CONTINUOUS HYDROLOGY
Moving Along The Water's Edge

Diploma Landscape Architecture
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student: Enrico Zanusso

59°56'58"N, 10°38'57"E
Mærradalsbekken, Oslo, Norway

Hovseter valley is part of comprehensive system of open spaces that are instrumental to the spatial and functional quality of Oslo. The project interpret the river valleys as a park: a material, physical space (of land and water flows to manage), a social space (of conflicts among actors and activities to solve), a cultural space (of aesthetic values to preserve), a political space (of land use rules to define), a public space. The water system is key component of the valley-park.

Six percent of Oslo's area consists of freshwater; that means 354km of rivers and streams unravel through the city. Until the 1990s this maze of waterways was covered, buried and piped in order to leave space for a fast-growing city and to transport polluted water. Nowadays, this tendency has been reversed, leading the municipality to reopen streams and rivers in order to adapt against climate change with heavier and more frequent rainfall.

The project needs to re-read and re-interpret the public space and define a new image whose ambition is:
- holds together flows and social practices.
- meet the urgency of the municipality to restore an hydraulic effectiveness.
- integrate and enhance a variety of existing social practices.
- reduce conflicts between the actors.
- restore adaptable, resilient, healthy, diverse and pleasant conditions in the urban landscape.

The following guiding principles of water guided the design process integrating different level of scale:

Physical integration. A visible system of well-functioning water flows and vegetation patterns is organised to fit the local physical landscape conditions and natural processes.

Social integration. Looking at enhancing a variety of existing social practices of integration in the valley, the new system of elements is organised to improve access and reduce conflicts and improve synergy among possible forms of social appropriation related to a variety of life styles.

These principles aim at restoring adaptable and resilient, healthy, and diverse and pleasant conditions in the urban landscape.

WATERSHED SCALE

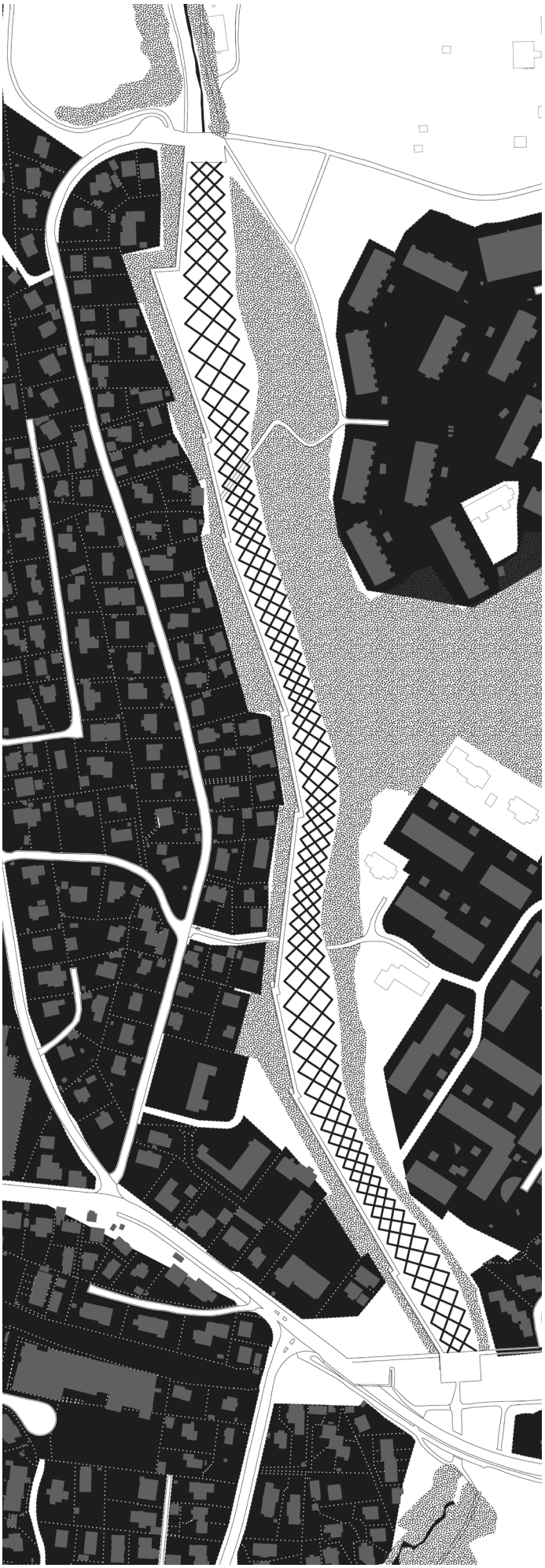
Hovseter.
water and forest before
and after intervention.

Considering Mærradalsbekken valley as a linear park. A 6km long, beautiful urban park running from the hills down to the fjord.
Walking through this valley, is possible to perceive that this park is fragmented.
Hovseter is located in an important and strategic point in Mærradalsbekken from the hydrological point of view: that segment of the valley (about 1km long) was piped in 1970s, when a pathway and an open area took place of the river and his riparian zone.
Walking through the valley, coming from the woods upstream, that space is perceived as a visual interruption of the valley-park.

By meeting the urgency of the municipality to renew the water systems in that segment and the political goal of reopening the waterways in Oslo, I'm proposing an intervention aimed to restore the hydraulic continuity. My vision is that the hydraulic continuity could create an image of continuity also for all the activities that take place there. That they are biking, running, hiking, skiing, or just walking, most of the people just cross Hovseter, coming from the upper paert of the valley and going downstream, or the other way around. This is the proof that Hovseter valley is already used as linear park. To strenghten the image of continuity, I'm proposing to enhance the vegetated edges of the new valley; the east edge is today partially vegetated, only reminder of the former big wood that took place in this valley until the middle 20th century. The strategy for this edge is to thicken the vegetation by planyting new trees. The west edge of the valley, instead, almost completely naked, it is possible to even count the number of the trees. The strategy for this edge is to create a slightly raised vegetated corridor of variable width bordered by the pathway and its 50cm tall retaining-wall/city-bench. The aim is to define the perimeter of new space with visible vertical elements. By using the tree species found in the enchanting woods upstream (grey birch) it guaranteed a beatiful level of transparency in terms of sun shadows and visual perception while walking through them.

The result is a visible urban blue-green continuity from the hills to the fjord.

NEIGHBORHOOD SCALE - HOVSETER

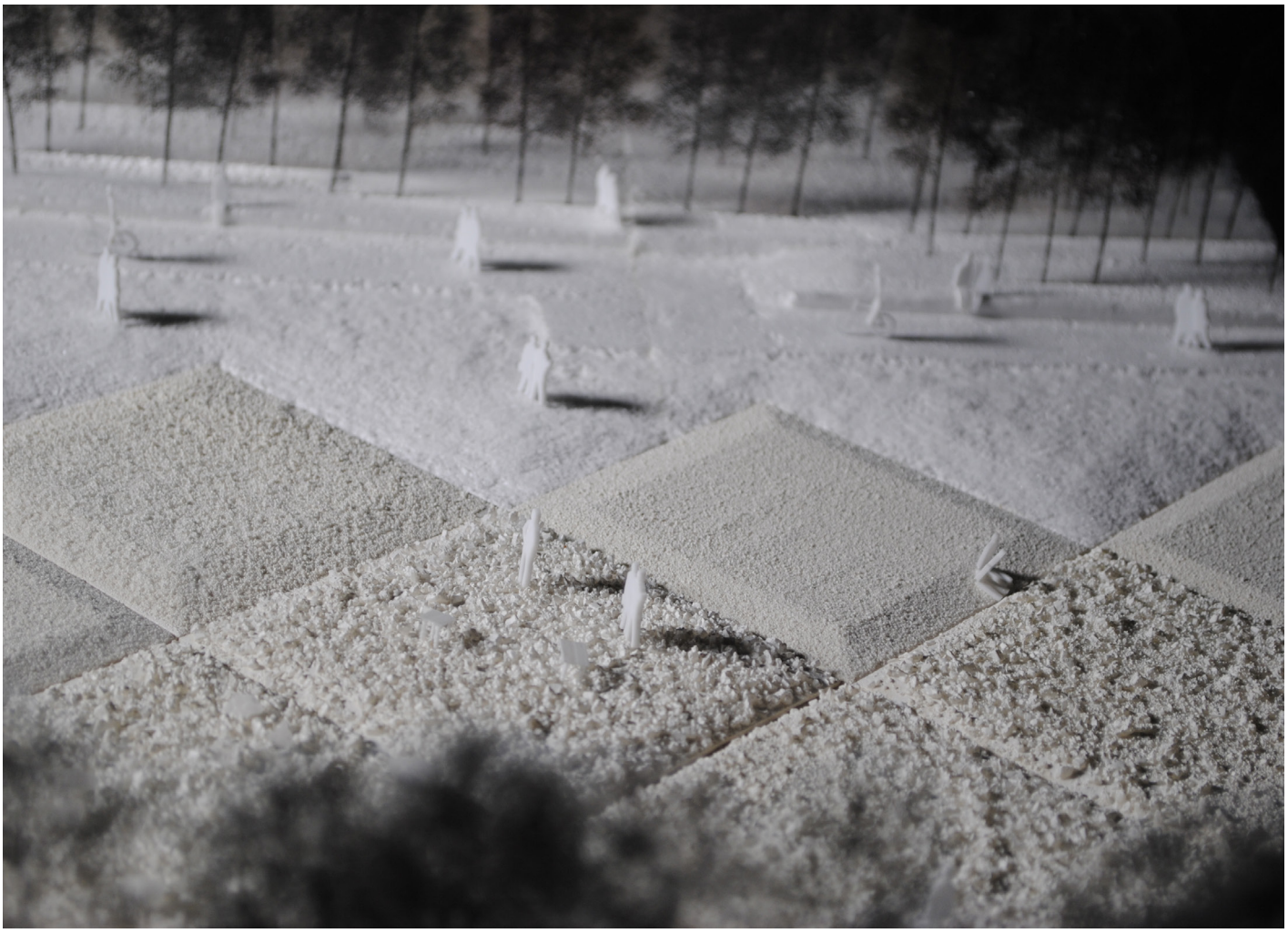


Mærradalsbekken has been buried and today a pipe runs under Hovseter Valley. To bring back the water of the surface implies two main consideration: one- to take in account the amount of flowing water and calculate a sufficient retaining volume and two- keep in consideration all the activities which today take place in the valley and design a water landscape device capable to host them.
I imagined a device able to hold a daily small amount of water but at the same time able to accept sudden large amounts of rainwater in case of heavy storms. An hydrological study led me to define shapes and dimensions that better fit the water runoff patterns. In result the waterflow is imagined as a mesh, a maze of canals, as cuts in the ground. These cuts shape the ground and define islands with different dimensions. The dimensions float between a minimum of 5x5m to a maximum of 15x15m and they suggest different possible use of the space. Someone relaxing and reading a book in a small island, close to the vegetated edge, while, not far from there, a group of kids are taking the big island to play football.

A pedestrian pathway runs through the west side of the valley, accompanied by a long 50cm tall wall-bench.

A platform defines the beginning and the end of the valley having in one side the river as water line and in the other the river as water mesh.

HUMAN SCALE



By getting close enough to the projects it's possible to discover different materials, different patterns, different textures of the ground and of course different possible interpretation of uses for them. The gravel that was used to fill up and cover the valley can be sorted by granulometry in order to create different patterns. The finest grains, extremely compressed will form the pedestrian pathway. Gradually, the increase of the diameter of the grains will define different grounds. From the fine grain that permits a flat and compact surface, (football field playground for instance) to the big boulder that can be used as place to sit.
Through seasons this space will change. In the norwegian winter, with the snow covering the surface and hiding all the patterns, I imagine just the biggest boulders emerging from the snow, casting long shadows on the snow and giving a wonderful visual experience to everyone who's walking, training, running or skiing in the valley.