The Landscape of Contemporary Infrastructure (review)

Barry Lehrman

Landscape Journal: design, planning, and management of the land,
Volume 30, Number 1, 2011, pp. 156-158 (Review)

Published by University of Wisconsin Press

I found this book to be delightful to read because it will resonate with many people from all walks of life. There are plenty of books for specialists about the science of botany, biodiversity conservation, and ecological restoration. This is a book that you can give to a relative and say, "This is what landscape architecture is about." Better yet, this is a book that you can give to any designer, and you will truly win a place in their heart.

REFERENCES

Botanic Gardens Conservation International. 2010. Mission statement http://www.bgci.org/global/mission/ Accessed 7 September.

Myers, Norman, Russell Mittermeier, Cristina Mittermeier, Gustavo da Fonseca, and Jennifer Kent. 2000. Biodiversity hotspots for conservation priorities. *Nature* 403: 853–858.

Pinheiro, Marcelo, Luiz de Almeida Neto, and Reinaldo Montiero. 2006. Urban areas and isolated remnants of natural habitats: An action for botanical gardens. Biodiversity and Conservation 15: 2747–2764.

Ward, Catherine, Caitlin Parker, and Charlie Shackleton. 2010. The use and appreciation of botanical gardens as urban green spaces in South Africa. *Urban Forestry & Urban Greening* 9: 49–55.

Dr. Laura R. Musacchio is Associate Professor in the department of Landscape Architecture at the University of Minnesota. She was guest editor of *Metropolitan Ecology* special issue of *Landscape Journal* (2008) and *The Ecology and Culture of Landscape Sustainability* special issue in *Landscape Ecology* (2009).

The Landscape of Contemporary Infrastructure

by Kelly Shannon & Marcel Smets. 2010. Rotterdam: NAi Publishers. 272 pages, including front/back piece, bibliography, index, credits, authors biography, and acknowledgements. Color photographs and black and white illustrations.
€59.50 hardcover.
English Edition ISBN13 978-9-056-62720-1

Reviewed by Barry Lehrman

The Landscape of Contemporary Infrastructure by Kelly Shannon and Marcel Smets is an ambitious and provocative book that is not about landscapes or infrastructure, but is about our culture of mobility as expressed through architecture and monumental works of engineering. The book consists of a series of critical essays on topics ranging from the "imprints of mobility on the landscape" (13) to "infrastructure as public space" (185) with a diverse cast of supporting case studies that are a good read and useful reference. The critical essays are used as short introductions to a theme that the subsequent case studies illustrate. These essays deserve to be longer, to allow for the myriad of ideas to be explored more fully.

Regarding the topic of landscapes, there are several eloquent statements made throughout the book that are worth sharing on how infrastructure defines the landscape:

> Once married with architecture, mobility, and landscape, infrastructure can more meaningfully integrate territories, reduce marginalization and segregation, and stimulate new forms of interaction. It can then truly become "landscape." (9)

But these few insights do not make the book about landscapes, or landscape architecture.

The etymology of infrastructure references the Latin for supporting structures, with the modern usage shifting to mean the entire network or system. "Infrastructure" is used throughout the book as a reference to the (monumental) nodes within the transportation network such as stations, bridges, and airports. These (large) projects may fall into the realm of civil engineering, but are just a fraction of the entire system. If only the authors had spent more time exploring the definition of infrastructure instead of assuming it was apparent.

In the introduction, the authors write how "the universal concern with sustainability and predicted consequences of climate change will most likely lead to major breakthroughs in rethinking the interplay between infrastructure and landscape" (11). But the authors never follow up with any significant discussion about road ecology, the energy used by different modes of transit, urban heat islands, stormwater, environmental justice, or the public health implications of any project. These are all issues that have been gaining momentum for most of the last decade or two, so their omission is curious.

The authors are very optimistic about the benefits of all transportation projects. This is most evident in their failure to condemn even the most oppressive acts of political subjugation like the Qinghai-Tibet Railroad (222), which is given the title "Colonizing the Roof of the World." They gloss over of how the project was met "predictably with a good deal

of controversy . . . the project has and will continue to have numerous detrimental effects on the environment . . . and is seen as a forceful means for China to strengthen its political and military control over Tibet" (222). That is the harshest negative assessment in the entire book, which in the next paragraph is undermined by the excitement of the engineering spectacle of "China's major technical achievement of the 21st century" (222). Maybe this is an example of subtle Dutch irony by including the railway in the section titled "Cenotaph for Technological Ability."

In Marcel Smets' February 17th, 2010 lecture at Harvard (available via podcast http://webcasts.gsd.harvard.edu/gsdlectures/s2010/smets.mov), Smets focuses on five of the strategies explored for integrating infrastructure into cities: Hiding, Camouflage, Assimilation, Detachment, and Fusion. Without getting into the definition of each of these terms, his talk covered only one section of the book, "physical presence." It should also be noted that the five strategies covered in the lecture are not the book's main thesis, which is outlined in the themes of "mobility, physical presence, movement, and public character." That said, many of the examples cited in each of these categories in his talk and in the book seem to be forced and often mislabeled. One of case studies included in "Assimilation through Camouflage" is Oslo's Airport (72). While I have not visited this project, it does not seem motivated by camouflage, but instead by place making to "evoke Norway" (72) and minimizing ecological impacts—altogether a completely different critical stance.

Exploring the distinction between landscape as camouflage and architecture/structure as camouflage is just one of many provocative topics that the authors could have written about. Another is the rupture between function and beauty—programming never gets explored, even in the chapter about "fusion" that mostly looks at mixed-use projects.

> In a world where urbanization is increasing produced by private capital, infrastructure appears as the backbone onto which these building initiatives can be grafted. As such, infrastructural design emerges as one of the last resorts that allow public authorities to give structure to haphazard settlement and reclaim the discipline of urbanism (9).

"Mobility, physical presence, movement, and public character" are all topics that were first explored in the 1960s in books like Appleyard and Lynch's *The View from the Road* (1964). These topics are discussed on page 123 in the chapter titled "Changing Modes of Perception." This is revealing clue about the limits of the book, as Shannon and Smets never escape their overriding concerns of view and visibility.

THE CASE STUDIES

The book provides a rich selection of contemporary case studies that include bridges and viaducts, subway stations and transit kiosks, parking facilities, and highway service stations. The joy of this book is discovering many projects that have not gotten much attention outside their region, such as the French highway service stations on the A16 at the Bay of Somme by Bruno Mader (44), or the Garabit (France) Highway Rest Area by Latitude Nord (132). But since the book is organized by visual assimilation themes instead of typologies, it is difficult to compare similar projects. Each case study has a similar two-page spread, where the text is limited to half a page, while photographs and drawings fill the rest.

In the introduction, the authors state their intent to "give critical commentary on noteworthy projects" (9). Instead, the text accompanying the case studies is very descriptive, and often reads like a bit of marketing copy submitted by the firms. The book could have transcended the rah-rah publicity and explored each project more critically with interviews of the designers that explored what worked or failed, what the challenges and compromises were, along with the design process and public participation level. It would have also been informative to see the entire project team and team structure, especially since the authors devote part of one of the essays to exploring the implications of integrated design teams and public process (9).

A few projects in the book have been overexposed and may have benefited the book by their omission: The High Line Park, and the Yokohama Port Terminal jump out. So what about the hundreds of examples of Rails to Trails—of those, there is only the Cedar Lake Trail in Minneapolis by Jones and Jones/Richard Haag (who is misidentified as an architect).

Given Ms. Shannon's interest in "the intersection of urban analysis, mapping and new cartographies, design, and landscape urbanism" (271), there is a curious lack of maps and analysis diagrams in the book. This lack of maps and site plans limits the ability to compare and contrast projects, to understand their context (outside of the aerial photographs) or to fully comprehend their scale.

For a book written by an architect and urban designer, there is a lack of credit for the planners and other parties responsible for the projects. For example, the Houston Metrorail Project (30), which is credited to HOK as the architect, while this project was planned by Ehrenkrantz, Eckstut, and Kuhn (EEK) and involved over a dozen other consultants not listed (Full disclosure, the review's author used to work for EEK). The index only provides a listing of firms and individuals, and does not provide access to the projects by locations or project types. Scale is barely mentioned, a few projects have area, length, or height mentioned in the text, but there is not a discussion about how systems and places vary in function (and complexity) by scale. A more useful (but less provocative) organization for such a book as *The Landscape of Contemporary Infrastructure*, would have been by typology and scale, not the themes selected. There have been several fascinating studies of scale published on the web over the last decade—seeing the contrast in size and density of subway systems from cities around the world, or the scale of a city's ring highway, or of a park area, illuminates geographic distinctions and serve as vital references. That comprehensive book has not been published about infrastructure. Brian Hayes' *Infrastructure—a Field Guide to the Industrial Landscape* (2005), also suffers from the lack of diagrams and scale comparisons (and does not take a critical stance either).

> With the advent of urbanism, land ceases to be mere place. It becomes territory—with order, accessibility, and layered narratives. Infrastructure, by its very nature, is a colonization of land and there is a plethora of examples monumentalizing man's [*sic*] ability to tame and conquer nature through technology and innovation, engineering and infrastructural feats (106).

This quote is a good summary of what the book explores and accomplishes. What is needed is a book that questions the role of infrastructure in our society, which casts a critical eye on the impacts of the "colonization of land," and which chooses examples that are not necessarily beautiful but transcend engineering to perform in a truly sustainable fashion.

In contrast to being a book that "address[es] itself to urban designers, architects, landscape architects, civil engineers, traffic planners, and policy makers," (11) the audiences who will best appreciate and use the wisdom of this book are students the architecture and landscape who do not need quantitative metrics, nor deeply critical analysis of the successes and failures of each project, nor a description of the process or team organization. The design community is still waiting for such a book about infrastructure that provides all those missing pieces, in addition to the provocative critical essays provided by Shannon and Smets.

Barry Lehrman is a Landscape Architect and Lecturer in the Department of Landscape Architecture at the University of Minnesota.

Boomtown 2050: Scenarios for a Rapidly Growing City

by Richard Weller. 2009. Perth, Australia: University of Western Australia Press. 453 pages, numerous color photographs, diagrams, and drawings.
$99.95 hardcover.
ISBN13 978-1-921-40121-3

Reviewed by Michael Martin

Perth: the final frontier. To a native of North American suburbs, the story is oddly familiar. A 19th century pioneer outpost becomes established in a regional landscape with few natural boundaries but with abundant marketable natural resources. The outpost becomes a town; the town grows organically and haphazardly, sustains itself through territorial expansion and appropriation/economic exploitation of those natural resources (in this case, primarily minerals and natural gas), experiences tremendous growth during the late 20th century, and by the onset of the 21st century everyone is beginning to reconsider the social/functional/aesthetic tradeoffs as well as the ecological consequences of "spacious" suburbanism sprawling miles and miles willy-nilly from the urban core.

Weller and his team of researchers (based at the University of Western Australia's program of Landscape Architecture) have waded deeply into this reconsideration by engaging the suburbanized Swan Coastal Plain landscape at a regional scale, situating that landscape within a wide-angle global economic/ecological context, and then zooming in to tightly frame their speculative proposals at site scale—or, at least, they begin to accomplish the latter (resolution at site scale is actually more in a category of "future directions" for this work). What we hold in both hands is a weighty, durably bound dead tree tome, beautifully wrought on thick heavy-duty paper, gorgeously and imaginatively illustrated, succinctly presented