# INTRODUCTION

<table>
<thead>
<tr>
<th>Foreword</th>
<th>Wolfgang Nowak</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living in the Urban Age</td>
<td>Ricky Burdett and Philipp Rode</td>
<td>8</td>
</tr>
<tr>
<td>The Architecture of the Endless City</td>
<td>Deyan Sudjic</td>
<td>44</td>
</tr>
<tr>
<td>The Economies of Cities</td>
<td>Saskia Sassen</td>
<td>56</td>
</tr>
</tbody>
</table>

# CITIES

## MUMBAI

<table>
<thead>
<tr>
<th>Managed Chaos</th>
<th>Deyan Sudjic</th>
<th>86</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democracy and Self-Interest</td>
<td>K. C. Sivaramakrishnan</td>
<td>90</td>
</tr>
<tr>
<td>A Matter of People</td>
<td>Darryl D’Monte</td>
<td>94</td>
</tr>
<tr>
<td>Looking for the Bird of Gold</td>
<td>Suketu Mehta</td>
<td>102</td>
</tr>
<tr>
<td>The Static and the Kinetic</td>
<td>Rahul Mehrotra</td>
<td>108</td>
</tr>
<tr>
<td>The Long View</td>
<td>Charles Correa</td>
<td>116</td>
</tr>
<tr>
<td>Beyond the Maximum</td>
<td>Geetam Tiwari</td>
<td>122</td>
</tr>
</tbody>
</table>

## SÃO PAULO

<table>
<thead>
<tr>
<th>The Urban Giant</th>
<th>Deyan Sudjic</th>
<th>146</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filling the Political Vacuum</td>
<td>Jeroen Klink</td>
<td>150</td>
</tr>
<tr>
<td>The Cultures of the Metropolis</td>
<td>Gareth A. Jones</td>
<td>156</td>
</tr>
<tr>
<td>Looking for a Shared Identity</td>
<td>José de Souza Martins</td>
<td>162</td>
</tr>
<tr>
<td>Worlds Set Apart</td>
<td>Teresa Caldeira</td>
<td>168</td>
</tr>
<tr>
<td>The Mirage and Its Limits</td>
<td>Raul Juste Lores</td>
<td>176</td>
</tr>
<tr>
<td>Living on the Edge</td>
<td>Fernando de Mello Franco</td>
<td>182</td>
</tr>
</tbody>
</table>

## ISTANBUL

<table>
<thead>
<tr>
<th>The City Too Big to Fail</th>
<th>Deyan Sudjic</th>
<th>206</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridging Histories</td>
<td>İlhan Tekeli</td>
<td>210</td>
</tr>
<tr>
<td>The Hinge City</td>
<td>Richard Sennett</td>
<td>218</td>
</tr>
<tr>
<td>It’s Istanbul (not Globalization)</td>
<td>Hashim Sarkis</td>
<td>224</td>
</tr>
<tr>
<td>The Violence of Change</td>
<td>Asu Aksoy</td>
<td>232</td>
</tr>
<tr>
<td>The Contours of Concrete</td>
<td>Ömer Kanıpak</td>
<td>240</td>
</tr>
<tr>
<td>Measuring Success</td>
<td>Çağlar Keyder</td>
<td>246</td>
</tr>
</tbody>
</table>
DATA

Vital Statistics: Nine Cities Compared  252
Understanding the Numbers  Justin McGuirk  292
Understanding What People Think  Tony Travers  308

REFLECTIONS

Boundaries and Borders  Richard Sennett  324
No Frills and Bare Life  Alejandro Zaera-Polo  332
City Solutions to Global Problems  Nicholas Stern, Dimitri Zenghelis and Philipp Rode  342
Democracy and Governance  Gerald E. Frug  350
The Urban Earthquake  Anthony Williams  356
Uneven Landscapes  Sophie Body-Gendrot  360
From Utopia to Youtopia  Alejandro Aravena  368
Surviving in an Urban Age  David Satterthwaite  374
Getting to Work  Fabio Casiroli  380
Facing the Metro Challenge  Bruce Katz  388
On the Ground  Adam Kaasa with Marcos Rosa and Priya Shankar  396

INDEX

Notes  414
Credits  416
Contributors  419
Urban Age Conference Participants  421
Index  428
Editors’ Acknowledgments  431
Cities are political programmes made visible. They are mirrors of society and systems of governance of the country in which they are located. Successful cities demonstrate the viability of social systems. In cities, all of the world’s problems and conflicts are crowded together in a confined space. In growing metropolises the first, second and third worlds come into direct contact with each other. Cities have to deal with religious and cultural confrontations, terrorism, economic crises, pandemics, and, of course, migration issues. Centuries ago, cities believed they could protect themselves against problems with walls. Today people try to protect themselves against unresolved problems through gated communities within cities.

We are experiencing a crisis of responsibility between citizens and government – and not only in Western cities and states. Citizens experience their own powerlessness walking through their city every day, and they interpret it as powerlessness on the part of the government. In particular, young people are often radically disoriented by the experience and become vulnerable to any kind of ideological discipline. Occasional ‘attacks’ through a ruthless enforcement of special interests, e.g. by prestige buildings, only reinforce doubts about the government and its ability to serve the common good. The kind of conflicts that occur in cities can only be resolved, however, by mediating between different value perceptions. Learning and mediating and the willingness to see through other people’s eyes are core competencies for the successful governance of a city. Nowadays legitimacy results not only from elections; it develops when a mayor achieves a significant contribution as an impartial entity to improving the situation of citizens, and takes a stand against the repeated threat of growing cities disintegrating into unbridled individual interests.

The growth of cities is currently unstoppable. The constitutions of European cities were designed to address problems of the twentieth century. They are hardly appropriate to today’s challenges. Some cities have become urban regions which are limited in their development by ‘historic’ national and city borders. In many countries, it is national rather than municipal government that holds the strings to planning decisions. In effect, these cities are governed from outside. But nations will increasingly depend on cities and their economic success. New forms of governance for cities are required. To a certain extent, we find ourselves in a hiatus: the old form is no longer effective and the new form is not clearly visible yet. A new generation of mayors proves on a daily basis that they can not only endure political conflicts, but also resolve them. Some have even stepped up to become heads of state. They have
managed to mobilize the expertise of all citizens for better solutions. Cities put high demands on their leaders. They must succeed in not only managing a confusion of issues, problems and contradictions, but in linking them into a common will in an ongoing process. Once this has been achieved, a city becomes a visible, political programme of change, one that replaces the old ideologies of the twentieth century.

Since 2005, the London School of Economics and Deutsche Bank’s Alfred Herrhausen Society – together with mayors, city planners, state governments, architects, scientists, community groups and committed local people – have studied growing, and in some cases shrinking, cities of the twenty-first century. *The Endless City*, published in 2007, described the outcome of the first two years of collaboration. This book, *Living in the Endless City*, covers the following three. Given the fact that the twenty-first century is the ‘urban age’, the work was extended to cities in India, Latin America and the Mediterranean. The result was an international ‘think-and-do tank’, linking people across continents and political systems, ready to learn from and with each to find better solutions for cities of the future.

In recognition of the value of this work, Deutsche Bank decided to fund a new research centre at the London School of Economics in 2010, which is now in full operation under the banner of LSE Cities. The objective of LSE Cities is to consolidate and build upon accumulated knowledge and serve as the centre of the evolving network of urbanists at a global level.

None of this would have been possible without the personal endorsement of Deutsche Bank’s CEO, Dr Josef Ackermann, whose commitment to the project has been outstanding. We wish to thank him and the Alfred Herrhausen Board for their continued support of this joint initiative.

During the Urban Age Conference in Mexico City in 2006, the conference participants visited a large informal neighbourhood whose residents suffered from lack of basic infrastructure and resources. In the middle of this misery we were surprised to find a building that had a transformative effect on the young people from the area. Organized as a local citizens’ initiative, this small arts centre was an island of hope in a hopeless environment. We responded by setting up the Deutsche Bank Urban Age award, a US$100,000 prize, which is given annually to projects, which demonstrate responsible partnering and that improve the social and physical environment of a city. Since 2007 the prize has been awarded in Mumbai, São Paulo, Istanbul and Mexico City, to projects that have reacted to intolerable conditions. They reacted positively, by working together on projects, without violence or extreme crime, either of which would have negated their existence as engaged citizens of their own city. They motivated themselves and others to break away from enforced passivity to find better solutions for human coexistence. The award gives a voice to those in the city who have no lobby. They are ambassadors of new ideas.

This volume describes our collective work between 2007 and 2010, including the conferences, the research and surveys, and the local awards. All parties in the Urban Age project are united by a common goal: to find a grammar for the success of cities. Scepticism is clearly justified given the major problems faced, especially by the cities in Asia, Africa and Latin America. And yet, I am confident that we will make it; as the former Brazilian President Lula once put it, with utopia in our hearts, but both feet firmly anchored in the real world.

Wolfgang Nowak is Director of Deutsche Bank’s Alfred Herrhausen Society
Why Cities? Why Now?

This book investigates the links between the physical and the social in cities. It is not an academic exercise, but one that stems from a sense of urgency that something needs to be done to address the dynamics of urban change described by the statistics on the front cover. With half of the seven billion people on earth living in cities, a substantial proportion of global GDP will be invested in energy and resources to accommodate a mass of new city dwellers over the next decades.¹ The form of this new wave of urban construction and the shape of our cities will have profound impacts on the ecological balance of the planet and the human conditions of people growing up and growing old in cities. That is why cities, and their design, matter.

It is not the first time that city form and social development attract global attention. Social reformers in Europe and North America in the late-nineteenth and early-twentieth centuries were preoccupied by similar concerns. In the aftermath of the Industrial Revolution cities were swamped by new migrants in search of jobs and opportunities. But, at a considerably slower pace and smaller scale than the current wave of global urbanization. London grew from 1 million to become the world’s first megacity of 10 million. It took over a hundred years to get there. Lagos, Delhi and Dhaka, are today growing at the rate of over 300,000 people per year. Mumbai is set to overtake Tokyo and Mexico City as the world’s largest city in the next few decades with over 35 million people. The order of magnitude is radically different.

Last time round, planners reacted to overcrowding and congestion with a heavy hand. Entire communities in traditional city cores were ripped apart to create clean and healthy new urban environments to house the urban poor. Road widening schemes and large-scale blocks replaced the fine grain of city streets. Suburbanization led to the separation of city functions, fuelling urban sprawl before we became aware of the consequences on climate change and social alienation. Are we are about to repeat the same mistakes, but at a grander and more dramatic scale?

The cities being built and transformed today will have far greater consequences, both locally and globally. The way they are changing is not encouraging. The investigations of the Urban Age project, which forms the basis of this publication, find that cities are becoming more spatially fragmented, more socially divisive and more environmentally destructive. The objective, of course, is quite different. Governments, public agencies and the private sector are driving this change to improve living conditions of existing and new city dwellers, responding to a real
2% of the earth’s surface is occupied by cities

53% of the world’s population lives in cities
market demand resulting from global economic growth and restructuring.

In Chinese cities like Shanghai, for example, strong growth has seen the new middle class triple the amount of space they occupy in the space of a few decades, moving from pre-industrial housing conditions to apartments with running water, reliable electricity and modern domestic facilities. Formally planned or illegally constructed neighbourhoods are emerging on the peripheries of older cities while new dormitory towns – gated communities or mass housing schemes – are appearing on the edges of Istanbul, São Paulo or Mumbai, as illustrated in the essays that follow. The problem is that the bulk of what is being built today, which could stay with us for hundreds of years, may have even more negative impacts on the urban communities they are designed to serve than the ones built by the well-intentioned social reformers of the last centuries.

A few examples serve to illustrate this point. In Istanbul, the government is building 3 million housing units in 20 years. All around the millennial city, rows of bland, 20-storey tower blocks surrounded by tarmac are emerging, reminiscent of the most alienating social housing projects built across Europe and the United States in the mid-twentieth century. Some of these have since been demolished because of their social dysfunctionality, yet the same ubiquitous typology continues to be erected around the world. Despite a recent slowdown, São Paulo continues its march towards endless sprawl fuelled by a planning ideology that finds four-hour commuting patterns acceptable in a city that accepts about one thousand new cars on its streets every day. Many other metropolitan areas of the fast-growing economies would have similar stories to tell. Mumbai’s cynical attempts to redevelop Dharavi, India’s largest slum located on valuable land near the centre, with large commercial blocks replacing the fine urban grain of one of the city’s most sustainable communities, raises the spectre of 1960s ‘slum clearance’ programmes that devastated the social life and urban structure of so many European and American cities. While the inevitable forces that drive improvement and growth must be embraced, it is time to ask ourselves whether we have got the planning formula right.

On balance, the answer from this publication is probably ‘no’. The impact of this emerging urban landscape on people and the environment, with very few exceptions, is likely to be negative. Before considering the findings and reflections of the Urban Age experts on the forces and contradictions that are shaping this new wave of urban change, it may be helpful to give an overview of the global impact of cities at economic, environmental and social level.

**The Global Urban Context**

With a population share of just above 50 per cent, but occupying less than 2 per cent of the earth’s surface, urban areas concentrate 80 per cent of economic output, between 60 and 80 per cent of global energy consumption, and approximately 75 per cent of CO₂ emissions. Seventy-five per cent of the world’s population is expected to be concentrated in cities by 2050 – a large proportion in megacities of several million people each and massively urbanized regions stretching across countries and continents. As the maps on pages 26 to 43 reveal, these patterns of human and urban development are not equally distributed across the surface of the globe. Cities in developing countries continue to grow due to high birth rates and by attracting migrants, while rural settlements are transformed into urban regions. At the same time, some cities of largely urbanized developed countries have had to adapt to profound economic restructuring with shrinking populations.
While urbanization has helped to reduce absolute poverty, the number of people classified as urban poor is on the rise. Between 1993 and 2002, 50 million poor were added to urban areas while the number of rural poor declined by 150 million. Urban growth puts pressure on the local environment that disproportionately affects disadvantaged people who live in precarious structures in more vulnerable locations such as riverbanks and drainage systems, all of which are exposed to flooding, mudslides and other hazards linked to climate change. Regular flooding in São Paulo, Istanbul and Mumbai – not to mention New Orleans or Jakarta – indicate the immediacy of the problem and its costs on human lives.

Cities of different wealth levels impact the environment differently. As their economies become more prosperous, with wider and deeper patterns of consumption and production, their environmental footprint is increasingly felt at a global level. In terms of carbon emissions, energy, electricity and water consumption, dwelling and transport patterns, there is a very marked difference between cities in developed and developing countries. Whereas cities in Europe, the US and Brazil, for example, have a lower environmental impact than their respective countries, cities in India and China have a much larger impact owing to their significantly higher income levels compared with their national averages.

But why are so many cities continuing to grow? From an economic perspective, cities bring people and goods closer together, help overcome information gaps, and enable idea flows. National development of countries has always been linked to the growth of its cities, as witnessed by the fact that manufacturing and services have increased their share of global GDP to 97 per cent, and most of these activities are located in urban areas.

Mirroring their economic performance, as cities grow in size, they leave a strong imprint on the planet. The World Bank has estimated that while urban populations in the developed world have grown only about 5 per cent, their built-up area has increased by 30 per cent between 1990 and 2000. For developing world cities, the growth of populations was 20 per cent against a 50 per cent increase in urbanized
33% of city dwellers live in slums
land. Annually, the amount of built-up land per person has increased by 2.3 per cent in cities in industrialized nations and 1.7 per cent in developing world cities. These statistics are living evidence that the ‘endless city’ is not simply a metaphor, but a description of a real physical phenomenon which applies just as much to Los Angeles and Phoenix in the United States, as it does to Mexico City or São Paulo.

As argued above, much of this expansion has occurred with the growth of peripheral development triggered by suburban lifestyles and a combination of land speculation, weak planning control and greater population mobility. The rapid expansion of car use has gone hand in hand with horizontal expansion. Increasing motorization continues to create an infrastructure legacy that matches those of the cheap oil period of the 1950s and 1960s, bringing with it a landscape of urban motorways, flyovers and tunnels that has a negative impact on the quality of the urban environment, causing physical severance and acoustic and air pollution. Even though fuel is no longer cheap, this has not stopped Mexico City spending most of its transport budget on the Segundo Piso, a double-decker flyover in the middle of the city, or Mumbai investing millions of dollars in the much disputed Bandra-Worli Sea Link across one of its stunning bays. Meanwhile Boston has invested over US$5 billion on the Big Dig, demolishing the 1960s elevated motorway that scarred the centre for decades. Many others have followed suit.

Despite an ongoing debate on the links between physical structure and energy use in cities, there is growing evidence that urban environments with higher-density residential and commercial buildings, a well distributed mix of uses and public transport reduce the energy footprint. Research has shown that the so-called ‘compact city’ model has lower per-capita carbon emissions as long as good public transport is provided at the metropolitan and regional level. Despite this evidence and important efforts like the C40 movement, the majority of cities globally are following the less sustainable model of urban growth. It is left to a handful of urban pioneers, like Copenhagen, Seattle, Singapore or Bogotá, to implement radical, but highly successful policies that have dramatically reduced their energy footprint, reduced commuting times and improved quality of life.

But, what do these numbers and statistics mean for both those who inhabit and those who build the city? How can the ‘old’ model of urbanity that has supported human existence for centuries serve us to comprehend the emerging form of cityness that the new century of massive global urbanization is delivering? What is the complex relationship between urban form and city life; and how can we intervene at governance level, as policymakers, urban designers and planners to bring about positive change? These are some of the questions that have been addressed by the Urban Age project to which we now turn.

Experiencing the Urban Age Project
A sequel to The Endless City, this book adds to the global debate on the future of cities with new research on Mumbai, São Paulo and Istanbul, yet builds on the accumulated knowledge and experiences of six other cities – New York, Shanghai, London, Mexico City, Johannesburg and Berlin. It is a distillation of more than five years of collaborative work that has brought together several hundred people who perhaps, before the Urban Age project, did not see themselves as ‘urbanists’ per se. Traffic engineers, mayors, criminologists, architects, sociologists, planners … perhaps, but not urbanists.
Yet, over time, as each one of us was confronted with a different spatial reality, the need to understand our distinct viewpoints in relation to the urban came sharply into focus. The more we observed the complex processes of social and economic change, the more we became aware – as Saskia Sassen puts it – that the materiality of the city itself allows it to survive, while nation-states, companies, kingdoms and enterprises come and go. Paradoxically, though, it became clear that that very materiality (its ‘architecture’) is subject to continuous, at times violent, modification that accounts for the resilience of some cities and the failure of others to adapt to economic change and deal with the consequences of transition. Confronting urban realities across the world has confirmed that city dwellers can do better than those who live in rural areas. Like the poorest Mumbaikars, we have found that many see their city as a ‘bird of gold’, a place of fortune, where you can change your destiny and fly.9 As the figures above show, city dwellers get jobs; they produce and earn more. They can have better access to education and health. They can more easily become part of a networked, global society. But, at the same time, they consume and pollute more. They are exposed to extreme floods, violence, disease and wars. Many live without rights to land, shelter or votes, entrapped in a vicious cycle of social and spatial exclusion. It is these fragmented topographies that bring the informal and the formal close together, rendering them interdependent within the contemporary urban landscape.

The essays in this book reveal that it has become difficult for many of the Urban Age experts to talk about their own discipline without reference to the spatial dynamics of urban change. As Wolfgang Nowak has described in the Foreword, this process started in 2005, when the first Urban Age conference took place in New York, followed in quick succession by five other conferences over the following two years. The second phase continued in three hotspots of global metropolitan growth. The first took place in November 2007 in Mumbai, India’s economic powerhouse where 44 newcomers per hour are swelling the ‘Maximum City’.10 The second occurred in December 2008, at the height of the global recession, in São Paulo, Brazil’s most populous and dynamic city growing at the rate of 11 people per hour. The final conference of the series was held in November 2009 in Istanbul, with claims to being Europe’s largest city (even though a third of its residents live on the Asian side) where 12 new residents per hour contribute to its success as one of the most resilient urban economies in the world.11 Not only do these cities represent world regions that are growing rapidly today, but their metropolitan areas expanded exponentially during the twentieth century: Mumbai by 1,978 per cent, São Paulo by 7,916 per cent and Istanbul by ‘only’ 1,305 per cent since 1900, even though it has quadrupled since 1980. By contrast, London only grew by 16 per cent over the same period.12

Each conference was attended by 300 to 400 people, with presentations given by up to 80 local and international experts covering subjects as diverse as urban governance, security and crime, transport and mobility, housing and public space as well as the impact of cities on the environment and sustainability. The Urban Age team carried out studies on wider regional trends, working with local municipalities and institutions as part of year-long research projects that generated the material and ideas discussed at the conferences and included in this book.13

The Mumbai conference became the focus of debate on urbanization of Indian cities – including Bangalore, Kolkata and Delhi – and at a time of significant restructuring of urban governance in the world’s largest and most cumbersome democracy. In São Paulo, we explored how South American cities – including Buenos Aires, Lima, Bogotá and Rio de Janeiro – were responding to different economic
75% of the world’s CO₂ emissions are produced by cities
and social pressures, especially in relation to inequality and security. In Istanbul, we focused on how the profound social, cultural and economic change in a city with a ‘deep history’, inhabited for over 2000 years, is affecting its spatial and political landscape.

**A Road Map for the Reader**

The book is divided into three sections: ‘Cities’ contains visual essays and analytic texts which mirror the content of Urban Age conferences held in the three core cities from 2007 to 2009; ‘Data’ is a compendium of vital statistics of all nine Urban Age cities, accompanied by a critical narrative and the results of opinion polls carried out among local residents; ‘Reflections’ collects the thoughts of scholars and practitioners who have followed our project, offering their perspectives on the lessons learnt for the twenty-first-century city.

Following this introductory text, the first two essays frame the critical thematic axes of the book: built form and the urban economy. Tackling the relationship between architecture and cities head-on, Deyan Sudjic offers a critique of the limits of the current discourse within the design professions when it comes to addressing the pragmatics and the poetics of ‘Living in the Endless City’. Reviewing recent projects in the three Urban Age case studies, he argues that architecture has remained on the edge of the conversation about cities, and makes a rallying call to architects to get off the fence and address what cities might become. Taking a different view, Saskia Sassen tackles the complex economies of global cities, arguing that their resilience and survival are interdependent on indeterminate infrastructure and built form. Using examples from Istanbul, Mumbai and São Paulo, she describes how backward, often informal, sectors serve advanced sectors and their high-income employees, concluding that urban manufacturing plays a critical role in extending the deep histories of global cities in current times and that the specialized differences of cities have specific spatial requirements in order to allow their complex economies to grow and survive.

In the essays that investigate Mumbai in the context of other Indian cities, the authors offer different insights on governance, civic engagement, exclusion, urban culture and mobility. A common theme runs through the texts, that despite the immense poverty of its residents and inadequacy of its infrastructure, Mumbai has lessons to offer other cities around the world. The sheer density of human occupation, which Suketu Mehta describes as ‘an assault on one’s senses’, cuts through all the essays, as does the notion of resilience and ingenuity of its residents. Mehta connects the vibrant social economy of slums like Dharavi to the realities of Lisbon and Istanbul, arguing that the tabula rasa approach to slum redevelopment is totally out of step with the needs of a more inclusive urban society, especially one that is so lacking in resources.

Equally critical of the ambitious top-down vision for Mumbai as a ‘Global City’, Darryl D’Monte argues that there are many cities in Mumbai, constituted by different social and cultural identities that run the risk of being stamped out by the current coalition of state bureaucrats and vested interests. Building on this theme, Rahul Mehrotra gives a new reading of how Mumbai functions for its diverse constituencies through its ‘kinetic’ dimension; a city of festivals, events, in perpetual motion, continually renewing itself. Geetam Tiwari agrees that a high population density has implicit benefits in terms of energy consumption, and while she applauds the fact that over 50 per cent of Mumbai’s population commute to work by foot or by bicycle,
she bemoans the failure of the state to build a public transport policy based on this uniquely efficient urban structure and the lifestyles of Indian cities.

Arguing that Mumbai is as politically fragmented as it is spatially, K. C. Sivaramakrishnan explains the power dynamics and struggles between central nation, state and local communities in the light of a much-vaunted government initiative (the 74th Constitutional Amendment) to devolve power downwards, which, he argues, is resulting in a significant loss of accountability. It is left to the architect of the failed attempt to decongest old Bombay with a new centre at Navi Mumbai, Charles Correa, to reflect wryly that current plans for Mumbai are more hallucinations than visions, and that the establishment should look again at the city’s own DNA. Rather than build a city for cars for people who cannot afford them, he proposes a single, networked and balanced system based on public transport to cope with the inevitable crisis Mumbai will face with the 'monstrous' prospect of becoming the largest city in the world where today over 6 million people live in slums.

The strength of the culture of social entrepreneurship and civic engagement stands out as a dominant theme emerging from the essays on São Paulo and other South American cities. Buenos Aires, Lima, Rio and Bogotá have responded to extreme political and economic developments from the 1970s onwards – dictatorships, revolutions, economic miracles and disasters – with a mixture of Latin hopelessness and pragmatism that reflects little faith in governments and their institutions. Jeroen Klink addresses the institutional vacuum that has shaped urban development of this highly urbanized continent, where lack of investment and political will has, to his mind, fuelled a vicious cycle of poverty, environmental degradation and socio-spatial exclusion that has failed to make the most of the potential offered by South American cities and nations.

Despite being a classic ‘second city’, São Paulo occupies a class of its own. With over 30,000 dollar millionaires, one of the largest and powerful cities of the BRIC nations whose economies keep driving global growth, São Paulo – as Fernando de Mello Franco argues – has fully exploited (to the point of exhaustion) its unique geographic location on a high plateau with rivers flowing inland to the rest of the continent, fuelling its strong export economy. Raul Juste Lores extends the narrative by describing the city as an octopus stretching out in all directions, way beyond its political state and municipal boundaries, invading its precious water reservoirs and giving in to the pressures of land speculation that has seen the emergence of shopping malls, gated communities and business centres around the sprawling edges of this sprawling city.

Recalling Georg Simmel’s preoccupations with how people would cope with the overstimulation of the metropolis, Gareth Jones suggests that the capacity for everyday life to hold on to the quality of contingency and connection is the mechanism through which excluded social groups – young people, gangs, ethnic minorities – are able to hang together in places where there is low public confidence in public institutions: politicians, planners or the police. His view that contemporary social life is marked on the urban landscape of Mexico City, Buenos Aires and Lima is further developed by Teresa Caldeira in her account of how social difference is spatialized in São Paulo through a process of exclusion that keeps people apart. Challenging the voyeuristic model of the rich/poor divide in neighbourhoods where extreme wealth sits cheek by jowl with impoverished favelas, she describes how the edges of the city have become increasingly segregated, with poorer people pushed out to areas without infrastructure and with high levels of crime, while the affluent
growth in the number of urban poor between 1993 and 2002
remain in guarded enclaves either in the centre, or move even further out to car-dependent ‘secure’ developments.

Echoing Teresa Caldeira’s identification of the different modalities of social cohesion defined through religion, graffiti, language, gangs or crime, José de Souza Martins focuses on São Paulo’s ‘transitive’ multicultural immigrant communities that populate the city’s strong neighbourhoods – Italian, Jewish, Spanish, Arab, German, Russian, and Ukrainian as well as Nordestinos (from northeast Brazil) and the more protected Japanese and Korean communities. He describes the city as being peculiar and multicultural. Not because it accepts the cultural diversity of those who arrive in it without conflict, but mainly because it ensures each example of diversity is allowed to be what it has always been, while the fact of their daily coexistence is embraced and leads to new forms and innovations.

The essays on Istanbul and its geopolitical hinterland revolve around the impact of globalization on city form and social equity, especially in a context of such physical specificity. Provocatively, Richard Sennett synthesizes this debate into a question. Does Istanbul in the future want to look more like modern Frankfurt or Renaissance Venice as it faces the challenges of global capitalism? Deyan Sudjic takes this visual analogy further by describing Istanbul as a city as beautiful as Venice or San Francisco, but ‘once you are away from the water [it becomes] as brutal and ugly as any metropolis undergoing the trauma of warp-speed urbanization.’

Sennett’s reference to a pre-modern Venice provides an interpretative framework for post-modern Istanbul. The first ‘hinge city’ of the Mediterranean, Venice imported spices from India, slaves from North Africa and cloth from Asia, and then sent finished goods to Europe and the East. This notion of city as workshop, with building and places that allow for the making of things to maintain its ‘hinge’ status, resonates with Saskia Sassen’s identification of the primacy of urban manufacturing, even in the most global of global cities. When the environment becomes homogenized and informality is neutralized from the public spaces of the city, the ‘hinge begins to rust’ and the city becomes dysfunctional as a social mechanism.

Hashim Sarkis develops this argument further, using spatial models based on Mediterranean historiography to analyze Istanbul’s ambivalent relationship within its wider context. This complements Ömer Kanıpak’s visual narrative of how the city is shaped by nature and its dynamic topography. He decodes Istanbul’s millennial DNA by explaining how water and steep escarpments are omnipresent, creating a uniform, accessible landscape for the residents, irrespective of their social or economic class. Observing recent urban developments in Arab cities of the wider Mediterranean area like Beirut, Cairo and Aleppo, Sarkis concludes that Istanbul has managed to maintain, albeit in a manicured way, a unifying geography over historic epochs and to display synchronicity among its historic layers.

Instead, Asu Aksoy and İlhan Tekeli offer a trenchant criticism of the impact of the ‘new round’ of globalization on the city’s spatial and social infrastructure. While Aksoy invokes the notion of ‘worldliness’ as a positive cocktail of openness, liberalism, pragmatism, democratic culture and global ‘embeddedness’, she shares Tekeli’s concern at the combined risks of an aggressive real estate market and the gargantuan building programme of the government’s own housing agency TOKI. Soft targets have been identified by the municipality; the historic Tarlabaşı district, with its abandoned Greek Orthodox churches and dilapidated nineteenth-century houses now occupied by Kurdish populations living side by side with local Gypsy populations and illegal African immigrants, is slated for a clean up. The bulldozer-led,
forced relocation of Roma families from the Sulukule district has already occurred, giving way to a new development of neo-Ottomanesque houses for the city’s new middle classes. Such heavy-handedness sits awkwardly within a culture that for decades has learnt how to make do, where the informality which gave rise to the gecekondu (illegal houses ‘built at night’ by immigrants) has spread to work (street hawkers), transport (dolmuş, shared taxis) and even music and construction. Perhaps this is why Tekeli is not over-critical of the ‘hybrid form’ of development control that Istanbul has now mastered – half planned, half unplanned – to service its hybrid political economy.

Unintentionally, this half-conclusion provides a way in for Çağlar Keyder to address the tricky question of how to measure success. He makes the point that the history of Istanbul’s spatial expansion was not straightforward – in the sense that the accommodation of population growth required ad hoc arrangements regarding land ownership – and that the commodification of land has become a necessity to realize the shared liberal and globalizing agenda which for the first decade of the twenty-first century has united the national leaders in Ankara with Istanbul’s city fathers.

The ‘Data’ section includes information on all nine Urban Age cities, laid out in diagrams drawn to the same scale to invite comparison. Assembled from different sources, the data have been checked and revised to ensure, wherever possible, consistency and accuracy. Each set of diagrams illustrates measures that capture various aspects of population distribution, density, age, inequality and employment as well as administrative boundaries, public transport and modal splits. Where relevant and available, information has been provided at the municipal, metropolitan and regional scales. Particular attention is given to patterns of residential densities found across the nine cities, with detailed maps and diagrams illustrating the urban form of the peak density areas in all cities.

In his extended essay, Justin McGuirk provides an interpretative commentary on the data, which probes and questions their meaning. The aim is to sketch an impression (that is, all ‘facts’ can do) about what the data really tell us, a guide to finding interpretations and readings in the wall of numbers. Moving from the impersonal and quantitative to the subjective and qualitative, Tony Travers provides a parallel interpretative narrative of the results of three opinion polls commissioned by the Urban Age among the residents of Mumbai, São Paulo and Istanbul. Travers’ text makes reference to a similar study carried out in London, allowing a four-city comparison to be made regarding what people’s opinions are on each city’s government and other issues including security, crime, education, public transport and the environment.

Polling of this kind is important for mayors and local governments in testing what people do and do not like about their neighbourhoods and cities. Personal safety emerges as a key issue in major metropolitan areas and the polling makes clear that in São Paulo and Istanbul there is a significant issue here. Health care and other public services are seen as poor in some developing cities, while the ‘range of shops’ can be an important reason for residents liking where they live. Perhaps, the unexpected overall conclusion from these soundings is that there is no overwhelming feeling within the four cities that life is bad.

The final section contains a number of personal reflections by individuals who have been closely associated with the Urban Age project from the outset, as well as some relative newcomers. Architects, mayors, sociologists and transport planners offer their views on the trends observed in the Urban Age cities,
providing a cross-section of opinions on the interactions between physical and social aspects of cities.

Richard Sennett immediately addresses the contradictions of these interactions by focusing on the fundamental difference between ‘borders’ and ‘boundaries’ and their socializing or alienating potential on urban residents, noting that the impermeable boundary is replacing the porous border in the new spaces of the contemporary city. Alejandro Zaera-Polo reflects on how a ‘no frills’ culture, spurred on by cheap money from the 1990s onwards, has given rise to a new form of homogenized building types that satisfies the need of global capital. Nicholas Stern, Dimitri Zenghelis and Philipp Rode explore how cities can play a significant role in mitigating the negative effects of climate change by developing a new model of green cities that reduces energy consumption and pollution. By comparing the governance structures of three Urban Age cities, Gerald Frug explains how national, state and municipal interests are often in conflict and rarely succeed in providing a democratic voice for the city’s contested electorate. Anthony Williams extends this political theme with a parable of how difficult it is for a city leader to steer a clear course between the opposing needs of different urban constituencies, while Sophie Body-Gendrot reflects on how violence, inequality and disorder have been spatialized in all the Urban Age cities.

Moving to a smaller scale, Alejandro Aravena addresses the need to find a flexible and affordable solution to the core building block of city form – the house – presenting the radical and innovative Elemental housing prototype as a viable response to the imprecise demands of the informal economy. David Satterthwaite turns to another core issue – survival – for the poorest city dwellers who are most at risk due to environmental hazards, poor governance and political exploitation. Fabio Casiroli extends our understanding of exclusion by explaining how the different patterns of mobility affect the residents of Istanbul, São Paulo and Mumbai in profoundly different ways, while Bruce Katz defines the problematic economic status of metropolitan areas in the US, offering scenarios for improvement through investment in urban jobs, innovation and export-orientated economy based on green technologies. Finally Adam Kaasa, with Marcos Rosa and Priya Shankar, brings us back to the ground by framing the Deutsche Bank Urban Age Awards – which have accompanied the Urban Age project since 2007 – with an understanding of the role of marginal groups in reclaiming the spaces of their own cities.

**Concluding and Looking Forward**

These multiple narratives provide a cross-section of the social and spatial dynamics of Mumbai, São Paulo and Istanbul, offering general insights on the state of cities at the beginning of the twenty-first century. The disparate and, at times, bracing accounts of how cities can brutalize both citizens and the environment remind us of the challenges and threats faced by the next generation of urban leaders who are tasked with steering their cities through what will be complex and difficult times.

But, the narratives also suggest that cities are uniquely placed to harness their human and environmental potential, guiding urban growth towards greater social and environmental equity. This will be the main task for mayors, governors and city leaders of the emerging Mumbais, São Paulos and Istanbuls.

Faced with similar threats and challenges more than a century ago, the city fathers of Barcelona, Paris, Chicago or Amsterdam had the vision to build new ‘pieces of city’ to accommodate the surge of new urban dwellers. A hundred and fifty years