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Paper : Les Folies Cellulaires – An Exploration in Architectural Design Using Cellular Automata

Abstract:

Inspired by Tschumi's famous realization in the Parc de la Vilette, the authors explore the concept of cellular automata (CA), applied in architectural and urban design. A series of "follies" has been created in a design experiment with senior architecture students. The theoretical approach to the problem of cellular automata considers works of Krawczyk, Coates and other authors proposing various ways of using cellular automata in the design process, particularly in architectural design. The experimental activity is supported by a CA module of the software Fun3D which has been created to support generative processes in architectural design. The CA module of the software allows certain level of redesign of a basically cubic cell and other elements of a CA system, as well as combination of multiple cellular systems. The resulting designs retain some features of Tschumi's follies (scale, type of context, coloristic approach, spatial interpretation) introducing and examining cellularity as a main creative idea. This paper is part of a continued research activity titled [Generic Explorations](#), within the Faculty of Architecture, University of Belgrade.

Topic: Cellular Automata

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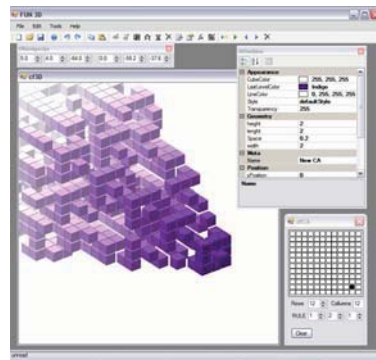
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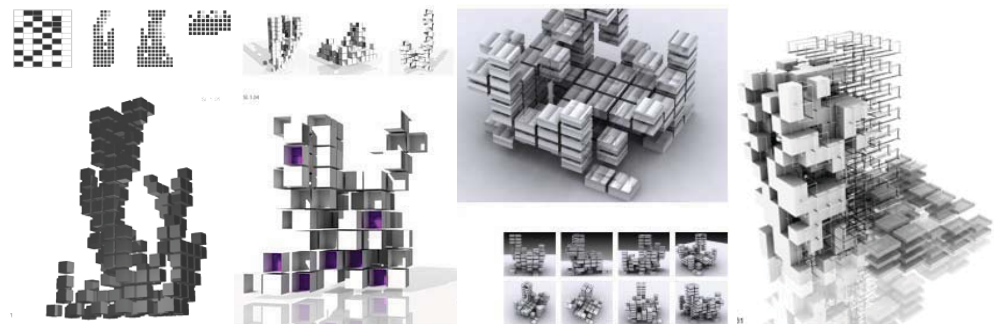
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The screenshot of the Fun3D software



The variations of CA systems, published in [Self-Replicating Systems in Spatial Form Generation – The Concept of Cellular Automata](#) (January 2009)

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Keywords:

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