

Review: Constructing Green: The Social Structures of Sustainability

By Rebecca L. Henn and Andrew J. Hoffman, Editors

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Think about 50-year-old car engines. Only a few of them still exist and their use is improbable if not for motor shows or other eccentric exhibitions because of their low efficiency, smoky wastes and costs. In the 1970s, car producers turned their attention to more efficient engines when the energy crisis compelled them to replace older models and adopt continuous technical enhancement practices.

Now think of a 50-year-old building, including all the boilers, pipes, and power devices it contains. Although efficiency has largely improved in construction technologies, 50 years are not so many to dismiss or entirely refurbish houses; thus, their continued inefficient use is regrettably certain. Consequently, residential and commercial buildings are now the major energy consumers in the industrialized world, employing forty percent of available power for heating, cooling, lighting, and household appliances of their inhabitants.

There is space to further efficiency implementation in construction, but the editors of the book *Constructing Green* warn that technological and financial benefits are not enough to make buildings sustainable. Contributors to this collection properly consider economics and technology in terms of first costs savings, reduced operating charges, and health and productivity benefits, including surveys of convenient market structures. Rebecca L. Henn (Assistant Professor of Architecture, Pennsylvania State University) and Andrew J. Hoffman (Professor of Sustainable Enterprise, University of Michigan), however, look beyond the technological and material aspects of ecological construction, focusing instead on the cultural, social, and structural changes required by sustainable building. Technical and economic aspects are essentials – they admit – but cannot grant for energy and nature saving. What is required is a new attitude of building that is inclusive of social and cultural dimensions. Otherwise, energy gains from efficient tools only result in rebound effects so that instead of decreasing, consumption simply shifts towards new, varied uses.

Essays in the collection share awareness of the harm built sites create for the natural and social environments and scrutinize the experimental contest that green building represents, recuperating in some cases, or leaving behind more usually, centuries-long traditions in architectural design. Useful narratives of new living experiences and visions of the future are included.

The route to satisfy environmental commitments starts from questioning on sourcing and disposal of building materials and looks forward to including biophilic design in urban planning. To connect human dimensions with green building – the authors suggest – philosophy is necessary to understand human-environment relations and their moral correlates; technology also is instrumental. Culture, however, must be considered in a transdisciplinary perspective incorporating philosophic and technical aspects to put changes in place.

Bearing in mind the contexts created by social movements, which since the second half of the 1900s resulted in a plethora of practical and theoretical instruments, contributors to this book discuss possible shifts ensuing sustainable building enactment, which can cause concerns in the conventional social and economic systems. Division of functions instead of concentration and the absence of hierarchies in building plans, although suggestive, have yet to find their path into governance and juridical structures, challenging the durable rules of the building industry and the professional lobbies.

Notably, in 2014, *Constructing Green* received an Honorable Mention from the Organizations and Natural Environment Division of the Academy of Management. This volume provides a conceptual frame to guide architects, civil engineers, and administrators through issues of building governance and urban design, which become more and more significant as urbanization processes spread worldwide. The aim is not de-urbanization, but incorporating nature into buildings (or vice versa) in post-urban sustainable constructions, avoiding the replica of sub-urban banlieues that, in a waste mix of concrete, steel and machinery, truly characterize the human habitat in the Anthropocene Era.

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