

large scale study . . . working process in the large scale . . . processing information of Oslo large

several visual analysis, including population, topographic and processing, built up area, geometry etc. were done by processing the surface
the surfaces are results of the same data, made in different resolution

Interpretation of previous Oslo analysis in two resolutions
representation between these two (Delaunay triangulation between intersect)

Interpretation, 3D visual study for directions within the city

local scale studies . . . processing of registered samples in selected locations

between Bjerke and Økern

sound processing . . . radio processing . . . image colour processing . . . wavelet signal analysis

audible sound and radio signal together

sections in time moments

rotations of decompositions of gaussian blur of the images

rotations of decompositions of the visual aspect of sound

rotations of sections in time moments "time wave"

the results of the local scale data processing are applied to the large scale study (on the left side, second row)

Pilestredet

image colour processing . . . sound/radio processing . . . wavelet signal analysis

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Lysaker

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the system of moving structure . . . the system of moving structure is developed by the combination of micado folding and frame structure

the metal rods are supporting each other in their position, thanks to that the rods from the "mikado" are connected only per three
the frame parts are using the same or similar types of joints
in the case of "triggle joint" on the frame the third rod serves hitching to paratized domain

large scale study . . . working process in the large scale . . . the processing results from the local scale studies (on the right side) are applied to the processed information of Oslo large

placing the sound, colour/light and sound/colour waves interactions into direction

sound + radio . . . colour . . . sound/colour . . . all together

visualisations of "protoscapes" (instalations and their light reflection effects) in different settings . . . the structures are applied according to the large scale studies all over the city while having a local settings . . . they paratizes on the existing infrastructure, fasades of the buildings, etc.

autumn afternoon . . . late summer afternoon . . . summer night . . . summer evening . . . summer noon . . . autumn noon . . . late autumn noon . . . spring morning . . . spring afternoon . . . summer early morning . . . autumn afternoon . . . summer evening . . . late summer afternoon . . . late summer evening . . . late autumn noon . . . autumn noon . . . spring noon . . . summer noon . . . summer late evening . . . autumn evening . . . autumn night . . . autumn night . . . autumn night . . . autumn night . . . autumn early morning . . . double joint . . . perspective . . . front . . . side . . . double joint connects two "frames"

physical modeling . . . development of the structure and interaction in more scales . . . the higher level of interdependency offers both, more possibilities as well as necessary regulation

paper folding structure helps as an abstract level of structural development and understanding supports a meaning of possibilities for real structure application in fact, and not fully consciously, all the principles from the paper folding development here are applied in final metal rods structure

the moving system developed from unconceivable structure with eight rods in one joint, through self-regulating one cell dimension based structure the communication between separate cells was difficult to the system where separate cell is more spatial than structural beam each cell is basely created by eight surroundings cells

the below models are developed for interaction

at the end, the final design structure requires only flexible triggle-joints these were designed on triple hierarchical system

triggle joint connects the rods of three neighbour "mikado" or it connects two "frames" and the third rod serves hitching to paratized domain

triggle joint connects two "frames"

quadri joint connects two separate structures (two "frames" per each) or it connects two "frames" of one structure and the other two rods serves for hitching to paratized domain

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pattern . . . the interrelated systems within the structure . . . all the systems are generated from one structure and they are mechanically as well as functionally interrelated

system of moving structure both types of the surfaces are created by custom made of taking the system with partially interrelated

the partially random elements is also used for making some of the surface paratized, while the others are flat, which creates more effective distoration

system of shape memory alloys was designed by partly random 3 degree curve interpolation of the system of moving structure

the different settings of randomness represents different stages of shape memory alloys in various temperature

attached system of shape memory alloys ("thermal memory, elasticity")

system of moving structure is splitted by the system of shape memory alloys that has different stages in different temperature

the different settings of randomness represents different stages of shape memory alloys in various temperature, etc.

application of the pattern to the interpolated meshes . . . each interrelated system within pattern is applied to suitable mesh . . . sound related system is sound related mesh, etc. . . the general structure is applied to the mesh which was generated for all

the mesh "all together"

the pattern (the structure) applied to the mesh "all together"

the structure (the installation)

in a suburb, the structure has strong role in integration and/or identification with the city
there are registered very strong public events activity while the sound condition has more detail character (leafs, grass, wind etc.) with the city condition of oligostatic background sound of the motorway
on the other hand the visual ground is oriented to the long distance view of surrounding nature and city landscape, the quality of detail and urban scale is lacking

this sample is from Bjerke, this area is built up by concept of uniform small family houses and large one buildings, apartments etc.
the scale interbetween is lacking
there was appear to me one of the most interesting example of this type of suburbs.
it is interesting for being the border line and/or diffusion between an idealistic idea of living in the "nature" and them

this is a crossing on the way to Skjelle from the city
it is a border line of the city and geography and serves as a crossing of public city transport for both of those two while the housing is developed in urban character, the traffic building already reminds suburban

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