

Nelson, A. ed. (2007) *Steering sustainability in an urbanizing world* (Burlington USA) Ashgate Publishing Company ISBN 978 0 7546 7146 6

Reviewed by Taeke M. de Jong, University of Technology Delft, Faculty of Architecture, department of Urbanism, chair Technical Ecology And Methods (TEAM).

The first pages of the last chapter written by the editor of this book with 30 authors offers a better insight in its intentions than the introductory first chapter or its table of contents. The table of contents shows four very general titles of the sections: '1: Transforming Cities', '2: Collective Practices', '3: Community and Civil Society', and '4: Transforming Suburbs'. In the introductory first chapter, named 'Steering Sustainability: What, When and Why', 'steering' is explained as correcting market failures of neoclassical economics to take the long term effects on the human condition into account. However 'What' the object of steering is, 'Why' and how it should be done (2: 'Collective practices') appears less easy to be explained. These questions get different Australian answers throughout the book, very often embedded in case studies. The first chapter stresses uncertainty, complexity and urgency ('When' is 'now'). It names 7 'new policy drivers' being not very new (energy, water, pollution and so on), but biodiversity is not one of them. It addresses 'the urban question' with some suppositions I do not share and it attempts to summarise the kaleidoscopic contributions not very convincingly connecting them within the titles of the sections mentioned.

However, the last chapter justifies the choice for a heterogeneous collection. It makes the tensions between some authors more explicit, specifically in respect of urban and rural settlement, what has to be sustained and how it should be done (top down or bottom-up). 'Community groups and local governments have outpaced the achievements of national governments in many places.' is a conclusion according to the contributions in part 3: 'Community and Civil Society'. It expresses doubts if capitalism ever can achieve environmental sustainability (the recent recession is perhaps its best contribution). It consequently questions the 'triple bottom line approach' (an agenda popular elsewhere as PPP: prosperity, people, planet) epitomizing confusion by its 'even-handed and well balanced treatment of the economic and social as well as environmental spheres'. Probably that is why I could not find any reference to the 'Cradle to cradle' concept, so popular now in the Netherlands.

As a Dutchman I inadvertently compare the priorities of the Netherlands (16 million inhabitants) to those of Australia (20 million inhabitants) in a territory ample 250 times as large, drying out rather than drowning. For us, Australia is best known by its sympathetic Permaculture concept, earlier represented in Mollison's catalogue of beautiful drawings designing numerous solutions, now eloquently actualised in the contribution of Dick Copeman in part 1 as 'Design principles for urban sustainability'. Nearly convinced by that eloquence I still keep my doubts about 'the urban question' as addressed here and mainly throughout the book, in particular in the first chapter. I do not concern the city and its life style as the main wrongdoer anymore since we counted more wild plant species in our towns than in its surroundings and in many of our natural reserves, defended by city-dwellers. Since WWII the Netherlands combat urban sprawl to keep scarce green areas open, stressing regional specialisation for agriculture and nature and consequently emphasising high densities of residential areas. Introducing agriculture within our towns would increase sprawl, the use of cars, the surface of pavement, the length of cables and pipes. It would decrease the support for public transport, for matter- and energy-saving opportunities and for social facilities. I do not share the ideal of economic autonomy at a neighbourhood level since the unnatural increase of world population forced to use technical means, regional specialisation and consequently exchange of goods and services.

The many Australian cases described and advertised as good examples of sustainable practice are not compared to evaluate their sustainability contribution by additional metric or pictorial figures. The editors did not choose one definition of sustainability to do justice to the diversity of opinions. I agree to implicit choice for diversity as a robust strategy for survival. But, I do not understand why the original Brundtland definition 'a development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs' would be not sufficient to select criteria for comparison. If that definition includes freedom of choice for future generations, there are two primary criteria from which any other criterium can be derived: sustaining biodiversity and health (not merely the absence of disease or infirmity, but including 'a state of complete physical, mental and social well-being' according to the still broadly accepted WHO definition in 1948). Even climate change would not be a problem if it would not affect biodiversity or human health (including risk). So, with primary interest I read the contributions about measuring sustainability: 'Policy

approaches Incorporating LCA' by Tim Grant and 'Indicators, audits and measuring success' by Richard Hyde et al. Grant cites the Ecoindicator 99 model coming down to the basic criteria of biodiversity and health not explicitly mentioned by Hyde et al. An important next step would be to evaluate the described cases according to one or more of these indicators, preferably derived from impacts on biodiversity and health at different levels of scale (from local into global). Then the simple question remains: 'How much do these examples contribute to biodiversity and health at different levels of scale?'

The book often stresses saving energy as a critical element in sustainability as many environmentalists do. But energy can not be an enduring environmental problem since there is 5000 times as much useful solar power at the Earth's surface (leaving the Earth unused, degraded into long wave radiation) as global economy and biosphere use together. The Netherlands would require its total surface to cover its actual power need by wind or biomass (an ecological disaster, but still the main basis of footprint calculations). However, current solar cells (producing hydrogen) would require 1/5 of its surface only. The technology of solar cells approaches the efficiency of fossil fuels after 40 years of substantial cost reductions per installed watt. The question is, if energy saving does not slow down its implementation and offers oil companies the time to develop technologies exploring more difficult but very rich remaining sources of fossil fuels like oil sands (an ecological disaster as well). The coming decade we may face the competition between these two technologies. And, if there is enough sustainable energy within a foreseeable future, desalinisation of seawater, mobility, regaining many kinds of resources and preventing pollution would no longer be an environmental problem. Decreasing biodiversity and health (including the increasing occupation of risky areas) will remain the real problem.

The book offers a comprehensive overview of the Australian state of the art for policy makers. Its extended index helps better navigating than the table of contents. I got some new insights, but it is difficult to find them back in a multitude of opinions and beliefs without a proper metrical underpinning and comparison. So, it will be difficult to evaluate the opinions and cases from an Australian administrative, cultural, economic, technical, ecological and spatial context for other contexts. However, that may apply to many contemporary and former publications about steering sustainability.