

Under the forest canopy

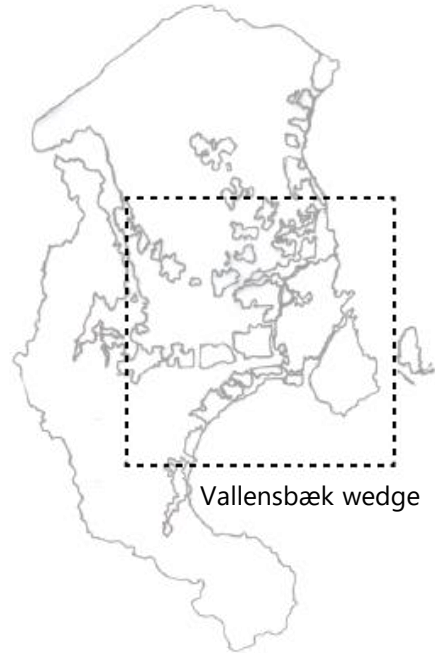
Forest thinking as an new approach in redeveloping the socio-spatial structure of Copenhagen

A4 Presentation | 17 June. 2026
Urban Forestry
Pratipalsinh Gohil | 6257194
First mentor – René van der Velde
Second mentor – Geertje Slingerland



Capital region

Territorial scale
Vision



Vallensbæk wedge

Regional scale
Greater Copenhagen region

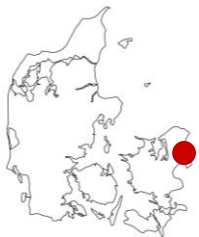
Strategic masterplan



Avedøre

Local scale
Copenhagen Municipality

Elaboration of certain aspects of strategic vision



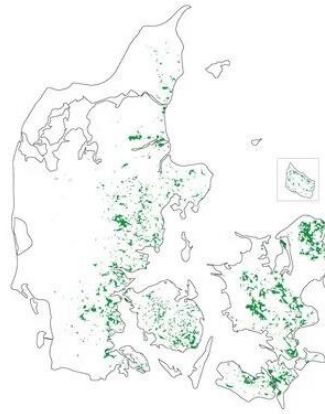
Denmark

location

1000 BC
100% forest

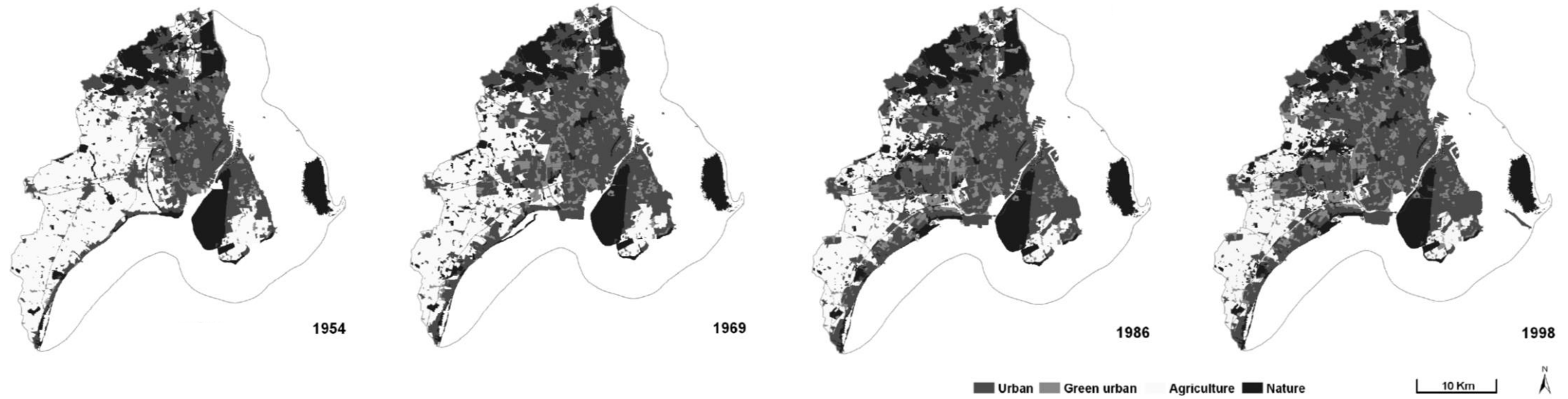


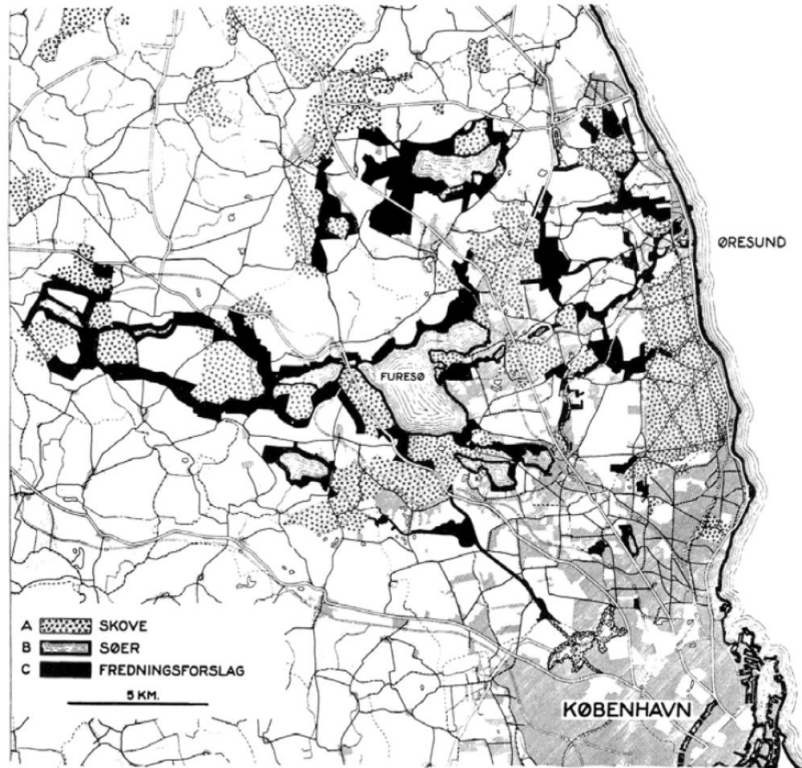
1800
2-3% forest



2020
14% forest

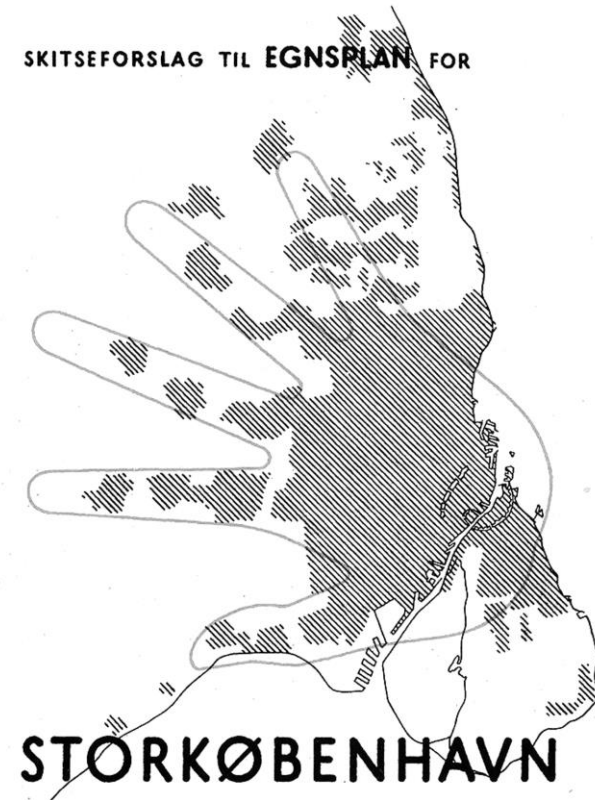






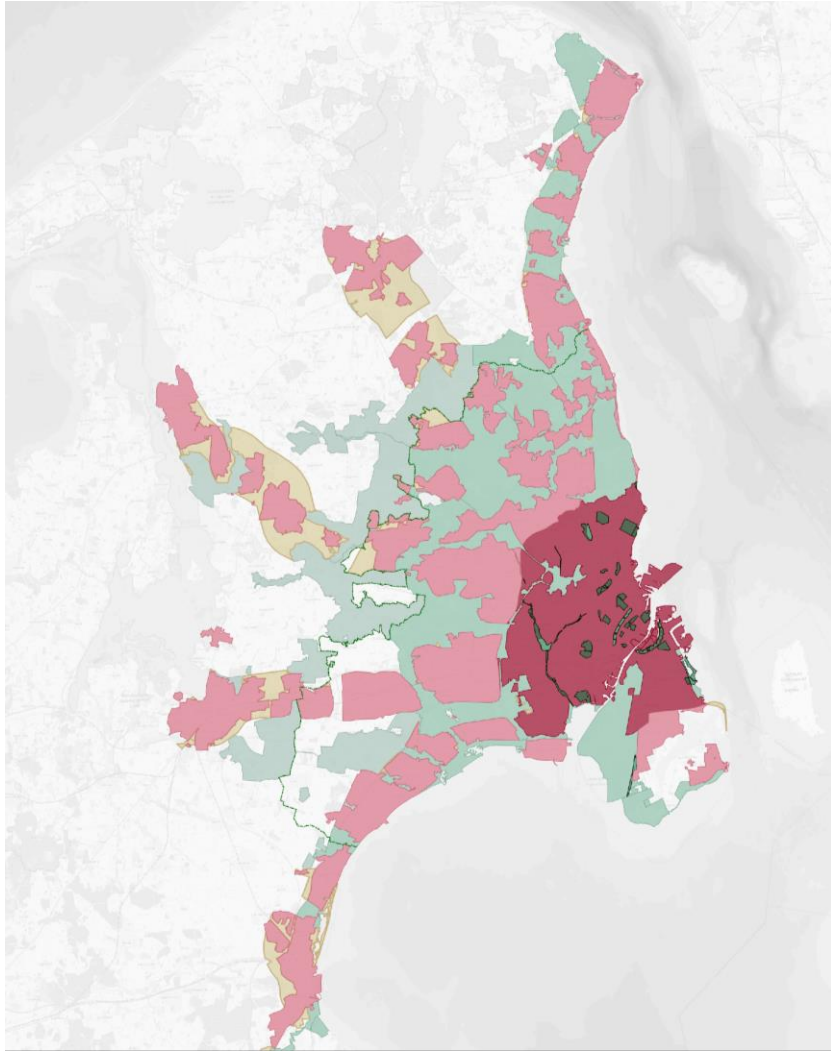
Green structure 1936

By Forchhammer 1936

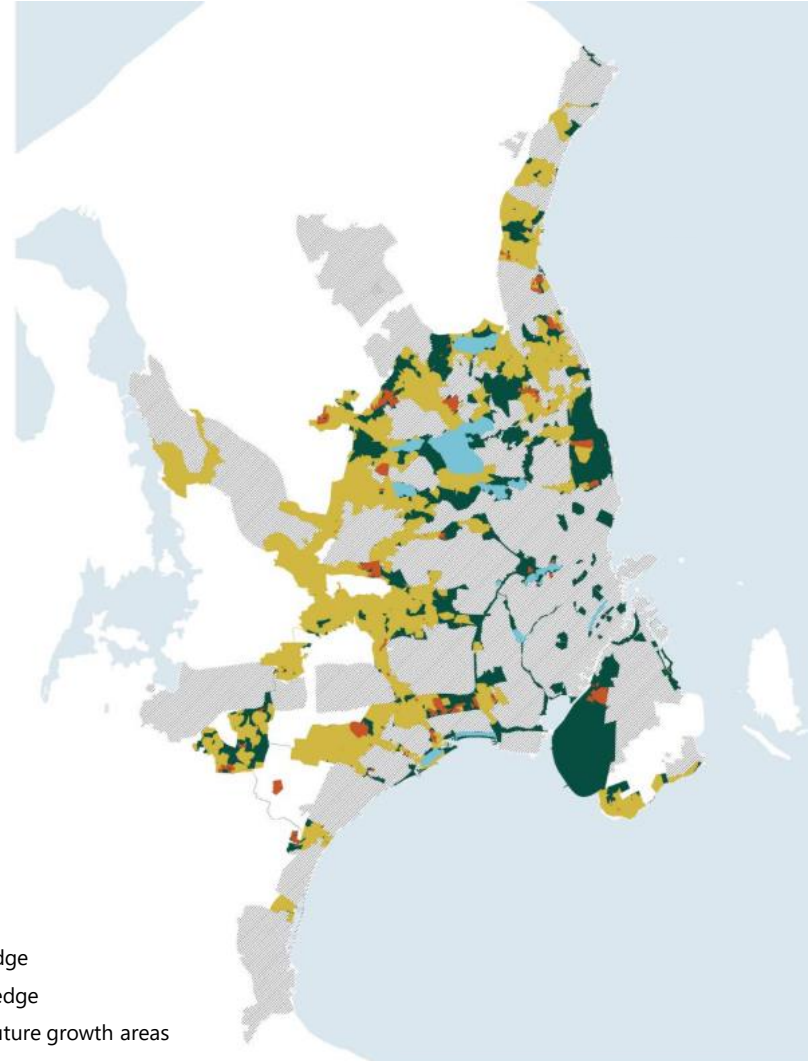


The Finger Plan

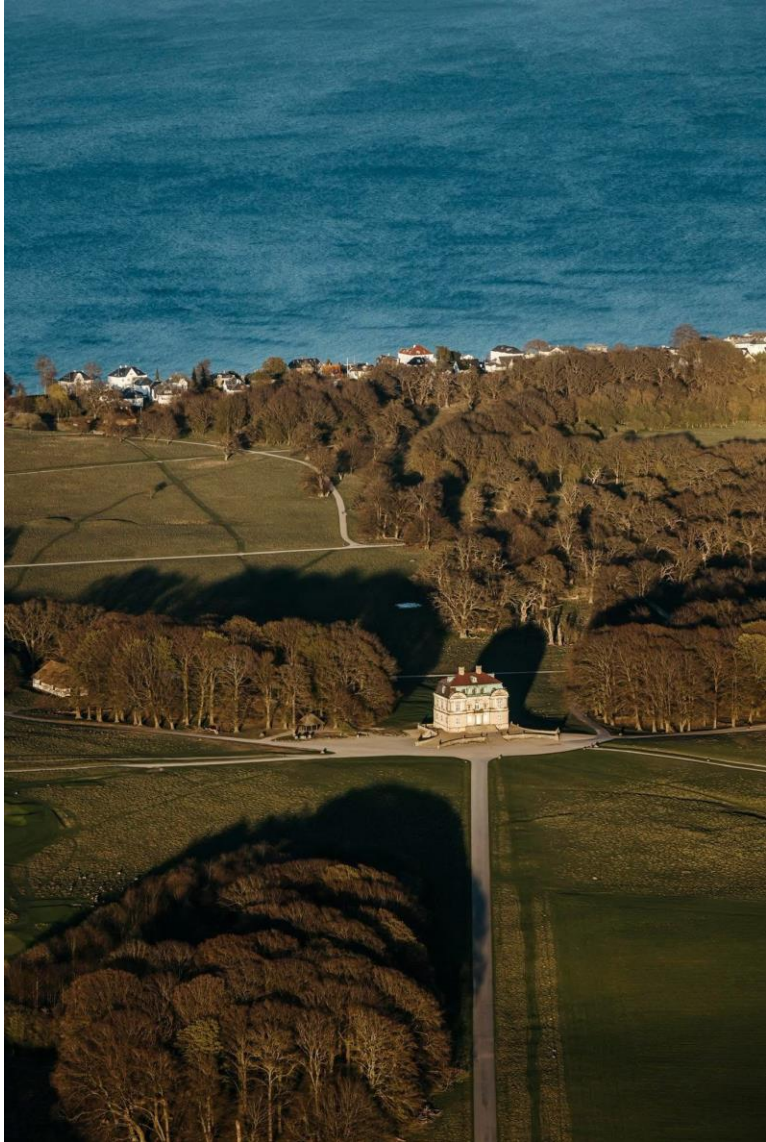
*Peter Bredsdorff and Sten Eller Rasmussen
and their team in 1947*



- Municipal CPH
- Urban area
- Core green wedge
- Outer green wedge
- Urban finger future growth areas

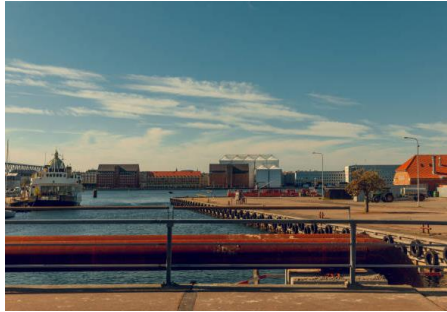


- Sports facility
- Farmland
- Lake
- Other greens
- The finger





Farmland outside Vallensbæk,



Harbor seen from Refshaleøen,



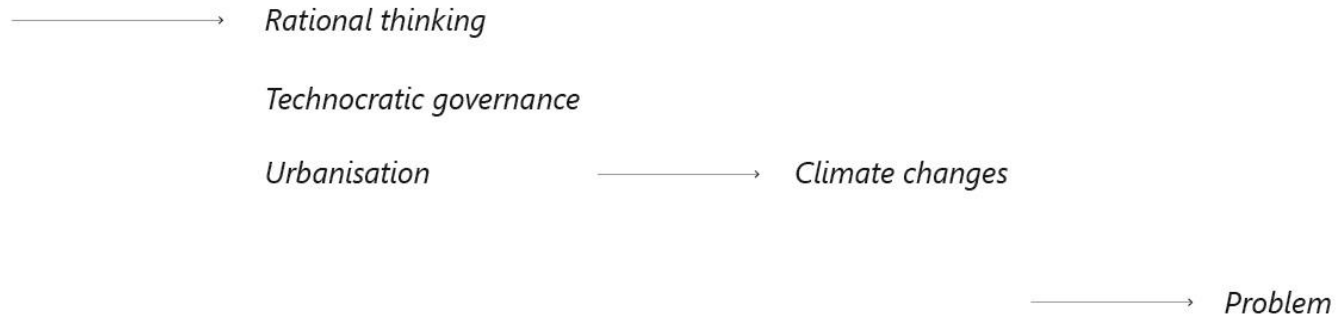
Farmlands outside Vestekoven, CPH,



Kalvebod Fælled



Kælkebakken, north west wedge



CPH

Municipality plans to add new nature with each new projects taking shape in and around the city and have nature part of daily life.

Copenhagen Municipality, 2025

83%

Finds that there should be larger areas where nature can unfold freely.

YouGov for VELUX, 2019

85%

long for nature with their access to nature in their daily lives.

YouGov for VELUX, 2019

ISOCARP

Research suggest on more accessible and equitable green space development.

ISOCARP, World planning congress, 2022

63%

believe that significant lifestyle changes are needed and that technology alone cannot solve the climate challenge.

CONCITO's Climate Barometer
2022



“To resist the extinction of biodiversity of this Earth, we also need to resist earth-affirming cultures and emotions. In the emergent Symbiocene humans will once again be anchored to a place and region, however it will be not the same as past. The new identity will have to be an work of creation.”

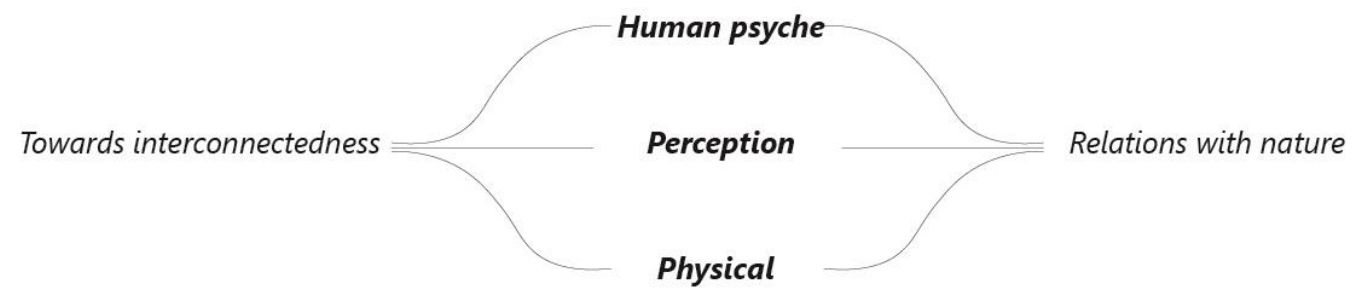
Glenn Albrecht, 2003
Earth Emotion

—————→ *the other half*

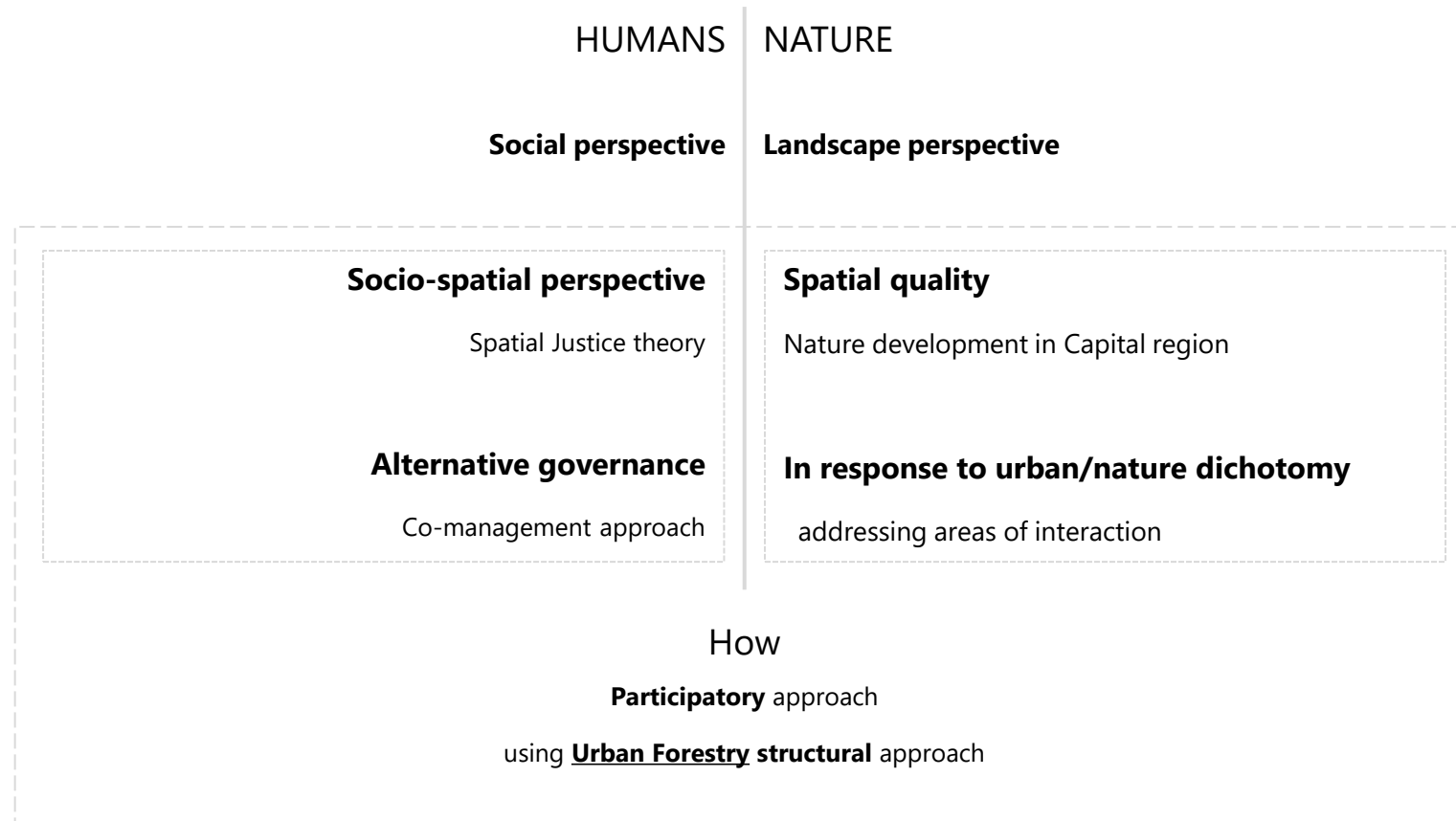
—————→ *fundamental needs*

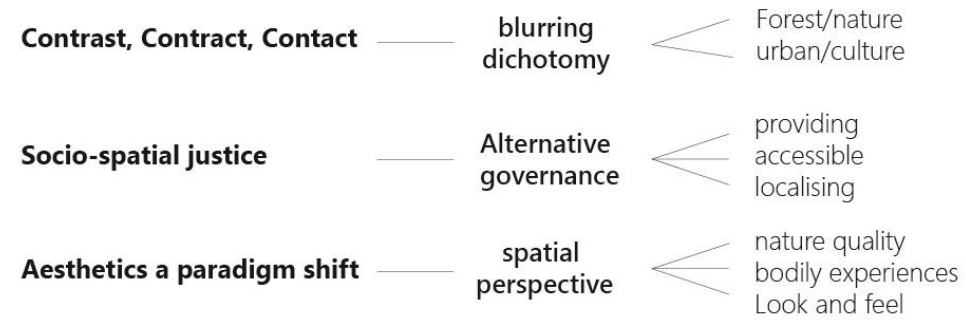
—————→ ***to Wonder,
to reflect,
to identify...***

& the wish to do so in *collaboration*.



What is Copenhagen's **new spatial forest approach** to help revive relations between human and nature by creating **equitable** green wedges?





CO-CREATING URBAN WOODS



Co-management day, September 2010 in a low woodland of *Tilia cordata* (H35).



Co-management zone (2022). Leaving the garden means entering the wood (H35).

Sletten landscape lab
Denmark



DESIGN PRINCIPLES



The seed pool model, Sletten, April 2006. The pioneer wood of *Betula pendula* (H40) is emerging.



The seed pool model, Sletten, August 2010. Lush field layer of grass and herbs beneath the light canopy of *Betula pendula* in H40.



The seed pool model, Sletten, August 2010. Lush field layer of grass and 'escaping' garden perennials under the light canopy of *Betula pendula* in H40.



Societal involvement in Natura 2000 areas

Experiences in Denmark, England and Germany

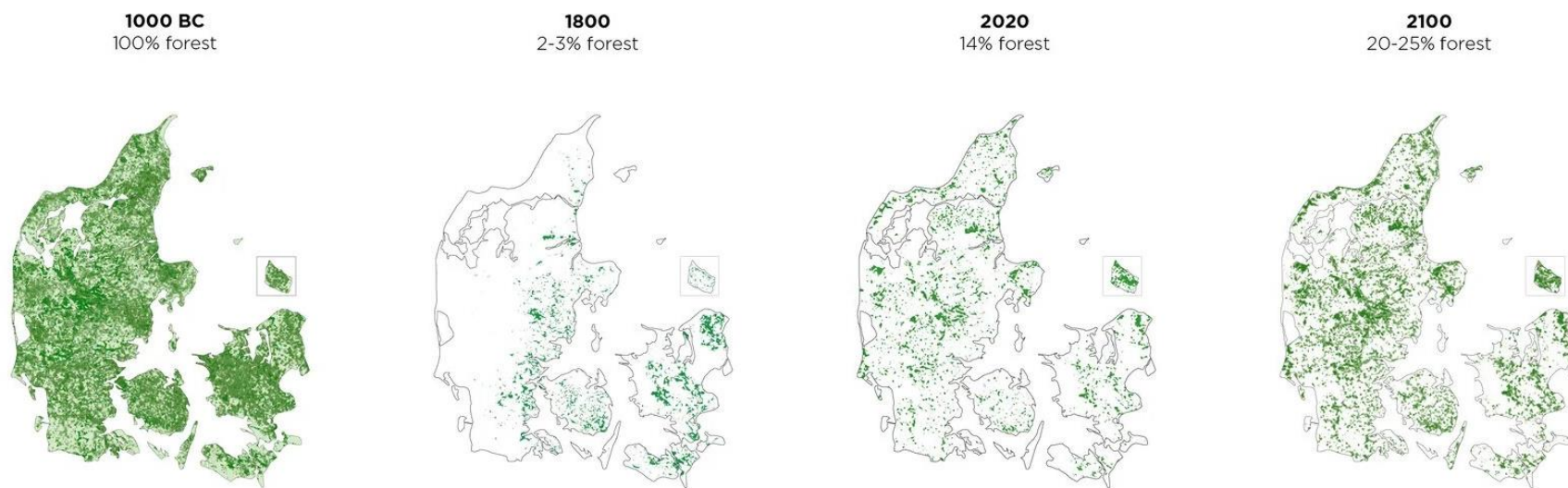


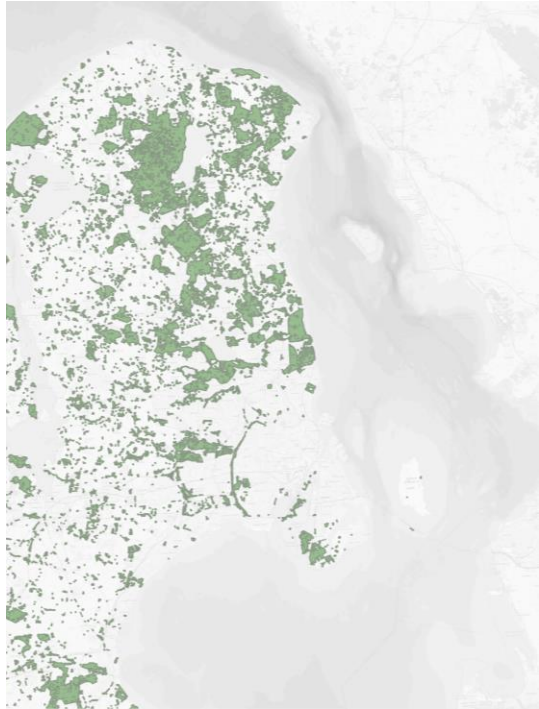
Since 2013, involving society in nature conservation has become an explicit ambition of the Dutch government. As neighbouring countries of the Netherlands have similar ambitions, this research reviewed the policies in these countries and the experiences gained in three study areas: Exmoor National Park (England); Naturpark Aukrug (Schleswig-Holstein, Germany) and Lille Vildmose (Denmark). The research shows that early engagement of local stakeholders, a motivating narrative, equality in cooperation, flexibility of subsidies and presence of local brokers are important elements of successful governance aimed at involving society.



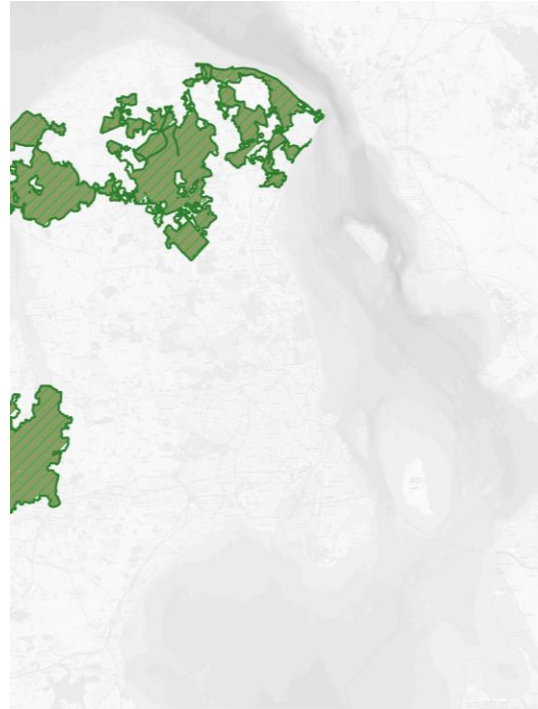
Societal involvement studies for PBL (NL)
Lille Vildmose, Denmark

		Scales of the Urban Forest		
		Element	Configuration	System
Dimension of the Urban Forest for non-humans and humans	Spatial	place, legibility, experience, identity		
	Social	health & wellbeing, recreation, social interaction, community		
	Environmental	time, microclimate, CO ₂ , water regulation, air quality		
	Economic	employment, wood production, food, leisure		
	Ecological	biodiversity: species, habitats, ecosystems		





Current tree cover



National Parks



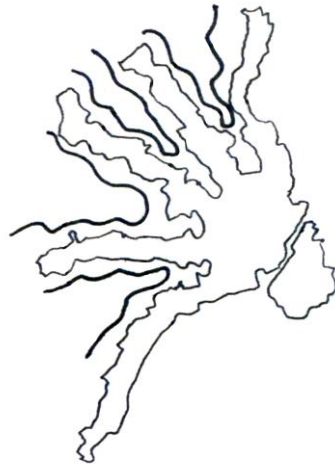
Water courses



Recreational routes



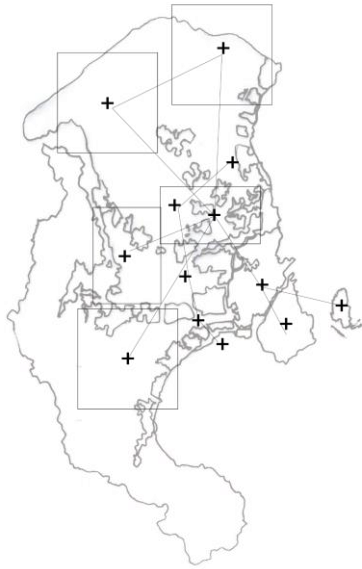
layer approach



Radial approach



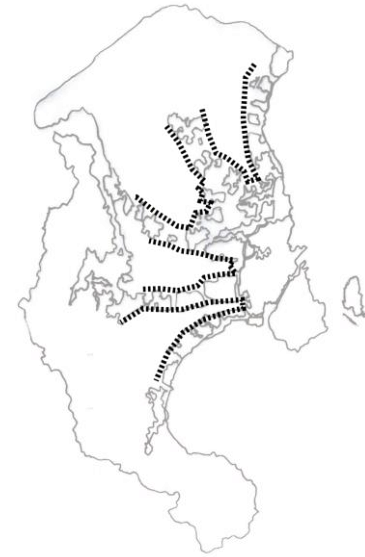
third nature approach



Potential connections to
fragmented
nature areas



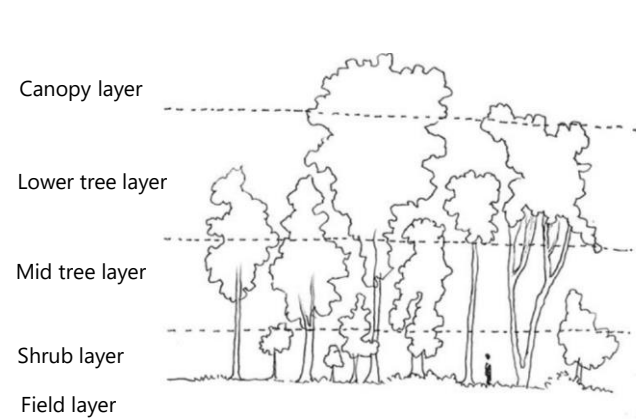
Need for **landscape**
quality to
vulnerable areas



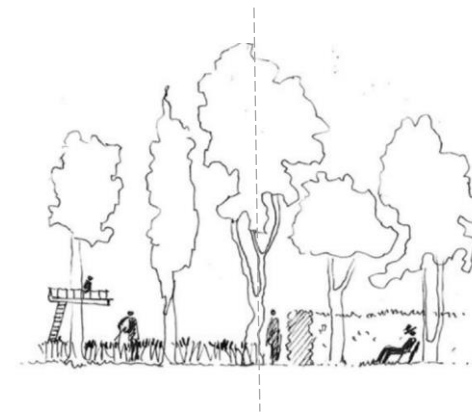
Need for measures to
Control urban sprawl



Blurring the dichotomy of
City/Nature, Urban/Culture



Need for **re introducing**
Forest in the capital region



Shared responsibility to
Grow and manage forests

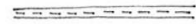


Limes
(line)

Milieus
(place)

Outer reaches
(territories)

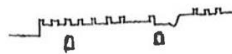
Human lines
CONSTRUCTION



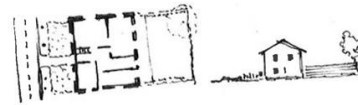
Roads, and similar



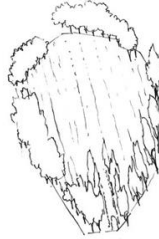
Check post



Defense wall



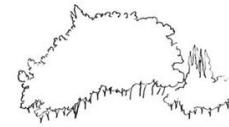
Private spaces, backyards



Parks



Grassland/pastures



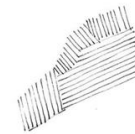
Protected nature



Historical structures



Urban areas



Farmlands



Allotment gardens

Non-Human lines
NATURE



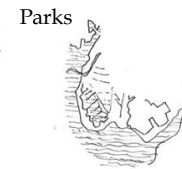
Embankments



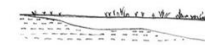
Ridges



Beach/coast



Human made Island



Wetlands



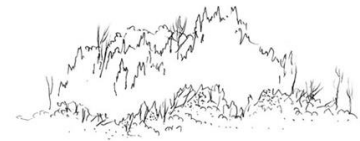
Larger parks



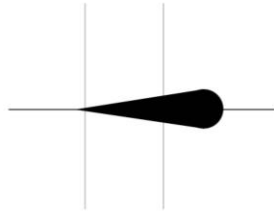
Lakes



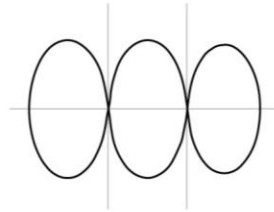
Rivers



Existing forests (Untouched nature)

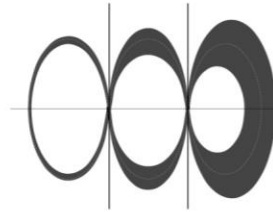


From the known world to unknown frontiers



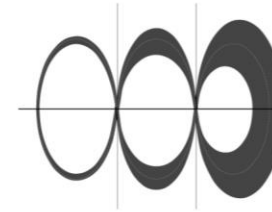
Mobius loop

Border-thickening phenomenon

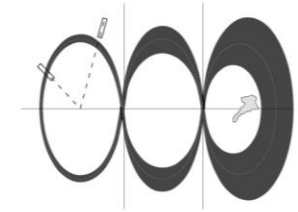


Limes (line) Milus (place) Outer reaches (territories)

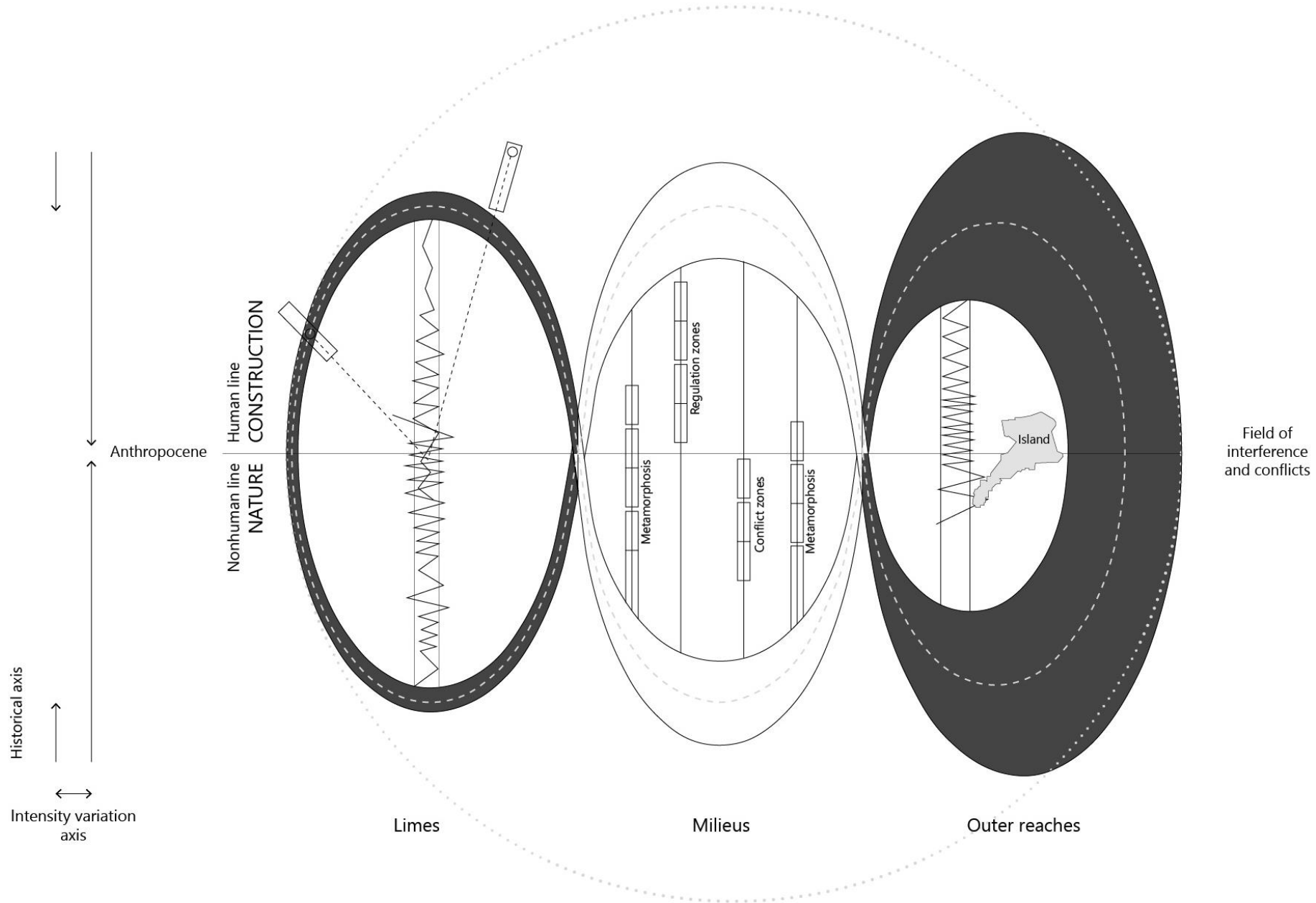
Human lines



Nonhuman lines

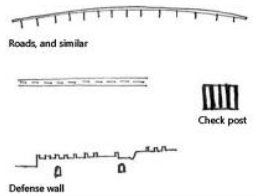


Embassies Island

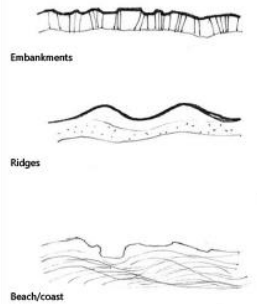


Limes

Human Borders: Infrastructure

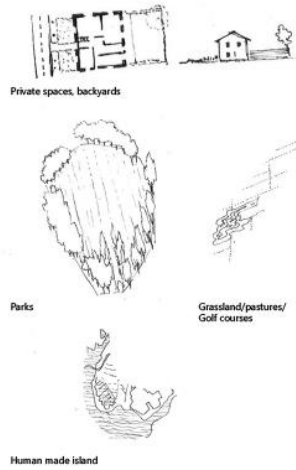


NonHuman Borders: topographies

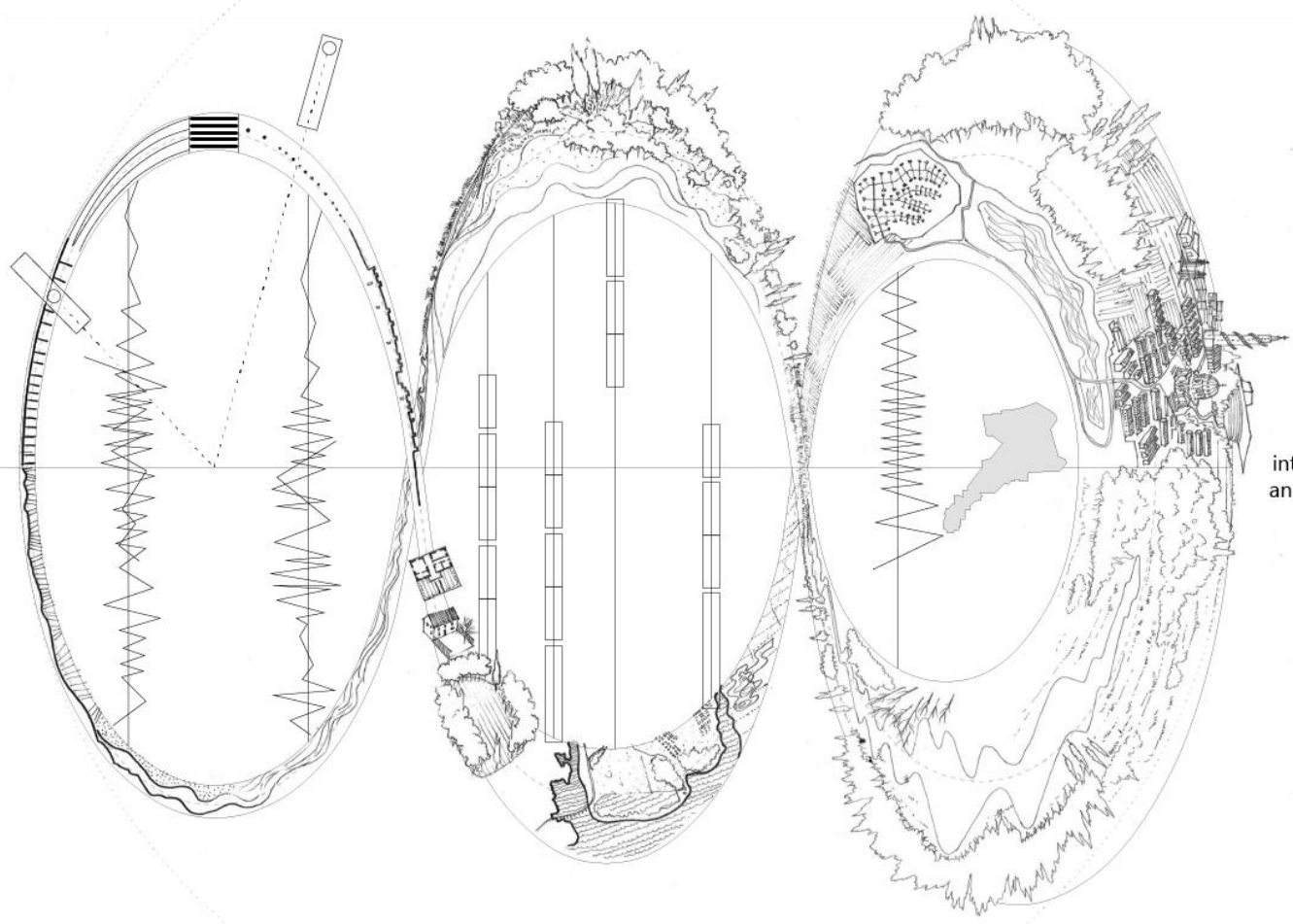


Milieus

Human Borders: Thresholds



Human line CONSTRUCTION
Nonhuman line NATURE



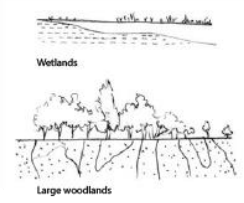
Limes

Milieus

Outer reaches

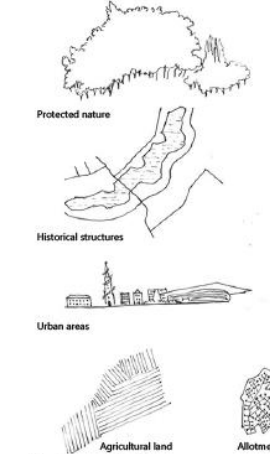
Field of interference and conflicts

NonHuman Borders: Ecotones

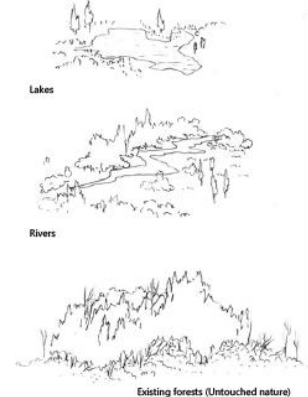


Outer reaches

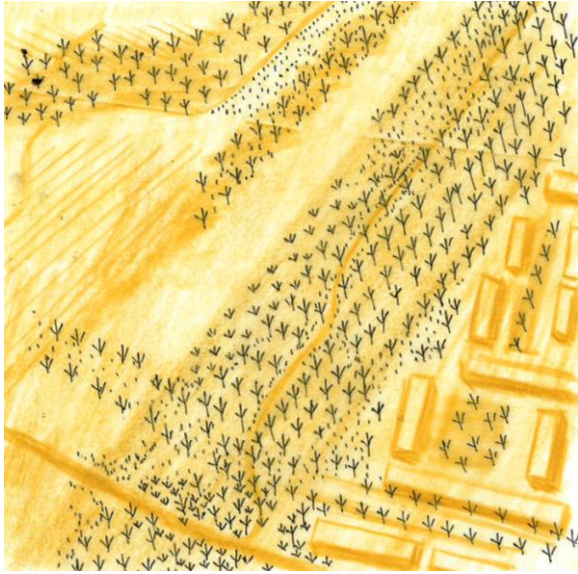
Human Borders: broader regions



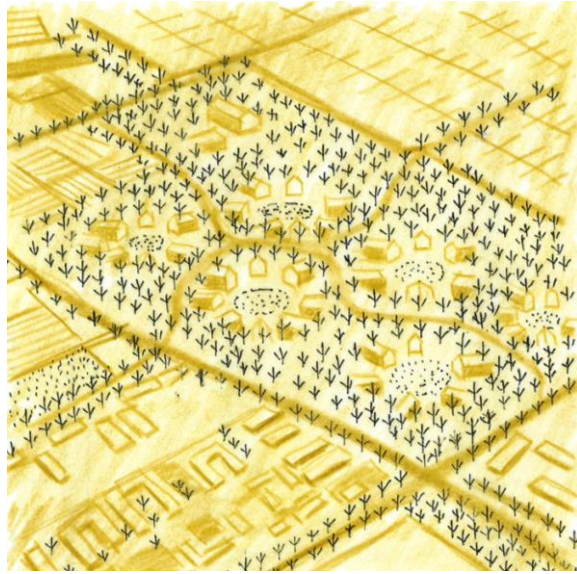
NonHuman Borders: biofences



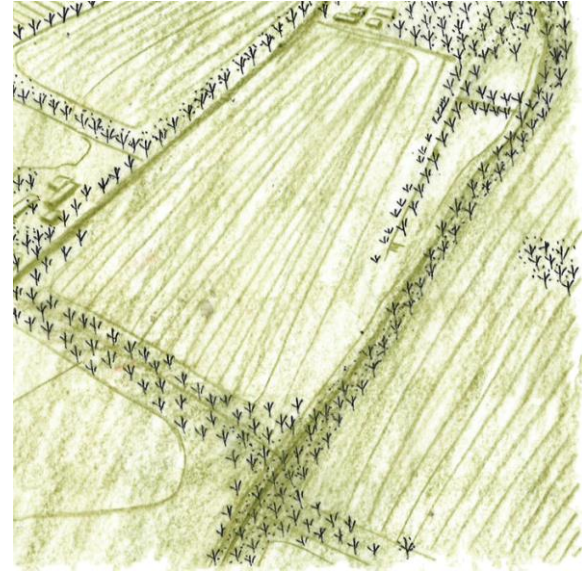
By author, based on Map making, book Terra forma



Limes
(line)






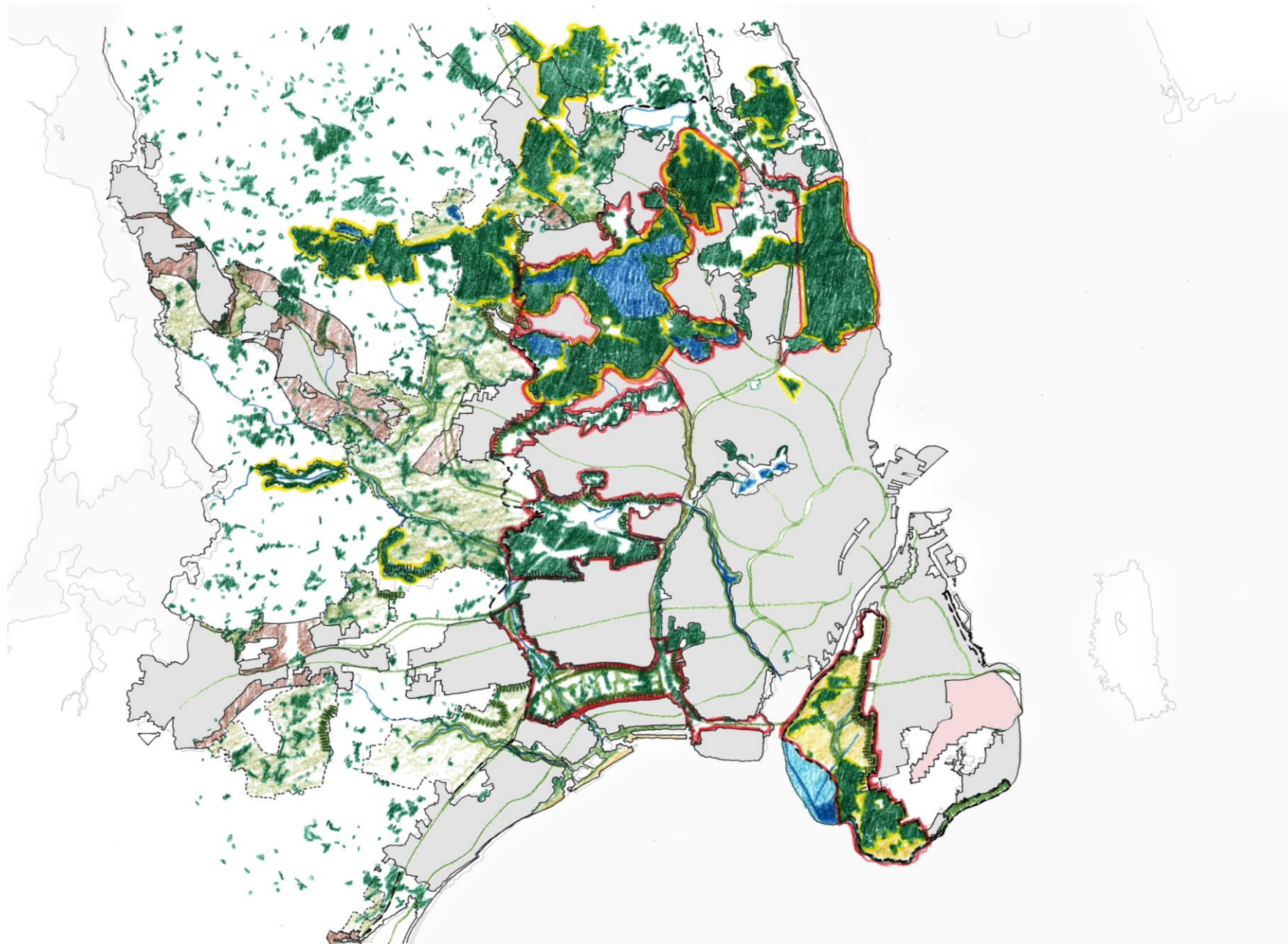
Milieus
(place)



Outer reaches
(territories)



-  Limes
-  Milieus
-  Outer reaches



Proposed Territorial vision

- Urban areas
- Existing forest cover
- Protected nature
- National parks
- Lakes
- Water courses

Limes

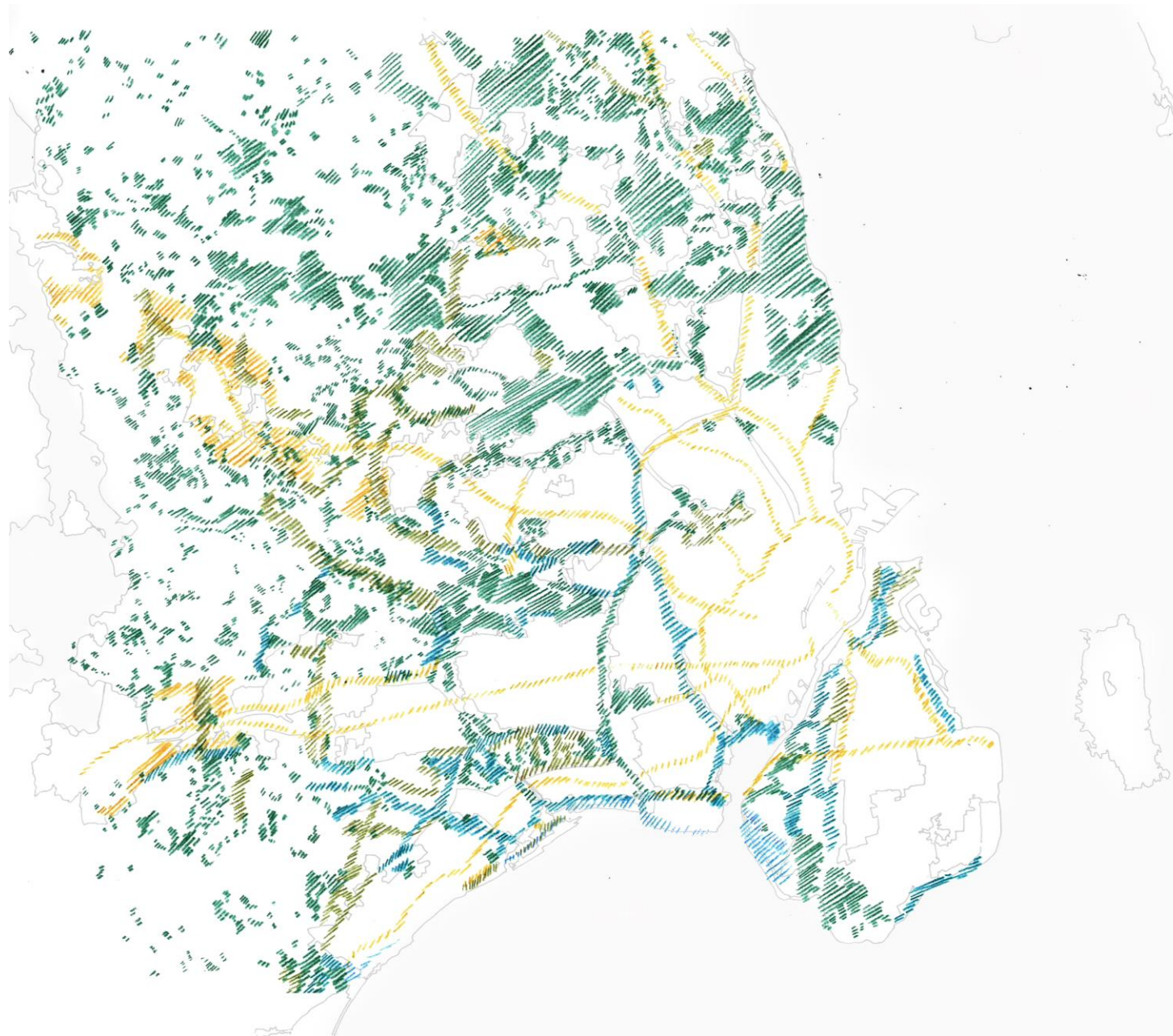
- Membrane
- New forest corridors
- New tree lines (*in urban areas*)

Milieus

- Core forests
- Forest rooms

Outer reaches

- Forest pastures, farms
- Future urban expansion
- Wetland
- Border-Core wedge
- Border-Outer wedge
(*Edge of finger plan area*)
- Copenhagen International Airport



Existing forest cover

Proposed situation + 25 years



Tall and open stands



Tall and dense stands

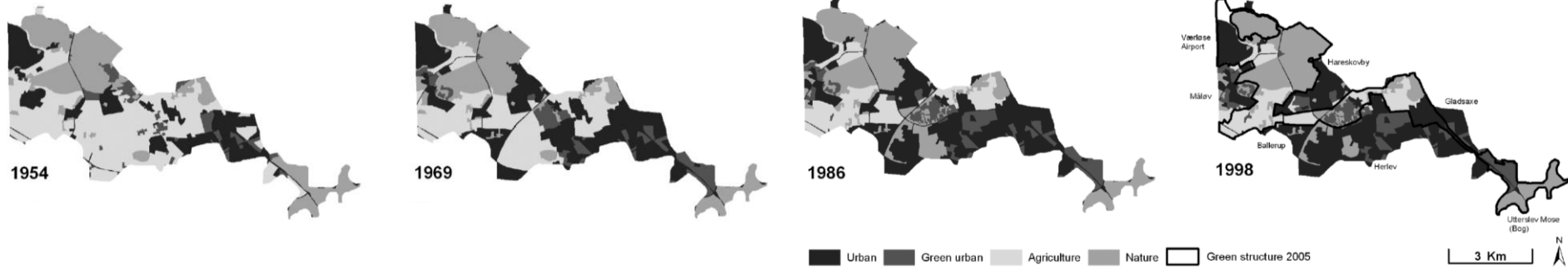


Tall and semi-open stands



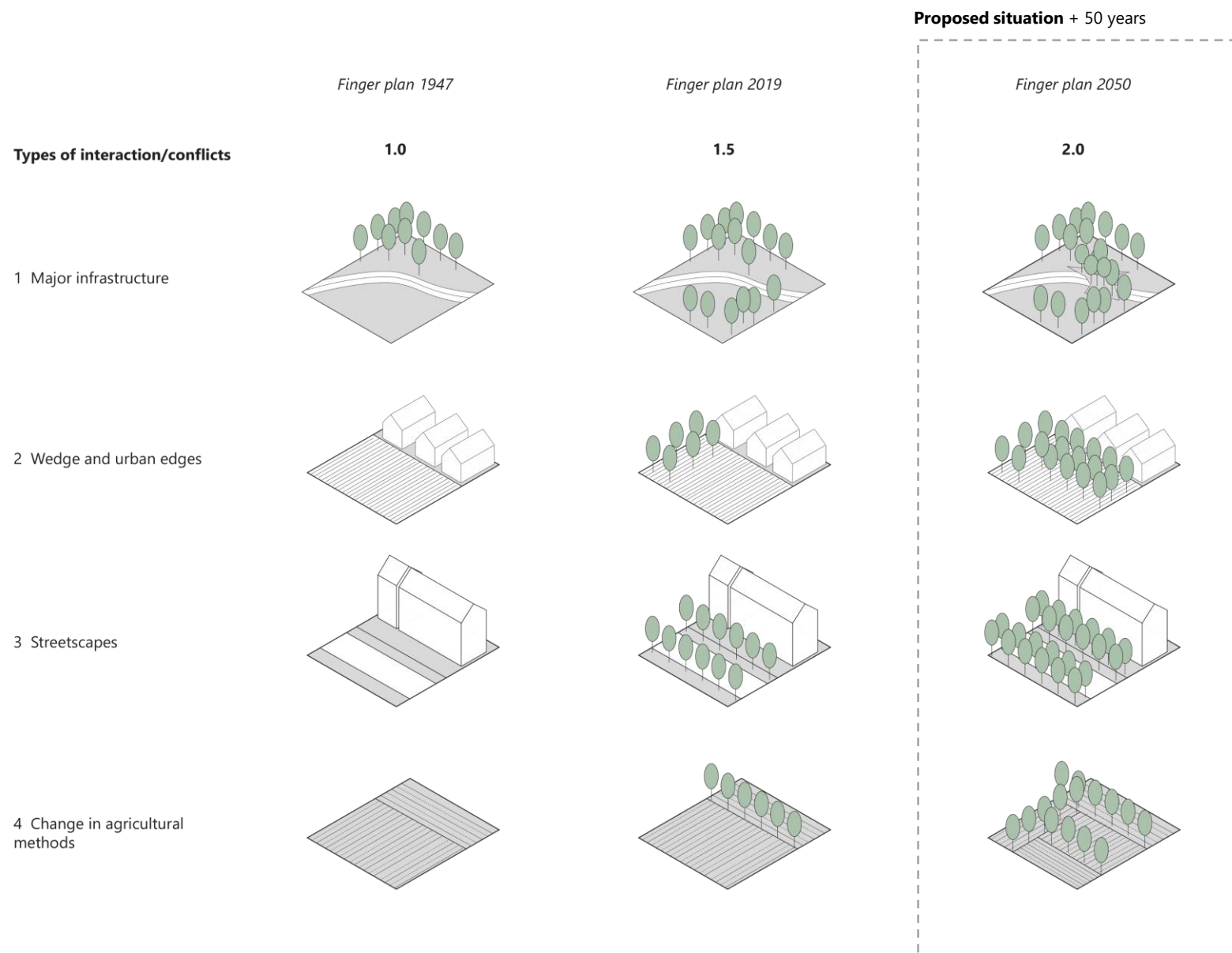
Mid/Low and semi-open

Hjortespring wegde



Vallensbaek wedge







Current situation



Current situation



Proposed situation + 50 years



Proposed situation + 50 years



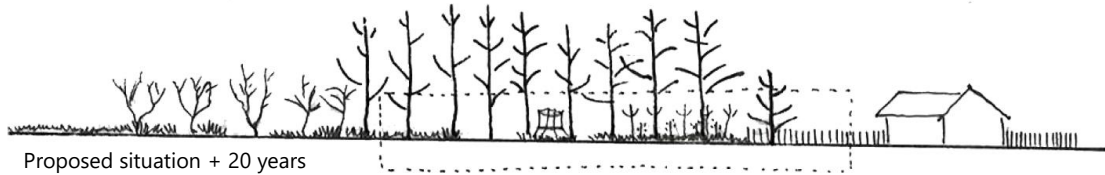
Current situation



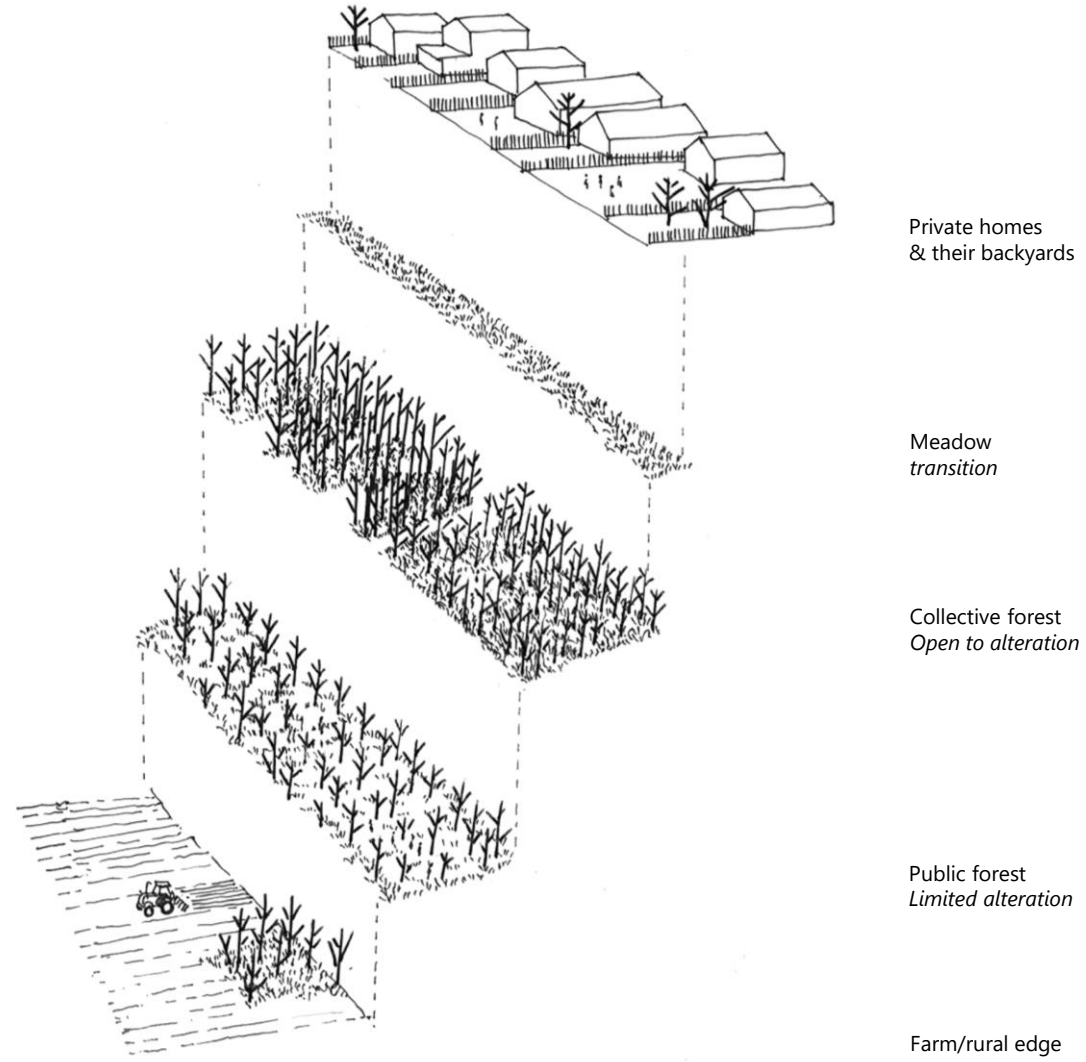
Proposed situation + 05 years

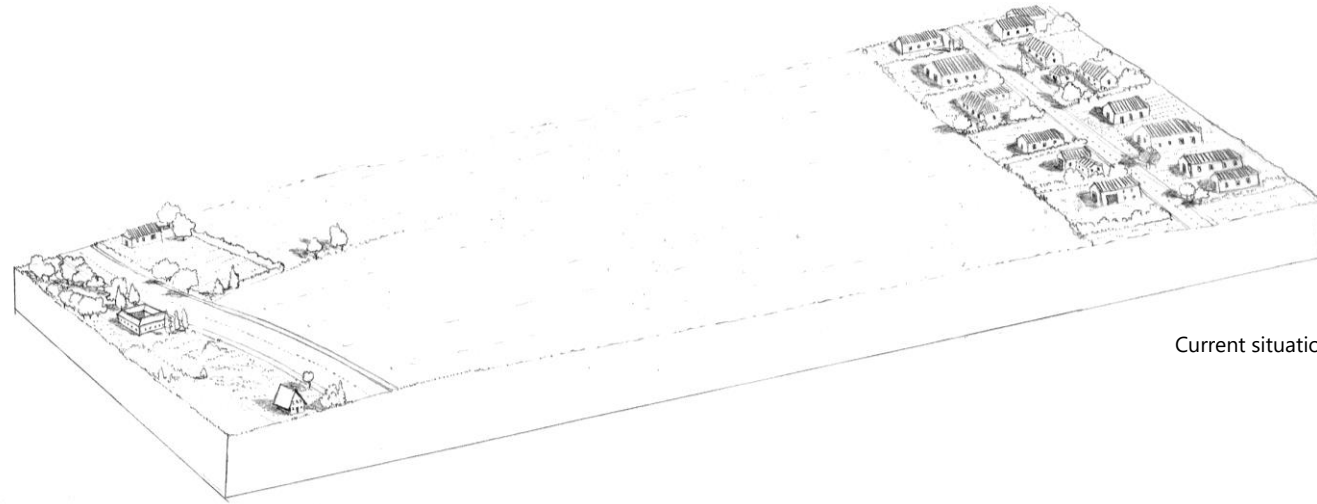


Proposed situation + 15 years

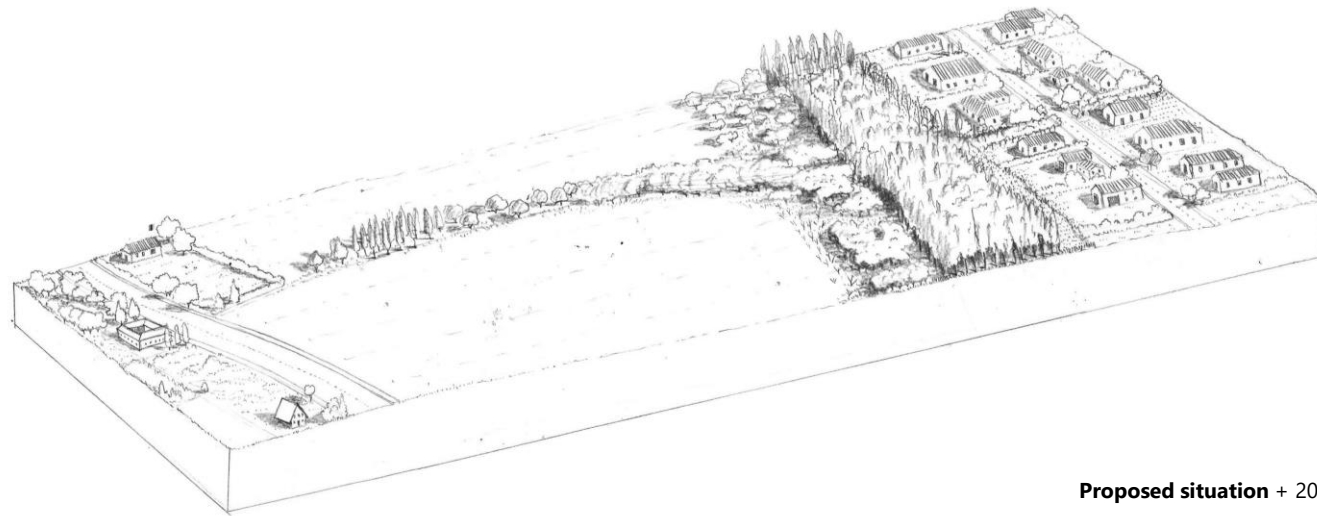


Proposed situation + 20 years





Current situation



Proposed situation + 20 years

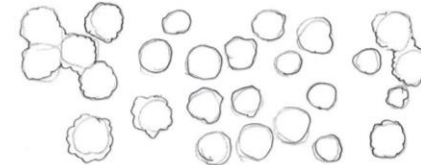
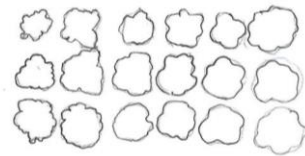
Directed approach

Non-Hierarchical approach

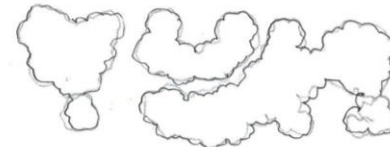
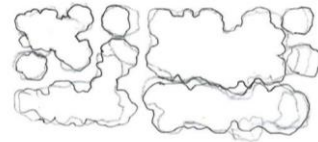
Beginning years of plantation



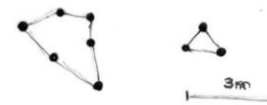
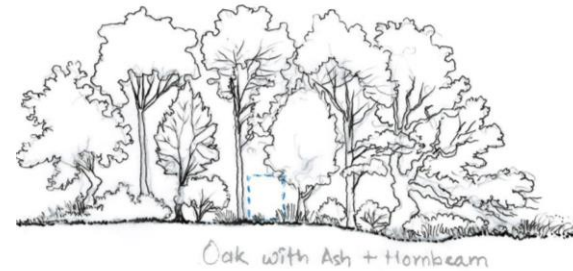
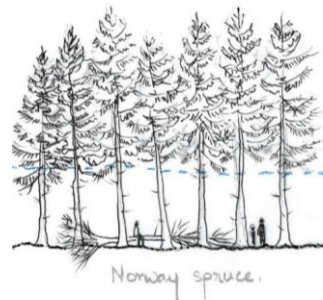
In 15 years



In 30 years

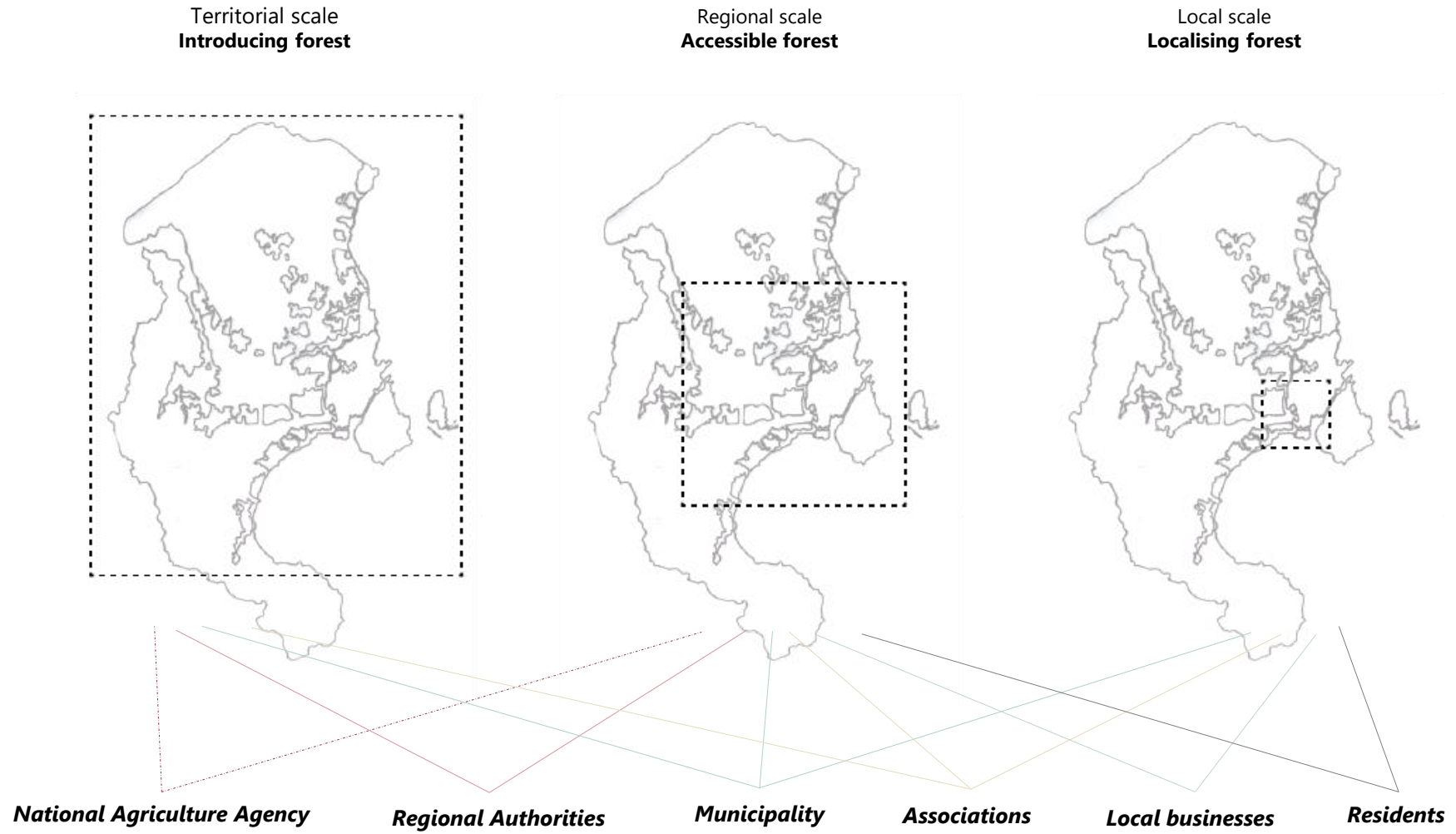


Over 50 years, with goal character

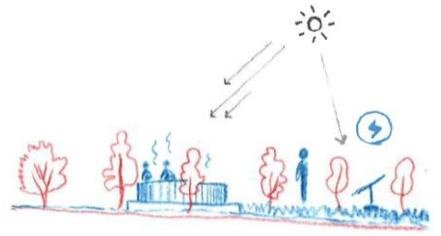


Species selection and stand type
Selection criteria:

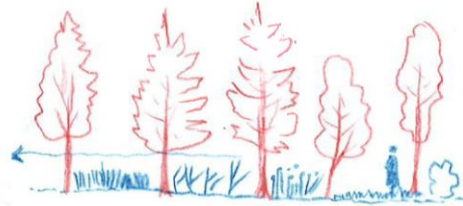
- 01 **Purpose** (Slow/fast growing trees)
- 02 **3/1 Mix ratio** Native/Exotic species
- 03 **Situation** (Location/Geography)



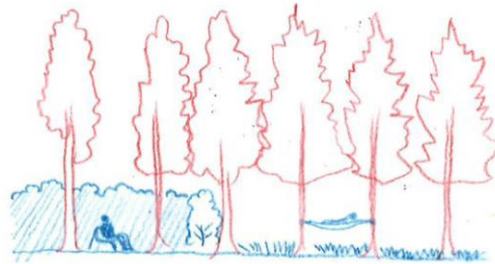
Beginning years of
plantation



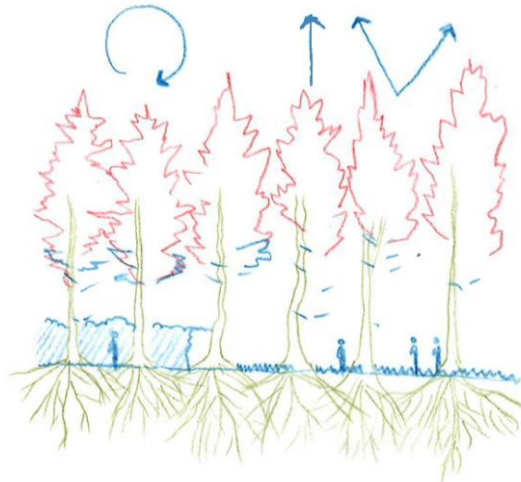
In 10 years



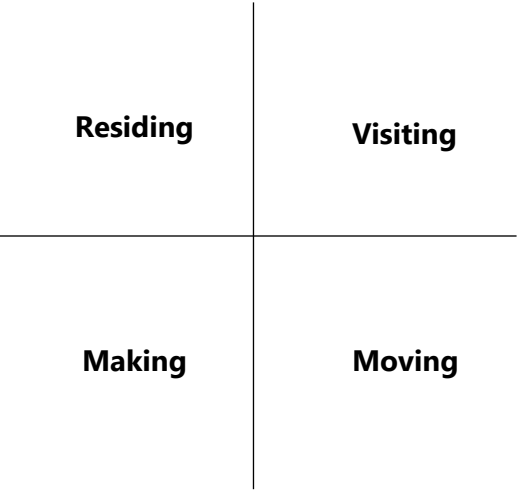
In 20 years



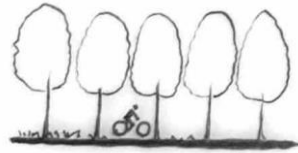
Over 30 years, with goal
character



- By nature
- By citizens
- By government agencies







Daily observation



Viewing



Being near



Entering



Current situation



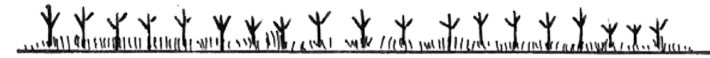
Current situation



Proposed situation + 25 years



Current/typical situation



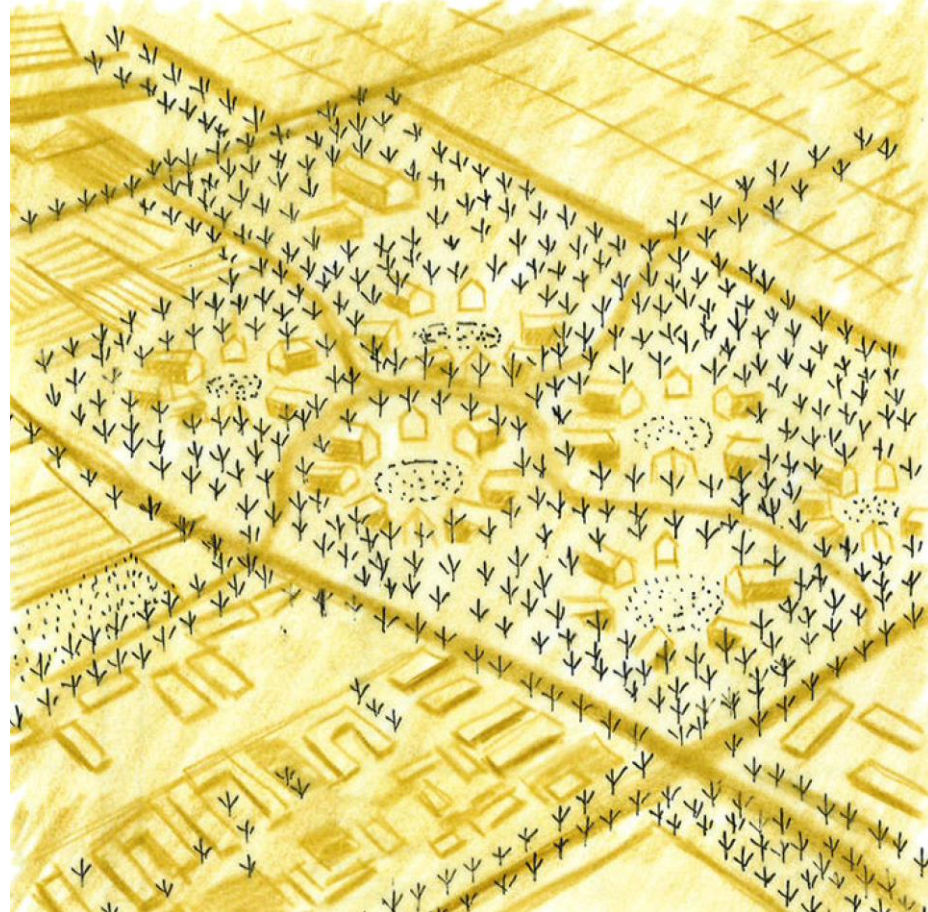
Proposed situation + 05 years



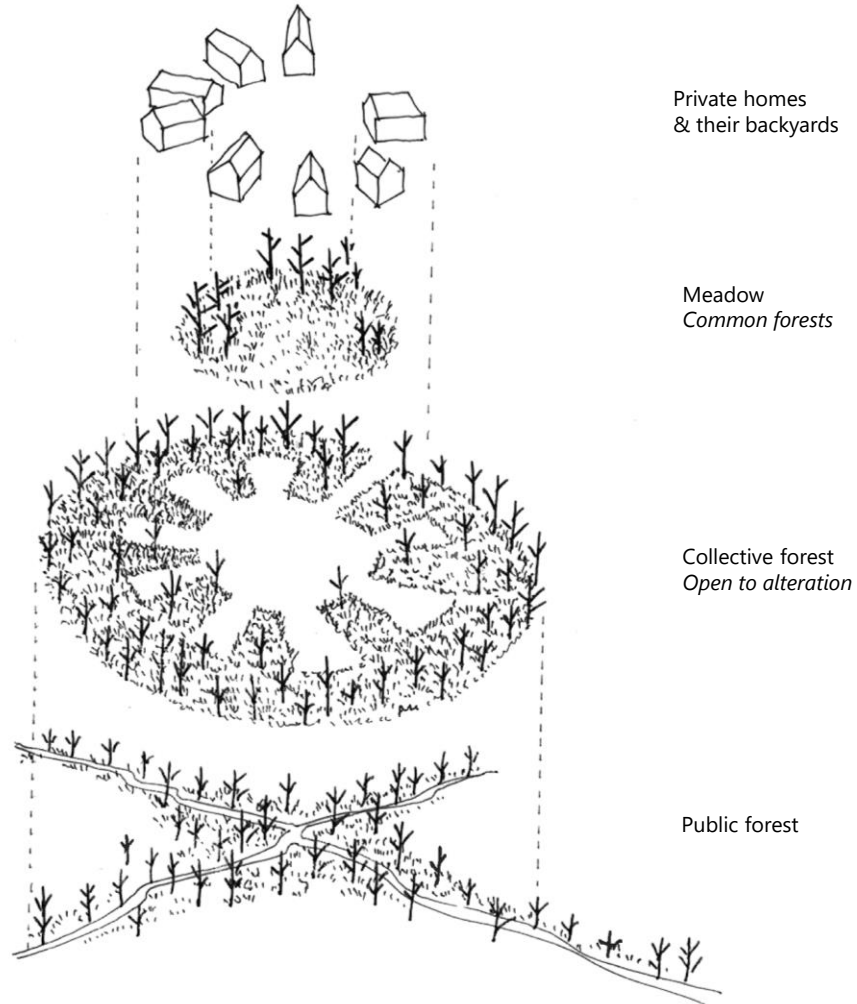
Proposed situation + 15 years



Proposed situation + 25 years

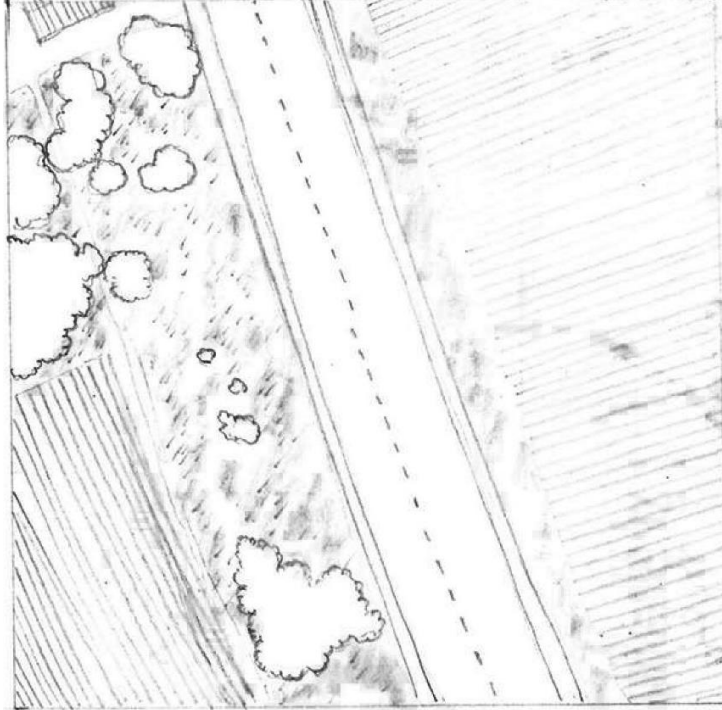


Proposed situation + 25 years

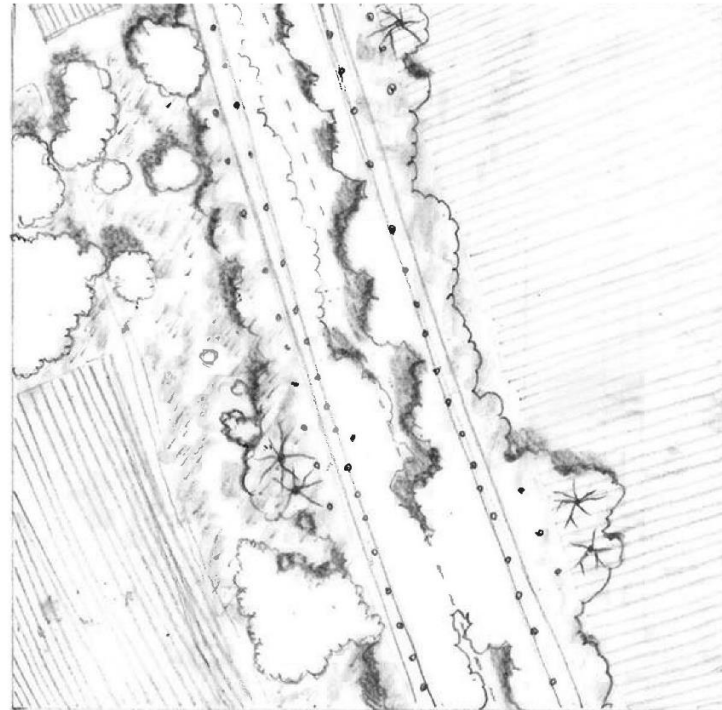




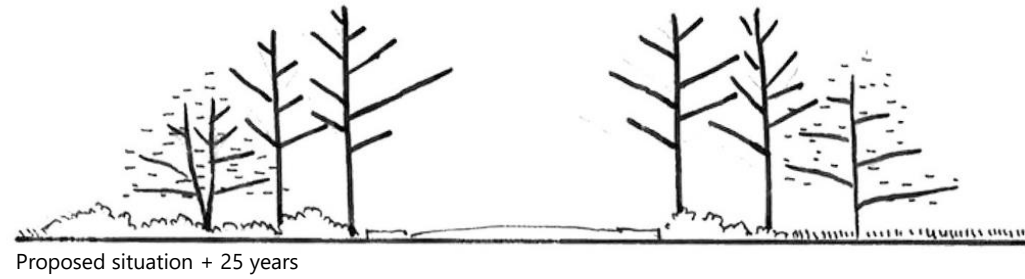
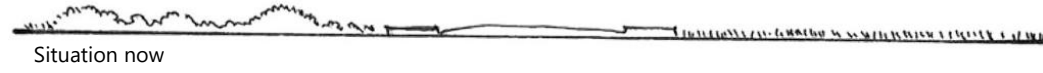
Current situation



Situation now

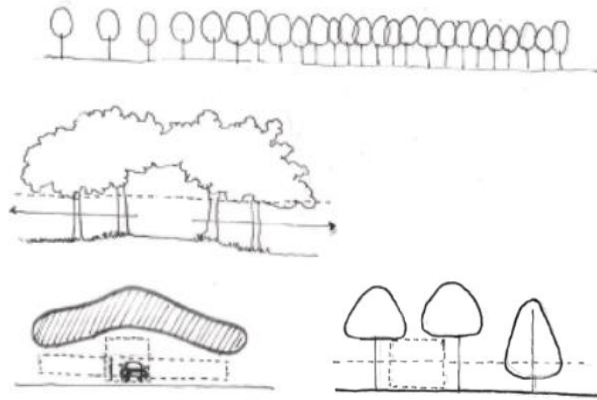


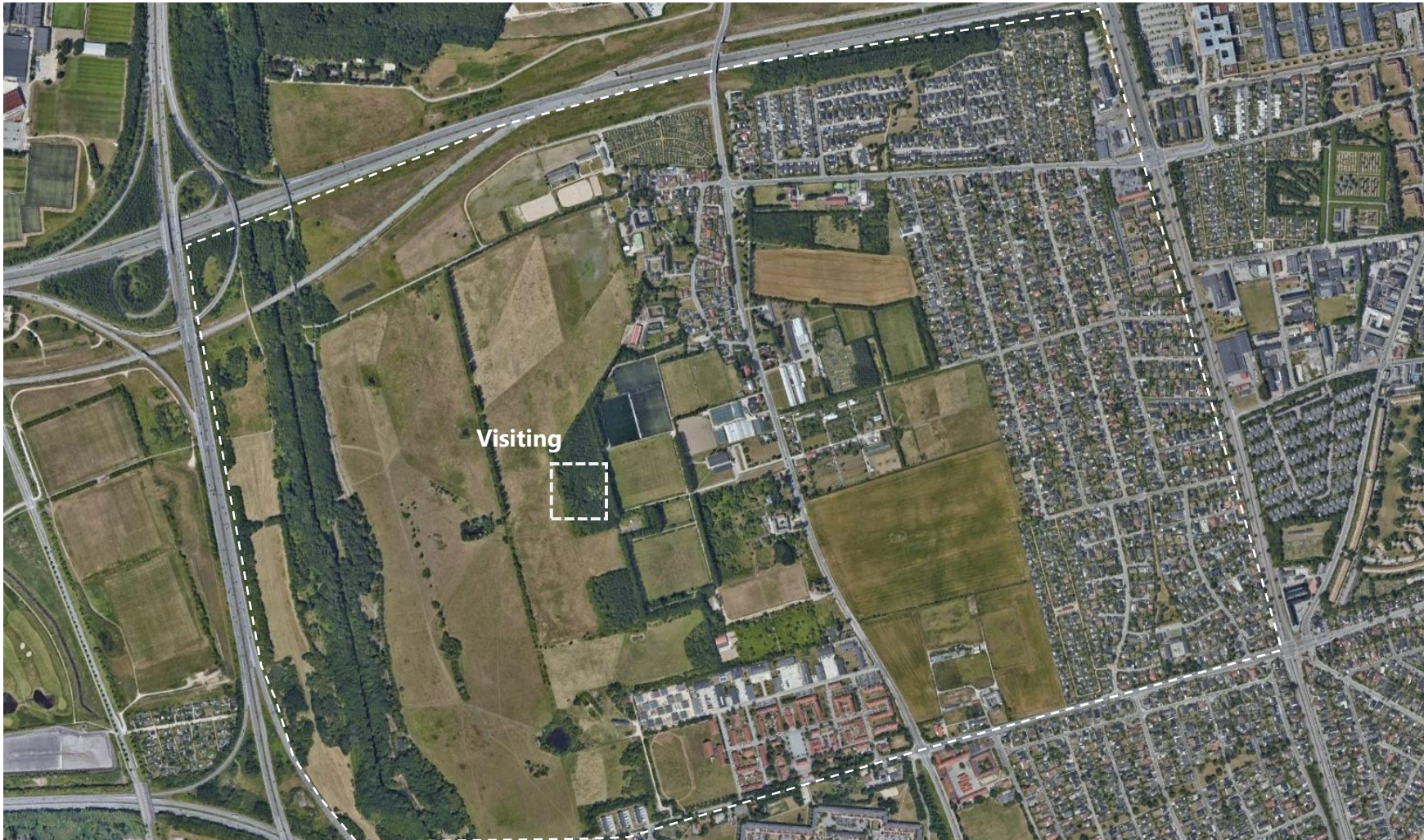
Proposed situation + 25 years



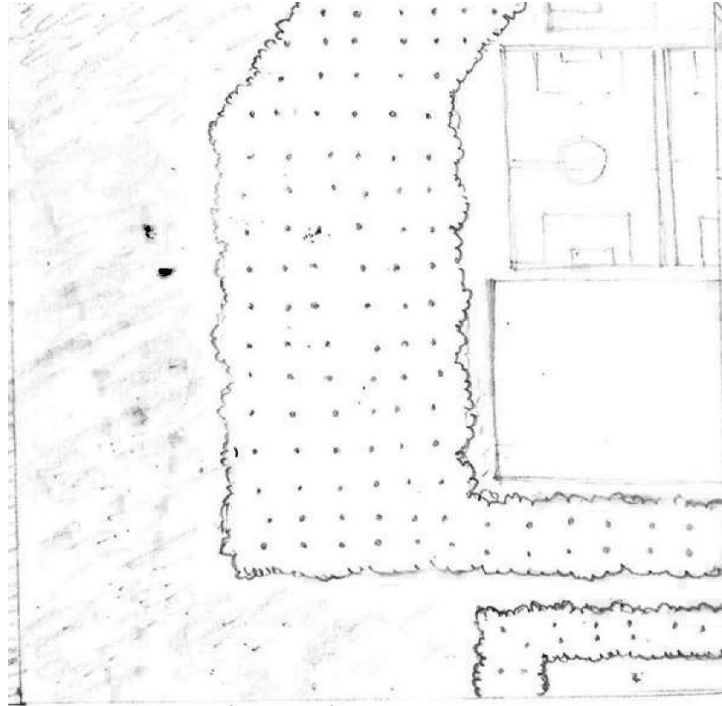
Quercus robur Picea abies

Picea abies Quercus robur

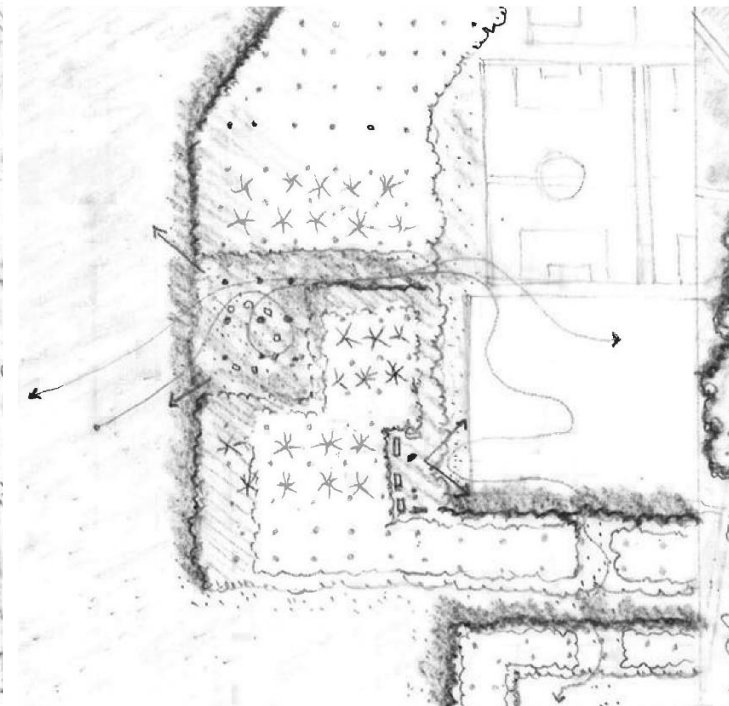




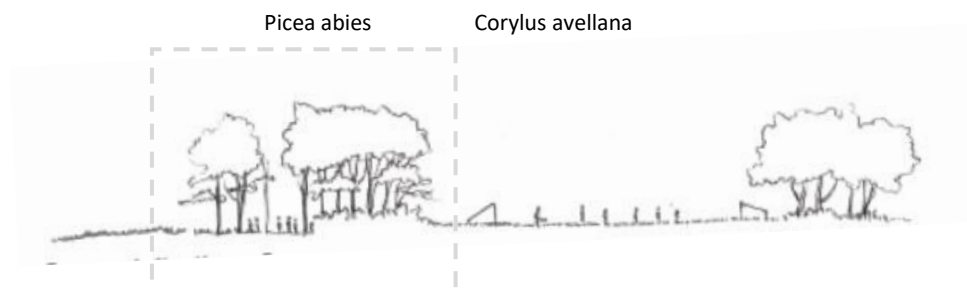
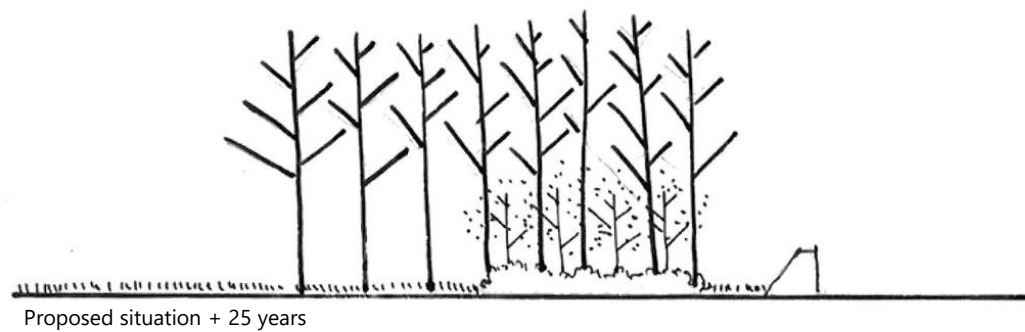
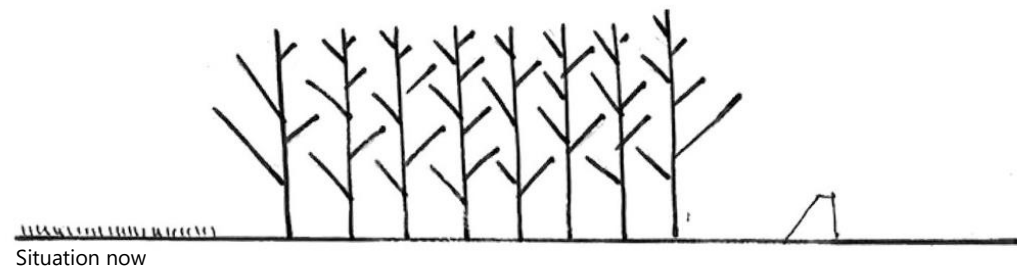
Current situation

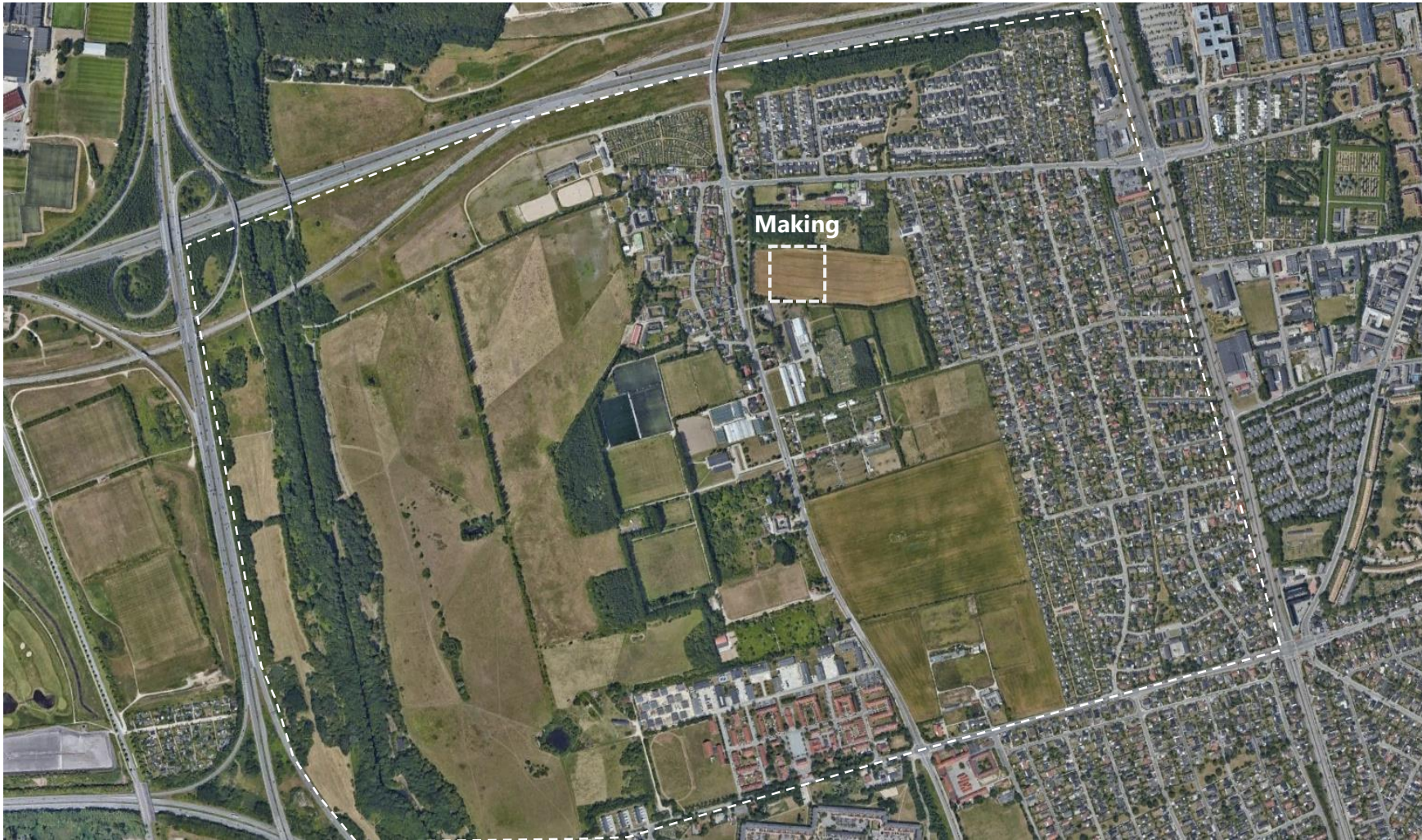


Situation now

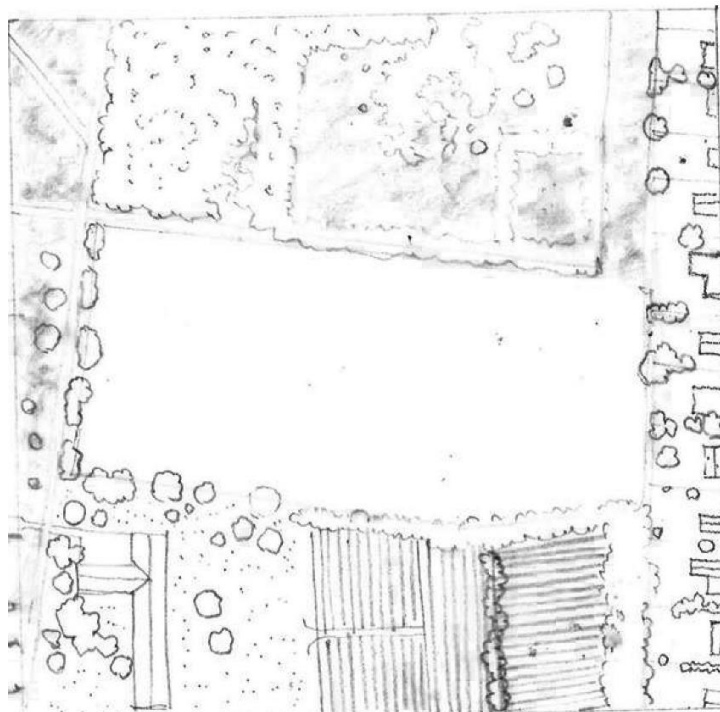


Proposed situation + 25 years

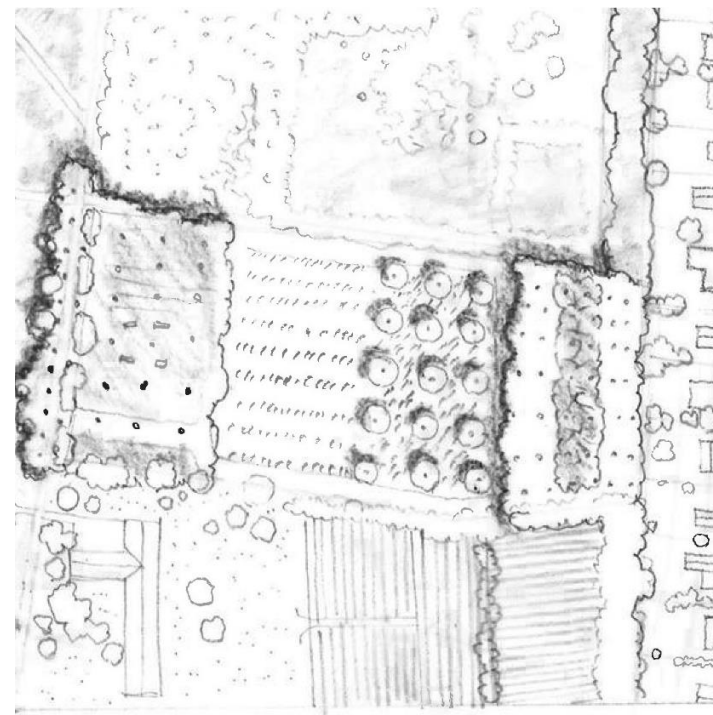




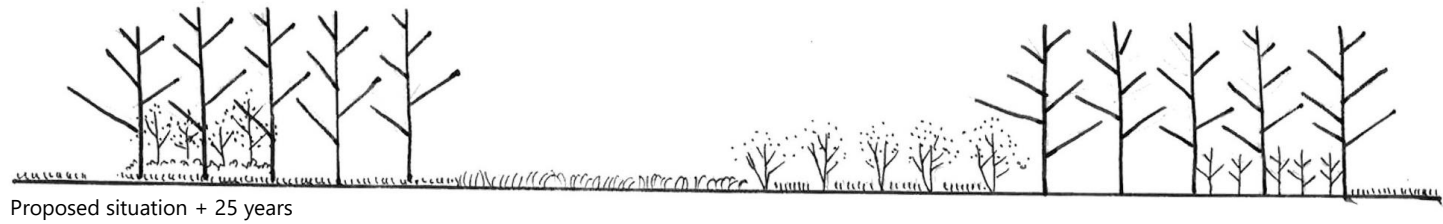
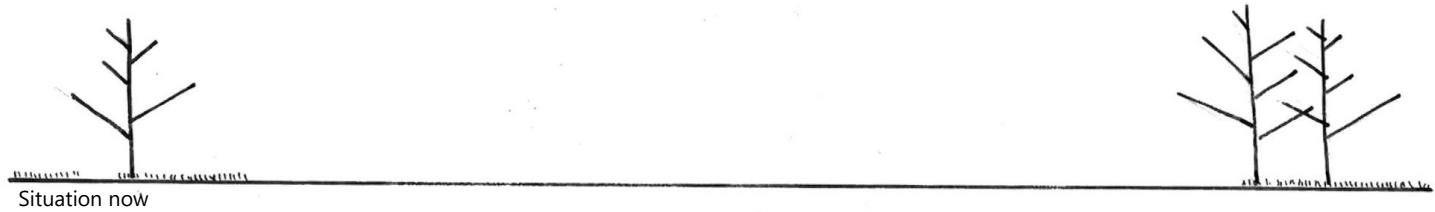
Current situation



Situation now

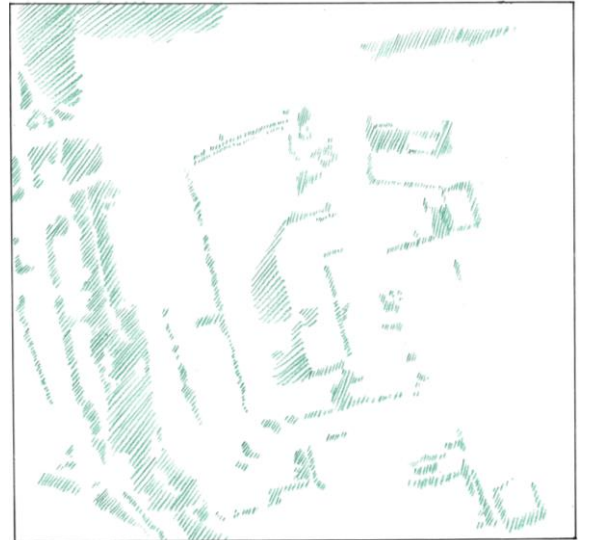


Proposed situation + 25 years





Current situation



Current tree canopy cover

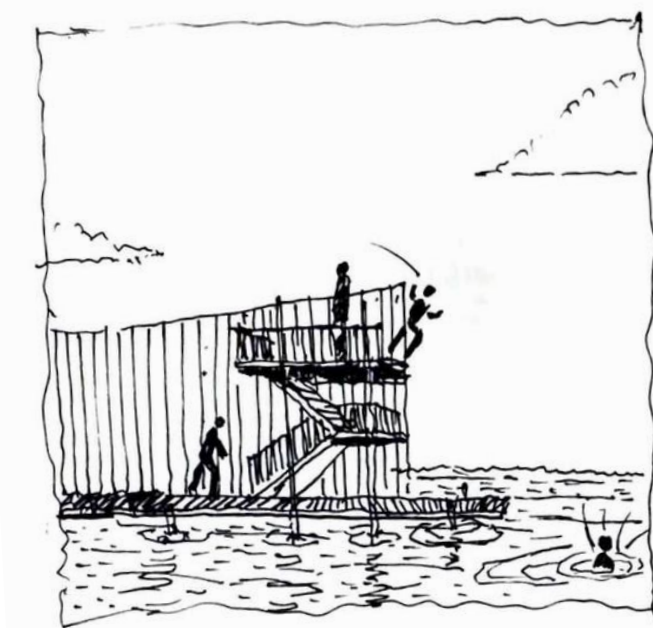


Proposed situation + 50 years





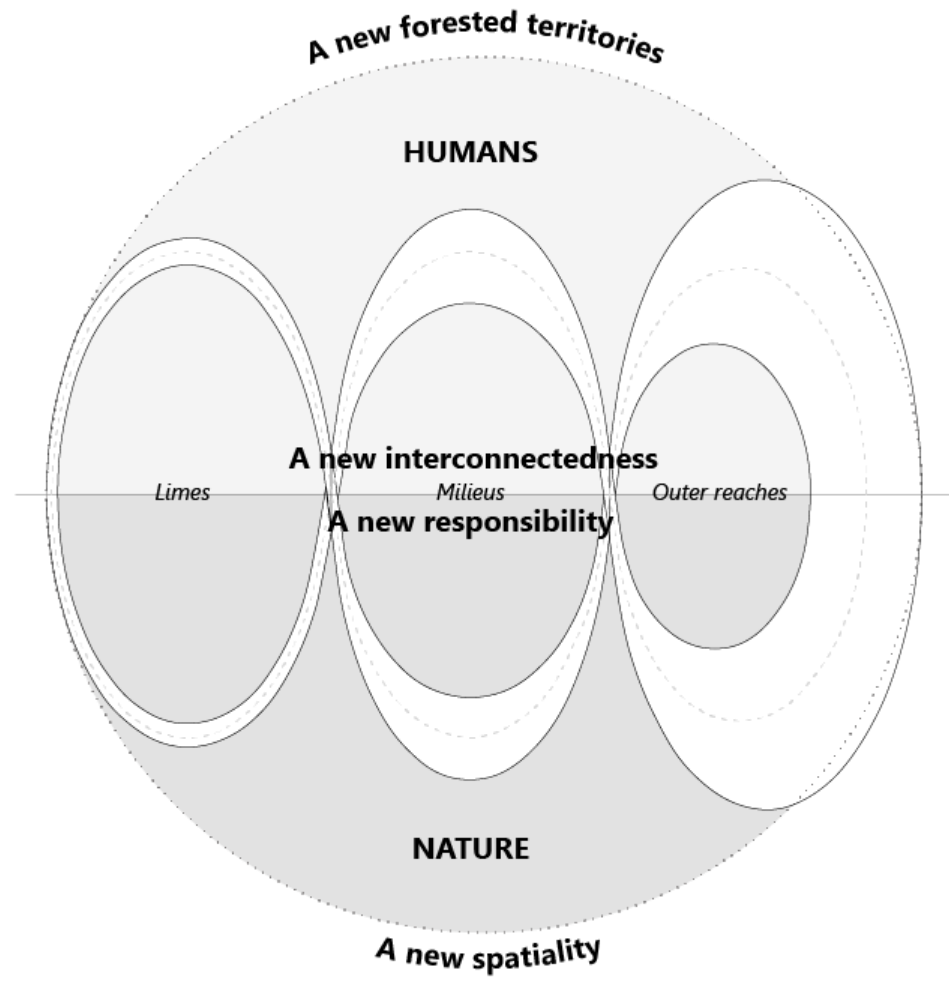




With Rational needs



And Fundamental needs



_In response to **Anthropogenic** pressure a new forested territory will be of **a need** to provide a base layer for region's landscape,

_In order to **blur the dichotomy** of urban/nature a new regional interconnected borders will have to be understood with new lens,

_where knowledge of **Landscape Architecture** can help solve urban sprawl by introducing ideas such as the Membrane,

_which will be **build upon** principles of Forest thinking as a key role in creating new urban nature that is spatially sound & flexible,

_where Vertical forest layer approach will provide **alternative governance** and a new share responsibility to manage them,

_creative management will help provide a **new way of heterogeneous functionality** under structural approach,

A person in a dark jacket and patterned pants is walking away from the camera on a path through a field of tall, dry grass. A white dog is walking alongside them. In the background, there is a dense forest of bare trees under a grey, overcast sky. A fence line is visible in the middle ground.

Under the **forest canopy** a *new Copenhagen*

Thank you

Proposal can be suitable for finger plan, urban character and also other types of urban growth patterns.

In case of Amsterdam

Principles

- Add landscape quality
- Wedge identity
- Urban spatial growth pattern & their relationships

Themes

- _w01 Historical
- _w02 Recreational
- _w03 Airport & Agriculture
- _w04 Sports & recreational
- _w05 Production landscape
- _w06 Tourism & Agriculture

Techniques

- Structural approach*
- _Vertical tree layer approach
- _Membrane



Amsterdam, Boom Landscape, manifesto de van Scheggenkaart