other actors—or fails to do so. By granting agency in the "controversy-map" to models, sketches, calculations, and so on, alongside individuals and organizations, their effect can be investigated. How architectural motives and narratives are materialized and dematerialized, coordinated and unraveled, how they are stabilized and then again made precarious, uncertain, and revisable—all this becomes visible. Following Latour, even architectural concepts such as "tecnoics," "coherence," "concept," or "parti" could be granted agency if they occur in the case being studied. Even the conviction of the architect—like Utzon's perception of "perfection"—could be seen as a specific association whose effects can be made visual, traceable, and accessible in the MAC context.

Actors come in different scales and they can change scale and position during the course of the study. This is discussed thoroughly in the book, as it poses challenges to the visualizations. But perhaps even the controversies could be said to come in different sizes. If the network of seemingly "smaller," more local controversies were unraveled, the researcher might be able to make an even closer investigation of how architectural motives, building methods, and techniques that are silenced elsewhere act within their network. In that sense, the MAC discourse might benefit from employing existing practices of architectural analysis, where drawings, models, renderings, and other mediators are more meticulously examined.

I find it unrealistic that MAC can replace the thorough and risky work of the "reflective practitioner" who, through a personalized, intuitive method of inquiry, produces concrete, architectural proposals. But there is no doubt that MAC is able to enhance our understanding of how the architectural proposal actually gets to work within its network. When further translations and adaptations of MAC come to be employed in the programming of architecture—both at schools of architecture and in real life—it will significantly substantiate this increasingly important phase of the architectural process.

Is "Mapping Architectural Controversies" a new ontology, a new didactical tool, a new methodology, a manifesto? The answer: It is all of these. The approach, the methods, and the theories laid out in Yaneva's book hold immense potential for both architectural education and research in the field of architectural practice.

Katrina Lorz, Royal Academy of Fine Arts, School of Architecture, Copenhagen

ECOLOGY AND DESIGN


Ecology and design. The first has to do with the intrinsic qualities of the natural world, and the second with the human ability for artifice. What could these two terms have in common? Quite a bit, argues the historian of science Peder Anker, in his book From Bauhaus to Ecohouse: A History of Ecological Design. In the twentieth century, modernist design exemplified by the Bauhaus school of thought has long been associated with functionalism and an aesthetic of mechanization. To enrich this view, Anker explores the "relationship of design and ecological science" and asks, "How have ecologists and designers supported each other?"

He begins by exploring a moment when Bauhaus designers embraced ecological concerns in their quest to design the optimal way of dwelling for modern society. Moving from England in the 1930s to North America in the 1950s, he then investigates postwar design science that had the much broader ambition of managing the earth as a whole. Anker's goal is to enrich our understanding of modernist design's encounter with ecological thinking. Building on his expertise in the history and applications of ecological science, he expands the history of modernist design beyond antecedents in architecture, while bringing design—as a mode of applied knowledge—to a history of environmental studies that is often exclusively oriented towards the philosophical frameworks of ecological thinking. Anker structures his book along the lines of Donna Haraway's Primate Visions (1989), by investigating the intersections between humanities and science through case studies linked by an overarching theme. And like Haraway, Anker is interested in the social and political contexts of both science and design.

From Bauhaus to Ecohouse is structured in two parts. The first half explores a pivotal moment in the 1930s, when Bauhaus ex-patriates Walter Gropius, Laszlo Moholy-Nagy, and Herbert Bayer encountered a group of social progressives and ecologists centered around the London Zoological Society—notably Julian Huxley—who saw modern design as an instrument for exploring ideas of "natural habitats" for animals or people. Two projects exemplify the common interest of these groups in habitat: the group Tectum's design for the Penguin House in the London Zoo, and a visionary scheme for an underground ecotopia, developed in the film Things to Come by Alexander Korda. While in all these cases the projects employed stripped-down "functionalist" design as a backdrop to display the true nature of animal behavior, the second widened its scope to encompass the operations of human society in a hermetically sealed, totally designed world. The ambition of this second, visionary project was to plan society at all levels. Its proponent, Julian Huxley, advocated a comprehensive plan for the island state of Britain, much like the comprehensive plan for the Tennessee Valley Authority, for which he was an impassioned advocate.

In two transitional chapters, Anker traces the impact of Bauhaus designers on schools of thought in the United States: Walter Gropius at Harvard, Moholy-Nagy in the Chicago School of Design (where he influenced Buckminster Fuller); and Herbert Bayer in his work for the Container Corporation of America and in Aspen, through his patron Water Paepcke. In this lineage, Bayer becomes a central figure for his contributions to mapping the world as a system of flows.

Building on the visionary "ecotopia" of Korda's underground world in Things to Come, the second half of the book turns to the design of closed ecosystems for human habitation. Here, Anker brings colonial underpinnings of a totally designed world under scrutiny in Anker's Imperial Ecology: Environmental Order in the British Empire, 1886-1945 (Harvard University Press, 2002), on the intersections between resource
management and the social control of its colonies by the British Empire informs his critique of the loss of humanism in the bio-centric designs of the cold war. In this regard, he is critical of Buckminster Fuller’s self-appointed role as “Captain of Spaceship Earth,” particularly for his close working relationship with the US military. Yet Fuller’s technological utopianism and sense of a planet in crisis were omnipresent in mainstream American culture in the Cold War era. And this apocalyptic vision, coupled with American advances in the space program, sets the stage for the most thought-provoking sections of the book.

The final three chapters explore the role of ideas about ecological systems on the project to colonize space. The key design metaphor here is the notion of the closed ecosystem, as ecologists were drawn into the design of space colonies. In a particularly provocative section, Anker traces the relationship between the American landscape architect Ian McHarg and the South African ecologist John Phillips, who saw no contradiction between his work on eco-systems design and the design of enclosed Bantustans in apartheid-era South Africa. At this point, Anker could have explored the design of urban mega-structures as human habitat—taking cues from Moše Safdie or Reyner Banham—but, perhaps because of his interest in what he delightedly calls the “capsule syndrome,” he closes his study with a return to the individual survivalists of John Todd’s Space Ark, the Farallones Institute’s Integral Urban House, and John Allen’s Biosphere 2 project in Arizona.

My principal criticism is of the tenuous link between the Bauhaus encounter with ecology and the subsequent American projects of designing closed ecosystems for outer space or on the earth. While Anker convincingly argues that the Bauhaus experts in England who were interested in establishing strong ecological underpinnings for their design agenda, the influence of Bauhaus design ideas is not convincingly demonstrated in the American projects. At issue here may be an assumption that a European architectural avant-garde was effectively imported into a US discourse on ecological design.

At the time the Bauhaus designers arrived in the United States, there was already an active and politically engaged discourse of conservation and environmentalism. Key figures in America who were developing theories of ecology span from John Muir to Gifford Pinchot (Tedd Roosevelt’s key forester in the era of progressive conservation). These two figures represented two approaches to ecological design and management: wilderness preservation (enamored by Muir) and productive conservation (epitomized by Pinchot). The very strong environmental tradition in the US—predicated in part on the fundamental position of nature in the national ethos—created a vibrant context for the emergence of the ecological movement. True, its approach to design was rooted in ethics rather than aesthetics, as is clear in Fuller’s work, but it was an instrumental ethos in which engineering and design were understood to form a necessary part of coexistence with nature. This design tradition, predicated on an Emersonian vision of harmonious integration with nature, spans from Frederick Law Olmsted to Lewis Mumford and his companions in the Regional Planning Association of America. It led to the concept of the Appalachian Trail, as a natural ecosystem for shaping a “regional city” and designs for Greenbelt towns, garden cities, and today, “pedestrian pockets.” Conversely, the projects for space colonies and capitalized habitations on earth, that so captured the American imagination from the 1930s through the 1980s, appear to owe less to the design agenda of the Bauhaus than to do to the ecological economic arguments of Barry Commoner and Amory Lovins and the technological fascinations of Buckminster Fuller, Jay Baldwin, and Stewart Brand.

These shortcomings aside, From Bauhaus to Ecoshouse: A History of Ecological Design is a thought-provoking work that sheds new light on some pivotal moments in the dialogue between ecologists and designers—particularly the encounter between Julian Huxley and the “Hampstead group” of Gropius, Moholy-Nagy, and Bayer; the impact of Herbert Bayer’s visualized fows on Buckminster Fuller’s “World Game”; and the fascinating influence of the South African ecologist John Phillips on Ian McHarg’s Design with Nature. Anker takes a cautionary approach to the notion of a “total design science,” critical of its societal implications and perhaps—as with the wings that Daedalus fashioned for his son Icarus—overarch the ambitions that may come with unexpected consequences.

Christina Macy
Dalhousie University

A STATE OF WELL-BEING

New Nordic—Architecture & Identity
Kjeld Kjeldsen and Michael Asgaard Andersen (curators)
Louisiana Museum of Modern Art
Humlebæk, Denmark
June 29, 2012—November 4, 2012

Architecture in the north of Europe is going through a very interesting phase at the beginning of the twenty-first century. The presence of creative talent, the influence of Nordic societies, and a strongly developed civic involvement contribute to conditions that are truly beneficial for architecture, landscape architecture, and urban design. During the last decade the Nordic countries have raised a furor with a range of ambitious projects, especially in Norway and Denmark, and to a lesser extent in Sweden, Finland, and Iceland. A selective overview of these projects forms the core of New Nordic—Architecture & Identity, an exhibition at the Louisiana Museum in Humlebæk curated by Kjeld Kjeldsen and Michael Asgaard Andersen. The central assumption behind the exhibition is that architecture, and by extension the built environment, mirrors and strengthens the identity of the people and culture that create and use it. Both the exhibition and the accompanying eponymous book focus on the question of what this identity might be, and if something particularly Nordic (or for that matter Danish, Finnish, Icelandic, Norwegian, or Swedish) can exist and survive in times of globalization.

One answer the exhibition offered to what Nordic is, or could be, was conveyed in two dozen peep shows, called Nordic theatres. These are little wooden boxes in which Nordic cultural personalities had each framed their individual perspective on this question. More than anything else, the variety of the peep shows made clear that there is not one monolithic Nordic identity but a possi-