<u>Home</u> > <u>ETDS</u> > <u>THESES</u> > <u>303</u>

Masters Theses 1896 - February 2014

Off-campus UMass Amherst users: To download campus access theses, please use the following link to log into our proxy server with your UMass Amherst user name and password.

Non-UMass Amherst users: Please talk to your librarian about requesting this thesis through interlibrary loan.

Theses that have an embargo placed on them will not be available to anyone until the embargo expires.

Regenerative Architecture: A Pathway Beyond Sustainability

Download

SHARE

Jacob A. Littman, *University of Massachusetts - Amherst*

Follow

Document Type Open Access

Degree Program Architecture

Degree Type
Master of Arts (M.A.)

Year Degree Awarded 2009

Month Degree Awarded May

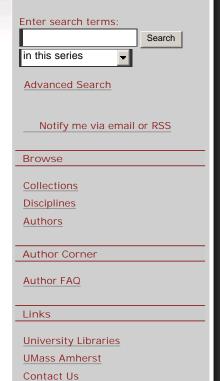
Keywords

Architecture, Sustainability, Green-Building, Permaculture

Abstract

The current paradigm in the field of architecture today is one of degeneration and obsolete building technologies. Regenerative architecture is the practice of engaging the natural world as the medium for, and generator of the architecture. It responds to and utilizes the living and natural systems that exist on a site that become the "building blocks" of the architecture. Regenerative architecture has two focuses; it is an architecture that focuses on conservation and performance through a focused reduction on the environmental impacts of a building.

This paper introduces regenerative architecture as a means for architectural design. I present the Nine Principles of Regenerative Architecture and Place Analysis Criteria, which I developed in order to provide a logical and succinct means for creating regenerative architecture. These are employed and embedded in the creation of the R_Urban Intervention Dwelling model and tested on the Coop House design project.



The result was an architectural design in which the Nine Principles of Regenerative Architecture are embodied through the application of the Place Analysis Criteria process. Though the process underwent many mutations through its infancy, the final product has proven to work in producing successful and potentially regenerative architecture as described in part 1 of this paper.

Advisor(s) or Committee Chair Luarasi, Skender Mann, Ray K

This page is sponsored by the <u>University Libraries</u>.

© 2009 <u>University of Massachusetts Amherst</u> • <u>Site Policies</u>