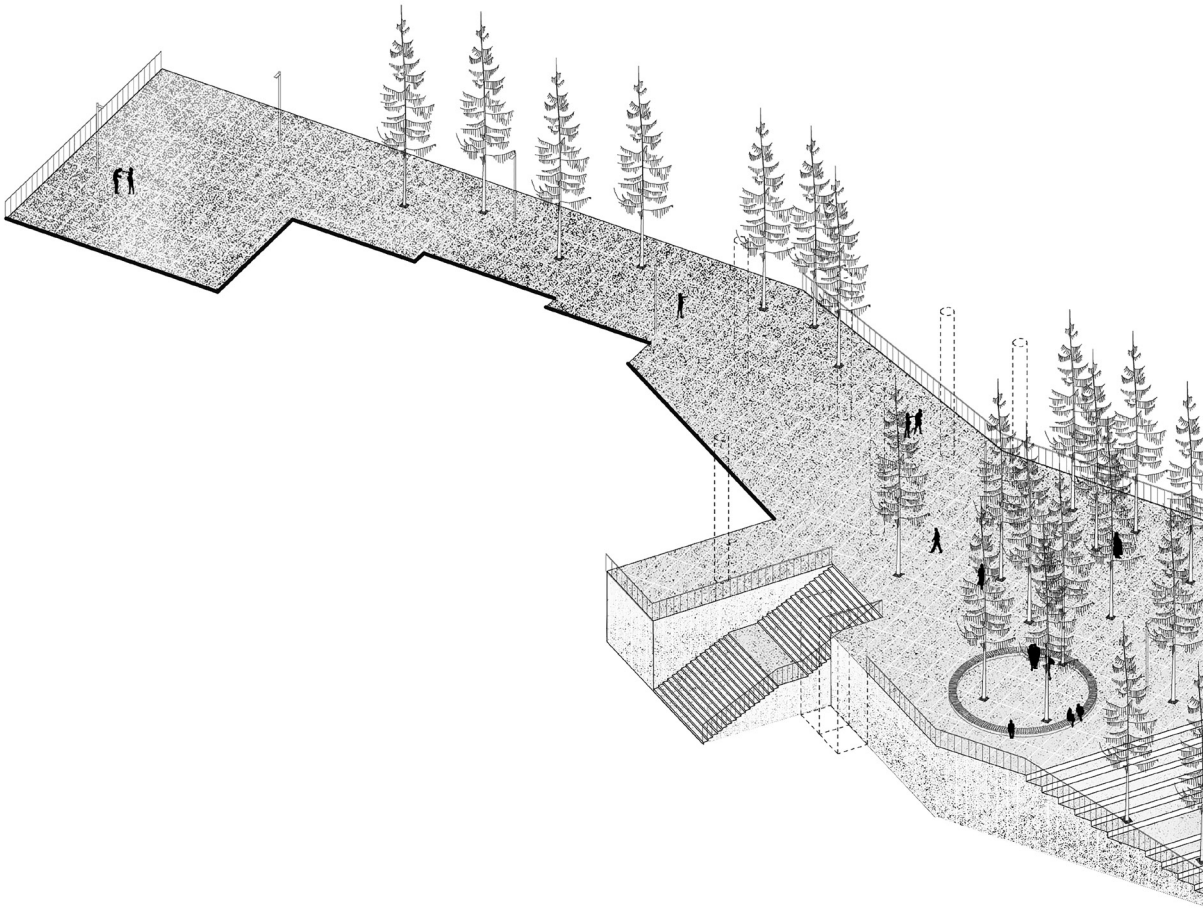
FOREST URBANISMS PROJECTS

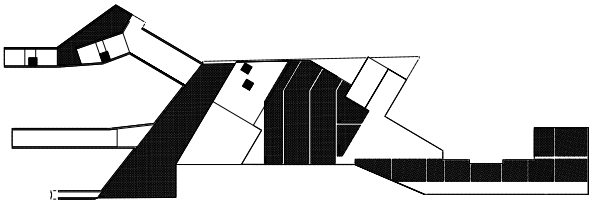
I. LANDSCAPE AFTER NATURE
Trinity, La Défense, Paris (France)

Bureau Bas Smets
design implementation: 2011-2020 client: Unibail-Rodamco-Westfield

A new skyscraper has been built atop an existing urban boulevard in Paris La Défense. Surrounding the tower, a floating plaza connects the elevated esplanade of La Défense with the lower-lying urban fabric of streets and pavements. The man-made environment of the business district is surprisingly like that of a mountain range: glass facades, like glaciers, reflect the sun in all directions, while the artificial mineral hardscape resembles exposed rocks. The only missing component was a tree line that introduces a horizon among the peaks. The project was therefore developed with four distinct layers. The first layer considers the design as a mountain range, where every peak directly influences its surroundings. La Défense's skyline, like a mountain range, contrasts sharply with Haussmann's homogeneous nineteenth-century urbanism. In the latter, the street defines the disposition of the building; in the former, the addition of every tower is accompanied by a design for its adjacent public space. Another layer is the contour line along the slopes, above which no trees grow. If La Défense is understood as a mountain, it needs a tree line. The project therefore imagined a robust public space planted with many trees. The trees, suspended above the boulevard, create a new horizon and anchor the skyscraper in its environment. At the mountain base, the plaza itself is built above an urban boulevard, with a mere 52 centimetres of space between the finished level and supporting concrete structure. To achieve the tree line, the area for soil needed to be maximized. The result is a continuous fertile slab that allows roots to grow horizontally beneath the stone pavement. The final layer is a resulting mountain grove landscape of 50 trees that now grow atop the urban boulevard. Serving as a windbreak and providing shade, the trees create a microclimate between the tall towers. As in a natural grove, there is minimal to no undergrowth; the floor of the urban grove is a continuous stone pavement. Massive slabs of Lanhelin granite cover the plaza, the staircases, the elevators and the retaining walls. Like an avalanche, this mineral environment makes its way down towards the street level, enveloping everything in its path.



Trees have been strategically inserted into the concrete jungle of Paris La Défense, creating a pocket of forest urbanism that not only attenuates the climate, but also provides an expanded public realm in an increasingly privatized business district.



Fertile Slab

Alder trees were chosen for this project in two varieties: *Alnus glutinosa* and *Alnus glutinosa 'Imperialis'*. These trees can grow in shallow earth and can resist the use of salt in winter. The roots of these trees were prepared in the nursery to be compact and flattened. An automatic irrigation system is connected to a network of humidity detectors.

The trees grow where they can. Constraints from fire and universal access regulations mimic constraints found in a natural situation, like waterflows. There is no composition of trees, only opportunity for growth.