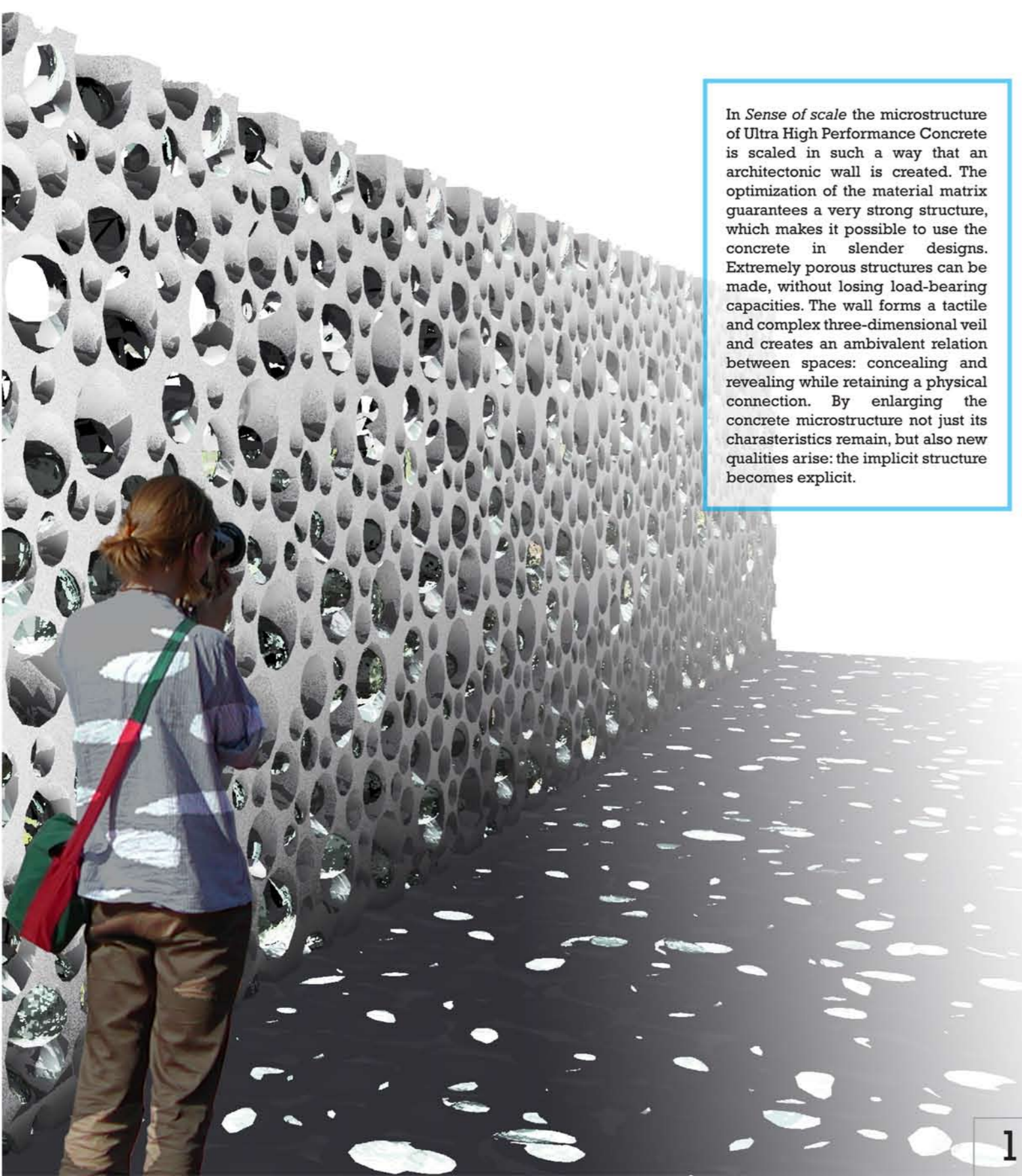




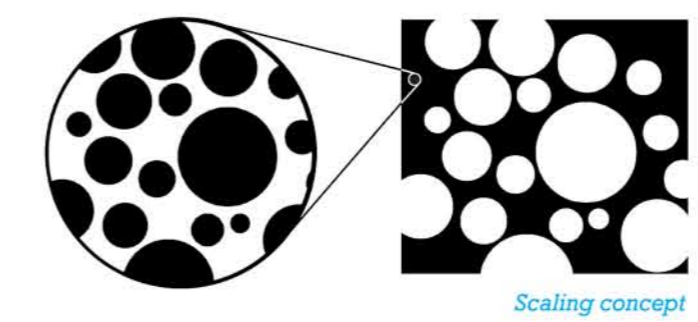
SENSE OF SCALE



In *Sense of scale* the microstructure of Ultra High Performance Concrete is scaled in such a way that an architectonic wall is created. The optimization of the material matrix guarantees a very strong structure, which makes it possible to use the concrete in slender designs. Extremely porous structures can be made, without losing load-bearing capacities. The wall forms a tactile and complex three-dimensional veil and creates an ambivalent relation between spaces: concealing and revealing while retaining a physical connection. By enlarging the concrete microstructure not just its characteristics remain, but also new qualities arise: the implicit structure becomes explicit.



SENSE OF SCALE

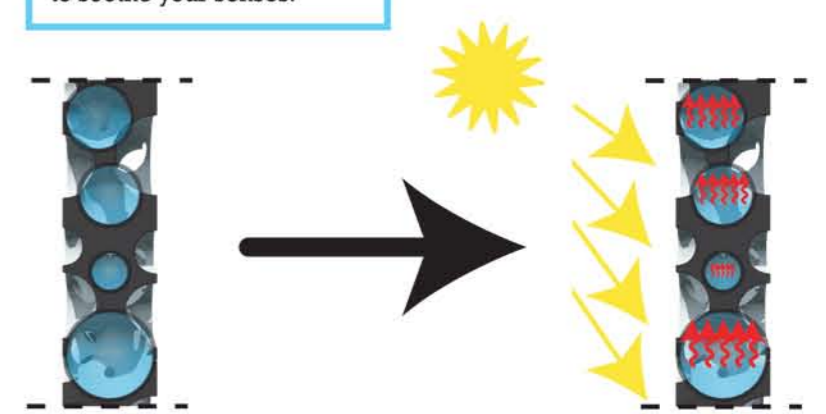


UHPC is a concrete with an dense micro-structure generated by powder-like silica sand. The material density is responsible for a compression strength that is almost comparable to steel and a surface quality that reflecting perfectly the material used as mold. Equipped with steel fibers as a part of the aggregate the self-compressing material can be disburdened from traditional rebars while providing high tensile strength.

By scaling the matrix of UHPC, a wall with different qualities and possibilities on both the architectural and technical level becomes possible. Appearances and technical qualities can be easily altered by using various materials to fill the 3d-structure. One can play with light admittance, colours and temperature, all to soothe your senses.



The mold



The thermal absorbancy of regular concrete walls is limited by the relative small amount of surface available for heat exchange. By making the structure porous more surface can be activated. The thermal qualities of the wall are improved even more drastically when water filled spheres are incorporated into the matrix. When the water shifts phase, energy is either stored or released in the structure.