

# CITIES ALIVE

*Jane Jacobs,  
Christopher Alexander,  
and the Roots of the  
New Urban Renaissance*

MICHAEL W. MEHAFFY

Cities are experiencing a renaissance today, because we've begun to understand how they really work — and what they will need to work better in the years ahead. This is the story of two revealing figures in the history of that renaissance: the urban economist Jane Jacobs, and the architect Christopher Alexander. Their key insights have shaped several generations of scholars, professionals, and activists.

However, as the book argues, this renaissance is still immature, and more must be done to achieve its promise — especially in an age of rapid, often sprawling urbanization. In response, in December 2016, all 193 member states of the United Nations adopted by consensus the “New Urban Agenda,” a historic document emphasizing the pivotal role of cities and towns in meeting the challenges of the future. As this book documents, Jacobs and Alexander played key roles in formulating the conceptual insights behind the New Urban Agenda — and as the book shows, they continue to offer us crucial implementation lessons for the years ahead.

*“Lively and easy to read... very helpfully brings the ideas of Jacobs and Alexander to our discussions of the future of city. The final chapters really shine, outlining the ways that their “complex systems thinking” produce key concepts for urban planning and design — not replicating their original directives, but with the help of Mehaffy, translating their work into useful knowledge and practices.”*

— Setha Low, Director, Public Space Research Group, The Graduate Center CUNY

*“I can't think of anyone better to write this important book than Michael Mehaffy — one of the most thoughtful and articulate writers on both Jane Jacobs and Christopher Alexander. They are both pioneers of the placemaking movement that is now becoming global.”*

— Fred Kent, President, Project for Public Spaces

*“Talented at taking seemingly abstract ideas like pattern languages and making them realistic and implementable.”*

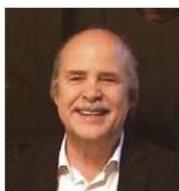
— Emily Talen, Professor of Urbanism, University of Chicago

*“A major work... gives a very deep and readable account of city structure.”*

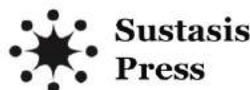
— Nikos Salingaros, mathematician and urban theorist

*“I find his voice as a writer fascinating and compelling.”*

— Christopher Alexander, architect and author



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New Urban Renaissance

By Michael W. Mehaffy, Ph.D.

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## INTRODUCTION:

### *Why cities are the problem, but cities are the answer too*

*“A growing number of people have begun, gradually, to think of cities as problems in organized complexity--organisms that are replete with unexamined, but obviously intricately interconnected, and surely understandable, relationships...”*

— *Jane Jacobs, The Death and Life of Great American Cities (1961)*

*“People used to say that just as the 20th century had been the century of physics, the 21st century would be the century of biology... We would gradually move into a world whose prevailing paradigm was one of complexity, and whose techniques sought the co-adapted harmony of hundreds or thousands of variables. This would, inevitably, involve new technique, new vision, new models of thought, and new models of action. I believe that such a transformation is starting to occur... To be well, we must set our sights on such a future.”*

— *Christopher Alexander, The Nature of Order*

In December 2016, the 193 member states of the United Nations adopted by consensus a document known as the “New Urban Agenda.” This historic declaration, the outcome of the UN’s “Habitat III” conference in October of that year, crystallizes several generations of reform in our thinking about cities and towns. It also focuses our attention on the daunting challenges ahead, in which cities and towns will play such an increasingly important role.

In a sense, the New Urban Agenda only formalizes a set of reforms that are already well under way, and that are the subject of this book. (The Agenda itself is also discussed in more detail in Chapter IV.1.) Thankfully, the benefits of these changes can already be seen in many cities and towns around the world, where once-dangerous or polluted neighborhoods are now thriving with activity; once-empty historic districts, formerly with little to offer but ugliness and despair, are now thriving and beautiful; and once-sprawling suburbs are now more diverse, more walkable, and more ecologically sustainable.

These are clear and hopeful signs that an urban renaissance is under way — a revival of our ability to make more beautiful, more

**Opposite:** *Cities at night, seen from the International Space Station. Photo: NASA*

ecological, and more successful places, from a human point of view. Moreover, there is intriguing evidence that the connection between the ecological quality of a settlement, its beauty, and its success from a human point of view, are all structurally inter-connected — a topic we will explore later in this book. Of course, much more remains to be done, and that too will be a subject of the book.

It is of course easy to focus on the many problems of cities — over-gentrification, displacement, ugly new developments, gated communities, sprawling suburbs, car dependence, pollution, habitat destruction, and all the other things we have gotten so wrong about cities in the last half-century or so. This book will discuss these things in due course. But it will do so from the perspective of what we have more recently gotten *right* about cities, with a focus on two people who have articulated these improvements with remarkable lucidity. Their work, along with many others', has paved the way for the urban renaissance that is now well under way.

Even so, from a longer historic perspective this remarkable transformation has barely begun, and its future course remains to be shaped (I hope by readers of this book, among others). As I will discuss, its achievements are far from secure, and the book will discuss some of its more notable threats, both external and self-induced (over-gentrification is a troubling example of the latter). But I aim to show that what is already happening is tapping into something deep and powerful about cities, and about human settlements in general — about the nature of life in general, and city life in particular.

So to tell the story of this renaissance, I will focus on two of its most interesting and, I think, revealing figures: the American-Canadian urbanist Jane Jacobs, and the English- American architect Christopher Alexander. I will do this for two reasons: first, each of them played a notable role in helping to bring about these changes, with highly influential works on the nature of cities beginning in 1961 and 1965, respectively. Secondly, each of them is a deep thinker about the nature of settlement, planning, design, technology — and the other related issues that we still face today. Together, their thinking has intriguing and revealing overlaps and synergies. They will serve as very good guides to our present challenges, I think.



When I speak of cities in this book, I am not only speaking of the big dense cores of major cities. Cities come in a wide range of sizes, and always have. Athens in the time of Pericles was barely 70,000 people, whereas Rome in the time of Julius Caesar was closer to one million. We focus perhaps too much of our attention on the largest cities of modernity, and especially, too much on their cores. Although these are important, so are the smaller cities and towns that have always shaped human life for a large percentage of humanity. For that reason, our purview in this book — perhaps even more than Alexander's, and certainly more than Jacobs' — will include *all* kinds of cities and suburbs and towns, large and small.

Just now almost everyone is aware that we face enormous challenges in the years ahead, including the depletion of critical resources, alarming changes in climates and ecosystems, toxic effects of production, geopolitical and economic instability, and — less obvious but no less serious — chaotic transformations in our technologies, in our cultures, and ultimately in the capacities of human civilizations. This is a daunting set of difficulties, to be sure. But human life has been full of no less existential threats, and we have persevered — even after nearing the brink of extinction, as the evidence now shows. We seem to have an innate capacity to survive, by adapting, innovating, and reforming our technology. That is a hopeful trait.

In all of our current challenges, cities — again, in the broad sense of urban settlements — loom very large. It is within the structures of these urban settlements that we consume, interact, create, and ultimately generate the impacts that now prompt such growing concern. But it is also within them that we develop as human beings and as a species — that we create, innovate, adapt and problem-solve. It is in these settlements that we create a civic framework by which we may work together on shared opportunities and challenges.

The renaissance of which I speak is ultimately just this: a revival of our capacity to live well together in settlements, to work together to adapt to our constraints, to create and develop new and well-ordered structures, to improve our quality of life, and to provide the likely basis for the vast majority of humanity to be well in the future.

The hopeful message of both Jane Jacobs and Christopher Alexander is that we *do* have the inherent capacity to grow and adapt in just this way. Their shared message is that we have a particular capacity within our settlements, our cities, that we can put to work

for us, and that is far stronger than we yet realize. We have the ability to develop new solutions, combined with the genius of old and even ancient ones.

As I hinted earlier, this book will take note of one interesting and surprisingly important fact. In this renaissance, as in the more famous one half a millennium ago, the phenomenon of beauty will play an outsized role. It is the deeper beauty of a life well lived, of a street full of people and vegetables and sunlight and energy. It is something much deeper than the superficial and manipulative beauty of a consumer product or even an exotic artwork. In fact, I will suggest that the treatment of beauty as a superficial or “psychological” quality is a sign of the obstructions we have let creep into our lives — the powerful but damaging forces of industrialized, consumer-marketed built environments, and the objectivist pseudo-sciences on which they are based. As Christopher Alexander has argued, their ugliness is a sign of a much deeper structural dysfunction. But it is a dysfunction that can be repaired, a pathology that can be healed. That is what this renaissance is all about, in the end.

I will argue that this renaissance is, in fact, a transformation in the way we think of beauty, of quality, and of life. It is a determined mastery of the technological abstractions that are, on the one hand, our powerful agents, but if we are not careful — and we have not been nearly careful enough — our destructive masters. This situation compels our ethical responsibility as professionals and as citizens. But even more important, it compels our understanding, of what Jane Jacobs called “the kind of problem a city is.” We could add, following historically recent scientific advancements, that we need to understand “the kind of problem that *life* is,” as a form of “organized complexity.” That too was a point that Jane Jacobs made, in her early and insightful observation in the brilliant last chapter of her first book, *The Death and Life of Great American Cities*.

This is a common theme for both authors, and so it will be a notable theme of this book. While both Jacobs and Alexander have celebrated and promoted the life and beauty of cities, each of them has also articulated powerful critiques of the traps we have laid for ourselves within modernity, and modern city-making. Each of them has also appealed to a rigorous, evidence-based kind of science to work our way through our challenges. Each of them has expressed a willingness to stand or fall on the evidence, to be falsified, and thereby

to transcend the pseudo-scientific weakness of so much “modern” planning and design theory. (Although this point is poorly understood, and each in turn has been accused of precisely the opposite — a point we will come back to later in the book.) Both of them are confident that we *can* learn from our mistakes as we have done in the past, and that we can harness the power of cities for the future. These two aspects of cities — what is good about them, and what has also gone wrong in critical respects, and must be put right — are the twin sides of the story this book will tell. Along the way it will tell a deeper story too, about design, technology, science, and culture.



The term “iconoclast” has been applied to both Jane Jacobs and Christopher Alexander more than once, and for good reason. Both were icon-smashers within the sacred iconographies of modern architecture and urbanism, although each did so with a distinct emphasis. Jacobs opened her first and most influential book, *The Death and Life of Great American Cities* (1961), by describing it as an “attack” on conventional city planning. Alexander opened one of his most influential papers, “A city is not a tree” (1965), by noting that most non-architects, “instead of being grateful to architects for what they do, regard the onset of modern buildings and modern cities everywhere as an inevitable, rather sad piece of the larger fact that the world is going to the dogs.”

Nor did either author confine their criticisms to architecture or urban planning, as this volume will explore. Each confronted broader issues of technology and culture, delving more deeply into those issues as their careers progressed — finding and reporting results that surprised even them. Both also explored deeper themes of modernity and its promises, and at the same time, both offered detailed structural critiques of the failures of modern industrial civilization, always with a focus on its systems of design, planning and building, especially the systems of city-building.

Neither, however, was an anti-modernist reactionary, or a despairing postmodernist. Both were, in an important sense, believers in the “project of modernity” — the treasury of thousands of years of philosophical reasoning and scientific advancement in understanding nature, culture, justice, and ethics, in the face of life’s challenges

to humanity. Both saw paths forward, rooted in science and reason, but also informed by a rich new sense of nature and its awesome, even transcendent complexities. In both cases, their iconoclasm was not an attack upon the progress of the Enlightenment, but a demand that its promises be fulfilled, that its failings and its dishonesties be confronted: that we learn and grow from our painfully evident mistakes.

It should be remembered that both Jacobs and Alexander spent their formative periods as members in good standing of the architectural establishment of their day. This is particularly easy to forget, since today they are both seen as quintessential outsiders and critics. But it was Jacobs who had been a respected journalist for *Architectural Forum*, writing admiringly about the modernist urban projects she later criticized. It was Alexander who was awarded the first Ph.D. in architecture at Harvard University, and who, as he tells it, interacted very happily with the then-elderly Walter Gropius — the man who brought the modernist architectural establishment to Harvard, and arguably, to the world.

That Jacobs and Alexander became two of the most influential critics of the same architectural establishment is an interesting and I think revealing story, with implications of great value to us even today. In both cases, they did not become critics by virtue of adopting contrarian “outsider” ideologies, but rather, by working *within* the logic of the establishment, and following their own quests for the truth within it — wherever those quests may have led them. When the result was inconsistency and evident failing, each in their own way confronted their assumptions, and each was forced by their own experiences — often painfully and slowly — to develop new ideas. That these new ideas were also at odds, often violently at odds, with the reigning orthodoxies, was clearly a surprise to them as much as to anyone.

But there is much more to the story than architectural or urban criticism. As this volume will explore, each felt compelled to develop broader ideas about history, culture, and ultimately nature — ideas with an intriguing overlap, as we will explore. In each case, the ideas have since turned out to be remarkably useful to many people outside the architecture and planning worlds. There is reason to think that much more use remains to be found in their partially overlapping, partially complementary ideas.

In a broader sense, each offers us a useful “critique of modernity” — a map of where we have begun to go wrong in our built environment, and in the cultural systems that produce it, and what we can actually do about this state of affairs. Each draws remarkably specific conclusions about what we will need for the future — the strategies, tools, habits of thinking, and notably, safeguards against the limits of reason and our common fallacies of thought and action. While each is known as a theorist — a term that has earned, in the era of modern design, a reputation as mere idle speculation — in reality each offers a most practical basis for confronting the challenges ahead.

As the philosopher Bertrand Russell put it, “there is nothing so practical as a good theory”.



This book assumes a general familiarity with Jacobs and Alexander as personages without assuming detailed knowledge of their works or ideas. For those readers who already have detailed familiarity with one or both, some of the material will necessarily cover old ground. However, the goal will be to provide a sufficiently fresh enough perspective to make the book interesting for any reader, regardless of their level of familiarity.

This book will focus on the ideas of each author, and their overlapping relationships. I will not consider biographical details except as they are required to tell this story. There are a number of excellent biographies of both Jacobs and Alexander, some of them included in the “Further Reading” section at the end of the book.

Readers looking for incisive critiques of the shortcomings of these two authors (real or imagined) can also find them in a great many other books and articles elsewhere. There is surely ample material to discuss regarding their shortcomings (as with any author), but the purpose of this book is different. While not a hagiography, it will forthrightly consider what positive (and interrelated) contributions these two authors have made to our understanding of cities, and how their work has been beneficial — and may be more so in the future. If that is not your interest, this book is probably not for you.

The structure of the book will include a section to assess each thinker’s ideas in detail, starting with Jacobs and then proceeding to Alexander. In some ways that allows us to start at the largest scale of

cities, with Jacobs, and proceed to the scale of buildings, crafts, and the detailed shaping of human environments, about which Alexander has had more to say than Jacobs. At the same time, it should be remembered that both had considerable overlap at almost all scales, from the regional to the crucial scale of human beings and their experiences of built environments. Indeed, the connectivity of urban structure across scales is another theme that is common to both authors.

The third section will consider the philosophical implications, making the argument that both authors point to a new form of “structuralism” — that is, a deeper understanding of nature as a kind of structural network between events as we experience them, and as we apply the tool of language, both to model and to regenerate them. In some ways, this “neo-structuralism” helps us to resolve age-old dualities between the subjective and objective, “matter” and “spirit”, and perhaps most importantly, “fact” and “value”. This potential re-unification of the worlds of value and fact has its echoes in the writings of many other authors as well, as I will briefly discuss. No less so, their “critique of modernity” certainly has many echoes in the writings of prominent philosophers from the Enlightenment up to the present day.

The fourth section explores several key challenges and opportunities in the contemporary world considering what Jacobs’ and Alexander’s insights contribute to those discussions. It is here that we will explore the UN’s “New Urban Agenda,” the possibilities of a “new” (or revived) urbanism, the impacts of climate change, the challenges of the current rapid urbanization, and the problems of gentrification, affordability, displacement, inequality, and related contemporary issues.

The fifth section considers the practical conclusions to be drawn from both authors, and presents several practical “takeaways” for the challenges ahead. That section also includes hopeful examples of cities and towns that are demonstrating aspects of this new urban renaissance, including photos and notes. A concluding chapter makes note of some unresolved questions, and topics for further exploration.