10 Urban Forests: Landscape Designs Tailored to Dense Cityscapes

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Forests are distinctive parts of the environments surrounding cities. Shifting with scale and land use, forests offer infinite arrangements of space, texture, and density. For a long time, we have been convinced that trees can define a space – even on a very small scale. In 1989, in collaboration with Christine Dalnoky, we created the Square des Bouleaux, or "birch tree square," in Paris (see Figures 10.1 and 10.2). This small grove of 110 birch trees is situated in the narrow courtyard of a public housing development designed by Renzo Piano. These urban woods pioneered a new style of landscape design: scaling the surrounding environment to a pocket garden.

In 2009, our design of a 1 ha forest at the foot of the Otemachi Tower in Tokyo cemented the urban forest concept as a feature of urban public space. With the help of botanists, we selected a large variety of tree, plant, and groundcover species, all found in the primary forest of the nearby mountains. The layered plantings in each section replicate both forest canopy and forest floor. Given the metro station located beneath the project site, creating an urban forest on the new soil above required careful planning. Planting trees is not only a question of depth but also of critical volume and soil space, underscoring the importance of restoring living, permeable surfaces in cities. (See Figure 10.3 for collage rendering and Figures 10.4 and 10.5 for the built form.)

With each new project, we aim to reproduce and develop the "miniature forest" concept, no matter the size of the site. At the Ministry of Culture in Paris, we recreated a small forest modeled after the woods of the Île-de-France region. 1,000 plants of 100 different species, including 86 trees, are carefully layered to create a mini forest of 170 m². The project is a prime example of economically and sustainably enhancing an urban space (see Figure 10.6).

In Kanaal, a business and residential neighborhood in Antwerp, we created our wooded design in place of a network of courtyards. The space is a vast landscape inspired by the area's surrounding forests, its buildings seemingly growing out of the greenery (see Figures 10.7 and 10.8).

These urban forests are folded into the constellations of small green spaces found in every city. The lush areas have a positive environmental impact, while also reducing the heat island effect, and also contributing to the climate action effort. By restoring greenery found in surrounding environments, urban forests bring to the very heart of a city that which the urban space left behind as it developed.

Note

1 Essay in collaboration with Stéphanie Cléau and translation by Clara Siegmund.



10.1
The Small Woods in the Square des Bouleaux, 1,625 m², Paris, 1989.



10.2 The Small Woods in the Square des Bouleaux, 1,625 m², Fall Season, Paris, 1989.



10.3
Collage Rendering of the Urban Forest at the Foot of the Otemachi Tower, 1.1 ha, Tokyo, 2009.



10.4 The Urban Forest at the Foot of the Otemachi Tower, 1.1 ha, Tokyo, 2009.



10.5
The Urban Forest at the Foot of the Otemachi Tower, 1.1 ha, Tokyo, 2009.



10.6 The Miniature Forest at the Ministry of Culture, 1,000 m^2 , Paris, 2011.



10.7 The Vast Landscape in the Business and Residential Neighborhood of Kanaal, 2.2 ha, Antwerp, View Looking Outside from the Building, 2016.



10.8
The Vast Landscape in the Business and Residential Neighborhood of Kanaal, 2.2 ha, Antwerp, 2016.