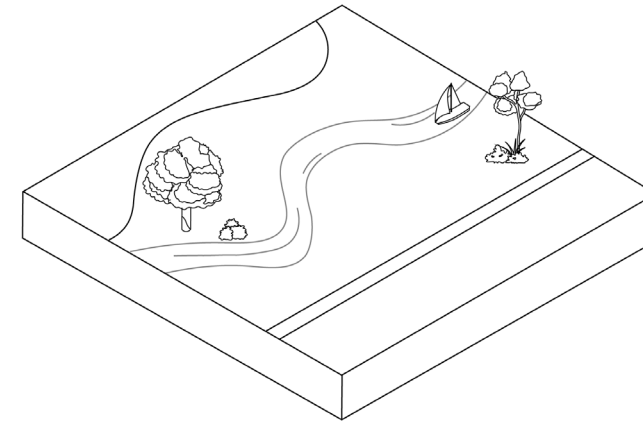
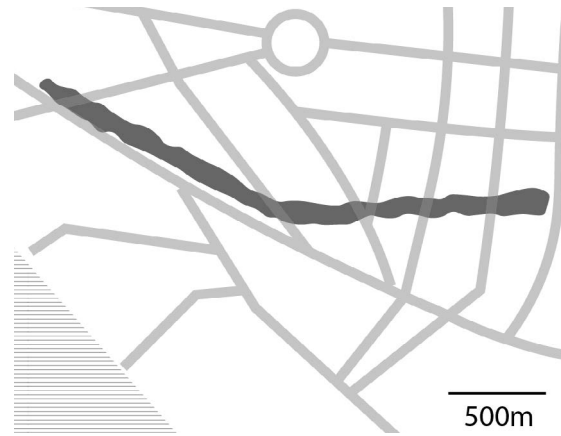


# Analysis

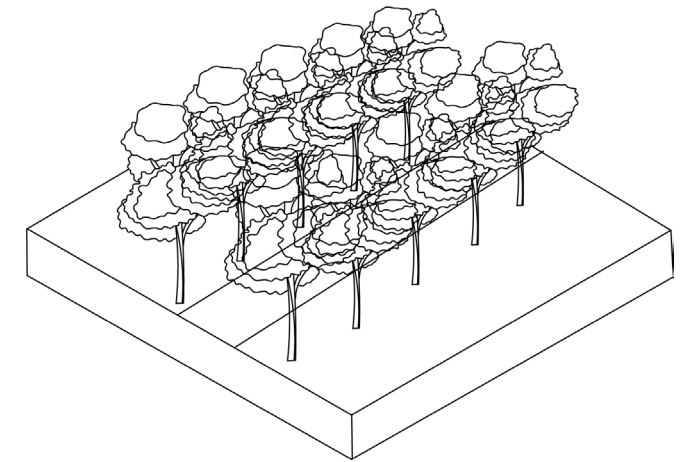
## *Lines - Social*



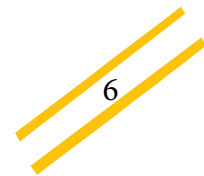
5. La Promenade Plantée



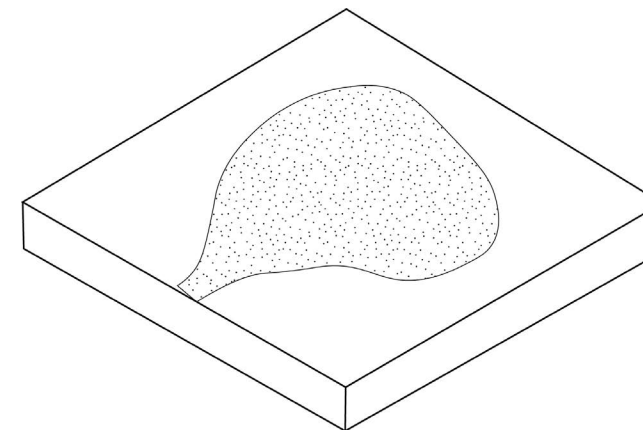
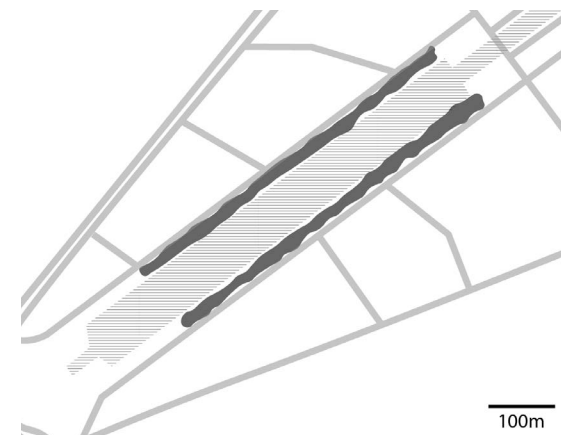
*Riverside*



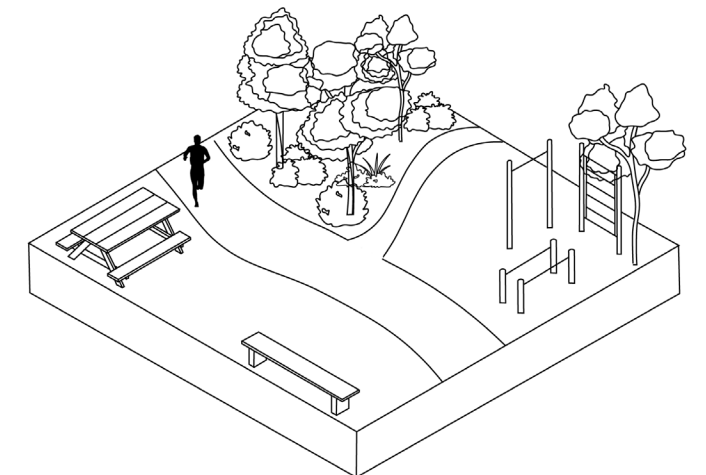
*Tree lined promenades*



6. Bassin de la Villette



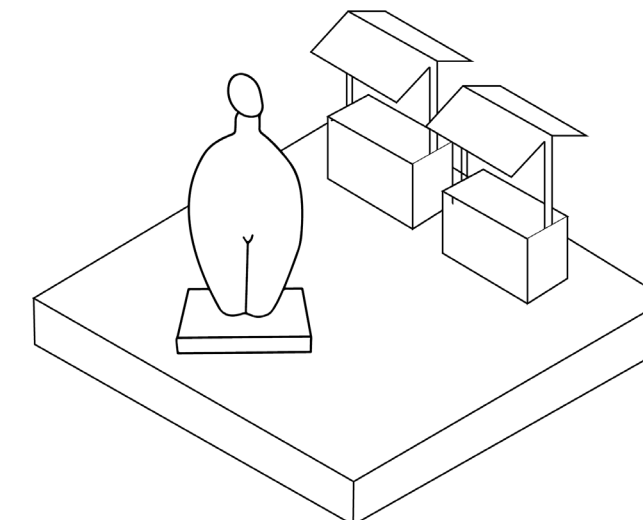
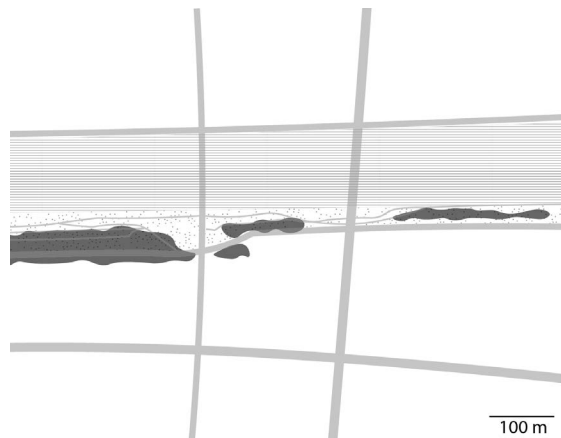
*Open space*



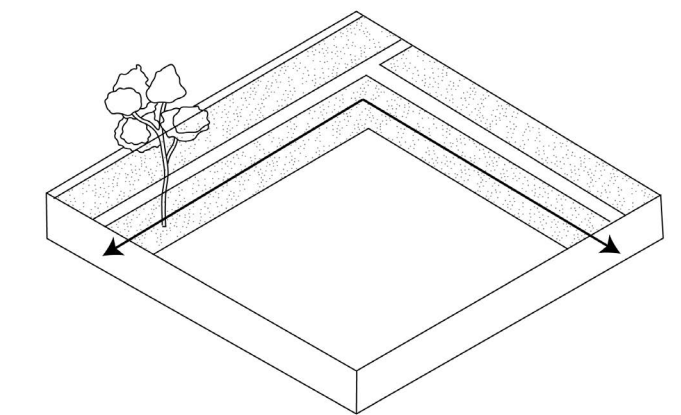
*Versatile spaces*



7. Berges de Seine



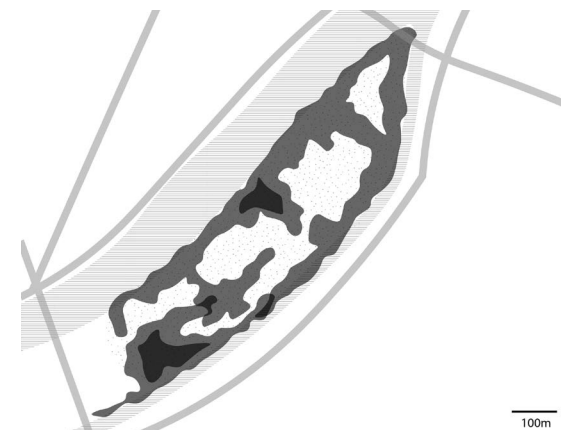
*Arts & Markets*



*Linear pathways*



8. Ile Saint-Germain





## *Seine River Banks*



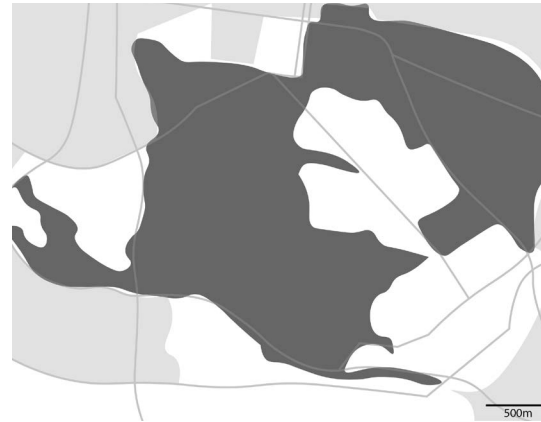


# Analysis

## *Planes - Healing*



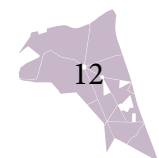
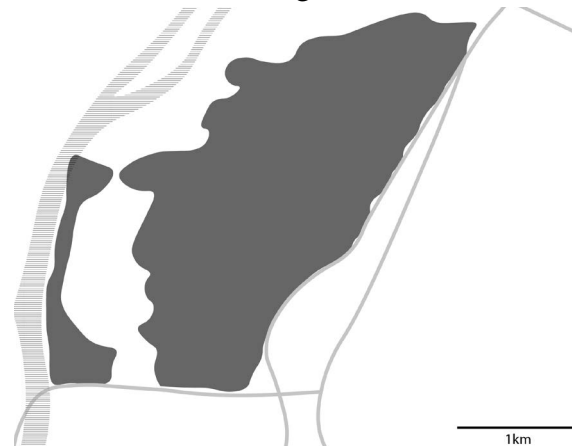
9. Bois de Vincennes



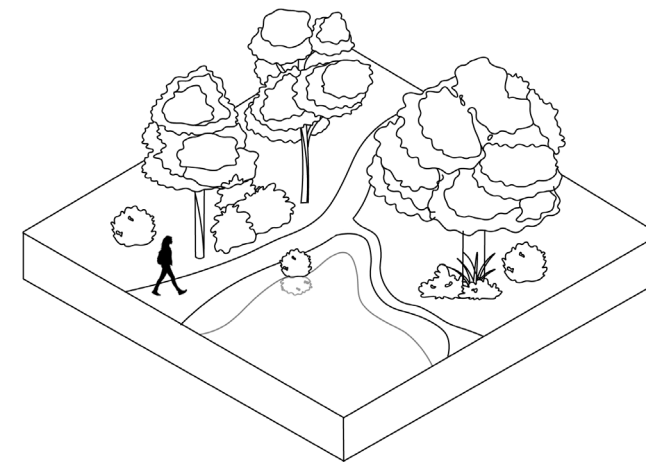
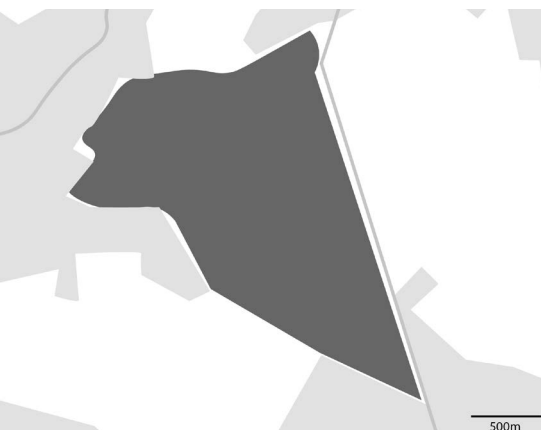
10. Forêt de Notre - Dame



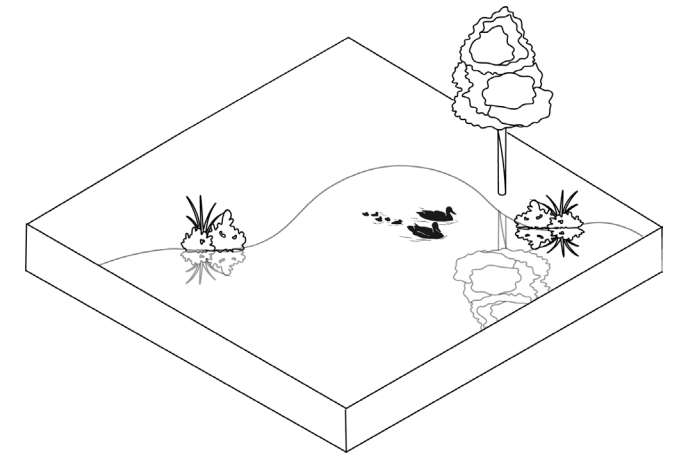
11. Bois de Boulogne



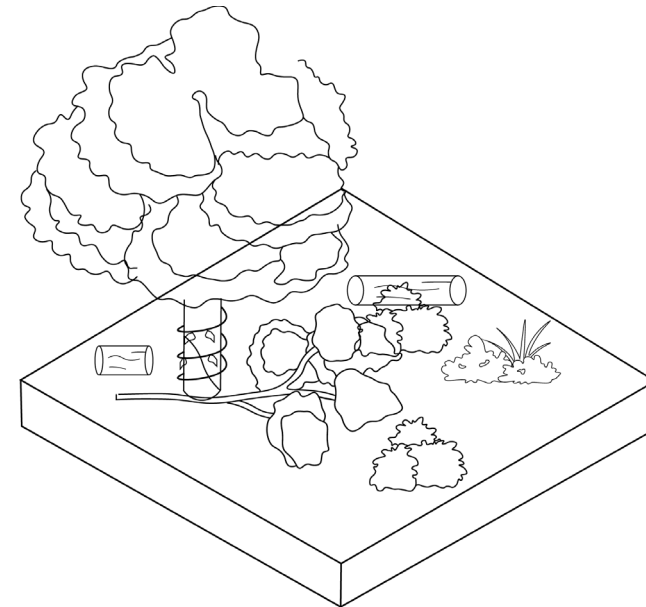
12. Forêt de Meudon



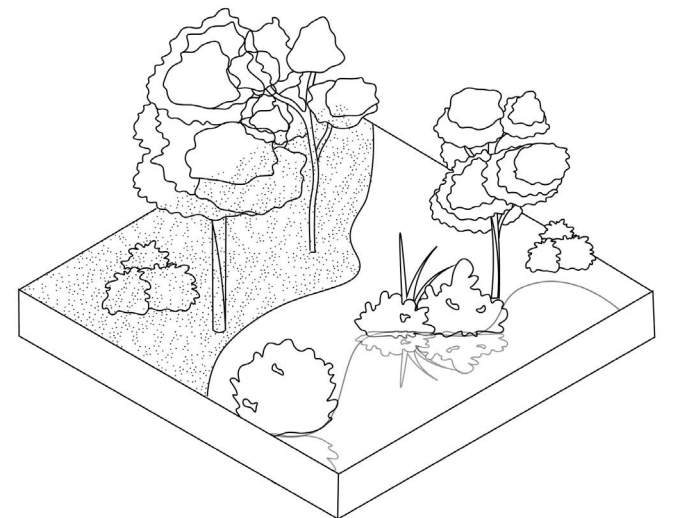
*Restorative Trails*



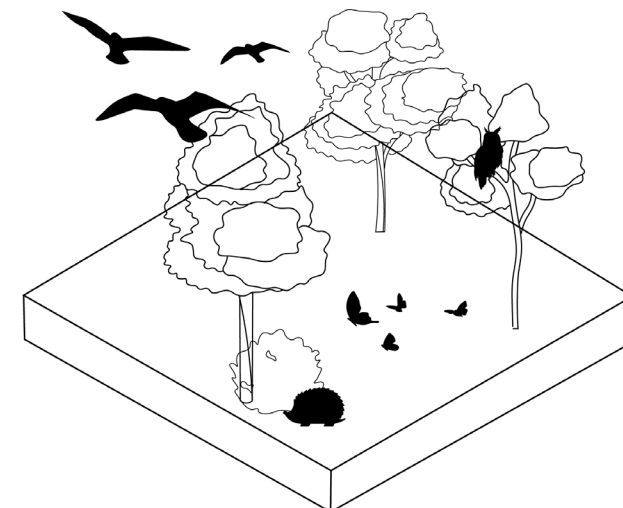
*Water*



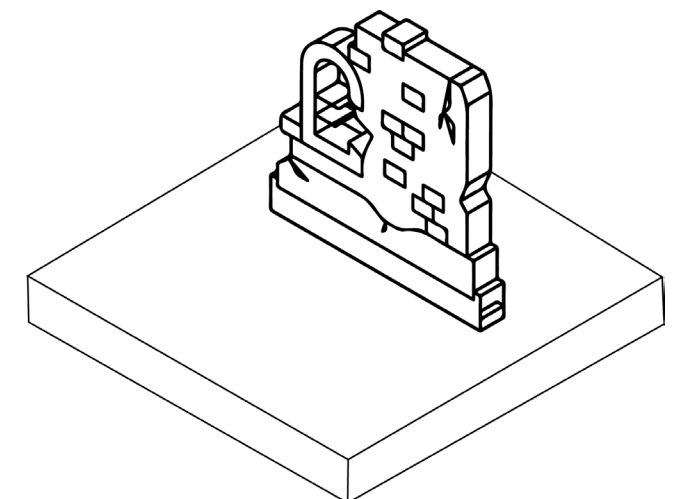
*Wild*



*Diverse*



*Biodiversity*



*History & Culture*



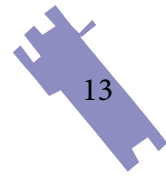
## *Bois de Boulogne*



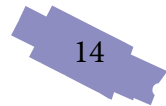


# Analysis

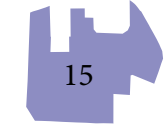
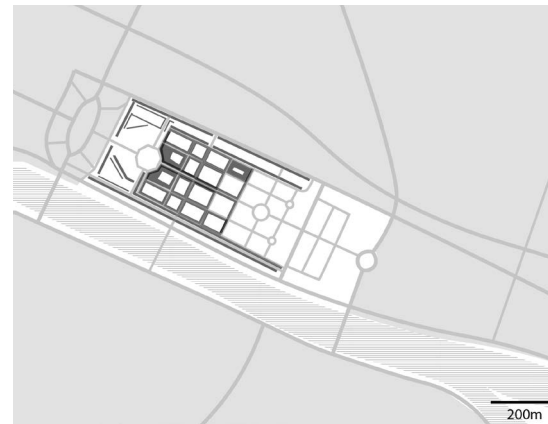
## *Grids - Focus*



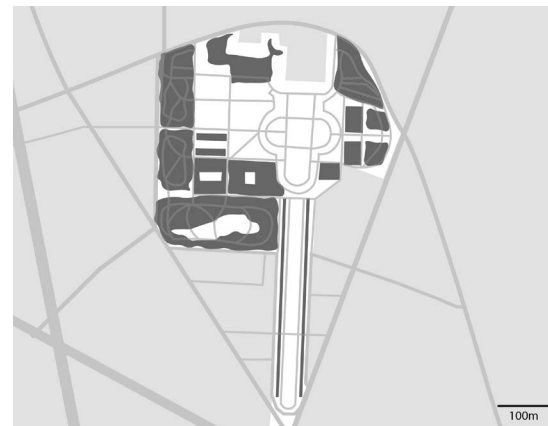
13. Parc de Bercy



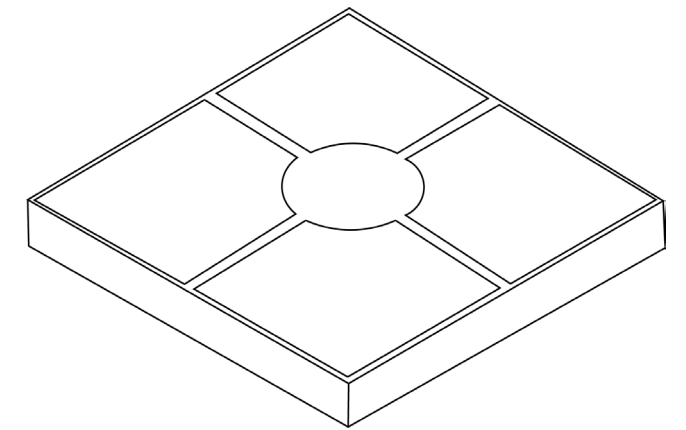
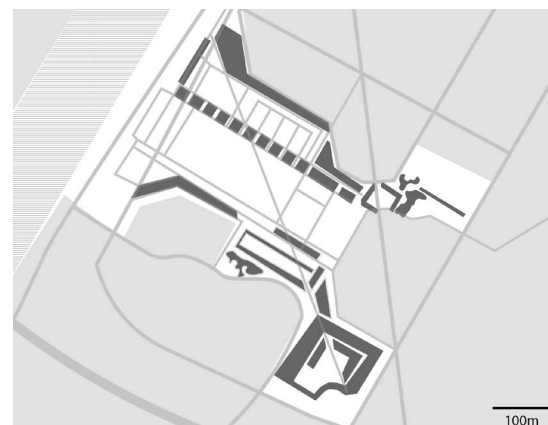
14. Jardin des Tuileries



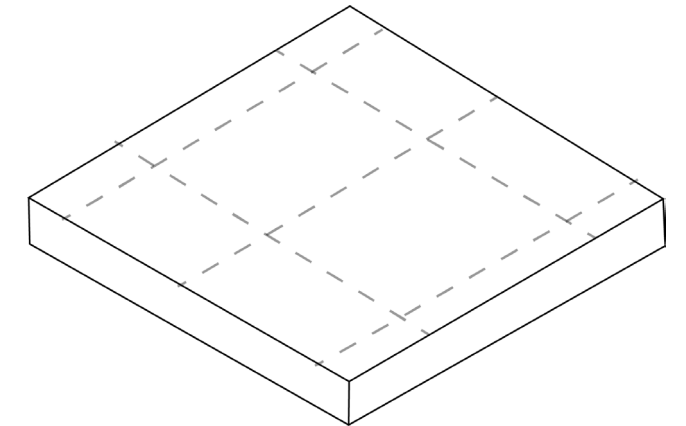
15. Jardin du Luxembourg



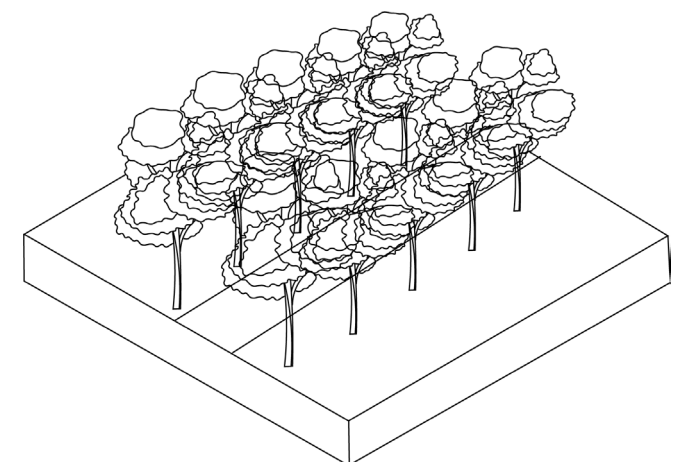
16. Parc André Citroën



*Central point*



*Geometric layout*



*Tree lined promenades*



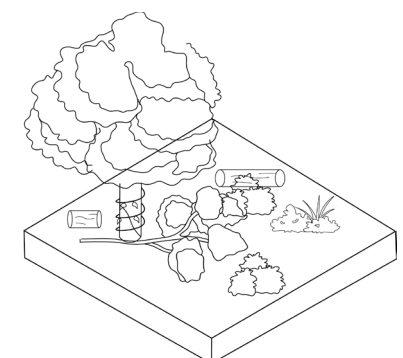
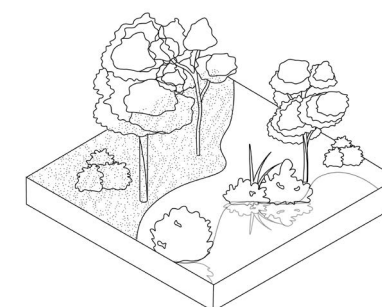
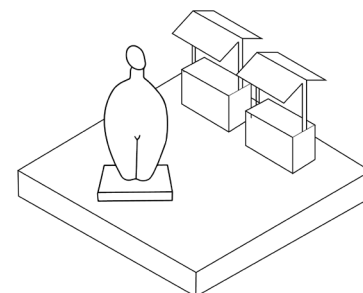
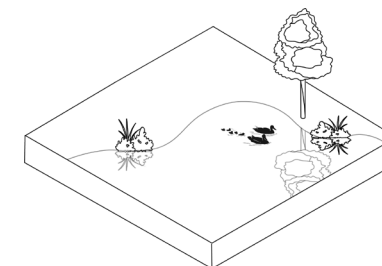
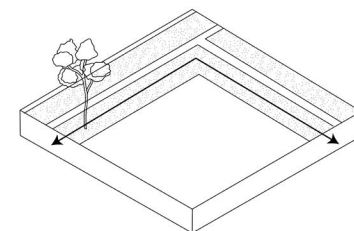
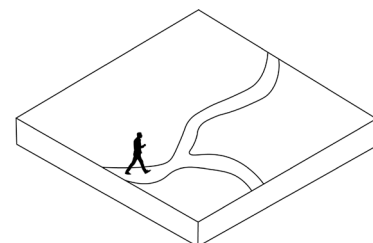
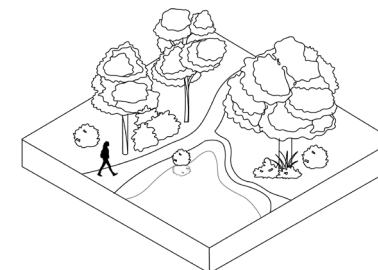
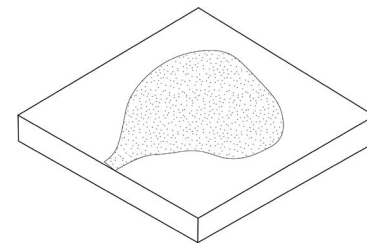
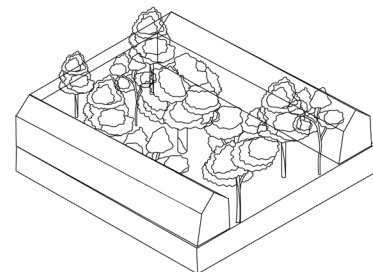
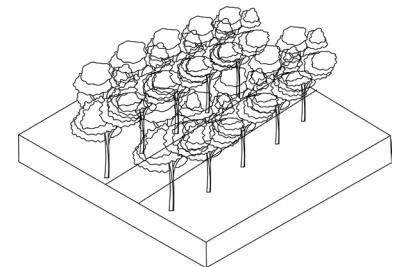
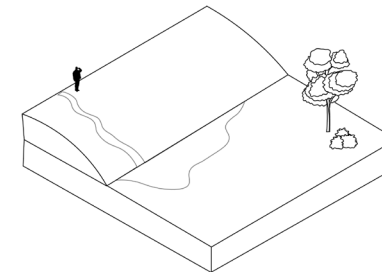
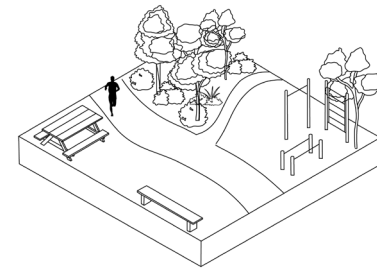
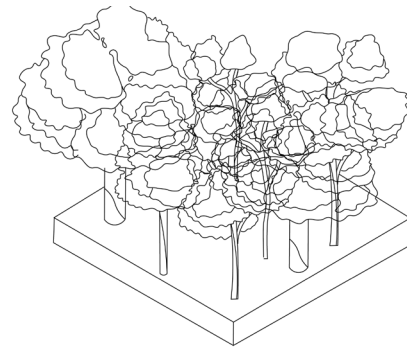
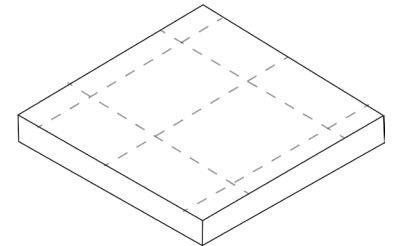
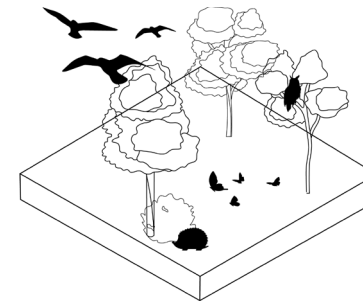
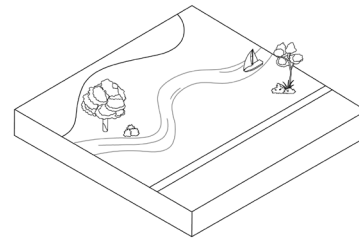
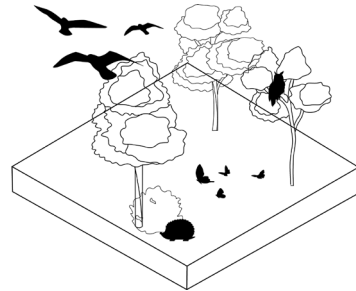
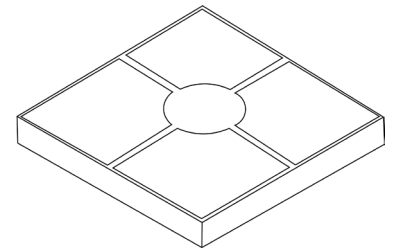
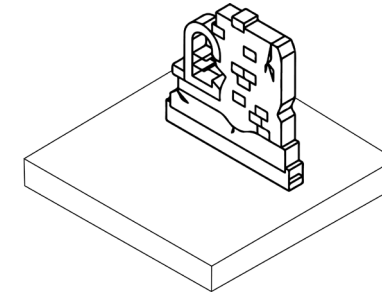
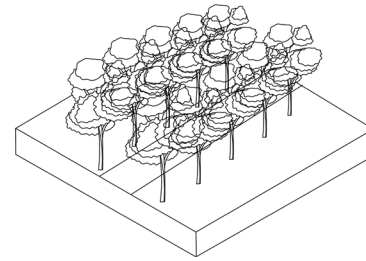
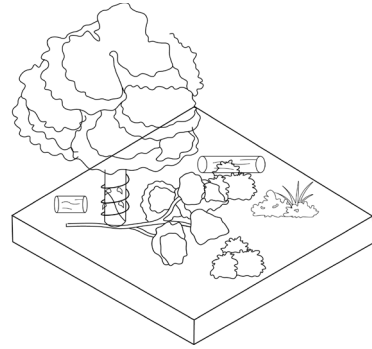
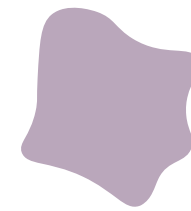
## *Tuileries*





# Analysis

## *Parisian Toolbox*





# In Situ Testing

## *Interviews*

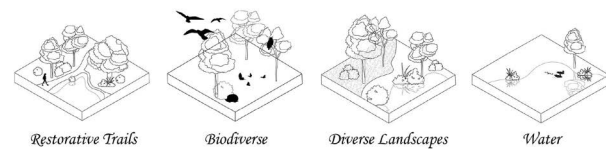




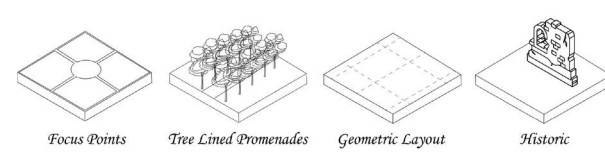
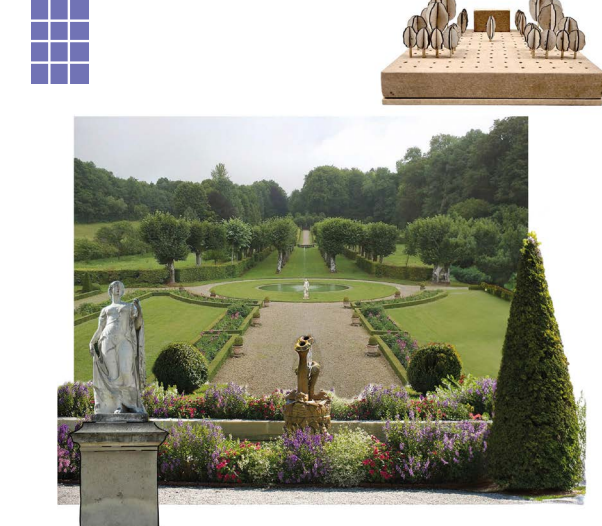
# In Situ Testing

## Interview Collages

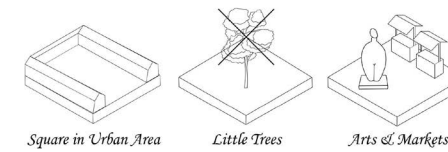
Typology 1



Typology 2



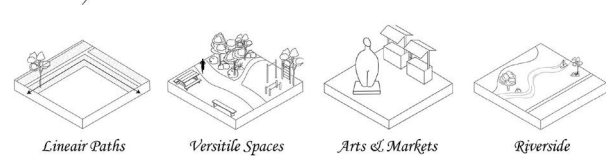
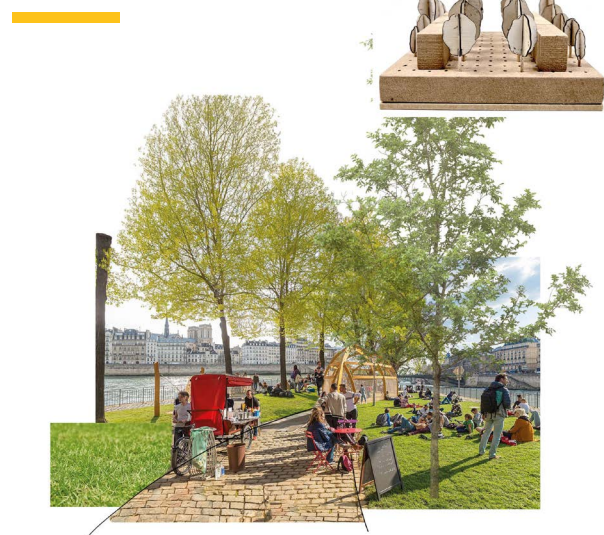
Square



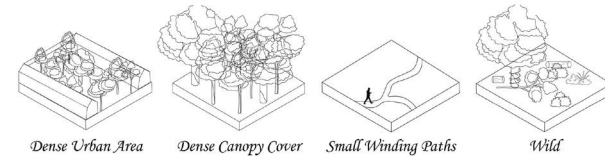
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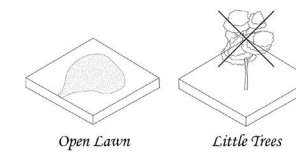
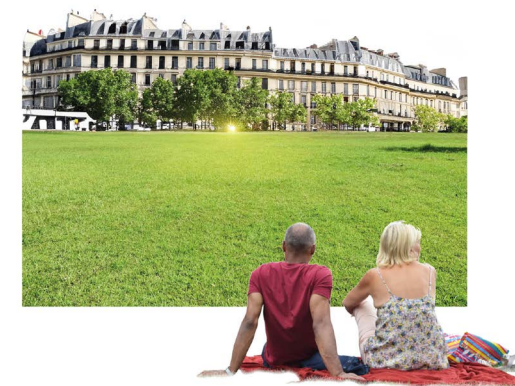
Typology 3



Typology 4



Lawn



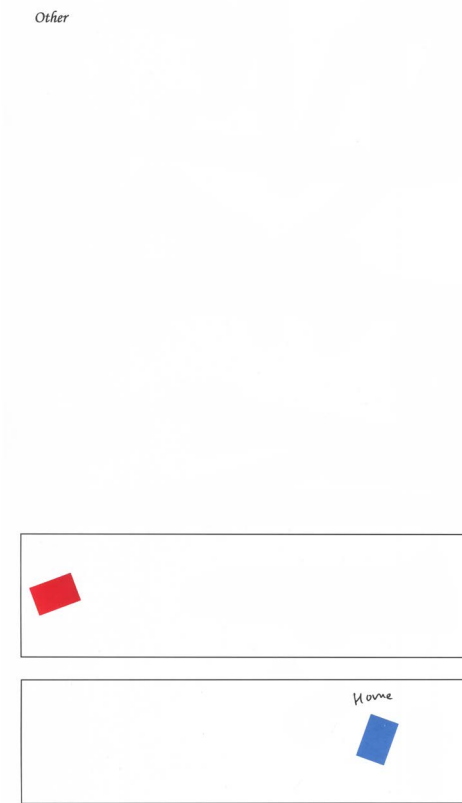
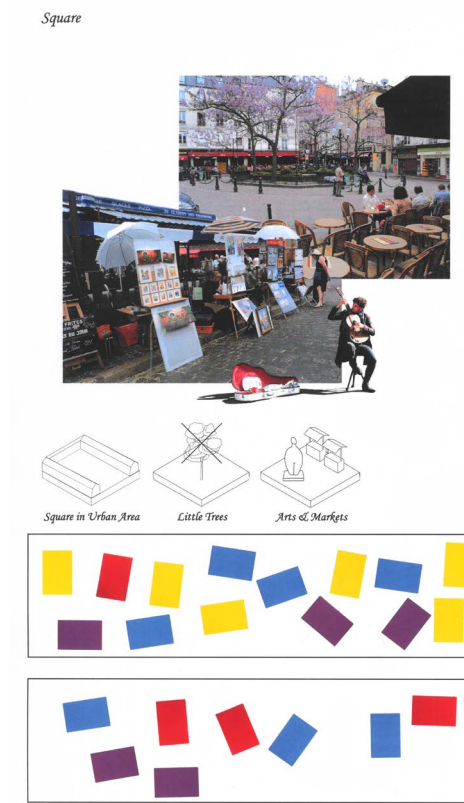
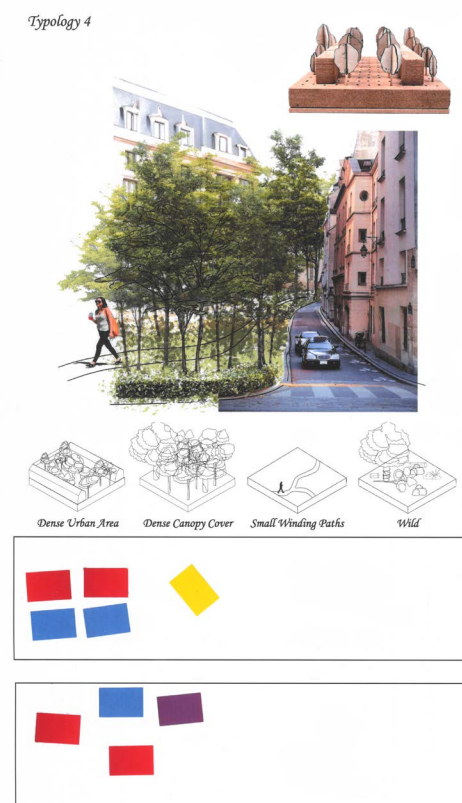
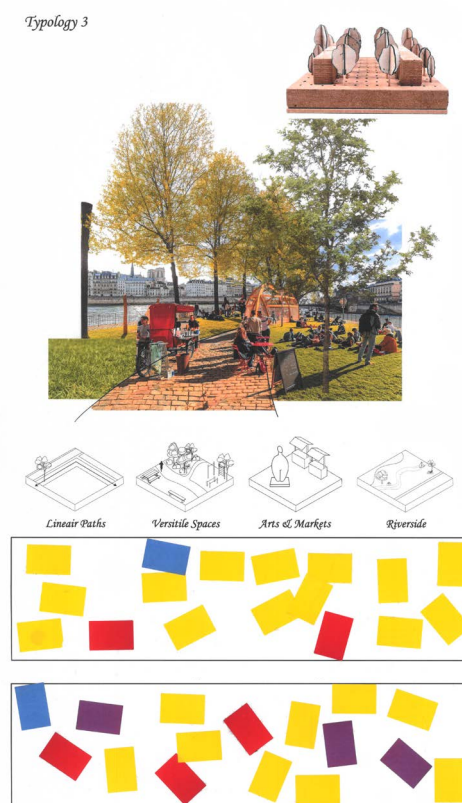
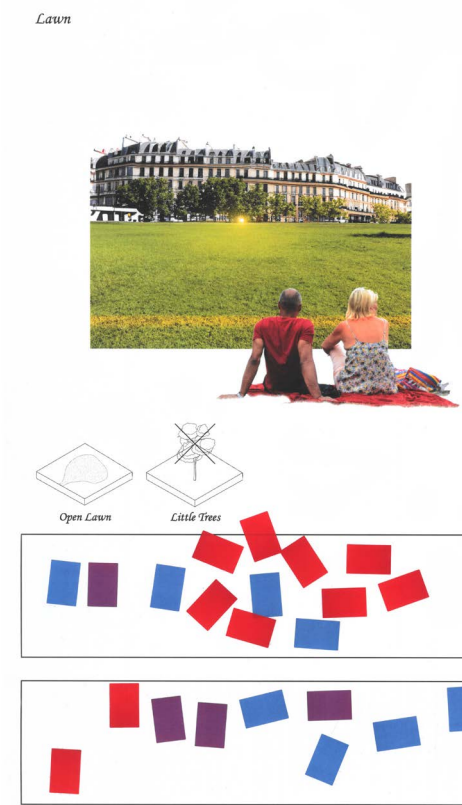
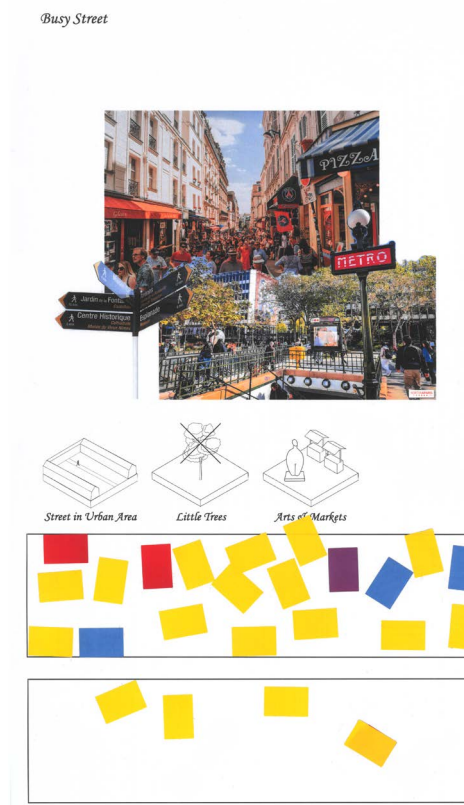
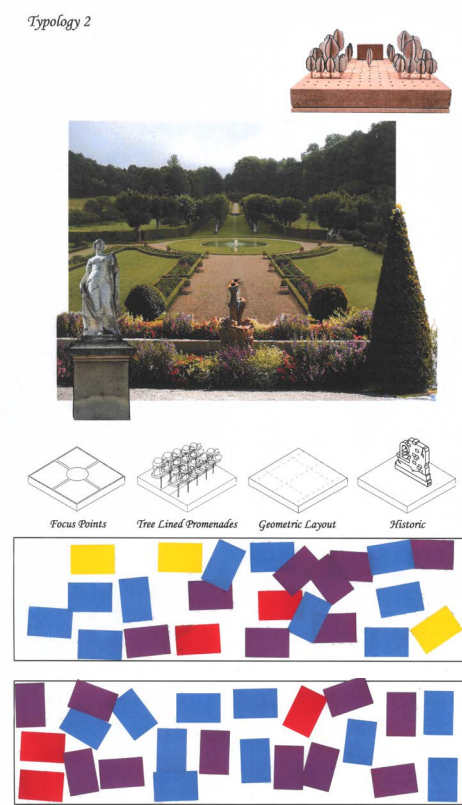
Other





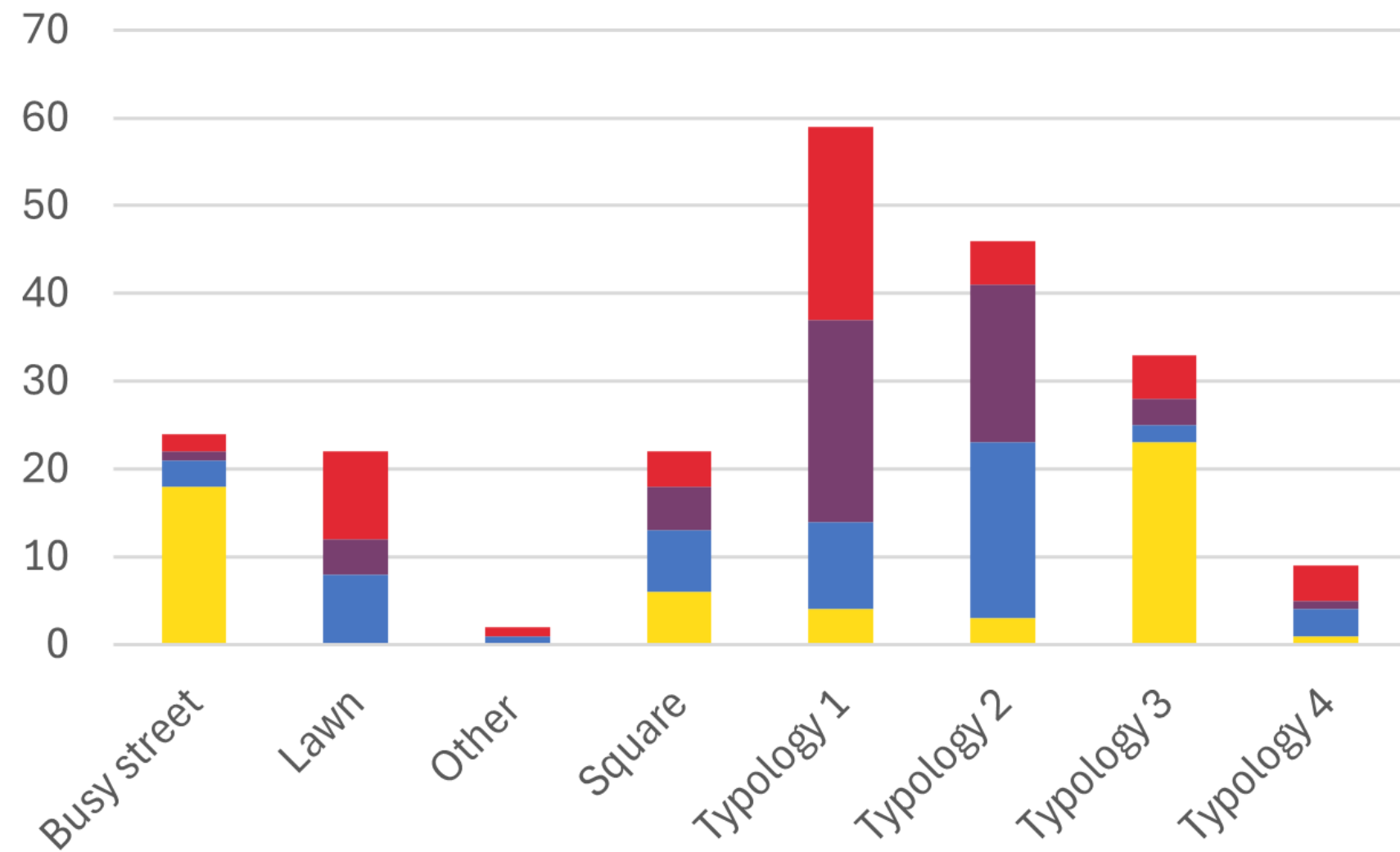
# In Situ Testing

## Results Interviews





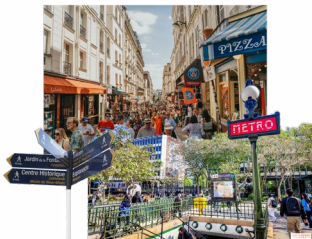
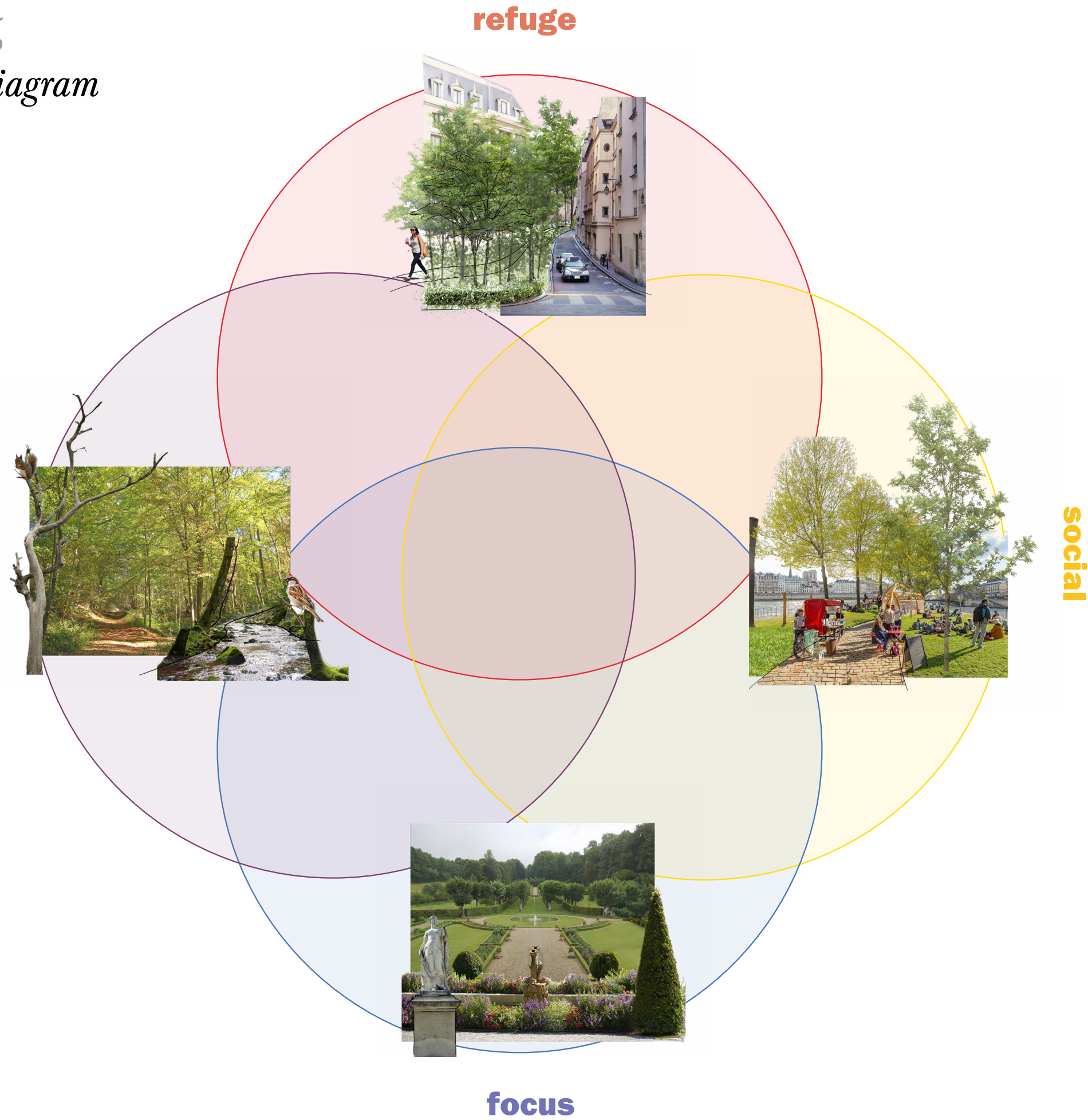
# In Situ Testing *Results*





# In Situ Testing

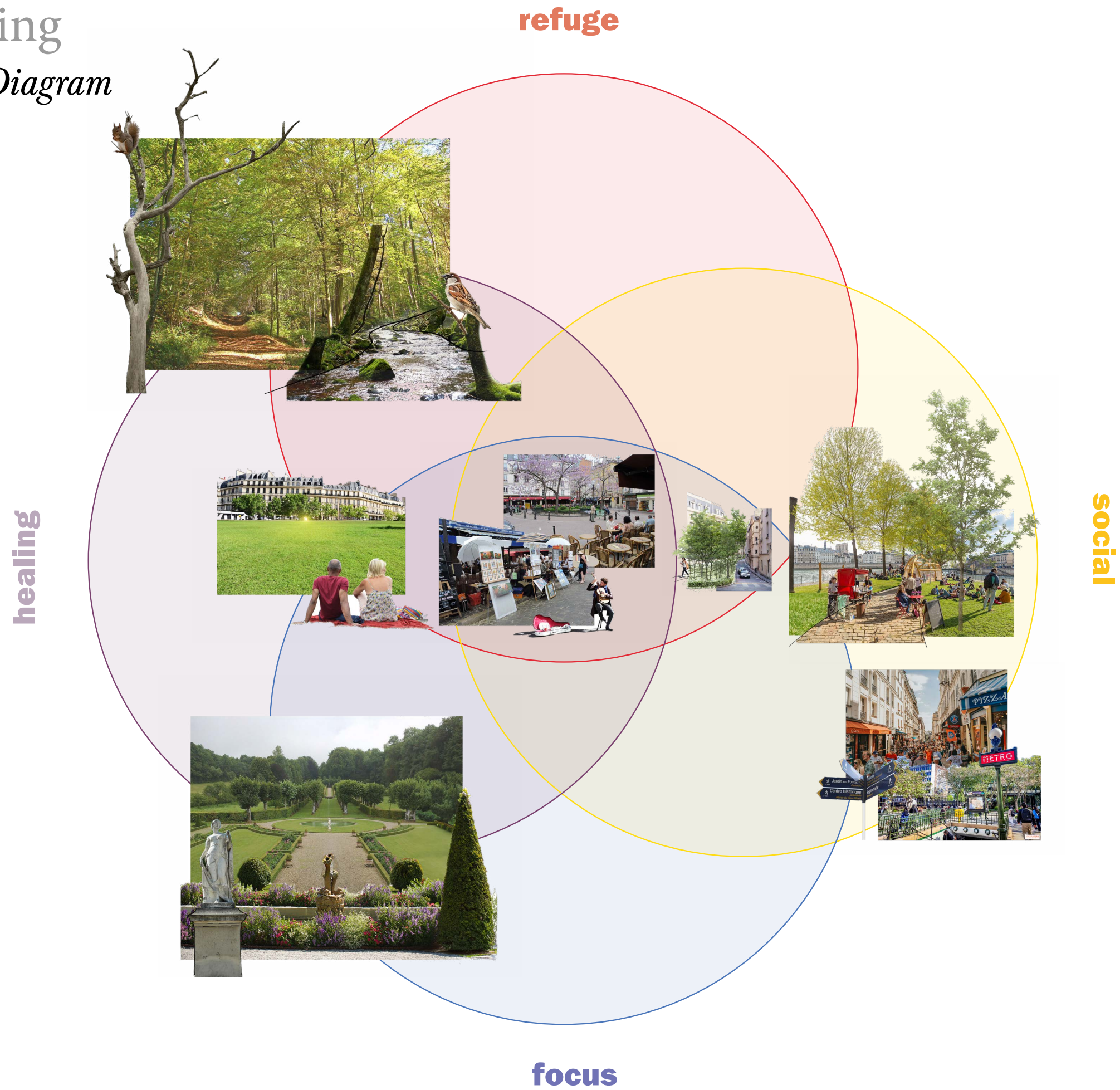
## *'Expected' Venn-Diagram*





# In Situ Testing

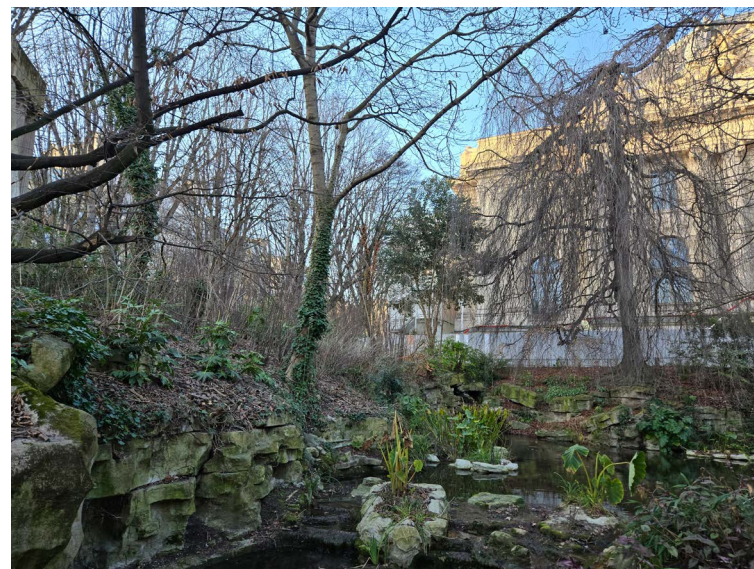
## *Results Venn-Diagram*





# In Situ Testing

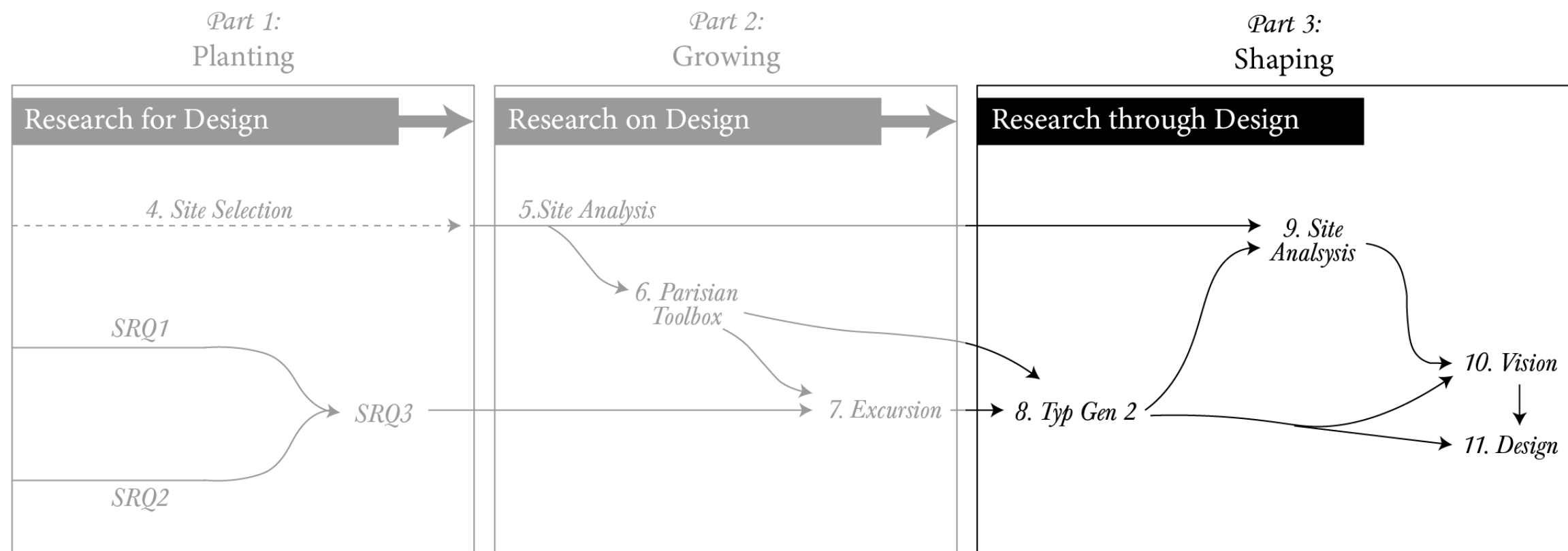
## *Other Observations*





# Shaping

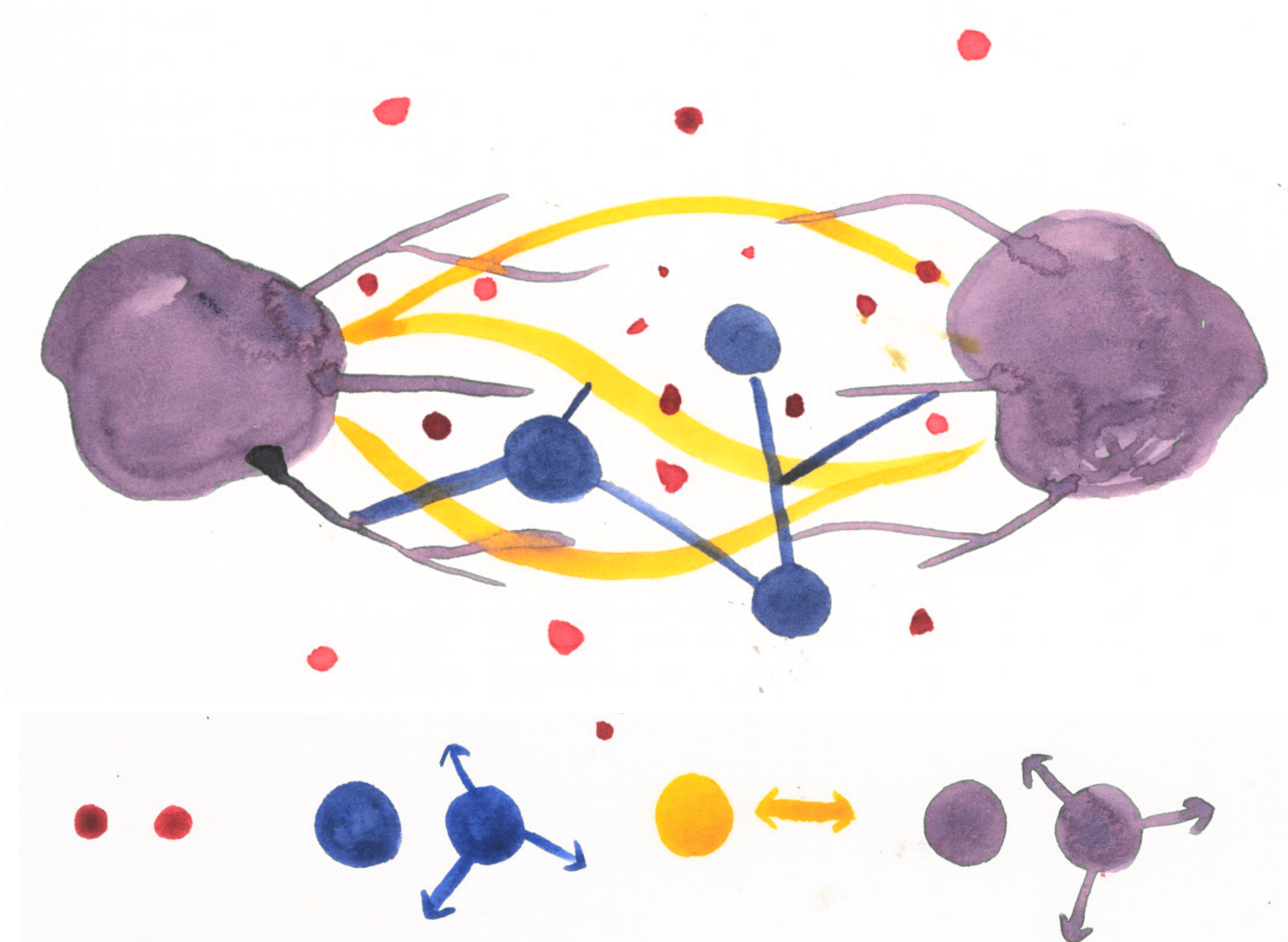
## *Part 3: Research through Design*





# Typologies Generation Two

*A New Way of Thinking*





# Typologies Generation Two

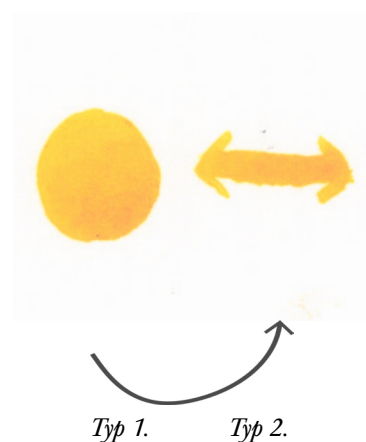
## ***Social Forest***

### **Problems**

- Social interaction is hindered by fragmented and car-dominated public space
- Many urban routes lack greenery, comfort, and space to pause or gather
- Existing walking paths often feel unsafe or uninviting for informal use

### **Opportunities**

- + Social experiences unfold naturally along shared green routes
- + Linear form allows continuous, walkable, and engaging environments
- + Green corridors support gathering, movement, and informal exchange
- + Enhancing social use doesn't require new parks, just better daily routes



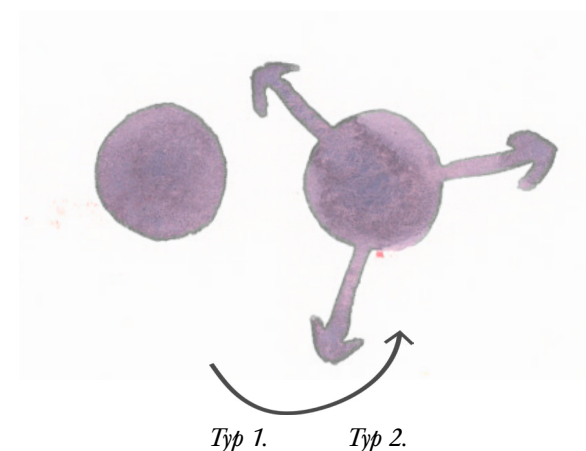
## ***Healing Forest***

### **Problems**

- Stress and sensory overload peak in the dense city
- Immersive natural spaces are not part of daily urban life
- Limited space is available for large new restorative areas

### **Opportunities**

- + Healing qualities can extend into the city through linear green routes
- + Lines allow gradual transition from urban intensity to natural calm
- + Sensory-rich corridors fit well within narrow, constrained spaces
- + Make healing accessible through everyday movement, not isolated destinations



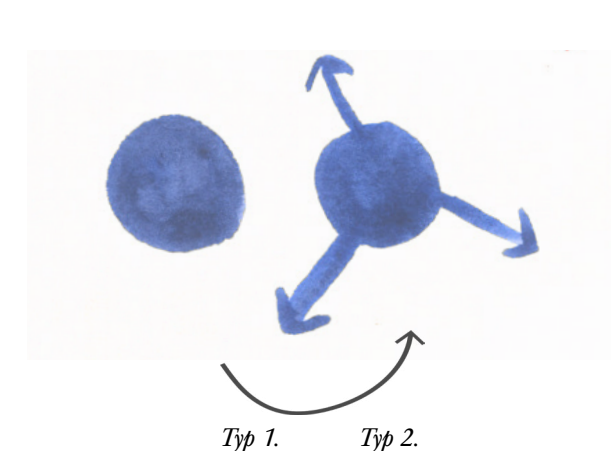
## ***Focus Forest***

### **Problems**

- Urban spaces often lack rhythm, structure, and orientation
- Focus-promoting green areas are disconnected from daily use
- Existing formal spaces are static and limited in reach

### **Opportunities**

- + Lines can express clarity, repetition and symmetry through planting and layout
- + A sequential spatial experience enhances mental focus during movement
- + Translating formal garden principles into routes improves urban legibility
- + Linear focus spaces support calmness in motion, not just in stillness





# Typologies Generation Two

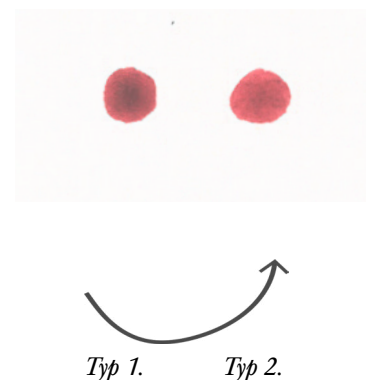
## *Refuge Forest*

### Problems

- Calm, enclosed green spaces are scarce in the dense city
- Existing public green is often open, exposed, and overstimulating
- There are few dedicated places for solitude, reflection or quiet retreat

### Opportunities

- + Point-like pocket forests offer spatial contrast within busy urban fabric
- + Dense planting and enclosure create a sense of protection and calm
- + Refuge pockets can be placed in underused or leftover spaces
- + Small-scale forests can enrich other typologies as still, hidden nodes





# Typologies Generation Two



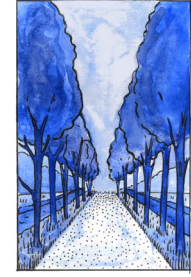
*Refuge*



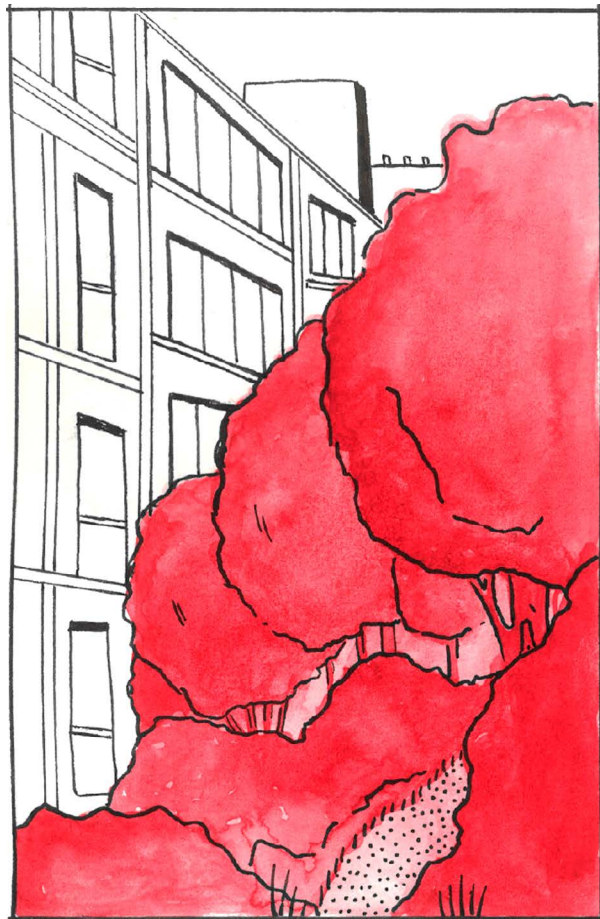
*Social*



*Healing*



*Focus*





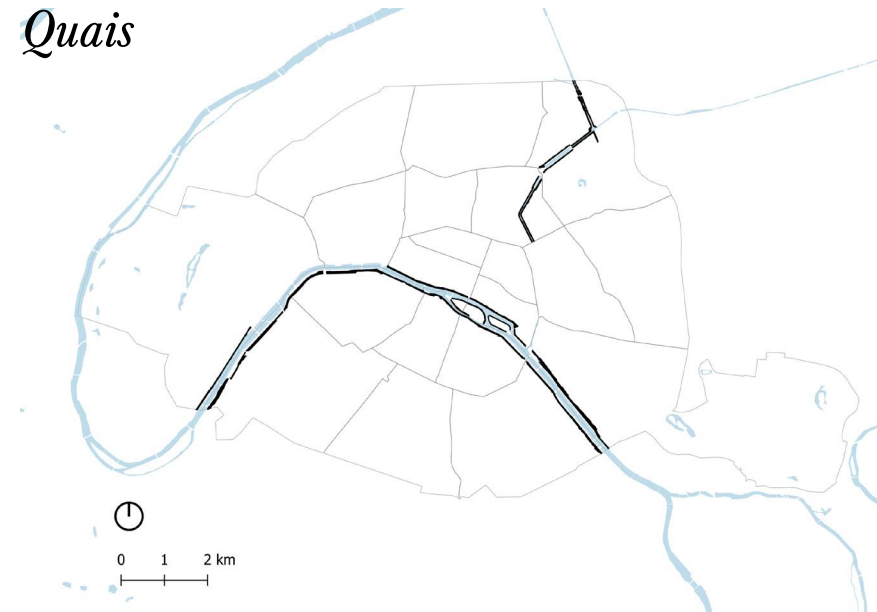
# Typologies Generation Two

## *Infrastructure Analysis*

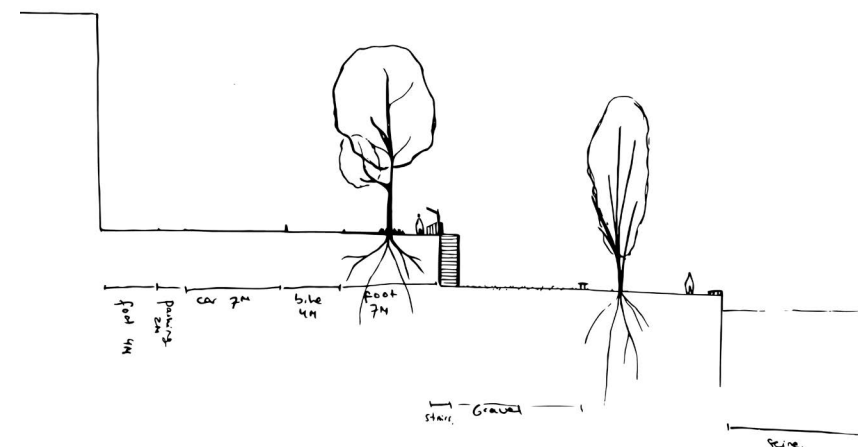
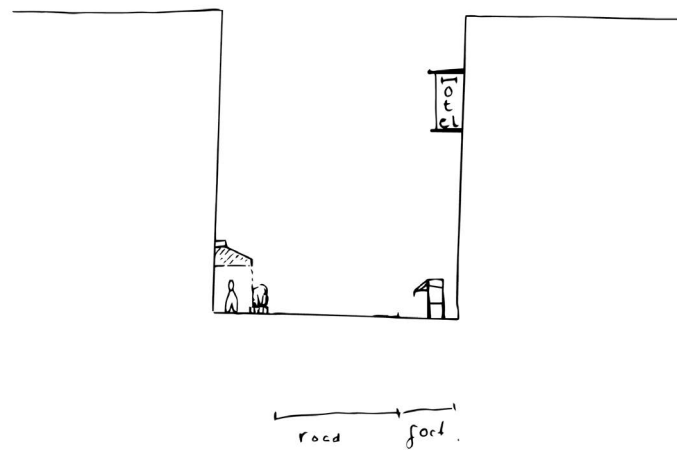
*Rues*



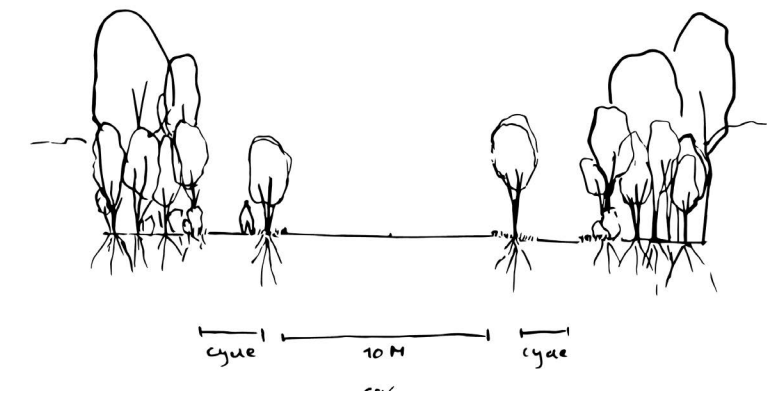
*Quais*



*Allées*



*allée de Longchamp 1:200 (1m=0.5cm)*





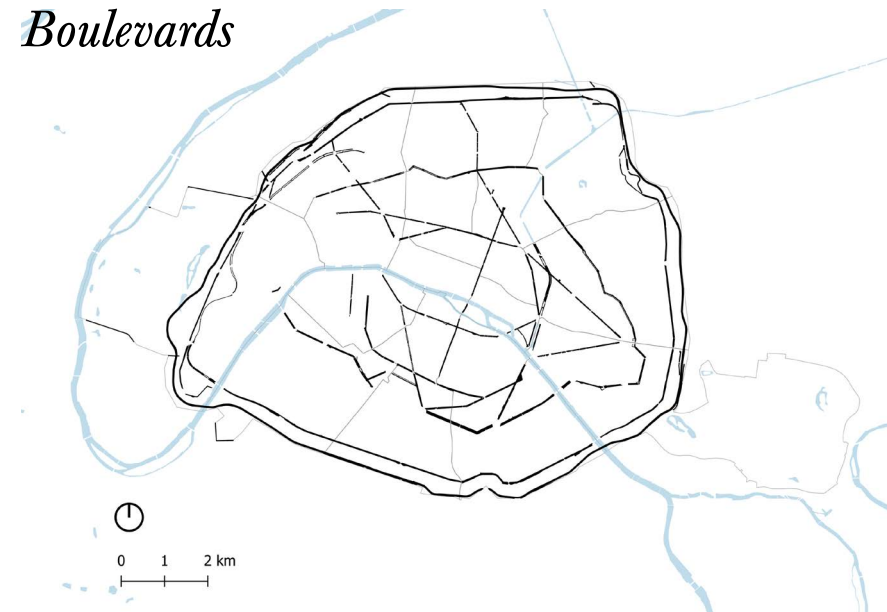
# Typologies Generation Two

## *Infrastructural Analysis*

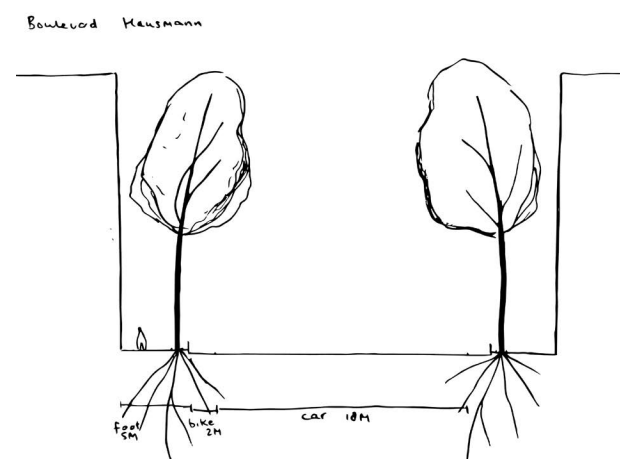
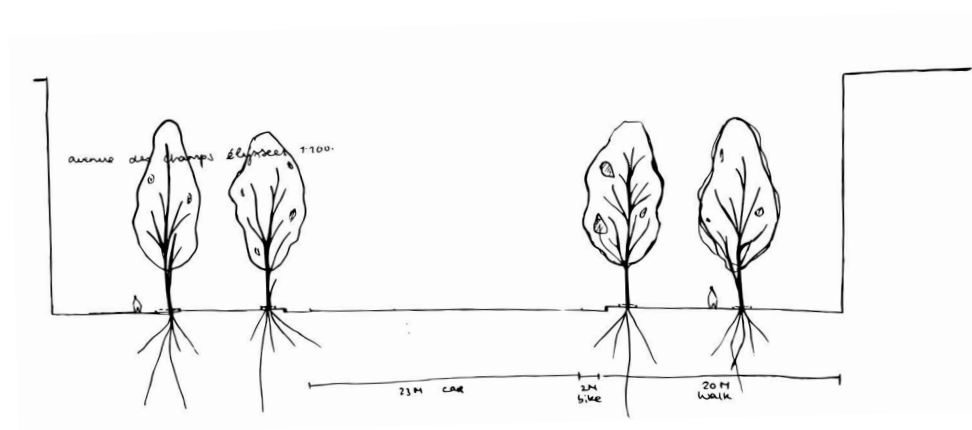
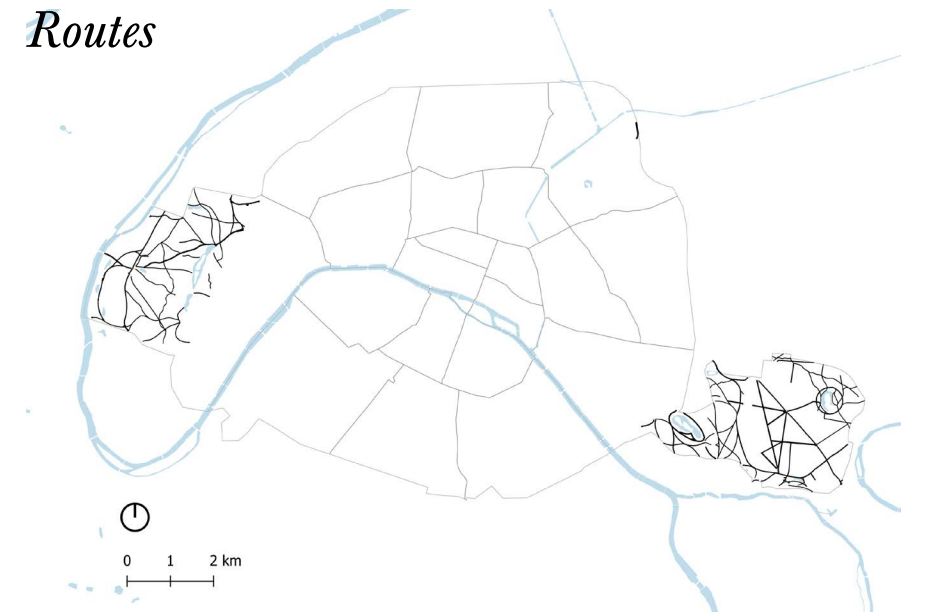
*Avenues*



*Boulevards*



*Routes*








*Route de la Muette. 1700.*





# Typologies Generation Two

## Conclusion Infrastructural Analysis

	Characteristics	Historical Context	Location	Typology Fit
<i>Allée</i>	Pedestrian - Oriented Embedded in parks / along water Shaded, quiet, immersive, naturalistic or formal	Used for promenades and leisure in green areas and estates	Parks and near water →	Healing Forest Lines Formal ones: Focus Lines 
<i>Avenue</i>	Grand- scale, tree lined, axial, formal structure, connects landmarks	Designed for royal use, Huassmann's plan emphasized symmetry and vistas	Radiate from central points; lined with cultural institutions →	Focus Forest Lines or Healing Lines depending on context 
<i>Boulevard</i>	Wide section, social acitivity, central medians	Developed under Haussmann to structure modern Paris	Ring-like stuctures in urban core →	Social Forest Lines 
<i>Quai</i>	Lineair waterfront, scenic, relaimed from cars, often wide	Used for transport and trade; increasingly pedestrianized	Follow Seine and canals →	Social Forest Lines 
<i>Rue</i>	Narrow, enclosed, varied use, spatially limited	Core of Paris, mixed use and limited room for expansion	Dense urban fabric troughout neighborhoods →	Less suited for large interventions
<i>Route</i>	Natural park roads, light traffic, surrounded by trees and nature	Originally rural or park baesd: integrated into new green areas	Inside parks →	Healing Forest Lines 



# Typologies Generation Two

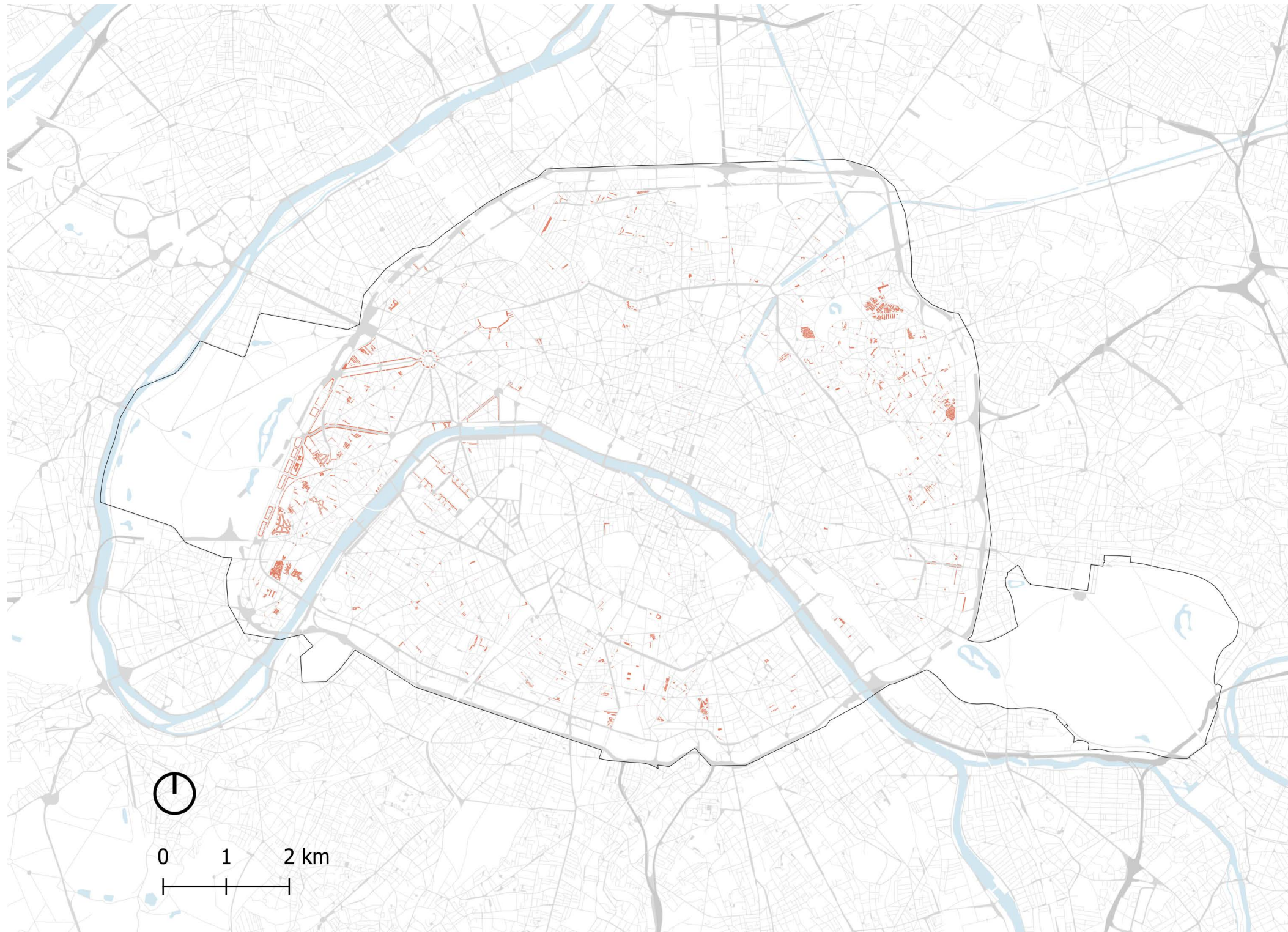
## *Conclusion Infrastructural Analysis*





# Typologies Generation Two

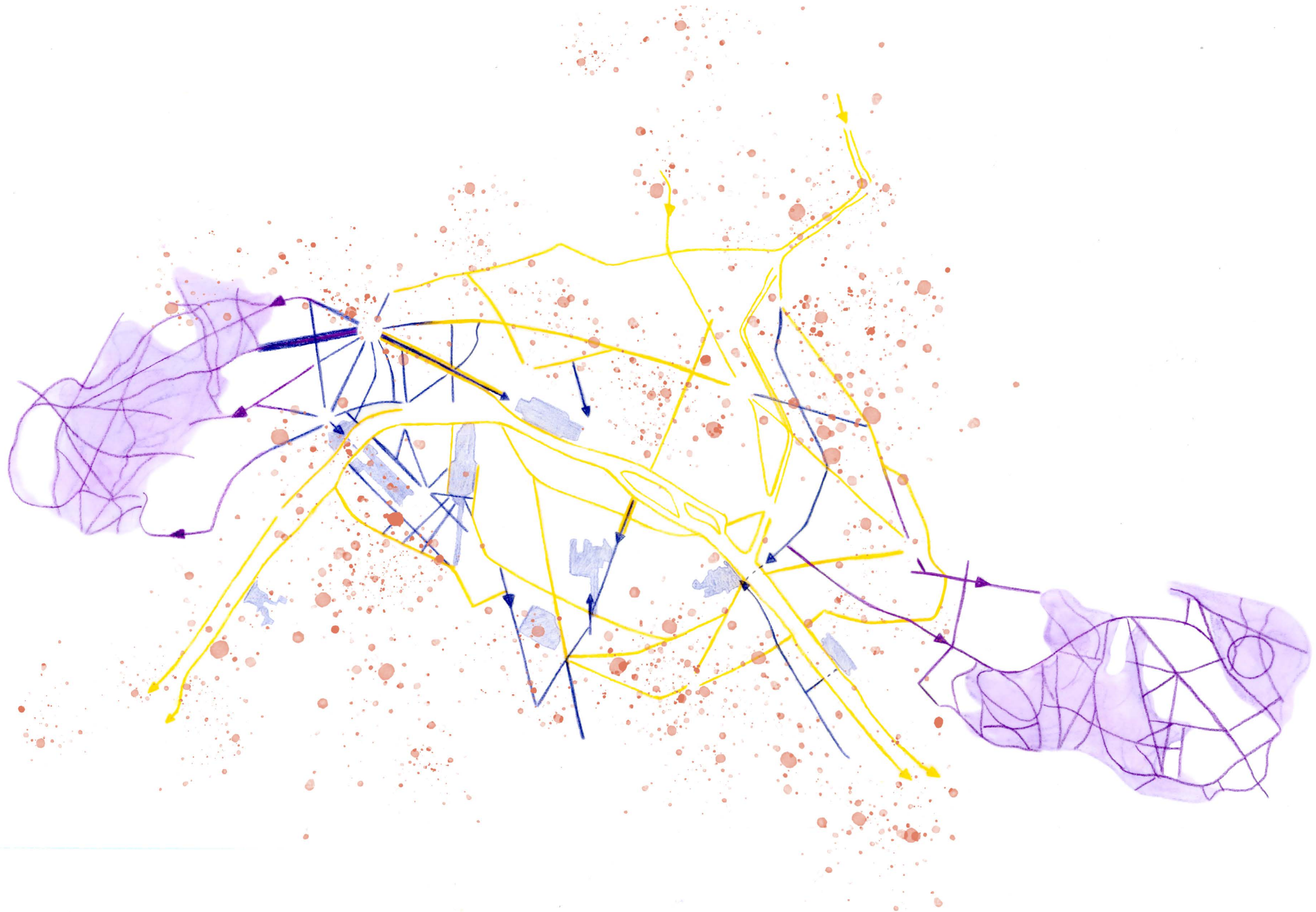
## *Possible Refuge*



Edited from (Open Data Paris, 2022)



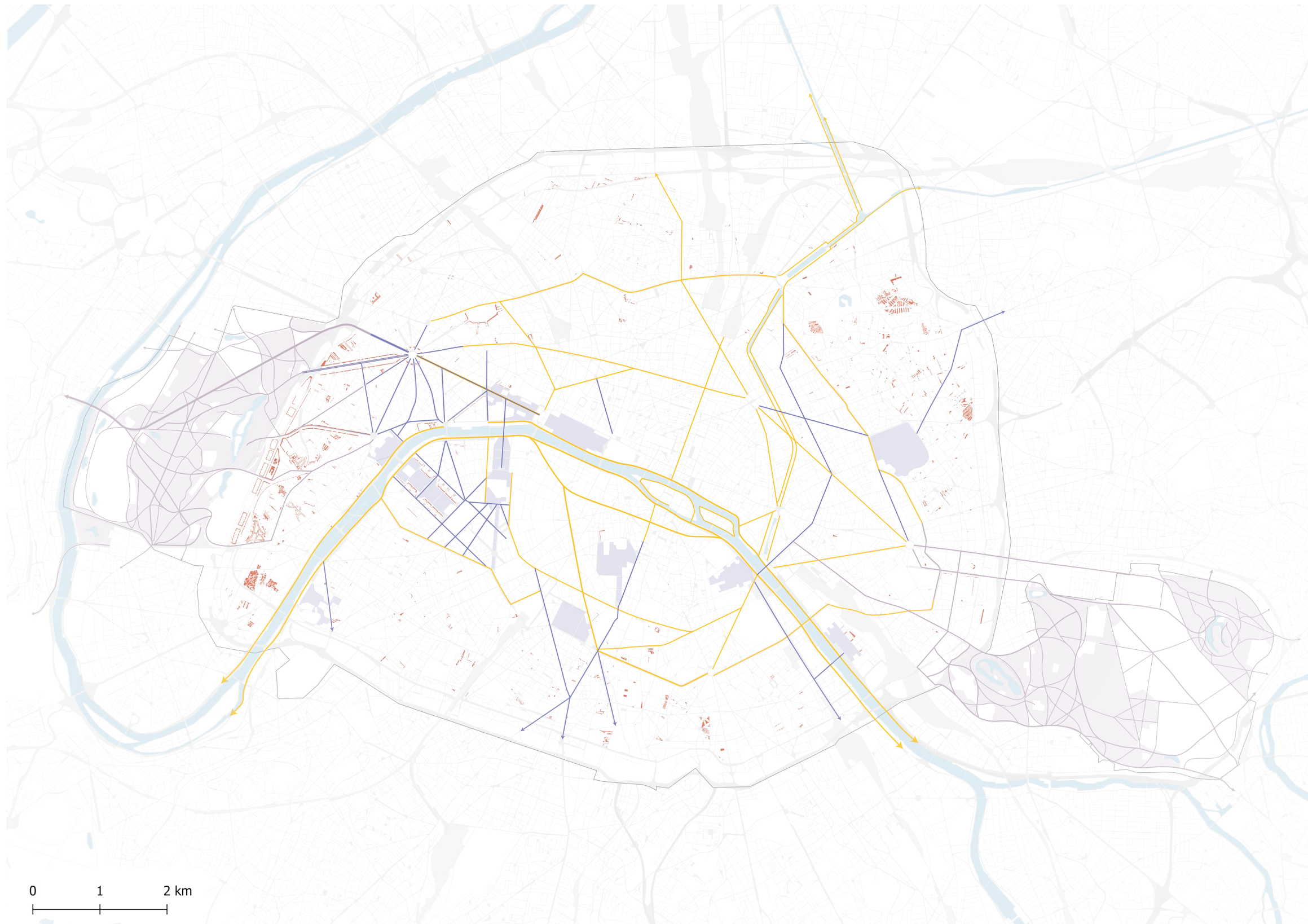
# City Vision





# City Vision

## *Infrastructure as Carrier*





# City Vision

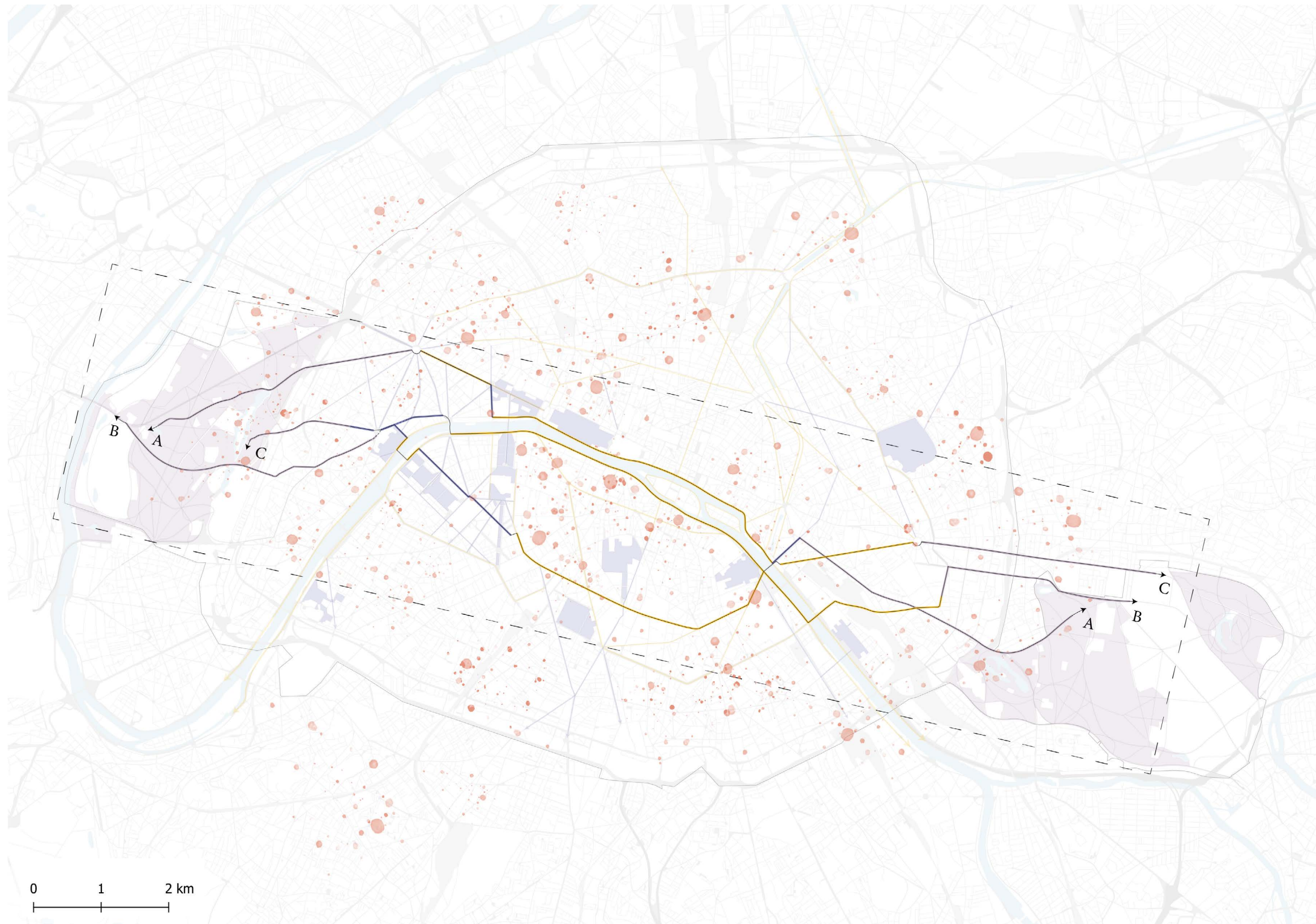
## *A New Green Structure*





# Design Concept

## *A Walk Through Paris*





# Design Visualisation

## *A Walk Through Paris*





# Zoom In-Visualisations

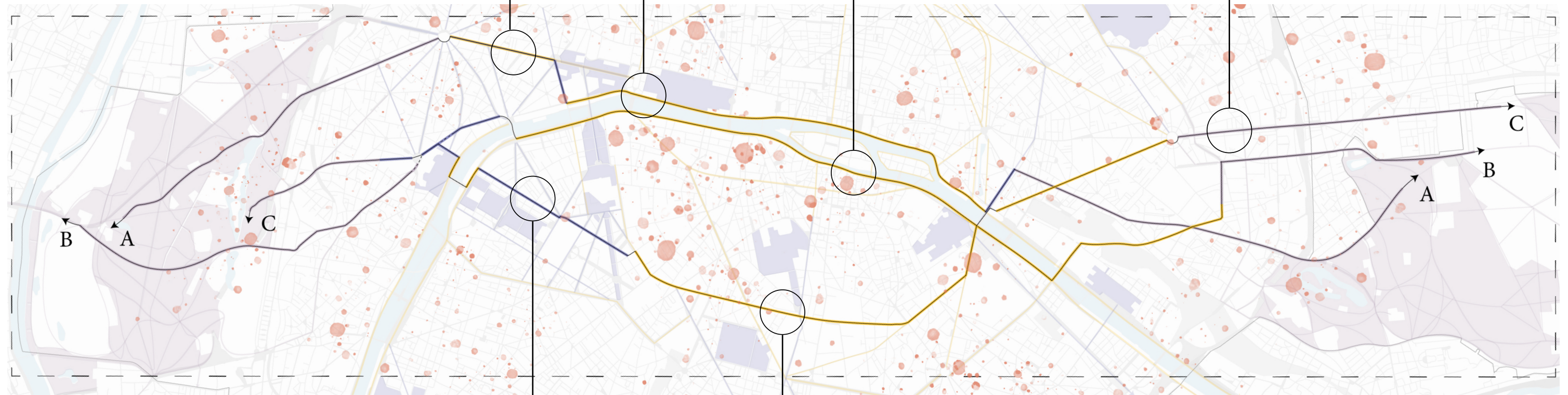
## *Locations & Types*

1. Avenue de Champs-Élysées  
*Focus + Social Forest Line*

5. Quai Saint-Michel  
*Social Forest Line*

2. Place de la Concorde  
*Refuge Forest*

4. Cours de Vincennes  
*Healing Forest Line*



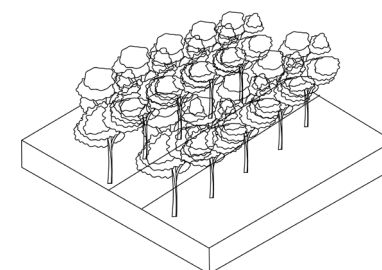
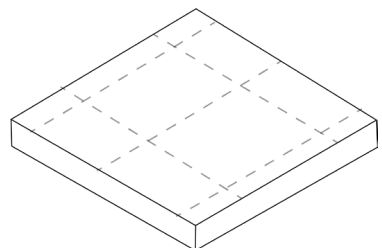
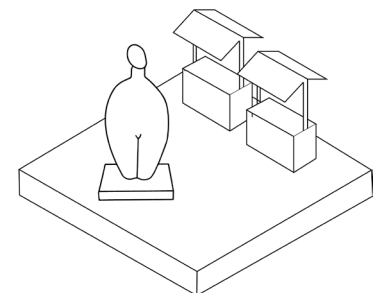
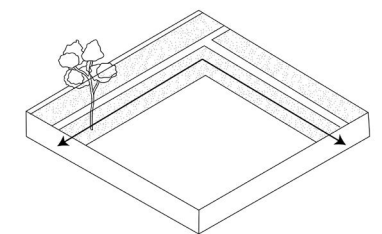
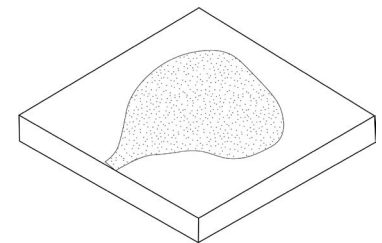
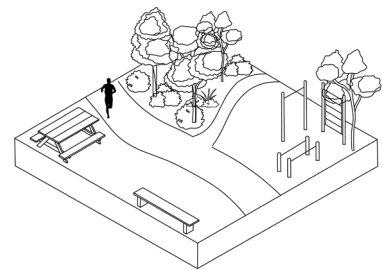
6. Boulevard du Montparnasse  
*Social Forest Line*

3. Avenue de la Bourdonnais  
*Focus Forest Line*



# Zoom-In Visualisation

## *Avenue des Champs-Élysées*



*PSD Cohesive*  
Repeated Structure



*ART-Extent*  
Soft Planting



*PSD Open*  
Clearings & Sightlines



*Ncadia*  
Active Zones

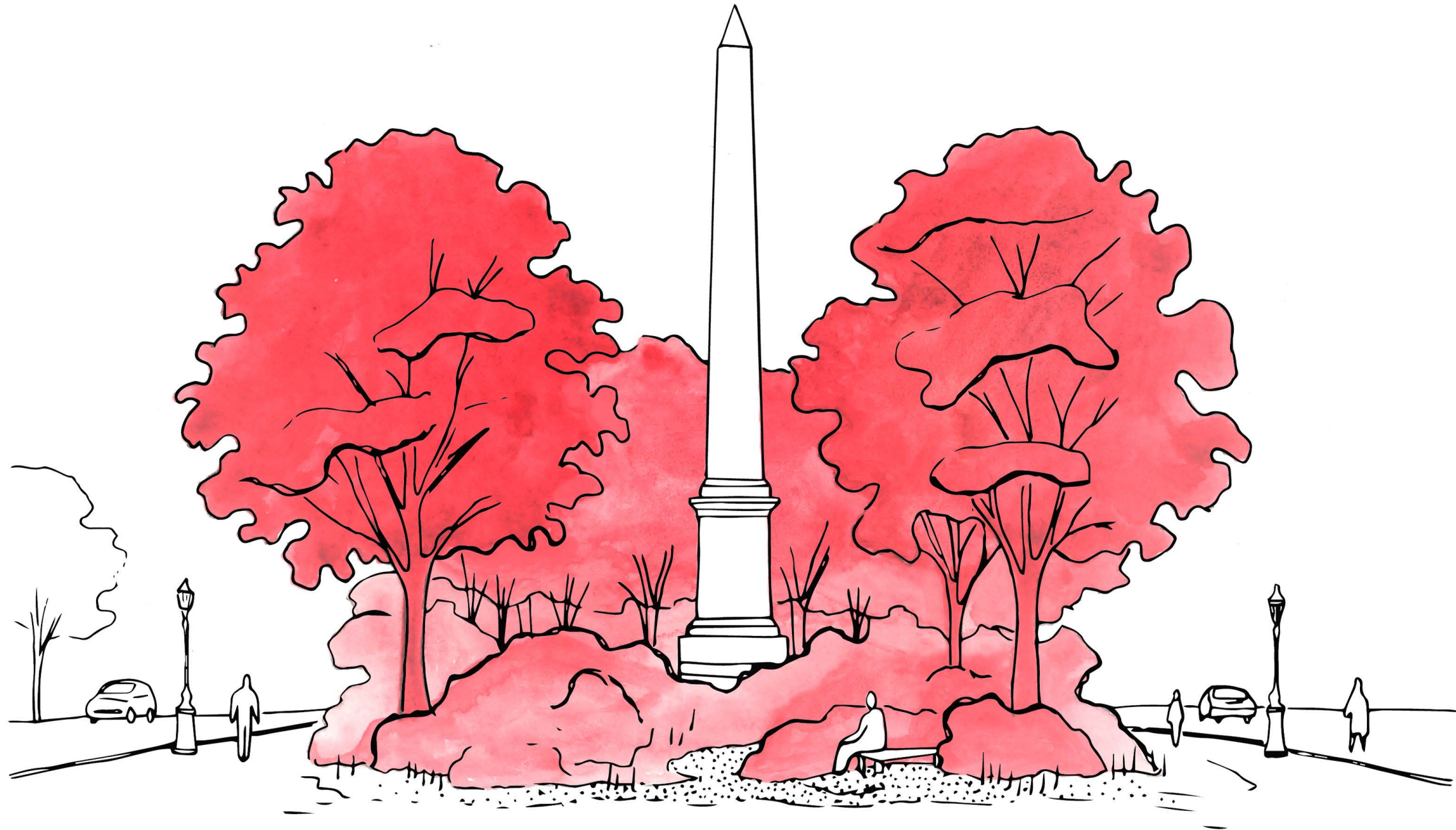
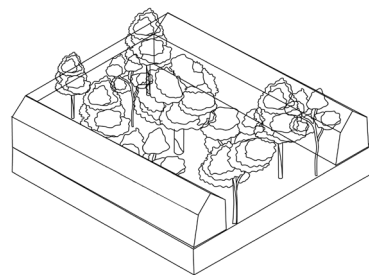
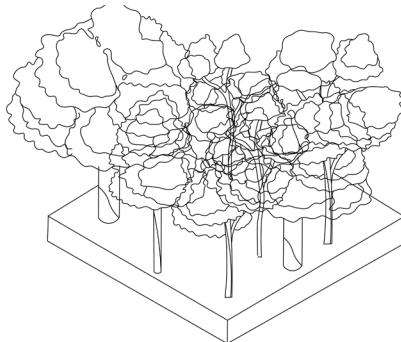
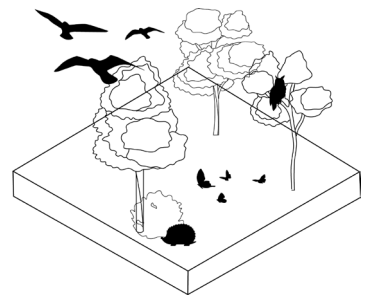
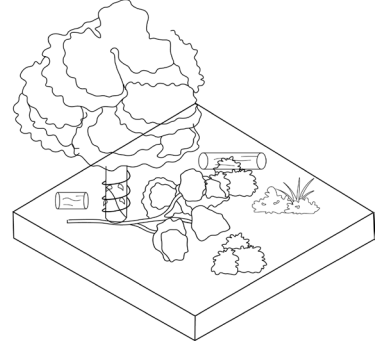
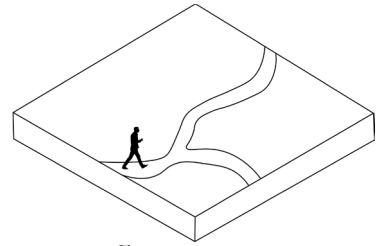


*PSD Social*  
Gathering Nodes



# Zoom-In Visualisation

## *Place de la Concorde*



●  
*Nacadia*  
Woodland Pockets

●  
*Shinrin - Yoku*  
Framed Paths

●  
*SRT*  
Sheltered Seating

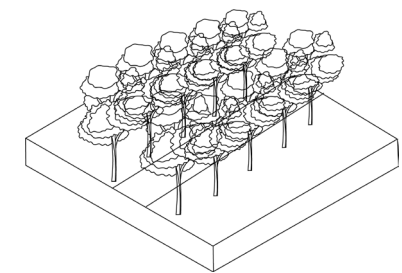
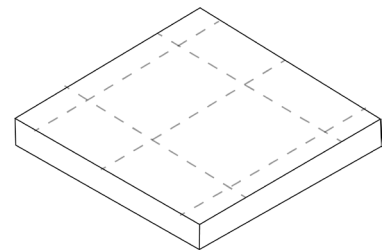
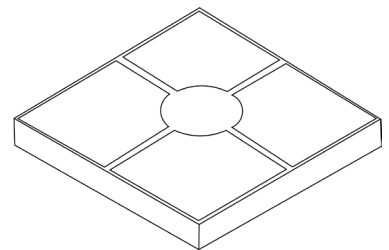
●  
*PSD Shelter & Refuge*  
Enclosure

●  
*PSD Natural*  
Spontaneous Vegetation



# Zoom-In Visualisation

## *Avenue de la Boudonnais*



*Nacadia*  
Sequential Layout

*PSD Cohesive*  
Repeated Structure

*PSD Cohesive*  
Consistent Materials

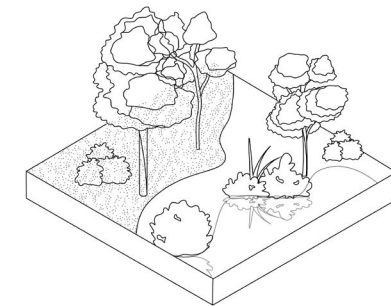
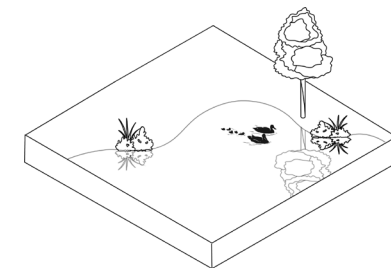
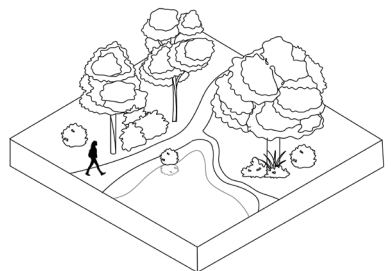
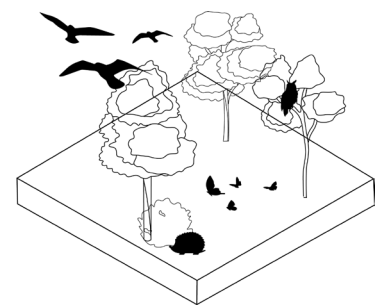
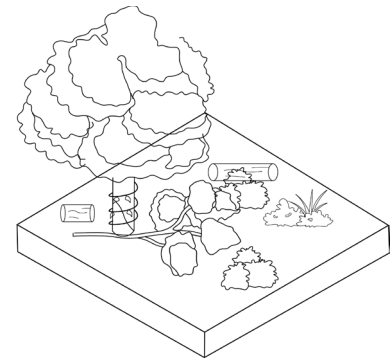
*ART Extent*  
Visual Continuity

*ART Compatibility*  
Legibility



# Zoom-In Visualisation

## *Cours de Vincennes*



*SRT*

Water Features



*SRT*

Soft Planting



*Nacadia*

Immersive Planting



*Shinrin Yoku*

Sensory Engagement



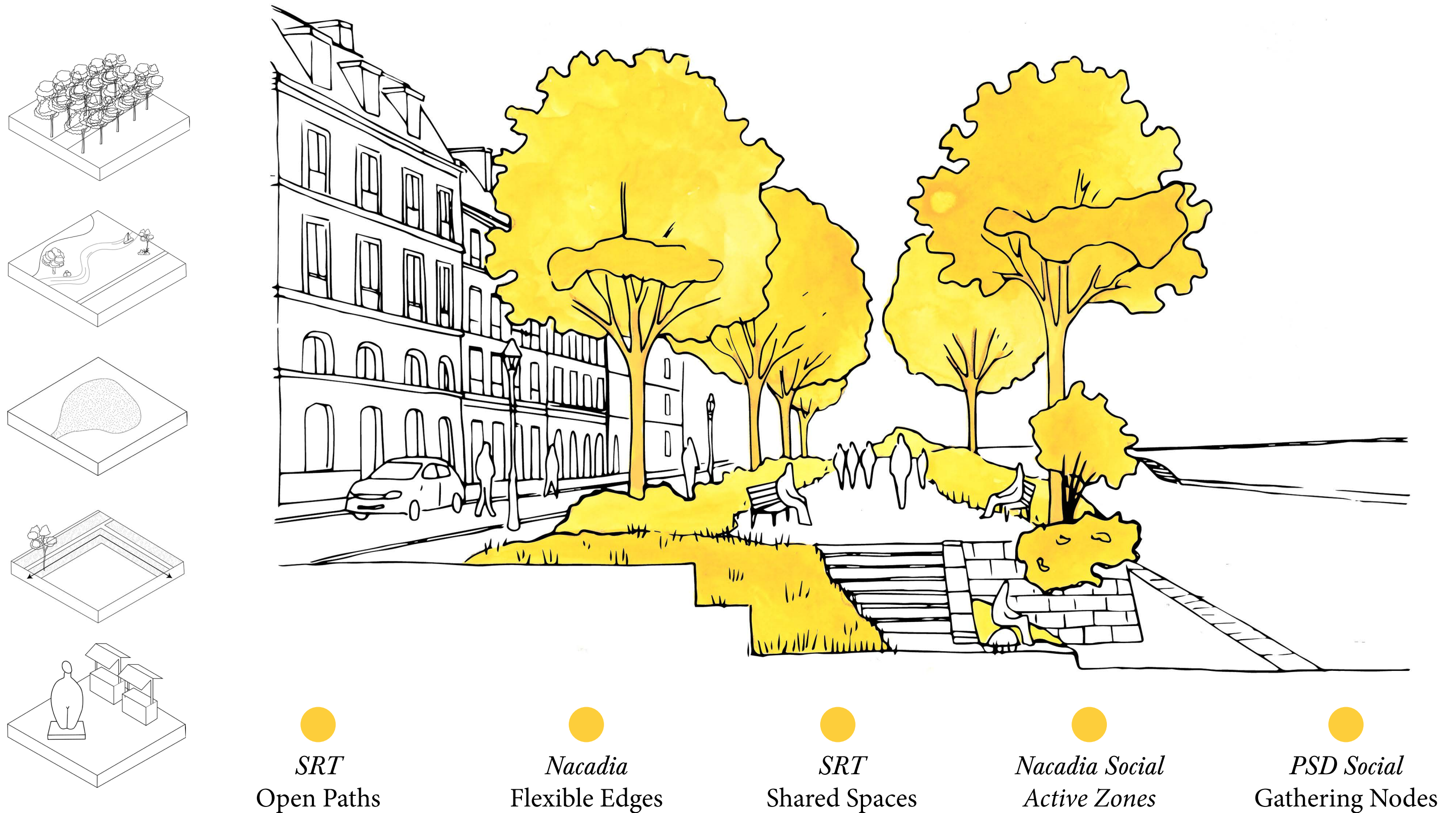
*Nacadia*

Minimal Stimuli



# Zoom-In Visualisation

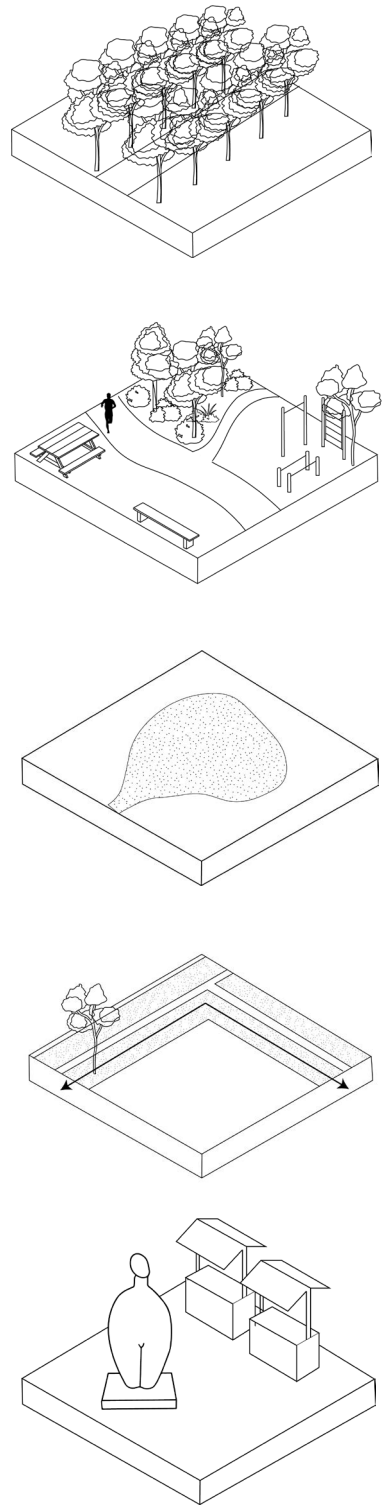
## *Quai Saint-Michel*





# Zoom-In Visualisation

## *Boulevard de Montparnasse*



●  
*PSD Open*  
Clearings

●  
*PSD Diverse*  
Multisensory

●  
*PSD - Culture*  
Art & Markets

●  
*Nacadia Social*  
Flexible Edges

●  
*PSD Social*  
Gathering Nodes

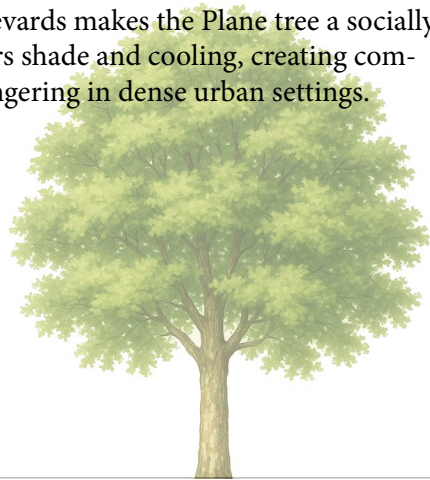


# Tree Catalogus

## *as a Design Tool - Social*

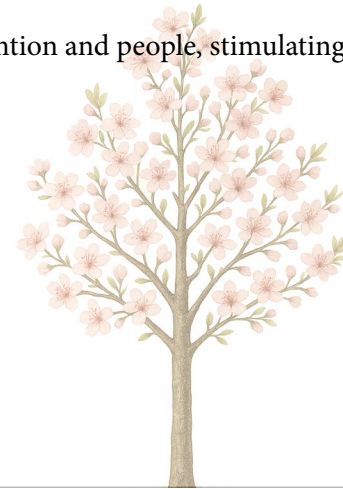
### 1. *Platanus*

- Widespread use in plazas and boulevards makes the Plane tree a socially iconic species. Its broad crown offers shade and cooling, creating comfortable spaces for gathering and lingering in dense urban settings.



### 6. *Prunus*

- Celebrated blooming periods draw attention and people, stimulating seasonal social interactions.



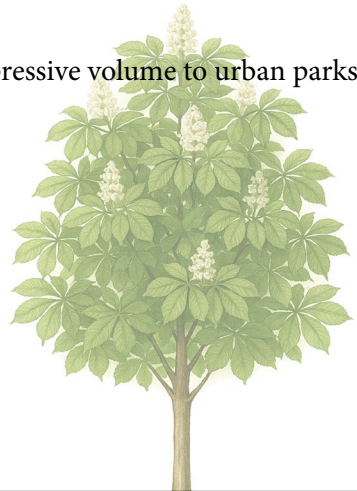
### 15. *Malus*

- Highly ornamental; supports festive or edible park experiences.



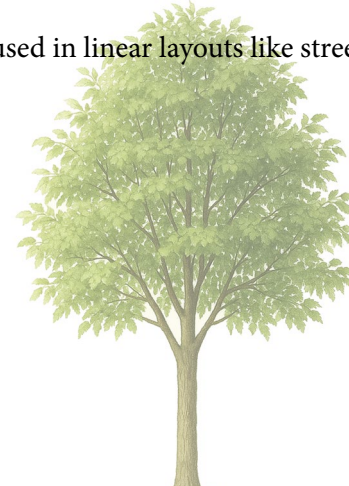
### 2. *Aesculus*

- Broad leaves and large flowers add expressive volume to urban parks.



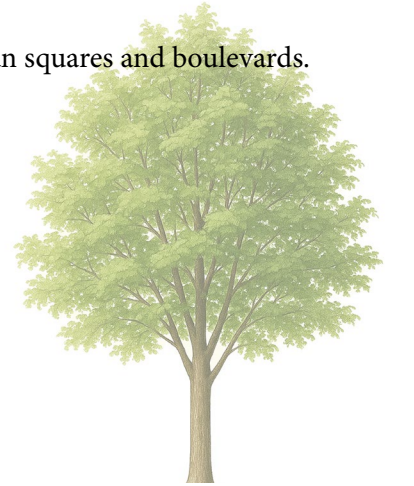
### 10. *Celtis*

- Durable in urban settings, commonly used in linear layouts like streets and promenades.



### 16. *Ulmus*

- Historically significant tree along urban squares and boulevards.



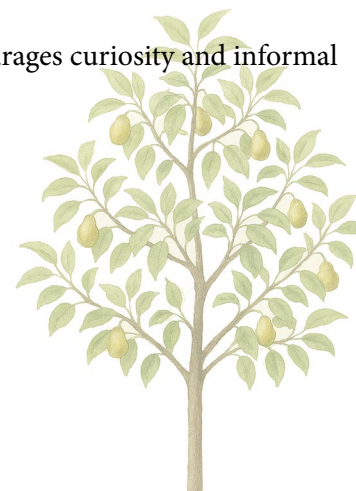
### 4. *Acer*

- Familiar presence in streets and parks supports community identity.



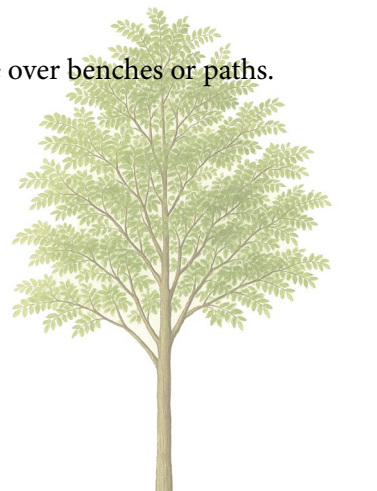
### 11. *Pyrus*

- Contributes to edible urbanism; encourages curiosity and informal interaction.



### 19. *Gleditsia*

- Light-filtering canopy provides soft shade over benches or paths.





# Tree Catalogus

## *as a Design Tool - Refuge*

1. *Platanus*



Broad canopy provides shade, sound buffering, and spatial containment in dense urban contexts.



8. *Quercus*



Dense and majestic, offering strong protection and ecological richness.



14. *Populus*



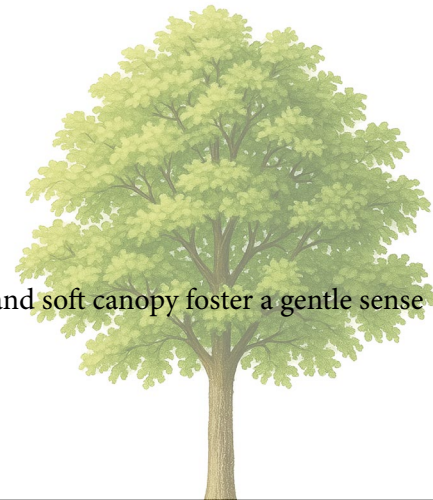
Tall, slim trees with rustling foliage provide acoustic buffering and spatial protection.



3. *Tilia*



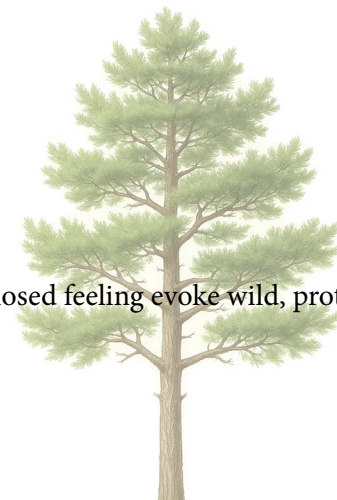
Familiar silhouette, rustling leaves, and soft canopy foster a gentle sense of enclosure.



9. *Pinus*



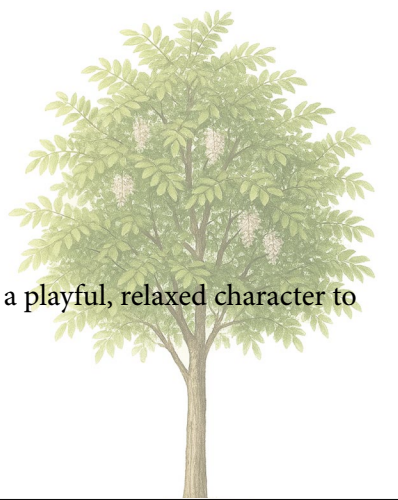
Evergreen canopy, forest scent, and enclosed feeling evoke wild, protective nature.



17. *Robinia*



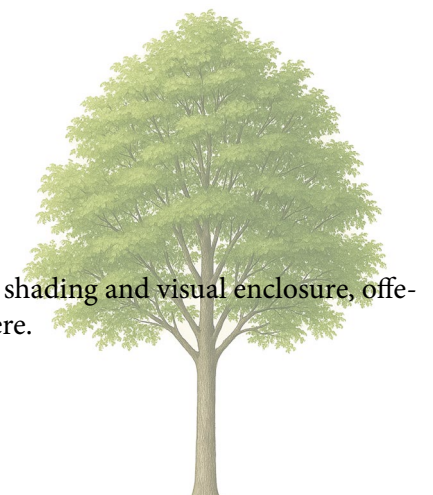
Light, unstructured appearance brings a playful, relaxed character to gathering areas.



7. *Fraxinus*



Dense summer foliage provides soft shading and visual enclosure, offering a quiet and protected atmosphere.



13. *Corylus*



Soft enclosure with low branching and layered growth gives gentle protection.



18. *Taxus*



Dense, dark foliage creates strong barriers and microclimates.

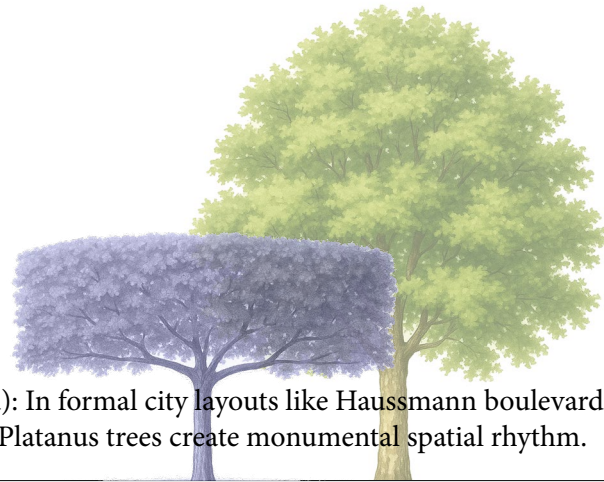




# Tree Catalogus

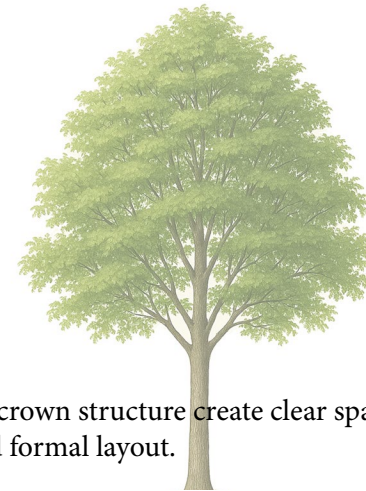
## *as a Design Tool - Focus*

### 1. *Platanus*



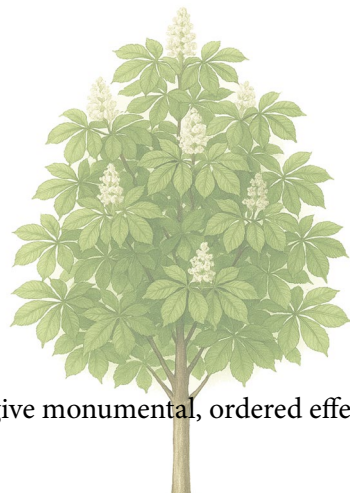
(pruned and aligned): In formal city layouts like Haussmann boulevards, aligned and pruned Platanus trees create monumental spatial rhythm.

### 7. *Fraxinus*



Its upright growth and symmetrical crown structure create clear spatial rhythms, supporting orientation and formal layout.

### 2. *Aesculus*



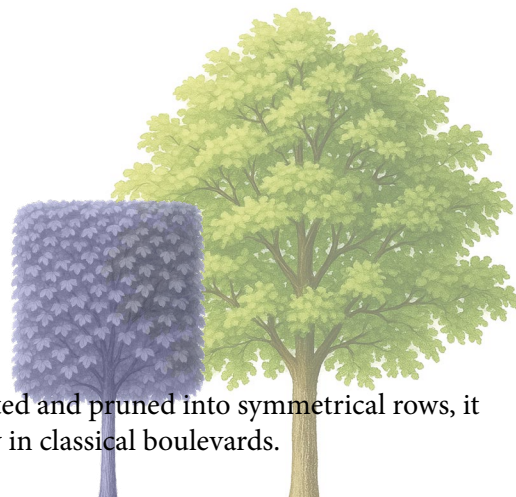
Strong vertical trunks and symmetry give monumental, ordered effect when planted along avenues.

### 12. *Carpinus*



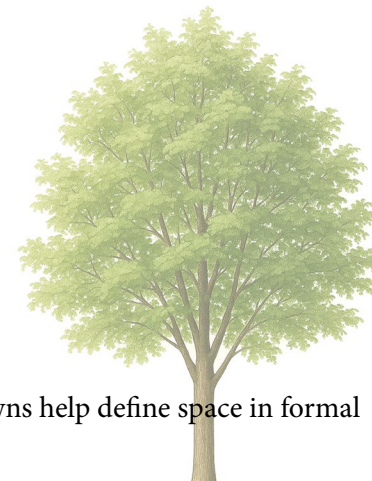
(pruned): Easily shaped into formal hedges or columns, perfect for baroque or geometric layouts.

### 3. *Tilia*



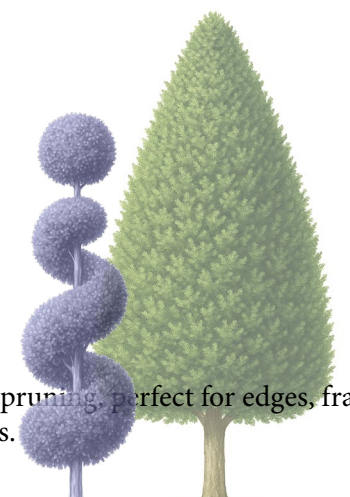
(pruned): When tightly planted and pruned into symmetrical rows, it creates rhythm and formality in classical boulevards.

### 16. *Ulmus*



(structured form): Tight, upright crowns help define space in formal compositions.

### 18. *Taxus*



(pruned): Exceptional for geometric pruning, perfect for edges, frames, or sculptural forms in formal gardens.

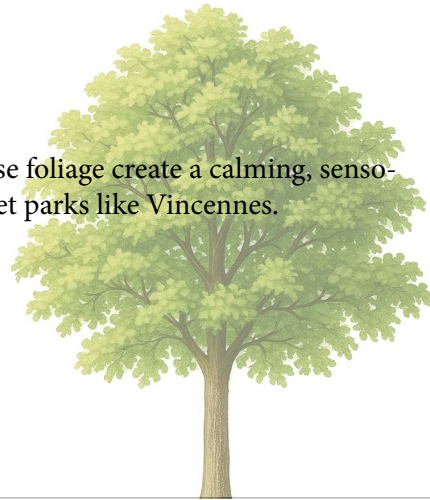


# Tree Catalogus

## *as a Design Tool - Healing*

### 3. *Tilia*

● Fragrant summer blossoms and dense foliage create a calming, sensory-rich atmosphere; common in quiet parks like Vincennes.



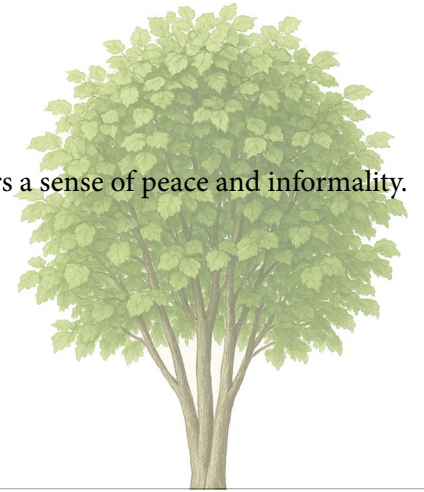
### 6. *Prunus*

● Striking spring blossoms and sweet fragrance enhance seasonal awareness and emotional resonance.



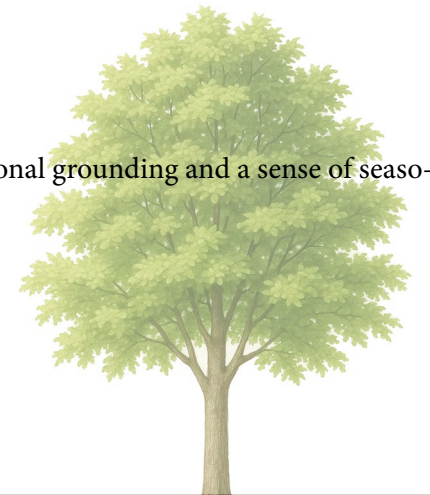
### 13. *Corylus*

● Irregular, multi-stemmed form fosters a sense of peace and informality.



### 4. *Acer*

● Rich autumn foliage provides emotional grounding and a sense of seasonal rhythm.



### 8. *Quercus*

● Seasonal change and natural appearance support mental restoration and biodiversity.



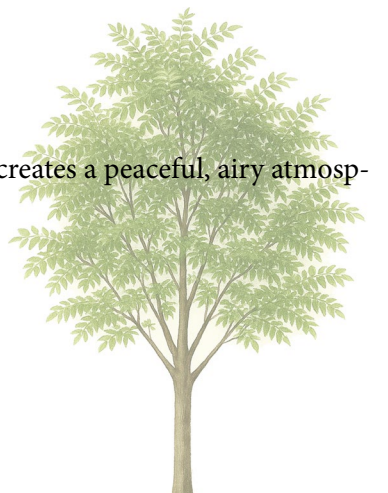
### 17. *Robinia*

● Natural, friendly image and scattered leaf pattern create an inviting atmosphere.



### 5. *Styphnolobium*

● Light, open crown with soft movement creates a peaceful, airy atmosphere.



### 9. *Pinus*

● Aromatic needles and wintergreen presence maintain sensory engagement year-round.



### 20. *Betula*

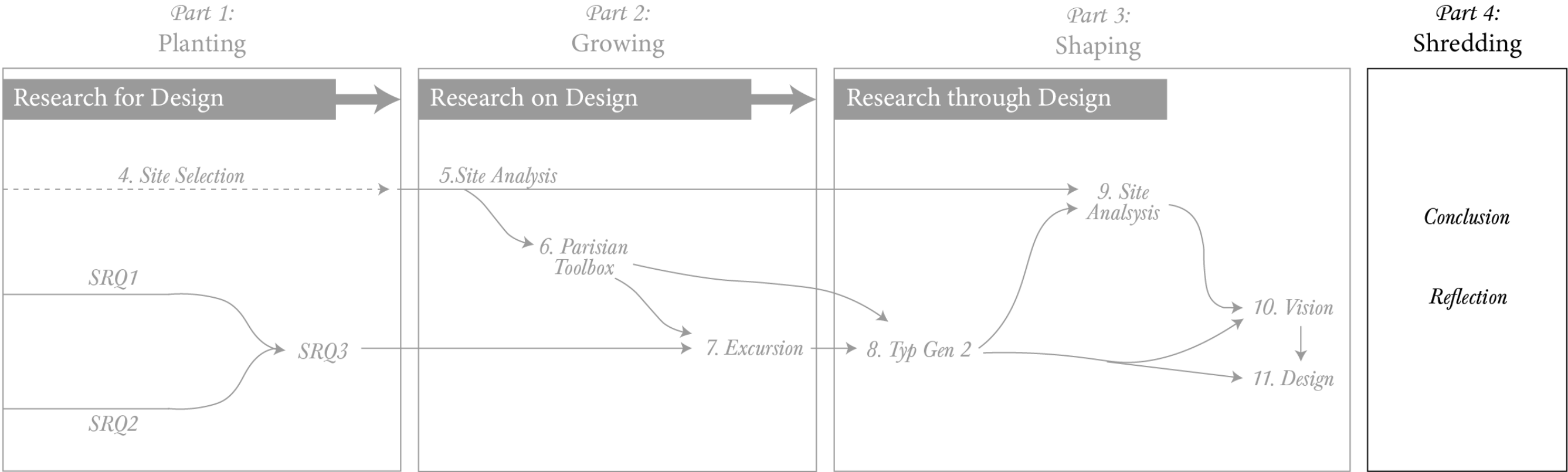
● White bark and whispering foliage create soft visual and auditory stimulation.





# Shredding

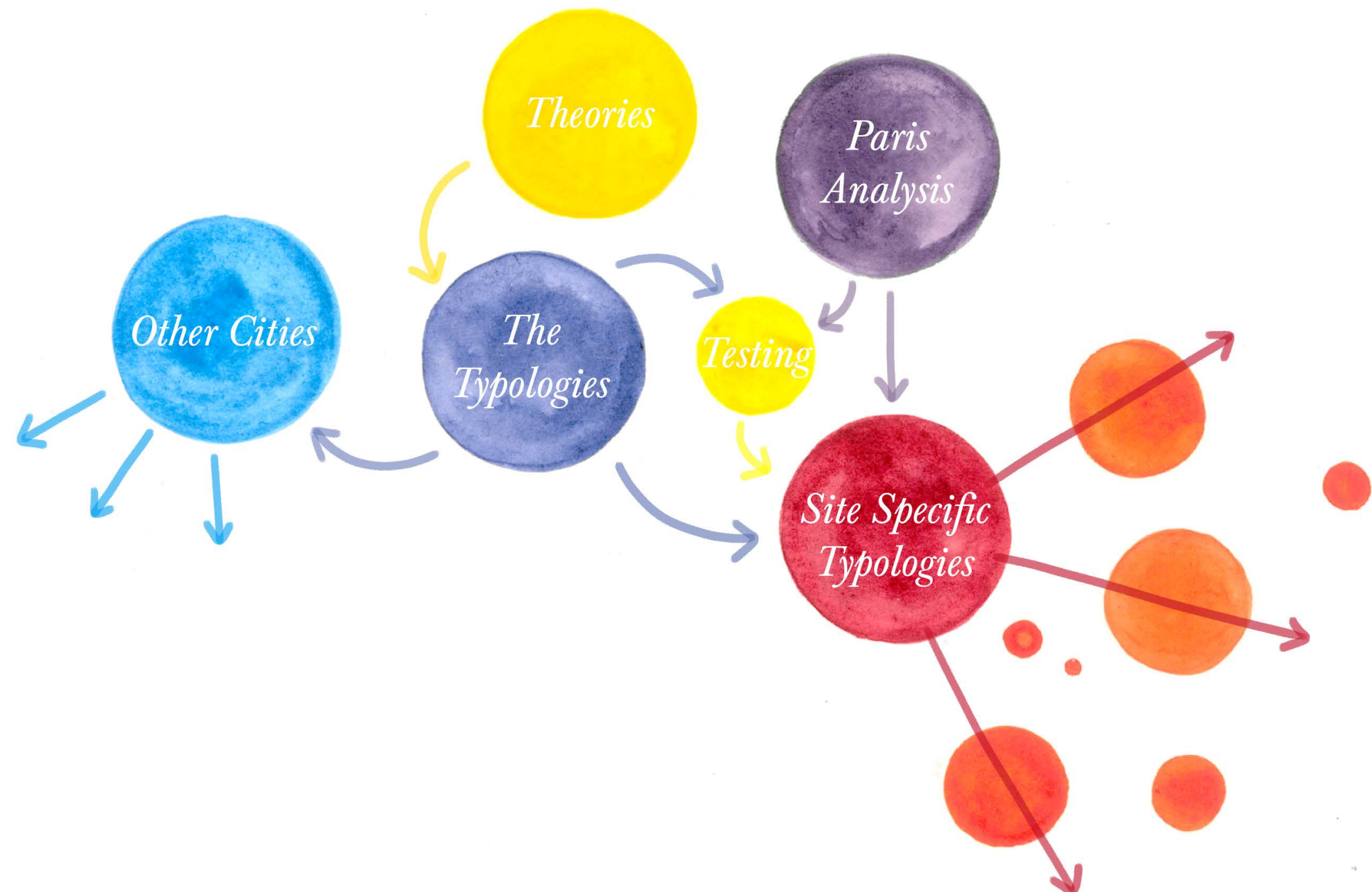
Part 4: Conclusion





# Conclusion

*“How can a **theory-driven typological framework** for urban forests be designed and implemented in the city of Paris to optimize residents’ **psychological restoration**, while also supporting the city’s **ongoing greening efforts** and contributing to the **reinvention of Paris** as a sustainable, evolving urban space?”*



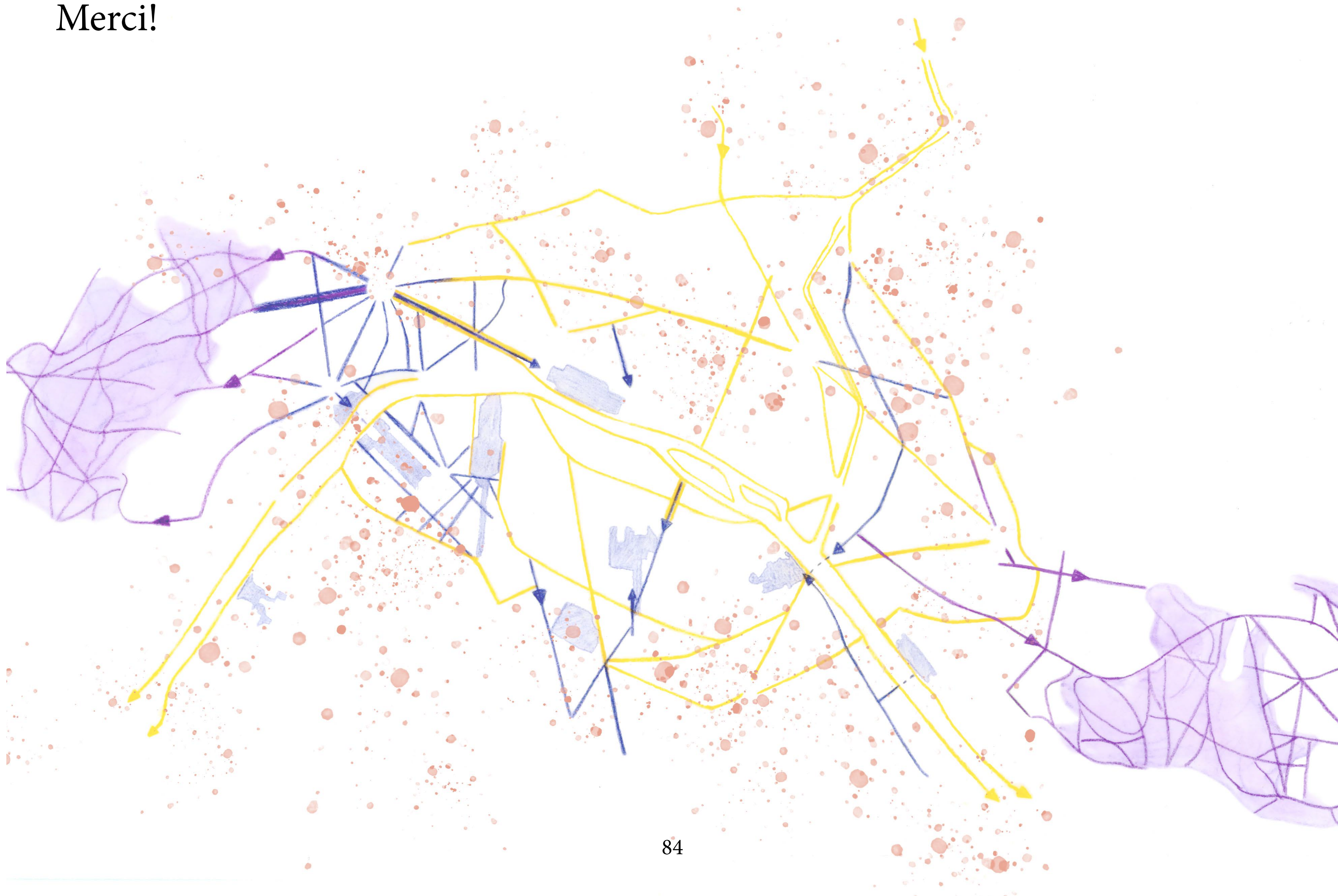


# Reflection / Discussion

- Emotional responses to green space are **highly personal**; one forest type can evoke **different reactions** in different people.
- While the framework is grounded in theory, its application remains **context-sensitive and partly interpretative**.
- Due to the **limited research** on psychological effects of forest types, I often had to make **intuitive design choices** guided by theory and observation.
- This project strengthened my belief in the **designer's role** in shaping care-based, emotionally responsive urban environments.
- It would be exciting to explore how these typologies perform in **other cities** and cultural contexts — and whether they evoke similar restorative effects.
- **Translating theoretical concepts into spatial typologies**



Merci!





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