teufonia cement works

context.

the site our project deals with is a conversion area, a resting mar-mine in the eastern outskirts of hanover, germany, where the lime for cement production (in the cementworks just beside) has been gained. the site supplies one of the raw materials for the production of concrete.

the 30 metres deep scar in the landscape, which measures 500 X 600 metres, is limited by white steep faces of mar and additionally surrounded by a bank which makes the site invisible from the outside. one third of the ground of the pit is covered with turquoise-coloured water and a biotope has developed in the course of time. through all these circumstances the site gets a quiet and isolated character, located on a level below the „outside world". the strong visual appearance makes it an unique almost surrealistic place which no one would expect in this context.

the site and its characteristics as a result of gaining raw material for concrete production are of paramount importance for the development of the project.
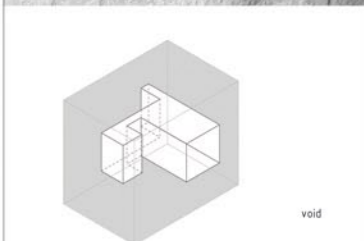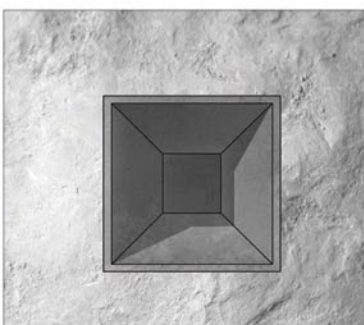
position in the city

position on the site (with main access)

concept.

based on the unique qualities of the site, we propose to establish a program which usually occurs in isolated contexts/and extreme (land)scapes (far away inner pulsing cities (e.g. on an island in the sea or in the mountains). the site has the potential to become a counterpart to the "outside world".

we want to create a space to escape from frantic pace, stress and consumption. a space for contemplation. a space to regenerate. a space to (re-)think. a space with a different, slower time. a space to become aware of oneself. a space of perception.

positioning.

putting program to the site, we decided neither to place it into the pit - to avoid an intervention in the space itself and its recreating nature, nor to place it outside at the rim of the pit, which would mean a loss of relation to the healing landscape of the site and the structure would be placed on the same level as the "outside world".

therefore we dig the spatial structure in between those two levels - into the steep face - with access from the above and a mainly passive, visual reference to the below (the pit).

signs of the times

positioning of the structure

model

zoning.

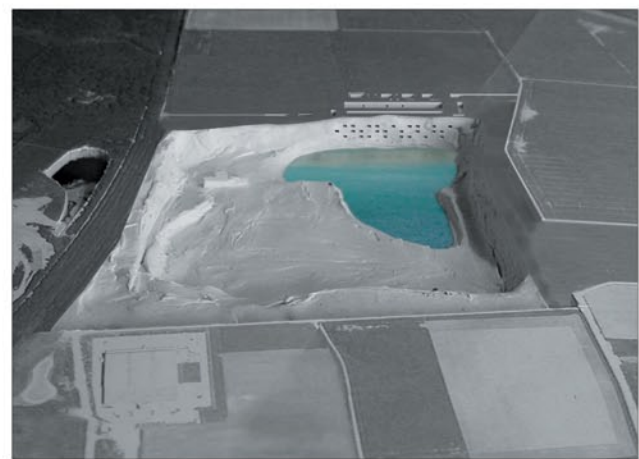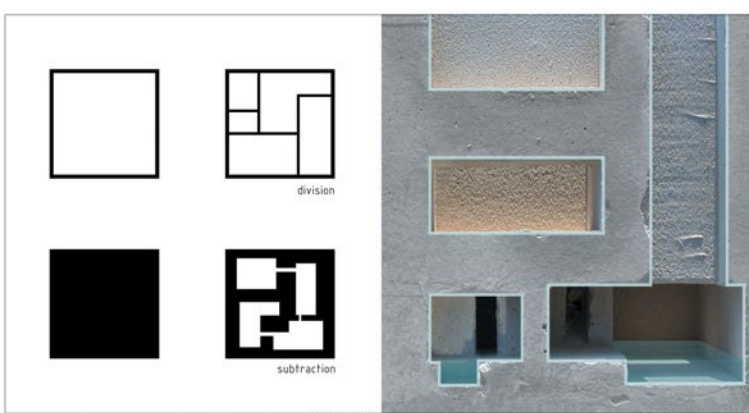the structure is arranged around a central 15 metres wide and 20 metres deep gap. on the short sides of the gap the (public and logistic) entrances, and the administrative and serving functions are situated. the long sides of the central gap are connected by wooden footbridges.

on the western side of the gap three levels with private cells are freely arranged in the eastern steep face of the pit with visual contact to the lake. these levels are connected through the major horizontal and vertical circulation.

the mass to the east of the gap contains the spaces of perception. on the top level courtyards with different themes (reading, communication, water, fire) are located. the level below contains „spaces of thought (reading, creativity and meditation). another level below the spaces for the body (the bath, recreational spaces) are arranged. the deeper one gets into the mass the less light gets into the spaces. the intensity of perception increases.

the sensually most extreme space is a space shrouded in total darkness. the visitor winds himself down into the massive rock until there is no light left and he has to relate to other senses than the visual.

spatial principles.

by placing the spatial structure into the mass, spaces are produced not by dividing a volume with walls (like in a "conventional" building) but by subtraction of mass from mass. this formal principle opens the possibility to think the spaces entirely from the inside, not directly having to relate to a space beside.
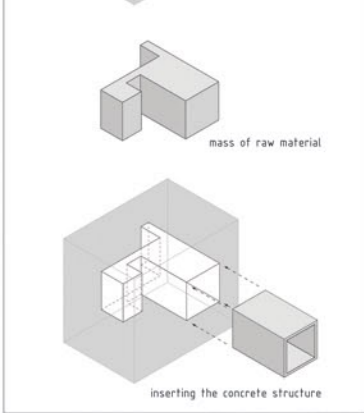
the voids are cut out of the mass. the mar which is taken out will be burned into lime, and then - by adding the necessary ingredients - into cement and finally into concrete. the concrete is put back into the holes to create the constructive support for the structure. the material is taken from the site and given back to the site.

further materials than the originally occuring will only be added if absolutely necessary. everything shall be designed in a simple and clear manner to support the needs of the program.
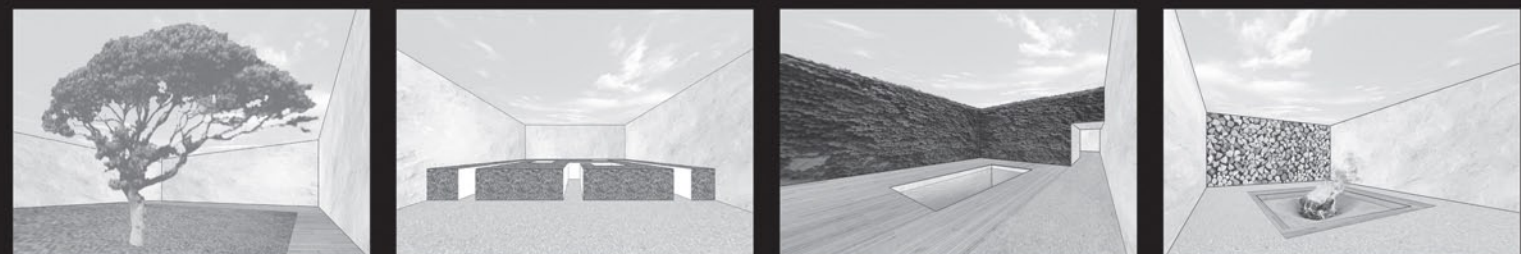
division

subtraction

spatial principles   sectional model (excerpt)

void

mass of raw material

inserting the concrete structure

reimplanting the modified material

the way

the central gap

submerging

the staircase

the arrival

the private room

excerpt from the presentation-book
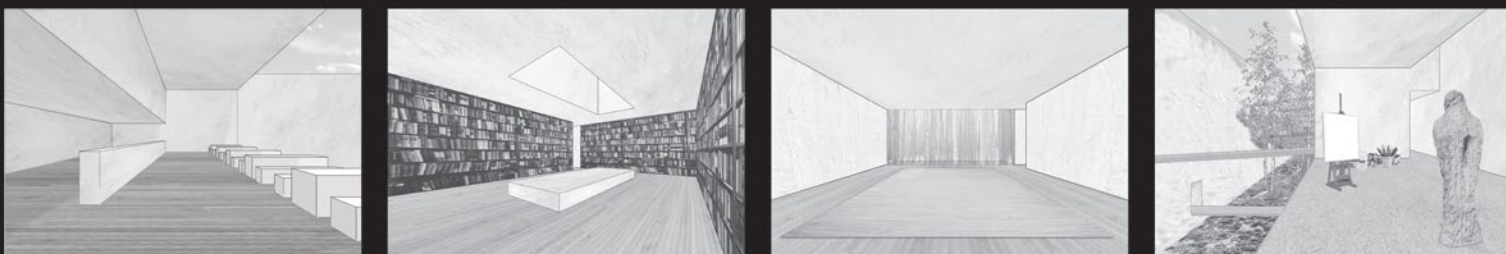

reading   communication   water   fire

dining room   library   meditation   creativity
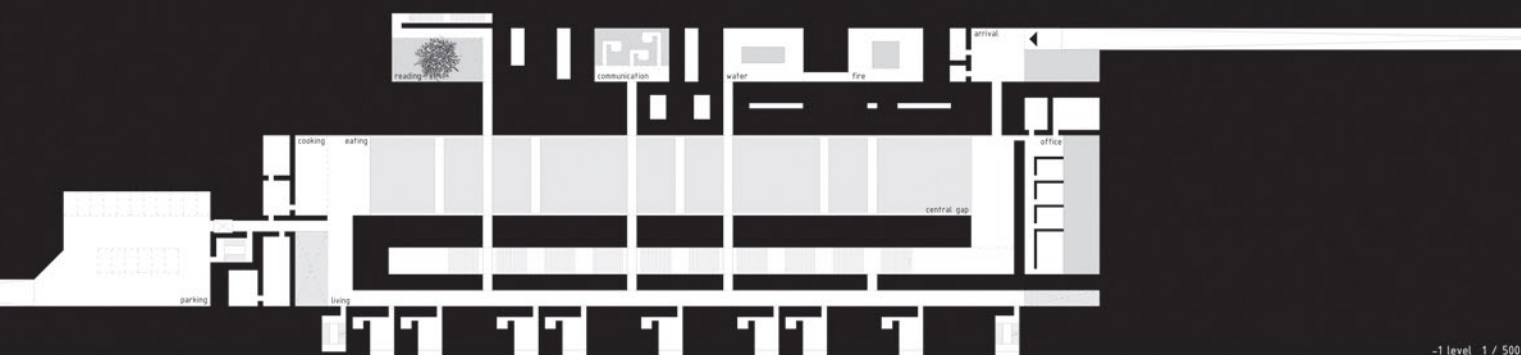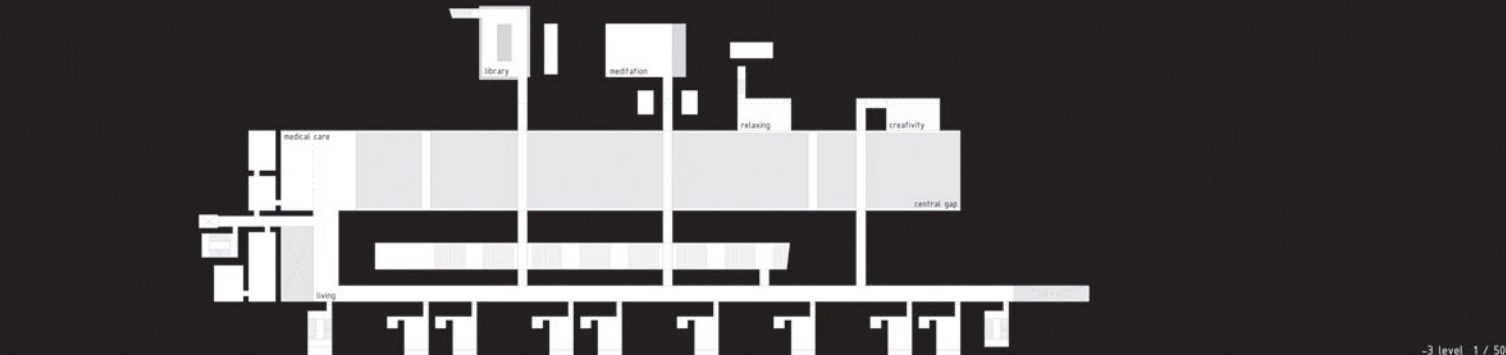
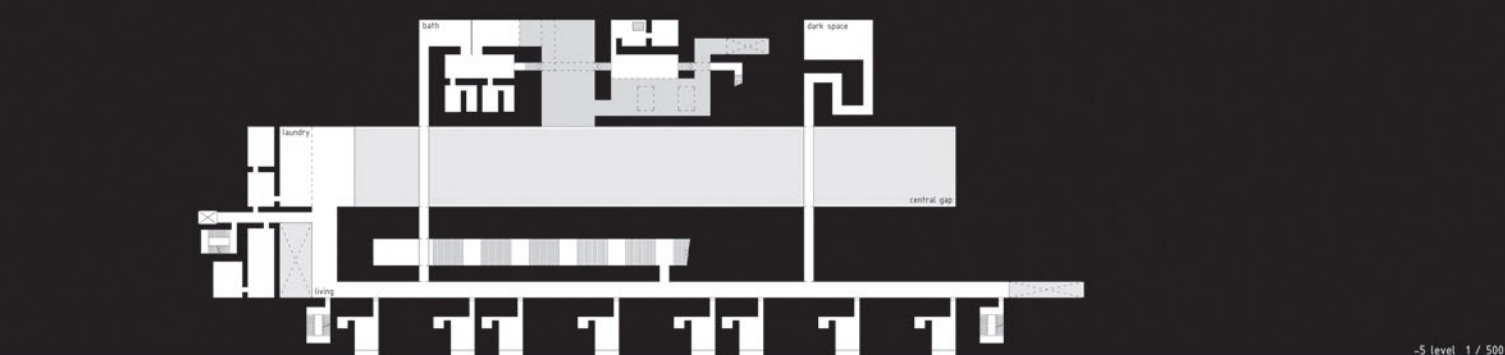bath - entrance   bath - in the basin   bath - relaxing platform   the dark space

-1 level 1 / 500

-3 level 1 / 500

-5 level 1 / 500