

Slawomir Wojtkiewicz

Illusion of perception - artwork, performance, poster



Abstract:

A Generative system is a structure of algorithms which are capable of generating a diversity of solutions. We can evolve those solutions by parameterization. Parameterization is not restricted to manipulating values or attributes. It extends to include algorithms. A system is synonymous to black box of algorithms. This box has doors (parameters), which allow us to handle maintenance of the algorithms. We design with rules all the time. There are many compilations of rules to provide a certain level of comfort and functionality in spaces we design.

Rules allow us to :

1. adjust sequencing of algorithms
2. control the treatment of parameters
3. guide responsibilities among designers
4. secure a convinced level of quality.

While artists and craftsmen typically do not express their process in writing, or of formalized methodologies of work, many scholars managed to describe works of art in algorithmic terms. Algorithms can be expressed in diverse representations: graphic, verbal, pseudo code, and programming languages such as RhinoScript, or others.

In my artwork I consider the following example. I develop an algorithm to populate a series of square tiles on a surface. I call this process illusion of perception. In final art experiment I obtain a shape of cube in close relation of outdoor and indoor. In this approach I take an attempt to create my own generative and algorithmic art system combined experiments with space. The result I wish to present is a short 3d movie appears through experiments that I carried out.

The aim of the research project is to discover and describe the mechanisms governing the logic of the space and the composition in the art and architecture. An important element is the analysis of the stages of development of space and “work” taking into accounts the factors affecting its value. Showing the relationship between objective and subjective factors in design - individual elements in the pragmatic and emotional defining the concept of beauty. The final results of the project - 3d computer animation would explain patterns in the process of composition and relate to aesthetic concepts such as art, beauty, style. Then describe the language through grammar patterns and concepts affecting the emotional and realistic dimension. Thus my artwork is a graphical representation of the algorithm, parameters and rules.

Topic: Generative Art, theory, design, architecture

Author:

Slawomir Wojtkiewicz

Technical University of Bialystok

Faculty of Civil and Environmental Engineering

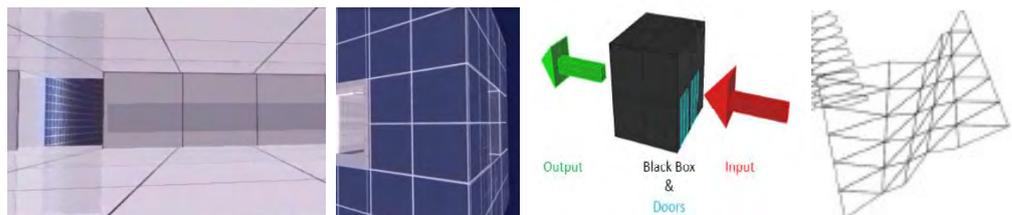
Poland

www.materialy.wb.pb.edu.pl/slawomirwojtkiewicz/

Main References:

[1] Stiny G, Mithell W J, (1978).The Palladian grammar. Environment and Planning B: Planning and Design 5 5-18

[2] Mandelbrot M., (2004) “Fractals and chaos” The Mandelbrot Set and Beyond”. Springer. New York, N.Y., U.S.A.



Contact:

.wojtkiewicz@pb.edu.pl

Keywords: Architecture, generative art, algorithms, rules, parameters, 3d animation