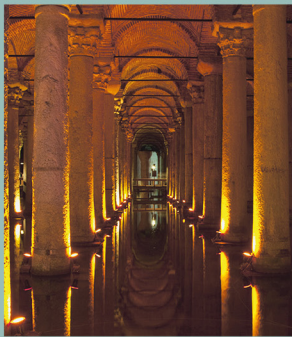


URBANISM FOR A DIFFICULT FUTURE

Practical Responses
to the Climate Crisis

KORKUT ONARAN



Foreword by **ANDRÉS DUANY**
Afterword by **PAUL CRABTREE**

“Here is the rare book that anticipates with commonsense intelligence the most practical problems of how we will inhabit our landscape in the 21st century. The author recognizes the macro trends of downscaling and re-localization that will determine how we live in a coming period of industrial de-growth, changing climate, and social crisis. The writing is straightforward, clear, and muscular, conveying an urgent and purposeful spirit of facing the facts and getting things done.”

— **James Howard Kunstler**, Author of *The Geography of Nowhere*,
The Long Emergency, and *World Made by Hand*

“In this ground-breaking book, Korkut Onaran tackles the inconvenient truth that humans must adapt to the accelerating impacts of climate change: where we’ll live, how we’ll live – and how we can successfully live together. This is an indispensable starting point for charting a resilient and humane future.”

— **Rick Cole**, Executive Director of The Congress for the
New Urbanism (CNU)



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Urbanism for a Difficult Future

Urbanism for a Difficult Future: Practical Responses to the Climate Crisis is a much-needed guide to launching the next generation of land use planning and urbanism that will enable us to adapt to and survive the consequences of climate change.

The book offers strong, straightforward measures for creating a landscape of resilience via pockets of self-sufficiencies. It demonstrates how to secure systems that sustain life (energy, water, food, waste, and production of essential goods) as well as political and social protocols enabling agile decision-making in managing these systems effectively at local levels. It also provides the design principles for creating a built environment that will enable the kind of localization we need for adaptation. The book explores how it is possible to create a life that does not depend on large-scale regional sustenance systems which are likely to be disrupted or fail.

This book uncovers how to enable people to be creative, productive, and supportive at local levels, so that we can achieve strong and diverse local economies that can sustain life. It will appeal to students, planners, and policy makers working in environmental studies, environmental engineering, urban and regional planning, architecture, landscape architecture, and urbanism.

Korkut Onaran is a founder principal of Pel-Ona Architects and Urbanists. He also teaches as adjunct in the College of Architecture and Planning, University of Colorado Denver. Urbanism, regulation cultures, and development codes have been a focus of his teaching and practice. His book

Crafting Form-based Codes: Resilient Design, Policy, and Regulation was published by Routledge in 2019.

Andrés Duany is one of the founders and intellectual fathers of the international New Urbanism movement. His sharp vision and inspiring talks have convinced many elected officials and professionals to encourage implementation of successful urbanism. He is also one of the founders of the Congress for the New Urbanism. As an architect, urban designer, planner, and author, he has produced plans for hundreds of new and renewed communities around the globe. He is the author of many essays and articles and co-author of several books including, *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*, *The Smart Code*, *The Smart Growth Manual*, *Garden Cities: Agricultural Urbanism*, and *The New Civic Art*.

Paul Crabtree is a visionary urbanist and civil engineer. He is the founder of Crabtree Group, Inc. (CGI). CGI projects have demonstrated that green infrastructure can outperform conventional infrastructure while reducing capital and operation costs. CGI was the Civil Engineer of Record for two projects (a residential neighborhood and a school), each which received the Colorado Sustainable Design Award for 2011. CGI is also the proud winner of three CNU Charter Awards (2010, 2018, and 2020). Paul's contribution to adaptation discussions has been essential.

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Climate Crisis

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Foreword by
Andrés Duany

Afterword by
Paul Crabtree

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To Andrés Duany



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FOREWORD

This is an important book, not just because it is rare in its cohort, but in the tough stand it takes. First, because it is relentlessly prescient. It was delivered to the publishers at the very moment of the Glasgow Conference (November 2021). This event was a shock. It is a moment in history when every adult on Earth was in some way conscious of the crisis. And yet, the commitments made were not enough. Since then, therefore, the future it engages seems a distortion field. To most realists it was as if a great pall had permeated the mind – and yet, this book is optimistic! And it is not theoretical.

One must now know that holding global warming down to 2 degrees centigrade by reducing carbon emissions to 50 percent by 2030 and 100 percent by 2050 is impossible. The author confronts that our Earth will continue to warm for a century at least. Science confirms that the best-case scenario to *mitigate the causes* of climate change must be concurrent with the *adaptation to its impacts*.

Korkut Onaran and I have been discussing the ideas behind this book for years. We determined that whatever criticism we have encountered following their public presentation is a misunderstanding of time frames. The majority today focuses on the period 2030–2060, whereas this book envisions the period 2060–2090.

These 30-year tranches correspond to the social convention that defines generations: from being born to giving birth. By these tranches it is possible

to put a human face on those who will be in charge and those who will be affected. By 2030 the Boomers will have finally checked out. By 2060 Gen X, which will have been most responsible for the mitigation, will be checking out. Millennials will be in charge until 2090, while Generation – Greta Thunberg’s generation – will bear the full burden of the inevitable heat. It is for the Millennials that this book is written – or at least some of them, as within these generations there are subsets in the kinds of response to the climate catastrophe.

There are several sociodemographic segments that filter “the science.” This number has grown to six that can already be identified. In the first are the “old denialists.” They are waning in number but, in any case, they are obtuse beyond convincing, and so this book ignores them.

In the second segment are the “ethicists” – those who are dedicated to safeguarding all of nature, its creatures, and humanity, for love – or because it is “the right thing to do.” Their epitome is the polar bear cub on a floating ice slab. Such ethicists, for historical reasons that cannot be covered here, are common in Northern Europe and rare in the United States. This book does not address them, as it makes no pretense of salvaging nature.

Then there are those who will do the right thing – but because it is fashionable. Unlike the ethicists, they are not prepared to actually suffer in pursuit of mitigation. They are subject to the insult of “greenwashing” or “virtue-signaling” by the ethicists. Yet they do care and love green so long as it is tasty, beautiful, and convenient. Their icons are many, including the Tesla, the organic avocado, and the surface of bamboo. They are called “cool greens.” Designers love them!

In the fourth segment are the politicians whose favorite, easy argument is that mitigating climate change is good for business. From Clinton to Biden, the narrative is that the switch to renewable energy will create millions of jobs. Despite scandalous disappointments such as ethanol, everybody approves of these “greenbacks,” which are accepted by the right. They are not necessarily as ethical or cool as the left.

The fifth segment, “the transitionalists,” must not be confused with the “survivalists” of the cold war. Those were armed individuals ready to make a last stand against red hordes. Surviving climate change requires a community and control of the regional level to secure localized water, power, and food. Sometimes their activities are derided as “circling the wagons.” But the best term is “transitionalists” – those who will have *adapted to the impacts*

of climate change with carbon *mitigation* as a secondary consequence. As such, they are very different from the former three. It is primarily to this segment that this book is addressed. They will understand what is being proposed, while the other segments won't.

Then, to these must be added one last: the emerging "party-on" segment. They would seem to be denialists, but are far from it. They are perhaps the most realistic of all. They have concluded from the evidence that mitigation is futile and the most rational response is to enjoy whatever days remain. They are great company, and we have nothing to offer them that Margari-taville does not already do.

And so, the reader has been introduced: this book will not make as much sense if you are inherently, by nature, among five of the sociodemographic segments described – yet there is overlap. This book does have some appeal to the business people of the fourth segment, as the communities to be built will involve entrepreneurs working for money. Good old American business will resonate, as usual, with what needs to be done.

And ... if the design of these communities is truly well done, the Greens too will flock in – with the latest food, clothing, and rides. The truly disappointed will be the ethicists. They will be bothered by the futility of the Glasgow attempt being called out. They will be affronted by what will seem to them to be lack of ambition.

The program leading to Glasgow 2021 was to salvage nature, its endangered creatures, humanity, and the works of humanity, wherever they may be – and in the very long term. This manual proposes only that those who follow its recommendations will lead relatively pleasant and meaningful lives for a generation or two – and perhaps three.

Is that too limited? Not at all! It is virtually utopian! History shows that three generations and the century they span are an eternity in human affairs. Furthermore, think of this: the promise for a nice week, which is rare, is here exceeded by the proposal of a nice life!

This is a book for realists who require a rare kind of spirit – one which understands the balance between the possible and the necessary. It will be necessary to have a new kind of local government, one that is much more efficient with implementation and agile in its decision-making. They must also understand that things will fall apart gradually. Yet, even then, sustaining life for a while will be worthwhile compared with the collapse that will inevitably occur elsewhere.

One last note: this book is not the only one you need. Make reference to the masterful volume by David Fleming called *Lean Logic* and to the movement that it catalyzed called Transition Town. With this book in your hand, you are not alone.

Andrés Duany

ACKNOWLEDGMENTS

Urbanism provides answers to many questions that environmentalists raise. This has been my observation since the early 1990s when I conducted my studies for my doctorate degree at the Institute for Environmental Studies, University of Wisconsin, Madison. That's also when I was first exposed to New Urbanism through a lecture by Andrés Dunay and a DPZ charette conducted at Middleton, a suburb of Madison, Wisconsin. Achieving sustainability through good urbanism has been an overarching objective that has given direction to my teaching, research, and practice since then.

When Andrés approached me at CNU 28, in Louisville, Kentucky, June 2019, and invited me to work with him and Paul on the subject of adaptation, I considered this invitation a gift. My relationship with Andrés has been very similar to a relationship of an advisor and a dissertator. Even though I ended up putting this book together, many of the ideas presented here have been developed between us. When I started working with him, there were already many ideas on the table: subsidiarity as a necessary principle for localization and centrality of a new generation of urbanism in developing a practical approach to adaptation. We agreed about the merits of focusing on adaptation, not mitigation, as intellectually the most sensible direction in the face of the climate crisis. Even though there were many discussions within CNU circles, especially after the CNU Climate Summit that took place in Alexandria, Virginia, September 2017, we, the new

urbanist community, lacked a comprehensive framework of how urbanists could contribute to, and facilitate, adaptation.

In order to jump start our efforts and develop a new development model, I invited Andrés to a 3-day workshop in my office, Pel-Ona Architects and Urbanists, in Boulder, Colorado, in February 2020. Peter Swift, as well as my business partner Ronnie Pelusio and CNU Colorado Chapter President Alexander Person, joined us in this workshop. My employees, Melissa Harrison, Matt Johnson, Daniel Sailor, and Caresa Atencio, and my students, Ryan Handy and Alex Hemmer, attended and helped us as well in designing an initial version of the adaptation village presented in this book. The workshop was finalized with a presentation at the University of Colorado Boulder, on February 15, 2020. I sincerely express my gratitude to the hard-working team of this workshop.

With the discussions of the workshop fresh in our minds, Andrés and I had an intense half hour of brainstorming in my car as I was driving him to the airport, on the morning of February 16, which produced the three-legged adaptation framework (the one presented in Table 1.1) that provides the structure of this book.

The Boulder workshop was followed by the 3-day California Adaptation Forum initiated by Andrés and organized by CNU California, in early March (just before we cancelled all our travels because of the COVID-19 pandemic). Some of the earlier versions of the ideas included in this book were presented there. The discussions in the forum were helpful in expanding my thoughts and clarifying some of the arguments of this book to myself. If I cannot explain and justify them in simple terms, that means I myself am not clear about the directives. These discussions have been ongoing, intensely, via several new urbanist email groups focusing on adaptation. Although there are many who have been contributing to the exchange of ideas, I would like to name a few: John Anderson, Scott Bernstein, Howard Blackson, Laura Clemons, Steve Coyle, Ann Daigle, Bruce Donnelly, Douglass Farr, Sara Hines, Andy Kunz, Douglass Kelbaugh, Matt Lambert, Michael Mehaffy, Steve Mouzon, Fernando Pagés Ruiz, Lynn Richards, Sandy Sorlien, and Scott Watkins. I thank them for keeping my critical mind awake.

Paul Crabtree's ideas, edits, and advice have been instrumental in developing many of the arguments in this book, especially those regarding the localization of sustenance systems. I express my sincere gratitude.

Writing a book that covers the subjects of many disciplines is a challenge, and the help of a creative editor is valuable. Nancy Bruning has been that person for this book; she went through several edits to make the text flow well, with a consistent tone. Thank you, Nancy. My hiring of Nancy has been made possible via financial help provided by the Vinyl Siding Institute (VSI), an institution that has become a good friend of the new urbanists in recent years. Thank you, VSI.

I would like to extend my gratitude to Routledge and my editor at Routledge, Kathryn Schell. She has been patient with me as I missed several deadlines and changed the outline of the book.

I saved the best for the last. That this book could not have been realized without Andrés Duany is an understatement. Not only did he collaborate in developing the backbone of this book's arguments, generously giving me many ideas and even editing my language, but he also let me write this book and put my name on it. I, the student, salute you as the master, with my deepest gratitude.

1

THE APPROACH

As planners and urbanists, we have the responsibility to expect the worst and plan for it. We are entering an era of climate disasters. We are past most of the tipping points to mitigate greenhouse gas emissions. The political will to change the patterns of human activity at the requisite global scale is limited. Various unprecedented challenges crowd our future. Where and how will we live, in this increasingly unrecognizable, unpredictable, difficult world?

This book is a manual that outlines a set of principles and techniques to enable a built and natural landscape adapted to the difficult future we face. It is a comprehensive proposal of adaptation via localization. It demonstrates how to secure systems that sustain life (energy, water, food, waste, and production of essential goods) as well as political and social protocols enabling agile decision-making to manage these systems effectively at local scales. It also provides the design principles for creating a built environment that will enable the kind of localization we need for adaptation.

This book shows how it is possible to create a life that does not depend on large-scale regional sustenance systems which are likely to be disrupted or fail. We show how to enable people to be creative, productive, and supportive at local levels, so that we can achieve strong and diverse local economies that can sustain life. Localization of sustenance systems, adopting governance models together with the appropriate social organizations, and the design principles for the right urban environment that can enable