Abstract: Since their introduction, shape or spatial grammars have been successfully used as a generative approach for creating alternative designs in different areas, e.g. visual arts, architecture or engineering. However, there are only a few three-dimensional spatial grammars that have been computationally implemented to date. Most are hard-coded, i.e. the vocabulary and rules cannot be changed without re-programming them, and only some provide limited rule parameter definition. This paper presents an approach for a basic 3D grammar interpreter that provides for the interactive, visual development and application of three-dimensional spatial grammar rules. It puts the creation and use of spatial grammars on a more general level and supports designers, who tend to think spatially, with facilitated definition and application of their own rules.

Stichworte: Spatial Grammars; Three Dimensional; Interpreter; Visual; Shape Grammars

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