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Book Review

Ndubisi, Forster O., ed. 2014. The Ecological Design and Planning Reader. Washington, DC: Island Press. 632 pp. \$90.00 (hardback). ISBN 978-1-61091-490-1. \$45.00 (paperback). ISBN 978-1-61091-489-5

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Since the professionalization of landscape architecture and urban planning in the late nineteenth and early twentieth centuries, the relationship between the built and natural environment has been a prominent theme animating research and practice in these allied fields. This has only increased in recent years as ecological degradation is an issue of growing public concern, exemplified in 2015 by Pope Francis's encyclical on the environment and the landmark climate accord in Paris. Humanity now finds itself at a significant threshold, as it becomes clear that we are the dominant agents of change in the biosphere.

Set in this context, Forster O. Ndubisi's edited volume *The Ecological Design and Planning Reader* is timely. The environmental discourse is vast and encompasses many narrative streams. Yet, the arc of thought encompassed in this compilation may be unique in its singular focus on the application of design and planning to achieve sustained use of the landscape—described as the totality of natural and cultural features on, over, and in the land—while accommodating human needs. Ndubisi is well qualified to curate this collection of foundational work. Professor and head of the Department of Landscape Architecture and Urban Planning at Texas A&M University, he has taught at the undergraduate and graduate levels for twenty-five years and has published widely on landscape related topics, including *Ecological Planning: A Historical and Comparative Synthesis* (2002).

The *Reader* has two stated goals: first, an educational objective to provide a teaching resource for upper-division undergraduates and graduate students in design, planning, and allied disciplines including architecture, environmental science, geography, and forestry; second, a scholarly objective to offer critical synthesis and analysis of the theories, methods, and practices of ecological design and planning, and to offer direction for future research. In so doing, Ndubisi is essentially pursuing a third unstated goal: to formalize ecological design and planning as a distinct discipline that is situated largely within landscape architecture. Drawing on one hundred sixty years of scholarly thought, the book is organized in seven parts that encompass forty-two articles selected through a survey of thirty leaders in ecological design and planning. These articles are drawn from peer-reviewed journals, books,

book chapters, monographs, and professional reports. Ndubisi introduces each part with a high-level synthesis, identifies noteworthy essays not included due to space constraints, and offers a summary conclusion.

Addressing the why of ecological design and planning, the first two parts—Historical Precedents and Ethical Foundations—are grounded in the broad environmental canon and include classic pieces from Henry David Thoreau (1854), George Perkins Marsh (1864), Aldo Leopold (1949), and Rachel Carson (1962). Pioneering works from environmental planning ground the discussion at hand and include Ebenezer Howard's garden city vision of urban settlements integrated with rural surroundings (1898); the regional scope of Patrick Geddes (1915) and his successor Benton MacKaye (1940); and a declensionist critique of Western philosophy, industrial modernity, and twentieth-century urbanization issued by Ian McHarg (1963). Bridging into the contemporary period, Steiner et al. (1988) review the historical foundations of ecological planning and summarize key US environmental legislation through the 1980s, while Timothy Beatley (1994) and J. Baird Callicott (1999) argue for a planning ethic based on biodiversity and wilderness protection.

Parts Three, Four, and Five—Substantive Theory, Procedural Theory, and Methods and Processes—address the how of ecological design and planning. This discussion encompasses the arts and natural sciences. But as Ndubisi notes, the latter underpins the narrative that informs one of the most important legacies of this discourse: the landscape suitability approach premised on the fitness of a given tract of land for a particular use that was popularized in McHarg's classic book *Design with Nature*, which undergirded the emergence of geographic information systems and environmental impact statements. Notable contributions supporting this approach include biologist Eugene Odum's compartmentalization of landscapes into ecological functions and optimal uses (1969); the evaluation of land suitability methods by Lewis Hopkins (1977); Ahern and colleagues' assessment of biodiversity protection as a basis for land use planning (2007); and Richard T.T. Forman's spatial language of patch-corridormatrix based on principles of landscape ecology (1995; 2008). Other essays elaborate upon the integration of human and nonhuman needs (e.g., Lyle 1985; Van Der Ryn and Cowan 1996; Palazzo and Steiner 2011), while Catherine Howett (1987) argues for a "post-humanist" aesthetics that treats landscapes as icons or symbols of a more ecologically sensitive world.

Following examples of practice in Part Six (addressed further below), the final part—Emerging Frameworks—assembles more recent conceptual approaches that inform the future of ecological design and planning. This includes new urbanism (Calthorpe 1994), ecological footprint (Wackernagel and Rees 1996), smart growth (Downs 2005), landscape ecological urbanism (Steiner 2011), ecological resilience (Wu and Wu 2013), and ecological urbanism (Spirn 2013).

In sum, this publication is a good resource for scholars and students interested in the history, ethics, theories, methods, and processes that undergird the ecological design and planning discourse. In the introductions to the book's various parts, Ndubisi demonstrates mastery of the subject matter and distills the essential points of the ensuing content. Through consolidation of this literature in a single volume, the publication also provides an opportunity to situate the ecological design and planning discourse within a broader discussion of twenty-first-century environmental challenges.

In this light, the case studies on Dimensions of Practice in Part Six are disappointing. Most are descriptive rather than analytic, short on concrete evidence or performance metrics, only a few pages long, and authored by the project designers themselves. In some instances, the text is drawn from original project reports. Collectively, the selections in this part of the *Reader* undermine the integrity of case study as an important method of research. The publication would have been better served by including robust analyses of built work by third party scholars. The Landscape Architecture Foundation, for example, has dozens of excellent case studies based on methods developed by Mark Francis (2001).

The weakness of the case studies in Part Six also raises questions about the degree to which the Reader succeeds in addressing the second of its stated goals—to provide critical analysis. Indeed, the book never grapples with the minor impact that landscape architectural works around the world have had on the global environment (Corner 1997). Moreover, the discourse encapsulated in this publication is largely limited to a particular cultural context. Notwithstanding project examples from four continents in Part Six and three texts from contemporary Asian scholars, most contributions are derived from Anglophone and mostly American thinkers. Reflecting this perspective, Ndubisi adopts first person voice in the concluding chapter: "Given the transitory nature of Americans and the opportunities afforded to us to move around in search of wealth, employment, and recreation, it is not surprising that we often fail to develop strong emotional attachments to specific places" (581). Such an assessment may be accurate in the United States, but it does not necessarily apply to other regions of the world, and this self-referential perspective is epistemologically and discursively inadequate for a scope that is planetary. For example, the adaptive reuse of a derelict former lumber processing center at Thesen

Islands, South Africa is noteworthy, but is the "traditional neighborhood concept that evolved in the Southern states of the USA" an appropriate model for international emulation, as suggested by this project's inclusion in Part Six as exemplary practice? A discourse characterized by the US context is also problematic in light of the antiurban streak that informs American intellectual thought (White and White 1977).

Indeed, the urban condition is noticeably absent from the book's concluding chapter, where Ndubisi makes meaning of the ecological design and planning literature through synthetic remarks. Urbanization is framed as a priority in the volume's introduction and cities are a recurring theme in many of the individual contributions, especially Part Seven on Emerging Frameworks. Urban areas may likewise be implicit in the editor's summary remarks, which argue for an "evolutionary-ecological land ethic" and touch on topics ranging from ecosystem services to adaptive-regenerative landscapes, commitment to place, regional thinking and action, a coupled design-management imperative, performance-based thinking and practices, and interdisciplinary collaboration. Yet, the terms "city," "cities," "urban," and "urbanization" appear only intermittently. The lack of explicit attention to this topic in the Reader's concluding discussion is disconcerting: most of the work that planners and designers undertake is in urban and suburban settings; some two-thirds of humans will live in cities by 2050; and urbanization is fundamental to the social and ecological challenges of the twenty-first century, as exemplified by the United Nations Sustainable Development Goals (United Nations Conference on Sustainable Development 2011).

Urban landscapes offer challenging, and perhaps fertile, ground for innovative thinking in ecological design and planning going forward; and this *Reader* provides a foundation for that evolving discourse. Indeed, as scholars, elected leaders, and the allied city planning and design professions contend with the profound implications of an urbanizing, anthropogenic biosphere (Ellis 2015), few topics could be more relevant.

References

Corner, James. 1997. "Ecology and Landscape as Agents of Creativity." In *Ecological Design and Planning*, edited by George F. Thompson and Frederick R. Steiner, 80–108. New York: John Wiley & Sons.

Ellis, Erle C. 2015. "Ecology in an Anthropogenic Biosphere." *Ecological Monographs* 85 (3): 287–331.

Francis, Mark. 2001. "A Case Study Method for Landscape Architecture." *Landscape Journal* 20:15–29.

Ndubisi, Forster. 2002. Ecological Planning: A Historical and Comparative Synthesis. Baltimore: Johns Hopkins University Press.

United Nations Conference on Sustainable Development. 2011. "Sustainable Cities." Rio 2012 Issues Briefs 5. https://docs.google.com/gview?url=http://sustainabledevelopment.un.org/content/documents/326brief5.pdf&embedded=true.

White, Morton, and Lucia White. 1977. *The Intellectual versus the City: From Thomas Jefferson to Frank Lloyd Wright*. 2nd ed. Oxford: Oxford University Press.