The Aesthetics of Sustainability. Systemic thinking and self-organization in the evolution of cities


PDF - Doctoral Thesis
Available under License Creative Commons Attribution Non-commercial No Derivatives.
21Mb

Abstract

Sustainability while being definitely a new form of humanity, as it has been proposed and dealt with in many urban and landscape projects lacks often of an essential characteristic of the anthropic space: seduction. We believe that Sustainability has to find its own power of seduction if it is to compete successfully with the ambiguous but established charms of the unsustainable city. From all the above it is clear the importance of the 'Aesthetic of Sustainability' as fundamental for the success of a new model of green planning not just from an environmental and economic point of view, but, perhaps and most importantly, from a social and mental one. This research investigates the possibility to look at Sustainability and Aesthetics through the lens of evolutive processes and the complexity theory to inform a new Bottom Up/Self Organized approach as a possible morphogenetic process for sustainable city design. Often criticized as the theory of 'out of control' the complexity theory applied to the urban could instead be the enabler of a new paradigm where the notion of single authorship with intellectual ownership and his aesthetic language is substituted by the concept of a collective and a new aesthetics of choice where the Aesthetics of Sustainability is that action on the psyche, negotiating between personal subjectivity and collective subjectivity, as a form of knowledge, a process, and a tool for aesthetic creation that cannot be separated from the socius and the environment.

Item Type: Doctoral Thesis (PhD)

Doctoral School: Environmental Engineering

PhD Cycle: 25

Subjects: Area 08 - Ingegneria civile e Architettura > ICAR/21 URBANISTICA

Repository Staff approval on: 27 Jun 2016 09:20

2. SYSTEMS THINKING. In the most general terms, a "system" is any entity with emergent qualities at the scale of the whole, which are not present in the individual parts. A system can be a cell, an organism, a school, or society. Systems thinking is now becoming the basis for integrative and synthetic theories in many fields. They are beginning to recognize that a systems approach offers the opportunity to integrate and unify what appear to be (what are framed as) isolated and fragmented aspects of both their own discipline and its relationships to other realms of knowledge. Based on principles of ecosystem organization, the following possibilities for the evolution of design schools, summarized in figure 2, are suggested: 4.1 Patterns of Interconnections. Systems thinking would enable us to perceive the patterns that connected otherwise disparate things and to detect the counter-intuitive logic underlying an often deceptive reality, thereby creating more coherent diagnoses, policies, and plans. The idea of sustainability would seem to imply that the remedy is a systems approach to environmental management, but the reality is otherwise. Similarly, creative daylighting improved aesthetics and occupant productivity, while reducing lighting bills and, again, long-term costs. Models of the city as a system of ecological inputs and outputs are a useful tool to place seemingly disparate and confusing data into its larger ecological context in order to improve decision-making across sectors, departments, and agencies.