



Country / CityThe Netherlands, Amsterdam.....
University / SchoolAmsterdam Academy of Architecture.....
Academic year2018.- 2019.....
Title of the projectTrees First - The Public Spaces of the Forest-City.....
AuthorsJean-François Gauthier.....

TECHNICAL DOSSIER

Title of the project	Trees First - The Public Spaces of the Forest-City
Authors	Jean-François Gauthier
Title of the course	Graduation project
Academic year	2018 - 2019
Teaching Staff	Jana Crepon (mentor), Mirjam Koevoet, Wiebke Klemm
Department/Section/Program of belonging	Landscape Architecture
University/School	Amsterdam Academy of Architecture



Written statement, short description of the project in English, no more than 250 words

Let's focus on trees in the city and their needs as a starting point for a better design of public space. Let's look at Brussels as a potential forest territory and let's establish new public space typologies around tree communities. Forest succession will bring a new temporality in the densely populated Belgium capital.

"Trees First" is a research on trees in the city and their needs as a starting point for a better design of public space. New ecological knowledge on forests and their underground social network forms the basis of the proposed urban forest. The design explores various public spaces in the very centre of Brussels that will be connected to each other through the underground system of tree roots. A hidden water system, artificial topography and remains of the initial Brussels valley define a potential forest territory. Different urban situations and very contrasted forest habitats can be found within the perimeter of our project area: the Boulevard Anspach and its surroundings.

Four main forest typologies are defined: the Canyon Forest Boulevard, the Hill Forest Square, the Wetland Forest Park and the Mountain Forest Towers. A green network is built around these forest typologies thanks to soil continuity and permeability. New urban programs can be developed around them. A set of design rules is defined from these case studies, exploring key urban habitats, tree communities, succession strategies. Brussels will receive great benefits in return in terms of ecosystem services and urban forests will contribute to public health and climate change adaptation.

For further information
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CLIMATE CHANGE AGAIN

11th International Biennial Landscape Barcelona

Barcelona September 2020
SCHOOL PRIZE

Forest-City Territories



The Hill Forest Square Anneessens



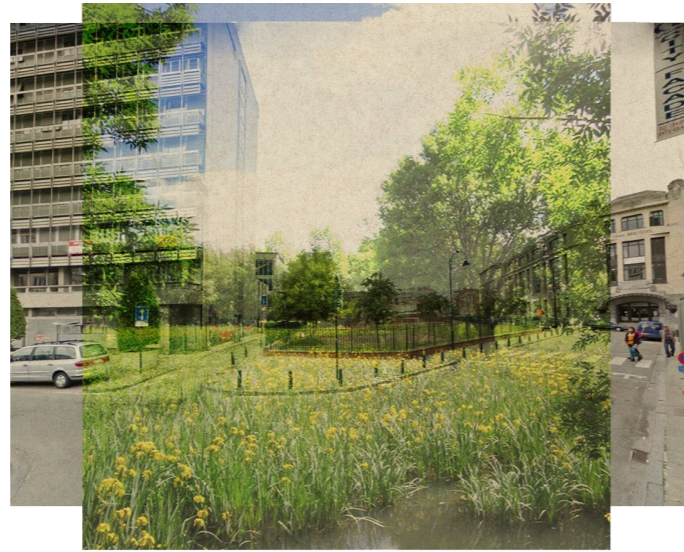
Lowlands and lower slopes of hills



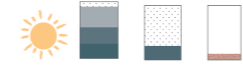
The Wetland Forest Parc Fontainas



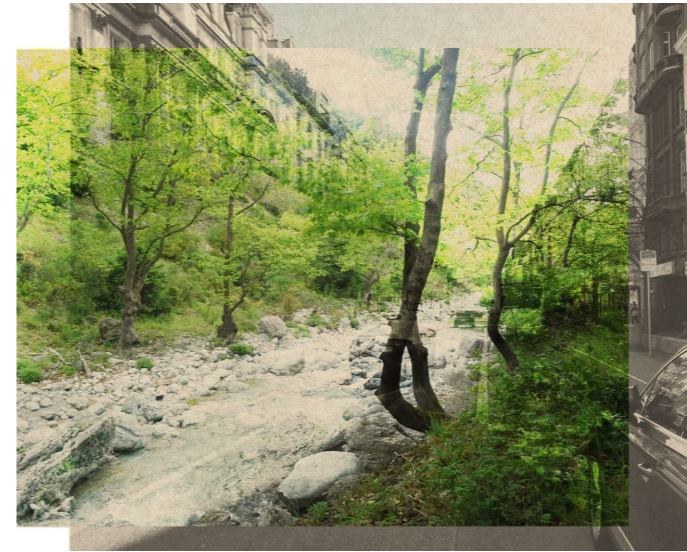
Valley territory with constant moisture



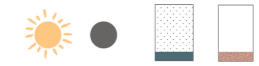
The Canyon Forest Boulevard Anspach



Contrasted seasonal changes from flood to drought



The Mountain Forest Brouckère Tower



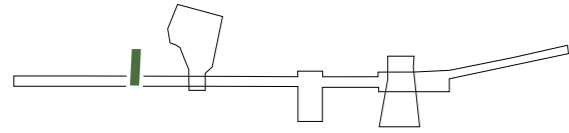
Contrasted and extremes conditions



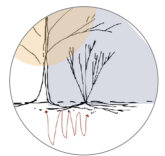
Forest-City Communities



The Hill Forest



Tree community at the edge between low and high land



Tilia as mother trees giving nutrients to siblings thanks to mycorrhizal exchange



Melampyrum pratense

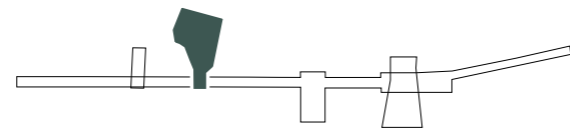


Narcissus pseudonarcissus

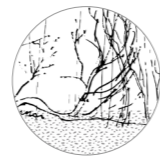
Anemone nemorosa

Bridge crossing wet and dry habitats

The Wetland Forest



Mosaic of wet habitats: valley, fringe and plain



Veteran Trees are ideal shelters for mushrooms and symbiotic bacteria



Central path crossing habitats



Later succession occurs in dryer ground



Salix Alba

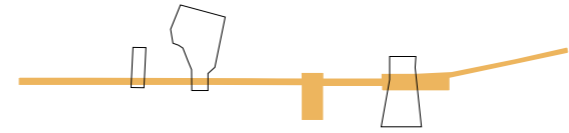


Caltha palustris



Populus buffering water in the Boulevard

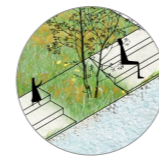
The Canyon Forest



Pioneer clumps, green walls and open under-story



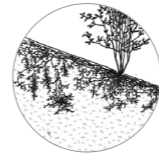
Alnus cordata regenerating soil fertility through symbiotic nitrogen fixation



Canyon Green Wall



Stones giving stability to trees

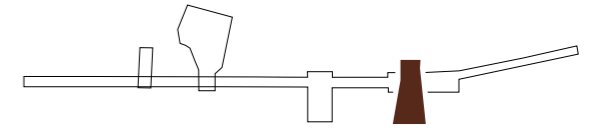


Pioneer ability to grow on steep surface

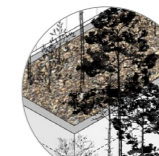


Salix aurita

The Mountain Forest



Communities of specialist



Pinus nigra as key specie



Quercus petraea



Asplenium trichomanis



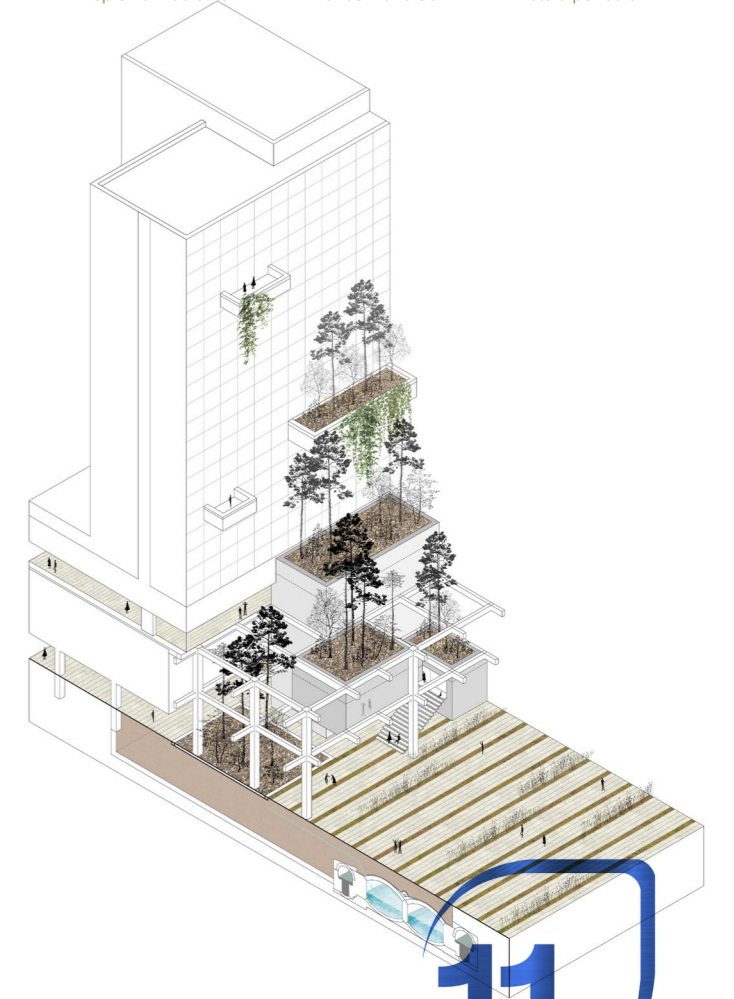
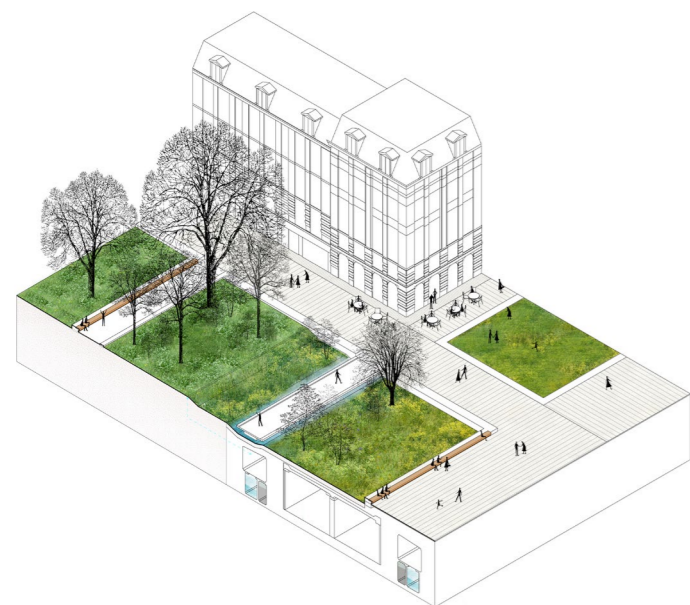
Asplenium adiantum



Prunus mahaleb



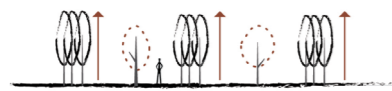
Betula pendula



Forest-City Successions



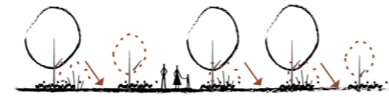
The Hill Forest



Pioneer Strategy



The Wetland Forest



Mother Trees Strategy



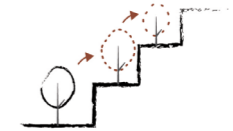
The Canyon Forest



Spreading Strategy



The Mountain Forest



Vertical Growth Strategy

