

Peter Anker. *From Bauhaus to Ecohouse: A History of Ecological Design*. Baton Rouge: Louisiana State University Press, 2010. viii, 188 pages.

This book presents a history of “green building” that calls into question the current practice of ecological architecture and design. Anker traces ecological design back to the Bauhaus, the German school of modern design headed by Walter Gropius. Like most modern architects, Gropius believed that “form should follow function,” but, as Anker argues, as a result of their pre-WW II flight to London and meeting with some English naturalists, such as Julian Huxley, Gropius and his colleagues developed a peculiar “ecological” understanding of “function.” These naturalists held that the Earth was a closed, highly integrated ecosystem, in which the sun’s energy was passed from one part of the system to another in a complex and efficient manner, but that, unfortunately, this delicately balanced system of energy flows was being subverted by human interference: driven by technological change and population growth, society was becoming unsustainable. To counteract this process, members of the Bauhaus explored ecological designs in which buildings would function harmoniously with nature. As Gropius put it in the early 1950s, “The greatest responsibility of the planner and architect . . . is the protection . . . of our habitat. Man has evolved in a mutual relationship with nature on earth, but his power to change its surface has grown so tremendously that this may become a curse instead of a blessing” (p. 38). Although Gropius was an anthropocentrist who thought nature a resource to be intelligently used for the good of humans, he was not a *narrow* anthropocentrist; instead, he believed that ecological design required that science and culture be unified in such a way so as to address an *interconnected* set of issues, from sustainability, to the prevention of disease and urban sprawl, to the promotion of social equality, and to the creation of beauty.

After discussing how members of the Bauhaus came to incorporate ecological ideas into their designs, Anker turns to the question of “how the Bauhaus heritage of trying to unite art and science came to frame the work . . . of subsequent ecological designers” (p. 4). Unfortunately, as these chapters show, most post-Bauhaus ecological designers abandoned Gropius’s concern for *diverse* “humanistic” values—particularly aesthetic values—to focus narrowly on sustainability. The key element in this transformation was an increasing focus on the idea of energy circulation in a closed system. This British-inspired idea was reinforced both by the energy crisis of the early 1970s and by the many images of the Earth taken from space that showed it floating alone in the cosmos; but another stimulus was the growing need to develop sustainable micro-environments in which humans could live for prolonged periods of time. This need was the product of Cold War thinking which held that, to keep nuclear war from breaking out, it was necessary to maintain radar stations in constant operation under extreme arctic conditions, to maintain nuclear submarines on endless underwater patrols, and perhaps in the future to station warriors in outer space.

Anker’s discussion of this period focuses on Buckminster Fuller, the creator of that icon of early ecological design, the geodesic dome. During the early stages of

his career, Fuller was driven by many of the same values that Gropius held, but, as Anker recounts, Fuller's initial success was the result of contracts with the U.S. Navy, which used his geodesic domes to enclose radar installations. This connection often goes unmentioned by Fuller's followers, who instead emphasize his connections to NASA and the problems of maintaining life in space, and it is in this role that Fuller inspired a group of ecologically minded technologists led by Stewart Brand, the editor of the *Whole Earth Catalog*, to look on space travel as a possible solution to earthbound environmental problems and on the notion of a spaceship as a metaphor for understanding the ecological problems human faced on "Spaceship Earth." Anker traces this line of ecological design from Fuller's early work in the 1950s to the Biosphere II project of the early 1990s, in which a number of "Biospherians" lived in a supposedly hermetically sealed environment to test and publicize radical notions of sustainability.

This history seems entirely natural and, in hindsight, almost obvious; nevertheless, it will make ecological designers uncomfortable, in part because these early designers were often associated with unsavory causes—Anker takes particular pleasure in uncovering connections between early ecological designers and the Pentagon or South Africa's apartheid government. Contemporary ecological designers might want to disassociate themselves from this history, but they should not do so without reading Anker's account, for in it he is able to locate a problem in the concept of ecological design: although Gropius tried to create designs that solved a number of human problems while simultaneously creating buildings of great beauty, his immediate heirs have focused almost entirely on solving narrowly-conceived ecological problems, by creating either aesthetically unappealing, but ecologically sound, buildings or by simply applying a Modernist aesthetic to sustainable structures. Anker implies that this failure to "unite art and science" is a central problem of contemporary eco-design. Given this implication, it is unfortunate that he stops his history in the 1990s. Although he devotes a short concluding chapter to more recent developments, he fails to show that contemporary designers have escaped their history: he fails, that is, to address directly the question of whether contemporary designers have developed a "green aesthetic" worthy of their sustainable aspirations.

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