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The Principles of Green Urbanism: Transforming the City for Sustainability

Steffan Lehmann

*London, Earthscan, 2010, 911 pp., £49.99 (pbk)*

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Aimed at architecture and urban design students, this huge book is densely packed with colour images, making it a pleasure to leaf through. Each chapter is written as an introductory ‘module’ to point the reader towards further research, rather than as a definitive text. The intention is to present a series of inspirational ideas using urban renewal strategies and the conceptual model of Green Urbanism. There is ample material for scholars wishing to understand the role of housing within place-making.

Alongside the conceptual model, the student outputs of several of the author’s taught design studios are also presented. These design studios focus on a single ‘archetypal post-industrial city’ - Newcastle in New South Wales, Australia. Newcastle is used throughout the book as a test bed for the ‘revitalization of typical post-industrial urban landscapes’. Lehmann states that although many of the Green Urbanism strategies are generic and transferable, ‘no single formula will work everywhere’.

The first chapter describes why Lehmann believes Newcastle represents the ‘archetypical post-industrial city’, and presents his research on Green Urbanism, including a reflection on utopian ideas of early modernism, such as Howard’s Garden City; Garnier’s Functional zoning; Corbusier’s Ville Radieuse; Lloyd Wright’s Broadacre City; the mixed use compact city; and Tokyo’s Metabolist group.

Chapter two sets out the 15 principles of Green Urbanism in the form of a ‘step-by-step’ manual, though Lehmann stresses the principles must be used in combination rather than in isolation. Chapter three then demonstrates how the 15 principles can be applied strategically in four different sites within Newcastle. This is achieved using three case studies from the author’s design studios and one real case study. The student case studies are visually impressive, and show how the various challenges were tackled by particular design teams.

The final chapter focuses on the urbanisation of India and China to identify the next steps and research required to underpin a low or zero-carbon future for these rapidly expanding nations.

Apart from Chapter three, each lengthy chapter includes a final ‘scrapbook’ section to stimulate further research into the topics discussed. Much of this information is relevant and interesting, though it is a sometimes a little disjointed
and lacking in context - rather like rifling through someone else’s PowerPoint slides.

Lehmann states that modern Cities now compete to be seen as attractive, creative places; representing secure investments with a green vision. He coins the phrase ‘Post-Industrial condition’, which he says is the need to redefine the city centre’s identity and adapt its role to remain competitive. He states that this book is about optimism and hope, providing ‘emancipatory solutions’ for citizens and governments to rethink the city, moving away from purely functional and aesthetic design criteria to grasp opportunities to ‘turn entire districts into near zero carbon neighbourhoods’ supported by urban agriculture. These laudable aims are supported by some international exemplars, most notably Berlin’s ‘Energy Savings Partnership’ model, and Seoul’s Cheonggyecheon urban stream regeneration.

The 15 principles themselves have much in common with Bioregional’s ‘One Planet Principles’: in fact 10 of them appear to map across directly. What is more explicit here though is the focus on climate and site context; densification and intensification of existing districts; urban governance; education and training; and strategies specifically for developing countries.

However, one could question how useful the design studios are at demonstrating real-world deployment of the 15 principles. Each design studio gets between 75 and 100 pages each devoted to it, while the only real project to be presented - potentially the most interesting - gets just 9 pages. This imbalance highlights a slight tendency towards too much abstraction. Further credible real-world examples of how and why an urban design had evolved to deal with the multiple challenges of the city would have been valuable.

Some assertions about city suburbs do not perhaps quite ring true. Lehmann declares the ‘death knell to the inefficient sprawling suburb’ has been rung, that ‘...the suburban dream of the ‘big house in the green’ is vanishing’, and that ‘as the desire to live in these isolated places diminishes, suburbs will be vacated [giving us] the chance to gradually recycle them or eliminate them’. Suburbs are undoubtedly inefficient in land use and transport energy terms, but evidence of sustainability gains through urban intensification is still unclear, and solutions are more often about new technologies and changing behaviours than the built form. Though it may be desirable to ‘eliminate’ suburbs on grounds of inefficiency, I think this is currently unrealistic given the poor amenities of many city centres, particularly for families with young children, many of whom will still be dreaming about a spacious house with private gardens. The trick for green urbanism to pull off is providing the same quality of life with less private space, and though there are some excellent international examples of this being achieved (e.g. Vauban), I think the masses are yet to be convinced and the suburban exodus is currently on hold.
Finally, one might question how transferable Newcastle’s lessons really are. It is a small waterfront city (population 150,000), that ‘enjoys a Mediterranean climate’ with double the solar radiation of London or Berlin, and an average minimum temperature of 4.7 °C. This means the challenges Newcastle faces are quite different from many more temperate post-industrial cities. Perhaps a range of case studies would have broadened the resonance, and lessened the occasional impression of reading a commissioned report for the city of Newcastle rather than a general urban design book.

This ambitious book covers a lot of ground in an accessible style, and there is much to like. However, the structure of the book can feel cluttered at times, and there is a lack of the ‘wayfinding’ so beloved of urban designers that would allow the casual reader to navigate with ease.

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996 words.
The origins of green urbanism. Different schools of thought: from Green City to Green Building. Over the last thirty years or so, an international debate on eco-city theory has emerged and has developed as a relevant research field concerning the future of urbanism and the city itself. During that time, a number of architectural theorems have been developed and presented as ‘Green Urbanism’. How can we transform and future-proof the post-industrial city through strategies of architectural and urban design? The answer is to use an energy-efficient, zero-carbon model based on renewable energy sources and renewable building typologies. This book presents different models for sustainable urban growth, based on the principles of ‘Green Urbanism’. Current and emerging Holistic Principles to Transform Cities for Sustainability. By Steffen Lehmann. Submitted: December 1st 2010Reviewed: April 11th 2011Published: September 6th 2011. The following is a short list of the principles; for full discussion, see my book ‘The Principles of Green Urbanism. Transforming the City for Sustainability’ (2010). It must be noted, though, that in order to enable sustainable urban development and to ensure that eco-districts are successful on many levels, all urban design components need to work interactively and cannot be looked at separately. The principles are based on the triple-zero framework (triple-bottom line) of