

Urbanism in the Age of Climate Change

By Peter Calthorpe

Island Press, 2011

Reviewed by Hyungkyoo Kim

Climate change has become one of the key challenges for contemporary planning. Peter Calthorpe, a Berkeley-based architect, planner, and a founding member of the Congress for the New Urbanism, suggests an alternative approach to addressing this challenge. In his 126-page book "Urbanism in the Age of Climate Change" (Island Press, 2011), Calthorpe seeks to answer why urbanism is needed in the age of climate change, which he does not hesitate to describe as an "imminent threat." He forecasts the future impacts of various land use scenarios and offers solutions for planners and policy makers on how our cities and regions should be.

This book begins by walking its readers through the history of urbanism in the U.S. in the last fifty years. It depicts the ways in which the changes of urban growth patterns left the country with unsustainable energy needs and suggests that the built environment is responsible for almost two-thirds of greenhouse gas (GHG) emissions. Calthorpe argues that the sole solution to climate change is *urbanism* because it generates greater ecological, social, and economic benefits than the alternative. He defines urbanism as "compact and walkable development" and presents a set of solutions: a new set of urban design ethics centered on human scale, diversity, and conservation; regionalism in metropolitan planning practice; the Urban Footprint as a new planning tool; and transit-oriented development as an implementation strategy. Calthorpe proposes Green Urbanism, a combination of smart growth policies with the highest standards of technology and lifestyle, as he defines it, should be the most relevant future scenario in the age of climate change.

The greatest accomplishment of Calthorpe's book is a series of computer projections generated with Urban Footprint, a computer-based planning tool built by his team to forecast the impacts of future land use scenarios through 2050 presented with concise numbers and intuitive images. The projections come from his work for the Vision California study¹, in which he forecasted how each scenario that varies in housing, transportation, land use, and density futures would impact land consumption, energy use, infrastructure and utility cost, vehicle miles traveled (VMT), GHG emissions, and so forth. For example, the Green Urbanism scenario would

1. Scenario choices and their impacts of the San Francisco Bay Area can be interactively simulated at <http://www.youchoosebayarea.org>.

generate 12,200 less VMT, \$14,100 less in household utility costs, and 78 percent less GHG emissions per year than the typical auto-based sprawl.

Although Calthorpe's understanding of the current situation and the solutions offered sound appealing, there are weaknesses in his proposal. First, the concept of urbanism in this book is narrowly defined. Its focus is limited to the physical attributes and design of the built environment. Unlike Fischer (1976) and Ellin (1996), Calthorpe fails to develop and approach sufficiently comprehensive to properly address the complex and comprehensive nature of urbanism. He does not appear to have listened to the voices that criticized New Urbanism for its excessive emphasis on the physical environment and its disregard for the socio-economic and political realities and everyday life of city dwellers (Lund 2003; Southworth and Parthasarathy 1997; Zimmerman 2001).

Second, many of the planning and design solutions this book suggests are not refreshing propositions, but reiterations of those already implemented. Calthorpe's design suggestions generally come from the New Urbanist principles of city building that are quite familiar and even tedious to many of us. The Urban Footprint appears to be no more than a new packaging for long-established planning practices. Its only advancement may be the fact that it is web based and uses open source software. One might also wonder how this Urban Footprint differs from or advances beyond the more famous concept developed by William Rees in 1992, the "Ecological Footprint," which represents the amount of land needed to supply a city with resources and to absorb associated waste (Rees 1992). In addition, place-types planning, an integral component of the Urban Footprint, has been applied since the mid-2000s as an alternative to single-use zoning in a number of U.S. cities. Calthorpe's arguments would have been more compelling had he attempted to review the solutions and concepts by scrutinizing their effectiveness and implications, rather than introducing them superficially.

We live with many urbanisms today. These include Landscape Urbanism (Waldheim 2006), Sustainable Urbanism (Farr 2008), Ecological Urbanism (Mostafavi and Doherty 2010), and even another Green Urbanism (Beatley 1999), all of which share similar interests and goals with this book. Despite several weaknesses, Calthorpe's ideas, insights, visions, and challenges will inspire those who would have similar inquiries, making his contribution stand out as significant among the many urbanisms of today.

References

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