Abstract

Within architecture, generative design can be defined as the approach of developing applications, or systems which can develop, evolve, or design architectural structures, objects, or spaces autonomously depending on emerging circumstance. This paper tries to add additional design tools to support the existing design tools, to be based efficiently on perceptual actions that are important in the design process. It is a loop design method starting from shapes that are transferred to music, then extracting the parameters of this music into components related to those shapes. The out-coming musical components will be parametrically controlled in order to obtain newly generated music. The modified music shall be transferred back to shapes, materials and light in a pool of alternatives that gives the designer a wide chance to visualize form generation in purely interactive and aesthetic terms. It is the concept of playing music and architecture within multi-cognitive processes.

3rd International Conference on Civil and Architecture Engineering (ICCAE'15) - 2015, January