Climax City
Masterplanning and the complexity of urban growth

David Rudlin
Shruti Hemani

Book Overview
Overview of the book

The authors met at the urban design practice URBED (www.urbed.coop) which is one of the longest established urban design practices in the UK. David Rudlin is URBED's main director with an international profile having won the Wolfson Economics Prize in 2014. Shruti Hemani worked with URBED for five years before returning to India to undertake a PHD. Together they have continued working on a mapping project, producing large, hand drawn plans at common scales of cities across the world. Initially the idea was to produce an atlas of these maps. However as the discussions progressed they became interested in what they were learning from the process of drawing the maps.

As described in Appendix 2 of this proposal (which is written as a potential preface to the book) the process of drawing plans by hand may not be very scientific but it is a very good way of understanding the structure of cities. Drawing these large complex plans and exploring the structure of the cities highlights the tension between planned and organic growth. In every city the maps contain traces of past masterplans many of which were never completed and most of which have since been eroded by the ‘organic’ growth of the city.

This is a tension that is not really acknowledged by the literature on cities. Page X lists the urban design texts that the authors most admire and seek to emulate. These books tend to treat the ‘organic’ city as an artefact that we have inherited from pre-industrial times, from which we can learn and take inspiration, whereas the modern city is seen as place with many faults, in need of reform but which is also capable of being planned. Meanwhile there is a growing literature on the application of complexity theory and the idea of ‘emergence’ to the growth of cities (which we also list on page x). The work on complexity does not, on the whole, explore how the act of planning a city interacts with the process of organic urban growth. This is the territory that the authors want to explore in the book.

In doing so they are trying to change the way that we approach the planning of cities. Recent decades have seen a profound change in attitudes towards urban areas. Through the New Urbanist movement in the US and the Urban Renaissance in Europe cities are now seen in a much more positive light, their populations are generally growing and the quality or urban design has improved greatly. This is reflected in a wider level of public interest through books and television programmes.

Yet still we get things wrong more often that we get them right. Planners may have grasped some of the rules of the game but they still don’t understand how it is played. They suffer from the delusion that cites can be designed and, like a garden designer who doesn’t understand horticulture, are constantly surprised and disappointed by the results.
The authors therefore want to write a book that uses a selection of the maps that they have produced to open up an exploration of the way that masterplanning and the organic growth of cities have interacted across the world and through history. In Appendix 4 we set out a proposed structure for the book(s). One of the concerns that has been expressed is that there is too much material for a single book, which would become unmanageable and too expensive to market. The proposed contents therefore suggests how the material might be split into two books, much as Spiro Kostof produced his two volumes (‘The City Shaped’ and ‘The City Assembled’).

The outstanding features of the book hopefully relate both to its content and its format. It is seeking to create a classic urban design text – like those that listed on page 11 – but to do so at a time when complexity theory and emergence are better understood than they were when many of these books were written. It also takes a much more international perspective. By exploring informal settlements in India and South America alongside the Tuscan hill town we hope to uncover the processes that underlie all human settlement thereby giving the book an international reach. Like the listed urban design books the format is very graphic heavy with each page designed as a piece and drawing on a huge amount of graphic material produced by the authors. Yet it will also be written in a lucid and compelling, non-academic style as demonstrated by the samples in Appendixes 2 and 3 and David Rudlin’s previous writings.

The limitations relate to the scale of the subject that the authors are seeking to address and the possible confusion of genres. The scale of the maps and the scope of the subject may make it difficult to create a marketable publication at a reasonable price. There is also a risk that the large scale mapping is seen as part if the well-established genre of urban atlases. The authors had initial discussions with Birkhäuser in Germany who publish architecture book. The worry was however that they wanted to produce a beautiful graphic book and were not particularly interested in the written content.

The title of the book Climax City is explained in Appendix 3. It is analogous to the biological concept of Climax Vegetation and explores the idea that in the past all human settlements developed towards a relatively stable climax state, but that this has been disrupted in the modern age, not least by the process of town planning. As such we would see the book sitting within the Architecture and Urban Design section of the catalogue.
I. Table of Contents

We have explored the structure of the book in either one of two volumes as set out below. A more detailed outline of each Chapter can be found in Appendix 4.

PART 1: THE SPONTANEOUS CITY

- **Chapter 1: The process of spontaneous urban growth**: The process by which cities grow without planning based on the process of self-organisation.
- **Chapter 2: The natural town**: The way that this process has shaped traditional places.
- **Chapter 3: The spontaneous slum**: The application of the same process to the modern city in the development of slums.

PART 2: THE DESIGNED CITY

- **Chapter 4: The subtle art of masterplanning**: A history of masterplanning and the techniques involved.
- **Chapter 5: The conception of the city**: The masterplanning of whole cities from Ancient Rome to Brasilia.
- **Chapter 6: The extension of the city**: The history of planned urban extensions to cities from Barcelona to Edinburgh New Town.

PART 3: THE UNRULY CITY

- **Chapter 7: The exploding city**: The growth of mega cities from Manchester to the booming cities of the developing world.
- **Chapter 8: The incredible shrinking city**: The decline of cities in the west through lost of population.
- **Chapter 9: The sprawling city**: The story of suburbia and how it grew as an alternative to the city thus sapping its lifeblood.

PART 4: THE CITY AND THE PLANNER

- **Chapter 10: The imposition of order**: The tension between planning and the power of the organic city to reassert itself - a history of failed masterplans.
- **Chapter 11: The birth of modern town planning**: The postwar introduction of planning systems and the means they use to control the city.
- **Chapter 12: The blue sky modernists**: The post war modernist masterplans for cities like Coventry and the new towns.
- **Chapter 13: Urban Idiocy**: The way in which well meaning planning policies have undermined the vitality of urban areas.

PART 5: THE NEW URBAN AGE

- **Chapter 14: The urban planet**: The rediscovery of cities as economic drivers and the regrowth of urban populations.
- **Chapter 15: The rediscovery of urbanism**: A modern history of urban design and urbanism since the late 1980s.
- **Chapter 16: The Sustainable Compact City orthodoxy**: The emerging ideas about city development and sustainability, particularly in India.
- **Chapter 17: The Climax city in the 21st century**: A concluding chapter that suggests that by understanding the complexity of urban areas we can harness the innate ability of humans to create beautiful places.
BOOK STRUCTURE
Part 1: The Spontaneous City

Chapter 1: The process of spontaneous urban growth: This will describe the process by which cities grow without planning based on three conditions – a) decisions taken by many individuals over time b) buildings built one at a time without an overarching plan c) decisions taken incrementally without forward planning. This will be related to the science of Complexity Theory based and the work of Stephen Johnson who has made the link between ant colonies, software and the writings of Jane Jacobs. The chapter will go on to explore the factors that affect this process – topography and climate, proximity and movement, commerce, community, and safety.

Chapter 2: The natural town: The way that this process has shaped traditional places. It will tell a story from the earliest human settlements, through the medieval towns of Europe and the Arab world through to the great cities that have grown from these organic roots. The aim will be to identify a number of examples of Climax City forms, to illustrate how they developed from the processes in chapter 1 and how they differ from each other.

Chapter 3: The spontaneous slum: The application of the same process to the modern city in the development of slums, shanty towns and favelas. This will start with a description of the Walled City in Hong Kong before reviewing the current literature on slums in the developing world context, drawing on Shrutti’s PhD. This will draw parallels between the traditional towns in Chapter 2 and modern slums - both seen as spontaneous vernacular forms of urban existence, while also questioning whether this undermines the relevance of the Climax City today.
PART 2: The Designed City

Chapter 4: The subtle art of masterplanning: This chapter will explore the process of masterplanning and the way that this interacts with the spontaneous city. There has always been an assumption in the built environment world that cities can be conceived on a drawing board, and realised on the ground exactly as drawn. To a large extent this is what happened in the new towns and council estates of the 1960s and the results were not a huge success – rigorously planned places lack the diversity and serendipity of organic town and often fail. This does not however undermine the idea of a masterplan as a tool that can shape cities in two very different ways. The first is to set out a framework (or trellis) into which the city can grow as with the ‘planted’ American cities of the ‘new town’ extensions of many European cities. The second is the use of a masterplan to repair the fabric of the existing city, to filling gaps, impose order, improving conditions etc. as Nash did in London and Haussmann in Paris. In both cases the role of the masterplan was to guide and train the organic growth of the city rather than to be built exactly as drawn. This is the true art of the masterplanner.

Chapter 5: The conception of the city: This chapter will look at masterplanning in its purest sense when it is able to conceive a whole town. It will look at its history from ancient cities to Roman military towns, through European and Asian walled cities and towns decreed by kings to the new towns of colonists across the world such as the garden city inspired plan of Brisbane as well as US cities from the Enfant’s European-inspired plan of Washington to the grids of Chicago, New York and LA. This will be brought up to date with the masterplanning of new towns, starting in the UK where we will explore the the ‘wonky’ grid of Milton Keynes and the way it was corrupted in its development. We will link this to the current trend in India of building ‘new’ or ‘naya’ (as they call it in Hindi) towns based on the ‘smart city’ concepts. This will look at both older examples such as Navi Mumbai, Nayi Delhi as well as more recent ones like Naya Raipur, Lavasa and many more that are being planned throughout the country.

Chapter 6: The extension of the city: This chapter will explore the history of planned urban extensions to cities to accommodate population growth. Most European cities have planned extensions; Barcelona’s being possibly the best know. The chapter will trace their history from the estates north of the Euston Road in London to Edinburgh New Town and Glasgow through Milan and of course Barcelona. Ahmedabad is also a good example of the planned extension of an Indian city using a British town planning scheme. This has meant that its growth has been much more ordered and compact than other Indian cities.

Opposite: Grey Street, masterplanned in the 1830s is a very English type of planning, designed to fit around constraints rather than sweeping them aside as a French masterplanner would
PART 3: The Unruly City

Chapter 7: The exploding city: This chapter will look at the industrial phase of urban growth starting with the world’s first mega city – Manchester and tracing the lineage between this and the booming mega cities of today rapidly emerging in the developing economies of the world. It will look at the pressures for growth, the conditions that this creates and the measures taken to address these issues.

Chapter 8: The incredible shrinking city: The second part of this story will tell how in the west the Anglo-American city tipped into decline in the 1970s and the problems of economic decline, crime and dereliction that came with this. It will look also at the cities of East Germany and the way that they declined after German Reunification and at the current bankruptcy of cities like Detroit following the credit crunch in the US.

Chapter 9: The sprawling city: This chapter will tell the parallel story of suburbia and how it grew as an alternative to the city thus sapping it of its lifeblood. It will review the garden city movement, metro-land and Levitt Town before looking at the peak of suburban development in the UK in the 1980s, the suburbanisation of many European cities and the hyper sprawl of the US.

PART 4: The City and the Planner

Chapter 10: The imposition of order: This chapter will look at the tension in many European cities between the desire to impose order and the power of the organic city to reassert itself. This will compare the failure of Wren’s plans to rebuild London after the great fire to the long line of Parisian masterplanners (culminating in Haussmann) who have striven to turn medieval Paris into a grand royal and then imperial capital.

Chapter 8: The fallacy of control: This chapter will bring the process up to date, looking at the modern process of masterplanning and the different approaches that are being taken. It will include the stitching together of Berlin after the fall of the wall and the redevelopment of modernist estates and across Europe. It will also look at the process of planning in India and China and the way that they are repeating many of the mistakes made in Europe in the 1970s with modernist-inspired masterplanning to rebuild slum areas. In India, the approaches to rebuilding or rehabilitating slums vary; there are cities where slums have been cleared to make way for the new developments while in some cases they have been carefully consolidated through community empowerment, tenure alteration, Slum Networking initiatives, etc. In all such cases NGO’s play an important role in motivating the slum communities and mobilizing resources from them.

Chapter 5: The blue sky modernists: The story of modernist town planning and how it broke from centuries of tradition. This will include Corbusier’s plans for Paris and the way that they were interpreted in the design of Coventry after the second world war and later the design of Brasilia as a new capital city. The chapter will show how this evolved into the townscape movement in the 1970s
combining through the work of Ian Nairn and Gordon Cullen to appropriate the language of urban design.

**Chapter 6: The best of intentions:** This will focus on the problems inherent in the modern planning system. The way that problems are isolated, optimised solutions developed and policies and strategies implemented that may solve the specific problems but have unforeseen consequences elsewhere in the city. The chapter will trace the history of planning for the motorcar and how this has created a raft of planning policies from neighbourhood units to Radburn layouts and Buchannan’s traffic in towns that may have solved one problem but have caused many many more.
PART 5: The new urban age

Chapter 7: The urban planet: The implications for the city now that more than 50% of the world’s population is urban. The phases of urban growth and decline and the fact that there is life after the post industrial city in which urban populations once more start to grow and cities once more become drivers for economic growth. This will look at population trends in European cities and the work of writers like Glaeser and Florida. It also looks at the global shift of the world’s population from developed to developing countries which will account for about 80% of the world’s urbanities by 2030 marking one of the largest urban movements in time.

Chapter 8: The rediscovery of urbanism: A modern history of urban design and urbanism since the late 1980s, looking at the seminal books, the Smart Growth and New Urbanist movements in the US and the Urban Renaissance in the UK. The battles that have been fought in places like Australia, the way that government policy has changed in Europe and the difficulty of bringing about change in the US.

Chapter 9: The Sustainable Compact City orthodoxy: The art of urban-form making has, for city designers, always remained a subject for utopian longings and hopes for an optimistic future. From the ancient cosmic ideology to modern technological perfections, the notion of “perfect” or “ideal” city has remained embedded in urban design through to the present day where sustainable urban forms address urban growth within the ideal of a balanced and sustained environmental, economic or social development. In the Western context, this notion is embodied in planning policies and urban design theories that share elements in common with the “compact city” ideology as the 21st century utopia for sustainable cities. Stressed under international sustainability commitments and rapid urban change this ideology turned orthodoxy is being enthusiastically adopted in other developing nations’ context like India where every international ‘ism’ is mirrored in the urban form production as a ‘style’ ignoring the potential of indigenous typologies and practices. This section explores the compact city orthodoxy in the Indian context. It argues that pluralism and formlessness that secures flexibility and liveability of a constantly evolving society are the most important characteristics of any urban form-making mould.

Chapter 10: The Climax city in the 21st century: A concluding chapter that draws together the strands and suggests that in the modern age we have entirely misunderstood the process by which planning changes cities. We have underestimated the complexity of urban areas and treated them as clocks to be mended rather than organisms to be healed. We have failed to understand that urbanism and urban design are related, but they are not the same thing. They differ in the same way that horticulture is different to garden design. The books argument is that by understanding this relationship we will be better able to harness the innate ability of humans to create beautiful places.