Abstract

Mohamed - Ayoub

Associative Parametric Urbanism: A Computational Approach to Parameterization of Conceptual Design Phase

Urban planning projects usually comprise a complex set of objectives that needs to be addressed by developing a number of proposals. This requires a lot of repetitive steps resulting in fewer and slowly-developed design alternatives. To address the limitations of the existing system, this research introduces the merge of associative parametric design tools with the conceptual design phase of urban planning process to propose a Parameterized Conceptual Design Phase. The developed Associative Algorithm within the proposed phase represents a computational approach that translates a site’s settings into local attractors to define urban fabric, and provide the designer with variations for optimal solutions. The Informal Settlement of Ezbet El Matar, Alexandria, is Selected as the case study of this approach.