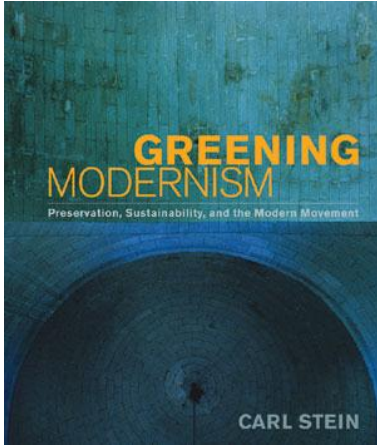


**Greening Modernism: Preservation, Sustainability, and the Modern Movement**, by Carl Stein. W.W. Norton, November 2010. 296 p. col. Ill. ISBN 9780392732832 (cl.), \$60.00



In his new book, *Greening Modernism*, author Carl Stein does something unusual for an architect: he articulates a systematic argument *against* the design and construction of new buildings. Stein, a practicing architect and an expert in energy usage in architecture, emphasizes the finite nature of land, natural resources, and our capacity to generate energy. Since the eighteenth century, industrialized societies have exhausted vast supplies of building materials and fossil fuels to enlarge cities, causing significant alterations to the global ecosystem. New construction, Stein asserts, uses an extraordinarily high amount of “embodied energy,” a cumulative calculation of consumption based on energy depleted during the complex processes of producing, transporting, and erecting building components.

Because of the costs of new construction, the author argues that architects have an ethical imperative to alter their approaches and to embrace adaptive reuse on a mass scale. Preserving and retrofitting existing buildings (including wasteful modern ones produced during an era of cheap energy) conserves the natural resources, energy, and human labor that have been expended already, an embodied energy savings of between one-third and one-half compared to new construction.

The book’s greatest strength is the author’s presentation of his own design methodology, based on the study of Modernist work by Walter Gropius (1883-1969), Le Corbusier (1887-1965), and his former employer, Marcel Breuer (1902-1981), whose design methods, he holds, have more urgency and relevance than ever. Stein stresses the difference between the *Modernism* of Gropius, et al., and the *modernist*: the former was designed based on holistic study of a client’s programmatic needs, budgetary restrictions and new technologies; the latter focused on novelty and form-making without holistic study, a generalization that has some truth. In short chapters, he lays out his approach starting with programmatic requirements and then proceeds to envelope geometry, glazing, thermal mass, ventilation and technological controls. He underscores the energy savings gained from careful use of passive solar orientation, natural ventilation, and daylighting.

Stein’s advocacy of historic preservation will serve multiple ends, including saving energy, but will also reconnect people with the historical and physical particularities of their surroundings. Preservation will encourage in Stein’s words, “authentic experience,” important in a world mediated by computers and cyberspace.

A serious oversight of this book, however, is its lack of footnotes, depriving readers of Stein’s extensive command of the literature. Additionally, more explanatory diagrams would have helped in early parts of the book containing technical matters. In sum, *Greening Modernism* is an excellent introductory text for undergraduate architecture students outlining the scale of our energy problems and a path to socially-responsible building methods.

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